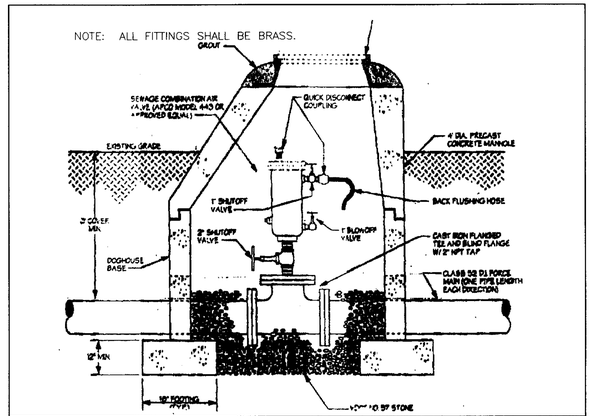
VDOT NOTES

1. ALL MATERIALS AND CONSTRUCTION WITHIN THE PUBLIC RIGHT OF WAY SHALL BE IN ACCORDANCE WITH CURRENT VIRGINIA DEPARTMENT OF TRANSPORTATIONS' SPECIFICATIONS, STANDARDS, CURRENT WORK AREA PROTECTION MANUAL, AND ALL APPLICABLE LOCATION AND DESIGN INSTRUCTIONAL AND INFORMATIONAL MEMORANDUMS.
2. LAND USE PERMIT (CE-7) MUST BE OBTAINED FROM THE VIRGINIA DEPARTMENT OF TRANSPORTATION PRIOR TO BEGINNING ANY CONSTRUCTION WITHIN THE EXISTING STATE MAINTAINED RIGHT OF WAY (INCLUDING ACCESS).
3. VDOT IS TO RECEIVE WRITTEN NOTIFICATION 48 HOURS PRIOR TO COMMENCING WITH INITIAL CONSTRUCTION ACTIVITIES.
4. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL CONSULT THE ENGINEER AND VERIFY THE APPROVAL OF THE PLANS BY ALL APPLICABLE FEDERAL, STATE AND LOCAL AGENCIES.
5. PRELIMINARY DESIGN OF THE PAVEMENT STRUCTURE FOR ALL SUBDIVISION STREETS SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE PAVEMENT DESIGN GUIDE FOR SUBDIVISION AND SECONDARY ROADS IN VIRGINIA. THE COMPLETED DESIGN WORKSHEET APPENDIX IV SHALL BE INCLUDED WITH THE INITIAL PLAN SUBMITTAL FOR EACH PROPOSED PAVEMENT SECTION UTILIZING THE PREDICTED SOIL SUPPORT VALUE SHOWN IN APPENDIX I OF THE PAVEMENT DESIGN GUIDE.
6. THE CONTRACTOR SHALL VERIFY THE ELEVATIONS OF ALL POINTS OF CONNECTION OR PROPOSED WORK TO EXISTING CURBS, SANITARY LINES, WATER LINES, ETC., PRIOR TO CONSTRUCTION.
7. UPON DISCOVERY OF SOILS THAT ARE UNSUITABLE FOR FOUNDATIONS, SUB-GRADES, OR OTHER ROADWAY CONSTRUCTION PURPOSES, THE CONTRACTOR SHALL IMMEDIATELY CONTACT A GEOTECHNICAL ENGINEER AND VDOT. THESE AREAS SHALL BE EXCAVATED BELOW PLAN GRADE AS DIRECTED BY A GEOTECHNICAL ENGINEER, BACKFILLED WITH SUITABLE MATERIAL AND COMPACTED IN ACCORDANCE WITH CURRENT VDOT SPECIFICATIONS.
8. ALL STORM SEWER DESIGN AND CONSTRUCTION TO BE IN ACCORDANCE WITH VDOT I & I LD-94 (D) 121.13. (VDOT DRAINAGE MANUAL AND HYDRAULIC AVERSIONS)
9. ALL DRAINAGE STRUCTURES SHALL BE IN ACCORDANCE WITH THE CURRENT VERSIONS OF LD-97 (D) 121. PIPE WITHIN THE RIGHT OF WAY SHALL BE A MINIMUM CL-III OR GREATER IN ACCORDANCE WITH CURRENT VDOT
10. ALL PRE-CAST UNITS SHALL BE VDOT APPROVED. CERTIFICATIONS AND VDOT STAMP WILL BE REQUIRED ON ALL UNITS. SHOP DRAWINGS, GEOTECHNICAL DATA AND SOIL BEARING CAPACITY, AND PLAN VIEW SHALL BE SUBMITTED AS PACKAGE FOR VDOT REVIEW AND APPROVAL.
11. ALL CONCRETE SHALL BE MINIMUM CLASS A3-AE (AIR ENTRAINED 3,000 PSI).
12. ALL ENTRANCES ARE TO BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH CURRENT VDOT STANDARDS. RESIDENTIAL LOT ACCESS SHALL BE PROVIDED PER THE FOLLOWING CRITERIA:
