Digital EGLE/USACE Joint Permit Application (JPA) for Inland Lakes and Streams, Great Lakes, Wetlands, Floodplains, Dams, Environmental Areas, High Risk Erosion Areas and Critical Dune Areas

version 1.38

(Submission #: HPX-KQ1G-2AS15, version 2)

Details

Submission ID HPX-KQ1G-2AS15

Submission Reason New

CORRECTION REQUEST *(APPROVED)*

D-Key Consistency Letter

For Red Files, our updated Threatened and Endangered species procedures are to have the applicant run the proposed project through USFWS IPAC D-Key. Your responses to questions within the D-key will determine if you can achieve a "No Effect" determination for fed listed species by agreeing to potential BMPs.

Please provide us with the D-Key output letter after you have completed this step.
Created on 12/8/2023 1:37 PM by **James Bales**

1 COMMENT

Natalie Dingledine (ndingledine@dlz.com) (12/18/2023 10:56 AM)
The DKey and NLAA letter have been added to the USFWS Correspondence package.

NOTE *(CREATED)*

Red File

This application is being Red Filed. Once the application is marked complete and Public Noticed, the EPA has 90-days to comment. This may require an application processing extension.
Created on 12/8/2023 1:33 PM by **James Bales**

Form Input

Instructions

To download a copy or print these instructions, please click this link (recommended).

The EGLE/USACE "Joint Permit Application" (JPA)

READ THOROUGHLY BEFORE STARTING THE FORM
It is recommended to download a pdf of this page at www.michigan.gov/jointpermit for reference while filling out the form. Please also refer to this website for additional information regarding this form, including a glossary and other helpful resources on information required to be submitted in this form.

This is the Joint Permit Application (JPA) for construction activities where the land meets the water. This application covers permit requirements derived from state and federal rules and regulations for activities involving:

Wetlands
Floodplains
Marinas
Dams
Inland Lakes and Streams
Great Lakes Bottomlands
Critical Dunes
High Risk Erosion Areas

This application prevents duplication of state and federal forms for these activities and provides concurrent review under all pertinent state and federal laws. In the case of U.S. Army Corps of Engineers (USACE) jurisdiction, the Michigan Department of Environment, Great Lakes, and Energy will also send a copy of this Joint Permit Application to the USACE for simultaneous processing. The Michigan Department of Environment, Great Lakes, and Energy will provide coordination between state and federal agencies during the application review.

This application form is set up with the following sections to be completed by the applicant (note that it is recommended to gather all this information prior to starting this form):

Contact Information:
Applicant, Property Owner(s), Consultant(s), and any other Authorized Representative(s)
Authorizations are required from the property owner for:
- when the applicant is not the owner,
- when there is a consultant/representative for the applicant,
- when spoils disposal locations are not on site,
- when other permissions are necessary based on project specifics and are identified by the form.

Project Location Information:
Address, coordinates, and directions to the site, etc.

Background Information:
Existing site conditions, other related permits, existing easements/encumbrances, other related application numbers (pre-application meetings, Wetland Identification Program, etc.)

Permit Application Category and Public Notice Information:
This section asks what permit application category you believe fits your project. While this is not required to submit the application, knowing this will also help you submit the right permit application fee and avoid a correction request and processing delays.

The choices of permit application categories to select in the form are:
General Permit, $50 fee (https://www.michigan.gov/egle/-/media/Project/Websites/egle/Documents/Programs/WRD/Wetlands/General-Permit-Categories.pdf?rev=e7fc28cb17e14c7b821b7595f6aa585d&hash=490A504F4063BC141104F8DDDCAF70AE)
Minor Project, $100 fee (https://www.michigan.gov/egle/-/media/Project/Websites/egle/Documents/Programs/WRD/Wetlands/Minor-Project-Categories.pdf?rev=c0e17657e1484b20afe47010a67a6999&hash=3C83AAE98832042FA83E28328C7C9842)
Public Notice Individual Permit, range from $500-$4,000 depending on type of activity. For High Risk Erosion Areas and Critical Dune Areas fees for Public Notice individual permit applications can range from $50-$4000. Additional fees may be applied for some special project requirements such as hydraulic analysis, dam projects, and a special exception application in a critical dune area. See Fee Schedule on website for more information.
Unsure, select this and the permit reviewer will make the determination on permit type after the application is submitted based on the project details. However, some fee is required to be submitted with the application. If an additional fee is required, the Michigan Department of Environment, Great Lakes, and Energy will send a correction request that will show the remaining amount required. The application will not be considered complete without the proper fee.

Adjacent Landowner contact information for Public Notice projects is required by law. This includes any parcels touching the project parcel and parcels across the street.

Project Description:
Information on the Proposed Use and Purpose of the project (who and what the project is intended for and why is it needed). This includes a written summary of the project as well as a list of project uses and types to select from as follows:

Project Use Selections:
Private
Commercial
Public/Gov/Tribal
Federal/State funded
Non-Profit

Other

Project Type Selections:
Agriculture
Airport
Development- Condo/ Subdivision/Residential
Development-Commercial/ Industrial
Drain-County
Drain-Private
Drawdown
Lake, Drawdown
Wetland Forestry
Landfill
Marina/Mooring Facility
Marine Railway
Mining-Mineral,
Mining-Sand and Gravel
Private Residence
Restoration-Wetland
Restoration-Stream
Transportation
Septic System Surveying or Scientific Measuring Device
Utility-Electrical, Fiber optic
Utility-Oil and gas pipelines
Utility-Sewer/water line
Other

Construction Details including sequencing, timeframes, SESC measures, etc.

Alternatives Analysis detailing all options considered and why this is the least impactful feasible and prudent proposal. The depth of this analysis is typically commensurate with the size and purpose of the project and at minimum should include variables such as alternate locations (including other properties), configurations and sizes (layout and design), and methods (construction technologies), and other constraints (local regulations, resource issues). Discussion should also include why the "do nothing" alternative is not feasible or prudent.

Project Compensation:
Narrative of how proposed impacts will be compensated (mitigated or other minimization measures), including amount, location, and method; or why mitigation should not be required. This can be traditional mitigation and/or other techniques used to minimize overall loss of functions.

Resource and Activity Type. This section is intended to determine what additional sections of the application are generated (as seen on the left side of the screen) for further information gathering. This includes questions regarding what Resource feature is involved (e.g., wetland, stream, floodplain, pond, dam, critical dune, etc.) and if there are identified Special Activities (i.e., activities requiring a specific series of questions to be answered). Be sure to choose all that apply to your project. If your activity is not listed, choose "None of the Above" and move on to the next question. More specific activity questions will appear later based on the resource section answers.

Resource Information and Impacts Sections (Multiple Sections). These are a series of sections that will appear on the left side of the screen based on your answers to the Resource and Activity Types section. You will input further information on the existing resources to be impacted (e.g., wetland type, permanent or temporary impact, water elevation data, drainage area, etc.) and all proposed Project Activities with their Dimensions (e.g., length, width, depth, square footage). For example, when "Wetland" is selected as a resource that your project will involve, a "Wetland Project Information and Impacts" section will appear on the left side of the screen that includes questions specific to gathering information about the wetland.

For projects including Floodplains, Marinas, Dams, Critical Dunes, or High Risk Erosion Areas individual sections will appear on the left side of the screen that include different sets of specialized questions as required by those programs. These sections do not share a specific format. Help tips will guide you in filling out these sections.

For projects including wetlands, ponds, inland lakes, streams, or the Great Lakes resources, individual sections will appear on the left side of the screen that are similar in format to each other. Each of these resource sections asks initial general information and then has additional questions regarding the Types of Activities proposed for each resource. The outline for these resource activity impacts questions is Activity Type, Dimensions Table, and Special Questions.

