

ROANOKE/FRANKLIN COUNTY WATERLINE EXTENSION PHASE I  
CAVE SPRING MAGISTERIAL DISTRICT  
ROANOKE COUNTY, VIRGINIA

MAY 20, 2008  
PROJECT #FCPP1004

GENERAL SITE PLAN NOTES

- CLIENT: WESTERN VIRGINIA WATER AUTHORITY
- CONTACT INFORMATION: EARTH ENVIRONMENTAL CONSULTANTS, INC.
- PARCEL INFORMATION: MULTIPLE PARCELS IDENTIFIED IN PLANS
- THE CONTRACTOR SHALL ASSEMBLE AND INSTALL MATERIALS/PRODUCTS IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND INDUSTRIAL/ASSOCIATION STANDARDS.
- SEE SPECIFICATIONS FOR SPECIFIC DETAILS RELATED TO WATERLINE AND APPURTENANCES.
- THE PROPERTY OWNER AND/OR CONTRACTOR IS RESPONSIBLE FOR OBTAINING EROSION AND SEDIMENT CONTROL PERMIT AND PERMISSION FOR ANY OFFSITE GRADING, EROSION & SEDIMENT CONTROL MEASURES, AND CONSTRUCTION.
- NO GRADING IS PERMITTED PRIOR TO INSTALLATION OF EROSION & SEDIMENT CONTROL MEASURES AND ISSUANCE OF A LAND DISTURBANCE PERMIT BY THE APPROPRIATE REVIEWING AUTHORITY.
- CONTRACTOR SHALL INSTALL & MAINTAIN ADDITIONAL EROSION & SEDIMENT CONTROL DEVICES, PER THE LATEST EDITION OF THE VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK AS NEEDED TO CONTROL EROSION ON SITE FOR THE DURATION OF THE PROJECT.
- CONTRACTOR SHALL ENSURE THAT ANY OFF SITE WORK SUCH AS LAND FILLING OPERATIONS SHALL BE PRE APPROVED BY THE OFF SITE PROPERTY OWNER ACCEPTING THE MATERIAL AND THE APPROPRIATE PERMITTING AUTHORITY.
- UTILITIES SHOWN HEREON ARE BASED ON AVAILABLE ABOVE GROUND STRUCTURES (VALVES, POLES, MANHOLES, ETC.)
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO MEET COMPLIANCE REQUIREMENTS WITH SECTION 59.1-406, ET SEQ. OF THE CODE OF VIRGINIA (OVERHEAD HIGH VOLTAGE LINES SAFETY ACT).
- CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OF ANY DAMAGES AS A RESULT OF CONSTRUCTION ACTIVITIES.
- THE CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL ALIGNMENT OF ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT MISS UTILITY AT LEAST 72 HOURS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITY.
- CONTRACTOR SHALL USE TRAFFIC CONTROL FLAGGERS ON PUBLIC ROADS. CONTRACTOR IS RESPONSIBLE FOR MEETING THE REQUIREMENTS OF THE VIRGINIA DEPARTMENT OF TRANSPORTATION.
- DISTANCES & RADII REFERRED TO ARE TO THE EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED.
- CONTRACTOR IS RESPONSIBLE FOR THE LOCATION, IDENTIFICATION, AND REPAIR OF ALL STORMWATER RELATED STRUCTURES.
- ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL O.S.H.A. REGULATIONS AND OTHER LOCAL AND STATE RULES AND REGULATIONS.