13. ALL DRIVEWAY ENTRANCE CULVERTS ARE TO BE MINIMUM OF 15" DIAMETER X 20' LONG PIPE AND SHALL CONFORM TO PE-1 PRIVATE ENTRANCE STANDARDS UNLESS OTHERWISE DIRECTED BY THE RESIDENT ENGINEER. NO ENTRANCE CULVERTS ARE TO BE INSTALLED WITHIN FIVE (5) FEET OF A PROPERTY CORNER.
14. VDOT STANDARD CG-9D ENTRANCES SHALL BE INSTALLED IN CURB AND GUTTER NEIGHBORHOODS. INSPECTIONS TO BE PERFORMED BY VDOT SHALL BE REQUESTED IN WRITING, 48 HOURS PRIOR TO ENTRANCE INSTALLATION.
15. THE DEVELOPER IS RESPONSIBLE FOR FURNISHING AND INSTALLING ALL SIGNS DEEMED PERTINENT TO THE PROPOSED DEVELOPMENT. THE CONTRACTOR SHALL CONTACT VDOT INSPECTION STAFF TO ESTABLISH LOCATIONS FOR ANY SIGNAGE REQUIREMENTS AS DEEMED NECESSARY BY VDOT. INSTALLATION OF SAID SIGNS SHALL OCCUR AT NO EXPENSE TO THE STATE AND PRIOR TO STATE ACCEPTANCE OF ROADWAY(S).
16. DESIGN CHANGES VIA SCHOOL BOARD, SPECIFIED MATERIALS CHANGES AND/OR FIELD CHANGES FROM THE APPROVED PLANS NEED TO BE RE-SUBMITTED TO VDOT PRIOR TO PROCEEDING WITH THE WORK. A LETTER OF EXPLANATION SHALL ACCOMPANY THE REVISED PLANS AND/OR DRAINAGE CALCULATIONS, WHICH MUST BE SUBMITTED, TO VDOT FOR REVIEW AND APPROVAL BY THE RESIDENT ENGINEER.
17. CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES SHOWN ON PLANS IN AREAS OF CONSTRUCTION PRIOR TO STARTING WORK. CONTACT ENGINEER IMMEDIATELY IF LOCATION OR ELEVATION IS DIFFERENT FROM THAT SHOWN ON PLAN. IF THERE APPEARS TO BE A CONFLICT, AND/OR UPON DISCOVERY OF ANY UTILITY NOT SHOWN ON THIS PLAN, CALL MISS UTILITY OF CENTRAL VIRGINIA AT 1-800-552-7001. THE DEVELOPER SHALL BE RESPONSIBLE FOR THE RELOCATION OF ANY UTILITY WITHIN EXISTING AND/OR PROPOSED RIGHT OF WAY REQUIRED BY THE DEVELOPMENT.
18. ALL STREETLIGHTS SHALL BE LOCATED IN A MINIMUM OF 9.5' FROM THE EDGE OF PAVEMENT ON CURB AND GUTTER STREETS AND/OR LOCATED A MINIMUM OF 5.5' BEHIND THE DITCH LINE ON OPEN DITCH STREETS.
19. GENERALLY, PAVED ROADSIDE DITCHES ARE TO BE SPECIFIED WHEN VELOCITIES EXCEED CURRENT VDOT DESIGN CRITERIA OR WHEN DITCH SLOPES ARE LESS THAN 0.75%. WHERE DITCH SLOPES EXCEED 5.0%, THE DEVELOPER MAY CHOOSE TO IMPLEMENT EROSION AND SEDIMENT CONTROL MEASURES IN AN ATTEMPT TO ACHIEVE CHANNEL STABILIZATION WHILE ACKNOWLEDGING THAT ADDITIONAL PAVED DITCH LININGS MAY BE REQUIRED PRIOR TO ACCEPTANCE OF THE ROADS INTO THE SECONDARY SYSTEM OF STATE HIGHWAYS. PAVED ROADSIDE DITCHES SHALL CONFORM TO VDOT-PG-2A STANDARDS AND SPECIFICATIONS.
20. VDOT APPROVAL OF CONSTRUCTION PLANS DOES NOT PRECLUDE THE RIGHT TO REQUIRE ADDITIONAL FACILITIES AS DEEMED NECESSARY FOR ACCEPTANCE OF THE ROADS INTO THE VDOT SECONDARY ROAD SYSTEM.
