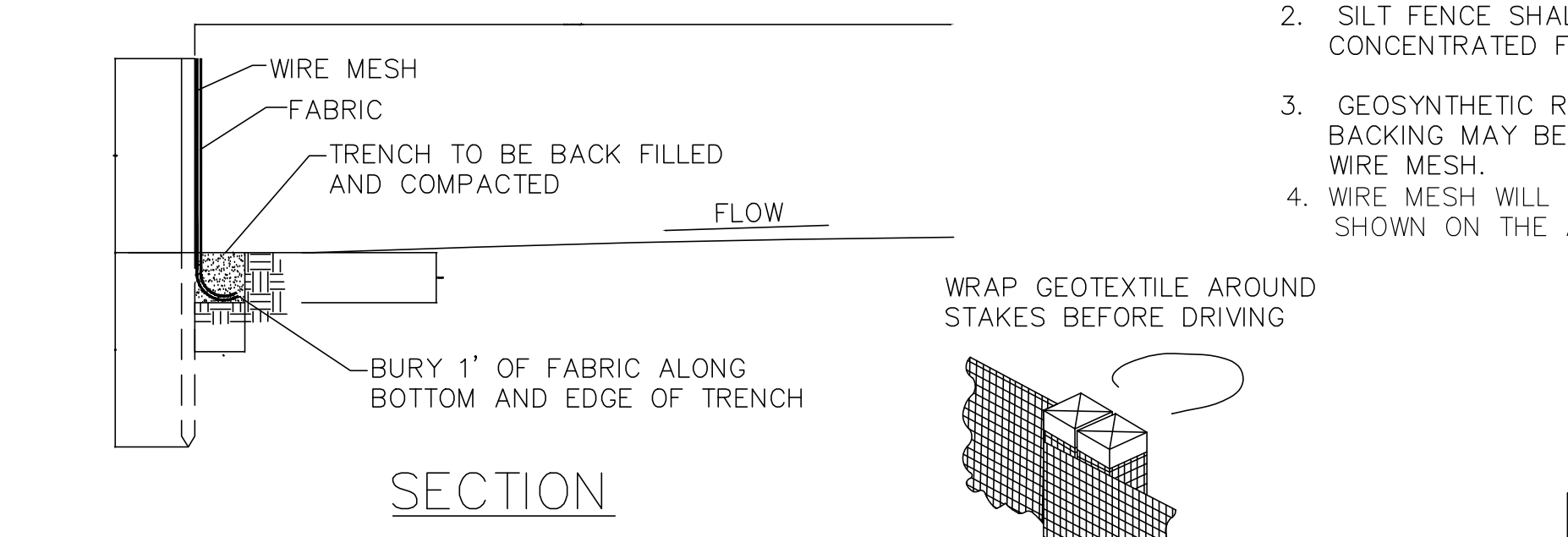
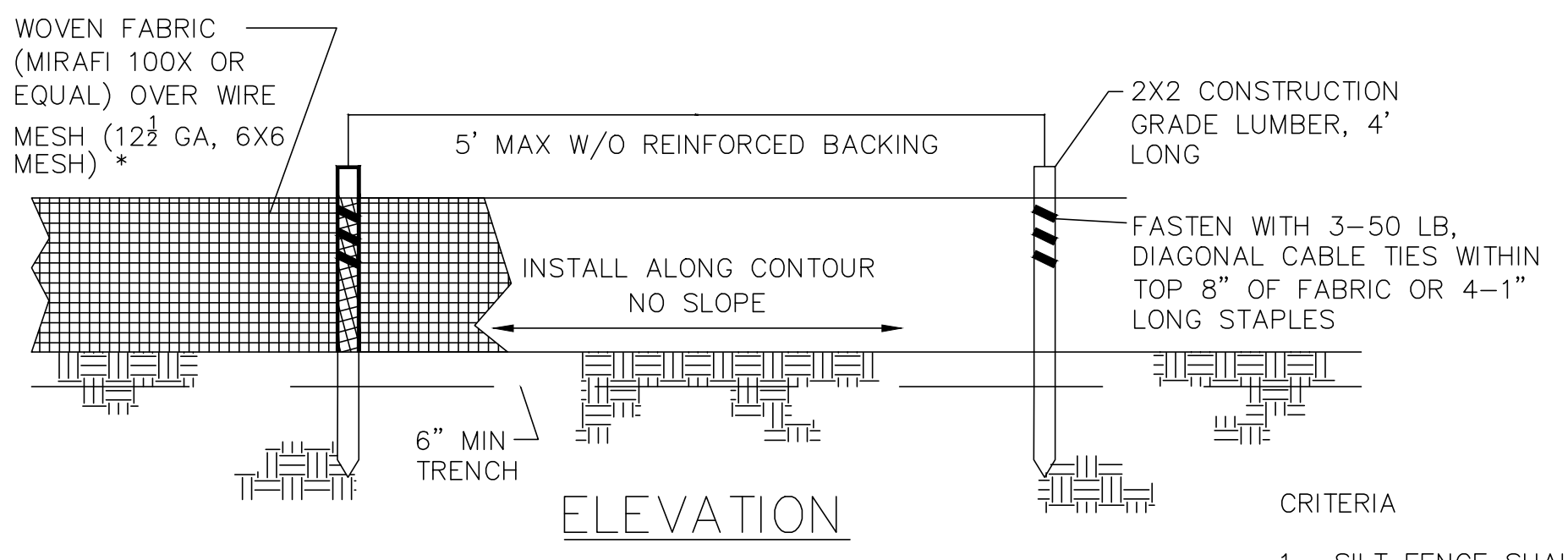


