

DUST CONTROL

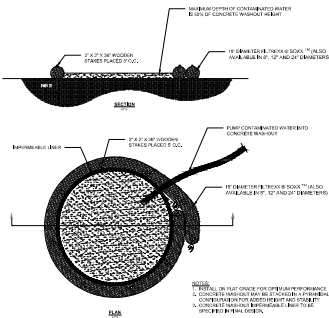
DUST CONTROL INVOLVES PREVENTING OR REDUCING DUST FROM EXPOSED SOILS OR OTHER SOURCES DURING LAND DISTURBING, DEMOLITION AND CONSTRUCTION ACTIVITIES TO REDUCE THE PRESENCE OF AIRBORNE SUBSTANCES WHICH MAY PRESENT HEALTH HAZARDS, TRAFFIC SAFETY PROBLEMS OR HARM ANIMAL OR PLANT LIFE.

THE FOLLOWING SPECIFICATIONS FOR DUST CONTROL SHALL BE FOLLOWED ONSITE:

- 1. **VEGETATIVE COVER AND MULCH** - APPLY TEMPORARY OR PERMANENT SEEDING AND MULCH TO AREAS THAT WILL REMAIN IDLE FOR OVER 14 DAYS, SAVING EXISTING TREES AND LARGE SHRUBS WILL ALSO REDUCE SOIL AND AIR MOVEMENT ACROSS DISTURBED AREAS, SEE TEMPORARY SEEDING, PERMANENT SEEDING, MULCHING PRACTICES; AND TREE AND NATURAL AREA PROTECTION PRACTICES.
- 2. **WATERING** - SPRAY SITE WITH WATER UNTIL THE SURFACE IS WET BEFORE AND DURING GRADING AND REPEAT AS NEEDED, ESPECIALLY ON HAUL ROADS AND OTHER HEAVY TRAFFIC ROUTES, WATERING SHALL BE DONE AT A RATE THAT PREVENTS DUST BUT DOES NOT CAUSE SOIL EROSION, WETTING AGENTS SHALL BE UTILIZED ACCORDING TO MANUFACTURERS INSTRUCTIONS.
- 3. **STONE** - GRADED ROADWAYS AND OTHER SUITABLE AREAS WILL BE STABILIZED USING CRUSHED STONE OR COARSE GRAVEL AS SOON AS PRACTICABLE AFTER REACHING AN INTERIM OR FINAL GRADE, CRUSHED STONE OR COARSE GRAVEL CAN BE USED AS A PERMANENT COVER TO PROVIDE CONTROL OF SOIL EMISSIONS.
- 4. **BARRIERS** - EXISTING WINDBREAK VEGETATION SHALL BE MARKED AND PRESERVED, SNOW FENCING OR OTHER SUITABLE BARRIER MAY BE PLACED PERPENDICULAR TO PREVAILING AIR CURRENTS AT INTERVALS OF ABOUT 15 TIMES THE BARRIER HEIGHT TO CONTROL AIR CURRENTS AND BLOWING SOIL.
- 5. **OPERATION AND MAINTENANCE** - WHEN TEMPORARY DUST CONTROL MEASURES ARE USED, REPETITIVE TREATMENT SHOULD BE APPLIED AS NEEDED TO ACCOMPLISH CONTROL.
- 6. **STREET CLEANING** - PAVED AREAS THAT HAVE ACCUMULATED SEDIMENT FROM CONSTRUCTION SHOULD BE CLEANED DAILY, OR AS NEEDED, UTILIZING A STREET SWEEPER OR BUCKET - TYPE ENDLOADER OR SCRAPER.

