



Andrew M. Cuomo Governor

> Rose Harvey Commissioner

New York State Office of Parks, Recreation and Historic Preservation

Historic Preservation Field Services Bureau Peebles Island, PO Box 189, Waterford, New York 12188-0189 518-237-8643 www.nysparks.com

August 22, 2012

Mr. Michael P. Anderson New York State Department of Transportation 4 Burnett Boulevard Poughkeepsie, New York 12603

Re: FHWA, NYSDOT, NYSTA

Tappan Zee Hudson River Crossing Project: Final Environmental Impact Statement

Rockland and Westchester Counties

11PR06692

Dear Mr. Anderson:

The Federal Highway Administration (FHWA), in coordination with the New York State Department of Transportation (NYSDOT) and the New York State Thruway Authority (NYSTA) and in consultation with our office and the Advisory Council for Historic Preservation (ACHP), applied the Criteria of Adverse Effect [as per 36 CFR § 800.5(a)(1)] to identified historic properties within the area of potential effects (APE), and found the project will have an Adverse Effect under the Replacement Bridge Alternative, due to the proposed removal and demolition of the existing Tappan Zee Bridge, a National Register-eligible structure. Our office concurred with this finding in a letter dated June 5, 2012. The FHWA formally issued an Adverse Effect determination for the project on June 6, 2012, noting that efforts were made through engineering analysis that avoid adverse effects on two contributing resources in the South Nyack Historic District.

In accordance with 36 CFR § 800.6(c), the FHWA, in coordination with NYSDOT and NYSTA and in consultation with our office, ACHP, and other consulting parties, developed a Memorandum of Agreement (MOA) to resolve the project's adverse effects and to formalize commitments to satisfy remaining Section 106 obligations for archaeological resources.

The executed MOA includes stipulations for the mitigation measures agreed upon during the consultation process. Measures to mitigate adverse effects associated with the demolition and removal of the existing Tappan Zee Bridge include documentation of the Tappan Zee Bridge following Historic American Engineering Record (HAER) standards; production of educational materials interpreting the history and significance of the Tappan Zee Bridge for use by local libraries, historical societies, and educational institutions; and interpretive signage along the proposed shared-use path.

The MOA stipulates implementation of procedures outlined in the Phase I Archaeological Survey Report, Addendum 1: Status of Recent Cultural Resource Identification Efforts and Proposed Evaluation Strategies, for additional archaeological investigations to identify potential submerged Hudson River archaeological resources. The objective of these investigations is to gather sufficient information to evaluate National Register eligibility of any confirmed resources, and to inform the consideration of measures to avoid, minimize, or mitigate the project's effects on any submerged resources determined to be eligible for the National Register.

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If the previously identified deeply buried Paleo landform is determined to be present and significant, the soil boring analysis report will serve to document the deeply buried Paleo landform and will serve as mitigation in the event that the project's impacts to this resource cannot be avoided. Furthermore, if any National or State Register-eligible historic resources, such as shipwrecks, are identified on the river bottom, consultation will be conducted to consider measures to avoid, minimize, or mitigate adverse effects, as stipulated in the executed MOA. If necessary, an alternative mitigation plan will be developed and implemented in coordination with SHPO and consulting parties, as appropriate, to mitigate any unavoidable adverse effects associated with the project.

Should you have any questions, please feel free to contact me at (518) 237-8643.

Sincerely,

John Bonafide

Director

Bureau for Technical Preservation Services

cc: Jonathan D. McDade, FHWA
John Burns, FHWA
Daniel Hitt, NYSDOT EAB
Mary Santangelo, NYSDOT EAB

Elizabeth Novak, NYSTA



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2 290 BROADWAY NEW YORK, NY 10007-1866

SEP - 4 2012

Jonathan D. McDade Region Administrator Federal Highway Administration Leo W. O'Brien Building 11A Clinton Avenue, Suite 719 Albany, New York 122007

Dear Mr. McDade:

The Environmental Protection Agency (EPA) has reviewed the Federal Highway Administration's (FWHA) Final Environmental Impact Statement (FEIS) for the Tappan Zee Hudson River Crossing Project (CEQ# 20120256). This review was conducted in accordance with Section 309 of the Clean Air Act, as amended (42 U.S.C 7609, PL 91-604 12 (a), 84 Stat. 1709), and the National Environmental Policy Act (NEPA).