- DESIGN CRITERIA**
- SILT FENCE FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
 - STRAW BALE BARRIERS FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
 - REFER TO INDIVIDUAL ESC FIGURE FOR INSTALLATION.
 - TERRACING INCLUDES LOGS, WATTLE & FILTER SOCKS.

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**SPACING CHART
FOR ESC DEVICES**

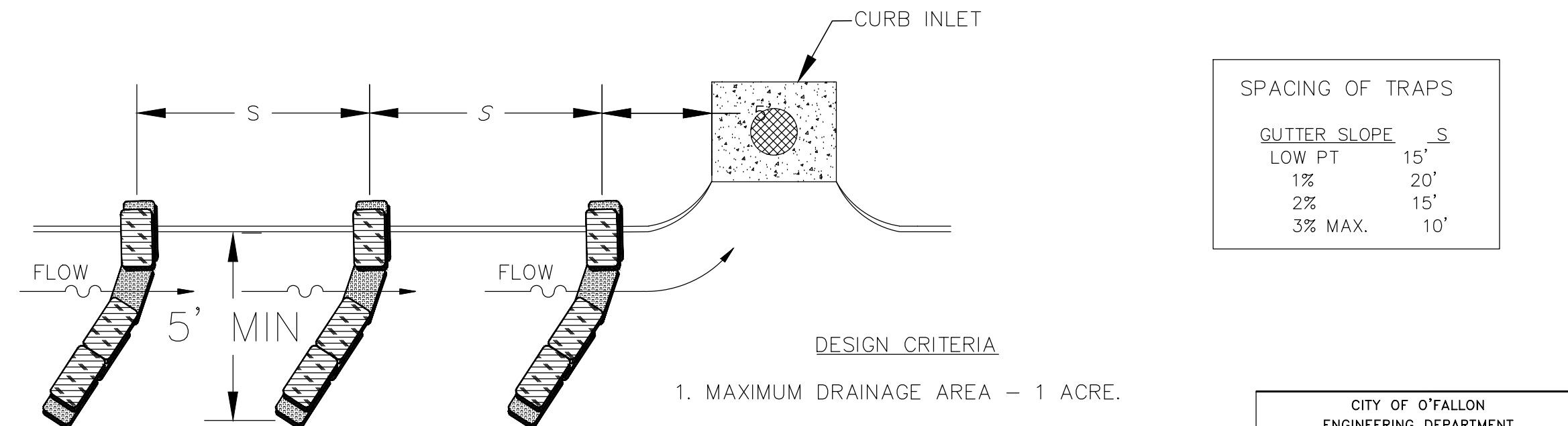
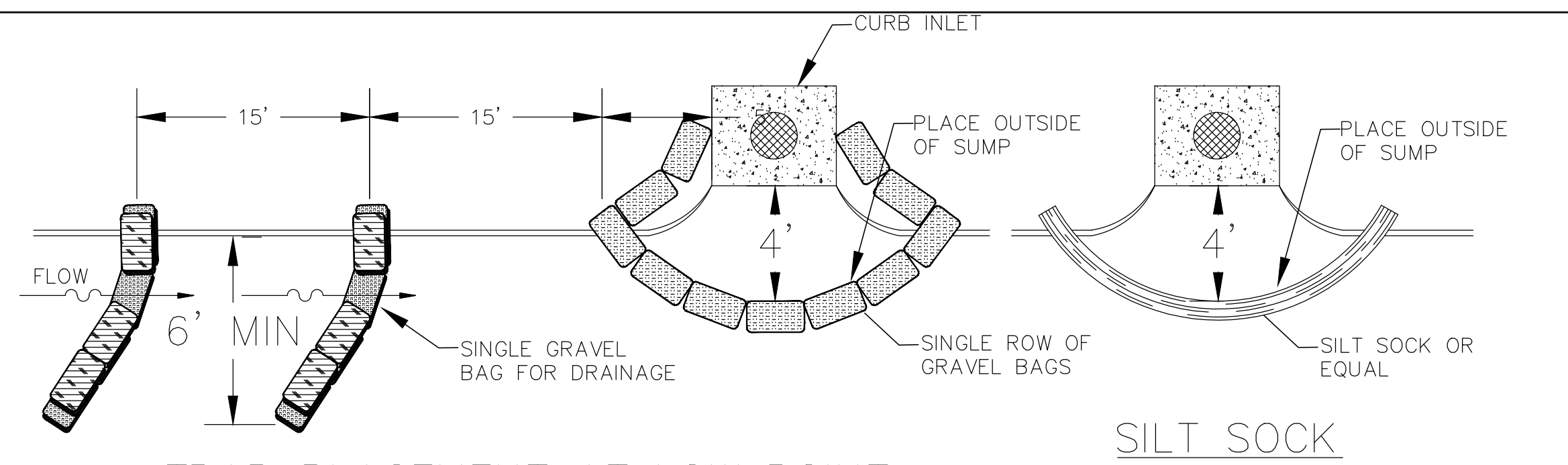


- CRITERIA**