CONCRETE WASHOUT

SPECIFICATIONS FOR CONCRETE WASHOUT



- NOTES:
- 1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE.
 - 2. 18" DIAMETER FILTER SOCK MAY BE STACKED ONTO DOUBLE 24" DIAMETER SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT.
 - 3. A SUITABLE GEOMEMBRANE SHALL BE PLACED AT THE LOCATION OF THE WASHOUT PRIOR TO INSTALLING THE SOCKS
- *ADAPTED FROM FILTREXX

- 1. THE RESIDUE OR CONTENTS OF ALL CONCRETE MIXERS, DUMP TRUCKS, OTHER CONVEYANCE EQUIPMENT AND FINISHING TOOLS SHALL BE WASHED INTO CONCRETE CLEAN-OUT STRUCTURES CONSISTING OF A STRAW BALE BARRIER WITH GRAVEL BACKFILL. THE LENGTH AND WIDTH OF THESE STRUCTURES SHALL BE AS DETERMINED BY THE CONTRACTOR TO FACILITATE THE PARTICULAR EQUIPMENT USED, THESE STRUCTURES SHALL BE CONSTRUCTED ON LEVEL GROUND AT LEAST 100' FROM THE NEAREST WATERCOURSE, DRAINAGE SWALE OR INLET, AT NO TIME SHALL THE STRUCTURE BE ALLOWED TO BE MORE THAN 50% FULL, THE CONTRACTOR SHALL MAINTAIN THESE PONDS UNTIL ALL CONCRETE PLACEMENT IS COMPLETE FOR THE PROJECT.
- 2. THE INTENT OF THESE STRUCTURES IS TO COLLECT ALL CONCRETE WASH OUT WATER AND ALLOW IT TO DRY TO A SOLID MATERIAL AFTER DRYING, THE SOLID MATERIAL CAN BE REMOVED WITH A LOADER OR EXCAVATOR FOR PROPER DISPOSAL, WASH OUT WILL NOT BE PERMITTED IN ANY OTHER AREAS.
- 3. USE THE MINIMUM AMOUNT OF WATER TO WASH THE VEHICLES AND EQUIPMENT, NEVER DISPOSE OF WASH OUT INTO THE STREET, STORM INLET, DRAINAGE SWALE OR WATERCOURSE, DISPOSE OF SMALL AMOUNTS OF EXCESS DRY CONCRETE, GROUT AND MORTAR IN THE TRASH, ANY SOAPS THAT ARE UTILIZED SHALL BE PHOSPHATE-FREE AND BIODEGRADABLE.

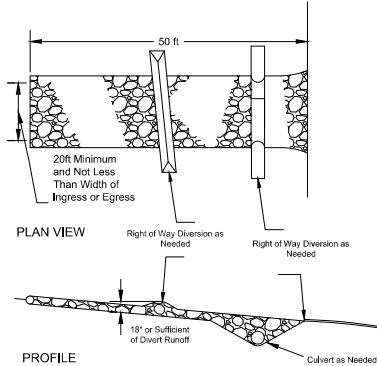
- 4. ADDITIONAL CONCRETE CLEAN-OUT STRUCTURES SHALL BE CONSTRUCTED WITHIN THE SPECIFIED AREA AS NEEDED BASED UPON THE VOLUME OF WASH OUT GENERATED DAILY.

ROCK CONSTRUCTION ENTRANCE

DESCRIPTION

A CONSTRUCTION ENTRANCE IS A STABILIZED PAD OF STONE UNDERLAIN WITH GEOTEXTILE AND IS USED TO REDUCE THE AMOUNT OF MUD TRACKED OFF-SITE WITH CONSTRUCTION TRAFFIC. LOCATED AT POINTS OF INGRESS/EGRESS, THE PRACTICE IS USED TO REDUCE THE AMOUNT OF MUD TRACKED OFF-SITE WITH CONSTRUCTION TRAFFIC.

