

APPROVED Before you start work you are required to notify the site inspector at 703-324-1720. Failure to notify can result in a violation and possible permit revocation. A VDOT Permit will be required for any activity disturbing VDOT right-of-way or impeding pedestrian or vehicular traffic. Plan Number: 009820-CON -002- Date: 03/01/22 Stamped By: Manish Joshi

PLAN APPROVAL INFORMATION table with columns: RELATED INFORMATION, REQUIRED, NOT REQUIRED, COUNTY I.D. NUMBER, COMMENTS/SHEET NO.

LEGALITY OF LOT CERTIFICATION (LTI 02-10) I HEREBY CERTIFY THAT ALL APPROPRIATE COUNTY APPROVALS WERE OBTAINED IN ACCORDANCE WITH THE PROCESS REQUIRED BY THE SUBDIVISION ORDINANCE IN EFFECT AT THE TIME OF THE CREATION OF LOT(S) 27. THE LOT(S) WERE CREATED AS PART OF THE THOMPSON ROAD PROPERTY SUBDIVISION APPROVED BY FAIRFAX COUNTY ON OCTOBER 1, 2004 AND RECORDED IN DEED BOOK 16579 AT PAGE 1676 IN FAIRFAX COUNTY LAND RECORDS.

WETLANDS PERMITS CERTIFICATION I HEREBY CERTIFY THAT ALL WETLANDS PERMITS REQUIRED BY LAW WILL BE OBTAINED PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES. SIGNATURE: Andrew Rieger, 02/21/22. OWNER/DEVELOPER: ANDREW L. RIEGER, OWNER: ANDREW L. RIEGER.

INFORMATION REGARDING ACTIVITIES IN THE RESOURCE PROTECTION AREA table with columns: ACTIVITY, YES/NO. Includes rows for CONSTRUCTION, REDEVELOPMENT, PUBLIC ROADS, PRIVATE ROADS, DRIVEWAYS, STORMWATER OUTFALL, OTHER.

SWMO WATER QUALITY REQUIREMENT DETERMINATION table with columns: INFORMATION REQUIRED, VALUE. Includes rows for TOTAL SITE AREA, TOTAL POST DEVELOPMENT IMPERVIOUS COVER, NET INCREASE IN IMPERVIOUS AREA, ADJUSTED POST-DEVELOPMENT PHOSPHORUS LOAD, TOTAL RUNOFF VOLUME REDUCTION.

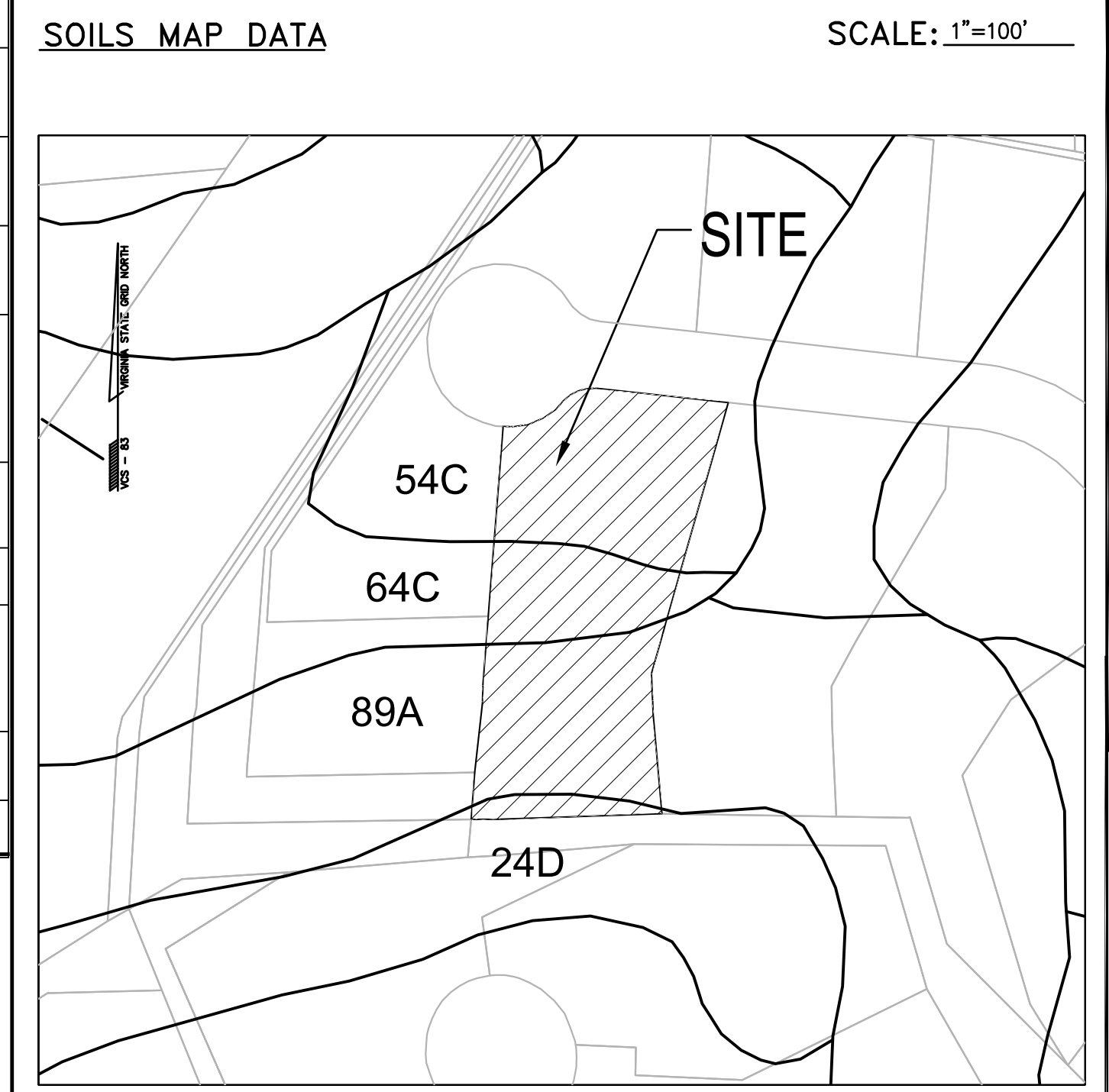
REQUIRED INFORMATION DESCRIPTION OF PROPOSED WORK THIS PROJECT CONSIST OF THE CONSTRUCTION OF A DECK, PATIO AND POOL. THE PROJECT WILL INCLUDE EROSION AND SEDIMENT CONTROL DEVICES TO PREVENT SEDIMENT FROM LEAVING THE SITE. THIS PROJECT DOES NOT ENCR OACH INTO ANY RPA AND HAS 4,975 SF OF DISTURBANCE.

TREE PRESERVATION TREE PRESERVATION TARGET DEVIATIONS OR MODIFICATIONS ARE BEING REQUESTED. YES [] NO [X]

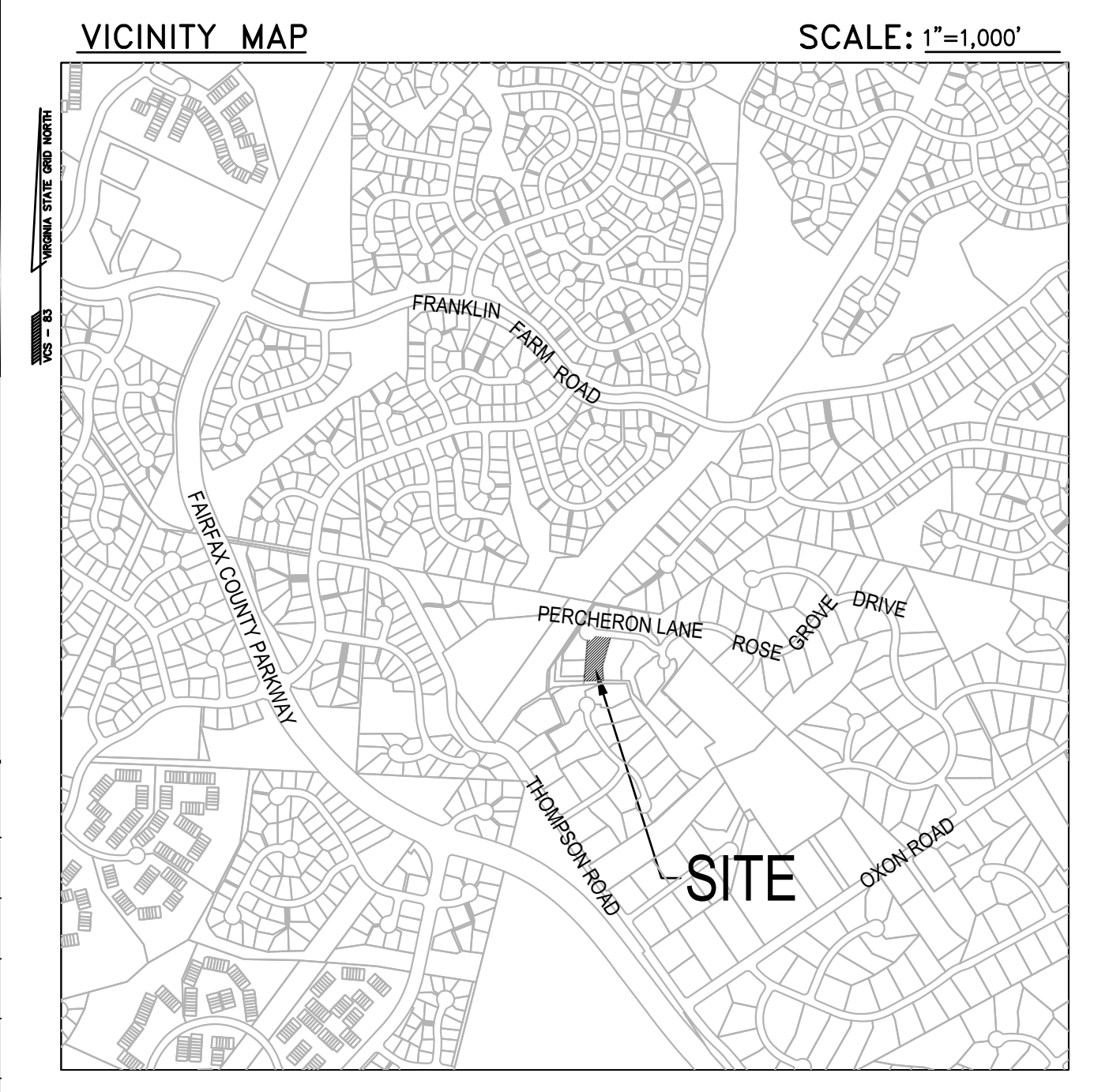
NOTICE OF VIOLATION IS THIS PLAN SUBMITTED AS A RESULT OF NOTICE OF VIOLATION? YES [] NO [X] IF "YES", COPY OF NOTICE OF VIOLATION PROVIDED ON SHEET NO. _____

STORMWATER INFORMATION COUNTY STORMWATER PERMIT REQUIRED? YES [X] NO [] VPDES PERMIT COVERAGE REQUIRED YES [] NO [X] HIGH DENSITY POLYETHYLENE (HDPE) PIPE USED ON THIS PROJECT YES [] NO [X] WATER QUALITY OPTION: NON-POINT NUTRIENT CREDITS [X] COMPREHENSIVE SWM PLAN [] OFF-SITE FACILITY [] EXISTING ONSITE FACILITY [] SWM FACILITIES DESIGNED USING: TECHNICAL CRITERIA 5 [] (OLD) TECHNICAL CRITERIA 4 [] (NEW) TIME LIMITS [] VPDES PERMIT NO. (IF TIME LIMITS): GRANDFATHERED [] DEQ MEMO 14-2014 [] NEW DEVELOPMENT [] REDEVELOPMENT [X] SWM FACILITIES (PROPOSED ONLY) table with columns: FACILITY ID NO., FACILITY TYPE, PURPOSE, AREA TREATED, LATITUDE, LONGITUDE, WATERSHED, RECEIVING WATERS, MAINTENANCE AGREEMENT, VAH06 CODE, LENGTH/AREA OF FACILITY, UNIT (FT/SF), NO. OF BLDG. SERVED.

