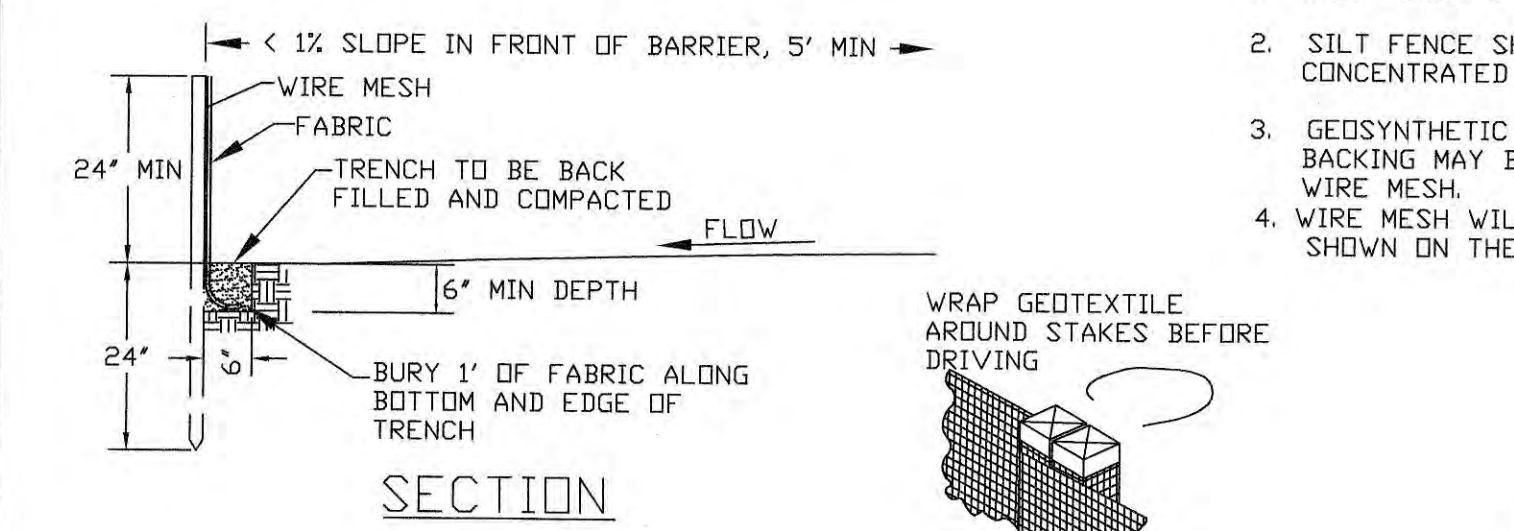
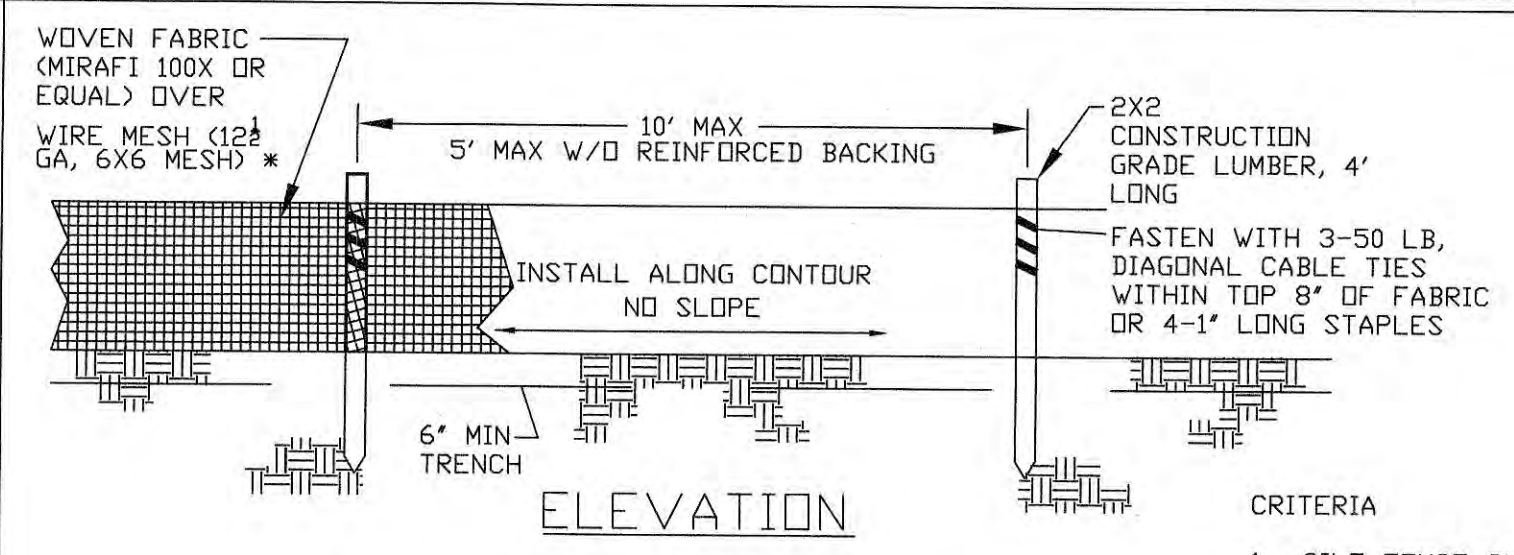


