# Environmental Assessment Evergreen Avenue, Ten Mile Creek / Lateral 2 Crossing Project August 11, 2016

# Applicant: Portage County Drainage District

## Proposal: Replace culvert in a district drain

**Location:** The culvert and bridge are located at Evergreen Avenue as it crosses Lateral 2 of the Portage County Drainage District. The drain is also known as Ten Mile Creek. The project is located in Sections 16 and 21, T21N, R7E, in the Town of Grant, Portage County, Wisconsin.

## 1. Nature and Purpose of the Proposed Action

The Portage County Drainage District (PCDD) filed a full application with the Department of Agriculture, Trade, and Consumer Protection (DATCP) on August 11, 2016, seeking approval for a construction project in Ten Mile Creek / Lateral 2, which is a district drain.

The Town of Grant has developed highway improvement plans for the Ten Mile Creek / Lateral 2 culvert crossing replacement on Evergreen Avenue. The proposed project on Evergreen Avenue includes the reconstruction of the existing roadway to meet Wisconsin Department of Transportation town road design standards and replacing the existing Ten Mile Creek / Lateral 2 culvert crossing.

The Town of Grant is proposing to replace a nested set of four 72-inch by 44-foot corrugated steel culvert pipes with two 128x83-inch by 86-foot aluminized corrugated steel pipe arch culverts. The replacement culvert is designed to allow proper drainage from land in the district and to allow passage of coldwater fish at baseflow conditions.

Although the Town of Grant is responsible for the proposed project, the PCDD has the responsibility under s. ATCP 48.34, Wis. Admin. Code, to obtain DATCP approval before authorizing any person to install or modify any structure in a district drain. Also, the proposed action involves a cold water fishery in a district drain with a navigable stream history, which requires the preparation of an environmental assessment (EA) under s. ATCP 48.38(5)(d). The preparation of an EA will determine if an environmental impact statement (EIS) is warranted under s. ATCP 3.02(3)(b).

## 2. Foreseeable Environmental Effects of the Proposed Action

- a. Immediate effects: The proposed action will result in filling 4,095 square-feet of aquatic bed and riparian emergent wetlands. The DNR has issued a general permit to the Town of Grant for this action.
- b. Long-term effects: The replacement culverts will be buried at a depth of one foot below the existing streambed. This design will allow the culvert to silt in, creating a natural streambed that promotes the passage of fish and other aquatic organisms.
- c. Direct effects: The proposed action will involve excavation of the existing streambed along the full width of the road crossing.
- d. Indirect effects: Due to excavation of the existing streambed and filling of riparian emergent wetlands, some amount of sedimentation will most likely occur downstream of the project site. However, the Department of Natural Resources (DNR) general permit covering this

activity prohibits culvert replacement work between September 15 and May 15<sup>th</sup> to minimize impacts to fish and other aquatic organisms during sensitive time periods such as spawning, winter dormancy, and migration. Improved fish passage at the culvert crossing is intended to enhance the cold water fishery in Ten Mile Creek / Lateral 2, both upstream and downstream of the project site.

e. Cumulative effects: Overall, the positive benefits of ensuring fish passage in Ten Mile Creek / Lateral 2 outweigh the relatively small area of wetland fill and fairly minor sedimentation downstream of the project site due to construction activities.

# 3. Persons, Groups, and Agencies Affected by the Activity

Because of the proposed action: 1) area residents and other individuals utilizing Evergreen Avenue will benefit from a safer roadway, 2) agricultural and other landowners that are currently benefiting from drainage will continue to receive those benefits, and 3) anglers will benefit from an enhanced cold water fishery.

## 4. Significant Economic and Social Effects of the Proposed Action

By maintaining drainage, farmers will continue to receive the economic benefits of having additional acreage available for production agriculture. The proposed action assures that the benefits received by each landowner will continue to be in line with assessments made by the Portage County Drainage Board to cover the costs of maintaining drains in the Portage County Drainage District.

Maintaining safe transportation services and drainage infrastructure are necessary to help support the local farming community.

## 5. Controversial Issues Associated with the Proposed Action

Over the past several months, a number of parties discussed different culvert designs and the effects on fish passage. Parties to the discussion, including the DNR, agreed to a design intended to enhance the cold water fishery. This process directly addressed an issue that otherwise could have been controversial.

The proposed action is not expected to raise controversial issues.

## 6. Possible Alternatives to the Proposed Action

- a. Take no action: The existing bridge structure is in need of improvements. Taking no action would not improve the current structural conditions, and failure of the structure would result in road closure and loss of service.
- b. Rehabilitation: The rehabilitation alternative would not fully address the substandard roadway alignment. The culvert pipes would be replaced in kind, but this would not address possible culvert plugging.
- c. Design differently: Any culvert design must meet structural standards, DNR permitting requirements, and applicable drainage performance standards under s. ATCP 48, subchapter IV.

## 7. Possible Measures to Mitigate Adverse Environmental Effects

Overall, the proposed action is anticipated to have positive environmental effects. Any adverse environmental effects will be of a secondary and minor nature. The town is responsible for complying with the terms and conditions of the permit obtained from the DNR, which includes a number of construction best management practices. In other words, permit compliance should mitigate any adverse environmental effects.

Also, both the DNR and the county drainage board can take direct action to mitigate adverse environmental effects through their respective inspection authorities. The DNR can minimize adverse effects by verifying compliance with the conditions specified in the Town of Grant's general permit. On the other hand, the county drainage board can minimize adverse environmental effects such as risk of flooding downstream or backing up water upstream by verifying: 1) that district drains are maintained in compliance with ATCP 48, 2) that landowners are complying with applicable requirements under ATCP 48, and 3) whether the district drainage system is operating effectively to achieve the goals which have been specified for the drainage district pursuant to s. 88.63, Wis. Stats., and s. ATCP 48.36(1)(f).

## 8. Final Determination

This assessment finds that the reconstruction of the existing roadway and culvert replacement at Evergreen Avenue and Ten Mile Creek / Lateral 2 in the Town of Grant will have no significant environmental impact and is not a major action significantly affecting the quality of the human environment. No environmental impact statement is necessary under s. 1.11(2), Wis. Stats., and s. ATCP 3.03.

Date\_8/11/16\_\_ By\_\_\_\_ (totoph (lyla

Chris Clayton, Drainage Program Manager Land and Water Resources Bureau Agricultural Resource Management Division

The decision indicating that this document is in compliance with s. 1.11, Stats., is not final until certified by the Administrator of the Agricultural Resource Management Division.

Date\_8/11/16\_ By\_\_\_\_Keith Foye, Acting Administrator

Agricultural Resource Management Division