

Appendix C: Historic and Cultural Resources

C-3 Executed Memorandum of Agreement

**MEMORANDUM OF AGREEMENT
AMONG
THE FEDERAL HIGHWAY ADMINISTRATION (FHWA),
ADVISORY COUNCIL ON HISTORIC PRESERVATION (ACHP),
THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT),
THE NEW YORK STATE THRUWAY AUTHORITY (NYSTA),
AND THE
NEW YORK STATE HISTORIC PRESERVATION OFFICER (NYSHPO)
REGARDING THE
TAPPAN ZEE HUDSON RIVER CROSSING PROJECT
IN WESTCHESTER AND ROCKLAND COUNTIES, NEW YORK**

WHEREAS, the Federal Highway Administration (FHWA) proposes to undertake the Tappan Zee Hudson River Crossing Project (hereafter referred to as “the Project”), the purpose of which 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 structural, operational, safety, security and mobility needs of the Tappan Zee Hudson River Crossing (**Exhibit A – Project Location**);

WHEREAS, in compliance with the National Environmental Policy Act (NEPA, codified as 42 USC 4321 *et seq.*), FHWA is progressing an Environmental Impact Statement (EIS) for this project, in coordination with the New York State Department of Transportation (NYSDOT) and the New York State Thruway Authority (NYSTA), acting as Joint Lead Agencies under NEPA; and

WHEREAS, prior to the completion of the NEPA process, the NYSTA and NYSDOT have issued a Request for Proposals (RFP) for the design, construction and other identified activities for the Project under a Design-Build contract, and the RFP includes appropriate provisions ensuring that all environmental and mitigation measures identified in the NEPA document will be implemented; and

WHEREAS, the Project would require permits and approvals from other Federal agencies, including the United States Army Corps of Engineers (USACE) and the United States Coast Guard (USCG) and FHWA, USACOE and USCG have agreed that FHWA is the federal lead agency pursuant to NEPA;

WHEREAS, FHWA is the federal agency responsible for compliance with Section 106 of the National Historic Preservation Act (NHPA, codified at 16 USC 470f, and herein “Section 106”);

WHEREAS, NYSTA and NYSDOT, the project applicants, have been delegated specific tasks by FHWA to assist in meeting Section 106 obligations, and are signatories to this Agreement; and

WHEREAS, FHWA, in coordination with NYSTA and NYSDOT, conducted extensive analysis to study and evaluate alternatives to rehabilitate the existing Tappan Zee Bridge, a structure determined eligible for listing in the National Register of Historic Places in 2003, and concluded that rehabilitation does not meet the Project’s purpose and need; and

WHEREAS, the New York State Historic Preservation Officer (NYSHPO) has concurred with the finding that rehabilitation of the existing Tappan Zee Bridge is not a viable alternative, and FHWA, in coordination with NYSTA and NYSDOT, determined that only the No Build and Replacement Bridge Alternative would be considered in the EIS; and

WHEREAS, the Replacement Bridge Alternative, consisting of Short Span and Long Span options, would require the removal and demolition of the existing Tappan Zee Bridge; and

WHEREAS, FHWA, in coordination with NYSTA and NYSDOT, and in consultation with the NYSHPO has determined that the Project would adversely affect properties included in or eligible for inclusion in the National Register of Historic Places (“Historic Properties”) and have determined that it is appropriate to enter into this Memorandum of Agreement (“Agreement”) pursuant to Section 106 of the

Tappan Zee Hudson River Crossing Project – Memorandum of Agreement

National Historic Preservation Act of 1966, as amended, and its implementing regulations 36 CFR Part 800 – Protection of Historic Properties ; and

WHEREAS, FHWA invited the Advisory Council on Historic Preservation (“ACHP”) to participate in the Section 106 process for this Project and ACHP has accepted;

WHEREAS, the project is located within the identified area of interest of five federally recognized Indian tribes, and FHWA has consulted with the Delaware Nation, the Delaware Tribe, the Saint Regis Mohawk Tribe, the Shinnecock Indian Nation and Stockbridge-Munsee Band of Mohican Indians on a government-to-government basis in accordance with 36 CFR Part 800.2(c)(ii), and invited them to sign this Agreement as concurring parties; and

WHEREAS, in keeping with 36 CFR 800.2(c)(3) and (5), FHWA identified representatives of local governments, individuals and organizations with a demonstrated interest in the undertaking, has approved requests to participate in Section 106 consultation for the Project, and invited these Consulting Parties to sign this Agreement as concurring parties (The Section 106 Consulting Parties for the Project are presented in **Exhibit B – Consulting Parties**); and

WHEREAS, FHWA in coordination with NYSTA and NYSDOT has provided the Consulting Parties and the public appropriate opportunities to review and comment on Section 106 documents and findings to date; and

WHEREAS, the NYSTA and NYSDOT have prepared a Public Involvement Plan (PIP), with the goal of engaging a diverse group of public and agency participants, including the NYSHPO, seeking and using their views, and providing timely information throughout the design and construction process; and

WHEREAS, the RFP establishes that the Project will be designed with particular regard to its surroundings and the process of design will maximize opportunities for community input, including the NYSHPO, Section 106 Consulting Parties and the broader public; and

WHEREAS, the Project’s Design-Build contractor is required to ensure that all visual quality management is consistent with the principles of context-sensitive solutions using inclusive design approaches that integrate and balance community, aesthetic, historic, and environmental values with transportation safety, maintenance, and performance goals; and that during final design efforts will be made to minimize any effects to historic properties by reason of final design; and

WHEREAS, in consultation with the NYSHPO, an Area of Potential Effects (APE) has been established for the project as defined by 36 CFR 800.16(d), extending 500 feet from either side of the existing centerline of Interstate 87/287 from Interchange 10 (Route 9W), in Rockland County on the west, to Interchange 9 (Route 9), in Westchester County, on the east; and

WHEREAS, the APE expands to approximately 1.5 miles south of the existing bridge and approximately 1.2 miles north of the existing bridge in both Rockland and Westchester Counties within visual range of the Tappan Zee Bridge to encompass potential indirect effects associated with construction of the replacement bridge, and the APE for the Project is depicted on the map presented in **Exhibit C– Area of Potential Effect** hereto; and

WHEREAS, in accordance with 36 CFR 800.10(a), FHWA in coordination with NYSTA and NYSDOT, has planned and designed the Project to minimize effects on the following National Historic Landmarks (NHL) located within the APE in Westchester County, with the result that the Project will have no adverse effects on these properties: Lyndhurst, Sunnyside, and the Old Croton Aqueduct; and

