

# ALLEN COUNTY'S CREDIT BRIDGE EXPERIENCE

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# ZURMEHLY ROAD BRIDGE

- Over the Little Ottawa River
  - Steel truss, reinforced concrete deck with asphalt overlay
  - 65' long and 20' wide
  - Built in 1950
  - Current ADT = 2,300
  - Structurally deficient
  - Posted load limit since March of 2012
  - Less than a quarter mile from a middle school and high school
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# PREVIOUS STRUCTURE





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# NEW STRUCTURE

- Surveyed in-house
  - Designed by Kohli & Kaliher Associates, Inc.
  - Single-span, non-composite prestressed reinforced concrete box beams
  - 78'-0" c/c bearings
  - 32'-0" f/f guardrail
  - HL-93 loading
  - Asphalt wearing surface
  - Reinforced Concrete Capped Pile Abutments
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# NEW STRUCTURE

- Length of Project = 400 feet
  - Guardrail
    - Twin Steel Tube on the bridge
    - Bridge Terminal Assemblies (Type 1), MGS with Long Posts, Type A & Type T Anchor Assemblies
    - All posts are steel
  - No additional right-of-way required
  - Earth Disturbing Activity = less than 1 acre
  - No design exceptions
  - Engineer's Estimate = \$589,348.15
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# FUNDING

- There was no way we could fund this project with local funds
  - We pursued OPWC funds
    - In 2014, we applied for an 80% grant with a 20% local match
    - In 2015, we applied for a 53% grant and 20-year, no interest loan
  - Once we were approved for funding, we began the Credit Bridge process
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# CREDIT BRIDGE TIMELINE

- 2/22/16: Maumee Watershed Conservancy District approved the project
  - 2/28/16: Requested field review with ODOT District 1
  - 3/14/16: Lima-Allen County Regional Planning Commission issued a Floodplain Development Permit
  - 3/16/16: Field Review with ODOT District 1
    - No historical/archeological concerns
    - No wetlands
    - No wild/scenic rivers
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# CREDIT BRIDGE TIMELINE

- 3/16/16: Field Review with ODOT District 1
    - A Nationwide Permit must be received from the Army Corps prior to any in-stream work
      - ODOT was concerned that the stream may be suitable for mussels
  - 4/4/17: Pre-Construction Notification submitted to the Army Corps
  - 6/2/16: Army Corps approves the Nationwide Permit
    - No mussel survey was required
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# CREDIT BRIDGE TIMELINE

- 7/1/16: Bid Opening
    - 3 Bidders: R.G. Zachrich Construction, Inc. was the low bidder at \$511,305.59
  - 7/11/16: ODOT approved the project for Credit Bridge
  - 8/12/16: Roadway was closed
  - 10/28/16: Roadway was reopened
  - 12/1/16: Credit Bridge Program Project and Cost Certification was submitted to ODOT
  - 12/12/16: ODOT final inspection
  - 3/16/17: Federal Highway Administration approval
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# COMPLETED PROJECT





# COMPLETED PROJECT





# COMPLETED PROJECT

- Final Construction Cost = \$500,491.46
  - On time and under budget
  - Credit Bridge = \$400,393.17
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# WHY CREDIT BRIDGE?

- We used Credit Bridge Funds on the Central Avenue Bridge
  - Local-Let LPA Project
  - Engineer's Estimate = \$757,691.93
  - We had budgeted 20%
    - \$151,538.39
  - We only had to pay 5%
    - \$37,884.60
    - We also used Credit Bridge Funds for the inspection/project management contract and only had to pay 5% (\$2,400)
  - We were able to save \$110,000 on just one project
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# WHY CREDIT BRIDGE?



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- We have two more federal projects programmed
  - Grubb Road in FY 2019
    - Estimate = \$290,000
    - 20% = \$58,000
    - 5% = \$14,500
    - Savings = \$43,500
  - Fisher Road in FY 2022
    - Estimate = \$1,055,000
    - 20% = \$211,000
    - 5% = \$52,750
    - Savings = \$158,250
- We were able to fund 3 projects and still have Credit Bridge Funds available
  - All from 1 bridge we were already going to replace



# SUMMARY

- Overall, it was a fairly smooth process
    - Being a contract job, cost certification was very simple
  - We will definitely pursue more Credit Bridge projects in the future
    - Both in-house and consultant designed
    - Both contractor and force account projects
  - Another tool to “do more with less”
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# LESSONS LEARNED

- Focus on relatively simple projects
    - Minimal environmental concerns
    - Little or no right-of-way needed
  - Start the process as early as possible
    - Not only on projects to earn Credit Bridge Funds, but also on projects that you want to use Credit Bridge Funds on
  - Make sure the amount of credit is worth the extra time, effort and money
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