



HPO Project # 05-0435-9
HPO-D2016-238

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION
NATURAL AND HISTORIC RESOURCES

Office of the Assistant Commissioner
MAIL CODE 501-03A
PO Box 420
Trenton, New Jersey 08625
609-292-3541/Fax: 609-984-0836

CHRIS CHRISTIE
GOVERNOR

BOB MARTIN
COMMISSIONER

KIM GUADAGNO
Lt. Governor

April 28, 2016

Roslyn C. Khurdan
Assistant County Engineer
Morris County Division of Engineering
10 Court Street
P.O. Box 900
Morristown, NJ 07960

**Re: Morris County, Roxbury Township
Replacement of Morris County Bridge 1400-073
Landing Road over New Jersey Transit and the former Morris Canal**

Dear Ms. Khurdan:

I am writing concerning your application for authorization for the replacement of the Landing Road Bridge (County Bridge 1400-073), located within the boundaries of the Morris Canal in Morris County, Roxbury Township. In accordance with the New Jersey Register of Historic Places Act, the Historic Preservation Office (HPO) presented the Application to the New Jersey Historic Sites Council (HSC) at its April 22, 2016 meeting. I have taken into account the recommendation made by the Council and am adopting their resolution number HSC-2016-370 (attached).

I hereby authorize the replacement of the Landing Road Bridge (County Bridge 1400-073) with the following mitigating conditions:

1. Morris County shall finalize the design of the replacement bridge and associated project elements in consultation with the HPO, the Roxbury Historic Advisory Committee, Landing Gateway Committee, Canal Society of New Jersey, and other interested parties that may wish to participate. Morris County shall ensure that the proposed design is responsive to the guidance and recommended practices found in the Secretary of the Interior's Standards for the Treatment of Historic Properties and that the design, character, materials, quality, and workmanship of project elements is compatible with the historic and architectural character and setting of the Landing Road Bridge, Landing Station, and the Morris Canal.

2. Prior to the removal, demolition, or alteration of any components of the Landing Road Bridge, Morris County, using the services of a consultant meeting the Secretary of the Interior's Professional Qualifications Standards [48 FR 44738-9] in History and/or Architectural History, shall document the existing conditions and setting of the bridge to the standards of the Historic American Engineering Record (HAER). The HAER recordation document shall include written historical and descriptive data, photographic documentation (both historic imagery and current), and measured drawings. Morris County shall ensure that all documentation is completed and accepted by the HPO prior to any demolition or alteration of the bridge or new construction. The County shall provide one original copy of the recordation documentation to the HPO and duplicate copies, with original photographs, shall be provided to appropriate repositories as identified in consultation with HPO staff.
3. Morris County shall, in consultation with the HPO, the Roxbury Historic Advisory Committee, Landing Gateway Committee, Canal Society of New Jersey, and any other parties that may wish to participate, develop and install interpretive signage outlining the history of Landing, focusing on the Morris Canal, railroads, and bridges at the project site. Sign design, location, and text shall be approved by the HPO prior to placement within the project area and shall be consistent with signage located elsewhere along the Morris Canal Greenway currently being developed.
4. Morris County shall develop an archaeological treatment plan (Plan). The Plan shall include, but not limited to, the following:
 - a) Detailed provisions for a program of archaeological monitoring within Area 1, Area 2, and Area 3 as identified in Hunter Research's July 2003 Phase IA report Figure 4.1.
 - b) Phase I archaeological survey within Block 10101, Lot 30 to identify archaeological resources prior to the start of project construction.
 - c) Provisions for any Phase II archaeological survey within Block 10101, Lot 30. Any Phase II plans shall be developed in consultation with the HPO.
 - d) Provisions for ways to avoid, minimize, and/or mitigate adverse effects to any New Jersey Register of Historic Places eligible and/or listed archaeological resources developed in consultation with the HPO.
 - e) All archaeological work shall be conducted in accordance with the Secretary of the Interior's *Standards and Guidelines for Archaeology and Historic Preservation*.
 - f) All archaeological survey and reporting shall conform to the rules at N.J.A.C. 7:4-8.4 through 8.5.
 - g) The individual(s) conducting all phases of archaeological survey and reporting shall meet the Secretary of the Interior's Professional Qualifications Standards for Archaeology (48 FR 44738-9).
 - h) The submission of the Plan to the HPO for review and approval prior to the start of construction.
 - i) Morris County shall ensure that the Plan is implemented.