SPECIFICATIONS FOR CONSTRUCTION ENTRANCE



- 1. **STONE SIZE** - THE ROCK SHALL BE 3" COARSE AGGREGATE, OR EQUIVALENT, SPREAD EVENLY 6" THICK.
- 2. **LENGTH** - THE CONSTRUCTION ENTRANCE SHALL BE AS LONG AS REQUIRED TO STABILIZE HIGH TRAFFIC AREAS BUT NOT LESS THAN 50 FT.
- 3. **THICKNESS** - THE STONE LAYER SHALL BE AT LEAST 6 INCHES THICK.
- 4. **WIDTH** - THE ENTRANCE SHALL BE AT LEAST 20 FEET WIDE, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
- 5. **GEOTEXTILE** - A NONWOVEN GEOTEXTILE SHALL BE LAID OVER THE ENTIRE AREA, PRIOR TO PLACING STONE.
- 6. **TIMING** - THE CONSTRUCTION ENTRANCE SHALL BE INSTALLED AS SOON AS IS PRACTICABLE BEFORE MAJOR GRADING ACTIVITIES.
- 7. **CULVERT** - A PIPE OR CULVERT SHALL BE CONSTRUCTED UNDER THE ENTRANCE IF NEEDED TO PREVENT SURFACE WATER FROM FLOWING ACROSS THE ENTRANCE OR TO PREVENT RUNOFF FROM BEING DIRECTED OUT ONTO PAVED SURFACES.
- 8. **WATER BAR** - A WATER BAR SHALL BE CONSTRUCTED AS PART OF THE CONSTRUCTION ENTRANCE IF NEEDED TO PREVENT SURFACE RUNOFF FROM FLOWING THE LENGTH OF THE CONSTRUCTION ENTRANCE AND OUT ONTO PAVED SURFACES.
- 9. **MAINTENANCE** - TOP DRESSING OF ADDITIONAL STONE SHALL BE APPLIED AS CONDITIONS DEMAND, MUD SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADS, OR ANY SURFACE WHERE RUNOFF IS NOT CHECKED BY SEDIMENT CONTROLS, SHALL BE REMOVED IMMEDIATELY, REMOVAL SHALL BE ACCOMPLISHED BY SCRAPING OR SWEEPING.
- 10. **CONSTRUCTION ENTRANCES** SHALL NOT BE RELIED UPON TO REMOVE MUD FROM VEHICLES AND PREVENT OFF-SITE TRACKING, VEHICLES THAT ENTER AND LEAVE THE CONSTRUCTION-SITE SHALL BE RESTRICTED FROM MUDDY AREAS.
- 11. **REMOVAL** - THE ENTRANCE SHALL REMAIN IN PLACE UNTIL THE DISTURBED AREA IS STABILIZED OR REPLACED WITH A PERMANENT ROADWAY OR ENTRANCE.

COMPOST FILTER SOCK

- 1. THE CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN COMPOST FILTER SOCK THROUGHOUT THE CONSTRUCTION PERIOD,
- 2. **MATERIALS** - COMPOST USED FOR FILTER SOCKS SHALL BE WEED, PATHOGEN AND INSECT FREE AND FREE OF ANY REFUSE, CONTAMINANTS OR OTHER MATERIALS TOXIC TO PLANT GROWTH. THEY SHALL BE DERIVED FROM A WELL-DECOMPOSED SOURCE OF ORGANIC MATTER AND CONSIST OF A PARTICLES RANGING FROM 3/8" TO 2".
- 3. **FILTER SOCKS** SHALL BE 3 OR 5 MIL CONTINUOUS, TUBULAR, HDPE 3/8" KNITTED MESH NETTING MATERIAL, FILLED WITH COMPOST PASSING THE ABOVE SPECIFICATIONS FOR COMPOST PRODUCTS.

INSTALLATION:

- 1. **FILTER SOCKS** WILL BE PLACED ON A LEVEL LINE ACROSS SLOPES, GENERALLY PARALLEL TO THE BASE OF THE SLOPE OR OTHER AFFECTED AREA, ON SLOPES APPROACHING 2:1, ADDITIONAL SOCKS SHALL BE PROVIDED AT THE TOP AND AS NEEDED MID-SLOPE.
- 2. **FILTER SOCKS** INTENDED TO BE LEFT AS A PERMANENT FILTER OR PART OF THE NATURAL LANDSCAPE, SHALL BE SEEDED AT THE TIME OF INSTALLATION FOR ESTABLISHMENT OF PERMANENT VEGETATION.
- 3. **FILTER SOCKS** ARE NOT TO BE USED IN CONCENTRATED FLOW SITUATIONS OR IN RUNOFF CHANNELS.

