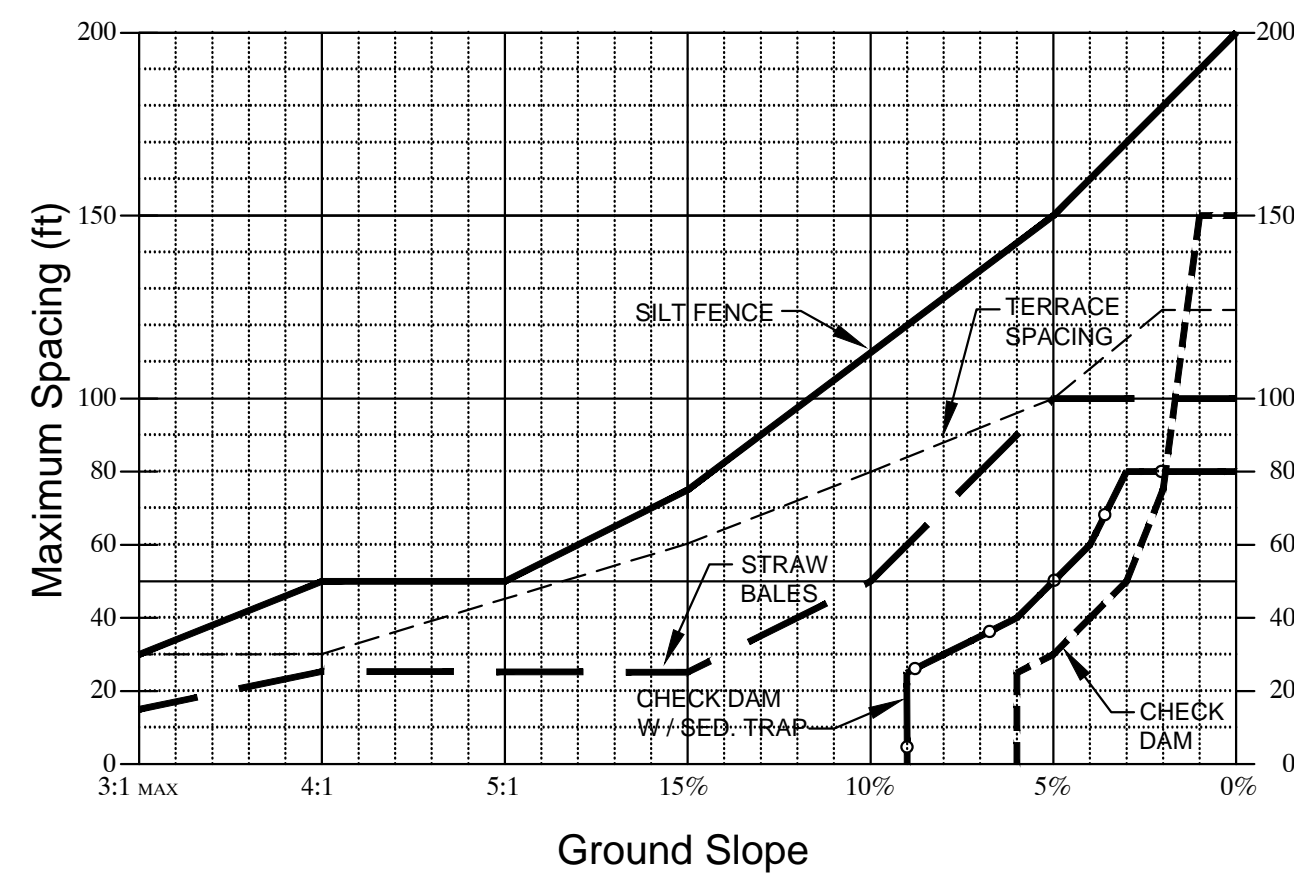


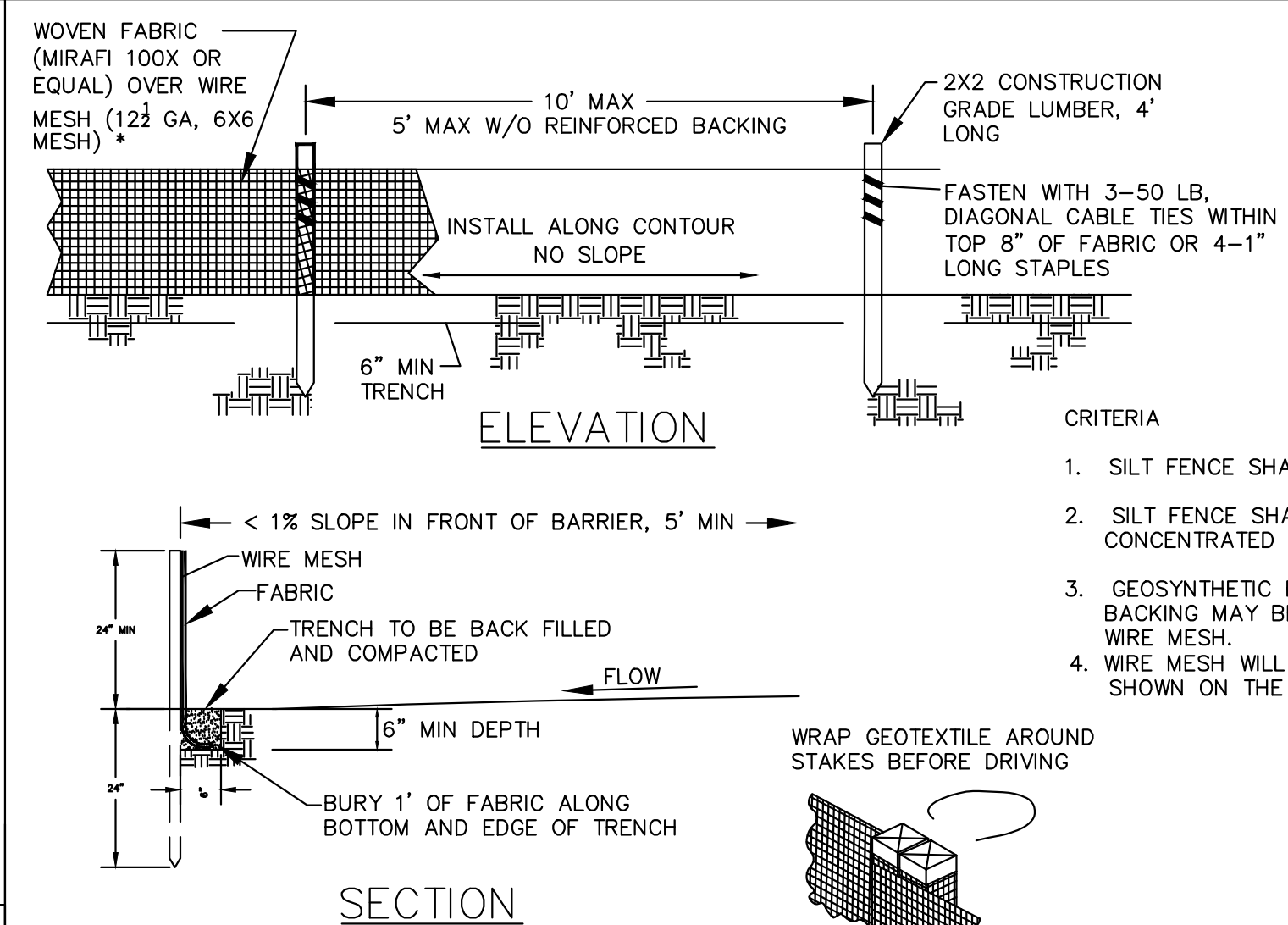
ISSUE	DATE / REMARKS
1	06/28/2017 Initial Submittal
2	10/06/2017 City Comments
3	11/10/2017 City Comments
4	12/16/2017 City Comments
5	01/11/2018 City Resubmittal



