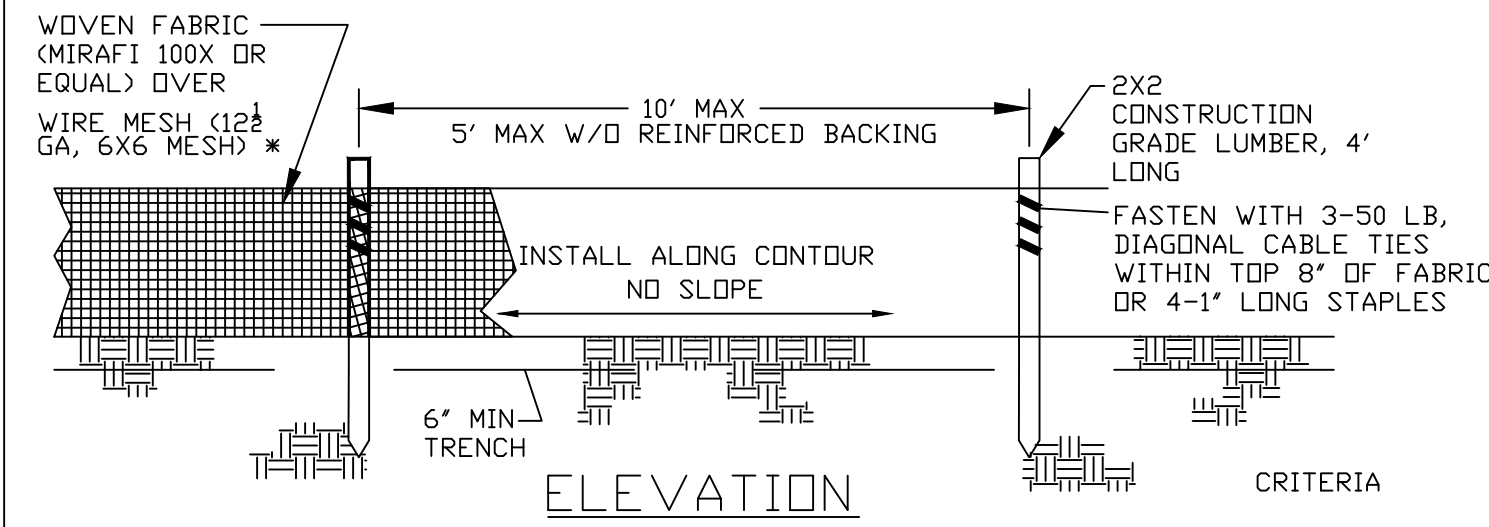


- DESIGN CRITERIA**
- SILT FENCE FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
 - STRAW BALE BARRIERS FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
 - REFER TO INDIVIDUAL ESC FIGURE FOR INSTALLATION.
 - TERRACING INCLUDES LOGS, WATTLES & FILTER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

SPACING CHART FOR ESC DEVICES

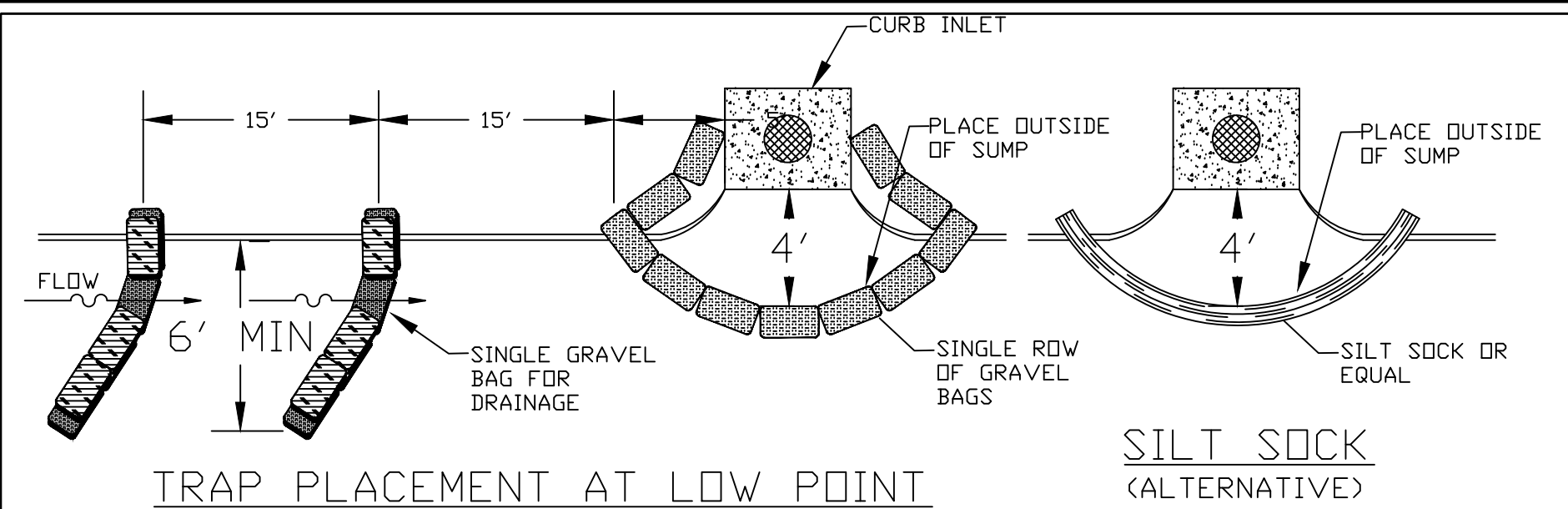
CITY OF O'FALLON
ENGINEERING DEPARTMENT
O'FALLON, MISSOURI



