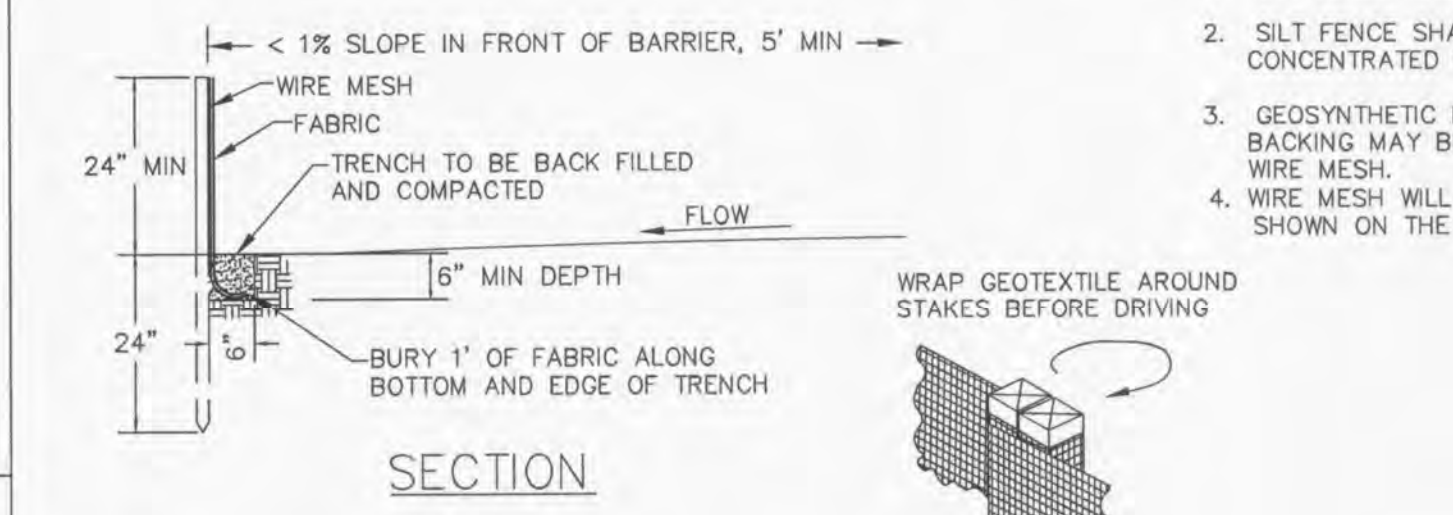
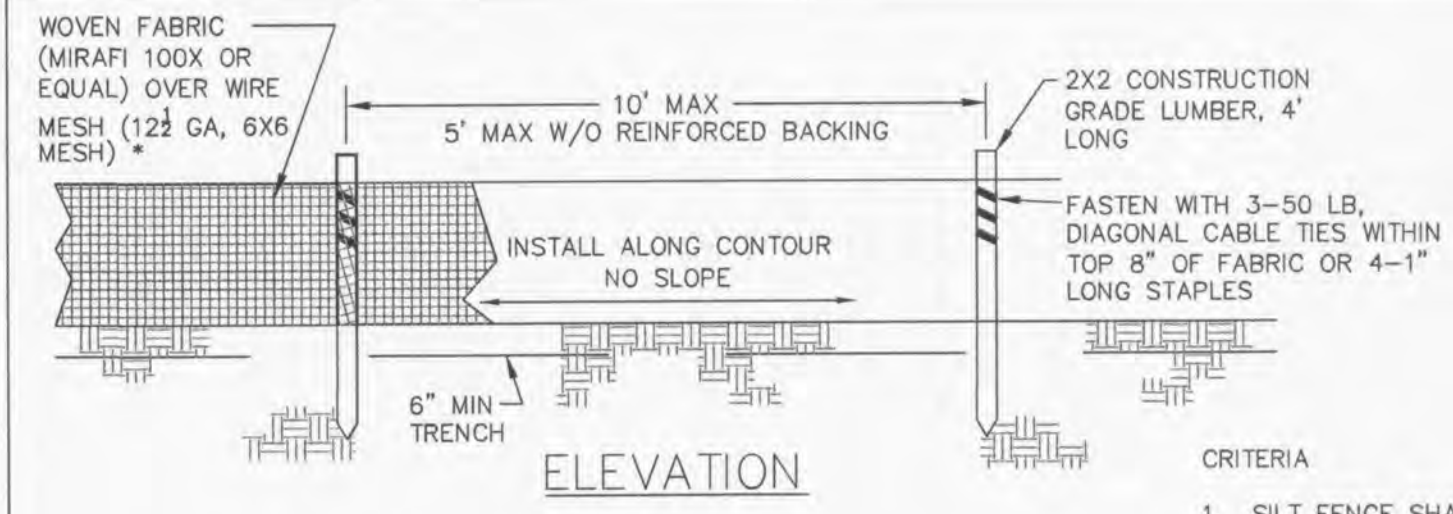


