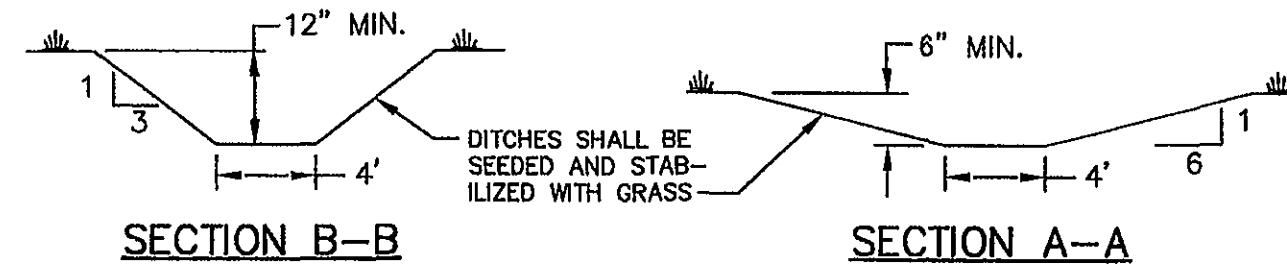
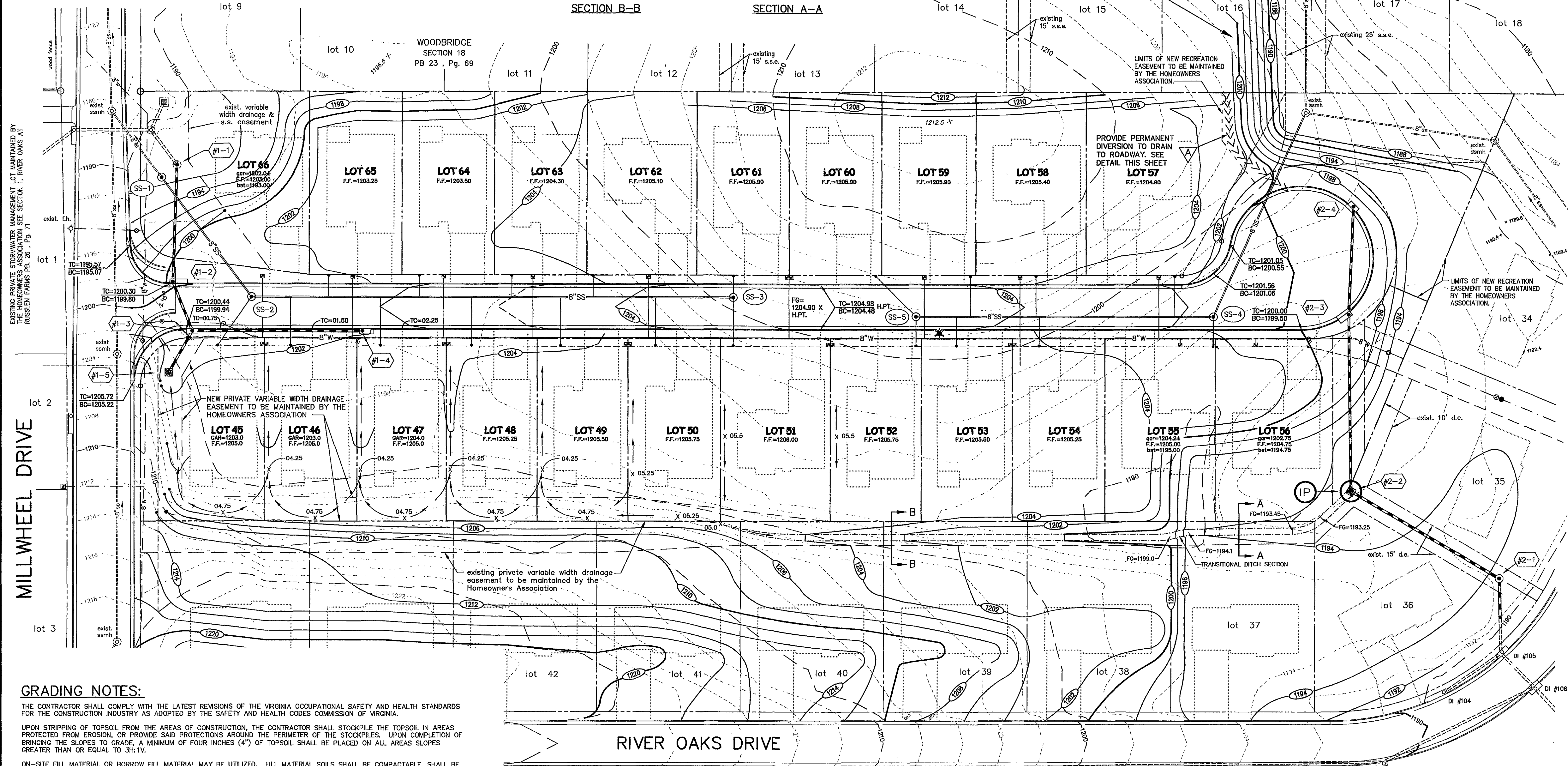