There are four overall "Types of Activities" groups for wetlands, ponds, inland lakes, streams or the Great Lakes:
Fill Activities
Dredge Activities
Structure Activities
Other Activities

Under each of these Types of Activity questions, specific activity lists will be shown that are typical for that type (fill, dredge, structure, other) and resource (wetland, lake, stream, etc). Follow these steps to accurately fill out the Activity Type Questions:

1. Start with the Fill question and choose any activities on the list that is included in your project. If your activity is not shown, then select "None of the Above" and move to the next question.

2. When you select an activity listed under Fill, Dredge, Structure, or Other, a dimensions table will appear under that question. This table is where you enter EACH activity OF THE TYPE YOU SELECTED and associated dimensions. Be sure that all the activities you selected are also listed in the table with the dimensions. Multiple activities covering the same footprint may be combined on one line in the table (for example, riprap on slopes of driveway fill can be entered on the same impact dimensions line and does not necessarily need to be broken out).

3. Continue to answer the Activity Type questions (Fill, Dredge, Structure, Other) until all have been answered with either a specific Activity listed under that Type or "None of the Above". If you did not find your activity in any list then select "Other, Other" and provide a description of your activity in the space that appears. Please be as descriptive as possible.

Proposed mitigation questions may appear within specific resource types sections based on your answers. Enter any proposed mitigation in the appropriate section (wetland, stream, etc.) and if no mitigation is proposed you must provide commentary with an explanation as to why it is not required. Mitigation plans according to the mitigation checklist (link) are required for a complete application. When mitigation is proposed be sure to also select mitigation in the Permit Application Type section under the second question.

In the above sections, uploads will be prompted as required by the answers to questions. These should be uploaded in these location (ex, mitigation plans should be uploaded in the mitigation section). Please do not wait to upload one large document with all plans combined at the end. Note that each individual upload is limited to 10M.

Upload of Proposed Site Plans.
Any plans or explanatory narratives not requested in previous sections should be uploaded in this section. Construction Plans including overhead view, cross sections, and profiles showing each impact either to-scale or with dimensions are required and typically would be uploaded here. Plan labels should correspond with labels entered in the form for each activity selected. The application will not be complete without the proper site plans. If drawings are not received with all required dimensions and resources identified, then the Michigan Department of Environment, Great Lakes, and Energy will send a correction request and your application processing will be delayed. However, please limit drawings, plans, and narratives submitted to the items necessary for permit review. For example, entire bid package documents and CAD drawings are often not helpful for permit review and may cause delays from wading through extraneous information. Plans, profiles and cross sections specific to the resource impacts are the most helpful.

Review:
This section allows you to see the entire form with the answers you entered. Please review for accuracy prior to hitting the submit button. A print option is provided on this screen (print to PDF is recommended). Once the application is submitted you may not make changes to it until the application has been assigned to a staff person.

Certify & Submit:
This is the final section of the application form. The "Submit Form" button selection certifies that all information in the application is true and accurate and that you have the authority to apply for the permit as indicated. This application will become part of public record.

We recommend that you have the above information ready prior to starting this application. You will be able to save in-progress applications and come back later, but all required uploads and questions are necessary before the system will allow submittal of the application. Some sections of this application form load faster than others depending on the complexity of the questions. Thanks for your patience while you work through the application. For assistance with this form visit:
https://www.michigan.gov/jointpermit

Click here for additional information on maps, drawings, and other attachments

Contact Information

Applicant Information (Usually the property owner)

First Name	Last Name
Glen	*Wiczorek*

Organization Name
City of Ann Arbor, Water Treatment Services

Phone Type	Number	Extension
Business	734-794-6426	

Email
gwiczorek@a2gov.org

Address
919 SUNSET RD
ANN ARBOR, MI 48103

Is the Property Owner different from the Applicant?
No

Has the applicant hired an agent or cooperating agency (agency or firm assisting applicant) to complete the application process?
Yes

Agent Contact

First Name	Last Name
Natalie	*Dingledine*

Organization Name
DLZ

Phone Type	Number	Extension
Business	15179084971	

Email
ndingledine@dlz.com

Address
1425 KEYSTONE AVE
LANSING, MI 48911

Upload Attachment for Authorization from Agent
20231016_JPA_authorization.pdf - 10/16/2023 03:23 PM
Comment
NONE PROVIDED

Are there additional property owners or other contacts you would like to add to the application?
Yes

Additional Contact Information (1 of 1)

Contact Role(s)
Consultant

Contact Information

Prefix
NONE PROVIDED

First Name	Last Name
Steven	*McManus*

Title
NONE PROVIDED

Organization Name
NTH Consuiltats, Ltd.

Phone Type	Number	Extension
Business	248-662-2709	

Email
smcmanus@nthconsultants.com

Address
41780 6 MILE RD Suite 200
NORTHVILLE, MI 48168

Project Location

EGLE Site Reference Number (Pre-Populated)
-4998380618785828115

Project Location
42.31011915849979,-83.75743418029384

Project Location Address
Barton Pump Station
1010 W. Huron River Drive
Ann Arbor, MI 48103

County
Washtenaw

Is there a Property Tax ID Number(s) for the project area?
No

Is there Subdivision/Plat and Lot Number(s)?
No

Is this project within Indian Lands?
No

Local Unit of Government (LUG)
Ann Arbor

Directions to Project Site
Project area is located off W. Huron River Drive which is located to the west of M14/ Business US23 north of Ann Arbor. The site is accessed from the Barton Nature Area parking lot.

Background Information

Has the Michigan Department of Environment, Great Lakes, and Energy (EGLE) and/or United States Army Corps of Engineers (USACE) conducted a pre-application meeting/inspection for this project?
Yes

Provide the date of the pre-application meeting/inspection
06/07/2022

Pre-application File Number:
HPF-AB76-57KNB

EGLE and/or USACE staff person involved in the pre-application meeting/inspection:
James Bale

Has the project scope or design changed since the pre-application meeting/inspection?
No

Has the EGLE completed a Wetland Identification Program (WIP) assessment for this site?
No

Environmental Areas are coastal wetlands on the shorelines of the Great Lakes. Enter this number only if a designated Environmental Area is in the proposed project area. Environmental Areas are designated locations along the Great Lakes shoreline. If you don't know whether there is an environmental area within the project area, leave blank. Additional information on Environmental Areas can be found by clicking the following link:
Click Here for Link

Environmental Area Number (if known):
NONE PROVIDED

Has the United States Army Corps of Engineers (USACE) completed either an approved or preliminary jurisdictional determination for this site?
No

Were any regulated activities previously completed on this site under an EGLE and/or USACE permit?
No

Have any activities commenced on this project?
No

Is this an after-the-fact application?
No

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

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

Are there any other federal, interstate, state, or local agency authorizations associated with this project?
Yes

List all other federal, interstate, state, or local agency authorizations.

Agency	Type of Approval	Number	Date Applied	Approved/Denied/Undetermined
Amtrak	Permit to Enter	MDOT PTE 22-43	3/3/2023	Undetermined
Washtenaw County	SESC	NONE PROVIDED	NONE PROVIDED	Undetermined
Federal Energy Regulatory Comm.	Regulatory Oversight of Dam	Facility P-3142	NONE PROVIDED	Undetermined

Comments
FERC is the licensing agency for the project.

