

VIRGINIA DEPARTMENT OF TRANSPORTATION NOTE:

1. Quality Control

Streets to be graded and paved and all structural components erected within the proposed rights of way shall be constructed in accordance with the Virginia Department of Transportation Road and Bridge Specifications dated January 2001, Road and Bridge Standards dated January 1, 2002, and The Work Area Protection Manual dated January 1, 1996, Botetourt County. All materials used shall be tested in accordance with standard policies. The developer must contact the office of the Resident Engineer, prior to beginning of any construction at which time an inspection and Testing Procedure Policy will be drawn. The developer will produce test reports from approved independent laboratories at the developer's expense.

The pavement designs shown are based on a subgrade CBR value 10 or greater. The subgrade soil is to be tested by an independent laboratory and the results submitted to the Virginia Department of Transportation prior to pavement construction. Should the subgrade CBR values be less than 10, then additional base material will be required in accordance with departmental specifications.

The subgrade must be approved by Virginia Department of Transportation prior to placement of the base. Base must be approved by Virginia Department of Transportation for depth, template and compaction before surface is applied.

2. Utilities

All necessary utility laterals along with provisions for conduits (I.E. water, sewer, storm, gas and telephone) will be constructed prior to placement of base material.

Gas or petroleum transmission lines will not be permitted within the pavement or shoulder element (back of curb to back of curb) of the development. Service laterals crossing and pipe lines located outside the pavement but inside the right of way will be constructed in conformity with ASA B 31.8 Specifications and Safety Regulations. Distribution lines with pressure less than 120 lbs. are unaffected by the above.

Permits will be required for all utilities within street right of way prior to acceptance into the secondary highway system.

Any easements granted to a utility company for placement of power, telephone, etc. must be released prior to acceptance.

3. Private Entrances

Modified CG-9D gutter will be provided at all entrances to private lots where standard CG-6 curb and gutter is approved for use.

Driveways connecting to roads without curb & gutter shall conform to the pavement, shoulder & slope.

Permits will be required for all private entrances constructed on street rights of way prior to acceptance into the secondary highway system.

4. Erosion Control and Landscaping

Care must be taken during construction to prevent erosion, dust and mud from damaging adjacent property, clogging ditches, tracking public streets and otherwise creating a public or private nuisance to surrounding areas.

The entire construction area including ditches, channels, back of curbs and or pavement are to be backfilled and seeded at the earliest possible time after final grading.

Drainage easements must be defined by excavated ditches or channels for their full length to well defined existing natural watercourses.

This road will be reviewed during construction for the need of paved gutters. If erosion is encountered in any drainage easement, it will be the responsibility of the developer to sod, rip rap, grout, pave, or to do whatever is necessary to correct the problem.

All vegetation and overburden to be removed from shoulder to shoulder prior to the conditioning (cutting and/or preparation) of the subgrade.

5. Intersection Pavement Radius

Minimum pavement radius of 25 feet is required at all street intersections.

If the proposed streets are to be traveled by school bus, the return radii must be increased to 50' minimum.

6. Connections to State - Maintained Roads

While these plans have been approved, such approval does not exempt connections with existing state-maintained roads from critical review at the time permit applications are made. This is necessary in order that the prevailing conditions be taken into consideration regarding safety accompaniments such as turning lanes.

7. Guardrails

Standard guardrail with safety end sections may be required on fills as deemed necessary by the VDOT Resident Engineer. After completion of rough grading operations, the office of the Resident Engineer, Virginia Department of Transportation, shall be notified so that a field review may be made of the proposed locations.

Where guardrails are to be installed the shoulder width shall be increased in accordance with VDOT Road and Bridge Standards.

NOTE:

ALL WATER AND SANITARY SEWER FACILITIES TO BE INSTALLED ACCORDING TO THE ROANOKE COUNTY WATER AND SANITARY SEWER REGULATIONS

8. Storm Drainage

Field review will be made by the VDOT Resident Engineer during construction to determine the need and limits of paved ditches and/or ditch stabilization treatments, and to determine the need and limits of additional easements. All drainage easements must be cut and made to function to a natural watercourse. Any erosion problems encountered in an easement must be corrected by whatever means necessary prior to subdivision acceptance.

Ditch slopes are to be four to one (4:1) for shoulder widths of six feet (6') or greater and three to one (3:1) for shoulder widths of four feet (4') or five feet (5'), unless otherwise specified in the plans.

9. Entrance Permit

Contractor shall obtain entrance permit to the existing Virginia Department of Transportation Right of Way from Resident Engineer prior to road construction.

