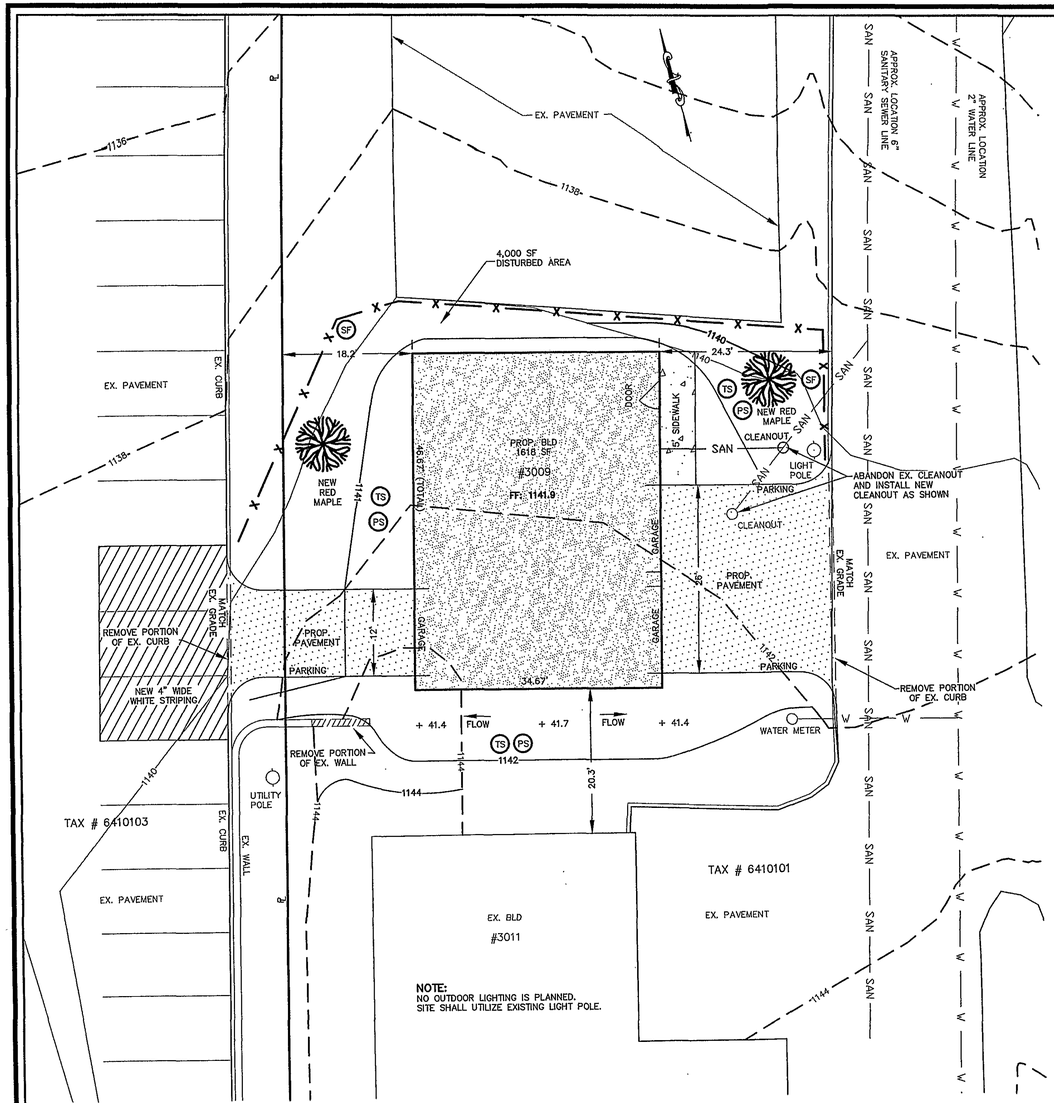
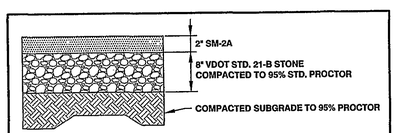


GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)

1 inch = 10 ft.



