



PURSUANT TO MINIMUM STANDARD 16 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL LAW AND REGULATIONS, THE FOLLOWING ITEMS APPLY SPECIFICALLY TO THE INSTALLATION OF UNDERGROUND UTILITY LINES.

UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA:

A. NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.

B. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.

C. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.

D. RESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE REQUIREMENTS SHOWN ELSEWHERE ON THESE PLANS. E. APPLICABLE SAFETY REGULATIONS OF THE SOIL EROSION CONTROL HANDBOOK, LATEST EDITION, SHALL BE COMPLIED WITH THROUGHOUT THE DURATION OF CONSTRUCTION.

PERMANENT SEEDING MIXTURE

DISTURBED AREAS SHALL BE PERMANENTLY SEEDED WITHIN SEVEN (7) DAYS OF ACHIEVING FINAL GRADE, OR ON DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE WITHIN ONE YEAR.

TYPE A

03/15 TO 05/15 OR 08/16 TO 10/31: ANNUAL RYEGRASS @ 20 LB / ACRE RED TOP @ 2 LB / ACRE KY 31 FESCUE @ 150 LB / ACRE

05/16 TO 08/15:

FOXTAIL MILLET @ 20 LB / ACRE RED TOP @ 20 LB / ACRE KY 31 FESCUE @ 150 LB / ACRE

11/01 TO 02/28: WINTER RYE @ 20 LB / ACRE RED TOP @ 20 LB / ACRE KY 31 FESCUE @ 150 LB / ACRE

TYPE B (SLOPES 3:1 OR STEEPER)

03/15 TO 05/15 <u>OR</u> 08/16 TO 10/31: CROWN VETCH @ 20 LB / ACRE ANNUAL RYEGRASS @ 20 LB / ACRE RED TOP @ 20 LB / ACRE KY 31 FESCUE @ 108 LB / ACRE 05/16 TO 08/15:

CROWN VETCH @ 20 LB / ACRE FOXTAIL MILLET @ 20 LB / ACRE RED TOP @ 20 LB / ACRE KY 31 FESCUE @ 108 LB / ACRE 11/01 TO 02/28:

CROWN VETCH @ 20 LB / ACRE WINTER RYE @ 20 LB / ACRE RED TOP @ 20 LB / ACRE KY 31 FESCUE @ 108 LB / ACRE

4,000 LB / ACRE PULVERIZED AGRICULTURAL LIMESTONE FERTILIZER: 10-20-10 @ 1,000 LB / ACRE

SHALL BE USED OVER ALL SEEDED AREAS AND SHALL BE APPLIED IN STRICT ACCORDANCE WITH STANDARD AND SPECIFICATION 3.35 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.

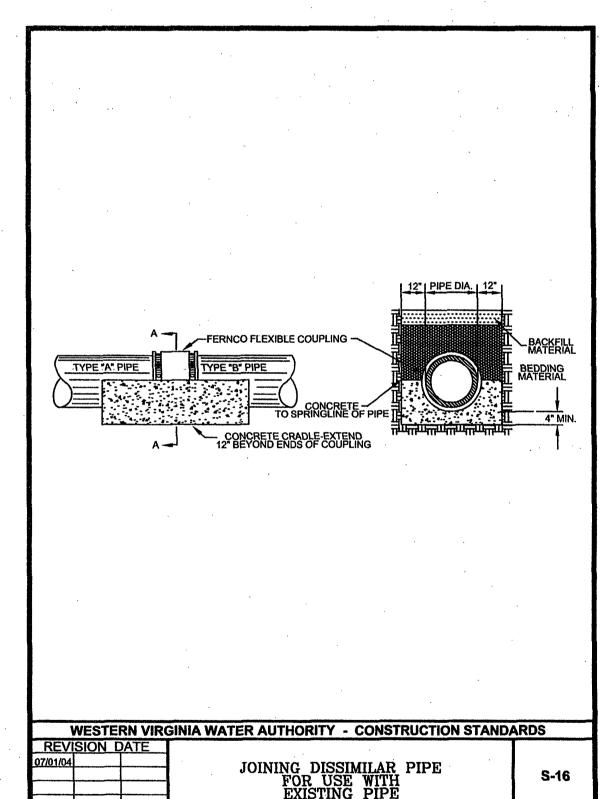
SOIL CONDITIONING:

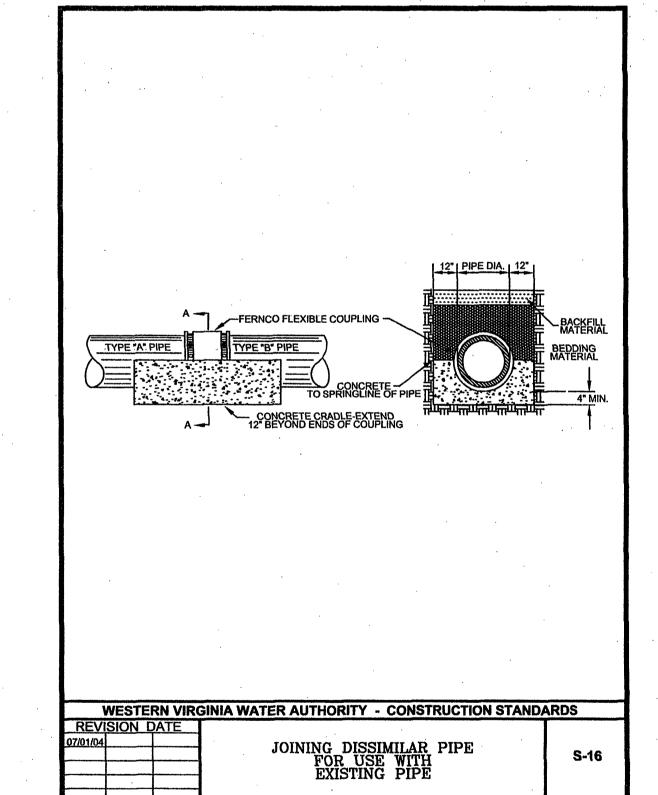
INCORPORATION OF LIME AND FERTILIZER, SELECTION OF CERTIFIED SEED, MULCHING, MAINTENANCE OF NEW SEEDLINGS, AND RESEEDING SHALL BE IN ACCORDANCE WITH SPECIFICATIONS CONTAINED WITHIN THE VIRGINIA SOIL EROSION AND SEDIMENT CONTROL HANDBOOK. LATEST EDITION. ADDITIONAL SEEDING TO BE PERFORMED AS REQUIRED BY THE CITY ENGINEER.

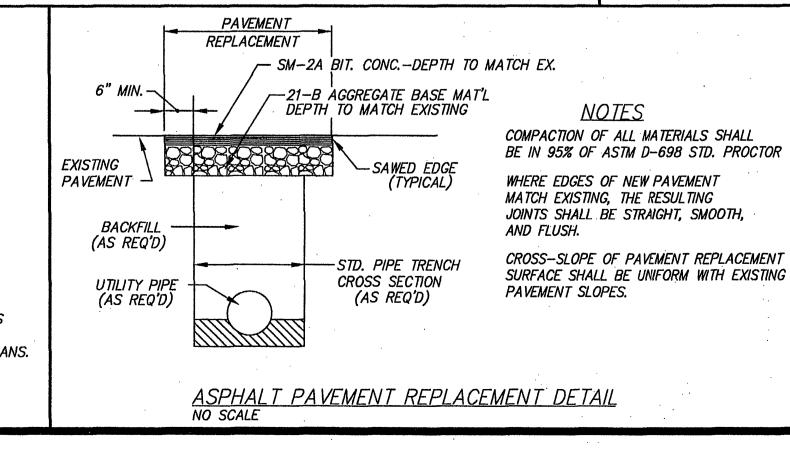
SEED APPLICATION: APPLY SEED UNIFORMLY WITH A CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDROSEEDER ON A FIRM, FRIABLE, SEEDBED. MAXIMUM SEEDING DEPTH SHALL BE 1/4 INCH.