5. Morris County shall develop final plans, specifications, and other appropriate contract documents incorporating the previous conditions that shall be submitted to the HPO for review and approval prior to the construction bidding process.

Please note that, in accordance with N.J.A.C. 7:4-7.2(e)5, you must respond in writing to the conditions within 60 days of the issuance of this letter. If you agree to the conditions specified above, please sign the bottom of this letter in the space provided and return it to the HPO. Signature at the bottom of the letter will constitute formal acceptance of the conditions of project authorization. If you disagree or fail to respond to the requirements set forth within 60 days, I must, by regulation, deny your application.

Please do not hesitate to contact Jonathan Kinney of my staff at (609) 984-0141 if you have any questions.

Sincerely,



Rich Boornazian
Assistant Commissioner for
Natural and Historic Resources

Cc:

Sean Ream, NJDOT
Roslyn Khurdan, Morris County Engineering
John Bonanni, Morris County Administrator
Heather Wyse Emelander, Morris County Historical Society
Marion Harris, Morris County Trust for Historic Preservation
Peg Shultz, Morris County Heritage Commission
Margaret Cushing, Roxbury Township Historical Society
Miriam Morris, Roxbury Historic Trust
Margaret Cushing, Roxbury Township Historical Advisory Committee
Amy Rhead, Roxbury Township Clerk
Joseph Macasek, Canal Society
Christine Houtz, Landing Gateway Committee
Martin Kane, Lake Hopatcong Foundation
Dara Callender, New Jersey Transit
David F. Julian, Norfolk Southern
Richard Porter, RBA Group
Megan Kelly, North Jersey Transportation Planning Authority

By signing this letter, the County of Morris accepts the conditions of authorization outlined above, in accordance with New Jersey Register of Historic Places Act, Chapter 4, laws of 1970 and N.J.A.C. 7:4-7.2(e)5.

For Morris County

Date

NEW JERSEY HISTORIC SITES COUNCIL
RESOLUTION

HPO-2016-370

NAME OF PROPERTY ON STATE REGISTER OF HISTORIC PLACES: Morris Canal
COUNTY: Morris County
MUNICIPALITY: Roxbury Township
DATE REGISTERED: November 26, 1973
APPLICANT: Morris County

WHEREAS, the New Jersey Historic Sites Council, created pursuant to N.J.S.A. 13:1B-15.108 et. Seq., is authorized by N.J.S.A. 13:1B-15.131 to offer advice and recommendations concerning encroachments upon properties listed in the New Jersey Register of Historic Places to the Commissioner of the Department of Environmental Protection; and

WHEREAS, the jurisdiction of the Department of Environmental Protection/Historic Sites Council under the New Jersey Register of Historic Places Act, N.J.S.A. 13:1B-15.131, and its attendant regulation, N.J.A.C. 7:4 concerns the consideration of actions with effects, both direct and indirect, on New Jersey Register of Historic Places listed properties; and

WHEREAS, Morris County has requested authorization for the replacement of Morris County Bridge 1400-073 (Landing Road over New Jersey Transit and the former Morris Canal), located in Morris County/Roxbury Township; and

WHEREAS, the New Jersey Historic Sites Council conducted an open public meeting on April 22, 2016, pursuant to the requirements of the "Open Public Meetings Act," N.J.S.A. 10:4-6 et seq.; and

WHEREAS, the New Jersey Historic Sites Council, based on the evidence presented at the public meeting, made the following findings of fact:

1. The Morris Canal was listed on the New Jersey Register of Historic Places on November 26, 1973 for significance in the areas of Engineering, Industry, and Transportation. Completed in 1836, the Morris Canal linked the Delaware River at Phillipsburg in Warren County with the Hudson River and Port of New York at Jersey City in Hudson County. The Canal traversed a distance of 102 miles and overcame a difference in elevation of 1,674 feet using a system of both locks and inclined planes. The Morris Canal is a nationally significant historic property. The period of significance for this resource extends from the beginning of its construction in 1825 to its closure in 1930.
2. The Landing section of Roxbury Township lies at the southwestern tip of Lake Hopatcong and is historically significant as the site of the major intermodal interchange of passengers between the railroad and the Morris Canal, associated with the Lake Hopatcong tourist trade during the late nineteenth and early twentieth centuries. Tourists arriving in Landing by rail would disembark and then board steam launches in the adjacent Canal for transport to various locations on the lake. The Landing Road Bridge spans a wide cut that was originally excavated for the construction of the Morris Canal and later widened for the addition of the railroad tracks parallel to the Canal. The DL&W Railroad expanded its lines through Landing in 1905, necessitating the construction of a new wider bridge, which also accommodated a trolley line.

3. Morris County Bridge 1400-073, historically known as the Landing Road & Morris County Traction Company/Delaware Lackawanna and Western Railroad & Morris Canal Bridge, and hereafter referred to as the Landing Road Bridge, is a key-contributing resource to the New Jersey and National Register listed Morris Canal, still a navigable waterway when the bridge was constructed. The bridge was completed in 1907 and carries Landing Road over NJ Transit's Montclair & Boonton Line (formerly the Delaware, Lackawanna and Western Railroad) and the former Morris Canal (now a parking lot).

The Landing Road Bridge is also a key-contributing resource to the New Jersey and National Register eligible Old Main Delaware, Lackawanna & Western Railroad Historic District. In addition, the bridge was determined individually eligible for listing on the New Jersey and National Registers of Historic Places in a SHPO Opinion of Eligibility on February 25, 1994. It is technologically significant as the earliest example of an earth-filled concrete deck arch and the only two-span example of the bridge type in the County. The bridge is also significant for its historical associations with the Morris Canal and the Delaware, Lackawanna & Western Railroad, a leader in concrete bridge constructions in the early 1900s. At the meeting, Joseph Macasek of the Canal Society of New Jersey testified that the Landing Road Bridge is the last extant roadway bridge built to span the Morris Canal.

The two-span Landing Road Bridge is 136' long and consists of twin reinforced concrete arches and an earth-filled reinforced concrete deck with an asphalt overlay and simple metal railings. The curb-to-curb width of the bridge is 29'6" and the overall width is 38.8', which includes a 6' sidewalk on the north side. The bridge carries two 14'9" travel lanes with no shoulders.

4. Soon after the construction of the new Landing Road Bridge, a new Landing Railroad Station (which replaced the original 1880s station) was built to on the southwest quadrant of the bridge and is still extant today. In November 2015, the New Jersey State Review Board approved a revision to the Morris Canal boundary to include the Station as a contributing resource, which has since been formally listed on the New Jersey Register of Historic Places. The Station complex originally included a now non-extant concrete pedestrian bridge and access stairs from the station to the north side of the track and covered trackside platforms, which was located just south of the Landing Road Bridge.
5. Landing Road is classified as a minor urban arterial roadway. The Average Daily Traffic (ADT) in 2011 was recorded as 37,079 vehicles. Landing Road extends from I-80 approximately 0.8 miles to the southern edge of Lake Hopatcong, where it intersects with Lakeside Boulevard (CR 602) and Mount Arlington Boulevard, providing one of the few major access points for residents and visitors on both the east and west shores of Lake Hopatcong.
6. As stated in the submitted Application, the Landing Road Bridge is considered functionally obsolete due to substandard deck geometry for the current ADT (37,079). The current curb-to-curb width of 29'6" is less than the minimum NJDOT approved design width of 32' (two 12' lanes with two 4' shoulders) and the AASHTO standard design width of 34 feet (two 12' lanes with two 5' shoulders). The bridge has been the subject of ongoing maintenance work and several major rehabilitation campaigns, including April-June of 2000 and September 2010-November 2012. The 2003 and 2009 inspection reports indicate that the bridge was determined to be structurally deficient due to the poor condition of the superstructure and serious condition of the substructure. The

bridge was upgraded to fair condition in the 2011 and 2013 inspections due to concrete repairs that were made in 2010 and currently has a sufficiency rating of 58.3 out of 100. The 2013 re-evaluation survey shows the bridge's superstructure was given Condition rating of 5 (fair) due to patching covering 60% of both arch intrados, as well as the cracking, scaling, leakage and efflorescence throughout both intrados and spandrel walls. Substructure units (abutments and piers) were also given a condition rating of 5 (fair) due to large concrete patches, fine to medium cracks with efflorescence, and the incipient spalls and hollow sounding concrete areas in the pier and both abutments.

