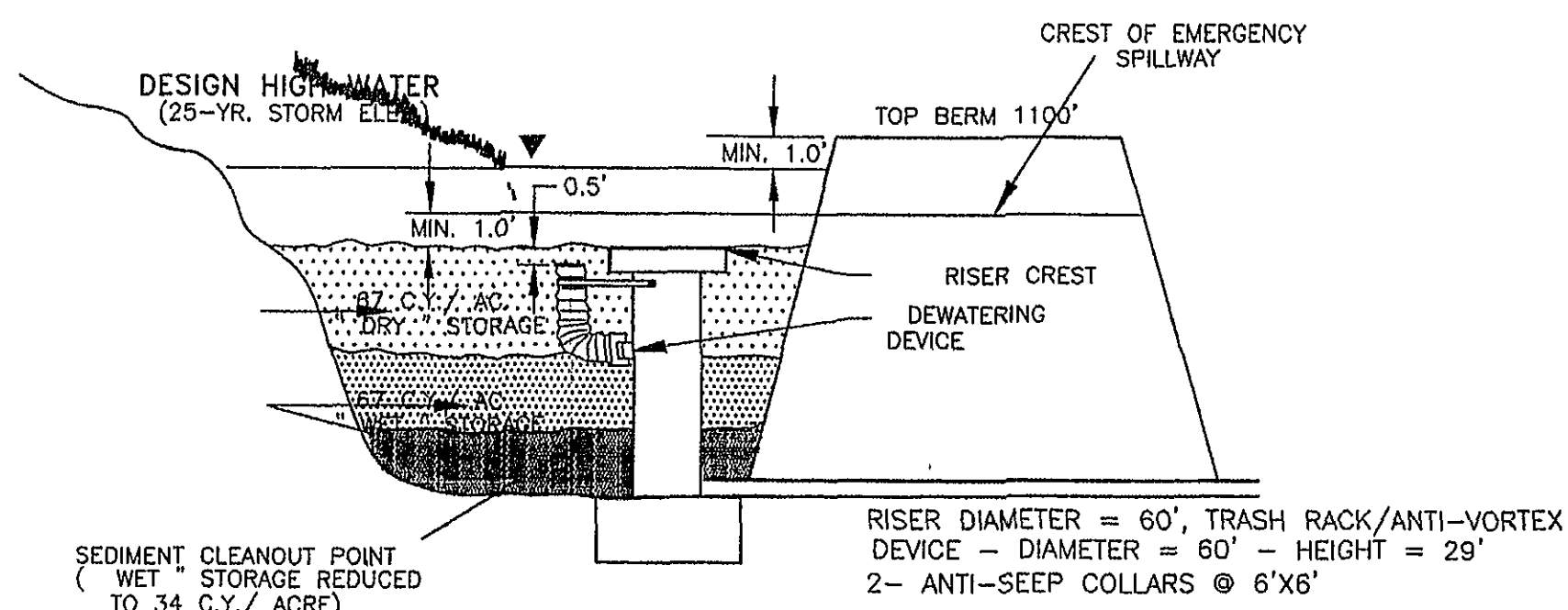


CBR NOTE: SUB-BASE DEPTH FOR SUBGRADE BASED ON CBR VALUE OF 10. SOIL TEST OF SUBGRADE MUST BE TAKEN FOR ACTUAL DETERMINATION OR REQUIRED SUB-BASE THICKNESS PRIOR TO CONSTRUCTION.

