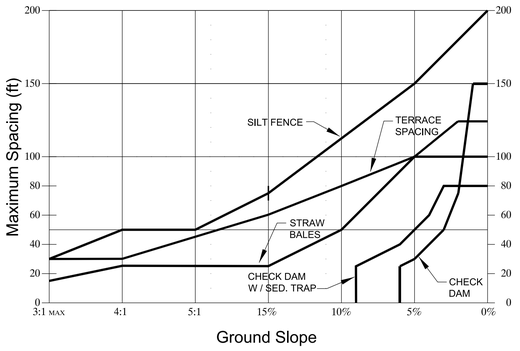
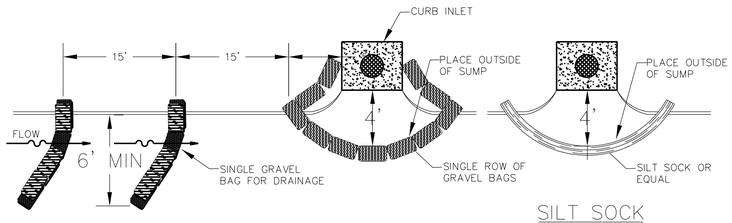


DESIGN CRITERIA

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.

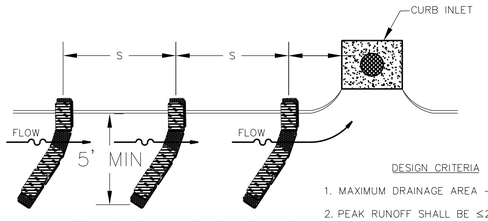
CITY OF O'FALLON ENGINEERING DEPARTMENT O'FALLON, MISSOURI

SPACING CHART FOR ESC DEVICES



TRAP PLACEMENT AT LOW POINT

SILT SOCK (ALTERNATIVE)



TRAP PLACEMENT AT INTERMEDIATE INLET

SPACING OF TRAPS

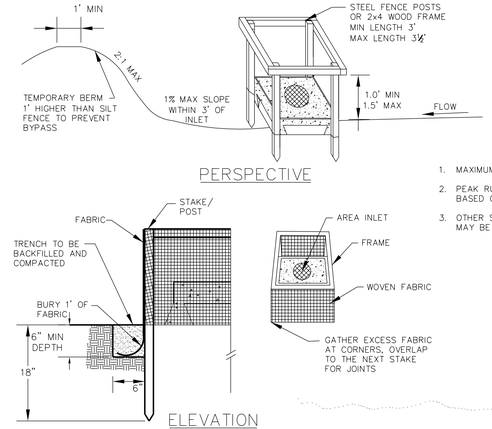
GUTTER SLOPE	S
LOW PT	15'
1%	20'
2%	15'
3% MAX.	10'

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.

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

CURB INLET PROTECTION



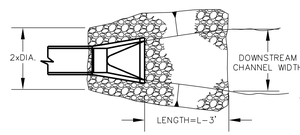
DESIGN CRITERIA

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

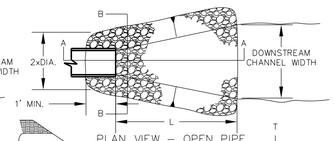
St. Charles County
Erosion & Sediment Controls
Standard Drawings

AREA INLET PROTECTION FABRIC DROP

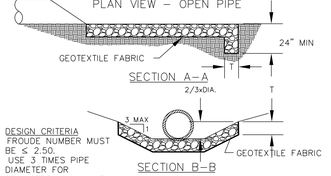
DATE: **MARCH 2008** | DRAWING **ESC-14**



PLAN VIEW
W/FLARED END SECTION



PLAN VIEW – OPEN PIPE



PIPE SIZE	VELOCITY < 5 FPS				VELOCITY < 10 FPS			
	ROCK SIZE		APRON DIM		ROCK SIZE		APRON DIM	
	d_{50}	d_{MAX}	T	L	d_{50}	d_{MAX}	T	L
(inch)	(inch)	(inch)	(inch)	(ft)	(inch)	(inch)	(inch)	(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	9	14	24	22	12	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

RIPRAP SIZE & APRON DIMENSION

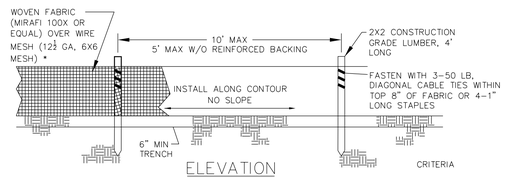
d_{50} – NOMINAL DIAMETER
d_{MAX} – MAXIMUM DIAMETER
T – THICKNESS
L – LENGTH

DESIGN CRITERIA

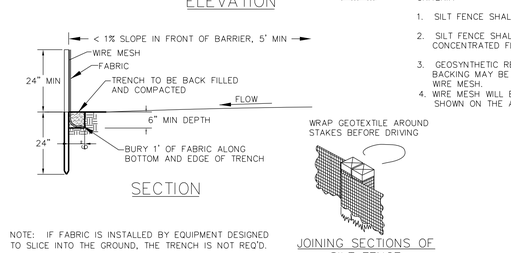
1. FROUDE NUMBER MUST BE ≤ 2.50.
2. USE 3 TIMES PIPE DIAMETER FOR DOWNSTREAM CHANNEL WIDTH IF THERE IS NO DEFINED CHANNEL.
3. BANK PROTECTION HEIGHT TO BE 2/3 TIMES PIPE DIAMETER.
4. ROCK SLOPES SHALL BE NO STEEPER THAN 3:1.

