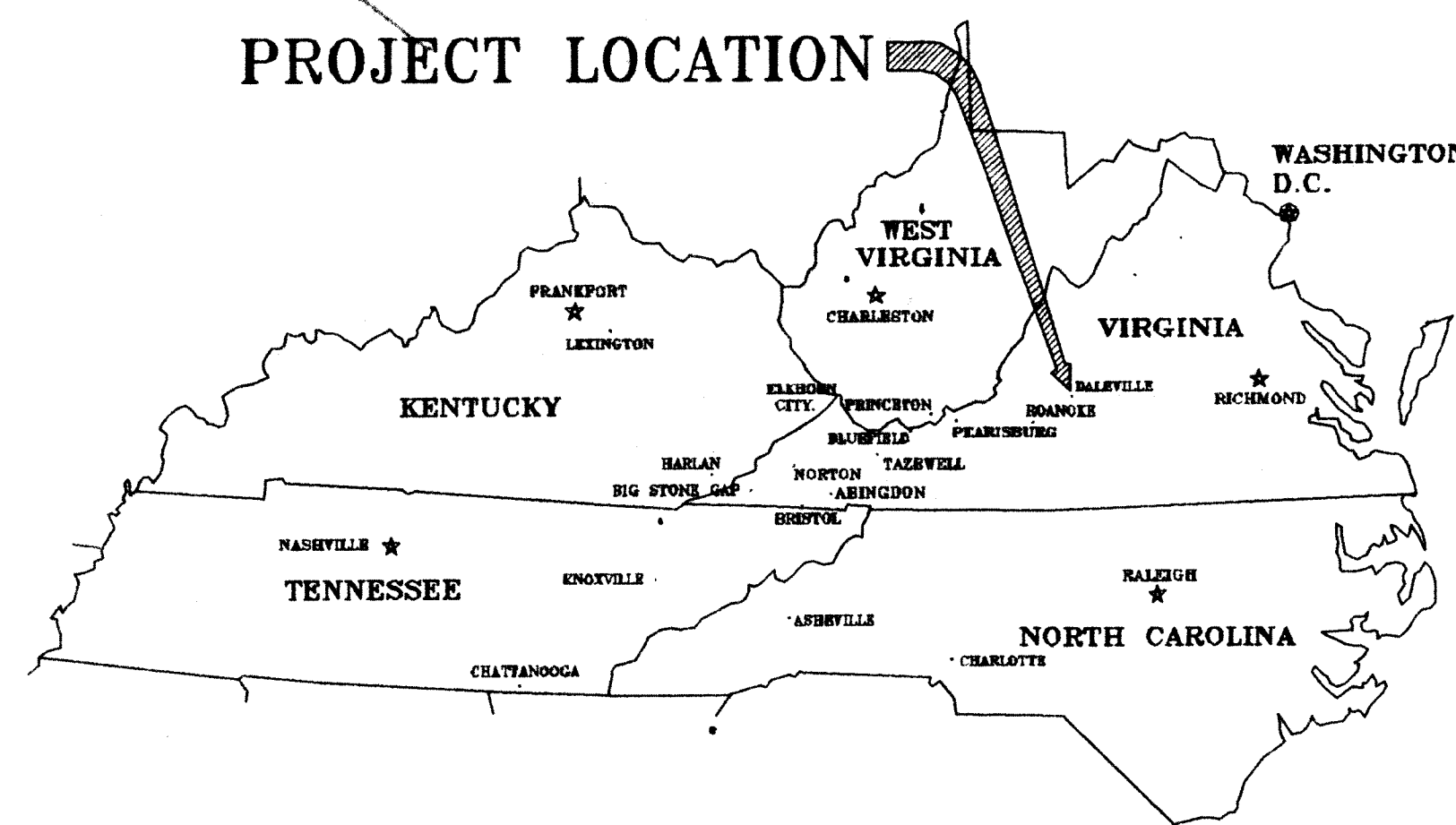


PROJECT NAME: Rader Funeral Home  
DATE: 6-95  
TYPE: Site Plans  
LOCATION: 220  
TOTAL # SHEETS: 6  
A/E FIRM: R.V.K.  
# OF SETS: 1

# RADER FUNERAL HOME

DALEVILLE, VIRGINIA

## PROJECT LOCATION



**VICINITY MAP**  
NOT TO SCALE

SCI FUNERAL SERVICES, INC.

OWNER

1929 ALLEN PARKWAY  
P.O. BOX 130548  
HOUSTON, TEXAS

SPECTRUM ENGINEERS, P.C.

CIVIL ENGINEERS  
ROANOKE, VIRGINIA

RVK ARCHITECTS

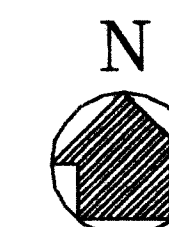
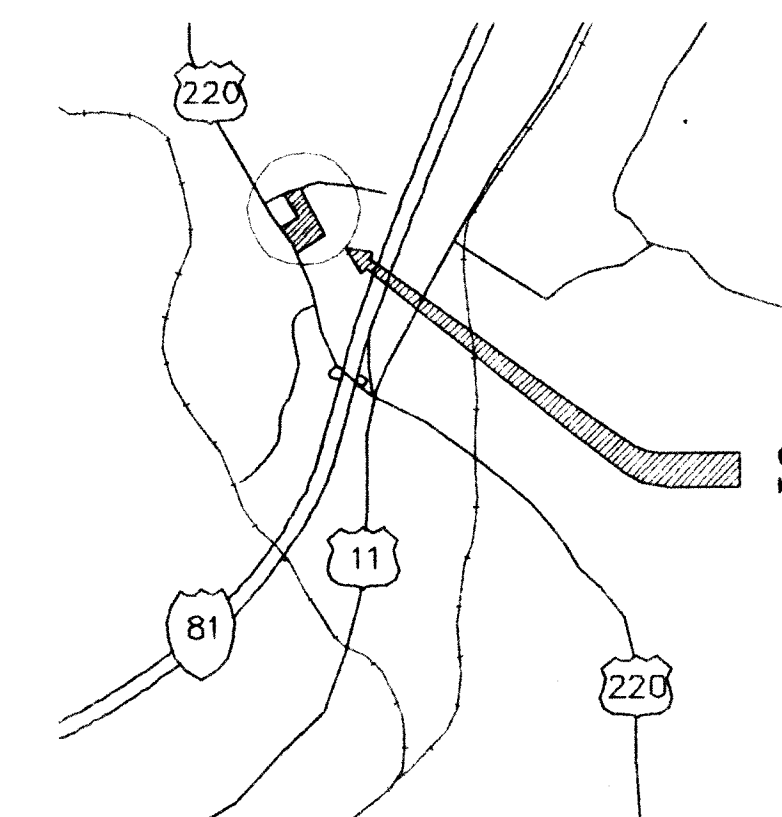
ARCHITECT

SAN ANTONIO, TEXAS

CHARLES R. McMURRY

SURVEYOR

DALEVILLE, VIRGINIA



**LOCATION MAP**  
NOT TO SCALE

## SITE LOCATION

## DRAWING INDEX

DRAWING NUMBER:

C-1  
C-2  
C-3  
C-4  
C-5

DESCRIPTION:

NOTES / SPECIFICATIONS  
DIMENSIONAL & UTILITIES PLAN  
GRADING, DRAINAGE, SAN & ESC  
PROFILES & DETAILS  
EROSION CONTROL DETAILS



GENERAL NOTES

Legal Reference:DB 246, PG 91  
Tax Map and Parcel Number:Tax ID# 101-67, 68, & 69  
Magisterial District:Valley District-Botetourt Co., Virginia  
Existing Land Use:Vacant  
Proposed Land Use:Funeral Home & Vacant  
Building Size (SF): Existing=11,244 Ft.  
Future= 800  
TOTAL: 12,044 Sq. Ft.  
# Stories:One Story and 35 feet  
Type Construction:2C (Unprotected, noncombustible)  
and Sprinklered

Parking Spaces Provided:Regular:  
Staging Area:36  
Handicapped:

Topo and Datum: Post Geodetic (USGS)  
Survey & Topographic Map by:  
Charles R. McMurry, Certified Land Surveyor

STANDARDS: All materials and methods shall comply with the applicable standards of the American Society of Testing and Materials (ASTM), American National Standards Institute (ANSI), Virginia Department of Transportation (VDOT), Commonwealth of Virginia Department of Health (VDH) and/or the County of Botetourt, latest editions. Recommendations of applicable materials manufacturers shall also be followed as part of this Contract.

SOILS INVESTIGATION/TESTING:

General: Prior to beginning grading operations the Owner shall employ a qualified Soils Testing Laboratory which staffs a Professional Geotechnical or Soils Engineer registered in Virginia (hereinafter GE). The GE shall make a site inspection, review governing requirements for this Work and the test results and make recommendations on applicable portions of the Work (detention basin lining and berm, traffic bearing areas and building foundation). The GE shall submit two (2) certified copies of their test results and recommendations to the Design Engineer and copy the Owner with one (1). The recommendations of the GE shall be followed as part of this Contract. The GE shall provide an "As-Built" certification of rough grades and pavement base (same distribution).

Specific:  
For General Earthwork, the GE shall determine the maximum density in accordance with VTM-1 (Standard Proctor) of material proposed for use beneath buildings and pavement, whether cut or fill. The GE shall inspect potential existing problems when unearthed by the Excavating Contractor, perform tests as necessary and make recommendations regarding any special condition and/or treatments to be implemented. The GE shall also perform inspections, supervision and testing of all filling operations.

For Storm Water Management Structures, the GE shall review geotechnical maps and publications for the area and comment whether the underlying geology should be of concern. If so, the GE shall make recommendations concerning further testing, the need for a basin liner, etc. The GE shall also comment on the suitability of onsite materials for lining and berm construction, and on geotechnical aspects of the design for the specific site.

For Pavement, the GE shall determine the maximum density in accordance with VTM-1 (Standard Proctor) and the VTM-8 (California Bearing Ratio (CBR)) of material proposed for use beneath pavement, whether cut or fill. Final pavement design shall be based on a sufficient number of certified CBR tests to determine the support value of the subgrade. The GE shall certify the location and results of the CBR tests and submit a pavement redesign using the Vaswani method whenever the actual CBR value is less than ten (10). When the CBR value is greater than ten (10), the GE shall redesign the pavement using the Vaswani method to minimize cost of construction.

AMERICANS WITH DISABILITIES ACT (ADA): Detectable Warnings on Walking Surfaces: A curb ramp shall have a detectable warning extending the full width and depth of a curb ramp. Detectable warnings shall consist of raised truncated domes with a nominal diameter of 0.9 inch (23 mm), a nominal height of 0.2 inch (5 mm) and a nominal center-to-center spacing of 2.35 inches (60 mm) and shall contrast visually with adjoining surfaces either light-on-dark or dark-on-light. The material used to provide contrast shall be an integral part of the walking surface.

PLANS, PERMITS, INSPECTION, VERIFICATION: The Contractor shall be responsible for obtaining any and all necessary permits. No work shall begin on this project without written approval of construction documents from Botetourt County. An approved set of construction documents shall be available on-site at all times while work is in progress. All work shall be subject to inspection by Botetourt County and Virginia Department of Transportation (VDOT) Inspectors. Contractor shall verify and be responsible for all dimensions on site.

ENTRANCE PERMIT: The Contractor shall obtain a street opening/entrance permit to tie to existing public right-of-way from the VDOT Residency Office for Botetourt County, located in Salem, prior to any construction within the public street/highway right-of-way. Plan approval by Botetourt County does not guarantee issuance of any permit by VDOT.

NOTIFICATION: The Contractor shall notify the Botetourt County Engineering Department, in writing, at least three (3) days prior to any construction, including but not limited to the following:  
- Installation of approved erosion control devices  
- Clearing and grubbing  
- Subgrade excavation  
- Installing storm sewers or culverts  
- Placing curb and gutter  
- Placing other concrete  
- Placing gravel base  
- Placing any roadway surface  
- Installing water lines  
- Installing sanitary sewer lines

VISIBILITY TRIANGLE: At the intersection of any entrance with a public/private street, no material impediment to visibility between a height of 2.5 - 8 feet shall be erected or planted within a triangular area as described by the following points:  
1. Intersection of the center line of the entrance with the R/W  
2. 35 feet along the R/W in the direction toward approaching traffic  
3. 25 feet back into the entrance on the same center line.

UNDERGROUND UTILITIES: The Contractor shall verify the location and elevation of all underground utilities shown on the plans in areas

of construction prior to starting work. The Engineer shall be contacted immediately:

- if any location or elevation is different from that shown on the plans, .
- if there appears to be any conflict, or
- upon discovery of any utility not shown on the plans.

