FOR GUIDANCE USE ONLY
Riprap Shore Protection

REGULATORY REFERENCE	FEE
Part 301. Inland Lakes and Streams Minor Permit Category 37, and Part 325. Great Lakes Submerged Lands Minor Project Category 37	$100

GENERAL GUIDANCE

You must answer *True* to *all* of the following statements for application to qualify as a minor permit, and to use this guide:

- The shoreline has visible signs of erosion, and the method of protection is the least disruptive alternative.
- Riprap is placed on a 1-on-2 slope (1 foot vertical to 2 feet horizontal), or gentler slope.
- The shore protection is no longer than 300 feet, and does not extend more than 5 feet from the shoreline.
- The shore protection and fill will not be placed in a wetland, or alter water flow into or out of any wetland.
- The shore protection is not located in a Critical Dune Area.

In Inland Lakes:
- Natural field stone or rock is used that is less than 24 inches in diameter, and is not broken concrete.

In Streams or Rivers:
- Natural field stone or rock is used that is properly sized for the stream velocity, or is broken concrete in a designated county drain.

Note: If constructed along the shoreline of one of the Great Lakes, a conveyance may be required.

APPLICATION REQUIREMENTS

Note: On-line users can go to the appropriate section or drawing by pressing the indicated button

The following Sections of the Permit Application must be completed:

Sections 1-9 | Section 10A | Section 10C | Section 10D

If you answer Yes to this question, complete the section of the application indicated.

Will you be excavating the shoreline, or watercourse? Section 10B

Will the project be located in a stream? Section 13

Is the project located in a marina? Section 19

Include the following drawing:

Site Location Map

Include the following site plan and cross-section drawings:

Riprap Site Plan | Riprap Cross-Section

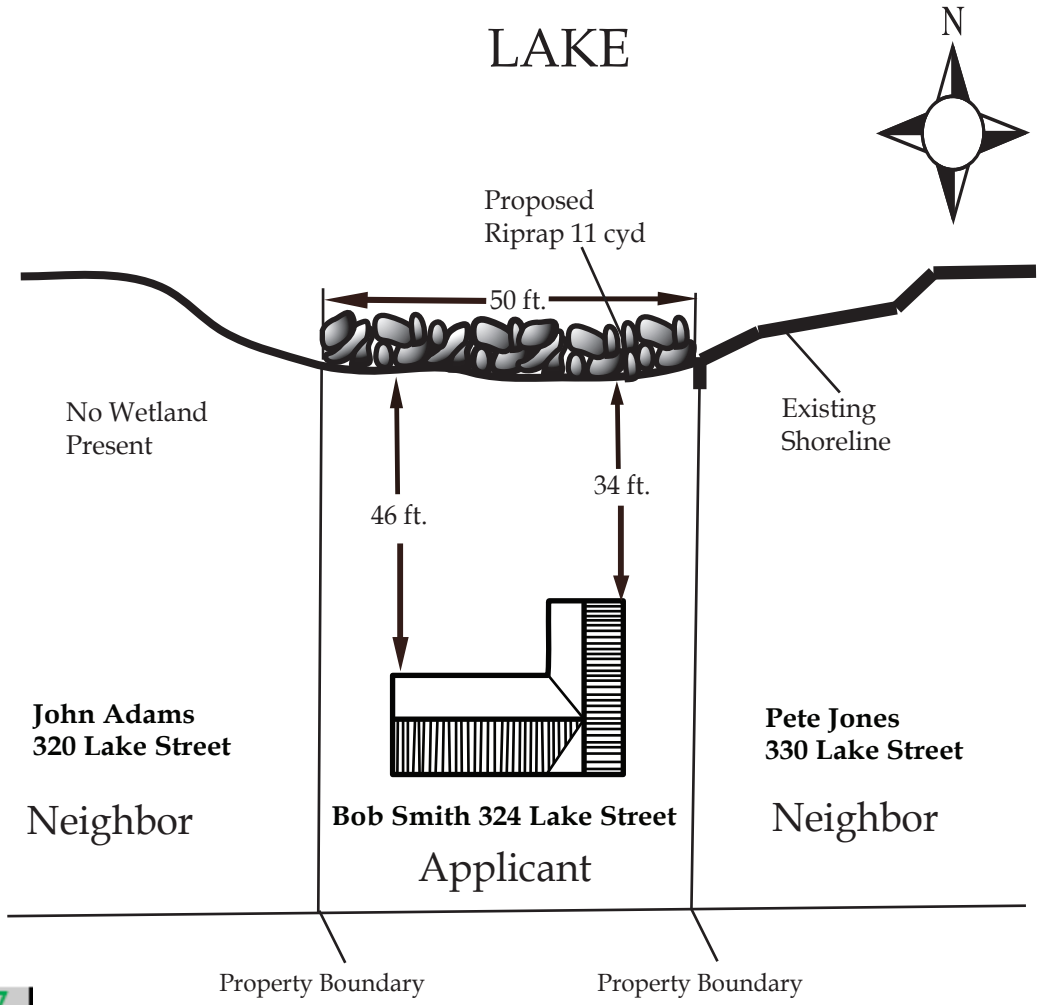
Please include the following photos:

Take photos looking along the shoreline at 50 ft. intervals:

Take photos of the ***lake*** adjacent to the shoreline:

Take photos of the ***land*** adjacent to the shoreline:

Sample Site Plan
Riprap



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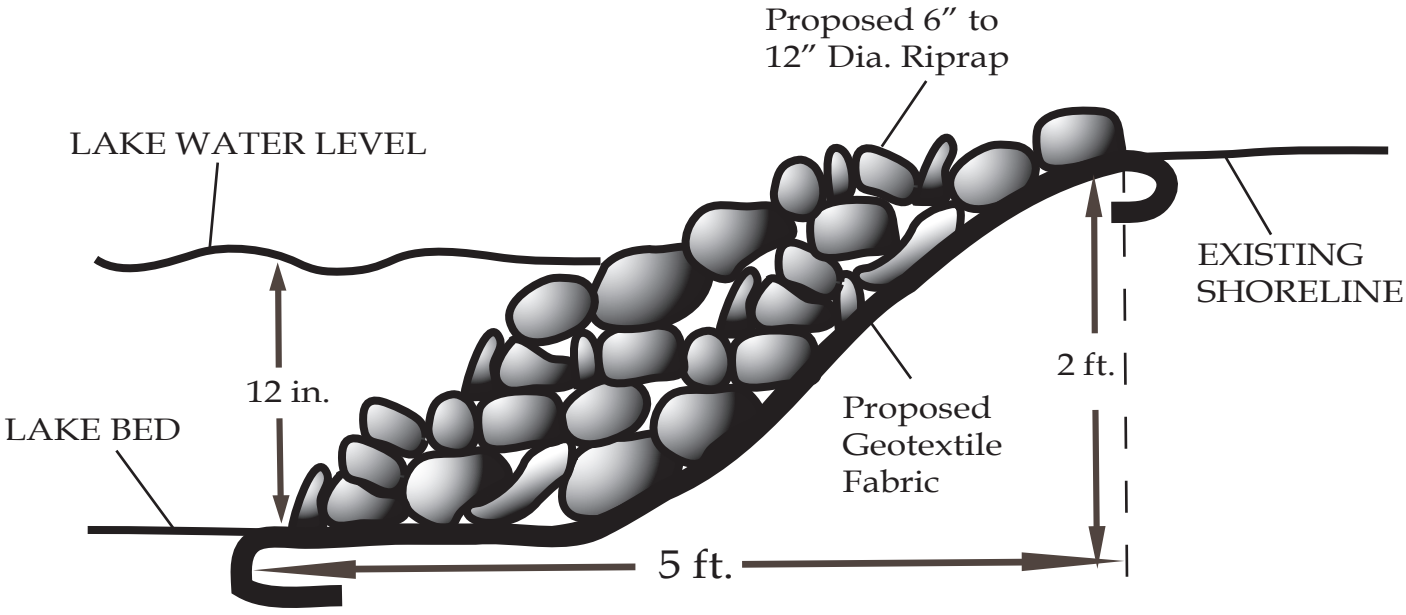
Sample Cross-Section
Riprap



