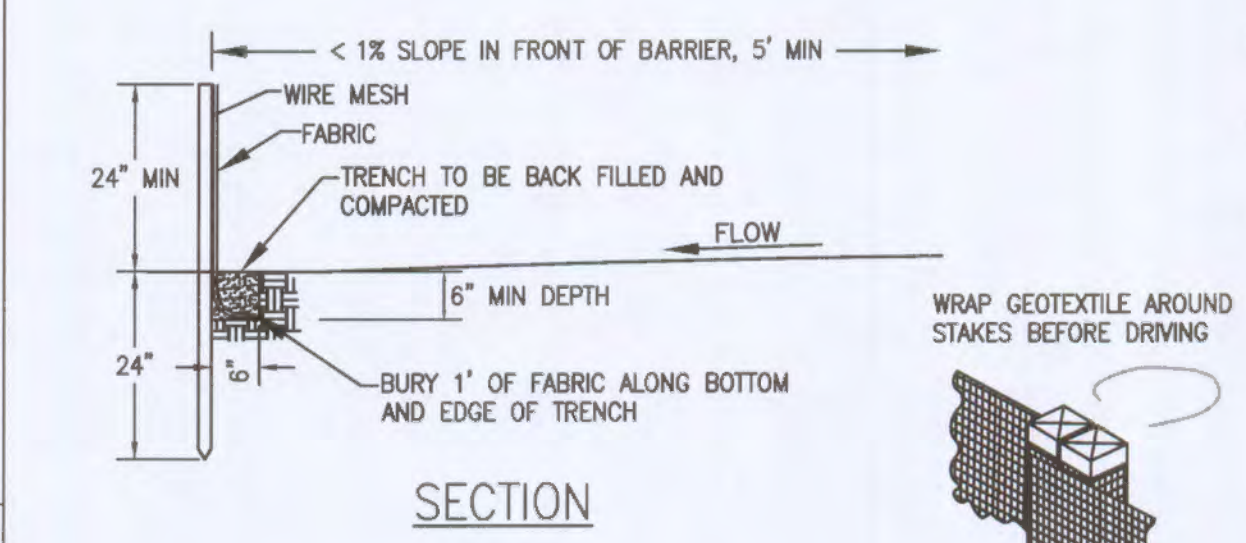
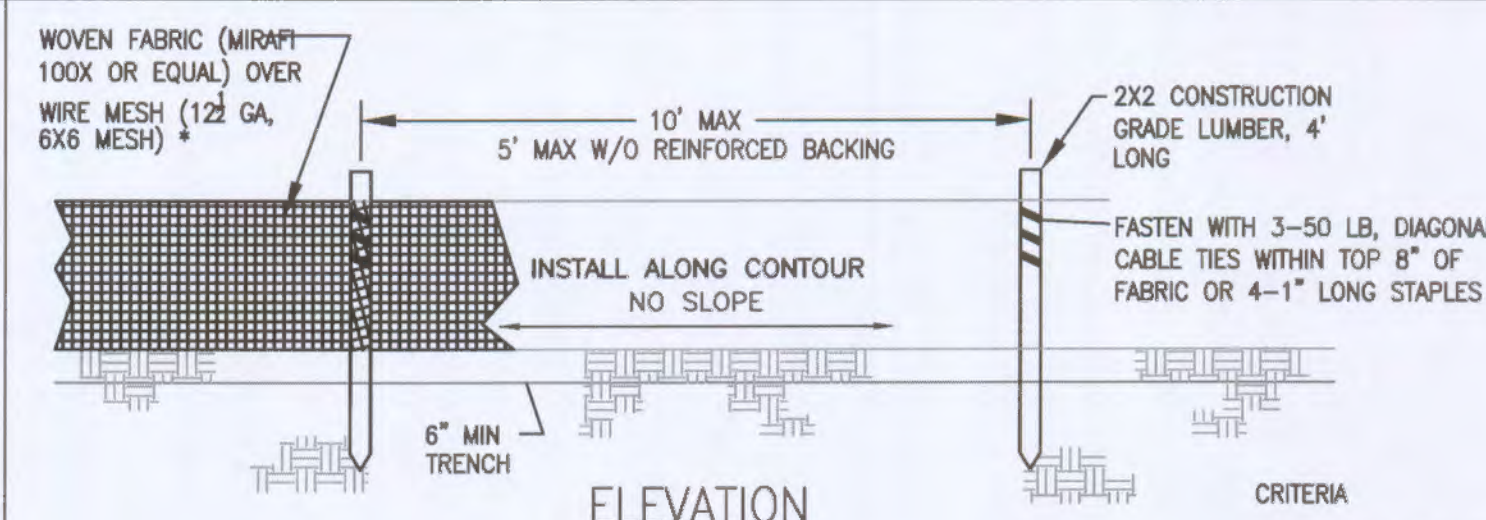


- DESIGN CRITERIA**
- SILT FENCE FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
 - STRAW BALE BARRIERS FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
 - REFER TO INDIVIDUAL ESC FIGURE FOR INSTALLATION.
 - TERRACING INCLUDES LOGS, WATLES & FILTER SOCKS.