MAINTENANCE:

- 4. ROUTINELY INSPECT FILTER SOCKS AFTER EACH SIGNIFICANT RAIN, MAINTAINING FILTER SOCKS IN A FUNCTIONAL CONDITION AT ALL TIMES.
- 5. REMOVE SEDIMENTS COLLECTED AT THE BASE OF THE FILTER SOCKS WHEN THEY REACH 1/3 OF THE EXPOSED HEIGHT OF THE PRACTICE.
- 6. WHERE THE FILTER SOCK DETERIORATES OR FAILS, IT WILL BE REPAIRED OR REPLACED WITH A MORE EFFECTIVE ALTERNATIVE.
- 7. REMOVAL - FILTER SOCKS WILL BE DISPERSED ON SITE WHEN NO LONGER REQUIRED IN SUCH A WAY AS TO FACILITATE AND NOT OBSTRUCT SEEDINGS.

SPECIFICATIONS FOR COMPOST FILTER SOCK

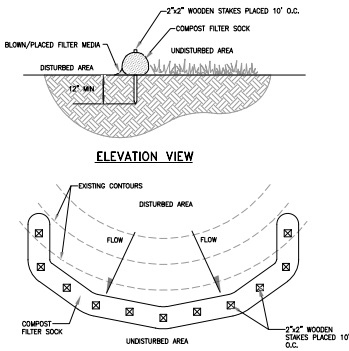


TABLE 4.1 Compost Sock Fabric Minimum Specifications					
Material Type	3 mil HDPE	5 mil HDPE	5 mil HDPE	Multi-Filament Polypropylene (MFPP)	Heavy Duty Multi-Filament Polypropylene (HDMFPP)
Material Characteristics	Photo-degradable	Photo-degradable	Bio-degradable	degradable	degradable
Sock Diameters	12" 18"	12" 18" 24"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
Mesh Opening	3/8"	3/8"	3/8"	3/8"	1/8"
Tensile Strength		25 psi	25 psi	44 psi	202 psi
Ultraviolet Stability %					
Original Strength (ASTM G-155)	23% at 1000 hr.	23% at 1000 hr.		100% at 1000 hr.	100% at 1000 hr.
Minimum Functional longevity	6 months	9 months	6 months	1 year	2 years
Two-ply systems					
Inner Containment Netting		HDPE biaxial net			
		Continuously welded			
		Fusion-welded junctures			
		3/4" x 3/4" Max. aperture size			
Outer Filtration Mesh		Composite Polypropylene Fabric			
		Woven layer and non-woven fleece mechanically fused via needle punch			
		3/16" Max. aperture size			
Sock fabrics composed of burlap may be used on projects lasting 6 months or less.					
Filrexx & JMD					

COMPOST SOCK FABRIC MINIMUM SPECIFICATIONS
N.T.S.

ISSUED FOR PERMITTING
NOT FOR CONSTRUCTION

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

FILTRATION BERM - FRONT VIEW

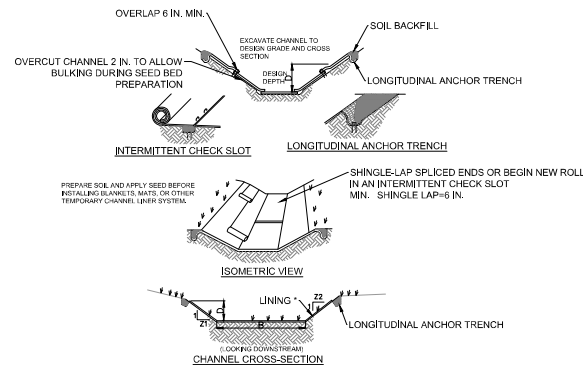
FILTRATION BERM - SIDE VIEW

NOTES:

1. FILTRATION BERM SHALL HAVE A CONSISTENT SHAPE THROUGHOUT.
2. COARSE FILTER AGGREGATE SHALL BE 1" ROCK CONSISTING OF NATURALLY OCCURRING UNIFORMLY BLENDED MINERAL MATERIALS WITH NO MORE THAN 20% PASSING THE NO. 200 SIEVE AND CONTAINING NO TOPSOIL, ORGANICS, OR SEVERELY WEATHERED ROCK.
3. RIP RAP SHALL HAVE A D50 = 6" AND SHALL BE FREE OF SOIL AND OTHER DEBRIS AND CONSIST OF STONED WITH AT LEAST ONE FRACTURED FACE WHOSE WIDTHS ARE NOT LESS THAN 30% OF THE LENGTH OF EACH STONE.

MAINTENANCE:

4. ROUTINELY INSPECT FILTRATION BERM AFTER EACH SIGNIFICANT RAIN.
5. REPAIR DAMAGED AREAS WITHIN 24 HOURS. IF PORTIONS OF THE BERM OUTSIDE OF THE ROCK FILTERS ARE BREACHED, THE BERM SHALL BE EXPANDED OR ENLARGED UNTIL BREACHING IS PREVENTED.



* SEE MANUFACTURER'S LINING INSTALLATION DETAIL FOR STAPLE PATTERNS, VEGETATIVE STABILIZATION FOR SOIL AMENDMENTS, SEED MIXTURES AND MULCHING INFORMATION.
 **AMENDED SOILS SPECIFICATIONS TO BE DETERMINED IN THE FINAL PLANS.

NOTES

ANCHOR TRENCHES SHALL BE INSTALLED AT BEGINNING AND END OF CHANNEL IN THE SAME MANNER AS LONGITUDINAL ANCHOR TRENCHES.

CHANNEL DIMENSIONS SHALL BE CONSTANTLY MAINTAINED. CHANNEL SHALL BE CLEANED WHENEVER TOTAL CHANNEL DEPTH IS REDUCED BY 25% AT ANY LOCATION.

SEDIMENT DEPOSITS SHALL BE REMOVED WITHIN 24 HOURS OF DISCOVERY OR AS SOON AS SOIL CONDITIONS PERMIT ACCESS TO CHANNEL WITHOUT FURTHER DAMAGE. DAMAGED LINING SHALL BE REPAIRED OR REPLACED WITHIN 48 HOURS OF DISCOVERY.

NO MORE THAN ONE THIRD OF THE SHOOT (GRASS LEAF) SHALL BE REMOVED IN ANY MOWING. GRASS HEIGHT SHALL BE MAINTAINED BETWEEN 2 AND 3 INCHES UNLESS OTHERWISE SPECIFIED. EXCESS VEGETATION SHALL BE REMOVED FROM PERMANENT CHANNELS TO ENSURE SUFFICIENT CHANNEL CAPACITY.

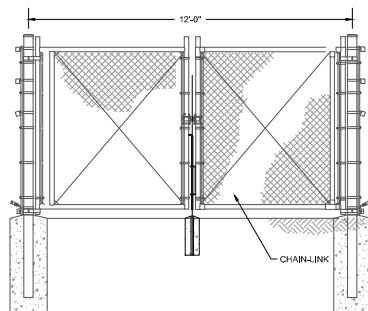
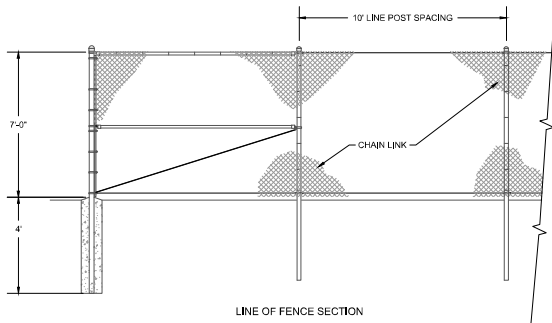
CONSTRUCTION SEQUENCE