- DESIGN CRITERIA**
1. SILT FENCE FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
 2. STRAW BALE BARRIERS FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
 3. REFER TO INDIVIDUAL ESC FIGURE FOR INSTALLATION.
 4. TERRACING INCLUDES LOGS, WATTLES & FILTER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

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**SPACING CHART
FOR ESC DEVICES**



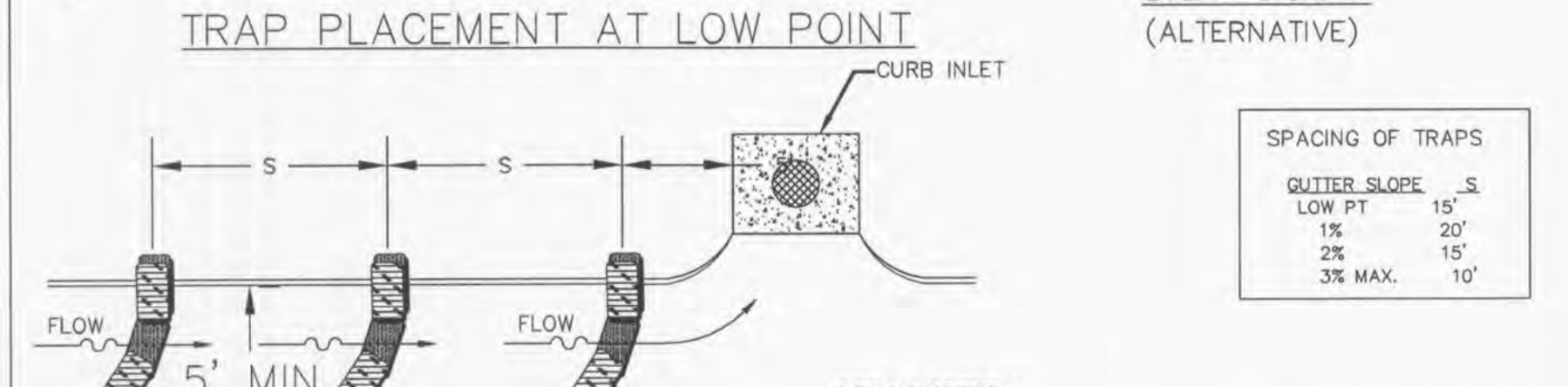
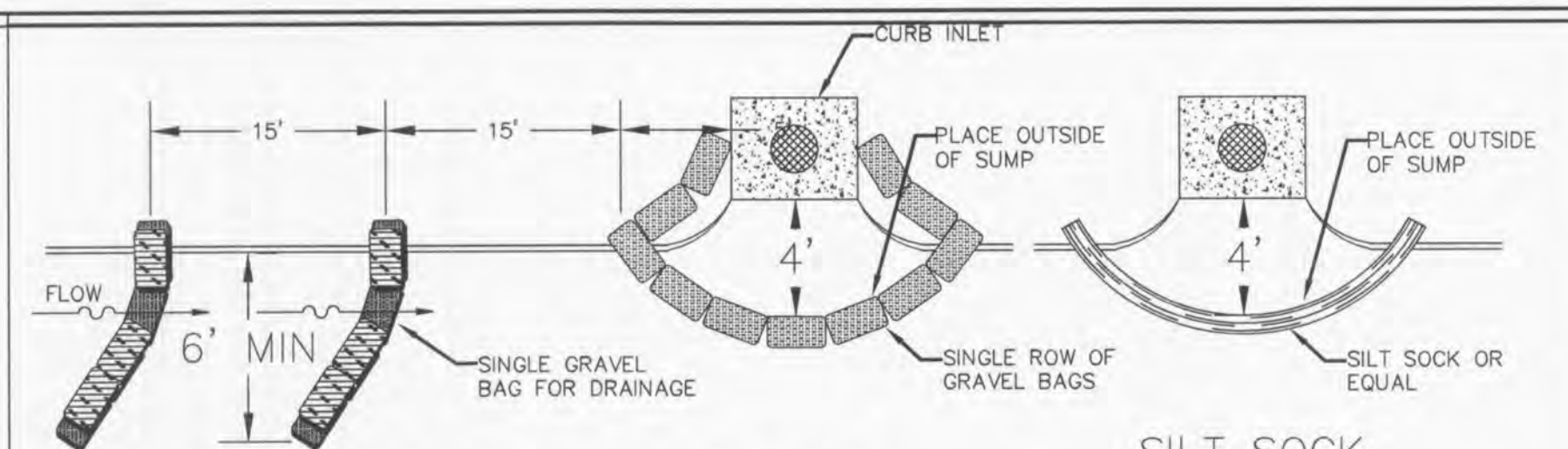
NOTE: IF FABRIC IS INSTALLED BY EQUIPMENT DESIGNED TO SLICE INTO THE GROUND, THE TRENCH IS NOT REQ'D.