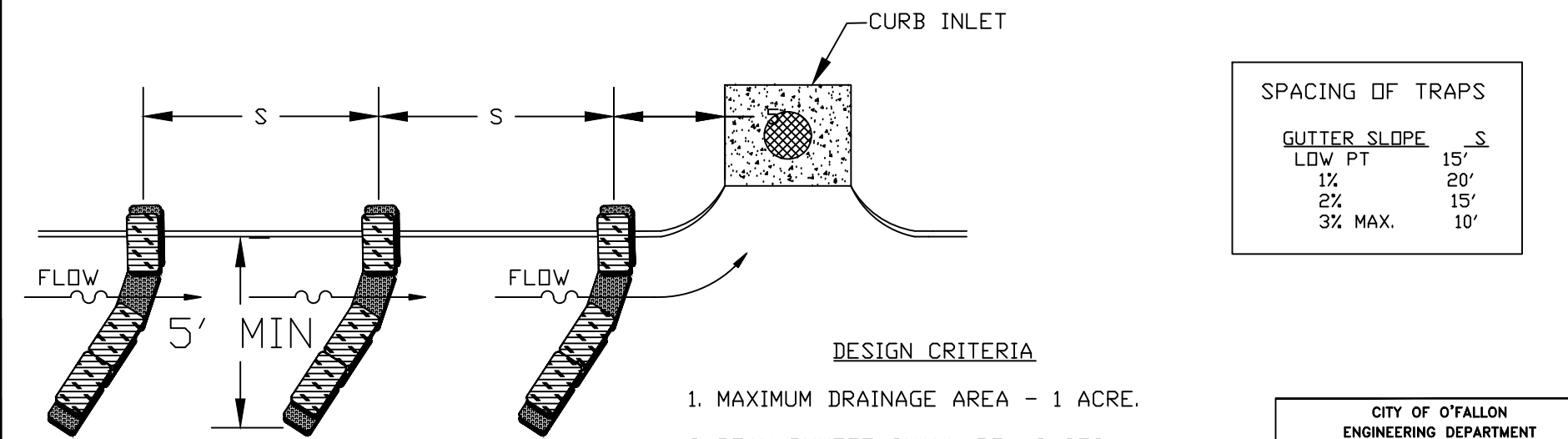
- CRITERIA**
- SILT FENCE SHALL BE 24 INCHES HIGH.
 - SILT FENCE SHALL NOT BE USED FOR CONCENTRATED FLOWS.
 - GEOSYNTHETIC REINFORCED SILT FENCE BACKING MAY BE USED IN LIEU OF WIRE MESH.
 - WIRE MESH WILL BE USED AT LOCATIONS SHOWN ON THE APPROVED SWPPP.

SILT FENCE INSTALLATION SHEET FLOW (ONLY)

