DOMINION ENERGY VIRGINIA SITE PREPARATION PERFORMANCE SPECIFICATIONS

PREFACE

IT IS THE INTENT OF THESE SPECIFICATIONS TO HAVE A COMPLETELY PREPARED SITE FOR THE CONSTRUCTION OF AN ELECTRICAL FACILITY AT THE COMPLETION OF THE "WORK" AS INDICATED ON THE DRAWINGS, SPECIFICATIONS, OR OTHER DOCUMENTS PROVIDED.

THE REGULATIONS OF ALL LOCAL, STATE, OR FEDERAL GOVERNMENTAL BODIES HAVING JURISDICTION OVER THE WORKING AREAS SHALL BE OBSERVED AT ALL TIMES.

ANY SPECIFICATIONS OR INSTRUCTIONS APPEARING ON THE DRAWINGS SHALL HAVE PRECEDENCE OVER THE WRITTEN SPECIFICATIONS WHICH APPEAR HEREIN. IN THE EVENT THAT A DISCREPANCY OR OMISSION HAS OCCURRED, DOMINION ENERGY VIRGINIA SHALL BE CONSULTED FOR RESOLUTIONS.

ALL "WORK" SHALL BE PERFORMED IN A MANNER CONSISTENT WITH THE BEST PRACTICES OF THE TRADES INVOLVED.

ALL "WORK" SHALL BE PERFORMED WITHIN THE LIMITS OF THE PROPERTY / RIGHTS-OF-WAY SHOWN ON THE DRAWINGS. THE CONTRACTOR WILL RECOGNIZE AND ABIDE BY ALL TERMS AND CONDITIONS OF PERMITS, EASEMENTS, AND AGREEMENTS RELATING TO THE PROJECT.

CLEARING AND GRUBBING

LIMITS FOR CLEARING AND/OR GRUBBING SHALL BE AS DEFINED ON THE DRAWINGS. CLEARING SHALL CONSIST OF REMOVAL AND DISPOSAL OF BRUSH, DOWNED TIMBER, LOGS, STANDING TREES AND SNAGS, OTHER GROWTH AND ANY ITEMS THAT WOULD INTERFERE WITH CONSTRUCTION OPERATIONS.

GRUBBING SHALL CONSIST OF REMOVAL AND DISPOSAL OF STUMPS, BURIED LOGS, ROOTS GREATER THAN 1/2 " DIAMETER, AND ANY OTHER ORGANIC MATERIAL BELOW THE GROUND SURFACE. ALL CLEARED AREAS WILL BE GRUBBED UNLESS OTHERWISE NOTED.

DISPOSAL OF CLEARED/GRUBBED MATERIAL BY BURNING SHALL ONLY BE USED WHEN WRITTEN APPROVAL IS OBTAINED FROM LOCAL AUTHORITIES AND DOMINION ENERGY VIRGINIA. OTHERWISE, DISPOSAL SHALL BE OUTSIDE THE LIMITS OF DOMINION ENERGY VIRGINIA CONTROLLED LAND.

TOPSOIL

ALL TOPSOIL AND SURFACE SOILS CONTAINING ORGANIC MATERIAL SHALL BE REMOVED FROM THE GRUBBED AREA. TOPSOIL SHALL BE STOCKPILED FOR FUTURE USE IN APPROVED LOCATIONS UNLESS OTHERWISE SHOWN ON THE DRAWINGS.

TOPSOIL SHALL NOT BE USED AS, OR MIXED WITH, FILL MATERIAL IN THE CONSTRUCTION OF EARTH EMBANKMENTS UNLESS OTHERWISE SHOWN ON THE DRAWINGS.

TOPSOIL MATERIAL USED AS A SURFACE DRESSING SHALL BE REASONABLY FREE OF CINDERS, DEBRIS, AND STONES. UNSUITABLE AND EXCESS TOPSOIL MATERIAL SHALL BE DISPOSED OFFSITE.

EARTHWORK

EXCAVATION:

EXCAVATION SHALL BE ACCOMPLISHED BY CUTTING ACCURATELY TO THE CROSS SECTIONS, GRADES, AND ELEVATIONS SHOWN ON THE DRAWINGS.

SOFT, UNSTABLE, OR OTHERWISE UNSATISFACTORY MATERIALS ENCOUNTERED AT THE REQUIRED GRADES SHALL BE REMOVED AS DIRECTED AND REPLACED WITH APPROVED, PROPERLY COMPACTED MATERIAL.

COMMON EXCAVATION SHALL INCLUDE ALL MATERIAL WHICH CAN BE REMOVED BY COMMON EARTH EXCAVATION EQUIPMENT, OTHER THAN SOLID ROCK OR BOULDERS AND DETACHED PIECES OF ROCK, EACH EXCEEDING 2 CUBIC YARDS IN VOLUME.

ROCK EXCAVATION SHALL BE MATERIAL WHICH REQUIRES THE USE OF PNEUMATIC HAMMERS AND/OR EXPLOSIVES FOR REMOVAL.

SITE PREPARATION:

IF EARTHWORK OPERATIONS ARE PERFORMED DURING WET SEASONS, CONTRACTOR SHALL AVOID OPERATING EQUIPMENT ON SATURATED SOILS. ANY WET SUBGRADE AREAS WHICH RECEIVE COMPACTED FILL SHALL BE DRAINED AND ALLOWED TO DRY.

THE EXPOSED SUBGRADES OF THE BUILDING PAD AND ROADBEDS SHALL BE PROOFROLLED TO DETECT UNSUITABLE SOIL CONDITIONS. PROOFROLLING SHALL BE DONE AFTER A SUITABLE PERIOD OF DRY WEATHER TO AVOID DEGRADING THE SUBGRADE. PROOFROLLING SHALL BE PERFORMED WITH A HEAVILY LOADED DUMP TRUCK OR WITH SIMILAR APPROVED CONSTRUCTION EQUIPMENT.

SOFT MATERIALS ENCOUNTERED SHALL BE COMPLETELY EXCAVATED AND REPLACED WITH APPROVED FILL MATERIALS.

EMBANKMENT:

EMBANKMENT WORK SHALL CONSIST OF THE PLACEMENT AND COMPACTION OF FILL MATERIAL ABOVE THE NATURAL GROUND OR OTHER SURFACE IN CONFORMANCE WITH THE DRAWINGS.

MATERIALS:

APPROVED SOILS USED IN COMPACTED FILLS SHALL BE FREE OF DEBRIS AND FIBROUS ORGANIC MATERIAL. FROZEN MATERIAL WILL NOT BE PERMITTED IN THE FILL. SATISFACTORY MATERIALS SHALL COMPRISE THOSE CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOIL SYSTEM, ASTM D-2487 AS GW, GP, SW, SP, SM, AND SC. THESE MATERIALS SHALL POSSESS A MAXIMUM DRY DENSITY OF 100 #/CU.FT. OR GREATER REFERENCED TO ASTM D-698 STANDARD PROCTOR. SOILS SHALL HAVE A LIQUID LIMIT LESS THAN 40 PERCENT AND A PLASTICITY INDEX LESS THAN 15. OTHER MATERIALS, WHEN APPROVED BY ENGINEERING, MAY BE PERMITTED IN FILL AREAS.

UNSATISFACTORY SOILS INCLUDE THOSE CLASSIFIED AS PT, OH OR OL, CH, MH, CL AND ML, AS REFERENCED TO ASTM D-2487.

COMPACTION:

COMPACTION EQUIPMENT SHALL CONSIST OF VIBRATORY OR TAMPING ROLLERS, SHEEPSFOOT ROLLER, PNUEMATIC-TIRED ROLLERS, THREE-WHEEL POWER ROLLERS, WALK BEHIND VIBRATORY ROLLERS, VIBRATORY PLATE OR OTHER APPROVED EQUIPMENT WELL SUITED TO THE SOIL BEING COMPACTED.

APPROVED FILL MATERIAL SHALL BE PLACED IN UNIFORM HORIZONTAL LIFTS OF APPROXIMATELY 8" DEPTH (LOOSE MEASUREMENT), EXCEPT FOR ROAD MATERIALS ABOVE SUBGRADE ELEVATION AND THE UPPER 12" OF BUILDING PADS WHICH REQUIRE 6" LIFTS. WHERE WALK BEHIND ROLLERS AND VIBRATORY PLATE COMPACTORS ARE USED, THE LIFT THICKNESS SHALL NOT EXCEED 4".

GENERALLY, FILLS SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D-698), WITH MOISTURE CONTENT RANGING BETWEEN LESS THAN 3 PERCENT UP TO THE OPTIMUM AS DETERMINED BY THE PROCTOR DENSITY TEST. THE UPPER 12" OF ROADBEDS AND CONTROL ENCLOSURE BUILDING PADS REQUIRE 98 PERCENT COMPACTION REFERENCED TO ASTM D-698, WITH MOISTURE CONTENT MAINTAINED WITHIN 2 PERCENT OF THE OPTIMUM.

EACH SUCCESSIVE LIFT WILL BE PLACED ON FIRM APPROVED SUBGRADE OR COMPACTED FILL. WHERE PREVIOUS LIFTS ARE FOUND TO BE UNACCEPTABLE, THE AREA WILL BE SCARIFIED, AERATED OR MOISTENED, RECOMPACTED OR REMOVED, AND REPLACED AS REQUIRED.

DRAINAGE:

THE FILL SURFACE SHALL BE ADEQUATELY MAINTAINED DURING CONSTRUCTION. THE SURFACE SHALL BE SLOPED TO ACHIEVE SUFFICIENT DRAINAGE, AND TO PREVENT WATER FROM PONDING ON THE FILL. IF PRECIPITATION IS EXPECTED WHILE FILL CONSTRUCTION IS TEMPORARILY HALTED, THE SURFACE SHALL BE ROLLED WITH RUBBER-TIRED OR STEEL-DRUMMED EQUIPMENT TO IMPROVE SURFACE RUNOFF. FOR PLACEMENT DURING OR AFTER DIFFICULT WEATHER CONDITIONS, WET OR FROZEN MATERIAL SHALL BE REMOVED.

FINISHED GRADE TOLERANCES:

THE TOP OF EARTHWORK FOR SUBSTATION PAD AND ROADWAY TRAVEL AREAS SHALL BE WITHIN 0.10 FT. ABOVE OR BELOW THE THEORETICAL GRADE.

EARTH SLOPES:

EXCAVATED SLOPES STEEPER THAN 3:1 SHALL BE ROUGH GRADED IN A MANNER TO PROVIDE HORIZONTAL RIDGES AND GROOVES HAVING AN AVERAGE DEVIATION NO GREATER THAN 0.75 FT. FROM THE THEORETICAL LINE OF THE TYPICAL CROSS SECTION.

EXCAVATED SLOPES 3:1 OR FLATTER SHALL BE UNIFORMLY FINISHED AND SHALL NOT DEVIATE FROM THE THEORETICAL PLANE SURFACE BY MORE THAN 0.50 FT.

EMBANKMENT SLOPES STEEPER THAN 3:1 SHALL BE ROUGH GRADED IN A MANNER TO PROVIDE HORIZONTAL RIDGES AND GROOVES NOT MORE THAN 0.50 FT. FROM THE THEORETICAL LINE OF THE TYPICAL CROSS SECTION.

EMBANKMENT SLOPES 3:1 OR FLATTER SHALL BE UNIFORMLY FINISHED AND SHALL NOT DEVIATE FROM THE THEORETICAL PLANE SURFACE BY MORE THAN 0.50 FT.

ROCK SLOPES:

SHALL NOT DEVIATE FROM A PLANE SURFACE BY MORE THAN 2.0 FT. AND SHALL NOT DEVIATE FROM THEIR THEORETICAL LOCATION BY MORE THAN 2.0 FT. MEASURED ALONG ANY LINE PERPENDICULAR TO THE THEORETICAL SLOPE LINE.

MATERIALS / INSTALLATION

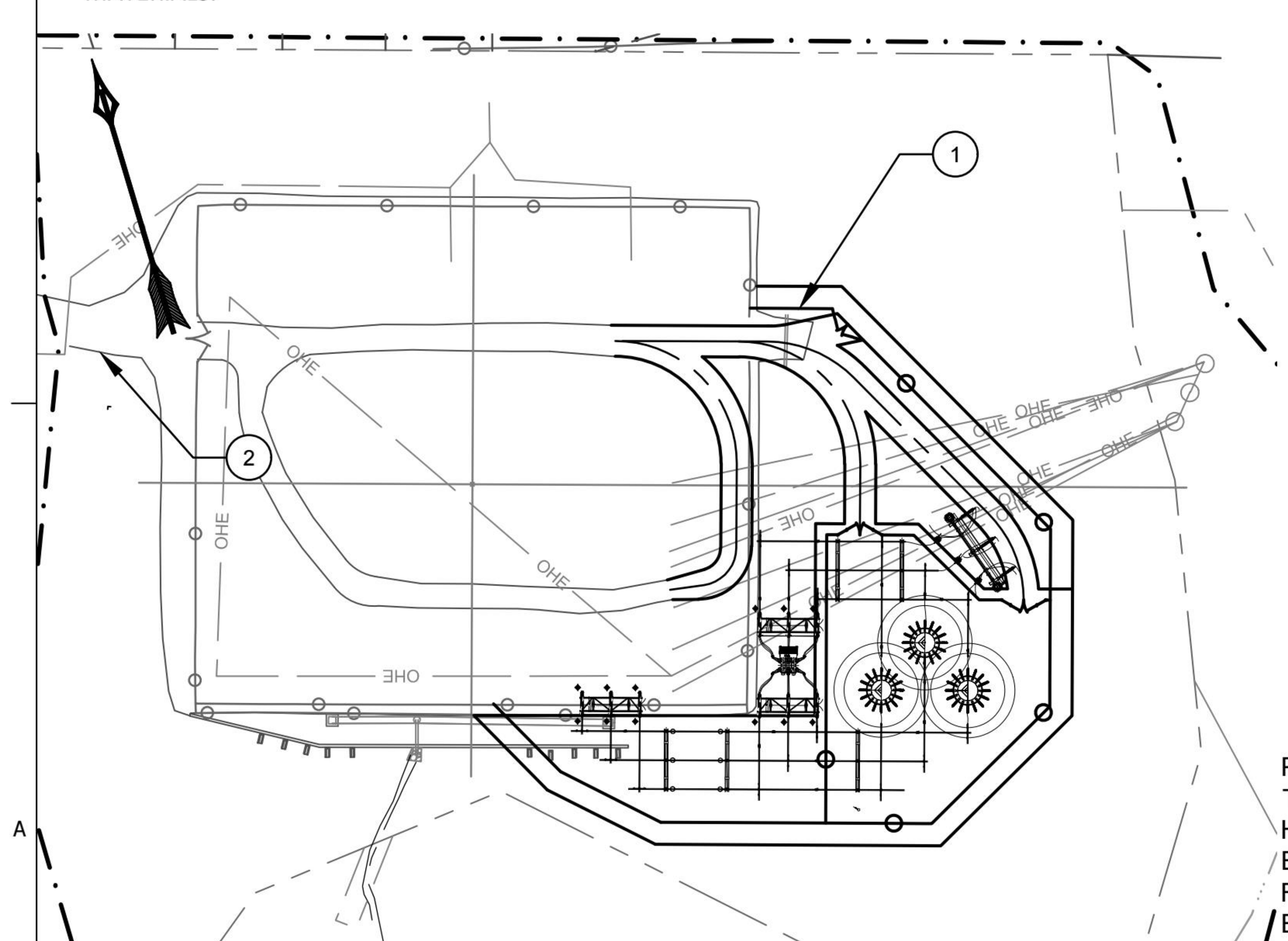
VDOT:

ITEMS REFERENCED TO THE VIRGINIA DEPARTMENT OF TRANSPORTATION SHOWN ON THE DRAWINGS SHALL CONFORM TO THE REQUIREMENTS OF THEIR LATEST STANDARDS AND SPECIFICATIONS.

