# Digital EGLE/USACE Joint Permit Application

version 1.20

(Submission #: HP1-4RV1-1CE64, version 3)

## Details

Submission IDHP1-4RV1-1CE64Submission ReasonNewStatusSubmitted

#### Fees

Fee	\$2,000.00
Payments/Adjustments	(\$2,000.00)
Balannce Due	\$0.00 (Paid)

## **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 (preapplication 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/documents/deq/wrd-general-permit-categories\_555828\_7.pdf) Minor Project, \$100 fee (https://www.michigan.gov/documents/deq/wrd-minor-project-categories\_555829\_7.pdf) 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 attachment

#### **Contact Information**

#### Applicant Information (Usually the property owner)

First NameLast NameHarrySheehan

Organization Name Washtenaw County Water Resources

Phone Type Number Extension

Mobile 7344177343 Email

sheehanh@washtenaw.org

705 NORTH ZEEB RD PO BOX 8645 ANN ARBOR, MI 48107

Is the Property Owner different from the Applicant?

Yes

#### **Property Owner Contact Information**

First Name Last Name Jennifer Lawson

Organization Name

City of Ann Arbor

#### Phone Type Number Extension

Business 734-794-6430 43735

Email

jlawson@a2gov.org

301 E Huron St

P.O. Box 8647

Ann Arbor, MI 48107

#### Upload Attachment for Authorization from Property Owners

MiWaters\_Authorization\_City Placeholder.pdf - 11/02/2020 02:16 PM Comment

NONE PROVIDED

#### NOTE (CREATED) City Authorization

I uploaded the signed authorization letter sent via email to the application documents. Created on 11/25/2020 3:31 PM by **Melissa Letosky** 

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

Yes

#### Upload Attachment for Authorization from Agent

agent.pdf - 11/02/2020 01:47 PM Comment NONE PROVIDED

#### Agent Contact

First NameLast NameSteveRoznowski

Organization Name Spicer Group Inc

Phone Type Number Extension

Mobile 989-415-3317

Email

stever@spicergroup.com

230 S WASHINGTON AVE

SAGINAW, MI 48607

# Are there additional property owners or other contacts you would like to add to the application? $\ensuremath{\mathsf{Yes}}$

#### Additional Contact Information (1 of 2)

Contact Role(s) Consultant

#### **Contact Information**

Prefix Mr. **First Name** Last Name Ron Hansen Title NONE PROVIDED **Organization Name** Spicer Group Inc Phone Type Number Extension 989-928-8021 Mobile Email ronh@spicergroup.com 230 S Washington Ave Saginaw, Michigan 48607

#### Additional Contact Information (2 of 2)

## Contact Role(s)

Consultant

#### **Contact Information**

Prefix NONE PROVIDED

First Name Last Name Kelsea Sutton

Title

Project Manager I

**Organization Name** Spicer Group Inc

Mobile

Phone Type Number Extension 989-415-4991

Email

kelseas@spicergroup.com

230 S Washington Ave Saginaw, Michigan 48607

#### **Project Location**

#### **DEQ Site Reference Number (Pre-Populated)** 2530447542793449819

**Project Location** 42.25532374114,-83.77494476275841

#### **Project Location Address**

STEEPLECHASE DR Ann Arbor, MI [NO ZIP CODE SPECIFIED]

County Washtenaw

#### Is there a Property Tax ID Number(s) for the project area? Yes Please enter the Tax ID Number(s) for the project location

09-12-06-200-051 09-12-06-200-030

#### 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**

From downtown Ann Arbor, head west on E Washington St until you reach S 5th Ave. Head south on S 5th Ave until you reach W Madison St and turn right to head west. Turn left to head south on S Main St for about 1.2 miles until you reach Scio Church Rd. Turn right and head west for 1 mile on Scio Church Rd before turning left and heading south on Churchill Dr. Take the next right onto Wiltshire Dr and head west until the road dead ends forks and turn left and go south on Steeplechase Dr. The Churchill Downs Park entrance will be on the right about 150 feet down the road.

#### **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 9/2/2020

**Pre-application File Number:** HP0-QJJC-SFJ5E

EGLE and/or USACE staff person involved in the pre-application meeting/inspection: Amy Berry, Melissa Letosky, Ralph Reznick, Matthew Herman

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? No

#### 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.

Upload a list.

