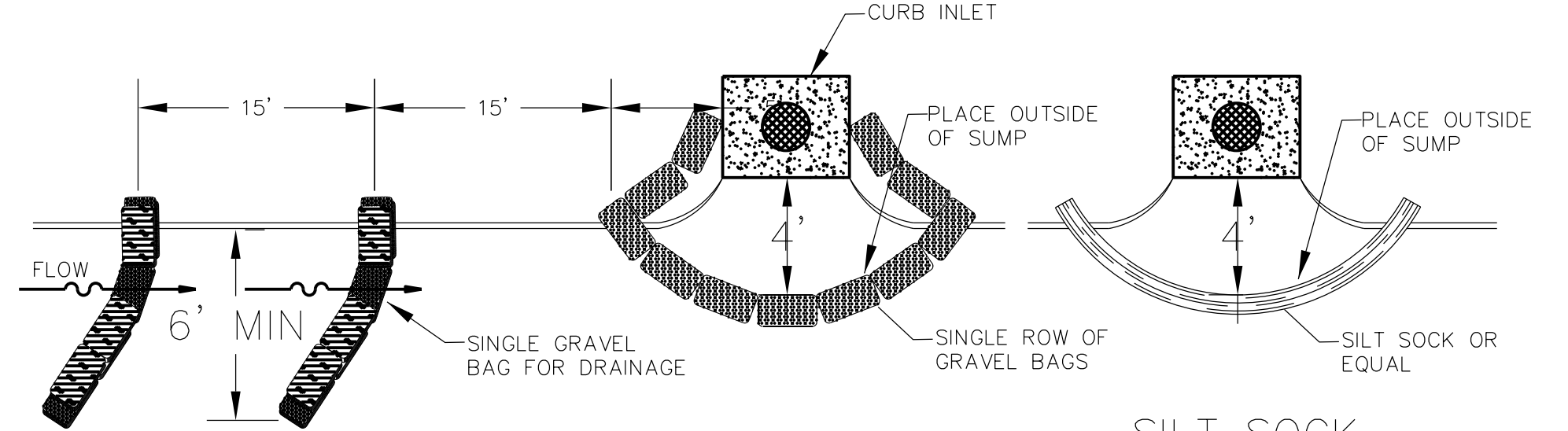


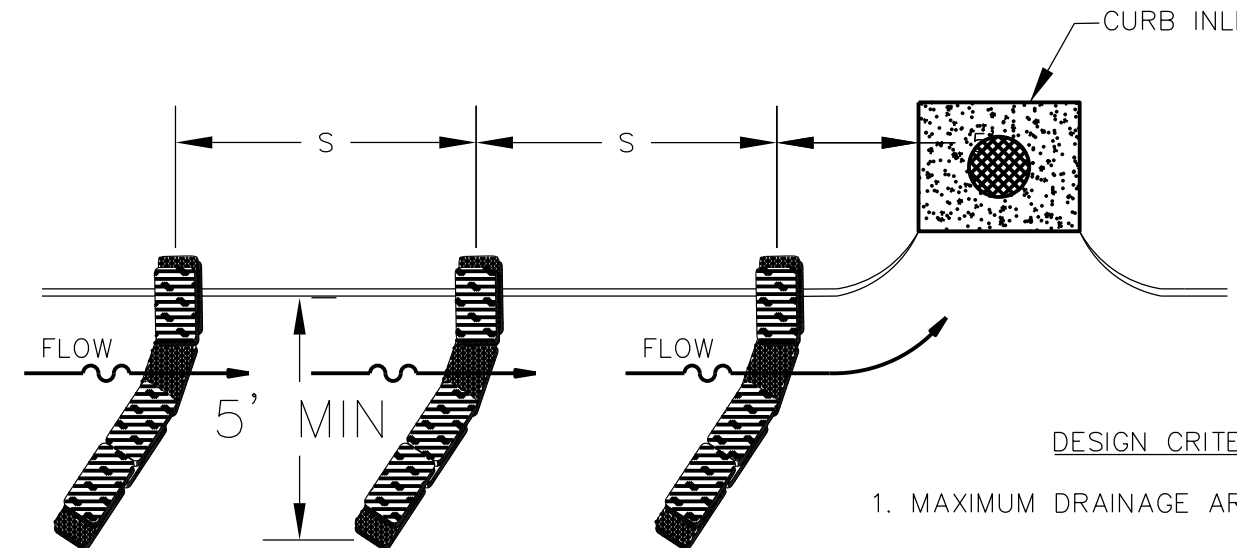
- DESIGN CRITERIA**
- SILT FENCE FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
 - STRAW BALE BARRIERS FOR SHEET FLOW SHALL HAVE A MAXIMUM DRAINAGE AREA OF 1/4 ACRE PER 100 LF.
 - REFER TO INDIVIDUAL ESC FIGURE FOR INSTALLATION.
 - TERRACING INCLUDES LOGS, WATTLES & FILTER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