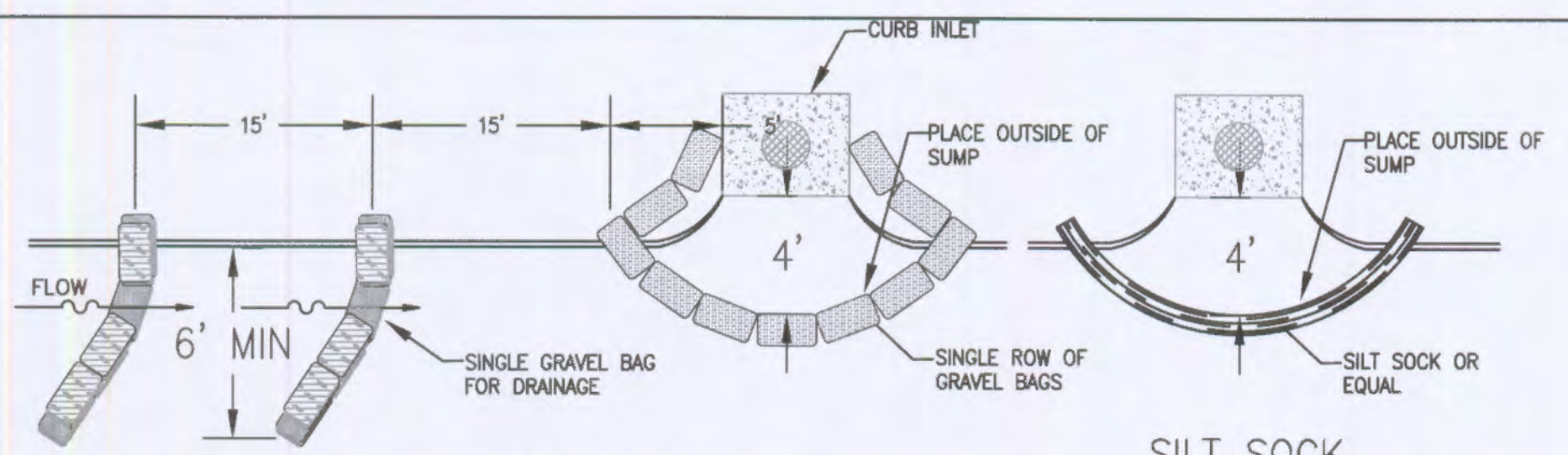
SPACING CHART FOR ESC DEVICES



JOINING SECTIONS OF SILT FENCE

- CRITERIA**
- SILT FENCE SHALL BE 24 INCHES HIGH.
 - SILT FENCE SHALL NOT BE USED FOR CONCENTRATED FLOWS.
 - GEOSYNTHETIC REINFORCED SILT FENCE BACKING MAY BE USED IN LIEU OF WIRE MESH.
 - WIRE MESH WILL BE USED AT LOCATIONS SHOWN ON THE APPROVED SWPPP.

SILT FENCE INSTALLATION SHEET FLOW (ONLY)



TRAP PLACEMENT AT LOW POINT

TRAP PLACEMENT AT INTERMEDIATE INLET

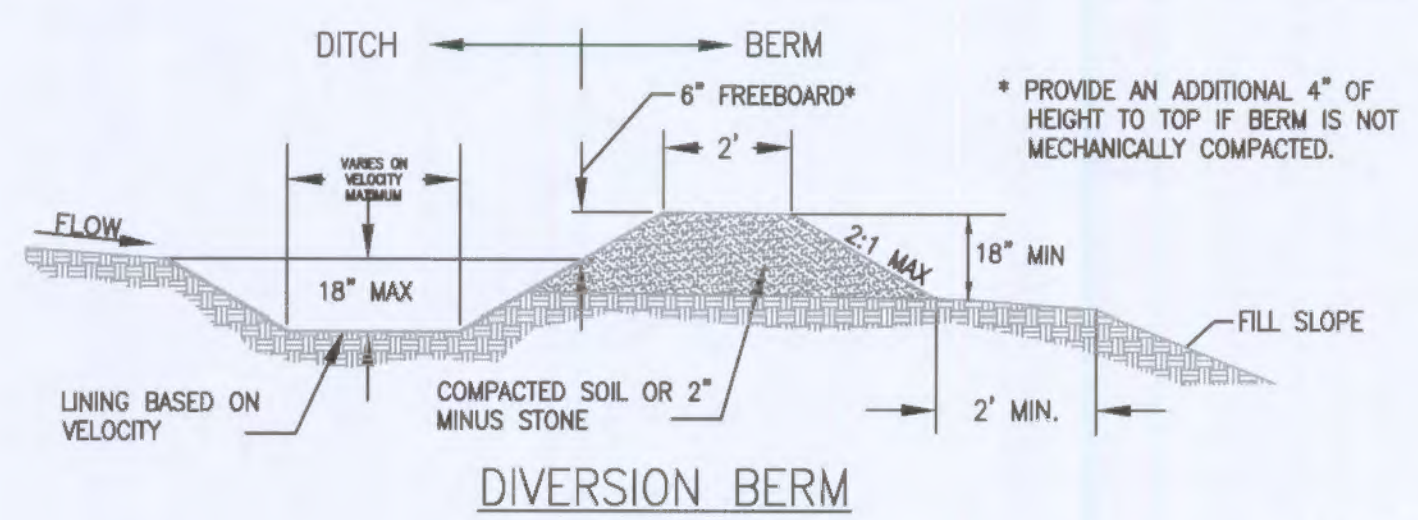
SILT SOCK (ALTERNATIVE)