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U.S. Army Corps of Engineers
Detroit District Office
Phone: 313-226-2218, Fax: 313-226-6763
Web site: www.lre.usace.army.mil

Michigan Department of Environmental Quality
Water Resources Division
See Web site link "Who to Contact"
Web site: www.mi.gov/jointpermit

Joint Permit Application

For work in Inland Lakes and Streams, Great Lakes, Wetlands, Floodplains, Dams, High Risk Erosion Areas and Critical Dune Areas

www.mi.gov/jointpermit

What is the purpose of the Joint Permit Application?	This Joint Permit Application was developed to facilitate the state and federal permit application process administered by the Michigan Department of Environmental Quality (DEQ) and the U.S. Army Corps of Engineers (USACE). The Joint Permit Application is a multi-purpose application used to describe and quantify proposed activities regulated by the DEQ and/or the USACE. This application is for those activities regulated by the following Parts of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended by the State of Michigan. • Part 301, Inland Lakes and Streams • Part 325, Great Lakes Submerged Lands • Part 303, Wetlands Protection • Floodplain Regulatory Authority found in Part 31, Water Resources Protection • Part 315, Dam Safety • Part 323, Shorelands Protection and Management (High Risk Erosion Areas) • Part 353, Sand Dunes Protection and Management (Critical Dune Areas) The regulated activities are summarized in Appendix D. The statutes and rules are available at www.mi.gov/jointpermit. This application is also for those activities regulated by the USACE within the waters of the United States under Section 10, Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 404, Clean Water Act of 1977 (33 U.S.C. 1344). Pre-Application Meeting: This is an optional service available for activities proposed in inland lakes and streams (Part 301), wetlands (Part 303) and critical dune areas (Part 353). A pre-application meeting can answer many questions regarding whether or not a permit is required and the review process. The application form and fee schedule are available at www.mi.gov/jointpermit.
How do I complete the Joint Permit Application? *An accurate and complete application package is required for processing; inaccurate or missing information will delay processing.*	**There are three parts to a complete Joint Permit Application package:** 1. Application Form 2. Maps and Drawings 3. Fee Follow the checklists on the following page for each part of the application package. **When you have questions or need assistance in completing the application package refer to the following information on our Web site www.mi.gov/jointpermit or you may contact the appropriate district office through the website link "Who to Contact".** • Joint Permit Application Training Manual • EZ Guides for small projects • Acronyms in Appendix A • Sample drawings in Appendix B • Minor Project and General Permit Categories in Appendix C • Fee schedule in Appendix C • State and Federal Authority and Penalties in Appendix D • Glossary in Appendix E

Application Checklist

The following website will provide township, range, section, latitude and longitude information:

www.mcgi.state.mi.us /wetlands/

www.geocoder.us

In each section check all boxes that apply to your project.

Show and label property lines on the site plan.

Label existing and proposed contours, dimensions, excavation and/or fill on the site plans and cross sections.

Provide tables for multiple impact areas.

1. Application Form

- ❑ Complete Sections 1 through 9 of the application form.
- ❑ An authorization letter from the property owner if someone other than the property owner is signing the application.
- ❑ Complete those Sections 10 through 20 that apply to your project. Follow the instructions at the beginning of each section. For additional information, the instructions for each sample drawing in Appendix B indicate the application sections you will most likely need to complete. Complete the application form as much as possible before adding attachments. Label each attachment with the applicant's name.
- ❑ Stake or flag the area for site inspection including the property corners, proposed road or driveway centerlines, and areas of proposed impacts. The site must be flagged when the application is submitted.

2. Maps and Drawings

- ❑ All maps and drawings must be black and white, legible, reproducible, and sized to 8.5" x 11". Aerial photographs do not substitute for site plans. If larger drawings or blueprints are required to show adequate detail for review, you may also submit one full size copy.
- ❑ Vicinity Map: A map to the proposed project location that includes ALL streets, roads, intersections, highways, or cross-roads to the project. Do not assume review staff knows your project location.
- ❑ Project Site Plan: Overhead drawings to scale or with dimensions, length and width, of the proposed project are required. Show and label property lines on the site plan.
- ❑ Cross-section drawings are required. Provide the cross-sections and profile views to scale or with dimensions, length, width, and height.
- ❑ Elevation data must include a description of the reference point or benchmark used and its corresponding elevation. For projects on the Great Lakes or Section 10 Waters, elevations must be provided in IGLD 85. For observed Great Lake water elevations in IGLD, visit the USACE website under "water levels". If elevations are from still water, provide the observation date and water elevation. On inland sites, elevations can use NGVD 29, NAVD 88, a local datum or an assumed bench mark.
- ❑ Provide descriptive photographs of the proposed work site showing vegetation if wetlands are involved or the shoreline for shore protection projects. All photographs must be labeled with your name and the date of the photograph, indicate what they show, and be referenced to the site plan. Proposed activities or structure(s) may be indicated directly on the photographs using indelible markers or ink pens. Provide aerial photographs 1:400 or larger for major projects.

3. Fee

- ❑ Payment to the **State of Michigan**. Fees typically range from $50.00 to $4,000.00 depending on the type of project. See Appendix C of the application at the Web site link www.mi.gov/jointpermit to determine the appropriate fee for your project and permit application payment options to submit payment by credit card or electronic fund transfer payment. **Checks may be submitted with the application to our district offices.**
- ❑ Applications should be sent directly to the district offices. Please refer to www.mi.gov/jointpermit "Who to Contact" for address and/or phone number.
- ❑ Applications for dams regulated under Part 315 or from public agencies eligible to receive federal and/or state transportation funding for a project involving public roadways, non-motorized paths, airports, or related facilities should be mailed to: DEQ, WRD, P.O. BOX 30458, Lansing, MI 48909-7958.

APPENDICES

Application status can be viewed on the Water Resources Division (WRD) Web site at www.deq.state.mi.us/CIWPIS. During the application period, if any information is missing from the application or if any clarification is needed regarding materials provided, the application is incomplete and staff will request the information from the applicant/agent by letter, email, fax or phone call. If a complete response is not provided within 30 days, the application will be closed. Some regulatory parts allow extensions if requested within the 30 day time frame. Once the WRD has received the information necessary for review of the project, including a thoroughly completed application, consistent drawings that have adequate detail for review and the full application fee, the file will be reviewed for final processing. A mailed postcard or a public notice will provide the file number and the telephone number of the office where the application is being processed. The review time to determine if an application is complete for processing ranges from 15 to 30 days. Technical processing times, after the application is administratively complete, may range from 60 to 90 days. Processing times will be longer if a public hearing is held. Staff from your local District/Field Office may visit the project site and may request additional information prior to a decision on the application. Application fees are not refundable or transferable.

If a federal permit will also be required, a copy of the permit application will be sent to the Detroit District Office, USACE, for processing at the federal level. Additional copies of this application form can be downloaded from the WRD Web site at www.mi.gov/jointpermit or can be photocopied from the original. If you have any questions about the permitting process or if you need to modify your application, you can contact the WRD by phone or fax at the addresses on the previous page, or email at DEQ-WRD-jointpermit@michigan.gov.

AGENCY USE	Previous USACE File Number	Date Received	DEQ File Number
	USACE File Number		Fee received $

Validate that all parts of this checklist are submitted with the application package. Fill out application and additional pages as needed.

- ☐ All items in Sections 1 through 9 are completed.
- ☐ Project-specific Sections 10 through 20 are completed.
- ☐ Dimensions, volumes, and calculations are provided for all impact areas.
- ☐ All information contained in the headings for the appropriate Sections (1-20) are addressed, and identified attachments (➡) are included.
- ☐ Map, site plan(s), cross sections; one set must be black and white on 8 ½ by 11 inch paper; photographs.
- ☐ Application fee is attached.