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

SPACING CHART FOR ESC DEVICES



TRAP PLACEMENT AT LOW POINT



TRAP PLACEMENT AT INTERMEDIATE INLET

SILT SOCK (ALTERNATIVE)

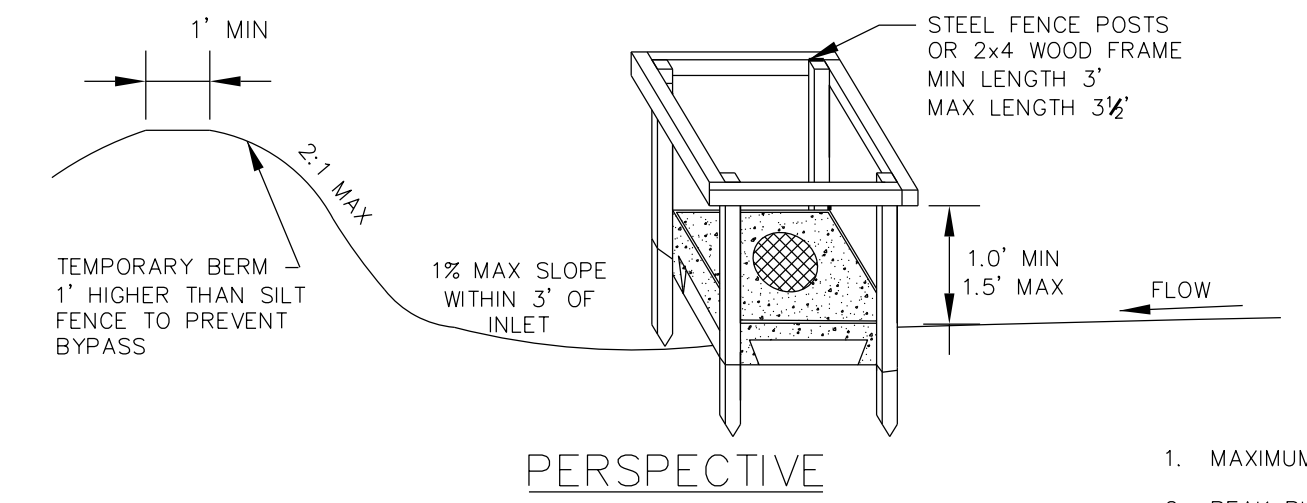
SPACING OF TRAPS

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

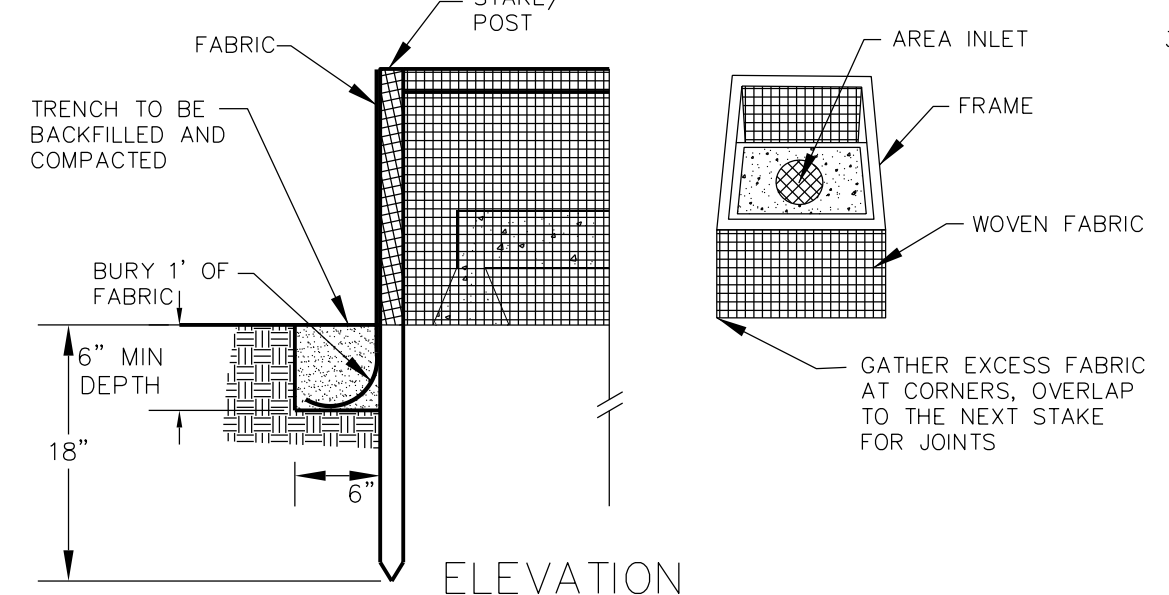
- DESIGN CRITERIA**
- MAXIMUM DRAINAGE AREA - 1 ACRE.
 - PEAK RUNOFF SHALL BE ≤ 2 CFS BASED ON THE 6-MONTH STORM.
 - STACK GRAVEL BAGS DOUBLE HIGH. PROVIDE GAP FOR DRAINAGE.