SPACING OF TRAPS

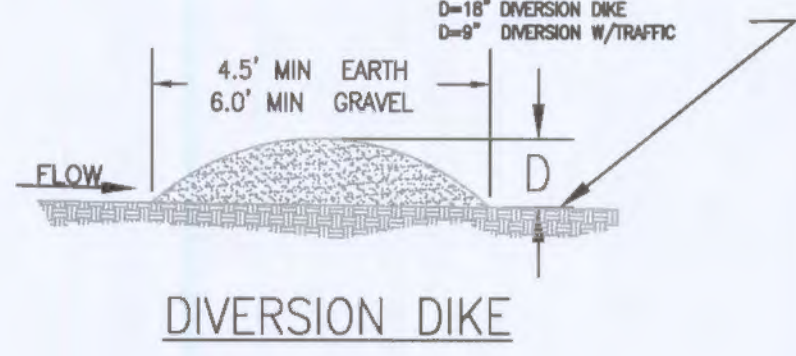
GUTTER SLOPE	S
LOW PT	15'
1%	20'
2%	15'
3% MAX.	10'

- DESIGN CRITERIA**
- MAXIMUM DRAINAGE AREA - 1 ACRE.
 - PEAK RUNOFF SHALL BE ≤ 2 CFS BASED ON THE 6-MONTH STORM.
 - STACK GRAVEL BAGS DOUBLE HIGH. PROVIDE GAP FOR DRAINAGE.

CURB INLET PROTECTION



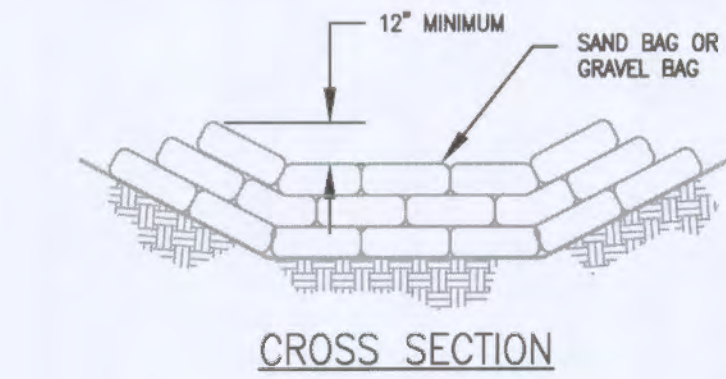
DIVERSION BERM



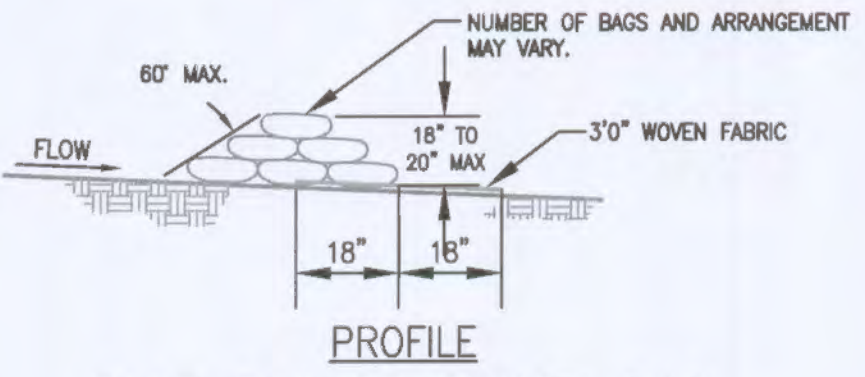
DIVERSION DIKE

- DESIGN CRITERIA**
- DIVERSIONS SHALL BE USED FOR DRAINAGE AREAS ≤ 3 ACRES.
 - DIVERSION CHANNELS SHALL BE DESIGNED TO CONVEY THE 6-MO STORM AT NON-EROSIVE VELOCITIES.
 - CRITICAL LOCATIONS SHALL BE DESIGNED FOR THE 15YR / 20MIN. STORM.
 - MAXIMUM CHANNEL SLOPE OF 3% WITHOUT CHECK DAMS.
 - SWALE SEDIMENT TRAPS ARE TO BE USED IN HIGHLY ERODIVE AREAS.
 - CHANNELS SHALL BE PROTECTED USING APPROPRIATE CHANNEL LINERS.
 - CHANNEL OUTLETS MUST BE STABILIZED.
 - STORM SEWERS MAY BE USED IN LIEU OF OPEN CHANNELS.

