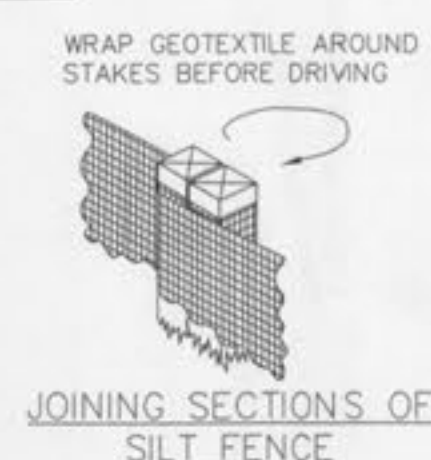
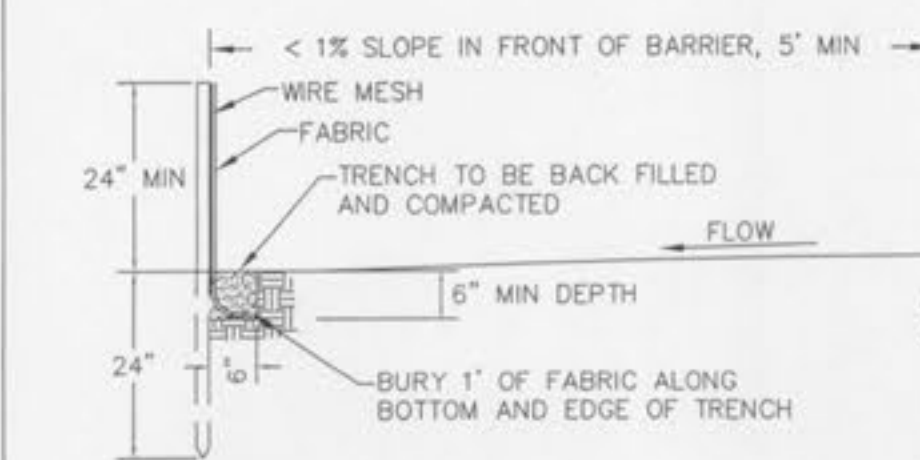
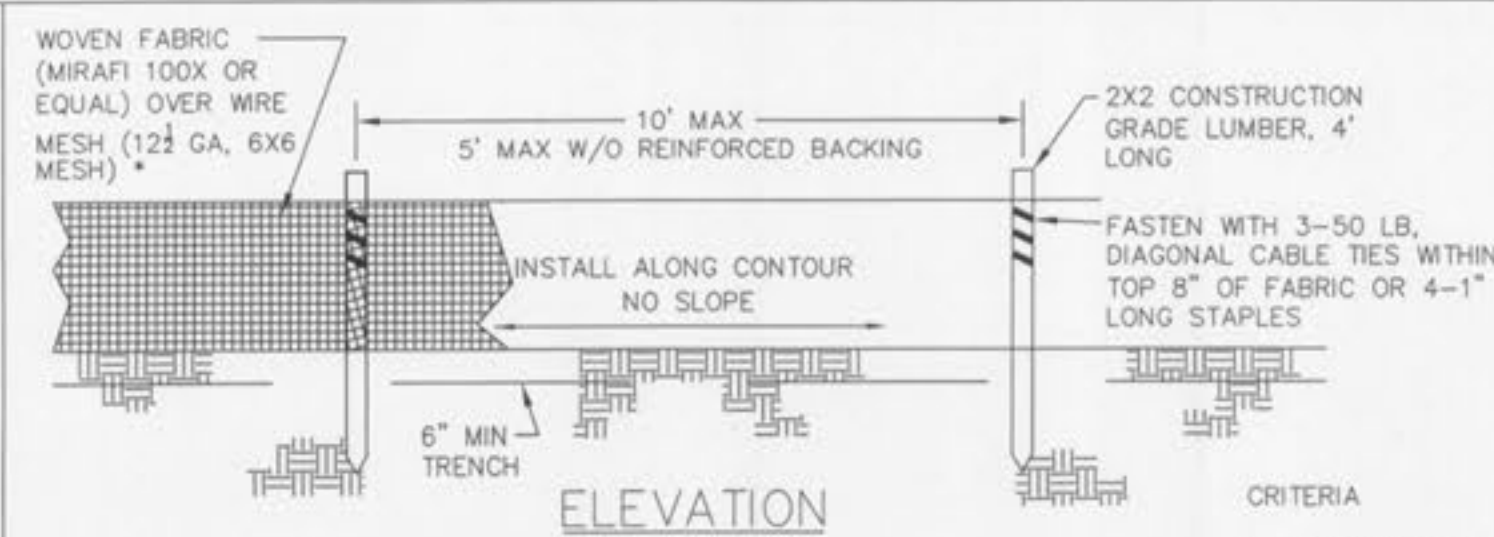


