

FOR GUIDANCE USE ONLY

Seawalls and Shore Protection

REGULATORY REFERENCE

Part 301. Inland Lakes & Streams [Administrative Rule 6\(1\)c](#)
and
Part 325. Great Lakes Submerged Lands [Administrative Rule 13\(2\)c](#)

FEE

\$50

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.
- The construction materials used are free of polluting materials, waste metal products, debris, and organic materials.
- The shore protection is no longer than 300 feet, and similar structures exist along the shoreline.
- The shore protection and fill will not be placed in a wetland.
- The shore protection is not located in a Critical Dune Area.

In Inland Lakes & Streams:

- Backfill does not exceed an average of 2 cubic yards per running foot along shoreline, or 300 cubic yards.

In Great Lakes (Note: a conveyance may be required):

- Backfill does not exceed an average of 3 cubic yards per running foot along shoreline, or 300 cubic yards.

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 10C](#)

[Section 10D](#)

If you answer Yes to any of these questions, complete the section of the application indicated.

Will you be placing fill, or riprap in the watercourse?

[Section 10A](#)

Will you be excavating the shoreline, or watercourse?

[Section 10B](#)

Will the project be located along a stream?

[Section 13](#)

Is the project located in a marina?

[Section 19](#)

Include the following drawing:

Include the following site plan and cross-section drawing:

[Site Location Map](#)

[Seawall Site Plan](#)

[Seawall Cross-Section](#)

Please include the following photos:

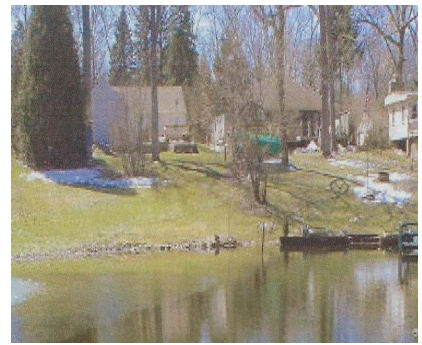
Take photos looking along the shoreline at 50 ft. intervals:



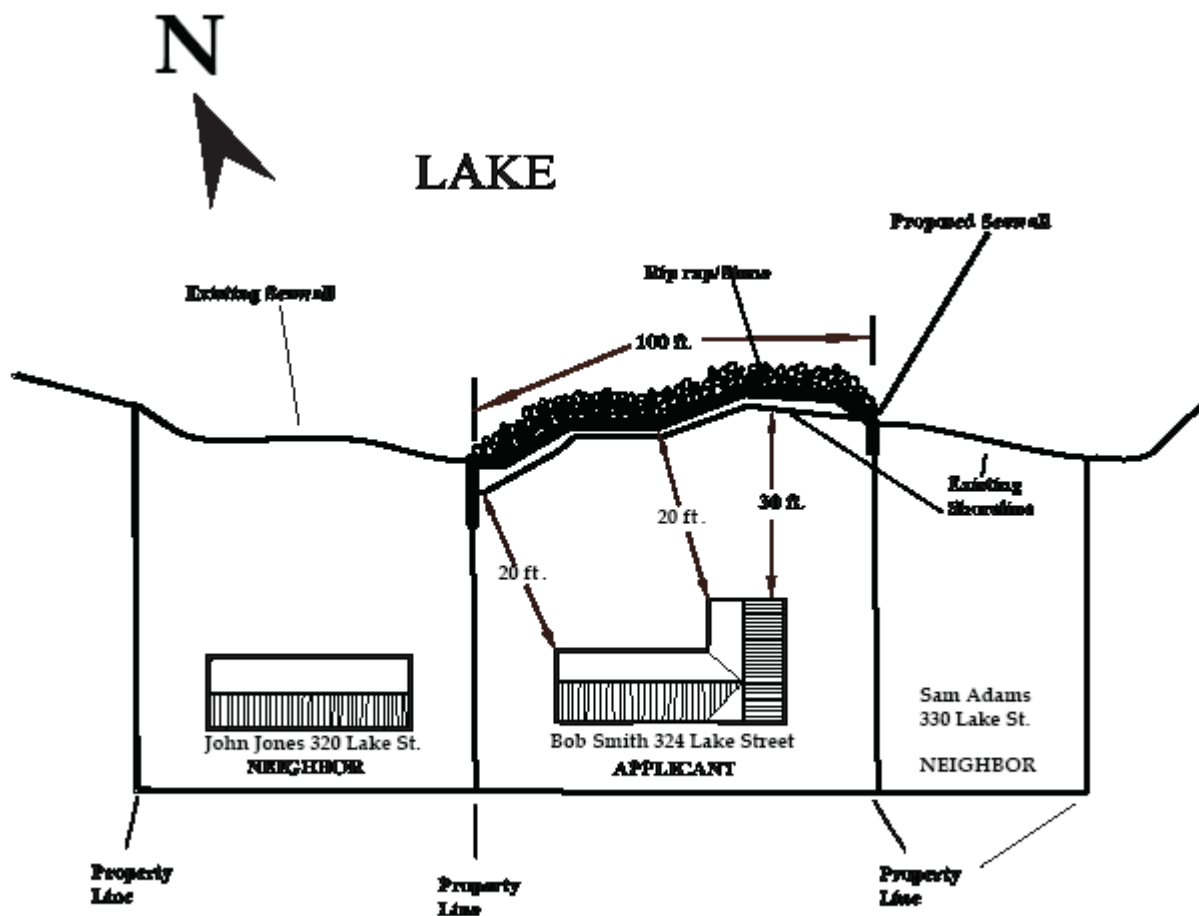
Take photos of the **lake** adjacent to the shoreline:



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

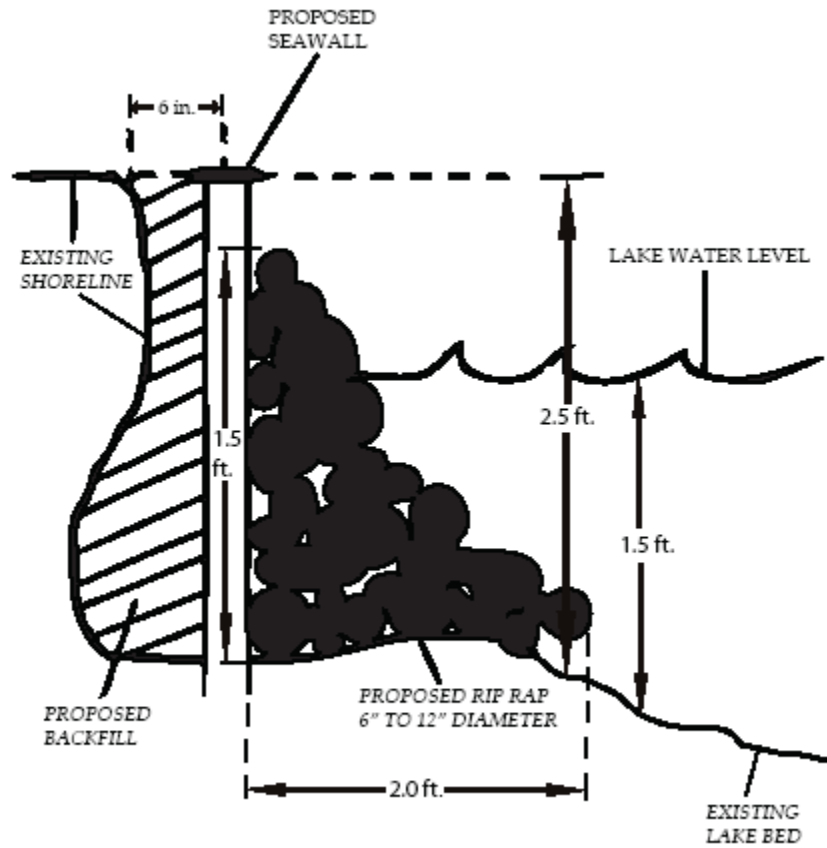


Sample Site Plan Seawall



[Return to EZ Guide](#)

Sample Cross-Section Seawall



[Return to EZ Guide](#)



AGENCY USE	Previous USACE Permit or File Number	Date Received	Land and Water Management Division, MDEQ File Number	AGENCY USE
	USACE File Number		Pre-application Number or Marina Operating Permit Number	
	District Office		Fee received \$	

Read Instructions pages i - iii. All of the following boxes below must be checked and information provided for the application to be processed:

- All items in Sections 1 through 9 are completed
- Items in Sections 10 through 21 that apply to the project are completed
- Dimensions, volumes and calculations are provided
- Reproducible location map, site plan(s), cross sections and photographs are provided, one set must be black and white on 8 1/2 by 11 inch paper.
- List any additional attachments, tables, etc.:
- Date project was staked
- Application fee is attached
- All requested supplementary attachments (➔) are included

1 PROJECT LOCATION INFORMATION

• Refer to your property's legal description for the Township, Range, and Section information, and your property tax bill for your Property Tax Identification Number(s).

Site location Address (road, if no street address)		Zip Code	Township Name(s)		Township(s)	Range(s)	Section(s)	
City/Village		County(ies)		Property Tax Identification Number(s)				
Name of Waterbody		Project Name or Job Number		Subdivision/Plat		Lot Number		Private Claim
Project types (check all that apply)		<input type="checkbox"/> private	<input type="checkbox"/> public/government	<input type="checkbox"/> industrial	<input type="checkbox"/> commercial	<input type="checkbox"/> multi-family		
		<input type="checkbox"/> building addition	<input type="checkbox"/> new building or structure	<input type="checkbox"/> building renovation or restoration	<input type="checkbox"/> river restoration	<input type="checkbox"/> single-family		
		<input type="checkbox"/> project is receiving federal transportation funds		<input type="checkbox"/> other (explain)				
The proposed project is on, within, or involves (check all that apply)				<input type="checkbox"/> a legally established County Drain (date established) (M/D/Y) / /				
<input type="checkbox"/> a stream	<input type="checkbox"/> a pond (less than 5 acres)	<input type="checkbox"/> a Great Lake or Section 10 Waters		<input type="checkbox"/> a natural river	<input type="checkbox"/> a new marina			
<input type="checkbox"/> a river	<input type="checkbox"/> a channel/canal	<input type="checkbox"/> a designated high risk erosion area		<input type="checkbox"/> a dam	<input type="checkbox"/> a structure removal			
<input type="checkbox"/> a ditch or drain	<input type="checkbox"/> an inland lake (5 acres or more)	<input type="checkbox"/> a designated critical dune area		<input type="checkbox"/> a wetland	<input type="checkbox"/> a utility crossing			
<input type="checkbox"/> a floodway area	<input type="checkbox"/> a 100-year floodplain	<input type="checkbox"/> a designated environmental area		<input type="checkbox"/> 500 feet of an existing waterbody				