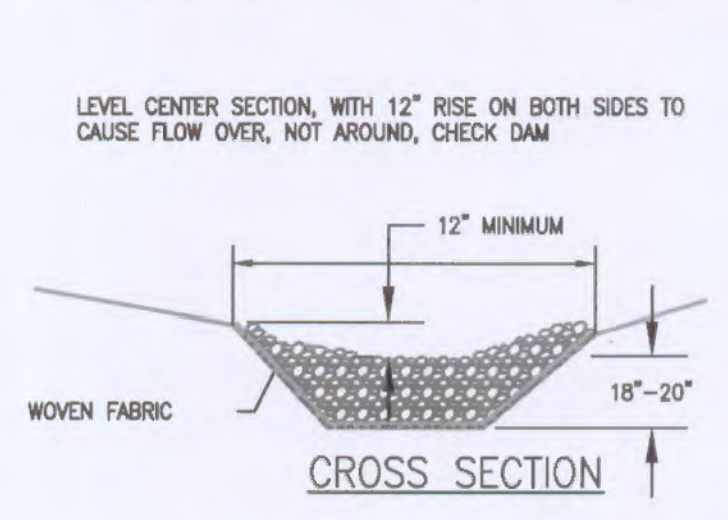
DIVERSION BERMS + DIKES



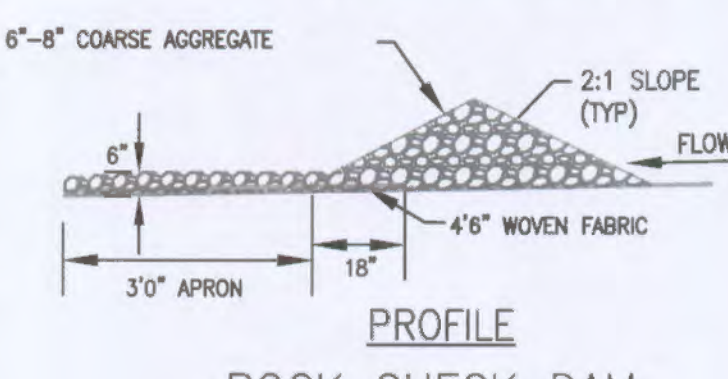
CROSS SECTION



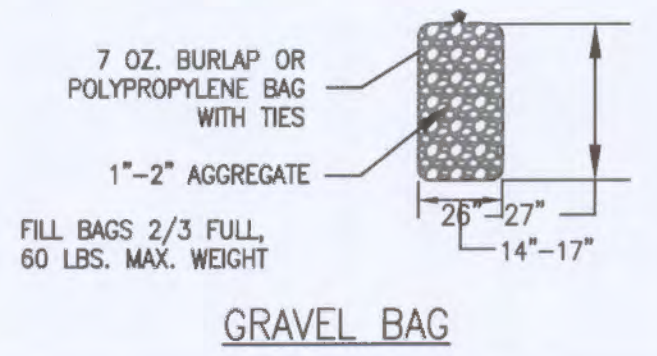
PROFILE SAND BAG OR GRAVEL BAG CHECK DAM



