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VIRGINIA DEPARTMENT OF TRANSPORTATION NOTES

- QUALITY CONTROL**
STREETS TO BE GRADED, PAVED AND ALL STRUCTURAL COMPONENTS ERECTED IN ACCORDANCE WITH CURRENT VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE SPECIFICATIONS AND ROAD DESIGN STANDARDS AND FRANKLIN COUNTY DESIGN STANDARDS AND SPECIFICATIONS. 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 WILL PRODUCE TEST REPORTS FROM APPROVED INDEPENDENT LABORATORIES AT THE DEVELOPER'S EXPENSE.

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.
- UTILITIES**
ALL NECESSARY UTILITY LATERALS ALONG WITH PROVISIONS FOR CONDUITS (I.E. WATER, SEWER, STORM, GAS AND TELEPHONE) WILL BE CONSTRUCTED PRIOR TO PLACEMENT OF BASE MATERIAL.

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 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.
- PRIVATE ENTRANCES**
MODIFIED C&G GUTTER WILL BE PROVIDED AT ALL ENTRANCES TO PRIVATE LOTS WHERE STANDARD C&G CURB AND GUTTER IS APPROVED FOR USE.

DRIVEWAYS CONNECTING TO ROADS WITHOUT CURB & GUTTER SHALL CONFORM TO THE PAVEMENT, SHOULDER & SLOPE.

PERMITS WILL BE REQUIRED FOR ALL PRIVATE ENTRANCES CONSTRUCTED ON STREET RIGHTS OF WAY AFTER ACCEPTANCE INTO THE SECONDARY HIGHWAY SYSTEM.

ALL PRIVATE ENTRANCES WITHIN THE RIGHT-OF-WAY AREA SHOULD NOT EXCEED EIGHT PERCENT (8%) MAXIMUM GRADE.
- 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 INCLUDING DITCHES, CHANNELS, BACK OF CURBS AND OR PAVEMENT ARE TO BE BACKFILLED AND SEEDED AT THE EARLIEST POSSIBLE TIME AFTER FINAL GRADING.

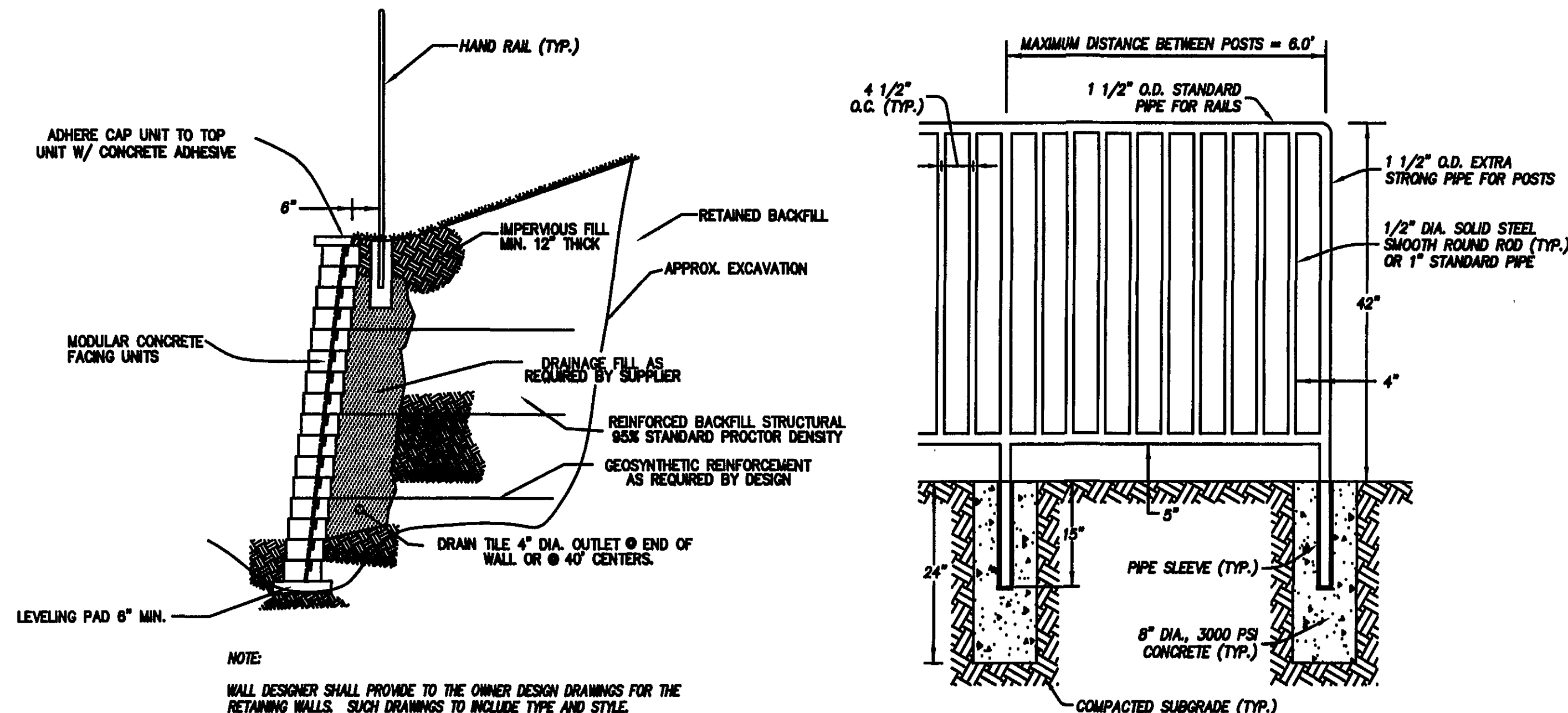
DRAINAGE EASEMENTS MUST BE DEFINED BY EXCAVATED DITCHES OR CHANNELS FOR THEIR FULL LENGTH TO WELL DEFINED EXISTING NATURAL WATERCOURSES.