2 DESCRIBE PROPOSED PROJECT AND ASSOCIATED ACTIVITIES, AND THE CONSTRUCTION SEQUENCE AND METHODS (attached additional sheets)

Written Summary of All Proposed Activities.

Construction Sequence and Methods.

3 APPLICANT, AGENT/CONTRACTOR, AND PROPERTY OWNER INFORMATION

Owner/Applicant (individual or corporate name)		Agent/Contractor (firm name and contact person)	
Mailing Address		Address	
City	State	Zip Code	
Daytime Phone Number with Area Code	Cell Phone Number		
Fax	E-mail		
<input type="checkbox"/> No <input type="checkbox"/> 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 owners. A letter signed by each property owner authorizing the agent/contractor/other owner to act on his or her behalf or a copy of easements or right-of-ways must be provided. If multiple property owners, also attach a list of all owners along with their names, mailing addresses, and telephone numbers. If the applicant is a corporation, a corporate officer must provide written document authorizing any agent/contractor listed above to act on its behalf. A letter of authorization must be provided from an owner receiving dredge spoils on their property, or where access through their property is required..			
Property Owner's Name (If different from applicant)		Mailing Address	
Daytime Phone Number with Area Code	Cell Phone Number		
		City	State Zip Code
<input type="checkbox"/> No <input type="checkbox"/> Yes Is there a MDEQ conservation easement or other easement, deed restriction, lease, or other encumbrance upon the property in the project area? ➔ If yes, attach a copy.			



4 PROPOSED PROJECT PURPOSE, INTENDED USE, AND ALTERNATIVES CONSIDERED (Attach additional sheets if necessary)

Purpose/Intended Use: The purpose must include any new development or expansion of an existed land use.
Alternatives: Include a description of alternatives considered to avoid or minimize resource impacts. Include factors such as, but not limited to, alternative construction technologies; alternative project layout and design; and alternative locations. For utility crossings, include both alternative routes and alternative construction methods.

5 LOCATING YOUR PROJECT SITE

➔ Attach a black and white, legible copy of a map that clearly shows the site location and road from the nearest major intersection, and includes a north arrow.
Is there an access road to the project? No Yes (If Yes, type of road, check all that apply) private public improved unimproved
Name of roads at closest main intersection _____ and _____
Directions from main intersection _____
Style of house or other building on site ranch 2-story cape cod bi-level cottage/cabin pole barn none other (describe) _____
Color _____ Color of adjacent property house and/or buildings _____ House number _____ Street name _____
Fire lane number _____ Lot number _____ Address is visible on house garage mailbox sign other (describe) _____
How can your site be identified if there is no visible address? _____
Provide directions to the project site, with distances from the best and nearest visible landmark and waterbody _____
Does the project cross the boundaries of two or more political jurisdictions? (City/Township, Township/Township, County/County, etc.)
 No Yes ➔ If Yes, list jurisdictions: _____

6 List all other federal, interstate, state, or local agency authorizations required for the proposed activity, including all approvals or denials received.

Agency	Type approval	Identification number	Date applied	Date approved / denied	If denied, reason for denial
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7 COMPLIANCE

If a permit is issued, date activity will commence (M/D/Y) / / Proposed completion date (M/D/Y) / /
Has any construction activity commenced or been completed in a regulated area? No Yes
➔ If Yes, identify the portion(s) underway or completed on drawings or
attach project specifications and give completion date(s) (M/D/Y) / /
Were the regulated activities conducted under a MDEQ permit? No Yes
If Yes, list the MDEQ permit number _____
Are you aware of any unresolved violations of environmental law or litigation involving the property? No Yes (If Yes, explain) _____

8 ADJACENT/RIPARIAN AND IMPACTED OWNERS (Attach additional sheets if necessary)

- Complete information for all adjacent and impacted property owners and the lake association or established lake board, including the contact person's name.
- 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	Zip Code
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Name of Established Lake Board or Lake Association
and the Contact Person's name, phone number, and mailing address _____

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 MDEQ, USACE, and/or their agents or contractors to enter upon said property in order to inspect the proposed activity site and the completed 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.