**JOINING SECTIONS OF
SILT FENCE**

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

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



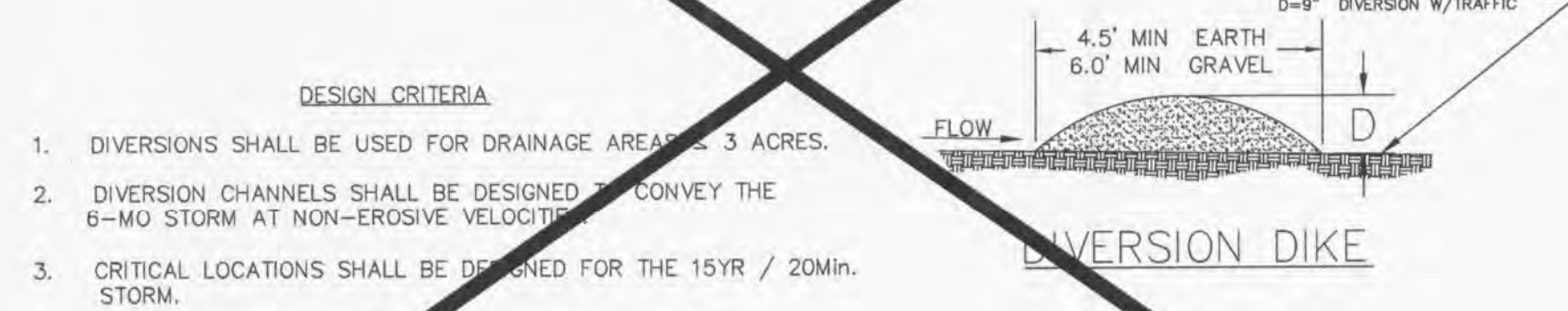
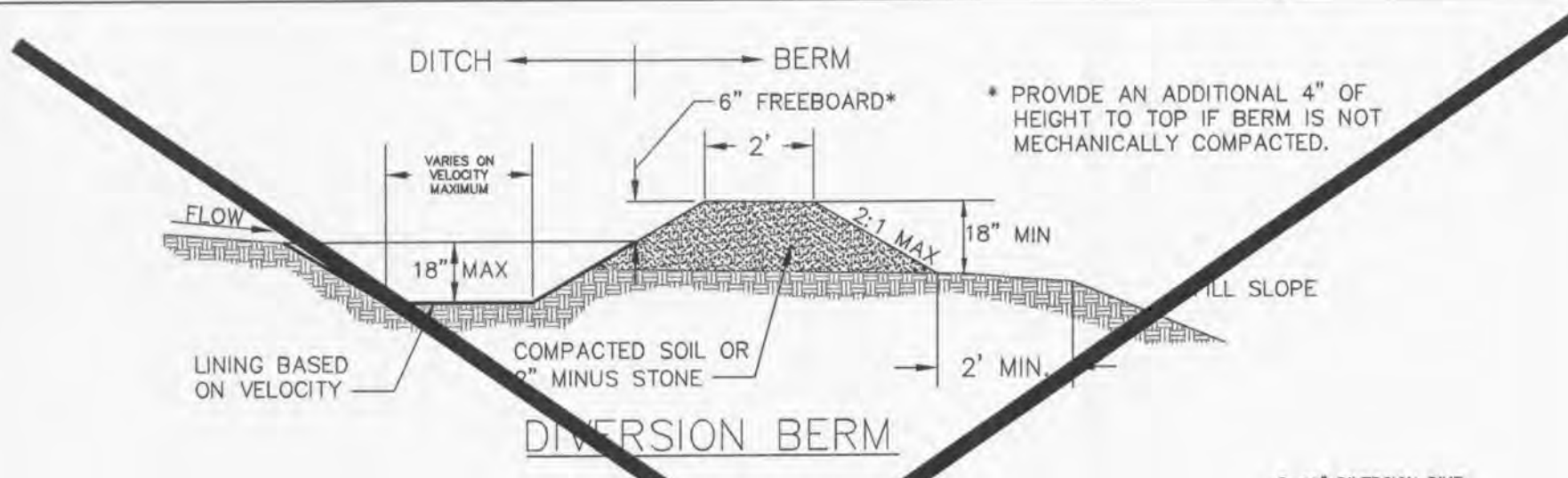
SPACING OF TRAPS