- ENGINEERED FILL SHOULD CONSIST OF CLEAN SOIL FILL, COMPACTED 6" TO 8" LIFTS TO A MINIMUM COMPACTIVE EFFORT OF 95% OF STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D-698). MOISTURE CONTENT SHOULD BE MAINTAINED WITHIN 2 TO 3 PERCENTAGE POINTS OF OPTIMUM MOISTURE CONTENT TO FACILITATE COMPACTION. EACH LIFT OF FILL SHOULD BE TESTED IN ORDER TO CONFIRM THAT THE RECOMMENDED DEGREE OF COMPACTION IS ACHIEVED. FILL MATERIAL: ASTM D 2487, CLASSIFICATION GW, GP, GW, GC, SW, SP, SM, SC WITH A MAXIMUM ASTM D 4318 LIQUID LIMIT OF 35, MAXIMUM ASTM D 4318 PLASTICITY INDEX OF 12, AND A MAXIMUM OF 25 PERCENT BY WEIGHT PASSING ASTM D 1140, NO. 200 SIEVE. SELECT MATERIAL: ASTM D 2487, CLASSIFICATION GW, GP, SW, SP WITH A MAXIMUM OF 10 PERCENT BY WEIGHT PASSING ASTM D 1140, NO. 200 SIEVE.
- OWNER, CONTRACTOR, AND ALL SUBCONTRACTORS SHALL COMPLY WITH ALL APPLICABLE CODES AND ORDINANCES GOVERNED BY STATE AND LOCAL JURISDICTION.
- CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND NATIONAL CODES AND REGULATIONS.
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO BIDDING.
- ALL MATERIALS INDICATED ARE NEW, SHALL BE PROVIDED BY CONTRACTOR UNLESS OTHERWISE NOTED.
- DURING THE COURSE OF CONSTRUCTION, IF THE CONTRACTOR UNCOVERS ANY CODE VIOLATION KNOWN TO HIM OR ANY DISCREPANCY WITH THE DESIGN, CONTRACTOR SHALL NOTIFY THE ENGINEER OF SUCH IMMEDIATELY.
- ANY CONSTRUCTION WITHIN THE VDOT RIGHT OF WAY SHALL BE IN ACCORDANCE WITH THE VDOT ROAD AND BRIDGE STANDARDS AND SPECIFICATIONS AND THE VIRGINIA WORK AREA PROTECTION MANUAL ARRANGED WITH THE APPROPRIATE RESIDENCY OFFICE (SALEM AND/OR ROCKY MOUNT).
- GUARDRAIL REPAIR, REPLACEMENT, AND UPGRADE OF EXISTING GUARDRAIL AS PER LOCATION AND DESIGN DIVISION INSTRUCTIONAL AND INFORMATIONAL MEMORANDUM NUMBER IIM-LD-220.2 DATED NOV. 21, 2003. NEW INSTALLATIONS SHOULD BE IN ACCORDANCE WITH THE VDOT ROAD AND BRIDGE STANDARDS.
- TOPOGRAPHIC AERIAL SURVEY PROVIDED BY VIRGINIA RESOURCE MAPPING. FIELD VERIFICATION PROVIDED BY COMPASS POINT LAND SURVEYING AND CORNERSTONE LAND SURVEYING.
- RIM ELEVATIONS OF VAULTS AND/OR MANHOLES IN THE VDOT RIGHT OF WAY SHALL BE COUNTSUNK ONE (1) TO TWO (2) INCHES BELOW FINAL GRADE ELEVATION.
- WATERLINE TRENCH WALLS SHALL BE A MINIMUM OF ONE (1) FOOT FROM THE EXISTING EDGE OF PAVEMENT AND THREE (3) FEET FROM THE EXISTING GUARDRAIL. IF THE INTEGRITY OF THE EXISTING STRUCTURES OR PAVEMENT IS COMPROMISED, THEY SHALL BE REPLACED AS DIRECTED BY THE VIRGINIA DEPARTMENT OF TRANSPORTATION.
- THE CONTRACTOR SHALL ARRANGE FOR AN APPROVED TESTING LABORATORY TO CONDUCT THE NECESSARY COMPACTION TESTS AT HIS OWN EXPENSE. TEST RESULTS SHALL BE SUBMITTED DIRECTLY FROM THE LAB TO THE ENGINEER.
- CONSTRUCTION REQUIRING LANE AND SHOULDER CLOSURES SHALL CONFORM IN ALL RESPECTS TO THE VDOT POLICY ENTITLED **LANE AND SHOULDER CLOSURES - SALEM DISTRICT** AS CONTAINED IN PARAGRAPH 1013.05 OF THE SPECIAL CONDITIONS (REF: ADDENDUM NO. 1, ITEM NO. 4). CONTRACTOR SHALL COORDINATE ALL LAND AND SHOULDER CLOSURES WITH THE APPROPRIATE VDOT RESIDENCY OFFICE (SALEM AND/OR ROCKY MOUNT).
- THE LOCATION OF ALL OFF-SITE FILL OR BORROW AREAS WITH THE CONSTRUCTION PROJECT WILL BE PROVIDED TO ROANOKE COUNTY DEPARTMENT OF COMMUNITY DEVELOPMENT. AN EROSION CONTROL PLAN OR MEASURES MAY BE REQUIRED FOR THIS AREA.