<input type="checkbox"/> Property Owner <input type="checkbox"/> Agent/Contractor <input type="checkbox"/> Corporation/Public Agency – Title	Printed Name	Signature	Date (M/D/Y) / /
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10 PROJECTS IMPACTING WETLANDS OR FLOODPLAINS OR LOCATED ON AN INLAND LAKE OR STREAM OR A GREAT LAKE

- Check boxes A through M that may be applicable to your project and provide all the requested information.
If your project may affect wetlands, also complete Section 12. If your project may impact 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.
Some projects on the Great Lakes require an application for conveyance prior to Joint Permit Application completeness.
Provide a cross-section and overall site plan showing 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 completing site-specific drawings.
Provide tables for multiple impact areas or multiple activities and provide fill and excavation/dredge calculations.

Water Level Elevation

On a Great Lake use IGLD 85 surveyed converted from observed still water elevation. On inland waters, NGVD 29 NAVD 88 other
Observed water elevation (ft) date of observation (M/D/Y)

A. PROJECTS REQUIRING FILL (See All Sample Drawings)

Attach both overall site plan and cross-section views to scale showing maximum and average fill dimensions.
(Attach all that apply) floodplain fill wetland fill riprap seawall, bulkhead, or revetment bridge or culvert
boat launch off-shore swim area beach sanding boatwell crib dock other
Fill dimensions (ft) length width maximum depth Total fill volume (cu yd) Maximum water depth in fill area (ft)
Type of clean fill pea stone sand gravel wood chips other Will filter fabric be used under proposed fill? No Yes (If Yes, type)
Source of clean fill on-site, If on-site, show location on site plan. commercial other, If other, attach description of location.
Fill will extend feet into the water from the shoreline and upland feet out of the water. Fill volume below OHWM (cu yd)

B. PROJECTS REQUIRING DREDGING OR EXCAVATION (For dredging projects see Sample Drawing 7, for excavation see other applicable Sample Drawings)

Attach both overall site plan and cross-section views to scale showing maximum and average dredge or excavation dimensions and dredge disposal location.
Refer to www.michigan.gov/jointpermit for disposal requirements and authorization.
(Attach all that apply) floodplain excavation wetland dredge or draining seawall, bulkhead, or revetment
navigation boat well boat launch other
Total dredge/excavation volume (cu yd) Dimensions length width depth Dredge/excavation volume below OHWM (cu yd) Method and equipment for dredging
Has proposed dredge material been tested for contaminants? No Yes Dredged or excavated spoils will be placed on-site off-site.
If Yes, provide test results with a map of sampling locations. Provide detailed disposal area site plan and location map.
Provide letter of authorization from owner, if disposing of spoils off site.
Has this same area been previously dredged? No Yes If Yes, date and permit number: / / /
If Yes, are you proposing to enlarge the previously dredged area? No Yes
Is long-term maintenance dredging planned? No Yes If Yes, when and how much?

C. PROJECTS REQUIRING RIPRAP (See Sample Drawings 2, 3, 8, 12, 14, 17, 22, and 23. Others may apply)

Riprap waterward of the shoreline OR ordinary high water mark Dimensions (ft) length width depth Volume(cu yd)
Riprap landward of the shoreline OR ordinary high water mark Dimensions (ft) length width depth Volume(cu yd)
Type of riprap field stone angular rock other Will filter fabric be used under proposed riprap? No Yes (If Yes, type)

D. SHORE PROTECTION PROJECTS (See Sample Drawings 2, 3, and 17) Complete Sections 10A, B, and/or C above, as applicable.

(check all that apply) riprap - length (ft) seawall/bulkhead - length (ft) revetment - length (ft) Distances of project from both property lines (ft)

E. DOCK - PIER - MOORING PILINGS - ROOFS (See Sample Drawing 10)

Dock Type open pile filled crib Permanent Roof? No Yes Mounted on
Seasonal support structure? No Yes Maximum Dimensions: length width height
Proposed structure dimensions (ft) length width Dimensions of nearest adjacent structures (ft) length width

F. BOAT WELL (See EZ Guides)

Type of sidewall stabilization wood steel concrete vinyl riprap other
Boat well dimensions (ft) length width depth Number of boats
Volume of backfill behind sidewall stabilization (cu yd) Distances of boat well from adjacent property lines (ft)

G. BOAT LAUNCH (See EZ Guide) (check all that apply) new existing public private commercial replacement

Proposed overall boat launch dimensions (ft) length width depth Type of material concrete wood stone other
Existing overall boat launch dimensions (ft) length width depth Boat launch dimensions (ft) below ordinary high water mark length width depth
Distances of launch from both property lines (ft) Number of adjacent Skid pier dimensions (ft) length width
Skid piers

H. BOAT HOIST (See EZ Guide)

(Check all that apply) seasonal permanent cradle side lifter other located on seawall dock bottomlands



