

# **Crawford County Soil and Sedimentation Pollution Control Permit Application Packet**

The following items **must be filled out completely** in order to submit an application for a Soil and Sedimentation Control Permit:

- \_\_\_ Soil and Sedimentation Permit Application
- \_\_\_ Erosion Control Plan
- \_\_\_ Site location Drawing
- \_\_\_ Legal Description
- \_\_\_ Part 91, Soil Erosion and Sedimentation Control Plan Checklist
- \_\_\_ Soil Erosion – Additional Earth Change information & Project Timing
- \_\_\_ **Application must include Landowner's signature or Designated Agent must have a written statement from Landowner authorizing Agent to make application for permit in the Landowner's name. This is a State Law.**

Crawford County Building & Safety  
 200 W Michigan Ave  
 Grayling, MI 49738  
 989.344.3233 Fax 989.348.1016

PERMIT APPLICATION  
 of Part 91  
 SOIL EROSION AND  
 SEDIMENTATION CONTROL

All blanks need to be filled out or Na written in blank

1. APPLICANT

Name			Landowner /Designated Agent (circle one)		
Address					
City	State	Zip Code	Area Code/Phone number		

2. LOCATION OF EXCAVATION

Street Address		City	Tax ID Number		
Township	Section	T	N	R	W

3. PROPOSED EARTH CHANGE

Type of Project (circle one)	Residential	Multi Family	Commercial	Industrial	Land Balancing
Describe project				Size of Earth Change(Acres or Square Foot)	
Name of distance to nearest Lake, Steam, Creek or Dam			Project Start Date	Project completion date	

4. SOIL EROSION AND SEDIMENTATION CONTROL/RESPONSIBLE PARTY

Plan preparer's name	Area Code/Phone number	Est. Cost Erosion & Sediment Control
Name of Individual 'On Site' Responsible for Earth Change	Company Name/Address	Phone number

5. PROPERTY OWNER

Name of Landowner	Address
City	State Zip Code Area Code/ Phone number

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

Amount Required\$ _____	Cash	Certified Check	Irrevocable Letter of Credit (attached)	Surety Bond (attached)
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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 Resources and Environmental Protection Act, 1994 PA 451, as amended, applicable local ordinances and the documents accompanying this application.  
 \*Application must include Landowner's signature or Designated Agent must have a written statement from landowner authorizing Agent to make application for permit in the Landowner's name. This is a State Law.

_____ Landowner's Signature	_____ Print Name	_____ Date
_____ Applicant's Signature	_____ Print Name	_____ Date

For Office Use Only

# Part 91, Soil Erosion and Sedimentation Control Plan Checklist

## Minimum Requirements

Parcel#: \_\_\_\_\_

Rule 17.03 Requirement		Included in Plan		Comments	
Map with scale: 1" = 200' or less, or indication of exact distances between noted features on site plan, including site location sketch		Yes	No		
Legal description of property (town, range, section, quarter-quarter section)		Yes	No	Include site address & location on waterbody (e.g. North End Burt Lake)	
Proximity of any proposed earth change to lakes and/or streams		Yes	No		
Predominant land features		Yes	No		
Slope description or contour intervals		Yes	No		
Soils survey or written description of the soil types of the proposed exposed land area		Yes	No		
Description and location of the physical limits of each proposed earth change		Yes	No		
Description and location of all existing and proposed on-site drainage and dewatering facilities		Yes	No		
Timing and sequence of each proposed earth change		Yes	No		
Location and description for installing and removing all temporary SESC measures		Yes	No	Install all temporary SESC measures according to manufacturer's specifications.	
Description and location of all proposed permanent SESC measures		Yes	No		
Maintenance program for all permanent SESC measures and designation of person responsible for maintenance		Yes	No	Seed all disturbed areas with a perennial seed and mulch until stable. Owner to maintain stabilization.	
Owner is responsible for maintaining all permanent stabilization.		Yes	No		
If no, please state who is responsible _____					

**f** No is checked above, the plan must be revised to include the missing element prior to submittal/approval. Other comments:

## Soil Erosion – Additional Earth Change Information & Project Timing

### Additional Earth Change Information

	Yes	No
Has earth-moving activity started?		
Is the earth-moving activity over 1 acre? <i>If yes, contact MDEQ</i>		
Will work be occurring in a wetland? <i>If yes, contact MDEQ</i>		
Will de-watering occur? <i>If yes, special requirements may apply</i>		
Will work be occurring in a waterway/floodplain? <i>If yes, contact MDEQ</i>		
Will a designated county drain be affected? <i>If yes, contact Drain Commissioner</i>		
Will fill be brought on-site? <i>Amount in cubic yards _____</i>		
Will material be removed from the site? <i>Amount in cubic yards _____</i>		










### Approximate Project Timing

Month	Year	For MINOR PROJECTS
		Temporary Erosion Control Measures Installed
		Gravel Drive/Entrance Installed
		Land Cleared or Excavation Started
		Final Grading/Seeding
		Permanent Erosion Control Measures in Place
		Temporary Erosion Control Measures Removed Once Site is Stabilized

Month	Year	For MAJOR PROJECTS
		Temporary Erosion Control Measures Installed
		Gravel Drive/Entrance Installed
		Land Cleared or Excavation Started
		Detention/Retention/Sediment Ponds Installed
		Road Constructed
		Utilities Installed
		Final Grading/Seeding
		Catch Basins/Ponds Cleaned
		Permanent Erosion Control Measures in Place
		Temporary Erosion Control Measures Removed

**Erosion Control Plan**

**Erosion Control Plan Legend**

-  Limits of Disturbance
-  Property Line
-  Director of water runoff
-  High Point
-  Silt Fence
-  Vegetation specification
-  Stockpiled Soil
-  Tree Preservation
-  Buffer strip of undisturbed existing growth

Slope: \_\_\_\_\_ %

Soil Type: \_\_\_\_\_

Scale: 1" = \_\_\_\_\_  
(1" = 200' or less)

<u>Parcel #:</u>	
<u>Address:</u>	
<u>Name:</u>	

# DEQ

Michigan Department of Environmental Quality  
Land and Water Management Division

## Regulated Activities Under the Natural Resources and Environmental Protection Act, 1994 PA 451, as Amended

- 1a. Does your project or activity involve an *earth change* that disturbs one or more acres of land or is located within feet of a *lake or stream*? If yes, a Part 91 permit must be obtained from the county or local governmental agency. Note: Some counties and local agencies may require permits for other earth changes in addition to those described above; please check with them prior to undertaking any earth change. A list of Part 91 permitting agencies is available at [www.deq.state.mi.us/iwm/](http://www.deq.state.mi.us/iwm/) under the Water Management Section, Soil Erosion and Sedimentation Control Program.

*Earth Change* means a human-made change in the natural cover of topography of land, including cut and fill activities, which may result in or contribute to soil erosion and sedimentation of the waters of the state. Earth change does not include the practice of plowing and tilling soil for the purpose of crop production.

*Lake* means "the Great Lakes and all natural and artificial inland lakes or impoundments that have definite banks, a bed, visible evidence of continued occurrence of water, and a water surface area equal to, or greater than, one acre."

*Stream* means a "river, creek, or other surface water course which may or may not be serving as a drain, as defined in the drain code, and which has definite banks, a bed, and visible evidence of the continued flow or continued occurrence of water, including the connecting waters of the Great Lakes."

- 1b. Does your project or activity involve an earth change that is under the jurisdiction (crosses the boundaries) of two or more county and/or local Part 91 agencies described in 1a? (Part 91).....No\_\_\_Yes\_\_\_

If your project or activity disturbs five or more acres, a stormwater permit is required from the Surface Water Quality Division (SWQD), Michigan Department of Environmental Quality (MDEQ) Please call 517.241.8993 for further information.

2. Is your project or activity in or near an *inland lake or stream*? (Parts 31 and 301).....No\_\_\_Yes\_\_\_

*Inland lake or stream* means "a natural or artificial lake, pond, or impoundment; a river, stream, or creek which may not be serving as a county drain as defined by the drain code; or any other body of water that has definite banks, a bed and visible evidence of a continued flow or continued occurrence of water ..." *Inland lake or stream does not include...a lake or pond that has a surface area of less than 5 acres"*

3. Does your project or activity impact a wetland? (Part 303).....No\_\_\_Yes\_\_\_

*Wetland* means "land characterized by the presence of water at a frequency and duration sufficient to support, and that under normal circumstances does support wetland vegetation or aquatic life, and is commonly referred to as a bog, swamp, marsh..."