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TRAP PLACEMENT AT LOW POINT



TRAP PLACEMENT AT INTERMEDIATE INLET

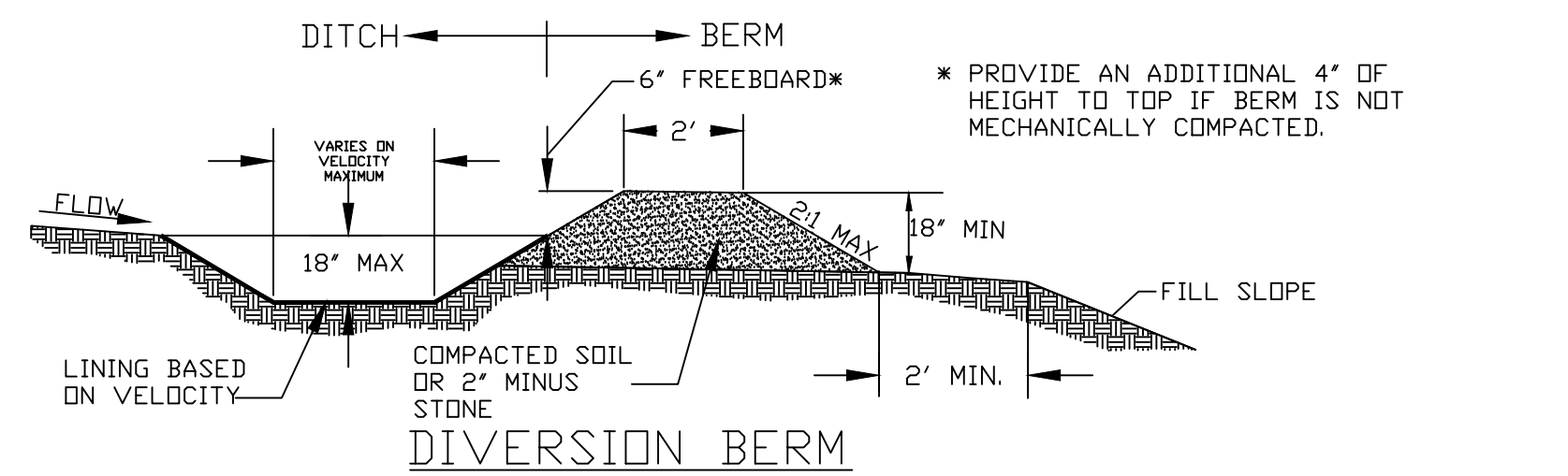
- DESIGN CRITERIA**
- MAXIMUM DRAINAGE AREA - 1 ACRE.
 - PEAK RUNOFF SHALL BE ≤ 2 CFS BASED ON THE 6-MONTH STORM.
 - STACK GRAVEL BAGS DOUBLE HIGH. PROVIDE GAP FOR DRAINAGE.

SPACING OF TRAPS

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

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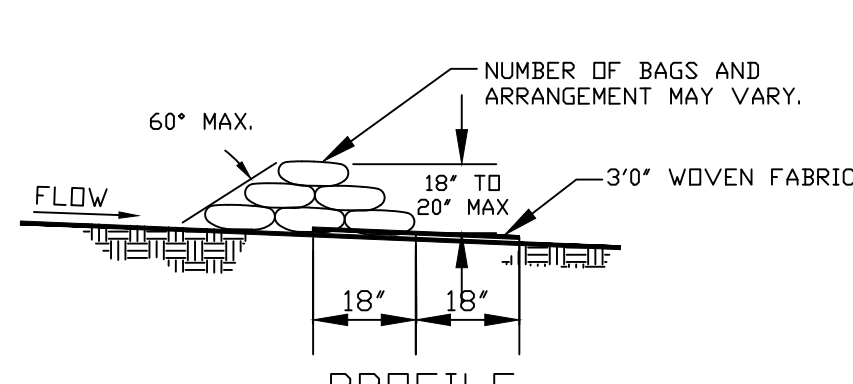
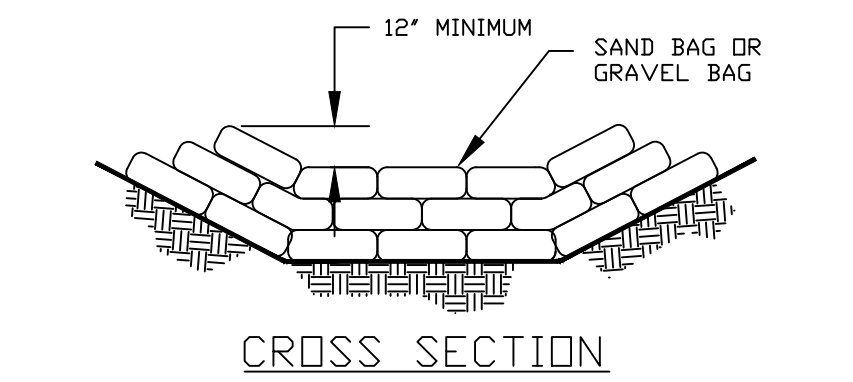
CURB INLET PROTECTION



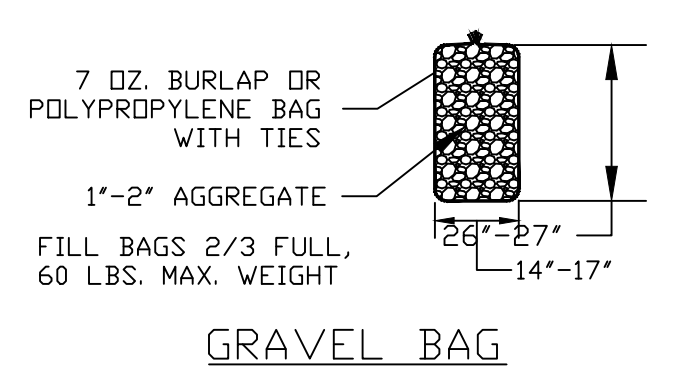
- DESIGN CRITERIA**
- DIVERSIONS SHALL BE USED FOR DRAINAGE AREAS ≤ 3 ACRES.
 - DIVERSION CHANNELS SHALL BE DESIGNED TO CONVEY THE 6-MO STORM AT NON-EROSIVE VELOCITIES.
 - CRITICAL LOCATIONS SHALL BE DESIGNED FOR THE 15YR / 20Min. STORM.
 - MAXIMUM CHANNEL SLOPE OF 3% WITHOUT CHECK DAMS.
 - SWALE SEDIMENT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

