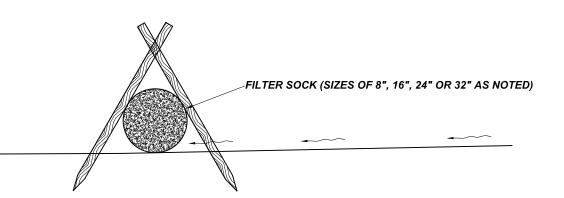


SILT FENCING SHALL BE EXTRA STRENGTH SYNTHETIC FILTER FARRIC HAVING A MINIMUM FLOW RATE OF 0.3 GAL/S.F./MIN. AND SHALL CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS OF EXPECTED USEABLE LIFE AT A TEMPERATURE RANGE OF 0 DEG. F. TO 120 DEG. F.

HEIGHT OF THE SILT FENCE SHALL BE A MINIMUM OF 16" ABOVE ORIGINAL GROUND SURFACE AND SHALL NOT EXCEED 34" ABOVE GROUND ELEVATION.

SILT FENCE BARRIER





FILTER SOCK BARRIER



SPECIFICATIONS FOR SEEDING, MULCHING AND SODDING

NOTES: ALL DISTURBED AREAS SHALL BE PERMANENTLY SEEDED UPON COMPLETION OF GRADING ACTIVITIES

SPECIFICATIONS FOR PERMANENT SEEDING

preparation should be done when the soil is

dry enough to crumble and not form

DORMANT SEEDINGS

ribbons when compressed by hand. For

winter seeding, see the following section on

1. Seedings shall not be planted from October

1 through November 20 During this period

2. The following methods may be used for

From October 1 through November 20,

prepare the seedbed, add the required

mulch and anchor. After November 20

amounts of lime and fertilizer, then

and before March 15, broadcast the

selected seed mixture. Increase the

seeding rates by 50% for this type of

From November 20 through March 15,

when soil conditions permit, prepare

the seedbed, lime and fertilize, apply

the selected seed mixture, mulch and

50% for this type of seeding.

anchor. Increase the seeding rates by

Apply seed uniformly with a cyclone

seeder, drill, cultipacker seeding, or

Where feasible, except when a

cultipacker type seeder is used, the

seedbed should be firmed following

roller, or light drag. On sloping land,

seeding operations should be on the contour where feasible.

or anchor the mulch material into the

left longer than 6 in.

critical slopes.

soil. Straw mechanically anchored shall

not be finely chopped but, generally, be

3. Mulch Nettings-Nettings shall be used

according to the manufacturer's

necessary to hold mulch in place in

areas of concentrated runoff and on

4. Asphalt Emulsion-Asphalt shall be

nanufacturer or at the rate of 160

5. Synthetic Binders-Synthetic binders

be used at rates recommended by the

such as Acrylic DLR (Agri-Tac), DCA-

70, Petroset, Terra Tack or equal may

6. Wood Cellulose Fiber-Wood cellulose

fiber binder shall be applied at a net dry weight of 750 lb./ac. The wood

cellulose fiber shall be mixed with water

maximum of 50 lb./100 gal. Of wood

and the mixture shall contain a

cellulose fiber.

IRRIGATION

and damage from runoff.

applied as recommended by the

seeding operations when a cultipacke

hydro-seeding (slurry may include seed

and fertilizer) on a firm, moist seedbed

the seeds are likely to germinate but

probably will not be able to survive the

SITE PREPARATION 1. A subsoiler, plow or other implement shall be used to reduce soil compaction and allow maximum infiltration. (Maximizing infiltration will help control both runoff rate and water quality.) Subsoiling should be done when the soil moisture is low enough to allow the soil to crack or fracture Subsoiling shall not be done on slip-prone areas where soil preparation should be

limited to what is necessary for establishing

2. The site shall be graded as needed to permit the use of conventional equipment for seedbed preparation and seeding. 3. Resoil shall be applied where needed to