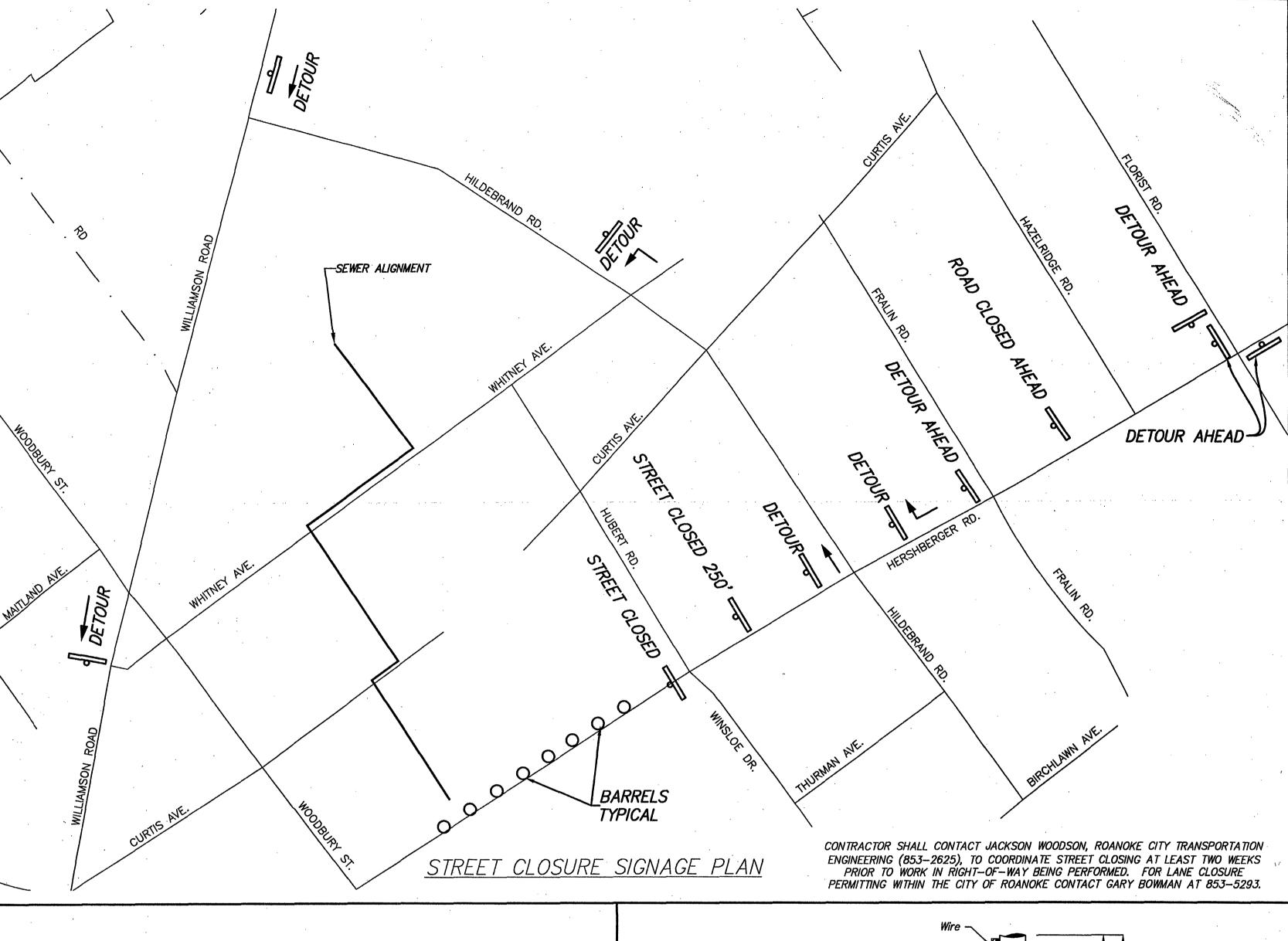
TEMPORARY SEEDING MIXTURE:

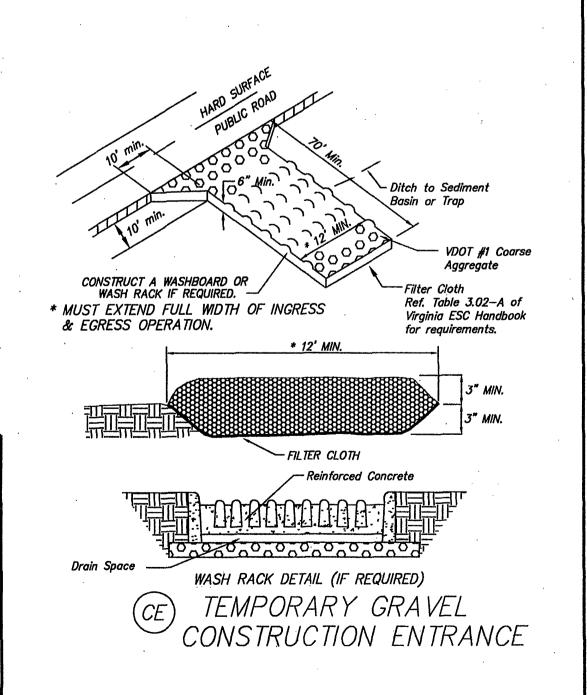
DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE FOR A PERIOD OF MORE THAN 30 DAYS SHALL BE STABILIZED WITH TEMPORARY SEEDING MEASURES AS CONTAINED IN STANDARD AND SPECIFICATION 3.31 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.

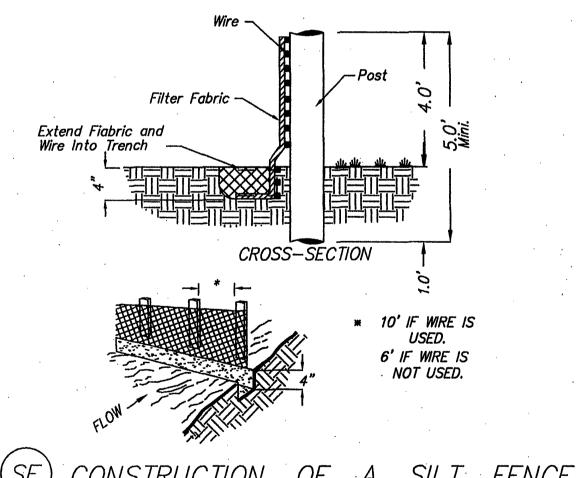












CONSTRUCTION, E&S DETAILS AND STREET CLOSURE SIGNAGE PLAN 900 BLOCK WHITNEY AVENUE SEWER REPLACEMENT

WESTERN VIRGINIA WATER AUTHORITY SITUATE HERSHBERGER ROAD, CURTIS AVENUE AND WHITNEY AVENUE CITY OF ROANOKE, VIRGINIA

Designed: JWK JJC/JWK Checked:____FBC Date: Jan. 17. 2007 Scale: As Shown Tax Parcel: As Shown

W.O. No.: _____06-0008

*CWA CALDWELL WHITE ASSOCIATES

> ENGINEERS / SURVEYORS / PLANNERS 4203 MELROSE AVENUE, N.W. P.O. BOX 6260 ROANOKE, VIRGINIA 24017 (540) 366-3400 FAX: (540) 366-8702