Permit Application Category and Public Notice Information

Project Category Selection:

The Permit Application Category you apply under is dependent on the type and scope of activities you are undertaking and the resources affected. There is a three-tier permitting process to aid in expediting permits for regulated activities that occur on

wetlands, inland lakes and streams, and the Great Lakes (Parts 301, 303, and 325): General Permit, Minor Project, and Individual Permit.

Additionally, Minor Project categories exist for floodplains under the authority of Part 31.

General Permit and Minor Project categories generally meet specific Best Management Practices criteria that have been shown to minimize impacts to resources if followed correctly. If you select a General Permit or Minor Project Category you must select the specific category(ies) that your project fits under. Any project that does not fit a General or Minor Category are Individual Permit projects. All projects in Critical Dunes, High Risk Erosion Areas, or Dam Safety projects will be Individual Permit Projects.

Indicate the type of permit being applied for.
Individual Permit for all other projects

This type of permit application requires that you include contact information for the adjacent landowners to this project. If you are only entering in a small number of bordering parcel owners contact information, please select "Enter list of recipients". If there is a rather large number of affected property owners such as a project that significantly affects lake levels, please upload a spreadsheet of the property owners. Please include names and mailing addresses.
Enter list of recipients.

This project may require public noticing. Please list the adjacent landowners to the project, along with any of the others that may apply:

Contact Type	Contact Person	Mailing Address	City	State	Zip Code
Adjacent Landowner	Sierra Williams for MDOT	425 W. Ottawa St.	Lansing	MI	48909

Link to General Permit Categories with Descriptions

Link to Minor Permit Categories with Descriptions

Link to Minor Project Category descriptions for Floodplain Only projects (See R323.1316)

Project Description

Project Use: (select all that apply - Private, Commercial, Public/Government/Tribal, Receiving Federal/State Transportation Funds, Non-profit, or Other)
Public/Government/Tribal

Project Type (select all that apply):
Other: Dam Rehabilitation

Please enter your answers in the text box for the next four questions. If you have a long description, please use the document upload at the end of the section. Please make every effort to enter your information directly into the application text boxes. If the answer is in an attachment, please identify that in the text box below.

Project Summary (Purpose and Use): Provide a summary of all proposed activities including the intended use and reason for the proposed project.

The Barton Dam is located on the Huron River in the City of Ann Arbor, Michigan. The dam was constructed in 1913 and is owned by the City of Ann Arbor (the City). It is regulated by the Federal Energy Regulatory Commission (FERC) and has been assigned the high hazard potential classification. Per FERC "Dams assigned the high hazard potential classification are those where failure or mis-operation will probably cause loss of human life." The condition of the Barton Embankment is listed as "Poor" in the National Dam Inventory.

The purpose of this project is to rehabilitate the Barton Dam right embankment. FERC is requiring the City to rehabilitate the right embankment to address ongoing seepage and stability concerns. The project is needed to protect the public and prevent the loss of human life. The project will include:

- Constructing a downstream earthen stabilization berm with an integrated drain,
- Relocating part of the existing collector ditch to accommodate the stabilization berm,
- Backfilling the existing collector ditch pond to stabilize the embankment,
- Removing the existing reverse filter near Toe Drain 39 (TD-39),
- Remediating Toe Drains Nos. 23 and 43,
- Raising the grade along the embankment crest to meet FERC requirements,
- Widening the existing pedestrian underpass below the railroad bridge to facilitate access of construction equipment,
- Replacing and relocating the existing outfall culvert, and
- Other ancillary works associated with the dam and park.

Access to the site is severely limited due to the physical constraints caused by the presence of the railroad located between the embankment and the Barton Nature Area parking lot. AMTRAK and MDOT have specified that no temporary or permanent railroad crossings over the tracks will be permitted. Areas adjacent to the parking lot and the City's pump station will be used for the construction laydown area. As such, construction equipment as well as future maintenance equipment and emergency services must access the site via the existing pedestrian path that traverses along the Huron River under the railroad bridge. To facilitate these activities, the path must be widened by 2 feet. Since the path is located within the floodway, the project team was required to demonstrate that no harmful flood rise would occur due to the change. Coordination with the EGLE Floodplain Engineer on this matter determined that less than 1% reduction of the floodway cross section would result in no harmful flood rise and no further hydraulic report or model would be required (see supporting documentation in Floodplain section). Existing and new pedestrian railings along the river are excluded from the analysis.

Excavations will be made within the 100-year floodplain of the Huron River resulting from construction activities including the underpass extension, culvert, and gabion removal. Fill will be placed within the floodplain resulting from activities to the collector ditch pond, culvert, and the access path improvements (Exhibit 8). Compensatory excavation will be made on site adjacent to the existing canoe launch to offset the fill quantities within the floodplain. The pedestrian pathway is below the OHWM of the Huron River (at 774.1). Existing, deteriorated gabions will be removed prior to placement of modular concrete walls and new granular fill (Exhibit 6).

The existing collector ditch receives runoff and flow from 75 existing toe drains and other seepage. The ditch flows into the collector ditch pond prior to flowing through a culvert and into the Huron River. Part of the existing ditch channel will be filled and relocated to facilitate construction of the stabilization berm (Exhibits 4 and 5). Wetland B will be impacted due to this fill activity (0.77 acres) and the collector ditch pond (0.12 acres) will be filled to address dam stability concerns (Exhibits 1 and 2, respectively). The proposed channel will be cut in along the toe of the proposed stabilization berm and will impact Wetland B. The current collector ditch outfall culvert will be realigned and replaced (Exhibit 7). The culvert is within the 100-year flood elevation but is not in the effective flow area of the river. Since it is not directly in the flow path downstream of the spillway, no hydraulic analysis was required. The new culvert will require a minor amount of new fill.

Temporary fill impacts will also occur as a result of the temporary construction access route from the construction laydown area to the existing pedestrian pathway. A grassy walkway exists in this portion of the project area but must be widened to facilitate construction equipment and material haulage. Wetland D, located adjacent to a small tributary, may be impacted by this temporary access route on the south side (see Exhibit 3).

Project Construction Sequence, Methods, and Equipment: Describe how the proposed project timing, methods, and equipment will minimize disturbance from the project construction, including but not limited to soil erosion and sedimentation control measures.
Construction is anticipated to start Summer 2024 and be completed in the 2026 or 2027 calendar year. The general construction sequence will be as follows:
• Install erosion protection including silt fence, turbidity curtains, and storm water management.
• Perform grouting of TD-23 and TD-43.
• Prepare Laydown area including fencing, crossing, signage, temporary haul road as well as necessary clearing.
• Remove underpass pavement, remove existing gabions, prep subgrade, install mod block wall system, backfill underpass, place temporary working surface course.
• Remove and replace existing retaining wall north of RR underpass.
• Clearing and grubbing of proposed work area.
• Raise embankment crest to Elevation 802.0 at west end of embankment.
• Relocate emergency stockpiles of sand and gravel.
• Install dewatering system, remove existing reverse filter and place backfill.
• Collector ditch pond filling - install dewatering system, remove unsuitable material, prepare subgrade, backfill collector ditch pond.
• Remove, relocate, and replace existing culvert at collector ditch pond. Relocate collector ditch.
• Remove topsoil and unsuitable material beneath stabilization berm and place backfill in strips no wider than 50-feet.
• Abandon toe drains 12 through 59 and place stabilization berm with granular filter, mineral drain, and perforated underdrain with cleanouts.
• Raise existing piezometers and install locking monuments.
• Finish construction of collector ditch and fill at toe of embankment to final grade.
• Revegetate stabilization berm and working areas.
• Install access path and fill at embankment crest.
• Install new stairs.
• Reinstall railing along Huron River.
• Remove temporary wearing course at underpass and replace with permanent pavement. Construct underpass canopy.
• Remove temporary haul road and complete final site restoration.

