SWPPP Cut Sheet

Last Updated: 7-1-07

Section 1: Erosion and Sediment Control – Construction Activities

1.1 Filtrexx SiltSoxx™

Sediment & Perimeter Control Technology

PURPOSE & DESCRIPTION

Filtrexx 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

Filtrexx 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 sheet 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 erodable 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 Filtrexx Soxx™ Material Specifications and use Certified Filtrexx FilterMedia™.
2. Contractor is required to be Filtrexx Certified™ as determined by Filtrexx International, LLC (440-926-2607 or visit website at www.filtrexx.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.filtrexx.com). Look for the Filtrexx 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. Stakes shall 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 rainfall/runoff 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 seam 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. Filtrexx SiltSoxx™ are not to be used in perennial, ephemeral, or intermittent streams.

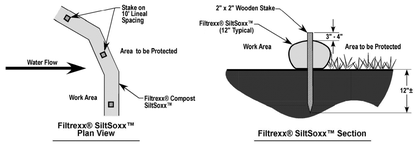
See design drawing schematic for correct Filtrexx SiltSoxx™ installation (Figure 1.1).

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 FilterMedia™ 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.

Filtrexx® SiltSoxx™ Details



Filtrexx® SiltSoxx™ Plan View

Filtrexx® SiltSoxx™ Section

Notes:
1. All material to meet Filtrexx® specifications.
2. SiltSoxx™ compost/soil/rock/seed fill to meet application requirements.
3. SiltSoxx™ depicted is for minimum slopes. Greater slopes may require larger socks per the Engineer.
4. Compost material to be dispersed on site, as determined by Engineer.

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™
	7 in (175 mm)**	10 in (250 mm) **	15 in (375 mm) **	20 in (500 mm) **	26 in (650 mm) **
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.

NOTES ARE FROM THE ST. CHARLES COUNTY SOIL AND WATER CONSERVATION DISTRICT EROSION AND SEDIMENT CONTROL GUIDELINES

60.20.2SURFACE STABILIZATION

IT IS CRITICAL THAT TEMPORARY AND PERMANENT SURFACE STABILIZATION BE PROVIDED AS SOON AS POSSIBLE TO REDUCE EROSION AT THE SOURCE. THERE ARE SEVERAL ACCEPTABLE METHODS TO STABILIZE BARE GROUND: REVEGETATION BY SEEDING OR SODDING, MULCHING, EROSION CONTROL BLANKETS, SOIL BINDERS, ROCK TOPPING, STRUCTURAL TOPPING SUCH AS CONCRETING, ETC. TEMPORARY SEED AND SURFACE STABILIZATION METHODS CAN BE USED IF THE AREA WILL BE DISTURBED LATER IN THE DEVELOPMENT. THE AREA SHOULD BE PERMANENTLY REVEGETATED OR SURFACED WHEN NO FURTHER LAND DISTURBANCE WILL OCCUR.

BARE GROUND MUST BE STABILIZED BY REVEGETATION, MULCHING, EROSION CONTROL BLANKETS AND NETTING, SOIL BINDERS, ROCK SURFACING, STRUCTURAL TOPPING, OR OTHER APPROVED TECHNIQUES. SEE ESC 3 FOR USE OF APPROPRIATE SURFACE STABILIZATION METHODS FOR SHEET FLOW.

THE FOLLOWING PROVISIONS SHALL APPLY TO SURFACE STABILIZATION:

1. SURFACE STABILIZATION MUST EFFECTIVELY STABILIZE AT LEAST 70% OF THE TOTAL DISTURBED SITE AREA.

2. SURFACE STABILIZATION MAY BE SUSPENDED FROM PORTIONS OF THE PROJECT AREA WHICH HAVE AN ACTIVE BUILDING PERMIT. UPON COMPLETION OF THE BUILDING ACTIVITY, THE SITE MUST BE PERMANENTLY STABILIZED.