TAX MAP NUMBER 0353 26 0027 ZONING DISTRICT R-1 MINIMUM YARD REQUIREMENTS (SETBACKS) FY: 40 FT, SY: 20 FT, RY: 25 FT MINIMUM LOT AREA REQUIREMENT 36,000 SF MINIMUM LOT WIDTH REQUIREMENT 150 FEET TOTAL LOT AREA (SQUARE FEET OR ACRE) 36,159 SQ. (0.83 ACRES) SERVED BY (INDICATE PUBLIC WATER OR INDIVIDUAL WELL) PUBLIC WATER SERVED BY (INDICATE PUBLIC SEWER OR INDIVIDUAL WASTEWATER MANAGEMENT SYSTEM) PUBLIC SEWER BUILDING HEIGHT CERTIFICATION (LTI 06-13) N/A E&S PRIORITY RATING FORM PROVIDED ON SHEET NO. 4 RESPONSIBLE LAND DISTURBER NAME: CURT CROUCH CERTIFICATE NO.: 047045 PHONE NO.: 540-359-1636 ADDRESS: 4995 CROUCH LANE, MIDLAND, VA 22728 WATER QUALITY WAIVER INFO, IF APPLICABLE N/A TREE CONSERVATION PLAN N/A



OWNER INFORMATION (X) OWNER () TRUSTEE () CORPORATION () PARTNERSHIP () AN INDIVIDUAL ANDREW L. RIEGER NAME 703-862-3375 PHONE 12917 PERCHERON LANE, OAK HILL VA 20171 ADDRESS ANDYRIEGER@AOL.COM EMAIL



APPROVED FOR INDIVIDUAL WASTEWATER SYSTEM AND/OR WATER WELL DATE _____ BY _____ FAIRFAX COUNTY DEPARTMENT OF HEALTH

RESOURCE PROTECTION AREA THE LIMITS OF CLEARING AND GRADING SHOWN NEAR AND/OR WITHIN THE LIMITS OF THE RESOURCE PROTECTION AREA (RPA) MUST BE STRICTLY OBSERVED AND ENFORCED. ANY ENCROACHMENT INTO, AND/OR DISTURBANCE OF, THE RPA NOT SHOWN ON THIS PLAN IS CONSIDERED A VIOLATION OF THE CHESAPEAKE BAY PRESERVATION ORDINANCE (CBPO) AND IS SUBJECT TO THE PENALTIES OF CBPO ARTICLE 9 (VIOLATIONS AND PENALTIES). (STORMWATER REVIEWER) _____ DATE: _____

APPROVED FOR GRADING ONLY ON _____ LOT(S) NO. _____ PARCEL(S) NO. _____ THE FOLLOWING CERTIFICATIONS BASED ON A FIELD SURVEY ARE REQUIRED PRIOR TO RUP ISSUANCE (REVIEWER TO CHECK APPROPRIATE ITEMS): _____ A BUILDING HEIGHT CERTIFICATION _____ A SETBACK CERTIFICATION APPROVED BY: _____ PLAN REVIEWER DATE: _____

SITE INSPECTION NOTES 1. NOTIFY SITE INSPECTIONS AT 703-324-1720 PRIOR TO BEGINNING ANY WORK ON THE PROJECT. FAILURE TO NOTIFY CAN RESULT IN THE ISSUANCE OF A VIOLATION AND A SUBSEQUENT FINE FOR COMPLIANCE INSPECTION. 2. NO EARTH DISTURBANCE OR CONSTRUCTION IS ALLOWED UNTIL THE BUILDING PERMIT FOR THE PROJECT IS ISSUED. EVIDENCE OF A BUILDING PERMIT MUST BE PROVIDED TO THE SITE INSPECTOR AT THE PRE-CONSTRUCTION MEETING. 3. NOTIFY THE "MISS UTILITY" NOTIFICATION CENTER AT 1-800-552-7001 AT LEAST TWO WORKING DAYS PRIOR TO COMMENCEMENT OF EXCAVATION, DEMOLITION, OR BLASTING IN ACCORDANCE WITH THE VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT.

Table with columns: SOIL ID NUMBERS, SOIL SERIES NAME, FOUNDATION SUPPORT, SOIL DRAINAGE, EROSION POTENTIAL, PROBLEM CLASS. Rows include 24D, 54C, 64C, 89A.

IS THE SITE LOCATED ON NATURALLY OCCURRING ASBESTOS (NOA) SOIL? YES [] NO [X] AREAS THAT MAY CONTAIN NOA SOIL ARE SHOWN ON THE OFFICIAL COUNTY SOILS MAP ON THE DIGITAL MAP VIEWER ON THE COUNTY WEBSITE. ASBESTOS IS REGULATED BY THE VIRGINIA DEPARTMENT OF LABOR AND INDUSTRY. SAFETY PRECAUTIONS AND LINKS TO REGULATIONS REGARDING THESE SOILS OR FILL ORIGINATING FROM THEM CAN BE FOUND ON THE NORTHERN VIRGINIA SOIL AND WATER CONSERVATION DISTRICT WEBSITE: WWW.FAIRFAXCOUNTY.GOV/NVSWCD

THIS APPROVAL IS NOT A COMMITMENT TO PROVIDE SANITARY SEWER.

SHEET INDEX table with columns: NUMBER, DESCRIPTION. Includes rows for COVER SHEET, GRADING PLAN AND NOTES, EROSION AND SEDIMENT CONTROL PLAN, EROSION AND SEDIMENT CONTROL DETAILS, IMPERVIOUS MAP AND OUTFALL NARRATIVE, BMP COMPUTATIONS.

DESIGN ENGINEER / SURVEYOR CURT R. CROUCH, P.E. 4995 CROUCH LANE MIDLAND, VIRGINIA 22728 PHONE NO: 540-359-1636 FAX NO: PROJ. MANAGER: CURT R. CROUCH EMAIL: CROUCH.CURT@GMAIL.COM

PROFESSIONAL SEAL DocuSigned by: Curt Crouch CC4778A34E3A4BB... CURT R. CROUCH Lic. No. 047045 02/21/21

PROFESSIONAL SEAL RIEGER, ANDREW L. THOMPSON ROAD PROPERTY LT 27 12917 PERCHERON LANE OAK HILL, VA 20171 SULLY DISTRICT FAIRFAX COUNTY, VIRGINIA

COUNTY NUMBER 2 9820-CON-002-XX PLAN REVIEWER

CMPO NOTES

THIS PLAN COMPLIES FULLY WITH AMENDMENT CHAPTER 118 (CHESAPEAKE BAY PRESERVATION ORDINANCE) OF THE CODE OF THE COUNTY OF FAIRFAX, EFFECTIVE NOVEMBER 18, 2003.

EXISTING UTILITY NOTE

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE LOCATION OF ALL UTILITIES BEFORE COMMENCING WORK

GRADING NOTES

1. ALL FOOTING TO BE SET A MINIMUM OF 24" BELOW FINAL GRADE IN ORDER TO PROVIDE ADEQUATE FROST COVER PROTECTION
2. THE AREA LOCATED ADJACENT TO DWELLING IS TO BE SLOPED AT 5% AWAY FROM THE FOUNDATION WALL FOR A MINIMUM OF 10 FEET TO PROVIDE POSITIVE DRAINAGE.
3. NO DOWNSPOUTS TO BE DIRECTED STRAIGHT TO NEIGHBOR PROPERTY.
4. SITE WORK CONTRACTOR TO FIELD CHECK FINAL GRADING TO ENSURE THE DEVELOPMENT GRADING PLAN.
5. CONTRACTOR TO ENSURE POSITIVE DRAINAGE ACROSS ALL SURFACES TO PRECLUDE THE PONDING OF WATER IN YARDS OR ON PAVED SURFACES. THIS DOES NOT APPLY TO PONDING ASSOCIATED WITH STORMWATER MANAGEMENT FACILITIES.
6. THE SUB-BASE OF ALL PARKING AREAS AND TRAVEL LANES ON SITE SHALL BE PROOF ROLLED PRIOR TO THE REPLACEMENT OF ANY PAVING MATERIALS TO IDENTIFY ANY AREAS OF INADEQUATE OR STRUCTURALLY UNSATISFACTORY MATERIAL THAT MUST BE UNDERCUT.
7. IF STRUCTURAL FILL MATERIALS IS REQUIRED IT MUST BE APPROVED BY A GEOTECHNICAL CONSULTANT PRIOR TO PLACEMENT. FILL MATERIALS MUST BE COMPACTED IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEERS SPECIFICATIONS AND UNDER HIS/HER GUIDANCE.
8. FOUNDATION DRAIN WILL DISCHARGE INTO SUMP PIT AND PUMPED AWAY FROM THE HOUSE AS SHOWN ON THIS PLAN.
9. CONTRACTOR MUST VERIFY APPROVED ARCHITECTURAL PLANS FOR BUILDING FOOTPRINTS AND ELEVATIONS. IF ANY DISCREPANCIES, CONTRACTOR HAS TO NOTIFY ENGINEER OR OWNER PRIOR TO START OF THE CONSTRUCTION WORK.

SEQUENCE OF CONSTRUCTION

1. INSTALL SILT FENCE, TREE PROTECTION FENCE PRIOR TO AND SITE DISTURBANCE OR DEMOLITION.
2. ONCE PERIMETER CONTROLS ARE INSTALLED, PRIOR TO FURTHER LAND DISTURBANCE, THE COUNTY SITE INSPECTOR MUST APPROVE THE INSTALLATION OF THE CONTROLS.
3. CLEAR AND GRUB SITE FOR INSTALLATION OF PERIMETER CONTROLS.
4. CLEAR, GRUB, STRIP TOP SOIL AND ROUGH GRADE SITE
5. COMPLETE NEW CONSTRUCTION AND FINAL GRADING
6. STABILIZE ALL DISTURBED AREAS, NOT BUILT OVER OR PAVED WITH TOPSOIL, MULCHING AND SEEDING.
7. ALL SEDIMENT AND EROSION CONTROLS ARE TO REMAIN IN PLACE UNTIL SITE IS STABILIZED AND CAN ONLY BE REMOVED AT THE DIRECTION OF THE COUNTY INSPECTOR.

LEGEND:

- 300 EXISTING CONTOUR
- 300 PROPOSED CONTOUR
- PROPOSED LIMITS OF CLEARING AND GRADING
- FABRIC SILT FENCE OR BERM WITH GRAVEL FILTER
- 70.3 PROPOSED SPOT ELEVATION
- 70.7 EXISTING SPOT ELEVATION
- # DENOTES STREET ADDRESS
- ▲ DENOTES WALKOUT DOOR
- EXISTING TREE
- FAIRFAX COUNTY GIS 2003 RPA
- EXISTING WELL
- EXISTING DRAINFIELD LINE

REAR YARD COVERAGE COMPUTATIONS

TOTAL REAR YARD AREA	3,108.6 SF
PROPOSED POOL AND PATIO AREA	0.0 SF
EXISTING SHED AND PATIO	0.0 SF
TOTAL REAR LOT COVERAGE (SQ.FT)	0.0 SF
% OF LOT COVERAGE (POST)=	$\frac{0.0 \times 100}{3,108.6} = 0.0\%$

IMPERVIOUS AREA/RUNOFF COMPUTATIONS (SQ. FT.)

DESCRIPTION	PRE-DEV	POST-DEV
EX. HOUSE	3,578.0	3,578.0
EX. SIDEWALK	699.0	699.0
EX. DRIVEWAY	1,634.0	1,634.0
DECK/PORCH	621.0	730.0
PATIO/POOL	1,013.0	2,124.0
TOTAL IMPERVIOUS AREA (SQ.FT)	7,545.0	8,765.0
PERVIOUS AREA/GRASS AREA (SQ.FT)	28,614.0	27,394.0
TOTAL SITE AREA (SQ.FT)	36,159.0	36,159.0
INCREASE IN IMPERVIOUS (SQ.FT.)		1,220.0

TOTAL % OF IMPERVIOUS AREA(POST)= $\frac{8,765 \times 100}{36,159.0} = 24.2\%$

"C" RUNOFF COEFFICIENT

A. PRE-DEVELOPMENT
 $\frac{7,545 \times 0.90 + 28,614 \times 0.35}{36,159.0} = 0.46$

A. POST-DEVELOPMENT *
 $\frac{8,765 \times 0.90 + 27,394 \times 0.35}{36,159.0} = 0.48$

RUNOFF Q=CIA

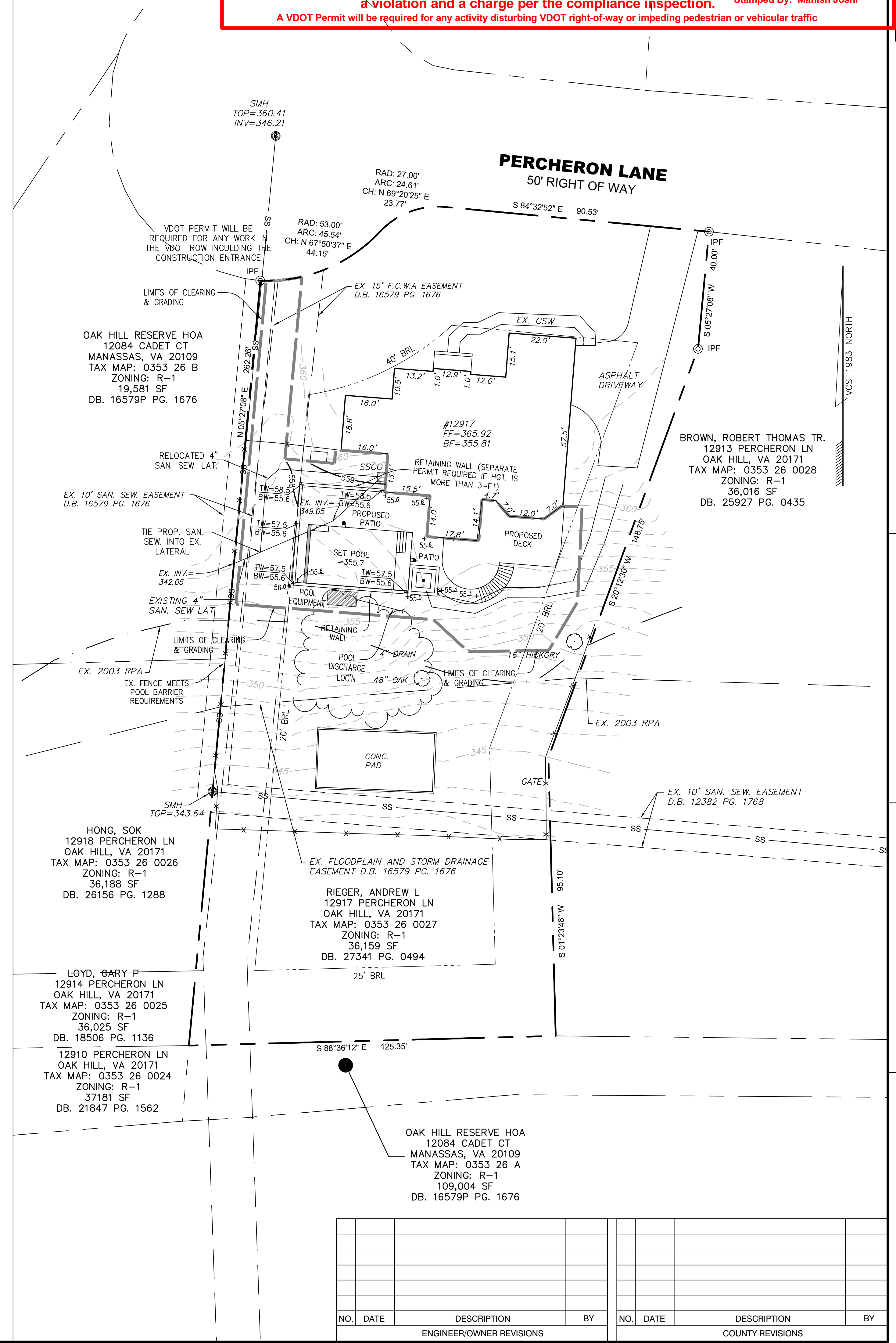
A. PRE-DEVELOPMENT
 $Q_2 = 0.46 \times 5.23 \times 0.83 = 2.00$ CFS
 $Q_0 = 0.46 \times 6.77 \times 0.83 = 2.58$ CFS

B. POST-DEVELOPMENT*
 $Q_2 = 0.48 \times 5.23 \times 0.83 = 2.08$ CFS
 $Q_0 = 0.48 \times 6.77 \times 0.83 = 2.70$ CFS

C. CHANGE IN RUNOFF*
 $Q_2 = 2.08 - 2.00 = +0.08$ CFS INCREASE IN RUNOFF
 $Q_0 = 2.70 - 2.58 = +0.12$ CFS INCREASE IN RUNOFF

-OUTFALL NARRATIVE ON SHEET 5

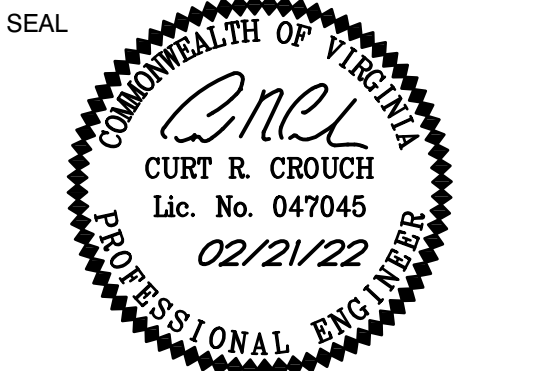
THE ENGINEER SHALL NOT HAVE CONTROL OVER OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK SHOWN ON THESE PLANS. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S SCHEDULES OR FAILURE TO CARRY OUT THE WORK. THE ENGINEER IS NOT RESPONSIBLE FOR NOTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, OR THEIR AGENTS OR EMPLOYEES, OR OF ANY OTHER PERSONS PERFORMING PORTIONS OF THE WORK.



