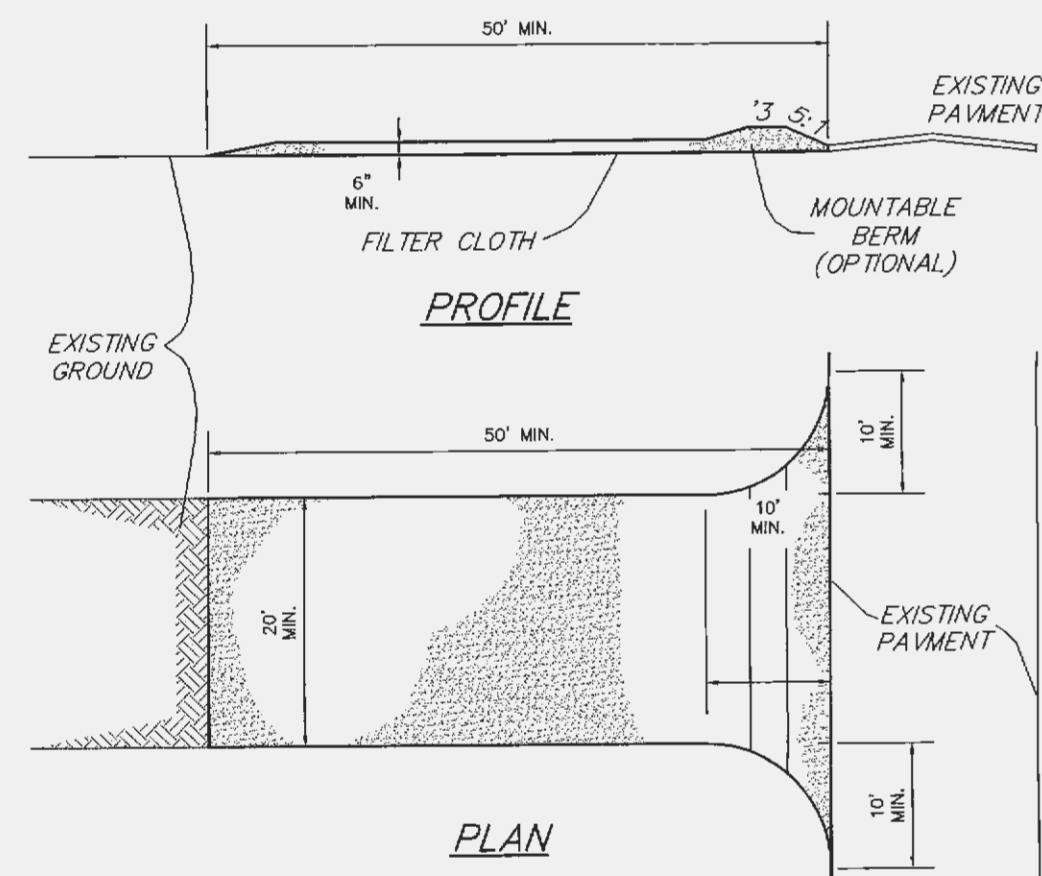


**St. Charles County  
Erosion & Sediment Controls  
Standard Drawings**

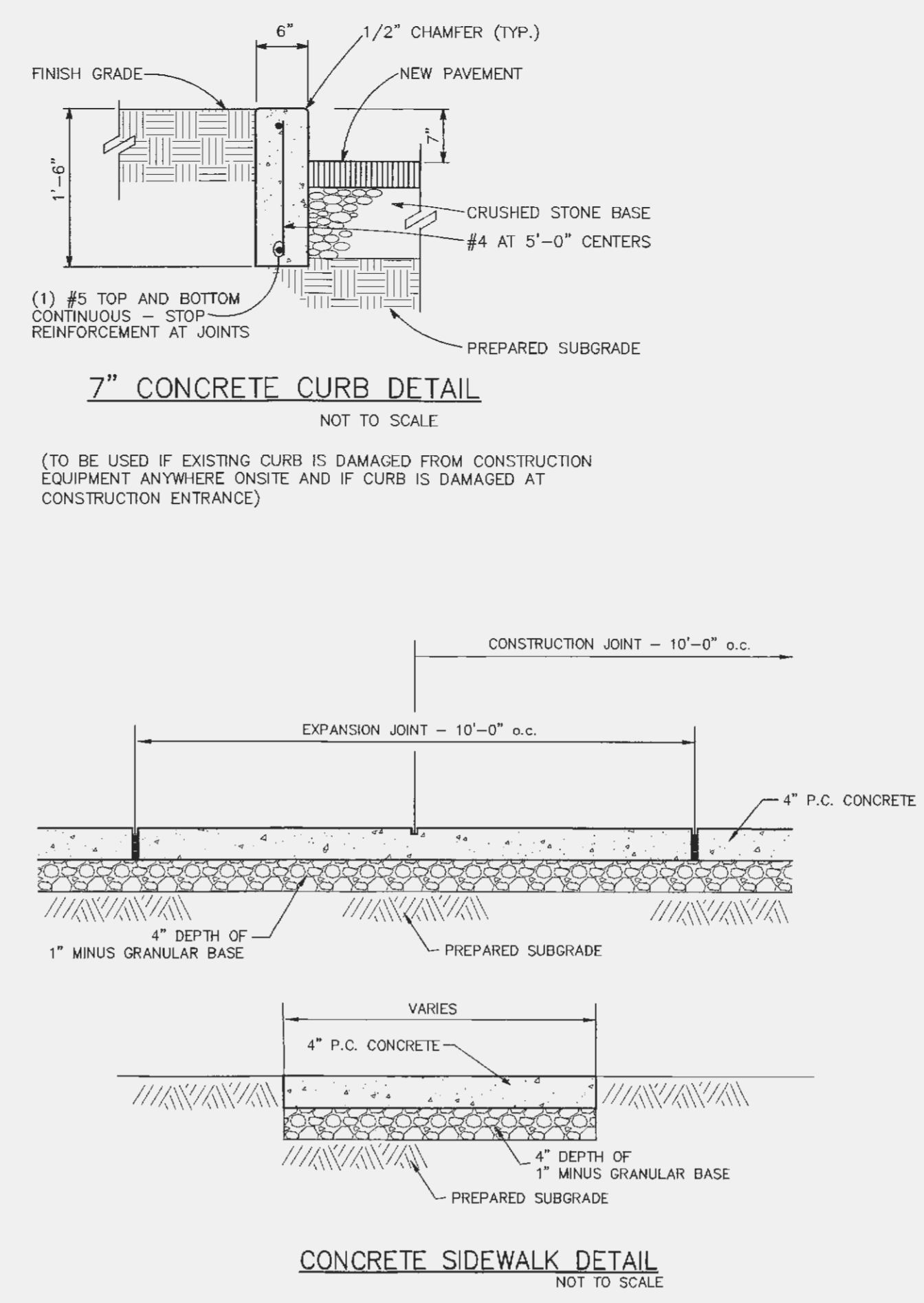
**AREA INLET  
PROTECTION  
FABRIC DROP**

DATE: MARCH 2008 DRAWING: EBC-14



- CONSTRUCTION SPECIFICATIONS**
1. Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
  2. Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply).
  3. Thickness - Not less than six (6) inches.
  4. Width - Twenty (20) foot minimum, but not less than the full width at points where ingress or egress occurs.
  5. Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
  6. Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be permitted.
  7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
  8. Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
  9. Periodic inspection and needed maintenance shall be provided after each rain.