7. The cultural resources consulting firm Arch2, Inc. conducted an intensive-level architectural survey of the project area in October 2004. Twenty-three additional architectural resources were surveyed and the potential existence of a Landing Historic District was evaluated. None of these additional resources were recommended eligible for the New Jersey and National Registers of Historic Places. The Historic Preservation Office (HPO) concurred with these assessments.
8. Hunter Research, Inc. conducted a Phase IA archaeological investigation within the project area in 2003. Three areas of archeological sensitivity within the APE for the Replacement Alternative (Alternative 7) were identified. These three areas were described as follows:
 - Area 1 – around the eastern abutment of Landing Road Bridge, an area that may possess deposits associated with the Morris Canal's eastern bank and towpath.
 - Area 2 – located off the south-eastern corner of the bridge at the location of the former post office
 - Area 3 – comprised of the area around the western abutment and to the south of the western abutment where the new bridge abutment is proposed.

The consultant recommended that an archeological resource monitoring plan be developed once a project alternative was selected. The HPO concurred with this strategy for addressing archaeological issues.

In addition, based on information in the Application, the parking area along the frontage of the Landing Railroad Station (Block 10101/Lot 31) is an area of archaeological sensitivity that will require formal phased archaeological survey to evaluate any identify deposits.

9. As described in the submitted Application, the purpose and need of the proposed project is to improve safety and traffic operations through the rehabilitation or replacement of the Landing Road Bridge and improvements to the intersections and roadways on both approaches. Improvements are needed to address the structural and functional deficiencies in the bridge and approach roadways.
10. In order to meet the project purpose and need, Morris County evaluated a number of potential design alternatives. The project alternatives are outlined in the detailed Alternatives Analysis report prepared by RBA Group on behalf of Morris County and submitted as part of the Application. The alternatives are summarized below:

No Build Alternative – This alternative would have no immediate adverse effect on the historic Landing Road Bridge or the Morris Canal. However, as stated in the Application material, this alternative does not meet the purpose and need of the project. With the exception of maintenance and basic stabilization measures, no

rehabilitation work or replacement of deteriorated materials would take place, resulting in further long-term deterioration of the structure. In addition, the bridge would continue to remain functionally obsolete for both existing and projected traffic levels. Therefore, Morris County has dismissed any further consideration of this alternative.

Rehabilitation Alternative – This alternative is described as the rehabilitation of the structure in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (Standards). The rehabilitation would not alter the existing historic features or further modernize the bridge. The bridge would not be widened as part of this alternative. This alternative would not be considered an encroachment upon the Landing Road Bridge or the Morris Canal.

Two “modified” rehabilitation alternatives that consist of more intensive work to the bridge were also outlined in the Alternatives Analysis. The first would include the in-kind replacement of the concrete arches. The existing concrete arches, together with the deck and asphalt pavement would be demolished and replaced with new concrete arches, deck, and pavement at the same location. No widening of the existing bridge deck would occur. The second “modified” rehabilitation alternative would consist of the in-kind replacement of the concrete arches, replacement of the bridge deck, and improvements to the substructure and the possible widening of the bridge. Morris County has dismissed each of the Rehabilitation Alternatives based on the conclusion that all would fall short of increasing the long-term strength of the bridge as deterioration would continue for any sections that are not replaced.

ByPass Alternative – This alternative, otherwise known as Alternative 1, involves the construction of a new bridge on a completely new alignment south of the existing bridge, the relocation of the roadway, and the reconfiguration of the intersections at both ends of the crossing. The new bridge would be designed to meet NJDOT and ASSHTO design standards and would address the structural and functional needs of the project. However, the ByPass Alternative would require extensive utility impacts and relocations, extensive right-of-way acquisition (29 partial or whole), the demolition of at least eight buildings (non-historic), and would have the highest construction costs of all of the alternatives. Although the existing Landing Road Bridge would not be demolished as a result of this alternative, the potential impacts to archaeological resources are greater based on it having the largest project footprint of any of the alternatives. This alternative was not selected based on the above-referenced factors as well as the continuing cost of maintaining the existing bridge.