- DESIGN CRITERIA**
- SILT FENCE FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
 - STRAW BALE BARRIERS FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
 - REFER TO INDIVIDUAL ESC FIGURE FOR INSTALLATION.
 - TERRACING INCLUDES LOGS, WATTLES & FILTER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

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

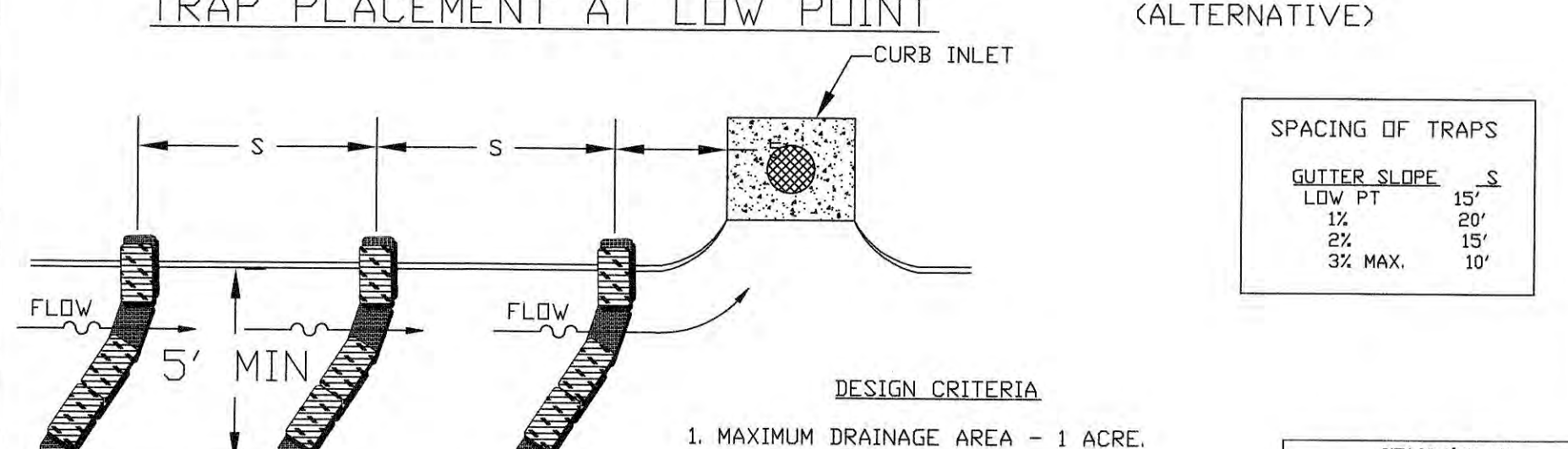
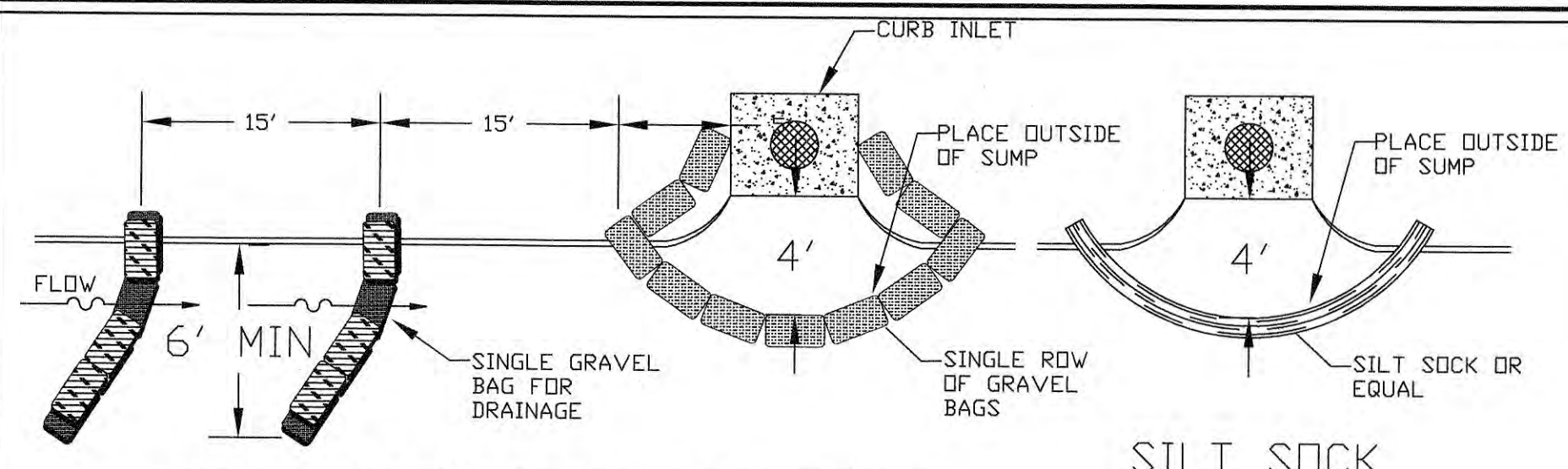
**SPACING CHART
FOR ESC DEVICES**



- 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.

