THE MOST CURRENT EDITION OF THE ROAD AND BRIDGE SPECIFICATIONS AND THE MOST CURRENT EDITION OF THE ROAD DESIGNS AND STANDARDS OF THE VIRGINIA DEPARTMENT OF HIGHWAYS AND TRANSPORATION SHALL GOVERN THE FOLLOWING: POURING, CURING, FORMS, WORKMANSHIP, ETC OF ALL CONCRETE USED ON THIS PROJECT. STABILIZED BASE COARSE MATERIAL AND SURFACE TREATMENT OR BITUMINOUS SURFACE. MATERIALS AND INSTALLING OF ALL PIPE CULVERTS. 2. ALL CURB AND GUTTER FILLETS AT INTERSECTIONS ARE TO HAVE 20" RADII UNLESS OTHERWISE NOTED. ALL EARTH DITCH FILLETS AT INTERSECTIONS ARE TO HAVE 35' RADII UNLESS OTHERWISE NOTED. BACKFILL FOR ALL UTILITIES WITHIN PROPOSED SUBDIVISION STREETS SHALL BE PLACED GENERALLY IN ACCORDANCE WITH PRINCE GEORGE COUNTY UTILITY SPECIFICATIONS AND THE FOLLOWING CRITERIA. NO TRENCH SHALL BE BACKFILLED UNTIL AUTHORIZED BY THE COUNTY ENGINEER. MATERIALS USED FOR BACKFILL FROM THE BOTTOM OF THE TRENCH TO TWELVE (12") INCHES ABOVE THE PIPE SHALL BE SELECT MATERIAL FREE FROM FROST, LARGE CLODS, STONES AND DEBRIS. IT SHALL BE THOROUGHLY AND CAREFULLY COMPACTED TO INSURE A SOUND BACKFILL AROUND AND OVER THE BACKFILL SHALL BE COMPACTED BY MECHANICAL TAMPING THROUGHOUT THE DEPTH OF THE TRENCH TO OBTAIN 95% DENSITY AT OPTIMUM MOISTURE ±20%. THIS IS TO INSURE A SUITABLE TAKEN FROM THE DITCH IS NOT SUITABLE FOR BACKFILLING, IT SHALL BE REMOVED AND ACCEPTABLE MATERIAL USED FOR BACKFILLING THE TRENCH. 4. ALL UTILITIES TO BE IN PLACE BEFORE LAYING BASE MATERIAL (AGGREGATE, TYPE 21-A) THE LOCATION OF ALL DRAINAGE STRUCTURES ON THESE PLANS IS APPROXIMATE. FINAL FIELD LOCATION HAY BE HADE BY THE ENGINEER ALL VEGETATION AND OVERBURDEN TO BE REMOVED FROM SHOULDER TO ALL DRAINAGE EASEMENTS TO BE CLEARED, GRUBBED AND GRADED TO CONTAIN WATER FROM PIPE CULVERTS. LENGTH OF ALL PIPE CULVERTS SHOWN ON THESE PLANS IS APPROXIMATE SPECIFICATIONS OF THE VIRGINIA DEPARTMENT OF HIGHWAYS AND OF THESE PLANS WILL EXPIRE THREE (3) YEARS FROM THE DATE OF PAVED IN ACCORDANCE WITH STANDARD PG-2A-1 (MODIFIED TO FIT TYPICAL SECTION) WITH MINIMUM DEPTH TO CONTAIN TEN YEAR STORM. UNLESS OTHERWISE DIRECTED, BY THE ENGINEER IN WRITING. ADDITIONAL FACILITIES SUCH AS SEEDING. PAVING. SILT DAMS. SILT BASINS. ETC. AS MAY BE DEEMED NECESSARY BY THE DEPARTMENT PRIOR TO THE ACCEPTANCE OF SUCH ROADS IN ORDER TO LIMIT SILTATION AND POLLUTION OF NEARBY LAKES, PONDS, STREAMS, AND ADJACENT PROPERTIES. 13. ALL DRAINAGE EASEMENTS ARE TO EXTEND TO A NATURAL WATER COURSE. . SLOPE EASEMENTS FOR FILL SLOPES ARE REQUIRED WHERE SLOPES EXCEED PROPOSED RIGHT OF WAY LIMITS. 