#### **Uploads/Attachments**

Adjacent and Adjoining Property Owners.pdf - 10/23/2020 01:37 PM Comment NONE PROVIDED

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):

Drain - County

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.

See attached Project Description\_Churchill

# 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.

See attached Project Description Churchill

# 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.

Several alternatives were reviewed and evaluated. The following is a summary of options that were considered: • The first option for any project is to simply not do anything. This is untenable because it would not address the two primary problems on the site. First, it would not address downstream flooding issues and second, it would leave the City s 20 watermain exposed in the stream bed. The design from the Stormwater Conveyance Study incorporated multiple natural floodplain areas and proposed to divert flows from an existing Covington Road storm sewer. The Covington Road sewer reroute was ultimately removed from the scope of the project due to the high cost and the minimal flood mitigation improvement it had on the overall model. Two separate natural floodplain areas were initially proposed in Churchill Downs: one north along the existing watercourse and one on the southern end, parallel to I-94. To minimize the required excavation for the northern natural floodplain area, a berm was proposed along the southwest property line. This option was eliminated after a detailed environmental study of the site (Natural Features Report for the Eisenhower Park) revealed wetlands located where the southern natural floodplain area was to be located. Since wetland area would be impacted by the southern natural floodplain area, alternative locations were considered. The berm was also removed from future designs because of concerns with the excess dirt that would be placed on the existing watermain. • Installation of flood mitigation measures upstream of I-94 was studied; however, the City was unable to purchase the required land for this option. • Options were evaluated to maintain portions of the existing watercourse without relocation or enclosure. These proved infeasible for several reasons. First, the outlet pipe from the natural floodplain storage area must be lowered by 6.47 feet to achieve the necessary flood mitigation for downstream properties. The channel is already incised and the amount of grading necessary to lower the channel (particularly at the eastern/downstream end of the park) to meet the new outlet elevation would encroach on neighboring properties and create instability in the channel. Secondly, the location of the existing watercourse along the road already has created steep slopes adjacent to Scio Church Road and relocation was necessary to prevent further erosion and improve safety along the road. Lastly, it was necessary to enclose the watercourse under the existing watermain. The loamy soils and obvious incision of the channel has demonstrated that it is infeasible to maintain the existing watercourse over the watermain. Therefore, it is necessary to enclose the watercourse under the watermain to both dissipate energy (decrease the slope) and prevent the watermain from becoming exposed in the drain bottom. Based on the considerations outlined above, the only feasible option is the one we have proposed. This involves creating a single, large natural floodplain area on the north end of Churchill Downs. The selected design avoids wetland impacts and maximizes the flood mitigation within the available land. The Drain will be realigned through the center of the natural floodplain area to eliminate conflicts with the Scio Church Road sidewalk and road shoulder, address safety concerns with the erosion of the existing channel, avoid impacts to the city watermain, and allow the outlet of the natural floodplain storage area to be lowered to reduce flooding potential downstream. Further, we have designed a sinuous low flow channel that will improve stream function. See attached Project Description Churchill for additional detail.

## CORRECTION REQUEST (APPROVED)

Stormwater Study Not Provided

The project alternatives section of the project description document mentions an attached "Upper Malletts Stormwater Conveyance Study" that was not provided with the application. Please provide this document when you revise your submission.

Created on 11/25/2020 1:27 PM by Melissa Letosky

#### 1 COMMENT

#### Kelsea Sutton (kelseas@spicergroup.com) (12/22/2020 10:55 AM)

The document has been uploaded to MiWaters. A dropbox link to a copy of the report will also be emailed out after submittal.

#### CORRECTION REQUEST (APPROVED) Additional Information Needed

More information is needed on the original design with the two floodplain areas. It is mentioned this plan was eliminated due to wetland impacts. What is the area of impact associated with that plan? Does the plan reduce the impacts proposed to Malletts Creek? Please provide a site plan showing this original design. Created on 11/25/2020 1:18 PM by **Melissa Letosky** 

#### 1 COMMENT

#### Kelsea Sutton (kelseas@spicergroup.com) (12/22/2020 10:54 AM)

This plan included a smaller basin in the location of the current proposed basin and one to the south, see page 39 of the Upper Malletts Stormwater Conveyance Study for a rough location of the initial basin concept. The concept still would require the relocation of Malletts Creek and with the high expense of wetland mitigation which may have been required by EGLE and/or the City of Ann Arbor, was not considered further. Please see city ordinance Ord. 18-08 for specific City of Ann Arbor wetland requirements, which can be reviewed here: Ordinance No. 18-08 | Code of Ordinances | Ann Arbor, MI | Municode Library

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.) See attached Project Description\_Churchill

Upload any additional information as needed to provide information applicable to your project regarding project purpose sequence, methods, alternatives, or compensation.