If work in wetlands cannot be avoided, a permit from the MDEQ may be required; and wetland mitigation to compensate for the loss of the wetland and its functions may also be required. For questions regarding regulated wetlands, please contact your local LWMD Field Office or the Inland Lakes and Wetlands Unit at 517.373.1746.

The MDEQ's Wetland Assessment Program assists property owners in identifying wetlands on their property. For more information on the Wetland Assessment Program call 517.241.8485

4. Is your project or activity in or adjacent to the *Great Lakes*? (Parts 323, 325 and 353).....No\_\_\_Yes\_\_\_

5. Does your project or activity involve constructing, maintaining, or altering a *dam*? (Part 315).No\_\_\_Yes\_\_\_

*Dam* means "an artificial barrier, including dikes, embankments, and appurtenant works, that impounds, diverts, or is designed to impound or divert water or a combination of water or any other liquid or material in the water."

PERMIT NUMBER: \_\_\_\_\_

**Permit Conditions:**

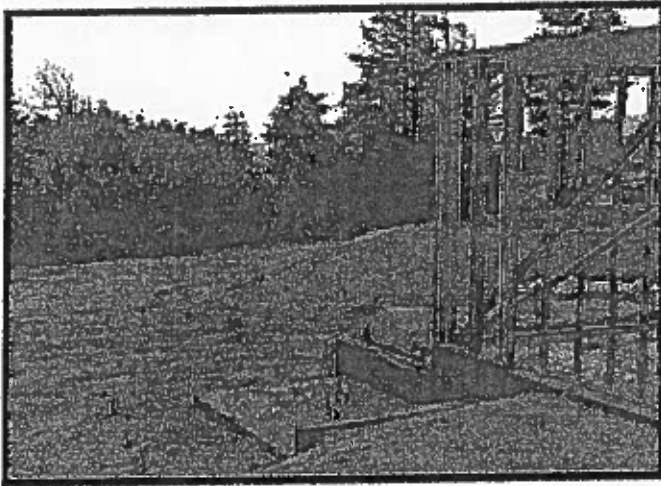
1. The permitted activity shall be completed in accordance with the approved plans and specifications, and the attached general and specific conditions.
2. This permit does not waive the necessity for obtaining all other required federal, state or local permits.
3. Permittee shall notify the permitting agency within one week after completing the permitted activity or one week prior to the permit expiration date, whichever comes first.

**GENERAL CONDITIONS**

In accordance with Rule 1709 promulgated under the authority of Part 91, Soil Erosion and Sedimentation Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, and in addition to the information on the attached plan(s) and special conditions, the following general conditions apply to the earth change authorized by this permit.

- Design, construct, and complete the earth change in a manner that limits the exposed area of disturbed land for the shortest period of time.
- Remove sediment caused by accelerated soil erosion from runoff water before it leaves the site of the earth change.
- Temporary or permanent control measures shall be designed and installed to convey water around, through, or from the earth change at a non-erosive velocity.
- Install temporary soil erosion and sedimentation control measures before or upon commencement of the earth change activity and maintain the measures on a daily basis. Remove temporary soil erosion and sedimentation control measures after permanent soil erosion measures are in place and the area is stabilized. ("Stabilized" means the establishment of vegetation or the proper placement, grading, or covering of soil to ensure its resistance to soil erosion, sliding, or other earth movement.)
- Complete permanent soil erosion control measures for the earth change within five calendar days after final grading or upon completion of the final earth change. If it is not possible to permanently stabilize the earth change, then maintain temporary soil erosion and sedimentation control measures until permanent soil erosion control measures are in place and the area is stabilized.

# SOIL EROSION AND STORMWATER CONTROL FOR CLEAN WATER IN NORTHERN MICHIGAN



*Controlling erosion protects water quality.*

## **Soil Erosion Is a Costly Problem**

Eroding construction sites are a leading cause of water quality problems in northern Michigan. For every acre under construction, about a dump truck and a half of soil washes into a nearby lake or stream unless the builder uses erosion controls. Problems caused by this sediment include:

- **Local taxes** - Cleaning up sediment in streets, sewers and ditches adds extra costs to local government budgets.
- **Dredging** - The expense of dredging sediment from lakes, harbors and navigation channels is a heavy burden for tax-payers.
- **Lower property values** - Property values are damaged when a lake or stream fills with sediment. Shallow areas encourage weed growth and create boating hazards.
- **Poor fishing** - Silt and sediment smothers gravel beds where fish such as trout find food and lay their eggs.
- **Nuisance growth of weeds and algae** - Sediment carries nutrients (eg.: fertilizers) that fuel algae and weed growth and make water unattractive for swimming.