- DESIGN CRITERIA**
- SILT FENCE FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
 - STRAW BALE BARRIERS FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
 - REFER TO INDIVIDUAL ESC FIGURE FOR INSTALLATION.
 - TERRACING INCLUDES LOGS, WATTLES & FILTER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

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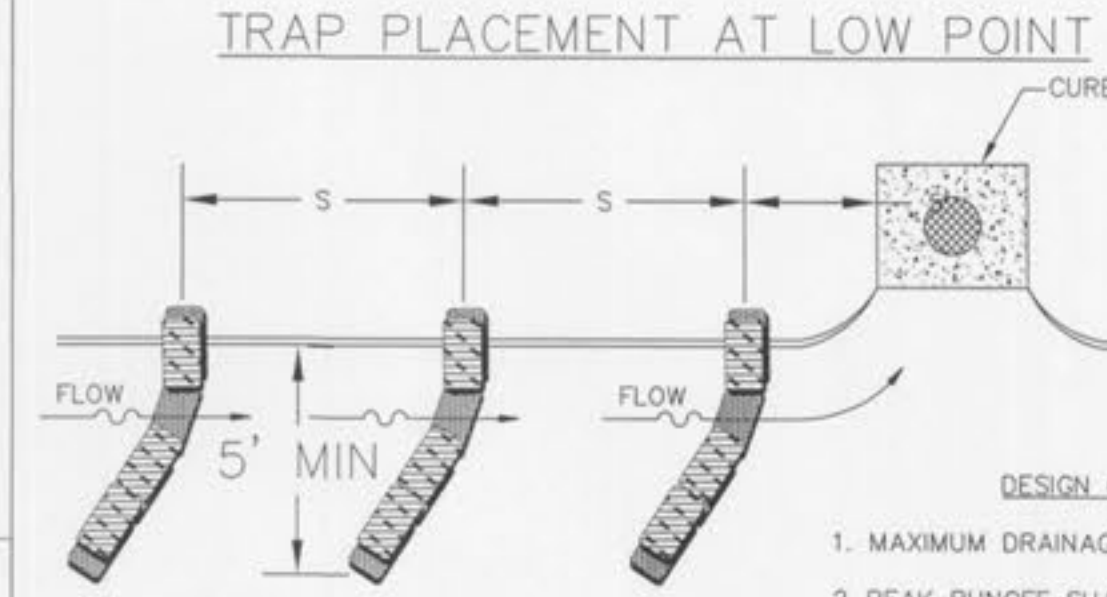
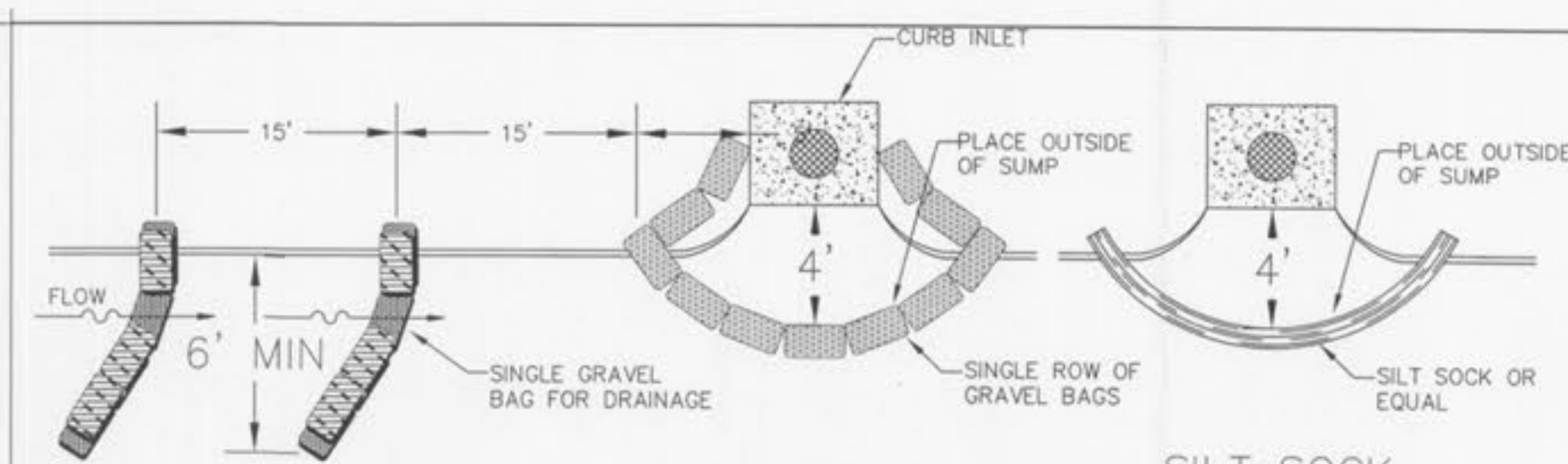
**SPACING CHART
FOR ESC DEVICES**



- 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.