- 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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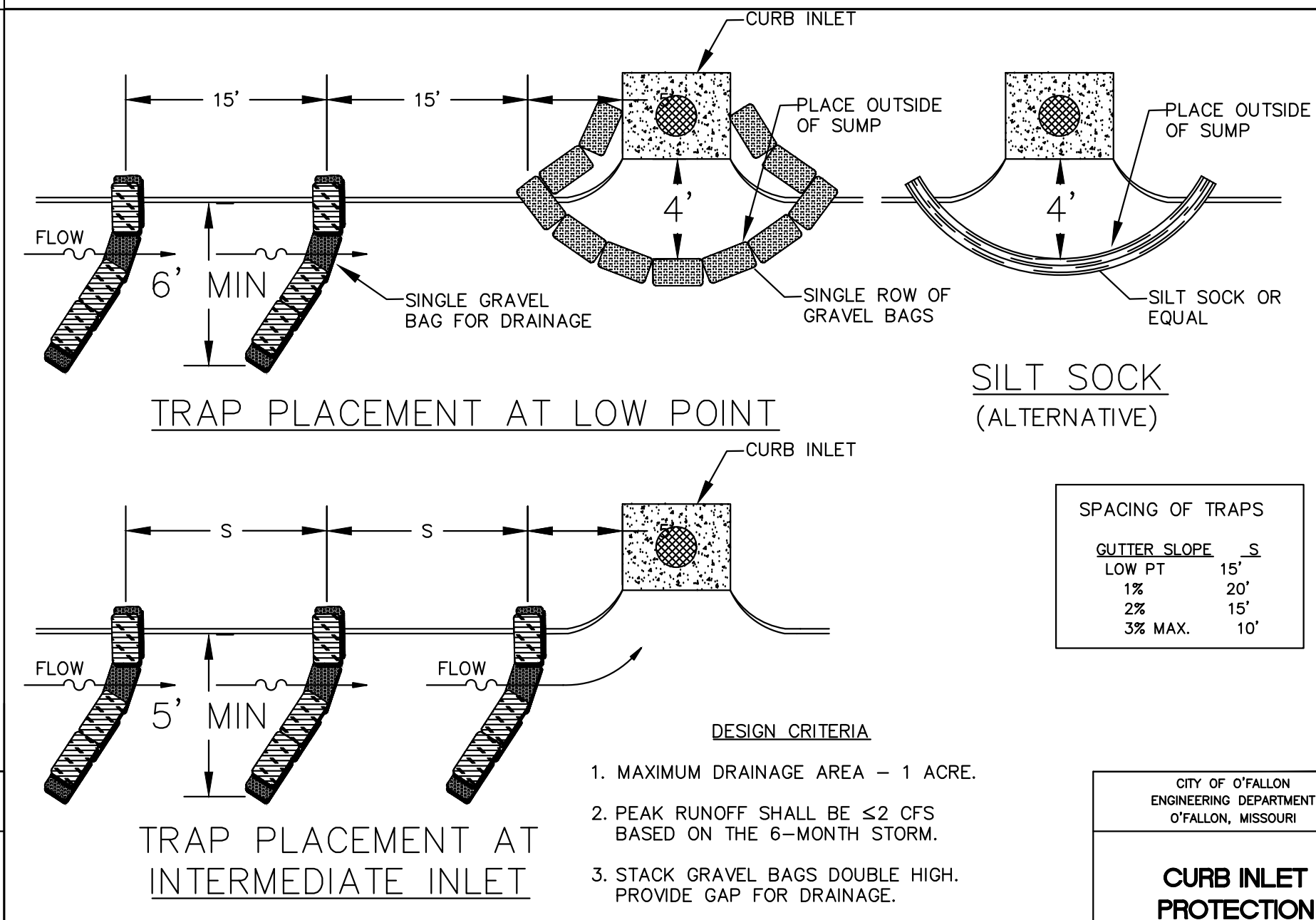
SPACING CHART FOR ESC DEVICES