15. A PERMIT TO TIE INTO EXISTING ROADS SHALL BE OBTAINED FROM THE RESIDENT ENGINEER PRIOR TO ROAD CONSTRUCTION. THE CONTRACTOR WILL SEED ALL SLOPES AND EASEMENTS WITH AT LEAST A TEMPORARY SEEDING WITHIN FIFTEEN (15) DAYS AFTER COMPLETION OF STREET GRADING OR STORM SEWER PLACEMENT TO ELIMINATE UNNECESSARY EROSION. NO DISTURBED AREA WILL BE ALLOWED AT THE TIME OF ACCEPTANCE OF THE ROAD INTO THE STATE SYSTEM. ENGINEER PRIOR TO THE PLACEMENT OF THE SURFACE COURSE. UNSUITABLE MATERIAL FOR THE SUBGRADE IS ENCOUNTERED. THE ROAD ENGINEER MUST BE NOTIFIED PRIOR TO PLACEMENT OF THE BASE MATERIAL. THE ROAD ENGINEER HUST BE NOTIFIED PRIOR TO THE SURFACE TREATMENT BEING APPLIED. THE LOCATION OF EXISTING UTILITIES, STORM SEWERS, SANITARY SEWERS, GAS LINES, WATER LINES, ELECTRICAL LINES AND TELEPHONE LINES EITHER UNDERGROUND AND/OR OVERHEAD ACROSS OR ALONG THE LINE OF PROPOSED WORK ARE NOT NECESSARILY SHOWN ON THE PLANS AND WHERE AT NO EXTRA COST, LOCATE ALL UNDERGROUND LINES AND STRUCTURES AS NECESSARY. NO CLAIMS FOR DAMAGES OR EXTRA COMPENSATION SHALL ACCURE TO THE CONTRACTOR FROM THE PRESENCE OF SUCH PIPES OR OTHER OBSTRUCTIONS OR FROM ANY DELAY DUE TO THE REMOVAL OF OR REARRANGEMENT OF SAME. . ALL CUT AND FILL SLOPES AND CHANNELSIDE SLOPES WHICH ARE NOT PAVED SHALL BE SEEDED UNTIL A GOOD STAND OF GRASS IS OBTAINED IN ACCORDANCE WITH THE VIRGINIA EROSION & SEDIMENT CONTROL HANDDBOOK AND THE FOLLOWING TABLE: A. 100 LB. PER 1000 SQ. FT. GROUND LIMESTONE OR EQUIVALENT. NO SOIL TEST REQUIRED FOR INITIAL ESTABLISHMENT. B. 25 LB. OF 5-20-10 FERTILIZER OR EQUIVALENT PER 1000 SQ. FT. C. VARIETIES TO BE SEEDED: SPRING SEEDING - MARCH 1 THRU MAY 1; MIXTURE #5 AT 1 LB. PER 1000 SQ. FT. SUMMER SEEDING - MAY 1 THRU AUGUST 1; MIXTURE #4 1-1/2 LBS. PER 1000 SQ. FT. AUTUMN SEEDING - AUGUST 1 THRU OCTOBER 1; MIXTURE #5 AT 1 LB. PER 1000 SQ. FT. 4. MULCH 80 LB. STRAW PER 1000 SQ. FT. OR ASPHALT MULCH 10 GAL. PER 1000 SQ. FT. . ALL SEEDING MUST BE MULCHED. AUTHORIZED LOCAL OFFICIALS SHALL BE NOTIFIED 24 HOURS IN ADVANCE OF THE WORK TO BE STARTED SO AN AUTHORIZED REPRESENTATIVE MAY BE ASSIGNED TO MAKE ANY AND ALL NECESSARY INSPECTIONS OF THE WORK PERFORMED. CONTRACTOR SHALL CALL FOR COUNTY INSPECTION OF ALL PIPE LINE INSTALLATON PRIOR TO PLACING BACKFILL 24. WHEN ALL IMPROVEMENTS ARE COMPLETED, ALL DRAINAGE AND SANITARY SEWER LINES ARE FLUSHED AND CLEANED OF FOREIGN MATTER AND ALL CURBS, GUTTERS AND STREETS ARE CLEANED AND FREE OF DIRT AND DEBRIS. THE DEVELOPER SHALL NOTIFY THE APPROPRIATE LOCAL OFFICIAL TO MAKE FINAL INSPECTION. A REPRESENTATIVE OF THE DEVELOPER SHALL BE PRESENT AT THE FINAL INSPECTION. THE CONTRACTOR SHALL NOTIFY THE LOCAL INSPECTOR AT LEAST 24 HOURS BEFORE PLACING BASE STONE SO THE SUBGRADE MAY BA INSPECTED AND 24 HOURS BEFORE PLACING SURFACE COURSE SO THE LOCAL INSPECTOR WILL BE ON SITE. · WHERE DITCHES ARE DEEPENED TO ACCOMODATE CULVERTS, THE SLOPE FROM THE SHOULDER TO THE DITCH SHALL BE MAINTAINED THEREBY HOVING THE DITCH PROFILE FURTHER FROM THE CENTERLINE. CONTRACTOR SHALL NOTIFY "MISS UTILITY" (1-800-552-7001) BEFORE BEGINNING ANY EXCAVATION. , ALL CONCENTRATED DRAINAGE BEING CONVEYED FROM ROADSIDE DITCHES IN CUT SECTIONS INTO FILL SECTIONS SHOULD BE CONFINED ALONG SUCH AREAS BY TOE DITCHES WHERE ADJACENT PROPERTY SLOPES AWAY FROM ROADWAY. TO PREVENT CONCENTRATED DRAINAGE FROM BEING TURNED ONTO ADJACENT LOTS. ₹ 29. EXCESS EXCAVATION TO BE DISPOSED OF AS DIRECTED BY THE ENGINEER