REGULAR PAVEMENT DETAIL
NOT TO SCALE

EROSION AND SEDIMENT CONTROL MEASURES:

PROVIDE THE FOLLOWING:

(SF) SILT FENCE MEETING VA ESCH STD. & SPEC. 3.05

(TS) TEMPORARY SEEDING MEETING VA ESCH STD. & SPEC. 3.31

(PS) PERMANENT SEEDING MEETING VA ESCH STD. & SPEC. 3.32

01 MARCH TO 30 APRIL
WINTER RYE (SECALE CERALE) @ 2 1/2 LB / 1000 SF
OR ANNUAL RYEGRASS (LOLIUM MULTI-FLORUM) @ 1 1/2 LF / 1000 SF
OR KOREAN LESPEDEZA (LESPEDEZA STIPULACEA) @ 1 1/2 LF / 1000 SF

01 MAY TO 15 AUGUST
GERMAN MILLET (SETARIA ITALICA) @ 1 LB / 1000 SF
OR WEEPING LOVEGRASS (ERAGROSTIS CURVULA) @ 5 1/2 OZ / 1000 SF
OR KOREAN LESPEDEZA (LESPEDEZA STIPULACEA) @ 1 1/2 LF / 1000 SF

15 AUGUST TO 01 NOVEMBER
WINTER RYE (SECALE CERALE) @ 1 LB / 1000 SF
AND ANNUAL RYEGRASS (LOLIUM MULTI-FLORUM) @ 1 LF / 1000 SF

MULCH: SHALL BE USED OVER ALL SEEDED AREAS AND SHALL BE APPLIED IN ACCORDANCE WITH SECTION 3.35 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, 3rd ED.

SEED APPLICATION: APPLY SEED UNIFORMLY WITH A CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDROSEEDER ON A FIRM, FRIABLE SEEDBED. MAX. SEEDING DEPTH SHALL BE 1/4 INCH.

(TS) **TEMPORARY SEEDING MIXTURE VA ESCH STD & SPEC 3.31**

TYPE A (SLOPES FLATTER THAN 3:1)

15 OCTOBER TO 1 FEBRUARY
K-31 FESCUE @ 5 LB / 1000 SF
BORZY WINTER RYE @ 1/2 LB / 1000 SF

1 FEBRUARY TO 1 JUNE
K-31 FESCUE @ 5 LB / 1000 SF
ANNUAL RYE @ 1/2 LB / 1000 SF

1 JUNE TO 1 SEPTEMBER
K-31 FESCUE @ 5 LB / 1000 SF
GERMAN MILLET @ 1/2 LB / 1000 SF

1 SEPTEMBER TO 15 OCTOBER
K-31 FESCUE @ 5 LB / 1000 SF
ANNUAL RYE @ 1/2 LB / 1000 SF

TYPE B (SLOPES 3:1 OR STEEPER)

15 MARCH TO 1 MAY
CROWN VETCH @ 1/2 LB / 1000 SF
PERENNIAL RYEGRASS @ 1/2 LB / 1000 SF
RED TOP @ 1/8 LB / 1000 SF

15 AUGUST TO 1 OCTOBER
CROWN VETCH @ 1/2 LB / 1000 SF
PERENNIAL RYEGRASS @ 1/2 LB / 1000 SF
RED TOP @ 1/8 LB / 1000 SF

LIME: 140 LB / 1000 SF PULVERIZED AGRICULTURAL LIMESTONE

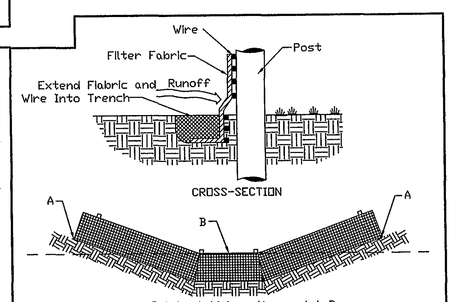
FERTILIZER: 5-20-10 @ 25 LB / 1000 SF
38-0-0 @ 7 LB / 1000 SF

MULCH: SHALL BE USED OVER ALL SEEDED AREAS AND SHALL BE APPLIED IN ACCORDANCE WITH SECTION 3.35 OF THE VA ESCH.