SEEDBED PREPARATION 1. Lime-Agricultural ground limestone shall be applied to acid soil as recommended by a soil test. In lieu of a soil test, lime shall be applied at the rate of 100 lb./1,000 sq. ft. 2. Fertilizer-Fertilizer shall be applied as

ecommended by a soil test. In lieu of a soil test, fertilizer shall be applied at a rate of 12 lb./1,000 sq. ft. or 500 lb./ac. Of 10-10-10 or 12-12-12 analysis 3. The lime and fertilizer shall be worked into the soil with a disk harrow, spring-tooth a depth of 3 in. On sloping land the soil

SEEDING DATES AND SOIL CONDITIONS Seeding should be done March 1 to May 31 or Aug 1 to September 30. These seeding dates are ideal but, with the use of additional mulch and irrigation, seedings may be made any time throughout the

SPECIFICATIONS FOR MULCHING

MATERIALS 1. Mulch material should be applied immediatly after seeding. Seedings made during optimum seeding dates and with favorable soil conditions and on very flat areas may not need mulch to achieve adequate stabilization. Dormant seeding shall be mulched.

2. Straw-If straw is used it shall be unrotted small-grain straw applied at the rate of 2 tons/ac. or 90 lb./1,000 sq. ft (two or three bales). The mulch shall be spread uniformly by hand or mechanically so the soil surface is covered. For uniform distribution of hand-spread mulch, divide area into approximately 1.000 sq.-ft, sections and spread two 45-lb. Bales of straw in

used, it shall be sued at 2,000 lb./ac. or 46 lb./1,000 sq. ft. 4. Other-Other acceptable mulches include mulch mattings applied according to manufacturer's recommendations or wood chips applied at 6 tons/ac.

3. Hydroseeders-If would cellulose fiber is

1. Permanent seeding shall include irrigation STRAW MULCH ANCHORING METHODS to establish vegetation during dry or hot 1. Straw mulch shall be anchored immediately weather or on adverse site conditions as needed for adequate moisture for seed to minimize loss by wind or water germination and plant growth. 2. Mechanical-A disk, crimper, or similar 2. Excessive irrigation rates shall be avoided type tool should be set straight to punch

SPECIFICATIONS FOR MAINTENANCE OF PERMANENT <u>SEEDING</u> 1. Permanent seeding shall not be considered established for at least 1 full year from the time of planting.

failure and vegetation reestablishe as needed. depending on-site conditions, fertilize overseed or reestablished plantings in order to provide permanent vegetation for adequate erosion control. Maintenance fertilization rates shall be established by soil test recommendations or by using the rates shown in the following table.

Steep Banks or Cut Slope: 20 1/2 Do not seed later than August

 Kentucky Bluegrass
 60
 1 1/2

 Creeping Red Fescue
 60
 1 1/2

Note: Other approved seed species may be substitute

SPECIFICATIONS FOR TEMPORARY SEEDING

Establish vegetation.

Perennial Ryegrass

Seed Mix

1. Structural erosion- and sediment-control practices such as diversions and sediment traps shall be installed and stabilized with temporary seeding prior to grading the rest of the construction-site 6. Resoil shall be applied where needed to

2. Temporary seed shall be applied between construction operations on soil that will not be graded or reworked from 45 days or more. These idle areas should be seeded as soor as possible after grading or shall be seeded within 7 days. Several applications of temporary seeding are necessary on typical

3. The seedbed should be pulverized and loose to ensure the success of establishing vegetation. However, temporary seeding shall not be postponed if ideal seedbed preparation is not possible. 4. Soil Amendments-Applications of temporary vegetation shall establish

adequate stands of vegetation which may

limited to what is necessary for establishing 5. The site shall be graded as needed to permit the use of conventional equipment for seedbed preparation and seeding.