- SILT FENCE SHALL BE 24 INCHES HIGH.
 - SILT FENCE SHALL NOT BE USED FOR CONCENTRATED FLOWS.
 - GEOSYNTHETIC REINFORCED SILT FENCE BACKING MAY BE USED IN LIEU OF WIRE MESH.
 - WIRE MESH WILL BE USED AT LOCATIONS SHOWN ON THE APPROVED SWPPP.

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

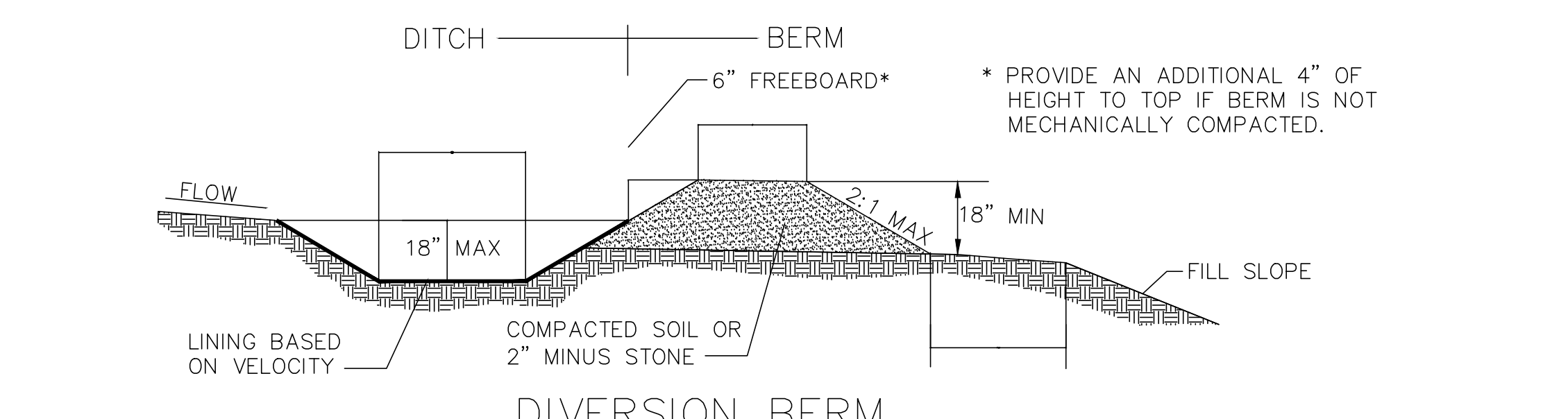
NOTE: IF FABRIC IS INSTALLED BY EQUIPMENT DESIGNED TO SLICE INTO THE GROUND, THE TRENCH IS NOT REQ'D.