DIVERSION BERMS + DIKES

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SAND BAG OR GRAVEL BAG CHECK DAM

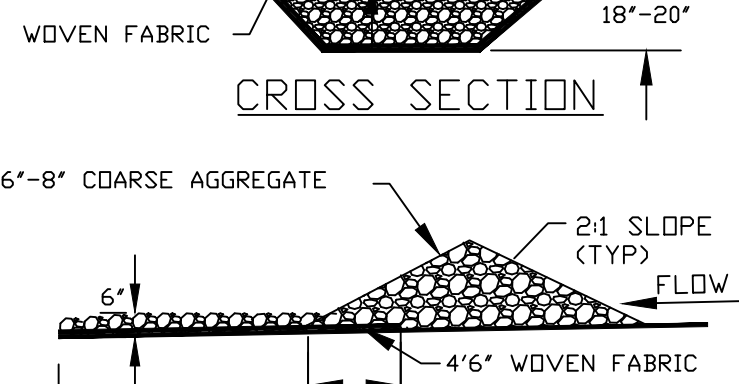
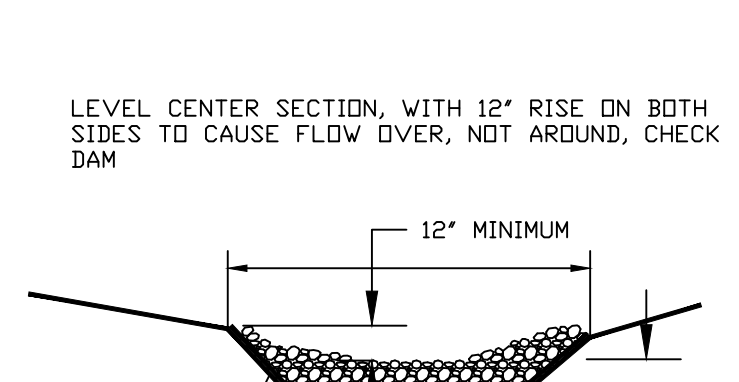


GRAVEL BAG

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

CHECK DAMS

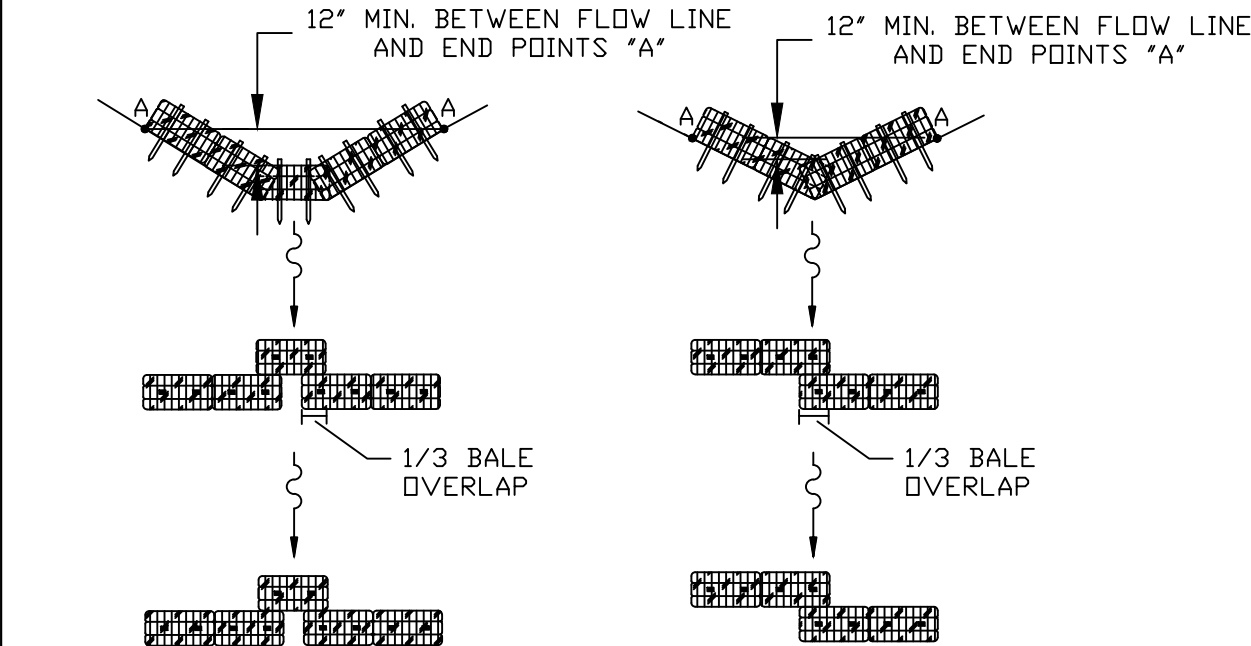
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PROFILE ROCK CHECK DAM