Replacement Alternative – This alternative, otherwise known as Alternative 7C, involves the demolition and replacement of the existing Landing Road Bridge in the same general location with some adjustments to the horizontal and vertical alignments of the bridge and reconfiguration of the approach roadways and adjacent intersections for safety improvements. The new bridge would consist of two 12' lanes in each direction and a 6' sidewalk on the north side. The western approach of Landing Road would be reconstructed to transition from two lanes to four lanes at the bridge. The intersection of Landing Road/Mount Arlington Boulevard and Lakeside Boulevard would be reconstructed to incorporate a fourth leg providing access to and from Canal Street and the NJ Transit station parking area. Existing Canal Street access from Landing Road and Lakeside Boulevard to the parking area would be eliminated improving traffic operations and safety on these roads.

Southbound Lakeside Boulevard would be widened to provide an exclusive left turn lane and exclusive through lane and a shared through and right turn lane. Approximately 20 partial or whole property acquisitions will be required and 3 non-historic buildings will be demolished in addition to the existing bridge. One of the properties affected by a partial acquisition and the roadway realignment will be the Landing Railroad Station. As described in the submitted Application, Morris County has selected this Alternative as their preferred alternative for several reasons:

- Meets the project's purpose and need
- Satisfies the traffic operations needs of the project and improves safety
- Meets current structural design standards
- Improves access to and from the NJ Transit parking area under the bridge
- Increases the load capacity and life expectancy of the bridge
- Improves sight distance
- Results in less utility relocation, right-of-way acquisition, and environmental impacts than the ByPass Alternative, but more than the Rehabilitation Alternative
- Is compatible with Roxbury Township's proposed streetscape improvements
- Allows traffic to be maintained during construction
- Has a lower construction cost than the ByPass Alternative but higher than the Rehabilitation Alternative

11. Morris County is undertaking the proposed project using funds from the State of New Jersey.
12. *The Secretary of the Interior's Standards for the Treatment of Historic Properties, Standards for Rehabilitation and Standards and Guidelines for Archaeology and Historic Preservation* are the appropriate Standards to use in the evaluation of this undertaking due to the structural elements and archaeological composition of the Morris Canal and its contributing resources.
13. In accordance with N.J.A.C. 7:4-7.4, the Historic Preservation Office determined that the proposed undertaking constitutes an encroachment upon the Morris Canal as it will result in the replacement of Morris County Bridge 1400-073 and significant alteration to the property containing the Landing Railroad Station, both contributing resources.
14. Morris County, NJDOT, HPO, Roxbury Township, and additional parties have been involved in extensive ongoing consultation with numerous parties regarding the proposed undertaking for many years. Most recently, Roxbury Township passed a municipal resolution on September 29, 2015 (updating a previous 2003 resolution) agreeing with the selection of the Replacement Alternative (7C). A public information center was also held on August 12, 2015.
15. The Roxbury Historic Advisory Committee submitted a letter supporting the County's preferred alternative, but expressing concerns about the current roadway/intersection configuration as it relates to pedestrian safety and access and requesting that the County include additional design features such as safe and signaled pedestrian access on the south side of the new bridge, a safe and a widened pedestrian area and access/observation areas between the realigned roadway and the Lake Hopatcong.
16. The Canal Society of New Jersey submitted a letter dated November 6, 2015 stating their conditional support for the County's preferred alternative. The Society's conditional

support is based on the replacement of the bridge with a similar double-arch span with appropriate railings and a façade similar to the smooth concrete of the current bridge in order to ensure compatibility with the Canal and the adjacent station. The Society also requested that a second walkway be added to the southern side of the bridge to improve pedestrian safety and access.

17. The Landing Gateway Committee also submitted comments dated November 10, 2015. The Committee supports the County's alternative and requests that the new project design take train, trail, lake, bike, and pedestrian access into consideration in the new design and would like input on the design of the bridge, sidewalks, pedestrian crossings, materials, lighting, bollards, street plantings, parking, fencing, and lake access.
18. Through the submitted documentation, Morris County has demonstrated that steps must be taken to address the various deficiencies of Morris County Bridge 1400-073 (Landing Road over New Jersey Transit and the former Morris Canal). While the project as currently proposed does not meet the *Secretary of the Interior's Standards for the Treatment of Historic Properties*, the project provides opportunities for the minimization and mitigation of effects to the Morris Canal. With the incorporation of the following mitigating conditions, the project will adequately balance the safety of the traveling public and the preservation of valuable cultural resources.

NOW, THEREFORE, BE IT RESOLVED, by the New Jersey Historic Sites Council, that based upon the above findings, the Council recommends that the Commissioner approve the replacement of Morris County Bridge 1400-073 (Landing Road over New Jersey Transit and the former Morris Canal) in accordance with their proposal and with the following mitigating conditions:

1. Morris County shall finalize the design of the replacement bridge and associated project elements in consultation with the HPO, the Roxbury Historic Advisory Committee, Landing Gateway Committee, Canal Society of New Jersey, and other interested parties that may wish to participate. Morris County shall ensure that the proposed design is responsive to the guidance and recommended practices found in the Secretary of the Interior's Standards for the Treatment of Historic Properties and that the design, character, materials, quality, and workmanship of project elements is compatible with the historic and architectural character and setting of the Landing Road Bridge, Landing Station, and the Morris Canal.
2. Prior to the removal, demolition, or alteration of any components of the Landing Road Bridge, Morris County, using the services of a consultant meeting the Secretary of the Interior's Professional Qualifications Standards [48 FR 44738-9] in History and/or Architectural History, shall document the existing conditions and setting of the bridge to the standards of the Historic American Engineering Record (HAER). The HAER recordation document shall include written historical and descriptive data, photographic documentation (both historic imagery and current), and measured drawings. Morris County shall ensure that all documentation is completed and accepted by the HPO prior to any demolition or alteration of the bridge or new construction. The County shall provide one original copy of the recordation documentation to the HPO and duplicate copies, with original photographs, shall be provided to appropriate repositories as identified in consultation with HPO staff.
3. Morris County shall, in consultation with the HPO, the Roxbury Historic Advisory Committee, Landing Gateway Committee, Canal Society of New Jersey, and any other

parties that may wish to participate, develop and install interpretive signage outlining the history of Landing, focusing on the Morris Canal, railroads, and bridges at the project site. Sign design, location, and text shall be approved by the HPO prior to placement within the project area and shall be consistent with signage located elsewhere along the Morris Canal Greenway currently being developed.

4. Morris County shall develop an archaeological treatment plan (Plan). The Plan shall include, but not limited to, the following:
 - a) Detailed provisions for a program of archaeological monitoring within Area 1, Area 2, and Area 3 as identified in Hunter Research's July 2003 Phase IA report Figure 4.1.
 - b) Phase I archaeological survey within Block 10101, Lot 30 to identify archaeological resources prior to the start of project construction.
 - c) Provisions for any Phase II archaeological survey within Block 10101, Lot 30. Any Phase II plans shall be developed in consultation with the HPO.
 - d) Provisions for ways to avoid, minimize, and/or mitigate adverse effects to any New Jersey Register of Historic Places eligible and/or listed archaeological resources developed in consultation with the HPO.
 - e) All archaeological work shall be conducted in accordance with the Secretary of the Interior's *Standards and Guidelines for Archaeology and Historic Preservation*.
 - f) All archaeological survey and reporting shall conform to the rules at N.J.A.C. 7:4-8.4 through 8.5.
 - g) The individual(s) conducting all phases of archaeological survey and reporting shall meet the Secretary of the Interior's Professional Qualifications Standards for Archaeology (48 FR 44738-9).
 - h) The submission of the Plan to the HPO for review and approval prior to the start of construction.
 - i) Morris County shall ensure that the Plan is implemented.
5. Morris County shall develop final plans, specifications, and other appropriate contract documents incorporating the previous conditions that shall be submitted to the HPO for review and approval prior to the construction bidding process.

MOVED BY: Marilou Ehrler

SECONDED BY: LuAnne DeCunzo

IN FAVOR: 3

AGAINST: 1

ABSTAIN:

The Council's recommendation and Advice are forwarded to the Commissioner of the Department of Environmental Protection. The Commissioner makes a final determination.