

Rawrence - 0473-C3-E&S.dwg - Tuesday, February 26, 2008 - 12:19 PM

SITE SPECIFIC SEEDING MIXTURES

MINIMUM CARE LAWN	TOTAL LBS/ACRE
COMMERCIAL OR RESIDENTIAL	200-250 LBS
KENTUCKY 31 OR TURF-TYPE TALL FESCUE	90-100%
IMPROVED PERENNIAL RYEGRASS*	0-10%
KENTUCKY BLUEGRASS	0-10%

GENERAL SLOPE (3:1 OR LESS)

KENTUCKY 31 FESCUE	128 LBS
RED TOP GRASS	2 LBS
SEASONAL NURSE CROP**	20 LBS
	150 LBS

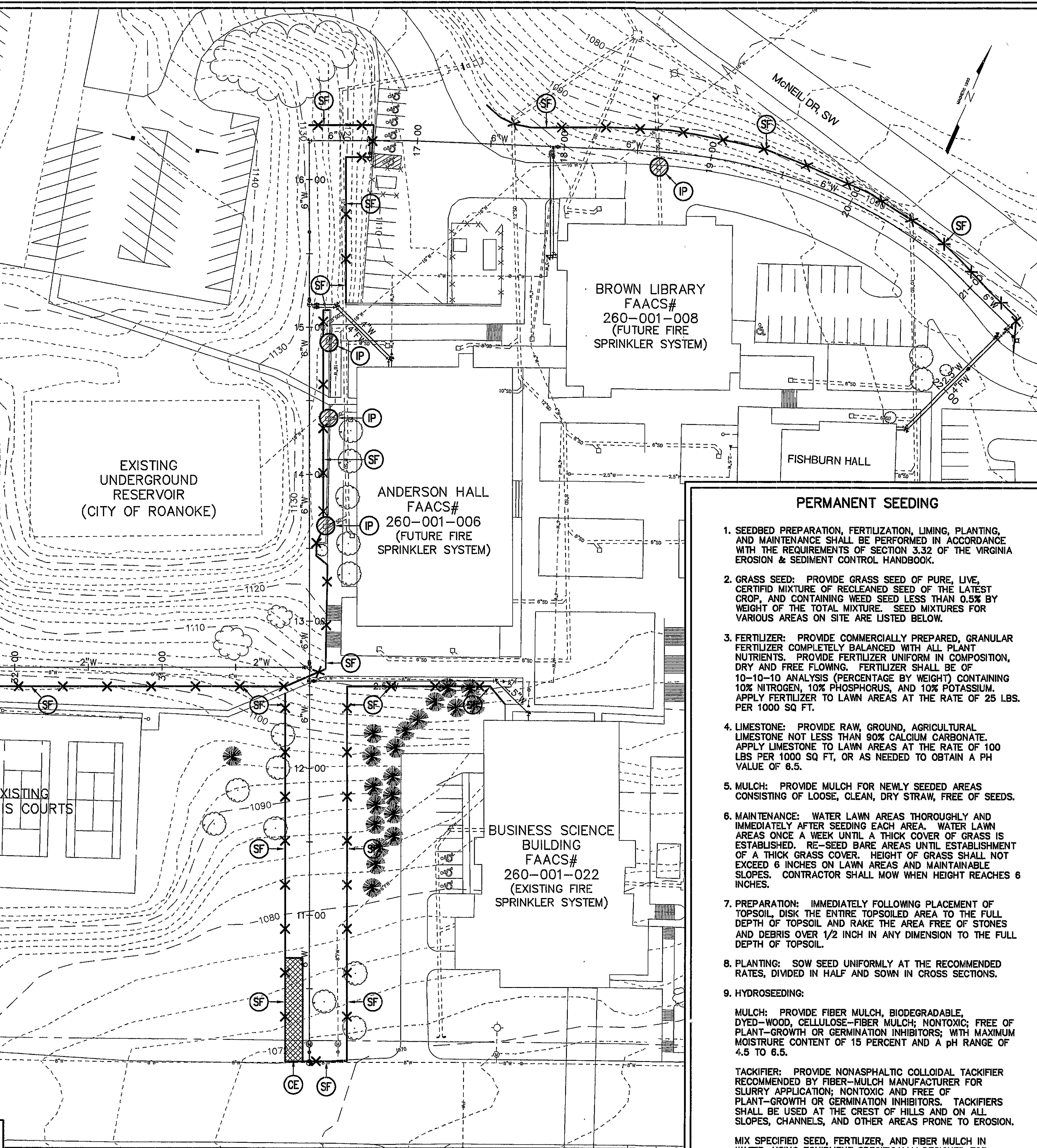
LOW MAINTENANCE SLOPE (STEEPER THAN 3:1)