CHECK DAMS

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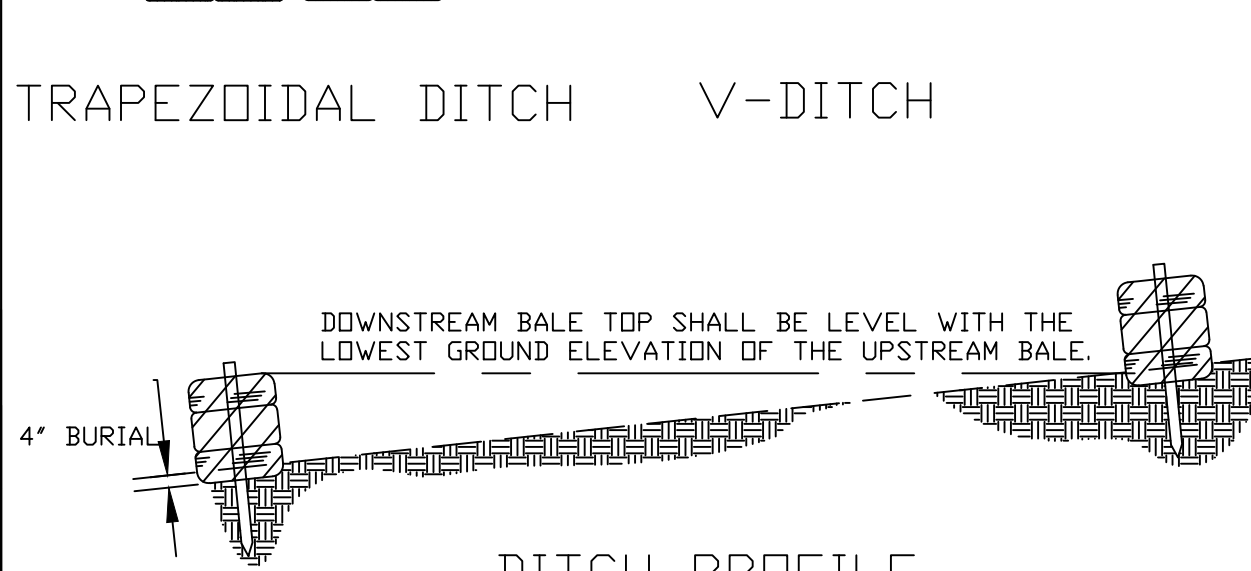


CRITERIA FOR LOW CONCENTRATED FLOWS

- DRAINAGE AREAS SHALL BE LESS THAN 1 ACRE.
- INSTALL TWO STAKES PER BALE.
- BALES WILL BE TRENCHED 4\"/>

CHECK DAM SPACING

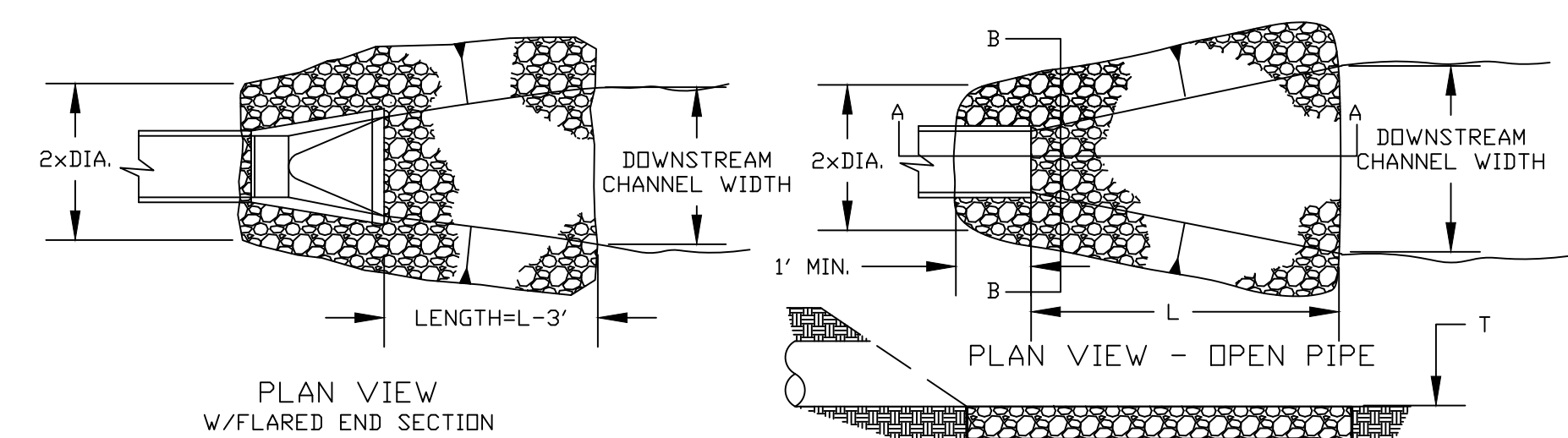
Ditch Slope	Maximum Spacing
3%	50%
2%	75%



