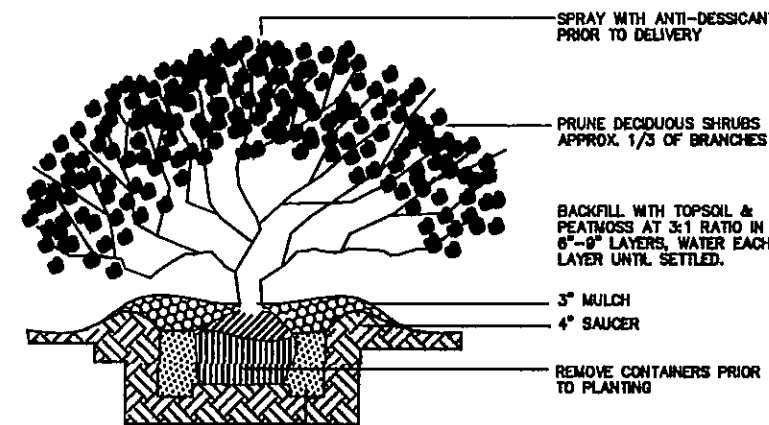
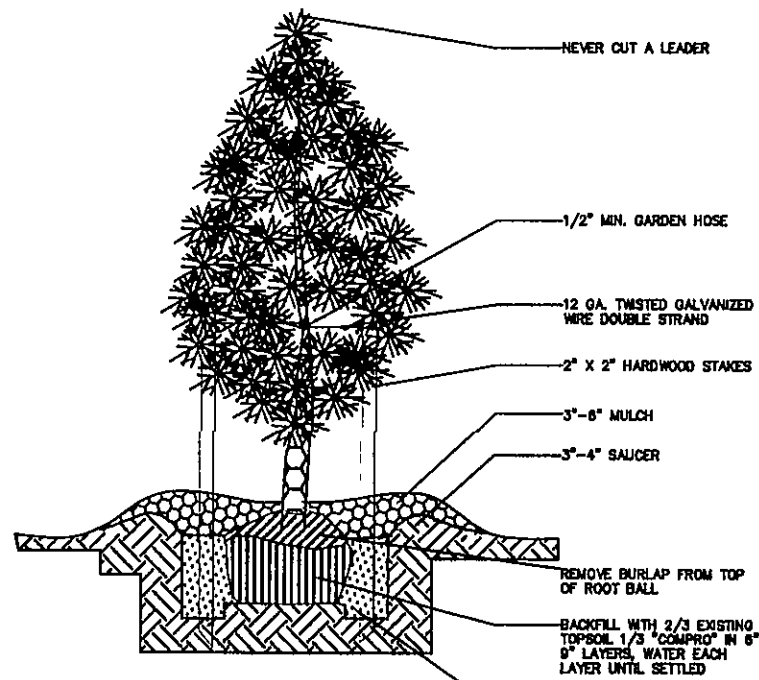