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

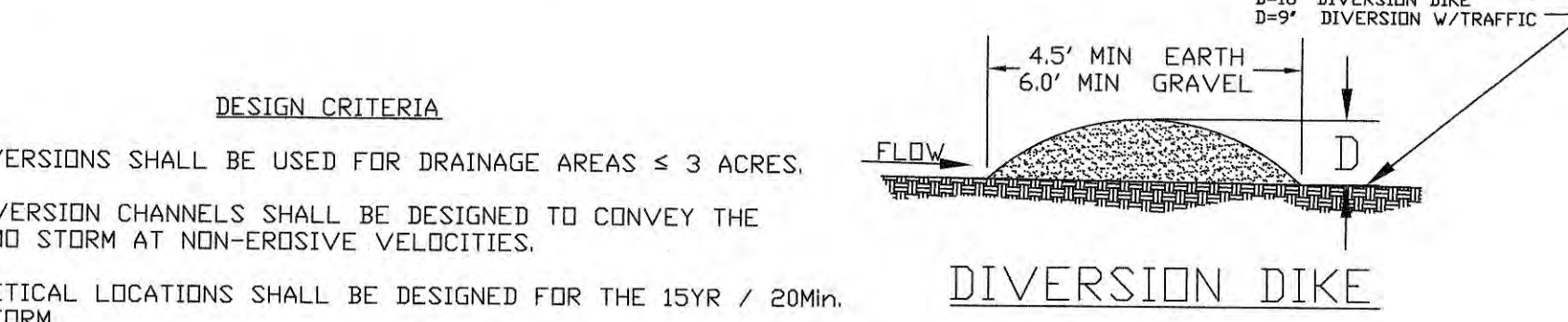
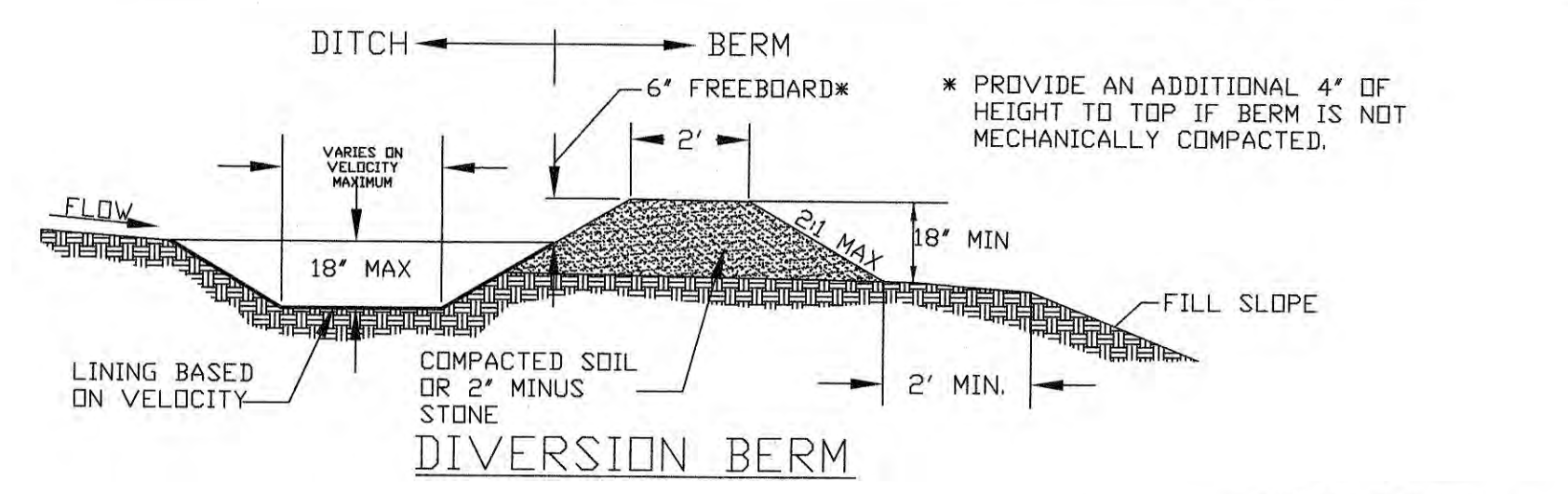
**SILT FENCE INSTALLATION
SHEET FLOW (ONLY)**



- 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.