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1 Project Location Information

For Latitude, Longitude, and TRS info anywhere in Michigan see www.mcgi.state.mi.us/wetlands/

Project Address (road, if no street address)	Zip Code	Municipality Township/Village/City)	County
Property Tax Identification Number(s)	Latitude __ __ . __ __ __ __ __ N		Township/Range/Section (TRS) T__ __ N or S; R__ __ E or W; Sec___
Subdivision/Plat and Lot Number	Longitude - __ __ . __ __ __ __ __ W		OR Private Claim #

2 Applicant and Agent Information

Owner/Applicant (individual or corporate name)	Agent/Contractor (firm name and contact person)
Mailing Address	Mailing Address
City State Zip Code	City State Zip Code
Contact Phone Number Fax	Contact Phone Number Fax
Email	E-mail

☐ No ☐ Yes Is the applicant the sole owner of all property on which this project is to be constructed and all property involved or impacted by this project? ➡ If no, attach letter(s) of authorization from all property owners including the owner of the disposal site.

Property Owner's Name (If different from applicant)	Mailing Address
Contact Phone Number	City State Zip Code

3 Project Description

Project Name	Pre-Application File Number __ __ - __ __ - __ __ __ __ -P
Name of Water body	Date project staked/flagged

The proposed project is on, within, or involves (check all that apply)

- ☐ an inland lake (5 acres or more)
- ☐ a pond (less than 5 acres)
- ☐ a stream, river, ditch or drain
- ☐ a legally established County Drain
  Date Drain was established _____
- ☐ a channel/canal
- ☐ 500 feet of an existing water body
- ☐ a Great Lake or Section 10 Waters
- ☐ a wetland
- ☐ a 100-year floodplain
- ☐ a dam
- ☐ a designated high risk erosion area
- ☐ a designated critical dune area
- ☐ a designated environmental area

Project Use

- ☐ private
- ☐ commercial
- ☐ public/government
- ☐ project is receiving federal/state transportation funds
- ☐ wetland restoration
- ☐ other_____

Indicate the type of permit being applied for: ☐ General Permit ☐ Minor Project ☐ Individual (All other projects.) ➡ See Appendix C.

Written Summary of All Proposed Activities

_____

_____

_

Construction Sequence and Methods

_____

_____

_____

4 Project Purpose, Use and Alternatives *Attach additional sheets as necessary.*

Describe the purpose of the project and its intended use; include any new development or expansion of an existing land use.

Describe the alternatives considered to avoid or minimize resource impacts. Include factors such as, but to limited to, alternative locations, project layout and design, and construction technologies. For utility crossings include alternative routes and construction methods.

5 Locating Your Project Site *Attach a legible black and white map with a North arrow.*

Names of roads of closest intersection

Directions from main intersection to the project site, with distances from the best and nearest visible landmark and water body

Description of buildings on the site *(color; 1 or 2 story, other)*	Description of adjacent landmarks or buildings *(address; color; etc)*

How can your site be identified if there is no visible address?

6 Easements and Other Permits

☐ No ☐ Yes Is there a conservation easement or other easement, deed restriction, lease, or other encumbrance upon the property?

➡ If yes, attach a copy. Provide copies of court orders and legal lake levels if applicable.

List all other federal, interstate, state, or local agency authorizations including required assurances for Critical Dune Area projects.

Agency	Type of Approval	Number	Date Applied	Date approved /denied	Reason for denial

7 Compliance

If a permit is issued, when will the activity begin? (M/D/Y)	Proposed completion date (M/D/Y)

☐ No ☐ Yes Has any construction activity commenced or been completed in a regulated area?

➡ If Yes, identify the portion(s) underway or completed on drawings or attach project specifications and give completion date(s).

☐ No ☐ Yes Were the regulated activities conducted under a DEQ and/or USACE permit?

➡ If Yes, list the permit numbers_____

☐ No ☐ Yes Are you aware of any unresolved violations of environmental law or litigation involving the property?

➡ If Yes, attach explanation.

8 Adjacent Property Owners *Provide current mailing addresses. Attach additional sheets/labels for long lists.*

☐ Established Lake Board ☐ Lake Association	Contact Person	Mailing Address	City	State and Zip Code

List all adjacents. If you own the adjacent lot, provide the requested information for the first adjacent parcel that is not owned by you.

Property Owner's Name	Mailing Address	City	State and Zip Code

9 Applicant's Certification *Read carefully before signing.*

I am applying for a permit(s) to authorize the activities described herein. I certify that I am familiar with the information contained in this application; that it is true and accurate; and, to the best of my knowledge, that it is in compliance with the State Coastal Zone Management Program. I understand that there are penalties for submitting false information and that any permit issued pursuant to this application may be revoked if information on this application is untrue. I certify that I have the authority to undertake the activities proposed in this application. By signing this application, I agree to allow representatives of the DEQ, USACE, and/or their agents or contractors to enter upon said property in order to inspect the proposed activity site before and during construction and after the completion of the project. I understand that I must obtain all other necessary local, county, state, or federal permits and that the granting of other permits by local, county, state, or federal agencies does not release me from the requirements of obtaining the permit requested herein before commencing the activity. I understand that the payment of the application fee does not guarantee the issuance of a permit.

☐ Property Owner ☐ Agent/Contractor ☐ Corp. or Public Agency / Title	Printed Name	Signature	Date

10 Projects Impacting Inland Lakes, Streams, Great Lakes, Wetlands or Floodplains

- Complete only those sections A through M applicable to your project.
- If your project impacts wetlands also complete Section 12. If your project impacts regulated floodplains also complete Section 13.
- To calculate volume in cubic yards (cu yd), multiply the average length in feet (ft) times the average width (ft) times the average depth (ft) and divide by 27. Example: (25 ft long x 10 ft wide x 2 feet deep) / 27 = 18.5 cubic yards
- Some projects on the Great Lakes require an application for conveyance prior to Joint Permit Application completeness.

➡Provide a black and white overall site plan, with cross-section and profile drawings. Show existing lakes, streams, wetlands, and other water features; existing structures; and the location of all proposed structures, land change activities and soil erosion and sedimentation control measures. Review Appendix B and EZ Guides for aid in providing complete site-specific drawings.

➡Provide tables for multiple impact areas or multiple activities such as multiple fill areas or multiple culverts. Include your calculations.

Water Level Elevation

On inland waters ☐ NGVD 29 ☐ NAVD 88 ☐ other ____ Observed water elevation (ft) _____date of observation (M/D/Y) _____

On a Great Lake ☐ IGLD 85 ☐ surveyed ☐ converted from observed still water elevation.

☐ A. PROJECTS REQUIRING FILL (See All Sample Drawings)

➡Attach a site plan and cross-section views to scale showing maximum and average fill dimensions with calculations.
➡ For multiple impact areas on a site provide a table with location, dimensions and volumes for each fill area.

Purpose ☐ bioengineered shore protection ☐ boat ramp ☐ boat well ☐ bridge or culvert ☐ crib dock ☐ riprap ☐ seawall ☐ swim area ☐ other_____

Dimensions of fill (ft) Length Width Maximum Depth	Total volume (cubic yards)	Volume below OHWM (cubic yards)
Maximum water depth in fill area (ft)	Area filled (sq ft)	Will filter fabric be used under proposed fill? ☐ No ☐ Yes (If Yes, type) _____

Fill will extend _____feet into the water from the shoreline and upland _____feet out of the water.

Type of clean fill ☐ peastone ___% ☐ sand ____% ☐ gravel ____% ☐ other _____

Source of clean fill ☐ commercial ☐ on-site ➡ If on-site, show location on site plan. ☐ other ➡ If other, attach description of location.

☐ B. PROJECTS REQUIRING DREDGING OR EXCAVATION (See Sample Drawings)

- Refer to www.mi.gov/jointpermit for spoils disposal and authorization requirements.