TREE PLANTING DETAIL

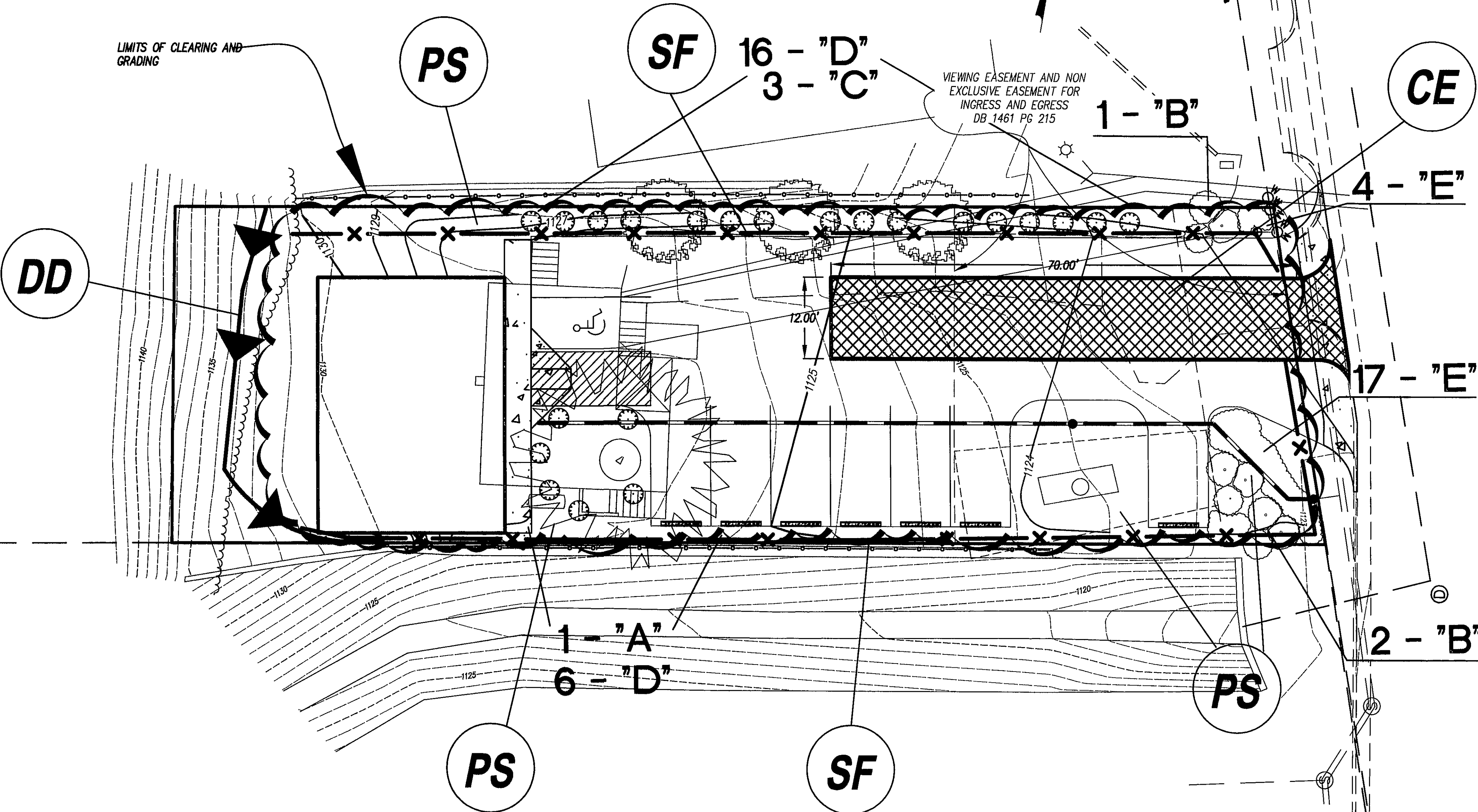


SHRUB PLANTING DETAIL



EVERGREEN TREE PLANTING

LIMITS OF CLEARING AND GRADING



PLANTING SCHEDULE

SYMBOL	LEGEND	QUANTITY	COMMON NAME	SCIENTIFIC NAME	SIZE
	A	1	RED MAPLE	<i>Acer rubrum</i>	1 1/2" CALIPER
	B	3	SERVICEBERRY	<i>Amelanchier x grandiflora 'Autumn Brilliance'</i>	6'-8" CLUMP
	C	3	EASTERN REDBUD	<i>Cercis canadensis</i>	1 1/2" CALIPER
	D	22	DWARF BURNING BUSH	<i>Euonymus alatus 'Compactus'</i>	18 - 24"
	E	21	CINQUEFOIL	<i>Potentilla fruticosa 'Gold Drop'</i>	18 - 24"

NOTES:

- LANDSCAPE PLAN MAY BE MODIFIED AS AGREED UPON BY ROANOKE COUNTY AND THE OWNER/DEVELOPER
- OWNER/DEVELOPER IS RESPONSIBLE FOR PLANTING SUCH TREES WITHIN THE VIEW EASEMENT WHICH WILL NOT BLOCK THE VIEW OF BILLBOARD.

LANDSCAPING REQUIRED:

CROWN COVERAGE
 ON-SITE DEVELOPED AREA: 8480 S.F.
 CROWN COVERAGE REQUIRED: 35% OF DEVELOPED AREA = 2,961 S.F.
 CROWN COVERAGE PROVIDED: 1 1/2" CALIPER TREES = 1 @ 1,250 S.F. = 1,250 S.F.
 MEDIUM DECIDUOUS TREES = 6 @ 250 S.F. = 1,500 S.F.
 LARGE SHRUBS = 22 @ 10 S.F. = 220 S.F.
 TOTAL CROWN COVERAGE PROVIDED: 2,970 S.F. (35%)

STREET SIDE PLANTING REQUIREMENT

STREET TREES REQUIRED: 1 SMALL DECIDUOUS TREE PER 20' OF ROAD FRONTAGE (3 REQUIRED)
 STREET SHRUBS REQUIRED: 2 SHRUBS PER 5' OF ROAD FRONTAGE (21 REQUIRED)
 STREET PLANTINGS PROVIDED (50.72' OF ROAD FRONTAGE): 3 SMALL TREES & 21 SHRUBS

EROSION & SEDIMENT CONTROL NARRATIVE

Project Description:

This project is located off US Route 220 (South) near intersection with Franklin Road in Roanoke County. The project consists of construction of a two story commercial building along with associated parking lot and utilities. Approximately 0.2 acres of land will be disturbed with this project. Grading operations for this project are required.

Existing Site Conditions:

The site is moderately sloping and drains to an existing paved channel located on southern side of the lot.

Adjacent Areas:

The proposed development is bordered on the Northwest side by a gas station, to the Southeast by existing commercial development, and to the East by the US Route 220.

