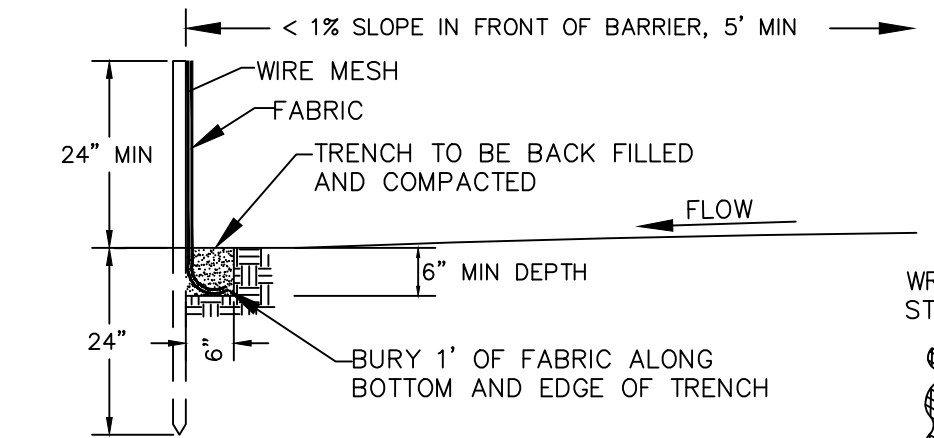
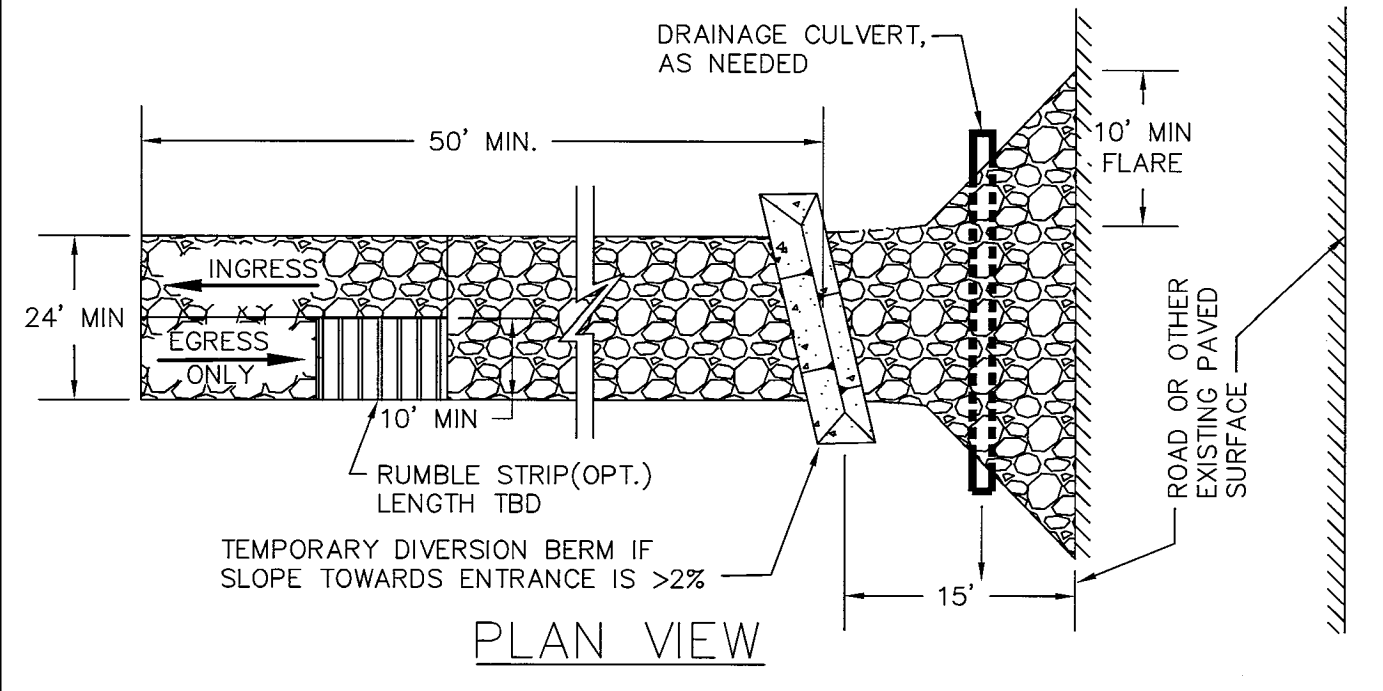


- CRITERIA**
- SILT FENCE SHALL BE 24 INCHES HIGH.
 - SILT FENCE SHALL NOT BE USED FOR CONCENTRATED FLOWS.
 - GEOSYNTHETIC REINFORCED SILT FENCE BACKING MAY BE USED IN LIEU OF WIRE MESH.
 - WIRE MESH WILL BE USED AT LOCATIONS SHOWN ON THE APPROVED SWPPP.