TO MISS UTILITIES CALL "MISS UTILITY" OF VIRGINIA (TOLL FREE) 1-800-552-7001 48 HOURS BEFORE YOU DIG. It shall be the Contractor's responsibility to notify area public utilities of proposed construction, through the above number, at least two but not more than ten working days in advance.

UTILITY COMPANIES: The Developer and/or Contractor shall supply all utility companies with copies of approved plans, advising them that all grading and installation shall conform to approved plans.

STAKING: Grade stakes shall be set for all curb (& gutter), culvert, sanitary and storm sewer.

FIELD CORRECTIONS: Field corrections shall be approved by the Botetourt County Engineering Department prior to such construction.

DEBRIS: Construction debris shall be containerized in accordance with the Virginia Litter Control Act. No less than one liter receptacle shall be provided on site. All damaged material or surplus excavated material not suitable for used as fill, backfill or topsoil shall become the property of the Contractor to dispose of offsite as he wishes, without injury to the Owner or any individual.

AS-BUILT PLANS: The Developer or Contractor shall supply the County with correct "As-Built" plans of items to be dedicated to the public for maintenance before final acceptance

LIGHTING: Care shall be taken in illuminating off-street parking areas to minimize light intensity on adjoining streets or residential uses (recommended 1.0 foot candle or less). Security lighting (at other than business operating hours) should also be limited to 1.0 foot candle measured at the base of the lighting structure.

SIGNS: Proposed signage shall meet all applicable state and local ordinances including conformance in design and placement with the Virginia Supplement to the Manual on Uniform Traffic Control Devices, latest edition. Any existing signs shall be moved if necessary to meet the same criteria (edge of signs shall be 12' off edge of pavement or 6' off shoulder or 2' behind face of curb; clear height shall be 7' above grade).

CLEANUP & RESTORATION: Keep the construction site neat, clean and orderly at all times. Cleanup shall be vigorous and continuous to minimize hazards or obstructions.

Materials at the site shall be stored in a neat and orderly manner. All damaged material shall be removed from the site immediately and disposed of in a proper manner. After trenching, remove all excavated materials unsuitable for, or in excess of, backfill requirements.

Immediately following each portion of the Work as it progresses, by cleanup and restoration, make every reasonable effort to encourage return of the entire surface and all improvements to a pleasant appearance and useful condition appropriate and complementary to the surroundings, and equal or superior to that before construction began.

GRADING & TRENCHING NOTES

CLEAR, GRUB & STRIP: All vegetation and overburden including topsoil, organic material and any unsatisfactory soil materials, shall be removed to the extent of grading indicated on the grading plan.

EXISTING FILL: Any existing fill material present on the site shall be removed and replaced with fill as herein specified, or tested in place by the GE and his recommendations followed.

NEW FILL: Fill material shall be satisfactory soil materials as determined by the GE and be free of rock or gravel larger than two (2) inches in any dimension, debris, waste, frozen materials, organics and other deleterious matter.

BACKFILL: Material, compaction and methods per VDOT requirements

EXISTING SUBGRADE PREPARATION: Scarify existing subgrade and compact to specifications for new fill below. Bench beneath areas of slopes.

COMPACTION: Fill material shall be placed in lifts not exceeding eight (8) inches and compacted to one hundred (100) percent of its maximum density as determined in accordance with VTM-1 (Standard Proctor). Separate Proctors shall be run for each soil type being used. It shall be the Contractor's responsibility to inform the GE of sources of fill material other than that obtained on-site.

TESTING: Each compacted lift shall be inspected and tested by the GE by conducting a minimum of three (3) field density tests per lift. Additional tests per lift shall be required if deemed appropriate by the GE.

GRADING LIMITS: Transition along the grading limits shall be smooth and uniform and prevent surface water ponding. Transitions at top and toe of slopes shall be graded smooth with uniformly rounded surfaces.

SOILS REPORT: In the event that a Soils Report has previously been prepared for the site and becomes part of this Contract, applicable recommendations therein shall take precedent.

EROSION CONTROL NOTES

STANDARDS: Unless otherwise indicated, all vegetative and structural erosion and sediment control practices will be constructed and maintained in accordance with the minimum standards and specifications of the Virginia Erosion and Sediment Control (ESC) Handbook, latest edition. References to VDOT refer to the Virginia Department of Transportation (VDOT) "Road and Bridge Standards and Specifications," latest edition.

APPROVAL/PERMIT: The Erosion and Sediment Control Plan must be approved and land disturbing permit obtained prior to any work on the site. All siltation controls shall be in place prior to clearing, stripping of topsoil or grading. Upon inspection of the erosion control devices the County Inspector may require that further steps be taken to control silt. Plan approval in no way releases the Developer or Contractor of the responsibilities contained in state and local erosion and sediment control ordinances/standards.

BUILDING PERMIT: Building permits will not be issued until the initial erosion and sediment control measures reflected in the approved plans have been properly installed.

NARRATIVE: The ESC Narrative, as approved by the County and/or Soil & Water Conservation Service, shall be considered as part of the Approved Construction Documents.

RIGHT OF ENTRY: Owner/Developer grants right of entry to County personnel for the purpose of monitoring compliance with the Code of Virginia, Erosion and Sediment Control Law (Title 21, Chapter 1, Article 6.1).

DETAILS: All details are from the ESC Handbook, which shall supplant these Plans, should a discrepancy exist.

MANAGEMENT STRATEGY: Construction should be sequenced so that grading operations can begin and end as quickly as possible.

PUBLIC STREETS: The Contractor shall provide adequate means of cleaning mud from trucks and/or other equipment prior to entering public streets. It is the Contractor's responsibility to insure that adjacent streets are in a clean, mud and dust free condition at all times.

MAINTENANCE & ADJUSTMENT OF ESC MEASURES: Erosion and sediment control measures shall be inspected after each rainfall and daily during periods of prolonged rainfall. The Contractor shall be responsible for maintaining and adjusting or relocating ESC measures or providing any other device or measure needed or required by existing conditions to prevent erosion, mud, or other debris from flowing in or upon the public right-of-way, waterways or abutting properties.

SEEDING: All cut and fill slopes shall be seeded and mulched as soon as possible after grading. All areas to be landscaped shall be seeded or receive finished surface treatment within seven (7) days of finished grading.

ROADSIDE DITCHES: All roadside ditches on grades of more than five (5) percent shall be paved with cement concrete to the limits indicated on the plans and as required at the field inspection.

DRAINAGE DIVIDES & FLOOD: Construction shall honor/maintain proposed drainage divides as shown on the plans. Restrictions pertaining to construction within the 100 year roadway and/or flood plain (if such boundaries exist on the site) shall be honored.

REMOVAL: Erosion control devices shall remain in place until all disturbed areas have adequate ground cover.

PAVEMENT NOTES

STANDARDS: All construction methods and materials shall be in accordance with the VDOT "Road & Bridge Standards & Specifications," latest edition, and the latest requirements of the County of Botetourt.

CHANGES WITHIN RIGHT-OF-WAY: Local government approval of the plans for improvements within the public right-of-way preclude the right to add additional facilities without repeating the review process.

OVERBURDEN: All vegetation, overburden and unsatisfactory material shall be removed to six (6) feet beyond the proposed edge of pavement (e.g. tie to the construction limits indicated on the plans, whichever is greater, prior to the construction/preparation of the subgrade.

UTILITIES: All utilities shall be in place prior to laying the base material.

PAVEMENT ON-SITE: Onsite parking lot paving shall consist of a six (6) inch base course of #2 1/2" A, prime coat and 220#/Sq. Yd. of SM-2A (per Soils Report, based upon a CBR = 7.1 (VTM-8)). Onsite travel lane and roadway paving shall consist of an eight (8) inch base course of #2 1/2" A, prime coat, two (2) inches of BM-3 and 110#/Sq. Yd. of SM-2A (per Soils Report, based upon a CBR = 7.1 (VTM-8)). Subbase fill shall be compacted to 100% of VTM-1 (Standard Proctor).

PAVEMENT WITHIN RIGHT-OF-WAY: Paving within the right-of-way shall consist of an eight (8) inch base course of #2 1/2" (based upon a CBR = 10 (VTM-8)), prime coat, four (4) inches of BM-2 and one and one-half inches of SM-2A. Subbase fill shall be compacted to 100% of VTM-1 (Standard Proctor). CBR tests shall be performed by the GE and submitted to VDOT and the Botetourt County Engineering Department prior to placement of base material. CBR values <10 will require revised pavement sections.

PAVED DITCHES: All roadside ditches on grades of more than five (5) percent shall be paved with cement concrete to the limits indicated on the plans and as required at the field inspection.

GUARD RAILS: Location of guard rails shall be determined at a joint field inspection by the County and VDOT.

SIGNAGE: Standard street and traffic control signs shall be erected at each intersection by the Developer prior to final street acceptance.

CURBING: All driven and islands as well as the perimeter of all parking lots shall be bordered by VDOT Std. CG-6 curb and gutter. Upslope curb may be CG-2 (curb only). See Plan for delineation.

STRIPING: Parking lot striping shall be four (4) inch painted lines. Marking paint shall be Chlorinated rubber-alkyd type, AASHTO M248, Type III, and applied in accordance with the manufacturer's instructions. Provide products by Sherwin-Williams, Benjamin Moore, or Devoe. Handicap Space Marking shall conform to Americans With Disabilities Act (ADA) requirements. Color shall be white, unless required otherwise by ordinance.

DRAINAGE NOTES

NATURAL DRAINAGE: The Contractor shall make provisions at all times to allow natural drainage to flow through the work area with minimum damage to the new construction and NO damage to adjacent properties or the existing downstream storm drainage system, whether natural or man-made.

MATERIALS: Storm drain pipe and fittings shall be reinforced concrete pipe (RCP) when the diameter is greater than twelve (12) inches. Reinforced concrete pipe shall mean 1105 III, wall thickness A (as a minimum), unless specified otherwise, and conforming to ASTM C-76 and VDOT Section 240.

When the diameter is twelve (12) inches or smaller, storm sewer and other rain water collection pipe and fittings shall be Polyvinyl chloride pipe (PVC) installed per manufacturer's instructions and conforming to ASTM F-405 and VDOT Section 240.

Transition from downspout to rain water collector shall be by pre-manufactured pieces specifically designed for their applications.

Culvert pipe and fittings shall be non-reinforced concrete pipe (CP). Non-reinforced concrete pipe shall mean extra strength, Class III (as minimum), unless specified otherwise, and conforming to ASTM C-14.

DETENTION BASIN: Detention volume will be provided within an excavated basin and earthen berm. The material for the earthen berm shall be acceptable to the GE for its intended purpose. The berm shall be constructed in lifts not to exceed twelve (12) inches with 100% compaction (Standard Proctor) ASTM D-698. See Plans for location and design.

FLOOD: The subject property is not within the limits of the FEMA 100 Year Flood boundary.

SPRINGS: All springs shall be capped and piped to the nearest storm sewer or natural water course. The pipe shall be a minimum of six (6) inches in diameter and conform to VDOT Standard SB-1.

TOPSOILING, SEEDING, PLANTING NOTES

MATERIALS: Topsoil shall be fertile, agricultural soil, typical for locality, capable of sustaining vigorous plant growth, taken from a drained site, free of subsoil, clay or impurities, plants, weeds and roots; minimum pH value of 5.5 and maximum of 7.0.

Seed shall be the following mixture and application rate:  
Temporary Seeding for Erosion and Sediment Control: Based on seeding date, use species indicated.

Date	Common Name	Rate
May - Aug.	German Foxtail Millett	25#/ac
Sept - Oct	Annual Rye Grass	30#/ac
Nov - Feb	Winter Rye	25#/ac
Mar - Apr	Annual Rye Grass	30#/ac

Lawns (Permanent Seeding): See Landscaping Plan and specs.

METHOD OF APPLICATION: Do not use wet seed or seed which is moldy or otherwise damaged in transit or storage. Do not seed within 48 hours of fertilizing. Do not seed when wind velocity exceeds 5 mph.

Apply seed uniformly on seed bed by sowing equal quantity in two directions at right angles to each other with a cyclone seeder, or drill cultipacker seeder on a firm, moist seed bed. Maximum seeding depth should be 1/4 inch on clayey soils and 1/2 inch on sandy soils.

Seed not less than the quantity of seed specified or scheduled. Rake seed lightly into top 1/8" of soil, roll lightly, and water with a fine spray.

MULCHING: Seeding shall be followed with the application of organic mulch conforming in material and application to Std & Spec 3.35 of the ESC Handbook.

HYDROSEEDING: (permitted in lieu of standard seeding) Apply seed uniformly on a firm, moist seed bed.

Mix specified seed, fertilizer and pulverized mulch in water, using equipment specifically designed for hydroseed application. Continue mixing until uniformly blended into homogenous slurry suitable for hydraulic application.