Off-site areas:

No off-site borrow or fill sites are expected to be associated with this project.

Soils:

This soil description is based upon Soil Survey of Roanoke County prepared by USDA and NRCS.

Symbol	Soil Type	Disturbed Area
B2	Udorthents-Urban Land Complex	0.178 Ac.

The predominant soils which will be disturbed are the Udorthents and Urban Land Complex. The components of this map unit are so intermingled that it is not practical to map them separately. This complex is about 80% Udorthents, 20% Urban Land, and 10% other soils. They range from about 5 to more than 200 acres. Slopes are mostly 0 to 30%, but range from 0 to 80%. The Udorthents consist of material that has been graded, cut, filled or otherwise disturbed during urbanization and highway construction. The material exposed in cuts consists of heavy or clayey material or other material and over limestone or shale bedrock, and is quite variable. The heavy or clayey material reflects the soils in the adjacent areas. A typical profile of a Udorthent soil is a surface layer ranging from about 5 to 15 inches in thickness, variable in color and texture and underlying material generally extending to a depth of several feet, but in some areas as shallow as 10 inches. This is generally mottled in shades of red, brown, and yellow. Permeability of the Udorthent ranges from slow to moderately rapid. The available water capacity ranges from low to high depending on the nature, thickness, and content of coarse fragments of the soil. Natural fertility and the organic matter content range from low to high. The thickness of the rooting zone and depth to bedrock range from 10 inches to several feet. Surface runoff is very slow to rapid. Potential frost action is low to high. Strata-seal potential ranges from low to high. The urban land consists of asphalt, concrete, or other impervious surfaces. Examples are highways, shopping centers, and industrial parks. Included with this unit in mapping are areas of undisturbed soils. These commonly are the very deep, well drained Fredericks, Greenstone, Hopewell, Tumbling, and Weathering soils, and the moderately deep, well drained Chatham and Lutz soils, and/or shallow, well drained Chatham soils. These soils are between highways and buildings. The properties and characteristics of the areas of this complex are so variable that an on-site investigation is generally needed to determine the suitability of the unit for most uses.

Critical Areas:

It is critical that the erosion and sediment control measures be maintained to prevent any sediment from reaching adjacent paved channel.

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 DEC's minimum standards listed on the Roanoke County ESD Detail Sheet.

Erosion and Sediment Control Measures:

Construction Entrance (CE) - Std. & Spec. 3.02

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.

Silt Fence (SF) - Std. & Spec. 3.05

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 plan in accordance with VDOT standards. The taller fence is specified as silt fence, "SF". A shorter fence is specified as filter barrier, "FB".

Temporary Diversion Dike (DD) - Std. & Spec. 3.08

A diversion dike is a temporary ridge of compacted soil constructed at the top or base of a sloping disturbed area to either divert runoff from upslope area away from unprotected disturbed area to a stabilized outlet, or to divert sediment-laden runoff from a disturbed area to a sediment trap or basin.

Temporary Seeding (TS) - Std. & Spec. 3.31

The temporary diversion dikes, topped 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.

Permanent Seeding (PS) - Std. & Spec. 3.32

Permanent Seeding shall be installed on all disturbed areas of the site not otherwise stabilized.

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-18. 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.

Storm Water Management Consideration:

The development of this property will not result in a significant increase in runoff. Therefore, no storm water management facility has been proposed. Please see storm water management calculations.

CONSTRUCTION SEQUENCE:

- Contractor's Certified Responsible Land Disturber shall be named and provide a copy of his RLD Certificate to Roanoke County Department of Community Development at least two days prior to the pre-construction meeting. RLD shall also attend pre-con meeting.
- Contractor shall apply for DCR Land Disturbance Permit at least two (2) days prior to land disturbance and provide Roanoke County Department of Community Development copy of said permit within five (5) days of issuance.
- Install Construction Entrance, Silt Fence and Diversion Dike as the first step in the construction process.
- 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.
- 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.

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 w/ 825-02-00 erosion and sediment control regulations.
- ES-2: The plan approving authority must be notified one week prior to the onsite preconstruction 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 and narrative, as well as a copy of the land disturbing permit, shall be maintained on the site at all times. The erosion and sediment control administrator will deliver these materials at the onsite preconstruction conference.
- 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 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 the land disturbing activities and during site development until final stabilization is achieved.
- ES-8: During dewatering operation, water will be pumped into an approved filtering device.
- ES-9: 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. An inspection report must be filed with the Roanoke County erosion and sediment control administrator once every two weeks, beginning with commencement of the land disturbing activity, and within 48 hours of any runoff-producing rainfall event. Failure to submit a report will be grounds for immediate revocation of the land disturbing permit. Reports must be postmarked within 24 hours of the deadline. A standard inspection report form will be supplied, which should be copied as necessary. This provision in no way waives the right of Roanoke County personnel to conduct site inspections, nor does it deny the right of the permittee (s) to accompany the inspector (s).