10 Continued - PROJECTS IMPACTING WETLANDS OR FLOODPLAINS OR LOCATED ON AN INLAND LAKE OR STREAM OR A GREAT LAKE					
<input type="checkbox"/> I. BOARDWALKS AND DECKS IN <input type="checkbox"/> WETLANDS - OR - <input type="checkbox"/> FLOODPLAINS (See Sample Drawings 5 and 6. Provide table if necessary)					
Boardwalk <input type="checkbox"/> on pilings <input type="checkbox"/> on fill		Dimensions (ft) length width		Deck <input type="checkbox"/> on pilings <input type="checkbox"/> on fill	
				Dimensions (ft) length width	
<input type="checkbox"/> J. INTAKE PIPES (See Sample Drawing 16) <input type="checkbox"/> OUTLET PIPES (See Sample Drawing 22)					
Type <input type="checkbox"/> headwall <input type="checkbox"/> end section <input type="checkbox"/> pipe <input type="checkbox"/> other			If outlet pipe, discharge is to <input type="checkbox"/> wetland <input type="checkbox"/> inland lake <input type="checkbox"/> stream, drain, or river <input type="checkbox"/> Great Lake <input type="checkbox"/> other		
Dimensions of headwall OR end section (ft) length width depth			Number of pipes		Pipe diameters and invert elevations
<input type="checkbox"/> K. MOORING AND NAVIGATION BUOYS (See EZ Guide for Sample Drawing)					
<ul style="list-style-type: none"> ➔ Provide an overall site plan showing the distances between each buoy, distances from the shore to each buoy, and depth of water at each buoy in feet. ➔ Provide cross-section drawing(s) showing anchoring system(s) and dimensions. 					
Number of buoys		Boat Lengths		Type of anchor system	
				Purpose of buoy <input type="checkbox"/> mooring <input type="checkbox"/> navigation <input type="checkbox"/> swimming	
Dimensions of buoys (ft) width height swing radius chain length				Do you own the property along the shoreline? <input type="checkbox"/> No <input type="checkbox"/> Yes ➔ Attach Authorization Letter from the property owner(s), if No above.	
<input type="checkbox"/> L. FENCES IN WETLANDS, STREAMS, OR FLOODPLAINS (No Sample Drawing available)					
<ul style="list-style-type: none"> • Provide an overall site plan showing the proposed fencing through wetlands, streams, or floodplains. • Provide drawing of fence profile showing the design, dimension, post spacing, board spacing, and distance from ground to bottom of fence. 					
(check all that apply) <input type="checkbox"/> wetlands <input type="checkbox"/> streams <input type="checkbox"/> floodplains			Total length (ft) of fence through wetlands streams floodplains		Fence height (ft)
					Fence type and material
<input type="checkbox"/> M. OTHER - e.g., structure removal or construction, breakwater, aerator, fish shelter, and structural foundations in wetlands or floodplains					
11 EXPANSION OF AN EXISTING OR CONSTRUCTION OF A NEW LAKE OR POND (See Sample Drawings 4 and 15)					
Which best describes your proposed waterbody use (check all that apply)					
<input type="checkbox"/> wildlife <input type="checkbox"/> stormwater retention basin <input type="checkbox"/> recreation <input type="checkbox"/> wastewater basin <input type="checkbox"/> other					
Water source for lake/pond					
<input type="checkbox"/> groundwater <input type="checkbox"/> natural springs <input type="checkbox"/> Inland Lake or Stream <input type="checkbox"/> stormwater runoff <input type="checkbox"/> pump <input type="checkbox"/> sewage <input type="checkbox"/> other					
Location of the lake/basin/pond <input type="checkbox"/> floodplain <input type="checkbox"/> wetland <input type="checkbox"/> upland					
Maximum dimensions (ft) length width depth			Spoils will be placed <input type="checkbox"/> onsite <input type="checkbox"/> offsite outside of wetland and floodplain <input type="checkbox"/> other		
Maximum Area: <input type="checkbox"/> acres <input type="checkbox"/> sq ft			<ul style="list-style-type: none"> ➔ Provide a Detailed Disposal Area Site Plan with location map, address and disposal dimensions ➔ Provide a Letter of Authorization from off site disposal site owner ➔ Provide elevations and cross sections for outlets and/or emergency. Complete Section 10J, 		
Will project involve construction of a dam, dike, outlet control structure, or spillway? <input type="checkbox"/> No <input type="checkbox"/> Yes (If Yes, complete Section 17)					
12 ACTIVITIES THAT MAY IMPACT WETLANDS (See Sample Drawings 8 & 9, and complete sections 10 A and 10 B for dredge or excavation as applicable)					
<ul style="list-style-type: none"> • For information on the MDEQ's Wetland Identification Program (WIP) visit www.michigan.gov/deqwetlands or call 517-373-1170. • Complete the wetland dredge and wetland fill dimension information below for each impacted wetland area. ➔ Attach tables for multiple impact areas or activities • Label the impacted wetland areas on a site plan, drawn to scale or with dimensions. ➔ Attach at least one cross-section for each wetland dredge and/or fill area. • If dredge/excavation material will be disposed of on site, show the location on site plan and include soil erosion and sedimentation control measures. 					
(check all that apply) <input type="checkbox"/> fill (Section 10A) <input type="checkbox"/> dredge or excavation (Section 10B) <input type="checkbox"/> boardwalk or deck (Section 10I) <input type="checkbox"/> dewatering <input type="checkbox"/> fences (Section 10L) <input type="checkbox"/> bridges and culverts (Section 14) <input type="checkbox"/> draining surface water <input type="checkbox"/> stormwater discharge <input type="checkbox"/> restoration <input type="checkbox"/> other					
wetland dredge/excavation dimensions	maximum length (ft)	maximum width (ft)	dredge/excavation area <input type="checkbox"/> acres <input type="checkbox"/> sq ft	average depth (ft)	dredge volume (cu yd)
wetland fill dimensions	maximum length (ft)	maximum width (ft)	fill area <input type="checkbox"/> acres <input type="checkbox"/> sq ft	average depth (ft)	fill volume (cu yd)
Total wetland dredge/excavation area <input type="checkbox"/> acres <input type="checkbox"/> sq ft		Total wetland dredge/excavation volume (cu yd)		Total wetland fill area <input type="checkbox"/> acres <input type="checkbox"/> sq ft	
Total wetland fill volume (cu yd)					
The proposed project will be serviced by: <input type="checkbox"/> public sewer <input type="checkbox"/> private septic system ➔ Show system on plans			If septic system, has an application for a permit been made to the County Health Department? <input type="checkbox"/> No <input type="checkbox"/> Yes		If Yes, has a permit been issued? <input type="checkbox"/> No <input type="checkbox"/> Yes ➔ Provide a copy.
Has a professional wetland delineation been conducted for this parcel? <input type="checkbox"/> No <input type="checkbox"/> Yes ➔ Provide a copy of the delineation. ➔ Supply data sheets.				Applicant purchased property <input type="checkbox"/> before OR <input type="checkbox"/> after October 1, 1980.	
Is there a recorded MDEQ easement on the property? <input type="checkbox"/> No <input type="checkbox"/> Yes If Yes, provide the easement number)					
Has the MDEQ conducted a wetland assessment for this parcel? <input type="checkbox"/> No <input type="checkbox"/> Yes ➔ If Yes, provide a copy of assessment or WIP number:					
Describe the wetland impacts, the proposed use or development, and any alternatives considered:					
Does the project impact more than 1/3 acre of wetland? <input type="checkbox"/> No <input type="checkbox"/> Yes ➔ If Yes, submit a Mitigation Plan that includes the type and amount of mitigation proposed. For more information go to www.michigan.gov/deqwetlands					
Describe how impacts to waters of the United States will be avoided and minimized:					
Describe how impact to waters of the United States will be compensated. OR Explain why compensatory mitigation should not be required for the proposed impacts.					
Is any grading or mechanized land clearing proposed? <input type="checkbox"/> No <input type="checkbox"/> Yes ➔ Show locations on submitted site plan.			Has any of the proposed grading or mechanized land clearing been completed? <input type="checkbox"/> No <input type="checkbox"/> Yes ➔ Show labeled locations on site plan.		