Apply slurry uniformly to all areas to be seeded. Rate of application as required to obtain specified seed sowing rate.

RECONDITIONING EXISTING LAWNS: Recondition existing lawn areas damaged by Contractor's operations including storage of materials and equipment and movement of vehicles. Also recondition existing lawn areas where minor regrading is required.

SEWER NOTES

STANDARDS: Construction of all sanitary sewer lines, structures, and pavement replacement shall conform to the requirements of the Virginia Department of Transportation (VDOT) "Road and Bridge Standards and Specifications" and the Commonwealth of Virginia/State Board of Health (VDH) "Sewage Handling and Disposal Regulations" latest editions, as minimum standards, as well as those of Botetourt County.

SURFACE & COVER: In areas of sewer construction, grades shall be three (3) feet over the crown of the pipe to be laid or within six (6) inches of finished subgrade prior to the commencement of this work. Minimum clear cover over proposed lines shall be three (3) feet.

SEPARATION: The Contractor shall comply with the State Water Works Regulations and County Design and Construction Standards pertaining to separation of water and sanitary sewer. When the sewer cannot maintain ten (10) feet horizontal separation measured edge to edge or eighteen (18) inches vertical separation edge to edge (below waterline), the sewer shall be constructed of AWWA approved water pipe (DR-14), pressure tested in place to fifty (50) psi without leakage prior to backfilling.

STAKING: All lines shall be staked prior to construction.

MATERIAL & BEDDING: Pipe and fittings shall be Polyvinyl Chloride (PVC) SDR 35 and shall conform to ASTM D-3034. Bedding shall be per VDOT Standard and Spec. All trenches in existing or future highway rights-of-way shall be compacted according to VDOT Standards.

TAPS: All connections to existing sanitary sewer mains shall be made by the Contractor.

MANHOLE CONNECTIONS: Pipe shall be connected to manholes through precast openings and joined with either a flexible boot adapter or a pipe seal gasket. Laterals from manholes shall be of sufficient length to provide two (2) feet of bearing on natural ground. Transitions between allowable types of pipe shall be made with an adapter coupling within the right-of-way.

LIGHT COMMERCIAL: (Connection to New Main) Sanitary service connections shall be made with a six (6) inch pipe through a wye or tee-wye branch fitting (when not directly to a structure) and shall be installed on a minimum grade of one-eighth (1/8) inch per one (1) foot from the building to sewer main or manhole within R/W or easement line where a cleanout shall be placed.

The location and invert depth of the service connection shall be shown on the "as-built" plans (this shall be the responsibility of the Contractor).

FINISH GRADE: The Contractor shall locate and uncover all sewer manholes after pavement/surface treatment of roads and adjust the tops to final road grades, if necessary.

WATER NOTES

GENERAL: Also see General Notes

SURFACE & COVER: In areas of water line construction, grades shall be within six (6) inches of finished subgrade prior to the commencement of this work. Minimum clear cover over proposed lines shall be three (3) feet.

STAKING: All lines shall be staked prior to construction.

SEPARATION: The Contractor shall comply with the State Water Works Regulations pertaining to separation of water and sanitary sewer.

MATERIAL: Water pipe shall be Polyvinyl Chloride (PVC). PVC pipe shall conform to AWWA C-900 with a DR 100 dimension ratio (DR) of 14, pressure class 200.

BEDDING, BACKFILLING, LOCATING: PVC pipe shall be installed, embedded and back-filled in accordance with the manufacturer's written instructions. To facilitate future locating of PVC water pipe, a metallic wire shall be laid with the pipe and in contact with all fittings and valves. All trenches in existing or future highway rights-of-way shall be backfilled and compacted according to VDOT Standards.

TAPS/CONNECTIONS: Connections to existing water main exists. Tee & valve @ approximate location indicated. Contractor shall connect & place water meter and box.

SERVICE: All service line connections to PVC pipe shall be made using a service saddle and corporation stop. The service saddle shall be of a type specifically manufactured for PVC pipe and shall be of the extra wide or double band type. No direct tap to PVC pipe will be permitted. All water service pipe from the main connection to the meter box assembly shall be "K" type copper. All connections shall use flared fittings. Size of service is indicated on the Plans. Fittings for service lines shall meet AWWA spec. C-800.

JOINTS: Only bell and spigot joints with elastomeric gaskets shall be used. Solvent-cement joints or pipe requiring use of couplings shall not be used.

FINISH GRADE: The Contractor shall locate and uncover all valve boxes after pavement/surface treatment of roads and adjust the tops to final road grades, if necessary.

VDOT NOTES

QUALITY CONTROL: Streets shall be graded, paved and all structural components erected in accordance with the Virginia Department of Transportation (VDOT) "Road and Bridge Standards and Specifications," latest edition. All materials used shall be tested in accordance with standard policies. The Developer must contact the office of the Resident Engineer, prior to beginning any construction at which time an inspection and testing procedure policy will be drawn. The Developer may produce test reports from approved independent laboratories or solicit testing by VDOT, in either event at the Developer's expense.

The pavement designs shown are based on a subgrade rating (California Bearing Ratio) of 10 or greater. The subgrade soil shall be tested by an independent laboratory and the results submitted to VDOT prior to pavement construction. Should the subgrade CBR values be less than 10, then additional base material will be required.

UTILITIES: All necessary utility laterals shall be placed prior to pavement surfacing or conduit provisions made for the same (i.e. water, sewer, power, gas 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 this 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 pressures less than 120 lbs. are unaffected by the above. Permits will be required for all utilities within the street right-of-way prior to acceptance into the Secondary Highway System.

PRIVATE ENTRANCES: Standard CG-9B entrance gutter shall be provided at all entrances to private lots where standard CG-6 curb and gutters are approved for use. Permits will be required for all private entrances constructed on street rights-of-way prior to acceptance into the Secondary Highway System.

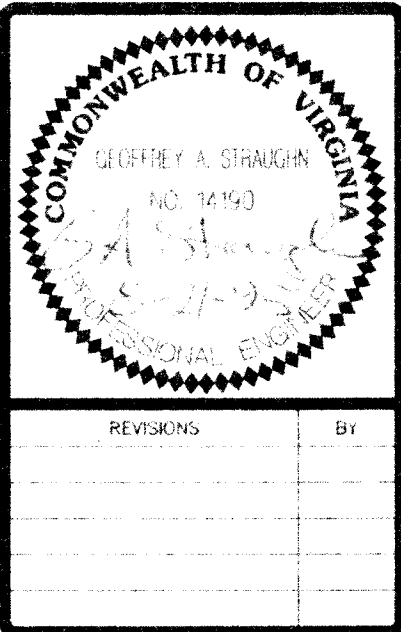
EROSION CONTROL AND LANDSCAPING: Care must be taken during construction to prevent erosion, dust and mud from damaging adjacent property, clogging ditches, tracking public streets and otherwise creating a public or private nuisance to surrounding areas. The entire construction area back of curbs and/or pavement shall be backfilled and seeded together with ditches and channels, at the earliest possible time after final grading. Drainage easements shall be defined by excavated ditches or channels for their full length to well defined existing natural watercourses. Roads will be revegetated 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, graut, pave, or to do whatsoever is necessary to correct the problem.

RADIUS: Minimum curb/pavement radius shall be 25 feet at Rte. 220 intersections and 12.5 feet at Rte. 653.

APPROVAL/REVIEW: 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 may be taken into consideration regarding safety requirements. Additional safety accompaniments such as turning lanes may or may not be required.

GUARDRAIL: The shoulder width shall be increased by the following amounts where guardrail is to be installed:  
4' shoulder increased by 2'  
2' shoulder increased by 3'

DITCH SLOPES: Ditch slopes shall be 4:1 - 6' width, 3:1 - 4' width.



RADER FUNERAL HOME

DALEVILLE, VIRGINIA

NOTES / SPECIFICATIONS

SPECTRUM

ENGINEERS, P. C.