3. NON-DEGRADABLE MATS SHALL BE USED ONLY AS A PERMANENT INSTALLATION, AND IN AREAS THAT WILL NOT BE MOWED.

4. SURFACE STABILIZATION SHALL BE SCHEDULED AS PROVIDE IN **TABLE 60-5** BELOW:

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 to1 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

60.20.2.1 TEMPORARY SEEDING

TEMPORARY SEEDING AND MULCHING SHALL BE APPLIED TO ALL CLEARED, UNVEGETATED, OR SPARSELY VEGETATED SOIL SURFACES WHERE VEGETATIVE COVER IS REQUIRED FOR LESS THAN 1 YEAR. TEMPORARY SEEDING SHALL GERMINATE TO A DENSITY OF AT LEAST 70% OF THE TOTAL DISTURBED SITE AREA. TEMPORARY SEEDING MAY BE USED FOR DIVERSIONS, DAMS, TEMPORARY SEDIMENT BASINS, TEMPORARY ROAD BANKS, TOPSOIL STOCKPILES, AND ANY OTHER EXPOSED AREAS OF A CONSTRUCTION SITE, WHICH MEET VELOCITY AND OTHER REQUIREMENTS FOR ITS USE.

TEMPORARY SEEDING MAY BE SUSPENDED FROM INDIVIDUAL LOTS LOCATED IN THE PROJECT AREA, WHICH HAVE AN ACTIVE BUILDING PERMIT. UPON COMPLETION OF THE BUILDING ACTIVITY, THE SITE SHALL BE PERMANENTLY VEGETATED.

60.20.2.1.1 SEED

SEED MUST BE CLEAN, RELATIVELY FREE OF WEED SEED AND OTHER CONTAMINANTS, AND COMPLY WITH THE FEDERAL SEED ACT AND THE MISSOURI STATE SEED LAW. SEED THAT HAS BECOME WET, MOLDY, OR OTHERWISE DAMAGED IN TRANSIT OR STORAGE IS NOT ACCEPTABLE. TURF MIXES CAN BE USED WITH NO MORE THAN 10% KENTUCKY BLUEGRASS AND AT LEAST 20% PERENNIAL RYE.

60.20.2.1.2 SEEDBED PREPARATION

SEEDBED PREPARATION IS ESSENTIAL FOR THE SEED TO GERMINATE AND GROW. FOR BROADCAST SEEDING AND DRILLING, LOOSEN THE TOP 3 TO 6 INCHES OF SOIL. LIME AND FERTILIZER SHOULD BY INCORPORATED BY DISKING. IF RECENT TILLAGE OR GRADING OPERATIONS HAVE RESULTED IN A LOOSE SURFACE, ADDITIONAL TILLAGE MAY NOT BE REQUIRED. IF RAINFALL CAUSED THE SOIL SURFACE TO BECOME SEALED OR CRUSTED, SURFACE TILLING WILL BE REQUIRED PRIOR TO SEEDING.

THE SEEDBED AREA SHALL BE TESTED BY AN APPROVED NURSERY FOR PROPER APPLICATION RATES OF LIME AND FERTILIZER. RESULTS OF THE TEST ARE TO BE SENT TO THE COUNTY INSPECTOR WITH THE RECOMMENDED APPLICATION RATES. MULCHING OR THE ADDITION OF STOCKPILED TOPSOIL IS REQUIRED ON ALL SEEDBEDS PRIOR TO THE PLACEMENT OF SEED WHEREVER THERE ARE INADEQUATE AMOUNTS OF TOPSOIL. MULCH SHALL BE APPLIED AFTER SEEDING FOR PROTECTION AND TO AID IN SEED GERMINATION. MULCH SHALL BE PLACED IN ACCORDANCE WITH THE MULCHING SECTION OF THIS DOCUMENT.

