

VIRGINIA DEPARTMENT OF TRANSPORTATION NOTES:
(APPLIES TO WORK WITHIN VDOT RIGHT-OF-WAY ONLY)

- 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 ROANOKE 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 PAVEMENT DESIGNS SHOWN ARE BASED ON A SUBGRADE CBR VALUE OF 10 OR GREATER. THE SUBGRADE SOIL IS TO BE TESTED BY AN INDEPENDENT LABORATORY AND THE RESULTS SUBMITTED TO THE VIRGINIA DEPARTMENT OF TRANSPORTATION PRIOR TO BASE CONSTRUCTION. SHOULD THE SUBGRADE CBR VALUES BE LESS THAN 10, THEN ADDITIONAL BASE MATERIAL WILL BE REQUIRED IN ACCORDANCE WITH DEPARTMENTAL SPECIFICATIONS.

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 CG-9D GUTTER WILL BE PROVIDED AT ALL ENTRANCES TO PRIVATE LOTS WHERE STANDARD CG-6 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.

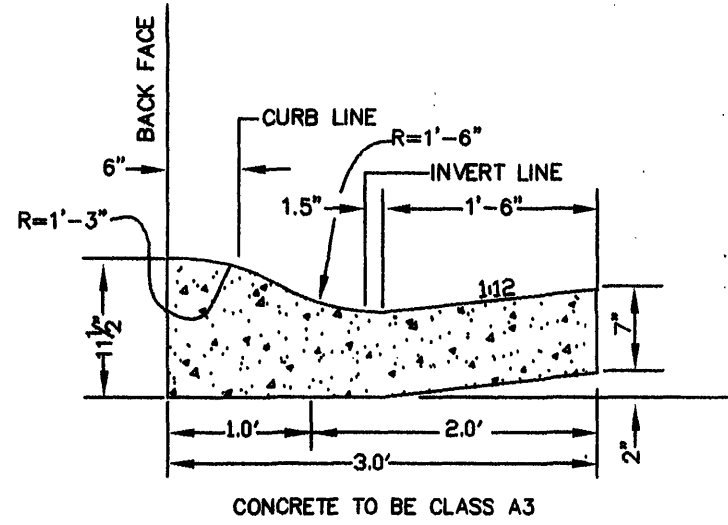
DRAINAGE EASEMENTS MUST BE DEFINED BY EXCAVATED DITCHES OR CHANNELS FOR THEIR FULL LENGTH TO WELL DEFINED EXISTING NATURAL WATERCOURSES.

THE ROAD WILL BE REVIEWED 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, PAYE 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.
- GUARDRAILS**
STANDARD GUARDRAIL WITH SAFETY END SECTIONS MAY BE REQUIRED ON FILLS AS DEEMED NECESSARY BY THE RESIDENT ENGINEER. AFTER COMPLETION OF ROUGH GRADING OPERATIONS, THE OFFICE OF THE RESIDENT ENGINEER, SHALL BE NOTIFIED SO THAT A FIELD REVIEW MAY BE MADE OF THE PROPOSED LOCATIONS.

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.
- 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.

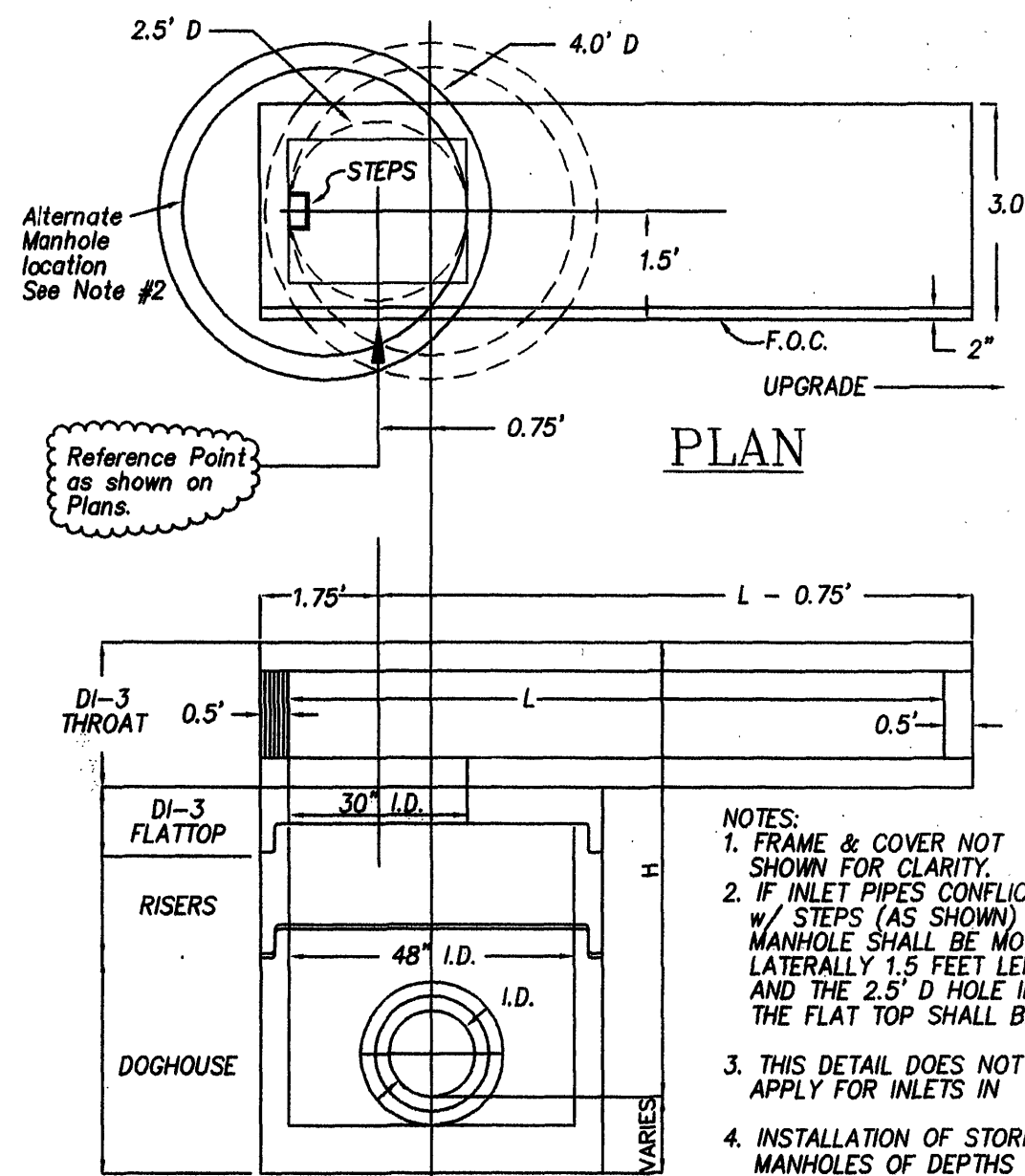


ROLL TOP CURB

NO SCALE

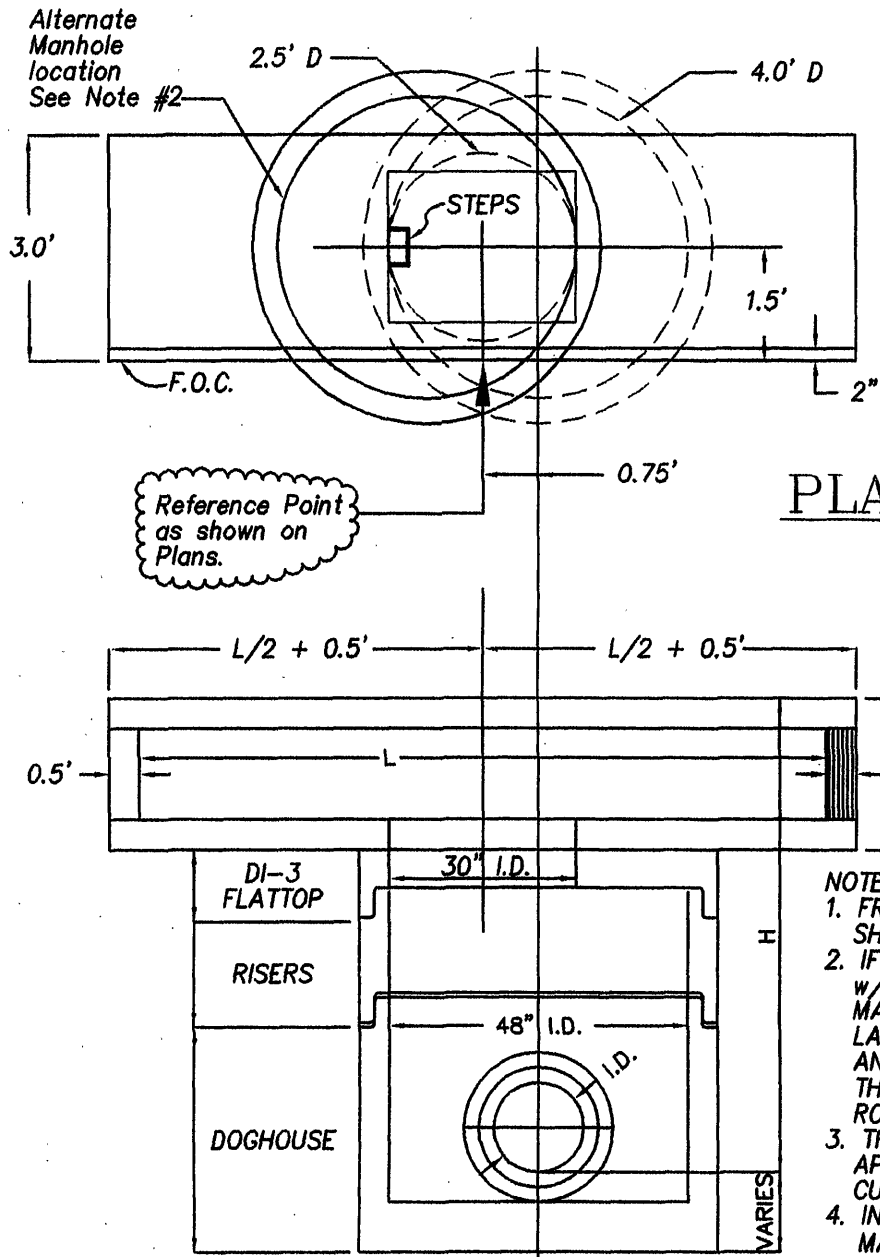
CURB SHAPING NOTES:

- PROVIDE 5' MINIMUM SMOOTH, TAPERED, AND CONTINUOUS TIE-INS TO ALL STRUCTURES PLACED ALONG ROLL TOP CURB INCLUDING DRAINAGE STRUCTURES AND HC ACCESS RAMPS.
- AT CURB INLETS WARP GUTTER PAN TO MATCH CURB INLET OPENINGS.
- ALL CURB INLETS SHALL HAVE VDOT STD. TYPE "A" NOSE.
- FOR CURB TIE-IN TO DI SEE "CURB TRANSITION DETAIL", THIS SHEET.



LOCATION DETAIL FOR DI-3B (PRECAST)

NO SCALE



LOCATION DETAIL FOR DI-3A AND DI-3C (PRECAST)

NO SCALE

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, SHOULD 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.
- COMPACTION TEST RESULTS FOR STORMWATER MANAGEMENT FACILITY SHALL BE SUBMITTED TO ROANOKE COUNTY FOR REVIEW AS PART OF THE AS-BUILT PLANS.

WESTERN VIRGINIA WATER AUTHORITY GENERAL NOTES

- ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO THE CONSTRUCTION STANDARDS AND SPECIFICATIONS OF THE WESTERN VIRGINIA WATER AUTHORITY, ROANOKE COUNTY AND/OR THE VIRGINIA DEPARTMENT OF TRANSPORTATION.
- A PRE-CONSTRUCTION CONFERENCE SHOULD BE SCHEDULED WITH ROANOKE COUNTY ENGINEERING DIVISION, AND THE WESTERN VIRGINIA WATER AUTHORITY, TO BE HELD AT LEAST ONE (1) DAY PRIOR TO ANY CONSTRUCTION.
- ALL WORK SHALL BE SUBJECT TO INSPECTION BY THE WESTERN VIRGINIA WATER AUTHORITY, ROANOKE COUNTY AND/OR THE VIRGINIA DEPARTMENT OF TRANSPORTATION INSPECTORS.
- THE DEVELOPER OR CONTRACTOR SHALL SUPPLY THE COUNTY, AND THE WESTERN VIRGINIA WATER AUTHORITY WITH CORRECT AS-BUILT PLANS BEFORE TENTATIVE ACCEPTANCE.
- FIELD CORRECTIONS SHALL BE APPROVED BY THE ROANOKE COUNTY ENGINEERING DIVISION AND THE WESTERN VIRGINIA WATER AUTHORITY PRIOR TO SUCH CONSTRUCTION.
- LOTF 1, LOT# 2, AND WATER SERVICE TAPS BELOW ELEVATION=1305.20 FT. REQUIRE PRESSURE REDUCING VALVES.

SITE AND ZONING TABULATIONS

CURRENT ZONING: R-1 (CLUSTER DEVELOPMENT OPTION)
PROPOSED USE: RESIDENTIAL / SINGLE FAMILY DETACHED
SITE ACREAGE: 16.08 ACRES
PROPOSED NUMBER OF LOTS: 30
ALLOWABLE UNIT DENSITY: FIVE AND ONE-HALF (5.5) DWELLING UNITS PER ACRE.
UNIT DENSITY PROVIDED: 30 DWELLING UNITS/16.08 ACRES = 1.9 DWELLING UNITS PER ACRE.
MINIMUM FRONTAGE REQUIRED: VARIES (PER PRIVATE STREET PROVISIONS OF CLUSTER ORDINANCE SECTION 30-82-13.1(F.))
THERE SHALL BE NO MINIMUM AREA OR SETBACK REQUIREMENTS, HOWEVER, THE NORMAL FRONT, REAR, AND SIDE YARD SETBACKS REQUIREMENTS MUST BE MAINTAINED ADJACENT TO ANY LOT OR EXISTING PUBLIC STREET RIGHT-OF-WAY NOT WITHIN THE PROPOSED CLUSTER DEVELOPMENT.
PRIMARY AND SECONDARY CONSERVATION AREAS TO EQUAL AT LEAST 50% OF TOTAL TRACT ACREAGE
8.197 ACRES = 50.9% TOTAL TRACT ACREAGE
MINIMUM REQUIRED SETBACKS:
OPEN SPACE REQUIREMENTS:
OPEN SPACE PROVIDED:
MAXIMUM BUILDING HEIGHT: 45' (PRINCIPAL STRUCTURES)

ADDITIONAL SITE AND ZONING TABULATION NOTES:

- THIS SITE CONTAINS NO KNOWN HISTORIC STRUCTURES OR SITES.
- THIS SITE CONTAINS NO DESIGNATED VIEW SHEDS OR RIDGE TOP PRESERVATION AREAS.
- ALL PORTIONS OF THE SITE ARE BELOW ELEVATION 1500.
- THE SITE CONTAINS NO KNOWN SPECIES LISTED AS ENDANGERED, THREATENED OR OF SPECIAL CONCERN.
- THE SITE CONTAINS NO PRODUCTIVE AGRICULTURAL AND/OR FOREST LANDS.
- 0.700 AC. INCLUDED IN CONSERVATION AREA MAY BE PART OF STORMWATER MANAGEMENT AREA.
- TRASH COLLECTION FOR THIS DEVELOPMENT SHALL BE PRIVATE.

GENERAL NOTES

- THE PROPERTY SHOWN ON THESE PLANS IS LOCATED AT ROANOKE COUNTY TAX ASSESSMENT MAP 086-01-01-04-00-00
- OWNER/DEVELOPER: BENCHMARK BUILDERS, INC.
5754 SCENIC HILLS DRIVE
ROANOKE, VA 24018
- THE BOUNDARY IS THE DIRECT RESULT OF A FIELD SURVEY BY LUMSDEN ASSOCIATES, P.C. IN APRIL 2003.
- TOPOGRAPHY DATA BASED ON AERIAL SURVEY DATA.
- THE ENTRANCE TO THIS DEVELOPMENT SHALL BE ACCESSED BY PUBLIC ROADS. THE INTERIOR PROPERTY ON THESE PLANS SHALL BE SERVED BY PRIVATE ROADS WITH ONE ENTRANCE/EXIT PROVIDED AT THE INTERSECTION OF ROAD A AND TWO FORD ROAD.
- A TITLE REPORT WAS FURNISHED FOR THIS PROPERTY.
- THE DEVELOPMENT SHOWN ON THESE PLANS SHALL BE SERVED BY COUNTY WATER AND SEWER.
- ALL EXTERIOR LIGHTS SHALL BE DESIGNED, ARRANGED, AND LOCATED SO AS NOT TO DIRECT GLARE ON ADJACENT RESIDENTIAL PROPERTIES OR RIGHT OF WAYS. THE MAXIMUM LIGHTING DENSITY AT ADJOINING PROPERTIES OR RIGHT OF WAYS SHALL NOT EXCEED 0.5 FOOT CANDLES.
- ANY PRIVATE SIGNS SHALL BE SET A MINIMUM OF 15 FEET OFF THE RIGHT OF WAY. A SEPARATE SIGN PERMIT WILL BE REQUIRED FOR ANY EXTERIOR SIGNAGE. FOR UNITS REQUIRING INDIVIDUAL STORMWATER MANAGEMENT FACILITIES SHOP DRAWINGS OF EACH UNIT SHALL BE SUBMITTED TO ROANOKE COUNTY FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
- NO CONSTRUCTION CHANGES OR FIELD CHANGES SHALL BE MADE WITHOUT THE APPROVAL OF THE CONSULTING ENGINEER AND ROANOKE COUNTY.
- ANY NEW ALIGNMENT, CHANGE IN GRADES, ALTERNATE PIPE SIZES OR MANHOLES, AND CHANGES TO THE EROSION AND SEDIMENT CONTROL MEASURES WILL REQUIRE SUBMISSION OF A NEW SET OF PLANS STAMPED BY THE CONSULTING ENGINEER. PLAN SHEETS MAY BE 8 1/2" X 11" IF ALL INFORMATION IS LEGIBLE.
- ALL CONSTRUCTION, INSTALLATION, PUBLIC AND/OR PRIVATE, SHALL BE IN ACCORDANCE WITH ROANOKE COUNTY, THE WESTERN VIRGINIA WATER AUTHORITY, AND VDOT STANDARDS AND SPECIFICATIONS.

CONSTRUCTION NOTES

- ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT COUNTY OF ROANOKE, VDOT, AND WESTERN VIRGINIA WATER AUTHORITY STANDARDS AND SPECIFICATIONS.
- 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 SUBSOIL 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.
- ALL WATER CONNECTIONS TO EXISTING LINES SHALL BE COORDINATED WITH AND PERFORMED BY THE WESTERN VIRGINIA WATER AUTHORITY.
- ALL SANITARY SEWER CONNECTIONS TO EXISTING LINES SHALL BE PERFORMED BY THE CONTRACTOR WITH A WESTERN VIRGINIA WATER AUTHORITY INSPECTOR ON-SITE.
- 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.
- ALL CURB INLETS SHALL HAVE VDOT STD. TYPE "A" NOSE.

DECORATIVE POND AREA NOTES

- THE "DECORATIVE POND AREA" AND "STEP POOL AREA" SHALL BE DESIGNED TO CONTRIBUTE TO MITIGATION OF STORMWATER RUNOFF AS PART OF THE OVERALL STORMWATER MANAGEMENT PLAN FOR THIS DEVELOPMENT.
- PLANS, SPECIFICATIONS, AND DETAILS RELATING TO THE "DECORATIVE POND AREA", "STEP POOL AREA", AND "PEDESTRIAN/UTILITY BRIDGE" TO BE SUBMITTED BY OTHERS.
- PLANS, SPECIFICATIONS, AND DETAILS RELATING TO THE "DECORATIVE POND AREA", "STEP POOL AREA", AND "PEDESTRIAN/UTILITY BRIDGE" SHALL BE SUBMITTED TO ROANOKE COUNTY FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
- THE OWNER/DEVELOPER IS RESPONSIBLE FOR COORDINATION OF DESIGN AND CONSTRUCTION OF THE "DECORATIVE POND AREA", "STEP POOL AREA", AND "PEDESTRIAN/UTILITY BRIDGE" WITH THE VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY, THE ARMY CORPS OF ENGINEERS, ROANOKE COUNTY, VDOT, AND LUMSDEN ASSOCIATES, P.C.

PIPE I.D.	H	L	A	B
12"	2.00'	4.00'	1.83'	1.83'
15"	2.25'	5.00'	1.83'	1.83'
18"	2.50'	6.00'	1.83'	1.83'
24"	3.17'	8.00'	1.83'	1.83'
30"	3.83'	10.00'	1.83'	1.83'
36"	4.33'	12.00'	1.83'	1.83'
42"	4.79'	14.00'	3.00'	2.83'
48"	5.33'	16.00'	3.00'	2.83'

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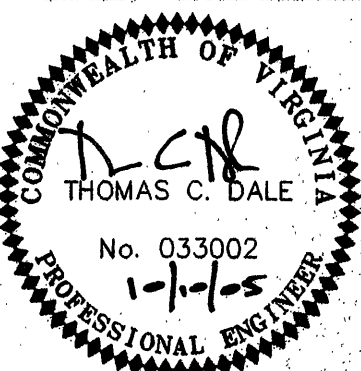
- CONCRETE 4,000 P.S.I.
- REINFORCING #4 @ 6" C.C. E.W. DOUBLE ROW THROUGHOUT.
- FOUR (4) BOLTS AND INSERTS ARE REQUIRED FOR 42" AND 48" EW-1.
- PLACE CLASS 1 RIP RAP ALONG THE PERIMETER OF THE STRUCTURE TO PREVENT SCOUR AND EROSION.

EW-1 MODIFIED WITH ENERGY DISSIPATER

NO SCALE

WWW.ID#BYOKEF

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



NOTES AND DETAILS

"THE PRESERVE AT
TWO FORD ROAD"

PREPARED FOR
BENCHMARK BUILDERS, INC.
WINDSOR HILLS MAGISTERIAL DISTRICT
ROANOKE COUNTY, VIRGINIA

REVISIONS	NO.	DATE	DESCRIPTION
	1		
	2		
	3		
	4		
	5		
DATE: October 10, 2005			
SCALE: NO SCALE			
COMMISSION NO. 02-244			
SHEET 4 OF 13			