SOIL CONDITIONING: INCORPORATION OF LIME AND FERTILIZER, SELECTION OF CERTIFIED SEED, MULCHING, MAINTENANCE OF NEW SEEDLINGS, AND RESEEDING SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS CONTAINED WITHIN THE VA ESCH. ADDITIONAL SEEDING TO BE PERFORMED AS REQUIRED BY THE INSPECTOR.

SEED APPLICATION: APPLY SEED UNIFORMLY WITH A CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDROSEEDER ON A FIRM, FRIABLE SEEDBED. MAX. SEEDING DEPTH SHALL BE 1/4 INCH.

(PS) **PERMANENT SEEDING MIXTURE VA ESCH STD & SPEC 3.32**



(SF) *SILT FENCE*
VA ESCH STD. & SPEC. 3.05

GENERAL DEMOLITION NOTES:

1. THE CONTRACTOR SHALL PROVIDE AT LEAST THE FOLLOWING PROTECTIONS AT THE JOB SITE; MAKE ARRANGEMENTS, BEFORE INITIATING DEMOLITION, FOR RELOCATING, ABANDONING, OR SIMILAR ACTION AS MAY BE REQUIRED RELATIVE TO UTILITIES TO PERMIT WORK TO PROCEED WITHOUT DELAY. ARRANGEMENTS SHALL BE MADE IN ACCORDANCE WITH REGULATIONS OF AUTHORITIES OF UTILITIES MENTIONED, SUCH AS OVERHEAD AND UNDERGROUND ELECTRIC, TELEPHONE, GAS, WATER, ETC.

2. ENSURE SAFE PASSAGE OF PERSONS AROUND ALL AREAS OF DEMOLITION. CONDUCT OPERATIONS TO PREVENT DAMAGE TO ADJACENT BUILDINGS, STRUCTURES, OTHER FACILITIES, OR INJURY TO PERSONS.

3. PROMPTLY REPAIR DAMAGES CAUSED TO ADJACENT FACILITIES BY DEMOLITION OPERATIONS AT NO COSTS TO THE OWNER(S).

4. *MAINTAIN EXISTING UTILITIES INDICATED TO REMAIN, KEEP IN SERVICE, AND PROTECT AGAINST DAMAGE DURING DEMOLITION OPERATIONS, PREVENT INTERRUPTION OF SERVICES.* PROVIDE TEMPORARY SERVICES DURING INTERRUPTIONS TO EXISTING UTILITIES AS ACCEPTABLE TO GOVERNING AUTHORITIES.

5. USE WATER SPRINKLING AND OTHER SUITABLE METHODS TO LIMIT DUST AND DIRT POLLUTION TO THE LOWEST PRACTICAL LEVEL.

6. COMPLY WITH GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.

7. RETURN ADJACENT AREAS TO EXISTING CONDITIONS PRIOR TO THE START OF WORK.

8. PERMITS, FEES, AND LICENSES SHALL BE SECURED AND PAID FOR BY THE CONTRACTOR, INCLUDING DISPOSAL CHARGES AS REQUIRED.

9. ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE GOVERNING AUTHORITIES IN DEMOLITION OF EXISTING PAVEMENT, CONCRETE, CURB, AND OTHER STRUCTURES AS MAY BE REQUIRED.

10. THE SITE SHALL BE CLEARED AND *SELECTED ITEMS REMOVED AS SHOWN WITHIN THE LIMITS* OF DISTURBANCE. ALL DEBRIS SHALL BE REMOVED FROM THE SITE. THE CONTRACTOR SHALL SAW-CUT CURB, PAVEMENT, ETC. AT ALL PLACES WHERE NEW CONSTRUCTION JOINS THE EXISTING.