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

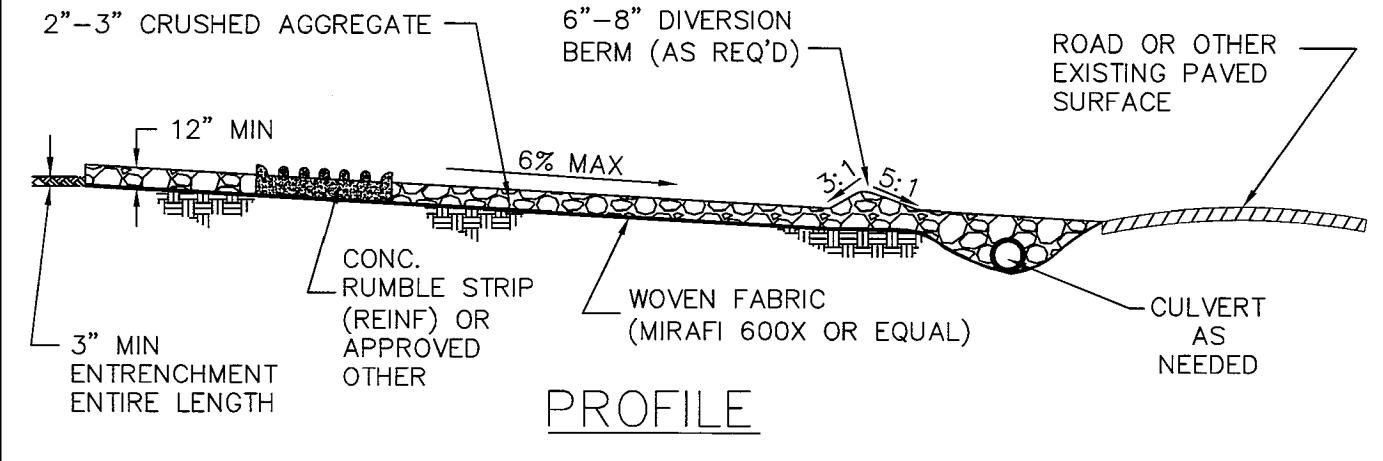
JOINING SECTIONS OF SILT FENCE



NOTE: A SPECIAL USE PERMIT IS REQ'D FOR THE ENTRANCE.