MANUFACTURERS' ITEMS:

ITEMS REFERENCED TO SPECIFIC MANUFACTURERS OR BRAND NAMES SHALL BE SUBJECT TO ANY RECOMMENDATIONS OR LIMITATIONS PERTAINING TO THEIR INSTALLATION OR USE.

REQUESTS FOR SUBSTITUTIONS MUST BE APPROVED BY ENGINEERING. SUFFICIENT INFORMATION REGARDING REQUESTS MUST BE RECEIVED BY ENGINEERING 10 DAYS IN ADVANCE OF APPROVAL.



SUBSTATION EQUIPMENT LAYOUT
SCALE 1"=60'

SUBSTATION GENERAL EQUIPMENT LEGEND

1. SECURITY FENCE
2. EQUIPMENT ACCESS ROAD

ALL EXISTING AND PROPOSED GRADES SHOWN ON THIS SITE PLAN ARE DIRT GRADES.

PROJECT DESCRIPTION:
THIS PROJECT PROVIDES FOR THE INSTALLATION OF AIR CORE SERIES REACTOR ON LINE 2054 AT HOLLYMEADE SUBSTATION. THE SUBSTATION WILL BE EXPANDED TO PROVIDE SPACE FOR NEW EQUIPMENT. NEW PERIMETER FENCING WILL BE INSTALLED TO MATCH THE EXISTING STATION FENCE. AN INTERNAL SEPARATION FENCE MUST ALSO BE INSTALLED TO PROHIBIT PERSONNEL AND EQUIPMENT APPROACH TO REACTORS WHILE ENERGIZED.

RESPONSIBLE LAND DISTURBER DESIGNATION

THE PERSON IDENTIFIED BELOW IS DESIGNATED AS THE RESPONSIBLE LAND DISTURBER WHO WILL BE IN CHARGE OF AND RESPONSIBLE FOR CARRYING OUT THE LAND DISTURBING ACTIVITY ASSOCIATED WITH THIS PROJECT. THIS PERSON MEETS THE APPLICABLE REQUIREMENTS OF VIRGINIA CODE SECTION 10.1-563 AND 10.1-566 BY VIRTUE OF THE FOLLOWING:

- ✓ RESPONSIBLE LAND DISTURBER CERTIFICATE
- ___ DCR CERTIFICATION FOR COMBINED ADMINISTRATOR, ADMINISTRATOR, PLAN REVIEWER, INSPECTOR, OR CONTRACTOR.
- ___ VIRGINIA PROFESSIONAL ENGINEER, LAND SURVEYOR, LANDSCAPE ARCHITECT, OR ARCHITECT.

RESPONSIBLE LAND DISTURBER CONTACT INFORMATION:

NAME (SIGNATURE) ______ DATE ______
NAME (PRINT) DAVID K. PERRY
CERTIFICATION / REGISTRATION NUMBER RLD07424
COMPANY DOMINION ENERGY
MAILING ADDRESS 10900 NUCKOLS ROAD
GLEN ALLEN, VA 23060
TELEPHONE (804) 257-4631 FAX ______
E-MAIL David.K.Perry@Dominionenergy.com

THIS DESIGNATION MAY ONLY BE CHANGED BY A PLAN COVER SHEET REVISION THAT MUST BE SUBMITTED TO THE VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ) FOR VERIFICATION AND APPROVAL.

THE FOLLOWING INFORMATION MUST BE SUBMITTED TO DEQ AT LEAST TWO (2) WEEKS IN ADVANCE OF THE COMMENCEMENT OF LAND DISTURBING ACTIVITIES. NOTIFICATIONS SHALL BE SENT BY EMAIL TO standardsandspecs@deq.virginia.gov

- i: PROJECT NAME OR PROJECT NUMBER (INCLUDING ANY ASSOCIATED CGP PERMIT NUMBER);
- ii: PROJECT LOCATION (INCLUDING NEAREST INTERSECTION, LATITUDE & LONGITUDE, ACCESS POINT);
- iii: ON-SITE PROJECT MANAGER NAME AND CONTRACT INFORMATION;
- iv: RESPONSIBLE LAND DISTURBER (RLD) NAME AND CONTACT INFORMATION;
- v: PROJECT DESCRIPTION;
- vi: ACREAGE OF DISTURBANCE FOR PROJECT;
- vii: PROJECT START AND FINISH DATE;
- viii: ANY VARIANCES/EXEMPTIONS/WAIVERS ASSOCIATED WITH THIS PROJECT

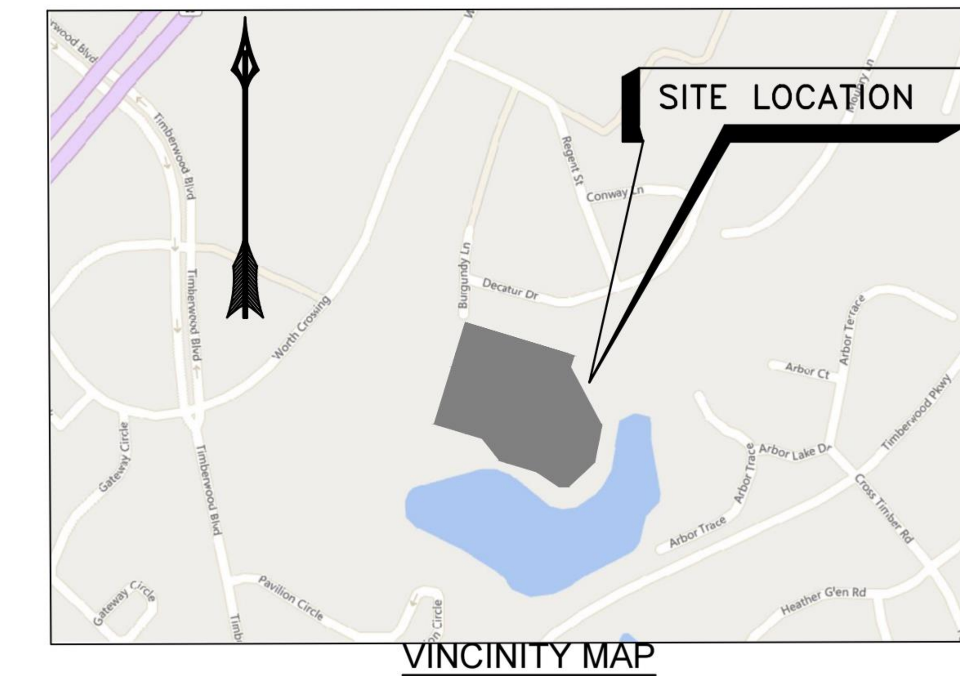
PLEASE CONTACT DOMINION PERMITTING (C.J. LINDEMANN) AT 804.771.6408 TO SET UP A PRE-CONSTRUCTION MEETING.

DRAWING LIST

1	OF	24	COVER SHEET, SPECIFICATIONS/GENERAL NOTES
2	OF	24	OVERALL SITE PLAN
3	OF	24	EROSION & SEDIMENT CONTROL GENERAL NOTES & NARRATIVE
4	OF	24	EROSION & SEDIMENT CONTROL MINIMUM STANDARDS AND DETAILS
5	OF	24	EROSION & SEDIMENT CONTROL DETAILS
6	OF	24	EROSION & SEDIMENT CONTROL AND DEMOLITION PLAN (1 OF 3)
7	OF	24	EROSION & SEDIMENT CONTROL AND DEMOLITION PLAN (2 OF 3)
8	OF	24	EROSION & SEDIMENT CONTROL AND DEMOLITION PLAN (3 OF 3)
9	OF	24	SITE PLAN (1 OF 3)
10	OF	24	SITE PLAN (2 OF 3)
11	OF	24	SITE PLAN (3 OF 3)
12	OF	24	FENCE PLAN
13	OF	24	GRADING & DRAINAGE PLAN (1 OF 2)
14	OF	24	GRADING & DRAINAGE PLAN (2 OF 2)
15	OF	24	GRADING SECTIONS AND PROFILES (1 OF 3)
16	OF	24	GRADING SECTIONS AND PROFILES (2 OF 3)
17	OF	24	GRADING SECTIONS AND PROFILES (3 OF 3)
18	OF	24	CONSTRUCTION DETAILS
19	OF	24	STORMWATER NARRATIVE
20	OF	24	WATER QUALITY
21	OF	24	STORMWATER MANAGEMENT DRAINAGE AREA MAPS & ROUTING DIAGRAMS
22	OF	24	STORMWATER MANAGEMENT PRE-DEVELOPED 1-, 2- AND 10-YR ROUTING
23	OF	24	STORMWATER MANAGEMENT POST-DEVELOPED 1-, 2- AND 10-YR ROUTING
24	OF	24	CALCULATIONS

SURVEY DRAWING LIST

1	OF	1	TOPOGRAPHIC SURVEY FOR PROPOSED HOLLYMEADE SUBSTATION EXPANSION



VINCINITY MAP
SCALE 1"=500'

GENERAL SITE INFORMATION

OWNER:	VIRGINIA ELECTRIC & POWER COMPANY
ADDRESS:	3317 WORTH CROSSING, CHARLOTTESVILLE, VA 22911
MAGISTERIAL DISTRICT:	RIVANNA
LAT. - LONG.:	LAT: 38° 07' 40.176" N LONG: 78° 26' 9.232" W
ZONING:	R-1 and R-15
PARCEL ID:	03200-00-00-03700
USE:	ELECTRICAL SUBSTATION
PARCEL ACREAGE:	6.72 ACRES
WATER AND SEWER:	NONE PROPOSED
WETLANDS IMPACTS:	N/A
LAND DISTURBANCE:	2.90 ACRES
EXISTING TREE CANOPY COVERAGE:	3.45 ACRES
PROPOSED TREE CANOPY COVERAGE:	2.85 ACRES
PARKING:	NONE PROPOSED OR EXISTING
PROPOSED BUILDINGS:	NONE PROPOSED (PRE-FAB ENCLOSURE)
OFFSITE LAND DISTURBANCE:	TEMPORARY FOR CONSTRUCTION ACCESS. ANY OFFSITE LAND DISTURBING ACTIVITY ASSOCIATED WITH THIS PROJECT MUST HAVE AN APPROVED EROSION AND SEDIMENT CONTROL PLAN.
LAND DISTURBANCE PERMIT:	CONTACT DEQ TWO (2) WEEKS PRIOR TO ANY LAND DISTURBING ACTIVITY. SEE DETAILS IN THE RESPONSIBLE LAND DISTURBER DESIGNATION BLOCK ON THIS SHEET FOR DETAILS.
VIRGINIA STORMWATER MANAGEMENT PROGRAM PERMIT (VSMP):	REQUIRED PRIOR TO ANY LAND DISTURBANCE. AN APPROVED VSMP MUST BE ACCOMPANIED WITH A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) PRIOR TO CONSTRUCTION.
FLOODPLAIN:	THIS PROPERTY IS LOCATED IN ZONE "X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AS SHOWN ON FEMA PANEL #51003C0145D EFFECTIVE DATE: FEBRUARY 4, 2005. NO FLOODPLAIN LINES SHOWN ON PROPERTY.

REVISIONS

REV	DATE	DESCRIPTION

gai consultants

Dominion Energy

PRELIMINARY SITE AND GRADING PLAN

DRAFT

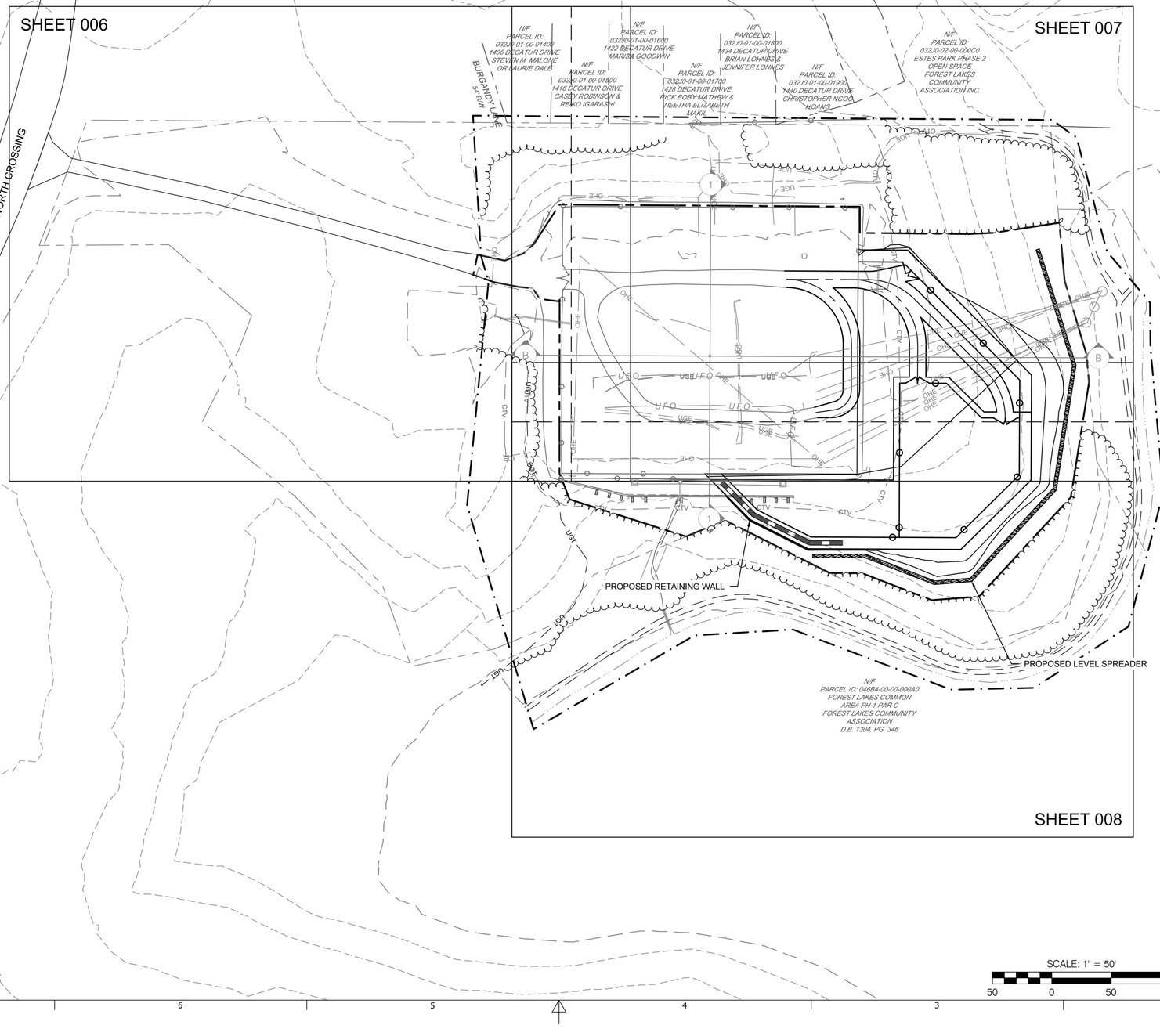
HOLLYMEADE SUBSTATION EXPANSION

ALBEMARLE COUNTY VIRGINIA

OPERATIONAL REGION		B/M No.		SCALE	NTS
PROJECT	NAME	DATE	SHEET: 001		
DESIGNER					
PROJECT ENGINEER			DRAWING:		
APPROVED BY			R220236-00-000-00-C-001		