21. VDOT APPROVAL OF SITE PLANS WILL EXPIRE FIVE (5) YEARS FROM THE DATE OF THE INITIAL APPROVAL. VDOT APPROVAL OF SUBDIVISION PLANS WILL EXPIRE THREE (3) YEARS FORM THE DATE OF THE INITIAL APPROVAL.
22. VDOT SHALL HAVE PERFORMED THE REQUIRED FIELD INSPECTION (PROOF ROLL) PRIOR TO PLACEMENT OF THE AGGREGATE BASE COURSE(S). CONTACT VDOT, IN WRITING, FOR SUBGRADE INSPECTION 48 HOURS PRIOR TO SCHEDULING PLACEMENT OF AGGREGATE BASE COURSE(S). THE PROPER CONTACTS FOR VDOT CAN BE REACHED AT THIS NUMBER: (804)863-4000.
23. A PRIME COAT SEAL BETWEEN THE AGGREGATE BASE AND BITUMINOUS CONCRETE WILL BE REQUIRED AT A RATE OF 0.30 GALLONS PER SQUARE YARD (REC-250 PRIME COAT) PER VDOT STANDARDS AND SPECIFICATIONS.
24. THE SCHEDULING OF AGGREGATE BASE INSTALLATION AND SUBSEQUENT PAVING ACTIVITIES SHALL ACCOMMODATE FORECAST WEATHER CONDITIONS PER SECTION 315 OF THE ROAD AND BRIDGE SPECIFICATIONS.
25. VDOT SHALL HAVE APPROVED ALL BASE COURSE(S) FOR DEPTH, TEMPLATE AND PERFORMED THE REQUIRED FIELD INSPECTION (VISUAL, PROOF ROLL, COMPACTION OR ANY ADDITIONAL AS DETERMINED BY VDOT INSPECTOR) PRIOR TO PLACEMENT OF ANY SURFACE COURSE(S). CONTACT VDOT, IN WRITING, FOR INSPECTION OF THE BASE COURSE(S) 48 HOURS PRIOR TO APPLICATION OF THE SURFACE COURSE(S). THE PROPER CONTACTS FOR VDOT CAN BE REACHED AT THIS NUMBER: (804)863-4000.
26. AN ACTUAL COPY OF THE COMPLETE CBR REPORT IS TO BE SUBMITTED TO VDOT IN CONJUNCTION WITH FINAL PAVEMENT DESIGNS. ALL PAVEMENT DESIGN RECOMMENDATIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT EDITION OF THE PAVEMENT DESIGN GUIDE FOR SUBDIVISION AND SECONDARY ROADS IN VIRGINIA.
27. A LICENSED GEOTECHNICAL ENGINEER SHALL ASCERTAIN CAUSE AND CERTIFY RECOMMENDED METHOD OF REPAIR FOR ALL PAVEMENT STRUCTURAL FAILURES PRIOR TO STATE ACCEPTANCE.
28. ALL VEGETATION AND ORGANIC MATERIAL IS TO BE REMOVED AS NECESSARY FROM THE RIGHT OF WAY LIMITS PRIOR TO CONDITIONING OF THE SUBGRADE.
29. DRY GUTTER IS NOT ALLOWED IN VDOT RIGHT OF WAY.
30. THE DEVELOPER WILL BE RESPONSIBLE FOR THE DESIGN COSTS OF ANY TRAFFIC SIGNAL INSTALLATIONS AND/OR MODIFICATION UNDER AN ACCOUNT RECEIVABLE WITH VDOT.
31. APPROVAL OF A DETAILED CONSTRUCTION SEQUENCING/MAINTENANCE OF TRAFFIC NARRATIVE FOR THE WORK ZONE IS A PREREQUISITE FOR ISSUANCE OF A LAND USE PERMIT ALLOWING ACCESS TO AND CONSTRUCTION WITHIN VDOT MAINTAINED RIGHT-OF-WAY.
32. VDOT SHALL BE PROVIDED DOCUMENTATION BY A LICENSED GEOTECHNICAL ENGINEER, CERTIFYING THAT ALL IN-PLACE PAVEMENTS MEET OR EXCEED THE APPROVED PAVEMENT DESIGN THICKNESS PRIOR TO STATE ACCEPTANCE. THE CERTIFYING DOCUMENTATION SHALL CONFORM TO VDOT SPECIFICATIONS AND THE APPROVED PLANS.
