
Philo – Duncan Falls Update January 2017

Large projects such as the Philo-Duncan Falls bridge replacement can be broken into four components, design, environmental, right of way and construction. Below is an overall summary of each area. For more information we have posted the Feasibility Study and Structure Type Study on our website www.mceo.org.

Design

We began with 3 alternatives and added a 4th at the request of the community. In June 2016, the pros and cons of each were presented to the public. There was strong local support for locating the new bridge downstream of the existing location and tying back in near the current intersections on both sides of the river. The information on each alternative can be found in the Feasibility Study. This included some rough cost estimates which allowed the MCEO to pursue construction funds from ODOT under their local major bridge program. We were successful in our pursuit and have commitments for a large portion of the funds.

There are many details that need to be accounted for in designing a bridge, especially one of this magnitude. Many of the overarching considerations are defined in a Structure Type Study. This was completed in early January and has been posted on our website, mceo.org. The new bridge is recommended to be a 7-span, 6-beam pre-stressed concrete structure on wall type piers. The selection was based on initial cost, meeting local needs, constructability and maintenance. Based on requests from the public, lighting has also been added to the bridge along each barrier face to provide light for pedestrians and also help delineate the roadway during frequent fog events. Other more technical considerations such as expansion systems, drainage options, coast guard clearance, flood calculations, scour concerns, pier depth required to reach bedrock, corrosion prevention, style of formwork, crash testing of railing options have also been evaluated.

The area has been surveyed and design plans for the roadway connections are advancing ahead of the bridge plans. A portion of the soil borings occurred this summer, but others will need completed in the spring when the water reaches higher levels. We anticipate the next round of roadway plans and bridge plans, called stage 2, in March. Final construction plans that include finite quantities will be complete in late fall/early winter 2017.

Environmental

An environmental clearance document is required before right of way/property can be purchased. Our consultant team has been working on multiple components throughout the last year. Major river crossings require the construction of a causeway for erecting the structure. This in turn requires specialized water permits from multiple agencies such as the Army Corps of Engineers, Ohio EPA, ODNR, and Coast Guard. Many other environmental aspects are also being evaluated such as endangered species, critical habitat, underground petroleum contamination, asbestos, historical significance, cultural resources, wetlands, and recreational impacts. All of these items are required for the use of federal transportation funds. By late spring, we intend to have completed all the necessary studies and have approval of commitments to be followed during construction for inclusion in the final plans. It is likely there will also be some work done prior to the construction contract such as clearing of trees and relocating mussel beds found in the river.

Right of Way

The right of way process (R/W) includes both property purchases and utility relocations. There are 9 affected properties. Title research and appraisal work is beginning now.

Construction

The construction sale date is scheduled for March 8, 2018. It will be advertised and administered by ODOT. Construction will span two years from 2018 to 2020. The intention is to utilize the existing bridge during construction to minimize traffic detours.

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by ODOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 11, 2015, and executed by FHWA and ODOT.