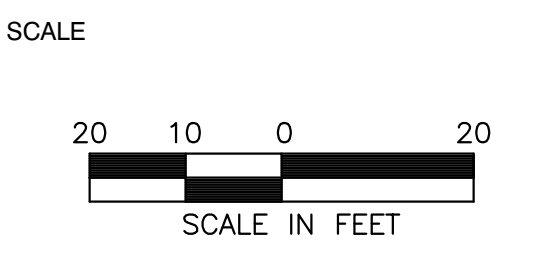
CURT R. CROUCH, P.E.

4995 CROUCH LANE
 MIDLAND, VIRGINIA 22728
 EMAIL: CROUCH.CURT@GMAIL.COM
 TELEPHONE: 540.359.1636

RIEGER, ANDREW L.
 THOMPSON ROAD PROPERTY
 LT 27
 12917 PERCHERON LANE
 OAK HILL, VA 20171
 SULLY DISTRICT
 FAIRFAX COUNTY, VIRGINIA



KEY PLAN



No.	DATE	BY	Description

DRAWN BY: CC
 APPROVED BY: CC
 CHECKED BY: CC
 DATE: NOVEMBER 2021

GRADING PLAN AND NOTES

PROJECT NO. 9820-CON-002-1.1

NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY

ENGINEER/OWNER REVISIONS

COUNTY REVISIONS

C:\Users\rcrouch\Documents\Projects\02-GRADING-PLANS.dwg

GENERAL LAND CONSERVATION NOTES
(FAIRFAX COUNTY PUBLIC FACILITIES MANUAL - SECTION 11)

- 11-0406.1 (38-93-PFM) NO DISTURBED AREA WHICH IS NOT ACTIVELY BEING WORKED SHALL REMAIN DENuded FOR MORE THAN 14 CALENDAR DAYS UNLESS OTHERWISE AUTHORIZED BY THE DIRECTOR.
11-0406.2 ALL E&S CONTROL MEASURES APPROVED WITH THE PHASE I E&S CONTROL PLAN SHALL BE PLACED AS THE FIRST STEP IN GRADING.
11-0406.3 (38-93-PFM) ALL STORM AND SANITARY SEWER LINES NOT IN STREETS SHALL BE SEEDED AND MULCHED WITHIN 14 DAYS AFTER BACKFILL. NO MORE THAN 500' (150 M) SHALL BE OPEN AT ANY ONE TIME.
11-0406.4 (38-93-PFM) ELECTRIC POWER, TELEPHONE AND GAS SUPPLY TRENCHES SHALL BE COMPACTED, SEEDED AND MULCHED WITHIN 14 DAYS AFTER BACKFILL.
11-0406.5 (38-93-PFM) ALL TEMPORARY EARTH BERMS, DIVERSIONS AND SEDIMENT CONTROL DAMS SHALL BE SEEDED AND MULCHED FOR TEMPORARY VEGETATIVE COVER IMMEDIATELY (AS SOON AS POSSIBLE BUT NO LATER THAN 48 HR) AFTER COMPLETION OF GRADING. STRAW OR HAY MULCH IS REQUIRED. ALL SOIL STOCKPILES SHALL BE SEEDED AND MULCHED WITHIN 14 DAYS AFTER GRADING.
11-0406.6 DURING CONSTRUCTION, ALL STORM SEWER INLETS SHALL BE PROTECTED BY SEDIMENT TRAPS, MAIN-TAINED AND MODIFIED DURING CONSTRUCTION PROGRESS AS REQUIRED.
11-0406.7 ANY DISTURBED AREA NOT COVERED BY § 11-0406.1 AND NOT PAVED, SODDED OR BUILT UPON BY NOVEMBER 1, OR DISTURBED AFTER THAT DATE, SHALL BE MULCHED IMMEDIATELY WITH HAY OR STRAW MULCH AT THE RATE OF 2 TONS/ACRE (4483 KG/HA) AND OVER-SEEDED BY APRIL 15.
11-0406.8 AT THE COMPLETION OF ANY PROJECT CONSTRUCTION AND PRIOR TO BOND RELEASE, ALL TEMPORARY SEDIMENT CONTROLS SHALL BE REMOVED AND ALL DENuded AREAS SHALL BE STABILIZED.

MINIMUM STANDARDS

- MS-1. 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 7 DAYS TO DENuded AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR. (TEMPORARY AND PERMANENT STABILIZATION SHALL BE PER VESCH SEC. 3.31 & 3.32)
MS-2. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES 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.
MS-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.
MS-4. SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.
MS-5. STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES, AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.
MS-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 DRAINAGE AREAS GREATER THAN OR EQUAL TO THREE ACRES SHALL BE CONTROLLED BY SEDIMENT BASINS. THE MINIMUM STORAGE CAPACITY FOR 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 TWENTY-FIVE YEAR STORM OF 24-HOUR DURATION. RUNOFF COEFFICIENTS USED IN RUNOFF CALCULATIONS SHALL APPLY TO A BARE EARTH CONDITION OR THOSE CONDITIONS EXPECTED TO EXIST WHILE THE SEDIMENT BASIN IS UTILIZED.
MS-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.
MS-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.
MS-9. WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.
MS-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.
MS-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.
MS-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 POSSIBLE EXTENT DURING CONSTRUCTION. NON-ERODIBLE MATERIAL SHALL BE USED FOR THE CONSTRUCTION OF CAUSEWAYS AND COFFERDAMS. EARTHEN FILL MAY BE USED FOR THESE STRUCTURES IF ARMORED BY NON-ERODIBLE COVER MATERIALS.
MS-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 NON-ERODIBLE MATERIAL SHALL BE PROVIDED.
MS-14. ALL APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS PERTAINING TO WORKING IN OR CROSSING LIVE WATERCOURSES SHALL BE MET.
MS-15. THE BED AND BANKS OF A WATERCOURSE SHALL BE STABILIZED IMMEDIATELY AFTER WORK IN THE WATERCOURSE IS COMPLETED.
MS-16. UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA:
A. NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.
B. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPSHILL SIDE OF TRENCHES.
C. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.
D. MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION. (GENERAL LAND CONSERVATION NOTE #4)
E. RE-STABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THESE REGULATIONS.
F. APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH.
MS-17. WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED OR PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY VEHICULAR TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PAVED OR PUBLIC ROAD SURFACE, THE ROAD SURFACE SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER. THIS PROVISION SHALL APPLY TO INDIVIDUAL DEVELOPMENT LOTS AS WELL AS TO LARGER LAND-DISTURBING ACTIVITIES.
MS-18. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE AUTHORIZED BY THE LOCAL PROGRAM. TRAPPED SEDIMENT AND DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.
MS-19. PROPERTIES AND WATERWAYS DOWNSTREAM FROM DEVELOPMENT SITES SHALL BE PROTECTED FROM SEDIMENT DEPOSITION, EROSION, AND DAMAGE DUE TO INCREASES IN VOLUME, VELOCITY, AND PEAK FLOW RATE OF STORMWATER RUNOFF FOR THE STATED FREQUENCY STORM OF 24-HOUR DURATION IN ACCORDANCE WITH THE FOLLOWING STANDARDS AND CRITERIA:
A. CONCENTRATED STORMWATER RUNOFF LEAVING A DEVELOPMENT SITE SHALL BE DISCHARGED DIRECTLY INTO AN ADEQUATE NATURAL OR MAN-MADE RECEIVING CHANNEL, PIPE, OR STORM SEWER SYSTEM. FOR THOSE SITES WHERE RUNOFF IS DISCHARGED INTO A PIPE OR PIPE SYSTEM, DOWNSTREAM STABILITY ANALYSES AT THE OUTFALL OF THE PIPE OR PIPE SYSTEM SHALL BE PERFORMED.
B. ADEQUACY OF ALL CHANNELS AND PIPES SHALL BE VERIFIED IN THE FOLLOWING MANNER:
I. THE APPLICANT SHALL DEMONSTRATE THAT THE TOTAL DRAINAGE AREA TO THE POINT OF ANALYSIS WITHIN THE CHANNEL IS ONE HUNDRED TIMES GREATER THAN THE CONTRIBUTING DRAINAGE AREA OF THE PROJECT IN QUESTION; OR
II. (A) NATURAL CHANNELS SHALL BE ANALYZED BY THE USE OF A TWO-YEAR STORM TO VERIFY THAT STORMWATER WILL NOT OVERTOP CHANNEL BANKS NOR CAUSE EROSION OF CHANNEL BED OR BANKS; AND (B) ALL PREVIOUSLY CONSTRUCTED MAN-MADE CHANNELS SHALL BE ANALYZED BY THE USE OF A TEN-YEAR STORM TO VERIFY THAT STORMWATER WILL NOT OVERTOP ITS BANKS AND BY THE USE OF A TWO-YEAR STORM TO DEMONSTRATE THAT STORMWATER WILL NOT CAUSE EROSION OF CHANNEL BED OR BANKS; AND (C) PIPES AND STORM SEWER SYSTEMS SHALL BE ANALYZED BY THE USE OF A TEN-YEAR STORM TO VERIFY THAT STORMWATER WILL BE CONTAINED WITHIN THE PIPE OR SYSTEM.
C. IF EXISTING NATURAL RECEIVING CHANNELS OR PREVIOUSLY CONSTRUCTED MAN-MADE CHANNELS OR PIPES ARE NOT ADEQUATE, THE APPLICANT SHALL:
I. IMPROVE THE CHANNEL TO A CONDITION WHERE A TEN-YEAR STORM WILL NOT OVERTOP THE BANKS AND A TWO-YEAR STORM WILL NOT CAUSE EROSION TO THE CHANNEL BED OR BANKS; OR
II. IMPROVE THE PIPE OR PIPE SYSTEM TO A CONDITION WHERE THE TEN-YEAR STORM IS CONTAINED WITHIN THE APPURTENANCES; OR
III. DEVELOP A SITE DESIGN THAT WILL NOT CAUSE THE PRE-DEVELOPMENT PEAK RUNOFF RATE FROM A TWO-YEAR

STORM TO INCREASE WHEN RUNOFF OUTFALLS INTO A NATURAL CHANNEL, OR WILL NOT CAUSE THE PRE-DEVELOPMENT PEAK RUNOFF RATE FROM A TEN-YEAR STORM TO INCREASE WHEN RUNOFF OUTFALLS INTO A MAN-MADE CHANNEL; OR
IV. PROVIDE A COMBINATION OF CHANNEL IMPROVEMENT, STORMWATER DETENTION, OR OTHER MEASURES TO PREVENT DOWNSTREAM EROSION SATISFACTORY TO THE PLAN-APPROVING AUTHORITY.
D. THE APPLICANT SHALL PROVIDE EVIDENCE OF PERMISSION TO MAKE THE IMPROVEMENTS.
E. ALL HYDROLOGIC ANALYSES SHALL BE BASED ON THE EXISTING WATERSHED CHARACTERISTICS AND THE ULTIMATE DEVELOPMENT OF THE SUBJECT PROJECT.
F. IF THE APPLICANT CHOOSES AN OPTION THAT INCLUDES STORMWATER DETENTION, HE SHALL OBTAIN APPROVAL FROM THE LOCALITY OF A PLAN FOR MAINTENANCE OF THE DETENTION FACILITIES. THE PLAN SHALL SET FORTH MAINTENANCE REQUIREMENTS OF THE FACILITY AND DESIGNATE THE PERSON RESPONSIBLE FOR PERFORMING THE MAINTENANCE.
G. OUTFALL FROM A DETENTION FACILITY SHALL BE DISCHARGED TO A RECEIVING CHANNEL, AND ENERGY DISSIPATORS PLACED AT THE OUTFALL OF THE DETENTION FACILITIES AS NECESSARY TO PROVIDE A STABLE TRANSITION FROM THE FACILITY TO THE RECEIVING CHANNEL.
H. ALL ON-SITE CHANNELS MUST BE VERIFIED TO BE ADEQUATE.
I. INCREASED VOLUMES OF SHEET FLOWS CAUSING EROSION OR SEDIMENTATION ON ADJACENT PROPERTY SHALL BE DIVERTED TO A STABLE OUTLET, ADEQUATE CHANNEL, PIPE OR PIPE SYSTEM, OR TO A DETENTION FACILITY. IN APPLYING THESE STORMWATER RUNOFF CRITERIA, INDIVIDUAL LOTS OR PARCELS IN A RESIDENTIAL, COMMERCIAL, OR INDUSTRIAL DEVELOPMENT SHALL NOT BE CONSIDERED TO BE SEPARATE DEVELOPMENT PROJECTS. INSTEAD, THE DEVELOPMENT AS A WHOLE SHALL BE TREATED AS A SINGLE PROJECT. HYDROLOGIC PARAMETERS THAT REFLECT THE ULTIMATE DEVELOPMENT STATE SHALL BE USED IN ALL ENGINEERING CALCULATIONS.
K. ALL MEASURES USED TO PROTECT PROPERTIES AND WATERWAYS SHALL BE EXECUTED IN A MANNER THAT MINIMIZES THE IMPACT ON THE PHYSICAL, CHEMICAL, AND BIOLOGICAL INTEGRITY OF RIVERS, STREAMS, AND OTHER STATE WATERWAYS.