33. THE ESTABLISHMENT OF A TEMPORARY VEGETATIVE COVER IS REQUIRED ON ALL DENUDED AREAS THAT ARE NOT TO BE FINE GRADED FOR PERIODS LONGER THAN 30 DAYS.
35. NO STRUCTURE SHALL BE CONSTRUCTED ON STATE MAINTAINED RIGHTS OF WAY UNLESS SAID STRUCTURES ARE SHOWN ON ROAD CONSTRUCTION PLANS APPROVED BY VDOT OR COVERED BY A VDOT LAND USE PERMIT.
36. THE DEVELOPER IS RESPONSIBLE FOR CONTACTING THE RICHMOND DISTRICT TRAFFIC ENGINEERING SECTION AT 804-524-6000 FOR GUARDRAIL LOCATION AND PLACEMENT REQUIREMENTS.
37. A PRECONSTRUCTION MEETING IS REQUIRED PRIOR TO UNDERTAKING ANY ROADWAY CONSTRUCTION ACTIVITIES. DEVELOPER OR DESIGNEE WILL CONTACT PETERSBURG RESIDENCY, IN WRITING, FIVE WORKING DAYS IN ADVANCE OF ANTICIPATED CONSTRUCTION START TO ESTABLISH DATE, TIME AND LOCATION FOR PRECONSTRUCTION MEETING. THE PRIMARY FUNCTION OF THE CONSTRUCTION MEETING WILL BE TO IDENTIFY GEOTECHNICAL PARAMETERS OF PROPOSED CONSTRUCTION ACTIVITIES.
38. EXISTING PAVEMENT MARKINGS WITHIN STATE RIGHT OF WAY ARE TO BE ERADICATED (ALL ERADICATION SCARS SHALL BE OVERLAID WITH SURFACE MIX OR SLURRY SEAL #4).
39. A GEOTECH REPORT SHALL VERIFY/APPROVE STONE DEPTHS IN ACCORDANCE WITH VDOT APPROVED PAVEMENT DESIGNS, PRIOR TO ASPHALT PLACEMENT.
40. ALL CONSTRUCTION DEBRIS, MATERIALS, DUMPSTERS, ETC. SHALL BE LOCATED OUTSIDE THE ROADWAY PRISM PRIOR TO STATE ACCEPTANCE OF THE ROADS AND SHALL BE MAINTAINED OUTSIDE THE ROADWAY PRISM WITHIN EXISTING STATE ROUTES.
41. ANY LANDSCAPING, IDENTIFICATION SIGNS, LIGHTING, ETC. THAT MAY BE INDICATED WITHIN THE CONSTRUCTION PLANS SHALL BE FOR INFORMATION PURPOSES ONLY. NON-STANDARD ITEMS MUST BE APPROVED BY SEPARATE SUBMITTAL THROUGH THE PERMITTING PROCESS
42. ALL VDOT SIGNS ARE TO REMAIN IN PLACE THROUGHOUT THE LIFE OF THE PROJECT. ANY SIGN REMOVED FOR CONSTRUCTION ACTIVITY SHALL BE RETURNED BY THE END OF THE WORK DAY. TEMPORARY SIGNAGE SHALL ALWAYS BE USED WHEN ORIGINAL VDOT SIGNS HAVE BEEN REMOVED FOR CONSTRUCTION ACTIVITY.
43. LAND DISTURBANCE WITHIN VDOT RIGHT-OF-WAY SHALL BE DRESSED UP, SEEDED AND MULCHED AT THE END OF EACH DAY AS WORK PROGRESSES.
44. ALL ENTRANCE CULVERT PIPES REMOVED OR DAMAGED DURING CONSTRUCTION MUST BE REPLACED BY 15" MIN. DIAMETER PIPES.
45. OPEN CUT GRAVEL ENTRANCES OR TRENCHES WITHIN THE VDOT ROADWAY PRISM MUST BE BACKFILLED AT 95% COMPACTION. TESTING OF TRENCHES MUST BE SUBMITTED TO VDOT. FURTHER, CONTRACTOR SHALL REPLACE ALL CULVERTS DAMAGED DURING CONSTRUCTION.
46. ALL MANHOLES AND VALVE TOPS WITHIN VDOT RIGHT-OF-WAY SHALL MATCH EXISTING GROUND ELEVATIONS.
47. APPROVAL OF THESE PLANS DOES NOT PRECLUDE THE RIGHT FOR VDOT TO ADD ADDITIONAL REQUIREMENTS TO THE PLANS.
48.

