Form Name: Submission Time: Browser: IP Address: Unique ID: Location:

SFY 2025 Municipal Bridge Application August 15, 2024 2:43 am Chrome 127.0.0.0 / Windows 23.245.111.32 1255313614 40.0946, -83.0118

State Fiscal Year 2025 Municipal Bridge Application

Agreement of Understanding	I have read and understand the terms described in the overview above
Contact Information	
Applicant/Project Sponsor	Public Service Director, City of Pataskala
Name	Alan Haines
Address	621 W. Broad St. Suite 2B Pataskala, OH 43062
Phone	(614) 746-5365
Email	ahaines@ci.pataskala.oh.us
Bridge Inspection and Studies/Analysis	
Are the applicant's local bridge inspections up to date?	Yes
Does a Structure Type Analysis need to be performed?	Yes
Does a Hydraulics Analysis need to be performed?	Yes
Project Identifiers	
ODOT District	5
County	Licking
Route	Inventory Route is not on the Base Network
Structure crosses over:	South Fork Licking River
Bridge Structure File Number	4564014
Project Type	Rehabilitation
Is the anticipated project going to be administered as ODOT Let or Local Let?	ODOT Let

Project Description

Describe the Current Conditions

The 2024 bridge inspection found evidence of water seepage through the deck wearing surface and between the prestressed concrete adjacent box beams resulting in large areas of concrete delamination and spalling along the lower edges of the box beams. Multiple beams have exposed, corroded, and broken strands reducing the live load capacity of the bridge. The approach guardrail does not meet current standards. The bridge does not provide sidewalk continuity from the Key Blvd community to the amenities of downtown Pataskala recreation centers, parks, Elementary School and the primary business corridors in the City located immediately across the South Fork Licking River.

The Key Blvd Bridge serves as the only access point across the South Fork Licking River to a local neighborhood currently comprised of 131 homes and the City's wastewater treatment plant. All future construction projects (new housing development and wastewater treatment improvements) may be required to use the existing Key Blvd Bridge forcing construction traffic to travel through the Key Blvd community which poses a safety concern. Additionally, if there is a need for emergency services, access will be constrained and may potentially be unavailable during certain construction activities (e.g. new beam erection) or other circumstances.

Describe the Proposed Work

The City of Pataskala desires to replace the superstructure of the Key Blvd bridge utilizing a detour on a new secondary bridge and roadway to be constructed approximately 0.5 miles south of the Key Blvd bridge from a tee intersection at Creek Rd to a tee intersection at Shawnee Loop South. The new bridge will be either a prestressed concrete adjacent box beam bridge or a steel I-beam bridge. The new two-lane roadway will be approximately 0.25 miles long which includes the approximate 120-ft bridge length. This new bridge and roadway will allow unobstructed access to the contractor to replace the superstructure of Key Blvd bridge allowing the work to be completed faster and therefore more cost-effectively and will become a secondary access point to the 131 home community and the City's wastewater treatment plant.

Identify Any Potential Environmental or Right-of-Way Issues

Environmental:

The construction of the new bridge and roadway will require routine NEPA environmental screenings. No significant environmental issues are anticipated.

The existing Wastewater treatment plant was built by the Village of Pataskala in 1967. The choice of location was driven by the need to be able to use gravity flow to capture the wastewater from the old village area. With original construction, and this being the only suitable location for the plant, the only access to the plant until the Key Blvd. bridge was built was by fording the river which was an undesirable situation. The construction of the Key Blvd. bridge greatly improved an undesirable situation of no access. However, as the City of Pataskala grows generating a greater demand on treatment, it is imperative that continuous reliable access is available to the wastewater treatment plant which secondary access will provide and is high on the City of Pataskala's list of priorities. Right-of-Way:

The new bridge and road will be constructed on City owned property, so no right-of-way acquisition is required.

Identify Any Historical Significance Relating to the Proposed Project

None

Describe Any Preventative Maintenance and/or Rehabilitation That Has Previously Occurred on the Bridge

Describe Any Preventative Maintenance Periodic crack sealing of the bituminous asphalt wearing surface.