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

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

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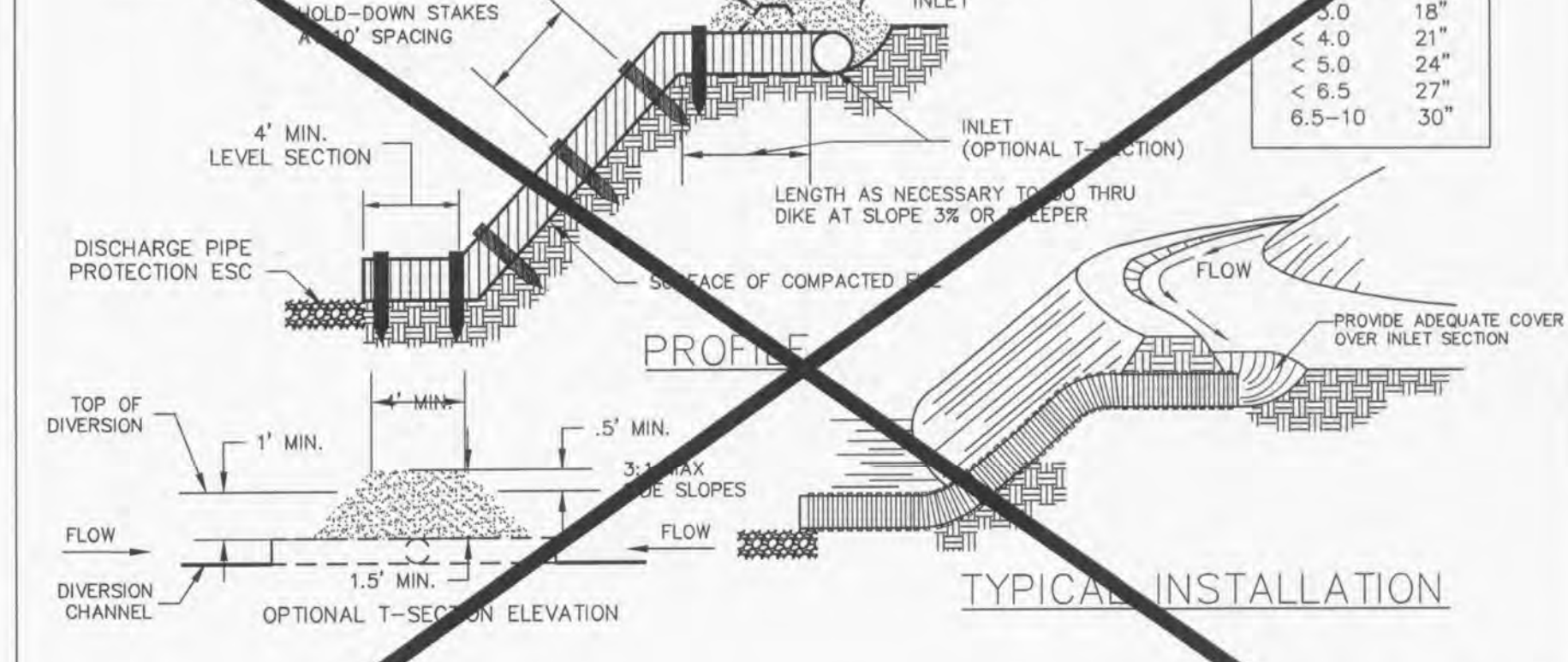