325 Mountain Avenue, Roanoke, Virginia 24016, 703-345-8020, FAX 703-345-6633

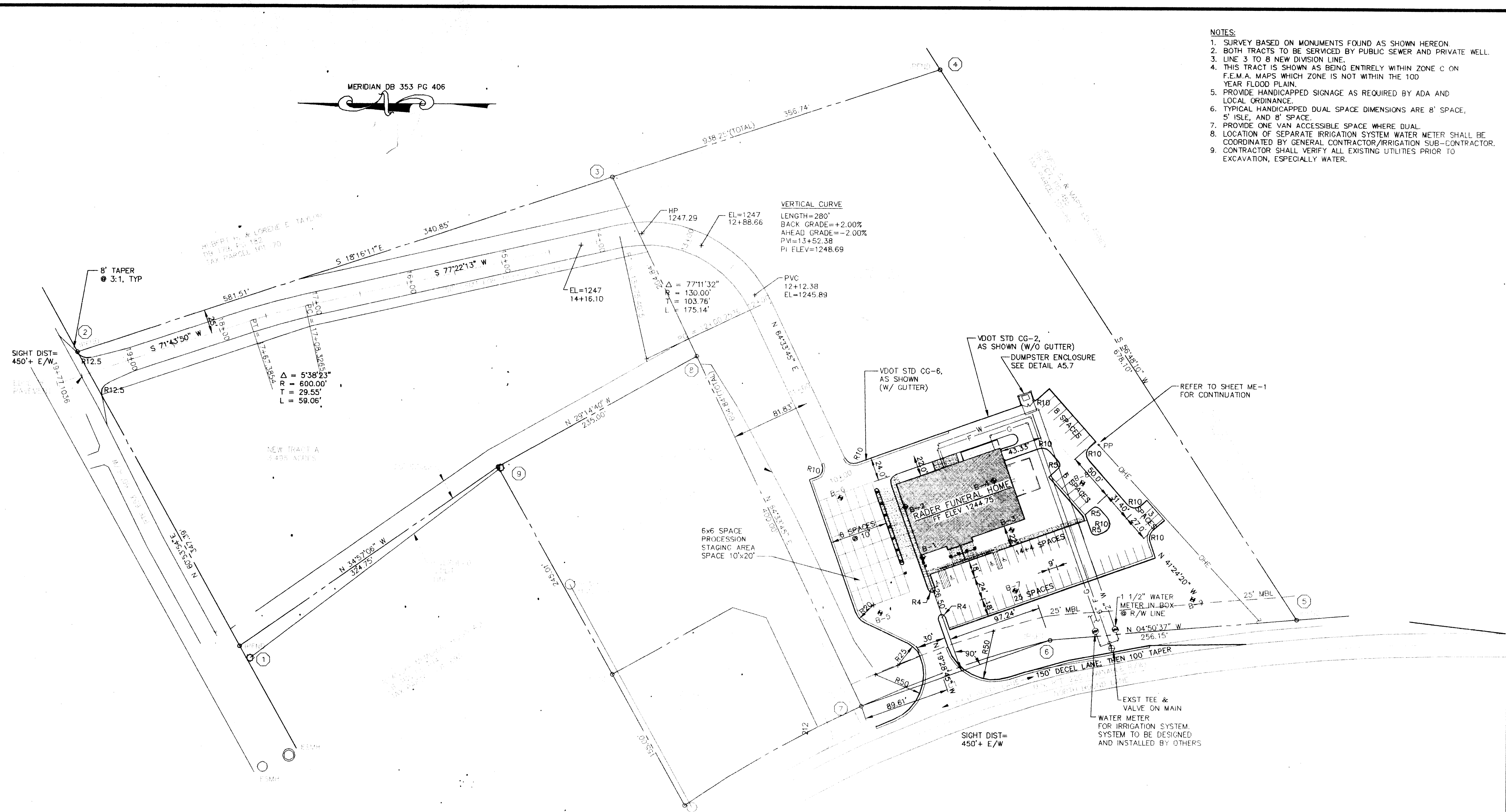
Member of

AMERICAN CONSULTING ENGINEERS COUNCIL

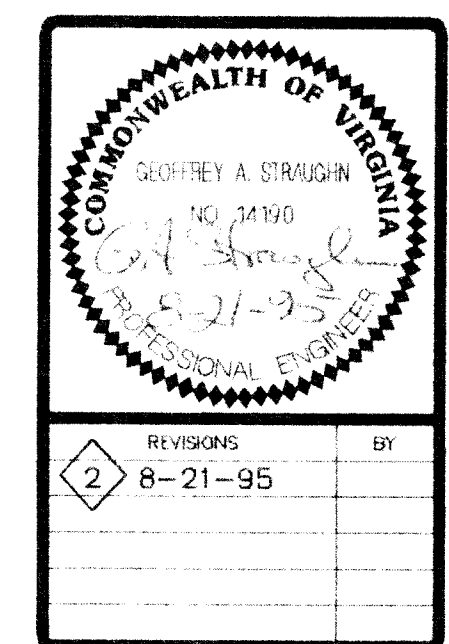
Providing Excellence in Engineering

DESIGNED	PROJECT
DRAWN	CHECKED
RNP	CES
DATE	
6-16-95	
SHEET	
C-1	
OF	SHEETS

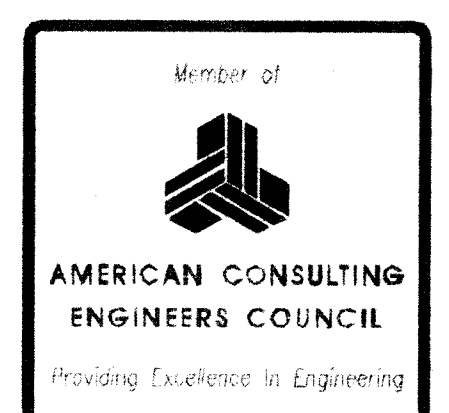




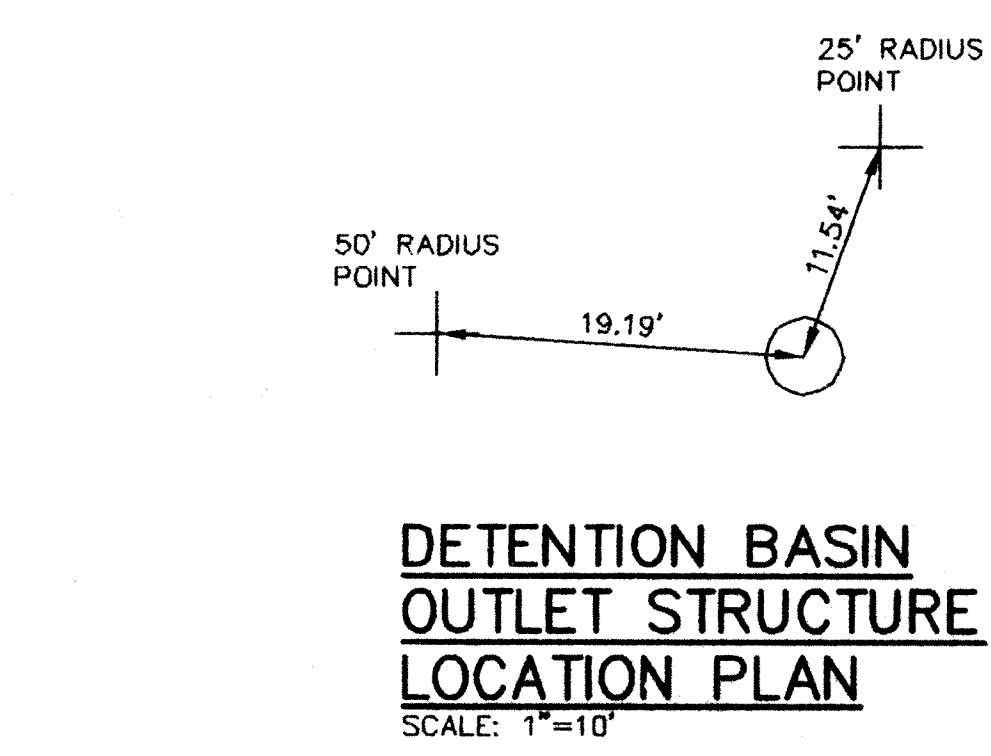
- NOTES:**
1. SURVEY BASED ON MONUMENTS FOUND AS SHOWN HEREON.
  2. BOTH TRACTS TO BE SERVICED BY PUBLIC SEWER AND PRIVATE WELL.
  3. LINE 3 TO 8 NEW DIVISION LINE.
  4. THIS TRACT IS SHOWN AS BEING ENTIRELY WITHIN ZONE C ON F.E.M.A. MAPS WHICH ZONE IS NOT WITHIN THE 100 YEAR FLOOD PLAIN.
  5. PROVIDE HANDICAPPED SIGNAGE AS REQUIRED BY ADA AND LOCAL ORDINANCE.
  6. TYPICAL HANDICAPPED DUAL SPACE DIMENSIONS ARE 8' SPACE, 5' ISLE, AND 8' SPACE.
  7. PROVIDE ONE VAN ACCESSIBLE SPACE WHERE DUAL.
  8. LOCATION OF SEPARATE IRRIGATION SYSTEM WATER METER SHALL BE COORDINATED BY GENERAL CONTRACTOR/IRRIGATION SUB-CONTRACTOR.
  9. CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES PRIOR TO EXCAVATION, ESPECIALLY WATER.



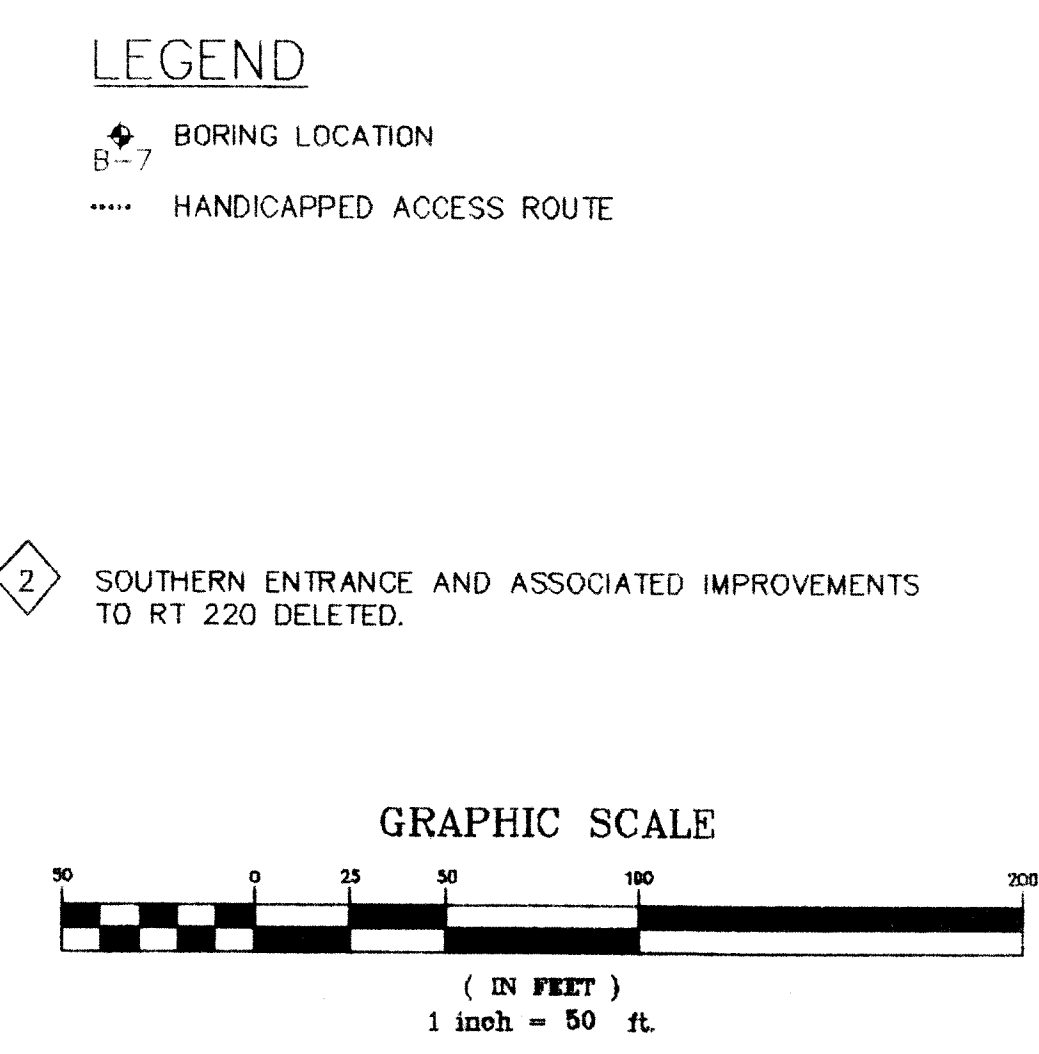
**RADER FUNERAL HOME**  
DALEVILLE, VIRGINIA  
**DIMENSIONAL & UTILITIES PLAN**



DESIGNED	PROJECT
DRAWN	94138
CHECKED	
DATE	6-16-95
SHEET	
<b>C-2</b>	
OF	SHEETS



CURVE	DELTA ANGLE	RADIUS	ARC	TANGENT	CHORD	CHORD BEARING
6-7	09°56'21"	1193.88'	207.10'	103.81'	206.84'	N 19°28'45"W



2 SOUTHERN ENTRANCE AND ASSOCIATED IMPROVEMENTS TO RT 220 DELETED.

**NOTES:**

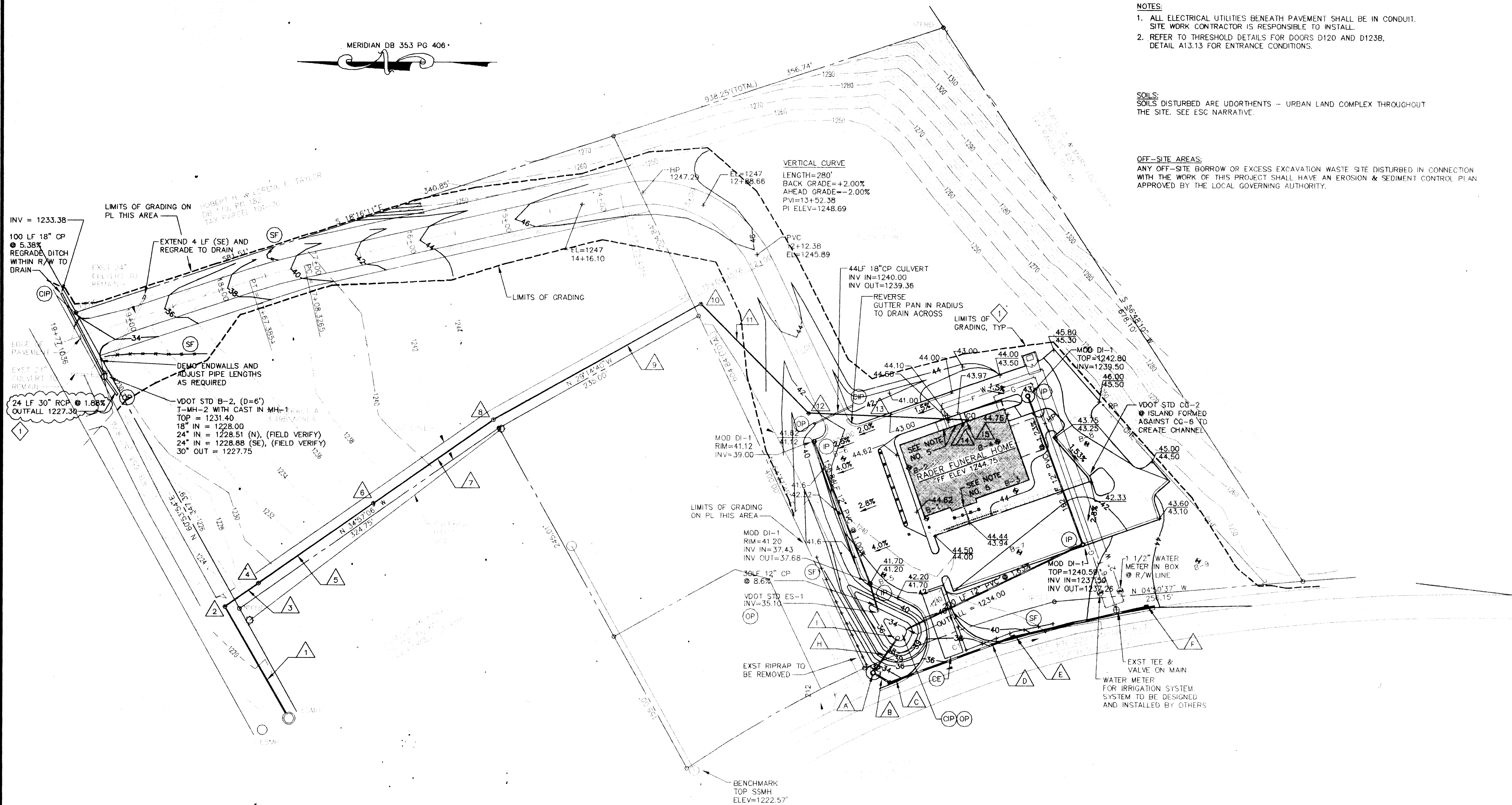
1. ALL ELECTRICAL UTILITIES BENEATH PAVEMENT SHALL BE IN CONDUIT. SITE WORK CONTRACTOR IS RESPONSIBLE TO INSTALL.
2. REFER TO THRESHOLD DETAILS FOR DOORS D120 AND D123B, DETAIL A13.13 FOR ENTRANCE CONDITIONS.

