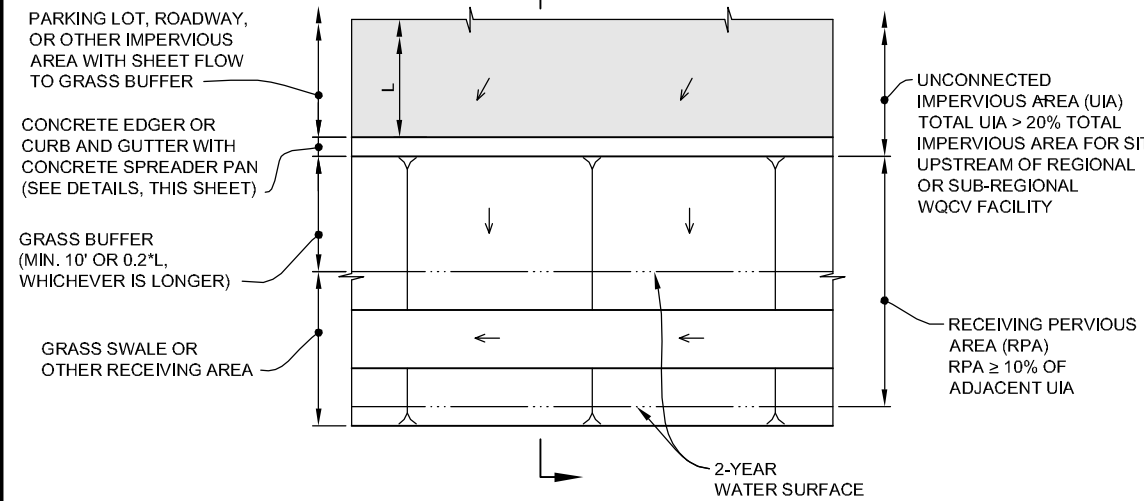


NOTES:

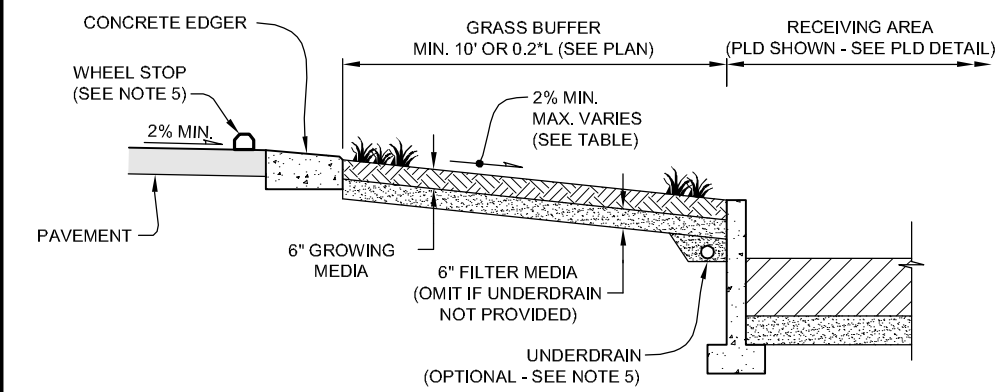
- GRASS BUFFERS ARE INTENDED FOR USE IN SHEET FLOW CONDITIONS (2-YR UNIT DISCHARGE NO GREATER THAN 0.05 CFS/FT). FOR CONCENTRATED FLOW SITUATIONS, A LEVEL SPREADER MUST BE USED TO CREATE SHEET FLOW CONDITIONS ONTO GRASS BUFFER. LEVEL SPREADER MAY CONSIST OF ONE OF THE FOLLOWING:
 - SPREADER BASIN AND CONCRETE CREST WALL (SEE PLAN AND DETAILS)
 - CONCRETE PAN (SEE DETAIL)
 - OTHER APPROVED DETAIL
- NON-IRRIGATED GRASS BUFFERS ARE NOT PERMITTED AS A WATER QUALITY BMP WITHOUT A VARIANCE. IF A VARIANCE IS GRANTED, SITE-SPECIFIC DETAILS MUST BE PREPARED AND TEMPORARY IRRIGATION MEASURES MUST BE PROVIDED UNTIL THE VEGETATION IS WELL ESTABLISHED.
- EROSION CONTROL BLANKET IS REQUIRED ON NATIVE GRASS BUFFERS FOR ESTABLISHMENT OF GRASS COVER. BLANKET SELECTION AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE SEMSWA GESC MANUAL.
- GRASS BUFFERS ADJACENT TO ROADS, PARKING LOTS, OR OTHER TRAFFIC AREAS MUST BE PROTECTED FROM WHEEL RUTTING BY ONE OF THE FOLLOWING MEASURES:
 - WHEEL STOPS - MUST HAVE DRAINAGE SLOTS
 - INTERMITTENT CURB - MAY REQUIRE LEVEL SPREADER TO MEET SHEET FLOW CRITERIA (SEE NOTE 1)
 - REINFORCED SHOULDER - PER DETAIL SHOWN OR IN ACCORDANCE WITH SECTION 14.5.3 OF SEMSWA CRITERIA MANUAL
- AN UNDERDRAIN MAY BE PROVIDED FOR GRASS BUFFERS IF DESIRED. ALL LEVEL SPREADER BASINS SHALL INCLUDE AN UNDERDRAIN. SEE UNDERDRAIN DETAILS ON GRASS SWALE DETAIL SHEET. CLEANOUTS SHALL BE PROVIDED AT THE UPSTREAM END, UPSTREAM OF EACH BEND, AND AT A MAXIMUM SPACING OF 200 FEET. UNDERDRAINS SHALL DAYLIGHT TO THE SURFACE OR SHALL BE TIED INTO INLET STRUCTURES OR MANHOLES. SURFACE OUTFALLS SHALL BE PROTECTED WITH A MINIMUM 5'X5' PAD OF TYPE VL SOIL RIPRAP (12" THICK).
- AGGREGATE BASE COURSE FOR REINFORCED SHOULDER SHALL BE PLACED ON COMPACTED SUBGRADE AND SHALL BE COMPACTED TO 95% OF THE MAXIMUM STANDARD PROCTOR DENSITY AND WITHIN 2% OF OPTIMUM MOISTURE CONTENT. GROWING MEDIA MAY BE OMITTED LEAVING AN EXPOSED SHOULDER, IF DESIRED.
- WHERE POSSIBLE, IRRIGATION SYSTEMS SHALL BE INSTALLED IN CONJUNCTION WITH FINISH GRADING OF GRASS BUFFER. IF IRRIGATION INSTALLATION WILL LAG, BUFFER SHALL BE RESTORED TO ORIGINAL CONDITION FOLLOWING INSTALLATION. DISTURBED LAYERS OF GRANULAR MATERIAL SHALL BE RESTORED, EROSION CONTROL BLANKET AND GEOTEXTILES SHALL BE REPLACED OR PATCHED, AND FINISH GRADES SHALL MAINTAIN DESIGN SLOPES.
- FERTILIZERS SHALL NOT BE APPLIED WHEN HEAVY PRECIPITATION IS ANTICIPATED. APPLICATION SHALL BE IN ACCORDANCE WITH THE SITE'S STANDARD OPERATION PROCEDURES AND THE MANUFACTURER'S RECOMMENDATIONS.
- APPROVED MATERIAL SELECTIONS AND SPECIFICATIONS FOR THE SELECTED BMP ARE LOCATED ON THE BMP SPECIFICATION SHEET.

GRASS BUFFER DESIGN CRITERIA

	MAX. SLOPE
IRRIGATED BLUEGRASS SOD	25%
IRRIGATED NATIVE TURF GRASS	10%

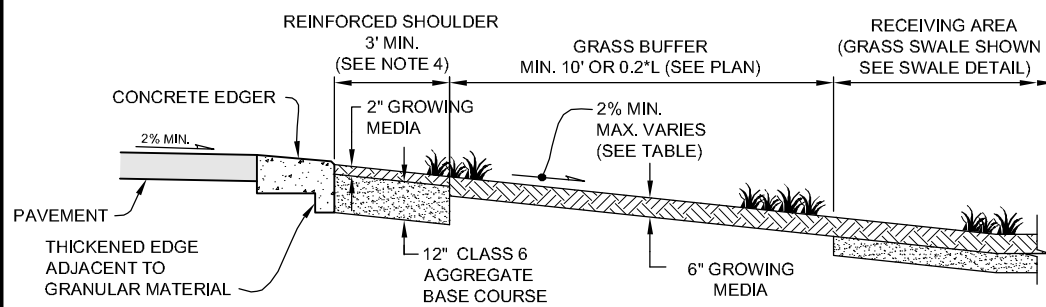


PLAN - GRASS BUFFER
N.T.S.