- 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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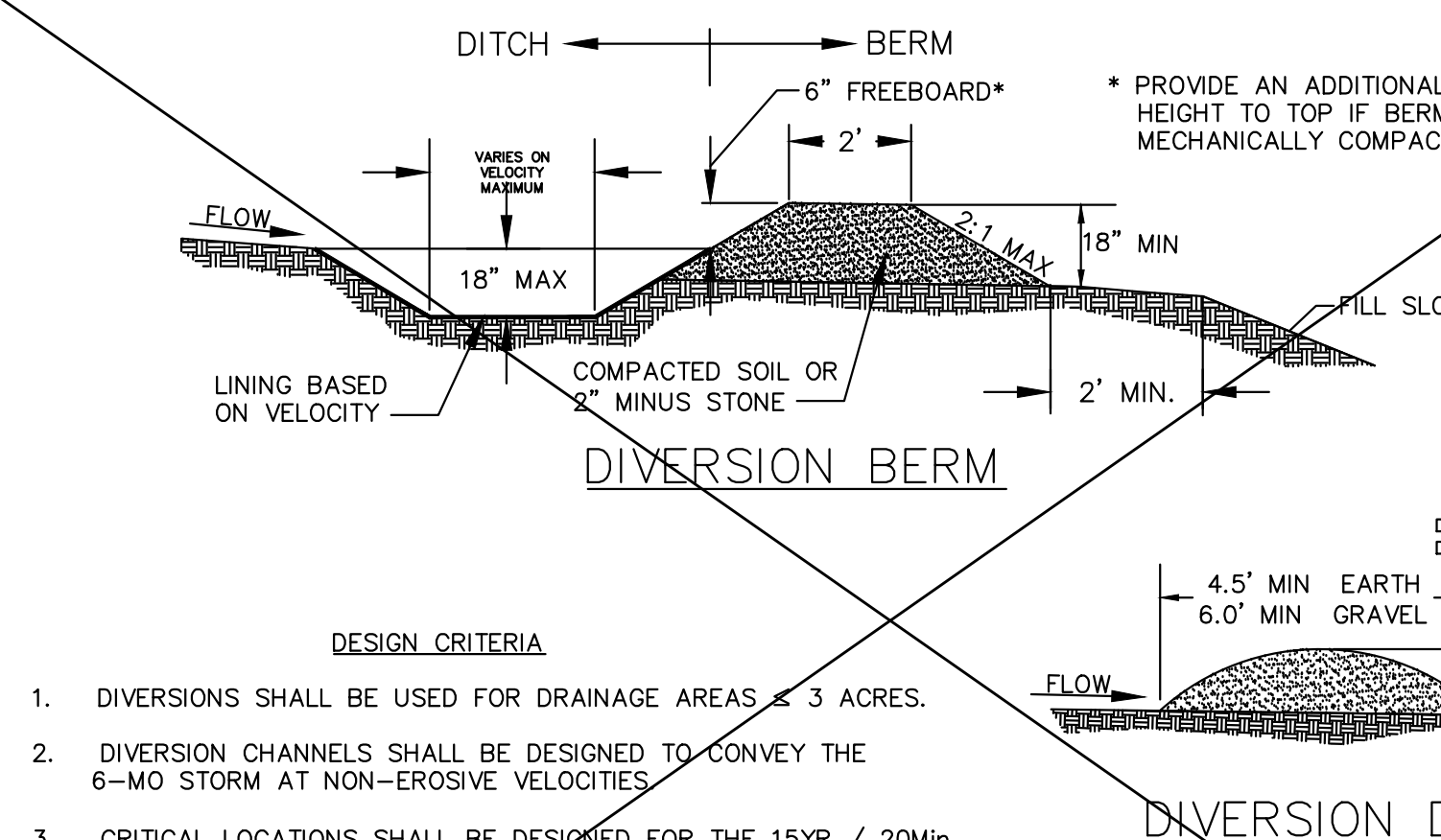
SILT FENCE INSTALLATION SHEET FLOW ONLY