The purpose of the project is to maintain a vital link in the regional and national transportation network by providing a Hudson River crossing between Rockland and Westchester Counties, New York that addresses the limitations and shortcomings of the existing Governor Malcolm Wilson Tappan Zee Bridge. The preferred alternative is the Replacement Bridge alternative. The FEIS discusses two options for the crossing substructure (the short and long span options) and two possible superstructures (cable stay and arch) for the replacement bridge. These options have only minor variations in their impacts to the environment and are meant to provide an envelope for the possible final design of the Replacement Bridge Alternative to be determined under a Design-Build process.

In general, the FEIS responds adequately to EPA's March 22, 2012 comments on the Draft EIS and we commend FHWA and the project sponsors for continuing to minimize impacts to the community and environment. As you move forward on the Design-Build process, we recommend that FHWA continue to work closely with EPA and other resource agencies on ensuring that impacts are minimized, and to consult on whether any supplemental NEPA analysis would be required should the final design represent a significant change from the parameters of design and construction outlined in the FEIS.

We also recognize that including a mass transit system across the bridge is not under consideration at this time, and that a new Regional Transit Task Force will be created to study costs and options for regional transit, including commuter rail and a bus rapid transit system on the bridge and key portions of the Westchester-Rockland corridor. EPA views the framework and mission of the Task Force as presented in the enclosed Rockland County Press Release as a positive environmental development. The potential for the addition of mass transit underscores the importance of structural features capable of supporting various transit options as described in the FEIS. We look forward to participating in this new planning effort.

We appreciate the opportunity to comment on the FEIS. If you have any questions, please call Lingard Knutson, Principal Project Reviewer at (212) 637–3747.

Sincerely,

Judith d. Ence

Judith A. Enck
Regional Administrator

Enclosure



STATE OF NEW YORK DEPARTMENT OF STATE

ONE COMMERCE PLAZA 99 WASHINGTON AVENUE ALBANY, NY 12231-0001

CESAR A. PERALES SECRETARY OF STATE

ANDREW M. CUOMO GOVERNOR

September 20, 2012

Daniel P. Hitt, RLA New York State Department of Transportation 50 Wolf Road Albany, NY 12232

RE:

F-2012-0315

U.S. Army Corps of Engineers/New York
District Permit Application and U.S. Coast
Guard Permit Application New York State
Thruway Authority / Tappan Zee Hudson River
Crossing Project. Rockland and Westchester

Counties

Concurrence with Recommendations

Dear Mr. Hitt.

The New York State Thruway Authority and New York State Department of Transportation, as co-applicants on the Tappan Zee Hudson River Crossing Project (the "project"), have applied to the U.S. Army Corps of Engineers for authorization under Section 10 Rivers and Harbors Act, Section 404 of the Clean Water Act, (NWPs#15 and 25), and Section 103 of the Marine Research, Protection and Sanctuaries Act. The co-applicants have applied to the U.S. Coast Guard for a U.S. Coast Guard Bridge Permit [General Bridge Act of 1946 (33 U.S.C 525)]. They have submitted to the Department of State (DOS) a federal coastal consistency certificate as required by 15 C.F.R. Part 930, Subpart D.

The DOS has completed its review of the consistency certification and data and information for the above referenced proceeding in accordance with the federal Coastal Zone Management Act (CZMA). Pursuant to 15 C.F.R. §§ 930.4 and 930.62, DOS concurs with the consistency certification for the project under the applicable policies of the New York State Coastal Management Program (CMP).

I. STATUTORY FRAMEWORK FOR CONSISTENCY REVIEW

The CZMA authorizes a coastal state with a federally approved Coastal Management Program (CMP) to review federal agency activities in or outside of the state's coastal zone affecting any land or water use or natural resource of the coastal zone for their consistency with the CMP enforceable coastal policies. Under this regulatory framework, the state coastal agency can concur with, conditionally concur with, or object to the consistency certification for a project. In this matter, DOS has concurred

with the certification subject to the additional mutually agreed upon recommendations as outlined in III below.

The "Design and Build" approach to this project, as well as the proposed mitigation as presented in the FEIS, may require that individual federal permits outside the scope of this application be sought by the contractor for additional work or for modifications from the general design(s) provided with this proposal. In that case, additional federal consistency review of those federal permits may be necessary.

II. SUBJECT OF THE REVIEW

Purpose and Need:

The FEIS determined that the Tappan Zee Bridge replacement project is needed "to maintain a vital link in the regional and national transportation network by providing a Hudson River crossing between Rockland and Westchester Counties, New York that addresses the limitations and shortcomings of the . . . Tappan Zee Bridge. The project would address the structural, operational, safety, security, and mobility needs of the Tappan Zee Hudson River crossing." The FEIS establishes the need for replacing the Tappan Zee Bridge and states that "over the years, the bridge and its highway connections have been the subject of numerous studies and subsequent transportation improvements. Despite these improvements, congestion has grown steadily over the years and the aging bridge structure has reached the point where major reconstruction and extensive measures are needed to sustain this vital link in the transportation system."