- 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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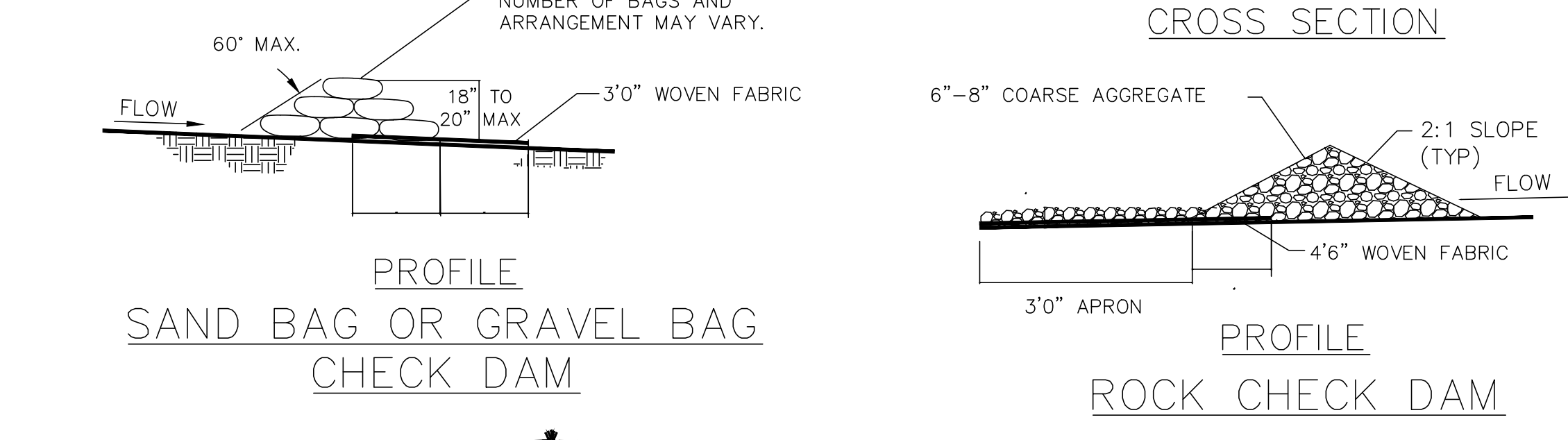
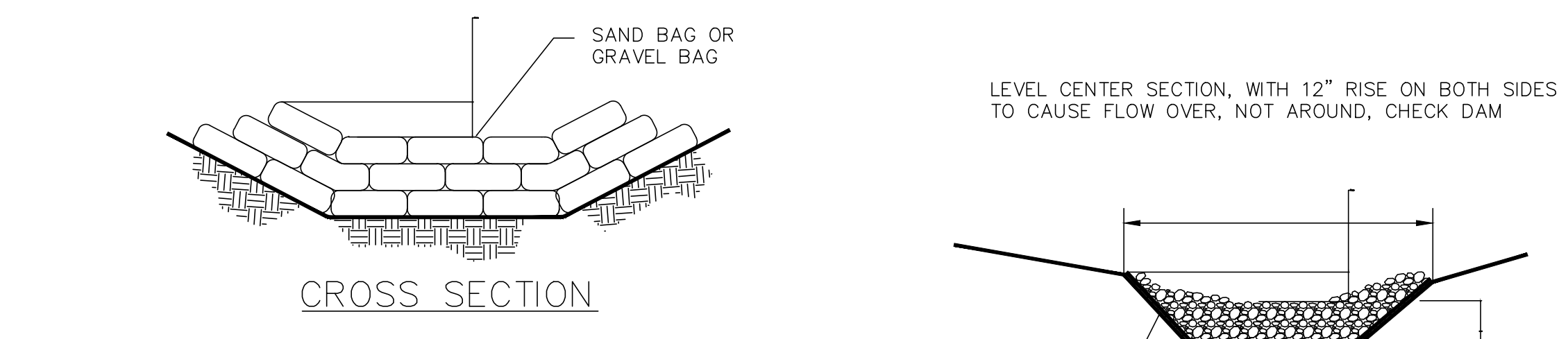
**CURB INLET
PROTECTION**