CROSS SECTION



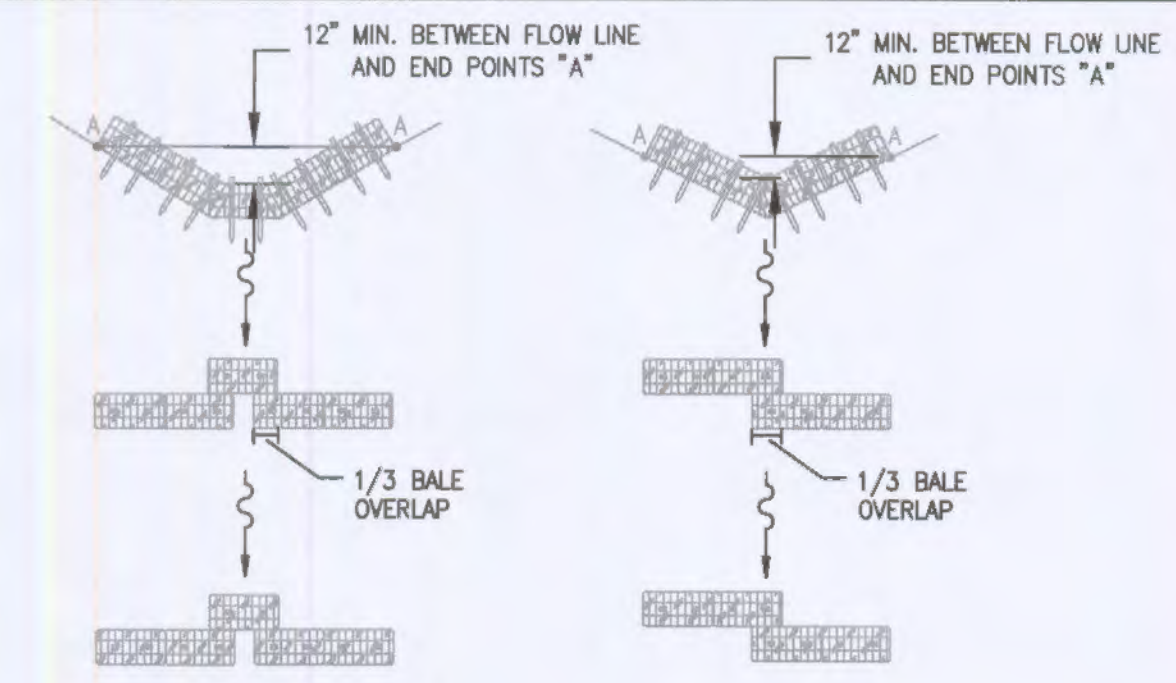
PROFILE ROCK CHECK DAM



GRAVEL BAG

- NOTE:**
- CHECK DAMS MAY BE CONSTRUCTED OF SEVERAL ESC CHECK DAM PRODUCTS.
 - SEE TABLE 69-19 AND ESC 1 FOR CHECK DAM SPACING.

CHECK DAMS



TRAPEZOIDAL DITCH

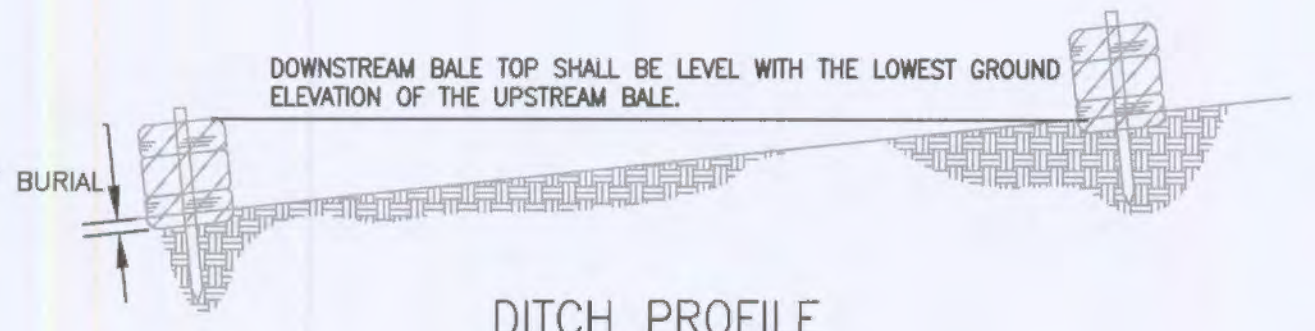
V-DITCH

- CRITERIA FOR LOW CONCENTRATED FLOWS**
- DRAINAGE AREAS SHALL BE LESS THAN 1 ACRE.
 - INSTALL TWO STAKES PER BALE.
 - BALES WILL BE TRENCHED 4" DEEP INTO EARTH.
 - MAXIMUM CHANNEL SLOPE OF 3%.
 - SEDIMENTATION TRAPS TO BE USED IN HIGHLY ERODIVE AREAS.