KENTUCKY 31 FESCUE	108 LBS
RED TOP GRASS	2 LBS
SEASONAL NURSE CROP**	20 LBS
CROWN VETCH***	20 LBS
	150 LBS

* PERENNIAL RYEGRASS WILL GERMINATE FASTER AND AT LOWER SOIL TEMPERATURES THAN FESCUE, THEREBY PROVIDING COVER AND EROSION RESISTANCE FOR THE SEEDBED.

** USE SEASONAL NURSE CROP IN ACCORDANCE WITH SEEDING DATES AS STATED BELOW:
MARCH, APRIL THROUGH MAY 15TH - ANNUAL RYE
MAY 16TH THROUGH AUGUST 15TH - FOXTAIL MILLET
AUGUST 16TH THROUGH SEPTEMBER, OCTOBER - ANNUAL RYE
NOVEMBER THROUGH FEBRUARY - WINTER RYE

*** IF FLATPEA IS USED, INCREASE TO 30 LBS/ACRE. ALL LEGUME SEED MUST BE PROPERLY INOCULATED. WEEPING LOVEGRASS MAY ALSO BE INCLUDED IN ANY SLOPE OR LOW-MAINTENANCE MIXTURE DURING WARMER SEEDING PERIODS; ADD 10-20 LBS/ACRE IN MIXES.



EROSION CONTROL LEGEND

SYMBOL	DESCRIPTION	ST'D. & SPEC.
(CE)	CONSTRUCTION ENTRANCE	3.02
(SF)	SILT FENCE	3.05
(IP)	INLET PROTECTION	3.07

****THIS PLAN IS FOR EROSION CONTROL PURPOSES ONLY****

1" = 40'-0" 20' 0 50' 100'

PERMANENT SEEDING

- SEEDBED PREPARATION, FERTILIZATION, LIMING, PLANTING, AND MAINTENANCE SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 3.32 OF THE VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK.
- GRASS SEED: PROVIDE GRASS SEED OF PURE, LIVE, CERTIFIED MIXTURE OF RECLEANED SEED OF THE LATEST CROP, AND CONTAINING WEED SEED LESS THAN 0.5% BY WEIGHT OF THE TOTAL MIXTURE. SEED MIXTURES FOR VARIOUS AREAS ON SITE ARE LISTED BELOW.
- FERTILIZER: PROVIDE COMMERCIALY PREPARED, GRANULAR FERTILIZER COMPLETELY BALANCED WITH ALL PLANT NUTRIENTS. PROVIDE FERTILIZER UNIFORM IN COMPOSITION, DRY AND FREE FLOWING. FERTILIZER SHALL BE OF 10-10-10 ANALYSIS (PERCENTAGE BY WEIGHT) CONTAINING 10% NITROGEN, 10% PHOSPHORUS, AND 10% POTASSIUM. APPLY FERTILIZER TO LAWN AREAS AT THE RATE OF 25 LBS. PER 1000 SQ. FT.
- LIMESTONE: PROVIDE RAW, GROUND, AGRICULTURAL LIMESTONE NOT LESS THAN 90% CALCIUM CARBONATE. APPLY LIMESTONE TO LAWN AREAS AT THE RATE OF 100 LBS PER 1000 SQ. FT. OR AS NEEDED TO OBTAIN A PH VALUE OF 6.5.
- MULCH: PROVIDE MULCH FOR NEWLY SEEDDED AREAS CONSISTING OF LOOSE, CLEAN, DRY STRAW, FREE OF SEEDS.
- MAINTENANCE: WATER LAWN AREAS THOROUGHLY AND IMMEDIATELY AFTER SEEDING EACH AREA. WATER LAWN AREAS ONCE A WEEK UNTIL A THICK COVER OF GRASS IS ESTABLISHED. RE-SEED BARE AREAS UNTIL ESTABLISHMENT OF A THICK GRASS COVER. HEIGHT OF GRASS SHALL NOT EXCEED 6 INCHES ON LAWN AREAS AND MAINTAINABLE SLOPES. CONTRACTOR SHALL MOW WHEN HEIGHT REACHES 6 INCHES.
- PREPARATION: IMMEDIATELY FOLLOWING PLACEMENT OF TOPSOIL, DISK THE ENTIRE TOPSOILED AREA TO THE FULL DEPTH OF TOPSOIL AND RAKE THE AREA FREE OF STONES AND DEBRIS OVER 1/2 INCH IN ANY DIMENSION TO THE FULL DEPTH OF TOPSOIL.
- PLANTING: SOW SEED UNIFORMLY AT THE RECOMMENDED RATES, DIVIDED IN HALF AND SOWN IN CROSS SECTIONS.
- HYDROSEEDING:
MULCH: PROVIDE FIBER MULCH, BIODEGRADABLE, DYE-WOOD, CELLULOSE-FIBER MULCH; NONTOKIC; FREE OF PLANT-GROWTH OR GERMINATION INHIBITORS; WITH MAXIMUM MOISTURE CONTENT OF 15 PERCENT AND A pH RANGE OF 4.5 TO 6.5.
TACKIFIER: PROVIDE NONASPHALTIC COLLOIDAL TACKIFIER RECOMMENDED BY FIBER-MULCH MANUFACTURER FOR SLURRY APPLICATION; NONTOKIC AND FREE OF PLANT-GROWTH OR GERMINATION INHIBITORS. TACKIFIERS SHALL BE USED AT THE CREST OF HILLS AND ON ALL SLOPES, CHANNELS, AND OTHER AREAS PRONE TO EROSION.