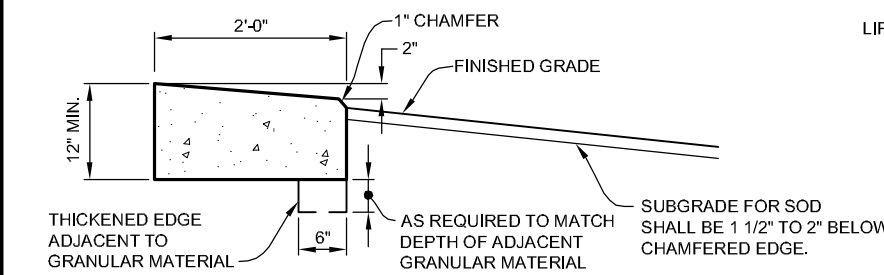
SECTION - GRASS BUFFER WITH WHEEL STOP

SCALE: 1" = 5"



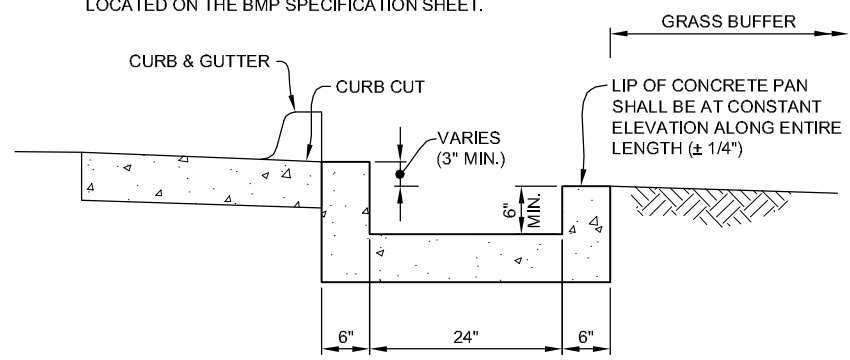
SECTION - GRASS BUFFER WITH REINFORCED SHOULDER

SCALE: 1" = 5"



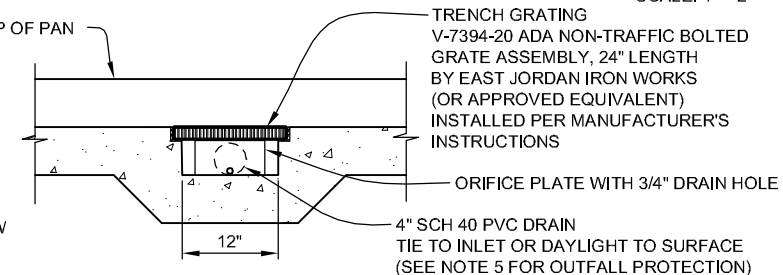
CONCRETE EDGER

SCALE: 1" = 2"



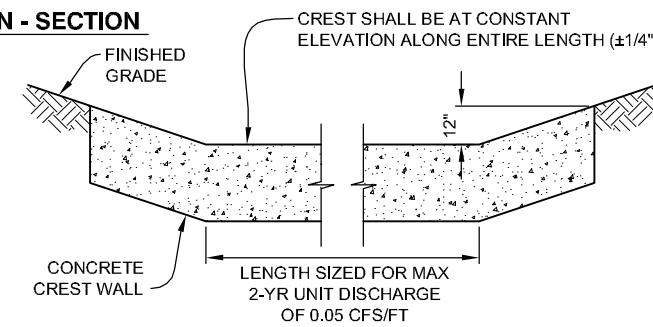
LEVEL SPREADER CONCRETE PAN - SECTION

SCALE: 1" = 2"



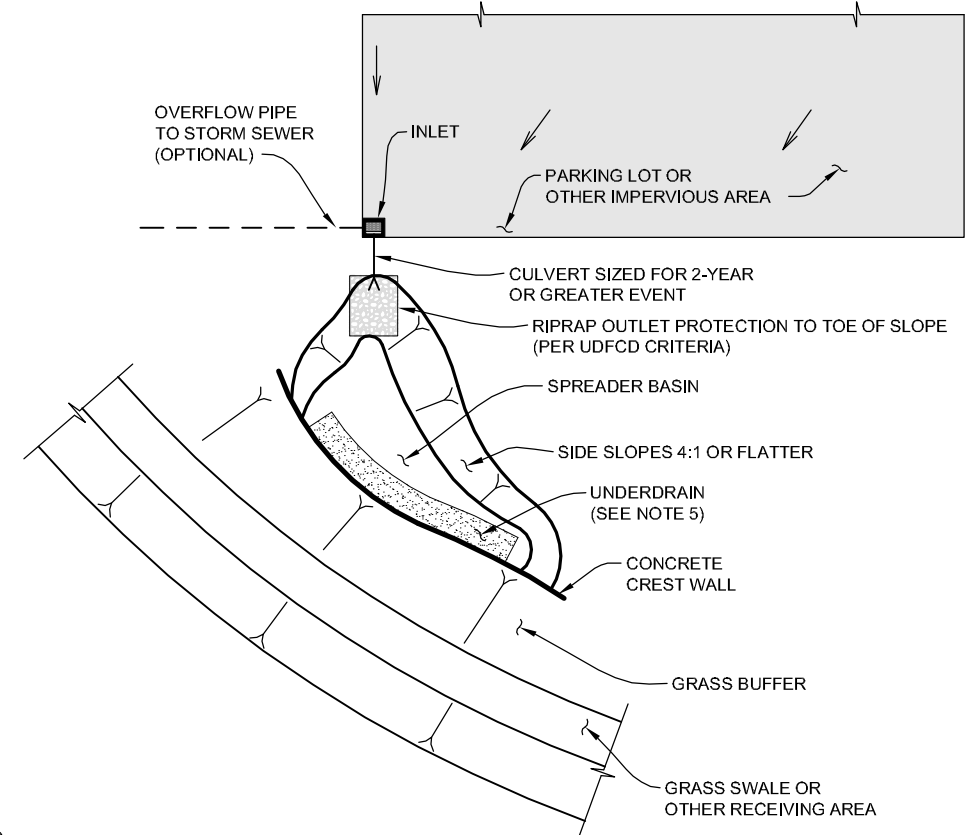
LEVEL SPREADER CONCRETE PAN - DRAIN DETAIL

