

LIC-CR128-0.97, PID 87642

CHERRY VALLEY ROAD BRIDGE REPLACEMENT OPEN HOUSE PUBLIC INVOLVEMENT MEETING

WEDNESDAY, JUNE 22, 2016

WELCOME

The City of Newark welcomes you to the Open House Public Involvement Meeting for the Cherry Valley Road Bridge Replacement project (LIC-CR128-0.97, PID 87642).

Tonight's meeting will provide information regarding the preliminary design that has been completed, the preferred alternative that is being proposed, the anticipated floodplain impacts, and other project details for your information and input. Members of the project team are on hand to discuss the project and answer your questions.

The meeting format is an open house. This format enables you to review the project materials at your own pace and ask questions of team members at your convenience.

Your comments are important to the development of the project. Comments may be submitted in the following ways:

- Spoken or submitted in person during the open house public involvement meeting.
- By phone to Brian Morehead, City of Newark Engineer, at (740) 670-7727.
- By email to bmorehead@newarkohio.net
- By mail to:

Brian R. Morehead, P.E.
City Engineer
40 West Main Street
Newark, OH 43055

All materials presented at tonight's meeting are available for review on the City's website at the following link:
<http://www.newarkohio.net/city-services/projects/cherry-valley-road-bridge-over-raccoon-creek>

THE FINAL DATE TO SUBMIT COMMENTS IS FRIDAY, JULY 8, 2016.

A summary of comments received during the public comment period and responses to those comments will be available by request and also posted by August 5, 2016 on the City's website at the link noted above.



PROJECT HISTORY

The proposed transportation improvement project is located in the City of Newark in Licking County, Ohio, and encompasses the existing bridge that carries County Road 128 (CR-128, Cherry Valley Road) over Raccoon Creek. The existing structure comprises a three-span (35'±, 35'±, 35'±), filled-spandrel, stone and concrete arch bridge, and is locally known as the "Showman Arch Bridge". It was originally constructed as an aqueduct, circa 1830, to carry the Granville Feeder over Raccoon Creek as part of the Ohio and Erie Canal system. After the canal was abandoned in the mid-1800s, the structure was converted to a roadway bridge. In 1889 the bridge was modified once more to carry the first, true interurban rail line in Ohio, which ran between the cities of Newark and Granville. Due to the increased popularity of travel by automobiles, the interurban line was shut down in 1923 and the bridge has carried only vehicular traffic since then. Aside from filling in the canal waterway with embankment when the structure was converted to a roadway bridge, the only recorded improvements to the structure occurred in the 1930s when it was widened by extending the arches and constructing new spandrel walls on both sides using reinforced concrete, reinforced concrete fenders were added on the upstream face between the arch legs, and a concrete facing was placed over the original stone masonry.

CR-128 currently functions as an urban arterial roadway through the communities of Newark and Granville. It also serves as the principal connection from the residential areas and the numerous governmental, medical, industrial, and commercial facilities in the west end of Newark to State Route 16 (SR-16), which is the major east-west freeway through central Licking County. The existing bridge carries an Average Daily Traffic (ADT) volume of 18,000 vehicles including 1,600 trucks. The traffic volume is projected to increase to 20,000 ADT by year 2039, with a similar percentage of truck traffic.

Long-term planning for a new Cherry Valley Road bridge over Raccoon Creek began as early as 1971 when a potential realignment of Cherry Valley Road, between Thornwood Drive and Newark-Granville Road, was included in the City of Newark's *Land Use and Thoroughfare Plan*. This concept was revisited in several planning studies over the next four decades, including the *Cherry Valley Corridor Study* (prepared in 1996 by the Licking County Area Transportation Study (LCATS), the *2025 Recommended Plan for Highway Projects* (prepared by LCATS in 2001), the *Destiny 2020 Comprehensive Plan* (prepared in 2002 for the City of Newark), the *SR-16/Cherry Valley Road/Thornwood Drive Corridor Study* (prepared for ODOT District 5 in 2007), and the *Transportation Moves 2035 Long-Range Multi-Modal Transportation Plan* (prepared by LCATS in 2012).

PURPOSE STATEMENT

The purpose of the proposed project is to maintain a safe, reliable route of travel on Cherry Valley Road (CR-128) over Raccoon Creek.

NEED ELEMENTS

- Existing Bridge Condition - The most recent inspection of Bridge No. LIC-CR128-0097 was completed on November 5, 2015 and assigned a General Appraisal Rating of 4 (Poor Condition) to the structure. This condition rating was due principally to the overall deteriorated condition of the arches and spandrel walls, which contain many delaminated and spalled areas in the concrete, loose or missing masonry stones near the spring lines of the arches, and minor scouring of the creek bed at the bottoms of the arch legs.
- Existing Bridge Sufficiency Rating - The ODOT Bridge Inventory Information Form (BM-191) for this structure was updated in 2015 and listed the Sufficiency Rating as 49.4 SD (Structurally Deficient). The Sufficiency Rating is indicative of a bridge's adequacy to remain in service and

PROJECT GOALS AND OBJECTIVES

- Preserve the Existing Bridge
- Support Licking County's Long-Term Thoroughfare Plan
- Promote Long-Term Economic Development Along Thornwood Drive
- Optimize Traffic Safety
- Optimize Traffic Flow
- Improve Hydraulics
- Minimize Impacts to Section 4(f) Resources
- Minimize Right-of-Way Acquisition
- Minimize Impacts to Environmental Resources
- Minimize Impacts to Utilities

Thornwood Crossing - Preferred Alternative



is rated on a scale of 0 to 100. A bridge with no deficiencies would receive a Sufficiency Rating of 100. According to FHWA's Highway Bridge Replacement and Rehabilitation Program (23 CFR 650.409), bridges with a Sufficiency Rating of 50 or less are eligible for replacement.