WHEREAS, the Wayside Chapel at 24 River Road, Grand-View-on Hudson, and the Tarrytown Lighthouse at Kingsland Point Park, Route 9 in Sleepy Hollow, Westchester County, are properties listed in the National Register of Historic Places, and are located within the APE for the Project; and

WHEREAS, FHWA in coordination with NYSDOT and NYSTA, and in consultation with the NYSHPO, has carried out steps to evaluate previously unevaluated properties within the APE, and identified 19 additional properties determined eligible for the National Register, as depicted in the table and maps presented in **Exhibit D – Historic Properties** hereto, thereby supplementing existing data on Historic Properties in the APE that have been previously listed and /or determined eligible for National Register listing; and

WHEREAS, FHWA, in coordination with NYSDOT and NYSTA, and in consultation with the NYSHPO, has determined that proposed removal and demolition of the existing Tappan Zee Bridge would constitute an Adverse Effect as defined by 36 CFR 800.5(a)(1); and

WHEREAS, Phase I archaeological survey has been completed for terrestrial portions of the APE and no archaeological resources were identified; and

WHEREAS, archaeological studies and analysis to assess the sensitivity of the Hudson River portion of the APE have identified an area of potential sensitivity associated with a submerged and deeply buried Paleo landform, and possible historic resources lying on the river bottom, including shipwrecks and historic piers; and

WHEREAS, FHWA, in coordination with NYSDOT and NYSTA, has consulted with the NYSHPO to develop methods for further investigations to gather sufficient information to identify and evaluate potential Hudson River resources for National Register eligibility; and

WHEREAS, if submerged archaeological properties are identified in the Hudson River and determined eligible for inclusion in the National Register of Historic Places, FHWA in coordination with NYSTA and NYSDOT, and in consultation with the NYSHPO and other consulting parties as appropriate, will consider measures to avoid, minimize or mitigate adverse effects on identified resources; and

WHEREAS, this Agreement was developed with appropriate public participation during the NEPA process pursuant to 36 CFR 800.2(d)(3). A copy of this draft Agreement was included in the Draft Environmental Impact Statement (DEIS), a copy of the executed Agreement will be included in and distributed with the Final Environmental Impact Statement (FEIS), and the public shall be duly notified as to the execution and effective dates of this Agreement through the issuance of the FEIS and FHWA Record of Decision (ROD) for the Project.

NOW, THEREFORE, the FHWA, ACHP, NYSHPO, NYSTA, and NYSDOT agree that the Project shall be implemented in accordance with the following stipulations to take into account the effects of the Project on historic properties.

STIPULATIONS

FHWA, in coordination with NYSTA and NYSDOT, shall ensure that the following stipulations are implemented.

I. ARCHAEOLOGICAL RESOURCES

NYSTA and NYSDOT, in coordination with FHWA, shall implement additional archaeological investigations to identify potential submerged Hudson River archaeological resources, following an approved work plan outlined in a Technical Memo, *Status of Recent Cultural Resource Identification Efforts and Proposed Evaluation Strategies*, incorporated as an addendum to the Phase I Archaeological Survey Report. 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. The field investigations shall be completed prior to FHWA's issuance of the Record of Decision (ROD) for the Project.

A. Submerged Paleo Landform

NYSTA and NYSDOT will oversee implementation of the following measures to investigate deeply buried *in situ* marsh deposits and underlying river terraces that may be present approximately 20 to 50 feet below the Hudson River's bottom to the north of the bridge, and to avoid, minimize, or mitigate adverse effects to any deposits that may contain evidence of prehistoric activity dating to the Archaic or Paleo-Indian Periods.

1. To determine the presence, extent, and significance of this landform, borings shall be undertaken in the potentially sensitive area and monitored by a professional archaeologist. The professional archaeologist shall also collect and analyze organic and/or soil samples recovered from the borings.
2. A report, documenting the findings of the soil boring program and soil analyses, shall be prepared by the professional archaeologist and submitted to NYSTA, NYSDOT, and FHWA for distribution to the NYSHPO, ACHP, Delaware Nation, Delaware Tribe, Shinnecock Indian Nation, St. Regis Mohawk Tribe, and Stockbridge-Munsee Band of Mohican Indians.
3. If the 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.

B. Submerged Historic Resources and Potential Shipwrecks

NYSTA and NYSDOT will oversee implementation of the following measures to investigate two potential archaeological resources lying on the Hudson River bottom. All activities will be carried out in accordance with the terms described under Stipulation I.D., 'General Requirements for Archaeological Investigations'.

1. Archaeologists will conduct additional research and document review to identify 'Target 003', a potential historic resource on the river bottom within the APE.
2. Archaeologists will conduct Phase II-level investigations of 'Target 001', a potential shipwreck, including the removal of overburden and excavation of trenches to expose the vessel structure and identify characteristics such as vessel type, structural materials, cargo type, age and use.

3. Phase II field investigations will be followed by testing and analysis of collected data, including imaging information, samples and artifacts. A Phase II report documenting these findings will be prepared and submitted to the NYSTA and NYSDOT, for consultation with the NYSHPO and FHWA to determine National Register eligibility.
4. Measures to avoid, minimize, or mitigate adverse effects on any identified National Register eligible shipwrecks or other submerged historic resources, if identified, will be developed in consultation among the NYSHPO, FHWA, NYSTA, and NYSDOT.

C. Unanticipated Discoveries Plan

1. NYSTA and NYSDOT, in consultation with FHWA shall develop and implement an Unanticipated Discoveries Plan for human and non-human archaeological resources in the event that any unanticipated archaeological resources are encountered during construction of the Project.
2. The Unanticipated Discoveries Plan shall be prepared and submitted to the NYSHPO for review and approval prior to any Project excavation and construction activities. The Unanticipated Discoveries Plan shall also be submitted for review to the Delaware Nation, Delaware Tribe, Shinnecock Indian Nation, St. Regis Mohawk Tribe, and Stockbridge-Munsee Band of Mohican Indians.