EROSION AND SEDIMENT CONTROL NARRATIVE

PROJECT DESCRIPTION
THIS PLAN IS FOR THE CONSTRUCTION OF A DECK, PATIO AND POOL AND ASSOCIATED GRADING AND DRAINAGE APPROXIMATELY 4,950 SF (0.11 ACRES) WILL BE DISTURBED WITH THIS PLAN. THE CONSTRUCTION ACCESS WILL BE OFF OF THE CUL-DE-SAC OF PERCHERON LANE WHICH IS LOCATED AT 12917 PERCHERON LANE, OAK HILL, VA 20171. THERE IS NO OFFSITE DISTURBANCE PROPOSED FOR THIS PROJECT.

EXISTING SITE CONDITION
THE EXISTING SITE IS A SINGLE FAMILY HOME WITH A DRIVEWAY, DECK AND SIDEWALKS. THE LOT IS MOSTLY OPEN GRASS WITH SEVERAL TREES ON THE PARCEL. THE SITE DRAINS MAINLY TO THE SOUTH AND ULTIMATELY INTO A NATURAL SWALE. THE SITE IS WITHIN THE CUB RUN WATERSHED.

ADJACENT AREAS
THE SITE IS BORDERED ON THE NORTH SOUTH AND WEST BY SINGLE FAMILY HOUSES. THERE IS AN SWM POND AND OPEN SPACE TO THE WEST OF THE PARCEL. PERCHERON LANE IS ON THE NORTH SIDE OF THE LOT.

OFF-SITE AREAS
IT IS NOT ANTICIPATED THAT ANY OFF-SITE PROPERTY WILL BE DISTURBED

CRITICAL AREAS
THERE ARE NO CRITICAL AREAS THAT ARE EXPECTED TO BE IMPACTED AS PART OF THIS CONSTRUCTION.

SOILS
SEE COVER SHEET, SHEET 1 FOR SOILS.

EROSION AND SEDIMENT CONTROL MEASURES

- 1. SILT FENCE - 3.05
SILT FENCE SEDIMENT BARRIERS WILL BE INSTALLED DOWNSLOPE OF AREAS WITH MINIMAL GRADES TO FILTER SEDIMENT-LADEN SHEET FLOW AS INDICATED ON THE PLANS. AS INDICATED ON THE PLANS, IN AREAS WHERE THE SILT FENCE WILL BE TREATING LARGER AREAS.
2. TREE PROTECTION - 3.38
TREE PROTECTION SHALL BE PROVIDED AS SHOWN ON THE PLAN TO ENSURE SURVIVAL OF DESIRABLE TREES WHERE THEY WILL BE EFFECTIVE FOR EROSION AND SEDIMENT CONTROL.
3. TEMPORARY CONSTRUCTION ENTRANCE - 3.02
A TEMPORARY CONSTRUCTION ENTRANCE WITH A WASH RACK SHALL BE INSTALLED AS SHOWN ON THE PLAN. DURING MUDDY CONDITIONS, DRIVERS OF CONSTRUCTION VEHICLES WILL BE REQUIRED TO WASH THEIR WHEELS BEFORE ENTERING PERCHERON LANE.

VEGETATIVE PRACTICES (SEE SHEET 4 FOR DETAILS)

- 1. TOPSOILING (STOCKPILE) - 3.30
TOPSOIL WILL BE STRIPPED FROM AREAS TO BE GRADED AND STOCKPILED FOR LATER USE. STOCKPILE LOCATIONS ARE TO BE STABILIZED WITH TEMPORARY VEGETATION. PRIOR TO LAND-DISTURBING ACTIVITIES, THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION & SEDIMENT PLAN TO THE OWNER COVERING THE STOCKPILE AREA WHICH MAY HAVE TO BE APPROVED BY THE PLAN APPROVING AUTHORITY BEFORE ANY ACTIVITY COMMENCES.
2. TEMPORARY SEEDING - 3.31
ALL DENuded AREAS WHICH WILL BE LEFT DORMANT FOR EXTENDED PERIODS OF TIME SHALL BE SEEDED WITH FAST GERMINATING TEMPORARY VEGETATION IMMEDIATELY FOLLOWING GRADING. SELECTION OF THE SEED MIXTURE WILL DEPEND ON THE TIME OF YEAR IT IS APPLIED.
3. PERMANENT SEEDING - 3.32
PLANTING SEED WILL BE INSTALLED ON DISTURBED AREAS TO REDUCE EROSION AND DECREASE SEDIMENT.

MANAGEMENT STRATEGIES

- PHASE I:
1. CONSTRUCTION WILL BE SEQUENCED SO THAT DEMOLITION OPERATIONS CAN BEGIN AND END AS QUICKLY AS POSSIBLE.
2. CLEAR ONLY THE AREAS AS SHOWN ON EROSION AND SEDIMENT CONTROL PHASE I PLAN FOR THE INSTALLATION OF PERIMETER CONTROLS SUCH AS SILT FENCE, TREE PROTECTION, AND CONSTRUCTION ENTRANCE, ETC. SHALL BE INSTALLED AS A FIRST STEP PER THE PHASE I EROSION & SEDIMENT CONTROL PLAN. THE MUD SHALL BE REMOVED FROM VEHICLES BEFORE ENTERING THE ROADWAY. A TANKER TRUCK SHALL BE USED IF A WATER SOURCE IS NOT AVAILABLE.
PHASE II:
1. PHASE II OF THE EROSION AND SEDIMENT CONTROL PROGRAM MAY BEGIN ONLY AFTER THE CONTRACTOR OBTAINS AN APPROPRIATE AUTHORIZATION FROM THE SITE INSPECTOR.
2. DEMOLITION OPERATIONS MAY COMMENCE ONCE PERIMETER CONTROLS ARE INSTALLED TO THE SATISFACTION OF THE SITE INSPECTOR.
3. AREAS THAT ARE NOT TO BE DISTURBED WILL BE CLEARLY MARKED BY FLAGS, SIGNS, ETC.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES.
5. AFTER ACHIEVING ADEQUATE STABILIZATION, THE TEMPORARY EROSION & SILTATION CONTROLS WILL BE CLEANED UP AND REMOVED AT THE DIRECTION OF THE SITE INSPECTOR.

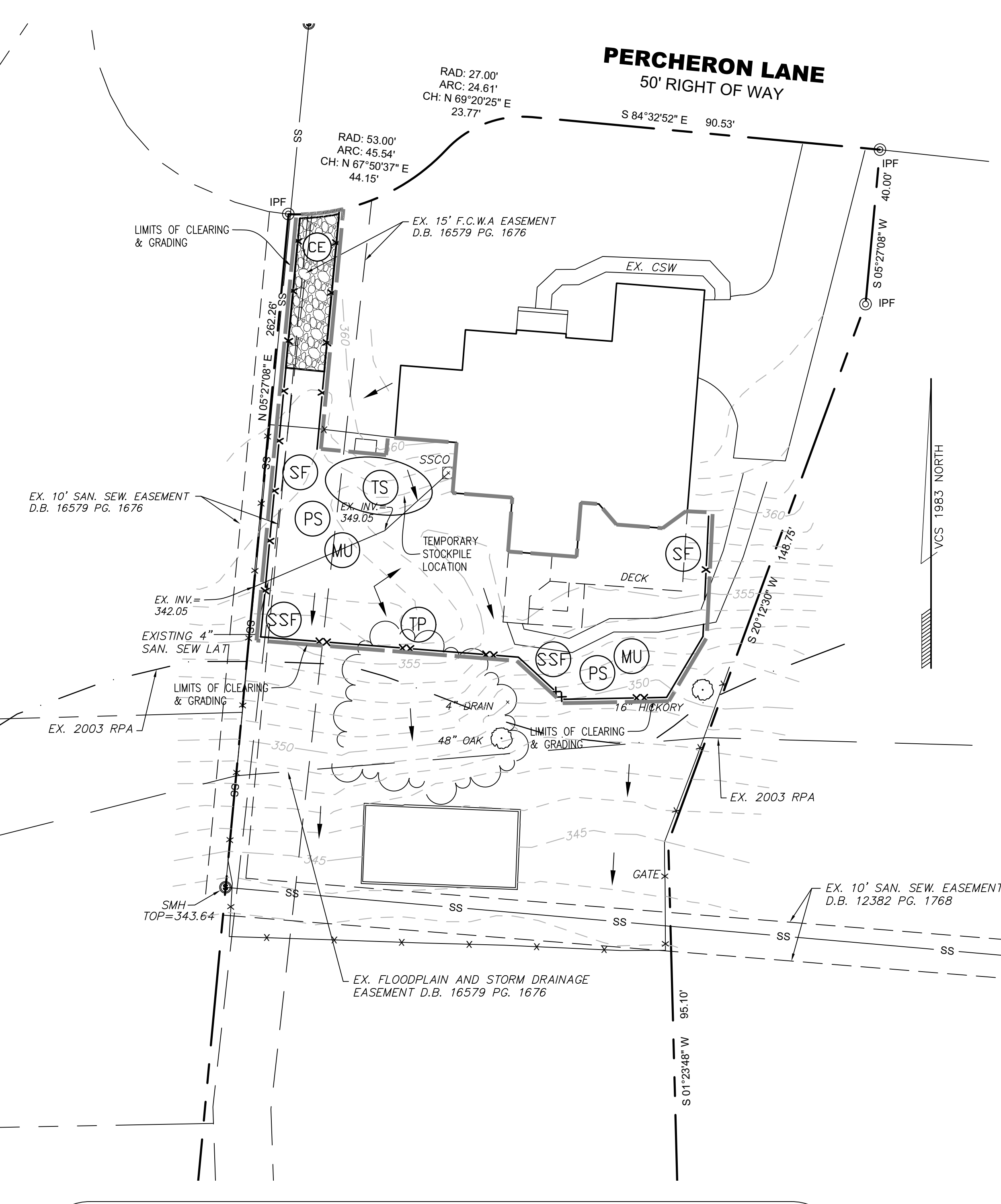
OUTFALL ANALYSIS DURING CONSTRUCTION
DURING CONSTRUCTION WATER WILL OUTFALL WITH ITS NATURAL PATH THRU EROSION AND SEDIMENT CONTROL MEASURES

- NOTES:
1. THERE ARE NO STOCKPILES EXCEPT FOR TOPSOIL PROPOSED WITH THIS PLAN. THE SOIL REMOVED WHEN DIGGING THE FOUNDATION WILL BE IMMEDIATELY SPREAD AROUND THE SITE WITHIN THE PROPOSED CLEARING LIMITS AND STABILIZED TO BRING THE SITE TO FINAL GRADE. ANY SOIL IN EXCESS OR SOIL DESIGNATED AS UNSUITABLE, WILL BE HAULED AWAY IMMEDIATELY.
2. THERE WILL BE NO EXCESS SOIL MATERIAL ONSITE; ALL EXCESS MATERIAL WILL BE HAULED OFFSITE.
3. THE GRADING/EXCAVATION CONTRACTOR FOR THE SUBJECT SITE IS REQUIRED TO NOTIFY, IN WRITING, THE ASSIGNED SITE INSPECTOR REGARDING ANY EXCESS MATERIAL PROPOSED TO BE HAULED OFFSITE PRIOR TO HAULING. THE NOTIFICATION MUST INDICATE THE QUANTITY OF MATERIAL TO BE MOVED OFFSITE, IDENTIFICATION OF THE RECEIVING SITE WHERE THE EXCESS WILL BE TAKEN, AND ALL INFORMATION NECESSARY TO SHOW THAT SUCH RECEIVING SITE HAS BEEN PROPERLY PERMITTED AND HAS E&S CONTROLS INSTALLED.
4. DUST CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH VESCH SECTION 3.39.

LEGEND table with symbols for CE (CONSTRUCTION ENTRANCE), SF (SILT FENCE), SSF (SUPER SILT FENCE), PS (PERMANENT SEEDING), TS (TEMPORARY SEEDING), MU (MULCHING)

- NOTES:
1. THERE ARE NO STOCKPILES EXCEPT FOR TOPSOIL PROPOSED WITH THIS PLAN. THE SOIL REMOVED WHEN DIGGING THE FOUNDATION WILL BE IMMEDIATELY SPREAD AROUND THE SITE WITHIN THE PROPOSED CLEARING LIMITS AND STABILIZED TO BRING THE SITE TO FINAL GRADE. ANY SOIL IN EXCESS OR SOIL DESIGNATED AS UNSUITABLE, WILL BE HAULED AWAY IMMEDIATELY.
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4. DUST CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH VESCH SECTION 3.39.

OUTFALL ANALYSIS DURING CONSTRUCTION
DURING CONSTRUCTION WATER WILL OUTFALL WITH ITS NATURAL PATH THRU EROSION AND SEDIMENT CONTROL MEASURES



THIS SHEET FOR EROSION AND SEDIMENT CONTROL PURPOSE ONLY

Revisions table with columns for NO., DATE, DESCRIPTION, and BY, divided into ENGINEER/OWNER REVISIONS and COUNTY REVISIONS.