THE ROAD WILL BE REMEDED DURING CONSTRUCTION FOR THE NEED OF PAVED DITCHES. 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.
- INTERSECTION PAVEMENT RADIUS**
MINIMUM PAVEMENT RADIUS OF 25 FEET IS REQUIRED AT ALL STREET INTERSECTION.
- CONNECTIONS TO STATE-MAINTAINED ROADS**
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.

WHERE GUARDRAILS ARE TO BE INSTALLED THE SHOULDER WIDTH SHALL BE INCREASED IN ACCORDANCE WITH VDOT ROAD AND BRIDGE STANDARDS.
- STORM DRAINAGE**
FIELD REVIEW WILL BE MADE DURING CONSTRUCTION TO DETERMINE THE NEED AND LIMITS OF PAVED DITCHES AND/OR DITCH STABILIZATION TREATMENTS, AND 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.

DITCH SLOPES ARE TO BE FOUR TO ONE (4:1) FOR SHOULDER WIDTHS OF SIX FEET (6') OR GREATER AND THREE TO ONE (3:1) FOR SHOULDER WIDTHS OF FOUR FEET (4') OR FIVE FEET (5'), UNLESS OTHERWISE SPECIFIED IN THE PLANS.
- ENTRANCE PERMIT**
CONTRACTOR SHALL OBTAIN ENTRANCE PERMIT TO THE EXISTING VIRGINIA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY FROM RESIDENT ENGINEER PRIOR TO ROAD CONSTRUCTION.
- INSPECTION**
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 FREE OF DEFECTS FOR ONE YEAR AFTER ACCEPTANCE BY THE DEPARTMENT OF TRANSPORTATION.
- STREET MAINTENANCE**
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.

