Regulatory Branch

SUBJECT: DEPARTMENT OF THE ARMY PERMIT Number NAN-2012-00090
Originally Issued to New York State Thruway Authority on 25 April 2013 Authorizing
Regulated Work to Facilitate Construction of The New NY Bridge in the Hudson
River between Tarrytown and Nyack, New York

PERMITTEE:
New York State Thruway Authority
ATTN: Peter Sanderson, Project Director
555 White Plains Rd, 4th Floor
Tarrytown, NY 10591
(518) 436-2810
(914) 789-3200

1. Reference is made to:

   a. Subject Department of the Army (DA) permit issued 25 April 2013;

   b. Subject DA Permit Modification #1 issued 24 June 2013;

   c. Subject DA Permit Modification #2 issued 14 January 2014;

   d. Subject DA Permit Modification #3 issued 3 April 2014;

   e. Subject DA Permit Modification #4 issued 17 October 2014;

   f. Subject DA Permit Modification #5 issued 10 December 2014;

   g. Subject DA Permit Modification #6 issued 11 February 2015;

   h. The subject permittee’s permit modification request dated 16 December
2014 to dredge within the Stage 2 Access Channel and the top 3-feet of
East Sediment Mound #3 along the southeastern segment of, and parallel
to, the existing Tappan Zee Bridge; and discharge fill material
(gravel/sand) in the Stage 2 Area as scour protection. All the dredged
material would be transported to a state-approved upland facility.

2. In accordance with the provisions of Section 10 of the River & Harbors Act of
1899 (33 USC 403) and Section 404 of the Clean Water Act (33 USC 1344), the New
York District of the U.S. Army Corps of Engineers issued the subject Department of
the Army permit [Reference 1(a)] on 25 April 2013 to New York State Thruway
Authority; issued the first permit modification [Reference 1(b)] on 24 June 2013;
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issued the second permit modification [Reference 1(c)] on 14 January 2014; issued the third permit modification [Reference 1(d)] on 3 April 2014; issued the fourth permit modification [Reference 1(e)] on 17 October 2014; issued the fifth permit modification [Reference 1(f)] on 10 December 2014; and issued the sixth permit modification [Reference 1 (g)] on 11 February 2015.

3. The modified regulated work requested at this time includes the dredging a total of approximately 187,960 cubic yards (CY) at a maximum depth of 13-feet (ft) below the plane of mean lower low water (MLLW) plus 1-ft overdredge, and the placement of 2-ft of sand and gravel, a total of approximately 37,960 cy, in the access channel of the Stage 2 Area. In addition, NYSTA has requested DA authorization to dredge the top 3-ft of East Sediment Mound #3 near the existing Tappan Zee bridge.

To minimize track outages and disruptions to Metro-North Railroad and Amtrak passenger rail operations, the Stage 2 dredge area has been extended toward the Westchester County shoreline to accommodate the use of the “Left Coast Lifter” (LCL), a 400-ft by 100-ft barge crane, to remove portions of the existing bridge spanning the Metro-North Railroad right-of-way (ROW). This extended area is known as the “Access Area” in the attached drawings. The dredging of this area is associated with the demolition activities of the existing Tappan Zee Bridge and the erection of the Westchester Landing of the New NY Bridge.

The work would involve dredging via closed-clamshell bucket of approximately 165,360 CY of sediment from the Stage 2 Area and approximately 22,600 CY from the Access Area to a depth of 13-ft below the plane of MLLW, plus an allowable 1-ft overdredge, for a total maximum depth of 14-ft. The total volume of the proposed Stage 2 Area plus the Access Area dredging is approximately 187,960 CY. The proposed dredging operation would be completed by two dredges over 75 days, for a total volume of approximately 2,500 CY per day.

The proposed work would also involve the dredging of the top 3-ft of East Sediment Mound #3 via closed-clamshell bucket, of a total of approximately 1,117 CY of sediment, which includes an allowable 1-ft overdredge. Sand/gravel armoring will not be placed in this area as there is a lack of potential scour from tugboats.

The proposed dredging activities would impact a total of 17.47 acres of benthic habitat.