**SOILS:**

SOILS DISTURBED ARE UDORTHENTS - URBAN LAND COMPLEX THROUGHOUT THE SITE. SEE ESC NARRATIVE.

**OFF-SITE AREAS:**

ANY OFF-SITE BORROW OR EXCESS EXCAVATION WASTE SITE DISTURBED IN CONNECTION WITH THE WORK OF THIS PROJECT SHALL HAVE AN EROSION & SEDIMENT CONTROL PLAN APPROVED BY THE LOCAL GOVERNING AUTHORITY.



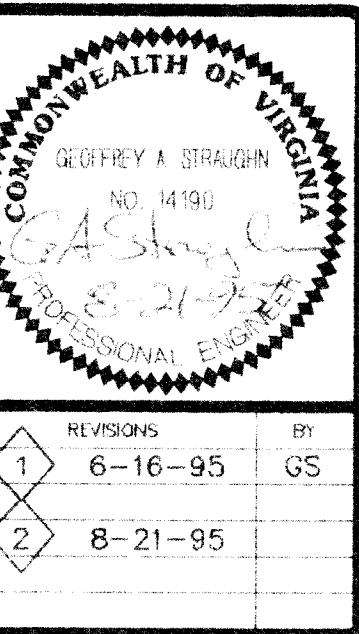
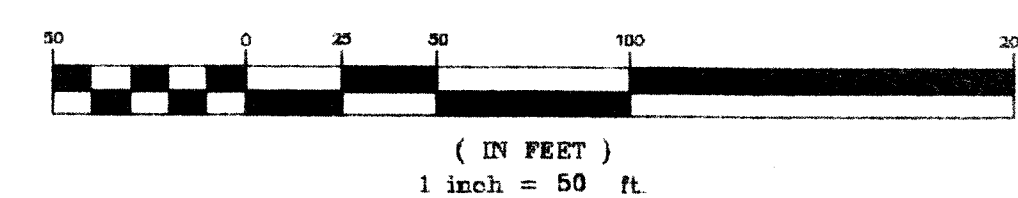
**OUTLET PROTECTION SCHEDULE**

18" CP CULVERT NE OF BUILDING	6" MIN. RIPRAP, 11' LENGTH
DISCHARGE FROM DROP INLET NW OF BUILDING TO DETENTION BASIN	6" MIN. RIPRAP, 10' LENGTH
DISCHARGE FROM DROP INLET SW OF BUILDING TO DETENTION BASIN	6" RIPRAP, LINE FROM OUTLET TO OUTLET STRUCTURE
DISCHARGE OF 30" RCP ALONG RT 653	9" RIPRAP, 25' LENGTH

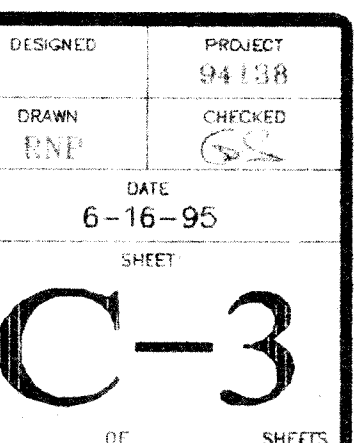
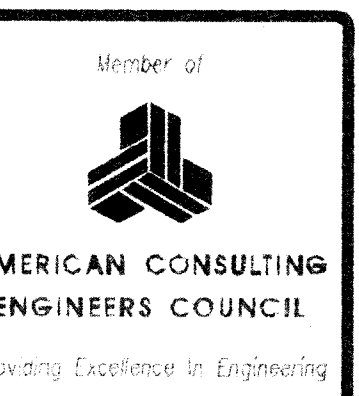
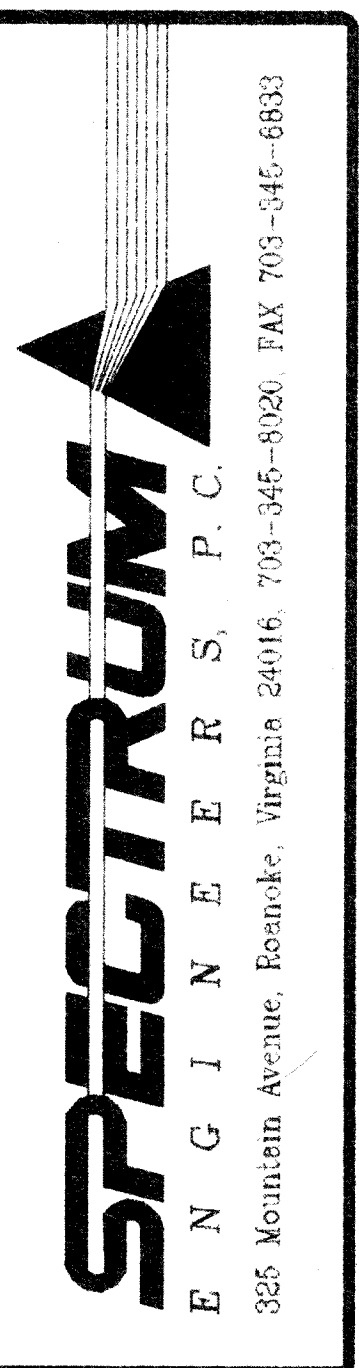
**GRADING, DRAINAGE, SAN & ESC**

- 1 LIMITS OF DISTURBANCE.
- 1 CULVERT SLOPE AND OUTFALL ELEVATION.
- 2 SOUTHERN ENTRANCE AND ASSOCIATED IMPROVEMENTS TO RT 220 DELETED.
- 2 OUTLET PROTECTION SCHEDULE.

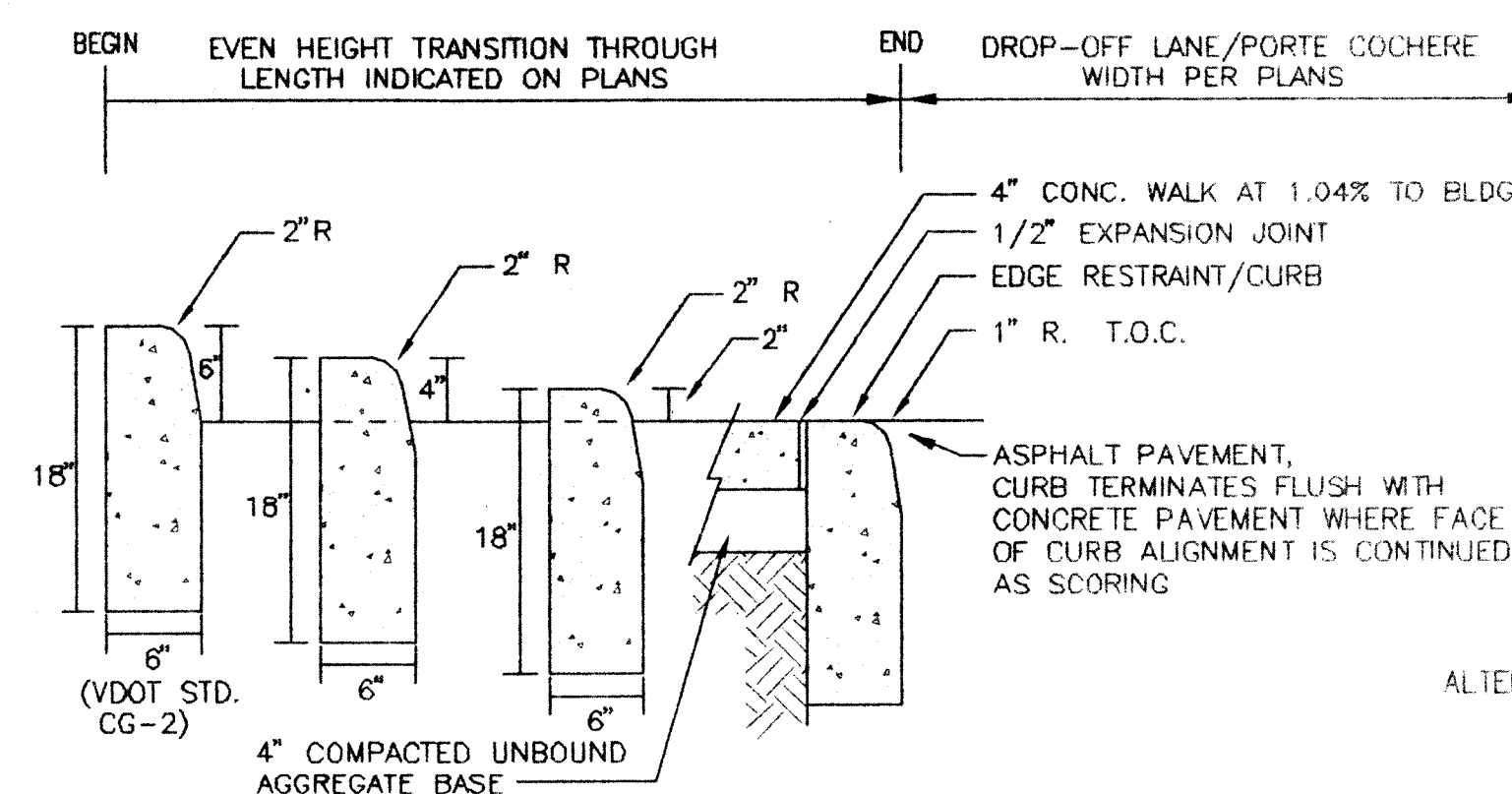
**GRAPHIC SCALE**



**RADER FUNERAL HOME**  
DALEVILLE, VIRGINIA  
**GRADING, DRAINAGE, SAN & ESC**

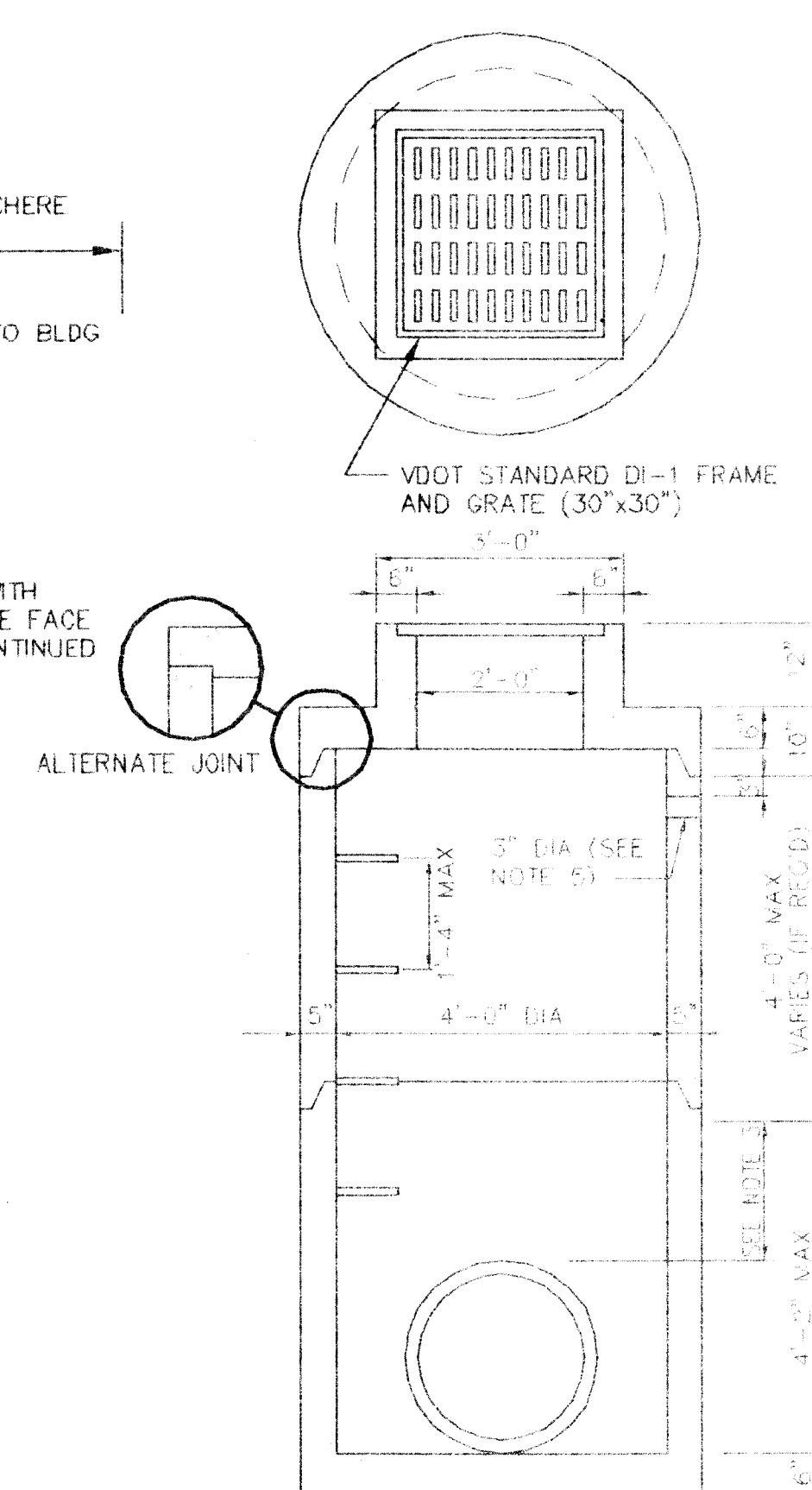






### SUBMERGED CURB

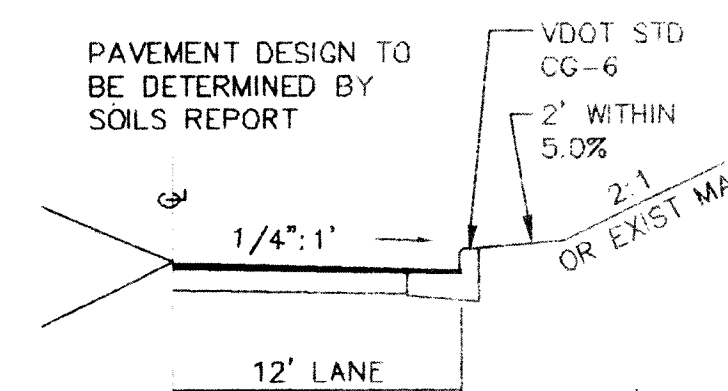
NO SCALE  
ASPHALT PAVEMENT & BASE PER CONTRACT