➡Attach a site plan and cross-section views to scale showing maximum and average dredge or excavation dimensions with calculations.
➡For multiple impact areas on a site provide a table with location, dimensions and volumes for each dredge/excavation area.

Purpose ☐ boat ramp ☐ boat well ☐ bridge or culvert ☐ maintenance dredge ☐ navigation ☐ pond/basin ☐ other_____

Dimensions (ft) Length Width Maximum Depth		Total volume (cu yds)	Volume below OHWM (cu yds)
Has this same area been previously dredged?	☐ No ☐ Yes	If Yes, provide date and permit number:	
Will the previously dredged area be enlarged?	☐ No ☐ Yes	If Yes, when and how much? _____	
Is long-term maintenance dredging planned?	☐ No ☐ Yes	If Yes, how often?_____	

Dredge or Excavation Method ☐ Hydraulic ☐ Mechanical ☐ other _____

Spoils Disposal

Dredged or excavated spoils will be placed ☐ on-site ☐ landfill ☐ USACE confined disposal facility ☐ other upland off-site
For disposal, provide a ➡Detailed spoils disposal area location map and site plan with property lines.
➡Letter of authorization from property owner of spoils disposal site, if disposed off-site.

For volumes less than 5,000 cu yards, has proposed dredge material been tested for contaminants within the past 10 years?
☐ No ☐ Yes ➡If Yes, provide test results with a map of sampling locations.

☐ C. PROJECTS REQUIRING RIPRAP (See Sample Drawings 2, 3, 8, 12, 14, 22, and 23)

Riprap water ward of the ordinary high water mark: dimensions (ft) length width depth	Volume(cu yd)
Riprap landward of the ordinary high water mark: dimensions (ft) length width depth	Volume(cu yd)

Type and size of riprap (inches)	Will filter fabric or pea stone be used under proposed riprap?
☐ field stone_____ ☐ angular rock_____ ☐ other _____	☐ No ☐ Yes, Type _____

☐ **D. SHORE PROTECTION PROJECTS** (See EZ Guides and Sample Drawings 2, 3, and 17. Complete Sections 10A, B, and/or C.)
➡ For bioengineering projects include the list of native plants/seeds, if available.

Type and length (ft) ☐ bioengineering (ft) ___ ☐ revetment (ft) _____ ☐ riprap (ft) _____ ☐ seawall/bulkhead (ft) _____

Structure is ☐ new ☐ repair ☐ replacement of an existing structure | Will the existing structure be removed? ☐ No ☐ Yes

Proposed Toe Stone (linear feet) _____ | Distance of project from adjacent property lines (ft)

Distance of project from an obvious fixed structure (example - 50 ft from SW corner of house)

For bioengineering projects indicate the structure type ☐ brush bundles ☐ coir log ☐ live stakes ☐ tree revetment ☐ other _____

☐ **E. DOCK - PIER – MOORING PILINGS** (See Sample Drawing 10)
➡ Attach a copy of the property legal description, mortgage survey, or a property boundary survey report.

Dock Type ☐ open pile ☐ filled ☐ crib ☐ floating ☐ cantilevered ☐ spring piles ☐ piling clusters ☐ other_____

Is the structure within the applicant's riparian area interest area? ☐ No ☐ Yes ➡ Show parcel property lines on the site plan.

Proposed structure dimensions (ft) length width | Use ☐ private ☐ public ☐ commercial

Dimensions of nearest adjacent structures (ft) length width | Distance of dock from adjacent property lines (ft)

☐ **F. BOAT WELL** (See EZ Guide. Complete Sections 10A and 10B)

Dimensions (ft) length width depth | Number of boats

Type of sidewall stabilization ☐ concrete ☐ riprap ☐ steel ☐ vinyl ☐ wood ☐ other _____

Volume of backfill behind sidewall stabilization (cu yd) | Distance of boat well from adjacent property lines (ft)

☐ **G. BOAT RAMP** (See EZ Guide. Complete sections 10A, 10B, and 10C for mattress and pavement fill, dredge, and riprap)

Type ☐ new ☐ existing ☐ maintenance/improvement | Use ☐ private ☐ public ☐ commercial

Existing overall boat ramp dimensions (ft)
length width depth | Type of construction material
☐ concrete ☐ wood ☐ stone ☐ other _____

Proposed overall ramp dimensions (ft)
length width depth | Proposed ramp dimensions (ft) below ordinary high water mark
length width depth

Number of proposed skid piers | Proposed skid pier dimensions (ft)
length width | Distance of ramp from adjacent property lines (ft)

☐ **H. BOAT HOIST – ROOFS** (See EZ Guide)

Type ☐ cradle ☐ side lifter ☐ other _____ | Located on ☐ seawall ☐ dock ☐ bottomlands

Hoist dimensions, including catwalks (ft) Length Width

Area occupied, including cat walks (sq ft) | Distance of hoist from adjacent property lines (ft)

Permanent Roof ☐ No ☐ Yes
➡ If Yes, how is the roof supported?_____ | Maximum Roof Dimensions (ft): length width height

☐ **I. BOARDWALKS and DECKS in WETLANDS or FLOODPLAINS** (See Sample Drawings 5 and 6. Complete Sections 12 and/or 13)
➡ Provide a table for multiple boardwalks and decks proposed in one project; include locations and dimensions.

Wetlands		Floodplains	
Boardwalk ☐ on pilings ☐ on fill Dimensions (ft) Length Width	Deck ☐ on pilings ☐ on fill Dimensions (ft) Length Width	Boardwalk ☐ on pilings ☐ on fill Dimensions (ft) Length Width	Deck ☐ on pilings ☐ on fill Dimensions (ft) Length Width

☐ **J. INTAKE PIPES** (See Sample Drawing 16) or **OUTLET PIPES** (See Sample Drawing 22)

If outlet pipe, discharge is to ☐ inland lake ☐ stream, drain or river ☐ overland flow ☐ Great Lake ☐ wetland ☐ other

Number of pipes | Pipe diameters and invert elevations | Does pipe discharge below the OHWM? ☐ No ☐ Yes
Is the water treated before discharge? ☐ No ☐ Yes

Type ☐ headwall ☐ end section ☐ other _____ | Dimensions of headwall OR end section (ft)
Length Width Height

☐ **K. MOORING and NAVIGATION BUOYS** (See EZ Guide for Sample Drawing)

➡Provide a site plan showing the distances between each buoy and from the shore to each buoy, and depth (ft) of water at each location.
➡Provide cross-section drawing(s) showing anchoring system(s) and dimensions.

Purpose of buoy	☐ mooring	☐ navigation	☐ scientific structures	☐ swimming ☐ other _____

Number of buoys	Dimensions of buoys (ft) width height swing radius chain length	Boat Lengths	Type of anchor system

Buoy Location: Latitude __ __ . __ __ __ __ __ N Longitude --__ __ . __ __ __ __ __ W. ➡ Provide a table for multiple buoys.

Do you own the property along the shoreline?	☐ No ☐ Yes	➡ If No, attach an authorization letter from the property owner(s).
Do you own the bottomlands?	☐ No ☐ Yes	➡ If No, attach an authorization letter from the property owner(s).

☐ **L. FENCES**

➡Provide an overall site plan showing the proposed fencing through streams, wetlands or floodplains.
➡Provide a drawing of fence profile showing the design, dimension, post spacing, mesh, and distance from ground to bottom of fence.

Purpose of fence	☐ Airport	☐ Cervidae	☐ Livestock	☐ Residential	☐ Security	☐ Other _____

Total length (ft) of fence through streams _____ wetlands_____ floodplains _____	Fence height (ft)	Fence type and material

☐ **M. OTHER** - e.g., structure removal, maintenance or repair, aerator, dry fire hydrant, gold prospecting, habitat structures, scientific measuring devices, soil borings, or survey activities.

Structure description, dimensions and volumes. Complete Sections 10A-C as applicable.
_____
_____
_____

11 Expansion **of an Existing or Construction of a New Lake or Pond** (See Sample Drawings 4 and 15)

➡Complete Section 10J for outlets and Section 17 for water control structures.
➡Provide elevations, cross-sections and profiles of outlets, dams, dikes, water control structures and emergency spillways to nearest water bodies.