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

CURB INLET PROTECTION



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 FIBR FENCEW.

St. Charles County
Erosion & Sediment Controls
Standard Drawings

AREA INLET PROTECTION FABRIC DROP

DATE: MARCH 2008 DRAWING: ESC-14

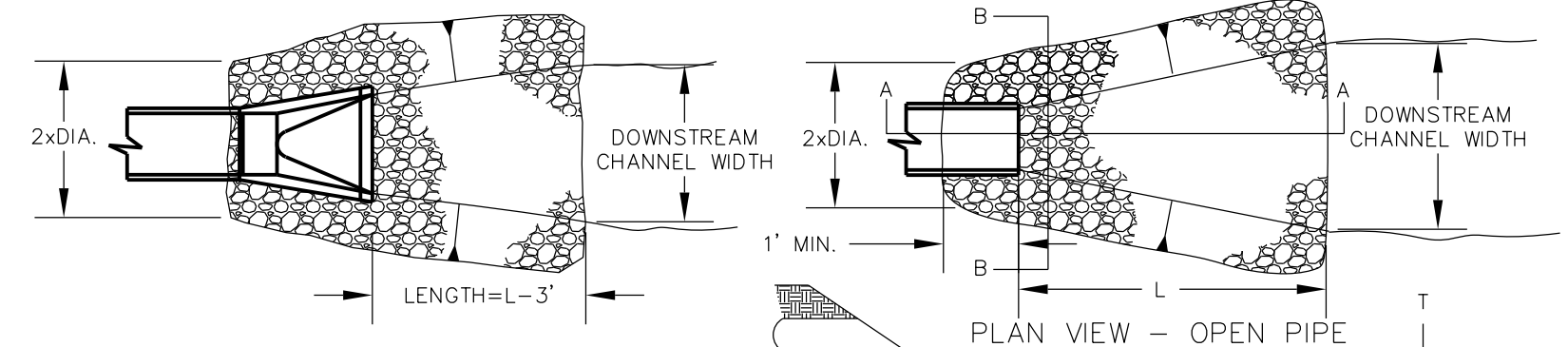
Lombardo
H · O · M · E · S

4 Research Park Drive, Suite 130
St. Charles, MO 63304
Phone: (636) 265-2710

VOLZ
INCORPORATED
CONSTRUCTION MANAGEMENT

10849 Indian Head Indl. Blvd.
St. Louis, Missouri 63132
Phone: (314) 890-1250 Fax
www.volzinc.com
Aulinity #203

RYAN L. HOLMES
Professional Engineer
PE-2017018988



PLAN VIEW W/FLARED END SECTION

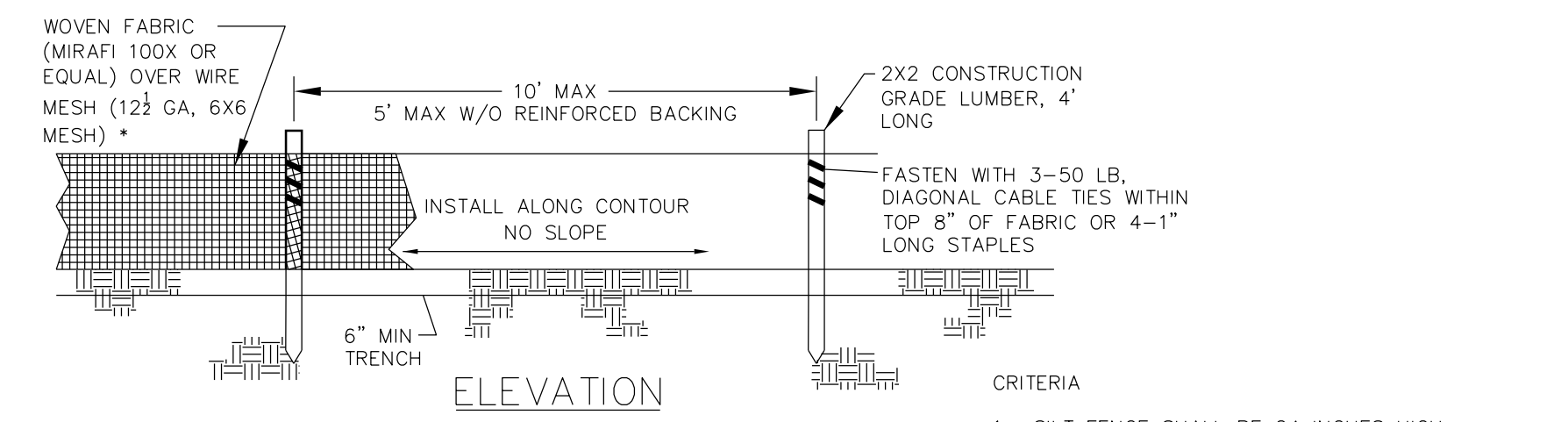
RIPRAP SIZE & APRON DIMENSION

| PIPE SIZE | VELOCITY < 5 FPS | | | | VELOCITY < 10 FPS | | | | |