BENCHMARK:
RIM OF EXISTING SANITARY SEWER MANHOLE
LOCATED IN INTERSECTION OF MILLWHEEL DRIVE
AND STONEMILL DRIVE.
ELEV. = 1175.22



LOTS 15-18, OF WOODBRIDGE, SEC. 18 ARE CURRENTLY OWNED
BY GRAHAM- THOMAS, LLC, A SUBSIDIARY COMPANY OF
RUSSELL FARMS DEVELOPMENT AND AS SUCH PROVIDES RIGHTS
TO GRADE ACROSS THE INDICATED LOTS.

WOODBRIDGE
SECTION 18
PB 23 , Pg. 69



GRADING NOTES:

THE CONTRACTOR SHALL COMPLY WITH THE LATEST REVISIONS OF THE VIRGINIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS FOR THE CONSTRUCTION INDUSTRY AS ADOPTED BY THE SAFETY AND HEALTH CODES COMMISSION OF VIRGINIA.

UPON STRIPPING OF TOPSOIL FROM THE AREAS OF CONSTRUCTION, THE CONTRACTOR SHALL STOCKPILE THE TOPSOIL IN AREAS PROTECTED FROM EROSION, OR PROVIDE SAID PROTECTIONS AROUND THE PERIMETER OF THE STOCKPILES. UPON COMPLETION OF BRINGING THE SLOPES TO GRADE, A MINIMUM OF FOUR INCHES (4") OF TOPSOIL SHALL BE PLACED ON ALL AREAS SLOPES GREATER THAN OR EQUAL TO 3H:1V.

ON-SITE FILL MATERIAL OR BORROW FILL MATERIAL MAY BE UTILIZED. FILL MATERIAL SOILS SHALL BE COMPACTABLE, SHALL BE WITHIN AN ACCEPTABLE RANGE OF MOISTURE CONTENT, SHALL NOT BE HIGHLY SUSCEPTIBLE TO VOLUME CHANGE (SHRINKAGE OR SWELL) OR SETTLEMENT, SHALL BE FREE OF ROOTS, ORGANICS AND STONES GREATER THAN 4" IN DIAMETER.

THE APPROVED FILL SHALL BE PLACED ON EIGHT INCH (8") LOOSE LIFTS. EACH LIFT SHALL BE SPREAD IN UNIFORM LAYERS. FILL SOIL SHALL BE UTILIZED ONLY WITHIN A MOISTURE RANGE OF +/- 5% OF THE OPTIMUM MOISTURE CONTENT. PROOFROLLING AND COMPACTION SHALL BE PERFORMED WITH APPROVED EQUIPMENT. COMPACTION OF THE LAYERS SHALL BE CONTINUOUS AND UNIFORM TO 95% PROCTOR.

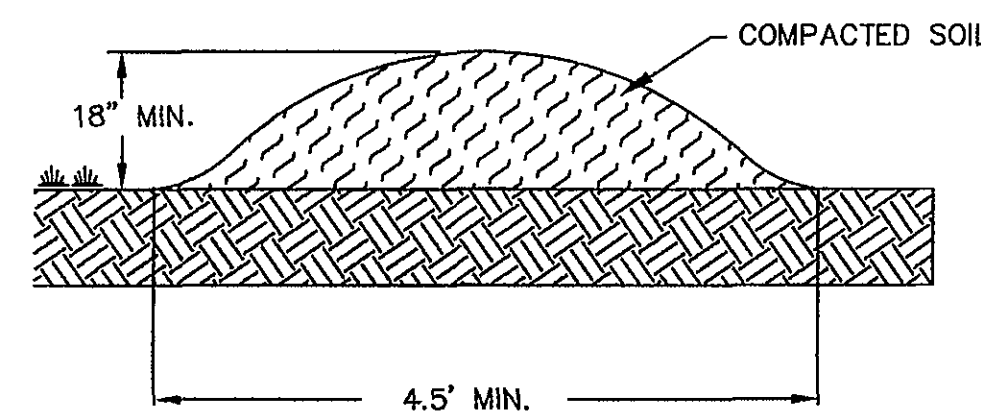
FIELD DENSITY TESTS ARE TO BE CONDUCTED BY AN INDEPENDENT SOILS TESTING LABORATORY UNDER THE DIRECTION OF A QUALIFIED GEOTECHNICAL ENGINEER. THE RESULTS OF THESE TESTS SHALL BE SUBMITTED TO THE VIRGINIA DEPARTMENT OF TRANSPORTATION AS A CONDITION OF ACCEPTANCE OF THE ROADWAYS INTO THE VIRGINIA SECONDARY ROAD SYSTEM. ANY AREAS FAILING TO MEET THE ABOVE REQUIREMENTS SHALL BE REWORKED AND/OR RECOMPACTED UNTIL THE REQUIRED DEGREE OF COMPACTION IS ACHIEVED.

