

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 60-9 Mulching Materials

| Material | Rate | Requirements | Installation/Uses |
|-----------------------------------|---|--|--|
| Straw | 1.5-2.5 tons/ac (3-4 tons, if roller punched) | Dry, unchopped, unweathered; free of weed seeds & rot. | Spread by machine 1.5-2.5 inches deep; must be tacked or tied down. |
| Compost Blanket | 1" thick | Double the application rate for embankments | Follow manufacturer's application method. |
| Wood fiber, wood cellulose, paper | 1-2 tons/ac | Double the application rate in critical areas | Use with power mulcher or hydroseeder; may be used to tack straw on steep slopes. Cannot be used in hot dry weather. |

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)

Saint Charles County, Missouri Design Criteria

Table 60-19 Riprap Outlet Dimensions

| Pipe Dia. (in) | Velocity ≤ 5 fps | | | | Velocity ≤ 10 fps | | | |
|----------------|--------------------|----------------|----------------|---------------------|-------------------|----------------|----------------|----|
| | Rock Size (in) d50 | Blanket T (in) | Blanket L (ft) | Rock Size (in) d100 | Blanket T (in) | Blanket L (ft) | Blanket 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 | 9 | 14 | 24 | 22 | 12 | 18 | 24 | 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 |

For improved channel discharges, the velocity and flow depth will be used.
 For non-circular discharges, the engineer will calculate a circular pipe equivalent.

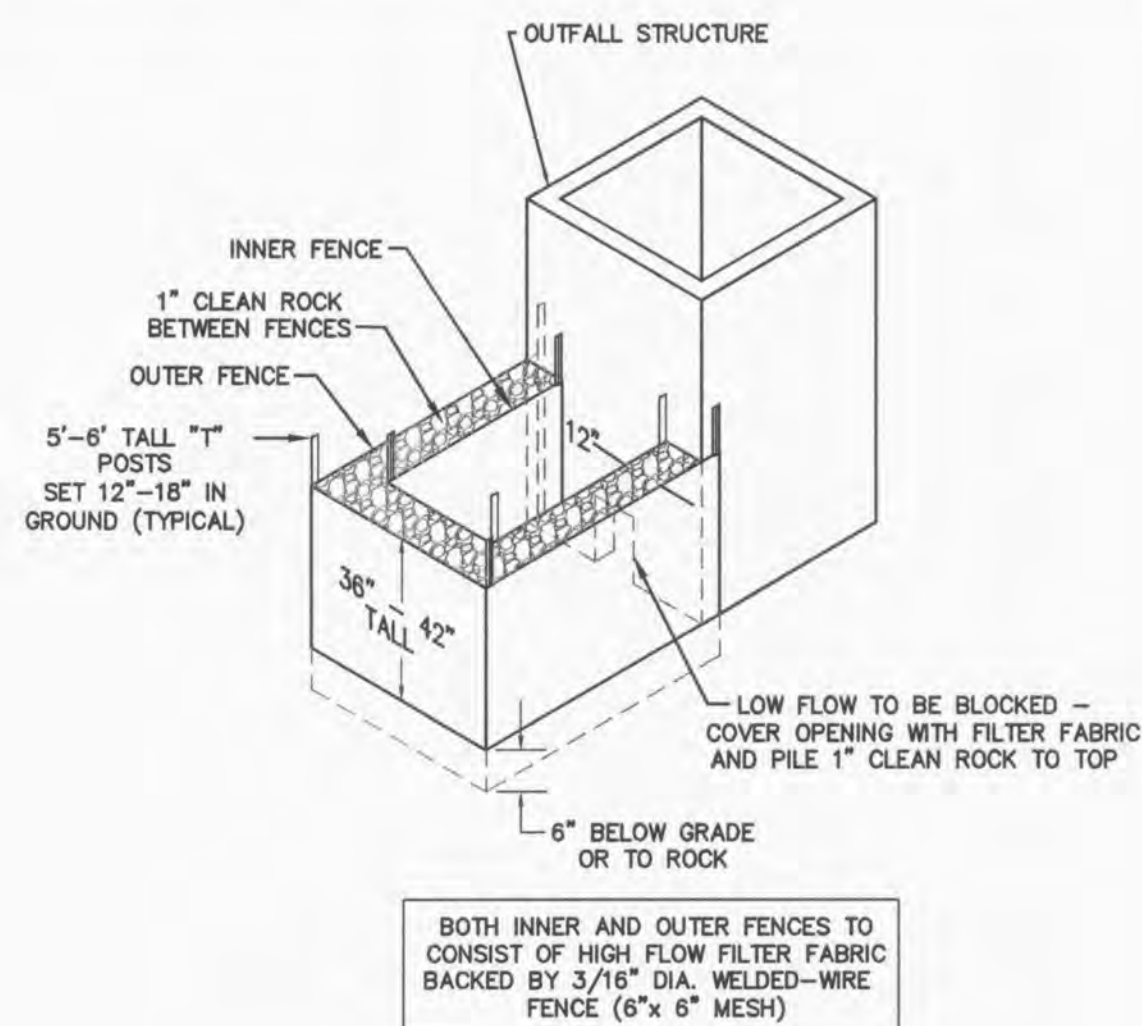
Where:
 d₅₀ = median stone size (50% stones equal or smaller size)
 d₁₀₀ = largest stone size (100% stones equal or smaller size)
 T = blanket thickness
 L = length of blanket