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

TEMPORARY OUTLET PIPE DISCHARGE PROTECTION



ELEVATION



SECTION

JOINING SECTIONS OF SILT FENCE

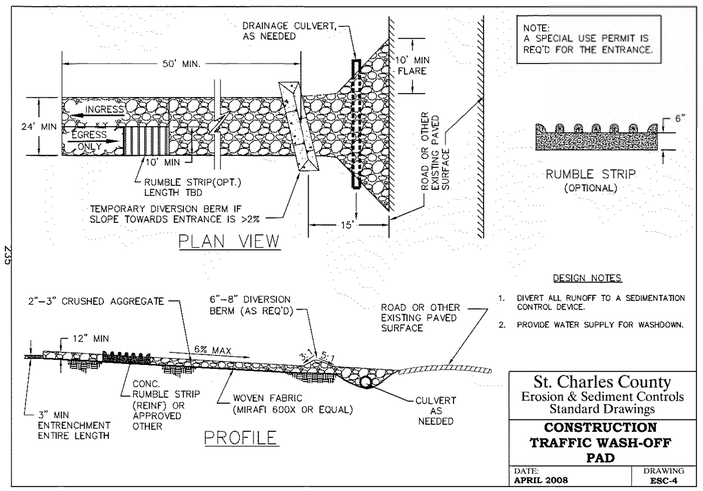
NOTE: IF FABRIC IS INSTALLED BY EQUIPMENT DESIGNED TO SLICE INTO THE GROUND, THE TRENCH IS NOT REQ'D.

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.

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

SILT FENCE INSTALLATION SHEET FLOW (ONLY)



DESIGN NOTES

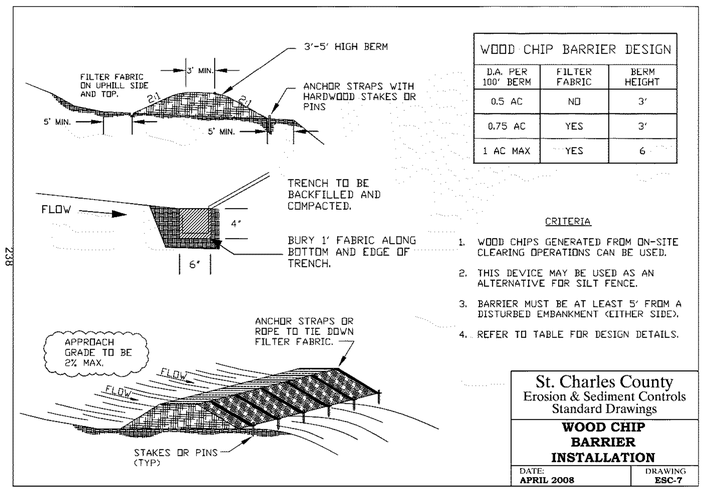
1. DIVERT ALL RUNOFF TO A SEDIMENTATION CONTROL DEVICE.
2. PROVIDE WATER SUPPLY FOR WASHDOWN.

PROFILE

St. Charles County
Erosion & Sediment Controls
Standard Drawings

CONSTRUCTION TRAFFIC WASH-OFF PAD

DATE: **APRIL 2008** | DRAWING **ESC-4**



WOOD CHIP BARRIER DESIGN		
D.A. PER 100' BERM	FILTER FABRIC	BERM HEIGHT
0.5 AC	NO	3'
0.75 AC	YES	3'
1 AC MAX	YES	6

CRITERIA

1. WOOD CHIPS GENERATED FROM ON-SITE CLEARING OPERATIONS CAN BE USED.
2. THIS DEVICE MAY BE USED AS AN ALTERNATIVE FOR SILT FENCE.
3. BARRIER MUST BE AT LEAST 5' FROM A DISTURBED EMBANKMENT (EITHER SIDE).
4. REFER TO TABLE FOR DESIGN DETAILS.

St. Charles County
Erosion & Sediment Controls
Standard Drawings

WOOD CHIP BARRIER INSTALLATION

DATE: **APRIL 2008** | DRAWING **ESC-7**

McKELVEY HOMES
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VOLZ Incorporated
ENGINEERING
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10849 Indian Head Indl. Blvd.
St. Louis, Missouri 63132
314.426.5222 Main
314.426.5062 Fax
www.volzinc.com
Authority #203

STATE OF MISSOURI
RYAN LEE HOLMES
NUMBER PE-2017018988
PROFESSIONAL ENGINEER
12-29-21
RYAN L. HOLMES
Professional Engineer
PE-2017018988

SOMMERLIN

SWPP DETAILS: SHEET 1

Design By: RLH | Drawn By: RLH | Checked By: RLH

Volz Project # 22074

06-28-21

C43

O'fallon Planning and Development Division File No.: 20-005554 | Approved: January 7, 2021