For shaded areas

SEEDBED PREPARATION 1. Lime-Agricultural ground limestone shall be applied to acid soil as recommended by a soil test. In lieu of a soil test, lime shall be applied at the rate of 100 lb /1 000 sq. ft. 2. Fertilizer-Fertilizer shall be applied as

recommended by a soil test. In lieu of a soil test, fertilizer shall be applied at a rate of 12 lb./1,000 sq. ft. or 500 lb./ac. Of 3. The lime and fertilizer shall be worked into the soil with a disk harrow, spring-tooth

require the use of soil amendments. Soil harrow, or other suitable field implement to tests should be taken on the site to predict a depth of nine inches. the need for lime and fertilizer

SPECIFICATIONS FOR SODDING

PENALTIES UNDER OHIO REVISED CODE 6111.

A COPY OF THE SEDIMENT CONTROL PLAN AND THE CONSTRUCTION DRAWINGS FOR THE DEVELOPMENT ARE REQUIRED TO REMAIN AT ALL TIMES ON THE CONSTRUCTION SITE.

14. SYMBOLS USED ARE TO SHOW WHAT METHOD OF SEDIMENTATION CONTROL ARE TO BE

15. SYMBOL DESCRIPTIONS ARE LISTED IN THE EROSION CONTROL SCHEDULE PROJECT

SCHEDULE OF WORK - OCTOBER 2013

DISTURBANCE AREA - 4.90 AC. SOIL CLASSIFICATION - Land Complex IMMEDIATE RECEIVING WATER - TRIBUTARY TO TUSCARAWAS RIVER

TOTAL DEVELOPING AREA - 4.90 AC.

TYPE OF CONSTRUCTION ACTIVITY - COMMERCIAL DEVELOPMENT

SOILS INFORMATION

STORM WATER PREVENTION PLAN NOTES

Bethesda Channery (BnF) Clay Loam, 25 to 70 percent slopes - Chili (CmA) Silt Loam, 0 to 3 percent slopes Fitchville-Urban (FeB) Land Complex, undulating - Sebring (Se) Silt Loam

SOIL PROTECTION CHART

STABILIZATION TYPE	J	F	М	Α	М	J	J	Α	s	0	N	D
PERMANENT SEEDING			*	*	*	*	*	*	*			
DORMANT SEEDING	*	*	*							*	*	*
TEMPORARY SEEDING			*	*	*	*	*	*	*			
SODDING			* *	* *	* *	* *	* *	* *	* *			
MULCHING	*	*	*	*	*	*	*	*	*	*	*	*