CHECK DAM SPACING

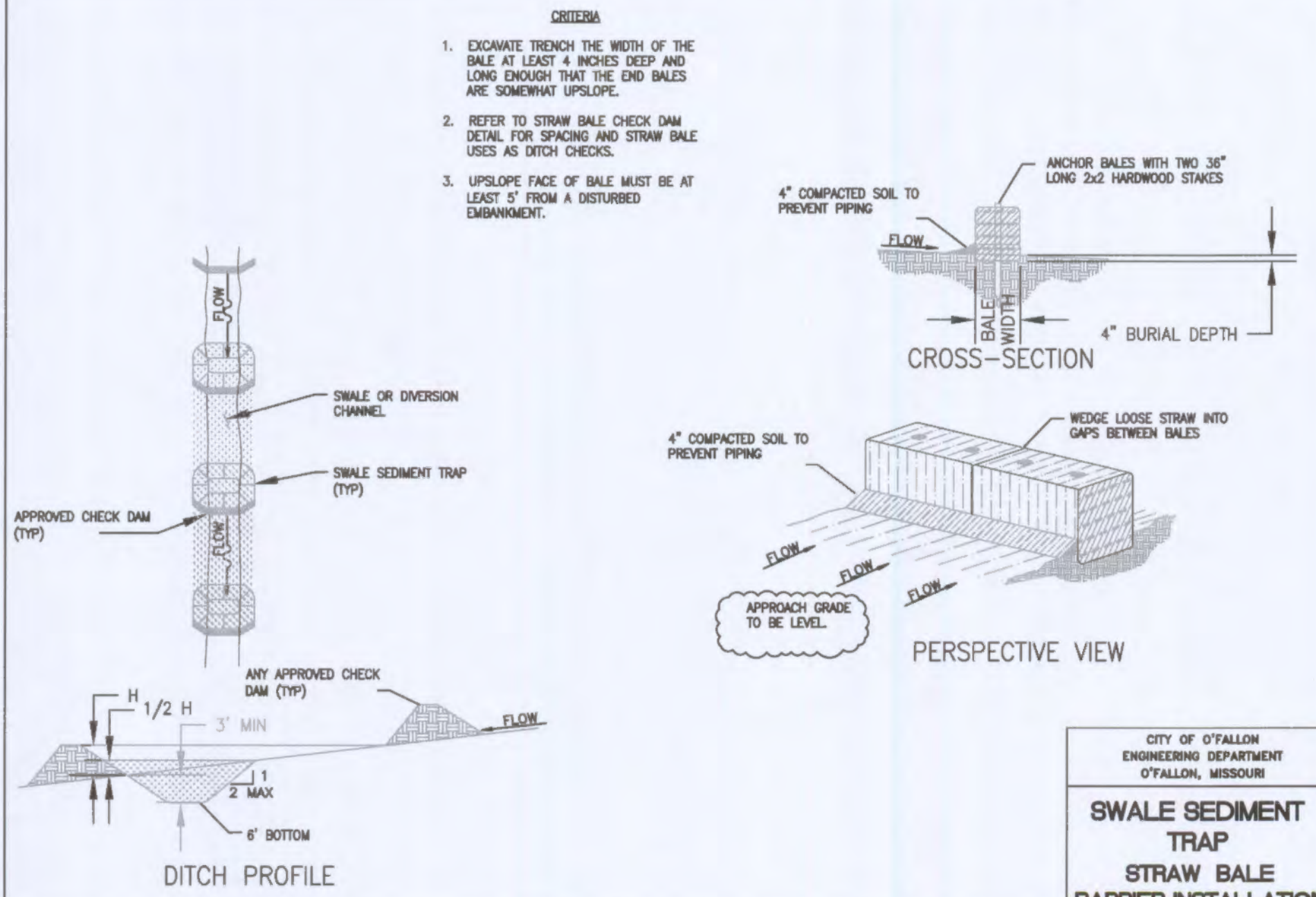
Ditch Slope	Maximum Spacing
3%	50'
2%	75'