## **Controlling Erosion is Easy**

Erosion control is important even for home sites of a acre or less. The materials needed are easy to find and relatively inexpensive: silt fence, stakes, plastic tube top soil, grass seed and mulch. Putting these materials to use is a straightforward process. Some controls which may be needed include:

- Preserving existing trees and grass where possible to prevent erosion;
- Silt fence to trap sediment on the downslope side of the lot;
- Soil piles located away from any roads and waterways;
- Cleanup of sediment carried off-site by vehicles during storms;
- Stone drain beds or downspout extenders to prevent erosion from roof runoff; and
- Revegetate as soon as possible, using native plants

A soil erosion control permit is needed if your project:

- Is within 500 feet of a lake or stream
- Disturbs more than one acre of land

Additionally, a permit may be needed if your site:

- Is a noncommercial development
- Is within 100 feet of a regulated wetland
- Has a slope of 10% or more
- Has heavy clay and/or hydric soil
- Or if a permit is required by your local city government

A permit from the Michigan Department of Environmental Quality is required for construction within:



### ***Silt Fence***

- Available from construction supply companies.
- Install prior to excavation.
- Install on downslope sides of site parallel to contour of land.
- Extend ends upslope enough to allow water to pond behind fence.
- Bury 8 inches of fabric in trench.
- Leave no gaps. Intertwine sections of silt fence.
- Inspect and repair once a week or after every 1/2 inch rain.
- Remove sediment if deposits reach half the fence height.
- Maintain until vegetation is established.

### ***Drainage Swale And Check Dams***

Grassed drainage swales or waterways reduce the runoff velocity of stormwater and allow for infiltration into the soil.

Check dams, made of stone, can be placed on the bottom of drainage swales across the path of stormwater flow to assist with water velocity reduction and infiltration.

- The side slope of the swale should be 3:1 or flatter if the site allows.
- To prevent erosion, the middle of the dam should be lower than the outer edges at natural ground elevation.

### ***Roof Runoff***

To manage stormwater runoff from roof tops, install stone drain beds or gutters with downspout extenders. These techniques reduce erosion and protect surrounding vegetation.

### ***Stone Drain Beds***

- Place a strip of small stones 4-6 inches deep which will extend at least 6 inches past the drip surrounding your home or structure
- Do not use stone beds, when basements or crawlspaces are located in clay or sandy loam soil.

### ***Gutters with Downspout Extenders***

- Use plastic drainage pipe to direct water to a grassed or other appropriate area for infiltration.

### ***Soil Piles***

- Locate away from any downslope street, driveway, stream, lake, wetland, ditch or drainage way.
- Temporary seed such as annual rye or winter wheat is recommended for topsoil piles.

### ***Wind Erosion***

- During high winds, exposed soil may need to be watered down to prevent soil from leaving the site.

### ***Sediment Cleanup***

- Immediately sweep or scrape up soil tracked onto the road.
- Immediately after a storm, clean up the soil washed off-site.

### ***Sewer Inlet Protection***

- Protect on-site storm sewer inlets with silt fences.
- Inspect, repair and remove sediment deposits after every storm.

### ***Preserve Existing Vegetation***

- Wherever possible, preserve existing trees, shrubs, and other vegetation.
- Minimize the area of disturbance near lakes, streams, and wetlands.
- To prevent root damage, do not grade, place soil piles, or park vehicles near trees marked for preservation.
- Place plastic mesh or snow fence barriers around trees to protect the area below the branches.

### ***Revegetation***

- Seed, sod or mulch bare soil within 5 days at final grade.
- Establish buffer strips of vegetation at least 25 ft. wide adjacent to water bodies for water quality protection.
- Plant native species, if possible (see local Soil Conservation District for suggestions).
- Consider attractive, low maintenance alternatives to traditional lawns such as native ground cover and wildflowers. Plant quick growing annual rye grasses to stabilize soil until other vegetation is established.