DIMENSION NOTES:

1. THE CONTRACTOR SHALL VERIFY BUILDING DIMENSIONS WITH ARCHITECT PLANS.

2. THE DIMENSIONS SHOWN ARE FROM EDGE PAVEMENT TO EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.

UTILITY NOTES:

1. WHILE CERTAIN UTILITIES ARE SHOWN AS APPROXIMATE, OTHER UNDERGROUND UTILITIES MAY BE ENCOUNTERED DURING CONSTRUCTION. PARKER DESIGN GROUP DOES NOT WARRANT LOCATION OR DEPTH OF ANY UTILITIES SHOWN. THE CONTRACTOR SHALL COORDINATE WITH "MISS UTILITY" PRIOR TO CONSTRUCTION AND ALL UTILITY DEPARTMENTS TO DETERMINE IF THE ENCOUNTERED UTILITY IS PUBLIC OR PRIVATE AND TAKE PROPER AND ADEQUATE METHODS TO PROTECT, IF NECESSARY.

2. WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE GOVERNING AUTHORITIES FOR UTILITY INSTALLATIONS. ALL NEW UTILITIES SHALL BE INSTALLED UNDERGROUND. WATER AND SANITARY SEWER ARE PRIVATE AND SHALL MEET BUILDING CODE.

3. THE CONTRACTOR SHALL UTILIZE EXISTING WATER METER BOX AND EXISTING SANITARY SEWER CLEANOUT. THE CONTRACTOR SHALL FIELD INVESTIGATE FOR THE LOCATION OF OTHER EXISTING UTILITY SERVICES.

ELEVATIONAL CONTROL:

1. ELEVATIONS SHOWN ARE BASED UPON CITY OF ROANOKE AERIAL TOPOPGRAPHY AND BRAMMER VILLAGE EXPANSION PLAN DATED FEBRUARY 14, 1997.

GRADING NOTES:

1. PRIOR TO ANY GRADING, THE CONTRACTOR SHALL INSTALL THE REQUIRED INITIAL EROSION & SEDIMENT CONTROL MEASURES AS SHOWN ON THIS PLAN.

2. THE CONTRACTOR SHALL COMPLY WITH LOCAL CODES IN OBSERVING EROSION CONTROL MEASURES BOTH ON AND OFF THE SITE. REFER TO THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK FOR DETAILS AND SPECIFICATIONS OF THOSE EROSION CONTROL ITEMS FOUND ON THESE DRAWINGS.

3. THE CONTRACTOR SHALL PROVIDE ALL SITE GRADING, GENERAL EXCAVATION, UTILITY TRENCHING & BACKFILLING, AND FINISH GRADING AS INDICATED ON THE DRAWINGS. WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH VDOT STANDARDS AND SPECIFICATIONS. ALL FILLS AND BACKFILLS SHALL BE UNIFORMLY COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DENSITY.

4. THE CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AT ALL TIMES.

5. THE CONTRACTOR SHALL STOCKPILE ANY AVAILABLE TOPSOIL AND PLACE THE TOPSOIL AT THE COMPLETION OF THE PROJECT.

6. ALL EARTH SLOPES AND DENUDED AREAS SHALL BE SEEDED AND MULCHED AS REQUIRED FOR STABILIZATION WITHIN SEVEN (7) DAYS OF COMPLETION OF EXCAVATION OPERATIONS. REFERENCE IS DIRECTED TO THE SEEDING REQUIREMENTS.

PLANT LEGEND:

2
RED MAPLE
Acer rubrum
(2" MINIMUM CALIPER)

ESC NARRATIVE:

PROJECT DESCRIPTION
THE PURPOSE OF THIS PROJECT IS TO PROVIDE DEMOLITION AND GRADING FOR THE CONSTRUCTION OF AN ACCESSORY USE GARAGE AND APPROPRIATE DRIVEWAYS. THE SITE IS LOCATED IN BRAMMER VILLAGE AT 3009 PETERS CREEK ROAD, AND TO INSTALL A PRIVATE WATERLINE FOR FIRE SERVICE. THE AMOUNT OF LAND DISTURBANCE IS ESTIMATED AT 4,900 SQUARE FEET (0.11 ACRES).

EXISTING CONDITIONS
THE UNDEVELOPED SITE SLOPES FROM THE REAR OF THE SITE TO PETERS CREEK ROAD, IN A NORTHERLY DIRECTION. SLOPES RANGE FROM FROM 2% TO 15%

ADJACENT PROPERTY
THE SITE FRONTS ON PETERS CREEK ROAD ALONG THE NORTH SIDE. THREE PARKING SPACES WILL BE LOST ON THE ADJACENT PROPERTY TO THE WEST, TAX # 6410103. THE PARKING SPACES ARE PROVIDED IN THE DRIVES.