ALL OFF-SITE DISPOSAL OF MATERIALS, AND ASSOCIATED FEES, WILL BE THE SITEMARK CONTRACTOR'S RESPONSIBILITY, AND IS TO BE PERFORMED IN A LEGAL FASHION (MUNICIPAL APPROVED WASTE SITE). ALL HAULING IS TO BE PERFORMED IN STRICT ACCORDANCE WITH LOCAL, STATE, AND FEDERAL RULES AND REGULATIONS PERTAINING THERETO.

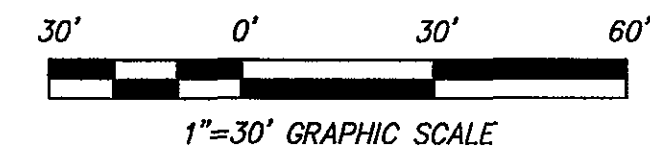
FOLLOWING THE PROGRESSION OF ROUGH GRADING, INSTALLATION OF NEW UTILITIES, STORM DRAIN, AND CONCRETE WORK AND PRIOR TO PAVING OPERATIONS, THE SITEMARK CONTRACTOR SHALL FINE GRADE ALL AREAS FROM TEN FEET (10') BEHIND THE PROPOSED CONCRETE CURBING TO A TOLERANCE OF +/-0.2'. SLOPES STEEPER THAN 3H:1V SHALL BE GRADED TO A TOLERANCE OF +/-0.33'. INCLUDED IN THIS FINE GRADING IS THE REMOVAL OF ALL ROOT MASS, ROCKS INS EXCESS OF 2" IN THEIR GREATEST DIMENSION, AND OTHER MATERIALS DELETERIOUS TO THE GROWTH OF ALL LAWN GRASSES, WITHIN THE UPPER 12" OF SOIL. THIS MAY BE ACCOMPLISHED BY NORMAL METHODS (MECHANICAL ROCK RAKE, HAND RAKE, ETC.) OR OTHER INNOVATIVE METHODS APPROVED BY THE ENGINEER. ALL DISTURBED AREAS SHALL BE PERMANENTLY SEEDED IN ACCORDANCE WITH SEEDING MIXTURES AND RATES SPECIFIED.

NOTE: THERE IS AN EXISTING LAND DISTURBING PERMIT AND POLLUTION CONTROL PLAN FOR THIS AREA OF DEVELOPMENT. THE EROSION CONTROL MEASURES IDENTIFIED ON THESE DRAWINGS ARE REQUIRED AS A SUPPLEMENT TO THE APPROVED PLANS AND MAY REQUIRE MODIFICATIONS AS DEEMED NECESSARY BY THE COUNTY OF ROANOKE OR CONSTRUCTION SEQUENCING.

NOTE: THE CONTRACTOR SHALL REFER TO SHEET C-6 FOR INFORMATION REGARDING THE DESCRIPTION AND LOCATIONS FOR THE PROPOSED STORM DRAIN AND SANITARY SEWER LOCATIONS. REFER TO SHEET C-8 FOR PROFILES FOR THE PROPOSED LINES WHICH IDENTIFY THE REQUIRED STRUCTURE DEPTHS AND SLOPES FOR THE CONNECTING PIPES.



PERMANENT DIVERSION DIKE



<p>COMMONWEALTH OF VIRGINIA FRANK B. CALDWELL, III NO. 9184 PROFESSIONAL ENGINEER</p>		<p>GRADING PLAN THE VILLAS AT RIVER OAKS SITUATE OFF OF MILLWHEEL DRIVE CATAWBA MAGISTERIAL DISTRICT ROANOKE COUNTY, VIRGINIA</p>	
<p>Designed: J.V. Judy Checked: F.B. Caldwell Revised: June 14, 2005 Scale: 1"=30' Tax Parcel: 58.03-2-43.2 W.O. #: 01-0090 Notebook: Russlen Farms</p>		<p>CWA CALDWELL WHITE ASSOCIATES ENGINEERS / SURVEYORS / PLANNERS 4303 MELROSE AVENUE, N.W. Post Office Box 9380 ROANOKE, VIRGINIA 24017 Telephone: (540) 386-3400 Fax: (540) 386-8702 EMAIL: CWA@ROANOKE.AOL.COM</p>	