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**SILT FENCE INSTALLATION
SHEET FLOW (ONLY)**



**SILT SOCK
(ALTERNATIVE)**

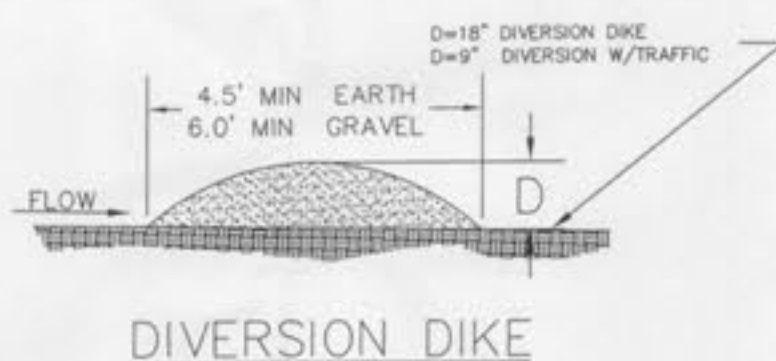
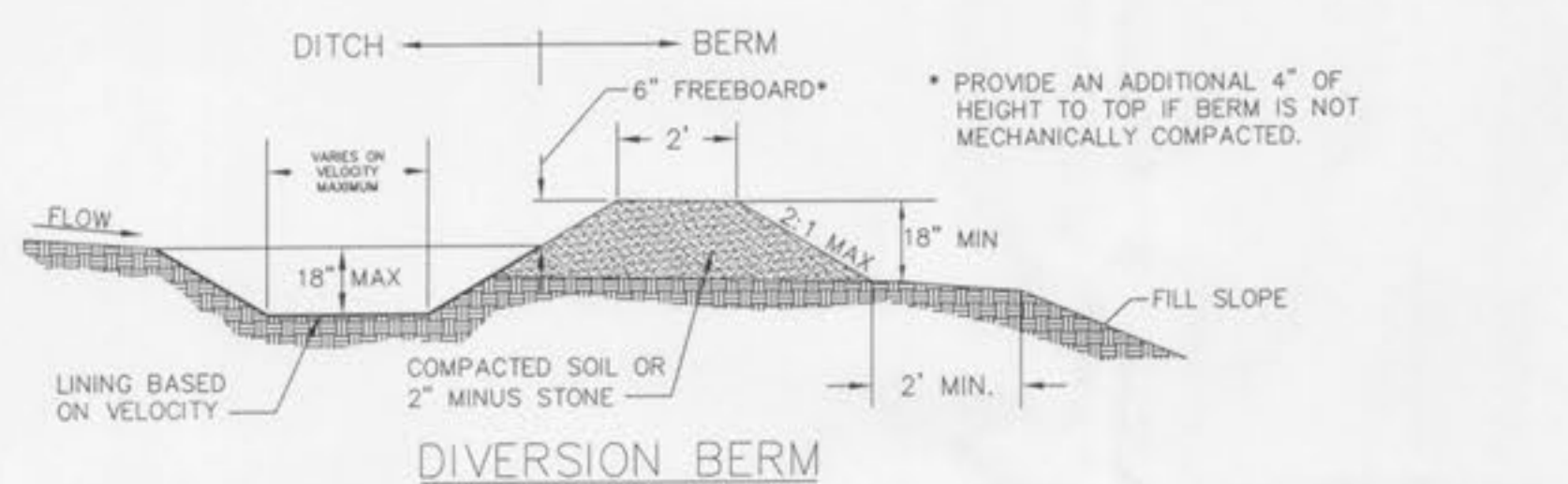
SPACING OF TRAPS

FLATTER 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.