OVERALL SITE PLAN

- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- PROPOSED MAJOR CONTOURS
- PROPOSED MINOR CONTOURS
- EDGE OF PUBLICLY AVAILABLE LIDAR
- EXISTING ADJACENT PROPERTY LINE
- EXISTING SITE PROPERTY LINE
- EXISTING FENCE LINE
- PROPOSED FENCE LINE
- EXISTING OVERHEAD ELECTRIC (OHE)
- EXISTING UNDERGROUND ELECTRIC (UGE)
- EXISTING UNDERGROUND TELEPHONE (UGT)
- EXISTING FIBER OPTIC (U F O)
- EXISTING TELECOMMUNICATION LINE (CTV)
- EDGE OF EXISTING GRAVEL
- PROPOSED SUBSTATION PAD
- EXISTING EDGE OF WATER
- TREELINE
- PROPOSED ACCESS ROAD CENTERLINE
- EXISTING RIP RAP
- EXISTING INLET
- EXISTING CULVERT (SD)
- EDGE OF EXISTING DITCH
- LIMIT OF DISTURBANCE
- PROPOSED STORM SEWER



SCALE: 1" = 50'

50 0 50 100

NOTES:

1. REFER TO "TOPOGRAPHIC SURVEY AND COMPILED BOUNDARY, COUNTY OF ALBEMARLE, VIRGINIA" FOR SURVEY INFORMATION.

REVISIONS			gai consultants
△			
REV	DATE	DESCRIPTION	

Dominion Energy

OVERALL SITE PLAN

DRAFT

HOLLYMEADE SUBSTATION EXPANSION

ALBEMARLE COUNTY VIRGINIA

OPERATIONAL REGION		B/M No.		SCALE	1"=50'
PROJECT	NAME	DATE	SHEET:	002	
DESIGNER					
PROJECT ENGINEER			DRAWING:	R220236-00-000-00-C-002	
APPROVED BY					

EROSION AND SEDIMENTATION CONTROL NOTES - DOMINION ENERGY VIRGINIA

1. CONTRACTOR SHALL HAVE AVAILABLE A COPY OF THE LATEST VERSION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK. CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION, MAINTENANCE, AND REMOVAL OF ALL CONTROL DEVICES. THESE DEVICES SHALL MEET OR EXCEED THE HIGHER OF THE REQUIREMENTS COVERED IN THIS HANDBOOK OR THE CONTROLLING AUTHORITY.
2. EROSION AND SEDIMENT CONTROL DEVICES, AS SHOWN ON THE PLAN, SHALL BE INSTALLED AS THE FIRST STEP OF THE GRADING PROCESS.
3. TEMPORARY DEVICES SHALL BE REPAIRED OR REPLACED IMMEDIATELY IF THEY CEASE TO FUNCTION AS INTENDED. TEMPORARY CONTROLS SHALL BE REMOVED WHEN AREAS ABOVE THEN BECOME STABILIZED TO THE SATISFACTION OF THE PLAN APPROVING AUTHORITIES.
4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO KEEP SURROUNDING DRAINAGE BEDS FREE OF SILT CAUSED BY EROSION DURING CONSTRUCTION.
5. NO DISTURBED AREA SHALL REMAIN DENUDED FOR LONGER THAN 7 DAYS, EXCEPT THOSE CONTINUOUSLY BEING WORKED OR BUILT UPON.
6. ELECTRIC POWER, TELEPHONE, AND GAS SUPPLY TRENCHES ARE TO BE COMPACTED, SEEDED, AND MULCHED WITHIN 7 DAYS AFTER BACKFILL. ALL EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
7. THE SITE STONE IS PART OF THE PERMANENT STABILIZATION OF THE SITE. IT SHALL BE APPLIED AS SOON AS PRACTICAL AFTER FOUNDATION INSTALLATIONS ARE COMPLETE.
8. TEMPORARY OR PERMANENT SEEDING SHALL BE ACCOMPLISHED WITHIN 7 DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SUBSTATION LOT.
9. TOPSOIL SHALL BE APPLIED IN 2-6 INCH LAYERS ON AREAS ROUGHENED USING STANDARD ROUGHENING PROCEDURES. ALL AREAS DESIGNATED TO BE SEEDED SHALL BE TOPSOILED WHEN SUFFICIENT MATERIAL IS AVAILABLE.
10. UNLESS OTHERWISE NOTED, ALL DITCHES AND OTHER GRASS LINED WATER WAYS SHALL BE LIMED, FERTILIZED, SEEDED, AND STABILIZED WITH EXCELSIOR BLANKET (CURLEX) IMMEDIATELY AFTER CONSTRUCTION.
11. TEMPORARY AND PERMANENT SEEDING SHALL CONFORM TO THE LATEST SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK. * GENERAL SPECIFICATIONS FOLLOW:
12. REFER TO SHEET 5 FOR TEMPORARY AND PERMANENT SEEDING SPECIFICATIONS.

GENERAL EROSION AND SEDIMENTATION CONTROL NOTES - VESCH

ES-1. UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND VIRGINIA REGULATIONS 9VAC25-840 EROSION AND SEDIMENT CONTROL REGULATIONS.

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 AS THE FIRST STEP IN CLEARING.

ES-4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON 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 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 ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING 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 RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.

PROJECT DESCRIPTION:

THE PURPOSE OF THIS PROJECT IS FOR THE INSTALLATION OF AIR CORE SERIES REACTORS ON LINE 2054 AT HOLLYMEADE SUBSTATION AT 3317 WORTH CROSSING, CHARLOTTE, VA. THE PROPERTY IS ZONED R1 AND R15 RESIDENTIAL. THE SITE AREA IS 2.90 ACRES WITH 1.42 EXISTING IMPERVIOUS ACRES. THE PROPOSED INSTALLATION WILL COMPRISE OF 0.77 ACRES OF ADDITIONAL IMPERVIOUS SURFACE AND 2.90 ACRES OF LAND DISTURBANCE. THIS PROPERTY IS WITHIN THE SOUTH FORK RIVANNA RIVER WATERSHED . (HUC 020802040203, VA 6TH ORDER JR08).

EXISTING CONDITIONS:

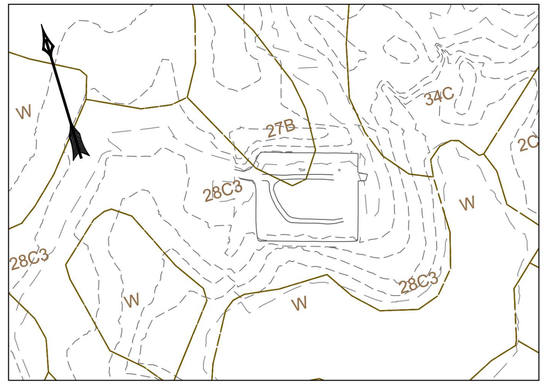
THE EXISTING SITE AREA CONSISTS MAINLY OF GRAVEL SURFACE DUE TO THE EXISTING SUBSTATION AND THE GRAVEL ACCESS ROAD TO THE WEST. THE AREA SURROUNDING THE SUBSTATION CONSISTS MAINLY OF GRASSY AREAS AND PATCHES OF WOODED AREAS ENCOMPASSING THE SUBSTATION. THE TERRAIN IS RELATIVELY FLAT UNTIL IT DROPS OFF TO AN EXISTING POND SOUTH AND EAST OF THE SUBSTATION.

ADJACENT PROPERTIES:

THIS SITE IS BOUND BY FIFTEEN (15) PROPERTIES, WHERE FOUR (5) ARE ZONED R-15 (RESIDENTIAL), ONE (1) IS ZONED R-4 (RESIDENTIAL), EIGHT (8) ARE PLANNED RESIDENTIAL DEVELOPMENTS, AND THE LAST IS A PLANNED RESIDENTIAL SHOPPING CENTER.

OFF-SITE AREAS:

THERE WILL BE NO OFF SITE DISTURBANCE.



SOILS MAP
SCALE 1"=200'

SOILS:

THE FOLLOWING THREE (3) SOIL TYPES ARE IDENTIFIED WITHIN THE SITE DEVELOPMENT AREA:

1) 27B ELIOACK LOAM, 2 TO 7 PERCENT, HYDROLOGIC SOIL GROUP (HSG) B, k=1.98.
2) 28C3 ELIOACK CLAY LOAM, 7 TO 15 PERCENT, HYDROLOGIC SOIL GROUP (HSG) B, k=1.98;
3) 34C GLENELG LOAM, 7 TO 15 PERCENT, HYDROLOGIC SOIL GROUP (HSG) B, k=1.98.

CRITICAL EROSION AREAS:

THERE ARE NO ENVIRONMENTALLY SENSITIVE AREAS WITHIN THE LIMITS OF DISTURBANCE.

STRUCTURAL PRACTICES

1. SAFETY FENCE - 3.01
2. CONSTRUCTION ENTRANCE - 3.02
3. SILT FENCE - 3.05
4. STORM DRAIN INLET PROTECTION - 3.07

VEGETATIVE PRACTICES

1. TOPSOIL - 3.30
2. TEMPORARY SEEDING - 3.31
3. PERMANENT SEEDING - 3.32
4. MULCHING - 3.35
5. SOIL STABILIZATION BLANKETS AND MATTING - 3.36
6. DUST CONTROL - 3.39

MANAGEMENT STRATEGIES

1. CONSTRUCTION WILL BE SEQUENCED SO THAT GRADING OPERATIONS CAN BEGIN AND END AS QUICKLY AS POSSIBLE.
2. TEMPORARY SEEDING OR OTHER STABILIZATION WILL FOLLOW SEVEN (7) DAYS AFTER GRADING.
3. AREAS WHICH ARE NOT TO BE DISTURBED WILL BE CLOSELY MARKED BY FLAGS, SIGNS, ETC.
4. THE JOB SUPERINTENDENT SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES.
5. AFTER ACHIEVING ADEQUATE STABILIZATION, THE TEMPORARY EROSION AND SEDIMENT CONTROLS WILL BE CLEANED AND REMOVED.

PERMANENT STABILIZATION

ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE STABILIZED WITH PERMANENT SEEDING IMMEDIATELY FOLLOWING FINISH GRADING. SEEDING SHALL BE APPLIED IN ACCORDANCE WITH STANDARD AND SPECIFICATION 3.32, PERMANENT SEEDING. MULCH WILL BE USED IN ALL SEEDED AREAS AFTER SEED, FERTILIZER, AND LIME HAVE BEEN APPLIED.

STORMWATER MANAGMENT

HOLD FOR FINAL SUBMITAL

MAINTENANCE

IN GENERAL, ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CHECKED DAILY AND AFTER EACH SIGNIFICANT RAINFALL. THE FOLLOWING MEASURES WILL BE CHECKED AND MITIGATED ACCORDINGLY.

SAFETY FENCE - 3.01

SAFETY FENCE SHALL BE CHECKED REGULARLY FOR WEATHER-RELATED OR OTHER DAMAGE. ANY NECESSARY REPAIRS MUST BE MADE IMMEDIATELY. CARE SHOULD BE TAKEN TO SECURE ALL ACCESS POINTS (GATES) AT THE END OF EACH WORKING DAY. ALL LOCKING DEVICES MUST BE REPAIRED OR REPLACED AS NECESSARY.

CONSTRUCTION ENTRANCE - 3.02

A CONSTRUCTION ENTRANCE WILL BE INSTALLED AT THE SITE FOR VEHICLE INGRESS AND EGRESS TO REDUCE THE AMOUNT OF SEDIMENT TRANSPORTED ONTO PAVED PUBLIC FACILITIES AND ROADS BY VEHICULAR TRAFFIC OR RUNOFF. THE CONSTRUCTION ENTRANCE SHALL BE INSTALLED FOLLOWING VESCH STANDARD 3.02.

SILT FENCE - 3.05

SILT FENCE BARRIERS SHALL BE INSTALLED DOWNSLOPE OF AREAS WITH MINIMAL GRADES TO FILTER SEDIMENT-LADEN RUNOFF FROM SHEET FLOW AS INDICATED ON THE E&SC PLANS. ALL MAINTENANCE PRACTICES SHALL FOLLOW THE GUIDELINES SET IN VESCH STANDARD 3.05.

STORM DRAIN INLET PROTECTION - 3.07

STORM DRAIN INLETS SHALL BE PROTECTED DURING CONSTRUCTION BY SILT FENCE, FILTERING, SEDIMENT-LADEN WATER BEFORE ENTERING STORM NETWORK. ALL MAINTENANCE PRACTICES SHALL FOLLOW THE GUIDELINES SET IN VESCH STANDARD 3.07.

TOPSOILING - 3.30

AREAS OF THE SITE MAY REQUIRE TOPSOILING TO PROVIDE A SUITABLE GROWTH MEDIUM FOR VEGETATION STABILIZATION. A TEMPORARY TOPSOIL STOCKPILE SHALL BE INSTALLED AS SHOWN ON SHEET 7. TOPSOILING PLACEMENT AND INSTALLATION SHALL FOLLOW THE GUIDELINES SET IN VESCH STANDARD 3.30.

TEMPORARY SEEDING - 3.31

CERTAIN AREAS OF THE SITE WILL BE ROUGH GRADED AS A FIRST STAGE OF CONSTRUCTION. FINISH GRADING WILL OCCUR NEAR PROJECT COMPLETION. THESE AREAS SHALL BE SEEDED TEMPORARILY WITH FAST GERMINATING GRASSES TO REDUCE EROSION POTENTIAL. DIVERSIONS, FILL DIVERSIONS, DIVERSION DIKES AND THE SEDIMENT BASIN EMBANKMENT SHALL ALSO RECEIVE TEMPORARY SEEDING. TEMPORARY SEEDING APPLICATIONS SHALL FOLLOW THE GUIDELINES SET IN VESCH STANDARD 3.31.

PERMANENT SEEDING - 3.32

IMMEDIATELY FOLLOWING FINISH GRADING, PERMANENT VEGETATION SHALL BE APPLIED IN ACCORDANCE TO THE GUIDELINES IN THE VESCH STANDARD 3.32 (PIEDMONT AREA) AND PER THE E&SC DETAILS IN THIS PLAN. PERMANENT SEEDING APPLICATIONS SHALL FOLLOW THE GUIDELINES SET IN VESCH STANDARD 3.32.

MULCHING - 3.35

IN AREAS THAT REQUIRE SUPPLEMENTAL EROSION CONTROL TO PROMOTE GROWTH OF VEGETATION OR TO REDUCE VELOCITIES FROM OVERLAND FLOW, MULCH MAY BE USED AS AN ALTERNATIVE. ANY MULCH APPLICATIONS SHALL FOLLOW THE GUIDELINES SET IN VESCH STANDARD 3.35.

SOIL STABILIZATION BLANKETS AND MATTING - 3.36

SOIL STABILIZATION BLANKETS AND MATTING MAY BE USED AS AN ALTERNATIVE TO TEMPORARY AND PERMANENT SEEDING OR IN CRITICAL AREAS WITH STEEP CUT OR FILL SLOPES. BLANKET AND MATTING STABILIZATION MAY BE USED PER THE DIRECTION OF THE E&SC INSPECTOR. ANY BLANKET AND MATTING APPLICATION SHALL FOLLOW THE GUIDELINES SET IN VESCH STANDARD 3.36.

DUST CONTROL - 3.39

DUST CONTROL APPLICATIONS MAY BE EMPLOYED WHEN SURFACE AND AIR MOVEMENT OF DUST RESULTING FROM CONSTRUCTION BECOMES AN ISSUE. DUST CONTROL APPLICATIONS SHALL FOLLOW THE GUIDELINES SET IN VESCH STANDARD 3.39.