MODIFIED 48" DIA  
DI-1 DROP INLET

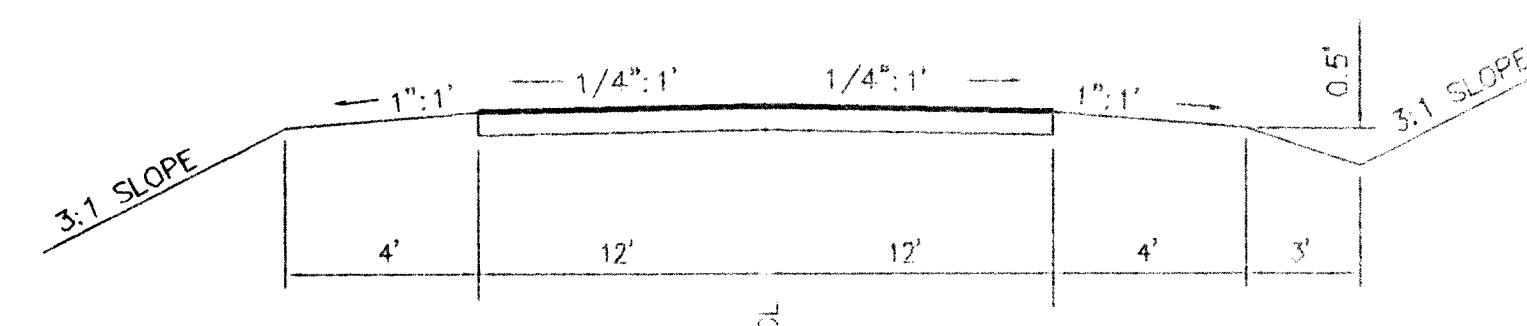
SCALE: 1/2"=1'-0"

- NOTES:
1. 4000 PSI CONCRETE.
  2. MANHOLE MEETS ASTM C478
  3. WHEN LESS THAN 6", THERE IS CONTINUOUS CIRCUMFERENTIAL REINFORCING STEEL ABOVE PIPE OPENING.
  4. REFER TO CONTRACT DOCUMENTS FOR PIPE SIZES, LOCATIONS, AND ELEVATIONS.
  5. 3" DIA WEEP HOLE TO BE PROVIDED IN FIRST RISER SECTION WHEN SUBSURFACE DRAINAGE IS REQUIRED.
  6. REINFORCING STEEL PER ASTM C478, AASHTO M-193, VDOT STANDARD FOR SPACING AND LOCATION.



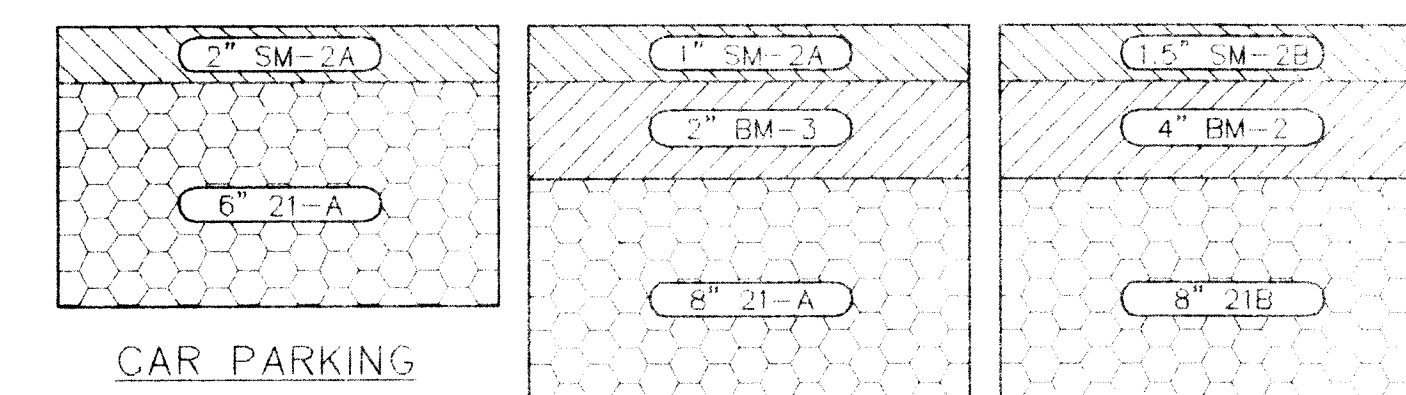
WEST BOUND RIGHT  
TURN LANE SECTION

NO SCALE



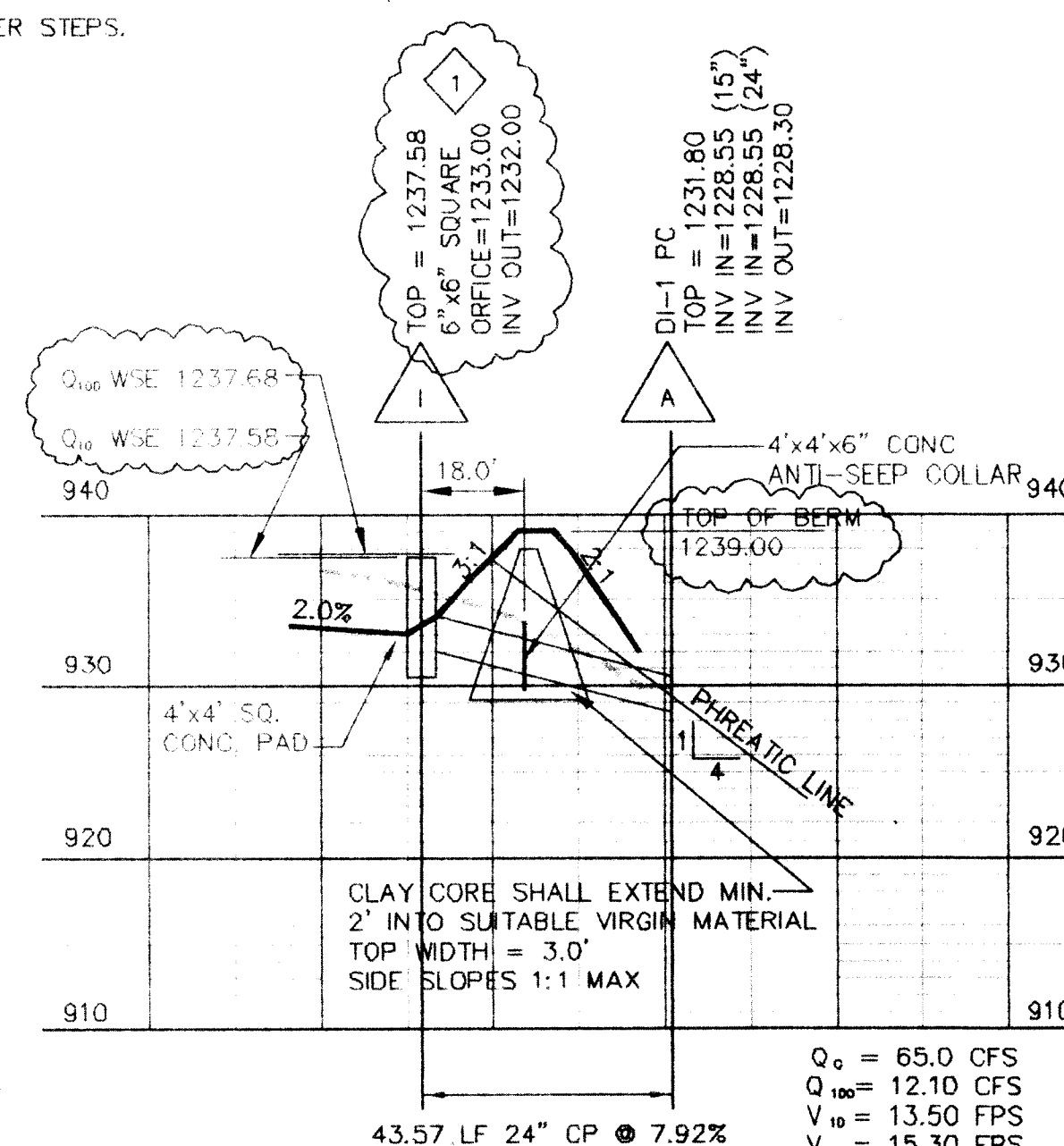
## TYPICAL ROAD SECTION

NO SCALE



## PAVEMENT SECTIONS

NO SCALE



## DETENTION BASIN &amp; BERM SECTION

SCALE: VERT. 1"=10'

HORZ. 1"=30'

1. BASIN BERM DESIGN SHALL CONFORM TO RECOMMENDATIONS OF GEOTECHNICAL ENGINEER.
2. TOP OF BERM SHALL BE LEVEL AT 939.00, AFTER SETTLEMENT, AND A MIN OF 6' WIDTH.

## STORM SEWER PROFILE

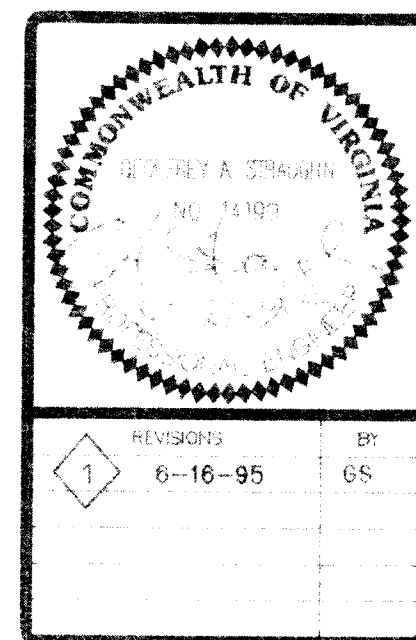
SCALE: VERT. 1"=10'

SCALE: VERT. 1"=10'  
HORIZ. 1"=30'

NOTE:

- \* TOP ELEVATION CALCULATED AT LEFT FRONT CORNER.  
ALIGN STRUCTURE TOP WITH PROPOSED GRADE OF  
DECEL LANE.





RADER FUNERAL HOME

DALEVILLE, VIRGINIA

EROSION CONTROL DETAILS

SPECTRUM

ENGINEERS, P.C.