|-----------|------------------|-----------|-----------|-----------|-------------------|-----------|-----------|-----------|------|
| | ROCK SIZE | APRON DIM | ROCK SIZE | APRON DIM | ROCK SIZE | APRON DIM | ROCK SIZE | APRON DIM | |
| (inch) | (inch) | (inch) | (ft) | (inch) | (inch) | (inch) | (ft) | (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 | 5 | 14 | 24 | 22 | 12 | 18 | 27 | 26 | |
| 48-54 | 5 | 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 | |

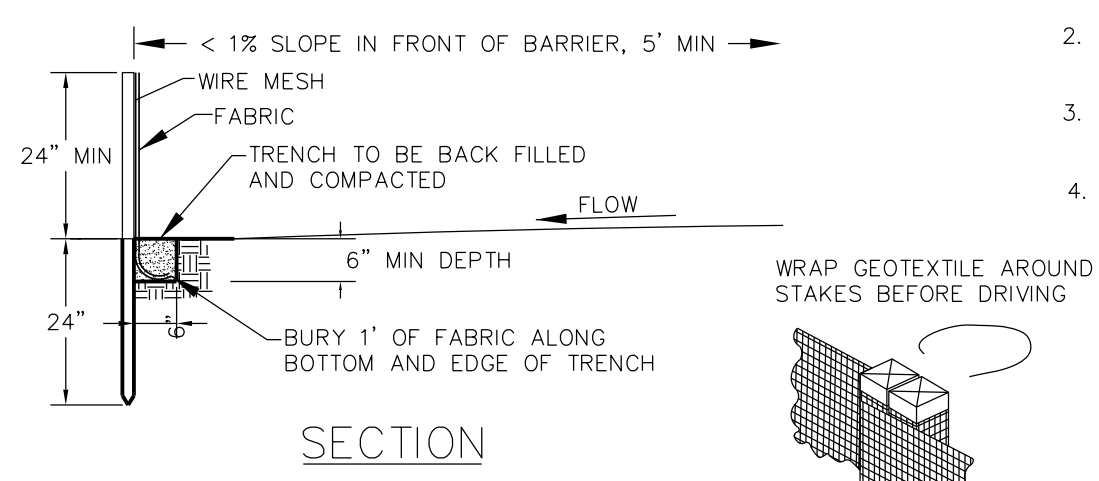
- DESIGN CRITERIA**
- FROUDE NUMBER MUST BE ≤ 2.50 .
 - USE 3 TIMES PIPE DIAMETER FOR DOWNSTREAM CHANNEL WIDTH IF THERE IS NO DEFINED CHANNEL.
 - BANK PROTECTION HEIGHT TO BE 2/3 TIMES PIPE DIAMETER.
 - ROCK SLOPES SHALL BE NO STEEPER THAN 3:1.