**STABILIZED CONSTRUCTION ENTRANCE/WASHDOWN AREA**  
NOT TO SCALE



**FILTREXX® SILT SOXX™**  
NTS

Slope Percent	Maximum Slope Length Above SiltSoxx™ in Feet (meters)*				
	8 in (200 mm) SiltSoxx™	12 in (300 mm) SiltSoxx™	18 in (450 mm) SiltSoxx™	24 in (600mm) SiltSoxx™	32 in (800mm) SiltSoxx™
2 (or less)	600 (180)	750 (225)	1000 (300)	1300 (400)	1650 (500)
5	400 (120)	500 (150)	550 (165)	650 (200)	750 (225)
10	200 (60)	250 (75)	300 (90)	400 (120)	500 (150)
15	140 (40)	170 (50)	200 (60)	325 (100)	450 (140)
20	100 (30)	125 (38)	140 (42)	260 (80)	400 (120)
25	80 (24)	100 (30)	110 (33)	200 (60)	275 (85)
30	60 (18)	75 (23)	90 (27)	130 (40)	200 (60)
35	60 (18)	75 (23)	80 (24)	115 (35)	150 (45)
40	60 (18)	75 (23)	80 (24)	100 (30)	125 (38)
45	40 (12)	50 (15)	60 (18)	80 (24)	100 (30)
50	40 (12)	50 (15)	55 (17)	65 (20)	75 (23)

\*Based on a failure point of 36 in (0.9 m) super silt fence (wire reinforced) at 1000 ft (303 m) of slope, watershed width equivalent to receiving length of sediment control device, 1 in/24 hr (25 mm/24 hr) rain event. \*\*Effective height of Silt Soxx™ after installation and with constant head from runoff as determined by Ohio State University.

**FILTREXX®**

**SWPPP Cut Sheet**  
Last Updated: 1-1-08

**Section 1: Erosion and Sediment Control - Construction Activities**  
1.1 Filtrix SiltSoxx™  
Sediment & Perimeter Control Technology

**PURPOSE & DESCRIPTION**  
Filtrix SiltSoxx™ are a three-dimensional tubular sediment control and storm water runoff filtration device typically used for perimeter control of sediment and other soluble pollutants (such as phosphorus and petroleum hydrocarbons), on and around construction activities.

**APPLICATION**  
Filtrix SiltSoxx™ are to be installed down slope of any disturbed area requiring erosion and sediment control and filtration of soluble pollutants from runoff. SiltSoxx™ are effective when installed perpendicular to street or low concentrated flow. Acceptable applications include:

- Site perimeters
- Above and below disturbed areas subject to sheet runoff, interrill and rill erosion
- Above and below exposed and erodible slopes
- Around area drains or inlets located in a "sump"
- On compacted soils where trenching of silt fence is difficult or impossible
- Around sensitive trees where trenching of silt fence is not beneficial for tree survival or may unnecessarily disturb established vegetation
- On frozen ground where trenching of silt fence is impossible
- On paved surfaces where trenching of silt fence is impossible.

**INSTALLATION**

1. SiltSoxx™ used for perimeter control of sediment and soluble pollutants in storm runoff shall meet Filtrix SiltSoxx™ Material Specifications and use Certified Filtrix FilterMedia™.
2. Contractor is required to be Filtrix Certified™ as determined by Filtrix International, LLC (440-926-2607) or visit website at www.filtrix.com. Certification shall be considered current if appropriate identification is shown during time of bid or at time of application (current listing can be found at www.filtrix.com). Look for the Filtrix Certified™ Seal.
3. SiltSoxx™ will be placed at locations indicated on plans as directed by the Engineer.
4. SiltSoxx™ should be installed parallel to the base of the slope or other disturbed area. In extreme conditions (i.e., 2:1 slopes), a second SiltSoxx™ shall be constructed at the top of the slope.
5. SiltSoxx™ are to be installed through the middle of the SiltSoxx™ on 10 ft (3m) centers, using 2 in (50mm) by 2 in (50mm) by 3 ft (1m) wooden stakes. In the event staking is not possible, i.e., when SiltSoxx™ are used on pavement, heavy concrete blocks shall be used behind the SiltSoxx™ to help stabilize during maintenance events.
6. Staking depth for sand and silt loam soils shall be 12 in (300mm), and 8 in (200mm) for clay soils.
7. Loose compost may be backfilled along the upslope side of the SiltSoxx™, filling the space between the soil surface and the device, improving filtration and sediment retention.
8. If the SiltSoxx™ is to be left as a permanent filter or part of the natural landscape, it may be seeded at time of installation for establishment of permanent vegetation. The Engineer will specify seed requirements.
9. Filtrix SiltSoxx™ are not to be used in perennial, ephemeral, or intermittent streams.