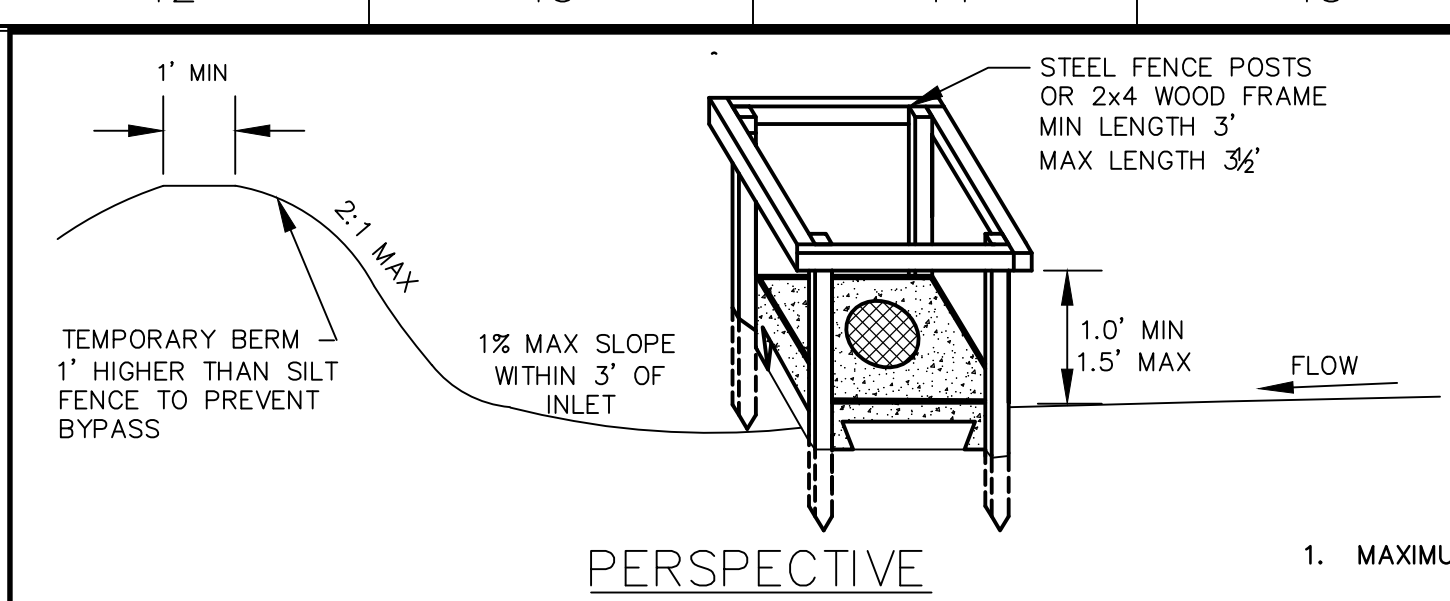


- DESIGN NOTES**
- DIVERT ALL RUNOFF TO A SEDIMENTATION CONTROL DEVICE.
 - PROVIDE WATER SUPPLY FOR WASHDOWN.

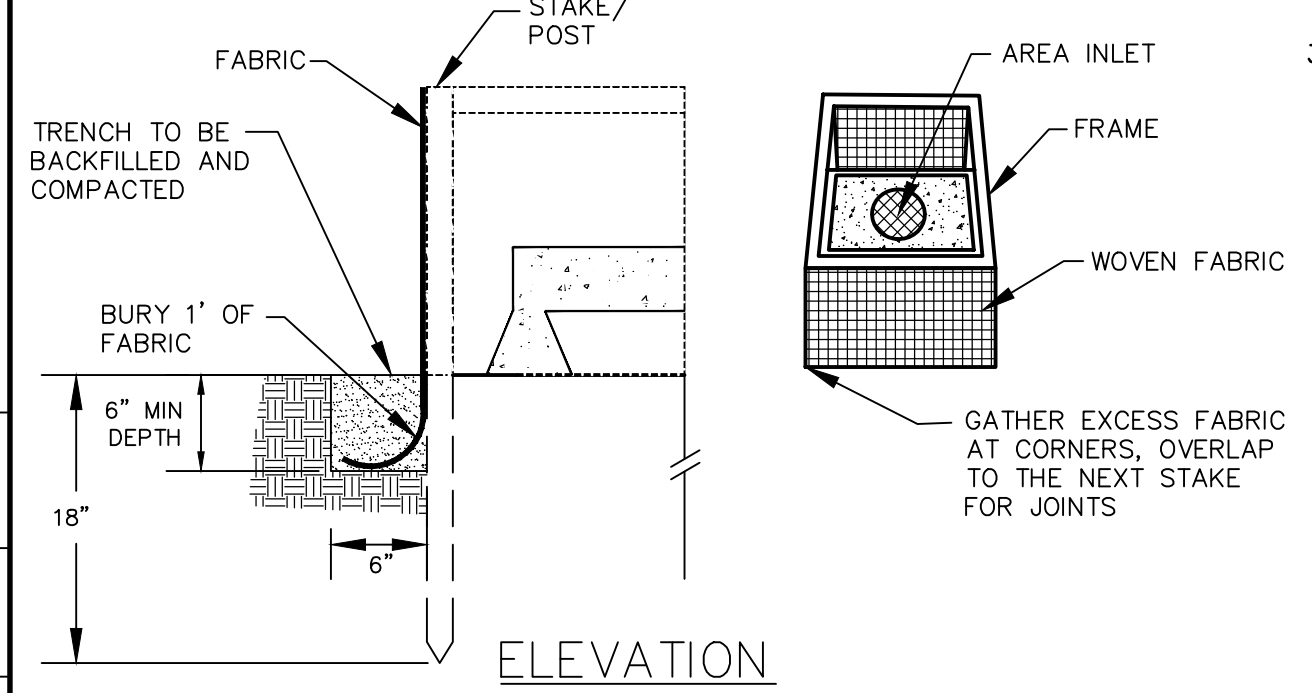


CITY OF O'FALLON
ENGINEERING DEPARTMENT
O'FALLON, MISSOURI

SILT FENCE INSTALLATION SHEET FLOW (ONLY)