20140321\_Upper Malletts\_Model\_FINAL\_REPORT.pdf - 12/22/2020 08:09 AM Project Description\_Churchill\_12-22-2020.pdf - 12/23/2020 09:26 AM Mallett Creek Stream Function Assessment Summary.pdf - 01/19/2021 09:03 AM Comment NONE PROVIDED

# CORRECTION REQUEST (APPROVED) Stream Design Information

Please provide any information or data used to design the new stream channel. How did you determine this sinuosity pattern was suitable for the stream?

Created on 11/25/2020 2:48 PM by Melissa Letosky

#### 1 COMMENT

#### Kelsea Sutton (kelseas@spicergroup.com) (12/22/2020 10:55 AM)

Please see the Opportunities for Functional Lift section of the attached stream function assessment summary for design considerations. The channel was designed such that it would not erode. The sinuosity pattern was determined to be suitable for the proposed stream based off the cohesive soils and flatter channel slopes.

# CORRECTION REQUEST (CORRECTED) Stream Function Assessment

A stream function assessment is needed to evaluate the conditions and functions of the existing stream and proposed stream design. It should be a data based assessment and show that stream functions lost by abandoning the existing channel will be replaced (and more preferably improved upon) by the proposed design. WRD has selected 5 parameters along with measurement techniques for these parameters that should be documented. Parameter 1: Floodplain Connectivity; Measurement method: Bank Height Ratio and Entrenchment Ratio. Typically these are derived from several, detailed channel cross sections of the existing stream. This information is also expected for channel design. Parameter 2: Bedform Diversity; Measurement method: Pool to Pool Spacing; % Riffle; and Pool Max Depth Ratio. Typically these are derived from a detailed longitudinal profile of the channel bed that includes, at a minimum, points at the head of riffle, head of pool, deepest point of pool, water surface, bankfull, and top of low bank. This information is also expected for channel design. Parameter 3: Bank Migration/Lateral Stability; Measurement method: dominant Bank Erosion Hazard Index and Near Bank Stress scores for all the eroding banks and outside of meander bends. Parameter 4: Riparian Buffer; Measurement of the quality (description, species, etc.) and the quantity (weighted average width) of the existing riparian buffer Parameter 5: Large Woody Debris; Measurement method: number of pieces per 100m, and LWD Index. These are detailed further in the attached document, "A Function Based Framework for Stream Assessment and Restoration Projects".

Created on 11/25/2020 1:53 PM by Melissa Letosky

#### 3 COMMENTS

#### Kelsea Sutton (kelseas@spicergroup.com) (1/19/2021 9:04 AM)

The Stream Function Assessment Summary has been updated to include assigned function ratings. Please see the attached updated Stream Function Assessment Summary.

#### Melissa Letosky (Letosky M@michigan.gov) (1/15/2021 1:18 PM)

Your stream function assessment should assign a function rating to each parameter (e.g. functioning, not functioning, functioning-at-risk). The ratings assist in quantifying the extent of lift in the proposed design. Please revise your assessment to include these ratings. I have an example stream assessment, but I'm not able to add additional attachments to this correction request. I will attach the example in a separate note in this section.

#### Kelsea Sutton (kelseas@spicergroup.com) (12/22/2020 10:55 AM)

A stream function assessment was completed for Mallet s Creek, please see the attached Mallett Creek Stream Function Assessment Summary.

#### NOTE (CREATED) Example Stream Function Assessment

Attached is the example stream function assessment mentioned in my comment in the stream assessment correction request.

Created on 1/15/2021 1:39 PM by Melissa Letosky

#### **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.

Stream, River or Drain Construction Relocation and Enclosure Activities Culverts - Stream Only

#### CORRECTION REQUEST (APPROVED)

#### Culvert should also be selected from this list.

This will generate a culvert section where you will need to provide the information for the proposed culverts. Created on 11/25/2020 2:12 PM by **Melissa Letosky** 

#### 1 COMMENT

#### Kelsea Sutton (kelseas@spicergroup.com) (12/22/2020 10:56 AM)

Culvert has been selected and additional information completed for the enclosed portions at the inlet and outlet of the proposed natural floodplain area.