1. BEGIN VEGETATED SWALE CONSTRUCTION ONLY WHEN THE UPDRAINAGE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES ARE IN PLACE. VEGETATED SWALES SHOULD BE CONSTRUCTED AND STABILIZED EARLY IN THE CONSTRUCTION SCHEDULE, PREFERABLY BEFORE MASS EARTH-WORK AND PLACING INCREASE THE RATE AND VOLUME OF RUNOFF.
2. ROUGH GRADE THE VEGETATED SWALE. EQUIPMENT SHALL AVOID EXCESSIVE COMPACTION AND/ OR LAND DISTURBANCE. EXCAVATING EQUIPMENT SHOULD NOT BE USED ON THE SIDE OF THE SWALE AND NEVER ON THE BOTTOM. IF EXCAVATION LEADS TO SUBSTANTIAL COMPACTION OF THE SUBGRADE (WHERE AN INFILTRATION TRENCH IS NOT PROPOSED), 18" INCHES SHALL BE REMOVED AND REPLACED WITH A BLEND OF TOPSOIL AND SAND TO PROMOTE INFILTRATION AND BIOLOGICAL GROWTH. AT THE VERY LEAST, TOPSOIL SHALL BE THOROUGHLY DEEP PLOWED INTO THE SUBGRADE. IN ORDER TO PENETRATE THE COMPACTED SUBGRADE, SOIL AERATION AND THE FORMATION OF MACROPORES, FOLLOWING THIS, THE AREA SHOULD BE DISKED PRIOR TO FINAL GRADING OF TOPSOIL.
3. CONSTRUCT CHECK DAMS, IF REQUIRED.
4. FINE GRADE THE VEGETATED SWALE. ACCURATE GRADING IS CRUCIAL FOR SWALES, EVEN THE SMALLEST NONCONFORMITIES MAY COMPROMISE FLOW CONDITIONS.
5. SEED, VEGETATE AND INSTALL PROTECTIVE LINING AS PER APPROVED PLANS AND ACCORDING TO FINAL PLANTING LIST. PLANT THE SWALE AT A TIME OF THE YEAR WHEN SUCCESSFUL ESTABLISHMENT WITHOUT IRRIGATION IS MOST LIKELY. HOWEVER, TEMPORARY IRRIGATION MAY BE NEEDED IN PERIODS OF LITTLE RAIN OR DROUGHT. VEGETATION SHOULD BE ESTABLISHED AS SOON AS POSSIBLE TO PREVENT EROSION AND SOIL LOSS.
6. ONCE ALL TRIBUTARY AREAS ARE SUFFICIENTLY STABILIZED, REMOVE TEMPORARY EROSION AND SEDIMENT CONTROLS. IT IS VERY IMPORTANT THAT THE SWALE BE STABILIZED BEFORE RECEIVING UP- AND STORMWATER FLOW.
7. FOLLOW MAINTENANCE GUIDELINES, AS DISCUSSED BELOW.

NOTE: IF A VEGETATED SWALE IS USED FOR RUNOFF CONVEYANCE DURING CONSTRUCTION, IT SHOULD BE REGRADED AND RESEED IMMEDIATELY AFTER CONSTRUCTION AND STABILIZATION HAS OCCURRED. ANY DAMAGED AREAS SHOULD BE FULLY RESTORED TO PROVIDE FUTURE FUNCTIONALITY OF THE SWALE.

