THE HOST 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

MATERIALS AND INSTALLING OF ALL PIPE CULVERTS. 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. HATERIALS 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 DEBRISE IT SHALL BE THOROUGHLY AND CAREFULLY COMPACTED TO INSURE A SOUND BACKFILL AROUND AND OVER THE

BACKFILL SHALL BE COMPACTED BY MECHANICAL TAMPING OPTINUM MOISTURE ±20%. THIS IS TO INSURE A SUITABLE SUBBASE, ACCEPTABLE TO THE ROAD ENGINEER FOR THE PROPOSED

TAKEN FROM THE DITCH IS NOT SUITABLE FOR BACKFILLING, IT SHALL BE REMOVED AND ACCEPTABLE HATERIAL 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 MAY BE MADE BY THE ENGINEER

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

THE CONTRACTOR WILL SEED ALL SLOPES AS SOON AS POSSIBLE TO ELIMINATE UNNECESSARY EROSION. NO DISTURBED SURFACE WILL BE LEFT UNSEEDED. WHERE REQUIRED, ALL ROAD DITCHES ARE TO BE 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.

SUBDIVISION ROAD PLANS DOES NOT PRECLUDE THE RIGHT TO ADD ADDITIONAL FACILITIES SUCH AS SEEDING. PAVING. SILT DAMS. SILT 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.

ALL DRAINAGE EASEMENTS ARE TO EXTEND TO A NATURAL WATER COURSE. SLOPE EASEMENTS FOR FILL SLOPES ARE REQUIRED WHERE SLOPES

EXCEED PROPOSED RIGHT OF MAY LIMITS. 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 TEMPORARY SEEDING WITHIN FIFTEEN (15) DAYS AFTER COMPLETION OF STREET GRADING OR STORM SEVER PLACEMENT TO ELIMINATE UNNECESSARY EROSION. NO DISTURBED AREA WILL BE ALLOWED AT THE

TIME OF ACCEPTANCE OF THE ROAD INTO THE STATE SYSTEM. IE BASE MATERIAL FOR ALL STREETS MUST BE APPROVED BY THE ROAD 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

19: 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 REHOVAL 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:

100 LB. PER 1000 SQ. FT. GROUND LIMESTONE OR EQUIVALENT. NO SOIL TEST REQUIRED FOR INITIAL ESTABLISHMENT. 25 LB. OF 5-20-10 FERTILIZER OR EQUIVALENT PER 1000 SQ. FT. 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.

- AUGUST 1 THRU OCTOBER 1 AUTUMN SEEDING -MIXTURE #5 AT 1 LB. PER 1000 SQ. FT. 4. HULCH 80 LB. STRAW PER 1000 SQ. FT. OR ASPHALT MULCH

10 GAL. PER 1000 SQ. FT. 5. 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 HAY 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.

WHEN ALL IMPROVEMENTS ARE COMPLETED, ALL DRAINAGE AND SANITARY SEVER 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 HAKE 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 BE 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 "HISS UTILITY" (1-800-552-7001) BEFORE

BEGINNING ANY EXCAVATION. 7 28. 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. EXCESS EXCAVATION TO BE DISPOSED OF AS DIRECTED BY THE ENGINEER.

BLAND **フノレン エフアア エ** 

## OWNER & DEVELOPER

P.O. BOX 1402 VIRGINIA 23860 PH. (804) 733-4656

MATCH TO ROADSIDE DITCH ON MIDDLE ROAD

EW-I ENDWALL AT BOTH ENDS & 45°BEND

INV. OUT = 74.50

INV. OUT = 71.90

INV. OUT 56.00

INV. OUT = 68.40

DOUBLE BARREL, 18" RCP, L = 64' AND L = 76', CLASS III, S = 0.94'

INV. OUT = 68.40

140' - 24" RCP, CLASS III

INV. IN = 75.70

230' - 42" RCP, CLASS III, S = 4.78%

124' - 42" RCP, CLASS III, S = 3.06%

132' - 48" RCP, CLASS III, S = 4.02%

EW-I ENDWALL AT BOTH ENDS

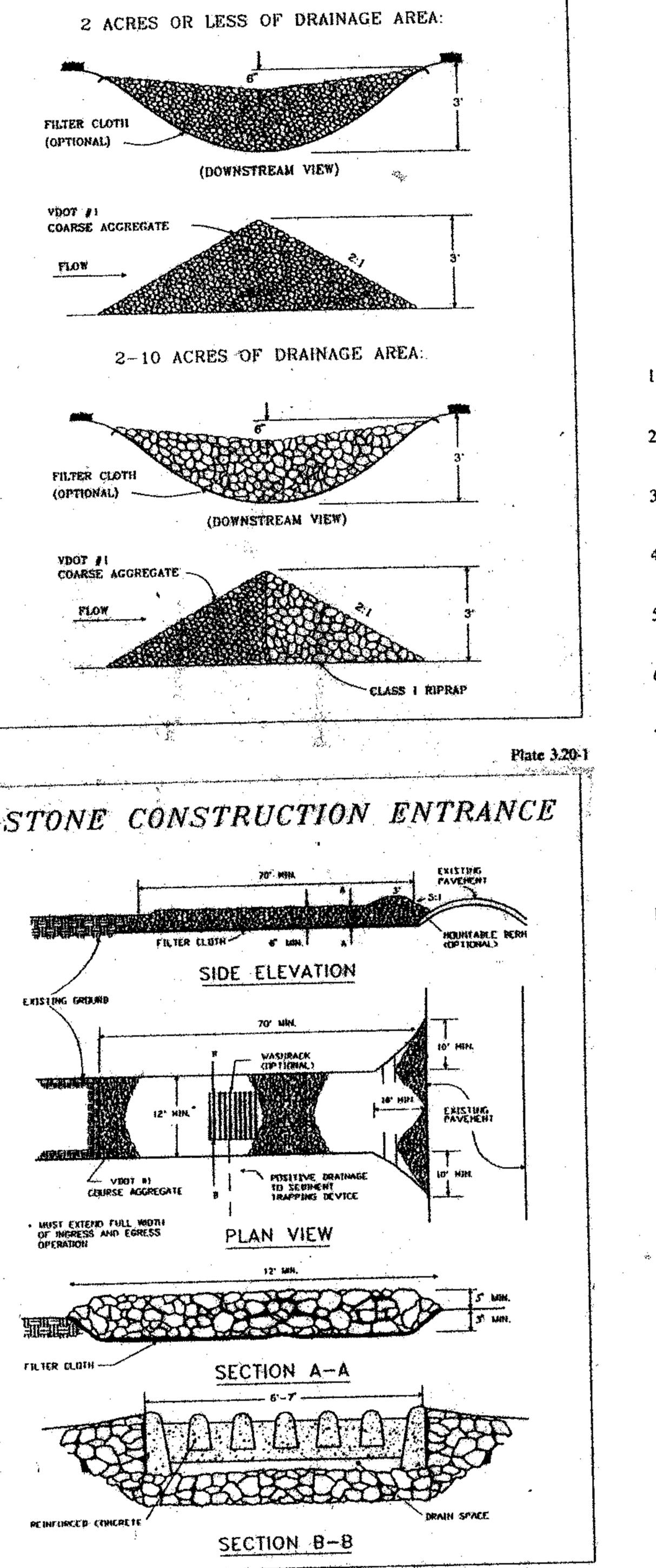
EW-I ENDWALL AT BOTH ENDS

156' - 42" RCP, CLASS III, S = 2.60%

EW-I ENDWALL AT BOTH ENDS

64' - 15" RCP, CLASS III, S = 0.94%

INV. IN = 57.80 INV. OUT = 53.75



Source: Adapted from 1983 Maryland Standards for Soil

FOR PRINCE GEORGE COUNTY.

Erosion and Sediment Control, and Va. DSWC

SECTION EXTENDED ONE FOOT ABOVE THE GROUND.

30. ALL MANHOLES IN UTILITY EASEMENTS ARE TO HAVE THE CONCRETE

PAVED SURFACES WHERE A MAXIMUM OF ONE RING IS PERMITTED

USE OF HEIGHT ADJUSTMENT RINGS WILL NOT BE ALLOWED EXCEPT UNDER

INSTALLED IN ACCORDANCE WITH THE LATEST APPLICABLE SPECIFICATIONS

SPECIAL BEDDING AND BACKFILL

DETAIL FOR PLASTIC SEWER PIPE \_\_Top of Ground

Compaction per

A ADDITIONAL STONE BACKFILL

1:172-57 Stone Bedding

County Specifications

A SMOOTH TRANSITION OR DROP MANHOLE MUST BE PROVIDED FOR EACH

LATERAL OR SANITARY SEWER ENTERING A SANITARY SEWER MANHOLE.

33. ALL MATERIALS FOR THE SEWER SYSTEM SHOWN SHALL BE SUPPLIED AND

Thoroughly compacted ..

fill area to be free .

of clods, debrio, etc.

ROCK CHECK DAM

MH-2 MANHOLE, TOP = 55.00 DI-5, TOP FLOWLINE = 61.25 INV. = 38.12INV. = 56.4060' - 15" RCP, CLASS III, S = 0.20% INV. IN = 38.12INV. IN = 56.40 INV. OUT = 54.15

DRAINAGE SUMMARY

DI-5, TOP FLOWLINE = 59.00 INV. = 53.40300' - 24" RCP, CLASS III, S = 0.80%

INV. OUT = 51.00DI-5, TOP FLOWLINE = 56.10INV. = 50.75

60' - 27" RCP, CLASS III, S = 0.80% INV. OUT = 50.27DI-5, TOP FLOWLINE = 55.70

420' - 30" RCP, CLASS III, S = 0.50% INV. OUT = 47.92DI-5, TOP FLOWLINE = 53.25

245' - 30" RCP. CLASS III, S = 4.82% INV. OUT = 36.01

INV. = 47.82

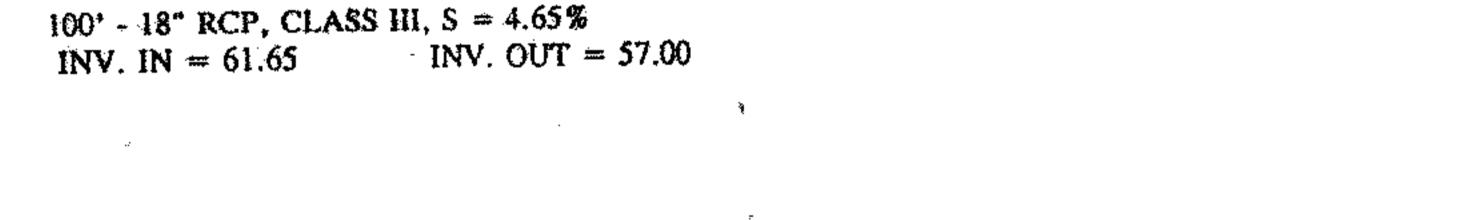
INV. = 30.3050' - 30" RCP, CLASS III, S = 0.60% INV. IN = 30.30 INV. OUT = 30.00

MH-2 MANHOLE, TOP = 45.00

EW-I ENDWALL DI-5, TOP FLOWLINE = 64.00

INV. = 59.00260' - 15" RCP, CLASS III, S = 5.38% INV. OUT = 45.01

CONTRACTOR MAY SUBSTITUTE POLIVINILCHLORIDE RIBBED SENER PIPE (SMOOTH INTERIOR) COMPORMING TO MASHTO M304 OR POLYETHYLENE RIBBED PIPE (SMOOTH INTERIOR) COMPORMING TO AMSHTO M294 FOR ALL STORM SEWER PIPE SYSTEMS. BEDDING SHALL IN ACCORDANCE WITH PB-1 PLASTIC CULVERT PIPE BEDDING STANDARD.



## **EROSION CONTROL NARRATIVE**

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 ONE 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 BE 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

INSTALL STORM SEWER AND CULVERTS. INSTALL INLET PROTECTION. INSTALL SANITARY SEWER.

INSTALL WATERLINES. INSTALL ALL DITCH IMPROVEMENTS IN SECTION ONE. INSTALL STONE BASE.

INSTALL SURFACE TREATMENT. STABILIZE SITE.

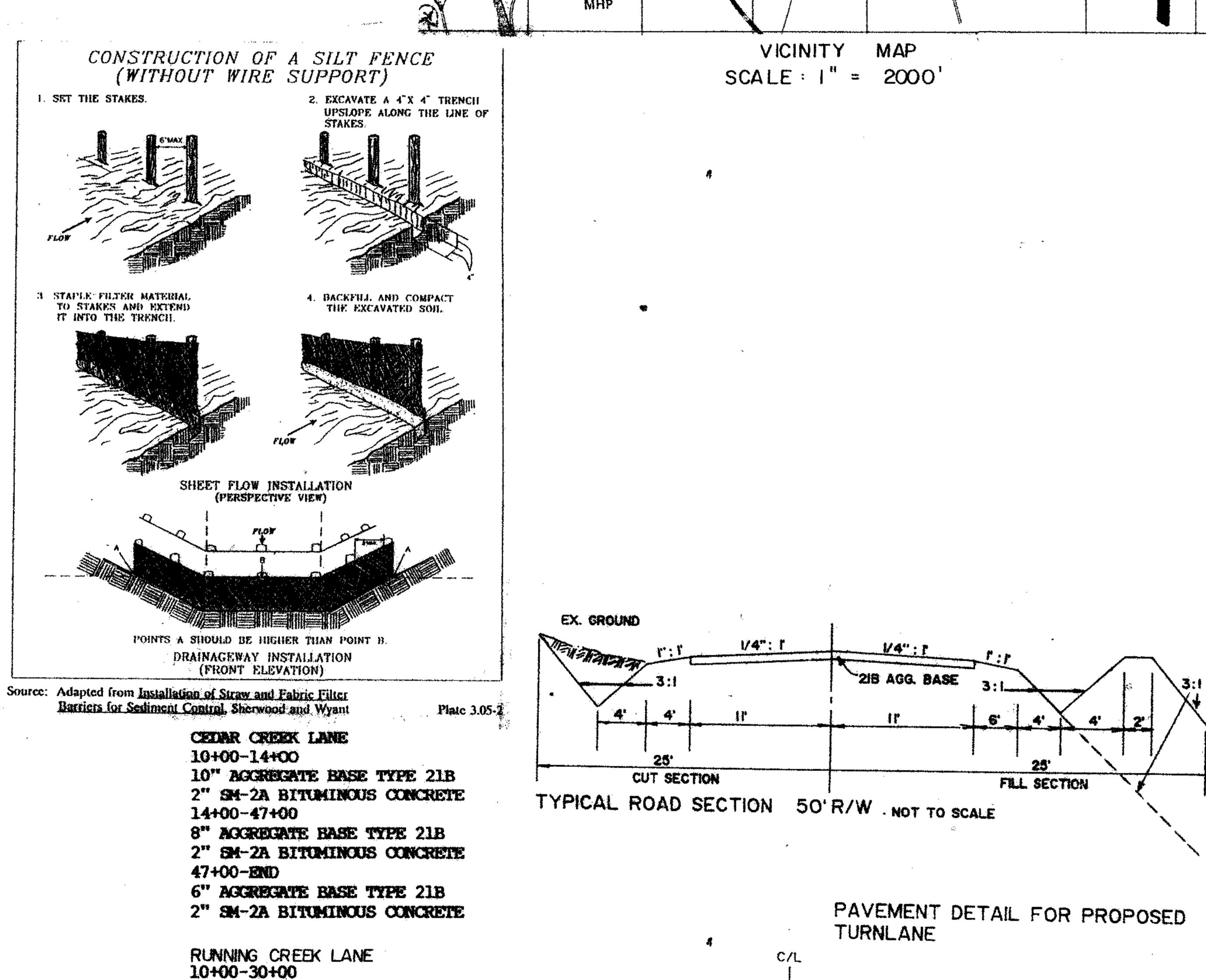
UPON SITE STABILIZATION. CLEAN STORM SEWER SYSTEM AND PAVED OUTFALLS OF ANY SILT AND REMOVE SILT FROM SITE. REMOVE SILT TRAPS AND CHECK DAMS AND REDIRECT DISCHARGE FROM ROADWAYS INTO PRECONSTRUCTION OUTFALL DITCHES.

REMOVE SILT FENCE AS UPSTREAM STABILIZES WITH AN ADEQUATE PERMANENT GROUND COVER.

## \* DENOTES HYDROSEED

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 EROSION 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.

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



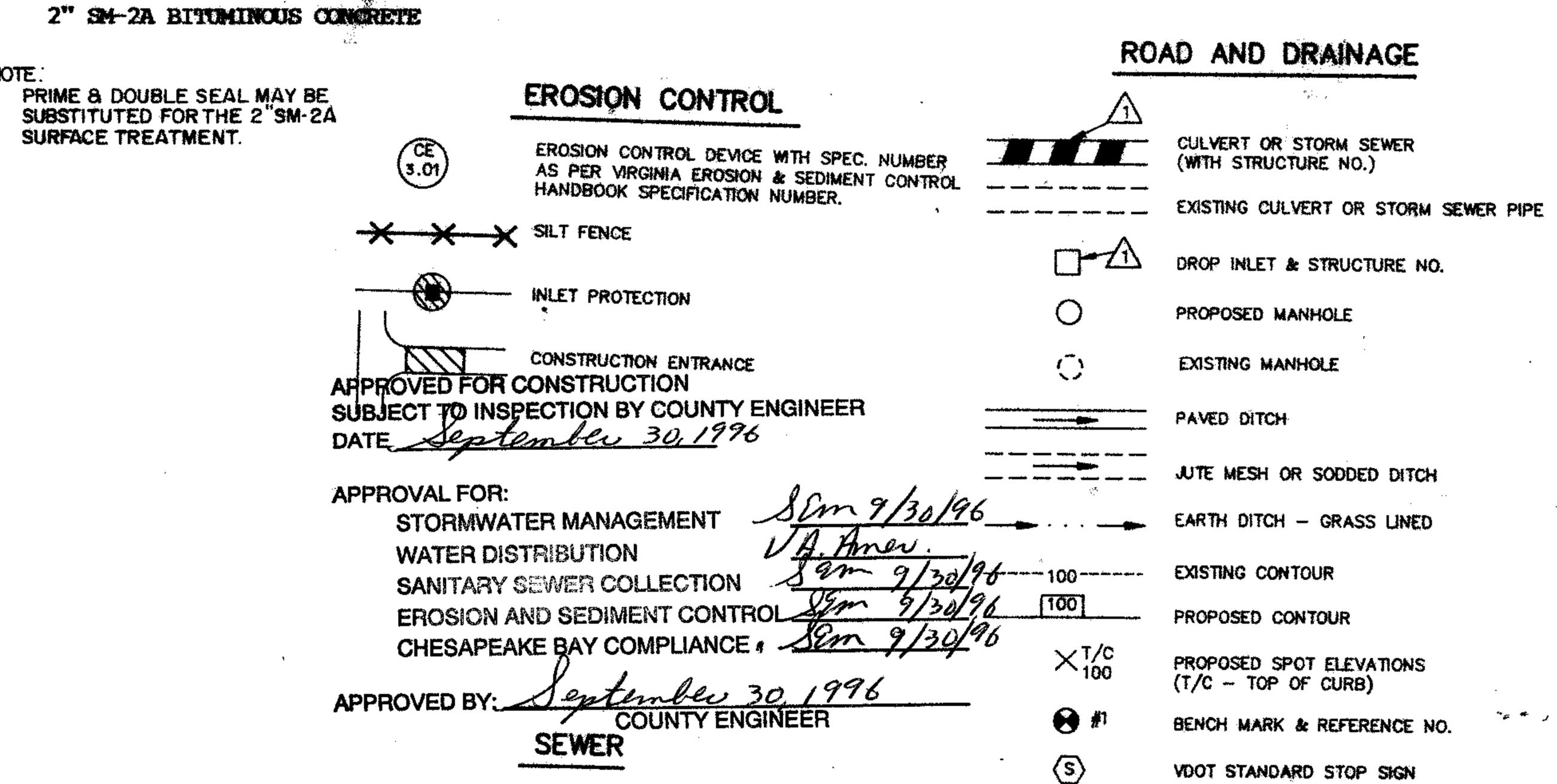
SECTION ONE

30+00-END 6" AGGREGATE BASE TYPE 21B 2" SM-2A BITUMINOUS CONCRETE JAY BIRD COURT, CEDAR TRAILS EAST AND WEST WITTE TELEVISION OF THE PARTY O 6" AGGREGATE BASE TYPE 21B 2" SM-2A BITUMINOUS CONCRETE MIDDLE ROAD WIDENING LANE 6" ACCREGATE HASE TYPE 21B 3" BM-2 BITUMINOUS CONCRUTE 2" SM-2A BITUMINOUS CONCRETE

8" ACCREGATE BASE TYPE 21B

SURFACE TREATMENT.

2" SM-2A BITUMINOUS CONCRETE



PROPOSED

PAVEMENT

TURNLANE

EX GROUND

REVISIONS PER COUNTY 12-1-95 PER REVIEW 3-20-96 PER COUNTY 7+11-96 8/24/95 DRAWN BY CHECKED BY

SHEET #