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

TEMPORARY OUTLET PIPE DISCHARGE PROTECTION



ELEVATION



SECTION



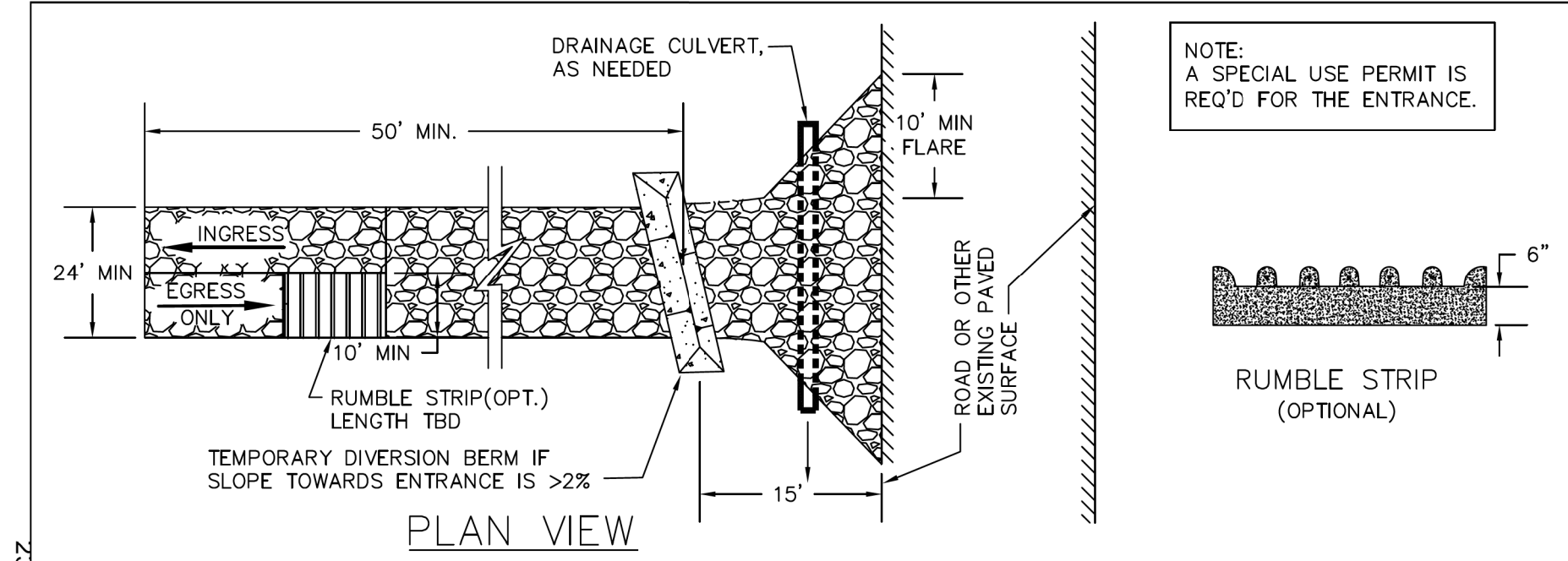
JOINING SECTIONS OF SILT FENCE

- 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.

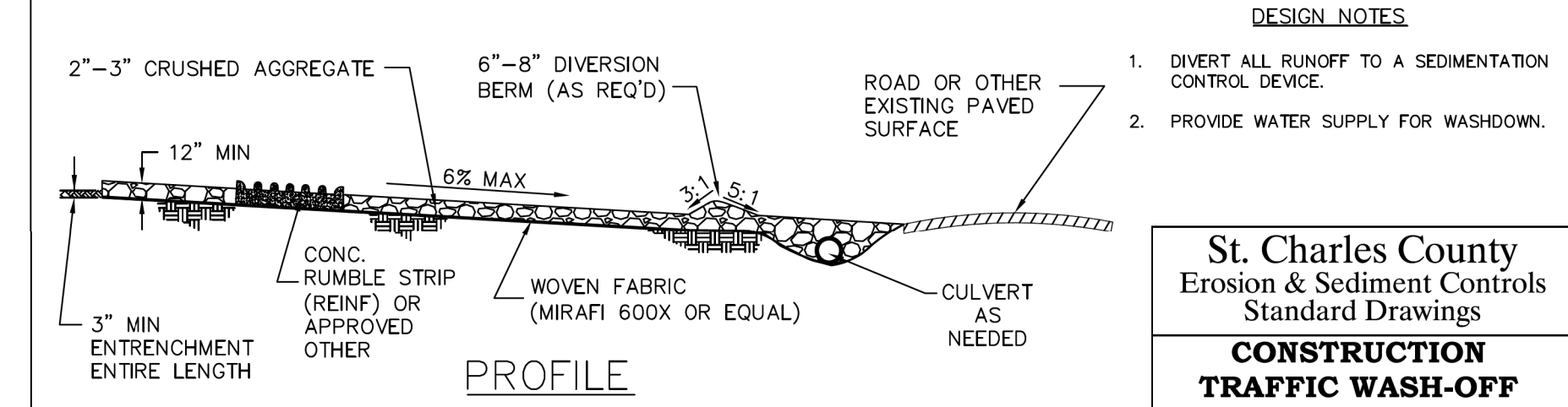
NOTE: IF FABRIC IS INSTALLED BY EQUIPMENT DESIGNED TO SLICE INTO THE GROUND, THE TRENCH IS NOT REQ'D.

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

SILT FENCE INSTALLATION SHEET FLOW (ONLY)