- 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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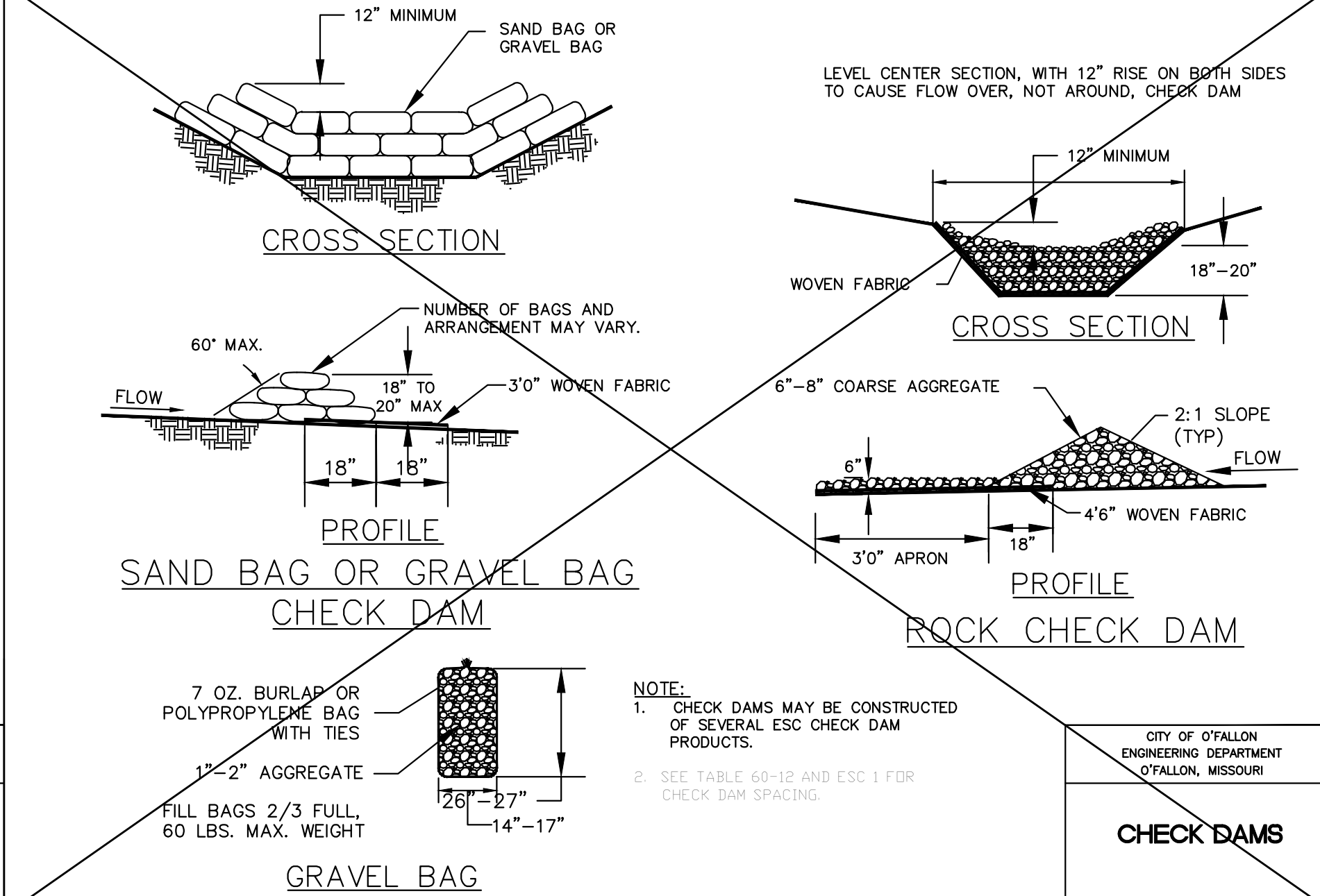
CURB INLET PROTECTION



