

SOIL EROSION NARRATIVE

PROJECT DESCRIPTION:
THE PURPOSE OF THIS PROJECT IS THE GRADING AND INSTALLATION OF THE INFRASTRUCTURES FOR A 22-Lot SUBDIVISION. THE SITE IS LOCATED WITHIN THE COUNTY OF ROANOKE WITHIN THE CATAWBA MAGISTERIAL DISTRICT. THIS PROPERTY IS MORE ACCURATELY DESCRIBED AS TAX PARCELS 56.03-02-43.2. APPROXIMATELY 5.0 ACRES OF THE ORIGINAL PROPERTY WILL BE DEVELOPED.

EXISTING SITE CONDITIONS:
THE PROPOSED DEVELOPMENT AREA IS CURRENTLY BEING GRADED UNDER AN EXISTING LAND DISTURBING PERMIT AND VPDES PERMIT.

ADJACENT PROPERTY:
REFER TO THE ATTACHED CONSTRUCTION PLANS, WHICH IDENTIFY THE ADJOINING RESIDENTIAL PROPERTIES.

OFF-SITE AREAS:
PRELIMINARY EARTHWORK COMPUTATIONS INDICATE THAT ADDITIONAL MATERIAL FROM OFF-SITE WILL NEED TO BE IMPORTED TO OBTAIN THE GRADES INDICATED. THE CONTRACTOR WILL UTILIZE MATERIAL FROM THEIR EXISTING BORROW AREA LOCATED OFF OF VA. SEC. 311.

SOILS:
NO INFORMATION IS CURRENTLY AVAILABLE FOR THE EXISTING MATERIAL LOCATED ON-SITE.

CRITICAL EROSION AREAS:
NO CRITICAL AREAS ARE ANTICIPATED AS 90% OF THE GRADED AREA DISCHARGES INTO AN EXISTING UNDERGROUND STORM DRAIN SYSTEM. THE REMAINING 10% WILL FLOW THROUGH A DIVERSION/SEDIMENT TRAP FACILITY LOCATED APPROXIMATELY 80' FROM THE ADJOINING PROPERTY.

EROSION AND SEDIMENT CONTROL MEASURES:
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.

MANAGEMENT STRATEGIES:
* CONSTRUCTION WILL BE SEQUENCED SO THAT GRADING OPERATIONS CAN BEGIN AND END AS QUICKLY AS POSSIBLE.
* SEDIMENT TRAPPING MEASURES WILL BE INSTALLED AS A FIRST STEP IN GRADING.
* 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.
* ALL FILL AND CUT SLOPES SHALL BE SEEDED WITHIN SEVEN (7) DAYS OF ACHIEVING FINAL GRADE.
* ONLY AFTER INSPECTION AND APPROVAL FROM THE LOCAL PROGRAM ADMINISTRATOR MAY ITEMS BE REMOVED FOLLOWING THE STABILIZATION OF THE CONTRIBUTING AREAS.

MAINTENANCE:
* IN GENERAL, ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CHECKED DAILY AND AFTER EACH SIGNIFICANT RAINFALL. THE FOLLOWING ITEMS WILL BE CHECKED IN PARTICULAR:
* THE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION TO PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAYS.
* ALL SILT FENCE BARRIERS SHALL BE CHECKED REGULARLY FOR UNDERMINING AND SEDIMENT BUILD-UP.
* ALL DIVERSION DITCHES SHALL BE CHECKED FOR SEDIMENT BUILDUP IN 'FLAT' AREAS, WHICH COULD CREATE OVERTOPPING AND CHECK FOR EXCESSIVE EROSION ALONG THE BOTTOM IN 'STEEP' SECTIONS, WHICH REQUIRE STABILIZATION TO PREVENT SEDIMENT FROM BEING DISPOSED OF OFF-SITE.
ALL AREAS NOT SODDED AND RECEIVING STANDARD SEED MIXTURES WILL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND OF GRASS HAS BEEN ESTABLISHED. ANY AREAS NOT GROWING SHALL BE FERTILIZED AND RESEEDED AS NEEDED.

STORMWATER MANAGEMENT:
THIS PROJECT IS PART OF THE ORIGINAL DESIGN FOR THE TWO EXISTING STORMWATER MANAGEMENT FACILITIES LOCATED WITHIN RUSSELL FARMS AND THE ORIGINAL DESIGN CAPACITIES HAVE BEEN VERIFIED BY SUPPLEMENTAL CALCULATIONS.

SITE SPECIFIC PRACTICES:

CONSTRUCTION ENTRANCE-Std. 3.02 a stone pad, located at points of vehicular ingress and egress on a construction site, to reduce the soil transported onto public roads and other paved areas.

CONSTRUCTION ROAD STABILIZATION-Std. 3.03 temporary stabilization with stone of access roads, subdivision streets, parking areas and other traffic areas immediately after grading to reduce erosion caused by vehicles during wet weather.

SILT FENCE-Std. 3.05 a temporary barrier constructed of posts, filter fabric and, in some case a wire support fence, placed across or at the toe of a slope to intercept and detain sediment.

INLET PROTECTION-Std. 3.07 installation of a sediment trapping measure around drop inlets or curb inlet structures prior to permanent stabilization of the disturbed area.

FILL DIVERSION-Std. 3.10 a channel with a supporting ridge on the lower side, constructed along the top of an active earth fill in order to divert runoff away from the unprotected slope to a stabilized outlet or sediment trapping structure.

RIGHT-OF-WAY DIVERSIONS-Std. 3.11 a ridge of compacted soil or loose gravel constructed across a disturbed right-of-way or similar sloping area to divert the runoff to a stabilized outlet.

DIVERSIONS-Std. 3.12 a permanent channel with a ridge on the lower side constructed across a slope to reduce slope length and intercept and divert stormwater runoff to a stabilized outlet at non-erosive velocities.

SEDIMENT TRAP-Std. 3.13 a small ponding area, formed by constructing an earthen embankment with a stone outlet across a drainage swale, to detain sediment-laden runoff from small disturbed areas.

TOPSOILING-Std. 3.30 preserving and using topsoil to provide a suitable growth medium for vegetation used to stabilize disturbed areas.

TEMPORARY SEEDING-Std. 3.31 establishment of 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 appropriate rapidly growing plants.

PERMANENT SEEDING-Std. 3.32 establishment of perennial vegetative cover by planting seed on rough-graded areas that will not be brought to final grade for a year or more or where permanent, long-lived vegetative cover is needed on fine-graded areas.

MULCHING-Std. 3.35 application of plant residues or other suitable materials to the soil surface to protect the soil surface from raindrop impact and to promote the growth of vegetation.

SOIL STABILIZATION BLANKETS & MATTING-Std. 3.36 application of a protective covering (blanket) or a soil stabilization mat on a prepared planting area of a steep slope, channel or shoreline as an aid in controlling erosion.

DUST CONTROL-Std. 3.39 reducing surface and air movement of dust during land disturbing, demolition and construction activity which may present health hazards, traffic safety problems or harm animal or plant life.

CONSTRUCTION SEQUENCING

FOLLOWING ISSUANCE OF A LAND DISTURBING PERMIT FROM ROANOKE COUNTY, THE CONTRACTOR SHALL PERFORM HIS SITEWORK IN GENERAL CONFORMANCE WITH THE FOLLOWING:

INSTALL NEW CONSTRUCTION ENTRANCE, COMPLETE WITH WASH RACK OR OTHER PERTINENT MEASURES.

PROVIDE AND INSTALL PERIMETER CONTROLS SUCH AS THE INSTALLATION OF SILT FENCE BARRIERS. CLEAR AND GRUB THE AREA REQUIRED TO CONSTRUCT THE NEW STORMWATER MANAGEMENT FACILITY. INSTALL THE NEW SOIL EROSION AND SEDIMENT CONTROL MEASURES. IMMEDIATELY CONSTRUCT AND STABILIZE THE AREAS DISTURBED BY CONSTRUCTION OF SEDIMENT TRAPPING MEASURES. SEE PLAN FOR APPLICABILITY OF REFERENCED MEASURES. TEMPORARY DIVERSIONS WILL BE REQUIRED AS EARTHWORK PROGRESSES TO DIRECT RUNOFF TO THE PROTECTED AREAS OF SEDIMENT COLLECTION.

STRIP AND STOCKPILE TOPSOIL. ALL TOPSOIL SHALL BE STOCKPILED ON-SITE. PERIMETER SILT FENCE BARRIER OR OTHER APPROVED PERIMETER CONTROLS SHALL PROTECT STOCKPILES FROM EROSION AND OFF-SITE SEDIMENTATION. THE CONTRACTOR SHALL PROVIDE TEMPORARY SEEDING OF STOCKPILED MATERIALS IN ACCORDANCE WITH THESE PLANS.

PERFORM CUT AND FILL OPERATIONS IN CONJUNCTION WITH GRADING OF THE SITE.

ALL DISTURBED AREAS NOT TO RECEIVE HARD SURFACING SHALL BE SEEDED (TEMPORARY, PERMANENT, OR BOTH), FERTILIZED, LIMED, MULCHED, AND WATERED IN ACCORDANCE WITH THESE PLANS.

THE SITEWORK CONTRACTOR SHALL CLEAN, REPAIR, OR OTHERWISE MAINTAIN CONTROL MEASURES THROUGHOUT THE CONSTRUCTION.

GENERAL EROSION AND SEDIMENT CONTROL 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 ISSUANCE OF A LAND DISTURBANCE PERMIT BY ROANOKE COUNTY, THE OWNER SHALL PROVIDE DOCUMENTATION OF AN EXISTING LAND DISTURBING PERMIT(S) THAT WOULD BE ASSOCIATED OR REQUIRED FOR ANY OFF-SITE BORROW OR WASTE AREAS; WHETHER LOCATED WITHIN THE COUNTY LIMITS OR NOT.

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 RUN-OFF PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.

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	REMARKS
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.	<i>SELF EXPLANATORY - REFER TO THE SEEDING SPECIFICATIONS ON THE EROSION CONTROL DETAIL SHEET.</i>
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.	<i>SELF EXPLANATORY - AREA HAS BEEN PREGRADED AND AN EXISTING TOPSOIL STOCKPILE LOCATION IS PROVIDED OFF OF MILLWOOD DRIVE.</i>
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.	<i>SELF EXPLANATORY - REFER TO THE SEEDING SPECIFICATIONS ON THE EROSION CONTROL DETAIL SHEET.</i>
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.	<i>THERE ARE TWO MAJOR SEDIMENT BASINS EXISTING WITHIN THE DEVELOPMENT TO CONTROL EROSION. A SEDIMENT TRAP IS ALSO PROPOSED NEAR LOT 57.</i>
5	STABILIZATION METHODS SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.	<i>SELF EXPLANATORY</i>
6	SEDIMENT TRAPS AND BASINS SHALL BE DESIGNED AND CONSTRUCTED BASED UPON THE TOTAL DRAINAGE AREA TO BE SERVED BY THE TRAP OR BASIN.	<i>SELF EXPLANATORY - REFER TO THE PREVIOUSLY APPROVED ENGINEERING CALCULATIONS.</i>
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.	<i>SELF EXPLANATORY</i>
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.	<i>SELF EXPLANATORY</i>
9	WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.	<i>SHOULD SEEPS OCCUR IN ANY EXISTING OR NEW CUT OR FILL SLOPE, THE CONTRACTOR SHALL FIRST INSURE THAT THERE ARE NOT AREAS OF POUNDED WATER AT THE TOPS OF THE SLOPES, AND THEN SHALL CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT GEOTECHNICAL ENGINEER FOR ON-SITE EVALUATION OF THE AREAS OF SEEPAGE.</i>
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.	<i>SELF EXPLANATORY</i>
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.	<i>SELF EXPLANATORY</i>
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.	<i>NOT APPLICABLE - THERE ARE NO INTERMITTENT OR PERENNIAL STREAMS PRESENT WITHIN THE LIMITS OF CONSTRUCTION.</i>
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.	<i>NOT APPLICABLE - THERE ARE NO INTERMITTENT OR PERENNIAL STREAMS PRESENT WITHIN THE LIMITS OF CONSTRUCTION.</i>
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.	<i>NOT APPLICABLE - THERE ARE NO INTERMITTENT OR PERENNIAL STREAMS PRESENT WITHIN THE LIMITS OF CONSTRUCTION.</i>
15	THE BEDS AND BANKS OF A WATERCOURSE SHALL BE STABILIZED IMMEDIATELY AFTER WORK IN THE WATERCOURSE IS COMPLETED.	<i>NOT APPLICABLE - THERE ARE NO INTERMITTENT OR PERENNIAL STREAMS PRESENT WITHIN THE LIMITS OF CONSTRUCTION.</i>
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.	<i>SELF EXPLANATORY</i>
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.	<i>SELF EXPLANATORY</i>
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.	<i>SELF EXPLANATORY</i>
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.	<i>THERE ARE TWO STORMWATER MANAGEMENT FACILITIES EXISTING WITHIN THE DEVELOPMENT TO CONTROL THE INCREASED QUANTITIES OR RUN-OFF DUE TO THIS PROPOSED SECTION.</i>

EROSION AND SEDIMENT CONTROL NOTES

THE VILLAS AT RIVER OAKS

SITUATE OFF OF MILLWHEEL DRIVE
CATAWBA MAGISTERIAL DISTRICT
ROANOKE COUNTY, VIRGINIA

Designed:.....J.V. Judy
Drawn:.....J.V. Judy
Checked:F.B. Caldwell
Revised:.....March 20, 2005
Scale:.....AS SHOWN
Tax Parcel:.....56.03-2-43.2
W.O. #.....01-0090

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