D. General Requirements for Archaeological Investigations

1. All archaeological investigations will be performed in accordance with the Secretary of the Interior's Standards and Guidelines for Archaeology (48 FR 44734-37), the Advisory Council on Historic Preservation's Section 106 Archaeology Guidance (www.achp.gov/archguide), the New York State Education Department Cultural Resources Survey Program Work Scope Specifications for Cultural Resource Investigations on New York State Department of Transportation Projects (2004), and the New York Archaeological Council's Standards for Cultural Resource Investigations and Curation of Archaeological Collections (NYAC 1994).
2. All cultural resource studies carried out pursuant to this Agreement will be conducted by or under the direct supervision of a person or persons meeting the Secretary of the Interior's Professional Qualifications Standards (36 CFR Part 61; 48 FR 44138-9).
3. All artifacts, notes and other documentation of archaeological investigations will be curated according to federal (36 CFR 79) and state (NYAC 1994) guidelines.

II. ARCHITECTURAL RESOURCES

NYSTA and NYSDOT, in coordination with FHWA shall ensure that the following measures are undertaken to minimize and mitigate adverse effects to Historic Properties:

A. Historic American Engineering Record (HAER)-Level Recordation

Historic American Engineering Record (HAER)-level recordation shall be prepared for the Tappan Zee Bridge by a professional who meets the Secretary of the Interior's Professional Qualifications Standards (36 CFR Part 61) with experience in preparing such reports. This recordation shall include the following:

1. Measured drawings of the Tappan Zee Bridge, including a plan, elevations, and details;
2. Three-dimensional computer model of the Tappan Zee Bridge;

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3. Archival photography of the Tappan Zee Bridge. Photographs, prints, and duplicates would meet appropriate HAER archival standards;
4. A narrative that describes in detail the physical and historic characteristics of the Tappan Zee Bridge; and
5. Archival copies of the HAER report shall be provided to FHWA, the NYSHPO and local repositories accessible to the public located in Rockland and Westchester Counties.

B. Educational and Interpretive Materials

A plan for the development and preparation of educational and interpretive materials shall be prepared with the goal of documenting the history and significance of the Tappan Zee Bridge and making the information available to the public.

1. The format and content of the educational materials and interpretive exhibits shall be identified by FHWA, NYSTA, and NYSDOT in consultation with the NYSHPO, other signatories, and concurring parties to this MOA.
2. The Plan will identify the targeted audience for the educational materials and locations of the interpretive exhibits.
3. Education materials shall include the following:
 - a. Written, graphic, and electronic media for use by local libraries, historical societies, and educational institutions; and
 - b. Interpretive exhibit(s) to be located on the project's planned shared-use path that present the history and engineering of the Tappan Zee Bridge.
4. The NYSDOT and NYSTA shall submit a draft of the Plan to the NYSHPO and concurring parties to this MOA to provide 30 calendar days for review and comment. The Educational and Interpretive Materials Plan shall be finalized and implemented once it has been approved by the NYSHPO.

C. Construction Protection Plan

To avoid inadvertent project-related construction damage to historic properties, NYSTA and NYSDOT, in coordination with FHWA, will develop a Construction Protection Plan for Historic Properties.

1. The Construction Protection Plan shall be developed prior to initiation of any excavation and construction activities.
2. In accordance with standard construction management practices, NYSTA and NYSDOT will:
 - a. Implement measures to protect historic properties from vibration, excavation, and damage from heavy equipment. These measures will be incorporated into the Construction Protection Plan to address both direct and indirect effects, including any effects from re-routed traffic flow.

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- b. Take measures to ensure the safe and efficient movement of traffic around work zones through a Maintenance and Protection of Traffic Plan, including access for emergency services, (fire, medical, police).
 - c. Take measures to ensure the maintenance of basic services (water, gas, electric).
 - d. Implement measures for the control and / or management of fugitive dust, erosion, noise, lighting and visual effects of construction activities to the extent practicable.
3. NYSTA and NYSDOT shall ensure that all historic properties that may be subject to damage by construction activities are covered by the Construction Protection Plan and thereafter ensure that the provisions of the Construction Protection Plan are implemented by the Project contractors.
4. The Construction Protection Plan will be distributed to concurring parties to the MOA for a 30 day period of review and comment, and to the NYSHPO and FHWA for review and approval.

III. DISPUTE RESOLUTION

Should any party to this Agreement object in writing to FHWA, NYSTA or NYSDOT regarding any action carried out or proposed with respect to the undertaking or to the implementation of this Agreement, FHWA shall consult with the objecting party to resolve the objection.

If after initiating consultation FHWA in coordination with NYSTA and NYSDOT determine that the objection cannot be resolved through consultation, FHWA shall forward all documentation relevant to the objection to the ACHP, including the FHWA's proposed response to the objection.

Within 30 days after receipt of all pertinent documentation, ACHP shall exercise one of the following options:

- A. Advise the FHWA that the ACHP concurs in the FHWA's proposed response to the objection, whereupon the FHWA will respond to the objection accordingly;
- B. Provide the FHWA with recommendations, which the Federal Lead Agency shall take into account in reaching a final decision regarding its response to the objection; or
- C. Notify the FHWA that the objection will be referred for comment pursuant to 36 CFR 800.7(a) (4), and proceed to refer the objection and comment. The FHWA shall take the resulting comment into account in accordance with 36 CFR 800.7(c) (4), with reference to the subject of the dispute.
- D. FHWA's responsibility to carry out all actions under this MOA that are not subject to the dispute shall remain unchanged.

IV. REPORTING AND OVERSIGHT

A. Reports

- 1. NYSDOT, in coordination with NYSTA, will provide to the NYSHPO, ACHP, and FHWA all final cultural resources plans, reports and studies resulting from this Agreement. NYSDOT, in coordination with NYSTA, will also make these documents available to the concurring parties, subject to the confidentiality provisions of 36 CFR 800.11(c).
- 2. The NYSHPO shall provide written concurrence or comments within 30 calendar days of receipt of draft and final plans, reports and studies. If no comments are received, FHWA, NYSTA and NYSDOT shall consider the NYSHPO in concurrence.

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3. Concurring parties to this MOA shall provide written comments within 30 days of receipt of any plans, reports and studies provided for their review. FHWA, NYSTA, and NYSDOT shall take all written comments into consideration.

B. Annual Reports. Commencing July 1, 2013, and every year thereafter until the Project has been completed, or the Agreement has been terminated, NYSTA and NYSDOT will prepare and submit a joint annual report to the NYSHPO, ACHP, and FHWA providing information concerning the status of implementation of the terms of this Agreement. The annual report will include milestone accomplishments, resolution of any problems encountered in implementation, and a schedule for completing any outstanding commitments. NYSTA and NYSDOT will notify other consulting parties of the availability of the annual reports via the Project website or another agreed-upon method of distribution.