See design drawing schematic for correct Filtrix SiltSoxx™ installation (Figure 1.1).

**INSPECTION and MAINTENANCE**

Routine inspection should be conducted within 24 hrs of a runoff event or as designated by the regulating authority. SiltSoxx™ should be regularly inspected to make sure they maintain their shape and are producing adequate hydraulic flow-through. If ponding becomes excessive, additional SiltSoxx™ may be required to reduce effective slope length or sediment removal may be necessary. SiltSoxx™ shall be inspected until area above has been permanently stabilized and construction activity has ceased.

1. The Contractor shall maintain the SiltSoxx™ in a functional condition at all times and it shall be routinely inspected.
2. If the SiltSoxx™ has been damaged, it shall be repaired, or replaced if beyond repair.
3. The Contractor shall remove sediment at the base of the upslope side of the SiltSoxx™ when accumulation has reached 1/2 of the effective height of the SiltSoxx™, or as directed by the Engineer. Alternatively, a new SiltSoxx™ can be placed on top of and slightly behind the original one creating more sediment storage capacity without soil disturbance.
4. SiltSoxx™ shall be maintained until disturbed area above the device has been permanently stabilized and construction activity has ceased.
5. The FiltrixMedia™ will be dispersed on site once disturbed area has been permanently stabilized, construction activity has ceased, or as determined by the Engineer.
6. For long-term sediment and pollution control applications, SiltSoxx™ can be seeded at the time of installation to create a vegetative filtering system for prolonged and increased filtration of sediment and soluble pollutants (contained vegetative filter strip). The appropriate seed mix shall be determined by the Engineer.

**Figure 2.1. Engineering Design Drawing for Curb and Drain InletSoxx™**

**Figure 2.2. Engineering Design Drawing for Curb Sediment Containment InletSoxx™**

**FILTREXX® INLET SOXX™ CURB SEDIMENT CONTAINMENT**  
NTS

**Table 2.4. Spacing for Curb Sediment Containment Systems.**

Grade (%)	Spacing (ft)	Spacing (m)
0.5	100	30
1.0	50	15
2.0	25	8
3.0	16	5
4.0	13	4
5.0	10	3

Source: Fifield, 2001

**PROJECT TITLE:**  
DISCOVERY RIDGE  
ELEMENTARY SCHOOL  
CLASSROOM ADDITIONS

**ENGINEERING SURVEYING**  
221 Point West Blvd.  
St. Charles, MO 63301  
636-926-5552  
FAX 926-1718

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I hereby specify that the documents intended to be authorized by my seal are limited to this sheet, and I hereby disclaim any responsibility for all other drawings, specifications, estimates, reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural or engineering project or survey.

**CLIFFORD L. HEITMANN**  
REGISTERED PROFESSIONAL ENGINEER  
STATE OF MISSOURI  
NUMBER E-29817

**CLIFFORD L. HEITMANN**  
CIVIL ENGINEER  
E29817

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**REVISIONS**

8-11-15	CITY COMMENTS

**DISCOVERY RIDGE ELEMENTARY:**  
WENTZVILLE R-IV SCHOOL DISTRICT  
ONE CAMPUS DRIVE  
WENTZVILLE, MO 63385  
636-927-8800

**CONSTRUCTION DETAILS**

**P+Z No.** 3407.11  
**City No.** 15-607