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

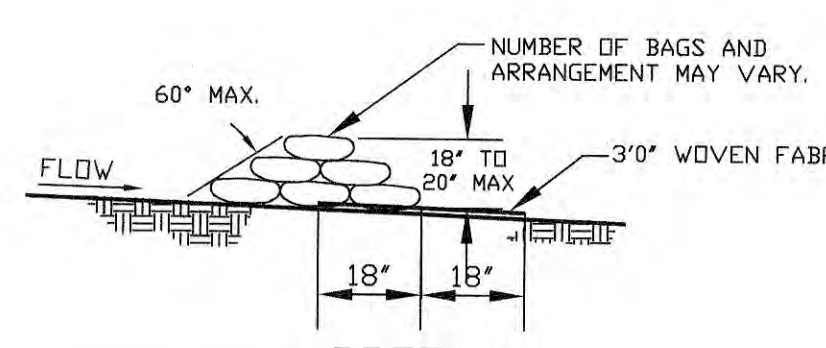
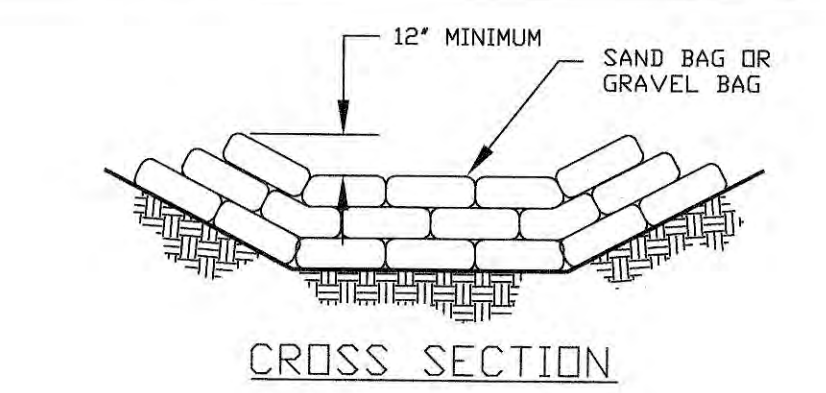
**CURB INLET
PROTECTION**



- 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 ERODIBLE AREAS.
 - CHANNELS SHALL BE PROTECTED USING APPROPRIATE CHANNEL LINERS.
 - CHANNEL OUTLETS MUST BE STABILIZED.
 - STORM SEWERS MAY BE USED IN LIEU OF OPEN CHANNELS.

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

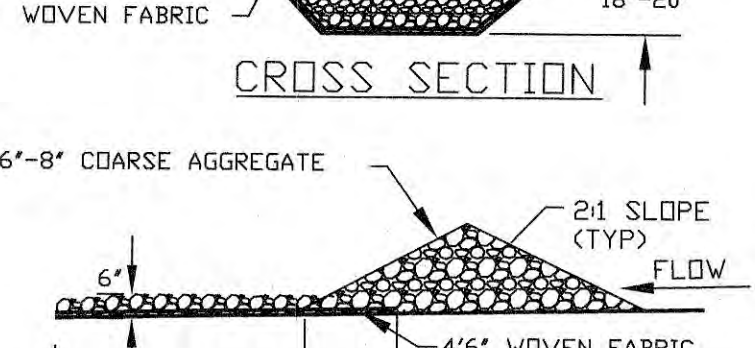
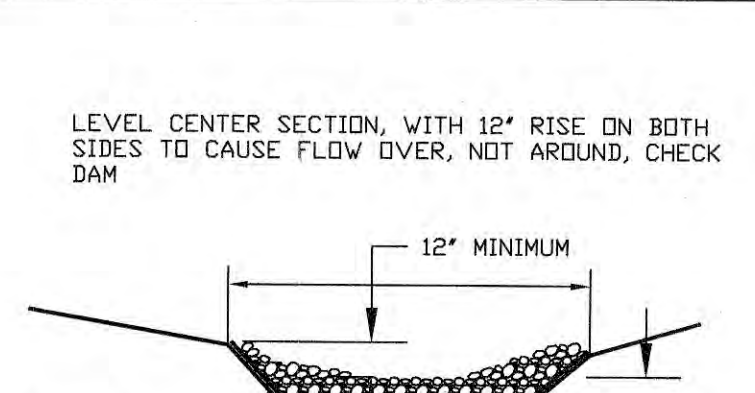
**DIVERSION BERMS
+ DIKES**