V. DURATION, AMENDMENT AND TERMINATION

A. This Memorandum of Agreement shall take effect on the date it is signed by the last signatory (FHWA, NYSHPO, ACHP, NYSTA, NYSDOT) and will remain in effect until the Stipulations set forth herein have been met.

B. Any signatory to this Agreement may request that it be amended, whereupon the parties will consult to reach a consensus on the proposed amendment. Where no consensus can be reached, the Agreement will not be amended. Any resulting amendments shall be developed and executed among the signatories in the same manner as the previous version(s) of the MOA. Any amendment to this MOA will go into effect only upon written agreement of all the signatories.

C. Any signatory to this Agreement may terminate it by providing thirty (30) days notice to the other parties, provided that the signatories will consult during the period prior to termination to seek agreement on amendments or other actions that would avoid termination. If within thirty (30) days (or another time period agreed to by all signatories) an amendment cannot be reached, any signatory may terminate the MOA upon written notification to the other signatories.

Once the MOA is terminated, and prior to work continuing on the undertaking, FHWA must either (a) execute an MOA pursuant to 36 CFR §800.6, or (b) request, take into account, and respond to the comments of the ACHP under 36 CFR §800.7. FHWA shall notify the signatories as to the course of action it will pursue.

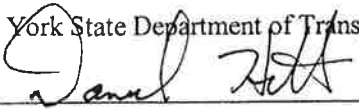
EXECUTION OF THIS MEMORANDUM OF AGREEMENT and implementation of its Stipulations evidences that FHWA has taken into account the effects of the Project on historic properties and afforded the ACHP an opportunity to comment on those effects.

Tappan Zee Hudson River Crossing Project – Memorandum of Agreement

EXECUTION OF THIS MEMORANDUM OF AGREEMENT and implementation of its Stipulations evidences that FHWA has taken into account the effects of the Project on historic properties and afforded the ACHP an opportunity to comment on those effects.

Signatory:

New York State Department of Transportation

By:  Date: 6-8-12

Daniel P. Hitt, (Acting) Director, Office of Environment

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EXECUTION OF THIS MEMORANDUM OF AGREEMENT and implementation of its Stipulations evidences that FHWA has taken into account the effects of the Project on historic properties and afforded the ACHP an opportunity to comment on those effects.

Signatory:

New York State Thruway Authority

By: Donald R. Bell Date: 6/8/12

Donald R. Bell P.E., Acting Chief Engineer

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EXECUTION OF THIS MEMORANDUM OF AGREEMENT and implementation of its Stipulations evidences that FHWA has taken into account the effects of the Project on historic properties and afforded the ACHP an opportunity to comment on those effects.

Signatory:

New York State Historic Preservation Officer

By: Ruth A Pierpont Date: 6/18/12

Ruth Pierpont, Deputy Commissioner/Deputy SHPO

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Signatory:

Federal Highway Administration

By: 

Date: 6/27/12

Jonathan D. McDade, Division Administrator

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Signatory:

Advisory Council on Historic Preservation

By: 

Date: 6/28/12

John M. Fowler, Executive Director

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EXECUTION OF THIS MEMORANDUM OF AGREEMENT and implementation of its Stipulations evidences that FHWA has taken into account the effects of the Project on historic properties and afforded the ACHP an opportunity to comment on those effects.

Invited Signatory:

Delaware Tribe

By: Bruce Obermeyer, Director Date: 6/15/2012

Name and Title

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EXECUTION OF THIS MEMORANDUM OF AGREEMENT and implementation of its Stipulations evidences that FHWA has taken into account the effects of the Project on historic properties and afforded the ACHP an opportunity to comment on those effects.

Concurring Party:

Bruce D. Forrest

By: 

Date: 6/22/2012

LIST OF EXHIBITS

- A Project Location Map**
- B Section 106 Consulting Parties**
- C Area of Potential Effects Map**
- D Identified Historic Properties**

EXHIBIT A

PROJECT LOCATION MAP

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EXHIBIT B

SECTION 106 CONSULTING PARTIES

Individual/Organization	Contact	Address
Advisory Council on Historic Preservation (ACHP)	Carol Legard, FHWA Liaison	1100 Pennsylvania Avenue NW, Suite 807 Washington, DC 20004
African American Chamber of Commerce of Westchester & Rockland	Robin L. Douglas, President, CEO & Founder	402 South 7th Avenue, Mount Vernon, NY 10550
Berezowsky, Adrian, Sleepy Hollow resident		55 West Red Oak Lane, White Plains, NY 10604
Delaware Nation	Tamara Francis, Cultural Resource Preservation Director, Jason Ross, Section 106 Assistant	31064 State Highway 281, Anadarko, OK 73005
Delaware Tribe	Dr. Brice Obermeyer,	Delaware Tribe Historic Preservation Office, 1420 C of E Drive, Suite 190, Emporia, KS 66801
Forrest, Bruce D.		Forrest & Company, Inc., P.O. Box 444, Nyack, NY 10960
Friends of the Old Croton Aqueduct	Robert Kornfeld	47 Summit Drive, Hastings-on-Hudson, NY 10706
The Historical Society Inc.	Sara Mascia	One Grove St, Tarrytown, NY 10591
Historical Society of the Nyacks	Winston C. Perry Jr, President	319 North Broadway, Nyack, NY 10960
Historical Society of Rockland County	Marianne B. Leese	20 Zukor Road, New City, NY 10956
Irving Neighborhood Preservation Association	Victoria Weisel, President	8 Washington Place, Tarrytown, NY 10591
	Stacy Shatkin-Cusick	113 Paulding Avenue, Tarrytown, NY 10591
	Melissa Demarest	72 Paulding Avenue, Tarrytown, NY 10591
		269 Old Mamaroneck Rd, White Plains, NY 10605
Lynn, Lawrence, Mayor of Village of Grand View-on-Hudson		276 River Road, Grand View, NY 10960
National Trust for Historic Preservation	Elizabeth S. Merritt, Deputy Counsel	1785 Massachusetts Ave N.W. Washington, DC 20036
	Krystyn Hastings-Silver	Lyndhurst, 635 South Broadway, Tarrytown, NY 10591
	Roberta Lane	7 Faneuil Hall Marketplace, 4th floor, Boston, MA 02109
Preservation League of New York State	Daniel Mackay	44 Central Avenue, Albany, NY 12206
Riverkeeper	c/o Pace University School of Law	Pace University School of Law, 78 North Broadway, White Plains, NY 10603
Rockland County Historic Preservation Board	Craig H. Long, Chair	120 Wayne Avenue, Suffern, NY 10901
Saint Regis Mohawk Tribe	Chief Randy Hart Arnold Printup, Jr. THPO	412 State Route 37, Hogsburg, NY 13655
Shinnecock Indian Nation	Marguerite Smith, Office of Tribal Trustees/Legal	100 Church Street, Shinnecock Community Center, Southampton, NY 11968
SHPO	John Bonafide, Ruth Pierpont, Mark Peckham	P.O. Box 189, Peebles Island, Waterford, NY 12188
Steiner, Henry, Village of Sleepy Hollow Historian		56 Pocantico Street, Sleepy Hollow, NY 10591
Stockbridge-Munsee Band of Mohican Indians	Sherry White, THPO	W13447 Camp 14 Road, Bowler, WI 54416
Stolldorf, Gini, Nyack resident		15 Fourth Avenue, Nyack, NY 10960
Village of Tarrytown	Michael Blau, Village Administrator	One Depot Plaza, Tarrytown, NY 10591
Westchester County Historical Society	Katherine Hite, Executive Director	2199 Saw Mill River Rd, Elmsford, NY 10523