- 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.
 - 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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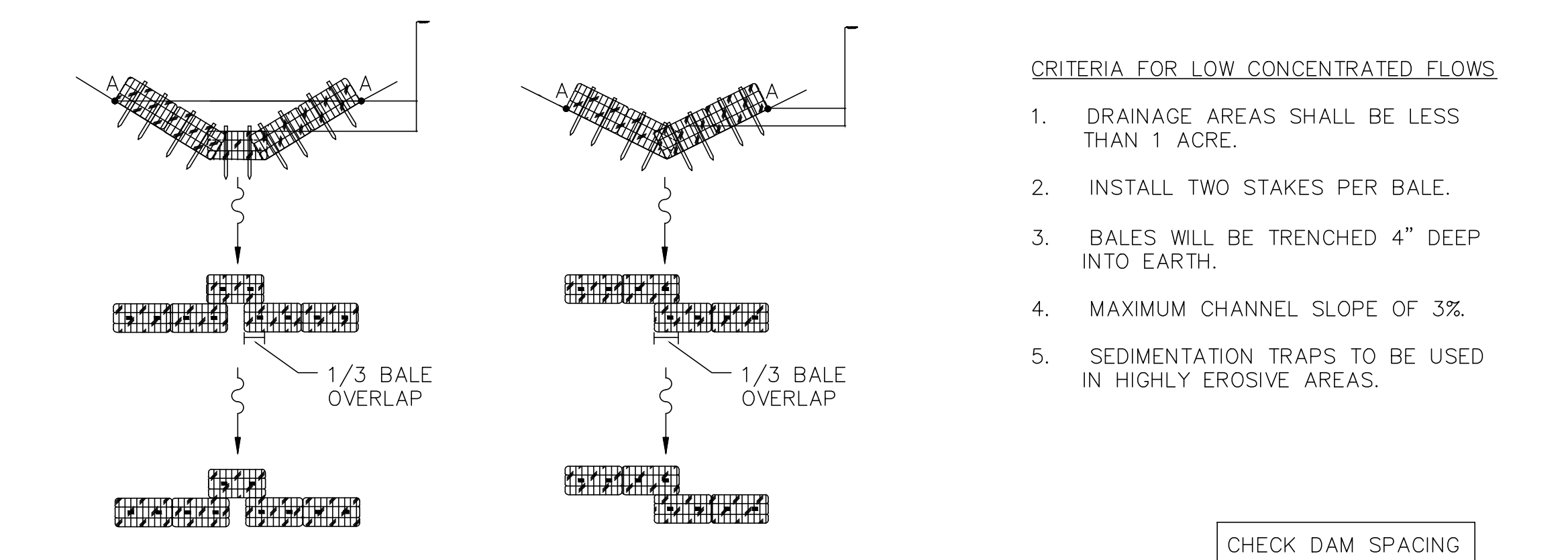
**DIVERSION BERMS
+ DIKES**