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



St. Charles County Erosion & Sediment Controls Standard Drawings

AREA INLET PROTECTION FABRIC DROP

DATE: MARCH 2008

DRAWING: ESC-14

636-584-0540 (tel.)
636-584-0512 (fax)
mail@ochran.com
6304 E. Independence Dr.
Union, Missouri 63084

UCHRAN

Civil Engineering
Land Surveying
Architecture
Site Development
General Consulting
Master Planning

Missouri State Certificate of Authority Numbers:
Survey: 000380
Engineering: 001655
Architecture: 2002014240

Three working days prior to the start of any excavation call 1-800-916-8171 for utility location information.

All OSHA rules & regulations and regulations required by these construction projects shall be strictly followed (ie. trenching, blasting, etc.)

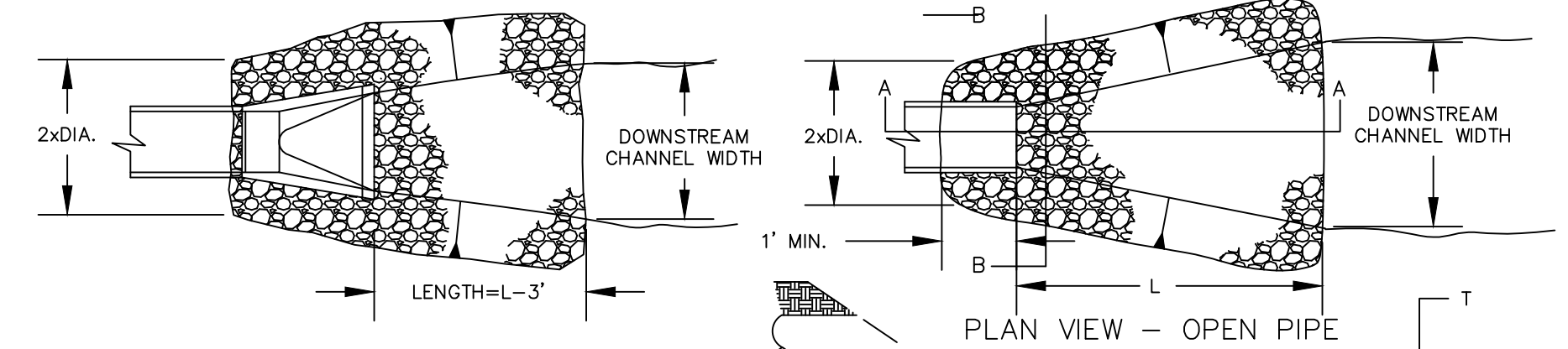
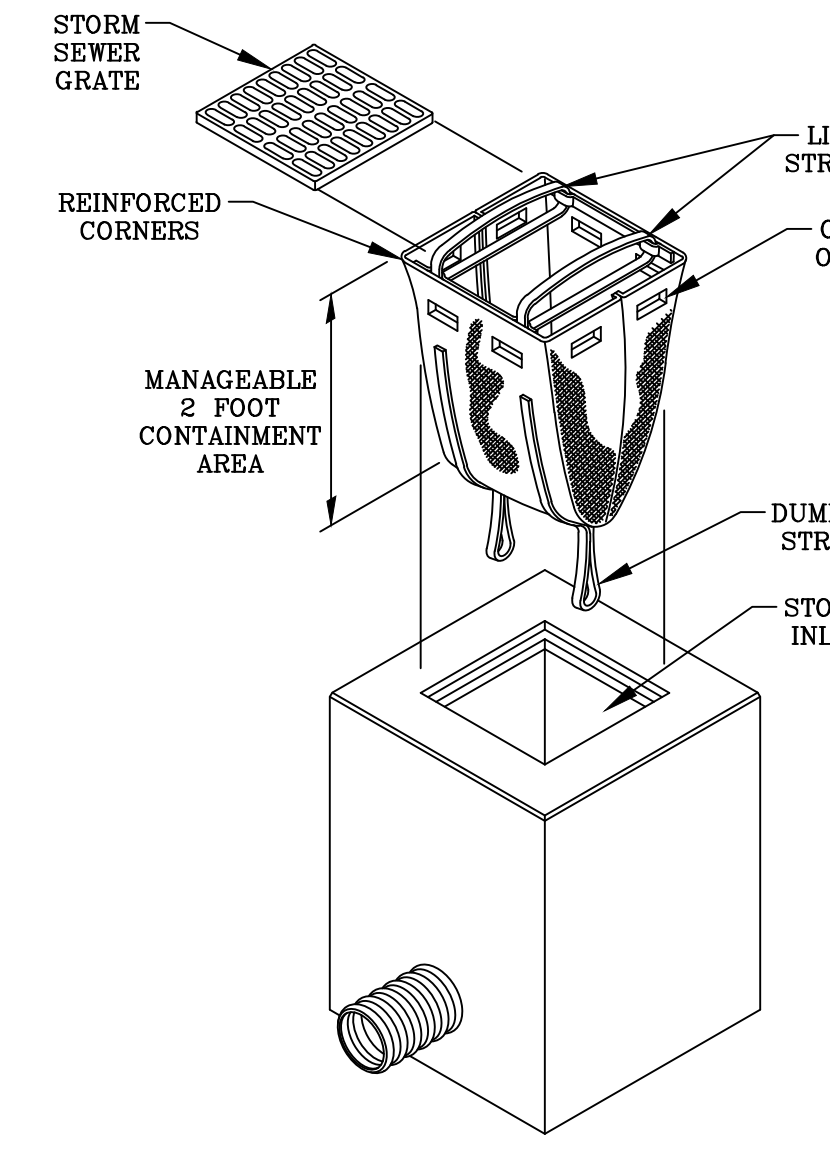
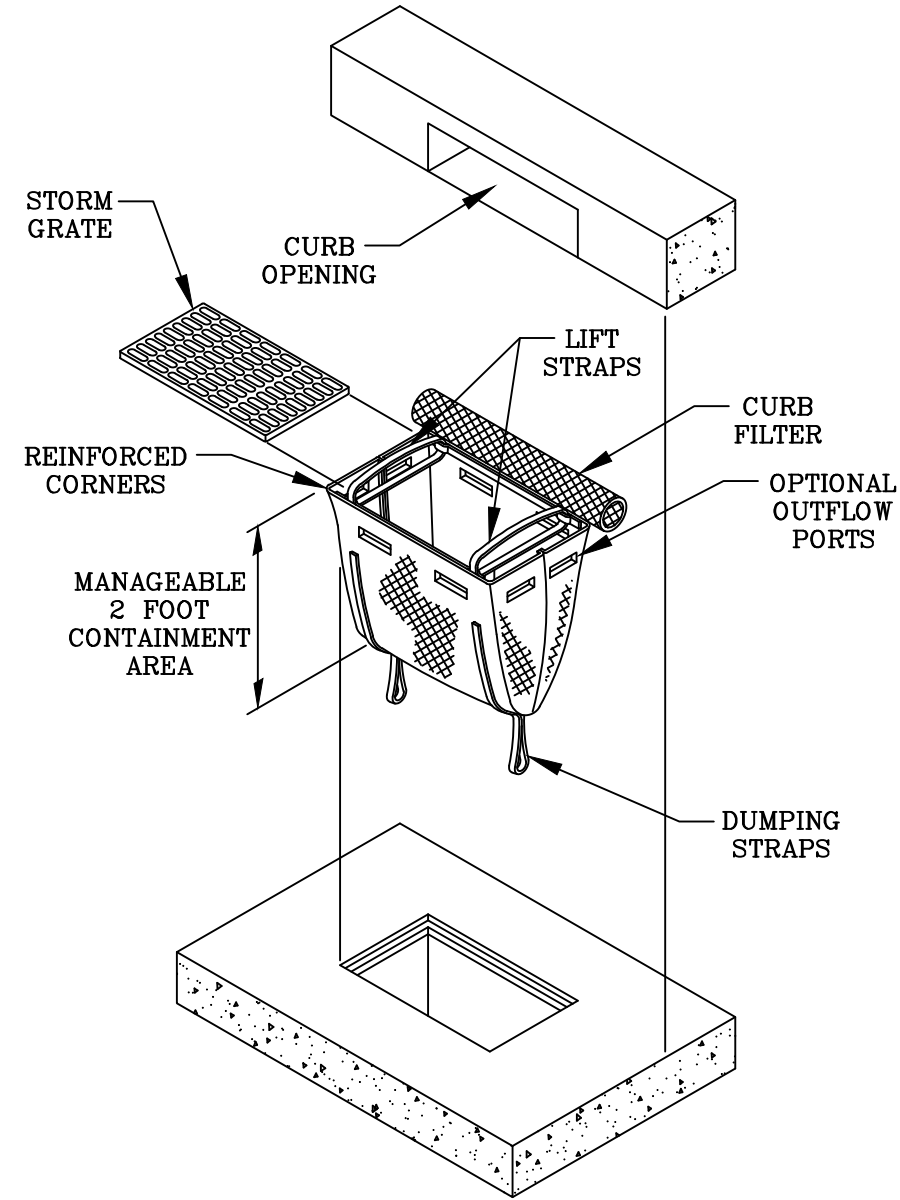
STATE OF MISSOURI