SCALE: 1" = 2"



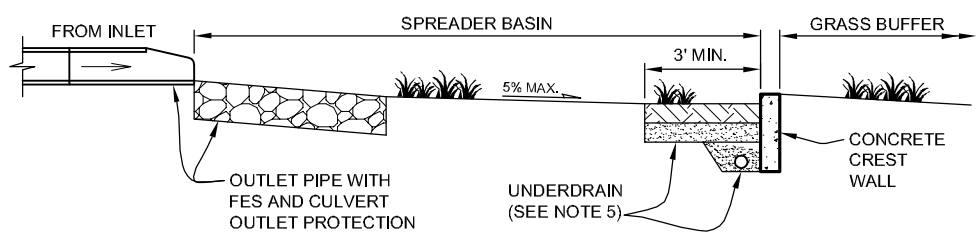
ELEVATION - CONCRETE CREST WALL

SCALE: 1" = 5"



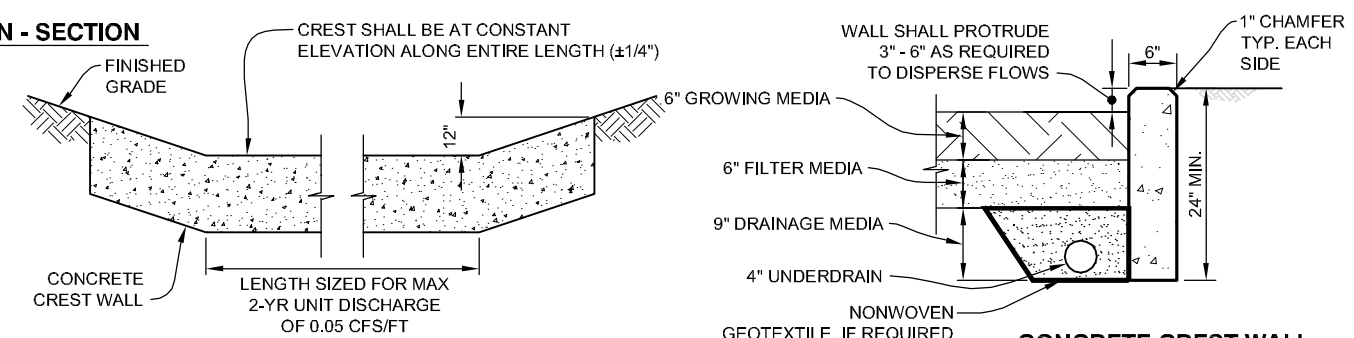
PLAN - LEVEL SPREADER BASIN AND CONCRETE CREST WALL

N.T.S.



SECTION - LEVEL SPREADER BASIN AND CONCRETE CREST WALL

SCALE: 1" = 5"



CONCRETE CREST WALL

SCALE: 1" = 2"

DATE: MAY 08, 2012 TIME: 10:27 PM
NAME: P:\08\01\03\2008 Task Orders SEMSWA\Task 4 EDB Detail\BMP Detail 5_12-1108-01\03_Grass.swg

REFERENCE:	SCALE:	No.	Date	Standard Plan Revision Description



76 INVERNESS DRIVE EAST, SUITE A
ENGLEWOOD CO, 80112
PHONE (303) 858-8844
FAX (303) 267-9565

GRASS BUFFER AND LEVEL SPREADER

SHEET 1 OF 1