



**Genesee County
Drain Commissioner
Water & Waste Services**

G-4610 Beecher Road Flint, MI 48532
Phone (810) 732-7870 Fax (810) 732-9773
www.gcdcwws.com

COMMERCIAL SOIL EROSION & SEDIMENTATION CONTROL PERMIT APPLICATION

1. APPLICANT (Please check if applicant is the landowner or designated agent*)

<input type="checkbox"/> Landowner <input type="checkbox"/> Designated Agent		NAME:		EMAIL:	
ADDRESS:					
CITY:	STATE:	ZIP:	PHONE:		

2. LOCATION

SECTION	<input type="checkbox"/> CITY <input type="checkbox"/> TOWNSHIP <input type="checkbox"/> VILLAGE		PROPERTY TAX ID #
SUBDIVISION:	LOT #	STREET ADDRESS:	

3. PROPOSED EARTH CHANGE

Project Type: Residential <input type="checkbox"/> Industrial <input type="checkbox"/> Multi-Family <input type="checkbox"/> Land Balancing <input type="checkbox"/> Commercial <input type="checkbox"/>			
Describe Project			Size of Earth Change (Acres, Linear feet or square feet)
Name of and distance to nearest Lake, Stream, or Drain		Date Project to start	Date Project to be complete

4. SOIL EROSION AND SEDIMENTATION CONTROL PLAN (Refer to Rule 323.1703 of Part 91)

Note: One complete set of plans must be attached.	Estimated Cost of Erosion and Sedimentation Control	
	Plan Preparer's Name	Phone #

5. PARTIES RESPONSIBLE FOR EARTH CHANGE

Name of Landowner (if not provided in Box. 1 above)			Address		
Email:					
City	State	Zip	Phone #		
Name of Individual "On Site" Responsible for Earth Change			Company Name		
Email:					
Address	City	State	Zip	Phone	

6. PERFORMANCE DEPOSIT (If required by the permitting agency)

Amount Required \$:				
Name of Surety Company:				
Address	City	State	Zip	Phone

7. NOTICE TO APPLICANT

I hereby acknowledge that if a soil and sedimentation permit is issued, I hereby voluntarily grant the employees of the Genesee County Drain Commissioner's Office, Division of Water and Waste Services, or their designated agents permission to enter onto my property to ensure that the project conforms to the soil erosion and sedimentation permit issued. I further understand that if I revoke my consent for the employees of the Genesee County Drain Commissioner's Office, Division of Water and Waste Services, or their designated agents to enter onto the property set forth herein, the permit is automatically revoked, I will need to resubmit a new soil erosion and sedimentation permit application and I must cease all earth moving activities on the property.

I further understand that if I continue to perform earth moving activities on the property after revoking my consent for the employees of the Genesee County Drain Commissioner's Office, Division of Water and Waste Services, or their designated agents to enter onto the property set forth herein, I may be subject to one or more of the enforcement procedures set forth in Part 91 of Act No. 451 of the Public Acts of 1994, as amended, and the administrative rules promulgated thereunder, including, but not limited to, being issued a civil infraction citation, having an injunction issued to prevent any further earth moving activities on the aforementioned property, the right of the Genesee County Drain Commissioner's Office, Division of Water and Waste Services or its agents to enter onto my property to install soil erosion and sedimentation control procedures and lien the property for all costs associated with installing the soil erosion and sedimentation control procedures, and/or the forfeiture of any security submitted in the amount required to bring the property into compliance with Part 91 of Act No. 451 of the Public Acts of 1994, as amended.

I hereby acknowledge that the information contained herein is truthful and accurate to the best of my knowledge. I understand that if I knowingly make any false statement in this application it may result in a civil fine of not more than \$10,000.00 per day for each violation.

I (we) affirm that the above information is accurate and that I (we) will conduct the above-described earth change in accordance with Part 91, Soil Erosion and Sedimentation Control, of the Natural Resource and Environmental Protection Act, 1994 PA 451, as amended, applicable local ordinances, and the documents accompanying this application.		
Landowner's Signature	Print Name	Date
Designated Agent's Signature*	Print Name	Date

* Designated agent must have a written statement from landowner authorizing him/her to secure a permit in the landowner's name.

LOG NO: _____

DATE: _____

**Genesee County Drain Commissioner Division of Water and Waste Services
Soil Erosion and Sedimentation Control Plan Submittal Checklist**

All SESC plans submitted to this office shall at a minimum be accompanied by the following information.