Multiple soil and sedimentation control measures such as seeding, erosion blankets, temporary check dams, silt fence, sediment booms, and stone construction access will be implemented to prevent temporary and permanent impacts to WOTUS features.

Project Alternatives: Describe all options considered as alternatives to the proposed project, and describe how impacts to state and federal regulated waters will be avoided and minimized. This may include other locations, materials, etc.
This project is required by FERC of the City to remedy dam safety concerns associated with seepage and stability of the right embankment. An alternatives analysis was completed by the project team in 2021 to evaluate potential remedies, including:
• Do nothing,
• Install a cutoff wall, and
• Construct a stabilization berm.

The "do nothing" alternative would not remedy the existing dam safety concerns associated with seepage and stability. As such, the dam would continue to pose a hazard to the public. The cutoff wall alternative was determined to be unfeasible, due to the site geologic conditions, and the risk of additional damage (e.g., deformation of the embankment, unpredictable changes in seepage, catastrophic breach) to the dam during construction. The downstream stabilization berm was the selected alternative, due to the inherent safety and constructability of the remedy. In 2022, FERC directed the City to proceed with design of this alternative.

Project Compensation: Describe how the proposed impacts to state and federal regulated waters will be compensated, OR explain why compensatory mitigation should not be required for the proposed impacts. Include amount, location, and method of compensation (i.e., bank, on-site, preservation, etc.)
Impacts to the wetland features within the project area will require mitigation since greater than 1/3 of an acre will likely be impacted. Compensatory wetland mitigation at a ratio of 1.5 acres of mitigation to 1 acre of impacts will be required. The method of compensation will come from a wetland mitigation bank from the Huron River Watershed.

Upload any additional information as needed to provide information applicable to your project regarding project purpose sequence, methods, alternatives, or compensation.
NONE PROVIDED
Comment
NONE PROVIDED

Resource and Activity Type

Important! Answer all questions completely. Properly identifying your project in this section generates the proper application sections. Incomplete applications will require corrections before they can be fully processed.

SELECT THE ACTIVITIES from the list below that are proposed in your project (check ALL that apply). If you don't see your project type listed, select "Other Project Type". These activities listed require additional information to be gathered later in the application.
Culverts - Stream Only
Stream, River or Drain Construction Relocation and Enclosure Activities
Other Project Type

The Proposed Project will involve the following resources (check ALL that apply).
Wetland
Stream or River
100-year Floodplain
Pond (open water less than 5 acres in size)

Pond Information

What is the surface area of the pond? (acres)
0.13

Identify all resources impacted by the proposed pond.
Pond located within 500 feet of a lake or stream

Major Project Fee Calculation Questions

Is filling of 10,000 cubic yards or more proposed (cumulatively) within wetlands, streams, lakes, or Great Lakes?
No

Is dredging of 10,000 cubic yards (cumulatively) or more proposed within streams, lakes, or Great Lakes? (wetlands not included)
No

Is new dredging or adjacent upland excavation in suspected contamination areas proposed by this application?
No

Is a subdivision, condominium, or new golf course proposed?
No

Wetland Project Information and Impacts

PLEASE READ

This section is for entering information regarding the impacts to Wetlands only. Do not input information that pertains to other resources (inland lakes, streams, floodplains, etc.). The initial questions are related to wetlands on the project site in general. The Proposed Activities questions are grouped into Fill, Dredge, Structures, Other and are only for wetland impacts related to these activities.
Click HERE for more information on Wetlands Protection Program.

Has a professional wetland delineation been completed for this site?
Yes

Attach a copy of wetland delineation report with data form.
Barton Dam Remediation Wetland Report Final .pdf - 12/18/2023 10:36 AM
Comment
Wetland Report with data sheets and photo log and includes appendices for Stream Assessment Report and Mussel Survey Report.

CORRECTION REQUEST *(APPROVED)*
Wetland Delineation Report

The provided wetland delineation report appears to be missing some of the figures and appendices, including: APPENDIX B – WETLAND SITE PHOTOGRAPHS AND DETERMINATION DATA FORMS. Please provide a delineation report that includes completed data forms.
Created on 12/8/2023 1:43 PM by **James Bales**

1 COMMENT

Natalie Dingledine (ndingledine@dlz.com) (12/18/2023 10:38 AM)

The final version with all appendices is now attached.

Total acres of wetland affected by this project.

Category	Affected area (acres)
Permanent	0.99
Temporary	0.03
	Sum: 1.02

Is filling or draining of 1 acre or more (cumulatively) of wetland proposed?
Yes

Select all wetland types that will be affected by this project:
Emergent

The following questions gather information on the specific Types of Activities your project includes that will impact WETLANDS. There are four overall Types of Activities: Fill, Dredge, Structure, Other. Under each of the Activity Type questions, specific activity lists will be shown. If the activity is not shown in the list given, select None of the Above and move to the next question. When you select an activity under Fill, Dredge, Structure, or Other, a table will appear under that type. Only enter the dimensions of the activity that are within wetland. Multiple activities covering the same footprint may be combined on one line in the table. Continue to answer the Activity Type questions (Fill, Dredge, Structure, Other) until all have been answered with either a specific Activity listed under that Type or "None of the Above". If you did not find your activity in any list then select "Other, Other" and provide a description of your activity.

If your project includes placing fill in wetland then select the proposed activities from the following list. If your activity is not shown, then select "None of the Above" and move to the next question. Only enter an impacted area in one of the impact tables (do not duplicate impact entries).:
General Fill
Path/Sidewalk

Complete this table for projects involving Fill. Enter each activity/ location that corresponds with each activity selected in the previous question and enter the dimensions. Activities may be entered in one line of the table if they occupy the same impact footprint and cannot be broken out separately (Example: Activity - Driveway and Riprap slope). Multiple activities in different locations should be listed on different lines of the table.

Activity	Length (feet)	Width (feet)	Depth (feet)	Area (square feet)	Volume (cubic feet)	Volume (cubic yards)	Corrected value for complex impact AREAS (square feet)
Temp Fill WET D	202	68	1	13736	13736	509	1474
General Fill WET B	851	85	2	72335	144670	5358	35008
General Fill Pond	125	50	4	6250	25000	926	5423
				Sum: 92321	Sum: 183406	Sum: 6793	Sum: 41905

Source of Fill Material:
Off-site
Please Describe
Contractor supplied based on plans

Type of Fill.
Other: Clean granular fill and topsoil

Is riprap proposed?
No

Select from the following list for Excavation/Dredge Activities (if your proposed project is primarily a structure enter the impact as a structure. Only enter an impacted area in one of the impact tables in one impact section):
None of the above
Excavation (wetlands)

If your project includes EXCAVATION/DREDGE IN WETLAND then select all of the proposed activities in the following list. If your activity is not shown, then select "None of the Above" and move to the next question. Only enter an impacted area in one of the impact tables (do not duplicate impact entries).:

Activity	Length (feet)	Width (feet)	Depth (feet)	Area (sq. feet)	Volume (cubic feet)	Volume (cubic yards)	Corrected value for complex impact AREAS (square feet)
Cut	450	12	2	5400	10800	400	2484
				Sum: 5400	Sum: 10800	Sum: 400	Sum: 2484

Spoils Disposal

Will the excavation/dredge spoils be disposed of on site or off site?
Off-site

Where will the excavation/dredge spoils be disposed of?
Contractor will determine proper off-site disposal.