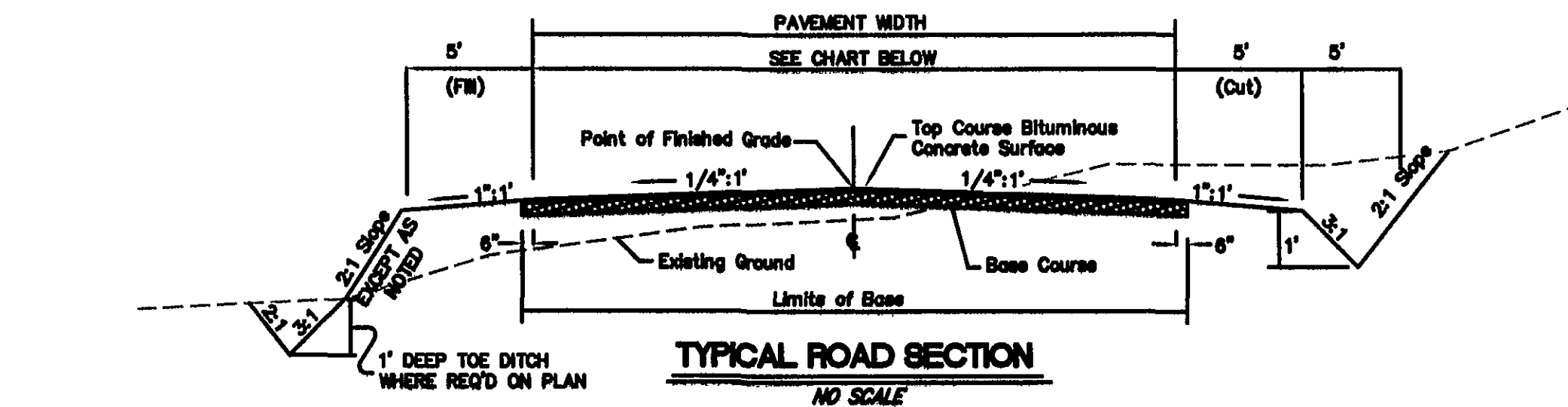


NOTE:

WALL DESIGNER SHALL PROVIDE TO THE OWNER DESIGN DRAWINGS FOR THE RETAINING WALLS. SUCH DRAWINGS TO INCLUDE TYPE AND STYLE. DRAWINGS SHALL BE SIGNED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF VIRGINIA. WALL DETAILS AND PROFILES SHOWN IN THESE PLANS ARE FOR SCHEMATIC DETAIL ONLY.