SOILS
AS IDENTIFIED BY THE U.S. DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE, GENERAL SOIL MAP, THE BASIC SOIL MATERIAL IS FREDERICK-URBAN LAND-CHILHOWIE (21C).

CRITICAL EROSION AREAS
THERE ARE NO CRITICAL EROSION AREAS.

EROSION AND SEDIMENT CONTROL MEASURES
UNLESS OTHERWISE STATED ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH MINIMUM STANDARDS AND SPECIFICATIONS OF THE LATEST EDITION OF THE "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK".

STRUCTURAL PRACTICES

SILT FENCE (3.05) – A TEMPORARY SEDIMENT BARRIER CONSTRUCTED OF POSTS, FILTER FABRIC AND, IN SOME CASES, A WIRE SUPPORT FENCE, PLACED ACROSS OR AT THE TOE OF A SLOPE OR IN A MINOR DRAINAGE WAY TO INTERCEPT AND DETAIN SEDIMENT AND DECREASE FLOW VELOCITIES FROM DRAINAGE AREAS OF LIMITED SIZE; APPLICABLE WHERE SHEET AND RILL EROSION OR SMALL CONCENTRATED FLOWS MAY BE A PROBLEM. MAXIMUM EFFECTIVE LIFE OF 6 MONTHS.

SILT FENCE WILL BE USED ON THIS PROJECT AND IS SHOWN ON THE DRAWINGS.

TEMPORARY SEEDING (3.31) – ESTABLISHMENT OF TEMPORARY VEGETATIVE COVER ON DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE FOR PERIODS OF 30 DAYS TO ONE YEAR BY SEEDING WITH APPROPRIATE RAPIDLY-GROWING PLANTS.

TEMPORARY SEEDING WILL BE USED ON THIS PROJECT AND IS SHOWN ON THE DRAWINGS.

PERMANENT SEEDING (3.32) – ESTABLISHMENT OF PERENNIAL VEGETATIVE COVER BY PLANTING SEED ON ROUGH-GRADED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE FOR A YEAR OR MORE OR WHERE PERMANENT, LONG-LIVED VEGETATIVE COVER IS NEEDED ON FINE-GRADED AREAS.

PERMANENT SEEDING WILL BE USED ON ALL FINISHED AREAS OUTSIDE OF THE PARKING AND DRIVEWAY AREAS.

MANAGEMENT STRATEGIES

1. CONSTRUCTION WILL BE SEQUENCED TO BEGIN AND END GRADING OPERATIONS AS QUICKLY AS POSSIBLE.

2. THE SILT FENCE WILL BE INSTALLED AS THE FIRST STEP OF THE GRADING PROCESS.

3. ALL AREAS SHALL BE SEEDED WITH PERMANENT STABILIZATION AS SOON AS THEY REACH FINAL GRADE.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES.

5. ONCE THE SITE HAS BEEN STABILIZED, THE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES MAY BE REMOVED AND THOSE AREAS BROUGHT TO FINAL GRADE AND STABILIZED.

PERMANENT STABILIZATION

ALL DISTURBED AREAS SHALL RECEIVE PERMANENT STABILIZATION ACCORDANCE WITH THE "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK", STD AND SPEC. 3.32 AS SOON AS THOSE AREAS ARE BROUGHT TO FINAL GRADE. FOR PERMANENT SEEDING MIXTURE SEE THE EROSION AND SEDIMENT CONTROL DETAIL SHEET.

MAINTENANCE

ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE CHECKED DAILY AND AFTER ALL SIGNIFICANT RAINFALL. IN PARTICULAR:

1. SILT FENCE SHALL BE CHECKED REGULARLY TO ENSURE THAT THE FABRIC HAS NOT BEEN UNDERMINED OR HAS DETERIORATED. SEDIMENT SHALL BE REMOVED WHEN LEVEL OF BUILDUP REACHES HALFWAY UP THE BARRIER.