[illegible]

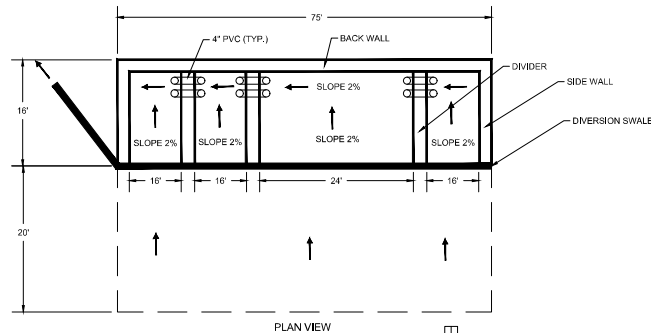
**ISSUED FOR PERMITTING
NOT FOR CONSTRUCTION**



NOTES:

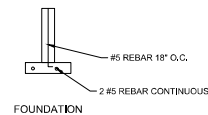
- FABRIC SHALL BE 34" 9 GA. BLACK VINYL CHAIN LINK (1 1/2 KK).
- INSTALL BRACE ASSEMBLY AS REQUIRED AT CORNER, CHANGE IN DIRECTION, OR APPROXIMATELY EVERY 1,500 LF.
- CONCRETE POST FOOTINGS SHALL BE FOUR TIMES THE DIAMETER OF THE POST AND SHALL HAVE A COMPRESSIVE STRENGTH OF 3,000 PSI MIN.
- INSTALL FENCING WITHIN THE LIMITS OF APPROVED CLEARING. PERFORM NO ADDITIONAL CLEARING TO ACCOMMODATE FENCE INSTALLATION.
- FENCE POSTS TO AVOID EXISTING DRAINILES TO THE MAXIMUM EXTENT PRACTICABLE.

1
C10.04 CHAIN LINK FENCE
N.T.S.

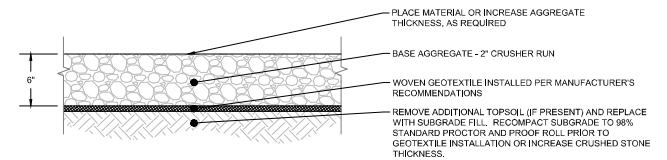


NOTES:

- WALL DIMENSIONS SHALL BE:
8" THICK SIDE WALLS
10" THICK BACK WALL
4" HIGH DIVIDERS/SIDE WALLS
8" HIGH BACK WALL



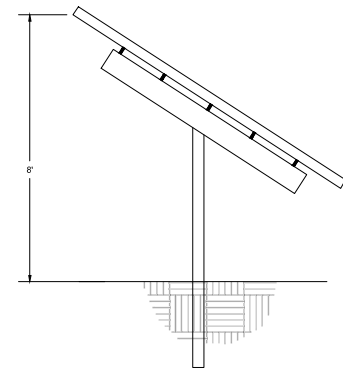
2
C10.04 AGGREGATE CONTAINMENT
N.T.S.



NOTES:

- FINAL GRAVEL ACCESS ROAD DESIGN TO BE APPROVED BY GEOTECHNICAL ENGINEER.

3
C10.04 GRAVEL ACCESS ROAD
N.T.S.



NOTES:

- SOLAR PANELS TO BE INSTALLED PER THE MANUFACTURER SPECIFICATIONS.
- SOLAR PANELS TO HAVE A MAXIMUM HEIGHT OF 8 FT.

4
C10.04 SOLAR PANEL
N.T.S.

**ISSUED FOR PERMITTING
NOT FOR CONSTRUCTION**

				NOTES AND DETAILS		REVISION C10
				MANKATO HYDROGEN ENERGY PLANT PROJECT CENTERPOINT ENERGY MANKATO, BLUE EARTH COUNTY, MN		REV. 0
SCALE N.T.S.		DESIGNED BY WJS		PROJECT NUMBER 0764026		SHEET NO. C10.04
DATE DRAWN 05/08/2026		DRAWN BY JH				
Rev.	Date	Description	By	Chk	Environmental Resources Management, Inc.	