13 FLOODPLAIN ACTIVITIES (See Sample Drawing 5. Others may apply.) For more information go to www.michigan.gov/deq/floodplainmanagement

- Complete Sections 10 A and 10 B and other Sections, as applicable.
- A hydraulic analysis or hydrologic analysis may be required to fully assess floodplain impacts. ➔ Attach hydraulic calculations.
- ➔ Attach additional sheets or tables with the requested information when multiple floodplain activities are included in this application.

(check all that apply) fill excavation 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 yd)	Compensating cut volume below the 100-year floodplain elevation (cu yd)
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14 BRIDGES AND CULVERTS (Including Foot and Cart Bridges) (See Sample Drawings 5, 14A, 14B, 14C, 14D, and EZ Guides)

- Provide detailed site-specific drawings of existing and proposed Plan and Elevation View, (Sample Drawing 14A), Elevation View (Sample Drawing 14B), Stream and Floodplain Cross-Section (Sample Drawing 14C), Stream Profile (Sample Drawing 14D) and Floodplain Fill (Sample Drawing 5) at a scale adequate for detailed review.
- Provide the requested information that applies to your project. If there is not an existing structure, leave the "Existing" column blank.
- If you choose to have a Licensed Professional Engineer "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, then you must use the "Required Certification Language." You may request a copy by phone, email, or mail. A hydraulic report supporting this certification may also be required. Is Certification Language attached? No Yes
- ➔ Attach additional sheets and table with the requested information for multiple crossings. Include hydraulic calculations.