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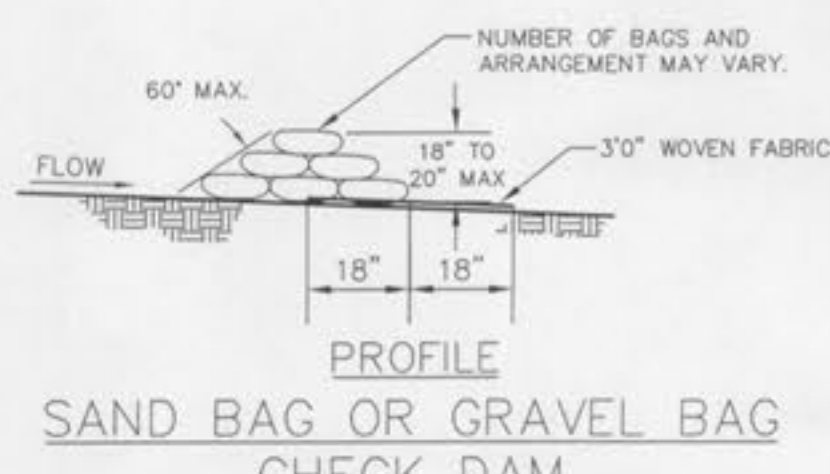
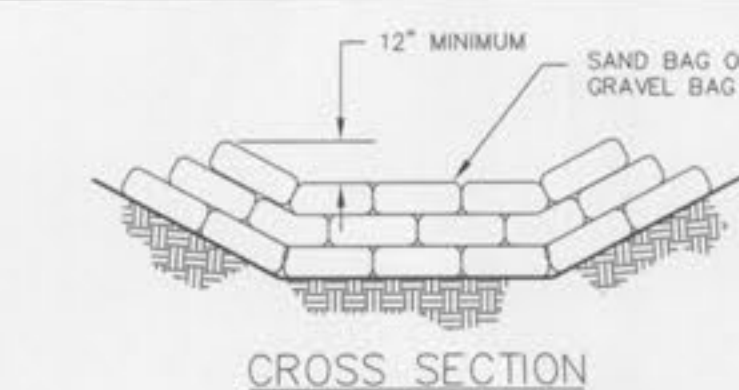
**CURB INLET
PROTECTION**



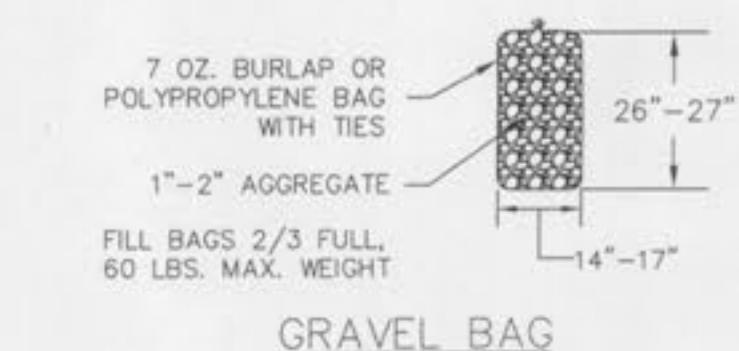
- DESIGN CRITERIA**
- DIVERSIONS SHALL BE USED FOR DRAINAGE AREAS ≤ 3 ACRES.
 - DIVERSION CHANNELS SHALL BE DESIGNED TO CONVEY THE 6-MO STORM AT NON-EROSIVE VELOCITIES.
 - CRITICAL LOCATIONS SHALL BE DESIGNED FOR THE 15YR / 20MIN. STORM.
 - MAXIMUM CHANNEL SLOPE OF 3% WITHOUT CHECK DAMS.
 - SWALE SEDIMENT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

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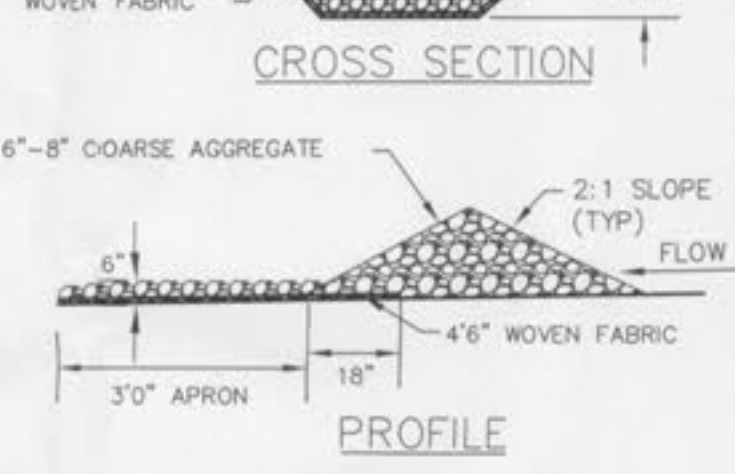
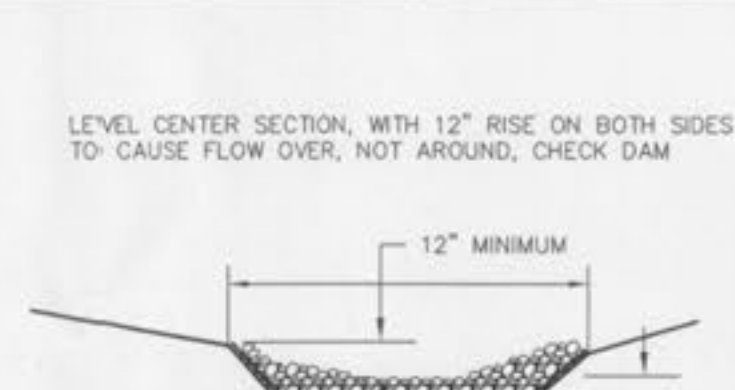
**DIVERSION BERMS
+ DIKES**