Describe any measures used to retain sediment:
SESC measures will be used to mitigate erosion and loss of sediment.

If your project includes STRUCTURES IN WETLAND then select all of the proposed activities in the following list. If your activity is not shown, then select "None of the Above" and move to the next question. Only enter an impacted area in one of the impact tables (do not duplicate impact entries).:
None of the above

If your project includes Other Activities in WETLAND not listed in this section, then select from the proposed activities in the following list. If your activity in Wetland has not been listed in this Wetland Section, then select "Other" and enter a description of your activity. Only enter an impacted area in one of the impact tables (do not duplicate impact entries). If you selected a Fill, Excavation/Dredging, or Structure activity above in this section, but do not have an activity listed as Other, then select None of the Above for this question.
None of the above

Wetland Mitigation

EGLE may impose as a condition of any wetland permit, other than a General permit, a requirement form compensatory mitigation. The wetland mitigation requirement may be waived for projects affecting less than one-third of an acre of wetland if no reasonable opportunity for mitigation exists.

Mitigation plans according to the mitigation checklist (link) are required for a complete application
Wetland Mitigation Information

Is Wetland Mitigation being proposed as part of this proposed project?
Yes

Mitigation Project Details for Wetlands

Impact Location (include identifier on site plan)	Impact Type:	Impact Amount (acres)	Replacement Ratio (include any reduction)	Mitigation Type	Mitigation Amount (acres)	Kind of Mitigation
WET B	Emergent	0.86	1.5	Forested	1.29	Bank

Impact Location (include identifier on site plan)	Impact Type:	Impact Amount (acres)	Replacement Ratio (include any reduction)	Mitigation Type	Mitigation Amount (acres)	Kind of Mitigation
Pond	Other: open water	0.13	1.5	Forested	0.20	Bank
		Sum: 0.99			Sum: 1.49	

Wetland mitigation plan or associated documents

Krummrey Bank.pdf - 10/25/2023 11:33 AM

Comment

Wetland bank credits will be purchased. Letter of confirmation for availability is attached.

Stream Project Information (1 of 2)

Stream Information

This section is for entering information regarding the impacts to a stream only. Do not input information that pertains to other resources (inland lakes, Great Lakes, floodplains, etc.).

If there are multiple streams associated with the project impacts, or different Ordinary High Water Mark (OHWM) elevation data on the stream reach, provide the information in duplicate stream project information tabs by clicking on DUPLICATE at the top right or bottom of this screen.

Elevation data must include a description of the reference point or benchmark used and its corresponding elevation. If elevations are from still water provide the observation date and water elevation. Include information in this section only as it pertains to proposed project activities in regards to impacts to streams.

This section is for entering information regarding the impacts to Streams only. Do not input information that pertains to other resources (Great Lakes, streams, floodplains, etc.).

Elevation data must include a description of the reference point or benchmark used and its corresponding elevation. If elevations are from still water provide the observation date and water elevation. Information provided in this section should pertain only to proposed activities in regards to Inland Lake impacts.

An OHWM can be determined by either surveyed information or through measurements taken in reference to a static benchmark such as an observed water level or base of a tree, etc. The following information indicates how to determine the OHWM in different situations:

OHWM for Inland Lakes (Part 301) is the line between upland and bottomland identified by the presence of a distinct change in character of the land caused by successive changes in water levels.

In Section 10 regulated waters, the U.S. Army Corps of Engineers (USACE) regulates activities below the USACE Great Lakes OHWM elevation.

See EGLE's YouTube Series for OHWM video tutorials, and the sample OHWM drawing for more information.
Determining the Ordinary High Water Mark (OHWM) - Video

Please provide a name for the stream, river, channel:
Collector Channel to Huron River

Stream Water elevation reference* (show elevation on plans with description):
NAVD 88

Ordinary High Water Mark (OHWM) elevation (feet):
777

Date of observation (M/D/Y)
10/16/2023

What length (feet) does the project activity(ies) extend waterward of the OHWM?
4

What length (feet) does the project activity(ies) extend landward of the OHWM?
4

Is the drainage area upstream of the proposed project area greater than 2 sq. miles?
No

What is the the width (feet) of the stream where the water begins to overflow its banks. This is called the Bankfull width.
4

Will a turbidity curtain be used during the proposed project?
Yes

If there are multiple streams associated with the project impacts, or different Ordinary High Water Mark (OHWM) elevation data on the stream reach, provide the information in duplicate stream project information tabs by clicking on DUPLICATE or ADD NEW below. This adds a new section where you will enter the information about additional project impacts.

Stream Project Information (2 of 2)

Stream Information

This section is for entering information regarding the impacts to a stream only. Do not input information that pertains to other resources (inland lakes, Great Lakes, floodplains, etc.).

If there are multiple streams associated with the project impacts, or different Ordinary High Water Mark (OHWM) elevation data on the stream reach, provide the information in duplicate stream project information tabs by clicking on DUPLICATE at the top right or bottom of this screen.

Elevation data must include a description of the reference point or benchmark used and its corresponding elevation. If elevations are from still water provide the observation date and water elevation. Include information in this section only as it pertains to proposed project activities in regards to impacts to streams.

This section is for entering information regarding the impacts to Streams only. Do not input information that pertains to other resources (Great Lakes, streams, floodplains, etc.).

Elevation data must include a description of the reference point or benchmark used and its corresponding elevation. If elevations are from still water provide the observation date and water elevation. Information provided in this section should pertain only to proposed activities in regards to Inland Lake impacts.

An OHWM can be determined by either surveyed information or through measurements taken in reference to a static benchmark such as an observed water level or base of a tree, etc. The following information indicates how to determine the OHWM in different situations:

OHWM for Inland Lakes (Part 301) is the line between upland and bottomland identified by the presence of a distinct change in character of the land caused by successive changes in water levels.

In Section 10 regulated waters, the U.S. Army Corps of Engineers (USACE) regulates activities below the USACE Great Lakes OHWM elevation.

See EGLE's YouTube Series for OHWM video tutorials, and the sample OHWM drawing for more information.
Determining the Ordinary High Water Mark (OHWM) - Video

Please provide a name for the stream, river, channel:
Huron River

Stream Water elevation reference* (show elevation on plans with description):
NAVD 88

Ordinary High Water Mark (OHWM) elevation (feet):
774.1

Date of observation (M/D/Y)
10/16/2023

What length (feet) does the project activity(ies) extend waterward of the OHWM?
10

What length (feet) does the project activity(ies) extend landward of the OHWM?
10

Is the drainage area upstream of the proposed project area greater than 2 sq. miles?
Yes

What is the the width (feet) of the stream where the water begins to overflow its banks. This is called the Bankfull width.
150

Will a turbidity curtain be used during the proposed project?
Yes

If there are multiple streams associated with the project impacts, or different Ordinary High Water Mark (OHWM) elevation data on the stream reach, provide the information in duplicate stream project information tabs by clicking on DUPLICATE or ADD NEW below. This adds a new section where you will enter the information about additional project impacts.