123 Mountain Avenue, Roanoke, Virginia 24016 703-945-6920 FAX 703-945-0851

AMERICAN CONSULTING ENGINEERS COUNCIL

Providing Technical Engineering

DATE: 6-16-95

C-5

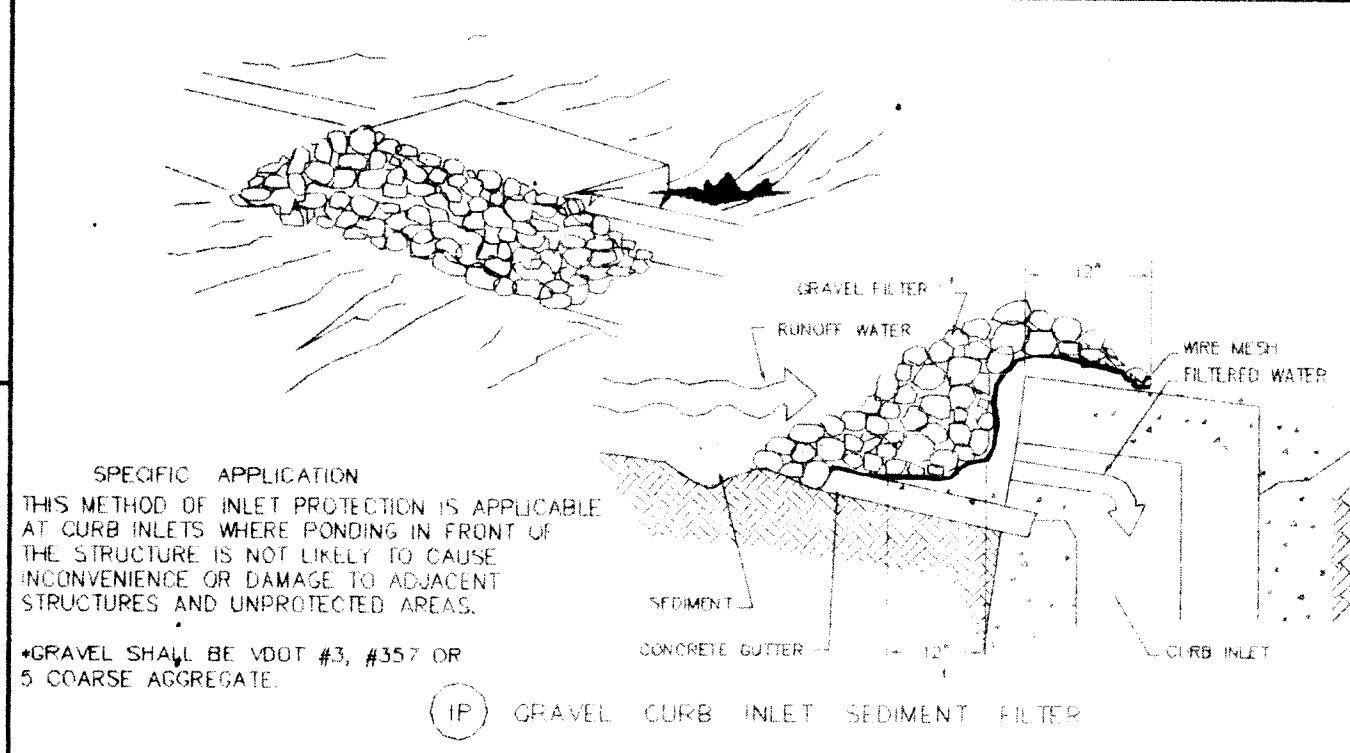
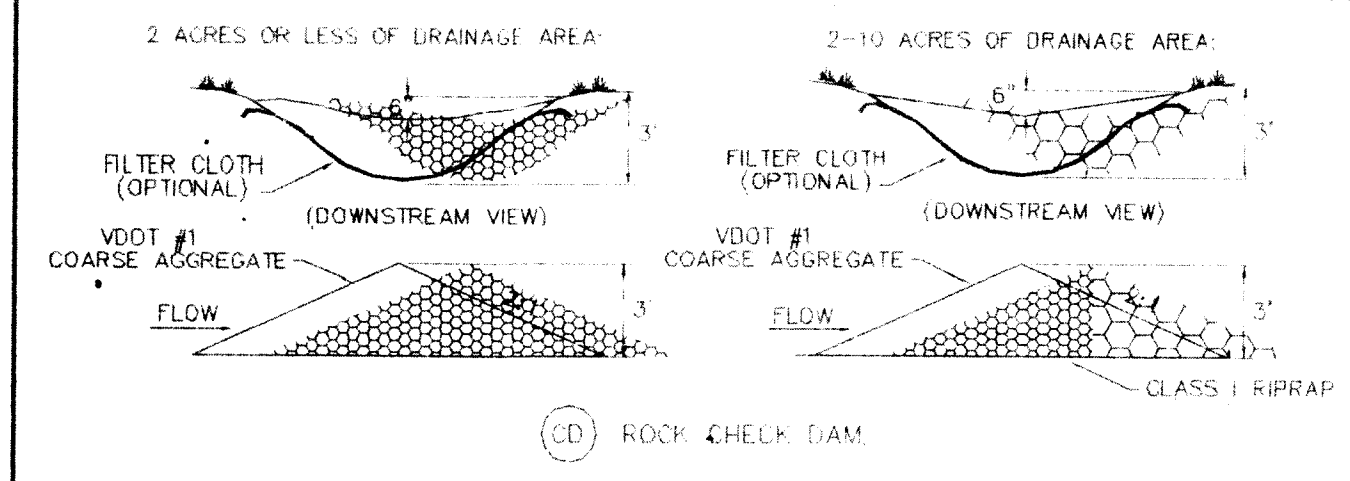
SHEET

## EROSION-SILTATION CONTROL COST ESTIMATE

ALL COSTS GIVEN ARE COMPLETE IN PLACE				
DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
CONSTRUCTION ENTRANCE	EA		\$	\$
SILT FENCE	LF			
INLET PROTECTION	EA			
TEMPORARY DIVERSION DIKE	LF			
TEMPORARY FILL DIVERSION	LF			
SEDIMENT TRAP	EA			
CHECK DAM	EA			
SEEDING	MSF			
INLET PROTECTION	EA			
SEDIMENT BASIN	EA			
DB BERM	LS			
DB STRUC & PIPE	LS			
SUB-TOTAL				\$
10% CONTINGENCY				\$
TOTAL PROJECT COST				\$

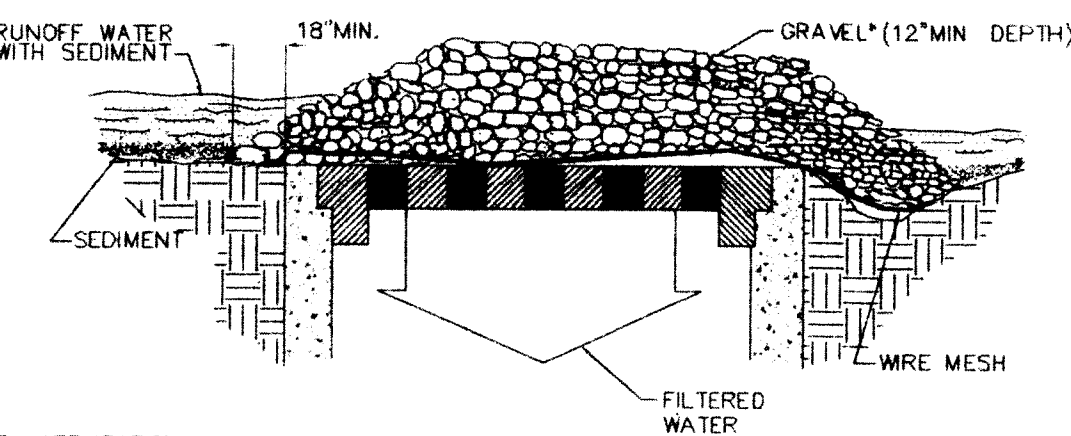
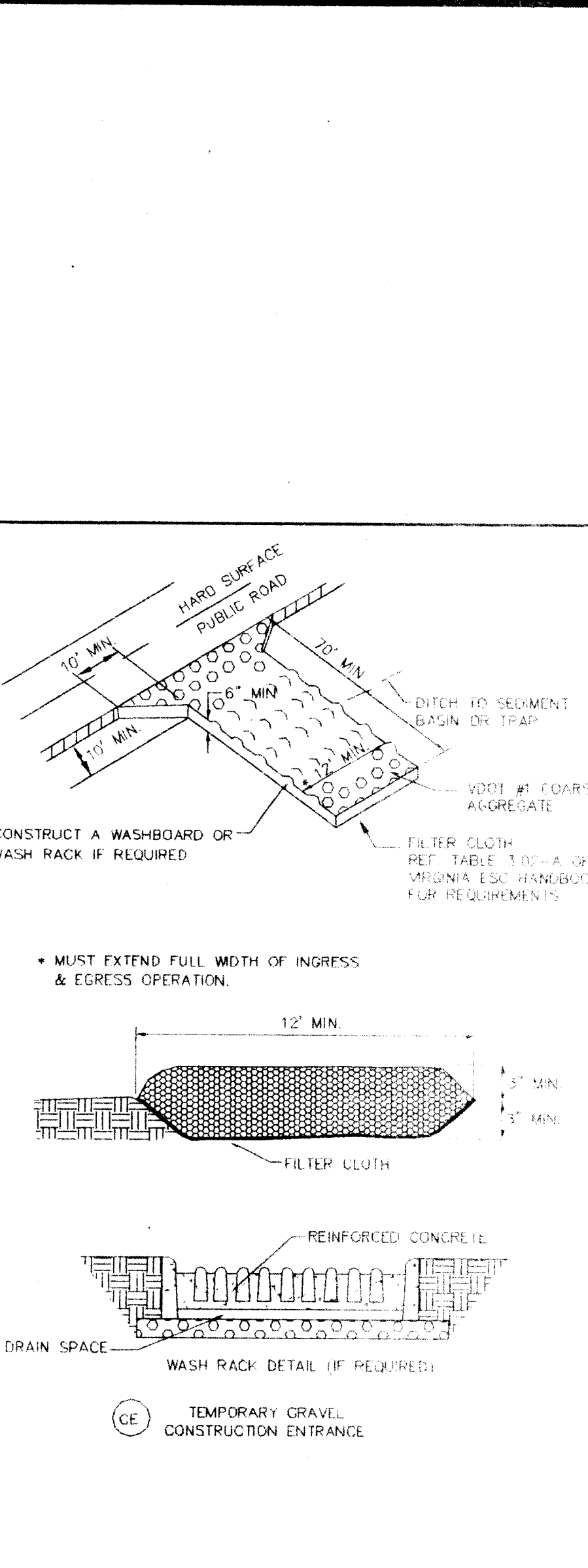
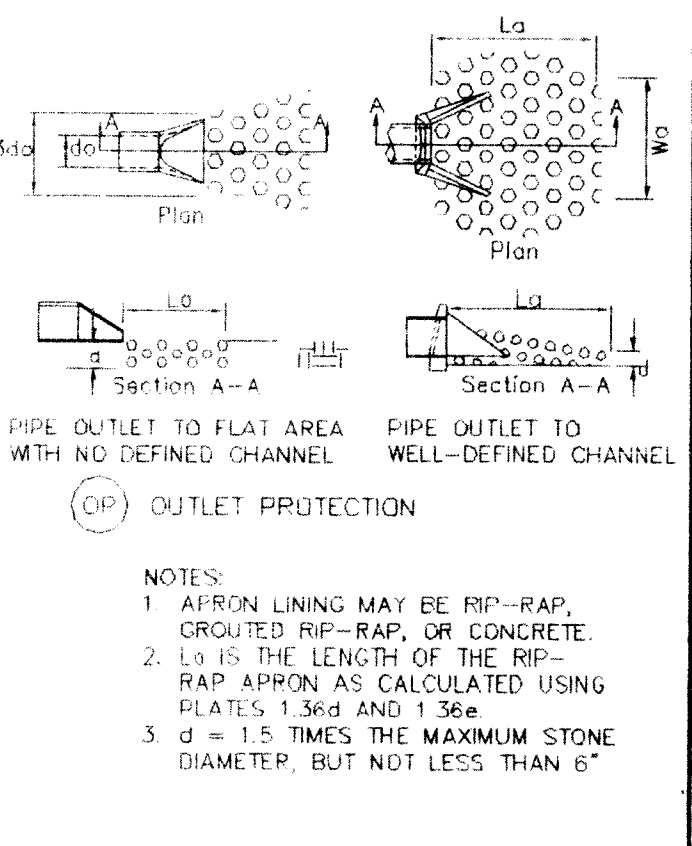
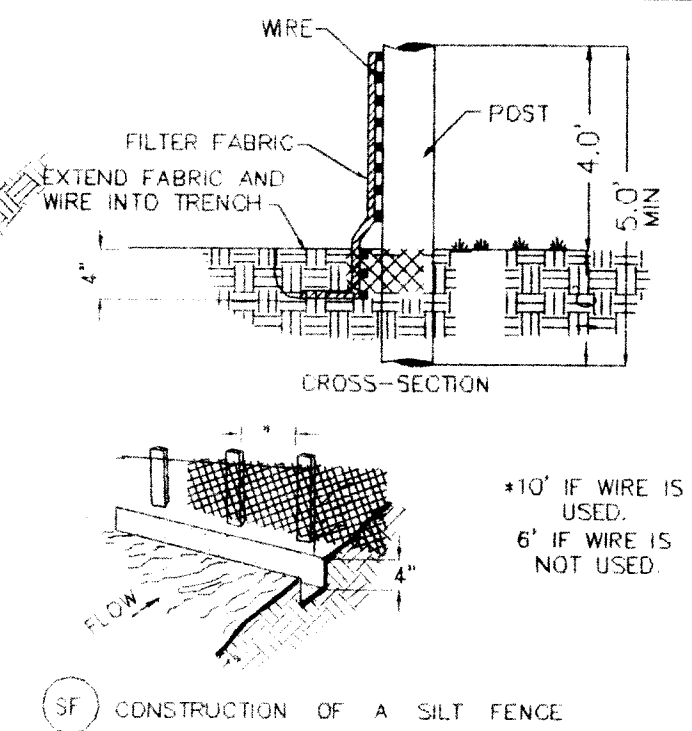
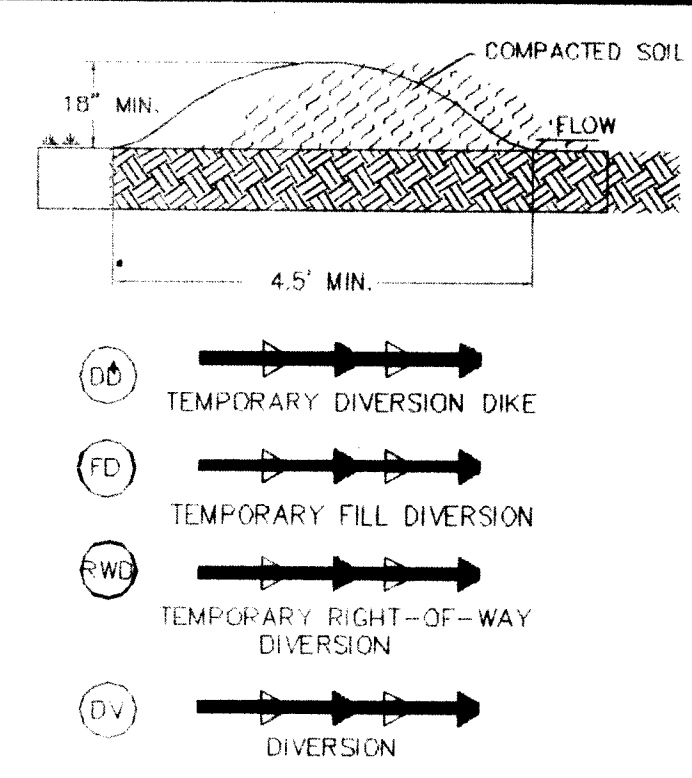
### GENERAL EROSION AND SEDIMENT CONTROL NOTES