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APPROVED 4 Before you start work you are required to notify the site inspector at 703-324-1720. Failure to notify can result in a violation and a charge per the compliance inspection.
Plan Number: 009820-CON -002- Date: 03/01/22 Stamped By: Manish Joshi

GEOTECHNICAL NOTES
SUBSOILS ARE NOT EXPECTED TO BE ENCOUNTERED WITH THE PROPOSED CONSTRUCTION ACTIVITY. SEASONAL INFLUENCES SUCH AS PRECIPITATION, SURFACE RUNOFF, EVAPORATION, AND OTHER FACTORS WILL INFLUENCE THE GROUND WATER LEVEL. IF GROUND WATER IS DETERMINED TO BE AN ISSUE DURING CONSTRUCTION A GEOTECHNICAL ENGINEERING SHALL DETERMINE THE EXTENT OF ANY NECESSARY MITIGATION PRIOR TO CONTINUING CONSTRUCTION ACTIVITY. THE CONTRACTOR MUST BE PREPARED TO PROVIDE CONSTRUCTION DEWATERING.
ADEQUATE DRAINAGE MUST BE PROVIDED TO MINIMIZE ANY INCREASE IN MOISTURE CONTENT OF THE FOUNDATION SOILS. THE SITE DRAINAGE SHALL ALSO BE SUCH THAT THE RUNOFF ONTO ADJACENT PROPERTIES IS CONTROLLED PROPERLY.
FILL PLACEMENT AND COMPACTION OPERATIONS SHALL EXTEND AT LEAST 10 FEET LATERALLY BEYOND STRUCTURAL BOUNDARIES. ALL MATERIAL USED AS FILL SHALL BE TESTED AND APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO USE. A SUFFICIENT NUMBER OF IN-PLACE DENSITY TEST MUST BE PERFORMED TO VERIFY THAT THE PROPER DEGREE OF COMPACTION IS BEING OBTAINED ON ALL FILL SOILS.
EXCAVATION SAFETY OF ADJACENT PROPERTY OWNERS- REVIEW AND APPROVAL OF PLANS, SPECIFICATIONS, AND REPORTS BY THE COUNTY, WITH OR WITHOUT RECOMMENDATIONS BY THE GEOTECHNICAL REVIEW BOARD, SHALL IN NO WAY RELIEVE THE DEVELOPER OF THE RESPONSIBILITY FOR THE DESIGN, CONSTRUCTION AND PERFORMANCE OF THE STRUCTURES, PAVEMENT, AND SLOPES OF THE PROJECT AND DAMAGE TO SURROUNDING PROPERTIES.

CURT R. CROUCH, P.E.

4995 CROUCH LANE
MIDLAND, VIRGINIA 22728
EMAIL: CROUCH.CURT@GMAIL.COM
TELEPHONE: 540.359.1636

RIEGER, ANDREW L.
THOMPSON ROAD PROPERTY
LT 27
12917 PERCHERON LANE
OAK HILL, VA 20171
SULLY DISTRICT
FAIRFAX COUNTY, VIRGINIA

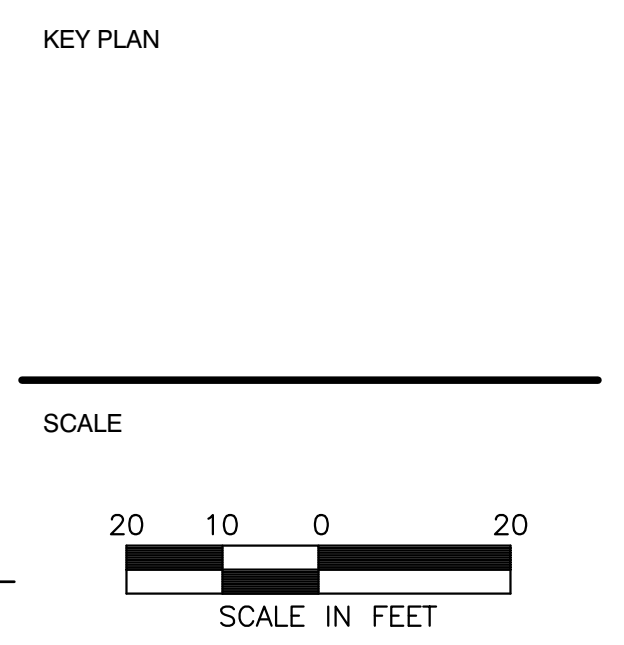
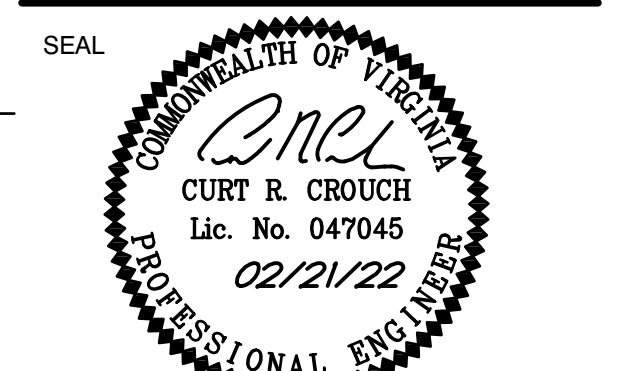
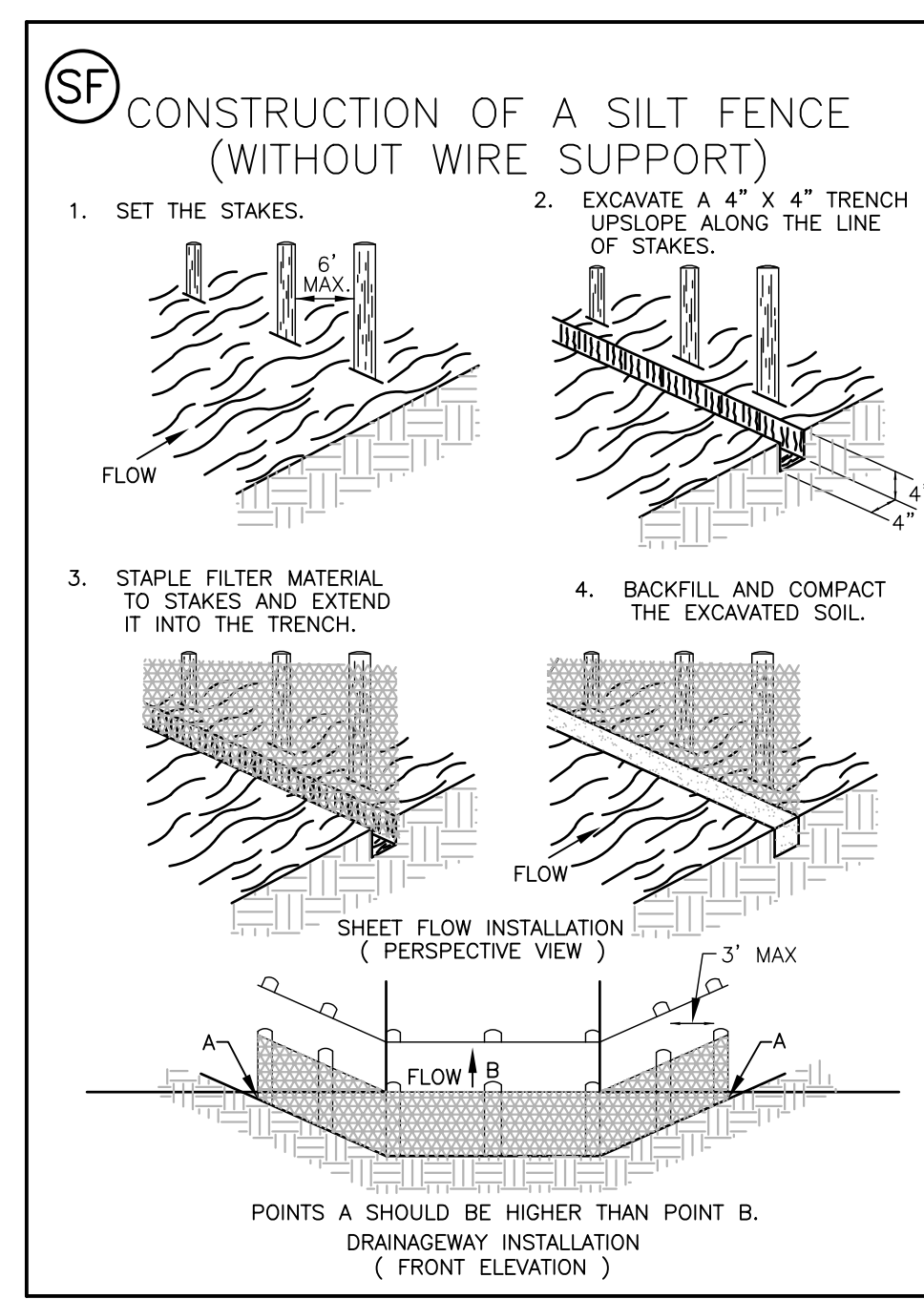
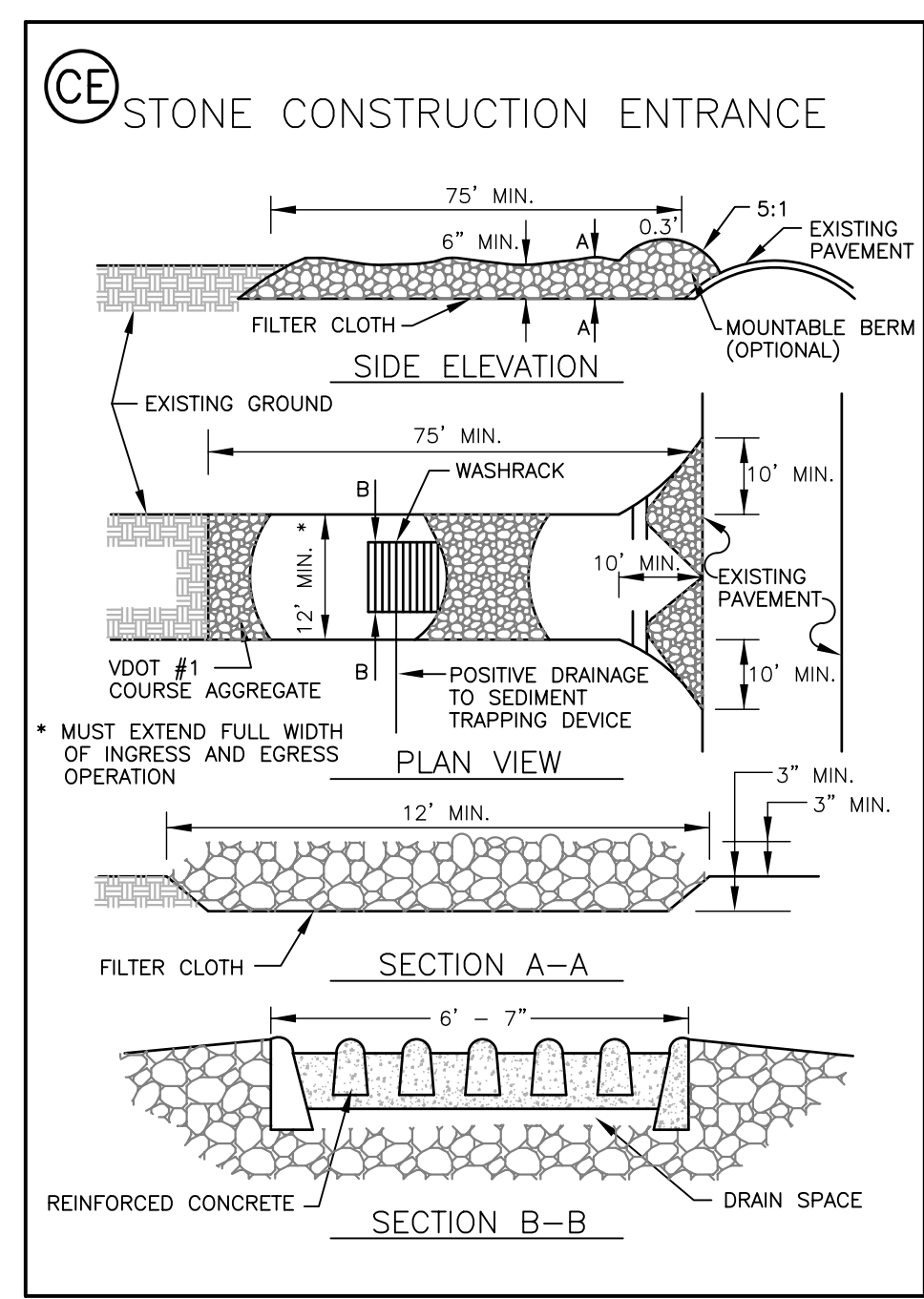
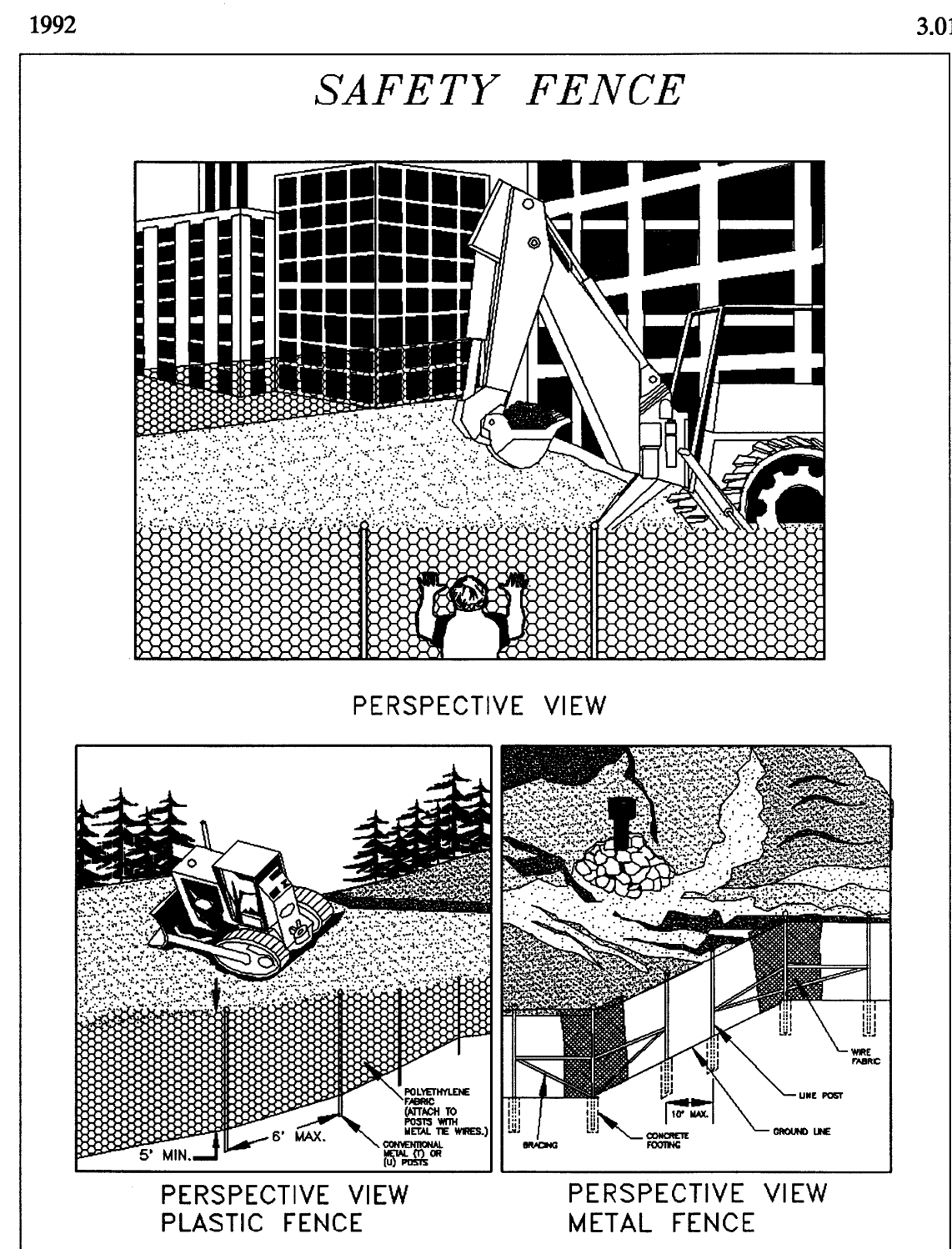