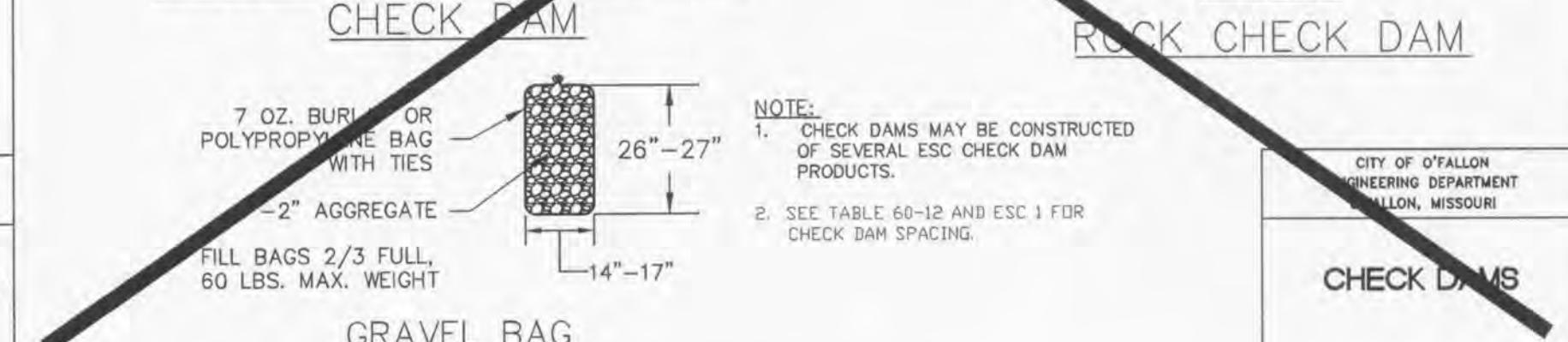
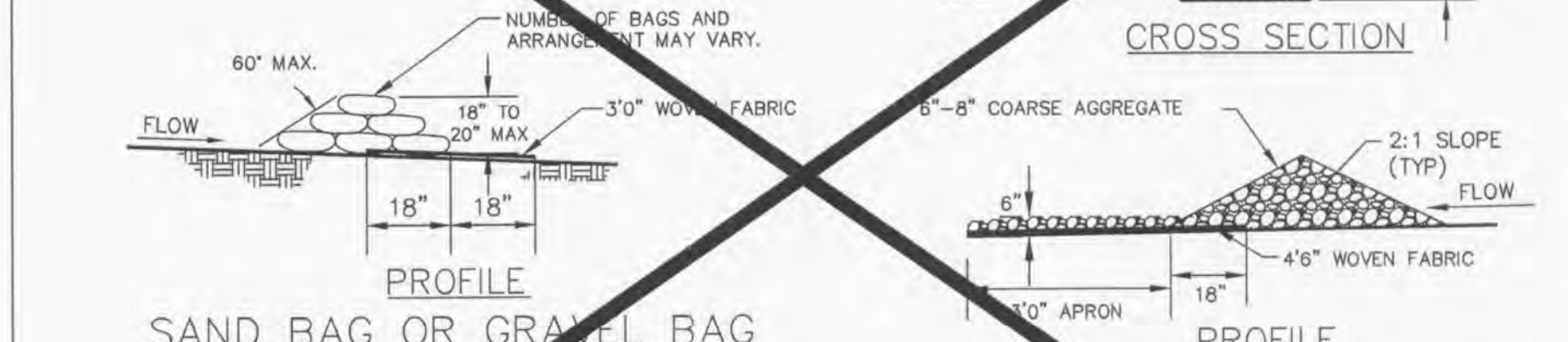
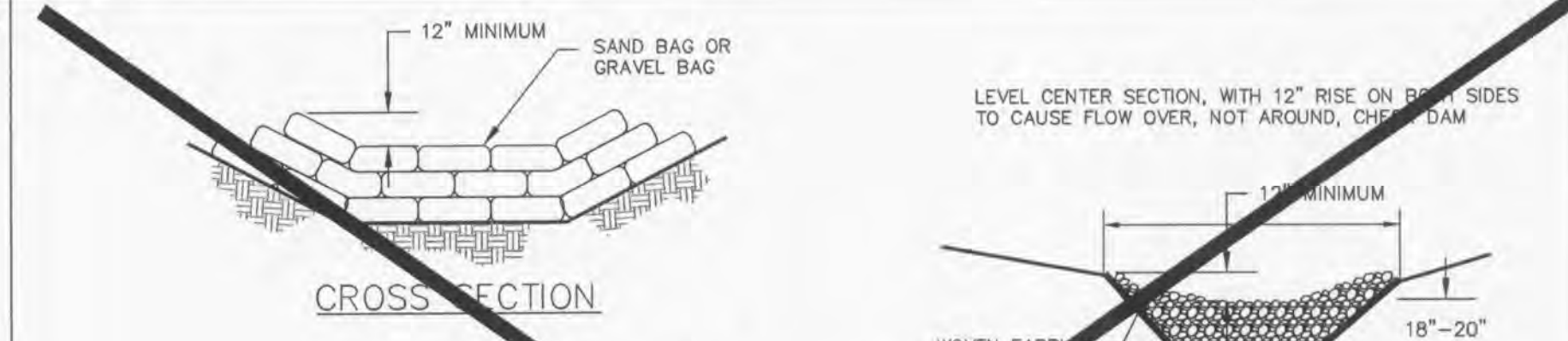
**CURB INLET
PROTECTION**