RETAINING WALL WITH HAND RAIL

NO SCALE

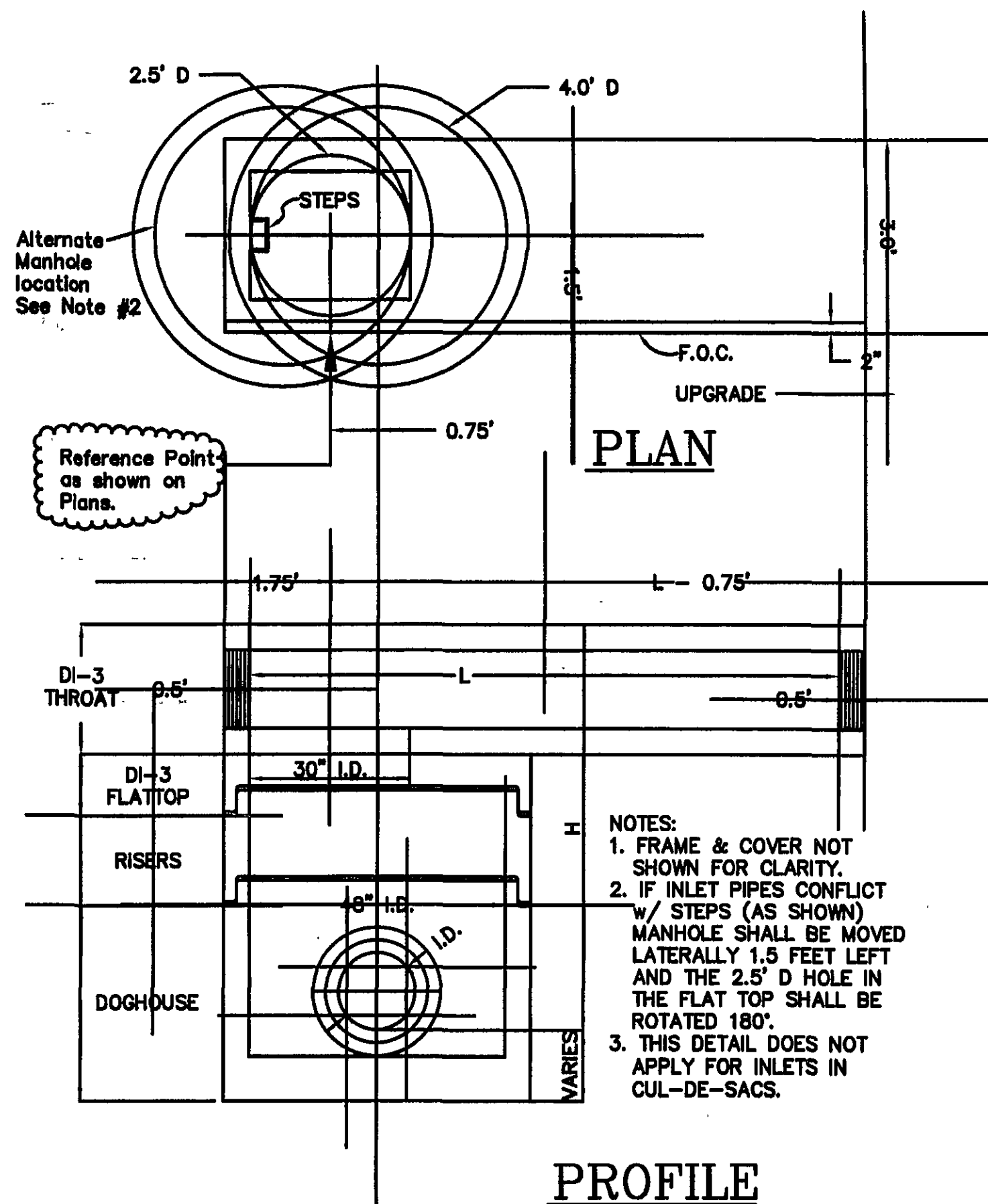


NOTES:

- THE SIZE 21B AGGREGATE SHALL BE PRIMED WITH APPROXIMATELY 0.35 GAL/S.Y. OF RC-250 ASPHALT AND COVERED WITH 16 TO 18 LBS/S.Y. OF SIZE 8-P AGGREGATE BEFORE PLACING OF THE SM-8.5A. THIS IS NOT REQUIRED WHEN BM-25 ASPHALT LAYER IS PLACED BETWEEN 21A AND SM-8.5A LAYERS.
- A LAYER OF APPROXIMATELY 2\"/>

PAVEMENT SPECIFICATIONS				
STREET NAME	FROM STATION TO STATION	PAVEMENT WIDTH	PAVEMENT SPECIFICATION	VEHICLE TRIPS PER DAY
FARM DRIVE	10+10 TO 13+72.58	24'	2\"/>	630
FARM DRIVE	13+72.58 TO 14+54.38	TRANSITION FROM 24' TO 20'	2\"/>	630
FARM DRIVE	14+54.38 TO 18+33.57	20'	2\"/>	540
FARM DRIVE	18+33.57 TO 49+03.35	20'	2\"/>	LESS THAN 400
SMOKEHOUSE ROAD	50+10 TO CUL DE SAC	18'	2\"/>	90
TOBACCO ROW CIRCLE	60+12 TO CUL DE SAC	18'	2\"/>	90
HAMMOCK POINTE DRIVE	70+10 TO 85+35.38	20'	2\"/>	170

- UNDERGROUND UTILITIES**
CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES SHOWN ON THE PLANS IN AREAS OF CONSTRUCTION PRIOR TO STARTING WORK BY CONTACTING MISS UTILITY. CONTACT SITE ENGINEER IMMEDIATELY IF LOCATION OR ELEVATION IS DIFFERENT FROM THAT SHOWN ON THE PLANS. 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 1-800-552-7001.
- REVISIONS OF SPECIFICATIONS AND STANDARDS**
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.



PROFILE

LOCATION DETAIL FOR DI-3B (PRECAST)

NO SCALE

SITE AND ZONING TABULATIONS

CURRENT ZONING: R1 - RESIDENTIAL SUBURBAN DISTRICT
PROPOSED USE: SINGLE FAMILY DETACHED DWELLINGS
SITE ACREAGE: 71.454 ACRES
PROPOSED NUMBER OF LOTS: 48
MINIMUM LOT AREA REQUIRED: 15,000 S.F. FOR LOTS SERVED BY PUBLIC WATER OR SEWER
MINIMUM FRONTAGE REQUIRED: 100' FOR LOTS SERVED BY PUBLIC WATER OR SEWER, LOTS ON A CUL DE SAC SHALL NOT BE LESS THAN 30 FEET.