BLAND エノエレ エエレエン エ

OWNER & DEVELOPER

P.O. BOX 1402 PH. (804) 733-4656

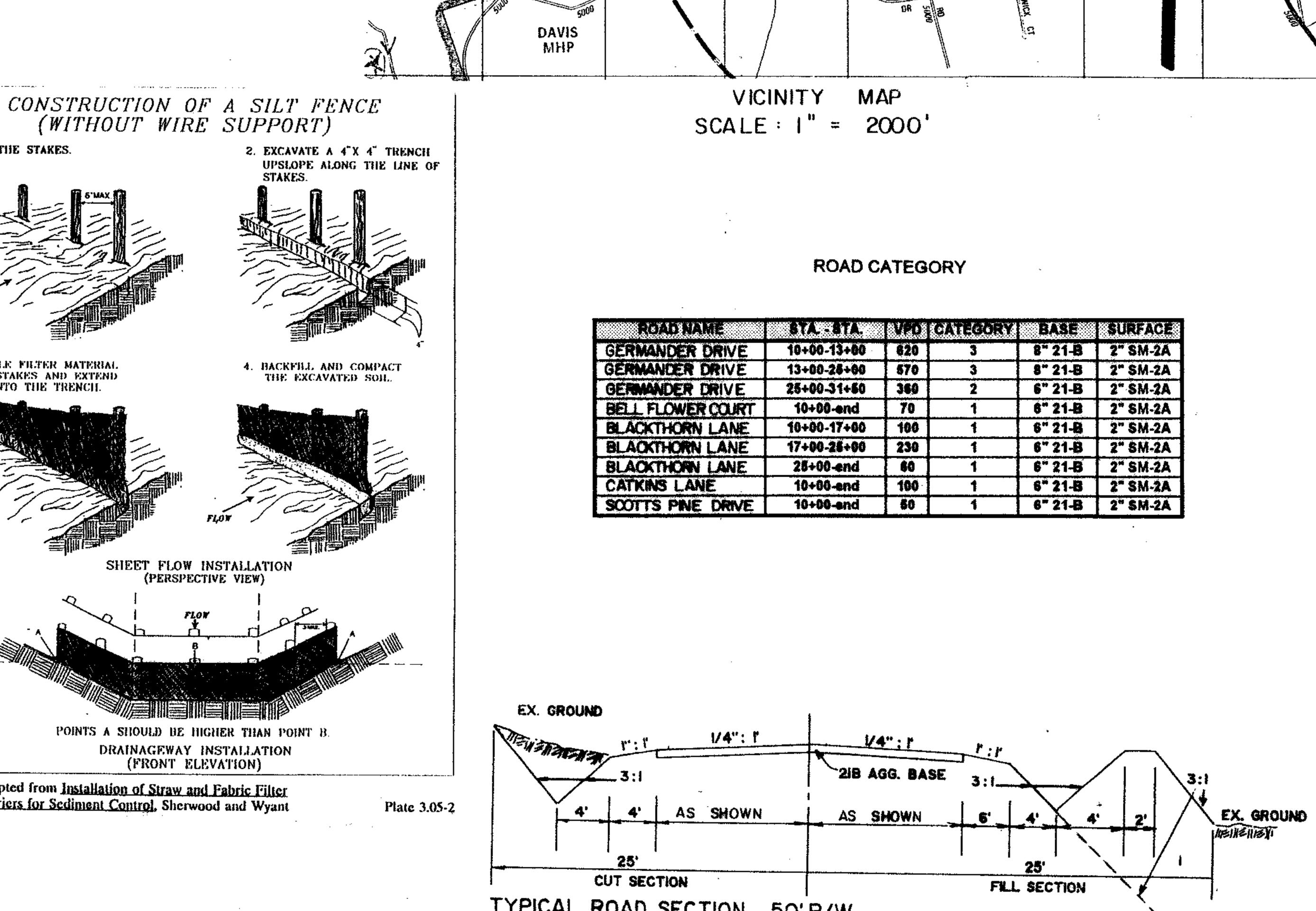
Structure	Lene in (t)	Diameter (in)	Material	Inv. In	Inv. Out	Slope (%)
1	136	24	RCP Class III	74.0	72.6	1.00
2	64	18	RCP Class III	97.5	96.3	1.88
3 *	64	18	RCP Class III	64.8	64.3	0.80
4	90	24	RCP Class III	52.6	49.5	4.00
5	60	15	RCP Class III	104.5	104.0	0.85
6	104	15	RCP Class III	76.6	64.0	12.12
7	125	15	RCP Class III	88.8	82.0	5.44
8	210	15	RCP Class III	79.0	52.4	12.67
9	90	15	RCP Class III	68.0	57.5	11.67
10	290	24	RCP Class III	49.0	38.3	3.86

THE ROAD CONTRACTOR IS RESPONSIBLE TO NOTIFY THE INSPECTOR WITH THE JAMES RIVER SOIL AND WATER CONSERVATION DISTRICT (748-2235 OR 733-2788) FOR A PRE-CONSTRUCTION MEETING AND ON-SITE VISIT ONE WEEK PRIOR TO BEGINNING CONSTRUCTION. CLEAR AND GRUB ALL RIGHTS OF WAYS AND EASEMENTS OF SECTION TWO ONLY AS DIRECTED BY DESIGN ENGINEER TEMPORARY *SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT WILL REMAIN DORMANT (UNDISTURBED) FOR LONGER THAN THIRTY DAYS. *PERMANENT STABILIZATION SHALL BF APPLIED TO AREAS THAT ARE LEFT DORMANT FOR MORE THAN ONE YEAR. INSTALL CONSTRUCTION ENTRANCE PAD, CE 3.02. INSTALL SILT TRAPS.

INSTALL SILT FENCE AND STONE CHECK DAMS IN LOCATIONS SHOWN. BRING ROAD TO SUBGRADE. PERMANENT *SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THIS SITE. INSTALL STORM SEWER AND CULVERTS. INSTALL INLET PROTECTION. INSTALL SANITARY SEWER.