CROSS SECTION

PROFILE

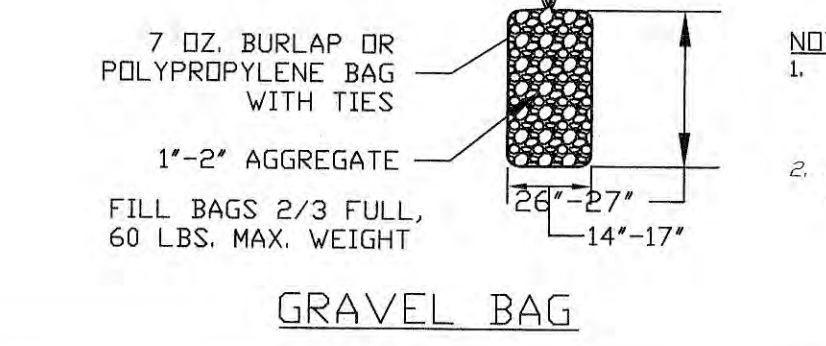
**SAND BAG OR GRAVEL BAG
CHECK DAM**



CROSS SECTION

PROFILE

ROCK CHECK DAM

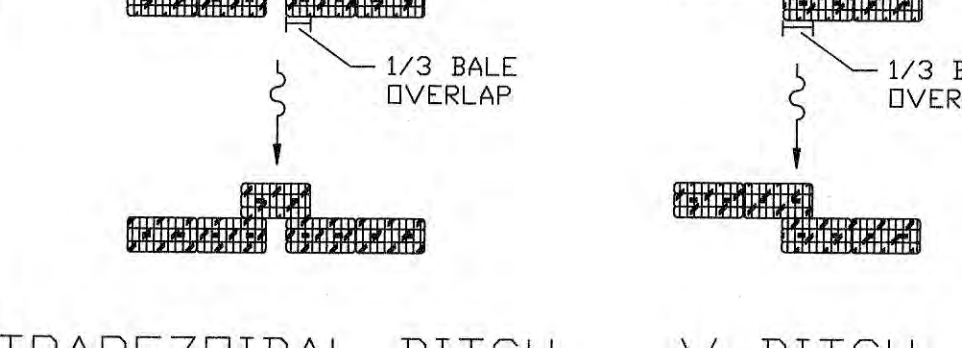
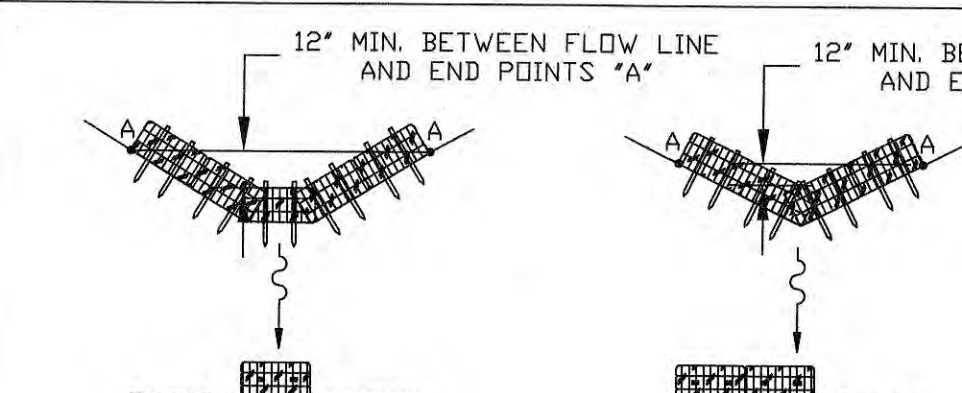


GRAVEL BAG

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

