

EROSION & SEDIMENT CONTROL NARRATIVE

Project Description:
This project is located along Walrand Drive. The project consists of construction of a warehouse building and a parking lot along with associated utilities. Also new drainage structures and sanitary sewerage will be installed along Walrand Park Road. A total of 2.0 acres of land will be disturbed.

Existing Site Conditions:
The site is relatively sloping. The entire site drains into an existing ditch along the property line along Walrand Drive. Existing vegetative cover mostly consists of grass and bushes. No large trees are present on the site.

Adjacent Areas:
This development is bordered to the north-west by Walrand Drive, north-east by an industrial parcel, south-east by the remaining of the property and south-west by Tinker Knoll sub-division.

Off-site areas:
No off-site borrow or fill areas associated with this construction are planned at this time.

Critical Areas:
No critical areas are present at the site.

Soils:
Soil 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 1987 and has not been field verified. The majority of the onsite soils fall into the Udothents-urban land complex (32) category. Udothents consist of material that has been graded, cut and filled, or otherwise disturbed during the growth of urban areas and during highway construction. The exposed material is variable in nature. It consists of loamy or clayey material or is shallow over limestone or shale bedrock. The areas of urban land consist of asphalt, concrete, or other impervious surfaces. Slopes are somewhere between 0 to 30 percent.

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.

Minimum Standards:
See DEQ's minimum standards listed on the Roanoke County ESC Detail Sheet.

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)**
The temporary stabilization of access roads, subdivision roads, parking areas, and other onsite vehicle transportation routes with stone immediately after grading.
- Standard and Specification 3.05 - Silt Fence (SF)**
Silt Fence shall be installed at the lower edge of disturbed areas as shown on the plan. Two types of silt fence are shown on the plans in accordance with VDOT standards. The taller fence is specified as silt fence, "SF". A shorter fence is specified as filter barrier, "FB".
- Standard and Specification 3.07 - Storm Drain Inlet Protection (IP)**
Inlet protection shall be installed to prevent sediment from entering the storm drainage system.
- Standard and Specification 3.08 - Culvert Inlet Protection (CIP)**
A sediment filter shall be provided at the inlet to storm sewer culverts to prevent sediment from entering, accumulating and being transferred by a culvert.
- Standard and Specification 3.09 - Diversion Dike (DD)**
Diversion dikes will be installed to divert offsite runoff around the construction area and also to divert sediment laden runoff in the sediment traps.
- Standard and Specification 3.13 - Temporary Sediment Traps (ST)**
Sediment traps will be utilized to allow sediment to settle out of runoff prior to exiting the site.
- Standard and Specification 3.18 - Outlet Protection (OP)**
Outlet Protection shall be installed as shown on the plan to prevent erosion and scour at the outlet ends.
- Standard and Specification 3.20 - Rock Check Dams (CD)**
Small temporary stone dams constructed across a erode or drainage ditch.
- 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)**
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.
- Standard and Specification 3.35 - Mulching (MU)**
Application of plant residues or other suitable materials to the soil surface.

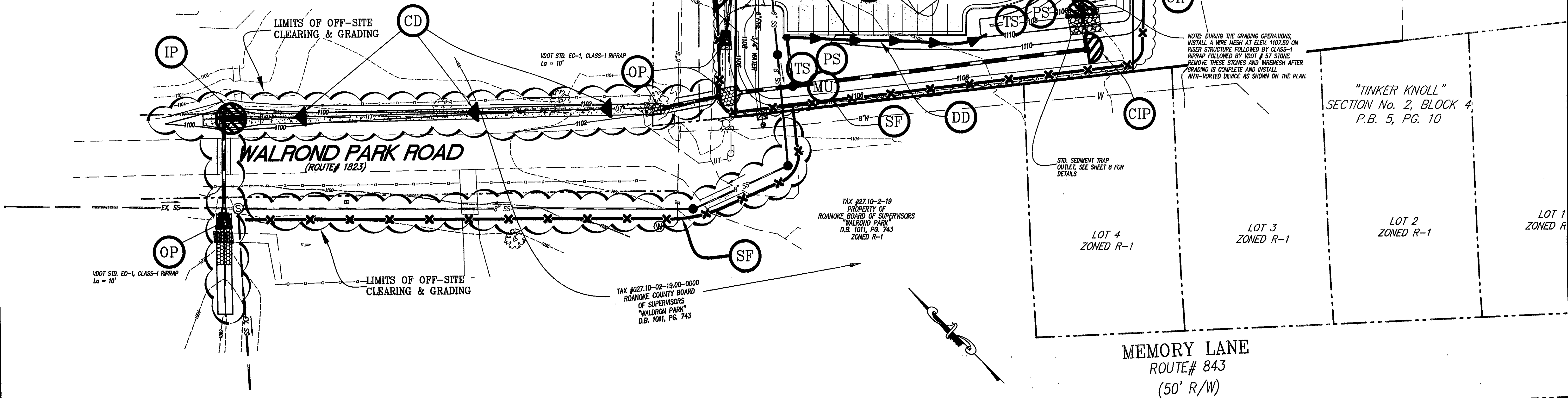
Storm Water Management Consideration:

A stormwater management facility has been proposed to release stormwater from the site in accordance with Roanoke County regulations. Please see the stormwater management calculations for this project.

Construction Sequence:

1. 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.
2. Install construction entrance, perimeter silt fence and diversion dike as the first step in the construction process.
3. Install storm drain from "AC" thru "AD" and "C2" thru "C1". Install inlet and outlet protections with storm drain construction.
4. Construct and stabilize stormwater management facility. Do not install anti-vortex device. On riser structure install a wire mesh followed by the class-1 riprap, followed by VDOT #57 stone at elevation 1107.5. This facility to act as modified sediment trap during construction.
5. Install remainder of storm drainage system with inlet protection and outlet protection as construction allows.
6. 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. All perimeter erosion and sediment control measures shall be installed prior to beginning grading operations in the affected areas.
7. 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 temporary erosion and sediment control measures.

TAX #27.10-2-19
PROPERTY OF
ROANOKE BOARD OF SUPERVISORS
"WALDRON PARK"
D.B. 1011, PG. 743
ZONED R-1



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COMMONWEALTH OF VIRGINIA
THOMAS C. DALE
No. 033002
4-23-97
PROFESSIONAL ENGINEER

EROSION & SEDIMENT CONTROL PLAN

VIRGINIA AIR DISTRIBUTORS
PREPARED FOR
VIRGINIA AIR DISTRIBUTORS
HOLLINS MAGISTERIAL DISTRICT
ROANOKE COUNTY, VIRGINIA

REVISIONS		DESCRIPTION	
NO.	DATE	1	2
1			
2			
3			
4			
5			

DATE: APRIL 23, 2007
SCALE: 1" = 30'
COMMISSION NO.: 06-257
SHEET 7 OF 11