PROJECT DESCRIPTION: THE PURPOSE OF THIS PROJECT IS THE CONSTRUCTION OF A RESIDENTIAL COMMUNITY (TOWNHOME & APARTMENT) AND PREPARE THE LOTS ALONG PETERS CREEK ROAD FOR FUTURE COMMERCIAL DEVELOPMENT. ACCESS TO THE SITE WILL BE FROM ARCHCREST DRIVE AT AN IMPROVED INTERSECTION WITH PETERS CREEK ROAD. A CONNECTION TO NOVER AVENUE WILL BE CONSTRUCTED TO FACILITATE PROPER TRAFFIC FLOW. THE SITE IS CURRENTLY UNDER PERMIT WITH ROANOKE COUNTY FOR A FILL SITE. MATERIAL WILL CONTINUE TO BE IMPORTED AS NECESSARY TO FILL THE SITE TO SUBGRADE. THE LIMITS OF DISTURBANCE FOR THIS PROJECT IS APPROXIMATELY 12.0 ACRES. THE PROJECT WILL BE CONSTRUCTED IN TWO PHASES AS SHOWN ON THIS PLAN SET. ALL MAJOR GRADING WILL TAKE PLACE WITH PHASE 1 AND ALL MAJOR ESC COMPONENTS SHALL BE INSTALLED IN PHASE 1.

EXISTING SITE CONDITIONS: THE EXISTING SITE CONSISTS OF A RESIDENTIAL DWELLING AND ASSOCIATED RESIDENTIAL IMPROVEMENTS.

DJACENT PROPERTY: THE PROPERTY IS BOUNDED BY PETERS CREEK ROAD RIGHT OF WAY TO THE EAST AND RESIDENTIAL PROPERTIES TO THE NORTH, WEST, AND SOUTH.

OFF-SITE AREAS: OFFSITE FILL IS BEING TRANSPORTED TO THE SITE AS FILL MATERIAL FOR THE RETAINING WALLS. OFFSITE AREAS MAY NEED AN ESC PLAN APPROVED BY ROANOKE COUNTY. G.C. SHALL VERIFY THAT FILL MATERIAL COMES FROM A SITE THAT IS PERMITTED APPROPRIATELY.

SOILS: SEE SOILS INFORMATION THIS SHEET.

CRITICAL EROSION AREAS: CRITICAL AREAS FOR THIS PROJECT INCLUDE THE AREAS ALONG WEST FORK CARVIN CREEK AND SLOPES GREATER THAN 3:1. ESC MEASURES MUST BE INSTALLED PROPERTY AND CHECKED PERIODICALLY TO ENSURE PROPER OPERATION.

EROSION AND SEDIMENT CONTROL MEASURES:

SHOREN THE FLOW LENGTH AND DIVERT THE RUNOFF TO A STABILIZED OUTLET.

UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, THIRD EDITION" (VESCH). THE MINIMUM STANDARDS OF THE VESCH SHALL BE ADHERED TO UNLESS OTHERWISE DIRECTED BY THE LOCAL PROGRAM ADMINISTRATOR.

CONSTRUCTION ENTRANCE-STD. 3.02.....A STONE PAD, LOCATED AT POINTS OF VEHICULAR INGRESS AND EGRESS TO THE CONSTRUCTION SITE, TO REDUCE THE SOIL TRANSPORTED ONTO PUBLIC ROADS AND OTHER PAVED AREAS.

CONSTRUCTION ROAD STABILIZATION-STD. 3.03....THE TEMPORARY STABILIZATION OF ACCESS ROADS, SUBDIVISION ROADS, PARKING AREAS, AND OTHER CONSTRUCTION SITE VEHICLE TRANSPORTATION ROUTES WITH STONE IMMEDIATELY AFTER GRADING TO REDUCE THE EROSION OF TEMPORARY ROADBEDS BY CONSTRUCTION TRAFFIC DURING WET WEATHER.