The dredged material will be transported by barge and then by truck to a state-approved upland disposal facility. No barge overflow or return flow to waters of the
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The dredged material will be transported by barge and then by truck to a state-
approved upland disposal facility. No barge overflow or return flow to waters of the
United States is anticipated. The proposed dredging would occur between August
1st through October 31st to protect Essential Fish Habitat (EFH) and EFH-designated
species.

The proposed dredged material will be sampled and analyzed for target analytes as
identified by the New York State Department of Environmental Conservation
(NYSDEC) and the New Jersey Department of Environmental Protection (NJDEP)
sampling and testing protocol for dredged material disposal.

Once the Stage 2 Area dredging is complete and to prepare a uniform bottom
surface in this dredged area, a specific-use drag barge would drag a 35-ton steel
beam filled with concrete or “drag bar” across the entire dredge footprint.
Approximately two-feet of sand and gravel (armoring), a total of 37,960 CY, would
be placed over approximately 12.48 acres within the access channel to limit the re-
suspension of sediment due to potential scour from tugs. The sand and gravel
would be delivered by barges or scows, and would be placed by barge-mounted
cranes. Without the armoring, additional dredging would be required to create a
deeper work zone. Bed leveling would be conducted simultaneously with the
placement of the armoring material.

The Access Area would remain unarmored, providing a design channel depth of 13-
ft, plus 1-ft overdredge, for a total depth of 14-ft below the plane of MLLW, to
accommodate the LCL draft requirements during heavy lifting operations. It is
anticipated that approximately three to four lifting operations would be required to
remove that portion of the existing bridge spanning the Metro-North Railroad ROW.
Shallow-draft tugs would slowly move the LCL into position for removing and
placing portions of the existing bridge onto attendant barges, minimizing re-
suspension of sediment.

The proposed work is located in the Hudson River, in the Town of Tarrytown,
Westchester County, New York.

4. The following special conditions are added to this permit modification:

   a. The permittee shall comply with the terms and conditions of the modification of the New York State Department of Environmental Conservation Permit 3-9903-00043/00012, dated 30 June 2015 (enclosed); and,
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b. Submit the following information, at a minimum, to the First Coast
Guard District for the publication in the Local Notice to Mariners before
starting operations, via e-mail to LNM@uscg.mil or faxed to (617) 223-
8291 a minimum of fourteen (14) days before starting operations:

- Date of submission;
- Name, phone number, and email address of project point of
  contact;
- Company name;
- Type of work;
- Waterway and location where work will be done;
- Latitude and longitude of work area (Degrees, Minutes,
  Thousandths of seconds);
- Work start and stop dates and hours of operation;
- Equipment on scene;
- Passing arrangements/time to move vessels to not impede
  navigation;
- VHF radio channel monitored;
- Disposal site (if used); and,
- NOAA Chart Number for the area.

5. Based upon an evaluation of the administrative record supporting the issuance
of the subject permit, a review of the permittee’s submitted materials in support
of their permit modification request [Reference 1(h)], and the incorporation of the
aforementioned special condition, the subject permit is hereby modified to
include the previously described proposed activities; the engineering plans titled
“New York State Thruway Authority, Stage II Dredging Permitting Plan for The
New NY Bridge”, dated 16 April 2014, Sheet Numbers 1 to 10, and the
engineering plans titled “New York State Thruway Authority, East Sediment
Mound #3 Dredging Plan for The New NY Bridge”, dated 30 January 2015, Sheet
Numbers 1 to 5, are included as part of the previously authorized permit
drawings.

6. All other terms, General Conditions, and Special Conditions of the subject
issued permit shall remain in effect, including the permit expiration date of 24
MARCH 2019.

7. This modified permit shall be known as Permit Number NAN-2012-00090-M7.
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8. This modified subject DA permit shall be available at project offices and
regulated work sites.