CONSTRUCTION SEQUENCE

1. FLAG THE LIMITS OF DISTURBANCE SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN PRIOR TO A PRE-CONSTRUCTION MEETING WITH CERTIFIED PERSONNEL AS IT PERTAINS TO THE VIRGINIA STORMWATER MANAGEMENT PROGRAM (VSMP) REGULATIONS AND IN ACCORDANCE WITH THE ANNUAL STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL AND STORMWATER MANAGEMENT (TE VEP 8000). A PRE-CONSTRUCTION MEETING WITH THE CONTRACTOR, PROJECT MANAGER, AND CERTIFIED EROSION AND SEDIMENT CONTROL INSPECTOR WILL BE SCHEDULED BY DOMINION.
2. DURING THE PRE-CONSTRUCTION MEETING, THE CERTIFIED EROSION AND SEDIMENT CONTROL INSPECTOR SHALL CHECK THE FLAGGING DESIGNATING THE LIMITS OF DISTURBANCE.
3. INSTALL THE CONSTRUCTION ENTRANCE.
4. INSTALL ALL OTHER PERIMETER DEVICES SUCH AS SILT FENCE.
5. CLEAR, GRUB AND REMOVE VEGETATION AS INDICATED IN THE EROSION AND SEDIMENT CONTROL PLAN ONCE ALL EROSION CONTROL DEVICES ARE FUNCTIONING AND IN PLACE.
6. PLACE AS NEEDED TEMPORARY TOPSOIL STOCKPILE AND PROTECT WITH SILT FENCE AND TEMPORARY SEEDING.
7. FILL THE SITE PER THE GRADING SHOWN IN THE GRADING AND DRAINAGE PLAN. ENSURE SURFACE ROUGHENING IS APPLIED TO 3:1 FILL SLOPES.
8. APPLY TEMPORARY SEEDING TO ANY DISTURBED AREAS THAT REMAIN DORMANT FOR MORE THAN SEVEN (7) DAYS.
9. PERFORM FINAL SITE GRADING AS SHOWN ON PLANS.
10. INSTALL A FOUR (4) INCH THICK LAYER OF VDOT #57 STONE COURSE AGGREGATE SITE STONE, TWELVE (12) INCH THICK VDOT No. 21A COMPACTED BASE COURSE ACCESS ROADS AND SUBSTATION SECURITY FENCE PER SHEET 007 AND THE DETAILS SHOWN ON SHEET 020. APPLY PERMANENT SEEDING TO REMAINING GRADED AREAS NOT STABILIZED BY STONE COVER.
11. NO EROSION AND SEDIMENT CONTROL DEVICES SHALL BE REMOVED UNTIL THE SITE IS DEEMED STABILIZED AND PER THE APPROVAL OF THE CERTIFIED EROSION AND SEDIMENT CONTROL INSPECTOR.

HOLD FOR FINAL SUBMITAL

TOTAL DISTURBED AREA: 2.90 ACRES

REVISIONS			gai consultants
△			
REV	DATE	DESCRIPTION	

Dominion Energy

EROSION & SEDIMENT CONTROL
GENERAL NOTES AND NARRATIVE

DRAFT

HOLLYMEADE SUBSTATION EXPANSION

ALBEMARLE COUNTY VIRGINIA

OPERATIONAL REGION		B/M No.		SCALE	NTS
PROJECT		NAME	DATE	SHEET:	003
DESIGNER					
PROJECT ENGINEER				DRAWING:	R220236-00-000-00-C-003
APPROVED BY					

VIRGINIA EROSION AND SEDIMENT CONTROL MINIMUM STANDARDS

MINIMUM STANDARDS

THIS SECTION IDENTIFIES THE MINIMUM EROSION AND SEDIMENT STANDARDS THAT THE PROJECT NEEDS TO MEET ACCORDING TO VIRGINIA'S EROSION AND SEDIMENT CONTROL LAW AND REGULATIONS (4VAC50-30-40).

MINIMUM STANDARD 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 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 AND PROVIDED AS THE SITE IS BROUGHT TO GRADE.

☒ APPLICABLE ☐ NOT APPLICABLE

PROJECT COMPLIANCE: TEMPORARY AND PERMANENT SEEDING SPECIFICATIONS HAVE BEEN INCLUDED AS A VEGETATIVE MEASURE. REFER TO E&SC PLANS AND DETAILS.

MINIMUM STANDARD 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.

☒ APPLICABLE ☐ NOT APPLICABLE

PROJECT COMPLIANCE: POTENTIAL STOCKPILE AREAS ARE TO BE KEPT ON-SITE AND WITHIN THE LIMITS OF DISTURBANCE UNDER THE CONTROL OF EROSION AND SEDIMENT CONTROL MEASURES.

MINIMUM STANDARD 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.

☒ APPLICABLE ☐ NOT APPLICABLE

PROJECT COMPLIANCE: PERMANENT SEEDING WILL BE PROVIDED ON ANY DENUDED AREA ONCE THE SITE HAS BEEN BROUGHT TO FINAL GRADE.

MINIMUM STANDARD 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 UPSLOPE LAND DISTURBANCE TAKES PLACE.

☒ APPLICABLE ☐ NOT APPLICABLE

PROJECT COMPLIANCE: IN ACCORDANCE WITH THE CONSTRUCTION SEQUENCE SILT FENCE SHALL BE INSTALLED PRIOR TO MASS GRADING OR UP GRADIENT LAND DISTURBANCES.

MINIMUM STANDARD 5. STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.

☒ APPLICABLE ☐ NOT APPLICABLE

PROJECT COMPLIANCE: DAMS OR OTHER EARTHEN MEASURE SHALL BE STABILIZED IN ACCORDANCE WITH MINIMUM STANDARD 1.

MINIMUM STANDARD 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.

☐ APPLICABLE ☒ NOT APPLICABLE

PROJECT COMPLIANCE: N/A

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 TWENTY-FIVE 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.

☐ APPLICABLE ☒ NOT APPLICABLE

PROJECT COMPLIANCE: N/A

MINIMUM STANDARD 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.

☒ APPLICABLE ☐ NOT APPLICABLE

PROJECT COMPLIANCE: ANY FILL SLOPE THAT MAY ERODE WILL BE MONITORED AND ADDITIONAL STABILIZATION WILL BE ADDED IF NEEDED.

MINIMUM STANDARD 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.

☐ APPLICABLE ☒ NOT APPLICABLE

PROJECT COMPLIANCE: N/A

MINIMUM STANDARD 9. WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.

☒ APPLICABLE ☐ NOT APPLICABLE

PROJECT COMPLIANCE: INADEQUATE DRAINAGE SHALL BE CORRECTED PRIOR TO STABILIZATION.

MINIMUM STANDARD 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.

☒ APPLICABLE ☐ NOT APPLICABLE

PROJECT COMPLIANCE: CULVERT INLET AND INLET PROTECTION TO BE INSTALLED. REFER TO E&SC PLANS AND DETAILS.

MINIMUM STANDARD 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.

☐ APPLICABLE ☒ NOT APPLICABLE

PROJECT COMPLIANCE: N/A

MINIMUM STANDARD 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 COFFERDAMS. EARTHEN FILL MAY BE USED FOR THESE STRUCTURES IF ARMORED BY NONERODIBLE COVER MATERIALS.

☐ APPLICABLE ☒ NOT APPLICABLE

PROJECT COMPLIANCE: N/A

MINIMUM STANDARD 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.

☐ APPLICABLE ☒ NOT APPLICABLE

PROJECT COMPLIANCE: N/A

MINIMUM STANDARD 14. ALL APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS PERTAINING TO WORKING IN OR CROSSING LIVE WATERCOURSES SHALL BE MET.

☐ APPLICABLE ☒ NOT APPLICABLE

PROJECT COMPLIANCE: N/A

MINIMUM STANDARD 15. THE BED AND BANKS OF A WATERCOURSE SHALL BE STABILIZED IMMEDIATELY AFTER WORK IN THE WATERCOURSE IS COMPLETED.

☐ APPLICABLE ☒ NOT APPLICABLE

PROJECT COMPLIANCE: N/A

MINIMUM STANDARD 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 UPHILL 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.

E. RESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THESE REGULATIONS.

F. APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH.

☒ APPLICABLE ☐ NOT APPLICABLE

PROJECT COMPLIANCE: ALL REGULATIONS PERTAINING TO TRENCHING WILL BE MET AND FOLLOWED ON THIS SITE.

MINIMUM STANDARD 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. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. 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.

☒ APPLICABLE ☐ NOT APPLICABLE

PROJECT COMPLIANCE: SEDIMENT TRANSPORTED ONTO PAVED PARKING FACILITIES AND PUBLIC ROADS WILL BE REMOVED AT THE END OF EACH WORK DAY. IN ADDITION, A CONSTRUCTION ENTRANCE WILL BE USED AS SHOWN ON THE APPROVED EROSION AND SEDIMENT CONTROL PLANS.

MINIMUM STANDARD 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 AUTHORITY. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION. ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES WILL BE REMOVED AFTER 30 DAY OF FINAL SITE STABILIZATION OR AFTER THE TEMPORARY DEVICES ARE NO LONGER NEEDED.

☒ APPLICABLE ☐ NOT APPLICABLE

PROJECT COMPLIANCE: ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES WILL BE REMOVED AFTER 30 DAY OF FINAL SITE STABILIZATION OR AFTER THE TEMPORARY DEVICES ARE NO LONGER NEEDED UPON THE APPROVAL OF THE CERTIFIED EROSION AND SEDIMENT CONTROL INSPECTOR.

MINIMUM STANDARD 19. PROPERTIES AND WATERWAYS DOWNSTREAM FROM DEVELOPMENT SITES SHALL BE PROTECTED FROM SEDIMENT DEPOSITION, EROSION AND DAMAGE DUE TO INCREASE 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 FOR THE PIPE OR PIPE SYSTEM SHALL BE PERFORMED.

B. ADEQUACY OF ALL CHANNELS AND PIPES SHALL BE VERIFIED IN THE FOLLOWING MANNER:

(1) 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

(2)(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 BANK; 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:

(1) 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

(2) IMPROVE THE PIPE SYSTEM TO A CONDITION WHERE THE TEN YEAR STORM IS CONTAINED WITHIN THE APPURTENANCES; OR

(3) 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

(4) PROVIDE A COMBINATION OF CHANNEL IMPROVEMENT, STORMWATER DETENTION OR OTHER MEASURES WHICH IS SATISFACTORY TO THE PLAN APPROVING AUTHORITY TO PREVENT DOWNSTREAM EROSION.

D. THE APPLICANT SHALL PROVIDE EVIDENCE OF PERMISSION TO MAKE THE IMPROVEMENT.

E. ALL HYDROLOGIC ANALYSES SHALL BE BASED ON 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 THE MAINTENANCE REQUIREMENTS OF THE FACILITY AND THE PERSON RESPONSIBLE FOR PERFORMING THE MAINTENANCE.

G. OUTFALL FROM A DETENTION FACILITY SHALL BE DISCHARGED TO A RECEIVING CHANNEL, AND ENERGY DISSIPATERS SHALL BE PLACED AT THE OUTFALL OF ALL DETENTION FACILITY AS NECESSARY TO PROVIDE A STABILIZED TRANSITION FROM THE FACILITY TO THE RECEIVING CHANNEL.

H. ALL ONSITE CHANNELS MUST BE VERIFIED TO BE ADEQUATE.

I. INCREASED VOLUMES OF SHEET FLOWS THAT MAY CAUSE EROSION OR SEDIMENTATION ON ADJACENT PROPERTY SHALL BE DIVERTED TO A STABLE OUTLET, ADEQUATE CHANNEL, PIPE OR PIPE SYSTEM, OR TO A DETENTION FACILITY.

J. 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 CONSIDERED TO BE A SINGLE DEVELOPMENT PROJECT. HYDROLOGIC PARAMETERS THAT REFLECT THE ULTIMATE DEVELOPMENT CONDITION SHALL BE USED IN ALL ENGINEERING CALCULATIONS.

K. ALL MEASURES USED TO PROTECT PROPERTIES AND WATERWAYS SHALL BE EMPLOYED IN A MANNER WHICH MINIMIZES IMPACTS ON THE PHYSICAL, CHEMICAL AND BIOLOGICAL INTEGRITY OF RIVERS, STREAMS, AND OTHER WATERS OF THE STATE.

☒ APPLICABLE ☐ NOT APPLICABLE

L. ANY PLAN APPROVED PRIOR TO JULY 1, 2014, THAT PROVIDES FOR STORMWATER MANAGEMENT THAT ADDRESSES ANY FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN-MADE CHANNELS SHALL SATISFY THE FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN-MADE CHANNELS IF THE PRACTICES ARE DESIGNED TO (I) DETAIN THE WATER QUALITY VOLUME AND TO RELEASE IT OVER 48 HOURS; (II) DETAIN AND RELEASE OVER A 24-HOUR PERIOD THE EXPECTED RAINFALL RESULTING FROM THE ONE YEAR, 24-HOUR STORM; AND (III) REDUCE THE ALLOWABLE PEAK FLOW RATE RESULTING FROM THE 1.5, 2, AND 10-YEAR, 24-HOUR STORMS TO A LEVEL THAT IS LESS THAN OR EQUAL TO THE PEAK FLOW RATE FROM THE SITE ASSUMING IT WAS IN A GOOD FORESTED CONDITION, ACHIEVED THROUGH MULTIPLICATION OF THE FORESTED PEAK FLOW RATE BY A REDUCTION FACTOR THAT IS EQUAL TO THE RUNOFF VOLUME FROM THE SITE WHEN IT WAS IN A GOOD FORESTED CONDITION DIVIDED BY THE RUNOFF VOLUME FROM THE SITE IN ITS PROPOSED CONDITION, AND SHALL BE EXEMPT FROM ANY FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN-MADE CHANNELS AS DEFINED IN ANY REGULATIONS PROMULGATED PURSUANT TO 62.1-44.15:54 OR 62.1-44.15:65 OF THE ACT.

☐ APPLICABLE ☒ NOT APPLICABLE

M. FOR PLANS APPROVED ON AND AFTER JULY 1, 2014, THE FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS OF 62.1-44.15:52 A OF THE ACT AND THIS SUBSECTION SHALL BE SATISFIED BY COMPLIANCE WITH WATER QUANTITY REQUIREMENTS IN THE STORMWATER MANAGEMENT ACT (62.1-44.15:24 ET SEQ. OF THE CODE OF VIRGINIA) AND ATTENDANT REGULATIONS, UNLESS SUCH LAND-DISTURBING ACTIVITIES ARE IN ACCORDANCE WITH 9VAC25-870-48 OF THE VIRGINIA STORMWATER MANAGEMENT PROGRAM (VSMP) REGULATIONS.

☒ APPLICABLE ☐ NOT APPLICABLE

N. COMPLIANCE WITH THE WATER QUANTITY MINIMUM STANDARDS SET OUT IN 9VAC25-870-66 OF THE VIRGINIA STORMWATER MANAGEMENT PROGRAM (VSMP) REGULATIONS SHALL BE DEEMED TO SATISFY THE REQUIREMENTS OF SUBDIVISION 19 OF THIS SUBSECTION.

☒ APPLICABLE ☐ NOT APPLICABLE

PROJECT COMPLIANCE: SEE SWM NARRATIVE ON SHEET 15 FOR SWM CALCULATIONS.

REVISIONS			gai consultants
△			
REV	DATE	DESCRIPTION	

Dominion Energy

EROSION & SEDIMENT CONTROL
MINIMUM STANDARDS AND DETAILS

DRAFT

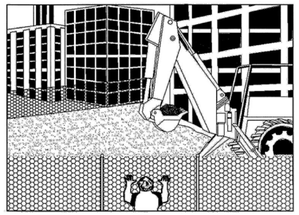
HOLLYMEADE SUBSTATION EXPANSION

ALBEMARLE COUNTY VIRGINIA

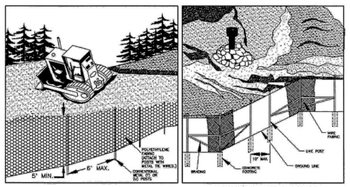
OPERATIONAL REGION		B/M No.		SCALE	NTS
PROJECT	NAME	DATE	SHEET:	004	
DESIGNER					
PROJECT ENGINEER			DRAWING:	R220236-00-000-00-C-004	
APPROVED BY					

1992 3.01

SAFETY FENCE



PERSPECTIVE VIEW



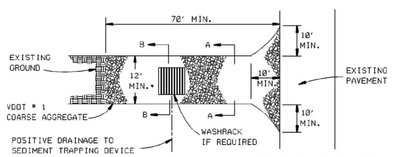
PERSPECTIVE VIEW
PLASTIC FENCE

PERSPECTIVE VIEW
METAL FENCE

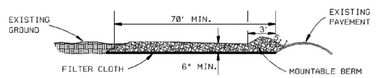
Source: Adapted from Conwed Plastics and VDOT Road and Bridge Standards

Plate 3.01-1

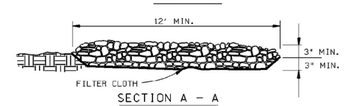
STONE CONSTRUCTION ENTRANCE - 3.02



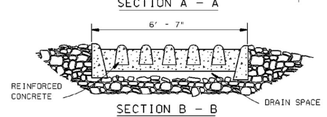
PLAN VIEW



ELEVATION



SECTION A - A



SECTION B - B

1992 3.32

TABLE 3.32-D
SITE SPECIFIC SEEDING MIXTURES FOR PIEDMONT AREA

	Total Lbs. Per Acre
Minimum Care Lawn	
- Commercial or Residential	175-200 lbs.
- Kentucky 31 or Turf-Type Tall Fescue	95-100%
- Improved Perennial Ryegrass	0-5%
- Kentucky Bluegrass	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.
- Crownvetch **	20 lbs.
	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 Crownvetch east of Farmville, Va. (May through September use hulled Sericea, all other periods, use unhulled Sericea). If Flatpea is used in lieu of Crownvetch, increase rate to 30 lbs./acre. All legume seed must be properly inoculated. Weeping Lovegrass may be added to any slope or low-maintenance mix during warmer seeding periods; add 10-20 lbs./acre in mixes.

1992 3.35

TABLE 3.35-A

ORGANIC MULCH MATERIALS AND APPLICATION RATES

MULCHES:	RATES: Per Acre	RATES: Per 1000 sq. ft.	NOTES:
Straw or Hay	1½ - 2 tons (Minimum 2 tons for winter cover)	70 - 90 lbs.	Free from weeds and coarse matter. Must be anchored. Spread with mulch blower or by hand.
Fiber Mulch	Minimum 1500 lbs.	35 lbs.	Do not use as mulch for winter cover or during hot, dry periods.* Apply as slurry.
Corn Stalks	4 - 6 tons	185 - 275 lbs.	Cut or shredded in 4-6" lengths. Air-dried. Do not use in fine turf areas. Apply with mulch blower or by hand.
Wood Chips	4 - 6 tons	185 - 275 lbs.	Free of coarse matter. Air-dried. Treat with 12 lbs nitrogen per ton. Do not use in fine turf areas. Apply with mulch blower, chip handler, or by hand.
Bark Chips or Shredded Bark	50 - 70 cu. yds.	1-2 cu. yds.	Free of coarse matter. Air-dried. Do not use in fine turf areas. Apply with mulch blower, chip handler, or by hand.

* When fiber mulch is the only available mulch during periods when straw should be used, apply at a minimum rate of 2000 lbs./ac. or 45 lbs./1000 sq. ft.

Source: Va. DSWC

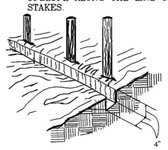
1992 3.05

CONSTRUCTION OF A SILT FENCE (WITHOUT WIRE SUPPORT)

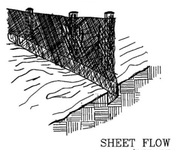
1. SET THE STAKES.



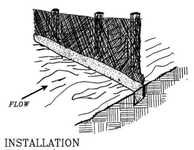
2. EXCAVATE A 4"X 4" TRENCH UPSLOPE ALONG THE LINE OF STAKES.



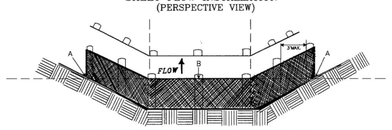
3. STAPLE FILTER MATERIAL TO STAKES AND EXTEND IT INTO THE TRENCH.



4. BACKFILL AND COMPACT THE EXCAVATED SOIL.



SHEET FLOW INSTALLATION
(PERSPECTIVE VIEW)



POINTS A SHOULD BE HIGHER THAN POINT B.

DRAINAGEWAY INSTALLATION
(FRONT ELEVATION)

Source: Adapted from Installation of Straw and Fabric Filter Barriers for Sediment Control, Sherwood and Wyant

Plate 3.05-2

TABLE 3.31-C

TEMPORARY SEEDING PLANT MATERIALS, SEEDING RATES, AND DATES

SPECIES	SEEDING RATE: Acre	SEEDING RATE: 1000 ft²	NORTH[a]: 3/1 to 4/30	NORTH[a]: 5/1 to 8/15	NORTH[a]: 8/15 to 11/1	SOUTH[b]: 2/15 to 4/30	SOUTH[b]: 5/1 to 9/1	SOUTH[b]: 9/1 to 11/15	PLANT CHARACTERISTICS
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[d] (Secale cereale)	2 bu. (up to 110 lbs., not less than 50 lbs.)	2.5 lbs.	X	-	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[c] (Lolium multi-florum)	60 lbs.	1½ lbs.	X	-	X	X	-	X	May be added in mixes. Will mow out of most stands.
WEEPING LOVEGRASS (Eragrostis curvula)	15 lbs.	5½ ozs.	-	X	-	-	X	-	Warm-season perennial. May bunch. Tolerates hot, dry slopes and acid, infertile soils. May be added to mixes.
KOREAN LESPEDEZA[c] (Lespedeza stipulacea)	25 lbs.	approx. 1½ lbs.	X	X	-	X	X	-	Warm season annual legume. Tolerates acid soils. May be added to mixes.

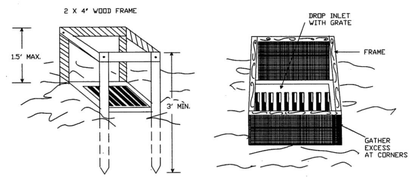
[a] Northern Piedmont and Mountain region. See Plates 3.22-1 and 3.22-2.
[b] Southern Piedmont and Coastal Plain.
[c] May be used as a cover crop with spring seeding.
[d] May be used as a cover crop with fall seeding.
X May be planted between these dates.
- May not be planted between these dates.

3.31

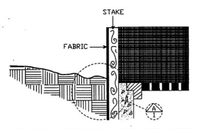
1992

1992 3.07

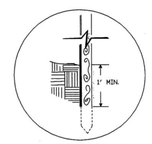
SILT FENCE DROP INLET PROTECTION



PERSPECTIVE VIEWS



ELEVATION OF STAKE AND FABRIC ORIENTATION



DETAIL A

SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPE NO GREATER THAN 5%) WHERE THE INLET SHEET OR OVERLAND FLOWS (NOT EXCEEDING 1 C.F.S.) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.

Source: N.C. Erosion and Sediment Control Planning and Design Manual, 1988

Plate 3.07-1

REVISIONS			gai consultants
△			
REV	DATE	DESCRIPTION	

Dominion Energy

EROSION & SEDIMENT CONTROL DETAILS

DRAFT

HOLLYMEADE SUBSTATION EXPANSION

ALBEMARLE COUNTY VIRGINIA

OPERATIONAL REGION		B/M No.		SCALE	NTS
PROJECT	NAME	DATE	SHEET:	005	
DESIGNER					
PROJECT ENGINEER			DRAWING:	R220236-00-000-00-C-005	
APPROVED BY					

WORTH CROSSING

N/F
PARCEL ID:
032J0-01-00-01400
1406 DECATUR DRIVE
STEVEN M. MALONE
OR LAURIE DALE

BURGANDY LANE
54' R/W

MATCHLINE SHEET 007

N/F
PARCEL ID:
032J0-01-00-01500
1416 DECATUR DRIVE
CASEY ROBINSON &
REIKO IGARASHI

03.
1422
MA

MATCHLINE SHEET 008

SCALE: 1" = 20'
20 0 20 40

EROSION & SEDIMENT CONTROL AND DEMOLITION PLAN (1 OF 3)

NO.	KEY	SYMBOL	TITLE
			EXISTING MAJOR CONTOURS
			EXISTING MINOR CONTOURS
			PROPOSED MAJOR CONTOURS
			PROPOSED MINOR CONTOURS
			EDGE OF PUBLICLY AVAILABLE LIDAR
			EXISTING ADJACENT PROPERTY LINE
			EXISTING SITE PROPERTY LINE
			EXISTING FENCE LINE
			PROPOSED FENCE LINE
		OHE	EXISTING OVERHEAD ELECTRIC
		UGE	EXISTING UNDERGROUND ELECTRIC
		UGT	EXISTING UNDERGROUND TELEPHONE
		U F O	EXISTING FIBER OPTIC
		CTV	EXISTING TELECOMMUNICATION LINE
			EDGE OF EXISTING GRAVEL
			PROPOSED SUBSTATION PAD
			EXISTING EDGE OF WATER
			TREELINE
			PROPOSED ACCESS ROAD CENTERLINE
			EXISTING RIP RAP
			EXISTING INLET
			EXISTING CULVERT
			EDGE OF EXISTING DITCH
			LIMIT OF DISTURBANCE
			PROPOSED STORM SEWER
3.02	CE		CONSTRUCTION ENTRANCE

REVISIONS			gai consultants
△			
REV	DATE	DESCRIPTION	

Dominion Energy

EROSION & SEDIMENT CONTROL AND DEMOLITION PLAN (1 OF 3)

DRAFT

HOLLYMEADE SUBSTATION EXPANSION

ALBEMARLE COUNTY VIRGINIA

OPERATIONAL REGION		B/M No.		SCALE	1"=20'
PROJECT	NAME	DATE	SHEET:	006	
DESIGNER					
PROJECT ENGINEER			DRAWING:		
APPROVED BY			R220236-00-000-00-C-006-008		

N/F
PARCEL ID:
032J0-01-00-01400
406 DECATUR DRIVE
STEVEN M. MALONE
OR LAURIE DALE

MATCHLINE SHEET 006

N/F
PARCEL ID:
032J0-01-00-01600
1422 DECATUR DRIVE
MARISA GOODWIN

N/F
PARCEL ID:
032J0-01-00-01500
1416 DECATUR DRIVE
CASEY ROBINSON &
REIKO IGARASHI

N/F
PARCEL ID:
032J0-01-00-01700
1428 DECATUR DRIVE
RICK BOBY MATHEW &
NEETHA ELIZABETH
MAKIL

N/F
PARCEL ID:
032J0-01-00-01800
1434 DECATUR DRIVE
BRIAN LOHNES &
JENNIFER LOHNES

N/F
PARCEL ID:
032J0-01-00-01900
1440 DECATUR DRIVE
CHRISTOPHER NGOC
HOANG

N/F
PARCEL ID:
032J0-02-00-00000
ESTES PARK PHASE 2
OPEN SPACE
FOREST LAKES
COMMUNITY
ASSOCIATION INC.

REMOVE EXISTING CULVERT

PROPOSED GATE

CLEAR AND GRUB TREES

PROPOSED LEVEL SPREADER

REMOVE EXISTING FENCE

EXISTING
TELECOMMUNICATION LINE
TO BE RELOCATED

MATCHLINE SHEET 008

SCALE: 1" = 20'

20 0 20 40

EROSION & SEDIMENT CONTROL AND
DEMOLITION PLAN (2 OF 3)

NO.	KEY	SYMBOL	TITLE
			EXISTING MAJOR CONTOURS
			EXISTING MINOR CONTOURS
			PROPOSED MAJOR CONTOURS
			PROPOSED MINOR CONTOURS
			EDGE OF PUBLICLY AVAILABLE LIDAR
			EXISTING ADJACENT PROPERTY LINE
			EXISTING SITE PROPERTY LINE
			EXISTING FENCE LINE
			PROPOSED FENCE LINE
		OHE	EXISTING OVERHEAD ELECTRIC
		UGE	EXISTING UNDERGROUND ELECTRIC
		UGT	EXISTING UNDERGROUND TELEPHONE
		U F O	EXISTING FIBER OPTIC
		CTV	EXISTING TELECOMMUNICATION LINE
			EDGE OF EXISTING GRAVEL
			PROPOSED SUBSTATION PAD
			EXISTING EDGE OF WATER
			TREELINE
			PROPOSED ACCESS ROAD CENTERLINE
			EXISTING RIP RAP
			EXISTING INLET
			EXISTING CULVERT
			EDGE OF EXISTING DITCH
			LIMIT OF DISTURBANCE
			EXISTING TO BE REMOVED
3.02	CE		CONSTRUCTION ENTRANCE
3.05	SF	X	SILT FENCE
3.07	IP		STORM DRAIN INLET PROTECTION
3.30	TO	TO	TOPSOILING
3.32	PS	PS	PERMANENT SEEDING
3.35	MU	MU	MULCHING

REVISIONS			gai consultants
△			
REV	DATE	DESCRIPTION	

Dominion Energy

EROSION & SEDIMENT CONTROL AND
DEMOLITION PLAN (2 OF 3)

DRAFT

HOLLYMEADE SUBSTATION EXPANSION

ALBEMARLE COUNTY VIRGINIA

OPERATIONAL REGION		B/M No.		SCALE	1"=20'
PROJECT	NAME	DATE	SHEET:	007	
DESIGNER					
PROJECT ENGINEER			DRAWING:		
APPROVED BY			R220236-00-000-00-C-006-008		

MATCHLINE SHEET 007

MATCHLINE SHEET 006

REMOVE EXISTING FENCE

REMOVE EXISTING RETAINING WALL AND FENCE

PROPOSED RETAINING WALL

EXISTING TELECOMMUNICATION LINE TO BE RELOCATED

CLEAR AND GRUB TREES

PROPOSED LEVEL SPREADER

N/F
PARCEL ID: 046B4-00-00-000A0
FOREST LAKES COMMON AREA PH-I PAR C
FOREST LAKES COMMUNITY ASSOCIATION
D.B. 1304, PG. 346

SCALE: 1" = 20'

20 0 20 40

EROSION & SEDIMENT CONTROL AND DEMOLITION PLAN (3 OF 3)

NO.	KEY	SYMBOL	TITLE
			EXISTING MAJOR CONTOURS
			EXISTING MINOR CONTOURS
			PROPOSED MAJOR CONTOURS
			PROPOSED MINOR CONTOURS
			EDGE OF PUBLICLY AVAILABLE LIDAR
			EXISTING ADJACENT PROPERTY LINE
			EXISTING SITE PROPERTY LINE
			EXISTING FENCE LINE
			PROPOSED FENCE LINE
		OHE	EXISTING OVERHEAD ELECTRIC
		UGE	EXISTING UNDERGROUND ELECTRIC
		UGT	EXISTING UNDERGROUND TELEPHONE
		U F O	EXISTING FIBER OPTIC
		CTV	EXISTING TELECOMMUNICATION LINE
			EDGE OF EXISTING GRAVEL
			PROPOSED SUBSTATION PAD
			EXISTING EDGE OF WATER
			TREELINE
			PROPOSED ACCESS ROAD CENTERLINE
			EXISTING RIP RAP
			EXISTING INLET
			EXISTING CULVERT
			EDGE OF EXISTING DITCH
			LIMIT OF DISTURBANCE
			EXISTING TO BE REMOVED
			PROPOSED STORM SEWER
3.05	SF	X	SILT FENCE
3.07	IP		STORM DRAIN INLET PROTECTION
3.30	TO	TO	TOPSOILING
3.32	PS	PS	PERMANENT SEEDING
3.35	MU	MU	MULCHING

REVISIONS			gai consultants
△			
REV	DATE	DESCRIPTION	

Dominion Energy

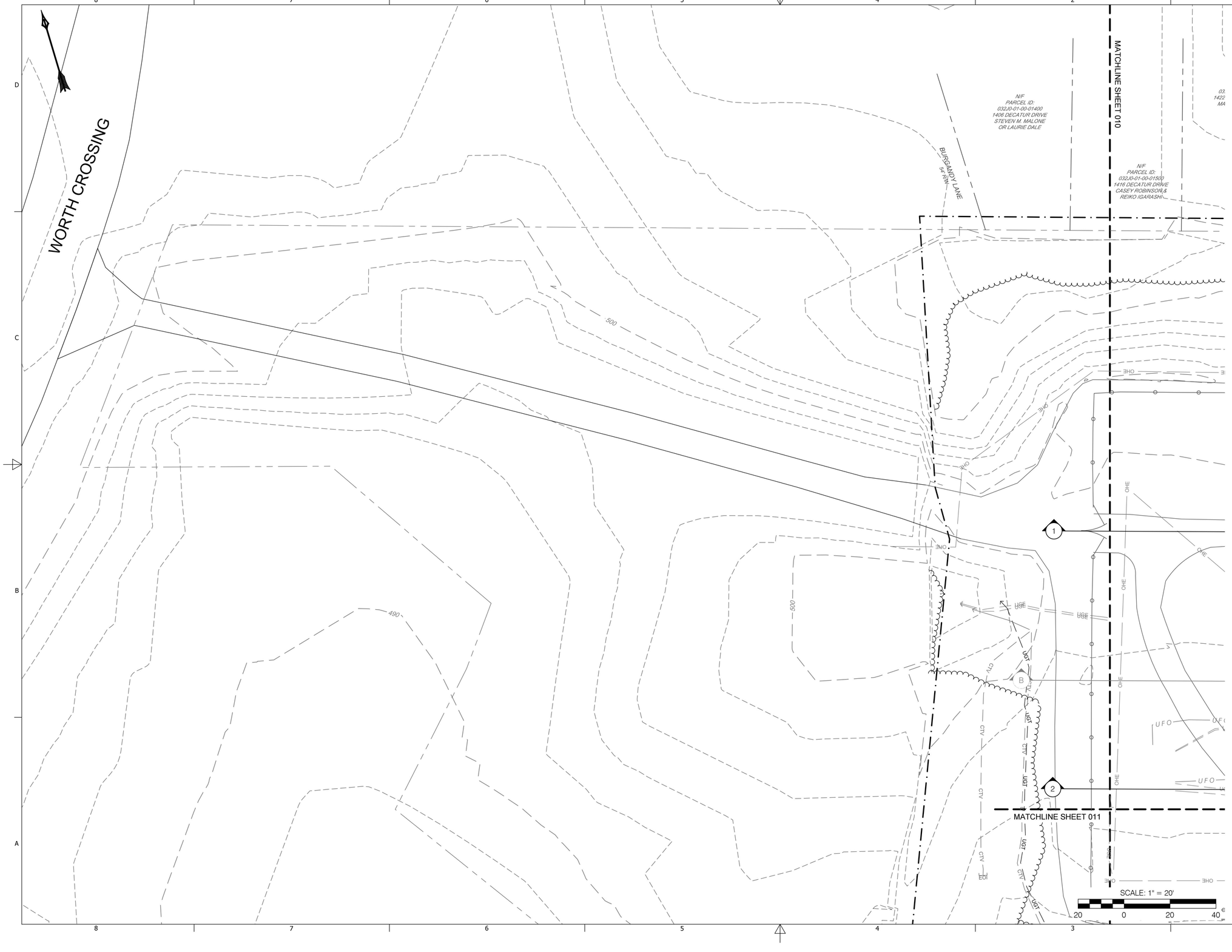
EROSION & SEDIMENT CONTROL AND DEMOLITION PLAN (3 OF 3)

DRAFT

HOLLYMEADE SUBSTATION EXPANSION

ALBEMARLE COUNTY VIRGINIA

OPERATIONAL REGION		B/M No.		SCALE	1"=20'
PROJECT	NAME	DATE	SHEET:	008	
DESIGNER					
PROJECT ENGINEER			DRAWING:		
APPROVED BY			R220236-00-000-00-C-006-008		



SITE PLAN (1 OF 3)

- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- PROPOSED MAJOR CONTOURS
- PROPOSED MINOR CONTOURS
- EDGE OF PUBLICLY AVAILABLE LIDAR
- EXISTING ADJACENT PROPERTY LINE
- EXISTING SITE PROPERTY LINE
- EXISTING FENCE LINE
- PROPOSED FENCE LINE
- EXISTING OVERHEAD ELECTRIC
- EXISTING UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND TELEPHONE
- EXISTING FIBER OPTIC
- EXISTING TELECOMMUNICATION LINE
- EDGE OF EXISTING GRAVEL
- PROPOSED SUBSTATION PAD
- EXISTING EDGE OF WATER
- TREELINE
- PROPOSED ACCESS ROAD CENTERLINE
- EXISTING RIP RAP
- EXISTING INLET
- EXISTING CULVERT
- EDGE OF EXISTING DITCH
- LIMIT OF DISTURBANCE

REVISIONS			gai consultants
△			
REV	DATE	DESCRIPTION	

Dominion Energy

SITE PLAN (1 OF 3)

DRAFT

HOLLYMEADE SUBSTATION EXPANSION

ALBEMARLE COUNTY VIRGINIA

OPERATIONAL REGION		B/M No.		SCALE	
PROJECT	NAME	DATE	SHEET:	009	
DESIGNER					
PROJECT ENGINEER			DRAWING:		
APPROVED BY			R220236-00-000-00-C-009-011		

MATCHLINE SHEET 009

N/F
PARCEL ID:
032J0-01-00-01400
406 DECATUR DRIVE
STEVEN M. MALONE
OR LAURIE DALE

N/F
PARCEL ID:
032J0-01-00-01600
1422 DECATUR DRIVE
MARISA GOODWIN

N/F
PARCEL ID:
032J0-01-00-01800
1434 DECATUR DRIVE
BRIAN LOHNES &
JENNIFER LOHNES

N/F
PARCEL ID:
032J0-01-00-01500
1416 DECATUR DRIVE
CASEY ROBINSON &
REIKO IGARASHI

N/F
PARCEL ID:
032J0-01-00-01700
1428 DECATUR DRIVE
RICK BOBY MATHEW &
NEETHA ELIZABETH
MAKIL

N/F
PARCEL ID:
032J0-01-00-01900
1440 DECATUR DRIVE
CHRISTOPHER NGOC
HOANG

N/F
PARCEL ID:
032J0-02-00-000C0
ESTES PARK PHASE 2
OPEN SPACE
FOREST LAKES
COMMUNITY
ASSOCIATION INC.

PROPOSED 14' ACCESS ROAD (TYP.)

PROPOSED LEVEL SPREADER

500.11

499.29

493.35

492.59

495.05

495.00

MATCHLINE SHEET 011

SCALE: 1" = 20'

20 0 20 40

SITE PLAN (2 OF 3)

- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- PROPOSED MAJOR CONTOURS
- PROPOSED MINOR CONTOURS
- EDGE OF PUBLICLY AVAILABLE LIDAR
- EXISTING ADJACENT PROPERTY LINE
- EXISTING SITE PROPERTY LINE
- EXISTING FENCE LINE
- PROPOSED FENCE LINE
- EXISTING OVERHEAD ELECTRIC
- EXISTING UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND TELEPHONE
- EXISTING FIBER OPTIC
- EXISTING TELECOMMUNICATION LINE
- EDGE OF EXISTING GRAVEL
- PROPOSED SUBSTATION PAD
- EXISTING EDGE OF WATER
- TREELINE
- PROPOSED ACCESS ROAD CENTERLINE
- EXISTING RIP RAP
- EXISTING INLET
- EXISTING CULVERT
- EDGE OF EXISTING DITCH
- LIMIT OF DISTURBANCE

REVISIONS			gai consultants
△			
REV	DATE	DESCRIPTION	

Dominion Energy

SITE PLAN (2 OF 3)

DRAFT

HOLLYMEADE SUBSTATION EXPANSION

ALBEMARLE COUNTY VIRGINIA

OPERATIONAL REGION		B/M No.		SCALE	1"=20'
PROJECT	NAME	DATE	SHEET:	010	
DESIGNER					
PROJECT ENGINEER			DRAWING:	R220236-00-000-00-C-009-011	
APPROVED BY					

MATCHLINE SHEET 010

MATCHLINE SHEET 009

495.05

495.00

494.26

493.76

493.35

492.59

493.33

PROPOSED RETAINING WALL

REVISED TREELINE

PROPOSED LEVEL SPREADER

N/F
PARCEL ID: 046B4-00-00-000A0
FOREST LAKES COMMON
AREA PH-I PAR C
FOREST LAKES COMMUNITY
ASSOCIATION
D.B. 1304, PG. 346

SCALE: 1" = 20'

20 0 20 40

SITE PLAN (3 OF 3)

- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- PROPOSED MAJOR CONTOURS
- PROPOSED MINOR CONTOURS
- EDGE OF PUBLICLY AVAILABLE LIDAR
- EXISTING ADJACENT PROPERTY LINE
- EXISTING SITE PROPERTY LINE
- EXISTING FENCE LINE
- PROPOSED FENCE LINE
- EXISTING OVERHEAD ELECTRIC
- EXISTING UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND TELEPHONE
- EXISTING FIBER OPTIC
- EXISTING TELECOMMUNICATION LINE
- EDGE OF EXISTING GRAVEL
- PROPOSED SUBSTATION PAD
- EXISTING EDGE OF WATER
- TREELINE
- PROPOSED ACCESS ROAD CENTERLINE
- EXISTING RIP RAP
- EXISTING INLET
- EXISTING CULVERT
- EDGE OF EXISTING DITCH
- LIMIT OF DISTURBANCE
- PROPOSED STORM SEWER

REVISIONS			gai consultants
△			
REV	DATE	DESCRIPTION	

Dominion Energy

SITE PLAN (3 OF 3)

DRAFT

HOLLYMEADE SUBSTATION EXPANSION

ALBEMARLE COUNTY VIRGINIA

OPERATIONAL REGION		B/M No.		SCALE
PROJECT	NAME	DATE	SHEET:	011
DESIGNER				
PROJECT ENGINEER			DRAWING:	R220236-00-000-00-C-009-011
APPROVED BY				

FENCE PLAN

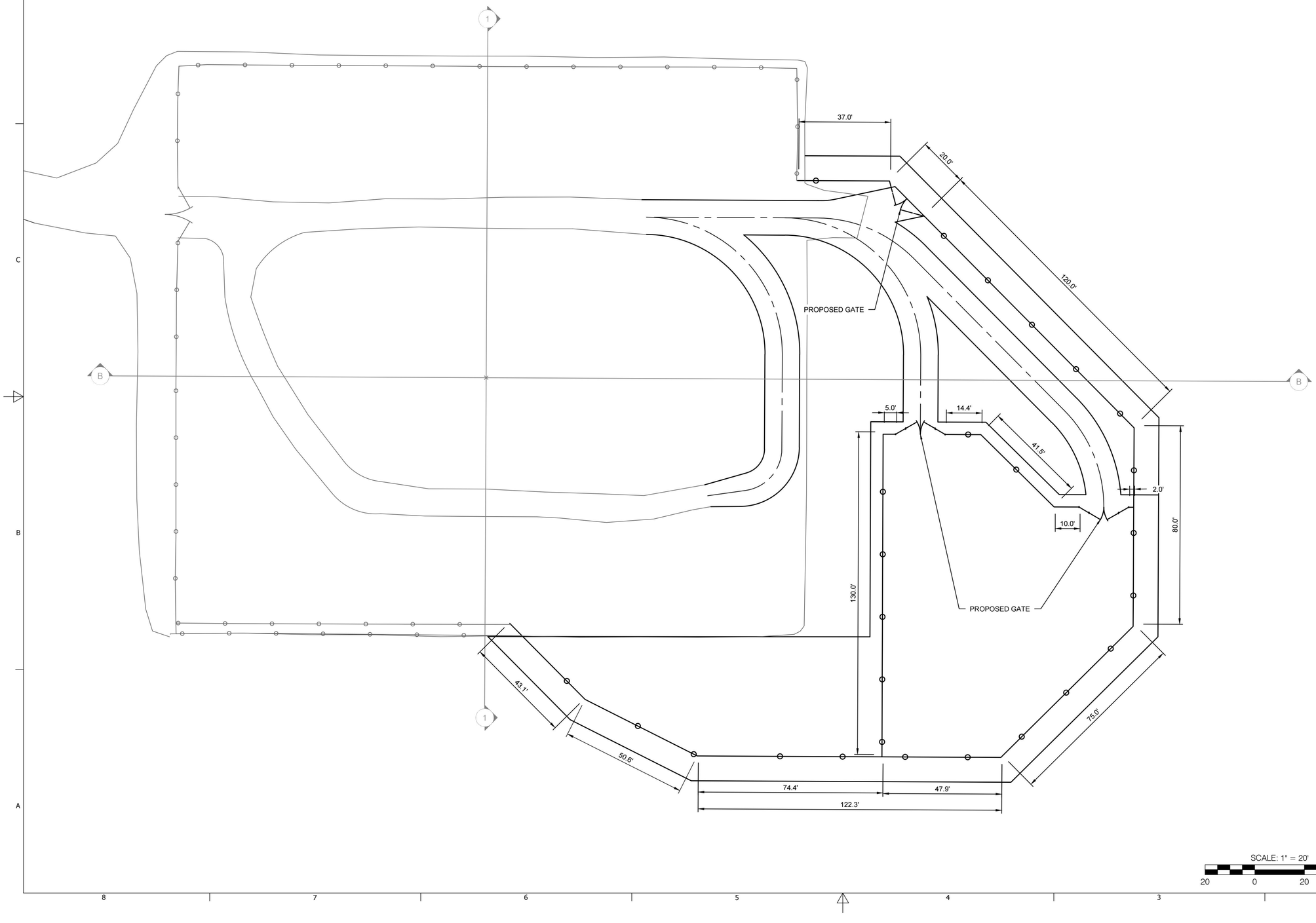
PROPOSED ACCESS ROAD CENTERLINE

PROPOSED SUBSTATION PAD

EDGE OF EXISTING GRAVEL

EXISTING FENCE LINE

PROPOSED FENCE LINE



SCALE: 1" = 20'

20 0 20 40

REVISIONS			gai consultants
△			
REV	DATE	DESCRIPTION	

Dominion Energy

FENCE PLAN

DRAFT

HOLLYMEADE SUBSTATION EXPANSION

ALBEMARLE COUNTY VIRGINIA

OPERATIONAL REGION		B/M No.		SCALE	1"=20'
PROJECT	NAME	DATE	SHEET:	012	
DESIGNER					
PROJECT ENGINEER			DRAWING:	R220236-00-000-00-C-012	
APPROVED BY					

GRADING AND DRAINAGE PLAN (1 OF 2)

N/F
PARCEL ID:
032J0-01-00-01400
406 DECATUR DRIVE
STEVEN M. MALONE
OR LAURIE DALE

N/F
PARCEL ID:
032J0-01-00-01600
1422 DECATUR DRIVE
MARISA GOODWIN

N/F
PARCEL ID:
032J0-01-00-01800
1434 DECATUR DRIVE
BRIAN LOHNES &
JENNIFER LOHNES

N/F
PARCEL ID:
032J0-01-00-01500
1416 DECATUR DRIVE
CASEY ROBINSON &
REIKO IGARASHI

N/F
PARCEL ID:
032J0-01-00-07900
1428 DECATUR DRIVE
RICK BOBY MATHEW &
NEETHA ELIZABETH
MAKIL

N/F
PARCEL ID:
032J0-01-00-01900
1440 DECATUR DRIVE
CHRISTOPHER NGOC
HOANG

N/F
PARCEL ID:
032J0-02-00-B00C0
ESTES PARK PHASE 2
OPEN SPACE
FOREST LAKES
COMMUNITY
ASSOCIATION INC.

500.11
499.29
493.35
495.05
495.00
492.59
PROPOSED LEVEL SPREADER
3:1
3:1
3%
MATCHLINE SHEET 014
SCALE: 1" = 20'
20 0 20 40

EXISTING MAJOR CONTOURS
EXISTING MINOR CONTOURS
PROPOSED MAJOR CONTOURS
PROPOSED MINOR CONTOURS
EDGE OF PUBLICLY AVAILABLE LIDAR
EXISTING ADJACENT PROPERTY LINE
EXISTING SITE PROPERTY LINE
EXISTING FENCE LINE
PROPOSED FENCE LINE
EXISTING OVERHEAD ELECTRIC
EXISTING UNDERGROUND ELECTRIC
EXISTING UNDERGROUND TELEPHONE
EXISTING FIBER OPTIC
EXISTING TELECOMMUNICATION LINE
EDGE OF EXISTING GRAVEL
PROPOSED SUBSTATION PAD
EXISTING EDGE OF WATER
TREELINE
PROPOSED ACCESS ROAD CENTERLINE
EXISTING RIP RAP
EXISTING INLET
EXISTING CULVERT
EDGE OF EXISTING DITCH
#21A COMPACTED GRAVEL
#57 STONE
UNCOMPACTED GRAVEL
LIMIT OF DISTURBANCE

REVISIONS			gai consultants
REV	DATE	DESCRIPTION	

Dominion Energy

GRADING AND DRAINAGE PLAN (2 of 3)

DRAFT

HOLLYMEADE SUBSTATION EXPANSION

ALBEMARLE COUNTY VIRGINIA

OPERATIONAL REGION		B/M No.		SCALE	1"=20'
PROJECT	NAME	DATE	SHEET:	013	
DESIGNER					
PROJECT ENGINEER			DRAWING:		
APPROVED BY			R220236-00-000-00-C-013-014		

MATCHLINE SHEET 013

495.05

495.00

493.35

492.59

493.33

494.26

493.76

PROPOSED RETAINING WALL

REVISED TREELINE

PROPOSED LEVEL SPREADER

3:1

3:1

3:1

2%

2%

3%

N/F
PARCEL ID: 04684-00-00-000A0
FOREST LAKES COMMON
AREA PH-1 PAR C
FOREST LAKES COMMUNITY
ASSOCIATION
D.B. 1304, PG. 346

SCALE: 1" = 20'

20 0 20 40

GRADING AND DRAINAGE PLAN (2 OF 2)

- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- PROPOSED MAJOR CONTOURS
- PROPOSED MINOR CONTOURS
- EDGE OF PUBLICLY AVAILABLE LIDAR
- EXISTING ADJACENT PROPERTY LINE
- EXISTING SITE PROPERTY LINE
- EXISTING FENCE LINE
- PROPOSED FENCE LINE
- EXISTING OVERHEAD ELECTRIC
- EXISTING UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND TELEPHONE
- EXISTING FIBER OPTIC
- EXISTING TELECOMMUNICATION LINE
- EDGE OF EXISTING GRAVEL
- PROPOSED SUBSTATION PAD
- EXISTING EDGE OF WATER
- TREELINE
- PROPOSED ACCESS ROAD CENTERLINE
- EXISTING RIP RAP
- EXISTING INLET
- EXISTING CULVERT
- EDGE OF EXISTING DITCH
- #21A COMPACTED GRAVEL
- #57 STONE UNCOMPACTED GRAVEL
- LIMIT OF DISTURBANCE
- PROPOSED STORM SEWER

REVISIONS			gai consultants
△			
REV	DATE	DESCRIPTION	

Dominion Energy

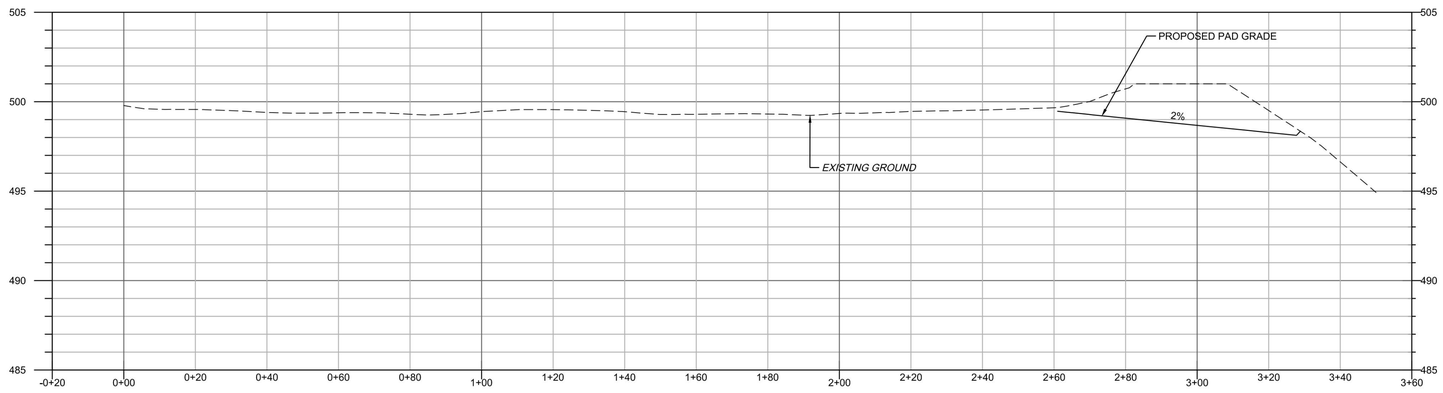
GRADING & DRAINAGE PLAN (3 OF 3)

DRAFT

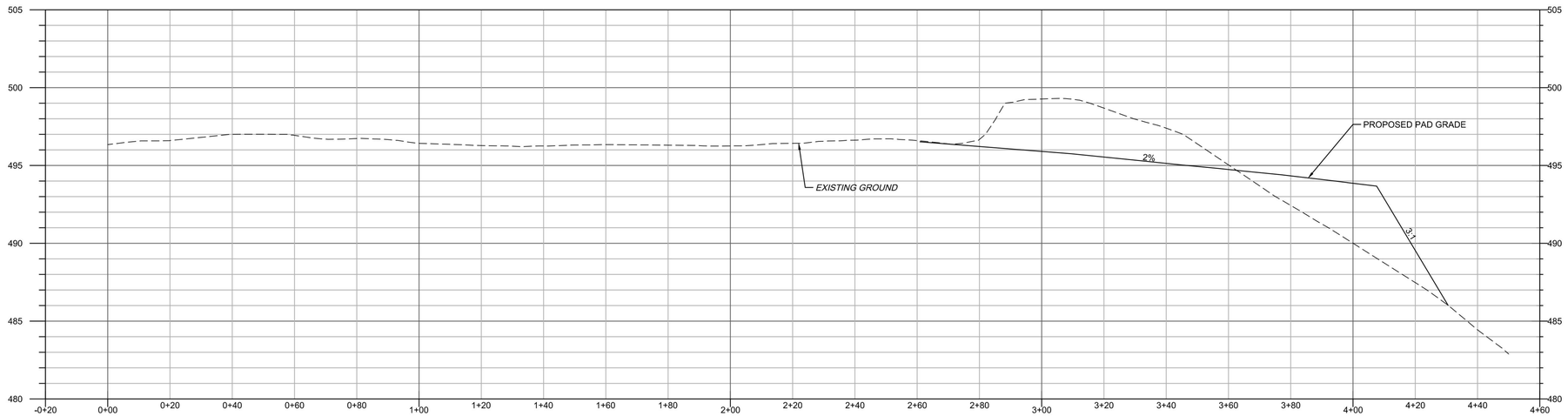
HOLLYMEADE SUBSTATION EXPANSION

ALBEMARLE COUNTY VIRGINIA

OPERATIONAL REGION			B/M No.		SCALE 1"=20'
PROJECT		NAME	DATE	SHEET:	014
DESIGNER					
PROJECT ENGINEER				DRAWING:	
APPROVED BY					R220236-00-000-00-C-013-014



SECTION 1-1
SCALE:
HORIZ: 1"=20' VERT: 1"=5'



SECTION 2-2
SCALE:
HORIZ: 1"=20' VERT: 1"=5'

REVISIONS		
△		
REV	DATE	DESCRIPTION

gai consultants

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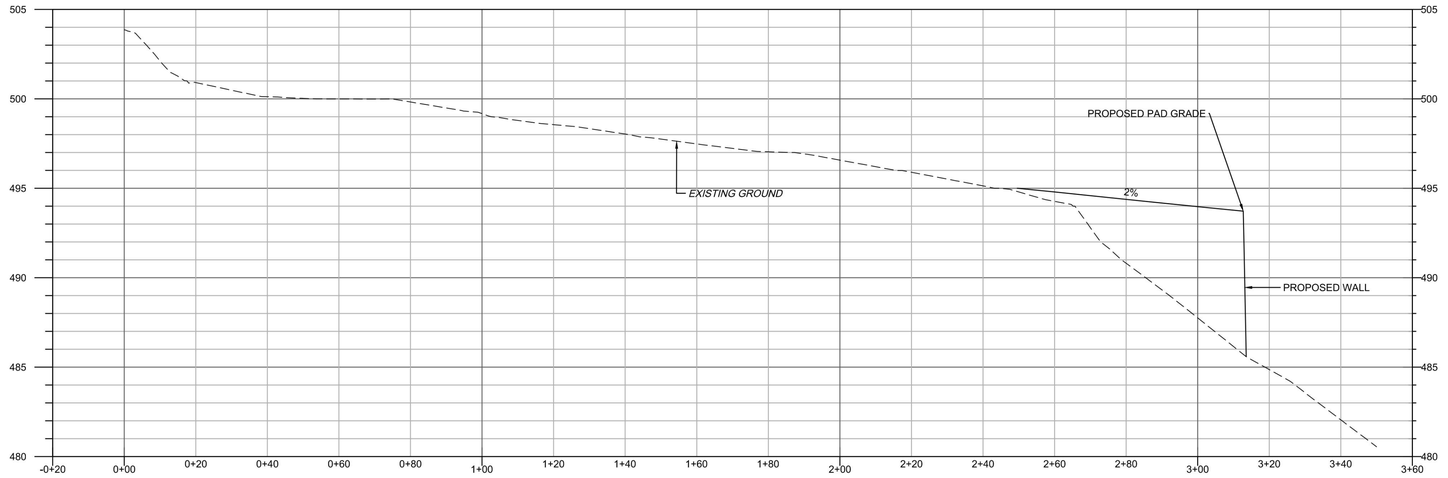
GRADING SECTIONS AND PROFILES
(SHEET 1 OF 3)

DRAFT

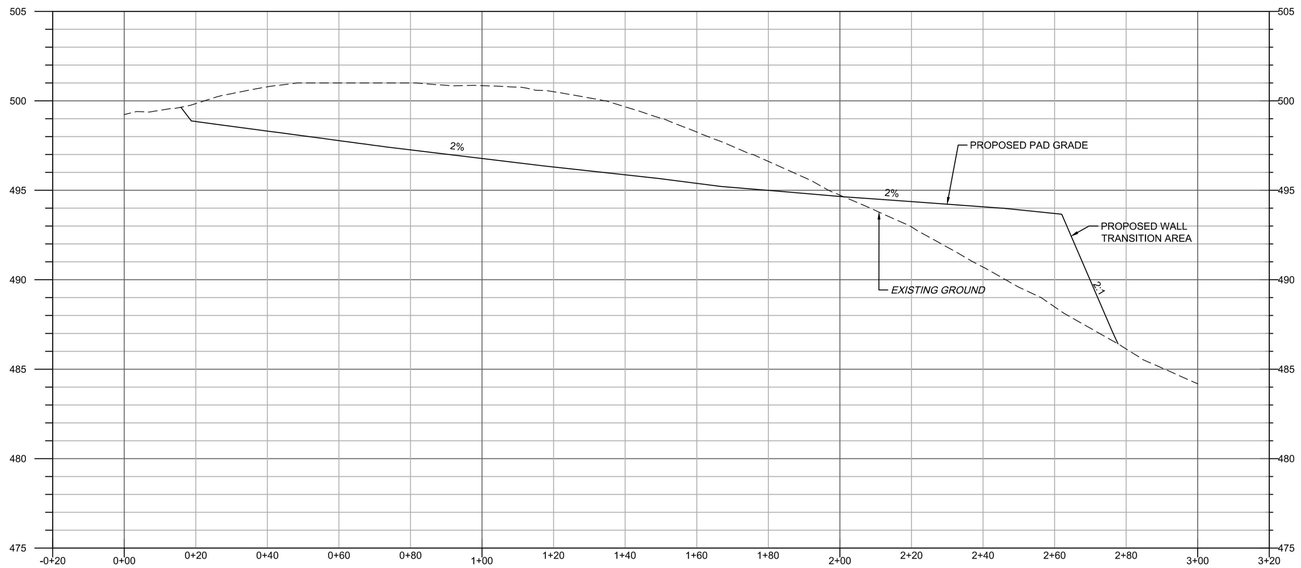
HOLLYMEADE SUBSTATION EXPANSION

ALBEMARLE COUNTY VIRGINIA

OPERATIONAL REGION		B/M No.		SCALE	AS NOTED
PROJECT	NAME	DATE	SHEET:	015	
DESIGNER					
PROJECT ENGINEER			DRAWING:		
APPROVED BY			R220236-00-000-00-C-015-017		



SECTION 3-3
SCALE:
HORIZ: 1"=20' VERT: 1"=5'



SECTION 4-4
SCALE:
HORIZ: 1"=20' VERT: 1"=5'

REVISIONS		
REV	DATE	DESCRIPTION

gai consultants

Dominion Energy

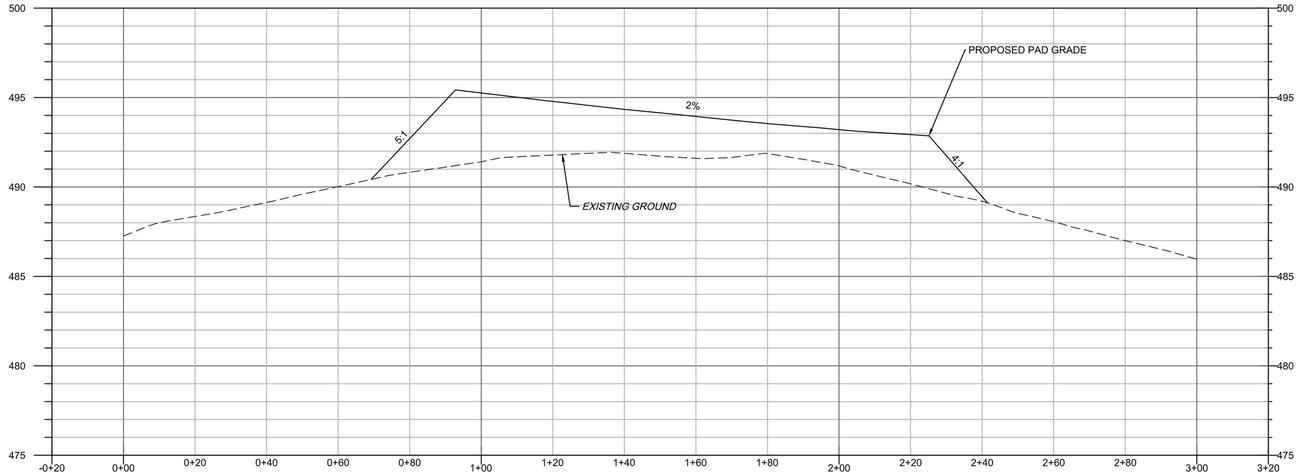
GRADING SECTIONS AND PROFILES
(SHEET 2 OF 3)

DRAFT

HOLLYMEADE SUBSTATION EXPANSION

ALBEMARLE COUNTY VIRGINIA

OPERATIONAL REGION		B/M No.		SCALE	AS NOTED
PROJECT	NAME	DATE	SHEET:	016	
DESIGNER					
PROJECT ENGINEER			DRAWING:		
APPROVED BY			R220236-00-000-00-C-015-017		



SECTION 5-5
SCALE:
HORIZ: 1"=20' VERT: 1"=5'

REVISIONS			gai consultants
△			
REV	DATE	DESCRIPTION	

Dominion Energy

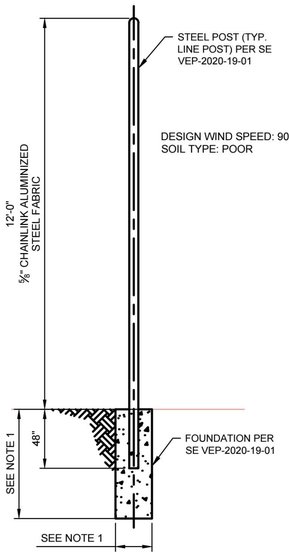
GRADING SECTIONS AND PROFILES
(SHEET 3 OF 3)

DRAFT

HOLLYMEADE SUBSTATION EXPANSION

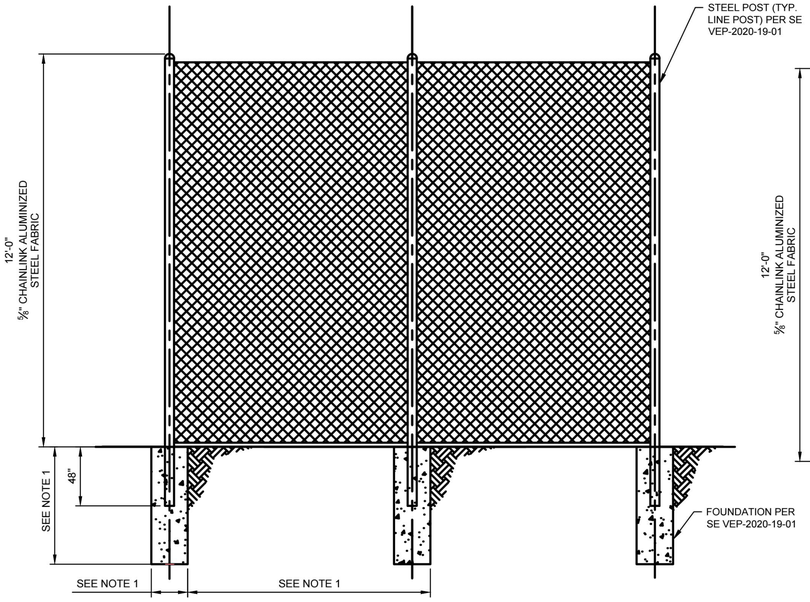
ALBEMARLE COUNTY VIRGINIA

OPERATIONAL REGION		B/M No.		SCALE	AS NOTED
PROJECT	NAME	DATE	SHEET:	017	
DESIGNER					
PROJECT ENGINEER			DRAWING:		
APPROVED BY			R220236-00-000-00-C-015-017		



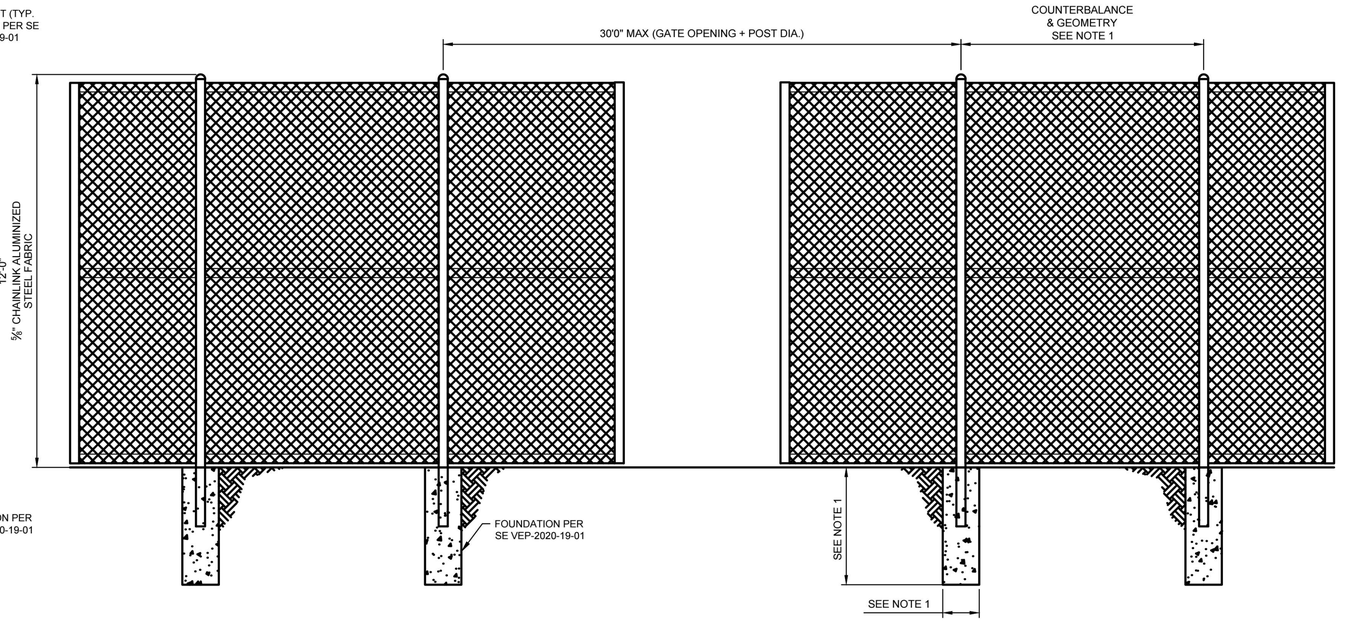
SUBSTATION FENCE DETAIL

NOT TO SCALE



SUBSTATION FENCE ELEVATION FOR ILLUSTRATIVE PURPOSES ONLY

NOT TO SCALE



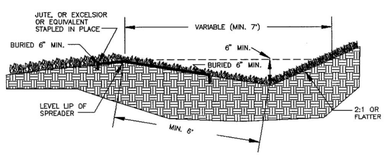
BI-PARTING SLIDE TYPE GATE FOR ILLUSTRATIVE PURPOSES ONLY

NOT TO SCALE

1992 3.21

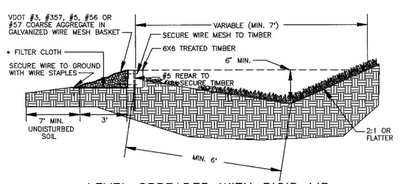
LEVEL SPREADER

CROSS SECTION



LEVEL SPREADER WITH VEGETATED LIP

CROSS SECTION



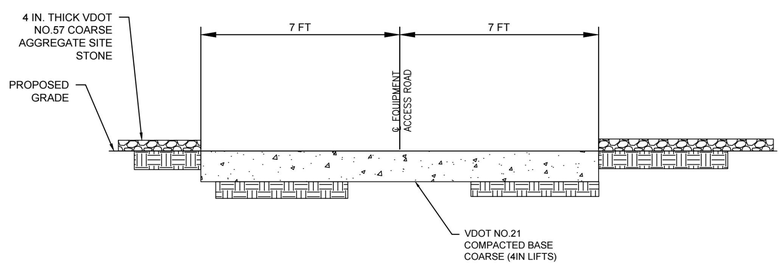
LEVEL SPREADER WITH RIGID LIP

* MIN. PHYSICAL REQUIREMENTS OF FILTER CLOTH NOTED IN STD. & SPEC. 3.19, RIPRAP

Source: Va. DSWC and N.C. Erosion and Sediment Control Planning and Design Manual

Plate 3.21-2

III - 195



REVISIONS			gai consultants
△			
REV	DATE	DESCRIPTION	

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CONSTRUCTION DETAILS

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HOLLYMEADE SUBSTATION EXPANSION

ALBEMARLE COUNTY VIRGINIA

OPERATIONAL REGION		B/M No.		SCALE	NTS
PROJECT	NAME	DATE	SHEET:	018	
DESIGNER					
PROJECT ENGINEER			DRAWING:	R220236-00-000-00-C-018	
APPROVED BY					

FENCE PLAN

PROPOSED ACCESS ROAD CENTERLINE

PROPOSED SUBSTATION PAD

EDGE OF EXISTING GRAVEL

EXISTING FENCE LINE

PROPOSED FENCE LINE

PROPOSED LEVEL SPREADER

PROPOSED STORM SEWER

PROPOSED RETAINING WALL

SCALE: 1" = 20'

20 0 20 40

REVISIONS			gai consultants
△			
REV	DATE	DESCRIPTION	

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EQUIPMENT LAYOUT

DRAFT

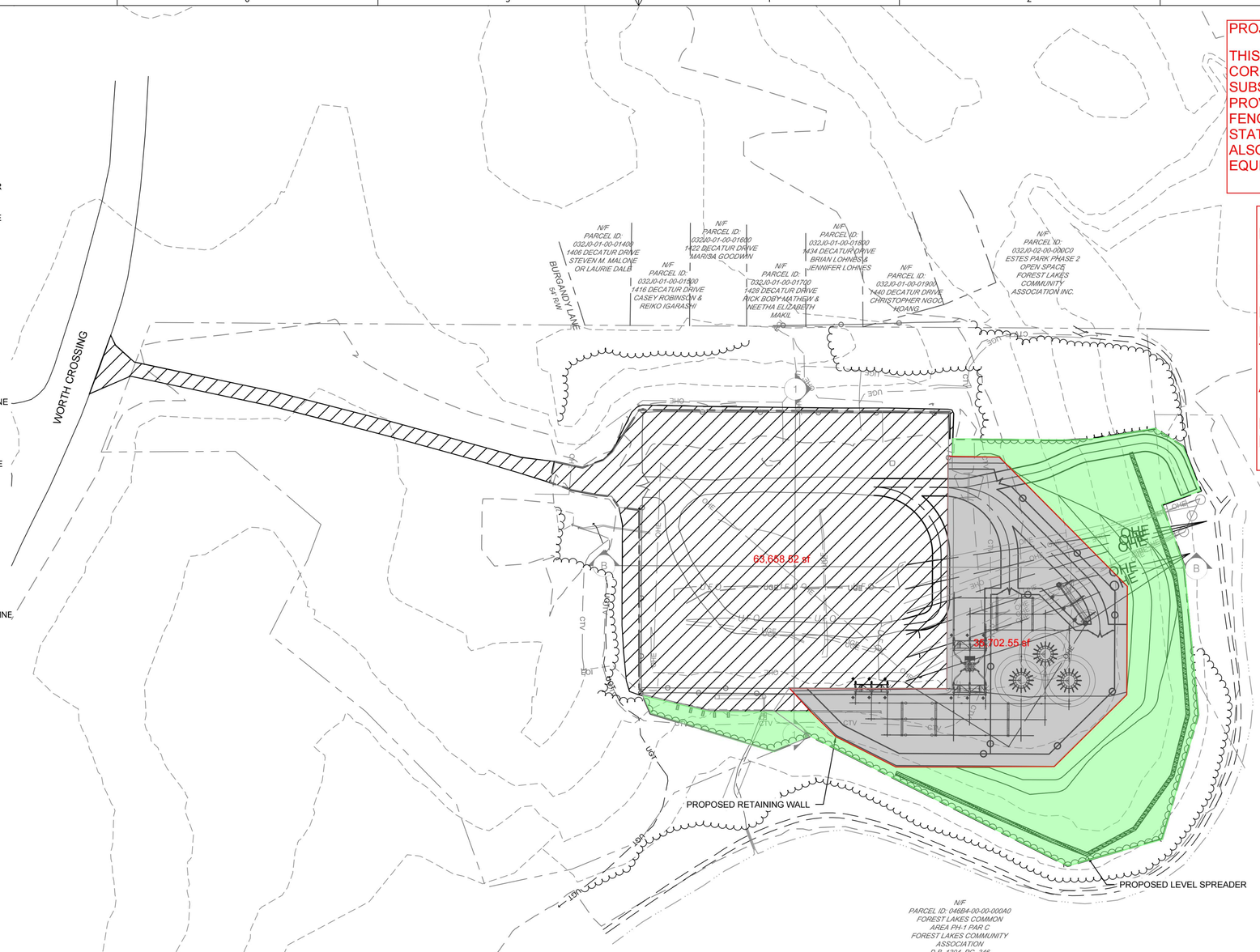
HOLLYMEADE SUBSTATION EXPANSION

ALBEMARLE COUNTY VIRGINIA

OPERATIONAL REGION		B/M No.		SCALE	1"=20'
PROJECT	NAME	DATE	SHEET:	025	
DESIGNER					
PROJECT ENGINEER			DRAWING:	R220236-00-000-00-C-Equipment	
APPROVED BY					

OVERALL SITE PLAN

- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- PROPOSED MAJOR CONTOURS
- PROPOSED MINOR CONTOURS
- EDGE OF PUBLICLY AVAILABLE LIDAR
- EXISTING ADJACENT PROPERTY LINE
- EXISTING SITE PROPERTY LINE
- EXISTING FENCE LINE
- PROPOSED FENCE LINE
- EXISTING OVERHEAD ELECTRIC
- EXISTING UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND TELEPHONE
- EXISTING FIBER OPTIC
- EXISTING TELECOMMUNICATION LINE
- EDGE OF EXISTING GRAVEL
- PROPOSED SUBSTATION PAD
- EXISTING EDGE OF WATER
- TREELINE
- PROPOSED ACCESS ROAD CENTERLINE
- EXISTING RIP RAP
- EXISTING INLET
- EXISTING CULVERT
- EDGE OF EXISTING DITCH
- LIMIT OF DISTURBANCE



PROJECT DESCRIPTION:

THIS PROJECT PROVIDES FOR THE INSTALLATION OF AIR CORE SERIES REACTOR ON LINE 2054 AT HOLLYMEADE SUBSTATION. THE SUBSTATION WILL BE EXPANDED TO PROVIDE SPACE FOR NEW EQUIPMENT. NEW PERIMETER FENCING WILL BE INSTALLED TO MATCH THE EXISTING STATION FENCE. AN INTERNAL SEPARATION FENCE MUST ALSO BE INSTALLED TO PROHIBIT PERSONNEL AND EQUIPMENT APPROACH TO REACTORS WHILE ENERGIZED.

PARCEL AREA:	6.72 AC.
PROJECT LIMITS AREA:	3.68 AC.
EXISTING IMPERVIOUS/GRAVEL:	1.46 AC.
NEW IMPERVIOUS/GRAVEL:	0.82 AC.
TOTAL IMPERVIOUS:	2.28 AC.
AREA DISTURBED FOR EXPANSION:	1.66 AC.
EXISTING TREE CANOPY:	3.45 AC. (51.3%)
PROPOSED TREE CANOPY:	2.54 AC. (37.8%)

SCALE: 1" = 50'

50 0 50 100

REVISIONS			gai consultants
△			
REV	DATE	DESCRIPTION	

Dominion Energy

OVERALL SITE PLAN

DRAFT

HOLLYMEADE SUBSTATION EXPANSION

ALBEMARLE COUNTY VIRGINIA

OPERATIONAL REGION		B/M No.		SCALE	1"=50'
PROJECT	NAME	DATE	SHEET:	002	
DESIGNER					
PROJECT ENGINEER			DRAWING:	R220236-00-000-00-C-002	
APPROVED BY					