### ***Seeding And Mulching***

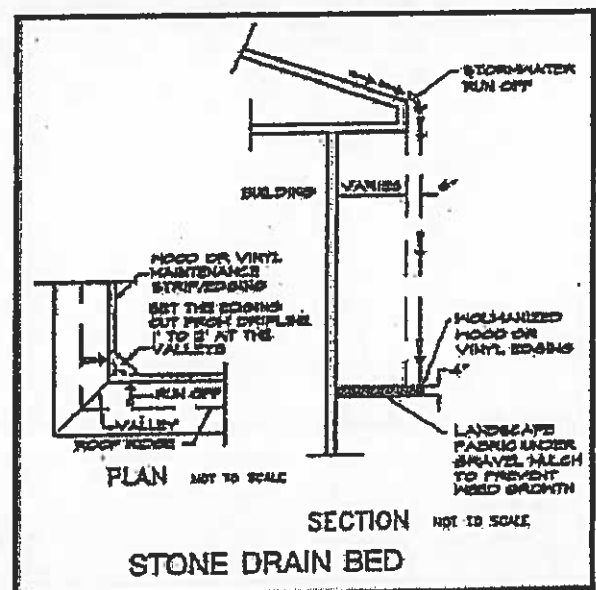
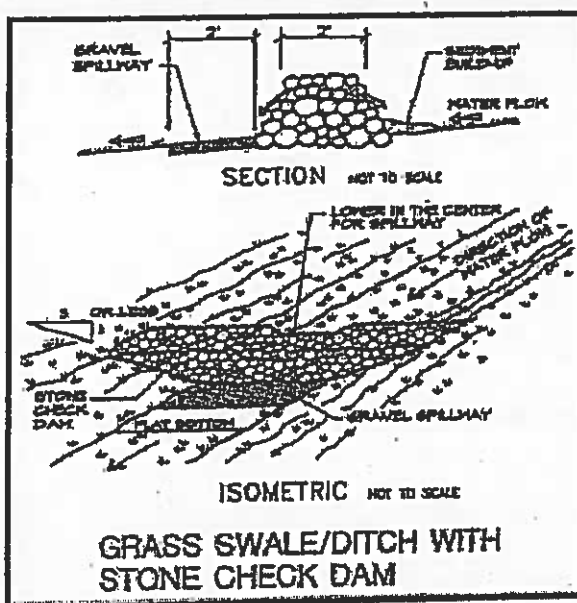
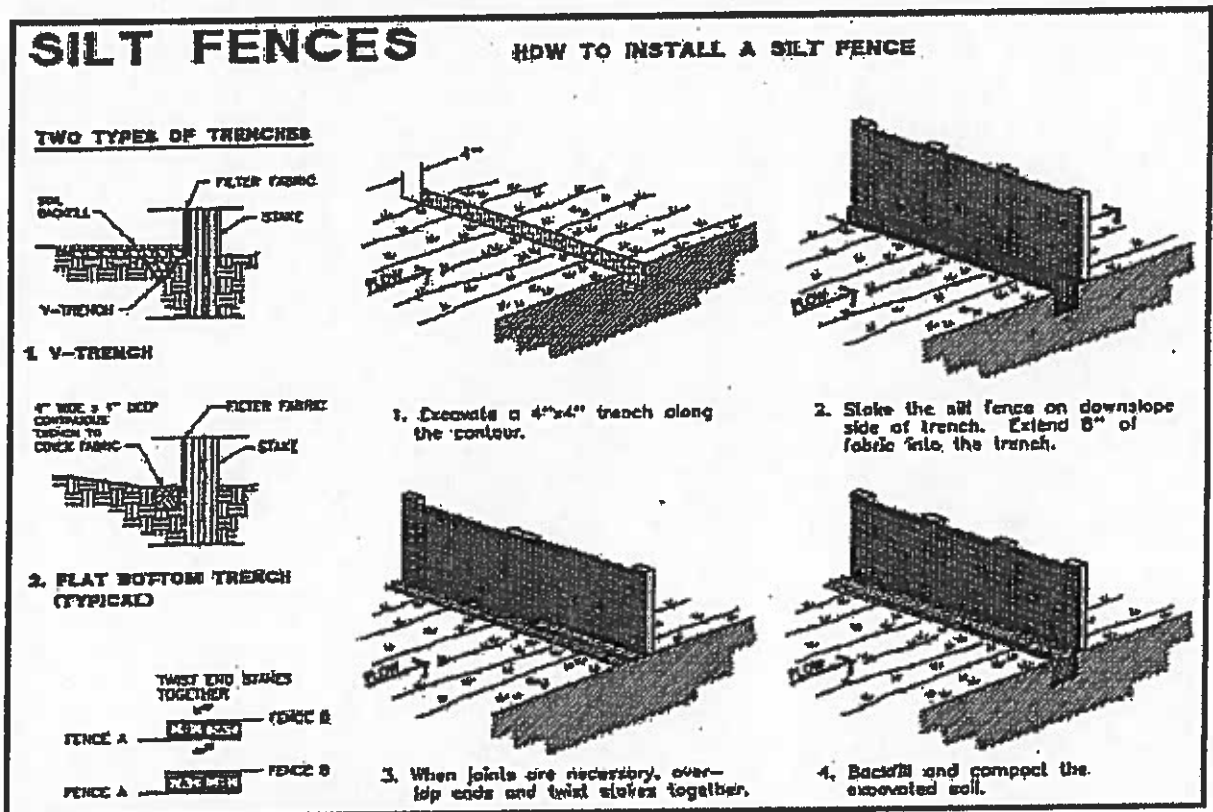
- Spread 4 to 6 inches of topsoil. Fertilize and lime only if needed according to soil test.
- Seed with an appropriate mix for the site. (For guidance call local Soil Conservation District.)
- Rake lightly to cover seed with 1/4" of soil. Roll lightly.
- Mulch with straw (two-three bales per 1000 sq.ft.).
- On steep slopes, anchor mulch by watering or using netting.
- Water gently every day or two to keep soil moist. Less watering is needed once grass is 2 inches tall.