- 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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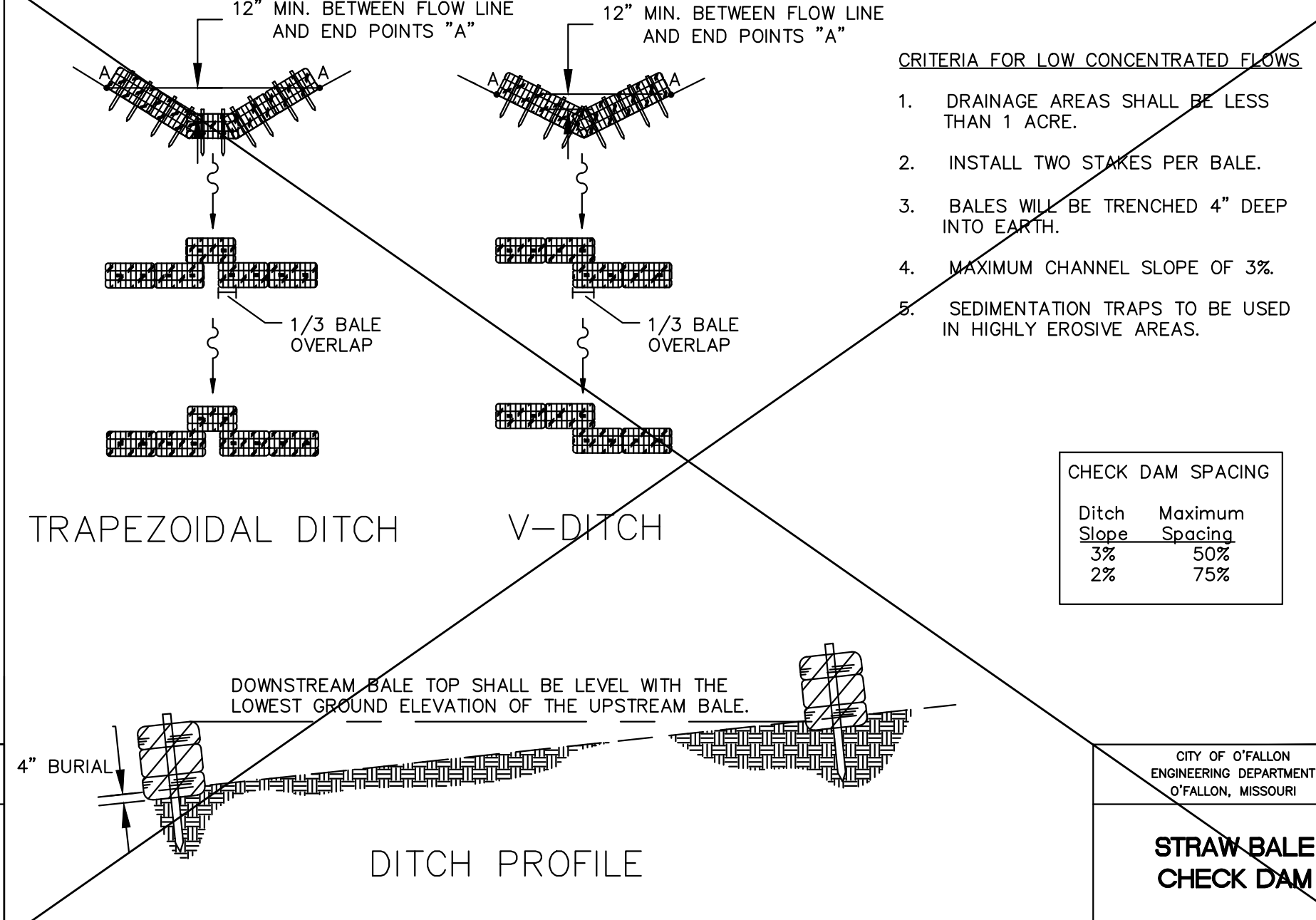
DIVERSION BERMS + DIKES



- NOTE:**
- CHECK DAMS MAY BE CONSTRUCTED OF SEVERAL ESC CHECK DAM PRODUCTS.
 - SEE TABLE 60-12 AND ESC 1 FOR CHECK DAM SPACING.