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

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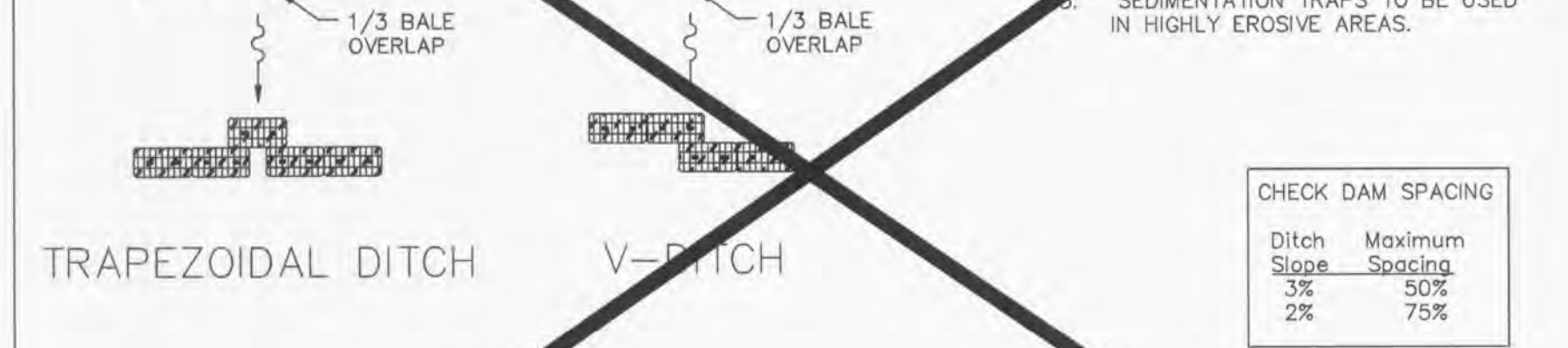
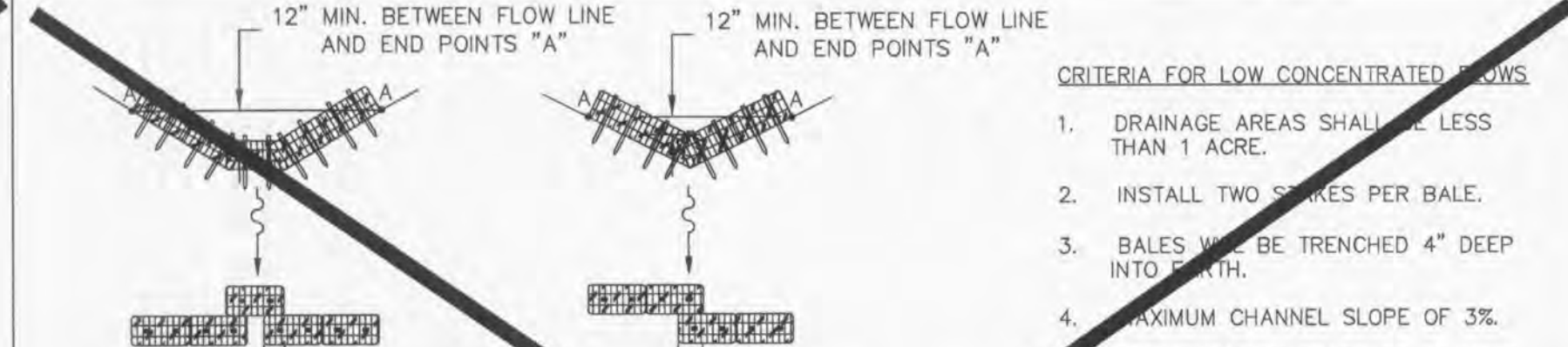
**DIVERSION BERMS
+ DIKES**