EXHIBIT C

AREA OF POTENTIAL EFFECTS MAP



Direct Effect Area of Potential Effect (APE)

Indirect Effect Area of Potential Effect (APE)

TAPPAN ZEE HUDSON RIVER CROSSING

Memorandum of Agreement

Exhibit C

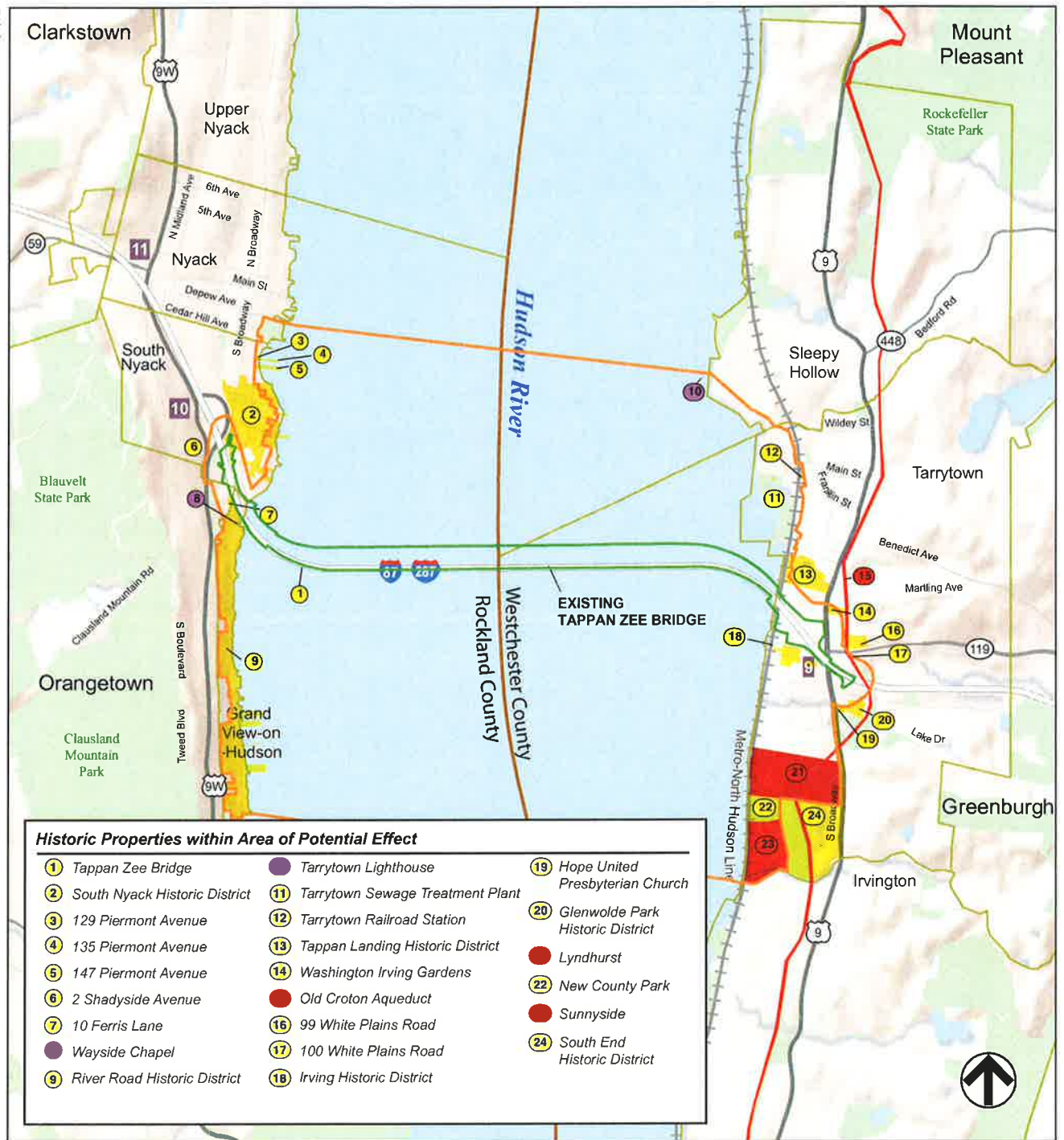
Direct and Indirect Effects APEs

Tappan Zee Hudson River Crossing Project – Memorandum of Agreement

EXHIBIT D

IDENTIFIED HISTORIC PROPERTIES IN THE APE

Ref No. ¹	Name	Location	NHL	NR Listed	NR Eligible
1	Tappan Zee Bridge (BIN 5516340)	Interstate I-87/287 over the Hudson River			X
<i>Rockland County</i>					
2	South Nyack Historic District*	South Nyack			X
3	129 Piermont Avenue*	South Nyack			X
4	135 Piermont Avenue*	South Nyack			X
5	147 Piermont Avenue*	South Nyack			X
6	2 Shadyside Avenue*	South Nyack			X
7	10 Ferris Lane*	Orangetown			X
8	Wayside Chapel**	24 River Road, Grand-View-on-Hudson		X	
9	River Road Historic District*	River Road, Grand-View-on-Hudson			X
<i>Westchester County</i>					
10	Tarrytown Lighthouse	Kingsland Point Park, Route 9, Sleepy Hollow		X	
11	Tarrytown Sewage Treatment Plant*	Pierson Park, Tarrytown			X
12	Tarrytown Railroad Station	1 Depot Plaza, Tarrytown			X
13	Tappan Landing Historic District*	Tappan Landing Road & North Tappan Road Tarrytown			X