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CHECK DAMS



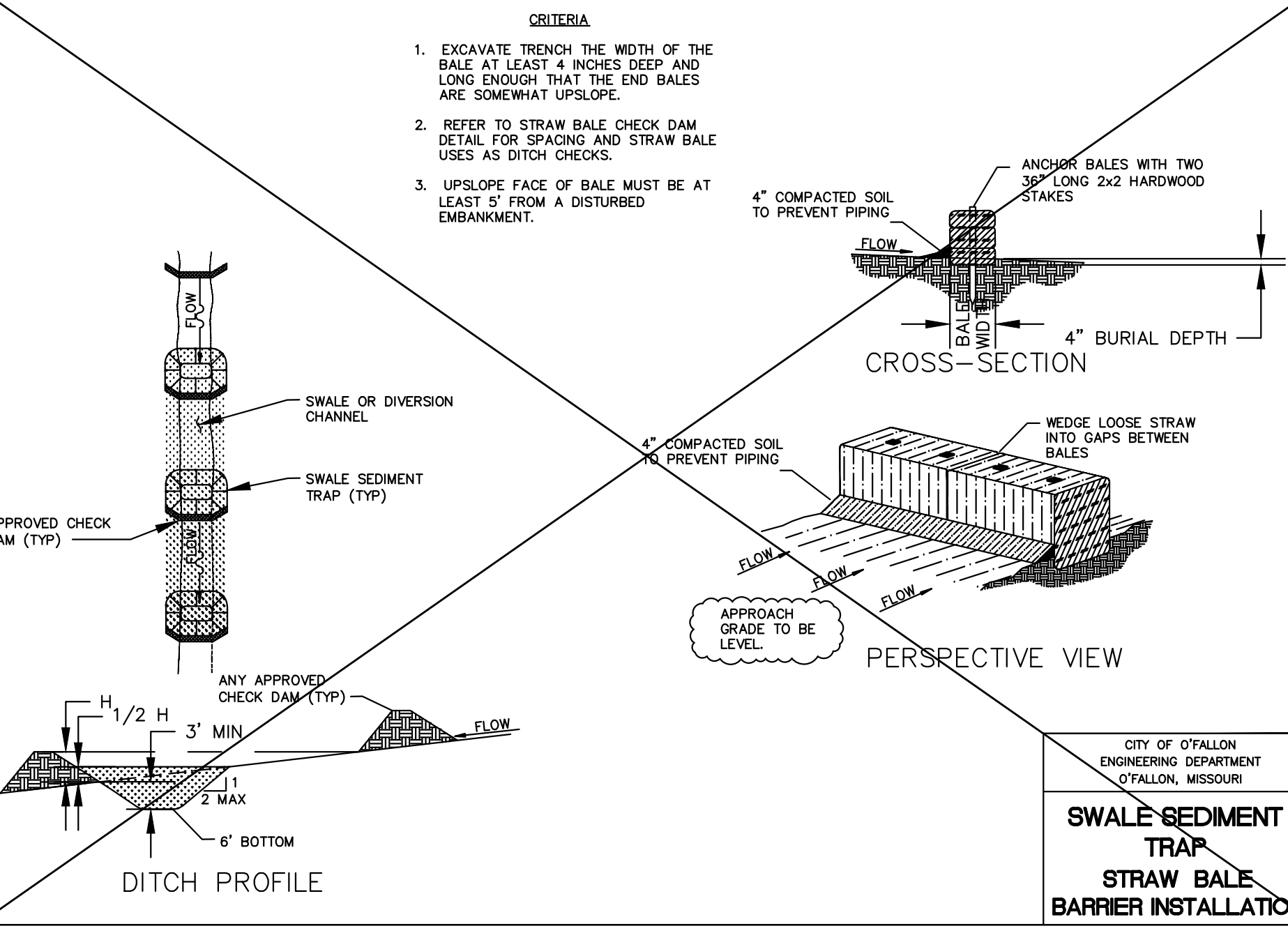
- CRITERIA FOR LOW CONCENTRATED FLOWS**
- DRAINAGE AREAS SHALL BE LESS THAN 1 ACRE.
 - INSTALL TWO STAKES PER BALE.
 - BALES WILL BE TRENCHED 4" DEEP INTO EARTH.
 - MAXIMUM CHANNEL SLOPE OF 3%.
 - SEDIMENTATION TRAPS TO BE USED IN HIGHLY EROSION AREAS.