STRAW BALE CHECK DAM

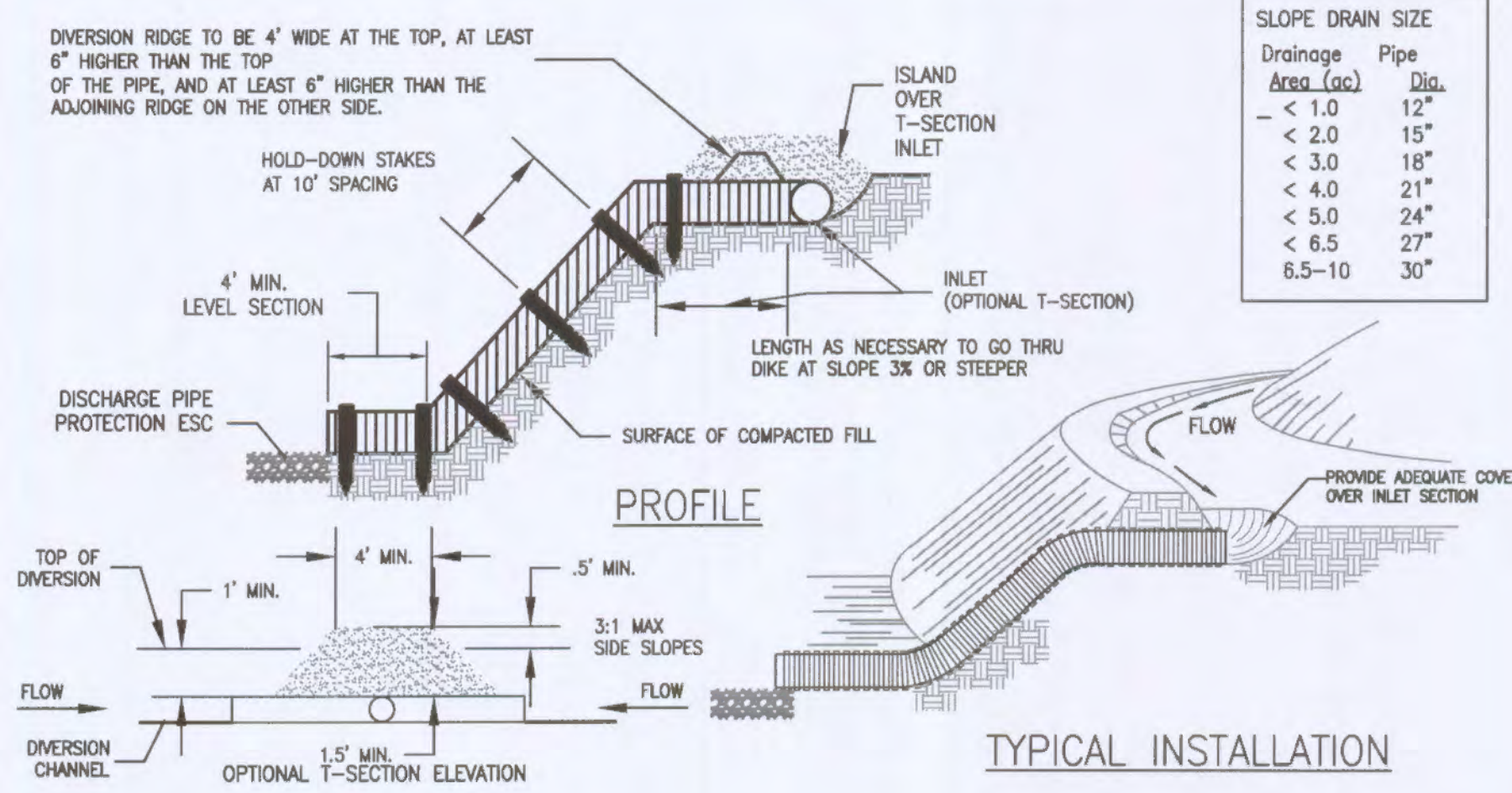


DITCH PROFILE

CITY OF O'FALLON ENGINEERING DEPARTMENT O'FALLON, MISSOURI



SWALE SEDIMENT TRAP STRAW BALE BARRIER INSTALLATION



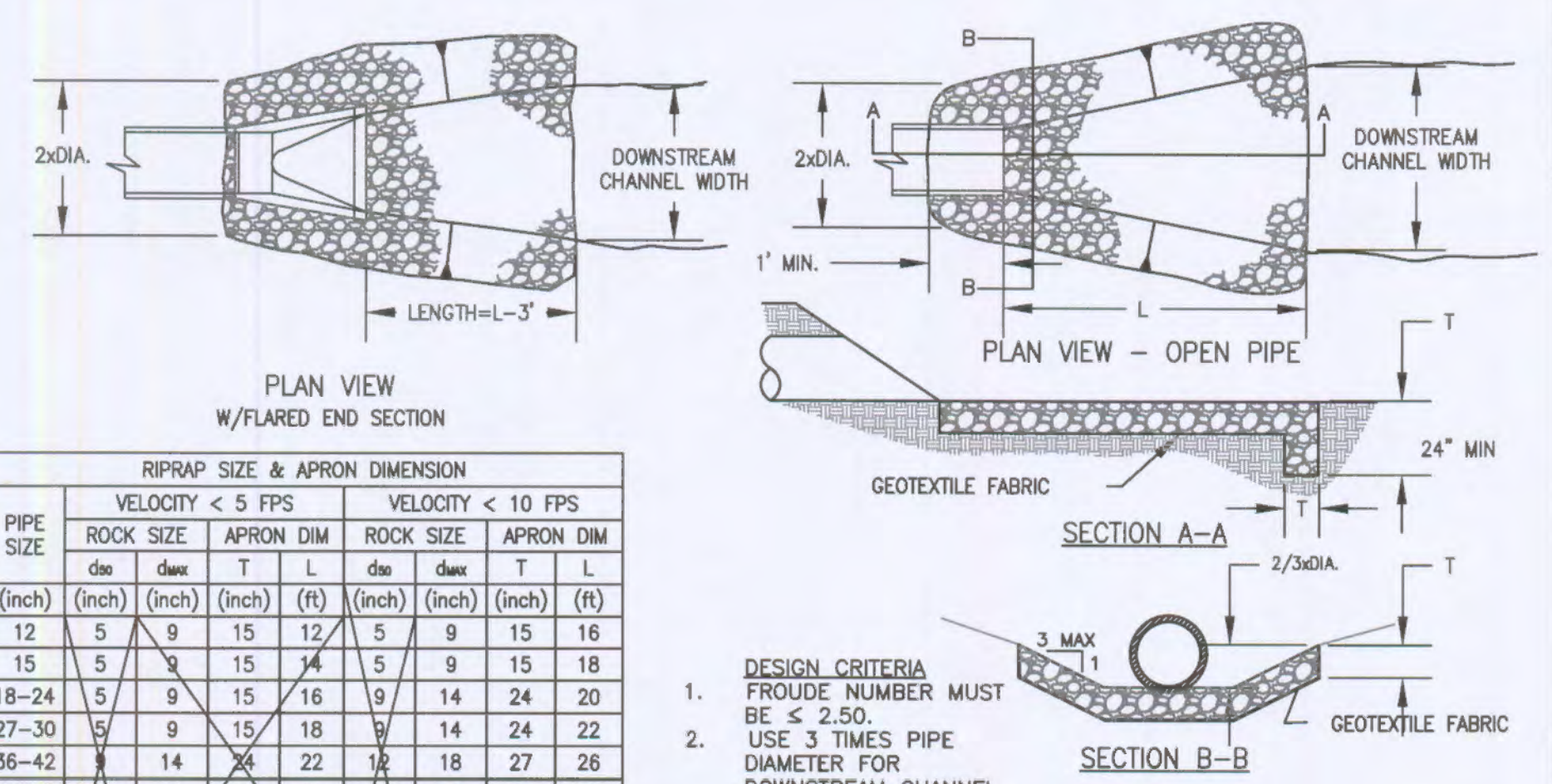
TYPICAL INSTALLATION

SLOPE DRAIN SIZE

Drainage Pipe Area (sq) Dia.	Area (sq) Dia.
< 1.0	12"
< 2.0	15"
< 3.0	18"
< 4.0	21"
< 5.0	24"
< 6.5	27"
6.5-10	30"

CITY OF O'FALLON ENGINEERING DEPARTMENT O'FALLON, MISSOURI

TEMPORARY SLOPE DRAIN



RIPRAP SIZE & APRON DIMENSION

PIPE SIZE (inch)	VELOCITY < 5 FPS			VELOCITY < 10 FPS		
	ROCK SIZE (inch)	APRON DIM (inch)	T (ft)	ROCK SIZE (inch)	APRON DIM (inch)	T (ft)
12	5	9	15	12	5	9
15	5	9	15	14	5	9
18-24	5	9	15	16	9	14
27-30	5	9	15	18	9	14
36-42	14	26	22	18	18	27
48-54	9	14	24	26	12	18
60-66	12	18	27	34	15	24
72-84	15	24	30	42	15	24
96	18	27	30	50	18	27

- DESIGN CRITERIA**
- FROUDE NUMBER MUST BE ≤ 2.50.
 - USE 3 TIMES PIPE DIAMETER FOR DOWNSTREAM CHANNEL WIDTH IF THERE IS NO DEFINED CHANNEL.