Project Development Details

Project Data

Substructure Condition Rating	7
Superstructure Condition Rating	5
Deck Condition Rating	5
Annual Average Daily Traffic	100
Legal Bridge Load Limit (Percentage)	117

Safety Indicators (Optional)

Speed	25
Number of Lanes	2
Functional Class of Roadway	Urban - Local

Lack of Facilities

The new superstructure on the Key Blvd bridge can be widened to accommodate an ADA complaint sidewalk and potentially a multi-use path to provide access for disabled citizens to the amenities of historic downtown Pataskala, recreation centers, parks, Elementary School and the primary business corridors in the City.

The new bridge and roadway will provide a secondary access route for emergency responders and residents to the current 131 home community and the City of Pataskala's wastewater treatment plant. Based on interest from developers like Rockford Homes to expand the community to the east which would add an additional 300+ homes, bicycle and pedestrian needs will increase placing a greater need for bicycle and pedestrian facilities.

Gaps in bicycle and pedestrian network

There is no secondary access for emergency responders to a community currently comprised of 131 homes and the City of Pataskala's wastewater treatment plant. The need for a secondary access point will intensify as developers have approached the City of Pataskala with interest in developing the nearly 200-acre adjacent farmland to the east. Most recently, Summer 2024, Rockford homes expressed interest in developing a 300+ home community but cited concerns over the single access point and if they were required to bear the sole cost of constructing a secondary access point the development would be financially unfeasible. Rockford Homes did express a willingness to consider cost sharing for the construction of a secondary access point to the Key Blvd community. Although there are sidewalks on both approaches to the Key Blvd bridge, the current bridge safety curb located on the north side of the bridge is narrow and does not meet ADA requirements. The City of Pataskala's Active Transportation Plan included in their 2021 Comprehensive Plan plans to construct recreation paths along Creek Road which Key Blvd connects to 650 west of the bridge and multiuse paths along Main Street and East Broad Street which are primary business corridors through the City of Pataskala. Therefore, the lack of ADA compliant sidewalks across the Key Blvd Bridge denies access for disabled citizens to the amenities of historic downtown Pataskala, recreation centers, parks, Elementary School and the primary business corridors in the City.

Presence of bicycle and pedestrian generators (neighborhoods, destinations, transit, etc.)

The Key Blvd bridge provides a single point of access to the current 131 home community. As noted above, developers have approached the City of Pataskala with interest in developing the nearly 200 acre adjacent farmland to the east. Most recently, Summer 2024, Rockford Homes expressed interest in developing a 300+ home community. The existing community and future development of the adjacent 200 acre farmland will produce a significant increased need for pedestrian and bicycle facilities to provide access to the amenities of historic downtown Pataskala, recreation centers, parks, Elementary School and the primary business corridors in the City.

System

Alignment with State and US Bike Route The Ohio Department of Transportation's document entitled "Ohio's State and US Bike Route System Review 2020, State Roate 16 (aka East Broad Steet) located approximately 0.6 miles north of Key Blvd along Creek/Township Road is a designated Ohio Bike Route.

Project Funding

Preliminary Engineering and	Environmental	Funding
------------------------------------	----------------------	---------

State Fiscal Year	2027
Local Contribution	10000
Other Funding Sources	0
Municipal Bridge Program Funding Request	40000
Total Preliminary Engineering and Environmental Funding	50000

Design Funding

State Fiscal Year	2027
Local Contribution	90000
Other Funding Sources	0
Municipal Bridge Program Funding Request	360000
Total Design Funding	450000

Right-of-Way Funding

State Fiscal Year	2026
Local Contribution	0
Other Funding Sources	0
Total Right-of-Way Funding	0