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

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CHECK DAMS



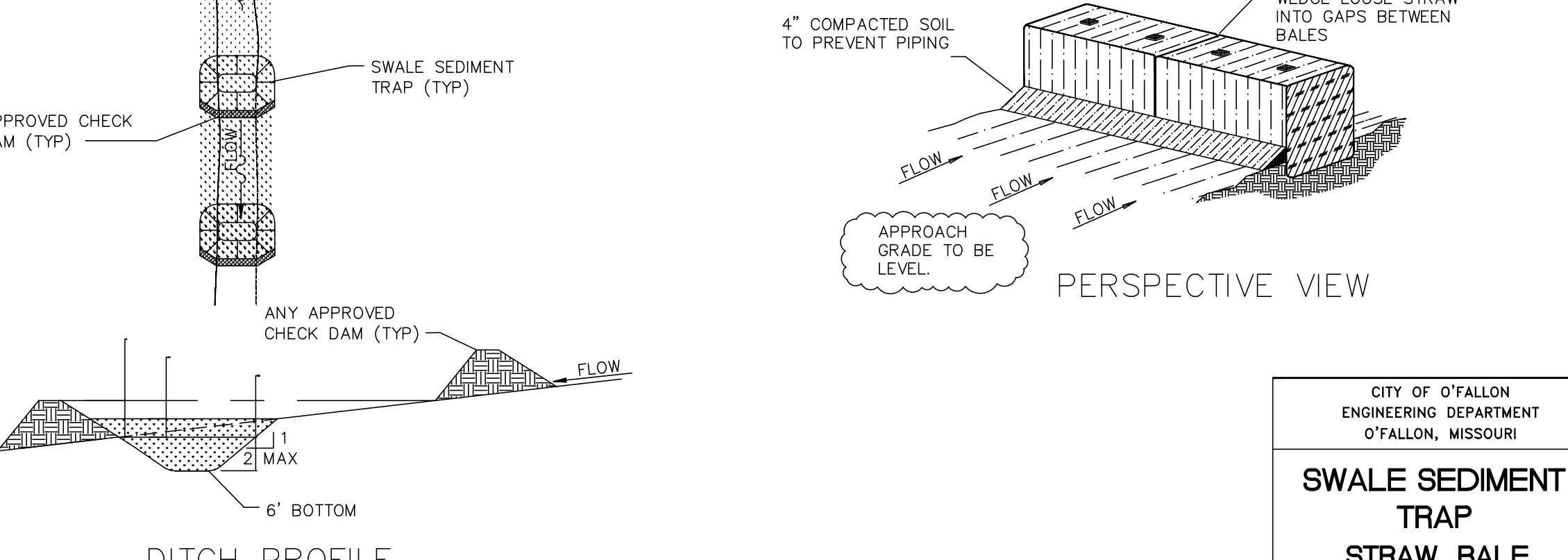
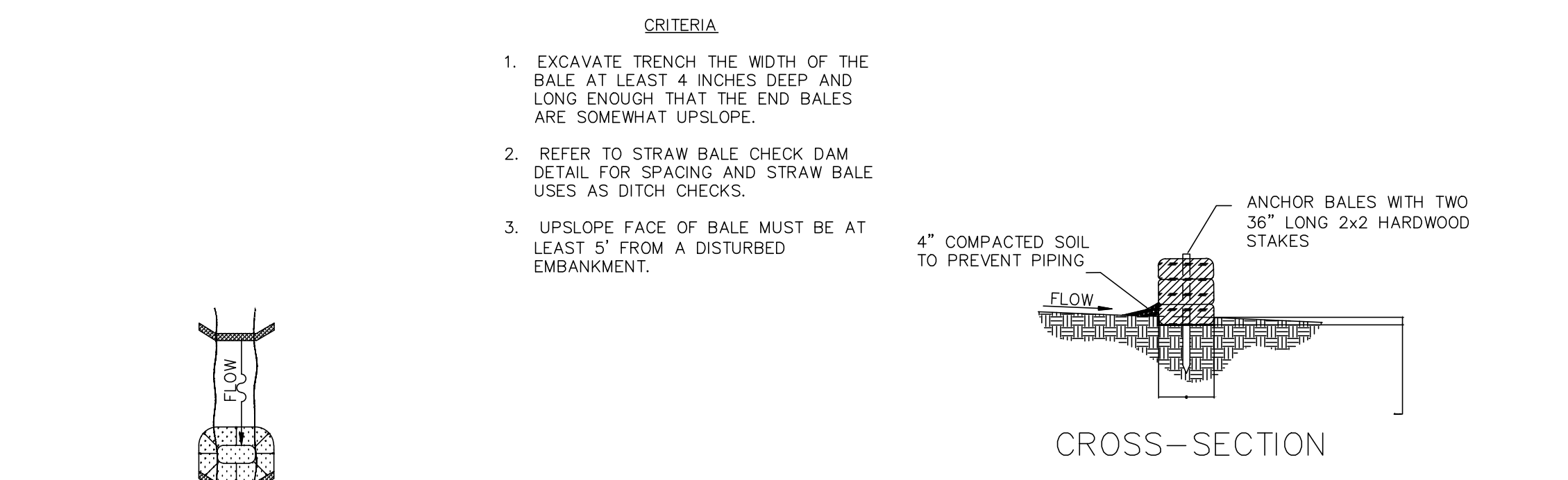
- CRITERIA FOR LOW CONCENTRATED FLOWS**
- DRAINAGE AREAS SHALL BE LESS THAN 1 ACRE.
 - INSTALL TWO STAKES PER BALE.
 - BALES WILL BE TRENCHED 4" DEEP INTO EARTH.
 - MAXIMUM CHANNEL SLOPE OF 3%.
 - SEDIMENTATION TRAPS TO BE USED IN HIGHLY EROSION AREAS.