CHECK DAM SPACING

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

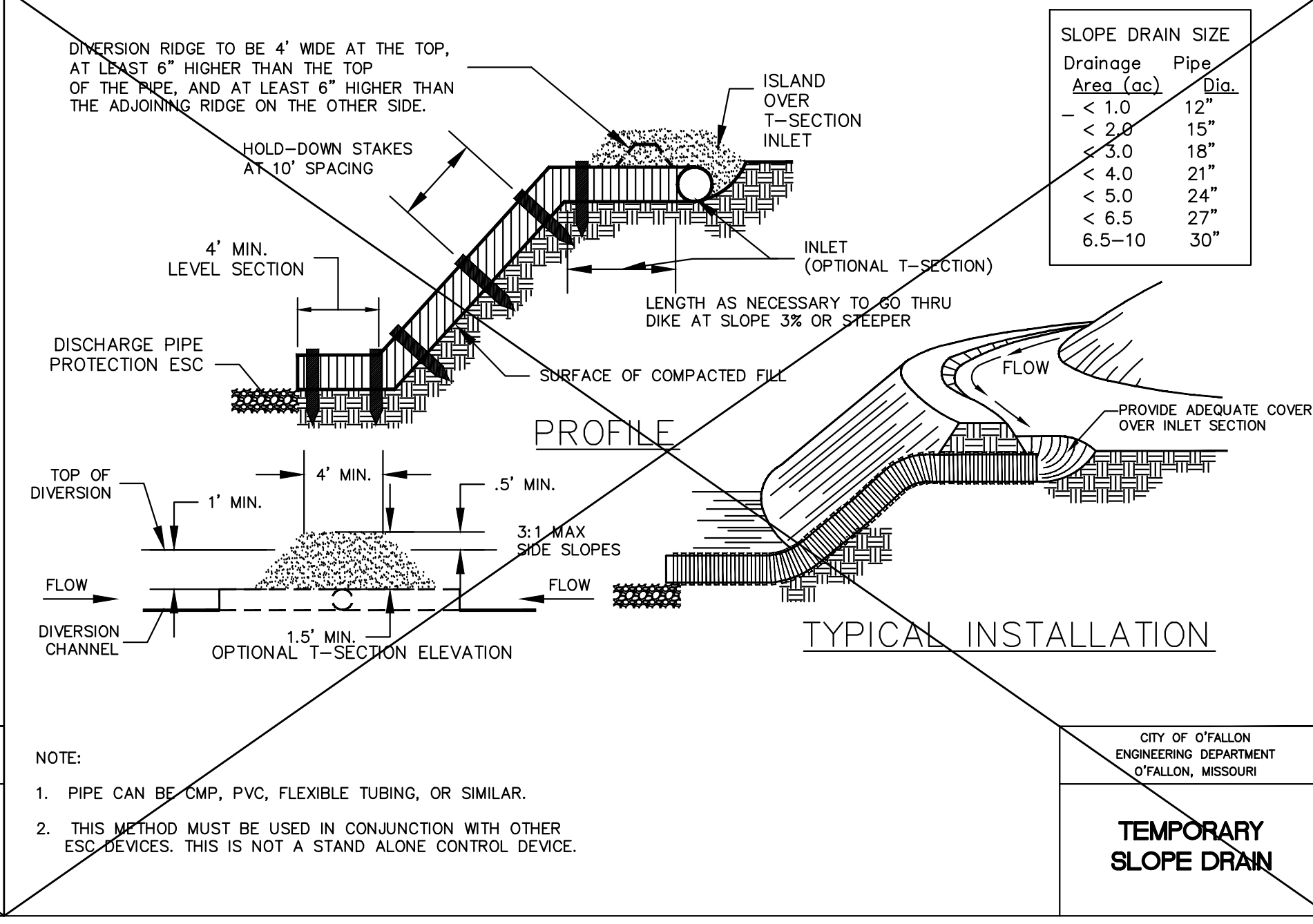
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STRAW-BALE CHECK DAM



