

CONSTRUCTION SEQUENCING

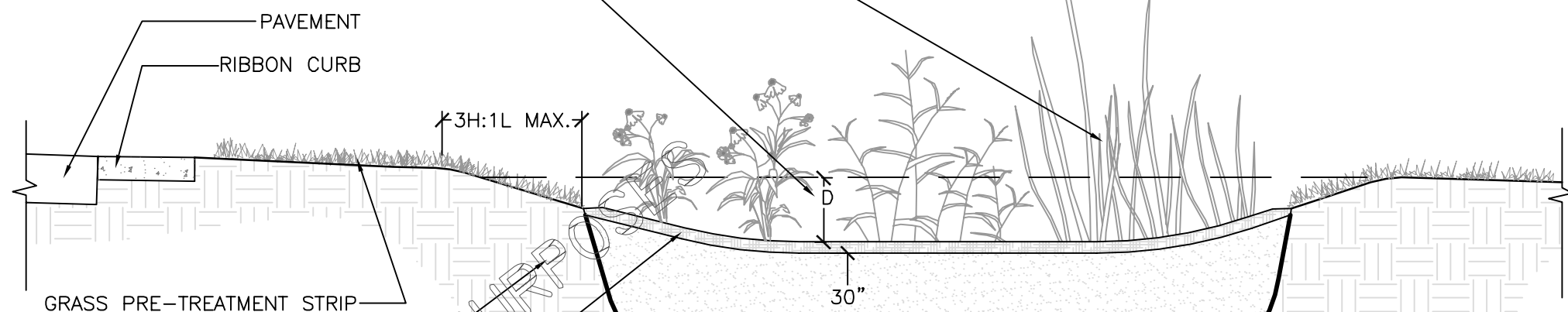
1. INSTALL SILT FENCE AND/OR OTHER APPROPRIATE TEMPORARY EROSION CONTROL DEVICES TO PREVENT SEDIMENT FROM LEAVING OR ENTERING THE PRACTICE DURING CONSTRUCTION.
2. ALL DOWN-GRADIENT PERIMETER SEDIMENT CONTROL BMP'S MUST BE IN PLACE BEFORE ANY UP GRADIENT LAND DISTURBING ACTIVITY BEGINS.
3. PERFORM CONTINUOUS INSPECTIONS OF EROSION CONTROL PRACTICES.
4. INSTALL UTILITIES (WATER, SANITARY SEWER, ELECTRIC, PHONE, FIBER OPTIC, ETC) PRIOR TO SETTING FINAL GRADE OF BIORETENTION DEVICE.
5. ROUGH GRADE THE SITE. IF BIORETENTION AREAS ARE BEING USED AS TEMPORARY SEDIMENT BASINS LEAVE A MINIMUM OF 3 FEET OF COVER OVER THE PRACTICE TO PROTECT THE UNDERLYING SOILS FROM CLOGGING.
6. PERFORM ALL OTHER SITE IMPROVEMENTS.
7. SEED AND MULCH ALL AREAS AFTER DISTURBANCE.
8. CONSTRUCT BIORETENTION DEVICE UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREA.
9. IMPLEMENT TEMPORARY AND PERMENATE EROSION CONTROL PRACTICES.
10. PLANT AND MULCH BIORETENTION DEVICE.
11. REMOVE TEMPORARY EROSION CONTROL DEVICES AFTER THE CONTRIBUTING DRAINAGE AREA IS ADEQUATELY VEGETATED.

GENERAL NOTES

1. IN THE EVENT THAT SEDIMENT IS INTRODUCED INTO THE BMP DURING OR IMMEDIATELY FOLLOWING EXCAVATION, THIS MATERIAL SHALL BE REMOVED FROM THE PRACTICE PRIOR TO CONTINUING CONSTRUCTION.
2. GRADING OF BIORETENTION DEVICES SHALL BE ACCOMPLISHED USING LOW-COMPACTION EARTH-MOVING EQUIPMENT TO PREVENT COMPACTION OF UNDERLYING SOILS.
3. ALL SUB MATERIALS BELOW THE SPECIFIED BIORETENTION DEPTH (ELEVATION) SHALL BE UNDISTURBED, UNLESS OTHERWISE NOTED.

PLANT MATERIAL TOLERANT OF INUNDATION AND DROUGHT. NATIVE PLANTS RECOMMENDED.

DEPTH REQUIRED TO DRAIN PRACTICE IN 48 HOURS OR LESS, NOT TO EXCEED 18".



UNDISTURBED, UNCOMPACTED INSITU SOIL

MAX. 3" SHREDDED BARK MULCH (MnDOT TYPE 6)

SUGGESTED MIN. PLANTING MEDIUM, DEPTH 30" WITH A WELL BLENDED MIXTURE (BY VOLUME):
 50-60% HOMOGENOUS CONSTRUCTION SAND
 20-30% ORGANIC LEAF COMPOST
 20-30% NATIVE TOPSOIL

LINER PREVENTING EFFLUENT PENETRATION INTO GROUND AND GROUNDWATER

NON-WOVEN GEOTEXTILE (MnDOT TYPE 1) OVER GRAVEL BLANKET - EXTENDING 1-2' FROM UNDERDRAIN PIPE SIDES.

UNDERDRAIN GRAVEL BLANKET 1-1.5" DOUBLE WASHED STONE OR 1/4"-1/2" WASHED RIVER RUN PEA GRAVEL

PERFORATED UNDERDRAIN OUTLET PIPE 8" MIN. DIAMETER - CONTAMINATION CAN BE CONTAINED BY CAPPING PIPE

FILTRATION ONLY FACILITY CROSS-SECTION

NOT TO SCALE

NO.	REVISION DESCRIPTION	DATE	BY

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

Print Name: _____ License No. _____
 Sign Name: _____
 Date: _____

Date	Designed By	Drawn By

Minnesota Pollution Control Agency
 520 LaJayette Road
 St. Paul, MN 55155-4194
 Phone: (651)-296-6300
 TTY: (651)-282-5332
 WEBSITE: www.pca.state.mn.us

2005 MINNESOTA STORMWATER MANUAL

BIORETENTION ONLY FACILITY

NOT FOR CONSTRUCTION PURPOSES