IN LIEU OF SOIL TESTING FOR LAND DISTURBANCE SITES LESS THAN TWO (2) ACRES, THE FOLLOWING FERTILIZER AND LIME RATES SHALL BE APPLIED:

TABLE 60-6 SOIL AMENDMENT RATES

Soil Amendment Material		Application Rate (Lb per Acre)
Fertilizer	Nitrogen (N)	30 [1]
	Phosphate (P_2O_5)	90 [1]
	Potash (K_2O)	90 [1]
Lime		1,000 [2]

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

60.20.2.1.3 TEMPORARY SEEDING RATES AND TIMES

IN AREAS THAT ARE ON SLOPES FLATTER THAN 4:1 AND THAT ARE NOT WITHIN WATERCOURSES, SEEDING SHALL BE APPLIED AT THE RATES AND TIMES SPECIFIED IN **TABLE 60-7** AND **TABLE 60-**

8. SEED SHALL BE EVENLY SPREAD WITH A BROADCAST SEEDER, DRILL, OR HYDRO SEEDER. THE PROPER DEPTH IS 1/4 TO 1/2 INCHES DEEP FOR LEGUMES AND GRASSES SUCH AS ANNUAL RYEGRASS AND UP TO 1 AND 1/2 INCHES FOR CEREAL GRAINS. IF THE SEED IS APPLIED BY A BROADCAST METHOD, THE AREA WILL BE ROLLED OR CULTI-PACKED IMMEDIATELY AFTER SEEDING ON A PREPARED SEEDBED ONLY. ROLLING OR CULTI-PACKING IS NOT REQUIRED IF THE BROADCAST SEEDING RATE IS INCREASED BY 50 PERCENT. OTHER SEED SPECIES AND MIXTURES CAN BE

PROPOSED PRIOR TO PLANTING, AS RECOMMENDED BY AN AGRONOMIST, COMPETENT NURSERY COMPANY, OR REFER TO NRCS MOFOTG CODE 340 (COVER CROP) IN APPENDIX D.

FOR CHANNELS, EMBANKMENTS, AND SLOPES OF 4:1 OR STEEPER, SEEDING SHALL BE A MIXTURE OF K31 FESCUE AND RYE AT A RATE OF 400 POUNDS PER ACRE.

TABLE 60-7 TEMPORARY FALL SEEDING

Soil Amendment Material		Application Rate (Lb per Acre)
Fertilizer	Nitrogen (N)	30 [1]
	Phosphate (P_2O_5)	90 [1]
	Potash (K_2O)	90 [1]
Lime		1,000 [2]

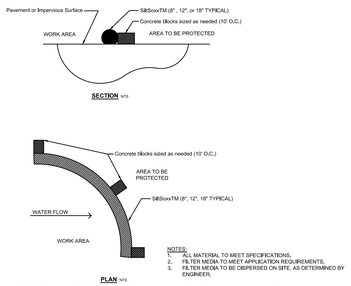
[1]Increase the rate by 25% for slopes steeper than 5:1.
[2]Rate is in effective neutralizing material (ENM) units.

TABLE 60-8 TEMPORARY SPRING 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 + 40 [2]	8/15 – 9/15

[1]If using aerial seeding or other broadcast method to apply seed without rolling or culti-packing, increase seeding rates by 50 percent.

[2]Pure live seed (PLS)



SiltSoxxTM for Sediment Control on Pavement

NTS

60.20.2.1.4 SUBMITTALS & FOLLOW-UP CARE

THE FOLLOWING SUBMITTALS ARE REQUIRED PRIOR TO TEMPORARY SEEDING:

1. SOIL TEST REPORT
2. SEEDING DATE
3. FERTILIZATION MIXTURE AND RATE
4. SEED MIXTURE(S) AND RATE(S), SUPPLIER, PURITY PERCENTAGE
5. MULCHING MATERIAL(S) AND APPLICATION RATE(S)
6. MOWING HEIGHT AND SCHEDULE

SEEDED AREAS SHALL BE RE-FERTILIZED 4 WEEKS AFTER INITIAL SEEDING. ALL AREAS IDENTIFIED AS BARE AND SPARSE (LESS THAN 30% GROUND COVER) DURING THE INSPECTION SHALL BE RE-SEEDED AND MULCHED. GRASS SHALL NOT BE CUT UNTIL 4 INCHES OF GROWTH OCCURS.