Project Description:

The Tappan Zee Bridge was first opened to traffic in 1955 between Nyack, NY and Tarrytown, NY. Over the years, traffic volume has increased and the bridge has been subject to extensive and costly repairs. The necessary major repairs and upgrades led to the completion in April 2000 of a Long Term Needs Assessment and Alternatives Analysis by New York State Governor's I-287 Task Force. The report included long-term alternatives calling for replacement of the existing Tappan Zee Bridge "because it was concluded that rehabilitation of the existing bridge would be highly disruptive, and as costly, and not nearly as beneficial in mobility enhancement or meaningful congestion relief as a replacement bridge." Further, "[t]he Tappan Zee Bridge provides the only interstate highway crossing of the Hudson River for the 48-mile stretch between the George Washington Bridge (Interstate 95) and the Newburgh-Beacon Bridge (Interstate 84). It is a vital link between the population and employment centers of Rockland and Westchester Counties, is a major route for freight movement, and is an emergency evacuation route."

The replacement bridge structure would be located between South Broadway in Nyack (Rockland County) and Interchange 9 (Route 9) in Tarrytown (Westchester County) and result in new structures and modifications to Interstate 87/287. The replacement bridge would consist of two parallel

² FEIS at p. S-1.

³ FEIS at p. S-2

⁴ See FEIS at p. 1-1.

⁵ See FEIS at p. 1-1.

⁶ FEIS at p. 1-1.

⁷ FEIS at p. 1-3. The bridge also "serves as a major freight route between points east and west of the Hudson River. It is a primary overland gateway to New England for goods delivered to the Port of New York and New Jersey. The bridge is also a bypass route around New York City for trucks traveling between New England and points south and west of New York City." Id.

structures—one carrying eastbound traffic, the other westbound traffic—that would be located to the north of the existing bridge. Changes to Interstate 87/287 located in Rockland and Westchester Counties would be made to include a shifting of lanes northward to meet the new abutments of the replacement bridge.

The replacement bridge would require approach spans and the two proposed options, the Short Span and the Long Span, would include linking with the main bridge span. As their names suggest, the Short Span and Long Span would differ in terms of the type of structure as well as the number of and distance between bridge piers. However, "both approach span options would include eight travel lanes (four eastbound and four westbound) with inside and outside shoulders on both structures. The north structure of each approach span option would also include a shared-use path. The approach span options would maximize the public investment for, and would not preclude, future transit service across the Tappan Zee Hudson River crossing."8

The FEIS examined two design options for the main spans, which are the portions of the bridge that cross the main navigable channel of the Hudson River and provide adequate vertical and horizontal clearance for marine transport on the Hudson River; cable-stayed and arch designs. However, the "Design-Build" proposal may consider design options that are within the parameters of these designs. Both options would result in a horizontal clearance of at least 1,042 feet and a vertical clearance of 139 feet over the navigable channel at mean high water and would include eight travel lanes (four eastbound and four westbound) with inside and outside shoulders on both structures. The north structure of each main span option would also include a shared-use path for cyclists and pedestrians.

Assessment of Potential Coastal Impacts:

The FEIS addresses the anticipated environmental and coastal impacts for the overall project, as well as localized impacts expected from individual components of the project. During construction, the project would cause temporary localized impacts to the river bottom and the area surrounding the replacement bridge location. Pilot studies have been completed to assess the extent of these impacts and to investigate measures to reduce or eliminate those impacts. DOT will employ effective measures during construction to minimize the anticipated impacts from construction. The FEIS also proposes mitigation measures to offset or minimize impacts to visual, aesthetic, historic, cultural, and ecological resources and to minimize noise and vibrations.

Significant Coastal Fish and Wildlife Habitats (SCFWH):

The proposed replacement bridge is not located within or in close proximity to a SCFWH or a proposed SCFWH. Sediment plume testing was completed and the plumes do not enter a SCFWH. 10 Further, hydroacoustic modeling was performed using the Best Management Practice, the 206 re 1µPa dB isopleths (impact criterion for physical effects to fish) extending for 1.5 miles north and south of the Replacement Bridge Alternative proposed location and the noise does not enter SCFWHs north or south of the project area and would otherwise not result in adverse impacts to SCFWHs. 11

⁸ FEIS at p. S-7.

See FEIS at p. S-8.
 See FEIS Appendix E.