Table 60-5 Soil Stabilization Schedule

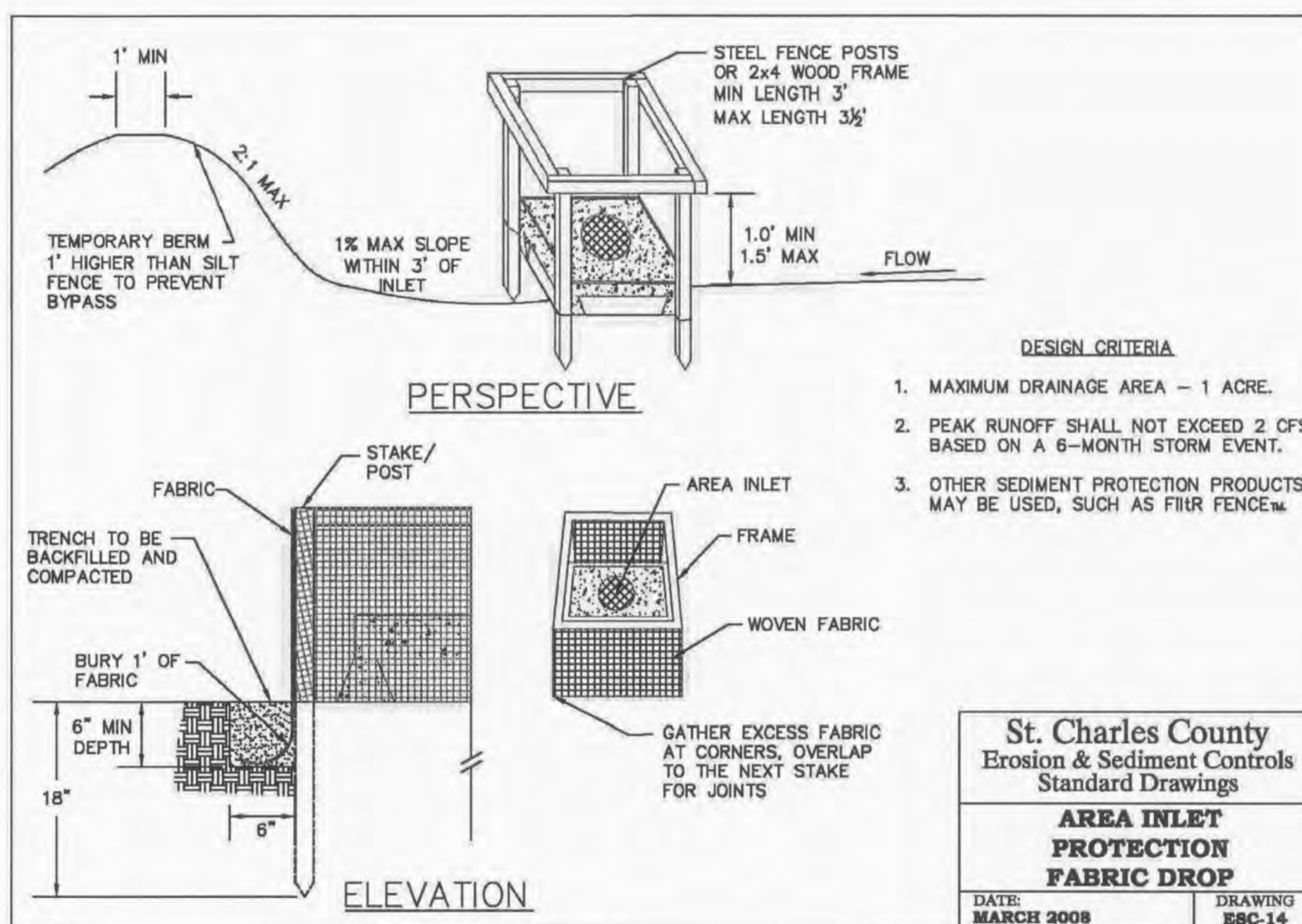
| Soil Disturbance Activity or Condition | Required Stabilization Time |
|---|-----------------------------|
| Soil disturbance has ceased in areas greater than 2,000 square feet. | 14 days |
| After construction of dikes, swales, diversions, and other concentrated flow areas | 5 days |
| When slopes 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 |

PERMANENT SEEDING SPECIFICATIONS SHALL CONFORM TO NRCS CONSERVATION PRACTICE STANDARD & SPECIFICATIONS FOR SEEDING.

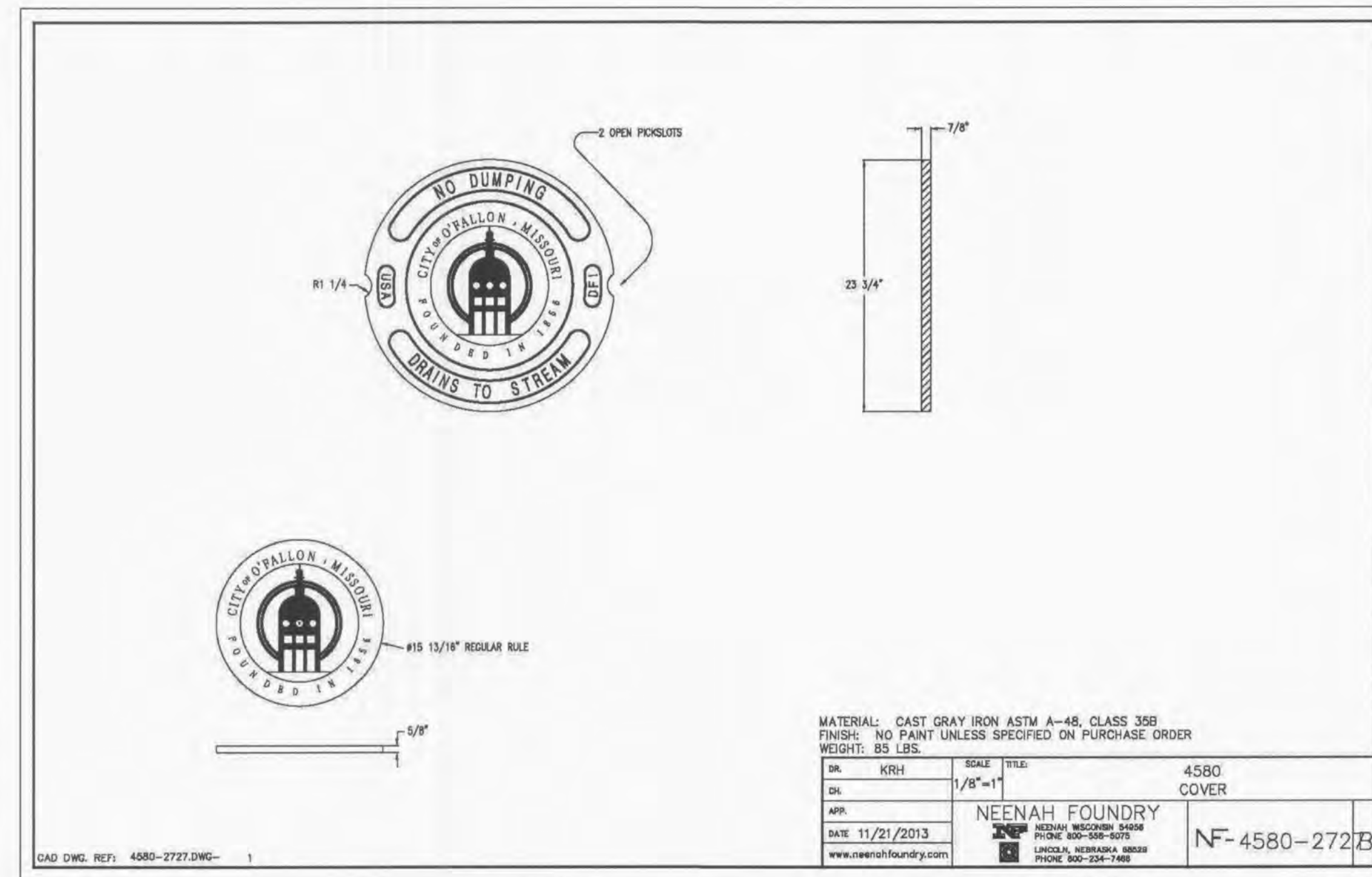
CODE 340 "COVER CROP"
 CODE 342 "CRITICAL AREA PLANTING"
 CODE 484 "MULCHING"
 CODE 590 "NUTRIENT MANAGEMENT"
 CODE 723 "VEGETATION ESTABLISHMENT, HERBACIOUS SEEDING"



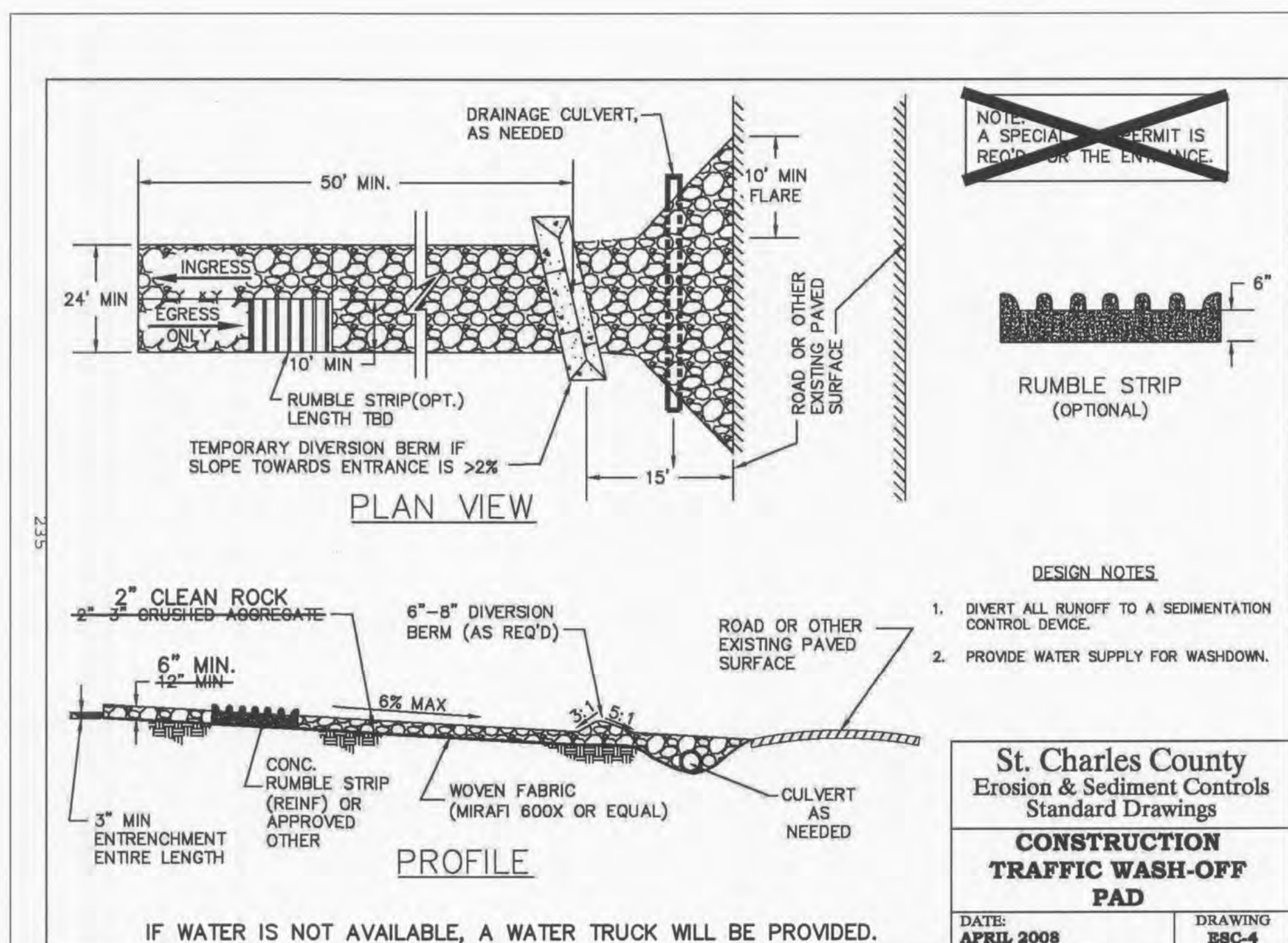
RUCKER OUTFALL BARRIER NOT TO SCALE



St. Charles County Erosion & Sediment Controls Standard Drawings
AREA INLET PROTECTION FABRIC DROP
 DATE: MARCH 2008 DRAWING: EBC-14



| SA | KIRH | SCALE | TITLE | 4580 COVER |
|------|------------|---------|-------|--------------|
| DL | | 1/8"=1' | | |
| APP. | | | | |
| DATE | 11/21/2013 | | | |
| | | | | NF-4580-272B |



St. Charles County Erosion & Sediment Controls Standard Drawings
CONSTRUCTION TRAFFIC WASH-OFF PAD
 DATE: APRIL 2008 DRAWING: EBC-4

PROJECT TITLE
BROOKSIDE VILLAGE A
 PRR No. 03029LOMB.01F

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ENGINEER'S AUTHENTICATION
 THE RESPONSIBILITY FOR PROFESSIONAL ENGINEERING LIABILITY ON THIS PROJECT IS HEREBY LIMITED TO THE SET OF PLANS AUTHENTICATED BY THE SEAL, SIGNATURE, AND DATE HEREON ATTACHED. RESPONSIBILITY IS DISCLAIMED FOR ALL OTHER ENGINEERING PLANS INVOLVED IN THIS PROJECT AND SPECIFICALLY EXCLUDES PROVISIONS AFTER THIS DATE SHALL BE AUTHENTICATED.
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P-Z No. 2603.04
 City No.
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