**SAND BAG OR GRAVEL BAG
CHECK DAM**



GRAVEL BAG

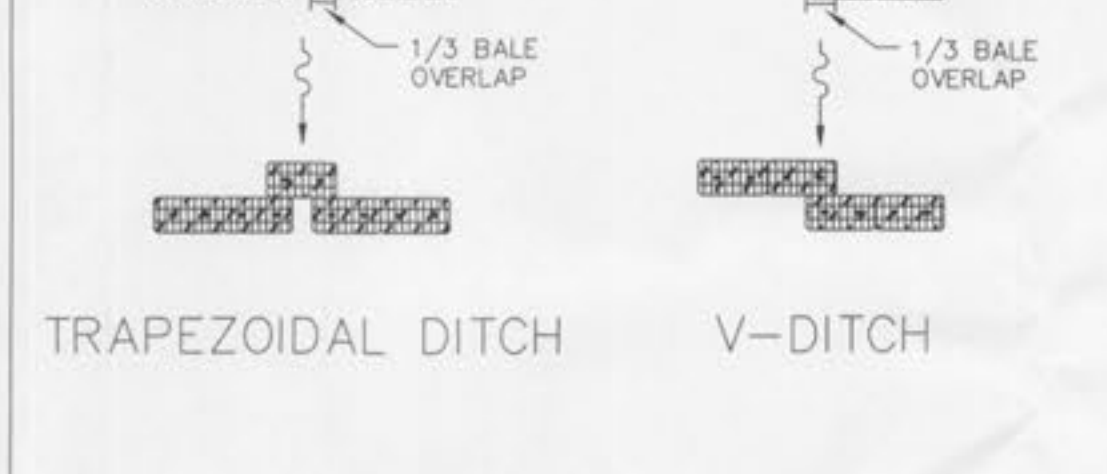
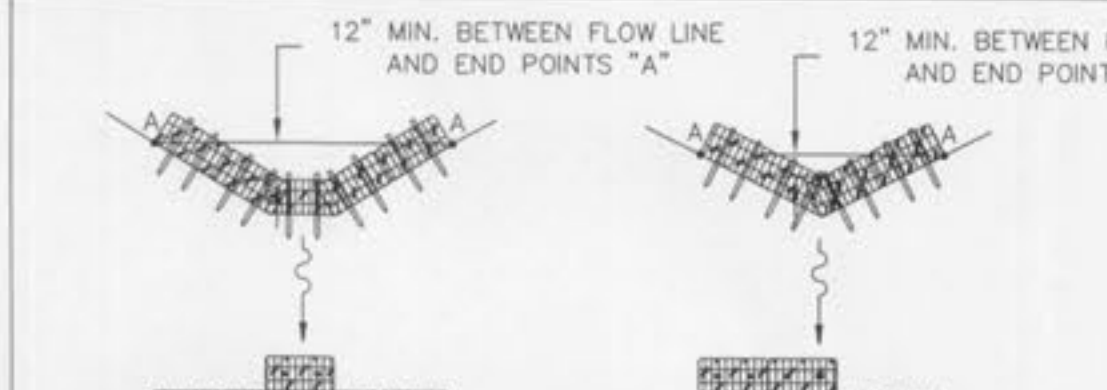


**PROFILE
ROCK CHECK DAM**

- NOTE:**
- CHECK DAMS MAY BE CONSTRUCTED OF SEVERAL ESC CHECK DAM PRODUCTS.
 - SEE TABLE 60-10 AND ESC 1 FOR CHECK DAM SPACING.