¹¹ See FEIS p. 16-28; see also FEIS Appendix F

Wetlands:

The project area includes a Department of Environmental Conservation (DEC) state-mapped intertidal wetlands just south of the project area on the east side of the river. The limit of DEC's tidal wetland jurisdiction is the south side of the existing bridge. No DEC tidal wetlands are mapped north of the bridge and no DEC freshwater wetlands are mapped within the project area. There is a small (0.23 acre) federally designated wetland on the east side of the river near the toll plaza. There will be temporary impacts to the federally delineated wetland and state tidal wetlands but the project is expected to mitigate these impacts on the coastal area, and return the wetlands to their original hydrology and vegetation through the following mitigating measures:

- The filling of wetlands will be avoided through the upland construction of an access road in federally delineated wetland (Westchester County) consisting of a temporary platform suspended over the wetland. The temporary platform will require the removal of some trees and the installation of pilings every 200 feet to support the suspended roadway. The temporary platform will also be suspended over NYSDEC mapped littoral zone tidal wetlands resulting in temporary impacts due to the piling footprint. This platform approach will ultimately eliminate the altering or an indirect impact to the wetland hydrology or downstream wetlands.¹⁴
- At the conclusion of construction the temporary platform will be removed and the natural riverine sedimentation processes will restore the littoral zone wetlands.
- There will be a temporary impact to approximately 0.10 acres of mapped NYSDEC littoral zone tidal wetland south of the existing bridge on the east bank of the River from dredging to construct an eastern portion of the replacement bridge. However, once the piles are removed the natural sedimentation of the riverine process will return the wetland to its natural hydrology. ¹⁵

The replacement bridge project and the use of a suspended temporary road access platform are not anticipated to have permanent adverse impacts on state or federal delineated wetlands.

Non-point Source Pollution from Stormwater Runoff

Permanent stormwater controls will be designed and constructed in accordance with the New York State Department of Environmental Conservation's (NYSDEC's) Stormwater Design Manual, NYSDOT's Highway Design Manual, NYSDOT's The Environmental Manual, and NYSTA engineering guidance. The permanent controls would be developed as part of the Stormwater Pollution Prevention Plan (SWPPP) for the proposed replacement bridge. Locations for the facilities will be determined as the final design for the replacement bridge is developed. The permanent stormwater methodology and controls are anticipated to address and mitigate coastal impacts from the project associated non-point source stormwater runoff. ¹⁶

¹² See FEIS at p. 16-16.

¹³ See FEIS at p. 16-16.

¹⁴ See FEIS at p. 18-81; see also Appendix F-3

¹⁵ See FEIS at p. 18-81; see also Appendix F-3.

¹⁶ See FEIS at pp. S-9 and 18-82.

Public Access and Navigation:

The construction and subsequent completion of the replacement bridge is not anticipated to interfere with public access to or navigation on the Hudson River. The public will continue to utilize the river for a variety of boating activities including sail boating, power boating, and other personal water craft uses for recreational purposes. While it is expected that there may be temporary disruptions to recreational boating during the construction period—for example, sail-boaters may have to lower their sails while passing through the construction zone—there will otherwise be no adverse impacts to recreational boaters during the construction period and no long-term impacts to recreational boating on the river once the project is complete. In coordination with the U.S. Coast Guard, applicants will utilize signage and channel markers to advise recreational boaters of preferred routes and potential dangers within the construction zone. The navigation channel will be maintained during the construction period and there will be no adverse impacts to the Hudson River Greenway Water Trail. The height requirements for the bridge design will be in keeping with the navigation requirements as regulated by the U.S. Coast Guard and Army Corps of Engineers and will be of sufficient height to ensure there are no impediments to waterborne transportation of goods.

Commercial and Recreational Fishing:

The construction and subsequent completion of the replacement bridge is not anticipated to interfere with commercial or recreational fishing on the Hudson River. No commercial fishing is currently permitted in the Hudson River. While it is expected that there may be temporary disruptions during the construction period, there will otherwise be no adverse impacts to recreational boaters during the construction period and no long-term impacts to recreational and commercial fishing on the river once the project is complete. In coordination with the U.S. Coast Guard, applicants will utilize signage and channel markers to advise boaters of preferred routes and potential dangers within the construction zone. 22

Growth Inducing Impacts:

The replacement bridge project is not anticipated to have growth-inducing impacts but instead to allow for new infrastructure to address the structural, operational, safety deficiencies of the current Tappan Zee Bridge and to continue meeting the existing mobility needs of the Hudson River crossing. The inclusion of a rapid transit lane and a shared-use pedestrian path may ultimately reduce the volume of individual automobiles thereby decreasing current traffic congestion and accident levels while increasing ease of mobility between Rockland and Westchester counties.