DITCH PROFILE

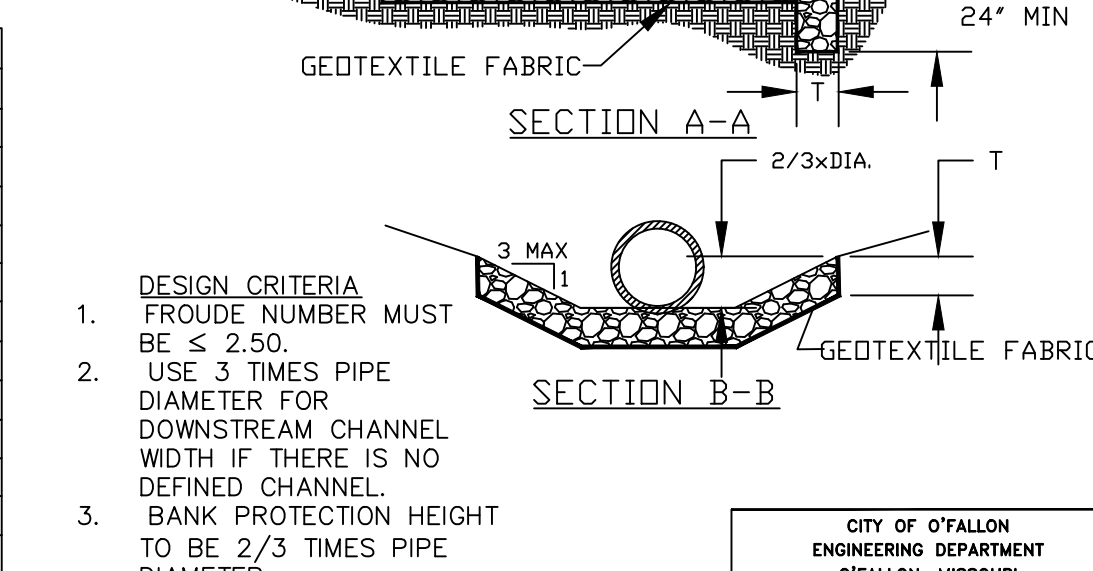
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STRAW BALE CHECK DAM



RIPRAP SIZE & APRON DIMENSION

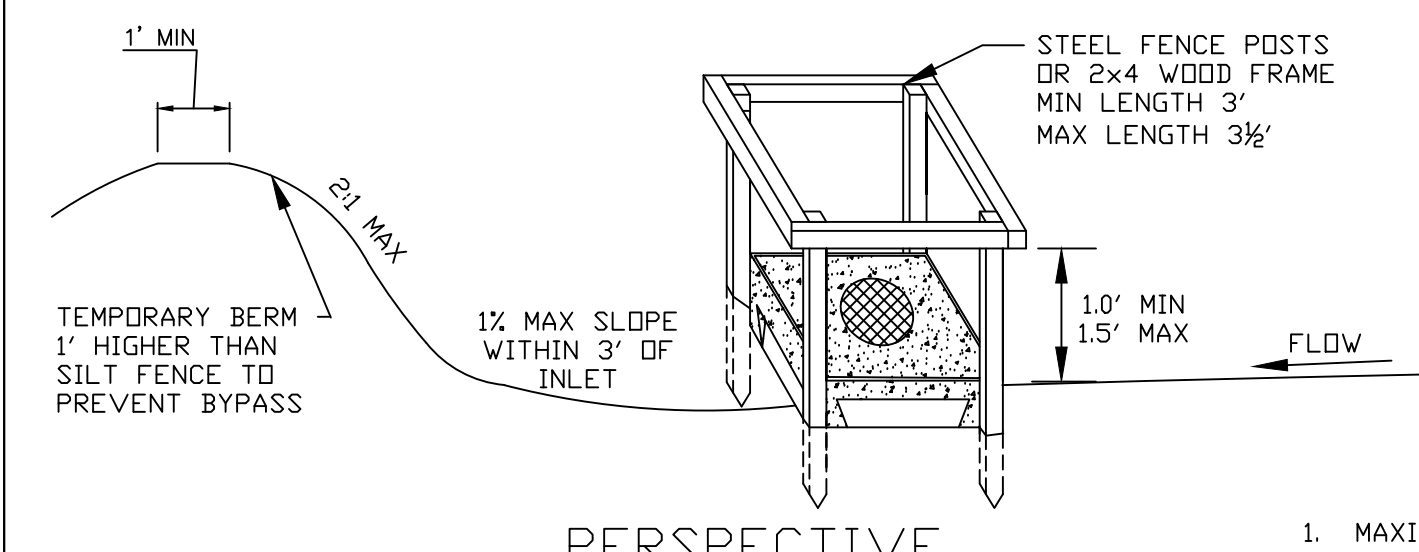
PIPE SIZE	VELOCITY < 5 FPS				VELOCITY < 10 FPS			
	d ₅₀	d _{max}	T	L	d ₅₀	d _{max}	T	L
12	5	9	15	12	5	9	15	16
15	5	9	15	14	5	9	15	18
18-24	5	9	15	16	9	14	24	20
27-30	5	9	15	18	9	14	24	22
36-42	9	14	24	22	14	18	27	26
48-54	9	14	24	26	14	18	27	30
60-66	12	18	27	34	15	24	30	38
72-84	15	24	30	42	15	24	30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