60.20.2.2 PERMANENT SEEDING

AFTER LAND DISTURBANCE ACTIVITIES HAVE BEEN COMPLETED IN AN AREA, PERMANENT SEEDING SHALL BE APPLIED. PERMANENT SEEDING IS THE ESTABLISHMENT OF PERENNIAL VEGETATION ON DISTURBED AREAS FOR PERIODS LONGER THAN 12 MONTHS. PERMANENT SEEDING IS USED WHEN VEGETATION IS DESIGNED TO PERMANENTLY STABILIZE THE SOIL. PARTICULAR CARE IS REQUIRED TO ESTABLISH A THICK COVER OF PERMANENT GRASS.

REFER TO SECTIONS 60.20.2.1.1, 60.20.2.1.2, AND 60.20.2.1.4 AND TO NRCS MOFOTG CODE 342 (CRITICAL AREA PLANTING) IN APPENDIX D FOR PERMANENT SEEDING GUIDELINES.

60.20.2.3 SODDING

SODDING IS THE USE OF A VEGETATIVE COVER TO PROVIDE IMMEDIATE EROSION CONTROL IN DISTURBED AREAS. SODDING IS WELL SUITED FOR STABILIZING ERODIBLE AREAS SUCH AS GRASS-LINED CHANNELS, STORMWATER DETENTION BASINS, DIVERSIONS, SWALES, SLOPES, AND FILTER STRIPS BECAUSE IT PROVIDES AN INSTANT VEGETATIVE COVER WITH AN ESTABLISHED ROOT SYSTEM. PLACEMENT OF SOD ON SLOPES STEEPER THAN 10% SHOULD BE STAKED.

60.20.2.4 MULCHING

MULCHING AND HYDRO MULCH ARE THE APPLICATION OF PLANT RESIDUES SUCH AS STRAW OR OTHER SUITABLE MATERIALS TO THE SOIL SURFACE. MULCH PROTECTS THE SOIL SURFACE FROM THE EROSIVE FORCE OF RAINDROP IMPACT AND REDUCES THE VELOCITY OF OVERLAND FLOW. IT HELPS SEEDLINGS GERMINATE AND GROW BY CONSERVING MOISTURE, PROTECTING AGAINST TEMPERATURE EXTREMES, AND CONTROLLING WEEDS. MULCH ALSO MAINTAINS THE INFILTRATION CAPACITY OF THE SOIL.

MULCH SHALL BE APPLIED TO SEEDED AREAS TO HELP ESTABLISH PLANT COVER. IT CAN ALSO BE USED AS TEMPORARY COVER IN UNSEEDED AREAS TO PROTECT AGAINST EROSION OVER THE WINTER OR UNTIL FINAL GRADING AND SHAPING CAN BE ACCOMPLISHED. APPLICATION RATES ARE SHOWN IN **TABLE 60-9** BELOW.

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.

60.20.2.5 TACKIFIERS & SOIL BINDERS

TACKIFIERS AND SOIL BINDERS CAN INCREASE THE PERFORMANCE OF MULCH MATERIAL. BINDERS CAN ALSO BE DIRECTLY APPLIED TO THE BARE SOIL TO PROVIDE BINDING OF THE SOIL PARTICLES AND REDUCE THE EROSION POTENTIAL OF THE BARE SOIL.

60.20.2.5.1 TACKIFIERS AND BINDERS

TACKIFIERS AND BINDERS ARE APPLIED TO ORGANIC MULCH TO REDUCE THE POTENTIAL OF MULCH MOVEMENT BY WATER OR WIND AND INCREASE THE PERFORMANCE OF THE MATERIAL. SUBSTANCES ARE USED TO ANCHOR STRAW, HAY, PAPER, OR WOOD MULCH BY CAUSING THE ORGANIC MATERIAL TO BIND TOGETHER.