TIMOTHY SCHOWE

Professional Engineer

NUMBER: PE-3018600268

10-21-22



RIPRAP SIZE & APRON DIMENSION

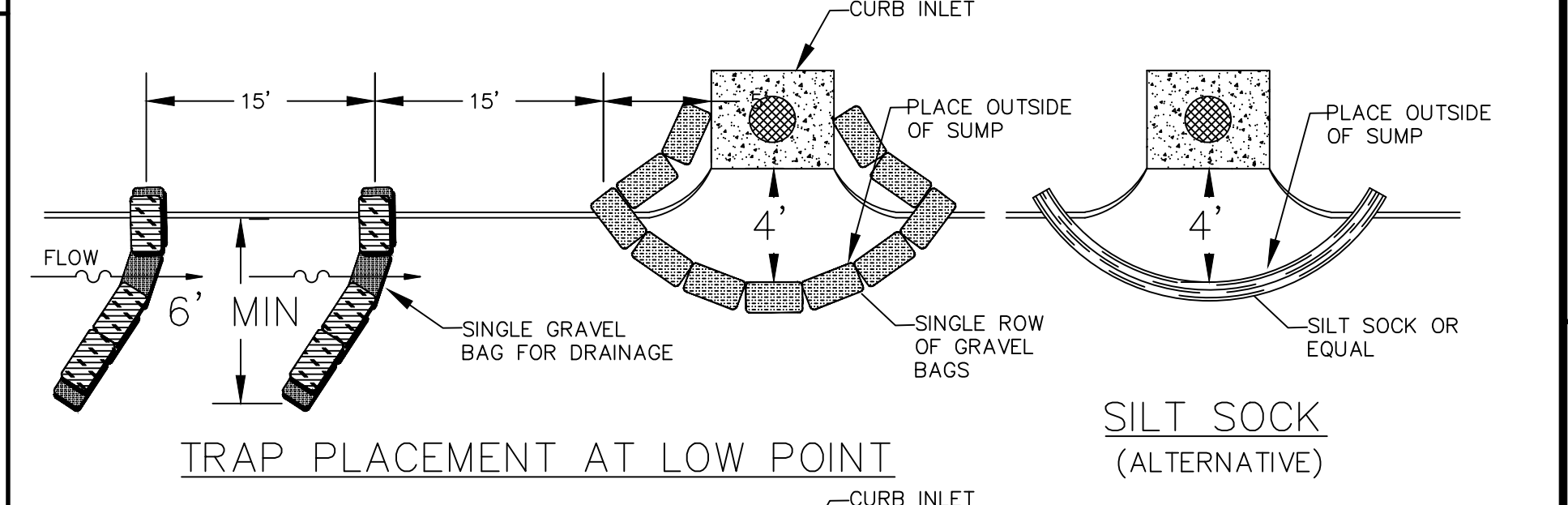
PIPE SIZE	VELOCITY < 5 FPS			VELOCITY < 10 FPS				
	ROCK SIZE	APRON DIM	ROCK SIZE	APRON DIM	ROCK SIZE	APRON DIM		
(inch)	d ₅₀ (inch)	d _{max} (inch)	T (inch)	L (ft)	d ₅₀ (inch)	d _{max} (inch)	T (inch)	L (ft)
12	5	9	15	12	5	9	15	16
15	5	9	15	14	5	9	15	18
18-24	5	9	15	16	9	14	24	20
27-30	5	9	15	18	9	14	24	22
36-42	5	14	24	22	14	18	27	26
48-54	9	14	24	26	12	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

d₅₀ - NOMINAL DIAMETER
d_{max} - 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.