		Existing	Proposed			Existing	Proposed
Culvert type (box, circular, arch) and material (corrugated metal, timber, concrete, etc.)				Bridge span (length perpendicular to stream) OR culvert <input type="checkbox"/> width <input type="checkbox"/> diameter (ft)			
Bridge type (concrete box beam, timber, concrete I-beam, etc.)				Bridge width (parallel to stream) OR culvert length (ft)			
Entrance design (projecting, mitered, wingwalls, etc.)				Bridge rise (from bottom of beam to streambed) OR Culvert rise (fill from top of culvert to streambed) (ft)			
Total structure waterway opening above streambed (sq ft)				Approach slope fill from existing grade to culvert or bridge			
<input type="checkbox"/> elevation of culvert crown	Upstream			Higher elevation of <input type="checkbox"/> culvert invert OR <input type="checkbox"/> streambed within culvert (ft)	Upstream		
<input type="checkbox"/> bottom of bridge beam (ft)	Downstream				Downstream		
Elevation of road grade at structure (ft)				Distance from low point of road to mid-point of bridge crossing (ft)			
Elevation of low point in road (ft)							
Cross-sectional area of primary channel (sq ft) (See Sample Drawing 14C)			Average stream width at OHWM outside the influence of the structure (ft)		Upstream		Downstream
Reference datum used (show on plans with description) <input type="checkbox"/> NGVD 29 <input type="checkbox"/> NAVD 88 <input type="checkbox"/> IGLD 85 (Great Lakes coastal areas) <input type="checkbox"/> other							

High water elevation – describe reference point and highest known water level above or below reference point and date of observation.

15 STREAM, RIVER, OR DRAIN CONSTRUCTION ACTIVITIES (No sample drawing available)

- Complete Section 10A for fill, Section 10B for dredge or excavation, and Section 10C for riprap activities.
- If side casting or other proposed activities will impact wetlands or floodplains, complete Sections 12 and 13, respectively.
- ➔ Provide an 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 cross-section (elevation) drawings necessary to clearly show existing and proposed conditions. Be sure to indicate drawing scales.
- ➔ For activities on legally established county drains, provide original design and proposed dimensions and elevations.

(check all that apply) maintenance improvement relocation enclosure new drain wetlands other

Dimensions (ft) of existing stream/drain channel to be worked on.		length	width	depth
Dimensions (ft) of new, relocated, or enclosed stream/drain channel.		length	width	depth
		Volume of dredge/excavation (cu yds)		
Existing channel average water depth in a normal year (ft)			Proposed side slopes (vertical / horizontal)	

How will slopes and bottom be stabilized?

Will old/enclosed stream channel be backfilled to top of bank grade? <input type="checkbox"/> No <input type="checkbox"/> Yes	Length of channel to be abandoned (ft)	Volume of fill (cu yds)
If an enclosed structure is proposed, check type <input type="checkbox"/> concrete <input type="checkbox"/> corrugated metal <input type="checkbox"/> plastic <input type="checkbox"/> other	Dimensions of the structure: diameter length volume of fill	

Will spoils be disposed of on site? No Yes ➔ Show location of spoils on site plan if spoils disposed of on an upland area.)

Water elevation Reference datum used NGVD 29 NAVD 88 IGLD 85 (Great Lakes coastal areas) other
 ➔ Show elevation on plans with description.



16 DRAWDOWN OF AN IMPOUNDMENT

- If wetlands will be impacted, also 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 MDEQ 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.michigan.gov/deqdamsafety
If wetlands will be impacted, also complete Section 12.
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 permissible from an environmental standpoint.
Attach detailed engineering plans for a dam repair, dam alteration, dam abandonment, or dam removal.

Which one best describes your project? new dam construction reconstruction of a failed dam enlargement of an existing dam dam repair dam alteration dam abandonment dam removal 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, also complete Section 16)

Riprap Volume (cu yd)

Dredging/excavation Volume (cu yd)

Fill volume (cu yd)

Does structure allow complete drainage of waterbody? No Yes

Benchmark elevation (ft)

Datum used Local NGVD 29 other

Describe benchmark and show on plans

Have you engaged the services of a Licensed Professional Engineer? No Yes If Yes, provide name, registration number, and mailing address.

Will a water diversion during dike 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 length (ft)

Embankment top width (ft)

Embankment bottom width (ft)

Embankment slopes Upstream Downstream (vertical / horizontal)

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, invert elevation (ft)

Do you have flowage rights to all proposed flooded property at the design flood elevation? No Yes

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

- If side casting is required, complete Sections 10A and 10B. If spoils will be placed in wetlands or wetlands may be impacted, complete Section 12.
Attach additional sheets or tables with the requested information as needed for multiple crossings.