The Proposed Project will involve the following resources (check ALL that apply). Stream or River

#### **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

#### Stream Project Information (1 of 1)

#### **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: Malletts Creek Drain

Stream Water elevation reference\* (show elevation on plans with description): Other: Depth above drain bottom

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

1

Date of observation (M/D/Y) 7/17/2020

What length (feet) does the project activity(ies) extend waterward of the OHWM? 5

What length (feet) does the project activity(ies) extend landward of the OHWM? 285

Is the drainage area upstream of the proposed project area greater than 2 sq. miles?  $\ensuremath{\mathsf{No}}$ 

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

3.48

Will a turbidity curtain be used during the proposed project?

No

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 1)

#### 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 HERE 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	270
Temporary	647
	Sum: 917

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 1. 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):

Backfill General Fill Riprap

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 of Existing Channel	693	5	0.4	3465	1386	51	NONE PROVIDED
Backfill for Proposed Enclosure - Scio Church Rd (US end of project limits)	206	7	0.33	1442	475.86	18	NONE PROVIDED
Backfill for Proposed Enclosure - Wiltshire Ct (DS end of project limits)	64	7	0.33	448	147.84	5	NONE PROVIDED
Riprap for Proposed Enclosure - Scio Church Rd (US end of project limits)	10	10	1	100	100	4	NONE PROVIDED
Riprap for Proposed Enclosure - Wiltshire Ct (DS end of project limits)	10	10	1	100	100	4	NONE PROVIDED
				Sum: 5555	Sum: 2209.7	Sum: 82	Sum: NaN

#### CORRECTION REQUEST (APPROVED) Existing Channel Fill

The width of the fill provided for the existing channel does not match the width of the stream provided elsewhere in the application. Please correct this discrepancy.

Created on 11/25/2020 1:59 PM by Melissa Letosky

1 COMMENT

#### Kelsea Sutton (kelseas@spicergroup.com) (12/22/2020 10:56 AM)

The width has since been updated to match the stream width and the depth of fill adjusted to match the proposed fill quantity.

#### Type of Fill

Other: Soil from on site natural floodplain area creation

Source of Fill On-site (show on plans)

**Is riprap proposed?** Yes **Indicate size range of riprap:** Plain rirprap

**Type of riprap** Angular rock

Will material be installed under the riprap? Yes

**Type of material installed under riprap:** Filter fabric

# Activities Involving Dredging or Excavation: Select from the following list for Excavation/Dredge Activities (select all that apply to this waterbody impacted):

Other: Natural floodplain area

Projects involving	g Excavation/Dredging	a below the Ordinar	v High Water Mark:
	j Enouvation/Droaging	g below the orallia	y ringin mater 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)
Low Flow Channel Creation within Natural floodplain area	647	10	1	6470	6470	240	4529
Cut for Proposed Enclosure - Scio Church Rd (US end of project limits)	206	7	.33	1442	475.86	18	NONE PROVIDED
Cut for Proposed Enclosure - Wiltshire Ct (DS end of project limits)	64	7	.33	448	147.84	5	NONE PROVIDED
				Sum: 8360	Sum: 7093.7	Sum: 263	Sum: 4529

#### Has this area been previously dredged?

Yes

#### describe:

County drain establishment and maintenance under Michigan Drain Code.

#### Date the area was previously Dredged:

NONE PROVIDED

**Permit Number under which previous dredging was authorized:** NONE PROVIDED

## Previous Owner's Name

NONE PROVIDED

# Will the previously dredged area be enlarged? No

Is long-term maintenance dredging proposed?

# Yes How often?

As needed for drain maintenance under Michigan Drain Code.

## What is the method used to be dredged?

Mechanical

# How much volume of material will be removed (cubic yards)? 181

# 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?

Upland area outside of any regulated floodplain or wetland areas

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).: Stream Enclosure

Activity	Length (feet)	Width (feet)	Depth (feet)	Area (square feet)	Volume (cubic feet)	Volume (cubic yards)	Corrected value for complex impact AREAS (square feet)
Proposed Enclosure - Scio Church Rd (US end of project limits)	206	5	1	1030	1030	38	NONE PROVIDED
Proposed Enclosure - Wiltshire Ct (DS end of project limits)	64	5	1	320	320	12	NONE PROVIDED
				Sum: 1350	Sum: 1350	Sum: 50	Sum: NaN

Projects involving Structures constructed below the Ordinary High Water Mark:

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 �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

#### 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?** Yes - Existing

#### Does the proposed project include an:

Enclosure Relocation

#### CORRECTION REQUEST (APPROVED)

Project is also proposing a relocation.

