

EROSION & SEDIMENT CONTROL NARRATIVE

**Project Description:**  
This project is located off East Ruritan Road (Route 609) on Golden Ivy Drive in Roanoke County, Virginia. This project consists of the construction of a cul-de-sac road (Cottage Rose Lane), sixteen (16) patio homes, and related site improvements. The approximate amount of disturbed area is 4.0 AC.

**Existing Site Conditions:**  
The site is moderately sloping, predominantly grass-covered, however some portions have been used for soil storage. The site generally drains to the south and southeast to storm sewer inlets along Golden Ivy Drive, which drain to the stormwater management pond or down to East Ruritan Road.

**Adjacent Areas:**  
This site is bordered by Section 1 of the Wedgewood subdivision on the northeast, large single-family lots on the northwest and southwest, and Golden Ivy Drive and a stormwater management pond on the southeast.

**Off-site areas:**  
No offsite borrow or fill sites are expected to be associated with this project.

The location of all off-site fill or borrow areas associated 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.

**Soils:**  
Soils information is based on an inspection of sheet number 7 of the soil survey of Roanoke County and the cities of Roanoke and Salem, Virginia, issued in 1997 and has not been field verified. The majority of the onsite soils fall into the Tumbling loam (49C) category with moderate permeability and high erosion potential.

The following symbols correspond with soil type

SYMBOL	SOIL NAME, TYPE, SLOPE RANGE %	DISTURBED AREA
49C	Tumbling, loam, 7/15	4.0 AC.

Typical sequence, depth and composition layers in the soils are as follows:

49C Tumbling, loam, 7 to 15% slopes

Layer	Depth / Description
Surface layer	0 to 2 inches, very dark grayish brown loam
Subsurface layer	2 to 11 inches, brownish yellow loam
Subsoil	11 to 15 inches, strong brown gravelly clay loam that has brownish yellow mottles
	15 to 28 inches, yellowish red gravelly clay loam that has red mottles
	28 to 49 inches, yellowish red very gravelly clay loam that has red mottles
Substratum	49 to 62 inches, mottled strong brown, red, dark red, and white clay loam

**Critical Areas:**  
There are no specific critical areas for concern with this project. However, the contractor shall take special care to establish permanent stabilization on all steep slopes, and to ensure that no sediment enters the existing ditch at the rear of the site and into the existing stormwater inlets along Golden Ivy Drive.

**General Standards:**  
All erosion and sediment control practices and procedures shall be in accordance with the latest edition of the Virginia Erosion and Sediment Control Handbook.

**Erosion and Sediment Control Measures:**  
**Standard and Specification 3.02 - Construction Entrance (CE)**  
A temporary construction entrance shall be installed where the construction access road leaves existing pavement. During wet weather conditions, drivers of construction vehicles will be required to wash their wheels before entering the street. When construction vehicles must enter disturbed areas, the tires of the vehicle shall be manually cleaned prior to leaving the site, if necessary.

**Standard and Specification 3.03 - Construction Road Stabilization (CRS)**  
Construction road stabilization will be installed as shown on the plan as soon as the area has been brought to subgrade. Construction traffic shall be limited to CRS access roads and areas to be graded. Traffic is prohibited from entering drainage swales or streams unless absolutely necessary.

**Standard and Specification 3.05 - Silt Fence (SF)**  
Silt fence shall be installed at the lower end of the Topsoil Stockpile as shown on the plan.

**Standard and Specification 3.07 - Inlet Protection (IP)**  
Inlet protection shall be installed at storm drain drop and curb inlets as shown on the plan.

**Standard and Specification 3.09 - Temporary Diversion Dike (DD)**  
A temporary ridge of compacted soil shall be constructed as shown on the plans to divert upslope runoff away from disturbed areas and/or to divert sediment-laden runoff from a disturbed area to a sediment trap or basin.

**Standard and Specification 3.11 - Temporary Right-of-Way Diversion (RWD)**  
A temporary ridge of gravel shall be installed as shown on the plans to allow construction traffic to pass while diverting sediment-laden runoff to a sediment trap or basin.