10. Inspection

An Inspector will not be furnished except for periodic progress inspection, the above mentioned field reviews and for required stone depths. The developer will be required to post a surety to guarantee the road free of defects for one year after acceptance by the Department of Transportation.

11. Street Maintenance

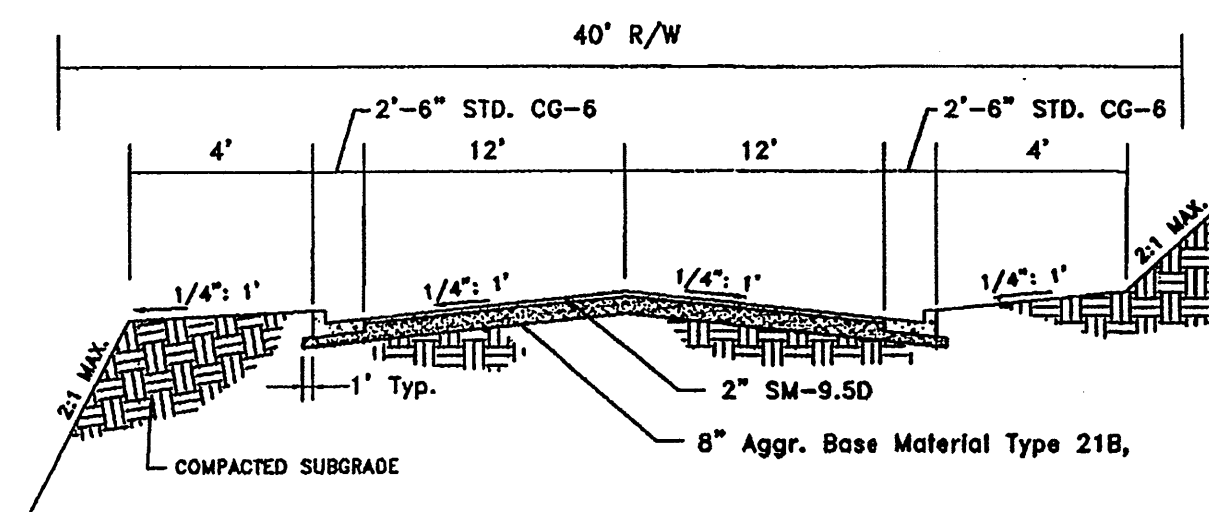
The streets must be properly maintained until acceptance. At such time as all requirements have been met for acceptance, another inspection will be made to determine that the street has been properly maintained.

12. Underground Utilities

Contractor shall verify location and elevation of all underground utilities shown on the plans in areas of construction prior to starting work by contacting Miss Utility. Contact site engineer immediately if location or elevation is different from that shown on the plans. If there appears to be a conflict, and upon discovery of any utility not shown on the plans call "Miss Utility" of central Virginia at 1-800-552-7001.

13. Revisions of Specifications and Standards

Approval of these plans will be based on specifications and standards in effect at the time of approval and will be subject, until completion of the roadway and acceptance by the Department, to future revisions, of the Specifications and Standards.