ALTERNATIVES CONSIDERED

Alternative 1 - Downstream Offset Alternative

would construct a new bridge over Raccoon Creek approximately 145' downstream from the existing bridge. Cherry Valley Road would be realigned to the east, and would directly tie-in to Thornwood Crossing at the north end of the bridge and to existing Cherry Valley Road south of Reddington Road. A traditional intersection with a traffic signal and turn lanes would be constructed at Reddington Road. The T.J. Evans bikeway would have to be realigned with a new crossing under Cherry Valley Road. Because the

bikeway is a Section 4(f) resource, additional agency coordination would be required during the project development to obtain approval for the realignment. Although it would provide an improved route from the new SR-16/Thornwood Crossing interchange to the industrial facilities along Thornwood Drive, this alternative would encourage the continued use of Cherry Valley Road as the principal roadway to the west end of Newark and would not meet the objectives of Licking County's long-term thoroughfare plan. The probable project cost for Alternative 1 is \$9,400,000.

Alternative 2 - Upstream Offset Alternative

would construct a new bridge over Raccoon Creek approximately 85' upstream from the existing bridge. Cherry Valley Road would be realigned to the west, and directly tie-in to Thornwood Crossing at the north end of the bridge and to existing Cherry Valley Road south of Reddington Road. A traditional intersection with a traffic signal and turn lanes would

be constructed at Reddington Road. The T.J. Evans bikeway would have to be realigned with new tunnels under Cherry Valley Road and Reddington Road. Because the bikeway is a Section 4(f) resource, additional agency coordination would be required during the project development to obtain approval for the realignment. As with Alternative 1, this alternative would encourage the continued use of Cherry Valley Road as the principal roadway to the west end of Newark. The probable project cost for Alternative 2 is \$8,300,000.

Alternative 3 - Direct Connection with a Signalized Intersection would provide a new bridge crossing of Raccoon Creek and the T.J. Evans bikeway approximately 1050 feet upstream from the existing bridge. This alternative will construct a new road from the SR-16/Thornwood Crossing interchange to Thornwood Drive as envisioned in several planning studies dating back to the 1990s. This alternative would be constructed along the same alignment as Alternative 4, but would utilize a traffic signal and turn lanes at the Thornwood Drive/Reddington Road/River Road intersection. Construction of Alternative 3 also will require the partial relocation of an 8" petroleum pipeline near the south end of the new bridge and the raising of power distribution lines near the north end of the bridge. The probable project cost for Alternative 3 is \$10,800,000.

Alternative 4 - Direct Connection with a Roundabout (PREFERRED ALTERNATIVE) will provide a new bridge crossing of Raccoon Creek and the T.J. Evans bikeway approximately 1050 feet upstream from the existing bridge. This alternative will be constructed along the same alignment as Alternative 3, connecting the SR-16/Thornwood Crossing interchange directly to Thornwood Drive. Providing a direct route from the new interchange to Thornwood Drive will facilitate the transportation of goods and services to/from the current and future commercial and industrial facilities along Thornwood Drive, and thereby assist Licking County's long-term plans for economic development in the western regions of Newark and Heath. Compared to a traditional intersection with a traffic signal and turn lanes, the roundabout proposed at the intersection with Thornwood Drive/Reddington Road/River Road will allow for improved traffic flow during the morning and afternoon peak travel periods, and promote safer speeds for vehicles traveling down the existing hill on Thornwood Drive toward the intersection. Construction of Alternative 4 will require the partial relocation of

an 8" petroleum pipeline near the south end of the new bridge and the raising of power distribution lines near the north end of the bridge. Alternative 4 is recommended as the PREFERRED ALTERNATIVE and has a probable project cost of \$10,800,000.

FLOODPLAIN IMPACTS

To comply with the floodplain regulations of the City of Newark and the Village of Granville, hydraulic analyses were performed for each alternative in order to determine the hydraulic opening and span length of the new bridge across Raccoon Creek. The current, effective 100-year FEMA floodplain analysis was utilized as the initial model. It then was updated to correct specific modeling errors, to account for the T.J. Evans bikeway bridge that was installed downstream of Cherry Valley Road in 2002, and to incorporate more detailed survey data of the existing creek channel and the Showman Arch Bridge. Additionally, the effective regulatory floodway was updated to reflect the changes made with the corrected, effective hydraulic model, and then subsequently optimized to allow for a maximum 1 foot surcharge in the 100-year flood elevation throughout the length of channel in the project study area. The corrected, effective 100-year model and optimized floodway then were used as the baseline hydraulic model to analyze each proposed bridge crossing. The pier locations, span lengths, and lowest beam elevation were established for each bridge so the 100-year flood elevation would not be increased upstream of the bridge. All four bridge crossing alternatives were modeled with the assumption that the existing arch bridge will remain in place after the project is constructed.

ANTICIPATED PROJECT SCHEDULE

Final Design Begins	Fall 2016
Environmental Document Approved	Summer 2018
Final Design Completed	Spring 2019
Right-of-Way Acquisition Completed	Summer 2019
Construction Begins	Spring 2020
Construction Completed	Summer 2021



Gannett Fleming

*Excellence Delivered **As Promised***

"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."