Table with columns for No., DATE, BY, and Description for revisions.

DRAWN BY CC
APPROVED BY CC
CHECKED BY CC
DATE NOVEMBER 2021

TITLE
EROSION AND SEDIMENT CONTROL PLAN AND NARRATIVE

PROJECT NO. 9820-CON-002-1.1



FAIRFAX COUNTY PRIORITY RATING FORM FOR EROSION & SEDIMENT CONTROL

PROJECT NAME: THOMPSON ROAD PROPERTY PROJECT NUMBER: _____
 TAX MAP: 0353 26 0027 EVALUATOR: CURT CROUCH DATE: 11-12-21

A. Percentage of Denuded Area to Total Site Area		F. Distance Between the Site Outfall and any Downstream, Wet Pond, Wetland, Parkland or other Land Deemed Environmentally Sensitive by the Director.	
• >60%	Rating 5	• <2,500-feet	Rating 5
• 31 to 60%	Rating 3	• 2,500 to 5,000-feet	Rating 3
• 10 to 30%	Rating 1	• >5,000-feet	Rating 0

If the denuded area is greater than 10 acres, the project is initially rated a high priority.

B. Watercourse Crossing		G. Critical Slopes Within 50-feet of Adjacent Property	
Yes	Rating 0	• Are there any slopes of 0 to 7%; greater than or equal to 300-feet in length; or,	Rating 5
No	Rating 0	• Are there any slopes of 7 to 15%; greater than or equal to 150-feet in length; or,	Rating 3
*If yes, project is initially rated a high priority.		• Are there any slopes greater than 15% and greater than or equal to 75-feet in length	Rating 0

C. Distance of Denuded Area to Downstream Adjacent Property		H. Soil Erodibility (Based on Physiographic Setting)	
• <50-feet	Rating 5	Physiographic Province	Rating
• 50 to 150-feet	Rating 3	• Triassic Basin	Rating 5
• >150-feet	Rating 0	• Piedmont Upland	Rating 3
*Minimum Vegetative Buffer (Trees, Shrubs, Grasses and other Plants)		• Coastal Plain	Rating 1
• <50-feet	Rating 0	TOTAL/OVERALL RATING: 15	
• 50 to 150-feet	Rating -3		
• >150-feet	Rating -5		

*Vegetation in Resource Protection Areas are not to be included as vegetative buffers for this application.

OVERALL RATING **PRIORITY** (Mark with an "X")

If > 22 High

If > 14 and < or = to 22 Medium

If < or = to 14 Low

PROJECT PRIORITY LEVEL: MEDIUM

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APPROVED BY: _____ DATE: _____
Plan Reviewer

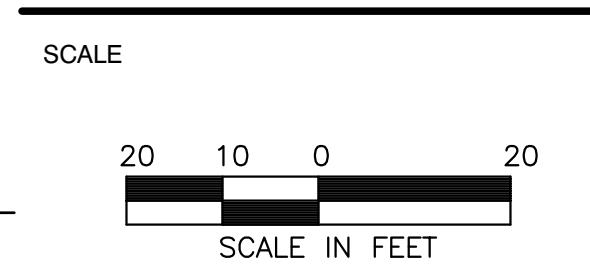
Descriptions on Reverse Side

4995 CROUCH LANE
 MIDLAND, VIRGINIA 22728
 EMAIL: CROUCH.CURT@GMAIL.COM
 TELEPHONE: 540.359.1636

RIEGER, ANDREW L.
 THOMPSON ROAD PROPERTY
 LT 27
 12917 PERCHERON LANE
 OAK HILL, VA 20171
SULLY DISTRICT
 FAIRFAX COUNTY, VIRGINIA



KEY PLAN



No.	DATE	BY	Description

DRAWN BY: CC
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 DATE: NOVEMBER 2021

TITLE
EROSION AND SEDIMENT DETAILS AND NOTES

PROJECT NO. 9820-CON-002-1.1

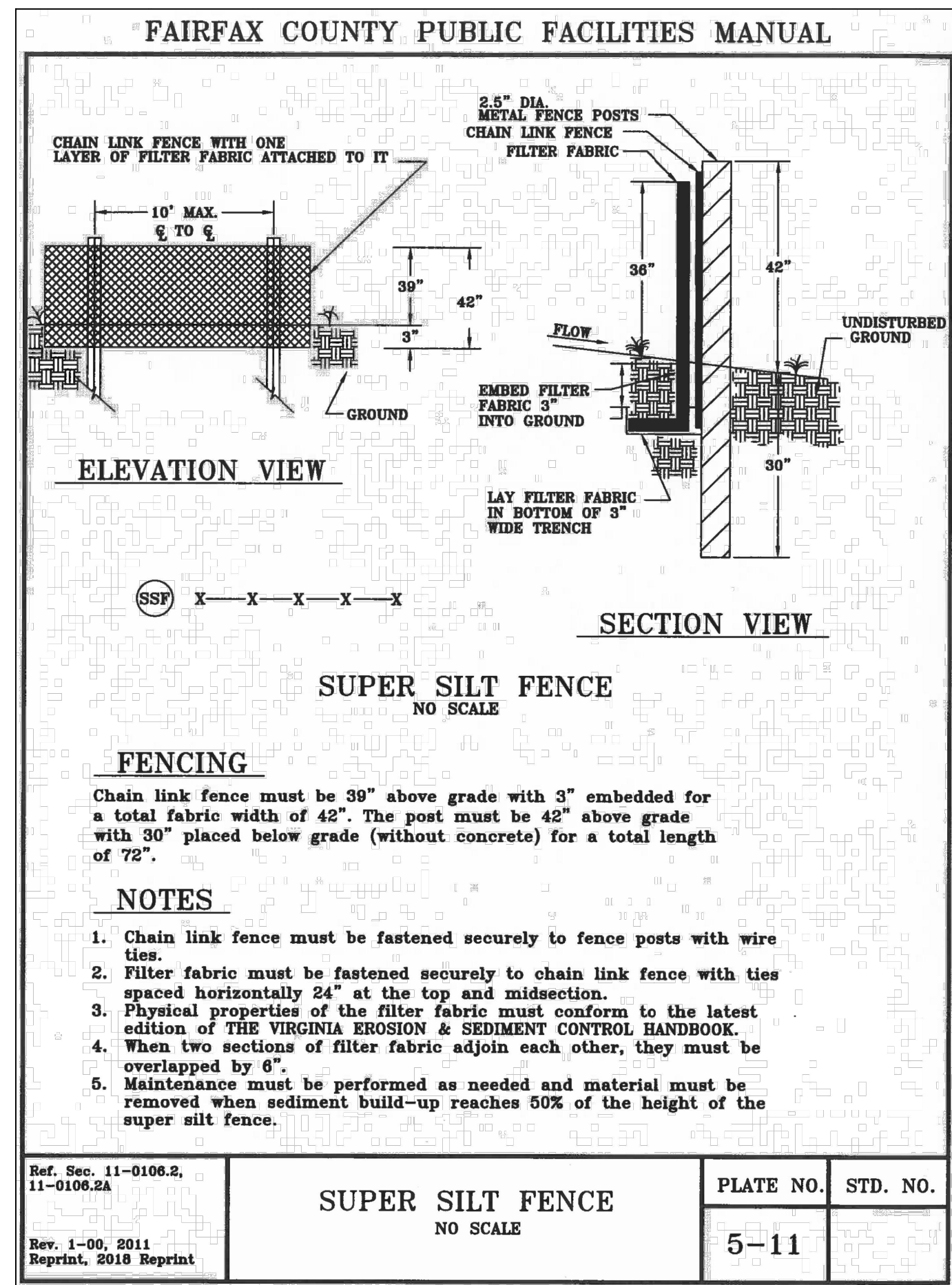


TABLE 3.32-D

SITE SPECIFIC SEEDING MIXTURES FOR PIEDMONT AREA

MINIMUM CARE LAWN	TOTAL LBS. PER ACRE
- COMMERCIAL OR RESIDENTIAL - KENTUCKY 31 OR TURF-TYPE TALL FESCUE - IMPROVED PERENNIAL RYEGRASS - KENTUCKY BLUEGRASS	175-200 LBS 95-100% 0-5% 0-5%
HIGH-MAINTENANCE LAWN	200-250 LBS
- KENTUCKY 31 OR TURF-TYPE TALL FESCUE	100%
GENERAL SLOPE (3:1 OR LESS)	
- KENTUCKY 31 FESCUE	128 LBS
- RED TOP GRASS	2 LBS
- SEASONAL NURSE CROP *	20 LBS
	150 LBS
LOW-MAINTENANCE SLOPE (STEEPER THAN 3:1)	
- KENTUCKY 31 FESCUE	108 LBS
- RED TOP GRASS	2 LBS
- SEASONAL NURSE CROP *	20 LBS
- CROWNWETCH **	150 LBS

* USE SEASONAL NURSE CROP IN ACCORDANCE WITH SEEDING DATES AS STATED BELOW:
 FEBRUARY 16TH THROUGH APRIL.....ANNUAL RYE
 MAY 1ST THROUGH AUGUST 15TH.....FOXTAIL MILLET
 AUGUST 16TH THROUGH OCTOBER.....ANNUAL RYE
 NOVEMBER THROUGH FEBRUARY 15TH.....WINTER RYE

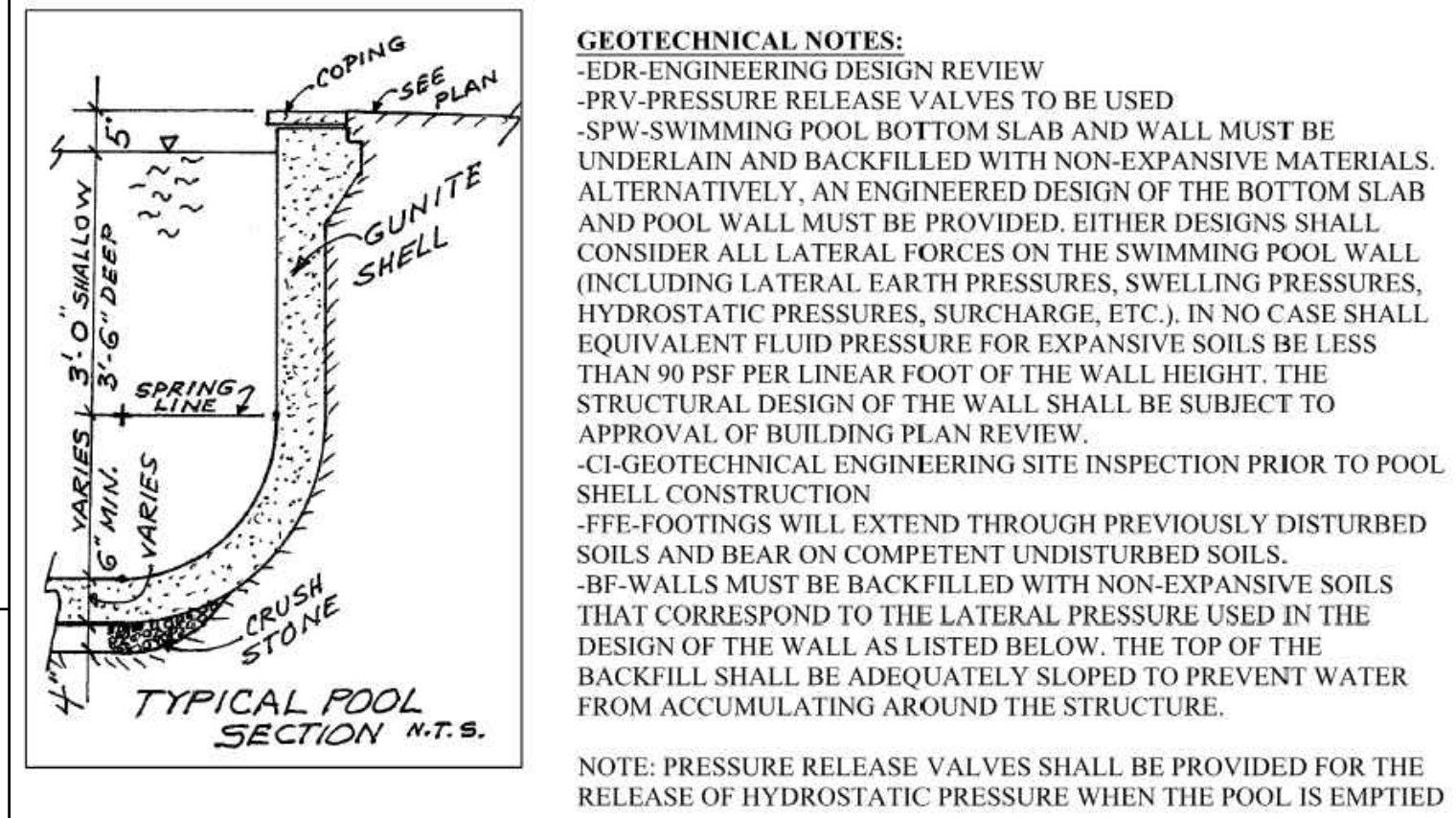
** SUBSTITUTE SERICEA LESPEDEZA FOR CROWNWETCH EAST OF FARMVILLE, VA. (MAY THROUGH SEPTEMBER USE HULLED SERICEA, ALL OTHER PERIODS, USE UNHULLED SERICEA). IF FLATPEA IS USED IN LIEU OF CROWNWETCH, INCREASE RATE TO 30 LBS/ACRE. ALL LEGUME SEED MUST BE PROPERLY INOCULATED. WEEPING LEGUMES MAY BE ADDED TO ANY SLOPE OR LOW-MAINTENANCE MIX DURING WARMER SEEDING PERIODS; ADD 10-20 LBS/ACRE IN MIXES.