Relocation should also be selected and the appropriate information should be entered regarding that aspect of the project. Created on 11/25/2020 2:09 PM by **Melissa Letosky** 

1 COMMENT

Kelsea Sutton (kelseas@spicergroup.com) (12/22/2020 10:56 AM) Relocation has been selected and associated questions completed.

Are stream relocations of 500 feet or more in length (cumulatively) proposed? No

Are stream enclosures of 100 feet or more (cumulatively) in length proposed? Yes

# Does enclosure include additional construction at the ends of the structure? $\ensuremath{\mathsf{No}}$

#### Dimensions of existing stream/drain channel

Length (feet)	Width (top of bank to top of bank) (feet)	Depth (feet)	Channel bottom width (feet)
693	5	1	4

#### Will existing channel be abandoned?

Yes

Length of channel to be abandoned (feet):

693

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

No

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

1

#### Dimensions of new or relocated stream channel:

Length (feet)	Width (feet)	Depth (feet)
283	4	1

#### Is a two-stage or similar design proposed?

Yes

#### Include a clear description on site plans and short description of design here.

A low flow channel will meander through the center of the natural floodplain area and approximately match the length of the existing watercourse. The proposed low flow channel is designed to handle the existing channel s bankfull-depth discharge as determined by EGLE s bankfull regression analysis. The proposed low flow channel was designed to pass the bankfull discharge unattenuated with a bankfull depth of 0.75 and bankfull width of 8.5 from the attached Manning Flow calculations. The proposed low-flow channel has 3H:1V side slopes with a four-foot bottom width and one-foot depth to provide channel stability; refer to sheet DR-10 for a typical detail. The portion of the channel along Scio Church Road (STA 8+25 to STA 12+22) need to be realigned due to road safety concerns and therefore the open channel section between STA 5+42 and STA 8+25 will also need to be relocated. The existing watercourse will be backfilled to allow for the creation of the natural floodplain area.

#### Volume of dredge/excavation (cubic yards)

51

How will slopes and bottom be stabilized?

Grading and seeding

**Proposed side slopes (vertical / horizontal):** 1/3

# 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 2)

#### 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 Enclosure - Scio Church Rd (US end of project limits)

#### STREAM INFORMATION

Width of the stream

Upstream (feet)	Downstream (feet)
NONE PROVIDED	4

**Cross-sectional area of primary channel (square feet):** 4.7

The width of the stream where the water begins to overflow its banks. Bankfull width (feet): 8.5

#### Is there an existing structure?

No

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)	0	206
Bridge span or Culvert width/diameter (perpendicular to stream) (feet)	0	5
Height of culvert prior to burying (if bridge enter 0)	0	5
Depth culvert buried (feet) (if bridge enter 0)	0	0
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	916.35

Question	Existing	Proposed
Stream invert elevation at bridge (feet) downstream	0	916.14
Bridge rise from bottom of beam to streambed or culvert crown height (feet)	0	5
Total structure waterway opening above streambed (square feet)	0	19.63
Total structure waterway area below the 100-year elevation (square feet) (if applicable)	0	0
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	
NONE PROVIDED	Circular	

#### **Culvert Material**

Existing	Proposed
NONE PROVIDED	Concrete

#### Structure Entrance Design Type:

Existing	Proposed
NONE PROVIDED	Other: U/S Manhole & D/S Flared End Section

#### **Certification Upload**

NONE PROVIDED Comment NONE PROVIDED

#### Bridges and Culverts (2 of 2)

#### 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 Enclosure - Wiltshire Ct (DS end of project limits)

#### STREAM INFORMATION

#### Width of the stream

Upstream (feet)	Downstream (feet)
4	0

**Cross-sectional area of primary channel (square feet):** 4.7

The width of the stream where the water begins to overflow its banks. Bankfull width (feet): 8.5

## Is there an existing structure?

No

Click the link below to view bridge profile sample drawings. <u>Click here for link</u>