**Standard and Specification 3.31 - Temporary Seeding (TS)**  
The temporary diversion dikes, topsoil stockpiles and all areas to be rough graded, but not finish graded during the initial phase of construction, shall be seeded with fast germinating, temporary vegetation immediately following grading, or installation if a temporary measure. See also Minimum Standards.

**Standard and Specification 3.32 - Permanent Seeding (PS)**  
Permanent Seeding shall be installed on all disturbed areas of the site not otherwise stabilized.

**Standard and Specification 3.35 - Mulching (MU)**  
All disturbed area shall be mulched after seeding. Straw mulch shall be applied at a rate of two tons per acre and anchored with 750 lbs per acre of fiber mulch over the seeded area.

**Permanent Stabilization:**

All areas disturbed by construction shall be stabilized with permanent seeding immediately following finish grading. Seeding will be done in accordance with Standard and Specification 3.32 of the Virginia Erosion and Sediment Control Handbook, latest edition. Permanently seeded areas shall be protected during establishment with straw mulch.

All slopes 3:1 or greater will have one (1) growing season to establish permanent stabilization. If not established, soil stabilization blankets and/or matting will be required in accordance with the VA ESC Handbook Std. & Spec. 3.36.

**Stormwater Management:**

Development of this project would result in an increase in stormwater runoff from the site. However, a stormwater management facility was designed, approved, and constructed with section No. 1 to account for the increase in runoff from this development and release this runoff in accordance with Roanoke County Standards.