SOIL EROSION AND SEDIMENT CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH THE CURRENT VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK THE COUNTY OF PRINCE GEORGE ENGINEERING DEPARTMENT AND OTHER INTERESTED COUNTY AGENCIES SHALL MAKE A CONTINUING REVIEW AND EVALUATION OF THE METHOD USED AND THE OVERALL EFFECTIVENESS OF THE PPROVED BY: YOU YOU YOU DESIGN CONTROL PROGRAM. AN APPROVED EROSION AND SEDIMENT CONTROL PLAN MAY BE AMENDED BY THE PLAN APPROVING AUTHORITY IF ON-SITE INSPECTION INDICATES THAT THE APPROVED CONTROL MEASURES ARE NOT EFFECTIVE IN CONTROLLING EROSION AND SEDIMENTATION OR IF BECAUSE OF CHANGED CIRCUMSTANCES, THE APPROVED PLAN CAN NOT BE CARRIED OUT.

IMMEDIATELY REPAIRED OR REPLACED.



TYPICAL ROAD SECTION 50'R/W . NOT TO SCALE PAVEMENT DETAIL FOR PROPOSED TURNLANE PROPOSED EXISTING PAVEMENT. MILLIAN

ROAD AND DRAINAGE EROSION CONTROL EROSION CONTROL DEVICE WITH SPEC. NUMBER AS PER VIRGINIA EROSION & SEDIMENT CONTROL ----------------------EXISTING CULVERT OR STORM SEWER PIPE DROP INLET & STRUCTURE NO. PROPOSED MANHOLE CONSTRUCTION ENTRANCE EXISTING MANHOLE PAVED DITCH EARTH DITCH - GRASS LINED

---- 100---- EXISTING CONTOUR BENCH MARK & REFERENCE NO.

JUNE 17, 1997 DRAWN BY

VIRGINIA 23860

CEDAR CREEK SECTION TWO DRAINAGE SUMMARY

Structure	Lengin (6)	Diameter (in)	Material	Inv. In	Inv. Out	Slope (%)
1	136	24	RCP Class III	74.0	72.6	1.00
2	64	18	RCP Class III	97.5	96.3	1.88
3 *	64	18	RCP Class III	64.8	64.3	0.80
4	90	24	RCP Class III	52.6	49.5	4.00
5	60	15	RCP Class III	104.5	104.0	0.85
6	104	15	RCP Class III	76.6	64.0	12.12
7	125	15	RCP Class III	88.8	82.0	5.44
8	210	15	RCP Class III	79.0	52.4	12.67
9	90	15	RCP Class III	68.0	57.5	11.67
10	290	24	RCP Class III	49.0	38.3	3.86

STONE CONSTRUCTION ENTRANCE

* = 2 Structures

COMPORMING TO AASHTO M304 OR POLYETHYLENE RIBBED PIPE (SMOOTH INTERIOR) CONFORMING TO AASHTO M294 FOR ALL STORM SEWER PIPE SYSTEMS. BEDDING SHALL

IN ACCORDANCE WITH PB-1 PLASTIC CULVERT PIPE BEDDING STANDARD.

30. ALL MANHOLES IN UTILITY EASEMENTS ARE TO HAVE THE CONCRETE SECTION EXTENDED ONE FOOT ABOVE THE GROUND. USE OF HEIGHT ADJUSTMENT RINGS WILL NOT BE ALLOWED EXCEPT UNDER

ROCK CHECK DAM

2 ACRES OR LESS OF DRAINAGE AREA:

2-10 ACRES OF DRAINAGE AREA:

SIDE ELEVATION

DESTITUTE ORATIVAGE

TO SERIMENT

TRAPPING DEVICE

PLAN VIEW

SECTION B-B

COURSE AGGREGATE

HUST EXTEND FULL WIDTH
 OF INGRESS AND EGRESS
 OPERATION

TILTER CLOTH --

PAVED SURFACES WHERE A MAXIMUM OF ONE RING IS PERMITTED. A SMOOTH TRANSITION OR DROP MANHOLE MUST BE PROVIDED FOR EACH LATERAL OR SANITARY SEWER ENTERING A SANITARY SEWER MANHOLE.. ALL MATERIALS FOR THE SEWER SYSTEM SHOWN SHALL BE SUPPLIED AND INSTALLED IN ACCORDANCE WITH THE LATEST APPLICABLE SPECIFICATIONS FOR PRINCE GEORGE COUNTY.