- IRRIGATION NEEDED DURING JUNE THRU AUGUST * * - IRRIGATION NEEDED FOR 2-3 WEEKS AFTER APPLYING SOD

EROSION CONTROL SCHEDULE PROJECT IMPLEMENTATION SCHEDULE

	SPECIFIC	SPECIFICATIONS FOR SODDING		ODOT ITEM	QUANTITIES	DESCRIPTION					
		1. SITE VE	1. SITE VEGETATION								
	MATERIALS 1. Sod shall be harvested, delivered and	brick-line pattern. Ensure that sod is not stretched or overlapped and that all joints	C/L	201	N/A	ACRE	SITE CLEARING LIMITS				
installed within a period of 48 hr. Sod not transplanted within this period shall be inspected and approved prior to installation.		are butted tight in order to prevent voids which would dry the roots.	2. SEDIMENT CONTROL MEASURES								
	The sod shall be kept moist and covered	On sloping areas where erosion may be a problem, sod shall be laid with the long	SF	207	1972	L.F.	SILT FENCING (FILTER FABRIC FENCE)				
	during hauling and preparation for placement on the sod bed.	edge parallel to the contour and with staggered joints. The sod shall be secured with peas or staples.	FS	207	735	L.F.	FILTER SOCK				
	3. Sod shall be machine cut at a uniform soil thickness of 0.75 in., plus or minus 0.25	with pegs or staples. 5. As sodding is completed in any one-section,	SB	207	N/A	Each	SEDIMENTATION TRAP				
	in., at the time of cutting. Measurements for thickness shall exclude top growth and	the entire area shall be rolled or tamped to ensure solid contact of roots with the soil	IP	207	N/A	Each	INLET PROTECTION				
	thatch.	surface. Sod shall be watered immediately after rolling or tamping until the sod and	D	207	N/A	Each	DRAINAGE-WAY ROUTING (DIVERSIONS)				
	SITE PREPARATION	soil surface below the sod are thoroughly wet. The operations of laying, tamping and irrigating for any piece of sod shall be									
	A subsoiler, plow or other implement shall be used to reduce soil compaction and	completed within 8 hr.	3. SITE GI	3. SITE GRADING							
	allow maximum infiltration. (Maximizing infiltration will help control both runoff rate	SOD MAINTENANCE	TS M	207	N/A	S.Y.	TEMPORARY SEEDING & MULCHING SEED MIX NO. 1				
	and water quality.) Subsoiling shall not be done on slip-prone areas where soil	 In the absence of adequate rainfall, watering shall be performed daily or as often as necessary during the first week 	FS	207	N/A	S.Y.	VEGETATIVE FILTER STRIP				
	preparation should be limited to what is necessary for establishing vegetation.	and in sufficient quantities to maintain moist soil to a depth of 4 in.	TS	651	N/A	C.Y.	TOPSOIL STOCKPILE				
	Sod shall not be placed on frozen soil.	After the first week, sod shall be watered	CRS	703.01	N/A	EACH	CONSTRUCTION ROAD STABILIZATION NO. 1 AGGREGATE				
	The first row or sod shall be laid in a straight line with subsequent rows placed	as necessary to maintain adequate moisture and ensure established.									
	parallel to and tightly wedged against each other. Lateral joints shall be staggered in a	The first mowing shall not be attempted until sod is firmly rooted.	4. SITE IMPROVEMENT INSTALLATION - SANITARY & STORM SEWERS, WATERMAIN								
	, 66	·	IPa	207	N/A	Each	INLET PROTECTION- Catch Basin				
	SWPPP GEN	IERAL NOTES:	IPb	207	N/A	Each	INLET PROTECTION- Silt Fence (Ditch Checks)				
GENERAL:		OP	601	N/A	Each	ROCK OUTLET PROTECTION- TYPE C (spillway)					
1. NOTICE OF INTENT (NOI) MUST BE SUBMITTED TO OHIO EPA FOR NPDES PERMIT 45 DAYS PRIOR TO			PS M	659	N/A	S.Y.	PERMANENT SEEDING & MULCHING				
2.	THE START OF CLEARING AND OR GRADING. CONSTRUCTION MUST COMPLY WITH ALL LO	5. MISCEL	LANEOUS								
3.	DEVELOPER OR DESIGNATED PARTY IS RESPONSIBLE TO ENSURE THAT THE SEDIMENT CONTROL			207	N/A	EA.	ROCK CHECK DAM				
PLAN IS IMPLEMENTED AND INSPECTED DURING THE CONSTRUCTION PHASE IN ACCORDANCE WITH THE OHIO STANDARDS FOR STORM WATER MANAGEMENT LAND DEVELOPMENT & URBAN STREAM PROTECTION, 2nd Edition, 1996. 4. FAILURE TO IMPLEMENT THESE METHODS AND PRACTICES DESCRIBED CAN RESULT IN				659	N/A	S.Y.	EROSION CONTROL MATTING (TYPE 1)				
				659	N/A	S.Y.	EROSION CONTROL MATTING (TYPE 2)				
7.	PENALTIES UNDER OHIO REVISED CODE 6111	00				IOD CONCEDUATION					