TABLE 3.31-C

TEMPORARY SEEDING PLANT MATERIALS, SEEDING RATES, AND DATES

SPECIES	SEEDING RATE	NORTH*				SOUTH*		PLANT CHARACTERISTICS
		3/1 TO 4/30	5/1 TO 8/15	8/15 TO 11/1	2/15 TO 4/30	5/1 TO 9/1	9/1 TO 11/15	
OATS (AVENA SATIVA)	3 BU. (UP TO 100 LBS, NOT LESS THAN 50 LBS)	2 LBS	X	-	-	X	-	USE SPRING VARIETIES (E.G., NOBLE).
RYE* (SECALE CEREALE)	2 BU. (UP TO 110 LBS, NOT LESS THAN 50 LBS)	2.5 LBS	X	-	X	X	-	USE FOR LATE FALL SEEDINGS, WINTER COVER. TOLERATES COLD AND LOW MOISTURE.
GERMAN MILLET (SETARIA ITALICA)	50 LBS	APPROX. 1 LB	-	X	-	-	X	WARM-SEASON ANNUAL. DIES AT FIRST FROST. MAY BE ADDED TO SUMMER MIXES.
ANNUAL RYEGRASS* (LOLIUM MULTI-FLORUM)	60 LBS	1 1/2 LBS	X	-	X	X	-	MAY BE ADDED IN MIXES. WILL MOW OUT OF MOST STANDS.
WEEPING LEGUMES* (ERAGROSTIS CURVULA)	15 LBS	5 1/2 OZS	-	X	-	-	X	WARM-SEASON PERENNIAL. MAY BUNCH. TOLERATES HOT, DRY SLOPES AND ACID, INFERTILE SOILS. MAY BE ADDED TO MIXES.
KOREAN LESPEDEZA* (LESPEDeza STIPULACEA)	25 LBS	APPROX. 1 1/2 LBS	X	X	-	X	X	WARM SEASON ANNUAL LEGUME. TOLERATES ACID SOILS. MAY BE ADDED TO MIXES.

* NORTHERN PIEDMONT AND MOUNTAIN REGION. SEE PLATES 3.22-1 AND 3.22-2.
 * SOUTHERN PIEDMONT AND COASTAL PLAN.
 * MAY BE USED AS A COVER CROP WITH SPRING SEEDING.
 * MAY BE USED AS A COVER CROP WITH FALL SEEDING.
 X MAY BE PLANTED BETWEEN THESE DATES.
 - MAY NOT BE PLANTED BETWEEN THESE DATES.



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NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY

ENGINEER/OWNER REVISIONS COUNTY REVISIONS

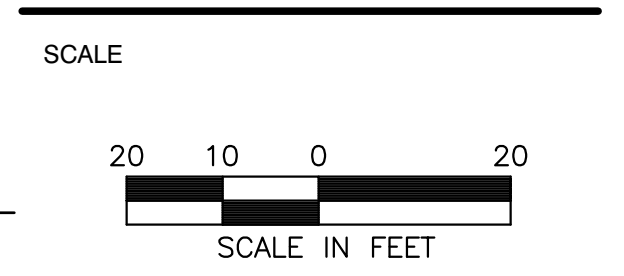
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4995 CROUCH LANE
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KEY PLAN



No.	DATE	BY	Description

REVISIONS

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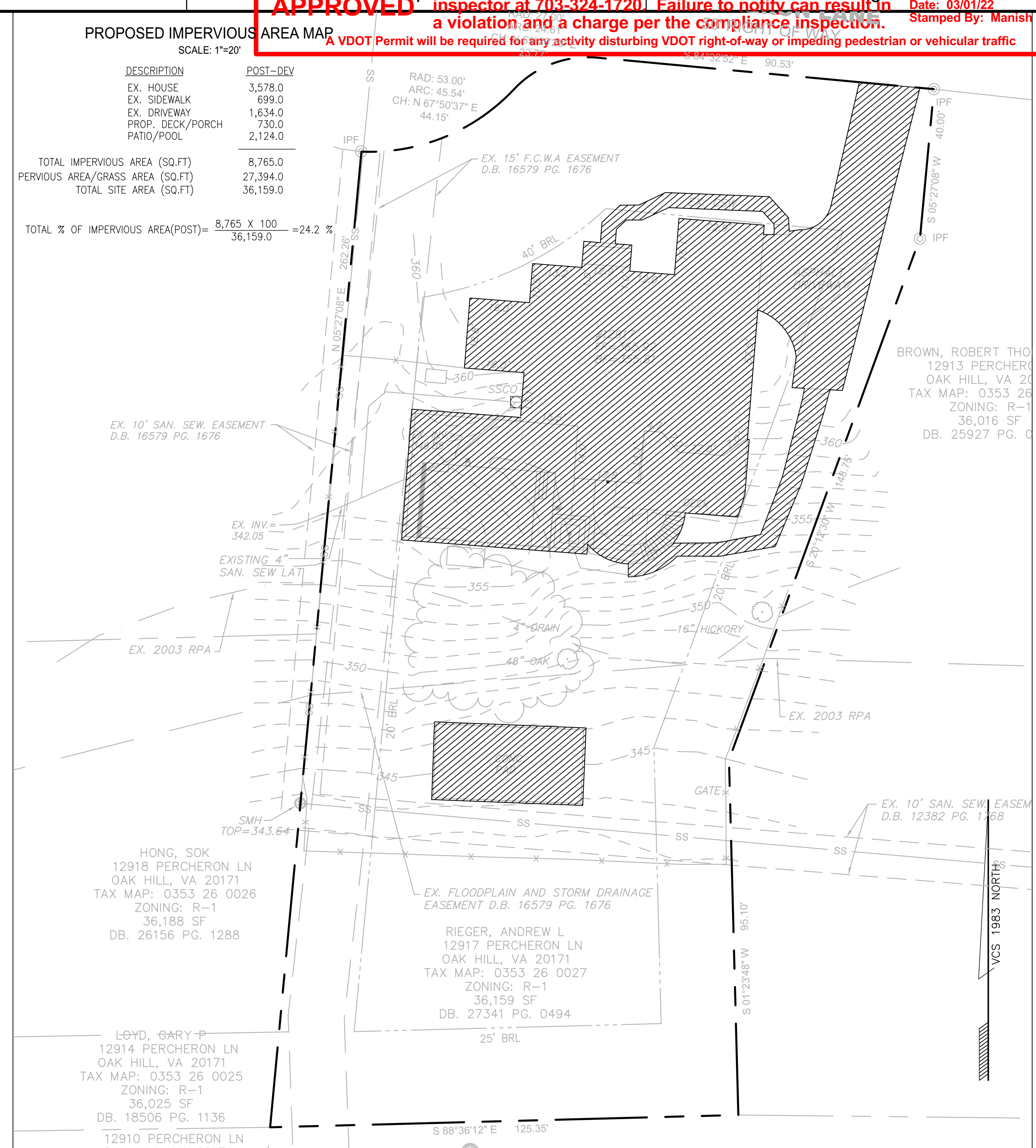
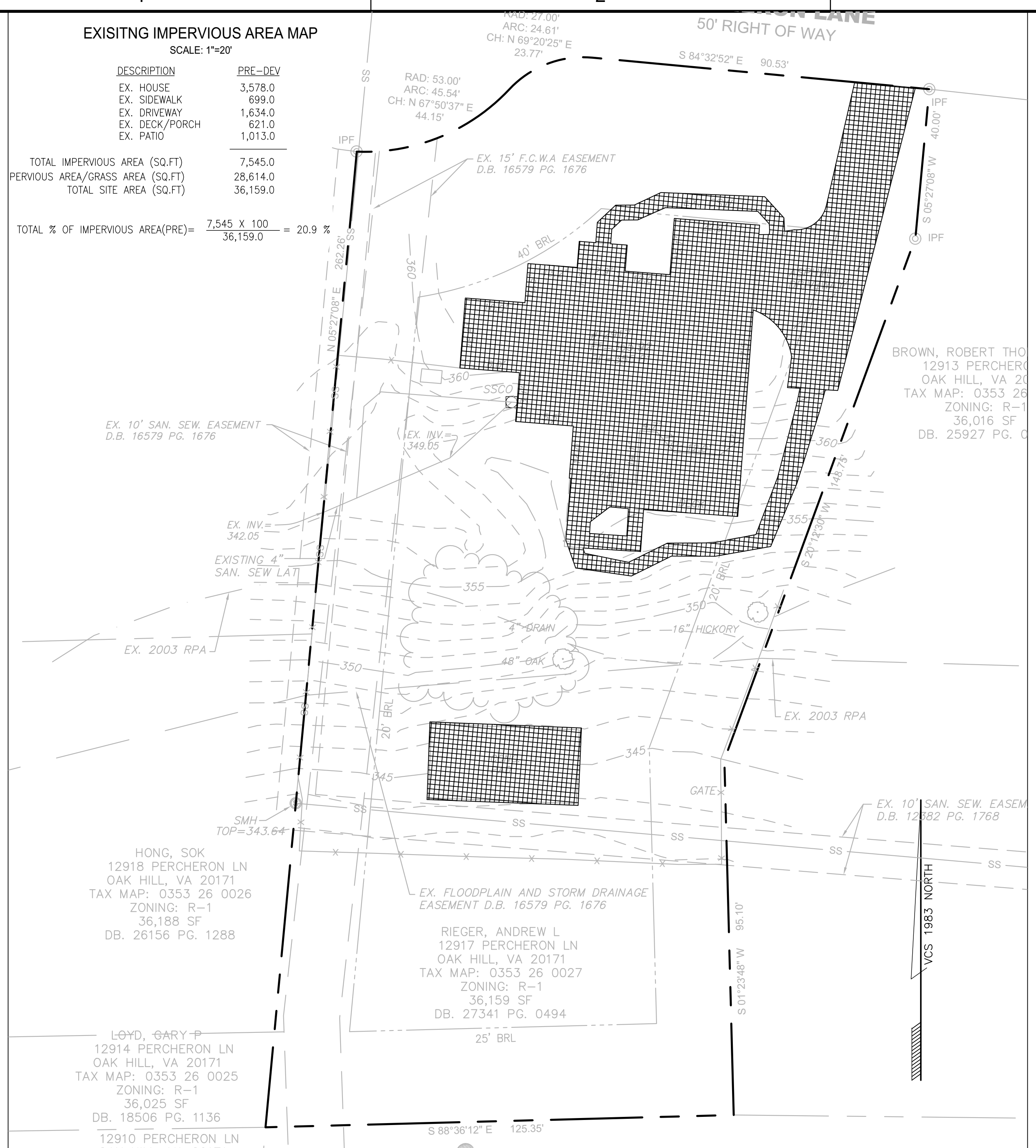
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CHECKED BY: CC

DATE: NOVEMBER 2021

TITLE
IMPERVIOUS AREA MAP AND OUTFALL NARRATIVE

PROJECT NO. 9820-CON-002-1.1



OUTFALL NARRATIVE (OUTFALL COMPUTATIONS ON SHEET 2)

PRE-DEVELOPMENT CONDITIONS

THIS SITE CONSISTS OF 0.83 ACRES OF TOTAL LAND AREA, OF WHICH 0.11 ACRES WILL BE DISTURBED FOR THE PROPOSED DEVELOPMENT OF A PATIO, POOL, DECK AND ASSOCIATED DRAINAGE IMPROVEMENTS. THE SITE IS WITHIN CUB RUN WATERSHED AND HAS ONE OUTFALL. THE RUNOFF FROM THE SITE MAINLY DRAINS TO THE SOUTH AS SHEET FLOW OVER GRASS COVERED AND VEGETATED AREA. AFTER THE RUNOFF LEAVES TO THE SOUTH OF THE SITE IT FLOWS INTO A NATURAL SWALE TO THE SOUTH. FIELD OBSERVATION REVEALED THAT NO DRAINAGE PROBLEM ON SITE AND OFFSITE WITHIN THE STUDY AREA.