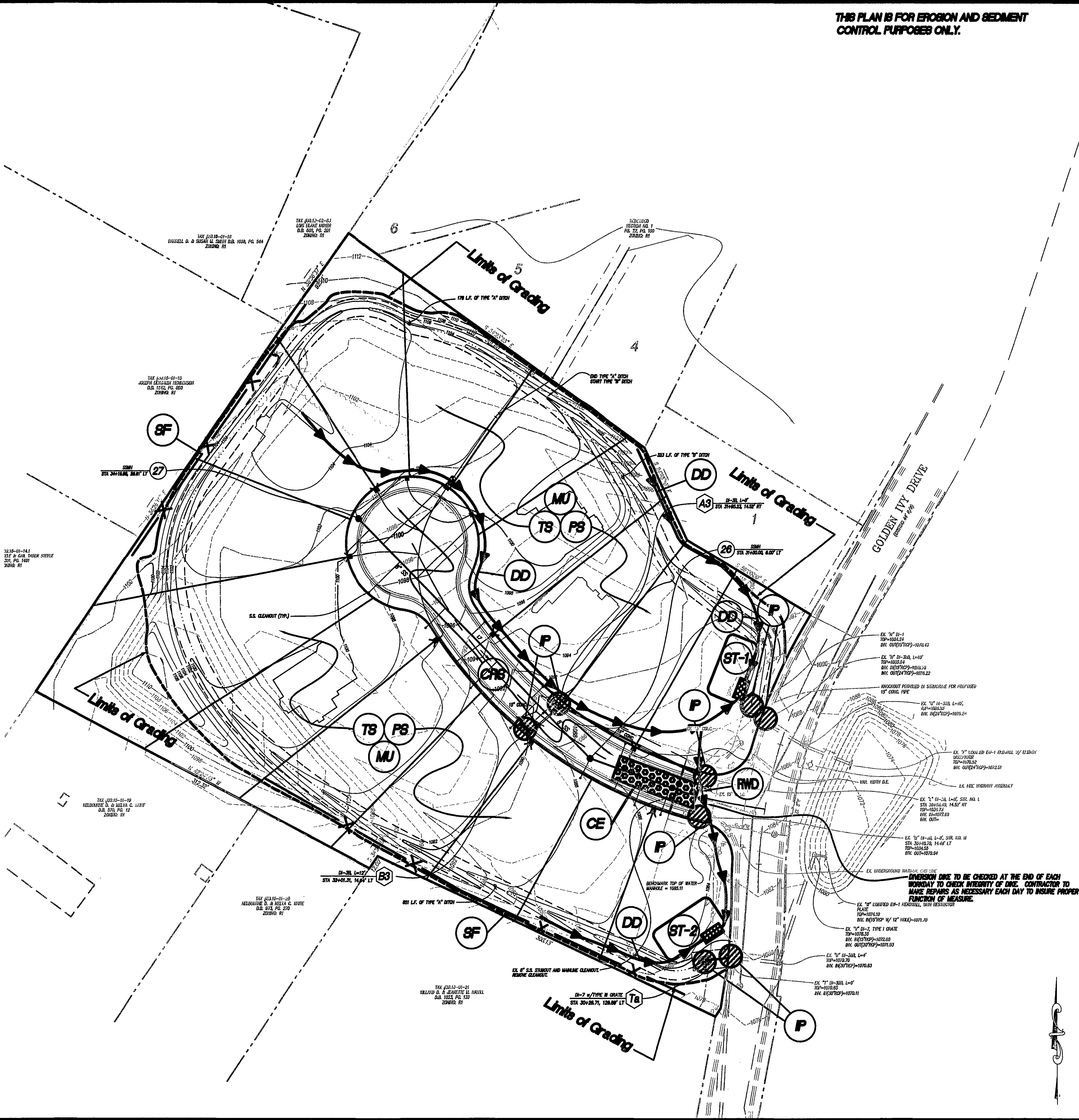
**Maintenance:**

All erosion and sediment control measures shall be inspected bi-weekly and after every runoff producing rainfall. A log of dates and inspections shall be kept. Any deficiencies that are found shall be corrected immediately. Accumulated sediment at trapping measures shall be routinely removed. All ditches, swales, and natural watercourses downstream of this project shall be field inspected during and after construction by the RLD to ensure compliance with DCR's MS-19. If erosion or scour is occurring the developer shall be responsible for all corrective measures. Erosion and sediment control measures shall be maintained until after all disturbed areas have been permanently stabilized and then temporary measures properly removed.

**Construction Sequence**

- Contractor's Certified Responsible Land Disturber shall be named at and attend the pre-construction meeting and provide a copy of his RLD Certificate thereto.
- All perimeter erosion and sediment control measures shall be installed prior to beginning grading operations in the indicated areas. Areas to be cut and filled are to be cleared and graded in phases. This phasing will be done to minimize the length of time areas are subject to erosion.
- Install sediment traps and their respective diversion dikes as soon as grading operations begin in the affected areas. The construction process should be sequenced as much as possible so that each area is seed and stabilized prior to beginning grading operations in another area.
- Install inlet protection and outlet protection along with the storm drain construction.
- Temporary erosion and sediment control measures shall be removed after those affected areas have been brought to final grade and permanently stabilized with improvements or established vegetation. Contractor to obtain approval from Roanoke County prior to removal of any temporary ESC measure.

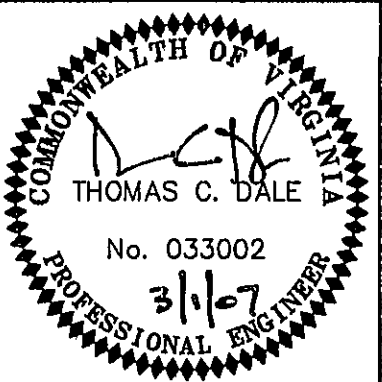
THIS PLAN IS FOR EROSION AND SEDIMENT CONTROL PURPOSES ONLY.



**LUMSDEN ASSOCIATES, P.C.**  
ENGINEERS-SURVEYORS-PLANNERS  
ROANOKE, VIRGINIA

PHONE: (540) 774-4411  
FAX: (540) 774-4411  
E-MAIL: MAIL@LUMSDENPC.COM

4664 BRAMBLETON AVENUE  
P.O. BOX 20680  
ROANOKE, VIRGINIA 24018



EROSION AND SEDIMENT CONTROL PLAN

"WEDGEWOOD" -SECTION 3  
PREPARED FOR  
STRAUSS DEVELOPMENT CORPORATION  
HOLLINS MAGISTERIAL DISTRICT  
ROANOKE COUNTY, VIRGINIA

NO.	REVISIONS				
	DATE	DESCRIPTION	BY	CHKD	APPD
1					
2					
3					
4					
5					

DATE: MARCH 1, 2007  
SCALE: 1"=40'  
COMMISSION NO: 04-336  
SHEET 9 OF 11