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

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 ERODIBLE AREAS.

CHECK DAM SPACING

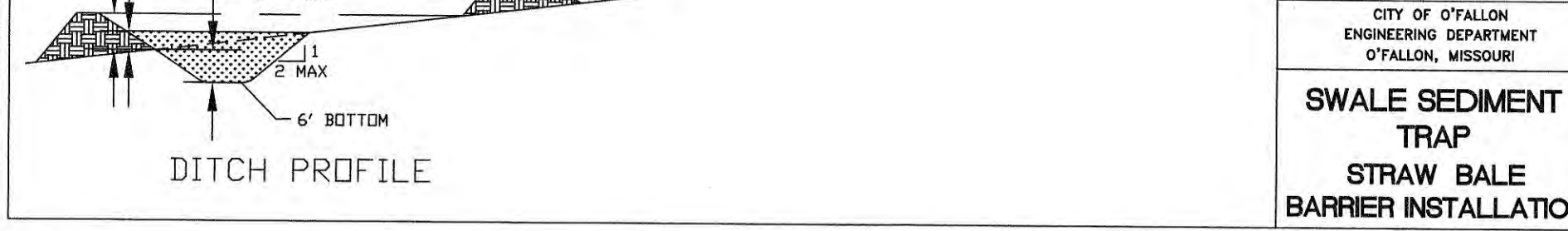
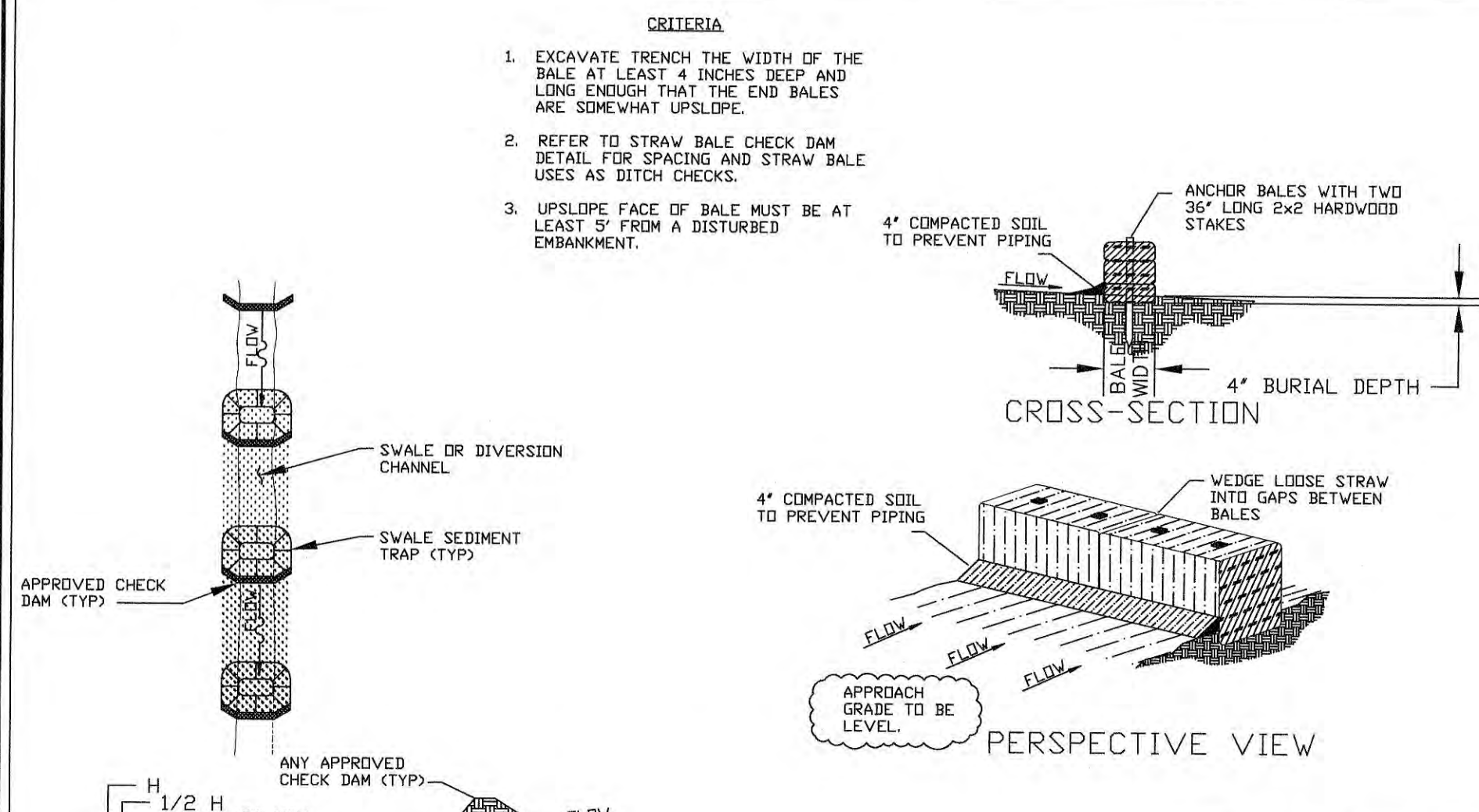
Ditch Slope	Maximum Spacing
3%	50'
2%	75'