Inland Lakes, Great Lakes and Stream Impacts (1 of 2)

PLEASE READ

This section will collect information regarding Inland Lakes, Great Lakes, and Streams impacts and activities only. The initial questions are related to which waterbody the impacts pertain to. When there are multiple waterbodies (e.g., some impacts are on an inland lake and some impacts are on a stream), fill out a DUPLICATE tab for each waterbody impacted. For each waterbody, questions will be asked regarding the proposed activities. Proposed Activities questions are grouped into Fill, Dredge, Structures, Other and are only for the impacts related to these groups. Click the link below for more information on the Inland Lakes and Streams Protection Program.
Link to Information on Inland Lakes and Streams Permitting

The following impact description applies to: (select only one at a time, duplicate this entire section if there are impacts to multiple waterbody types):
Stream

Linear feet of stream affected by your project

Category	Affected linear feet (ft)
Permanent	870
Temporary	0
	Sum: 870

The following questions gather information on the specific Types of Activities your project includes that will impact INLAND LAKES, STREAMS, AND GREAT LAKES. There are four overall Types of Activities: Fill, Dredge, Structure, and Other. Under each of the Activity Type questions, specific activity lists will be shown. If the activity is not shown in the list given, select None of the Above and move to the next question. When you select an activity under Fill, Dredge, Structure, or Other, a table will appear under that type. Only enter the dimensions of the activity that are within INLAND LAKES, STREAMS, or GREAT LAKES. Multiple activities covering the same footprint may be combined on one line in the table. Continue to answer the Activity Type questions (Fill, Dredge, Structure, Other) until all have been answered with either a specific Activity listed under that Type or "None of the Above". If you did not find your activity in any list then select "Other, Other" and provide a description of your activity.

Select from the following list all Fill Activities (select all that apply to this waterbody impacted):
General Fill

Complete this table for projects involving Fill below the Ordinary High Water Mark. Enter each activity/ location that corresponds with each activity selected in the previous question and enter the dimensions. Activities may be entered in one line of the table if they occupy the same impact footprint and cannot be broken out separately (Example: Activity - Driveway and Riprap slope). Multiple activities in different locations should be listed on different lines of the table.

Activity	Length (feet)	Width (feet)	Depth (feet)	Area (square feet)	Volume (cubic feet)	Volume (cubic yards	Corrected Value for complex impact Area (square feet)
General Fill	870	3.67	.67	3192.9	2139.243	79	3189
				Sum: 3192.9	Sum: 2139.243	Sum: 79	Sum: 3189

Type of Fill
Other: Clean granular fill and top soil
Sand
Gravel

Source of Fill
Off-site

Is riprap proposed?
No

Activities Involving Dredging or Excavation: Select from the following list for Excavation/Dredge Activities (select all that apply to this waterbody impacted):
Other: Excavation of unsuitable soils in current channel prior to fill. Existing retaining wall within the channel will also be removed.

Projects involving Excavation/Dredging below the Ordinary High Water Mark:

Activity	Length (feet)	Width (feet)	Depth (feet)	Area (square feet)	Volume (cubic feet)	Volume (cubic yards)	Corrected value for complex impact Areas (square feet)
Excavation	870	3.67	.67	3192.9	2139.243	79	3189
				Sum: 3192.9	Sum: 2139.243	Sum: 79	Sum: 3189

Has this area been previously dredged?
No

Is long-term maintenance dredging proposed?
No

What is the method used to be dredged?
Mechanical

Has the dredge material been tested?
No

Spoils Disposal

Will the excavation/dredge spoils be disposed of on site or off site?
Off-site

Where will the excavation/dredge spoils be disposed of?
Contractor will determine proper off-site disposal.

If your project includes STRUCTURES then select all of the proposed activities in the following list. If your activity is not shown, then select "None of the Above" and move to the next question. Only enter an impacted area in one of the impact tables (do not duplicate impact entries).:
None of the above

If your project includes Other Activities not listed in this section, then select from the proposed activities in the following list. If your activity has not been listed in this Section, then select ﷺOtherﷺ and enter a description of your activity. Only enter an impacted area in one of the impact tables (do not duplicate impact entries). If you selected a Fill, Excavation/Dredging, or Structure activity above in this section, but do not have an activity listed as Other, then select None of the Above for this question.
None of the above

Does the proposed project include mitigation?
stream mitigation

Descriptions of stream impact types and mitigation types identified in the following table.

Impact Type Definitions
Enclosure: Placing a stream inside a pipe or culvert

Relocation: Moving a stream from its current location

Dredging: Removing material (e.g., sediment, gravel, wood, etc.) from the bed or banks of a lake or stream

Armoring: Placing materials (e.g., rip rap, concrete, etc.) on the bed or banks of a lake or stream

Other: Activities that result in loss of stream functions. Examples may include: altering stream hydrology through the addition or removal of water or increasing the rate of storm water runoff to the stream channel; building of dams or creating impoundments; etc.

Mitigation Type Definitions: Replacement: Construction of a new stream channel to replace the stream functions lost as a result of the abandonment of an existing stream channel (i.e., on-site stream relocation).

Restoration: Activities that enhance the functions of an existing lake, stream or riparian area. Examples include: reconnecting a stream to its floodplain, bank stabilization or erosion protection, adding wood, creating pool and riffle complexes, restoring habitat connectivity (i.e., fish passage), restoring natural flow and sediment transport, enhancing aquatic or riparian vegetation and stream canopy, disconnecting or treating storm water runoff, enhancing habitat for fish and wildlife, etc.

Preservation: Use of a conservation easement or similar legal agreement to protect an existing lake, stream channel, riparian buffer, or other area that is integral to supporting proper lake or stream function.

Streams Impacts

Impact Location (include identifier on site plan)	Impact Type (Enclosure, Relocation, Dredging, Armoring, or Other)	Impact Amount (linear feet)
100+00	Relocation	869
		Sum: 869

Streams Mitigation

Mitigation Location (Label)	Mitigation Type (Replacement, Restoration, Preservation, or Other)	Mitigation Amount (linear feet)
200+00	Restoration	956
		Sum: 956

Stream Mitigation Details

Also attach mitigation plan with all required information as follows (see Conceptual Mitigation Plans document and Checklist for Stream Mitigation Plans for more detailed information.) An application that does not include these materials will be considered incomplete.

Appropriate Data summarizing information regarding the resource that is proposed to be impacted and how the mitigation proposed will compensate for the functions lost as a result of the project. See the Stream Functions Pyramid document for detailed information linked below.

The location of the proposed mitigation site in relation to the site proposed for impacts and a location map for the mitigation site showing surrounding roads and other landmarks.

Include the linear feet and mitigation type of the stream improvements proposed as mitigation to replace lost functions.

A description of the baseline conditions at the proposed mitigation site.

A description, and plan view as appropriate, of the method that will be used to replace lost functions. An engineered design is not required when the application is submitted, but sufficient justification of design should be provided to show that it will be designed, constructed, and monitored in a sufficient manner to replace lost functions. If preservation is proposed, submit a description of the proposed preservation site and justification for preservation credit.

A financial assurance will be required to ensure the mitigation is implemented and monitored properly.
Stream Functions Pyramid Document

Stream Mitigation Uploads

Stream Assessment Addendum A.pdf - 11/10/2023 12:12 PM
Comment
NONE PROVIDED

If there are multiple waterbodies associated with the project impacts, or different Ordinary High Water Mark (OHWM) elevation data on the waterbody, provide the information in duplicate stream project information tabs by clicking on DUPLICATE or ADD NEW below. This adds a new section where you will enter the information about additional project impacts.