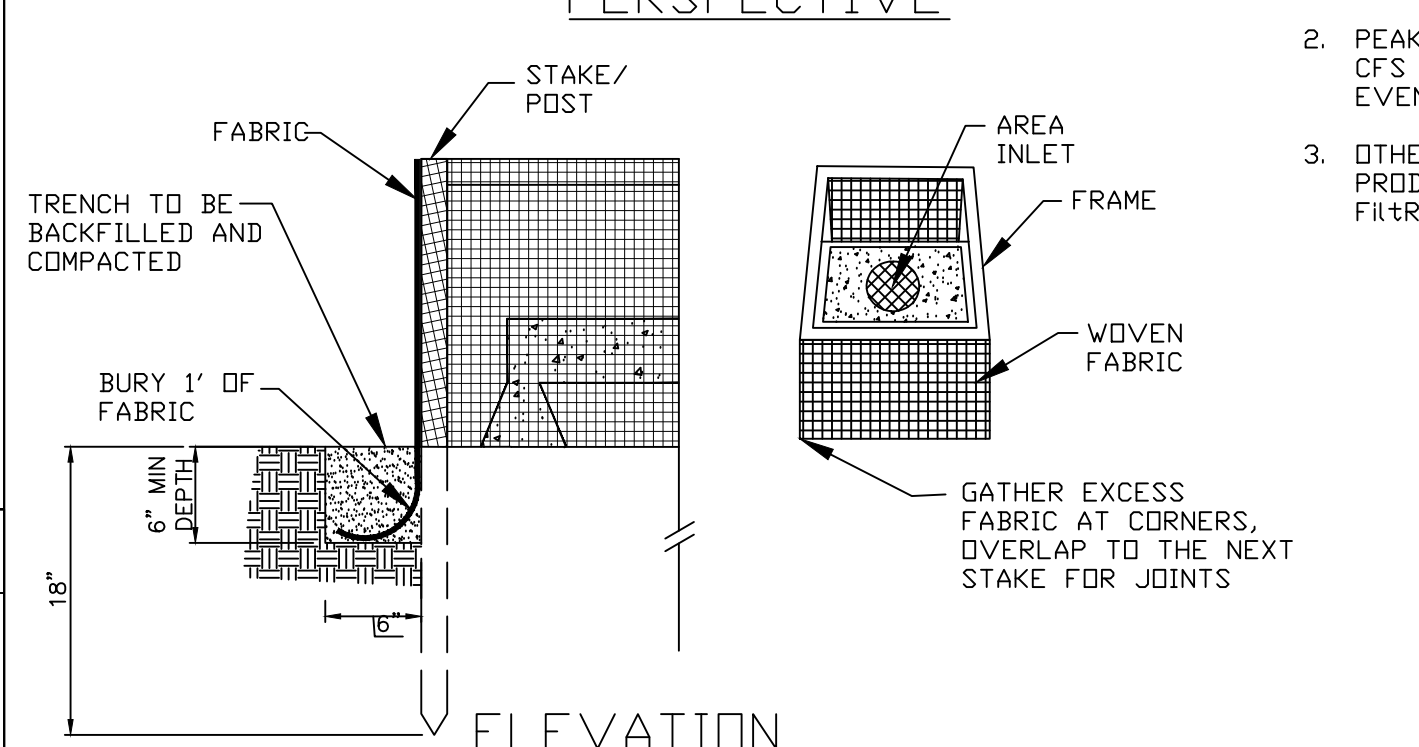
- DESIGN CRITERIA**
- FROUDE NUMBER MUST BE ≤ 2.50 .
 - USE 3 TIMES PIPE DIAMETER FOR DOWNSTREAM CHANNEL WIDTH IF THERE IS NO DEFINED CHANNEL.
 - BANK PROTECTION HEIGHT TO BE 2/3 TIMES PIPE DIAMETER.
 - ROCK SLOPES SHALL BE NO STEEPER THAN 3:1.