PLAN VIEW



PROFILE

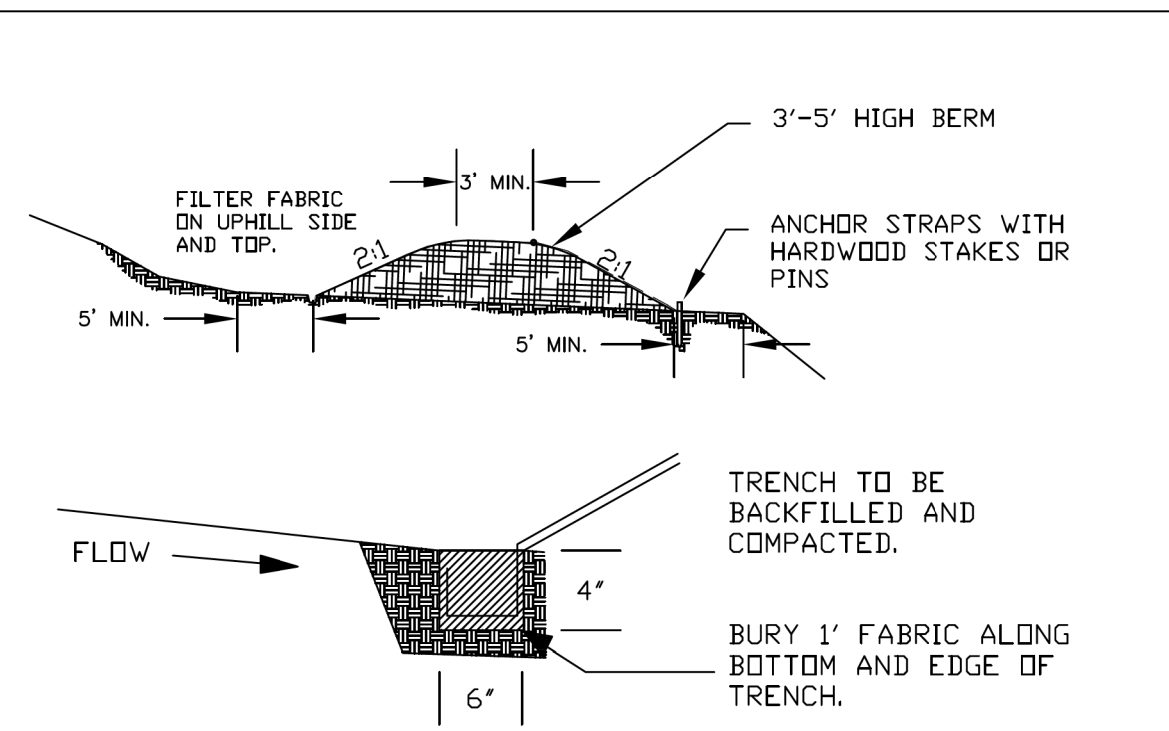
NOTE: A SPECIAL USE PERMIT IS REQ'D FOR THE ENTRANCE.

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

St. Charles County
Erosion & Sediment Controls
Standard Drawings

CONSTRUCTION TRAFFIC WASH-OFF PAD

DATE: APRIL 2008 DRAWING: ESC-4



WOOD CHIP BARRIER DESIGN

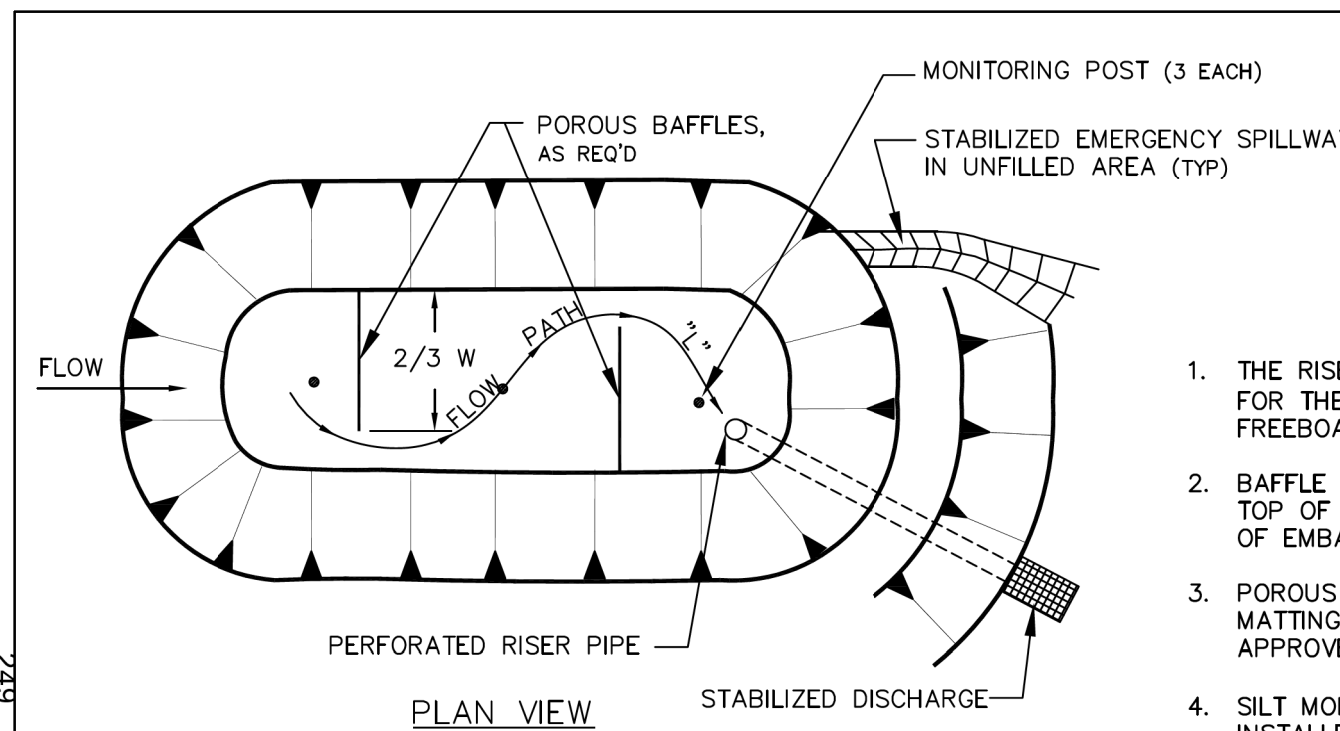
| D.A. PER 100' BERM | FILTER FABRIC | BERM HEIGHT |
|--------------------|---------------|-------------|
| 0.5 AC | NO | 3' |
| 0.75 AC | YES | 3' |
| 1 AC MAX | YES | 6' |