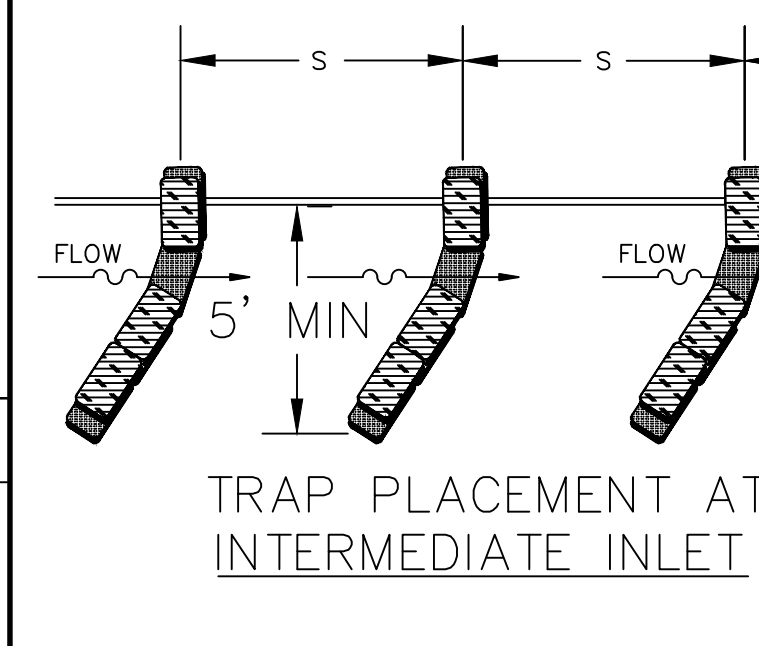
CITY OF O'FALLON
ENGINEERING DEPARTMENT
O'FALLON, MISSOURI

TEMPORARY OUTLET PIPE DISCHARGE PROTECTION



SPACING OF TRAPS

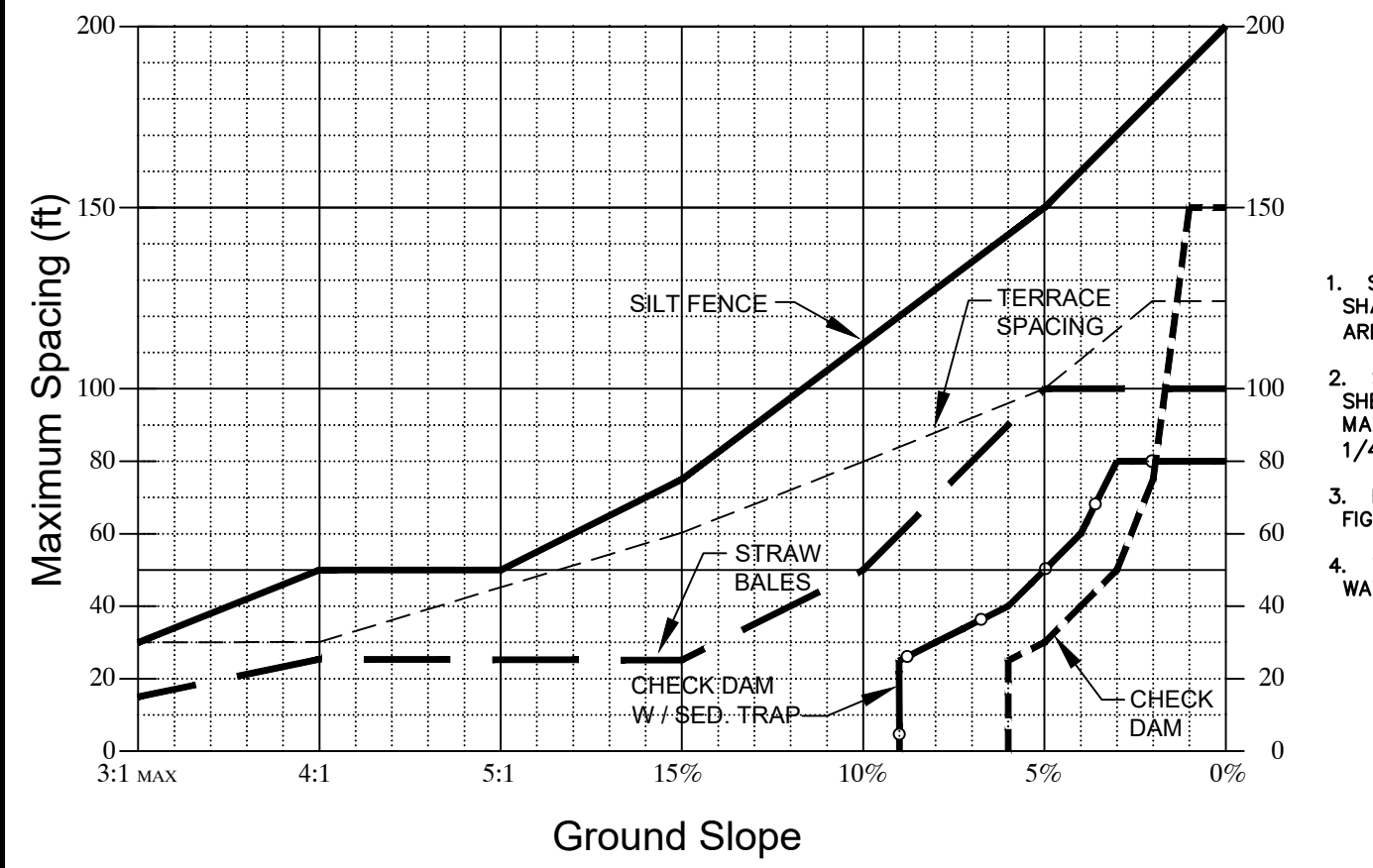
GUTTER SLOPE	S
LOW PT	15'
1%	20'
2%	15'
3% MAX.	10'