Inland Lakes, Great Lakes and Stream Impacts (2 of 2)

PLEASE READ

This section will collect information regarding Inland Lakes, Great Lakes, and Streams impacts and activities only. The initial questions are related to which waterbody the impacts pertain to. When there are multiple waterbodies (e.g., some impacts are on an inland lake and some impacts are on a stream), fill out a DUPLICATE tab for each waterbody impacted. For each waterbody, questions will be asked regarding the proposed activities. Proposed Activities questions are grouped into Fill, Dredge, Structures, Other and are only for the impacts related to these groups. Click the link below for more information on the Inland Lakes and Streams Protection Program.
Link to Information on Inland Lakes and Streams Permitting

The following impact description applies to: (select only one at a time, duplicate this entire section if there are impacts to multiple waterbody types):
Stream

Linear feet of stream affected by your project

Category	Affected linear feet (ft)
Permanent	286
Temporary	0
	Sum: 286

The following questions gather information on the specific Types of Activities your project includes that will impact INLAND LAKES, STREAMS, AND GREAT LAKES. There are four overall Types of Activities: Fill, Dredge, Structure, and Other. Under each of the Activity Type questions, specific activity lists will be shown. If the activity is not shown in the list given, select None of the Above and move to the next question. When you select an activity under Fill, Dredge, Structure, or Other, a table will appear under that type. Only enter the dimensions of the activity that are within INLAND LAKES, STREAMS, or GREAT LAKES. Multiple activities covering the same footprint may be combined on one line in the table. Continue to answer the Activity Type questions (Fill, Dredge, Structure, Other) until all have been answered with either a specific Activity listed under that Type or "None of the Above". If you did not find your activity in any list then select "Other, Other" and provide a description of your activity.

Select from the following list all Fill Activities (select all that apply to this waterbody impacted):
Path/Sidewalk

Complete this table for projects involving Fill below the Ordinary High Water Mark. Enter each activity/ location that corresponds with each activity selected in the previous question and enter the dimensions. Activities may be entered in one line of the table if they occupy the same impact footprint and cannot be broken out separately (Example: Activity - Driveway and Riprap slope). Multiple activities in different locations should be listed on different lines of the table.

Activity	Length (feet)	Width (feet)	Depth (feet)	Area (square feet)	Volume (cubic feet)	Volume (cubic yards	Corrected Value for complex impact Area (square feet)
Fill	286	6	6.5	1716	11154	413	NONE PROVIDED
				Sum: 1716	Sum: 11154	Sum: 413	Sum: NaN

Type of Fill
Other: pre-cast concrete blocks, granular fill

Source of Fill
Off-site

Is riprap proposed?
No

Activities Involving Dredging or Excavation: Select from the following list for Excavation/Dredge Activities (select all that apply to this waterbody impacted):
Other: Removal of existing gabions and underpass materials

Projects involving Excavation/Dredging below the Ordinary High Water Mark:

Activity	Length (feet)	Width (feet)	Depth (feet)	Area (square feet)	Volume (cubic feet)	Volume (cubic yards)	Corrected value for complex impact Areas (square feet)
Cut	286	2	7.5	572	4290	159	NONE PROVIDED
				Sum: 572	Sum: 4290	Sum: 159	Sum: NaN

Has this area been previously dredged?
No

Is long-term maintenance dredging proposed?
No

What is the method used to be dredged?
Mechanical

Has the dredge material been tested?
No

Spoils Disposal

Will the excavation/dredge spoils be disposed of on site or off site?
Off-site

Where will the excavation/dredge spoils be disposed of?
Contractor to determine suitable landfill location.

If your project includes STRUCTURES then select all of the proposed activities in the following list. If your activity is not shown, then select ﷺNone of the Aboveﷺ and move to the next question. Only enter an impacted area in one of the impact tables (do not duplicate impact entries).:
None of the above

If your project includes Other Activities not listed in this section, then select from the proposed activities in the following list. If your activity has not been listed in this Section, then select ﷺOtherﷺ and enter a description of your activity. Only enter an impacted area in one of the impact tables (do not duplicate impact entries). If you selected a Fill, Excavation/Dredging, or Structure activity above in this section, but do not have an activity listed as Other, then select None of the Above for this question.
Structure removal (except dam removal)

Does the proposed project include mitigation?
none

If there are multiple waterbodies associated with the project impacts, or different Ordinary High Water Mark (OHWM) elevation data on the waterbody, provide the information in duplicate stream project information tabs by clicking on DUPLICATE or ADD NEW below. This adds a new section where you will enter the information about additional project impacts.

Stream, River or Drain Construction Relocation and Enclosure Activities

STREAM INFORMATION

Is this a county drain?
No

Does the proposed project include an:
Relocation

Are stream relocations of 500 feet or more in length (cumulatively) proposed?
Yes

Dimensions of existing stream/drain channel

Length (feet)	Width (top of bank to top of bank) (feet)	Depth (feet)	Channel bottom width (feet)
1037	4.34	.67	3.67

Will existing channel be abandoned?
Yes

Length of channel to be abandoned (feet):
869

Will old/existing channel be backfilled to top of bank grade?
Yes

Existing channel average water depth in a normal year (feet)
0.25

Dimensions of new or relocated stream channel:

Length (feet)	Width (feet)	Depth (feet)
955	3	1

Is a two-stage or similar design proposed?
Yes

Include a clear description on site plans and short description of design here.
The existing collector ditch receives runoff and flow from 75 existing toe drains. The channel flows into a collector ditch pond and through a culvert which outlets into the Huron River. Impacts to 870 feet of the existing channel will be made due to the construction of a stabilization berm on the right embankment of Barton Dam. The proposed channel is being cut in along the toe of the proposed stabilization berm. The new channel will increase waterway length by 86 feet (increasing overall length to 1,123 feet) with improvements in the meander of the watercourse and removal of the pond. The proposed channel will have stable 1V:3H slopes. Concentrated flow points along approximately 875 feet of the channel will be eliminated as forty-eight (48) toe drains (TD# 12 -59) will be abandoned along the embankment.

Volume of dredge/excavation (cubic yards)
2919

How will slopes and bottom be stabilized?
The existing ditch lining, geotextile fabric, any loose material, and soils will be removed prior to filling the ditch and constructing the stabilization berm. The stabilization berm is comprised of compacted MDOT Class II granular fill, MDOT 2NS fine aggregate, and MDOT 17A coarse aggregate. The proposed channel will have stable slopes. The new collector channel will be constructed of 1 foot of MDOT Coarse Aggregate 3x1 over 6 inches of MDOT 17A Coarse Aggregate.

Proposed side slopes (vertical / horizontal):
1V:3H

For activities on legally established county drains, provide original design and proposed dimensions and elevations.

NONE PROVIDED
Comment
NONE PROVIDED

Bridges and Culverts (1 of 1)

Complete once for a single structure or add multiple sections when multiple structures are proposed.

Use the duplicate button to copy this section to enter information about each individual structure. If there are two or more you should duplicate for each one.

Unique Identifier:
Proposed 15" CPP Culvert

STREAM INFORMATION

Width of the stream

Upstream (feet)	Downstream (feet)
4.5	120

Cross-sectional area of primary channel (square feet):
36

The width of the stream where the water begins to overflow its banks. Bankfull width (feet):
21

Is there an existing structure?
Yes

Is the existing Structure perched?
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.

NONE PROVIDED
Comment
Provided with site plans.

Click the link below to view bridge profile sample drawings.
Click here for link

Help for the following Table

Structure Width: Enter the total width of culvert or bridge in feet.

Culvert Length or Bridge span: Enter the total length perpendicular or across the stream in feet.

Culvert Height Prior to any burying: Enter the total width of culvert in feet at this location as it measures on land. Do not subtract any depth the culvert may be buried. For bridges enter "0".

Depth culvert buried: Enter total feet the culvert bottom will be buried. Does not apply to bridges so enter "0".

Bottom of bridge beam (upstream) elevation (feet): For culverts enter "0".

Bottom of bridge beam (downstream) elevation (feet): For culverts enter "0".

Stream Invert Elevation (feet) Upstream: This is the elevation at the bottom of the culvert as it lies in place after installation on the

upstream end of the culvert, not including any fill on the culvert bottom.