Which best describes your proposed water body use (check all that apply)
☐ mining ☐ recreation ☐ storm water retention basin ☐ wastewater basin ☐ wildlife ☐ other _____

Water source for lake/pond
☐ groundwater ☐ natural springs ☐ Inland Lake or Stream ☐ storm water runoff ☐ pump ☐ sewage ☐ other_____

Location of the lake/basin/pond ☐ floodplain ☐ wetland ☐ stream (inline) ☐ upland

Maximum dimensions (ft) length width depth	Maximum Area: ☐ acres ☐ sq ft _____

Has the there been a hydrologic study performed on the site?	☐ No ☐ Yes	➡ If Yes, provide a copy.
Has the DEQ conducted a wetland assessment for this parcel?	☐ No ☐ Yes	➡ If Yes, provide a copy or WIP number:
Has a professional wetland delineation been conducted for this parcel?	☐ No ☐ Yes	➡ If Yes, provide a copy with data sheets.

Spoils Disposal

Dredged or excavated spoils will be placed ☐ on-site ☐ landfill ☐ USACE confined disposal facility ☐ other upland off-site
For disposal, provide a ➡Detailed spoils disposal area location map and site plan with property lines.
➡Letter of authorization from property owner of spoils disposal site, if disposed off-site.

12 Activities that may Impact Wetlands (See Sample Drawings 8 & 9). Complete other Sections as applicable.

- Locate your site and wetland information with the DEQ Wetlands Map Viewer at www.mcgi.state.mi.us/wetlands/
- For information on the DEQ's Wetland Identification Program (WIP) visit www.mi.gov/wetlands.
  - ➡ Provide a detailed site plan with labeled property lines, upland and wetland areas, and dimensions and volumes of wetland impacts.
  - ➡ Complete the wetland dredge and wetland fill dimension information below for each impacted wetland area.
  - ➡ Attach tables for multiple impact areas or activities.
  - ➡ Attach at least one cross-section for each wetland dredge and/or fill area; show wetland and upland boundaries on the cross-section.

Has the DEQ conducted a wetland assessment for this parcel?	☐ No ☐ Yes	➡ If Yes, provide a copy or WIP number: _____
Has a professional wetland delineation been conducted for this parcel?	☐ No ☐ Yes	➡ If Yes, provide a copy with data sheets
Is there a recorded DEQ easement on the property?	☐ No ☐ Yes	➡ If Yes, provide the easement number _____
Did the applicant purchase the property before October 1, 1980?	☐ No ☐ Yes	➡ If Yes, provide documentation.
Is any grading or mechanized land clearing proposed?	☐ No ☐ Yes	➡ If Yes, label the locations on the site plan.
Has any of the proposed grading or mechanized land clearing been completed?	☐ No ☐ Yes	➡ If Yes, label the locations on the site plan

Proposed Activity

☐ boardwalk or deck (Section 10I)	☐ bridges and culverts (Section 14)	☐ designated environmental area
☐ dewatering	☐ draining surface water	☐ driveway / road
☐ fences (Section 10L)	☐ fill or dredge	☐ restoration
☐ septic system	☐ stormwater discharge (Section 10J)	☐ other _____

FILL	Dimensions maximum length (ft) maximum width (ft)	Area ☐ acres ☐ sq ft	Average depth (ft)	Volume (cu yd)
DREDGE	Dimensions maximum length (ft) maximum width (ft)	Area ☐ acres ☐ sq ft	Average depth (ft)	Volume (cu yd)

Spoils Disposal

Dredged or excavated spoils will be placed ☐ on-site ☐ landfill ☐ USACE confined disposal facility ☐ other upland off-site

For disposal, provide a ➡ Detailed spoils disposal area location map and site plan with property lines.

➡ Letter of authorization from property owner of spoils disposal site, if disposed off-site.

Septic System

The proposed project will be serviced by:
☐ public sewer ☐ private septic system
➡ Show system on plans.

If a private septic system is proposed, has an application for a permit been made to the County Health Department? ☐ No ☐ Yes
If Yes, has a permit been issued? ☐ No ☐ Yes ➡ Provide a copy of the permit.

Describe the wetland impacts, the proposed use or development, and the alternatives considered:

_____
_____
_____

Does the project impact more than 1/3 acre of wetland? ☐ No ☐ Yes
➡ If Yes, submit a Mitigation Plan with the type and amount of mitigation proposed. For more information go to www.mi.gov/wetlands

Describe how impacts to waters of the United States will be avoided and minimized:

_____
_____
_____
_____

Describe how the impact to waters of the United States will be compensated. OR Explain why compensatory mitigation should not be required for the proposed impacts.

_____
_____
_____
_____
_____

13 FLOODPLAIN ACTIVITIES (See Sample Drawing 5 and others. Complete other applicable sections.)

- For more information go to www.mi.gov/floodplainmanagement. This site also lists the projects and requirements for an expedited floodplain review under "Expedited Review Information for Minor Floodplain Projects."
- Examples of projects proposed within the non-floodway portions of the 100-year-floodplain which may qualify for an expedited review: Open pile decks and boardwalks; residences, commercial/industrial facilities, garages and accessory structures; parking lots; pavilions, gazebos, large community playground structures; residential swimming pools
- Examples of projects proposed within the floodway portions of the floodplain which may qualify for an expedited review: Open pile decks and boardwalks, (non-enclosed) that are anchored to prevent floatation and that do not extend over the bed and bank of a watercourse; parking lots constructed at grade or resurfacing that is no more than 4 inches above the existing grade; dry hydrants that do not require fill placement; scientific structure such as staff gauges, water monitoring devices, water quality testing devices, and core sampling devices which meet specific design criteria and fish structures that meet specific design criteria.
- For expedited review include:
  - ➡ Photographs of the work site labeled to identify what is being shown and with the direction of the photo clearly indicated. Include photographs of any river or stream adjacent to the project.
  - ➡ A letter or statement from the local unit of government acknowledging your proposed application. See the website for sample wording.
- A hydraulic analysis or hydrologic analysis may be required to fully assess floodplain impacts.
- The state building code requires an Elevation Certificate for any building construction or addition in a floodplain. A sample form can be found at www.fema.gov/nfip/elvinst.shtm.
  - ➡Attach additional sheets or tables for multiple proposed floodplain activities and provide hydraulic calculations.
  - ➡Show reference datum used on plans.

Proposed Activity ☐ fill ☐ excavation or cut ☐ other _____	100-year floodplain elevation (ft) (if known) _____ Datum ☐ NGVD 29 ☐ NAVD 88 ☐ other _____
Site is _____ feet above ☐ ordinary high water mark (OHWM) OR ☐ observed water level. Date of observation (M/D/Y) _____	
Fill volume below the 100-year floodplain elevation (cu yds)_____	Compensating cut volume below the 100-year floodplain elevation (cu yds)_____

Buildings and/or Additions

Type of construction is ☐ residential ☐ garage/pole barn ☐ non residential ☐ other _____

Construction is ☐ new ☐ addition AND Serviced by ☐ public sewer ☐ private septic ☐ other_____

Lowest adjacent grade (ft): existing _____ proposed_____

datum ☐ NGVD 29 ☐ NAVD 88 ☐ other _____

Existing Structure Information		Proposed Structure Information	
Foundation type	☐ basement	Foundation type	☐ basement
☐ concrete slab on grade	☐ pilings	☐ concrete slab on grade	☐ pilings
☐ crawl space	☐ other	☐ crawl space	☐ other
Foundation floor elevation (ft)_____		Foundation floor elevation (ft)_____	
Height of crawl space/basement from finished foundation floor to bottom of floor joists (ft) _____		Height of crawl space/basement from finished foundation floor to bottom of floor joists (ft) _____	
Elevation of 1st floor above basement floor/crawl space (ft)_____		Elevation of 1st floor above basement floor/crawl space (ft)_____	

For enclosed areas below the flood elevation, such as a crawl space, garages and accessory structures:

Area of proposed foundation (sq ft) _____

Elevation of proposed enclosed area (ft) ____ datum ☐ NGVD 29 ☐ NAVD 88 ☐ other _____

Number of flood vents _____ net opening of each vent (sq inches) _____lowest elevation of flood vents (ft)_____

14 BRIDGES and CULVERTS Including Foot and Cart Bridges. (See EZ Guides and Sample Drawings 5, 14A, 14B, 14C, 14D.)

- Complete other applicable Sections, including 10A-C.
- A hydraulic analysis or hydrologic analysis may be required to fully assess impacts. ➡Attach hydraulic calculations.
- High Water Elevation - describe reference point and highest known water level above or below reference point and date of observation.