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

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**TEMPORARY
SLOPE DRAIN**



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

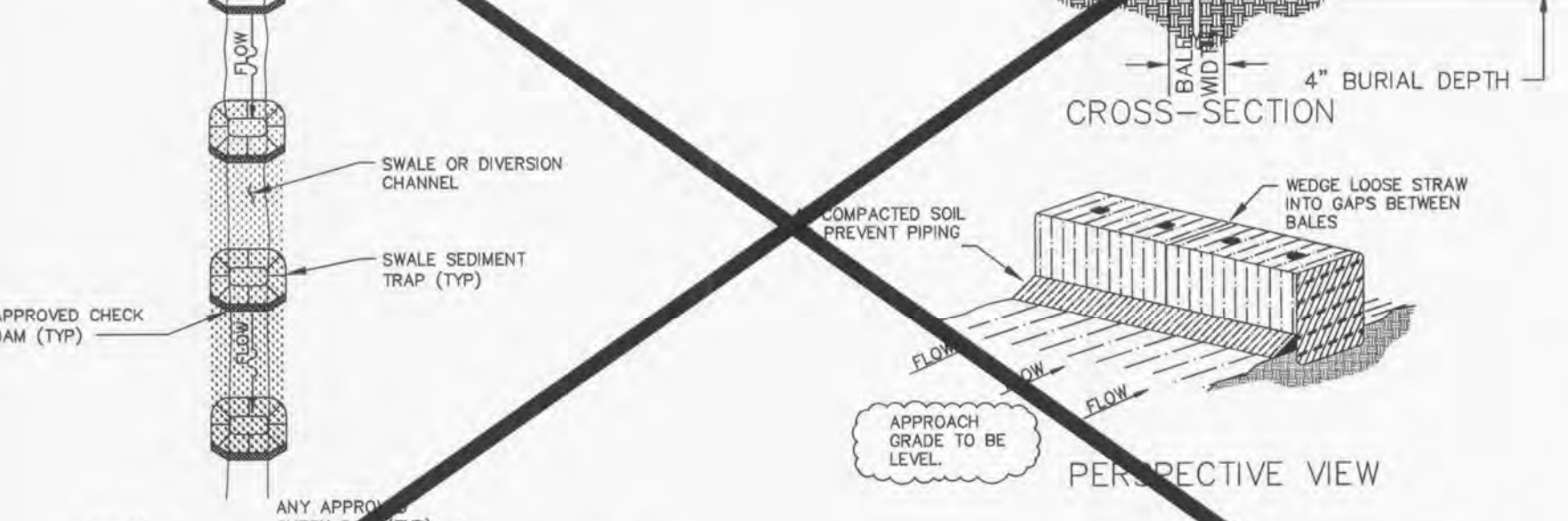
CHECK DAM SPACING

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

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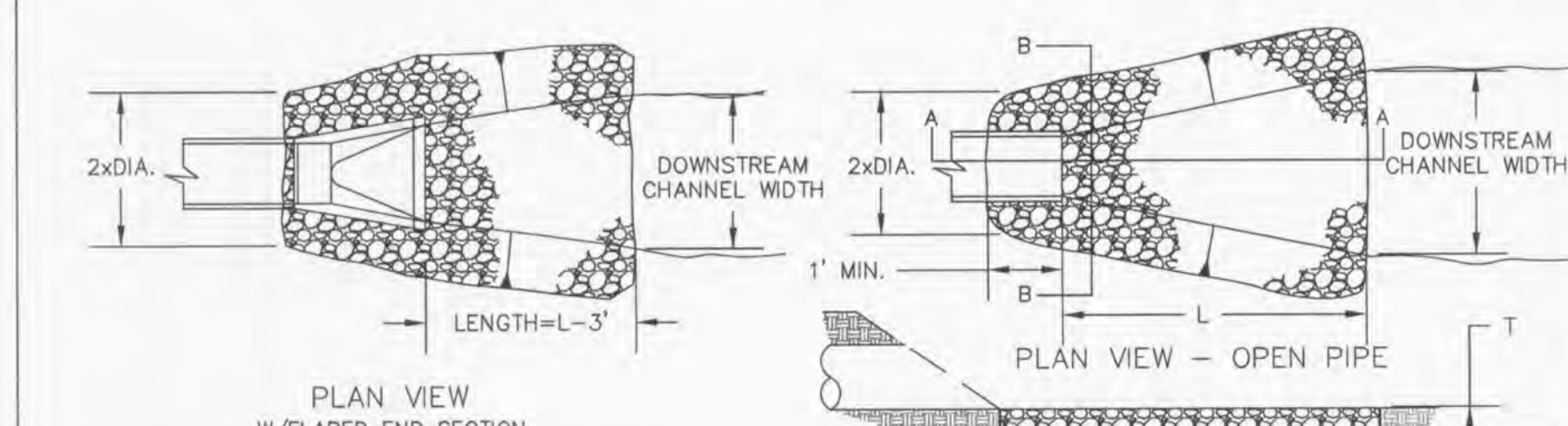
**STRAW BALE
CHECK DAM**

- CRITERIA**
1. EXCAVATE TRENCH THE WIDTH OF THE BALE AT LEAST 4 INCHES DEEP AND LONG ENOUGH THAT THE END BALES ARE SOMEWHAT UPSLOPE.
 2. REFER TO STRAW BALE CHECK DAM DETAIL FOR SPACING AND STRAW BALE USES AS DITCH CHECKS.
 3. UPSLOPE FACE OF BALE MUST BE AT LEAST 5' FROM A DISTURBED EMBANKMENT.



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**SWALE SEDIMENT
TRAP
STRAW BALE
BARRIER INSTALLATION**



RIPRAP SIZE & APRON DIMENSION

PIPE SIZE (inch)	VELOCITY < 5 FPS				VELOCITY < 10 FPS			
