



County of Marquette

RESOURCE MANAGEMENT/DEVELOPMENT DEPT.
SOIL EROSION PROGRAM
234 W BARAGA AVENUE • MARQUETTE, MI 49855

Building Codes 906.225-8180
Planning 906.225-8182
Facilities 906.225-8182
Fax 906.225-8203
www.co.marquette.mi.us

SOIL EROSION CONTROL PERMIT APPLICATION

Pursuant to Part 91, Soil Erosion and Sedimentation Control, of Act 451 of the Public Acts of 1994, as amended

A Soil Erosion Control Permit is required for **earth changes** that are located within 500 feet of a **lake or stream** or for **earth changes** that are one acre (43,560 square feet) or more in surface area, regardless of the location.

Earth Change—A human made change in the existing ground surface cover, including but not limited to excavating, filling, stockpiling, grading, clearing, grubbing, and stumping.

Stream—“A natural or artificial river, creek, or other surface watercourse which may or may not be serving as a drain (as defined in Act No. 40 of the Public Acts of 1956, as amended being section 280.1 et seq. of the Michigan Compiled Laws) 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.” This includes a ditch, gully, ravine, etc. that *is serving* as a river, stream, or creek.

Lake—“All natural and artificial inland lakes or impoundments that have definite banks, a bed, visible evidence of a continued occurrence of water, **and a surface area of water that is equal to or greater than one acre.**” “Lake” does not include sediment basins and basins constructed for the sole purpose of stormwater retention, cooling water, or treating polluted water.

There are a few types of earth change activities that are exempt from obtaining Part 91 permits but are not exempt from the requirements of Part 91. The exempted activities are **beach nourishment projects under Part 325, minor earth changes, normal road and driveway maintenance, changes of less than 225 square feet**, plowing/tilling for crop production, mining, and logging. *The exemption for mining does not apply to the removal of topsoil, sand, gravel, peat, clay, or marl. The exemption for mining and logging does not apply to ancillary or support facilities such as access roads, staging areas, processing facilities, and stockpiles that are outside of the “harvest” or “mining” area.* The exemptions listed above do not apply if the activity is a phase of site preparation for another land use activity that requires a permit.

Beach Nourishment Project: Project permitted by MDEQ under Part 325 of PA 451.

Minor Earth Change: An earth change of a minor nature that is stabilized (rip-rap, seed/mulch, sod, gravel, etc.) within 24 hours of the initial earth disturbance and that will not contribute sediment to lakes or streams.

Normal Road and Driveway Maintenance: Normal road and driveway maintenance, such as grading or leveling, that does not increase the width or length of the road or driveway and that will not contribute sediment to lakes or streams.

225 Square Foot Exemption: A permit waiver may be granted for an earth change after receiving a signed affidavit from the landowner stating that the earth change will disturb less than 225 square feet and that the earth change will not contribute sediment to lakes or streams.

If you have any questions or would like assistance with your application, please contact us for help.



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2016 SCHEDULE OF FEES (Effective 01-01-15) FOR SOIL EROSION AND SEDIMENT CONTROL PERMITS

Pursuant to Part 91, Soil Erosion and Sedimentation Control, Act 451 of the Public Acts of 1994, as amended.

ONLY IF WITHIN 500 FEET OF LAKE OR STREAM:

- WHERE EARTHWORK IS IN PROGRESS WITHOUT A VALID PART 91 PERMIT, A NOTICE OF VIOLATION WILL BE ISSUED AND A FINE OF UP TO \$2500 MAY BE LEVIED.
- Permits valid for 2 years from completion date stated on permit application
- 1 acre = 43,560 square feet. To figure out your acreage, take the total square feet that will be disturbed (excavation, fill areas, stockpiles, etc.) and divide it by 43,560. The fee is then calculated by the acreage x cost per acre.
- **BONDING:** A performance bond may be required for all projects that excavate or fill over 1000 cubic yards (27,000 cubic feet). The amount of the performance bond is \$1000 per acre of disturbance. See application packet for more information.
- ****NOTE:** Sand/Grave/Peat/Clay/Marl, etc. pits, landfills and stockpile yards are exempt from bonding requirements.

Project review without application/ Special Inspections/ Permit Transfer	\$100
Canceled projects (after permit is issued)	One half of permit fee will be refunded after permit is issued and before construction begins. No refund after construction begins.