DITCH PROFILE

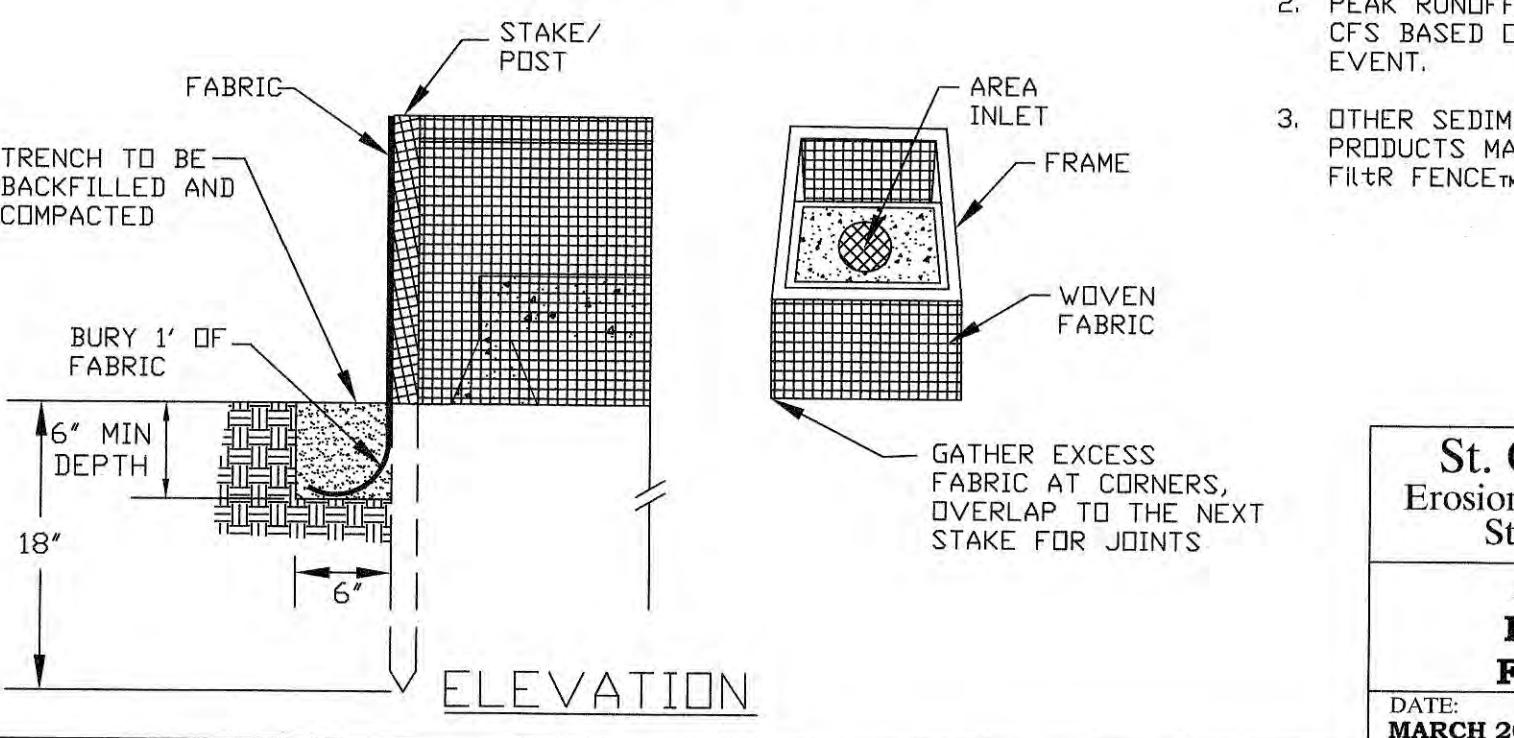
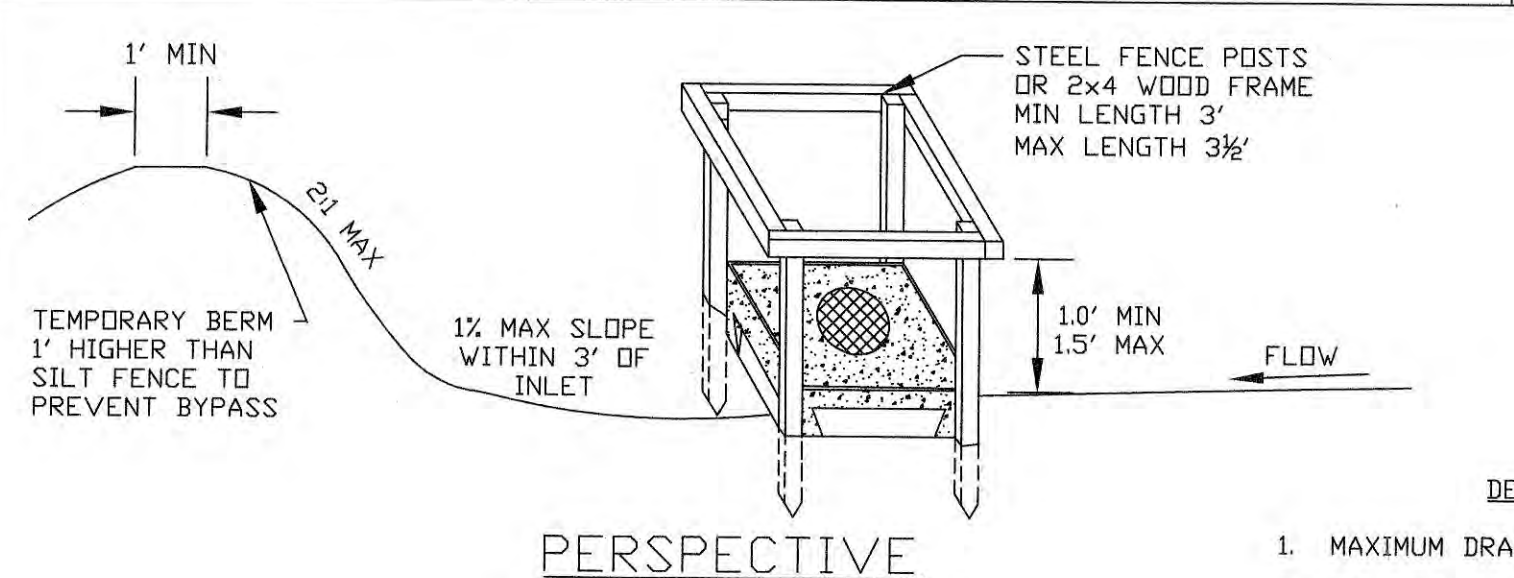
**CITY OF O'FALLON
ENGINEERING DEPARTMENT
O'FALLON, MISSOURI**