- 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**
- 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

Table 60-5 Soil Stabilization Schedule

Soil Disturbance Activity or Condition	Required Stabilization Time
Soil disturbance has ceased in areas greater than 2,000 square feet.	14 days
After construction of dikes, swales, diversions, and other concentrated flow areas	5 days
When slopes are steeper than 3 horizontal to 1 vertical	7 days
When slopes are greater than 3% and longer than 150 feet.	14 days
Perimeter controls around soil stockpiles.	End of workday
Stabilization or covering of inactive stockpiles.	30 days
When land disturbance is completed, permanent soil stabilization must be installed.	30 days

Table 60-6 Soil Amendment Rates

Soil Amendment Material	Application Rate (Lb per Acre)
Fertilizer	
Nitrogen (N)	30 ¹
Phosphate (P ₂ O ₅)	90 ¹
Potash (K ₂ O)	90 ¹
Lime	1,000 ²

¹Increase the rate by 25% for slopes steeper than 5:1.
²Rate is in effective neutralizing material (ENM) units.

Table 60-7 Temporary Fall Seeding

Plant Species	Rate ¹ (lb/acre)	Seeding Times
Side-Oats	65	8/16 - 9/30
Winter Rye	50	8/01 - 10/15
Winter Wheat	60	8/01 - 10/15
Orchard Grass	120	8/01 - 10/15
Perennial Ryegrass	80	8/01 - 10/15
Tall fescue, Smooth Brome	80	8/01 - 10/15
K-31 Fescue	120	9/01 - 11/15
Ladino Clover	2 ²	8/15 - 9/15
Crimson Clover	6 ²	8/15 - 9/15
Orchard Grass and Oats or Rye	15 ² 40 ²	8/15 - 9/15

¹If using aerial seeding or other broadcast method to apply seed without rolling or culti-packing, increase seeding rates by 50 percent.
²Pure live seed (PLS)

Table 60-8 Temporary Spring Seeding

Plant Species	Rate ¹ (lb/acre)	Seeding Dates
Winter Rye	50	3/15 - 5/31
Spring Oats	65	3/15 - 5/31
Annual Ryegrass	4 ²	3/15 - 6/15
Sudangrass	16 ²	4/15 - 6/15
K-31 Fescue	30 ²	3/15 - 5/31
Red Clover & Oats	2 ² 30 ²	3/15 - 5/31

¹If using aerial seeding or other broadcast method to apply seed without rolling or culti-packing, increase seeding rates by 50 percent.
²Pure live seed (PLS)

SITE IMPROVEMENTS

SSM HEALTH

O'FALLON, MISSOURI

EROSION & SEDIMENT CONTROL DETAILS

DATE: 10/21/2022

SCALE: NO SCALE

PROJ. NO: 22-9120

DWG. NO: ES2

DWG NAME: F:\22-9120 - Professional Design Services for the SSM Medical Building in O'Fallon, MO\AutoCAD Drawings\9120 - Plan Sheets\05 - EROSION & SEDIMENT CONTROL DETAILS.dwg LAYOUT TAB: ES2 PLOTTED ON: Oct 20, 2022 - 8:37am PLOTTED BY: tschow