➡Attach additional sheets for multiple bridges and/or culverts.

➡Provide detailed site-specific drawings of existing and proposed Plan and Elevation View at a scale adequate for detailed review.

➡Provide all information in the boxes below; do not write in a reference to plan sheets. Show reference datum used on plans.

Stream Information

The site has a high water elevation (ft) _____ ☐ above or ☐ below the Reference Point of _____ Date observed _____

Reference datum used ☐ NGVD 29 ☐ NAVD 88 ☐ IGLD 85 (Great Lakes coastal areas) ☐ other _____

Average stream width (ft) at the ordinary high water mark (OHWM) outside the influence of any ponding or scour holes around the structure	Upstream	
	Downstream	

Cross-sectional area of primary channel (sq ft) _____ (See Sample Drawing 14C for more information)

The width of the stream where the water begins to overflow its banks. Bankfull width (ft) _____

The invert of the stream 100-feet from structure (ft)	Upstream	
	Downstream	

Is the existing culvert perched? ☐ No ☐ Yes If Yes, provide a profile of the channel bottom at the high and low points for a distance of 200 feet upstream and downstream of the culvert.

Complete this form for each bridge / culvert location.		Existing	Proposed
Bridge	Number of bridge spans		
	Bridge type (concrete box beam, concrete I-beam, timber, etc.)		
	Bridge span (length perpendicular to stream) (ft)		
	Bridge width (parallel to stream) (ft)		
	Bottom of bridge beam (ft) Upstream		
	Downstream		
	Stream invert elevation at bridge (ft) Upstream		
	Downstream		
	Bridge rise from bottom of beam to streambed (ft)		
Culvert	Number of culverts		
	Culvert type (arch, bottomless, box, circular, elliptical, etc.)		
	Culvert material (concrete, corrugated metal, plastic, etc.)		
	Culvert length (ft)		
	Culvert ☐ width ☐ diameter (ft)		
	Culvert height prior to any burying (ft)		
	Depth culvert will be buried (ft)		
	Elevation of culvert crown (ft) Upstream		
	Downstream		
	Higher elevation of ☐ culvert invert OR ☐ streambed within culvert (ft) Upstream		
	Downstream		
Complete for both Bridges and Culverts	Entrance design (mitered, projecting, wingwalls, etc.)		
	Total structure waterway opening above streambed (sq ft)		
	Total structure waterway area below the 100-year elevation (sq ft) (if known)		
	Elevation of road grade at structure (ft)		
	Elevation of low point in road (ft)		
	Distance from low point of road to mid-point of bridge crossing (ft)		
	Length of approach fill from edge of bridge/culvert to existing grade (ft)		

A Licensed Professional Engineer may certify that your project will not cause a harmful interference for a range of flood discharges up to and including the 100-year flood discharge. The "Required Certification Language" is found under "forms" on the "maps, forms and documents" link from the www.mi.gov/jointpermit page or a copy may be requested by phone, email, or mail. A hydraulic report supporting this certification may also be required.

Is Certification Language attached? ☐ No ☐ Yes

15 STREAM, RIVER, or DRAIN CONSTRUCTION, RELOCATION and ENCLOSURE ACTIVITIES

- Complete Section 10C for riprap activities.
- If side casting or other proposed activities will impact wetlands or floodplains, complete Sections 12 and 13, respectively.
  - ➡ Provide a scaled overall site plan showing existing lakes, streams, wetlands, and other water features; existing structures; and the location of all proposed structures and land change activities.
  - ➡ Provide scaled cross-section (elevation) drawings necessary to clearly show existing and proposed conditions.
  - ➡ For activities on legally established county drains, provide original design and proposed dimensions and elevations.

Stream Information

Water elevation (ft) _____ datum ☐ NGVD 29 ☐ NAVD 88 ☐ IGLD 85 (Great Lakes coastal areas) ☐ other _____
➡ Show elevation on plans with description.

Dimensions (ft) of existing stream/drain channel (ft) length width depth

Existing channel average water depth in a normal year (ft)

Proposed Activity ☐ enclosure ☐ improvement ☐ maintenance ☐ new drain ☐ relocation ☐ wetlands ☐ other _____

If an enclosed structure is proposed, check material type ☐ concrete ☐ corrugated metal ☐ plastic ☐ other _____

Dimensions (ft) of the structure: diameter length	Volume of fill (cu yds)
Will old/enclosed stream channel be backfilled to top of bank grade? ☐ No ☐ Yes	
Length of channel to be abandoned (ft)	Volume of fill (cu yds)
Dimensions (ft) of improved, maintained, new, relocated or wetland stream/drain channel. length width depth	Volume of dredge/excavation (cu yds)
How will slopes and bottom be stabilized?	Proposed side slopes (vertical / horizontal)

Spoils Disposal

Dredged or excavated spoils will be placed ☐ on-site ☐ landfill ☐ USACE confined disposal facility ☐ other upland off-site
For disposal, provide a ➡ Detailed spoils disposal area location map and site plan with property lines.
➡ Letter of authorization from property owner of spoils disposal site, if disposed off-site.

16 DRAWDOWN OF AN IMPOUNDMENT

- If wetlands will be impacted, complete Section 12.

Type of drawdown ☐ over winter ☐ temporary ☐ one-time event ☐ annual event ☐ permanent (dam removal) ☐ other _____

Reason for drawdown _____

Has there been a previous drawdown? ☐ No ☐ Yes If Yes, provide date (M/D/Y) _____		Previous DEQ permit number, if known
Does waterbody have established legal lake level? ☐ No ☐ Yes ☐ Not Sure		Dam ID Number, if known
Extent of vertical drawdown (ft)	Impoundment design head (ft)	Number of adjacent or impacted property owners
Date drawdown would start (M/D/Y)	Date drawdown would stop (M/D/Y)	Rate of drawdown (ft/day)
Date refilling would start (M/D/Y)	Date refill would end (M/D/Y)	Rate of refill (ft/day)
Type of outlet discharge structure to be used ☐ surface ☐ bottom ☐ mid-depth	Impoundment area at normal water level (acres)	Sediment depth behind impoundment discharge structure (ft)

17 DAM, EMBANKMENT, DIKE, SPILLWAY, or CONTROL STRUCTURE ACTIVITIES (See Sample Drawing 15)

- For more information go to www.mi.gov/damsafety. If wetlands will be impacted, complete Section 12.
- Information on removing a dam is available at www.mi.gov/damsafety and following the Related Link – DEQ Dam Removal web site.

➡Attach site-specific conceptual plans for construction of a new dam, reconstruction of a failed dam, or enlargement of an existing dam for resource impact review. Detailed engineering plans are required once the activity has been determined to be permitable.

➡Attach detailed signed and sealed engineering plans for a Part 315 dam repair, dam alteration, dam abandonment, or dam removal.

➡Part 315 Dam Safety application fees are added to all other application fees.

Proposed Activity ☐ abandonment ☐ alteration ☐ enlargement of an existing dam
☐ removal ☐ repair ☐ reconstruction of a failed dam
☐ new dam construction ☐ other _____

Dam ID Number, if known | Type of outlet discharge structure ☐ surface ☐ bottom ☐ mid-depth

Will proposed activities require a drawdown of the waterbody to complete the work? ☐ No ☐ Yes ➡ If Yes, complete Section 16.