1. ___ Legal description, tax I.D. number and/or survey of site.
2. ___ A SESC site plan (scale of not more than 1"=200' on 24"x36" sheets) of the property with the items below clearly labeled :(Residential can be submitted on letter or legal paper)
 - A. ___ Name and address of Applicant. Name and address of landowner.
 - B. ___ Project Name, location, proximity to waters of the State (lake, stream, drain, wetlands) and (the 100 year floodplain contour for those waters for commercial applications only).
 - C. ___ Location map, NORTH arrow and drawing scale.
 - D. ___ Limits of earth change delineated and clearly labeled.
 - E. ___ Existing and proposed contours. If unchanged so state.
 - F. ___ Existing and proposed on-site and off-site (within drainage area of earth change) drainage and dewatering facilities including temporary dewatering shall be clearly labeled and identified.
 - G. ___ Existing on-site vegetation (type and location).
 - H. ___ Soil stock pile locations.
 - I. ___ Description of installation and location of all temporary and permanent erosion control measures, with measures clearly drafted and labeled with the (Michigan Unified Keying System and GCDC-WWS Specifications for commercial applications only).
 - J. ___ A program proposal for the continued maintenance of all permanent soil erosion and sediment control measures that remain after project completion.
 - K. ___ Person responsible for continued maintenance once permit is closed

Name: _____

Address: _____

Phone #: _____
Email address: _____

- 3. ___ A topographic map with the affected area clearly labeled.
- 4. ___ Existing soils information, with project area clearly labeled. (Soils Map)
- 5. ___ A completed Soil Erosion and Sedimentation Control application.
- 6. ___ A completed construction and maintenance schedule including a plan for permanent stabilization.
- 7. ___ A copy of any submitted MDEQ permit applications (as applicable) required for completing earthwork within the boundaries of waters of the state.

I hereby certify that the above information has been provided with the submitted plans.

Name of Party Preparing Checklist: _____

Signature: _____ Date: _____

OFFICE USE ONLY

This application review packet will be reviewed for completeness within 5 business days of being received. If the application review packet is found to be incomplete it will be returned in its entirety to the entity that made the submission.

Dated Received: _____

Is this application complete? YES NO

Dated Verified: _____

SESC Detailed Review:

Sign: _____ Date: _____

Project Engineer Authorization to issue SESC Permit: _____
(Commercial SESC ONLY)

Date: _____

Note: It is necessary to submit only one set of plans for review

SESC CONSTRUCTION AND MAINTENANCE SCHEDULE

Project Name: _____
 Anticipated Start Date: _____
 Anticipated End Date: _____

Construction Schedule

Construction Sequence	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Notes
Temporary SESC Measures													
Strip and Stockpile													
Rough Grading													
Underground Utilities													
Road Installation													
Building Construction													
Permanent SESC Measures													
Final Grade													
Landscaping													

Maintenance Schedule

Maintenance Sequence	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Notes
Street Sweeping													
Silt Fencing													
Maintain Buffer Strips													
Inlet Structures													
Seeding and Mulch													
Sediment Basins													
Rip-Rap													
Remove Temporary Measures													

Seeding and Planting Schedule

Temporary: (Refer to Tables 4 & 6 in MDEQ "Guidelines for Vegetative Erosion control" included with this packet)

Area on Plan	Mix #	Common Name	Natural Drainage Class Suitability	Suitable Uses	Rate lb/acre

Permanent: (Refer to Tables 4 & 6 in MDEQ "Guidelines for Vegetative Erosion control" included with this packet)

Area on Plan	Mix #	Common Name	Natural Drainage Class Suitability	Suitable Uses	Rate lb/acre

Trees and Shrubs: (Refer to Table 7 in MDEQ "Guidelines for Vegetative Erosion control" included with this packet)

Area on Plan	Quantity	Common Name	Scientific Name	Drainage Class	Notes

GENESEE COUNTY DRAIN COMMISSIONER
SOIL EROSION BOND
(To Accompany Application for Permit)

Bond NO. _____

(Name of development)

(S-Permit) / Log #

KNOW ALL MEN BY THESE PRESENTS, that _____
as principal and _____ as surety, are held and firmly bound unto
the Genesee County Drain Commissioner in the penal sum of _____
dollars, for the payment of which, well and truly to be made, we bind ourselves and our heirs, executors
and administrators, jointly and severally, firmly by these presents.