SINGLE - FAMILY RESIDENTIAL

Less than 225 square feet—NO PERMIT NEEDED, but need to fill out a "225 Exemption Letter"	\$20
225 square feet to 999 square feet	\$200
1000 square feet to 43,560 square feet	\$275
Over 1 acre or more	\$325/acre or fraction thereof
Drainfield/Septic tank install or replacement ONLY	\$125
Permit Revisions/Amendments	Fee to be calculated by Inspector
Time Extensions (requested or required) as needed to stabilize site (One time only. Maximum 1 year extension)	\$200

COMMERCIAL ACTIVITIES

- Utilities, Roads, Businesses, Apartment/Housing projects, Churches, Motels, Restaurants, Parking Lots, Warehouses, Motocross Tracks, Stockpile Yards, Topsoil Stripping, Subdivisions, Condominiums, Golf Courses, Land Clearing, Landfills, etc.
- Logging and mining access roads and ancillary activities

Less than 225 square feet—NO PERMIT NEEDED, but need to fill out a "225 Exemption Letter"	\$20
225 square feet to 43,560 square feet	\$325
Over 1 acre to 10 acres	\$400/acre or fraction thereof
Over 10 acres to 20 acres	\$4000 + \$325/acre over 10 acres
Over 20 acres to 30 acres	\$7250 + \$275/acre over 20 acres
Over 30 acres to 40 acres	\$10,000 + \$225/acre over 30 acres
Over 40 acres and up	\$12,250 + \$175/acre over 40 acres
PITS: Sand/Gravel/Peat/Clay/Marl (Valid for 5 years)	\$400 flat fee for all acreage
Permit Revisions/Amendments	Fee to be calculated by Inspector
Time Extensions (requested or required) as needed to stabilize site (One time only. Maximum 1 year extension)	\$200



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APPLICATION FOR EROSION CONTROL PERMIT

Under Part 91, Soil Erosion & Sedimentation Control, PA 451 of 1994, as amended.
 In accordance with Part 91- Act 451, 1994, the undersigned makes an application for a permit:

Is the application for: RESIDENTIAL COMMERCIAL SAND & GRAVEL PIT

PROJECT ADDRESS (Please provide map or detailed direction to project site)						PARCEL/PROPERTY ID #	
					MANDATORY		
CITY	TOWNSHIP	TOWNSHIP _____N	RANGE _____W	SECTION	52-____-____-____		
DESCRIPTION OF ALL EARTH CHANGES AND CONSTRUCTION:							
SIZE OF TOTAL EARTH CHANGE [SQUARE FEET OR ACREAGE]							
IDENTIFY CLOSEST LAKE/STREAM				DISTANCE FROM EDGE OF DISTURBANCE AREA TO LAKE OR STREAM			
LAND OWNER							
NAME (IF WORKING ONLY IN A PUBLIC ROW, THEN CONTRACTOR CAN BE APPLICANT)						TELEPHONE	
ADDRESS			CITY	STATE	ZIP	CELL #	
E-MAIL ADDRESS						FAX #	
LAND OWNERS SIGNATURE						DATE	
CONTRACTOR							
NAME						TELEPHONE	
CONTACT PERSON						TELEPHONE	
ADDRESS			CITY	STATE	ZIP	CELL #	
E-MAIL ADDRESS						FAX #	
CONTRACTORS SIGNATURE						DATE	
OFFICE USE ONLY							
PERMIT FEE:				RECEIPT #			
APPROVED BY:						DATE	

THIS PAGE MUST BE FILLED OUT FOR COMMERCIAL AND RESIDENTIAL EARTH CHANGE ACTIVITIES

1. Please write out **detailed directions** or a **map** to show how to access the site. Include roads, names, signs, fire #'s, etc.
2. On the map, fill in the scale (bottom) and then draw and label all applicable **EXISTING** items: stream, lake, driveway, home, camp, lawn area, garage, septic system, well, storage building, culverts, ditches, drainage paths, etc. Also include major land features such as a rock bluff, swamp, river, lake, forest, etc.
3. Please list all new **PROPOSED** earth disturbance activities (*driveway, access roads, home, camp, lawn area, garage, septic system, addition, well, storage building, culverts, ditches, etc.*), the approximate square feet that will be disturbed for each, and then draw/label each on the map. You may also provide one overall total area disturbed if this is easier.

Disturbance Activity:	Area in square feet:
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
Total:	_____

4. Please draw a **heavy outline** around **all disturbed areas** for your project.
5. **EXISTING** ground elevations. Start at a flat area and label this •100' elevation. Go out in all directions and give approximate elevations (difference can be at little as one foot or as much as ten) up or down relative to the •100'; include lake, river, road, and major land areas. Be sure to include all areas where disturbance will occur.
6. **PROPOSED** ground elevations. Using the already labeled existing elevations as a reference, use new numbers with a box around them to represent the elevations that the ground will be when you are done with your project, even if it will be the same. On a separate piece of paper, please draw a cross-section for new roads and areas of significant cut or fill of land.
7. Check off the temporary erosion control measures (and draw/label on map) that you will use during the project to prevent any soil from getting into a lake, stream, storm drain inlet, ditch, wetland, or onto other property:

Berm Mulch Silt Fence Trench Straw Bales Sediment Trap Filter Fabric over Inlet
 None
 Other _____

***Draw and label on the map chosen items.**

8. Check off the permanent erosion control measures (and draw/label on map) that you will use to restore disturbed areas when the project is completed: **SEE GENERAL STANDARDS FOR RESTORATION REQUIREMENTS**
 Sod Seed/Mulch Gravel Pavement Bark, Pine Needle, or Leaf Mulch Rock Rip-
 Rap
 Other _____

***Draw and label on the map chosen items.**

9. Please fill in approximate dates for the project: **Submit additional page as needed**
 Installation of temporary erosion controls: _____
 Excavation/Construction: _____
 Backfill and rough grade: _____
 Final grade: _____
 Full vegetation establishment or site stabilization w/permanent SESC Measures _____

Please check all applicable soil types that exist on the site and any fill that will be brought in:
 Sand Gravel Clay Loam Topsoil

10. How will you maintain the permanent erosion control measures?
 Will re-seed, re-sod, add rock, or add mulch as needed to fill in bare spots and prevent erosion _____
 Other _____

THIS PAGE FOR MUST BE FILLED OUT FOR PITS

****NOTE:IF BLUEPRINTS OR TOPO MAPS ARE AVAILABLE FOR THE PROJECT, THEY MUST BE USED IN PLACE OF THE MAP ON THE NEXT PAGE.**

1. Please include a vicinity map/plat book page to show directions to the site.
2. On the map fill in the scale (not more than 200' to the inch) and then draw and label all applicable **EXISTING** site features.
3. Please draw in all known **PROPOSED** earth disturbance activities (pit areas, access drives, buildings, stockpiles, basins, culverts, ditches, etc.), and the total acreage you are applying for:

TOTAL: _____ **acres**

4. Please draw a **heavy outline** around **all disturbed areas** for your project.
5. **EXISTING** ground elevations. Start at a flat area and label this $\pm 100'$ elevation. Go out in all directions and give approximate elevations (difference can be as little as one foot or as much as ten) up or down relative to the $\pm 100'$; include lake, river, road, and major land areas. Be sure to include all areas where disturbance will occur.
6. **PROPOSED** ground elevations. Using the already labeled existing elevations as a reference, use new numbers with a around them to represent the elevations that the ground will be when you are done with your project, even if it will be the same. On a separate piece of paper, please draw a cross-section for new roads and areas of significant cut or fill of land.
7. Check off the temporary erosion control measures (and draw/label on map) that you will use during the project to prevent any soil from getting into a lake, stream, storm drain inlet, ditch, wetland, or onto other property:

Berm Mulch Silt Fence Trench Straw Bales Sediment Trap Filter Fabric over Inlet
None
Other _____

***Draw and label on the map chosen items.**

8. Check off the permanent erosion control measures (and draw/label on map) that you will use to restore disturbed areas when the project is completed: **SEE GENERAL STANDARDS FOR RESTORATION REQUIREMENTS**
Sod Seed/Mulch Gravel Pavement Bark, Pine Needle, or Leaf Mulch Rock Rip-Rap
Other _____

***Draw and label on the map chosen items.**

9. Please fill in approximate dates for the project: **Submit additional page as needed**

Installation of temporary erosion controls: _____
Excavation/Construction: _____
Backfill and rough grade: _____
Final grade: _____
Full vegetation establishment or site stabilization w/permanent SESC Measures _____

Please check all applicable soil types that exist on the site and any fill that will be brought in:

Sand Gravel Clay Loam Topsoil

10. How will you maintain the permanent erosion control measures?

Will re-seed, re-sod, add rock, or add mulch as needed to fill in bare spots and prevent erosion _____
Other _____

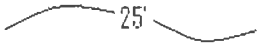
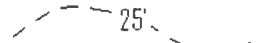

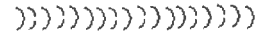

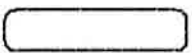
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NORTH ↑

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MAP LEGEND

-  25' Existing Contour
-  25' Proposed Contour
-  Disturbance Boundary
-  Berm
-  Silt Fence
-  Stockpile

SOUTH

SCALE: 1 inch=_____feet
(no more than 100 feet for Residential & Commercial)
(no more than 200 feet if Sand & Gravel Pit)



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**THIS PAGE MUST BE FILLED OUT AND RETURNED
IF APPLICANT IS NOT PROPERTY OWNER**

LETTER OF AUTHORIZATION

Name of Project _____

Project Address _____

CONTRACTOR:

Company and Individual Name (Please Print)

Signature

Date

Full Address

Home and Work Phone Numbers

Fax and/or Cell Phone, E-mail Address

As landowner or recorded easement holder of the project/property described above, I authorize the person indicated above to act on my behalf for the purposes of this application for a Soil Erosion and Sediment Control Permit pursuant to Part 91, Soil Erosion and Sedimentation Control, of the Natural Resources and Environmental Protection Act, Act No. 451 of the Public Acts of 1994, as amended. I understand that I am responsible for all earth changes related to this project and understand that Part 91, Act 451, as amended may be enforced against me in the event of any violation of that Act.

LANDOWNER or RECORDED EASEMENT HOLDER:

Name (Please Print)

Signature

Date



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GENERAL REQUIREMENTS AND STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL PLANS

Temporary Erosion/Sediment Control Measures:

The documents submitted for our review must show a reasonable representation of all of the control measures that are anticipated to be necessary during all stages of the earth change, i.e., from the time that the site is stripped of the existing vegetation until the site is permanently stabilized with a non-erodible surface (Note: A site that has been seeded and mulched is not considered to be permanently stabilized until the surfaces are well vegetated). The documents must include detailed drawings showing the proper use, materials, and installation of all temporary and permanent erosion/sediment control measures along with the requirement that the control measures be properly installed, maintained, relocated, modified, etc. as necessary to perform their intended function and be in compliance with the law.

Erosion and sediment controls are required for earth changes above the waterline to prevent sediment from entering the water. **PROPER EROSION CONTROL MEASURES ARE REQUIRED ALONG ALL WATERBODY EDGES FOR PROJECTS THAT ARE CLOSE TO A LAKE/STREAM. LARGER COMMERCIAL PROJECTS WILL BE REQUIRED TO INSTALL AND MAINTAIN BERMS/TRENCHES/ SEDIMENT TRAPS FOR EROSION CONTROL.**

The documents must include a project schedule and sequence with sufficient detail to show that the following requirements will be met: 1) earth changes shall be staged to keep the area of the disturbed earth surfaces as small as practicable for the shortest possible period of time; 2) all disturbed earth surfaces shall be expeditiously brought to the final grade and permanently stabilized; 3) the surface restoration work shall be a continuous operation and shall proceed concurrently with other items of work; 4) the work schedule and sequence to be followed is the one that will have the least potential for causing erosion/sediment damage.

Permanent Erosion and Sediment Control Measures:

All disturbed earth surfaces steeper than 3:1 and up to 2:1 (horz:vert) shall be restored with pegged sod, erosion control blanket, or other pre-approved equivalent. All disturbed earth surfaces steeper than 2:1 (horz:vert) shall be restored with rock rip-rap, erosion control blanket, or other pre-approved equivalent. No new slopes shall be constructed steeper than 1:1 unless specifically waived by the Soil Erosion Inspector. Earth surfaces on pre-existing slopes steeper than 2:1 are to be armored with riprap, erosion control blanket, or other pre-approved equivalent. These requirements apply to all ditch/cut/fill slopes.

All stream crossing slopes [both sides] must be stabilized with non-woven filter fabric and rip-rap [angular or field stone] from water line up to top of roadbase, regardless of slope.

In all areas of channelized flow, if the water velocity is between 4 fps and 6 fps for a 25-yr/24-hr storm, the channel shall be restored with pegged sod or other pre-approved equivalent. The sod shall extend a minimum of 1' above the channel bottom, measured vertically, or above the normal depth of flow for a 25-yr/24-hr storm. The sod seams shall be staggered in the direction parallel with the flow of water. In V-bottom ditches the sod seams shall not be installed in the bottom of the vee. The sod shall be entrenched such that the top of the root mat is to the line and grade of the adjacent ground.

In all areas of channelized flow, if the water velocity is greater than 6 fps for a 25-yr/24-hr storm, the channel shall be armored with riprap, pavement, or other pre-approved equivalent materials. The armor shall extend a minimum of 1 foot above the channel bottom, measured vertically, or above the normal depth of flow for a 25-yr/24-hr storm, whichever is the greatest.

Regardless of the velocity, all areas of channelized flow having a continuous baseflow shall be permanently stabilized with riprap, pavement, or other pre-approved method (bioengineering is encouraged). The riprap, pavement, etc. shall extend above the channel bottom to the normal depth of the baseflow. The surfaces within the channel above the normal depth of baseflow must be restored according to the velocity and normal depth requirements for a 25-yr/24-hr storm as discussed previously.

All riprap shall be sized such that the smallest stones will not be displaced by the water velocities resulting from a 25-yr/24-hr storm. The depth of the riprap shall be 1.5 times the smallest stone dimension or 8 inches, whichever is the greatest. All riprap shall be underlain by geotextile fabric. All riprap shall be entrenched such that the top of the riprap is to the line and grade of the adjacent ground.

Where subsurface water movement or excavations below the water table may cause seeps, soil erosion, soil slippage, sloughing, caving, or other earth movement, adequate subsurface drainage facilities and permanent surface stabilization measures shall be installed as necessary to prevent slope instability, soil erosion, and sedimentation.

The same end result of structural stability is required for earth impoundments. The suitability of the in-place foundation soils must be analyzed; the embankment cross-section, soils, compaction, outlet structures, etc. must be engineered to prevent slope instability, piping, seepage, settlement, etc. This also applies to existing earth fills that will be subjected to an increase in the backwater elevation due to an alteration of the drainage structures or due to stormwater diversions. Anti-seepage collars must be installed on all impoundment pipe outlets. On the interior surfaces of impoundments, the permanent stabilization method, materials, plant species, etc. must be carefully chosen to ensure that the method is appropriate for the range of water level fluctuations, and/or inundation duration and frequency of occurrence.

The existing surface cover types must also be analyzed and modified as necessary in areas that are not being disturbed but will be experiencing a change in water velocities, the range of water level fluctuations, and/or inundation duration and frequency of occurrence due to stormwater diversions and/or alterations of drainage control structures. The State law requires that all drainage conveyances be designed to prevent erosive velocities, therefore, in the locations where the existing ground surface cover will be subjected to erosive water velocities as a result of this project, the use of energy dissipators and velocity control structures will be required unless all affected surfaces are protected as necessary to prevent long term erosion problems.

The plans must show detail drawings of the configuration and dimensions of all riprap culvert aprons, energy dissipators, spillways, and downdrains. All riprap downdrains and impoundment spillways must be engineered using the USDA "Rock Chute" design method or other appropriate "engineered" method.

Performance Guarantees:

Performance guarantees are required at the discretion of the County Enforcement Agency for most earth changes that exceed 1000 cubic yards (27,000 cubic feet) of earthwork. If required the project must be bonded for \$1000 per acre of work. The performance guarantee may be in the form of a surety bond, cash bond, or irrevocable letter of credit. If the project owner is a government agency, in lieu of a bond, an agreement may be entered into between the project owner and the Soil Erosion Inspector whereby the owner agrees to act on the bond on our behalf in the event that the contractor defaults in performing the permit requirements. However, for this option to be considered, the contractor must be bonded to the owner for 100% of the permit requirements, i.e., the contract documents must incorporate all of the work as approved and required by this office.

Maintenance:

The State law requires that the soil erosion and sediment control plan include "a program proposal for the continued maintenance of all permanent soil erosion control facilities which remain after project completion, including the designation of the person responsible for the maintenance..."