SCHEDULE OF MAJOR CONSTRUCTION

,	A INSPECTORS LOG FOR MPCA STORM WATER PERMIT IS TO BE COMPLETED IN ACCORDANCE WITH THE MPCA'S COMPLIANCE GUIDE FOR EROSION AND SEDIMENT CONTROL.	OPERATIONS												
-	AT THE ENGINEERS DISCRETION A NOTICE OF TERMINATION WILL BE SUBMITTED TO THE OHIO	YEAR 2013	J	F	М	Α	М	J	J	Α	s	0	N	D
_	EPA STATING THAT ALL CONSTRUCTION HAS BEEN COMPLETED. THE DEVELOPER WILL BE RESPONSIBLE FOR ANY ADDITIONAL SEDIMENTATION CONTROL	CLEARING										*		
	PRACTICES THAT MAY OCCUR DURING THE CONSTRUCTION ACTIVITY. IT WILL BE THE ENGINEERS	SILT FENCE										*		
ĺ	DISCRETION FOR ADDITIONAL SEDIMENTATION CONTROL AND THE RESPONSIBILITY OF THE	SEDIMENTATION BASINS										*		
	DEVELOPER TO IMPLEMENT ALL SEDIMENTATION CONTROL PRACTICES.	STRAW BALE BARRIERS												
	THE DEVELOPER WILL EXERCISE DEED RESTRICTIONS TO ENSURE INDIVIDUAL LOT NOTICE OF INTENT FOR COVERAGE UNDER THE OHIO EPA STORM WATER CONSTRUCTION GENERAL PERMIT	DRAINAGE-WAY ROUTING										*		
1	REQUIRED FOR EACH LOT AND THE LOT OWNER SHALL BE RESPONSIBLE FOR EROSION CONTROL	OUTLET PROTECTION											*	
I	PRACTICES OF HOME SITES.	DITCH PROTECTION												
	REFER TO THIS SHEET FOR SEQUENCE OF EVENTS AND DETAILS.	MULCHING											*	
	LOT GRADING TO BE DONE AS PER STORM WATER PREVENTION PLAN. RESIDENTIAL AREA STORM WATER TO BE GRADED TO STREET DUE TO DRAINAGE CALCULATION.	PERMANENT SEEDING AND MULCHING												
. I	DOWNSPOUTS / SUMP PUMPS TO BE DRAINED DIRECTLY TO STORM SYSTEM.													

YEAR 2014	J	F	М	Α	М	J	J	Α	s	0	
CLEARING											
SILT FENCE											
SEDIMENTATION BASINS											
STRAW BALE BARRIERS											
DRAINAGE-WAY ROUTING											
OUTLET PROTECTION											
DITCH PROTECTION											
MULCHING											
PERMANENT SEEDING AND MULCHING								*	*		

16. NO SOLID OR LIQUID WASTE SHOULD BE DISCHARGED INTO STORM WATER RUNOFF. 17. OFF-SITE TRACKING OF SEDIMENTS SHALL BE MINIMIZED.

18. MUST SHOW COMPLIANCE WITH LOCAL WASTE DISPOSAL, SANITARY AND HEALTH REGULATIONS.

MAINTENANCE AND INSPECTION:

IMPLEMENTATION SCHEDULE.

19. PERMANENT RECORDS OF MAINTENANCE AND INSPECTION MUST BE MAINTAINED A MINIMUM OF ONCE EVERY 7 DAYS AND AFTER STORM EVENTS GREATER THAN 0.5 INCH IN A 24 HOUR PERIOD. 20. NAME OF INSPECTOR, MAJOR OBSERVATIONS, DATE OF RECORDS MUST BE MAINTAINED FOR 2 YEARS AFTER NOTICE OF INTENT PER OHIO EPA NPDES PERMIT.

21. ANY EROSION CONTROL MEASURES, STRUCTURES, DEVICES, OR RELATED ITEMS IN NEED OF REPAIR WILL BE MADE IMMEDIATELY UPON DISCOVERY.

22. TEMPORARILY STABILIZE DISTURBED AREAS THAT WILL REMAIN IDLE FOR 14 DAYS OR LONGER WITHIN 7 DAYS OF THE DISTURBANCE OR WITHIN 2 DAYS FOR AREAS WITHIN 50' OF A STREAM. PERMANENTLY STABILIZE DISTURBED AREAS WITHIN 7 DAYS OF REACHING FINAL GRADE. EROSION CONTROL BLANKETS AND MATTING SHOULD BE USED TO STABILIZE CHANNELS WHERE THE FLOW VELOCITY IS GREATER THAN 3.5 FT/SEC., STEEP SLOPES, ON HIGHLY EROSIVE SOILS AND ON AREAS SLOW TO ESTABLISH A VEGETATIVE COVER.

SHEET NO: