LEXINGTON TOWNSHIP
A.J. ALBEE BRIDGE #3042
BRIDGE REPLACEMENT
WIN 026150.00

Jerry Dostie
Project Manager

Preliminary Public Meeting
January 2025

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PROJECT HISTORY

2022/23/24 Work Plan

- Became a bridge replacement project in 2022 as part of MaineDOT’s 3-year Work Plan

Initial Site Visit

- October 06, 2022

Initial Team Meeting

- January 26, 2024

EXISTING CONDITIONS

- Highway Classification
  - State Aid Highway
  - Corridor Priority 4
- Traffic
  - AADT: 190 vehicles/day
- Posted Speed
  - 45 MPH
- Roadway Width
  - (2)-11ft travel lanes
  - (2)-2 ft shoulders

- Bridge Type
  - Concrete tee beam bridge constructed in 1932
- Span
  - 35ft
- Accident Data
  - 2 crashes (2017-2021)
  - No crashes attributed to the existing bridge
- Environmental Concerns
  - In-water work window
    - June 1 - September 30
  - 1.2 Bankfull Width Structure
    - To accommodate brook trout
    - Wildlife shelves at high water mark for wood turtles

EXISTING BRIDGE PHOTOS

Southerly view of the roadway surface over bridge

View downstream of the bridge

EXISTING BRIDGE PHOTOS

View of the advanced deterioration of the concrete tee beams

View of large crack in easterly abutment

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POTENTIAL ON-SITE DETOUR PHOTOS

Aerial Image of crossing with temporary bridge sketch

Looking downstream at potential on-site detour location

PURPOSE AND NEED

Purpose:

The purpose of the project is to address the structural deficiency of the A.J. Albee Bridge in a cost-effective manner. A successful project will provide a bridge capable of carrying all legal loads, will not need capital improvements for at least 20 years, will achieve a minimum remaining service life of at least 50 years, rating of good (or better), and improve site safety. The purpose is to also achieve MaineDOT standards for travel lane and shoulder widths for public safety and ease of maintenance.

Need:

The deck and superstructure having a condition rating of 4 (poor) with efflorescence, cracking, spalling, and exposed reinforcement. The substructure has a rating of 5 (fair) and has a large crack in one of the abutments, efflorescence, and is scour critical. The poor condition of the bridge justifies the project need.

ALTERNATIVES INVESTIGATED

Options:

Steel girder bridge with concrete deck

Northeast Extreme Tee (NEXT) concrete beam and deck. Due to the longer span, it is near the maximum span of those materials making transportation to the site difficult and would require very large equipment to install them.

Bulb Tee (NEBT) beams. NEBT are about 3 to 4 times heavier than steel girders when designed for a similar superstructure configuration which would also require much larger equipment to install.

Steel girders are the preferred option for the proposed span and location due to the ease of transport, installation, and their relation to the complete bridge construction.

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EXAMPLE OF PROPOSED REPLACEMENT STRUCTURE

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MAINTENANCE OF TRAFFIC

- Phased Construction
  - Build half of the bridge at a time, allowing one lane of traffic to use one side of the bridge while the other side is under construction. The existing bridge (concrete tee beams) is in poor condition and would make this type of construction too risky to seriously consider this option.

- Special Detour
  - On-site detour with a 16’ wide travelway accommodating one-way alternating traffic. A temporary traffic signal and temporary bridge would be installed downstream of the existing bridge. Constructing a special detour would increase construction time and costs.

- Local Detour
  - Full closure with an off-site detour using Old County Road and Long Falls Dam Road. The entire detour distance is 4.1 miles from one end of the bridge to the other.
    - Old County Road would need improvements prior to placing detoured traffic onto it including the following issues:
      - The existing travelway is about 19 feet wide but is as narrow as 17 feet in a few locations which is too narrow for 2 way large vehicle traffic including potential Poland Spring and logging trucks
      - There is significant brush overgrowth overhanging the shoulders along most of the road which would need to be removed
      - One location on Old County Road has a sharp curve on a blind knoll with a utility pole and guy pole on the opposite side of the road, limiting usability of the shoulders in this location as well.
      - Old County Road is about 1.7 miles long and these improvements would require additional surveying and engineering.
  - Selection
    - The special detour is the preferred option as the Town of Highland Plantation has expressed concerns with increasing the amount of traffic over their portion of the Old County Road in its current condition and the costs associated with improving the road including surveying, engineering, and construction are significant. In addition, there will be additional costs related to routine maintenance throughout the project due to the gravel surface.

PROJECT COST

- Total Cost of Project (Estimated)
  - $4,200,000 (80% Federal/20% State Funding)
    - Preliminary Engineering: $590,000
    - Right of Way: $25,000
    - Construction: $3,190,000
    - Construction Engineering: $395,000

$4,200,000

CURRENT PROJECT SCHEDULE

- Project Advertise
  - March 2027
- Contract Award
  - May 2027
- Construction Begin
  - Spring 2027 (earliest)/Spring 2028 (latest)
    - Factors include contractor workload, material manufacturing lead time, and in-water work window (July 15 - September 30)
- Construction Complete
  - Bridge open to traffic in the late Summer/early Fall of 2027 or 2028

COMMENTS OR QUESTIONS

If you have comments or questions, please go to the “Leave a Comment” section when you exit from this presentation

Input from local people who use this bridge is valuable to us. If there are other factors that may impact traffic such as annual events or anything else that you think may be important to us, please let us know.

Thank you for taking the time to view this presentation.

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