Does the structure allow complete drainage of the waterbody? ☐ No ☐ Yes | Impoundment size (acres) _____

Benchmark elevation (ft) _____
Describe the benchmark and show on the plans | Datum ☐ NGVD 29 ☐ NAVD 88 ☐ Local ☐ other _____

Dredging/excavation volume (cu yd) | Fill volume (cu yd) | Riprap volume (cu yd)

Have you engaged the services of a Licensed Professional Engineer? ☐ No ☐ Yes

Engineer's Name | Registration Number | Mailing Address

Will a water diversion during construction be required? ☐ No ☐ Yes

If Yes, describe how the stream flow will be controlled through the dam construction area during the proposed project activities:

Complete the following for a new dam, reconstruction of a failed dam or enlargement of an existing dam

Describe the type of dam and how you will design the dam and embankment to control seepage through and underneath the dam.

Embankment top elevation (ft) | Streambed elevation at downstream embankment toe (ft)

Structural height (difference between embankment top elevation and streambed elevation at downstream embankment toe) (ft)

Embankment dimensions length (ft)____ top width (ft)____ bottom width (ft)____ | slopes (vertical / horizontal) Upstream _____ Downstream _____

Proposed normal pool elevation (ft) | Impoundment flood elevation (ft)

Maximum vertical drawdown capability (ft) Attach operational procedure of the proposed structure, if available.

Have soil borings been taken at dam location? ☐ No ☐ Yes ➡ If Yes, attach results.

Will a cold water underspill be provided? ☐ No ☐ Yes ➡ If Yes, provide the invert elevation (ft) _____

Do you have flowage rights to all proposed flooded property at the design flood elevation? ☐ No ☐ Yes ➡ If No, provide a letter of authorization from the property owner.

18 UTILITY CROSSINGS (See Sample Drawings 12 and 13, and EZ Guide)

- If side casting is proposed, complete Sections 10A and 10B. If spoils will be placed in or impact wetlands, complete Section 12.
  - ➡Attach additional sheets or tables with the requested information as needed for multiple crossings.
  - ➡For wetland crossings using the open trench method show clay plugs at the wetland/upland boundaries on the plans.

Crossing of ☐ Inland Lake or Stream ☐ floodplain ☐ Great Lake ☐ wetlands (also complete Section 12)

What method will be used to construct the crossings? ☐ directional boring ☐ jack and bore ☐ open trench ☐ plow / knife ☐ flume

Utility Type	Number of lake or stream crossings	Number of wetland crossings	Pipe diameter with casing (in)	Pipe length per crossing (ft)	Distance below streambed or wetland (in)	Trench width (ft)
☐ sanitary sewer						
☐ storm sewer						
☐ watermain						
☐ cable						
☐ electric						
☐ fiber optic cable						
☐ oil/gas pipeline						

19 MARINA CONSTRUCTION, EXPANSION and RECONFIGURATION (See Sample Drawing 21)

- For more information go to www.mi.gov/marinas
- Marinas located on the Great Lakes, including Lake St. Clair, may be required to secure leases or conveyances from the state of Michigan to place structures on the bottomlands. If a conveyance is necessary, an application must be submitted before the Joint Permit Application can be determined complete.
  - ➡Fully complete Section 10 E. For multiple structures provide a table with the requested information.
  - ➡Enclose a copy of any current pump-out agreement with another marina facility, if on-site sanitary pump out facilities are not available.
  - ➡Attach a copy of the property legal description, mortgage survey, or a property boundary survey to your application.
  - ➡ The WRD may require a riparian interest area (RIA) estimate survey, sealed by a licensed surveyor, in order to determine whether the proposed project will adversely impact riparian rights. Include any available sealed RIA estimate survey and/or written authorizations from affected adjacent riparian owners with your application.

Proposed Marina Activity ☐ New construction ☐ Expansion ☐ Reconfiguration

Do you have an existing Great Lake Conveyance? ☐ No ☐ Yes For more information visit www.mi.gov/deqgreatlakes.

Are sanitary pump-out facilities available? ☐ No ☐ Yes | Is there a pump out agreement? ☐ No ☐ Yes If Yes, provide a copy.

Marina Description	Current Count	Final Count
Number of boat slips/wells (do not include broadside dockage or mooring buoys)		
Lineal feet of broadside dockage		
Maximum number of boats at broadside dockage		
Number of mooring buoys		
Number of launch ramps/lanes		

20 CRITICAL DUNE AREAS AND HIGH RISK EROSION AREAS (See Sample Drawings 19 and 20, also Sample Drawing 9 for wetlands)

Critical Dune Areas (See Sample Drawing 20)

- For more information go to www.mi.gov/deqsanddunes/
- All property boundaries, proposed structure corners including decks, septic system, water well, driveway, grading, and terrain alteration locations must be staked before the WRD site inspection.
- Scaled overhead and cross-section plans that include all property boundaries, location and dimensions of all structures and terrain alterations, and construction access must be included. Cross-sections must show existing and proposed grades including foundations.
- Additional information may be required to complete the application review.
  - ➡ Construction in critical dune areas requires the following written assurances submitted with the application:
    1) permit or letter from County Enforcing Agent stating project complies with Part 91 (Soil Erosion and Sedimentation Control),
    2) permit or letter from County Health Department for work on a septic system, and
    3) a copy of the assurance letter received from the local Conservation District indicating your project has been reviewed and the prepared instructions or plans for vegetation removal will be followed during and after the construction process.
- Construction in critical dune areas on slopes greater than 33 percent (1vertical: 3 horizontal) is prohibited without a special exception.
- Construction in critical dune areas on slopes that measure from 25 percent (1 vertical: 4 horizontal) to less than 33 percent requires plans prepared by a registered architect or licensed professional engineer.

High Risk Erosion Areas (See Sample Drawing 19)

- For more information go to www.mi.gov/jointpermit , select HREA under "related links"
- All property boundaries and proposed structure corners and septic system locations must be staked before the WRD site inspection.
- Scaled overhead plans that include all property boundaries, and the location and dimensions of all structures and septic systems must be included.
- Additional information, including the building construction plans, may be required to complete the application review.

Complete for all Critical Dune Areas and/or High Risk Erosion Areas

Parcel dimensions (ft) width _____ depth _____	Date project staked (M/D/Y) _____
Property is a ☐ platted lot ☐ unplatted parcel	Year current property boundaries created _____
Type of construction activities ☐ addition ☐ driveway ☐ garage ☐ home ☐ renovation ☐ septic ☐ other _____	
The proposed project will be serviced by ☐ public sewer ☐ private septic system. ➡ On the plans show the location and dimensions of the private septic system. If a private septic system is proposed has application been made to the County Health Department for a permit? ☐ No ☐ Yes If Yes, has a permit been issued? ☐ No ☐ Yes ➡ If Yes, provide a copy of the permit for all Critical Dune Area projects.	
If in a High Risk Erosion Area provide the number of individual living-units in the proposed building _____	

Critical Dune Areas

Utility Installation	**Proposed New Construction**
Installation Method ☐ directional bore ☐ plowing in ☐ open trench ☐ other_____	Foundation type ☐ basement ☐ concrete slab ☐ pilings ☐ crawl space ☐ other _____
➡Show utility locations and dimensions on the site plan.	Area of existing structure (sq ft)
➡Show construction access route on the site plan.	Area of proposed structure (sq ft)
➡Show existing and proposed grades on the cross-section.	Area of existing deck (sq ft)
➡Show locations of vegetation to be removed on the site plan.	Area of proposed deck (sq ft)