III. RECOMMENDATIONS

Although the project, as proposed, is consistent with CMP policies, the following mutually agreed upon recommendations are offered to ensure that the project can proceed in a manner that maximizes achievement of state policy goals:

¹⁷ See FEIS at p. 20-7.

¹⁸ See FEIS at p. 20-7; see also p. 7-5.

¹⁹ See FEIS at p. 20-7.

²⁰ See FEIS at p. 7-5.

²¹ See FEIS at p. 20-7; see also p. 7-5.

²² See FEIS at p. 20-7.

- 1. Utilizing best management practices and best available technology, efforts should be made to minimize the volume of dredging required for the project to the greatest extent practicable for the selected design.
- 2. The dredged materials resulting from the project should only be placed at the Historic Area Remediation Site (HARS) if the U.S. Environmental Protection Agency concurs that there are no practicable alternative locations and methods of disposal or recycling available.
- 3. Due to the "Design-Build" nature of this proposal, and the degree of uncertainty in final design details, the involved regulatory agencies shall be consulted to ensure that the designs submitted by the bidders comply with the applicable regulatory standards of all involved agencies.

Please contact me or Jeffrey Zappieri at: (518) 474-6000 if you have any questions.

Sincerely,

George R. Stafford

Deputy Secretary of State

cc: COE/New York – Steven Schumach (NAN-2012-00090-WSC)

USCG - Gary Kassof (USCG #6-12-1)

DEC/Central Office – John J. Ferguson (3-9903-00043/00012)

NYSTA - Elizabeth Novak



Federal Transit Administration – Region 2 One Bowling Green, Suite 429 New York, NY 10004-1452

Federal Highway Administration – NY Division Leo O'Brien Federal Building 11A Clinton Avenue, Suite 719 Albany, NY 12207

August 28, 2012

Mr. Daniel Hitt (Acting) Co-Director Office of Environment New York State Department of Transportation 50 Wolf Road Albany, NY 12232

Dear Mr. Hitt:

In accordance with the Clean Air Act Amendments of 1990, conformity of transportation plans and programs in each nonattainment and maintenance area is a requisite determination made jointly by the Federal Highway Administration and the Federal Transit Administration.

Because of the New York Metropolitan Transportation Council (NYMTC)'s recently adopted an amendment into its 2011-2015 Transportation Improvement Program (TIP) and into its 2035 Plan, new conformity determinations for all affected air quality non-attainment and maintenance areas are required. The results of the combined air quality conformity analyses for PM₁₀, PM_{2.5}, Ozone and Carbon Monoxide resulting from NYMTC's amended 2011-2015 TIP and 2035 Plan, together with the analyses on the existing 2011-2015 TIPs and existing 2040 Plans of the Orange County Transportation Council (OCTC) and the Poughkeepsie-Duchess County Transportation Council (PDCTC) were submitted by your August 22, 2012 letter.

We find that the submitted analyses demonstrate that the amended NYMTC 2011-2015 TIP and 2035 Plan, together with the existing OCTC and PDCTC 2011-2015 TIPs and 2040 Plans, do satisfy the appropriate emission tests for the respective non-attainment/maintenance classifications of the affected MPOs. Therefore, following Section 176(c) of the 1990 Clean Air Act Amendments, we officially determine that these documents are in conformity with the New York State Implementation Plan for Air Quality. This determination has been coordinated with the Environmental Protection Agency.

Marilyn & Shazor

Regional Administrator

Federal Transit Administration

Region II

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Sinderely,

Jonathan McDade Division Administrator

Federal Highway Administration

NewYork Division

cc: Via e-mail

Ms. M. Zeman, Environmental Protection Agency, Region II

Mr. M. Sheehan, NYSDEC

Ms. J. Simonsen, Statewide Planning Bureau, 6th floor, NYSDOT

Mr. S. Jin, Environmental Science Bureau, POD 4-1, NYSDOT

Mr. P. Lentlie, Environmental Science Bureau, POD 4-1, NYSDOT

Mr. R. Peters, Regional Planning & Program Manager, NYSDOT Region 8

Mr. G. Murrell, Acting Regional Planning & Program Manager, NYSDOT Region 10

Mr. L. Calderon, Acting Director, Planning & Program Management, NYSDOT Region 11

Mr. J. Czamanske, Deputy Commissioner, Orange County Planning Department

Mr. M. Debald, Transportation Program Administrator, PDCTC

Mr. J. Ettinger, Executive Director, NYMTC

Mr. Spencer Stevens, Planning Oversight & Stewardship Team, FHWA, Washington, DC (HEPP-10) (Room E72-109)