> DETAIL FOR PLASTIC SEWER PIPE __Top of Ground __ Compaction per Thoroughly compacted .. TADO MONAL STONE BACKFILL fill area to be free of clods, debris, etc.

Plate 3.02-1

SPECIAL BEDDING AND BACKFILL County Specifications ARRAS WITH MORE THAN 14 OF COVER.

EROSION CONTROL NARRATIVE

INSTALL WATERLINES INSTALL ALL DITCH IMPROVEMENTS IN SECTION TWO INSTALL STONE BASE. INSTALL SURFACE TREATMENT. STABILIZE SITE. UPON SITE STABILIZATION, CLEAN STORM SEWER SYSTEM AND PAVED OUTFALLS OF ANY SILT AND REMOVE SILT FROM SITE. REMOVE SILT " AND CHECK DAMS AND REDIRECT DISCHARGE FROM ROADWAYS INTO PRECONSTRUCTION OUTFALL DITCHES. REMOVE SILT FENCE AS UPSTREAM STABILIZES WITH AN ADEQUATE PERMANENT GROUND COVER.

* DENOTES HYDROSEED

ALL EROSION CONTROL DEVICES SHALL BE INSPECTED DAILY BY THE SITE FOREMAN. ANY STRUCTURES THAT ARE DAMAGED OR INOPERATIVE WILL BE

County of Prince George Prince George, Virginia 23875 Receiving WWTP: Hopewell Regional Treatment Facility Department of Development 300 N. Main Street Hopewell, Virginia 23860 PRIME & DOUBLE SEAL MAY BE SUBSTITUTED FOR THE 2"SM-2A SURFACE TREATMENT.

XXX SILT FENCE INLET PROTECTION APPROVED FOR CONSTRUCTION SUBJECT TO INSPECTION BY COUNTY ENGINEE DATE // MARCH 30 1799 APPROVAL FOR: STORMWATER MANAGEMENT WATER DISTRIBUTION SANITARY SEWER COLLECTION EROSION AND SEDIMENT CONTROL Sin CHESAPEAKE BAY COMPLIANCE

Note: All sanitary sewer to be installed satisfying

Prince George County Sewer Specifications.

Owner of Waterline:

P.O. Box 25405

Owner of Sewer:

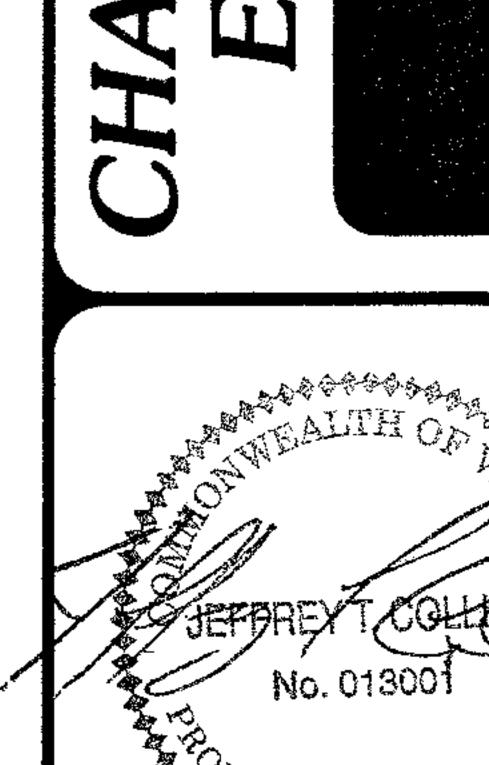
Virginia Amercian Water Co.

Alexandria, Virginia 22313

(WITHOUT WIRE SUPPORT)

IT INTO THE TRENCH

---- SS - - - EXISTING SANITARY SEWER SANITARY SEWER SERVICE CONNECTIONS



SS

REVISIONS 10/23/98 1/5/99

CHECKED BY