Sealed with our seals and dated this _____ day of _____ A.D. 20_____.

WHEREAS, the above bounded _____ has made application to said Drain
Commissioner for a permit as stated in the application therefore.

NOW THEREFORE, the condition of this obligation is such that if the above bounded shall perform the
undertakings of said application in the manner prescribed in the permit therefore issued by said Drain
Commissioner and shall well and truly pay for all damages on account of such construction, earth moving
and all other damages fines and penalties which he shall become liable to pay and shall save said Genesee
County Drain Commissioner harmless and indemnify them from all suits, claims, damages and proceedings
of every kind arising out of the aforesaid damages and injuries and shall observe all the terms and
conditions of the permit to be issued, then this obligation to be void, otherwise of full force and effect.

Principal _____
(Seal)

Principal's Mailing address

Surety _____
(Seal)

Surety's Mailing Address

.....
NOTICE TO SURETY OF
ISSUANCE OF PERMIT

This is to inform you that a permit,
covered by the above bond has been
issued as follows:

Applicant _____

Contractor _____

Permit No. _____

Permit Date _____

Please include this information on all
correspondence concerning the bond.

NOTICE OF TERMINATION
OF LIABILITY

This is to inform you that:

The permit operations
covered by the above bond
have been completed
satisfactorily.

The permit covered by
above has been canceled.

Liability under the bond is
therefore terminated effective

(Date)

By: _____

Table 4. Example Seeding Mixtures for Introduced Species

Mix #	Common Name	Natural Drainage Class Suitability	Suitable Uses	Rate lbs/acre
1	Creeping red fescue	WD, MWD	A, C/F, WW	40
2	Creeping red fescue White clover, red clover, or alfalfa	WD, MWD	C/F	30 4
3	Smooth brome grass Creeping red fescue White clover, red clover, or alfalfa	WD, MWD	C/F	15 15 4
4	Smooth brome grass alfalfa	WD, MWD	C/F, WW	30 4
5	Smooth brome grass Creeping red fescue	WD, MWD	C/F, WW	20 20
6	Kentucky blue grass Creeping red fescue	MWD	A, C/F	20 20
7	Creeping red fescue Tall fescue	MWD	C/F, WW	20 20
8	Creeping red fescue Creeping bentgrass	MWD, SPD	A, C/F	40 1
9	Smooth brome grass Tall Fescue	MWD, SPD	C/F, WW	20 20
10	Smooth brome grass Timothy Red clover	MWD, SPD	C/F, WW	15 4 4
11	Smooth brome grass Creeping red fescue Kentucky blue grass Birdfoot trefoil	MWD, SPD	C/F, WW	10 10 10 4
12	Tall fescue Creeping bentgrass	SPD, PD	C/F, WW	40 1
13	Tall fescue Alsike clover or birdfoot trefoil	SPD, PD	C/F, WW	40 1
14	Redtop Timothy Alsike clover or birdfoot trefoil	SPD, PD	C/F	2 5 2
15	Tall Fescue Smooth Brome grass Creeping bentgrass Birdfoot trefoil	SPD, PD	C/F, WW	12 12 1 6
16	Tall fescue Redtop	SPD, PD, VPD	C/F, WW	20 2

Mix #	Common Name	Natural Drainage Class Suitability	Suitable Uses	Rate lbs/acre
17	Redtop Alsike clover or birdfoot trefoil	PD, VPD	C/F	4 2
18	Creeping red fescue Kentucky bluegrass Redtop Timothy Alsike clover	See Note #1	C/F	8 8 1 2 3
19	Creeping red fescue Redtop Tall fescue Smooth Bromegrass Alsike clover or birdfoot trefoil White clover, red clover, or alfalfa	See Note #1	C/F, WW	6 1 6 6 3 3

Five pounds of annual or perennial ryegrass may be added to any mixture if quick cover is desired.

1 - These mixtures are suitable for large or linear projects where several soil types may be encountered, but a single seed mixture is desired for the entire project.