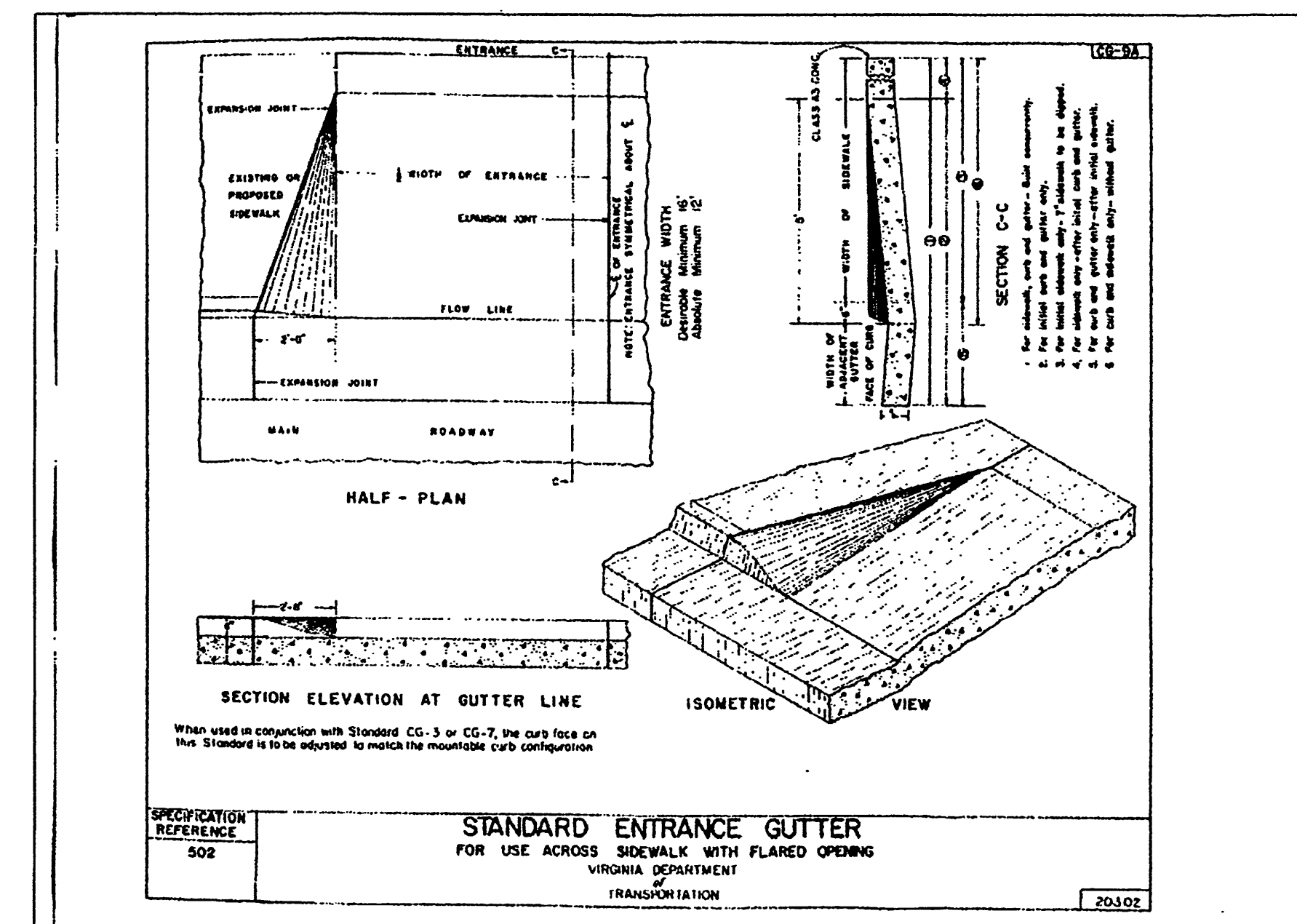
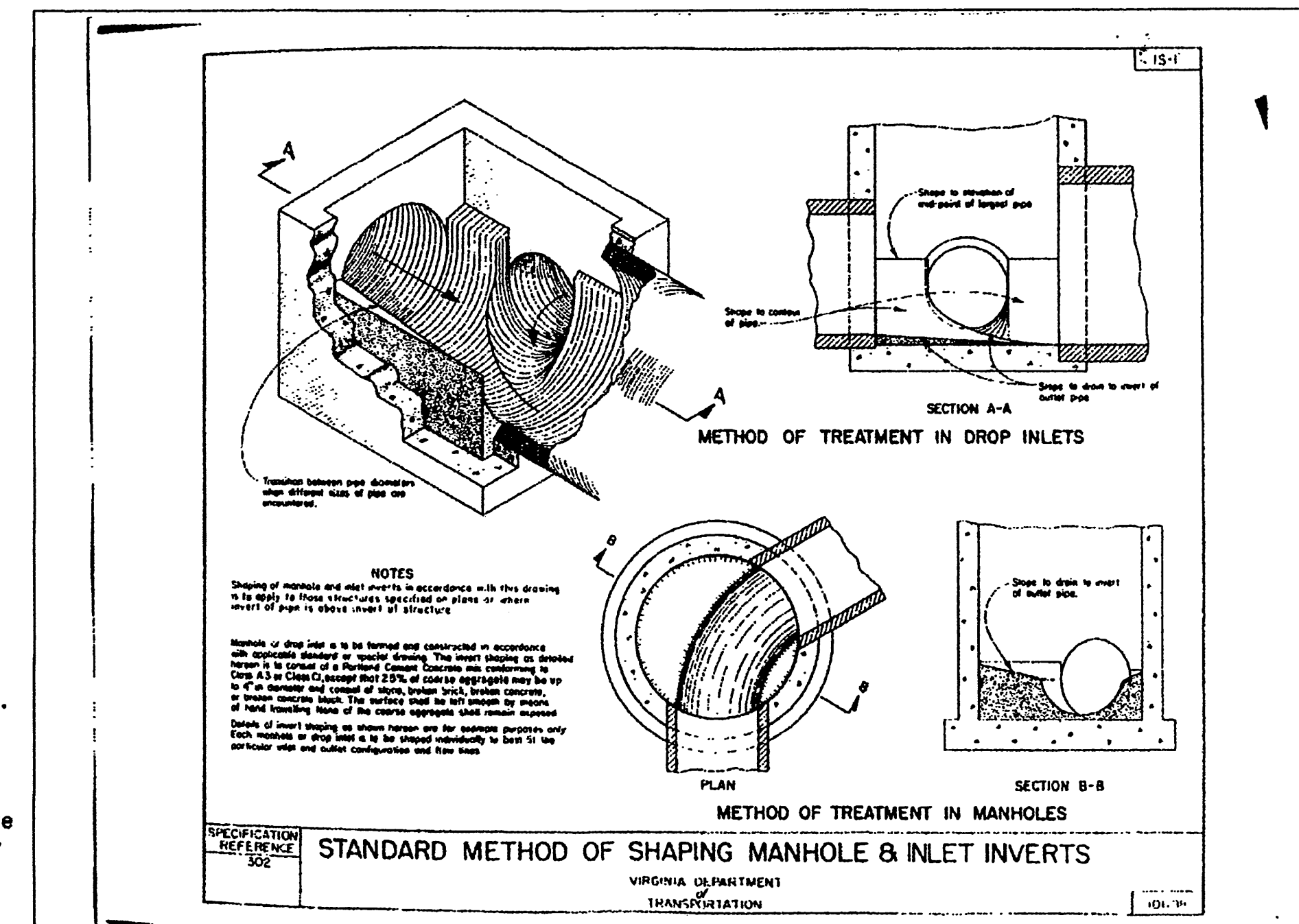
NOTE: SUB-BASE DEPTH FOR SUBGRADE BASED ON CBR VALUE OF 10. SOIL TEST OF SUBGRADE MUST BE TAKEN FOR ACTUAL DETERMINATION OR REQUIRED SUB-BASE THICKNESS PRIOR TO CONSTRUCTION.