14	Washington Irving Gardens*	300 South Broadway, Tarrytown			X
15	Old Croton Aqueduct	Route 9, Tarrytown	X	X	
16	99 White Plains Road*	Tarrytown			X
17	100 White Plains Road*	Tarrytown			X
18	Irving Historic District*	Van Wart & Paulding Avenues, Tarrytown			X
19	Hope United Presbyterian Church*	500 South Broadway, Tarrytown			X
20	Glenwolde Park Historic District*	Glenwolde Park, Water Street, and Willowbrook Avenue, Tarrytown			X
21	Lyndhurst	635 South Broadway, Tarrytown	X	X	
22	New County Park	Route 9, Tarrytown			X
23	Sunnyside	1 West Sunnyside Lane, Tarrytown	X	X	
24	South End Historic District*	West side of Route 9, Tarrytown			X
Notes: ¹ Corresponds to Figures D-1 through D-5. *Determined National Register of Historic Places-Eligible as part of this project **Also a contributing resource within S/NR-eligible River Road Historic District, Grand View-on-Hudson, Rockland County NHL: National Historic Landmark. NR: National Registers of Historic Places.					



⑭ Interchange Number

87 Interstate Highway

9W U.S. Highway

59 State Highway

Historic Properties

Direct Effect Area of Potential Effect (APE)

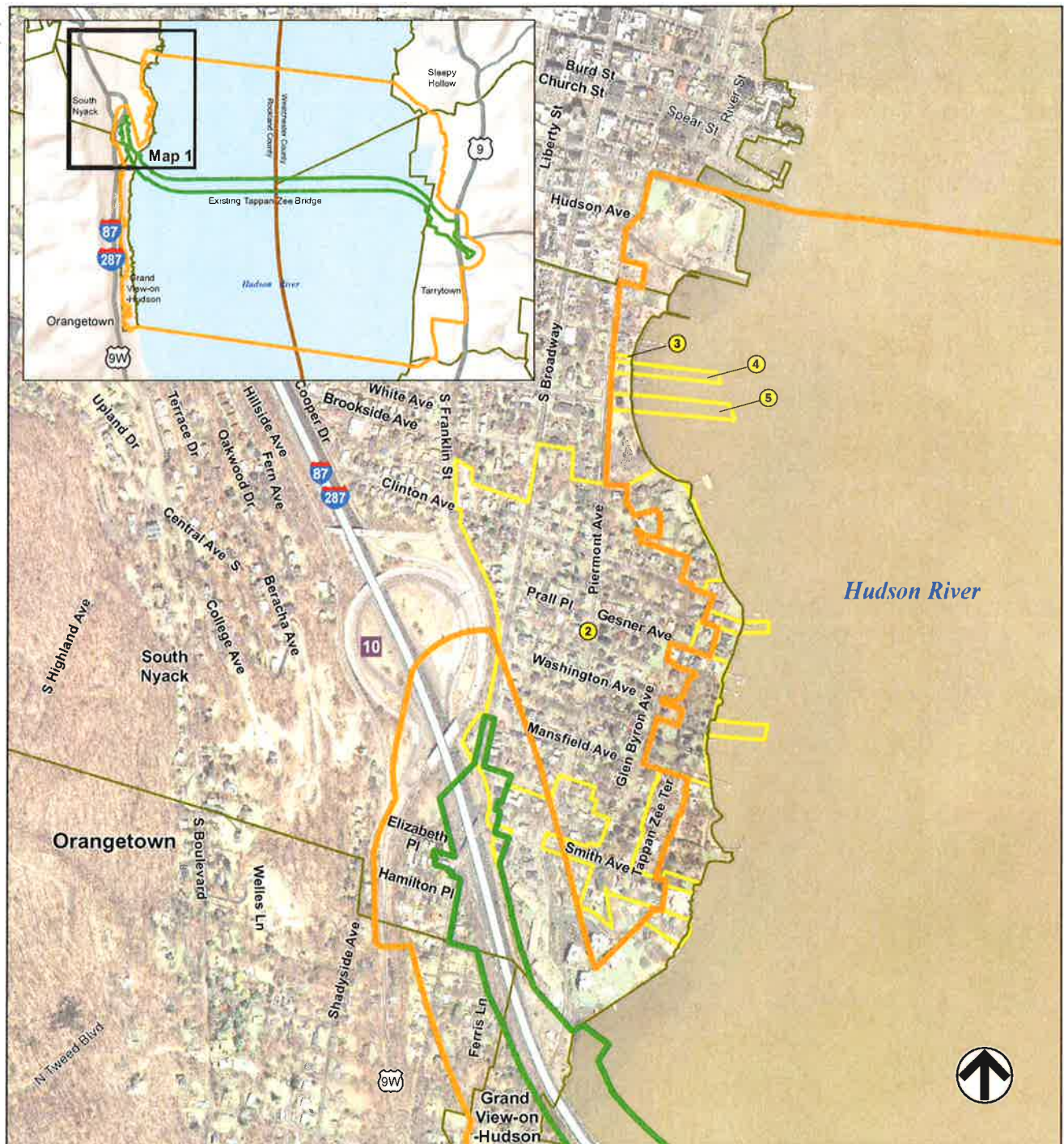
Indirect Effect Area of Potential Effect (APE)