**STRAW BALE
CHECK DAM**



**SWALE SEDIMENT
TRAP**

**STRAW BALE
BARRIER INSTALLATION**

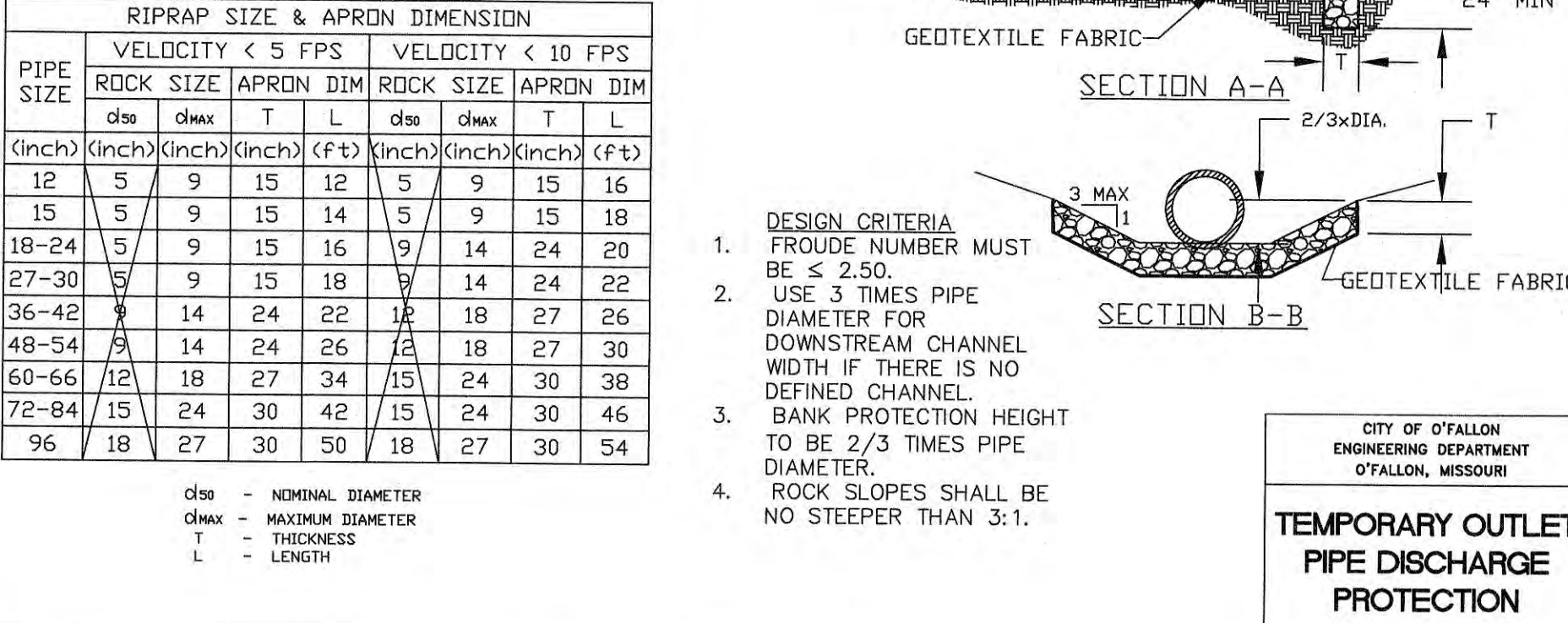
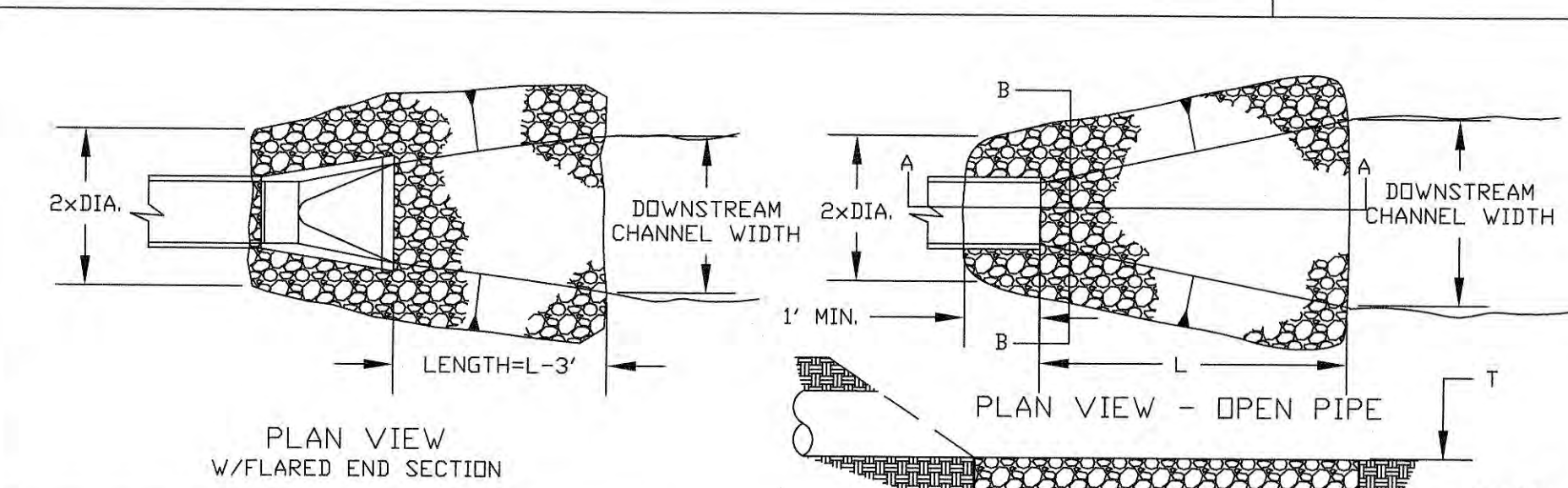


- DESIGN CRITERIA**
- MAXIMUM DRAINAGE AREA - 1 ACRE.
 - PEAK RUNOFF SHALL NOT EXCEED 2 CFS BASED ON A 6-MONTH STORM EVENT.
 - OTHER SEDIMENT PROTECTION PRODUCTS MAY BE USED, SUCH AS FIT R FENCE™.

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

**AREA INLET
PROTECTION
FABRIC DROP**

DATE: **MARCH 2008** DRAWING: **ESC-14**



- 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:
TOMMY'S EXPRESS CAR WASH
101 FALLON LOOP RD.
O'FALLON MISSOURI 63368



REFERENCE DRAWINGS ONLY, ENGINEERS SEAL DOES NOT APPLY TO THESE DETAILS

REVISIONS

NO.	DATE	DESCRIPTION
4-17-20	city, dcsd, pwsd2 & fire comments	

Developer / Owner:
DOWLING ENTERPRISES LLC - BILL DOWLING
5 BRIDLE LANE
FRONTENAC, MISSOURI 63131
314-614-4294

P+Z No. #19-009654
Approval Date: 11-7-19
City No. #

Page No.
11 of 15

EROSION CONTROL DETAILS

Issue Date: 1/24/2020