SILT FENCE-STD. 3.05.....A TEMPORARY BARRIER CONSTRUCTED ALONG THE PERIMETER OF THE DISTURBED AREA AS REQUIRED TO INTERCEPT AND

INLET PROTECTION-STD. 3.07.....INSTALLATION OF A SEDIMENT TRAPPING MEASURES AROUND DROP INLETS OR CURB INLET STRUCTURES PRIOR TO PERMANENT STABILIZATION OF THE DISTURBED AREA.

TEMPORARY DIVERSION DIKE-STD. 3.09.....A RIDGE OF COMPACTED SOIL CONSTRUCTED AT THE TOP OR BASE OF A SLOPING DISTURBED AREA WHICH DIVERTS SEDIMENT LADEN RUNOFF TO THE SEDIMENT TRAP.

TEMPORARY FILL DIVERSION-STD. 3.10.....A CHANNEL WITH A SUPPORTING RIDGE ON THE LOWER SIDE, CONSTRUCTED ALONG THE TOP OF AN ACTIVE EARTH FILL USED TO DIVERT SEDIMENT LADEN RUNOFF TO THE SEDIMENT TRAP.

TEMPORARY RIGHT-OF-WAY DIVERSION-STD. 3.11.....A RIDGE OF LOOSE GRAVEL ACROSS A DISTURBED RIGHT-OF-WAY OR SIMILIAR SLOPING AREA TO

DIVERSION-STD. 3.12.....A CHANNEL CONSTRUCTED ACROSS A SLOPE WITH A SUPPORTING EARTHEN RIDGE ON THE LOWER SIDE TO INTERCEPT AND DIVERT STORMWATER RUNOFF TO STABILIZED OUTLETS AT NON-EROSIVE VELOCITIES.

TEMPORARY SEDIMENT BASIN-STD. 3.14.....A TEMPORARY BARRIER OR DAM WITH A CONTROLLED STORMWATER RELEASE STRUCTURE FORMED BY CONSTRUCTING AN EMBANKMENT OF COMPACTED SOIL ACROSS A DRAINAGEWAY TO DETAIN SEDIMENT-LADEN RUNOFF FROM DISTURBED AREAS IN "WET" AND "DRY" STORAGE LONG ENOUGH FOR THE MAJORITY OF SEDIMENT TO SETTLE OUT.

STORMWATER CONVEYANCE CHANNEL-STD. 3.17.....A PERMANENT CHANNEL DESIGNED TO CARRY CONCENTRATED FLOWS WITHOUT EROSION. CONSTRUCTED TO CONVEY STORMWATER FROM EXISTING CHANNELS TO THE MAIN WATERCOURSE ONSITE.

OUTLET PROTECTION-STD. 3.18....STRUCTURALLY LINED APRONS OR OTHER ACCEPTABLE ENERGY DISSIPATING DEVICES PLACED AT OUTLETS OF PIPES TO PREVENT SCOUR AT THE OUTLET AND TO MINIMIZE THE POTENTIAL FOR DOWNSTREAM EROSION BY REDUCING THE VELOCITY OF CONCENTRATED

ROCK CHECK DAMS-STD. 3.20....SMALL TEMPORARY STONE DAMS CONSTRUCTED ACROSS A SWALE OR DRAINAGE DITCH TO REDUCE THE VELOCITY OF CONCENTRATED STORMWATER FLOWS, THEREBY REDUCING EROSION OF THE SWALE OR DITCH.

DEWATERING STRUCTURE-STD. 3.26.....A TEMPORARY SETTLING AND FILTERING DEVICE FOR WATER, WHICH IS DISCHARGED FROM DEWATERING ACTIVITIES, SUCH AS CLEANOUT OF THE SEDIMENT TRAP OR ANY REQUIRED TRENCHING ACTIVITIES.

TOPSOILING-STD. 3.30.....REFERS TO THE REMOVAL OF THE EXISTING ORGANIC SOIL LAYER WITHIN THE LIMITS OF GRADING AND STOCKPILED ONSITE UNTIL THE TOPSOIL CAN BE PLACED ON AREAS WHICH ARE CRITICAL IN OBTAINING A STABILIZED VEGETATIVE SURFACE.