● NHL

● S/NRHP Listed

● S/NRHP Eligible

0 1/2 1 MILE
SCALE

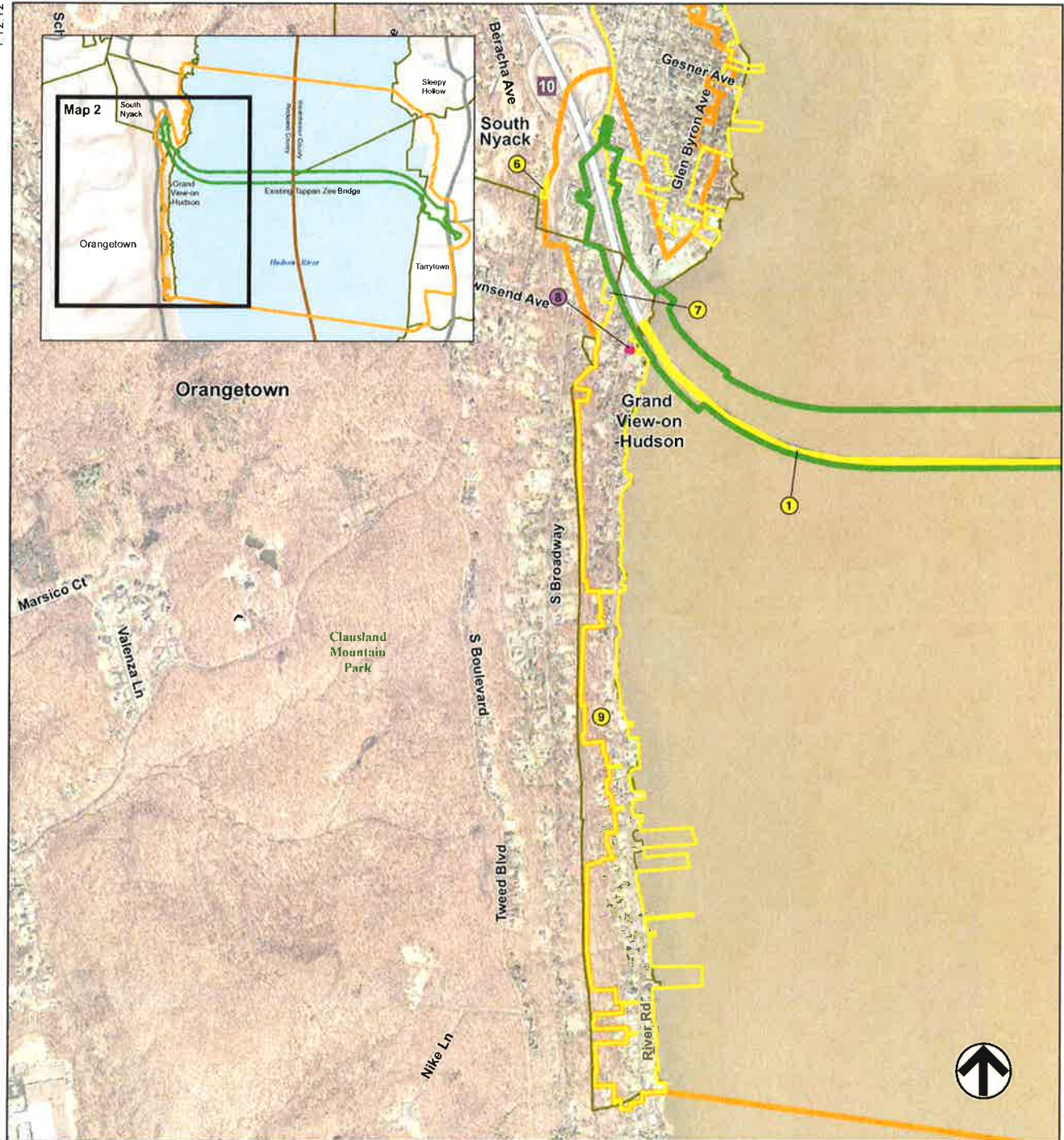


- Direct Effect Area of Potential Effect (APE)
- Indirect Effect Area of Potential Effect (APE)
- S/NRHP Eligible

**Historic Properties within
Area of Potential Effect – Map 1**

- ② South Nyack Historic District
- ③ 129 Piermont Avenue
- ④ 135 Piermont Avenue
- ⑤ 147 Piermont Avenue