#### 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)	0	64
Bridge span or Culvert width/diameter (perpendicular to stream) (feet)	0	5
Height of culvert prior to burying (if bridge enter 0)	0	5
Depth culvert buried (feet) (if bridge enter 0)	0	0
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	915.49
Stream invert elevation at bridge (feet) downstream	0	915.42
Bridge rise from bottom of beam to streambed or culvert crown height (feet)	0	5
Total structure waterway opening above streambed (square feet)	0	19.63
Total structure waterway area below the 100-year elevation (square feet) (if applicable)	0	0
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
NONE PROVIDED	Circular

#### **Culvert Material**

Existing	Proposed
NONE PROVIDED	Concrete

#### Structure Entrance Design Type:

Existing	Proposed
NONE PROVIDED	Other: U/S Flared End Section & D/S Manhole

#### **Certification Upload**

NONE PROVIDED Comment NONE PROVIDED

#### **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	Yes
Topographic Contour Lines from licensed surveyor or engineer when applicable	Yes

#### Upload Site Plans and Cross Section Drawings for your Proposed Project

BinderSet\_DR-3353-EGLE\_20201103.pdf - 11/03/2020 11:39 AM Comment NONE PROVIDED

# CORRECTION REQUEST (APPROVED)

Riprap

Multiple riprap details are provided in the plan set. Is any riprap proposed in the stream channel aside from the culvert inlets/outlets? If so, where and in what amounts? Created on 11/25/2020 2:55 PM by **Melissa Letosky** 

#### 1 COMMENT

#### Kelsea Sutton (kelseas@spicergroup.com) (12/22/2020 10:57 AM)

No riprap is proposed to be included in the stream channel other than the included riprap to be placed at the inlet and outlet of the enclosures. The additional details are standard details that are typically included with all drain projects.

#### CORRECTION REQUEST (APPROVED) Culvert Cross Sections Needed.

An end view cross-section is needed for the proposed culverts. Please label the dimensions and the depth the culvert will be buried.

Created on 11/25/2020 2:36 PM by Melissa Letosky

#### 1 COMMENT

#### Kelsea Sutton (kelseas@spicergroup.com) (12/22/2020 10:57 AM)

Please refer to sheet DR-15 pertaining to the standard details for culvert installation, see Typical Native Storm Sewer Crossing Detail. Depth of cover varies along the culvert. Please reference the plan and profile on sheet DR-09 for dimensions and to see depth of cover.

#### CORRECTION REQUEST (APPROVED) Floodplain Area Plans

Please provide a planting plan and maintenance plan for the floodplain area. Created on 11/25/2020 2:20 PM by **Melissa Letosky** 

#### 1 COMMENT

#### Kelsea Sutton (kelseas@spicergroup.com) (12/22/2020 10:57 AM)

Attached please find a draft tree list. Maples will try to be avoided due to an overrepresentation in the City. All plants will be native, and seeds and plugs will be ordered from a native plant nursery. All plantings and maintenance will be in accordance with city ordinance Ord. No. 43-04, (\*) 17, 1-3-05 and Ord. No. 19-05, (\*) 2, 5-16-05, which can be reviewed here: https://library.municode.com/mi/ann\_arbor/codes/code\_of\_ordinances?nodeld=TITIIIPAPUGR\_CH39PAENRE. Any requirements from the Washtenaw County Design Guidelines will also be adhered to for this project. A copy of those guideline can be found here: https://www.washtenaw.org/221/Rules-Design-Standards.

#### Additional Required and Supplementary Documents

Eisenhower Basin Natural Features Report June 2017 (small).pdf - 09/21/2020 03:38 PM Manning\_Flow\_Calculation.pdf - 10/28/2020 04:22 PM Churchill\_Bankfull Spreadsheet\_Existing Conditions.pdf - 10/28/2020 04:22 PM Churchill Downs Project Photos.pdf - 10/28/2020 04:22 PM StreetTreeListCharacteristics\_November2016.pdf - 12/23/2020 02:02 PM Comment NONE PROVIDED

#### 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

## **Status History**

	User	Processing Status
1/19/2021 9:02:14 AM	Kelsea Sutton	Draft
1/19/2021 11:10:37 AM	Kelsea Sutton	Submitted

# Revisions

Revision	Revision Date	<b>Revision By</b>
Revision 1	7/10/2020 7:45 AM	Kelsea Sutton
Revision 2	12/22/2020 8:07 AM	Kelsea Sutton
Revision 3	1/19/2021 9:02 AM	Kelsea Sutton