TEMPORARY SEEDING-STD. 3.31.....ESTABLISHMENT OF A TEMPORARY VEGETATIVE COVER ON DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE FOR PERIODS OF 30 DAYS TO 1-YEAR BY SEEDING WITH AN APPROPRIATE RAPIDLY GROWING SEED MIXTURE. REFER TO SHEET C-9 FOR

PERMANENT SEEDING-STD. 3.32....ESTABLISHMENT OF A VEGETATIVE COVER BY PLANTING SEED ON ALL FINAL GRADED AREAS THAT WILL NOT RECEIVE AN IMPERVIOUS COVER OR RECEIVE TOPSOIL MATERIAL TO PROVIDE A STABILIZED SITE AFTER THE PROJECT IS COMPLETE. REFER TO SHEET C-9 FOR

MULCHING-3.35....MULCH SHALL BE APPLIED TO ALL TEMPORARY AND PERMANENT SEEDING OPERATIONS TO PROMOTE THE GROWTH OF VEGETATION

AND TO PROTECT THE SOIL SURFACE FROM RAINDROP IMPACTS. SOIL STABILIZATION BLANKETS & MATTING-3.36.....UPON COMPLETION OF GRADING OPERATIONS FOR THE AREA ALONG THE CUL-DE-SAC EMBANKMENT.

A DEGRADABLE BLANKET SHALL BE INSTALLED ON ALL SLOPES 3:1 OR GREATER TO PROMOTE STABILIZATION DUE TO SEEDING OPERATIONS.

MANAGEMENT STRATEGIES: A) CONSTRUCTION WILL BE SEQUENCED SO THAT GRADING OPERATIONS CAN BEGIN AND END AS QUICKLY AS POSSIBLE.

B) SEDIMENT TRAPPING MEASURES WILL BE INSTALLED AS A FIRST STEP IN GRADING.

C) THE LOCAL PROGRAM ADMINISTRATOR RESERVES THE RIGHT TO ADD TO, DELETE OR OTHERWISE CHANGE THE EROSION CONTROL MEASURES AS DEEMED NECESSARY DUE TO ACTUAL FIELD CONDITIONS BY WRITTEN NOTIFICATION TO THE CONTRACTOR.

D) ALL FILL AND CUT SLOPES SHALL BE SEEDED WITHIN SEVEN (7) DAYS OF ACHIEVING FINAL GRADE.

E) ONLY AFTER INSPECTION AND APPROVAL FROM THE LOCAL PROGRAM ADMINISTRATOR MAY ITEMS BE REMOVED FOLLOWING THE STABILIZATION OF THE CONTRIBUTING AREAS.

INSPECTIONS:
THE GENERAL CONTRACTOR SHALL INSPECT DISTURBED AREAS OF THE SITE THAT HAVE NOT BEEN FINALLY STABILIZED, AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION, STRUCTURAL CONTROL MEASURES, AND THE AREA OF CONSTRUCTION VEHICLE ACCESS AT LEAST EVERY FOURTEEN (14) CALENDAR DAYS, AND WITHIN 48 HOURS OF THE END OF A STORM EVENT PRODUCING 1/2" OR GREATER OF PRECIPITATION. WHERE AREAS HAVE BEEN FINALLY OR TEMPORARILY STABILIZED OR RUNOFF IS UNLIKELY DUE TO WINTER CONDITIONS (SITE IS COVERED WITH SNOW, ICE, OR FROZEN GROUND EXISTS) SUCH INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY MONTH.

A) INSPECT DISTURBED AREAS AND AREAS OF MATERIALS STORAGE THAT ARE EXPOSED TO PRECIPITATION FOR EVIDENCE OF, OR THE POTENTIAL FOR SEDIMENT ENTERING THE STORM DRAIN SYSTEM. INSPECT E&S CONTROLS IN ACCORDANCE WITH REQUIREMENTS STATED HEREIN, AND INSPECT POINTS OF STORM DRAIN DISCHARGE FOR EXCESSIVE SEDIMENTATION. CORRECT SITE CONTROLS AS REQUIRED TO

REDUCE SEDIMENTATION OF STORM DRAINS, CULVERTS, AND RECEIVING CHANNELS.