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

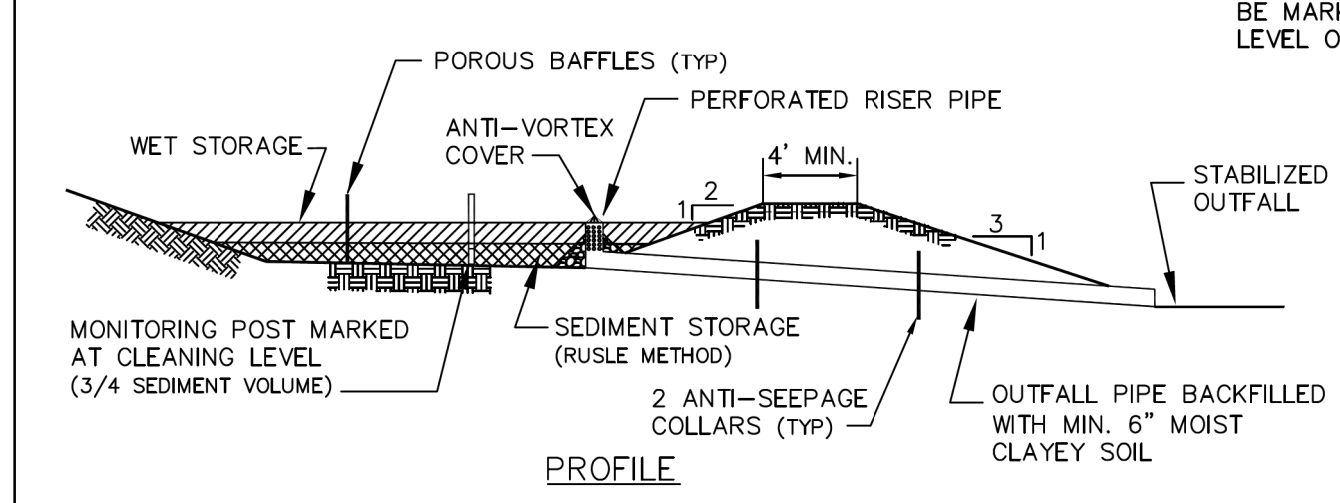
St. Charles County
Erosion & Sediment Controls
Standard Drawings