ALL PAVEMENT ITEMS SHALL MEET VDOT 211F-SECTION 211 ASPHALT CONCRETE MIXTURES (SUPERPAVE)

CG-12 REQUIRED AT ALL INTERSECTIONS.

THE PAVEMENT THICKNESS TO BE APPROVED BY VDOT PRIOR TO PAVING.

NOTE: INSTALLATION OF PIPE CULVERTS AND STORM SEWER SYSTEMS LOCATED WITHIN VDOT RIGHT-OF-WAY AND EASEMENTS SHALL CONFORM TO THE 2001 VDOT ROAD AND BRIDGE STANDARDS. THIS INCLUDES BEDDING.



ALL DITCHED, SWALES, NATURAL WATERCOURSES DOWNSTREAM OF THIS PROJECT NEED TO BE FIELD REVIEWED DURING AND AFTER CONSTRUCTION TO ENSURE COMPLIANCE TO DCR, MS-19. IF EROSION OR SCOUR IS OCCURRING AND IF SUCH IS FOUND, TO DETERMINE APPROPRIATE REMEDIAL CORRECTIVE MEASURES, THE DEVELOPER SHALL BE RESPONSIBLE FOR ALL CORRECTIVE MEASURES.

IT IS THE DEVELOPERS RESPONSIBILITY TO REPLACE OR REPAIR ANY STRUCTURES DAMAGED DURING ATTACHMENT TO EXISTING STORM SEWERS.

ALL ENTRANCE RADII SHOULD BE REVIEWED DURING CONSTRUCTION TO ENSURE THAT POSITIVE DRAINAGE IS BEING ACHIEVED. IF SUCH SAGS ARE FOUND, THE PRACTICE OF WARPING OR REVERSING THE CURB IS ACCEPTABLE TO CONVEY VERY SMALL AMOUNTS OF DRAINAGE. IF THERE IS A SIGNIFICANT AMOUNT OF DRAINAGE, WARPING OR REVERSING THE CURB WILL NOT BE AN ACCEPTABLE OPTION AND A DI WILL BE REQUIRED TO COLLECT THE RUNOFF IN THE SAG POINT OF THE RADII.

DATE: 05-05-03  
REVISIONS:  
09-18-03  
09-18-03  
09-18-03  
09-18-03

PIERSON  
ENGINEERING  
&  
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SUBDIVISION PLAN  
FOR  
NEW BARRENS COURT  
ROANOKE COUNTY, VIRGINIA

ROAD DETAILS

COMMONWEALTH OF VIRGINIA  
10-1-03  
RODERICK F. PIERSON  
NO. 023842  
PROFESSIONAL ENGINEER  
COMMISSION  
R200228  
SHEET  
SH7

C/BARRENS ROAD/SH7