CHECK DAM SPACING

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

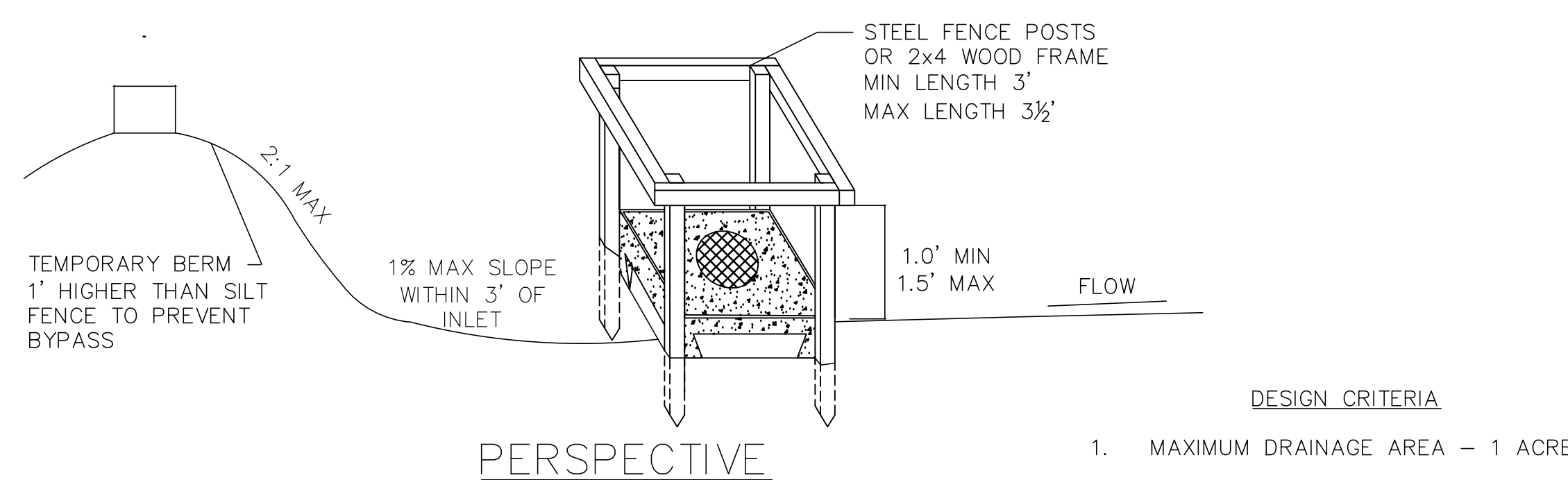
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**STRAW BALE
CHECK DAM**