 - BANK PROTECTION HEIGHT TO BE 2/3 TIMES PIPE DIAMETER.
 - ROCK SLOPES SHALL BE NO STEEPER THAN 3:1.

CITY OF O'FALLON ENGINEERING DEPARTMENT O'FALLON, MISSOURI

TEMPORARY OUTLET PIPE DISCHARGE PROTECTION

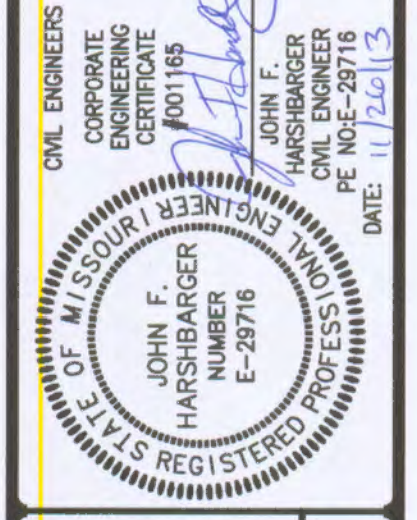
REVISIONS

NO	DATE	DESCRIPTION
1	10/19/2013	CITY, DSSD, TMSD COMMENTS
2	11/25/2013	CHANGE LOT NUMBERS

PRELIMINARY

PLUTE GROUP
 16640 CHESTERFIELD GROVE, SITE 200
 CHESTERFIELD, MO 63005
 PHONE: (636) 537-7129

FOR ANY PART OF THIS PROJECT TO WHICH THIS SET APPLIES, THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.



PRESTON WOODS PHASE 6 IMPROVEMENT PLANS

CRESTVIEW MANOR LANE
 O'FALLON, MO 63396

SWPP DETAILS

ST. CHARLES
 1520 S. Fifth Street
 Suite 307
 St. Charles, MO 63303
 636.974.7508 (tel)
 636.974.7508 (fax)

COLE
 CIVIL ENGINEERING / SURVEYING / PLANNING / LANDSCAPE ARCHITECTURE
 Cole & Associates, Inc.

DESIGN/CALC BY: R/JG
 DRAWN BY: R/JG
 CHECKED BY: TCA
 DRAWING SCALE: NOT TO SCALE
 DATE: 09/04/2013
 Job Number: 13-0054
 Sheet Number: C8.10