MINIMUM REQUIRED SETBACKS:
FRONT: 55' FROM CENTER OF RIGHT OF WAY, OR 30' FROM EDGE OF RIGHT OF WAY WHICHEVER IS GREATER
REAR: 30'
SIDE YARD: 10 PERCENT OF THE ROAD FRONTAGE - MINIMUM = 10', MAXIMUM = 12'
MAXIMUM HEIGHT ALLOWED: 40'

CURRENT ZONING: RPD - RESIDENTIAL PLANNED DISTRICT
PROPOSED USE: SINGLE FAMILY DETACHED DWELLINGS
SITE ACREAGE: 25.250 ACRES (18.376 ACRES ABOVE THE 800' CONTOUR)
PROPOSED NUMBER OF UNITS: 17
MAXIMUM DENSITY: 3 DWELLING UNITS PER ACRE
PROPOSED DENSITY: 0.92 DWELLING UNITS PER ACRE
MINIMUM LOT AREA REQUIRED: 15,000 S.F. FOR LOTS SERVED BY PUBLIC WATER OR SEWER
MINIMUM FRONTAGE REQUIRED: 100' FOR LOTS SERVED BY PUBLIC WATER OR SEWER, LOTS ON A CUL DE SAC SHALL NOT BE LESS THAN 30 FEET.

MINIMUM REQUIRED SETBACKS:
FRONT: 55' FROM CENTER OF RIGHT OF WAY, OR 30' FROM EDGE OF RIGHT OF WAY WHICHEVER IS GREATER
REAR: 20 FEET (CONTIGUOUS WITH SMITH MOUNTAIN LAKE)
SIDE YARD: 10 PERCENT OF THE ROAD FRONTAGE - MINIMUM = 10', MAXIMUM = 12'
MAXIMUM HEIGHT ALLOWED: 40'
OPEN SPACE REQUIRED: 50 PERCENT OF TOTAL GROSS AREA OF THE RPD
DEVELOPED OPEN SPACE: MINIMUM OF 5 PERCENT OF TOTAL GROSS AREA OF THE RPD

GENERAL NOTES

- THE PROPERTY SHOWN ON THESE PLANS IS LOCATED AT FRANKLIN COUNTY TAX ASSESSMENT MAP 49-15 AND 49-24.
- OWNER/DEVELOPER: RKL HOLDINGS, LLC (ATTN: RONALD WILLARD, II) P. O. BOX 540 WRTZ, VA 24184 (540) 721-5288
- THE BOUNDARY IS THE DIRECT RESULT OF A FIELD SURVEY BY LUMSDEN ASSOCIATES, P.C. DATED 2005.
- TOPOGRAPHY DATA BASED ON AERIAL MAPPING BY MCKENZIE SNYDER, INC. AND UPDATED WITH A FIELD SURVEY BY LUMSDEN ASSOCIATES, P.C. IN 2005.
- A TITLE REPORT WAS NOT FURNISHED FOR THIS PROPERTY.
- THE DEVELOPMENT SHOWN ON THESE PLANS SHALL BE SERVED BY PUBLIC WATER AND PRIVATE SEPTIC SYSTEM.
- THE PROPERTY ON THESE PLANS SHALL BE ACCESSED BY PUBLIC AND PRIVATE ROADS AS SHOWN ON THE PLAN.

CONSTRUCTION NOTES

- ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT COUNTY OF FRANKLIN STANDARDS AND SPECIFICATIONS AND THE CURRENT EDITION OF VDOT'S ROAD AND BRIDGE STANDARDS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE OWNER AND THE ENGINEER OF ANY CHANGES OR CONDITIONS ATTACHED TO PERMITS OBTAINED FROM ANY AUTHORITY ISSUING PERMITS.
- NO SUBSOL INVESTIGATIONS HAVE BEEN FURNISHED TO THE DESIGNING ENGINEER. THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY EXISTING CONDITIONS PRIOR TO STARTING CONSTRUCTION.
- THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO STARTING CONSTRUCTION.
- SEE VDOT ROAD AND BRIDGE STANDARDS FOR CONCRETE CURB AND STORM DRAINAGE DETAILS.
- THE CONTRACTOR AND OR OWNER SHALL PROVIDE A STORAGE CONTAINER FOR TEMPORARY STORAGE AND DISPOSAL OF LAND CLEARANCE DEBRIS AND BUILDING MATERIALS. ON-SITE BURIAL OF MATERIAL SHALL NOT BE PERMITTED.