Table 6. Seed Selection Guide for some Commonly Available Native Grasses

Common Name	Scientific Name	Seeding Rate lbs/acre	Drainage Class Suitability	Notes
American beachgrass	<i>Ammophila breviligulata</i>		Dunes, WD sands	1
"Tioga" Deer tongue	<i>Panicum clandestinum</i>	15	WD, MWD	2, 3
Little bluestem	<i>Schizachyrium scoparius</i>	12	WD, MWD	2
Big bluestem	<i>Andropogon gerardii</i>	15	WD, MWD, SPD	2
Switch grass	<i>Panicum virgatum</i>	10	WD, MWD, SPD	2
Indian grass	<i>Sorghastrum nutans</i>	10	WD, MWD, SPD	2

Notes:

- 1 - Beachgrass is planted vegetatively; see text.
- 2 - Warm season grasses.
- 3 - Suitable for sand and gravel pit and mine reclamation.

A great variety of native species are available; consult suppliers for cultural information.

KEY FOR Information in Tables 4, 5, 6, and 7

Abbreviations for *Soil Natural Drainage Classes*

WD = Well Drained

MWD = Moderately Well Drained

SPD = Somewhat Poorly Drained

PD = Poorly Drained

VPD = Very Poorly Drained

Abbreviations for *Suitable Uses* (Table 4)

A = Sites maintained as a lawn

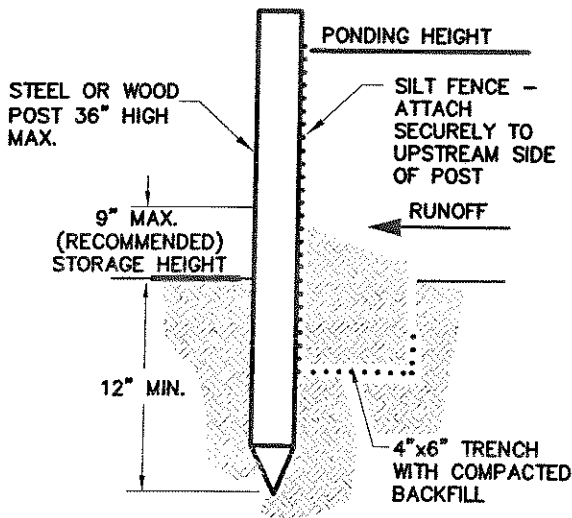
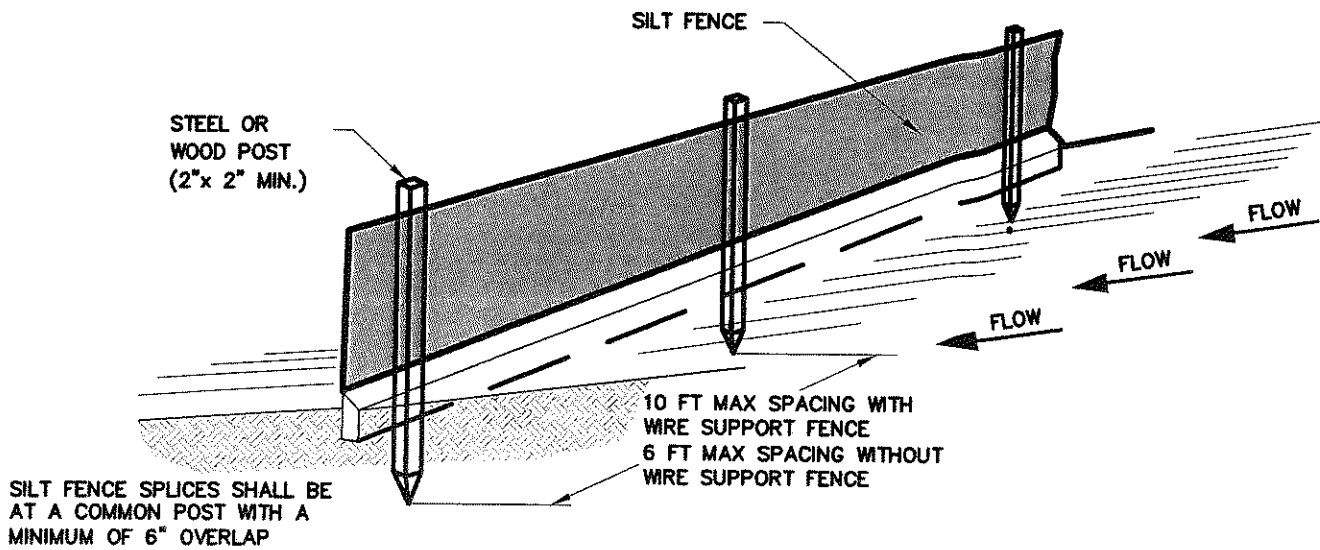
C/F = Cut and fill, slopes, ditch banks