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**SWALE SEDIMENT
TRAP
STRAW BALE
BARRIER INSTALLATION**

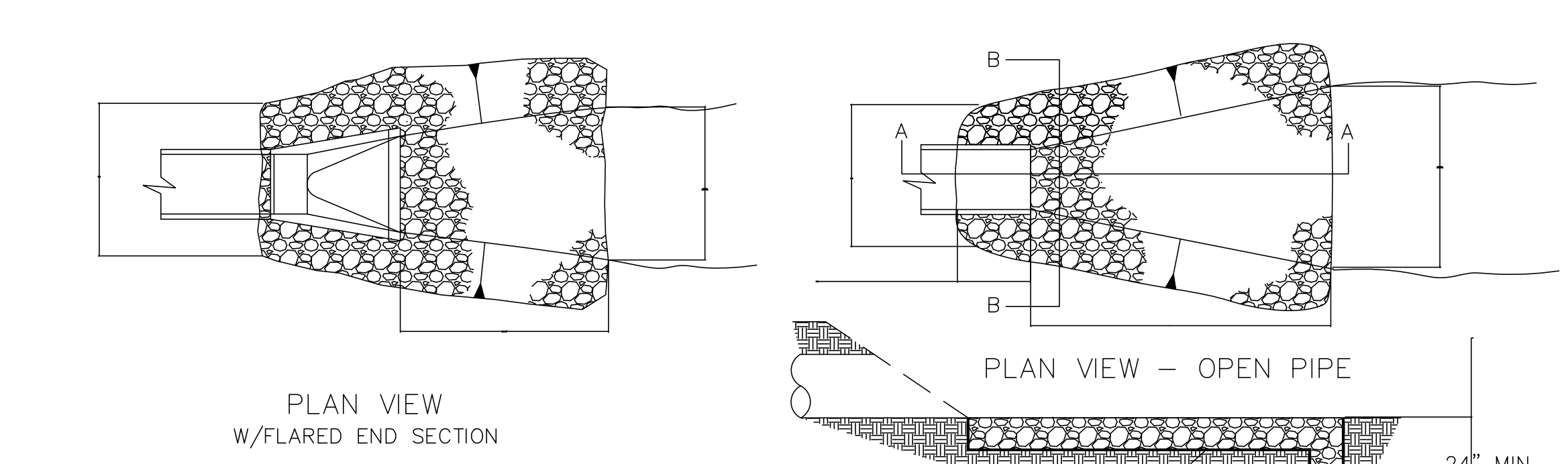


- DESIGN CRITERIA**
- MAXIMUM DRAINAGE AREA - 1 ACRE.
 - PEAK RUNOFF SHALL NOT EXCEED 2 CFS BASED ON A 6-MONTH STORM EVENT.
 - OTHER SEDIMENT PROTECTION PRODUCTS MAY BE USED, SUCH AS FILTER FENCE™.

**St. Charles County
Erosion & Sediment Controls
Standard Drawings**

**AREA INLET
PROTECTION
FABRIC DROP**

DATE: MARCH 2008 DRAWING: ESC-14



**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	ROCK SIZE	APRON DIM	ROCK SIZE	APRON DIM	ROCK SIZE	APRON DIM	ROCK SIZE	APRON DIM	
	d50 (inch)	dmax (inch)	T (inch)	L (ft)	d50 (inch)	dmax (inch)	T (inch)	L (ft)	d50 (inch)	dmax (inch)	T (inch)	L (ft)	
12	5	9	15	12	5	9	15	16	15	9	15	18	
15	5	9	15	14	5	9	15	18	18-24	5	9	15	20
27-30	5	9	15	18	9	14	24	22	48-54	9	14	24	30
36-42	9	14	24	22	12	18	27	26	60-66	12	18	27	34
48-54	9	14	24	26	12	18	27	30	72-84	15	24	30	42
60-66	12	18	27	34	15	24	30	38	96	18	27	30	54

d50 - NOMINAL DIAMETER
dmax - MAXIMUM DIAMETER
T - THICKNESS
L - LENGTH

- 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**