B) IF CONTROLS OR SEDIMENT PREVENTION AREAS ARE FOUND TO BE IN NEED OF REPAIR OR MODIFICATION, THE GENERAL CONTRACTOR SHALL PROVIDE ADDITIONAL MEASURES OR MODIFICATIONS TO EXISTING MEASURES AS REQUIRED. ANY ADDITIONAL MEASURES OR MODIFICATIONS TO EXISTING MEASURES SHALL BE RECORDED AS FIELD REVISIONS TO THESE PLANS. IN THE EVENT THAT ADDITIONAL CONTROLS ARE FOUND TO BE REQUIRED. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING THESE CONTROLS BEFORE THE NEXT ANTICIPATED STORM EVENT. IF IMPLEMENTATION BEFORE THE NEXT STORM EVENT IS IMPRACTICAL, THEY SHALL BE IMPLEMENTED

AS SOON AS PRACTICAL. C) A REPORT SUMMARIZING THE SCOPE OF INSPECTIONS. NAME OF INSPECTOR. INSPECTOR'S QUALIFICATIONS. DATES OF INSPECTIONS. MAJOR OBSERVATIONS PERTAINING TO THE IMPLEMENTATION OF THESE EROSION CONTROL PLANS, AND ACTIONS TAKEN SHALL BE MADE AND RETAINED AS A PART OF THESE PLANS. MAJOR OBSERVATIONS OF THESE REPORTS SHALL INCLUDE: THE LOCATIONS OF EXCESSIVE SEDIMENTATION FROM THE SITE; LOCATIONS OF CONTROLS IN NEED OF REPAIR; LOCATIONS OF FAILED OR INADEQUATE CONTROLS; AND LOCATIONS WHERE ADDITIONAL CONTROLS ARE NEEDED.

STORMWATER MANAGEMENT:

STORMWATER QUANTITY - THE PROPOSED SITE MAKES UP LESS THAN 1% OF THE DRAINAGE AREA TO THE EXISTING BOX CULVERT UNDER

PETERS CREEK ROAD. THIS INCLUDES THE RESIDENTIAL AND COMMERCIAL PARCELS A, B, AND C.

STORMWATER QUALITY - THE PROPOSED SITE MAKES UP LESS THAN 1% OF THE DRAINAGE AREA TO THE EXISTING BOX CULVERT UNDER PETERS CREEK ROAD. HOWEVER, THE DEVELOPER HAS PROPOSED TO CONSTRUCT HYDRODYNAMIC SEPARATOR UNITS AND GRASS SWALES AT KEY LOCATIONS ON THE SITE TO HELP FILTER OUT POLLUTANTS BEFORE ENTERING THE CREEK. WATER QUALITY WILL BE HANDLED SEPARATELY FOR THE COMMERCIAL PARCELS.

MINIMUM STANDARDS

THE FOLLOWING STANDARDS ARE TO BE PROVIDED OR ADDRESSED ON EVERY DEVELOPMENT PROJECT EXCEEDING 5000 S.F. IN AREA OF DISTURBANCE THESE STANDARDS ARE CONSIDERED A MINIMUM AND MAY REQUIRE ADDITIONAL MEASURES AS DEEMED NECESSARY BY THE LOCAL APPROVING AUTHORITY OR THE CONSULTING ENGINEER.