DURING CONSTRUCTION PERIOD

SILT FENCE WILL BE INSTALLED AS A SEDIMENT AND EROSION CONTROL MEASURE ALONG THE AREA OF DISTURBANCE (0.11 AC). THE RUNOFF FOR THE DISTURBED AREA WILL 1.31 CFS FOR THE 10-YEAR STORM EVENT. THE RUN OFF WILL BE DISPERSED AS A SHEET FLOW (PFM 6-0202.6) ACROSS THE LOT OVER GRASS COVERED AREA MAINLY TO THE SOUTH, THE DIRECTION OF EXISTING NATURAL SWALES. NO CONCENTRATED FLOW WILL BE GENERATED DURING THE CONSTRUCTION PHASE. THE SILT FENCE WILL TRAP THE SEDIMENT FROM FLOWING INTO THE NON DISTURBED AREAS AND DOWNSTREAM PROPERTIES. ALL OF THE SEDIMENT AND EROSION CONTROL DEVICES ARE TO BE KEPT FUNCTIONAL THROUGHOUT THE DURATION OF THE PROJECT. NO DEBRIS OR DIRT FROM THE SITE SHALL BE PERMITTED TO THE STREET. THE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED AND CONSTRUCTION VEHICLES SHALL BE CLEANED PRIOR TO ENTERING THE STREET. CONTRACTOR SHALL PROVIDE WATER FOR CLEANING CONSTRUCTION VEHICLES IF NO PUBLIC WATER IS AVAILABLE.

POST-DEVELOPMENT CONSTRUCTION

THERE WILL BE AN INCREASE OF 1,220 SF OF IMPERVIOUS AREA FOR A TOTAL OF 8,765 SF OF IMPERVIOUS AREA WHICH RESULTS IN AN INCREASE OF 0.08 CFS AND 0.12 CFS FOR THE 2 YEAR AND 10 YEAR STORM EVENT RESPECTIVELY, WHICH IS A MINIMAL INCREASE FOR THIS LOT. THE RUNOFF FROM THIS SITE WILL LEAVE AS SHEET FLOW. THE PROPOSED SWIMMING POOL DISCHARGES SHALL NOT DISCHARGE ON THE ADJACENT PROPERTY AND NOT HAVE ANY NEGATIVE IMPACTS TO CAUSE EROSION.

THIS INCREASE IN RUNOFF BY THIS DEVELOPMENT WILL HONOR THE NATURAL DRAINAGE DIVIDES AND WILL NOT AGGRAVATE ANY EXISTING DRAINAGE PROBLEM OR CAUSE ANY NEW DRAINAGE PROBLEM ON THE DOWNSTREAM PROPERTIES. THE RUNOFF FROM THIS SITE WILL LEAVE AS SHEET FLOW. IT IS THE OPINION OF THE ENGINEER THAT THIS INCREASE WILL NOT HAVE ANY ADVERSE IMPACT ON SITE OR OFFSITE AFTER COMPLETION OF THE PROPOSED DEVELOPMENT BECAUSE THE ORIGINAL SUBDIVISION STORM SEWER AND OUTFALL WAS DESIGNED TO HANDLE THE ADDITIONAL RUNOFF.

WATER QUALITY NARRATIVE

PRE-DEVELOPMENT CONDITIONS

THIS SITE CONSIST OF 0.83 ACRES AND HAS AN EXISTING HOUSE, SIDEWALK, DRIVEWAY AND DECK ON THE SITE FOR A TOTAL OF 7,545 SF OF IMPERVIOUS AREA, WHICH IS 20.9% OF THE ENTIRE SITE. A PORTION OF THE EXISTING IMPERVIOUS AREA WILL REMAIN WHEN THE PATIO/POOL IS CONSTRUCTED.

POST-DEVELOPMENT CONDITIONS

THE PROPOSED DEVELOPED WILL HAVE APPROXIMATELY 0.11 ACRES OF DISTURBANCE AND WILL HAVE 8,765 SF OF IMPERVIOUS AREA, WHICH IS 24.2% OF THE ENTIRE SITE. THE TOTAL INCREASE OF IMPERVIOUS AREA IS 1,220 SF.

WATER QUALITY REQUIREMENTS

WATER QUALITY REQUIREMENTS FOR THIS SITE ARE BEING PROVIDED BY PURCHASING OFFSITE NUTRIENT CREDITS. THE NEW STORMWATER REGULATIONS HAVE BEEN UTILIZED FOR THE PROJECT (4VAC50-60-10 THOUGH 4VAC50-60-85). THE VIRGINIA RUNOFF REDUCTION METHODOLOGY (VRRM) HAS BEEN USED TO DETERMINE BOTH THE PHOSPHOROUS REMOVAL REQUIREMENTS AND THE RUNOFF REDUCTION VOLUME. THE TARGET PHOSPHOROUS LOAD (POST-DEVELOPMENT) FOR THE SITE IS 0.41 POUNDS PER ACRE PER YEAR.

THE DEVELOPMENT SITE AREA IS 0.87 AC WITH A DISTURBED ACREAGE OF 0.11 AC. THE TOTAL REQUIRED PHOSPHOROUS REMOVAL IS 0.14 LBS/YR. THE TOTAL PHOSPHOROUS CREDITS TO BE PURCHASED FOR THIS SITE IS 0.14 LBS/YR.

THE NUTRIENT OFFSET AVAILABILITY LETTER IS SHOWN ON SHEET 6. THE OWNER MUST PURCHASE THE CREDITS PRIOR TO OBTAINING FINAL INSPECTION.

No.	DATE	DESCRIPTION	BY

ENGINEER/OWNER REVISIONS

No.	DATE	DESCRIPTION	BY

COUNTY REVISIONS

CURT R. CROUCH, P.E.

4995 CROUCH LANE
MIDLAND, VIRGINIA 22728
EMAIL: CROUCH.CURT@GMAIL.COM
TELEPHONE: 540.359.1636

RIEGER, ANDREW L.
 THOMPSON ROAD PROPERTY
 LT 27
 12917 PERCHERON LANE
 OAK HILL, VA 20171
SULLY DISTRICT
FAIRFAX COUNTY, VIRGINIA



KEY PLAN

SCALE

No.	DATE	BY	Description
REVISIONS			

TITLE
BMP COMPUTATIONS

PROJECT NO. 9820-CON-002-1.1

6

SHEET NO. 6 OF 6

Project Name: THOMPSON ROAD PROPERTY LOT 27
Date: 12-Nov-21
Linear Development Project? No

Site Information

Post-Development Project (Treatment Volume and Loads)

Enter Total Disturbed Area (acres) → **0.11**

Check: *BMP Design Specifications List: 2013 Draft Stds & Specs*

Maximum reduction required: **10%**
The site's net increase in impervious cover (acres) is: **0.04**
Post-Development TP Load Reduction for Site (lb/yr): **0.14**

Check:
Linear project? No
Land cover areas entered correctly?
Total disturbed area entered?

Pre-ReDevelopment Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed, protected forest/open space or reforested					0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be				0.66	0.66
Impervious Cover (acres)				0.17	0.17
Totals					0.83

Post-Development Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed, protected forest/open space or reforested					0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be				0.62	0.62
Impervious Cover (acres)				0.21	0.21
Totals					0.83
Area Check	OK.	OK.	OK.	OK.	0.83

Constants

Annual Rainfall (inches)	43
Target Rainfall Event (inches)	1.00
Total Phosphorus (TP) EMC (mg/L)	0.26
Total Nitrogen (TN) EMC (mg/L)	1.86
Target TP Load (lb/acre/yr)	0.41
TP (unitless correction factor)	0.90

Runoff Coefficients (Rv)

	A Soils	B Soils	C Soils	D Soils
Forest/Open Space	0.02	0.03	0.04	0.05
Managed Turf	0.15	0.20	0.22	0.25
Impervious Cover	0.95	0.95	0.95	0.95

LAND COVER SUMMARY -- PRE-REDEVELOPMENT

Land Cover Summary-Pre		
Pre-ReDevelopment	Listed	Adjusted ¹
Forest/Open Space Cover (acres)	0.00	0.00
Weighted Rv(forest)	0.00	0.00
% Forest	0%	0%
Managed Turf Cover (acres)	0.66	0.62
Weighted Rv(turf)	0.25	0.25
% Managed Turf	80%	78%
Impervious Cover (acres)	0.17	0.17
Rv(impervious)	0.95	0.95
% Impervious	20%	22%
Total Site Area (acres)	0.83	0.79
Site Rv	0.39	0.40

Treatment Volume and Nutrient Load

Pre-ReDevelopment	Adjusted ¹
Pre-ReDevelopment Treatment Volume (acre-ft)	0.0272 / 0.0264
Pre-ReDevelopment Treatment Volume (cubic feet)	1,185 / 1,149
Pre-ReDevelopment TP Load (lb/yr)	0.74 / 0.72
Pre-ReDevelopment TP Load per acre (lb/acre/yr)	0.90 / 0.91
Baseline TP Load (lb/yr) (0.41 lb/acre/yr applied to pre-redevelopment area excluding pervious land proposed for new impervious cover)	0.32

LAND COVER SUMMARY -- POST DEVELOPMENT

Land Cover Summary-Post (Final)		
Post ReDev. & New Impervious	Post-ReDevelopment	Post-Development New Impervious
Forest/Open Space Cover (acres)	0.00	
Weighted Rv(forest)	0.00	
% Forest	0%	
Managed Turf Cover (acres)	0.62	
Weighted Rv (turf)	0.25	
% Managed Turf	75%	
Impervious Cover (acres)	0.21	0.04
Rv(impervious)	0.95	0.95
% Impervious	25%	
Total ReDev. Site Area (acres)	0.83	
Final Post Dev Site Rv	0.43	

Treatment Volume and Nutrient Load

Final Post-Development	Post-ReDevelopment	Post-Development
Final Post-Development Treatment Volume (acre-ft)	0.0295	0.0032
Final Post-Development Treatment Volume (cubic feet)	1,287	138
Final Post-Development TP Load (lb/yr)	0.81	0.09
Final Post-Development TP Load per acre (lb/acre/yr)	0.97	0.91
Max. Reduction Required (Below Pre-ReDevelopment Load)	10%	
TP Load Reduction Required for Redeveloped Area (lb/yr)	0.07	0.07

¹Adjusted Land Cover Summary:
Pre ReDevelopment land cover minus pervious land cover (forest/open space or managed turf) acreage proposed for new impervious cover.
Adjusted total acreage is consistent with Post-ReDevelopment acreage (minus acreage of new impervious cover).
Column 1 shows load reduction requirement for new impervious cover (based on new development load limit, 0.41 lbs/acre/year).

Post-Development Requirement for Site Area

TP Load Reduction Required (lb/yr) 0.14

Nitrogen Loads (Informational Purposes Only)

Pre-ReDevelopment TN Load (lb/yr)	5.33	Final Post-Development TN Load (Post-ReDevelopment & New Impervious) (lb/yr)	5.78
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Area Checks

	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	AREA CHECK
FOREST/OPEN SPACE (ac)	0.00	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER (ac)	0.00	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER TREATED (ac)	0.00	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA (ac)	0.00	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA TREATED (ac)	0.00	0.00	0.00	0.00	0.00	OK.
AREA CHECK	OK.	OK.	OK.	OK.	OK.	

Site Treatment Volume (ft³) 1,287

Runoff Reduction Volume and TP By Drainage Area

	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	TOTAL
RUNOFF REDUCTION VOLUME ACHIEVED (ft ³)	0	0	0	0	0	0
TP LOAD AVAILABLE FOR REMOVAL (lb/yr)	0.00	0.00	0.00	0.00	0.00	0.00
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.00	0.00	0.00	0.00	0.00	0.00
TP LOAD REMAINING (lb/yr)	0.00	0.00	0.00	0.00	0.00	0.00
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	0.00	0.00	0.00	0.00	0.00	0.00

Total Phosphorus

FINAL POST-DEVELOPMENT TP LOAD (lb/yr)	0.81
TP LOAD REDUCTION REQUIRED (lb/yr)	0.14
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.00
TP LOAD REMAINING (lb/yr)	0.81
REMAINING TP LOAD REDUCTION REQUIRED (lb/yr):	0.14

Total Nitrogen (For Informational Purposes)

POST-DEVELOPMENT LOAD (lb/yr)	5.78
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	0.00
REMAINING POST-DEVELOPMENT NITROGEN LOAD (lb/yr)	5.78

November 18, 2021

Curt Crouch, PE
4995 Crouch Lane
Midland, VA 22728

RE: Two Song Nutrient Bank – Pricing Letter

Project Reference: Percheron Lane
12917 Percheron Lane, Oak Hill, VA 20171
Lat/Long: 38.900376, -77.397449
Nearest Waterway: Flatlick Branch
HUC: 2080010

Dear Mr. Crouch:

This letter is to confirm the availability of Nutrient Credits sufficient to meet your project requirements at the Two Song Nutrient Bank located in Fauquier County within the Hydrologic [08] Unit Code 2070010 and serving Virginia HUCs 2070010, 2070008, and 2070011. The Two Song Nutrient Bank received approval and release from the Virginia Department of Environmental Quality on September 1, 2020 with the release of 7.44 pounds of phosphorus. The Two Song Nutrient Bank received a secondary release in August 16, 2021 of 14.92 pounds of phosphorus. The nutrient reductions resulting from this activity will generate nonpoint source Nutrient "Credits" which are transferable to those entities requiring nutrient reductions in accordance with the Chesapeake Bay Watershed Nutrient Credit Exchange Program (VA Code §62.1-44.19:14) and the Virginia Stormwater Credit Program (VA Code §62.1-44.15:35).

The Two Song Nutrient Bank has **8.70** credits available and will be able to meet your removal requirement of approximately **0.14** Credits.

Feel free to contact me if you require further assistance.

Sincerely,

Allison Austin, M.S., PWD, PWS
Director of Environmental Consulting

6799-A KENNEDY ROAD VINTHILL, VIRGINIA 20187
Phone: (540) 349-1522 Fax: (540) 349-1577

NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
ENGINEER/OWNER REVISIONS				COUNTY REVISIONS			

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