WOOD CHIP BARRIER INSTALLATION

DATE: APRIL 2008 DRAWING: ESC-7



PLAN VIEW



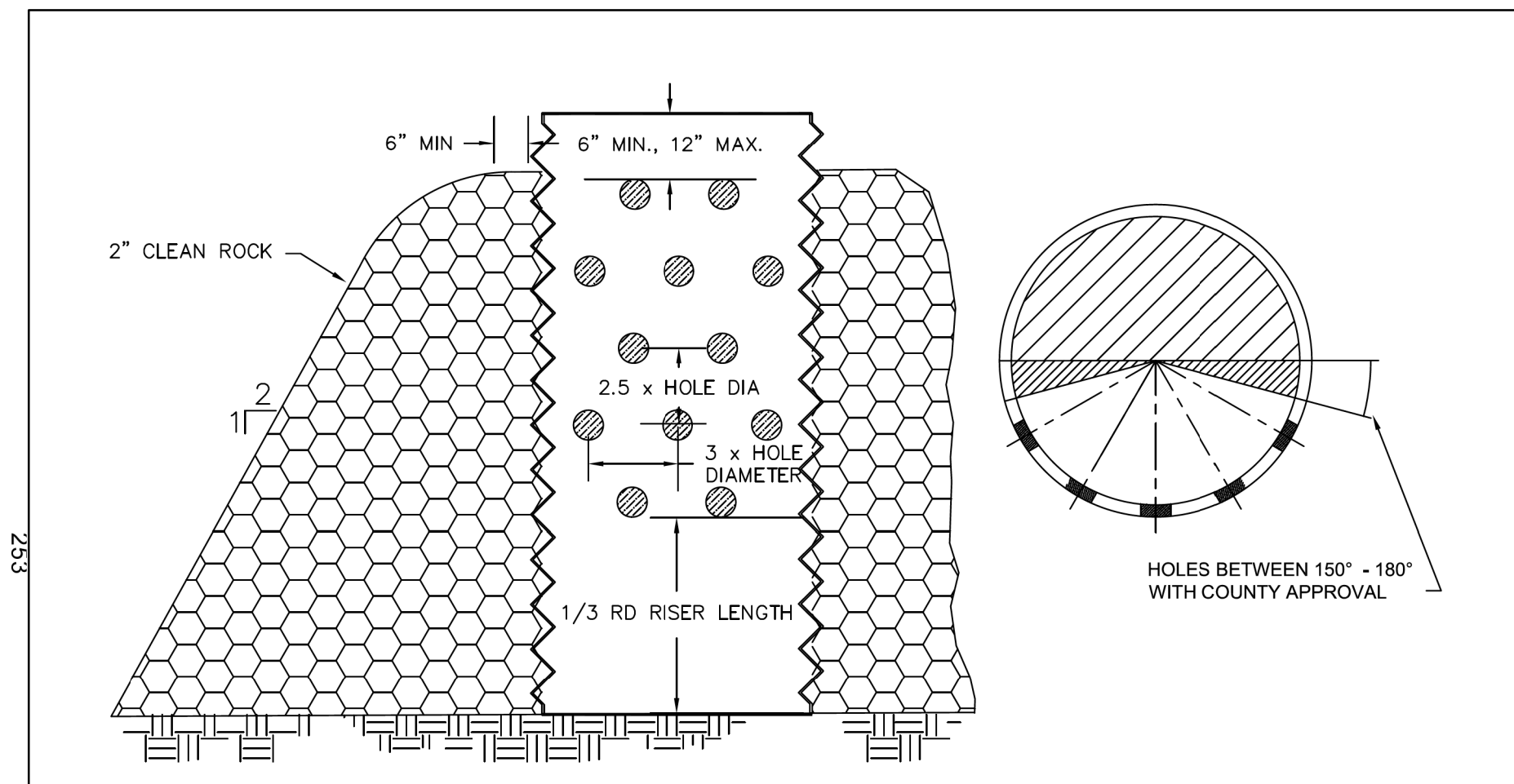
PROFILE

- DESIGN CRITERIA**
- THE RISER/OUTLET PIPE SHALL BE SIZED FOR THE 10-YR STORM WITH A 1' FREEBOARD.
 - BAFFLE HEIGHT SHALL BE GREATER THAN TOP OF RISER PIPE AND LESS THAN TOP OF EMBANKMENT.
 - POROUS BAFFLES SHALL BE JUTE MATTING, ROCK, SILT FENCE, OR SIMILAR APPROVED MATERIAL.
 - SILT MONITORING POST(S) SHALL BE INSTALLED NEAR THE OUTLET, THE MIDDLE THIRD, AND UPPER THIRD OF BASIN, AND BE MARKED WITH MAXIMUM PERMISSIBLE LEVEL OF SEDIMENT.

St. Charles County
Erosion & Sediment Controls
Standard Drawings

TEMPORARY SEDIMENT BASIN

DATE: MARCH 2008 DRAWING: ESC-18



DESIGN CRITERIA:

- TOP OF RISER PIPE SHALL BE A MIN. OF 18" BELOW THE TOP OF THE EMBANKMENT.
- THE RISER PIPE SHALL BE SIZED FOR THE 10-YR STORM WITH A 1 FT FREEBOARD.
- HOLES SHALL BE SPACED AS SHOWN. HOLES ARE TO BE PLACED WITHIN 150' FACING AWAY FROM THE EMBANKMENT.
- 2" CLEAN ROCK SHALL COVER THE HOLES. HOLES SHALL BE COVERED WITH 1/2" WIRE MESH.

St. Charles County
Erosion & Sediment Controls
Standard Drawings

SEDIMENT BASIN RISER PIPE

DATE: MARCH 2008 DRAWING: ESC-22

THE VILLAS AT ARAGON

VETERANS MEMORIAL PARKWAY
OFALLON, MO 63366

SWPPP DETAILS SHEET 1

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

Permit ID: 2-096C-S026-06-0001.10
Permit No. GR22-00001
Vole Project # 22649

03-31-22
G14