60.20.2.5.2 BONDED FIBER MATRIX (BFM)

A CLASSIFICATION OF EROSION CONTROL PRODUCTS THAT ARE DESIGNED TO STAY IN PLACE ON STEEP SLOPES. A BONDED FIBER MATRIX IS A CONTINUOUS LAYER OF ELONGATED FIBER STRANDS HELD TOGETHER BY A BINDING AGENT THAT IS WATER-RESISTANT. ONCE DRY, THE BFM FORMS A WATER ABSORBENT PROTECTIVE COVER THAT IS POROUS AND BREATHABLE AND SECURES SOIL AND SEED WHILE ENHANCING ESTABLISHMENT OF VEGETATION. DUE TO MANY DIFFERENT TYPES OF PRODUCTS AVAILABLE ON THE MARKET, IT IS BEST TO CONSULT WITH THE MANUFACTURER FOR PROPER APPLICATION RATES AND PROCEDURES WITH A MINIMUM OF 2 TONS PER ACRE.

60.20.2.5.3 FLEXIBLE GROWTH MEDIUM (FGM)

FGM COMBINES BOTH CHEMICAL AND MECHANICAL BONDING TECHNIQUES TO LOCK THE ENGINEERED MEDIUM IN PLACE TO BOND DIRECTLY TO THE SOIL. WOOD FIBERS, CRIMPED MAN- MADE FIBERS, AND PERFORMANCE-ENHANCING ADDITIVES FORM A LOFTY, INTERLOCKING MATRIX THAT CREATES AIR SPACE AND WATER ABSORBING CAVITIES THAT ACCELERATE GERMINATION, REDUCE THE IMPACT OF RAINDROP ENERGY, AND MINIMIZE SOIL LOSS. THE CHEMISTRY ENABLES THIS MATRIX TO HANDLE HIGHER RATES OF SURFACE FLOW ENERGY. AS WITH THE BFM, MAXIMUM EFFECTIVENESS IS ACHIEVED WHEN THE MATRIX HAS DRIED AND HAS THOROUGHLY CURED.

60.20.2.6 ROLLED EROSION CONTROL PRODUCTS (RECP)

A ROLLED EROSION CONTROL PRODUCT IS A PREFORMED PROTECTIVE BLANKET OF PLASTIC FIBERS, STRAW, OR OTHER PLANT RESIDUE DESIGNED TO PROTECT SOIL FROM THE IMPACT OF PRECIPITATION AND OVERLAND FLOW AND TO RETAIN MOISTURE TO FACILITATE THE ESTABLISHMENT OF VEGETATION. RECPS ARE USED WHERE:

1. PROTECTION OF NEWLY SEEDED AREAS IS CRITICAL.
2. SLOPES ARE GREATER THAN 3:1.
3. SLOPES AT 3:1 EXCEED 20 FOOT IN VERTICAL SURFACE LENGTH.
4. THE EXPECTED VELOCITY OF CONCENTRATED RUNOFF WILL CAUSE EROSION (DRAINAGEWAYS AND SWALES).

THERE ARE MANY PRODUCTS ON THE MARKET DESIGNED FOR A VARIETY OF APPLICATIONS. SEVERAL FACTORS SUCH AS SOIL CONDITIONS, STEEPNESS AND LENGTH OF SLOPE, DEPTH OF FLOW, RUNOFF VELOCITIES, AND TIME REQUIRED TO ESTABLISH DESIRED VEGETATION INFLUENCE THE CHOICE OF PRODUCT.

PRODUCTS ARE AVAILABLE FOR A VARIETY OF USES:

1. NETTING: SYNTHETIC OR NATURAL FIBER MESH INSTALLED OVER DISTURBED AREA TO HOLD ORGANIC MULCH AND/OR SEED IN PLACE.

2. BIODEGRADABLE RECP: NATURAL FIBER BLANKET HELD TOGETHER BY NETTING TO PROVIDE TEMPORARY EROSION PROTECTION ON SLOPES AND CHANNELS.