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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 EROSION AREAS.

CHECK DAM SPACING

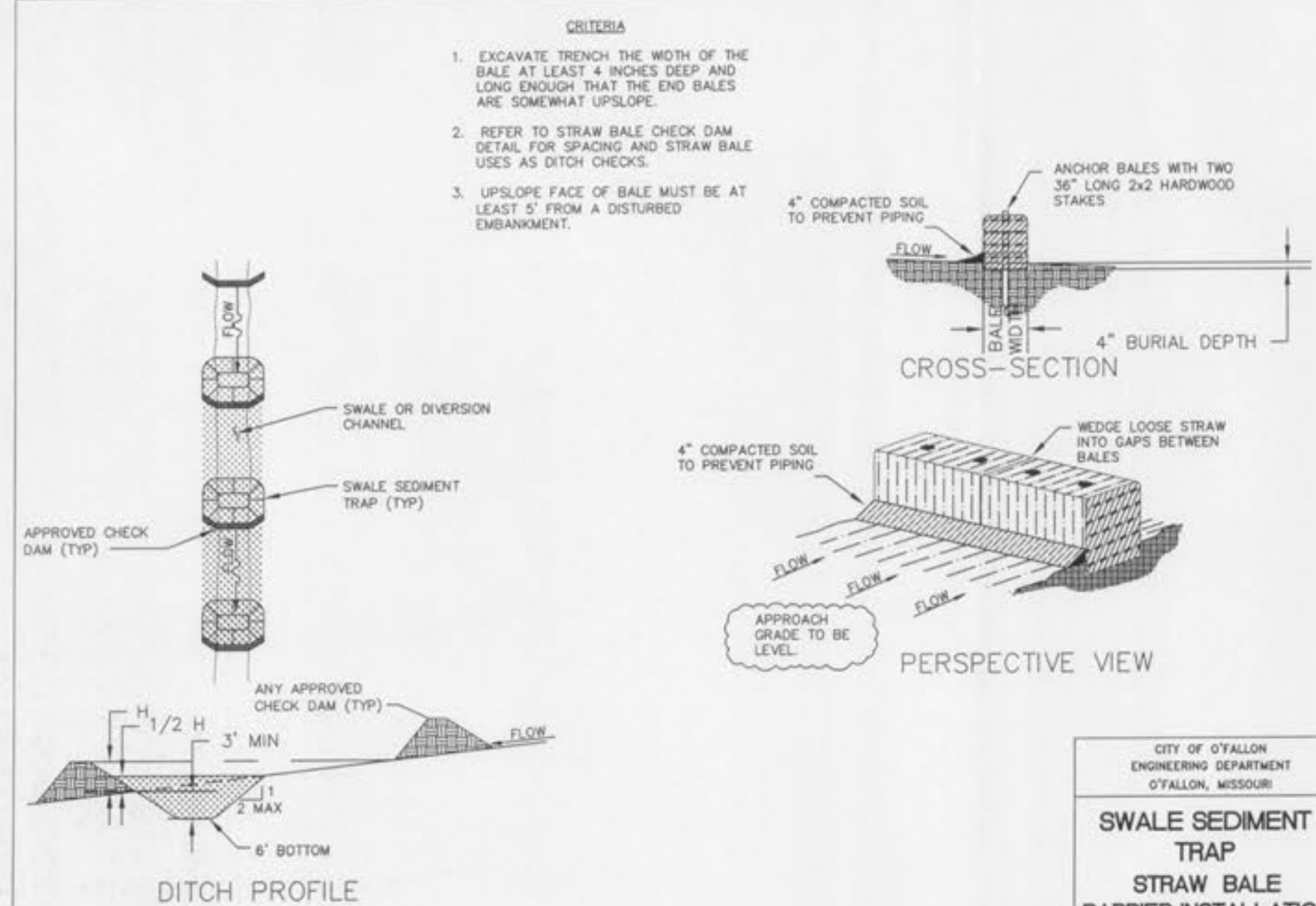
Ditch Slope	Maximum Spacing
3%	50%
2%	75%



DITCH PROFILE

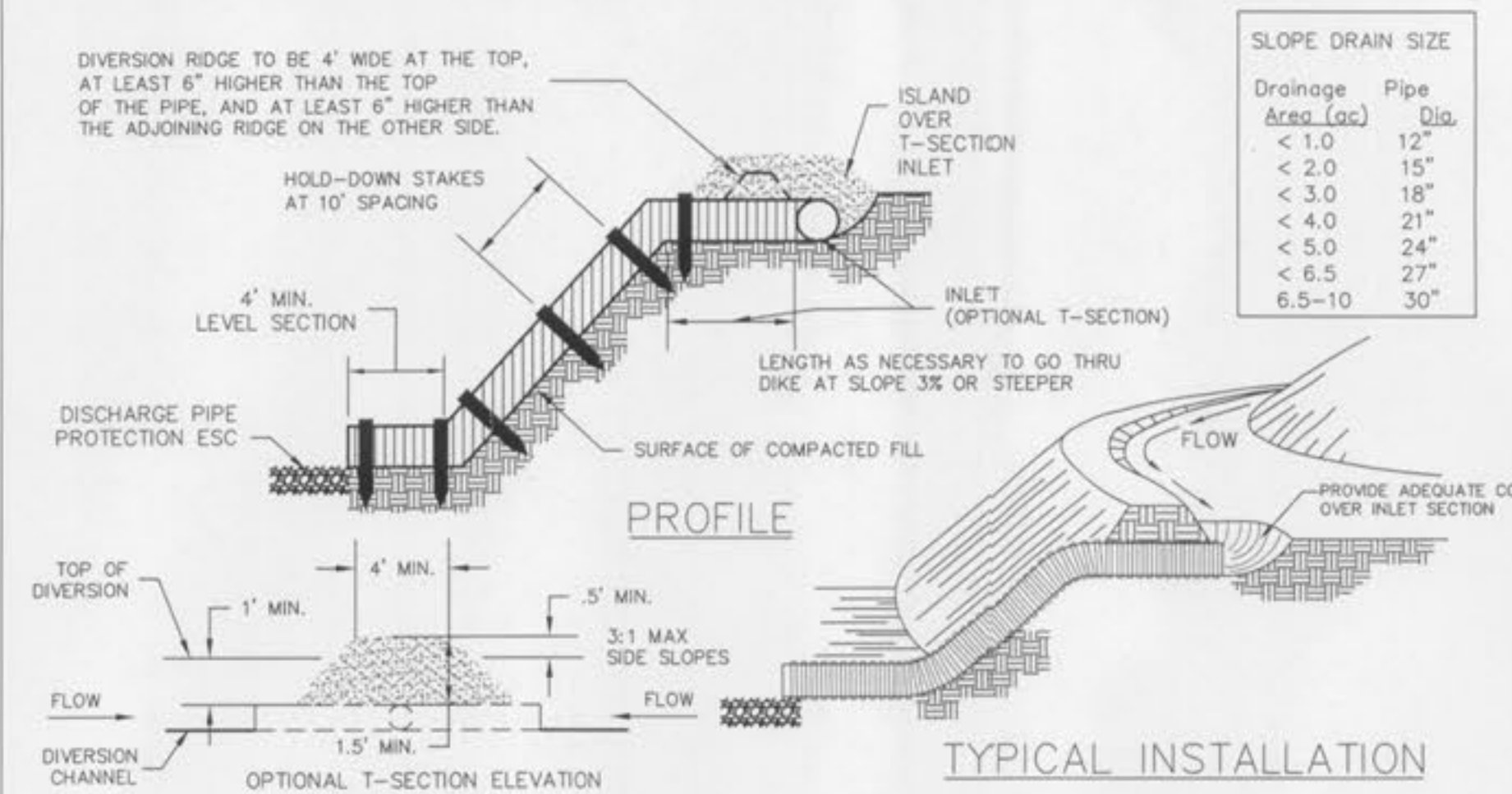
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**STRAW BALE
CHECK DAM**