### ***Sodding***

- Spread 4 to 6 inches of topsoil.

- Fertilize and lime only if needed according to soil test.
- Lightly water the soil.
- Lay sod. Tamp or roll lightly.
- On slopes, lay sod starting at the bottom and work toward the top, laying in a brickwork pattern. Peg each piece down in several places.
- Initial watering should wet soil 6 inches deep (or until water stands 1 inch deep in a straight-sided container). Then water lightly every day or two to keep soil moist, but not saturated, for 2 weeks.

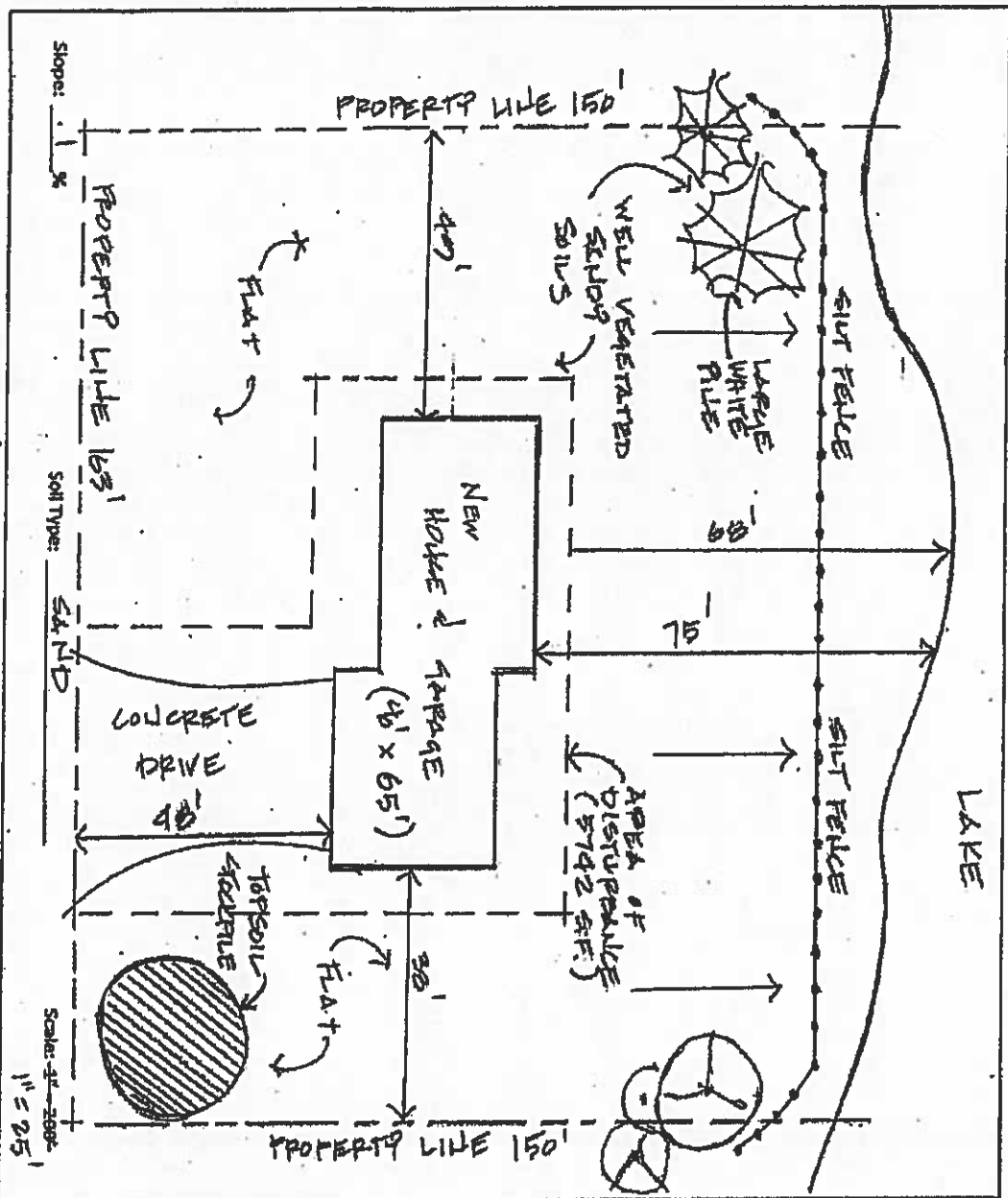
- Generally, the best times to sod or seed are early fall (Aug. 15-Sept. 15) or spring (May).
- If construction is completed after September 15, permanent seeding should be delayed. Sod may be laid until November 15. Temporary seed (such as rye or winter wheat) may be planted until October 15. Mulch or matting may be applied after October 15, if weather permits. Silt fences must be maintained until the disturbed area is stabilized with seeding, or sodding or appropriate ground cover.