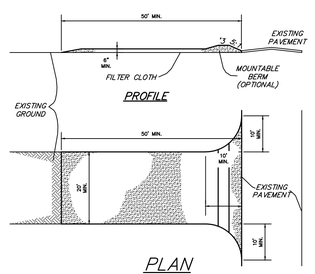
3. PERMANENT RECP - SYNTHETIC BLANKET MATERIAL WHICH PROVIDES PERMANENT EROSION CONTROL ON SLOPES AND CHANNELS WITH INCREASED WATER FLOW VELOCITIES.

4. TURF REINFORCEMENT MAT (TRM): 3-DIMENSIONAL PERMANENT SYNTHETIC MAT THAT PROVIDES A MATRIX TO GREATLY REINFORCE THE ROOT SYSTEM OF THE DESIRED VEGETATION FOR PERMANENT EROSION PROTECTION IN HIGH FLOW CHANNELS AND ON CRITICAL SLOPES. SINCE TRMS ARE NON-DEGRADABLE, THEY SHOULD BE USED AS A PERMANENT INSTALLATION. TRMS REQUIRE THE DESIGN BY A GEOTECHNICAL ENGINEER BASED ON THE SHEAR STRESS OF THE SOIL.

RECPS SHALL BE INSTALLED PER THE MANUFACTURE'S SPECIFICATIONS OR AS CALLED OUT BELOW, WHICHEVER STANDARD IS GREATER. RECPS SHALL BE INSTALLED AFTER ALL TOPSOILING, FERTILIZING, LIMING, AND SEEDING ARE COMPLETE. THE BLANKET MUST BE IN FIRM CONTACT WITH THE SOIL AND IT SHALL BE ANCHORED PER THE MANUFACTURER'S RECOMMENDATION WITH THE PROPER NUMBER AND SPACING OF WIRE STAPLES. THE STAPLES SHALL BE THE PROPER WIDTH AND LENGTH TO MEET THE MANUFACTURER'S RECOMMENDATIONS.

ON SLOPES AND IN SMALL DRAINS THE BLANKET SHALL BE UNROLLED UPSTREAM TO DOWNSTREAM PARALLEL TO THE DIRECTION OF FLOW. THE UPSTREAM END OF EACH BLANKET SHALL BE ANCHORED IN A MINIMUM 6-INCH DEEP ANCHOR TRENCH. THESE BLANKETS, WHEN LAID SIDE BY SIDE, SHALL OVERLAP A MINIMUM OF 3 INCHES. WHEN MORE THAN ONE BLANKET LENGTH IS NEEDED, THE MATERIAL SHALL BE OVERLAPPED 6 INCHES OVER THE DOWNSTREAM PIECE. ALL EDGES SHALL BE STAPLED AS PER MANUFACTURER'S RECOMMENDATION.

STABILIZED CONSTRUCTION ENTRANCE



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.

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PROJECT TITLE:
CONSTRUCTION PLANS FOR:
First Baptist Church of O'Fallon
8750 Veterans Memorial Pkwy
O'Fallon, MO 63366

Bax Project # 93-4007D Issue Date: XX/XX/2022

ENGINEERING
PLANNING
SURVEYING
221 Point West Blvd.
St. Charles, MO 63301
636-928-5552
FAX 928-1718

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

CLIFFORD L. HEITMANN
CIVIL ENGINEER
E-29817

REVISIONS

11–7–22	CITY COMMENTS
11–29–22	CITY COMMENTS
12–9–22	BLDG. UTILITIES
12–15–22	BID SET

Developer / Owner:
First Baptist Church of O'Fallon
8750 Veterans Memorial Pkwy
O'Fallon, MO 63366
Phone #

SEDIMENT AND EROSION CONTROL DETAILS

P-I-Z No. 22-005714
Approved: 07-07-22

City No.
22-010520