ROAD	ROUTE	CLASSIFICATION	STANDARD
OLD STAGE ROAD	SR 609	RURAL MAJOR COLLECTOR	GS-3
SEBERA ROAD	SR 710	RURAL LOCAL	GS-4

NOTE: ALL FITTINGS SHALL BE BRASS.



SEWAGE COMBINATION AIR VALVE

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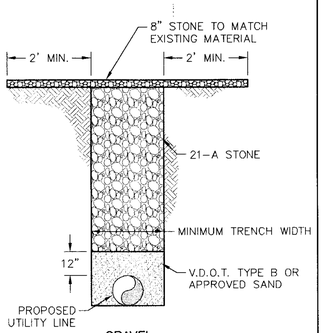
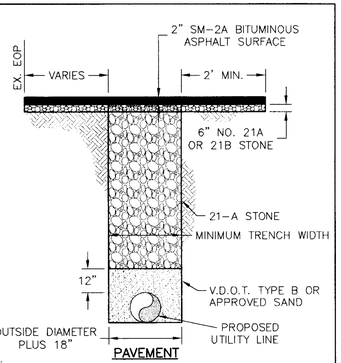


GRAVEL

NOTE: BACKFILL OF GRAVEL VEHICULAR ACCESS WAYS WITHIN VDOT RIGHT-OF-WAYS MUST BE COMPACTED TO 95% MAX DENSITY. TEST RESULTS SHALL BE PROVIDED TO THE VIRGINIA DEPT. OF TRANSPORTATION PETERSBURG RESIDENCY.

TYPICAL SECTION FOR REPAIR OF OPEN CUT ACROSS PRIVATE GRAVEL VEHICULAR ACCESS WAYS

NOT TO SCALE



PAVEMENT

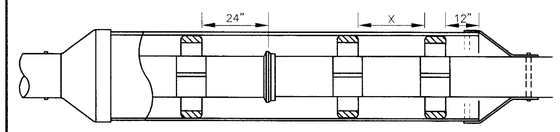
NOTES:
1. BACKFILL OF VEHICULAR ACCESS WAYS WITHIN VDOT RIGHT-OF-WAYS MUST BE COMPACTED TO 95% MAX DENSITY. TEST RESULTS SHALL BE PROVIDED TO THE VIRGINIA DEPT. OF TRANSPORTATION PETERSBURG RESIDENCY.
2. CUT/PATCH AREA SHALL EXTEND TO THE EDGE OF PAVEMENT

ASPHALT DRIVEWAY REPLACEMENT DETAIL

NOT TO SCALE

SEQUENCE OF CONSTRUCTION

1. OBTAIN ALL REQUIRED PERMITS BEFORE COMMENCE OF CONSTRUCTION.
2. INSTALL ALL REQUIRED EROSION AND SEDIMENT CONTROLS AS REQUIRED BY THE VDOT AND THE COUNTY.
3. PROVIDE REQUIRED TRAFFIC CONTROL MEASURES AS INDICATED ON PLANS.
4. PROVIDE INSPECTIONS REQUIRED BY VDOT (SEE ALSO VDOT NOTES).
5. INSTALL ALL PIPE PER PLANS AND SPECIFICATIONS.
6. AFTER PIPE INSTALLATION, REINSTATED TOPOGRAPHY BACK TO ORIGINAL GRADE.
7. INSTALL PERMANENT AND OR TEMPORARY SEEDING.
8. SEE ALSO VDOT NOTES FOR ADDITIONAL INFORMATION.