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SWALE SEDIMENT TRAP STRAW BALE BARRIER INSTALLATION

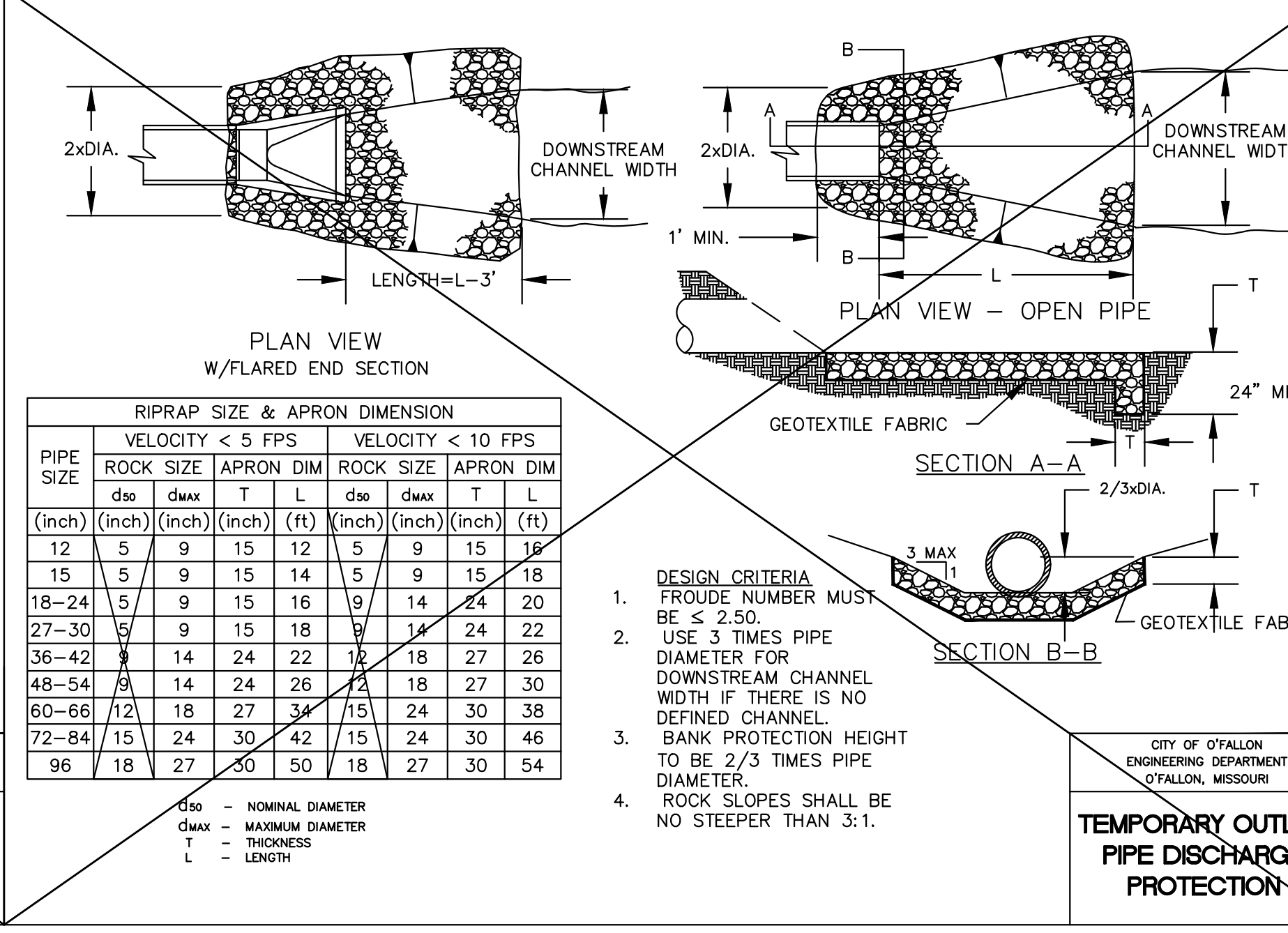


SLOPE DRAIN SIZE

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

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TEMPORARY SLOPE DRAIN



RIPRAP SIZE & APRON DIMENSION

PIPE SIZE (inch)	VELOCITY < 5 FPS			VELOCITY < 10 FPS		
	ROCK SIZE (inch)	APRON DIM (inch)	ROCK SIZE (inch)	APRON DIM (inch)	ROCK SIZE (inch)	APRON DIM (inch)
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	8	14	24	22	15	18
48-54	9	14	24	26	15	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

PROJECT TITLE

Brookview

O'FALLON, MISSOURI

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ENGINEERS & SURVEYORS

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St. Louis, Missouri 63129
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Corporate Certificate of Authority #001348



Date: 01/11/18
SEAN ACKLEY
LICENSE # PE-2009018679
Civil Engineer

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16091 Swingley Ridge Road, Suite 300
Chesterfield, Missouri 63017
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Fax (636) 537-2546

SWPPP DETAILS

P-Z No. 17-005894
City No. 17-008288
Date: 01/11/18
Job No. 17-02-041

Page No.

4.8

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