GRADING NOTES

- AREAS TO BE GRADED SHALL BE CLEARED OF ALL VEGETATION, STRUCTURES, AND OTHER PHYSICAL FEATURES IN PREPARATION OF GRADING.
- TOPSOIL SHALL BE REMOVED FROM THE CLEARED AREA AND STOCKPILED FOR FUTURE USE.
- FILL MATERIAL SHALL BE FREE FROM ORGANIC MATTER AND ROCKS LARGER THAN 6 INCHES IN DIAMETER.
- FILL MATERIAL SHALL BE PLACED AND COMPACTED IN EIGHT (8) INCH LOOSE LIFTS AND COMPACTED TO AT LEAST NINETY-FIVE (95) PERCENT OF THE MATERIAL'S MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698, STANDARD PROCTOR. MAINTAIN MOISTURE CONTENT OF FILL MATERIAL WITHIN THREE (3) PERCENT OF OPTIMUM TO ATTAIN REQUIRED COMPACTION DENSITY.
- NO SUBSURFACE SOILS INFORMATION HAS BEEN FURNISHED TO THE DESIGNING ENGINEER (LUMSDEN ASSOCIATES, P.C.). A QUALIFIED GEOTECHNICAL ENGINEER, LICENSED IN THE STATE OF VIRGINIA, SHALL BE CONSULTED CONCERNING SOIL STABILITY, SLOPE STABILIZATION, SOIL COMPACTION, TESTING, AND OTHER SOIL CHARACTERISTICS. LUMSDEN ASSOCIATES ASSUMES NO RESPONSIBILITY OR LIABILITY RELATING TO FAILURES RESULTING FROM SAME.

LOW IMPACT DEVELOPMENT METHODS

AS A PART OF THE REZONING OF THE PROPERTY, THE DEVELOPER AGREED TO LOOK AT POSSIBLE WAYS TO INCORPORATE LOW IMPACT DEVELOPMENT METHODS INTO THIS DEVELOPMENT. SOME OF THESE METHODS ARE OUTLINED BELOW:

- IN AN EFFORT TO MINIMIZE PAVEMENT WIDTH, A ROAD AND DITCH CROSS SECTION WAS UTILIZED WHICH ALLOWS FOR NARROWER IMPERVIOUS AREAS THAN WITH THE STANDARD CURB AND GUTTER SECTION OF ROADWAY. BY REDUCING THE AMOUNT PAVEMENT WIDTH, THE AMOUNT OF RUNOFF IS ALSO REDUCED.
- THE ROAD NETWORK WAS LAID OUT SUCH THAT WHEREVER POSSIBLE, THE ROADS WERE RUN ALONG THE RIDGES OF THE PROPERTY. THIS ALLOWS FOR MUCH OF THE ROADS TO BE CREATED WITHOUT THE NEED FOR ROADSIDE DITCHES. THIS ALLOWS THE RUNOFF TO MAINTAIN A SHEET FLOW CONDITION VERSUS CONCENTRATING WITHIN A DITCH SECTION. THE SHEET FLOW RUNOFF THEN FLOWS THROUGH FUTURE YARDS AND EXISTING FORESTED AREAS TO REMAIN.
- WHERE THE GRADING OF THE ROAD NETWORK NECESSITATED THE CREATION OF ROADSIDE DITCHES, AN EMPHASIS WAS PLACED ON USING GRASS LINED OR REINFORCED GRASS LINED DITCHES WHEREVER POSSIBLE. THE GRASS LINED CHANNELS INCREASE RUNOFF TIME AND PROMOTE THE SETTLING OUT OF SEDIMENTS AND OTHER POLLUTANTS CREATED BY THE DEVELOPMENT.
- THE DEVELOPMENT WAS CREATED AND LAID OUT TO AVOID IMPACTS TO STREAMS AND TO MINIMIZE THE AMOUNTS OF GRADING AND REMOVAL OF FORESTED AREAS ON SITE AS MUCH AS POSSIBLE.
- STRUCTURAL LOW IMPACT MEASURES INCLUDE THREE EXTENDED DETENTION BASINS, ONE BIO-RETENTION AREA AND THREE GRASS SWALES.

LUMSDEN ASSOCIATES, P.C.
ENGINEERS-SURVEYORS-PLANNERS
ROANOKE, VIRGINIA

PHONE: (540) 724-4411
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664 BRAMBLETON AVENUE
ROANOKE, VIRGINIA 24018

10/2/07

THOMAS C. DALE
No. 033002
PROFESSIONAL ENGINEER

"THE FARM"
PREPARED FOR
RKL HOLDINGS, LLC
GILLS CREEK MAGISTERIAL DISTRICT
FRANKLIN COUNTY, VIRGINIA

REVISIONS

NO.	DATE	DESCRIPTION
1		
2		
3		
4		
5		

DATE: OCTOBER 02, 2007
SCALE: NONE
COMMISSION NO: 2005-213
SHEET 3 OF 22