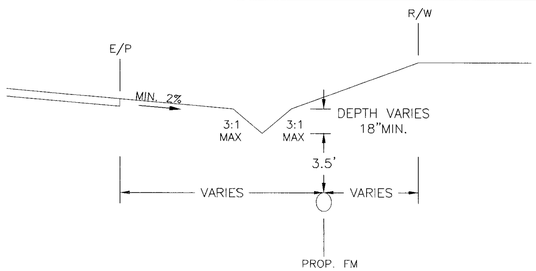


CASING DETAIL NOTES:

1. CARRIER PIPE SHALL BE CENTERED WITHIN CASING BY AN APPROVED STAINLESS STEEL CASING SPACER.
2. CASING PIPE SHALL BE SEALED BY USE OF WRAPAROUND END SEALS.
3. THREE CASING SPACERS SHALL BE ATTACHED TO EACH JOINT OF CARRIER PIPE WITH ONE AT THE CENTER AND ONE NOT MORE THAN 24" FROM EACH END.
4. ONE CASING SPACER SHALL BE LOCATED NOT MORE THAN 12" FROM EACH END OF CASING PIPE.
5. VALVES OR OTHER CONTROL/MAINTENANCE EQUIPMENT ATTACHED TO WATERLINE/ SEWER FORCE MAINS SHALL BE LOCATED A MINIMUM FOUR PIPE LENGTHS FROM THE END OF THE CASING, OR AS APPROVED BY THE COUNTY.
6. STEEL CASING SHALL HAVE A MINIMUM YIELD STRENGTH OF 35,000 PSI AND SUFFICIENT CORROSION PROTECTION.
7. HDPE CASING SHALL BE A MINIMUM OF DR 17.
8. REINFORCED CONCRETE CASING PIPE SHALL BE ASTM C-76, CLASS III STEEL CASING PIPE SHALL BE ASTM-139, GRADE B.
9. LINES TO BE ENCASED UNDER STATE ROADS/RAILROADS WILL COMPLY WITH COUNTY AND ANY APPLICABLE VDOT/AMERICAN RAILROAD ENDINEERING SPECIFICATIONS WHICHEVER IS MORE STRINGENT.
10. WHEN INSTALLING CARRIER PIPE, CONTRACTOR SHALL PUSH SO THAT PIPE JOINTS ARE ALWAYS BEING COMPRESSED IF REQUIRED.
11. ALL WATERLINES IN CASING SHALL BE A MINIMUM CLASS 51 DUCTILE IRON WITH M.J. BELLS AND AN APPROVED JOINT RESTRAINT DEVICE AT EACH M.J. CONNECTION. MINIMUM 3 JOINTS OUTSIDE EACH END OF CASING SHALL BE M.J. DUCTILE IRON WITH RESTRAINED JOINTS.

CASING DETAIL FOR WATER LINES & SEWER FORCE MAINS

DRWG. NO. CAS-4



1. THIS DETAIL SHALL BE USED AS A GUIDE FOR SHOULDER AND DITCH RESTORATION.
2. WHERE EXISTING CONDITIONS DO NOT ALLOW FOR RESTORATION PER THIS DETAIL, THE CONTRACTOR SHALL COORDINATE RESTORATION WITH VDOT AND THE ENGINEER.
3. MAINTAIN POSITIVE DRAINAGE ALONG THE DITCH PROFILE.
4. DITCH DEPTH AT THE ENTRANCES TO DRIVEWAYS TO BE DETERMINED BY ADDING CULVERT DIAMETER, PIPE THICKNESS AND MINIMUM COVER OVER CULVERT.

TYPICAL FORCE MAIN CROSS SECTION

NOT TO SCALE

FINAL

COMMONWEALTH OF VIRGINIA
FRED R. WILLIAMS
No. 032037
1/25/08
PROFESSIONAL ENGINEER

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YOUR VISION ACHIEVED THROUGH OURS.

Site Development | Residential | Infrastructure | Technology

DATE	REVISION DESCRIPTION

DATE 1/4/08
DRAWN BY M. ROBESON
DESIGNED BY T. ADAMS
CHECKED BY T. DILEGO
SCALE AS SHOWN

TIMMONS GROUP

NORTH ELEMENTARY SCHOOL PUMPING STATION & FORCE MAIN
PRINCE GEORGE COUNTY, VIRGINIA
VDOT NOTES & TYPICAL DETAILS

JOB NO. 24326
SHEET NO. U1.4

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