High Risk Erosion Areas

Existing Structure Information	**Proposed New Construction**
Foundation type ☐ basement ☐ concrete slab ☐ pilings ☐ crawl space ☐ other _____	Foundation type ☐ basement ☐ concrete slab ☐ pilings ☐ crawl space ☐ other _____
Material above foundation wall ☐ block ☐ log ☐ stud frame ☐ other____	Material above foundation wall ☐ block ☐ log ☐ stud frame ☐ other____
Siding material ☐ block ☐ vinyl ☐ wood ☐ other____	Siding material ☐ block ☐ vinyl ☐ wood ☐ other____
Area of the foundation, excluding attached garage (sq ft)	Area of the foundation, excluding attached garage (sq ft)
Area of the garage foundation (sq ft)	Area of garage foundation (sq ft)
If renovating or restoring an existing structure, indicate the renovation or restoration cost $	
Current structure replacement value $	
Tax assessed value of existing structure excluding land value $	Assessment Year

General Instructions For All Drawings

Required drawings:

- ❑ **Site location map** that clearly identifies your project location. Draw a map, copy a plat map or a county map, or create a map using the Internet (see Sample Drawing 1).
- ❑ **Overall site plan** showing areas of proposed impacts, existing lakes, streams, wetlands, *floodplains,* and other water features. Include name of waterbodies, property boundaries and corners, easement boundaries, neighboring property owner information, and *soil erosion and sedimentation control measures*.
- ❑ ***Plan view*** and ***cross-section*** (elevation) drawings that are site-specific and adequate for detailed review. Show both existing and proposed conditions (see Sample Drawings 2 through 23).

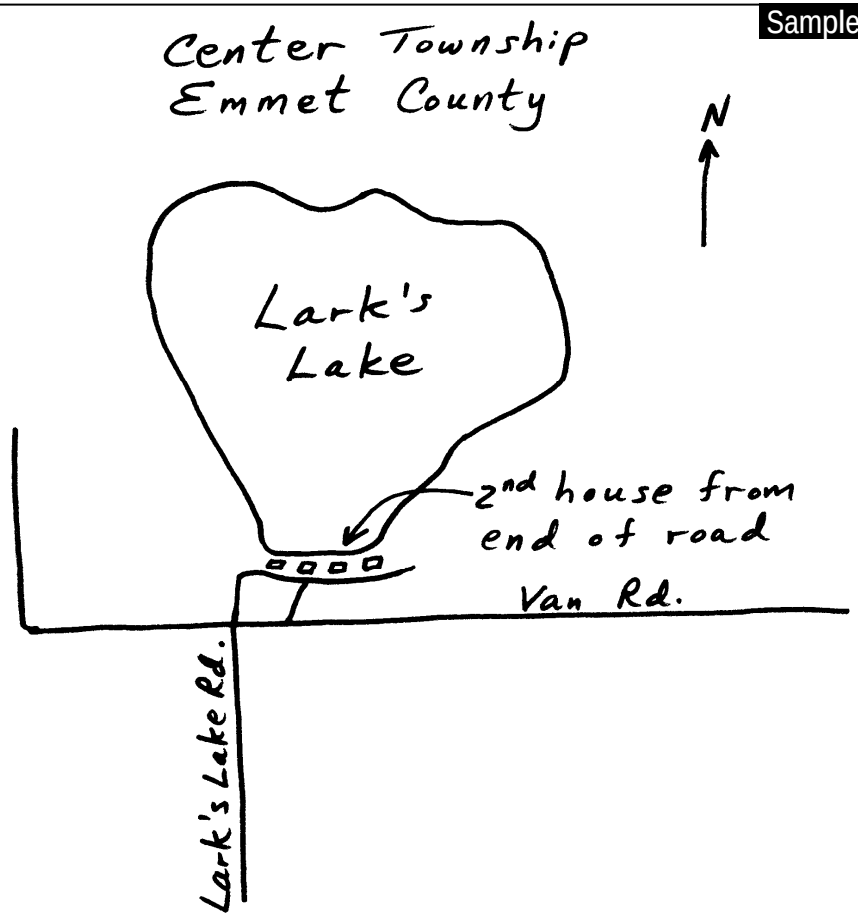
All drawings should:

- ❑ Be legible and clearly labeled on standard weight paper of 8-1/2 x 11-inch size.
- ❑ Title block on each drawing which includes: proposed activity; applicant's name; waterbody; city, village or township; county; drawing number and number in set (i.e., Drawing 1 of 4), and date prepared.
- ❑ Reference a datum (*NGVD 29*, NAVD 88, *IGLD 85*) if the proposed project is on *Section 10 Waters*.
- ❑ Be drawn to scale with the scale identified on each drawing. Show vertical scale if different than horizontal scale on each drawing.
- ❑ All plan view drawings should include a north arrow.
- ❑ Label all existing and proposed relevant features and dimensions relative to those features, especially those that correspond to questions on the application form.
- ❑ Include soil erosion and sedimentation control measures.

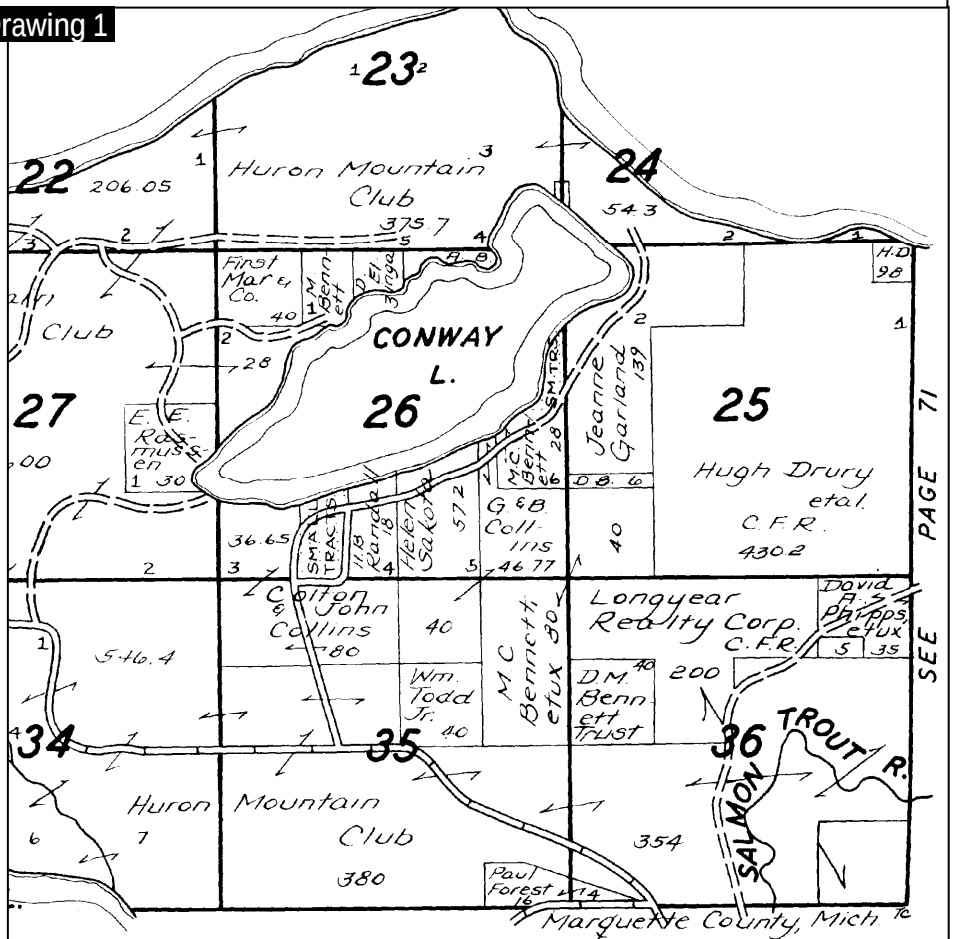
NOTE: To calculate volume in cubic yards (cu yd), multiply the average length in feet (ft) times the average width (ft) times the average depth (ft) and divide by 27.

Return to EZ Guide

Sample Drawing 1



Site location map using a hand-drawn map that is clearly labeled



Site location map using a copy of a county plat book