[Signature]

For and in behalf of
DAVID A. CALDWELL
Colonel, U.S. Army
Commander

Enclosures

CF: (w/encl)
CENAN-OP-R
NYSDEC Region 3 Permit Administrator
Tappan Zee Constructors, LLC
# NEW YORK STATE THRUWAY AUTHORITY

## STAGE II DREDGING PERMITTING PLAN FOR THE NEW NY BRIDGE

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### DREDGING KEY PLAN

![Diagram of dredging key plan]

### LOCATION MAP

![Diagram of location map]

### HYDROGRAPHIC NOTES

**NOTES:**

1. SURVEY INFORMATION BASED UPON HYDROGRAPHIC SURVEY PERFORMED BY RODGERS SURVEYING INC. IN SEPTEMBER 2013.

2. HORIZONTAL DATUM REFERS TO NEW YORK STATE PLANE EAST HOOD'S FEET.

3. VERTICAL DATUM REFERS TO NAVD88 FEET.

4. EASTERN EDGE OF THE TARRYTOWN HARBOR CHANNEL DEPICTED HEREIN WAS OBTAINED FROM PLAN PROVIDED BY THE ISSUER TITLED "TARRYTOWN HARBOR, NEW YORK, CONDITION SURVEY" DATED JUNE 8, 2011.

5. FLOATING DOCK AND DREDGING TRACKS DEPICTED HEREIN WERE OBTAINED FROM ISSUER PERMIT PLANS TITLED "12Q-006" AND DATED JUNE 24, 2013.

**LEGEND:**

- Existing Bathymetry Major
- Existing Bathymetry Minor
- Existing Navigation Channel
- Proposed Bathymetry

- MHW - Mean High Water Line
- MHL - Mean Low Water Line

4/16/2014
June 30, 2015

Peter Sanderson, Project Director  
The New NY Bridge Project  
NYS Thruway Authority  
303 South Broadway, Suite 413  
Tarrytown, NY 10591  

Re: The New NY Bridge - DEC Permit 3-9903-00043/00012  
Permit Modification / Stage 2 Dredging/Mound #3 Removal

Dear Mr. Sanderson:

This responds to your February 17, 2015 request to modify the subject permit to authorize Stage 2 dredging activities. In addition to your letter’s supporting documentation, the Department has reviewed the following:

- National Marine Fisheries May 11, 2015, letter regarding Stage 2 Dredging ESA and EFH Concurrence
- National Marine Fisheries June 19, 2015, letter regarding Mound #3 ESA and EFH Concurrence
- NYTA April 2, 2015, email responding to Department comments on the proposed modification.

The proposed modification would enlarge the area and volume to be dredged in the Stage 2 Access Channel, located along the southeastern shoreline of the existing Tappan Zee Bridge. Dredging this area is related to demolition of the existing bridge, to be undertaken at a future date, and construction of the Westchester Landing of the New NY Bridge. To assist in lifting operations here the Left Coast Lifter will be used, requiring expansion of the dredged area and an increase in dredged volume.

The previously approved dredging of approximately 150,000 cubic yards of will be increased to approximately 187,960 cubic yards. The full extent of proposed changes are detailed in your February 17, 2015, letter. The Department has determined that these modifications are consistent with the project’s Final Environmental Impact Statement (which refers to this work area as Stage 3) and the Department’s SEQR Finding for its bridge permit.
Accordingly, the subject permit is hereby modified to allow the proposed changes, as described in your February 17, 2015 letter and its attachments.

The approved work must comply with the Department’s permit and its conditions. Of particular relevance are conditions associated with Dredging (conditions 19-35); Armoring (36-39); and Water Quality Monitoring (59-64), and the plans approved thereunder by the Department, including all revisions. Further, as stated in the Thruway Authority’s April 2, 2015 email, permit condition 36 requires submission of an Armoring plan for the Stage 2 Access Channel dredging that will include the “source and size of armoring materials and layer/placement methods.”

These methods must be consistent with Armoring Plan Revision 6, which eliminated the first layer of bedding materials in order to prevent dust slicks and plumes observed in previous armoring operations.

Finally, condition 21 requires that any dredged material management activities carried out in New York State will require the relevant Department approvals before dredging starts.

If you have any questions please feel free to contact me.

Respectfully,

John J. Ferguson
Chief Permit Administrator

ecc: K. Edwards  
    J. Duschang