Construction Contract Funding

State Fiscal Year	2027
Local Contribution	120000

Other Funding Sources	250000
Municipal Bridge Program Funding Request	1900000
Total Construction Contract Funding	2270000
Construction Inspection Funding	
State Fiscal Year	2027
Local Contribution	30000
Other Funding Sources	0
Municipal Bridge Program Funding Request	200000
Total Construction Inspection Funding	230000
Total Project Funding	
Total Local Contribution	250000
Total From Other Funding Sources	250000
Total Municipal Program Funding Request	2500000
Total Project Costs	3000000
Project Funding Sources	
Identify all sources of already secured local contribution funds and funds from other sources:	None
Identify all sources of anticipated local contribution funds and funds from other sources that have not yet been secured and the timeframe in which the funds are expected to be secured:	OPWC (Ohio Public Works Comission), SRTS (Safe Routes to Schools), Rockford Homes (developer) and Local funding.
Identify the work to be done utilizing Municipal Bridge funding (to ensure eligibility):	Engineering (including Environmental and Survey), Construction and Construction Inspection of the existing Key Blvd Bridge superstructure replacement and the secondary access point Bridge crossing the South Fork Licking River.

Project Evaluation Information

Explain how the project scope and various alternatives were assessed, as well as cost estimates, environmental impacts, and community impacts.

Inspection of the existing bridge was completed and load rating of the existing superstructure accounting for observed prestressing strand deterioration to assess live load carrying capacity. The results indicate that the bridge does not need to be posted today but may in the next several years. Community impacts were assessed by reviewing the current access conditions and how construction of the Key Blvd Bridge superstructure replacement will impact these. After reviewing city property limits, a conceptual plan showing the location of detour route (and secondary access point), road alignment, tie-in locations to existing roads, and new bridge location was prepared as well as a planning level cost estimate for this secondary access point where no Right of Way Acquisition is required.

Potential environmental issues were identified through discussion with the City of Pataskala Wastewater Treatment Plant should the existing bridge fail or obstruct access during the superstructure replacement.

Environmental impacts were assessed and deemed that the construction of the new bridge and roadway will require routine NEPA environmental screenings with no significant environmental issues anticipated. Given the afore mentioned safety concerns, a cost estimate for the overall project was assessed to construct a new bridge and roadway that will provide a secondary access point as well as the superstructure replacement of Key Blvd Bridge. Capital planning for this alternative deemed necessary with current access safety concerns. Additionally, the existing community and future development of the adjacent 200 acre farmland will produce a significant increased need for pedestrian and bicycle facilities to provide access to the amenities of historic downtown Pataskala, recreation centers, parks, Elementary School and the primary business corridors in the City.

What other solutions were considered for this project?

Utilizing a part-width construction sequence for the Key Blvd Bridge superstructure replacement to keep one lane of traffic open.

Why was the proposed alternative selected over others?

This is a more practical and safe alternative for the community and City to have a secondary access point in case of emergencies, during construction and during maintenance work taking place. It will also reduce construction time and cost for any future work.

What are the forecasted impacts if this project is not awarded funding?

A part-width construction will take place for the superstructure replacement with only one lane open at a time. All future construction projects (new housing development and wastewater treatment improvements) may be required to use the existing Key Blvd Bridge forcing construction traffic to travel through the Key Blvd community which poses a safety concern. Additionally, if there is a need for emergency services, access will be constrained and may potentially be unavailable during certain construction activities (e.g. new beam erection) or other circumstances.

Ethics and Conflict of Interest

If selected for award, I agree to review and comply with the Ethics and Conflict of Interest laws, including 23 CFR 1.33; 23 CFR 636.116; and ORC sections 102.03, 2921.42, and 2921.43.

Signature

Signature



Print Name of Submitter	Elne Reed
Print Title of Submitter	Bridge Designer
Attachments	
Project Plans	https://www.formstack.com/admin/download/file/16770515970
Photographs of Project Site (Limit 10)	https://www.formstack.com/admin/download/file/16770515971
Project Schedule	https://www.formstack.com/admin/download/file/16770515972
Project Cost Estimate	https://www.formstack.com/admin/download/file/16770515973
Other Attachments	https://www.formstack.com/admin/download/file/16770515974
Other Attachments	https://www.formstack.com/admin/download/file/16770515975
Other Attachments	https://www.formstack.com/admin/download/file/16770515986