# Soil Erosion and Stormwater Control Practices for Home Sites

Use this sample as a guide for submitting your soil erosion and stormwater control plan.

SAMPLE PLAN



Erosion Control Plan Legend	
	Limits of Disturbance
	Property Line
	Director of water runoff
	High Point
	Silt Fence
	Vegetation specification
	Stockpiled Soil
	Tree Preservation
	Buffer strip of undisturbed existing growth
Parcel #:	280-025-100-100-02
Address:	2561 SUNNY LANE
Name:	BOB & KAREY SMITH

Homeowners are required to retain on their property all additional runoff generated by the development of the site. Impervious areas which generate additional runoff include: roof tops, sidewalks, driveways and decks.

**CRAWFORD COUNTY**  
**DEPARTMENT OF BUILDING SAFETY INSPECTIONS**  
**PART 91 SOIL EROSION PROGRAM**

200 W Michigan Ave, Grayling, MI 49738 (989) 344-3233 – Fax(989) 348-1016  
Paul Olmstead, Director

**Soil Erosion Permit Fee Schedule**

**Special**

Pertaining to any project in which earth work is done by hand  
Or disturbs less than 500 square feet \_\_\_\_\_ \$50.00  
Hourly for Staff \_\_\_\_\_ \$50.00

**Residential**

Pertaining to a "single family dwelling" up to one acre disturbed area \_\_\_\_\_ \$125.00  
Each additional five acres or fraction thereof \_\_\_\_\_ \$ 75.00  
Residential storm water/sewer permit \_\_\_\_\_ \$ 75.00

**Commercial**

Pertaining to "multiple housing units, mobile home parts, industrial and  
Recreational service facilities, subdivisions, businesses, up to one acre  
Disturbed area \_\_\_\_\_ \$175.00  
Each additional five acres or fraction thereof \_\_\_\_\_ \$125.00  
Minor fee for no increase in impervious surface, less than 5,000 square  
feet of disturbed area \_\_\_\_\_ \$ 75.00

**Roads/Access**

Up to one acre of disturbed area \_\_\_\_\_ \$125.00  
Each additional five acres or fraction thereof \_\_\_\_\_ \$75.00

**Pipeline & Cables**

First ½ mile \_\_\_\_\_ \$175.00  
Each additional ½ mile or fraction thereof \_\_\_\_\_ \$125.00

**Gravel Pits**

Sites that are over one acre of disturbed area \_\_\_\_\_ \$175.00  
Any gravel pit within 500 feet of lake, stream or river \_\_\_\_\_ \$175.00