MIX SPECIFIED SEED, FERTILIZER, AND FIBER MULCH IN WATER, USING EQUIPMENT SPECIFICALLY DESIGNED FOR HYDROSEED APPLICATION. CONTINUE MIXING UNTIL UNIFORMLY BLENDED INTO HOMOGENEOUS SLURRY SUITABLE FOR HYDRAULIC APPLICATION. MIX SLURRY WITH THE TACKIFIER AT THE MANUFACTURERS RECOMMENDED RATES. APPLY SLURRY UNIFORMLY TO ALL AREAS TO BE SEEDDED IN A ONE-STEP PROCESS. APPLY MULCH AT A MINIMUM RATE OF 1,500 LB/ACRE DRY WEIGHT BUT NOT LESS THAN THE RATE REQUIRED TO OBTAIN SPECIFIED SEED-SOWING RATE.

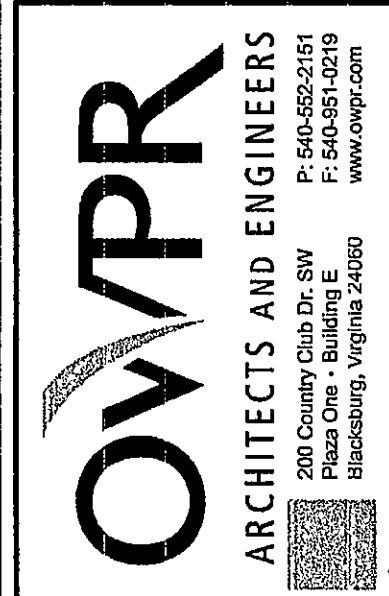
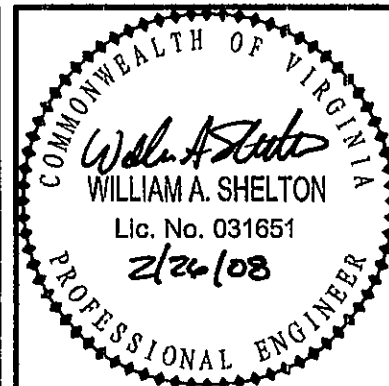
EROSION CONTROL NOTES