No.	CRITERIA, TECHNIQUE OR METHOD	PRACTICES PROVIDED		
1	PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN (7) DAYS AFTER FINAL GRADE HAS BEEN REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN (7) DAYS TO DENUDED AREAS THAT MAY BE AT FINAL GRADE BUT WILL REMAIN DORMANT (UNDISTURBED) FOR LONGER THAN THIRTY (30) DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE (1) YEAR.	TS PS MU FOR ALL DENUDED AREAS		
2	DURING CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.	TS PS MU FOR PROVIDED STOCKPILE		
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, IN THE OPINION OF THE LOCAL PROGRAM ADMINISTRATOR OR DESIGNATED AGENT, IS UNIFORM, MATURE ENOUGH TO SURVIVE AND WILL INHIBIT EROSION.	TS PS MU FOR ALL DENUDED AREAS		
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.	SF SB DD DV FD FOR ALL DRAINAGE DIVIDES		
5	STABILIZATION METHODS SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.	TS PS MU FOR ALL EARTHEN STRUCTURES		
6	SEDIMENT TRAPS AND BASINS SHALL BE DESIGNED AND CONSTRUCTED BASED UPON THE TOTAL DRAINAGE AREA TO BE SERVED BY THE TRAP OR BASIN.	SB		
7	CUT AND FILL SLOPES SHALL BE CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. SLOPES THAT ARE FOUND TO BE ERODING EXCESSIVELY WITHIN ONE (1) YEAR OF PERMANENT STABILIZATION SHALL BE PROVIDED WITH ADDITIONAL SLOPE STABILIZATION MEASURES UNTIL THE PROBLEM IS CORRECTED.	TS PS MU BM FOR ALL ERODING SLOPES		
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.	NOT APPLICABLE		
9	WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.	SHOULD SEEPS OCCUR IN ANY EXISTING OR NEW CUT OR FILL SLOPE, THE CONTRACTOR SHALL FIRST INSURE THAT THERE ARE NOT AREAS OF PONDED WATER AT THE TOPS THE SLOPES, AND THEN SHALL CONTACT BOTH THE DESIGNEER AND THE PROJECT GEOTECHNICAL ENGINEER FOR ON-SITE EVALUATION OF THE AREAS OF SEEPAGE.		
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.	IP		
11	BEFORE NEWLY CONSTRUCTED STORMWATER CONVEYANCE CHANNELS 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.	OP)		
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.	NOT APPLICABLE (6) MONTH WATERCOURSES /ORK IN THE		
13	WHEN A LIVE WATERCOURSE MUST BE CROSSED BY CONSTRUCTION VEHICLES MORE THAN TWICE IN ANY SIX (6) MONTH PERIOD, A TEMPORARY STREAM CROSSING CONSTRUCTED OF NONERODIBLE MATERIAL.			
14	ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS PERTAINING TO WORKING IN OR CROSSING LIVE WATERCOURSES SHALL BE MET. THE BEDS AND BANKS OF ANY WATERCOURSE SHALL BE STABILIZED IMMEDIATELY AFTER WORK IN THE WATERCOURSE IS COMPLETED.			
15	THE BEDS AND BANKS OF A WATERCOURSE SHALL BE STABILIZED IMMEDIATELY AFTER WORK IN THE WATERCOURSE IS COMPLETED.			
16	UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA: 1)NO MORE THAN 500 LINEAR FEET OF ANY TRENCH MAY BE OPENED AT ONE TIME. 2)EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES. 3)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. 4)MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION. 5)RESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THESE REGULATIONS. 6)APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH.	DS) FOR ALL SEDIMENT TRAPPING MEASURES		
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.	CE FOR ALL POINTS OF INGRESS/EGRESS		
18	ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE AUTHORIZED BY THE LOCAL PROGRAM ADMINISTRATOR. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.	TS PS MU		
19	PROPERTIES AND WATERWAYS DOWNSTREAM FROM DEVELOPMENT SITES SHALL BE PROTECTED FROM SEDIMENT DEPOSITION, EROSION AND DAMAGE DUE TO INCREASES IN VOLUME, VELOCITY AND PEAK FLOW RATE OF STORMWATER RUNOFF FOR THE STATED FREQUENCY STORM OF 24—HOUR DURATION IN ACCORDANCE WITH THE APPLICABLE CRITERIA.	PROJECT AREA AND DISTURBED AREA LESS THAN 1% OF DA TO CULVERT		

SOILS INFORMATION (DISTURBED AREA).

SOIL GROUP 3C3 - CHILHOWIE SILTY CLAY LOAM, 7 TO 15 PERCENT SLOPES, SEVERELY ERODED

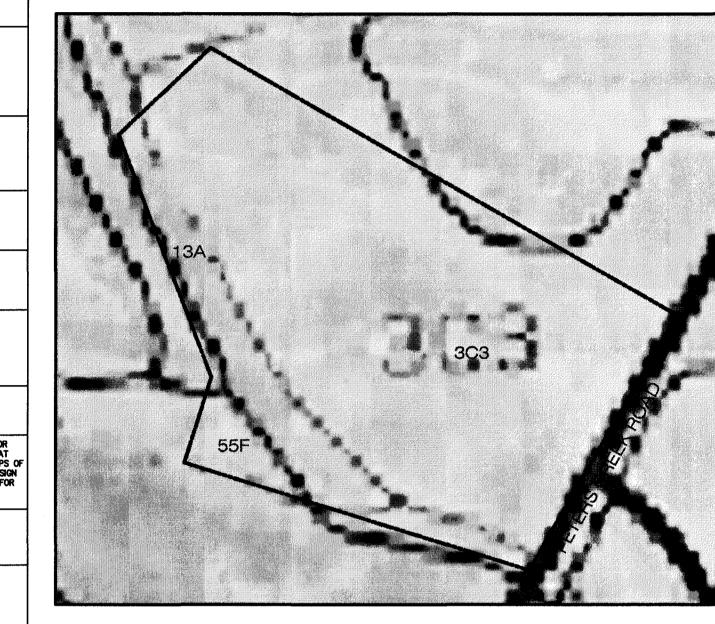
SURFACE LAYER: O TO 5 INCHES. DARK BROWN SILTY CLAY LOAM SUBSOIL: 5 TO 24 INCHES, YELLOWISH BROWN CLAY

SUBSTRATUM: 24 TO 34 INCHES, YELLOWISH BROWN SILTY CLAY LOAM BEDROCK: 34 INCHES, MODERATELY HARD, INTERBEDDED LIMESTONE AND CALCAREOUS SHALE

PERMEABILITY: SLOW SURFACE RUNOFF: RAPID

EROSION POTENTIAL: HIGH MODERATELY DEEP, WELL DRAINED SOILS, WITH MODERATE SHRINK SWELL POTENTIAL

EXISTING SOILS MAP



*NOTE: ALL SOILS INFORMATION SHOWN ON THIS MAP AND IN THE SOILS INFORMATION TABLE IS BASED ON THE "SOIL SURVEY OF ROANOKE COUNTY AND THE CITIES OF ROANOKE AND SALEM, VIRGINIA." NO SUBSURFACE EXPLORATION HAS BEEN PERFORMED ON ANY AREAS OF THE SITE. G.C. SHALL VERIFY ALL SOIL CONDITIONS DURING CONSTRUCTION.

ESC SEQUENCE OF CONSTRUCTION

REFER TO SHEET C-09, FOR ESC PLAN A

1. INITIAL CONSTRUCTION ACCESS SHALL BE FROM THE EXISTING CONSTRUCTION ENTRANCE FROM PETERS CREEK

2. AFTER THE CONSTRUCTION SITE IS ACCESSED, INSTALL ALL SILT FENCE TO PROTECT THE NATURAL WATERCOURSE ON SITE. G.C. SHALL ENSURE NO DISTURBANCE TO THE EXISTING WATERCOURSE.

3. INSTALL THE PERMANENT DIVERSION, DIVERSION DIKES, RIGHT-OF-WAY DIVERSION, AND CHECK DAM ALONG THE NORTHEASTERN PROPERTY LINE TO DIVERT CLEAN, OFFSITE WATER AROUND THE CONSTRUCTION SITE.

4. INSTALL THE SEDIMENT BASIN AND ADEQUATE FILL MATERIAL AS SHOWN TO DIVERT RUNOFF TO THE PROPOSED BASIN. INSTALL ASSOCIATED FILL DIVERSIONS TO CAPTURE SEDIMENT LADEN RUNOFF FROM ANY DISTURBANCE ON SITE. THE FILL DIVERSIONS WILL NEED TO BE ADJUSTED AS FILL IS PLACED ON-SITE.

5. CLEARING, GRUBBING, TOPSOIL STRIPPING, AND FILL OPERATIONS SHALL COMMENCE.

REFER TO SHEET C-10, FOR ESC PLAN B

1. INSTALL ALL UTILITIES AND STORM DRAINAGE STRUCTURES AND ASSOCIATED INLET/OUTLET PROTECTION. STORMWATER CONVEYANCE CHANNELS, AND CHECK DAMS.

2. STRUCTURE RUNS 35 THRU 30 AND 39 THRU 45 SHALL BE INSTALLED PRIOR TO ROAD 'A' GRADING AND CONNECTION TO PETERS CREEK ROAD. AN ADDITIONAL CONSTRUCTION ENTRANCE CAN BE INSTALLED AT THIS

3. ONCE ALL STORM DRAINAGE HAS BEEN INSTALLED ON SITE, THE SEDIMENT BASIN AND ASSOCIATED FILL DIVERSIONS CAN BE REMOVED WITH ROANOKE COUNTY APPROVAL. THE INSTALLED INLETS AND INLET PROTECTION WILL SERVE AS SEDIMENT FILTRATION. G.C. SHALL ENSURE THAT ALL RUNOFF IS DIRECTED TO THE APPRORIATE INLETS PRIOR TO CURBLINE INSTALLATION.

PS

4. REMAINING IMPROVEMENTS CAN BE CONSTRUCTED AT THIS TIME.

5. ONCE THE SITE IS STABILIZED AND FINAL GRADE IS ACHIEVED, WITH ROANOKE COUNTY APPROVAL, THE SEDIMENT BASIN, ASSOCIATED FILL DIVERSIONS, AND OTHER TEMPORARY ESC MEASURES CAN BE REMOVED.

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02	TEMPORARY STONE CONSTRUCTION ENTRANCE	CE	3.14	TEMPORARY SEDIMENT BASIN
03	CONSTRUCTION ROAD STABILIZATION	CRS	3.17	STORMWATER CONVEYANCE CHANNEL
05	SILT FENCE	SF	3.18	OUTLET PROTECTION
07	STORM DRAIN INLET PROTECTION	(IP)	3.20	ROCK CHECK DAM
09	TEMPORARY DIVERSION DIKE	DD	3.31	TEMPORARY SEEDING
10	TEMPORARY FILL DIVERSION	FD	3.32	PERMANENT SEEDING
11	TEMPORARY RIGHT OF WAY DIVERSION	RWD	3.36	SOIL STABILIZATION BLANKETS & MATTING
12	DIVERSION	DV	3.35	MULCHING
26	DEWATERING STRUCTURE	DS	3.30	TOPSOILING (
			·	

REFLECTING TOMORROW www.balzer.cc

> New River Valley Shenandoah Valley

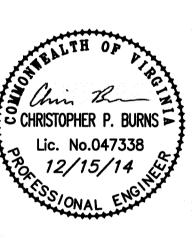
RESIDENTIAL LAND DEVELOPMENT ENGINEER

SITE DEVELOPMENT ENGINEERING LAND USE PLANNING & ZONING LANDSCAPE ARCHITECTURE LAND SURVEYING ARCHITECTURE STRUCTURAL ENGINEERING

TRANSPORTATION ENGINEERING **ENVIRONMENTAL & SOIL SCIENCE** VETLAND DELINEATIONS & STREAM EVALUATIONS

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DRAWN BY DESIGNED BY BTC CHECKED BY __CPB

DATE <u>05/24/2010</u> SCALE AS SHOWN

REVISIONS: 08/13/2010 10/15/2010 12/10/2010 02/06/2012 10/18/2012 02/14/2013 02/27/2013 04/24/2013 08/30/2013 P.R. #2 12/15/2014 P.R. #4

SHEET NO.