TEMPORARY OUTLET PIPE DISCHARGE PROTECTION

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PERSPECTIVE



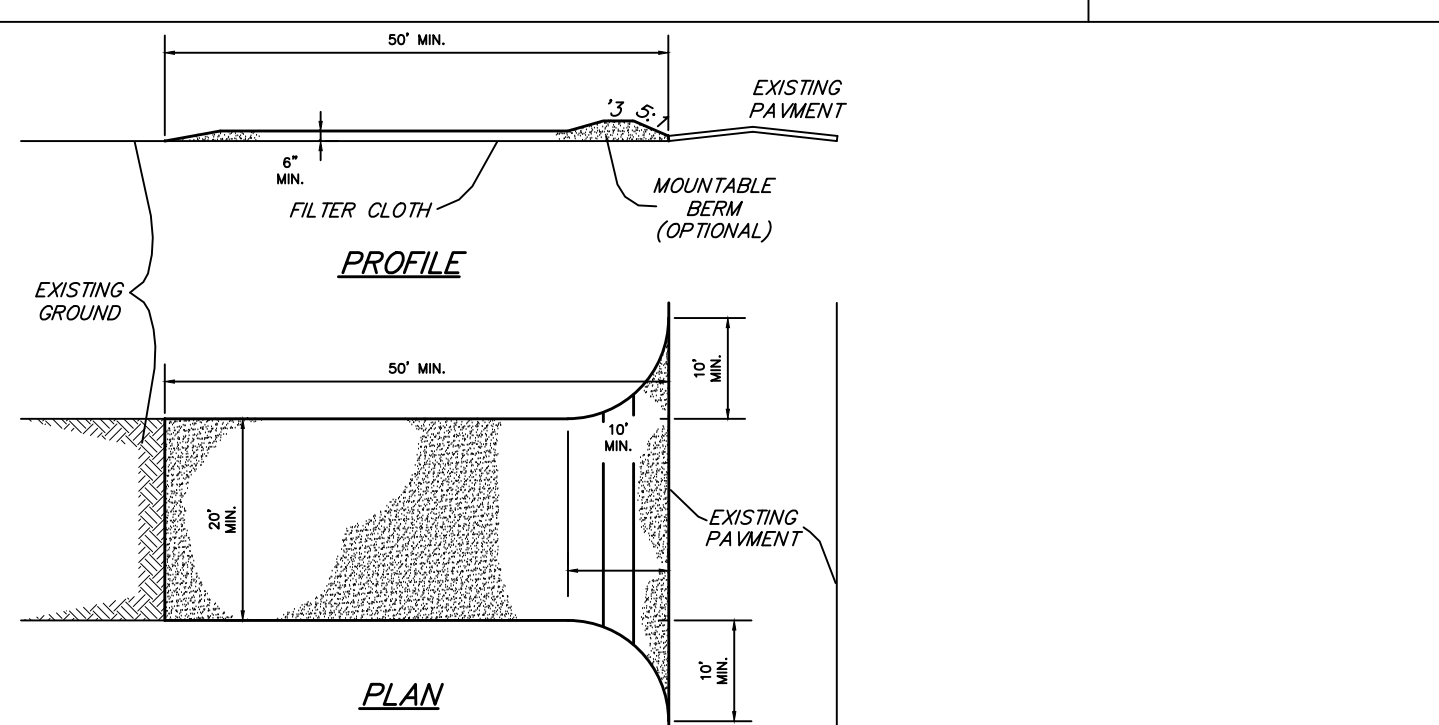
ELEVATION

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™.

AREA INLET PROTECTION FABRIC DROP

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CONSTRUCTION SPECIFICATIONS

- Stone Size - Use 2\"/>

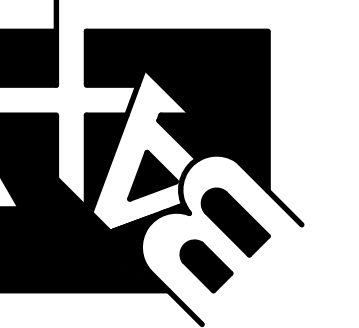
STABILIZED CONSTRUCTION ENTRANCE/WASHDOWN AREA
NOT TO SCALE

PROJECT TITLE:

The Willows

Issue Date: 01/28/2022

ENGINEERING
PLANNING
SURVEYING
221 Point View Blvd.
St. Charles, MO 63301
636-928-5562
FAX 928-1718



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REVISIONS

DATE	REVISIONS
03/02/22	CITY COMMENTS
03/30/22	CITY COMMENTS
04/18/22	CITY COMMENTS
07/01/22	CITY COMMENTS

Developer / Owner:
KAPB, L.L.C.
410 Crestview Drive
O'Fallon, MO 63366
636-272-4200

P+Z No. #21-08053

Approval Date: 03/24/2022

City No. GR22-000004

Page No.

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EROSION CONTROL DETAILS

ENGINEERS SEAL DOES NOT APPLY TO CITY OF O'FALLON DETAILS ON THIS SHEET.