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**SWALE SEDIMENT
TRAP
STRAW BALE
BARRIER INSTALLATION**



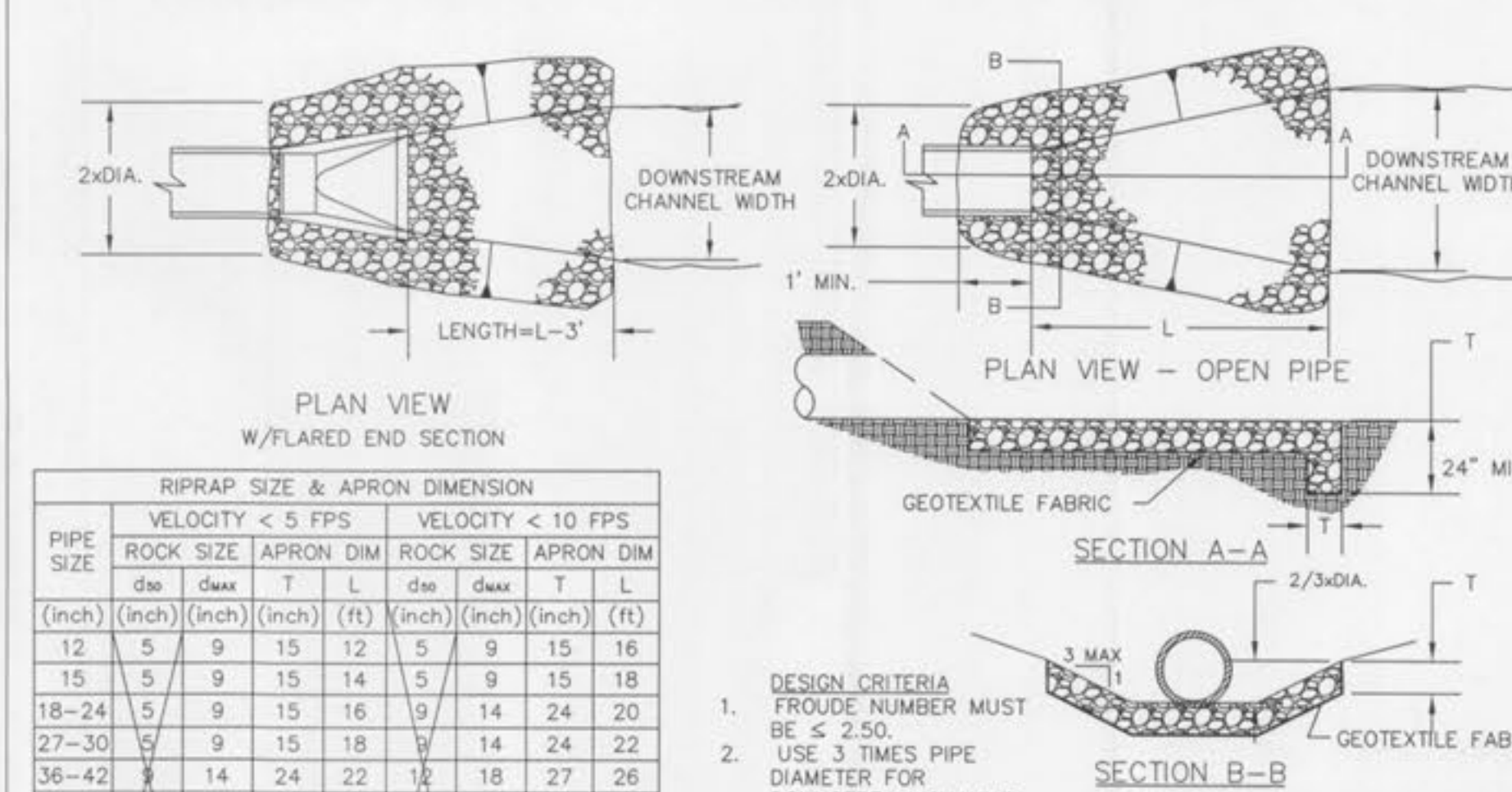
SLOPE DRAIN SIZE

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

- NOTE:**
- PIPE CAN BE CMP, PVC, FLEXIBLE TUBING, OR SIMILAR.
 - THIS METHOD MUST BE USED IN CONJUNCTION WITH OTHER ESC DEVICES. THIS IS NOT A STAND ALONE CONTROL DEVICE.

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**TEMPORARY
SLOPE DRAIN**



PLAN VIEW W/ FLARED END SECTION

PIPE SIZE	RIPRAP SIZE & APRON DIMENSION			
	VELOCITY < 5 FPS		VELOCITY < 10 FPS	
	ROCK SIZE	APRON DIM	ROCK SIZE	APRON DIM
	d ₅₀ d _{max} T	L	d ₅₀ d _{max} T	L
12	5 9	15	12 5	9 15 16
15	5 9	15	14 5	9 15 18
18-24	5 9	15	16 9	14 24 20
27-30	5 9	15	18 9	14 24 22
36-42	9 14	24	22 12	18 27 26
48-54	9 14	24	26 12	18 27 30
60-66	12 18	27	34 15	24 30 38
72-84	15 24	30	42 15	24 30 46
96	18 27	30	50 18	27 30 54

- 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.

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**TEMPORARY OUTLET
PIPE DISCHARGE
PROTECTION**

Comment

Revised

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**GOLDEN CORRAL
BRAMBLETT ROAD
OTTALON, MO 63366
SWPPP DETAILS**

Date: 12/15/11
Project Number: 11063
File Name: 11063 CD
Drawn By: JAB
Check By: MAD

C7