WW = Areas subject to periodic storm water flow such as grassed waterways,
ditch bottoms, diversions

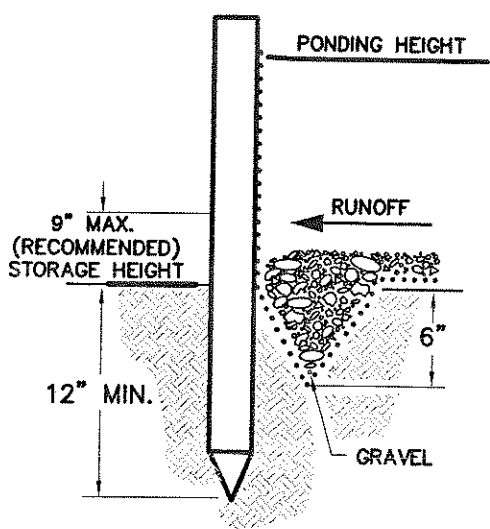
Species shown in **bold face** may be invasive and should not be planted where they can escape into sensitive natural areas.

Table 7. Selected Trees and Shrubs for Erosion Control

Common Name	Scientific Name	Drainage Class Suitability	Notes
Evergreen Trees			
Jack Pine	<i>Pinus banksiana</i>	WD, MWD, SPD	
Red Pine	<i>Pinus resinosa</i>	WD, MWD	
White Pine	<i>Pinus strobus</i>	MWD, SPD	
Norway Spruce	<i>Picea abies</i>	WD, MWD	1
Deciduous Trees			
Quaking aspen	<i>Populus tremuloides</i>	WD, MWD, SPD	
Bigtooth aspen	<i>Populus grandidentata</i>	WD, MWD	
Hybrid poplar	<i>Populus spp.</i>	WD, MWD, SPD	1
Red maple	<i>Acer rubrum</i>	ADAPTABLE	
Silver maple	<i>Acer saccharinum</i>	MWD, SPD, PD	
Hawthorn	<i>Crataegus spp.</i>	varies by species	3
Black willow	<i>Salix nigra</i>	SPD, PD, VPD	
With the exception of hawthorn, the trees listed above are fast growing and selected for their potential use in windbreaks.			
Shrubs			
Northern bayberry	<i>Myrica pensylvanica</i>	WD, MWD	1,2
Fragrant sumac	<i>Rhus aromatica</i>	WD, MWD	2
Staghorn sumac	<i>Rhus typhina</i>	WD, MWD	
Gray dogwood	<i>Cornus foemina (racemosa)</i>	WD, MWD, SPD	
Red-osier dogwood	<i>Cornus Stolonifera</i>	SPD, PD, VPD	
Cranberry-bush viburnum	<i>Viburnum opulus (trilobum)</i>	SPD, PD, VPD	
Scrub willows	<i>Salix spp.</i>	SPD, PD, VPD	
Blackberry/raspberry	<i>Rubus spp.</i>	varies by species	3
The shrubs listed above are selected for vigorous and extensive root growth, Willows are particularly useful for stream bank stabilization; they will sprout from cuttings or branch bundles if moisture is adequate.			
Notes -			
1 - These species are not native to Michigan (bayberry is native, but very rare).			
2 - These species may not be cold hardy in the Northern Lower or Upper Peninsula.			
3 - Thorny species are useful for excluding humans where foot traffic may create erosion sites.			



STANDARD DETAIL
TRENCH WITH NATIVE BACKFILL



ALTERNATE DETAIL
TRENCH WITH GRAVEL

APPLICATIONS

1. INSTALLED TO REDUCE SEDIMENT LADEN SURFACE RUNOFF FROM LEAVING THE PROPERTY OF A CONSTRUCTION SITE INVOLVING DISTURBED EARTH.
2. DIVERSIONARY STRUCTURE.

DESIGN

1. INSTALL AROUND THE BASE OF SOIL STOCKPILES.
2. UTILIZE FOR SHEET FLOW ONLY.

DESIGN (CONT)

3. INSTALL ON DOWN STREAM SIDE OF CONSTRUCTION.
4. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
5. IF POSSIBLE LOCATE FENCE 10-FT. FROM TOP OF SLOPE, WETLAND OR WATER BODY.