SOIL AND EROSION CONSTRUCTION SEQUENCE

- CONTRACTOR RESPONSIBLE FOR FOLLOWING WESTERN VIRGINIA WATER AUTHORITY EROSION AND SEDIMENT CONTROL STANDARDS AS APPROVED FOR UTILITY LINE CONSTRUCTION.
- ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE INSTALLED PRIOR TO OR AS THE FIRST STEP IN CLEARING/GRADING.
- TO THE EXTENT POSSIBLE, GRADING IS TO BE PERFORMED IN SEQUENCE TO MINIMIZE TOTAL DISTURBED AREA AND CHANNEL RUNOFF TO STORMWATER CONVEYANCE DITCHES.
- TEMPORARY OR PERMANENT SEEDING IS TO BE INSTALLED ON ALL DENUDED AREAS LEFT UNDISTURBED MORE THAN SEVEN DAYS.
- CONTRACTOR IS TO BE RESPONSIBLE FOR THE REMOVAL OF ALL TEMPORARY SOIL STABILIZATION MEASURES ONCE STABILIZATION HAS BEEN ACHIEVED.
- MISS UTILITY LOCATOR SERVICE (1-800-552-7001) TO BE CONTACTED AT LEAST SEVENTY-TWO HOURS PRIOR TO DIGGING.
- ALL TEMPORARY DITCHES AND SILT FENCES ARE TO BE REMOVED ONCE STABILIZATION HAS BEEN ACHIEVED.

GENERAL SOIL AND EROSION NOTES

ES-1: UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND VIRGINIA REGULATIONS VR 625-02-00 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 THE SITE AT ALL TIMES.

ES-5: PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO, OFF-SITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.

ES-6: THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL SOIL AND EROSION MEASURES REQUIRED BY THE PLAN APPROVING AUTHORITY.

ES-7: SITE GRADING IS TO DRAIN TO THE STORMWATER CONVEYANCE DITCHES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.

ES-8: 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.

MINIMUM STANDARDS FOR CONTROLLING EROSION AND SEDIMENT

MS-1 STABILIZATION OF DENUDED AREAS  
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 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.

MS-2 STABILIZATION OF SOIL STOCKPILES  
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 PERMANENT VEGETATION  
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 TIMING AND STABILIZATION OF SEDIMENT TRAPPING MEASURES  
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.

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

MS-6 SEDIMENT BASINS  
SEDIMENT TRAPS AND SEDIMENT BASINS SHALL BE DESIGNED AND CONSTRUCTED BASED UPON THE TOTAL DRAINAGE AREA TO BE SERVED BY THE TRAP OR BASIN.  
A. THE MINIMUM STORAGE CAPACITY OF A SEDIMENT TRAP SHALL BE 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA AND THE TRAP SHALL ONLY CONTROL DRAINAGE AREAS LESS THAN THREE ACRES.  
B. SURFACE RUNOFF FROM DISTURBED AREAS THAT IS COMPRISED OF FLOW FROM DRAINAGE AREAS GREATER THAN OR EQUAL TO THREE ACRES SHALL BE CONTROLLED BY A SEDIMENT BASIN. THE

MINIMUM STORAGE CAPACITY OF A SEDIMENT BASIN SHALL BE 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA. THE OUTFALL SYSTEM SHALL, AT A MINIMUM, MAINTAIN THE STRUCTURAL INTEGRITY OF THE BASIN DURING A 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.

MS-7 CUT AND FILL SLOPES  
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 FLOW DOWN CUT OR FILL SLOPES  
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 WATER SEEPS FROM A SLOPE FACE  
WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.

MS-10 STORM SEWER INLET PROTECTION  
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 STABILIZATION OF OUTLETS  
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 WORK IN LIVE WATERCOURSES  
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.

MS-13 CROSSING A LIVE WATERCOURSE  
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.

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

MS-15 STABILIZATION OF BED AND BANKS  
THE BED AND BANKS OF A WATERCOURSE SHALL BE STABILIZED IMMEDIATELY AFTER WORK IN THE WATERCOURSE IS COMPLETED.

MS-16 UNDERGROUND UTILITY CONSTRUCTION  
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.

MS-17 CONSTRUCTION ACCESS ROUTES  
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.

MS-18 TEMPORARY EROSION & SEDIMENT CONTROL MEASURE REMOVAL  
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.

MS-19 PROTECTION OF DOWNSTREAM PROPERTIES AND WATERWAYS  
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 LOCAL STATED FREQUENCY STORM OF 24-HOUR DURATION. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN AND ADHERE TO SAME. THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK SHALL BE USED IN ADDITION TO THE APPROVED NARRATIVE AND PLAN.

EROSION AND SEDIMENT CONTROL NARRATIVE

PROJECT DESCRIPTION

This project consist of the installation of approximately 19,700 linear feet of 12-inch waterline adjacent to route 220.

EXISTING SITE CONDITIONS

The site conditions vary, but in general consist of installing a 12-inch waterline within VDOT R.O.W. along the shoulder of route 220.

ADJACENT PROPERTY

No adjacent property is to be disturbed, the entire project shall remain within VDOT R.O.W. Silt fence will be installed as needed to protect all adjacent property.

OFFSITE AREAS

No offsite fill or borrow areas are anticipated for this project.

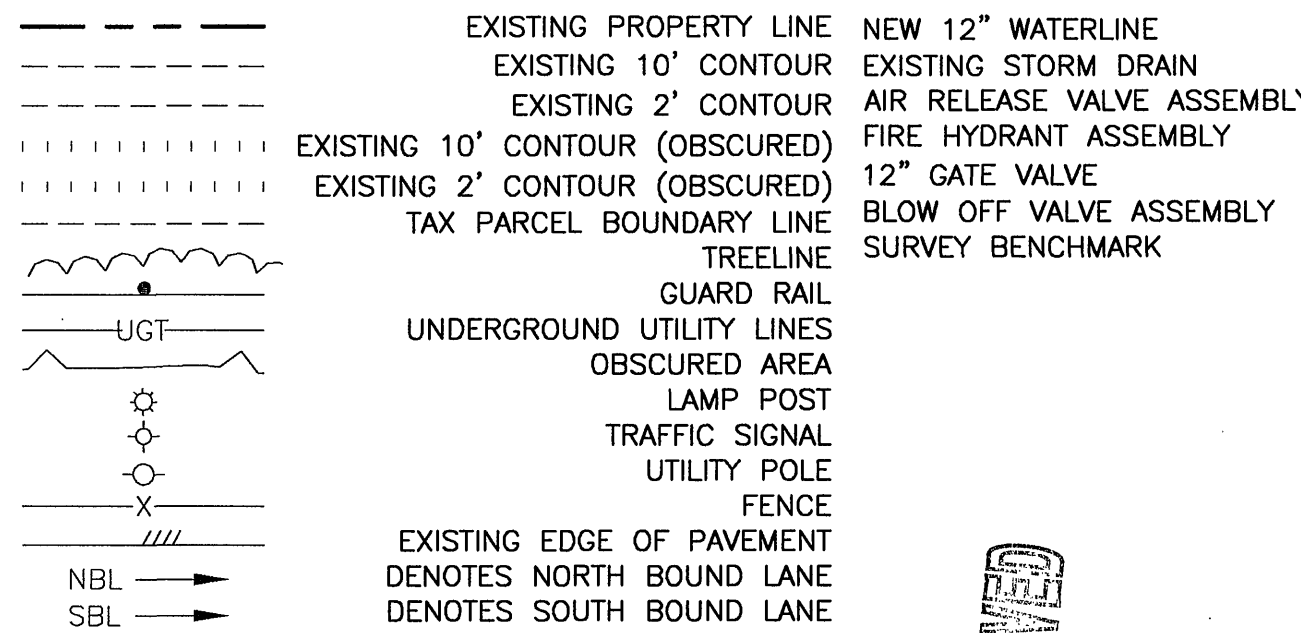
CRITICAL EROSION AREAS

Inlets, streams, and other critical erosion areas will be protected in accordance with the Virginia Erosion and Sediment Control Handbook Latest Edition.

EROSION AND SEDIMENT CONTROL MEASURES

All measures to be in accordance with the Virginia Erosion and Sediment Control Handbook Latest Edition.

LEGEND



ABBREVIATIONS

ARV	AIR RELEASE VALVE	EX	EXISTING	REQ'D	REQUIRED
BC	BACK OF CURB	FH	FIRE HYDRANT	RT	RIGHT
BM	BENCH MARK	HB	HORIZONTAL BEND	R/W	RIGHT OF WAY
C/C	CENTER TO CENTER	HC	HANDICAP	SS	SANITARY SEWER
C G	CURB AND GUTTER	INV	INVERT	ST	STORM
CIP	CAST IRON PIPE	IPS	IRON PIN SET	STA	STATION
CL	CENTER LINE	IPF	IRON PIN FOUND	STD	STANDARD
CMP	CORRUGATED METAL PIPE	LF	LINEAR FEET	SW	SIDEWALK
CO	CLEAN OUT	LT	LEFT	TBA	TO BE ABANDONED
CONC	CONCRETE	MH	MANHOLE	TBR	TO BE REMOVED
CPP	CORRUGATED PLASTIC PIPE	NTS	NOT TO SCALE	TC	TOP OF CURB
CY	CUBIC YARDS	O.C.	ON CENTER	TOB	TOP OF BANK
DIA	DIAMETER	PE	POLYETHYLENE	TYP	TYPICAL
DIP	DUCTILE IRON PIPE	PROP	PROPOSED	UG	UNDERGROUND
EL	ELEVATION	RPC	REINFORCED CONCRETE PIPE	WL	WATERLINE
ELEC	ELECTRIC	RESTR	RESTRAINED	WW	WOVEN WIRE
NOTES:				YDS	YARDS

NOTES:

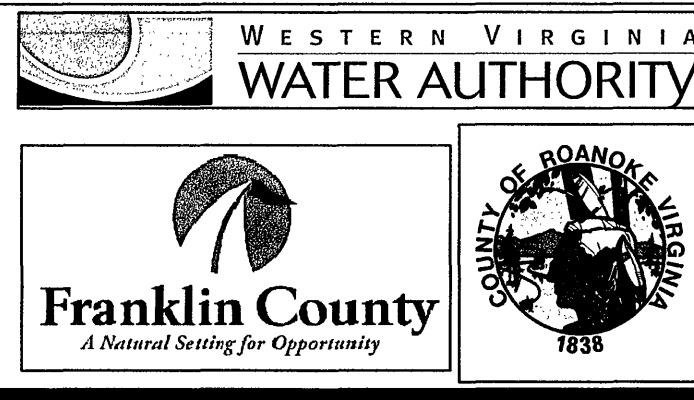
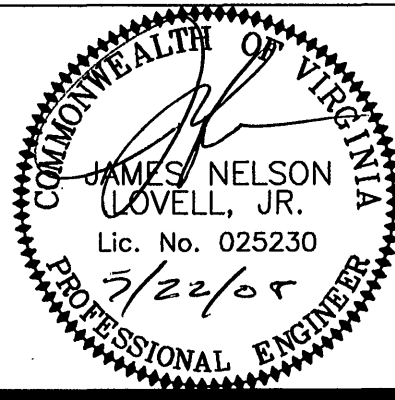
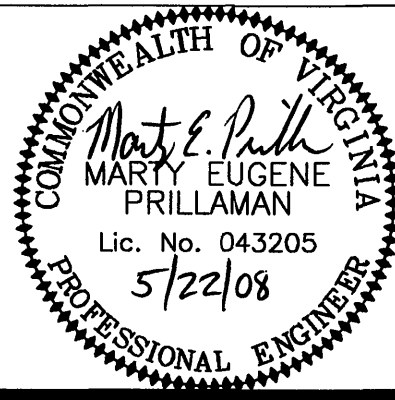
- THE SIZE OF THE SYMBOLS MAY VARY FROM THOSE SHOWN.
- ALL ABBREVIATIONS AND SYMBOLS SHOWN MAY NOT BE USED.

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DRAWING NUMBER	SHEET NUMBER	DESCRIPTION
G1	1 OF 18	COVER SHEET WITH GENERAL NOTES
G2	2 OF 18	ROANOKE COUNTY COVER AND GENERAL NOTES
C1	3 OF 18	PLAN AND PROFILE STA: 10+00 - 24+00
C2	4 OF 18	PLAN AND PROFILE STA: 24+00 - 38+00
C3	5 OF 18	PLAN AND PROFILE STA: 38+00 - 52+00
C4	6 OF 18	PLAN AND PROFILE STA: 52+00 - 66+00
C5	7 OF 18	PLAN AND PROFILE STA: 66+00 - 80+00
C6	8 OF 18	PLAN AND PROFILE STA: 80+00 - 94+00
C7	9 OF 18	PLAN AND PROFILE STA: 94+00 - 108+00
C8	10 OF 18	PLAN AND PROFILE STA: 108+00 - 122+00
C9	11 OF 18	PLAN AND PROFILE STA: 122+00 - 136+00
C10	12 OF 18	PLAN AND PROFILE STA: 136+00 - 150+00
C11	13 OF 18	PLAN AND PROFILE STA: 150+00 - 164+00
C12	14 OF 18	PLAN AND PROFILE STA: 164+00 - 178+00
C13	15 OF 18	PLAN AND PROFILE STA: 178+00 - 192+00
C14	16 OF 18	PLAN AND PROFILE STA: 192+00 - 204+48.15
D1	17 OF 18	EROSION & SEDIMENT CONTROL DETAILS
D2	18 OF 18	VDOT DETAILS

No:	Revisions:	Date:
1	ROANOKE, WVA, VDOT COMMENTS	2/1/08
2	ROANOKE COUNTY E&S, WVA ADDENDUM NO. 1	3/10/08
3	VDOT/CONTRACTOR COMMENTS	4/4/08
4	VDOT COMMENTS	5/20/08

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DESIGN BY: BKS/MEP	PROJECT: ROANOKE/FRANKLIN COUNTY WATERLINE EXTENSION PHASE I U.S. ROUTE 220 ROANOKE COUNTY, VA	DATE: 5/20/08
DRAWN BY: BKS	TITLE: COVER SHEET WITH GENERAL NOTES	DRAWING NUMBER: G1
REVIEWED BY: JNL/MEP	DRAWING NAME: G1 COVER SHEET.dwg	SHEET NUMBER: 1 of 18
PROJECT NUMBER: FCPP1004	SCALE: NTS	