Stream Invert Elevation (feet) Downstream: This is the elevation at the bottom of the culvert as it lies in place after installation on the downstream end of the culvert, not including any fill on the culvert bottom.

Bride rise from bottom of beam to streambed or culvert crown height (feet): This is the elevation at the top of the culvert as it lies in place after installation, for bridges this is from the bottom of the beam. Do not including any fill on top of the culvert or the bridge structure.

Total structure waterway area above streambed (square feet): This is the total square foot area that would allow passage of water through the structure opening.

Total structure waterway area below the 100-year elevation (square feet) (if known): This is the total square foot area that would allow passage of water that is below the 100-year flood elevation.

Elevation of road grade at structure (feet): Enter the elevation at the road above the structure.

Elevation of low point in road (feet): Enter the elevation of the lowest point in the road nearest the structure.

Distance from low point of road to mid-point of structure (feet): How far (in feet) from the structure does any fill used for the structure extend before it reaches the existing grade?

Length of approach fill from edge of bridge/culvert to existing grade (feet):

Existing and Proposed Bridge and/or Culvert Information

Question	Existing	Proposed
Bridge width or Culvert length (parallel to stream) (feet)	29	33
Bridge span or Culvert width/diameter (perpendicular to stream) (feet)	1.25	1.25
Height of culvert prior to burying (if bridge enter 0)	1.25	1.25
Depth culvert buried (feet) (if bridge enter 0)	1.25	1.25
Bottom of bridge beam (feet) upstream (if culvert enter 0)	0	0
Bottom of bridge beam (feet) downstream (if culvert enter 0)	0	0
Stream invert elevation at bridge (feet) upstream	0	0
Stream invert elevation at bridge (feet) downstream	0	0
Bridge rise from bottom of beam to streambed or culvert crown height (feet)	0	0
Total structure waterway opening above streambed (square feet)	1.2	1.2
Total structure waterway area below the 100-year elevation (square feet) (if applicable)	435	495
Elevation of road grade at structure (feet)	0	0
Elevation of low point in road (feet)	0	0
Distance from low point in road (feet)	0	0
Length of approach fill from edge of bridge/culvert to existing grade (feet)	0	0

Culvert Type

Existing	Proposed
Circular	Circular

Culvert Material

Existing	Proposed
Corrugated Metal	Plastic

Structure Entrance Design Type:

Existing	Proposed
Other: No structure.	Other: Headwall

Certification Upload

NONE PROVIDED

Comment

The culvert is within the 100-year flood elevation but is not in the effective flow area of the river. Since it is not directly in the flow path downstream of the spillway, no hydraulic analysis was required.

Floodplain

Proposed Activity

Parking Lot/Sidewalk/Pathway
Fill
Culvert
Excavation/Cut

100-Year Floodplain Elevation

Please provide a name for the stream, river, channel, or waterbody:	100-Year Floodplain Elevation (feet)	Datum	Source of Datum
Huron River	778.8	NAVD88	FEMA map & profile

Upload Documents for Datum Source

FEMA Profile.pdf - 10/23/2023 02:16 PM
FM26161C0242E.pdf - 10/23/2023 02:16 PM

Comment

NONE PROVIDED

Excavation/Cut volume below the 100-year floodplain elevation (cubic yards)

368

CORRECTION REQUEST *(APPROVED)*

Compensating Cut

Under Part 31 it is recommended that any application should have a NET fill of 300 CYD. In this case you are proposing 1210 CYD of fill and 368 CYD of cut, which results in a net fill of 842 CYD. Please find additional areas within the floodplain to provide 542 CYD or more of cut to get down to a new fill of 300 CYD.
Created on 12/11/2023 4:12 PM by **Joshua Gleason**

1 COMMENT

Natalie Dingledine (ndingledine@dlz.com) (12/18/2023 10:58 AM)
See compensating cut below.

Fill volume below the 100-year floodplain elevation (cubic yards)

841

Source of Fill Material:

Off-site

Type of Fill

Other: Clean granular fill and topsoil
Sand
Gravel

Calculations Upload

Floodplain Table_rev12.19.23.pdf - 12/21/2023 04:03 PM

Comment

Revised calculations attached.

Compensating cut volume (cubic yards)

173

Is this project located in the floodway?

Yes

Were one or more Hydraulic Analyses completed for this project?
No

CORRECTION REQUEST *(APPROVED)*
Hyraulic Review

Since there was no hydraulic report needed for this project please mark this bock "No".
Created on 12/11/2023 4:06 PM by **Joshua Gleason**

Local Unit of Government (LUG) Acknowledgement Letter Upload
NONE PROVIDED
Comment
NONE PROVIDED

Is there an existing building on site?
No

Upload of Proposed Site Plans

REQUIRED Application, maps, and drawings:

*Overall Project Site Plan
*Cross-Sectional Drawings

For Part 315 Dam Safety applications attach detailed signed and sealed engineering plans for a Part 315 dam repair, dam alteration, dam abandonment, or dam removal.
Examples site plan and cross-sectional drawings

For additional information on maps, drawings, and other attachments visit michigan.gov/jointpermit

Required on all Site Plan uploads. Please identify that all of the following items are included on your plans that you upload with this application.

Site Plan Features	Existing and Proposed Plan Set
Scale, Compass North, and Property Lines	Yes
Fill and Excavation areas with associated amounts in cubic yards	Yes
Any rivers, lakes, or ponds and associated Ordinary High Water Mark (OHWM)	Yes
Exterior dimensions of Structures, Fill and Excavation areas associated with the proposed project	Yes
Dimensions to other Structures and Lot Lines associated with the project	N/A
Topographic Contour Lines from licensed surveyor or engineer when applicable	Yes

CORRECTION REQUEST *(APPROVED)*
Culvert cross section - ordinary high water mark

Please display label the ordinary high-water (OHW) mark of the Huron River on the cross section for the proposed culvert/outfall.
Created on 12/8/2023 2:10 PM by **James Bales**

CORRECTION REQUEST *(APPROVED)*
Site Plans - ordinary high-water mark

Please display/label the ordinary high-water (OHW) mark of the Huron River on applicable site plans.
Created on 12/8/2023 2:08 PM by **James Bales**

Upload Site Plans and Cross Section Drawings for your Proposed Project

JPA COMBINED EXHIBITS.pdf - 11/10/2023 04:48 PM
6 - JPA Huron River AA 31.pdf - 12/21/2023 03:58 PM
7 - JPA Proposed Culvert.pdf - 12/21/2023 03:58 PM

Comment

Updated figures with OHWM as requested.

Additional Required and Supplementary Documents

Stream Impacts Summary Table.pdf - 11/09/2023 12:02 PM
Wetland Impacts Summary Table.pdf - 11/09/2023 12:02 PM
USFWS Correspondance_Revised.pdf - 12/18/2023 10:31 AM

Comment

USFWS Coordination regarding mussel survey and NLAA letter. General plan notes will be added for Protected Species including bat species and EMR.
Impact Summary Tables are attached.

Fees

The application fee identified in this section is a calculation based on answers to the questions in this application. This calculation is an estimate of the total fee and will be reviewed by the application processor to determine if any additional fees are required for a complete application.

Major Project Fee
+$2000.00

Total Fee Amount:
$2000.00

Is the applicant or landowner a State of Michigan Agency?
No

Revisions

Revision	Revision Date	Revision By
Revision 1	9/12/2023 1:47 PM	Natalie Dingledine
Revision 2	12/15/2023 9:57 AM	Natalie Dingledine