1. ALL SOIL EROSION & SEDIMENT CONTROL MEASURES SHALL BE ACCORDING TO THE STANDARDS AND SPECIFICATIONS CONTAINED IN THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.
2. THE APPROVED AUTHORITY MAY, AND TO, DELETE, RELOCATE, INCREASE OR OTHERWISE MODIFY EROSION AND SEDIMENT CONTROL MEASURES WHEN FIELD CONDITIONS ARE ENCOUNTERED THAT WARRANT SUCH MODIFICATIONS.
3. ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN ON THE PLAN SHALL BE PLACED IN ADVANCE OF THE WORK BEING PERFORMED, AS FAR AS PRACTICAL.
4. IN NO CASE DURING CONSTRUCTION SHALL WATER FLOW BE DIVERTED OR ALLOWED TO FLOW TO LOCATIONS WHERE ADEQUATE PROTECTION HAS NOT BEEN PROVIDED.
5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LEAVE THE SITE ADEQUATELY PROTECTED AGAINST EROSION, SEDIMENTATION OR ANY DAMAGE TO ANY ADJACENT PROPERTY AT THE END OF EACH DAYS WORK.
6. FOR THE EROSION CONTROL KEY SYMBOLS SHOWN ON THE PLANS, REFER TO THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION. THESE SYMBOLS AND KEYS ARE TO BE UTILIZED FOR ALL EROSION CONTROL PLANS SUBMITTED TO BRYAN/KE COUNTY.



**PS PERMANENT SEEDING MIXTURE**

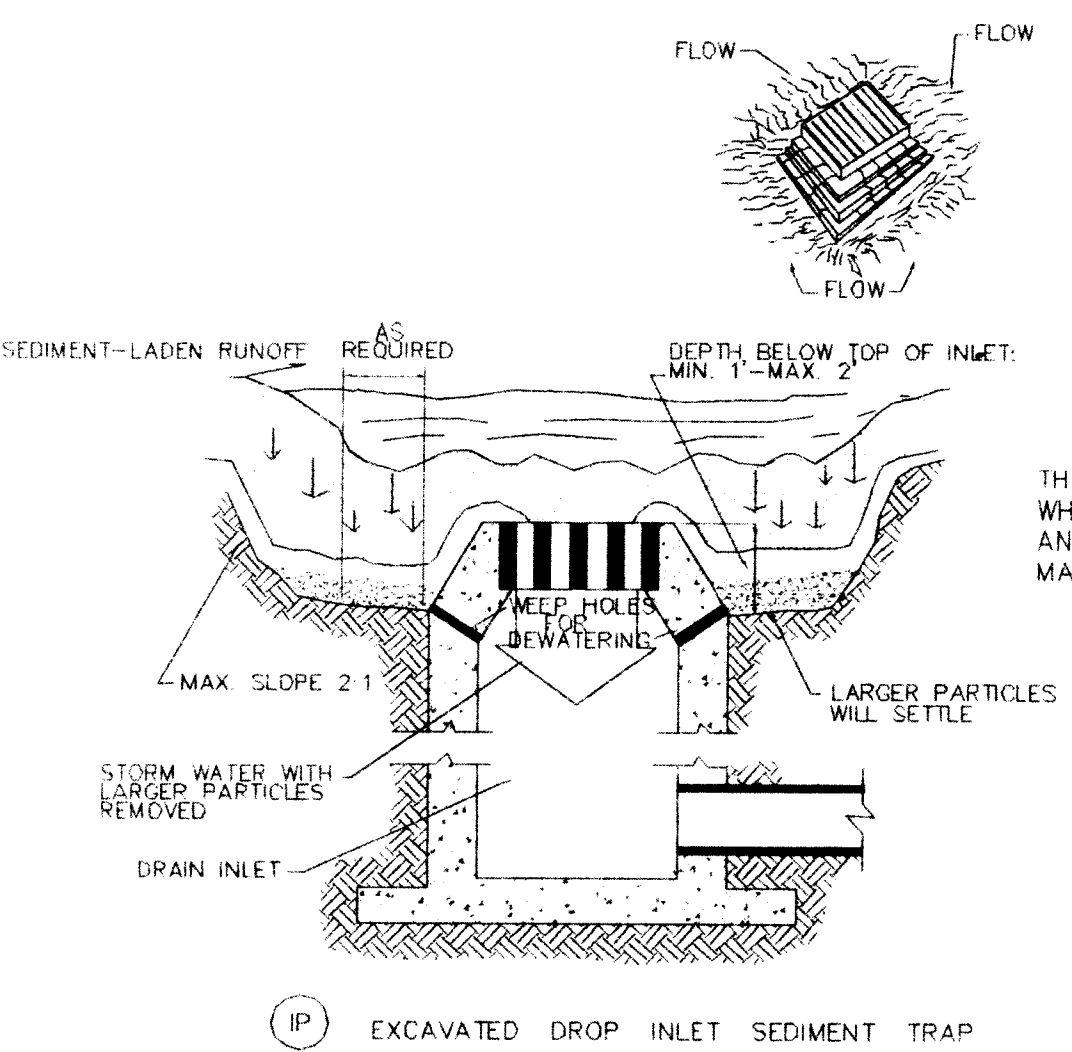
SEE ADDENDUM 1: 029-00 (LANDSCAPING) 3.5 HYDROMULCH MATERIAL



**IP GRAVEL AND WIRE MESH DROP INLET SEDIMENT FILTER**

SPECIFIC APPLICATION  
THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED, BUT NOT WHERE PONDING AROUND THE STRUCTURE MIGHT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREAS.

\* GRAVEL SHALL BE VDOT #3, #357 OR #5 COARSE AGGREGATE.



**IP EXCAVATED DROP INLET SEDIMENT TRAP**

SPECIFIC APPLICATION  
THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY FLOWS ARE EXPECTED AND WHERE AN OVERFLOW CAPABILITY AND EASE OF MAINTENANCE ARE DESIRABLE.

### OFF-SITE LAND DISTURBANCE ESC NOTE

THE CONTRACTOR SHALL BE RESPONSIBLE FOR SATISFYING ANY AND ALL EROSION CONTROL AND STORM WATER MANAGEMENT REQUIREMENTS FOR ANY LAND DISTURBING ACTIVITIES, INCLUDING BUT NOT LIMITED TO ON-SITE OR OFF-SITE BORROW, ON-SITE OR OFF-SITE STOCKPIILING OR DISPOSAL OF WASTE MATERIALS. BEFORE UNDERTAKING ANY LAND DISTURBING ACTIVITY FOR WHICH THE CONTRACT DOCUMENTS DO NOT SPECIFICALLY ADDRESS EROSION CONTROL AND STORM WATER MANAGEMENT, THE CONTRACTOR SHALL CONTACT THE EROSION & SEDIMENT CONTROL REVIEW AGENT OF THE ENGINEERING DEPARTMENT OF BOYD/COURT COUNTY TO DETERMINE WHAT EROSION CONTROL AND STORM WATER MANAGEMENT MEASURES ARE NECESSARY. THE CONTRACTOR SHALL COMPLETELY SATISFY ALL REQUIREMENTS OF THE COUNTY BEFORE CONTINUING WITH THE CONCERNED ACTIVITY.

NO.	TITLE	KEY	SYMBOL	NO.	TITLE	KEY	SYMBOL
3.01	SAFETY FENCE	SAF	[Symbol]	3.20	ROCK CHECK DAMS	CD	[Symbol]
3.02	TEMPORARY GRAVEL CONSTRUCTION ENTRANCE	CE	[Symbol]	3.21	LEVEL SPREADER	LS	[Symbol]
3.03	CONSTRUCTION ROAD STABILIZATION	CRS	[Symbol]	3.22	VEGETATIVE STREAMBANK STABILIZATION	VSS	[Symbol]
3.04	STRAW BALE BARRIER	STB	[Symbol]	3.23	STRUCTURAL STREAMBANK STABILIZATION	SSS	[Symbol]
3.05	SILT FENCE	SF	[Symbol]	3.24	TEMPORARY VEHICULAR STREAM CROSSING	VSC	[Symbol]
3.06	BRUSH BARRIER	BB	[Symbol]	3.25	UTILITY STREAM CROSSING	USC	[Symbol]
3.07	STORM DRAIN INLET PROTECTION	IP	[Symbol]	3.26	DEWATERING STRUCTURE	DS	[Symbol]
3.08	CULVERT INLET PROTECTION	CIP	[Symbol]	3.27	TURBIDITY CURTAIN	TC	[Symbol]
3.09	TEMPORARY DIVERSION DIKE	DD	[Symbol]	3.28	SUBSURFACE DRAIN	SD	[Symbol]
3.10	TEMPORARY FILL DIVERSION	FD	[Symbol]	3.29	SURFACE ROUGHENING	SR	[Symbol]
3.11	TEMPORARY RIGHT-OF-WAY DIVERSION	RWD	[Symbol]	3.30	TOPSOILING	TO	[Symbol]
3.12	DIVERSION	DV	[Symbol]	3.31	TEMPORARY SEEDING	TS	[Symbol]
3.13	TEMPORARY SEDIMENT TRAP	ST	[Symbol]	3.32	PERMANENT SEEDING	PS	[Symbol]
3.14	TEMPORARY SEDIMENT BASIN	SB	[Symbol]	3.33	SODDING	SO	[Symbol]
3.15	TEMPORARY SLOPE DRAIN	TSO	[Symbol]	3.34	BERMUDA GRASS AND ZOYSIAURASS ESTABLISHMENT	BZ	[Symbol]
3.16	PAVED FLUME	PF	[Symbol]	3.35	MULCHING	MU	[Symbol]
3.17	STORMWATER CONVEYANCE CHANNEL	SCC	[Symbol]	3.36	SOIL STABILIZATION BLANKETS AND MATTING	SBM	[Symbol]
3.18	OUTLET PROTECTION	OP	[Symbol]	3.37	TREES, SHRUBS, VINES AND GROUND COVERS	VEG	[Symbol]
3.19	RIPRAP	RR	[Symbol]	3.38	TREE PRESERVATION AND PROTECTION	TP	[Symbol]
				3.39	DUST CONTROL	DC	[Symbol]

## EROSION CONTROL DETAILS

ENTIRE SHEET WAS ADDED.