0 1500 FEET
SCALE

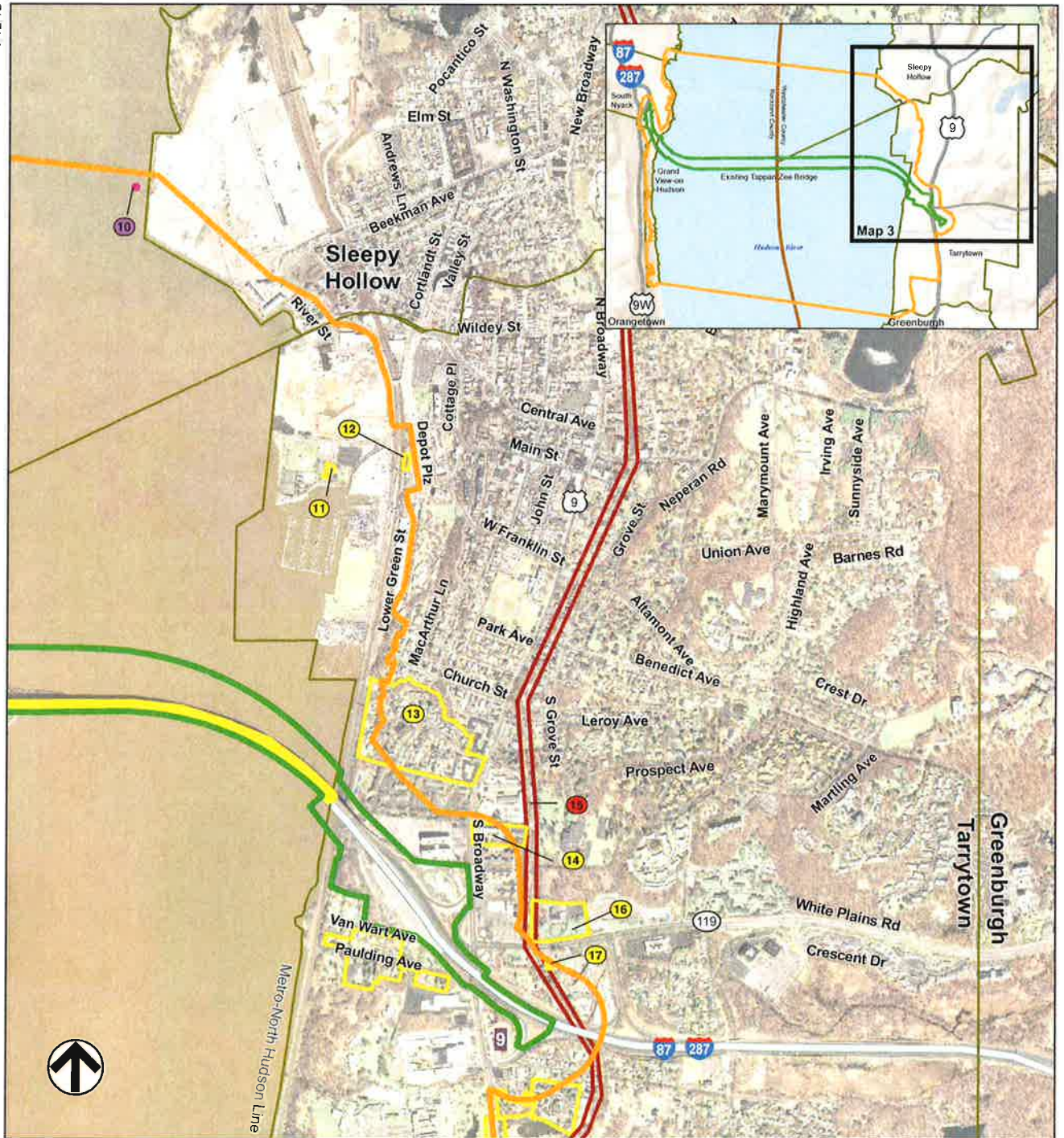


- Direct Effect Area of Potential Effect (APE)
- Indirect Effect Area of Potential Effect (APE)
- S/NRHP Listed
- S/NRHP Eligible

**Historic Properties within
Area of Potential Effect – Map 2**

- ① Tappan Zee Bridge
- ⑥ 2 Shadyside Avenue
- ⑦ 10 Ferris Lane
- ⑧ Wayside Chapel
- ⑨ River Road Historic District

0 2000 FEET
SCALE

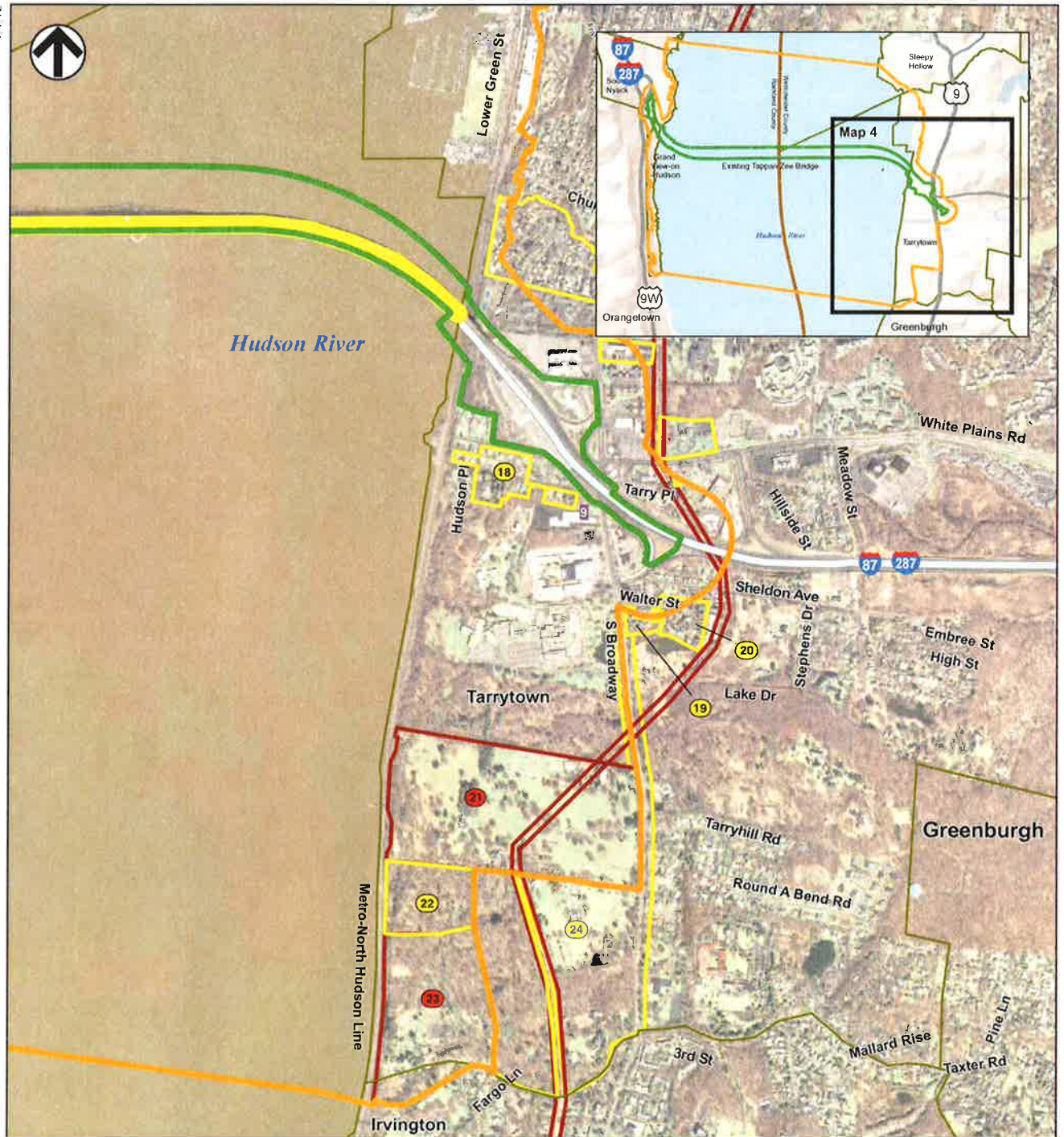


- Direct Effect Area of Potential Effect (APE)
- Indirect Effect Area of Potential Effect (APE)
- NHL
- S/NRHP Listed
- S/NRHP Eligible

Historic Properties within Area of Potential Effect – Map 3

- 10 Tarrytown Lighthouse
- 11 Tarrytown Sewage Treatment Plant
- 12 Tarrytown Railroad Station
- 13 Tappan Landing Historic District
- 14 Washington Irving Gardens
- 15 Old Croton Aqueduct
- 16 99 White Plains Road
- 17 100 White Plains Road

0 2000 FEET
SCALE



- Direct Effect Area of Potential Effect (APE)
- Indirect Effect Area of Potential Effect (APE)
- NHL
- S/NRHP Listed
- S/NRHP Eligible

Historic Properties within Area of Potential Effect – Map 4

- 18 Irving Historic District
- 19 Hope United Presbyterian Church
- 20 Glenwolde Park Historic District
- 21 Lyndhurst
- 22 New County Park
- 23 Sunnyside
- 24 South End Historic District

0 2000 FEET
SCALE