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

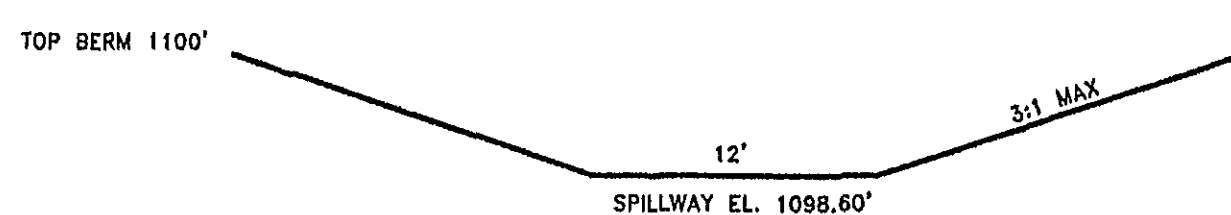
SEDIMENT BASIN SCHEMATIC ELEVATIONS



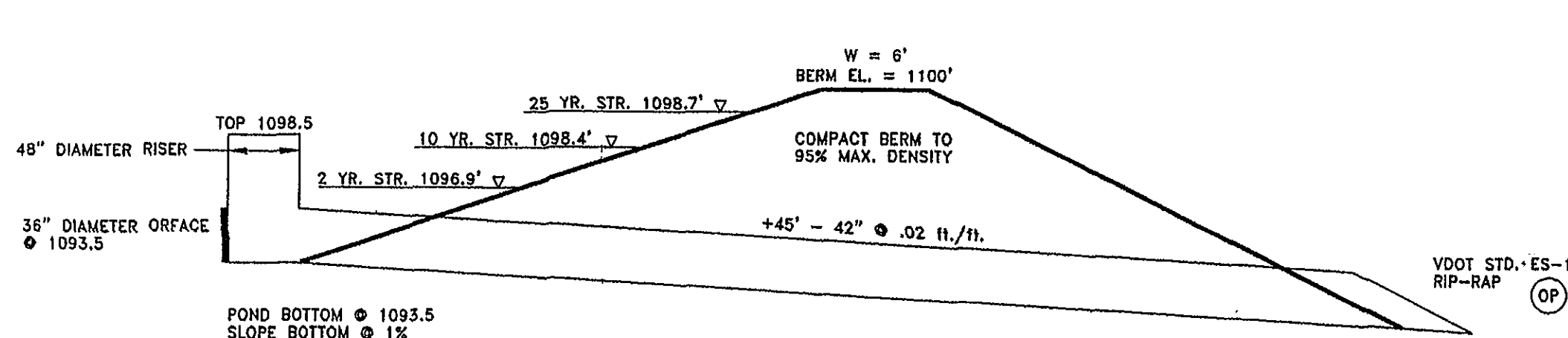
DESIGN ELEVATIONS WITH EMERGENCY SPILLWAY

THE EXISTING UNDERGROUND UTILITIES IN HEREON ARE BASED ON AVAILABLE INFORMATION. UTILITIES MAY EXIST IN THE CONSTRUCTION AREA OF THESE PLANS THAT ARE NOT SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND DEPTH OF ALL UTILITIES BEFORE COMMENCING WORK, AND FOR ANY DAMAGES WHICH OCCUR BY HIS FAILURE TO LOCATE THESE UNDERGROUND UTILITIES IF DURING CONSTRUCTION OPERATIONS THE CONTRACTOR SHOULD ENCOUNTER UTILITIES OTHER THAN THOSE SHOWN ON THESE PLANS, HE SHOULD IMMEDIATELY NOTIFY THE ENGINEER AND TAKE NECESSARY AND PROPER STEPS TO PROTECT THE FACILITY AND ASSURE CONTINUANCE OF SERVICE. TO MISS UTILITIES, CALL "MISS UTILITIES" AT 1-800-552-7001 (TOLL FREE) 48 HOURS BEFORE DIGGING. ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF ROANOKE AND VIRGINIA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS.

SWM FACILITY SPILLWAY CROSS-SECTION



SWM FACILITY SPILLWAY CROSS-SECTION



VDOT General Comments

1. Quality Control

Streets to be graded, paved and all structural components erected in accordance with the Virginia Department of Transportation Road and Bridge Specifications and Road Design Standards dated January 1992. 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 rating of CBR10 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 CBR10, 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 will be placed prior to pavement base and conduit provisions made for the same (ie. water, sewer, gas, power and telephone).

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

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 back of pavement to be backfilled and seeded together with ditches and channels, 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. Minimum pavement radius of 25 feet required at all street intersections.

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.

Standard guardrail with safety end sections may be required on fills as deemed necessary by the VDOT 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.

Field review will be made during construction to determine the need and limits of paved gutter and/or ditch stabilization treatments, to determine the need and limits of additional drainage 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.

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

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

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.

In order to meet public service requirements, all streets must serve a minimum of three occupied dwellings prior to acceptance.

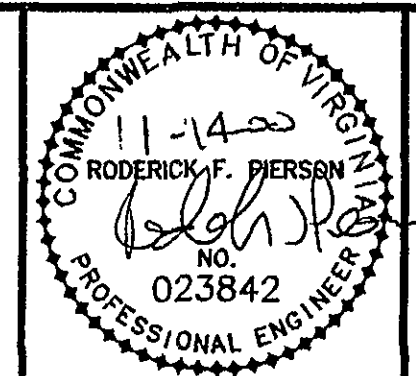
Contractor shall verify location and elevation of all underground utilities shown on the plans in areas of construction prior to starting work. Contract Engineer immediately if location or elevation is different from that shown on the plan. If there appears to be a conflict, and upon discovery of any utility not shown on this plan, call "Miss Utility" of Central Virginia at 1-800-552-70

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.

Pierson Engineering & Surveying
Roderick F. Pierson, P.E., L.L.S.
P.O. Box 311
1332 Roanoke Road, 220 North
Daleville, VA 24083
540.966.3027

REV	DATE	DESCRIPTION	BY	APP

MISCELLANEOUS DETAILS
READ MOUNTAIN - NORTH
CITY OF ROANOKE, VIRGINIA



SCALE: NONE
COMM. NO. R9989
DATE: 06/15/2000
SHEET 9