What method will be used to construct the crossings?

flume plow open trench jack and bore directional drilling

Crossing of Inland Lake or Stream floodplain international waters wetlands (also complete Section 12)

Type

Number of wetland crossings

Number of inland lake or stream crossings

Pipe diameter (in)

Pipe length per crossing (ft)

Distance below streambed or wetland (in)

Trench width (ft)

sanitary sewer

storm sewer

watermain

cable

oil/gas pipeline



19 MARINA CONSTRUCTION AND OPERATING PERMIT INFORMATION (See Sample Drawing 21)					
<ul style="list-style-type: none"> For more information go to www.michigan.gov/deqmarinas 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. ➔ Enclose a copy on any current pump-out agreement with another marina facility. ➔ Attach a copy of the property legal description or a property boundary survey report to your application. 					
Marina owner			Marina name		
Mailing address			Location street address		
City	State	Zip Code	City	State	Zip Code
Marina owner's daytime telephone number with area code - -			Marina's daytime telephone number with area code - -		
Check the reasons for submitting this application <input type="checkbox"/> Owner's name change/transfer <input type="checkbox"/> Construction of a new marina <input type="checkbox"/> Issuance of a new Marina Operating Permit <input type="checkbox"/> Expansion/modification of an existing marina <input type="checkbox"/> Renewal of a Marina Operating Permit			Current Marina Operating Permit Number (M/D/Y)		Expiration Date / /
	Existing	Proposed		Existing	Proposed
Number of boat slips/wells (do not include broadside)			Are sanitary pump-out facilities available?	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Lineal feet of broadside dockage			Number of launch ramps/lanes		
Number of mooring buoys			Maximum number of boats at broadside		
20 HIGH RISK EROSION AND CRITICAL DUNE AREAS (See Sample Drawings 19 and 20, also Sample Drawing 9 if wetlands are impacted)					
<ul style="list-style-type: none"> For more information go to www.michigan.gov/deqsanddunes Construction in critical dune areas on slopes greater than a 1-foot vertical rise in a 3-foot horizontal plane (33 percent) is prohibited without a special exception. Construction in critical dune areas on slopes that measure from a 1-foot vertical rise in a 4-foot horizontal plane (25 percent) to less than a 1-foot vertical rise in a 3-foot horizontal plane (33 percent) requires plans prepared by a registered architect or licensed professional engineer. All property boundaries and proposed structure corners, septic system, water well, and driveway locations must be staked before the MDEQ site inspection. Scaled overhead and cross-section plans that include all property boundaries, and the location and dimensions of all structures and terrain alterations must be included. Additional information, including the building construction plans, may be required to complete the application review. ➔ Construction in critical dune areas requires inclusion of the following written assurances: <ol style="list-style-type: none"> 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) letter from applicant stating any proposed tree or vegetation removal complies with instructions of the local Soil Conservation District. 					
Parcel dimensions (ft) width depth		Property is a <input type="checkbox"/> platted lot <input type="checkbox"/> unplatted parcel		Year current property boundaries created	
				Date project staked (M/D/Y) / /	
Type of construction activities <input type="checkbox"/> home <input type="checkbox"/> garage <input type="checkbox"/> driveway <input type="checkbox"/> septic <input type="checkbox"/> addition <input type="checkbox"/> renovation <input type="checkbox"/> other					
The proposed project will be serviced by <input type="checkbox"/> public sewer <input type="checkbox"/> private septic system ➔ If septic system, show septic system on plans.		If septic system, has application been made to the County Health Department for a permit? <input type="checkbox"/> No <input type="checkbox"/> Yes If Yes, has a permit been issued? <input type="checkbox"/> No <input type="checkbox"/> Yes		If Yes, critical dune projects require County Health Department approval submitted with application. ➔ Attach Written Assurance(s).	
Existing construction is on <input type="checkbox"/> pilings <input type="checkbox"/> basement <input type="checkbox"/> concrete slab <input type="checkbox"/> crawl space		Proposed new construction will be on <input type="checkbox"/> pilings <input type="checkbox"/> basement <input type="checkbox"/> concrete slab <input type="checkbox"/> crawl space			
Existing construction material above foundation wall <input type="checkbox"/> stud frame <input type="checkbox"/> log <input type="checkbox"/> block <input type="checkbox"/> other		Proposed new construction material above foundation wall <input type="checkbox"/> stud frame <input type="checkbox"/> log <input type="checkbox"/> block <input type="checkbox"/> other			
Existing siding material <input type="checkbox"/> wood <input type="checkbox"/> vinyl <input type="checkbox"/> block <input type="checkbox"/> other		Proposed new siding material <input type="checkbox"/> wood <input type="checkbox"/> vinyl <input type="checkbox"/> block <input type="checkbox"/> other			
Area of the existing foundation, excluding attached garage (sq ft)		Area of the proposed foundation, excluding attached garage (sq ft)			
Area of the existing garage foundation (sq ft)		Area of the proposed garage foundation (sq ft)			
If renovating or restoring existing structure, renovation or restoration cost \$		Current structure replacement value \$		Tax assessed value of existing structure excluding land value \$	
				Assessment Year	
21 ACTIVITIES IN DESIGNATED ENVIRONMENTAL AREAS (No Sample Drawings Available)					
<ul style="list-style-type: none"> Many designated environmental areas are completely or partially wetlands. Be sure to complete Section 12 if your proposed activities will also occur in wetlands. ➔ Attach a detailed site plan for any alteration in a designated environmental area. 					
(Check all that apply) <input type="checkbox"/> placement of structures <input type="checkbox"/> grading or other soil alteration <input type="checkbox"/> alteration of natural drainage <input type="checkbox"/> alteration of vegetation <input type="checkbox"/> other					