- ALL EROSION AND SEDIMENTATION CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK, LATEST EDITION.
- ALL EXISTING EROSION CONTROL MEASURES WHICH SERVE THIS SITE SHALL REMAIN IN PLACE AND SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL THE AREAS THEY SERVE HAVE BEEN STABILIZED. CONTRACTOR SHALL REMOVE ALL EROSION CONTROL MEASURES THAT SERVE THIS SITE ONCE THE AREAS THEY SERVE HAVE BEEN STABILIZED, AND STABILIZATION HAS BEEN APPROVED IN WRITING BY CITY OF ROANOKE INSPECTORS.
- CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL MEASURES AS DEEMED NECESSARY BY INSPECTORS OR LOCAL OFFICIALS.
- CONTRACTOR SHALL MAINTAIN ALL STREETS AND ROADWAYS FREE OF MUD AND DIRT, AND SHALL CONTROL ALL AIRBORNE POLLUTANTS AS NECESSARY.
- ANY TEMPORARY EARTH BERMS, DIVERSIONS, AND SOIL STOCKPILES SHALL BE SEEDDED FOR TEMPORARY VEGETATIVE COVER IMMEDIATELY AFTER INSTALLATION.
- CONTRACTOR SHALL LOCATE THE GRAVEL CONSTRUCTION ENTRANCE AS NECESSARY TO ADAPT TO FIELD CONDITIONS. CONTRACTOR SHALL MOVE THE CONSTRUCTION ENTRANCE FROM ITS LOCATION AS SHOWN ON THE PLAN ONLY AS APPROVED BY CITY OF ROANOKE INSPECTORS.
- PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT (UNDISTURBED) FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN A YEAR.
- PROVIDE SURFACE ROUGHENING AT ALL SLOPES WHICH ARE 3:1 OR GREATER TO AID IN STABILIZATION.
- DURING CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT.
- 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 ANY UPSLOPE LAND DISTURBANCE TAKES PLACE.

EROSION CONTROL MAINTENANCE NOTES

- ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CHECKED WEEKLY AND AFTER EACH RAINFALL PRODUCING RUNOFF TO INSURE THEIR STRUCTURAL INTEGRITY.
- SILT FENCES WILL BE CHECKED TO SEE THAT THEIR STRUCTURAL INTEGRITY IS MAINTAINED, THERE IS NO RUNOFF BEING DIVERTED AROUND THE FENCE, AND THERE IS NOT AN EXCESSIVE AMOUNT OF SEDIMENT BUILT-UP UP BEHIND THE FENCE.
- ALL SEEDDED AREAS WILL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS WILL BE FERTILIZED AND RESEEDDED AS NEEDED.
- CONTRACTOR SHALL ADHERE TO ALL INSTRUCTIONS GIVEN BY INSPECTORS OR LOCAL OFFICIALS.
- THE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED BY TOP DRESSING STONE PERIODICALLY IN ORDER TO PREVENT TRACKING OF MUD ONTO ADJACENT ROADWAYS.
- ENVIRONMENTAL PROTECTION: PROVIDE PROTECTION, OPERATE TEMPORARY FACILITIES AND CONDUCT CONSTRUCTION IN WAYS AND BY METHODS THAT COMPLY WITH ENVIRONMENTAL REGULATIONS, AND MINIMIZE THE POSSIBILITY THAT AIR, WATERWAYS AND SUBSOIL MIGHT BE CONTAMINATED OR POLLUTED. THAT OTHER UNDESIRABLE EFFECTS MIGHT RESULT. AVOID USE OF TOOLS AND EQUIPMENT WHICH PRODUCE HARMFUL NOISE. RESTRICT USE OF NOISE MAKING TOOLS AND EQUIPMENT TO HOURS THAT WILL MINIMIZE COMPLAINTS FROM PERSONS ON OR NEAR THE SITE. MAINTAIN EROSION CONTROL DEVICES. COMPLY WITH ALL LOCAL CODES PERTAINING TO THESE ISSUES.
- COLLECTION AND DISPOSAL OF WASTE: COLLECT WASTE FROM CONSTRUCTION AREAS AND ELSEWHERE DAILY. COMPLY WITH REQUIREMENTS OF NFPA 241 FOR REMOVAL OF COMBUSTIBLE WASTE MATERIAL AND DEBRIS. ENFORCE REQUIREMENTS STRICTLY. DO NOT HOLD MATERIALS MORE THAN 7 DAYS DURING NORMAL WEATHER OR 3 DAYS WHEN THE TEMPERATURE IS EXPECTED TO RISE ABOVE 80 DEGREES F. (27 DEGREES C). HANDLE HAZARDOUS, DANGEROUS, OR UNSANITARY WASTE MATERIALS SEPARATELY FROM OTHER WASTE BY CONTAINERIZING PROPERLY. DISPOSE OF MATERIAL IN A LAWFUL MANNER.

No.	Description	Date
	Revisions	



VMCC - WATER LINE
IMPROVEMENTS
PC# 260-05260-033
ROANOKE
VIRGINIA

Comm. No. 0473
Date 20 FEB 08
Designed: WAS/SGG
Drawn: SGG
Checked: WAS
Approved: RLL

EROSION CONTROL PLAN

C3.1