	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	9	15	18	17	14	24	22	
36-42	14	24	22	16	18	27	26	
48-54	14	24	26	18	18	27	30	
60-66	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**
1. FROUDE NUMBER MUST BE ≤ 2.50.
 2. USE 3 TIMES PIPE DIAMETER FOR DOWNSTREAM CHANNEL WIDTH IF THERE IS NO DEFINED CHANNEL.
 3. BANK PROTECTION HEIGHT TO BE 2/3 TIMES PIPE DIAMETER.
 4. ROCK SLOPES SHALL BE NO STEEPER THAN 3:1.

CITY OF O'FALLON
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O'FALLON, MISSOURI

**TEMPORARY OUTLET
PIPE DISCHARGE
PROTECTION**

PROJECT TITLE
WYNDGATE VILLAGE D
PLAT TWO

PICKETT, RAY & SILVER INC.
CIVIL ENGINEERING, LAND SURVEYING,
AND NATURAL RESOURCES SERVICES

BRANSON
110 W. Main Street, Suite 201
Branson, Mo. 64616

Phone (836) 937-1211 Fax (836) 937-1104
1-800-708-5818
www.prs3.com



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16091 Swingle Ridge Road, Suite 300
Chesterfield, Missouri 63017

P4-Z No. 3203

City No. 14-123-SP

Page No.
29 of 30