2. AREAS WHICH HAVE RECEIVED SEEDING SHALL BE CHECKED REGULARLY TO ENSURE THAT A GOOD STAND OF GRASS IS MAINTAINED. AREAS SHALL BE FERTILIZED AND RESEEDED AS REQUIRED.

OFFSITE WASTE AND BORROW NOTE:

THE PROPOSED DEVELOPMENT DOES NOT ANTICIPATE OFF-SITE WASTE/BORROW AREAS; HOWEVER, SHOULD THE PROJECT REQUIRE OFF-SITE WASTE AREAS OR BORROW AREAS, THE LOCATION OF THESE AREAS ASSOCIATED WITH THE CONSTRUCTION PROJECT WILL BE PROVIDED TO THE CITY OF ROANOKE. EROSION CONTROL PLANS OR MEASURES MAY BE REQUIRED FOR THESE OFF-SITE LOCATIONS.

GENERAL EROSION & SEDIMENT CONTROL NOTES:

1. ALL SOIL EROSION & SEDIMENT CONTROL MEASURES AS SHOWN ON THE PLAN SHALL BE ACCOMPLISHED IN STRICT ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS CONTAINED IN THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.

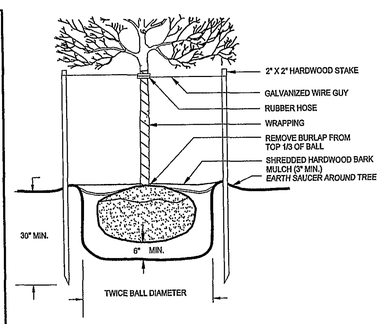
2. THE APPROVING AUTHORITY MAY ADD TO, DELETE, RELOCATE, CHANGE, OR OTHERWISE MODIFY CERTAIN EROSION AND SEDIMENT CONTROL MEASURES WHERE FIELD CONDITIONS ARE ENCOUNTERED THAT WARRANT SUCH MODIFICATIONS.

3. ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN ON THE PLAN SHALL BE PLACED IN ADVANCE OF THE WORK BEING PERFORMED, AS FAR AS PRACTICAL.

4. IN NO CASE DURING CONSTRUCTION SHALL WATER RUNOFF BE DIVERTED OR ALLOWED TO FLOW TO LOCATIONS WHERE ADEQUATE PROTECTION HAS NOT BEEN PROVIDED.

5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LEAVE THE SITE ADEQUATELY PROTECTED AGAINST EROSION, SEDIMENTATION, OR ANY DAMAGE TO ANY ADJACENT PROPERTY AT THE END OF EACH DAY'S WORK.

6. FOR THE EROSION CONTROL KEY SYMBOLS SHOWN ON THE PLANS, REFER TO THE VIRGINIA UNIFORM CODING SYSTEM FOR EROSION AND SEDIMENT CONTROL PRACTICES CONTAINED IN THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.



TREE PLANTING - UP TO 4" CALIPER
NO SCALE

EROSION AND SEDIMENT CONTROL REGULATIONS

MINIMUM STANDARDS:

MS-1. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN (7) DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN THIRTY (30) DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE (1) YEAR.

MS-2. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES AND BORROW AREAS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE APPLICANT IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS BORROW AREAS AND SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.

MS-3. A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT, IS UNIFORM, MATURE ENOUGH TO SURVIVE AND WILL INHIBIT EROSION.

MS-4. SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.

MS-5. STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.

parker
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COMMONWEALTH OF VIRGINIA
PAUL J. BROWN
Lic. No. 036148
8-20-2008
PROFESSIONAL ENGINEER

Brammer Village
Buildings 8, 10, 14 & 15
Prepared for Robert C. Brammer
Tax # 6410101
City of Roanoke, VA

REVISIONS:
Add 2nd garage pavement
August 19, 2008
Add Private Waterline

DESIGNED BY:	SLR
DRAWN BY:	SLR
CHECKED BY:	PJB
SCALE:	1" = 10'
DATE:	June 12, 2008

SHEET TITLE:
Site Development Plan

C06
06 OF 07
PROJECT NUMBER:
06-0458-02