



REPLY TO  
ATTENTION OF:

**DEPARTMENT OF THE ARMY**  
NEW YORK DISTRICT, CORPS OF ENGINEERS  
JACOB K. JAVITS FEDERAL BUILDING  
NEW YORK, N.Y. 10278-0090

JUL 16 2015

**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;**



## Regulatory Branch

**SUBJECT: Modification to Department of the Army Permit Number NAN-2012-00090 Issued to the New York State Thruway Authority (New NY Bridge Project)**

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



## **Regulatory Branch**

**SUBJECT: Modification to Department of the Army Permit Number NAN-2012-00090 Issued to the New York State Thruway Authority (New NY Bridge Project)**

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 1<sup>st</sup> through October 31<sup>st</sup> 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,



**Regulatory Branch**

**SUBJECT: Modification to Department of the Army Permit Number NAN-2012-00090 Issued to the New York State Thruway Authority (New NY Bridge Project)**

- 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](mailto: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.

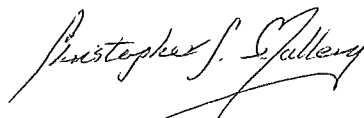
7. This modified permit shall be known as Permit Number NAN-2012-00090-M7.



**Regulatory Branch**

**SUBJECT: Modification to Department of the Army Permit Number NAN-2012-00090  
Issued to the New York State Thruway Authority (New NY Bridge Project)**

**8. This modified subject DA permit shall be available at project offices and regulated work sites.**

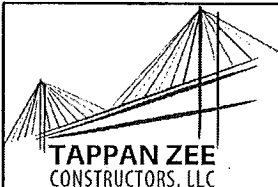
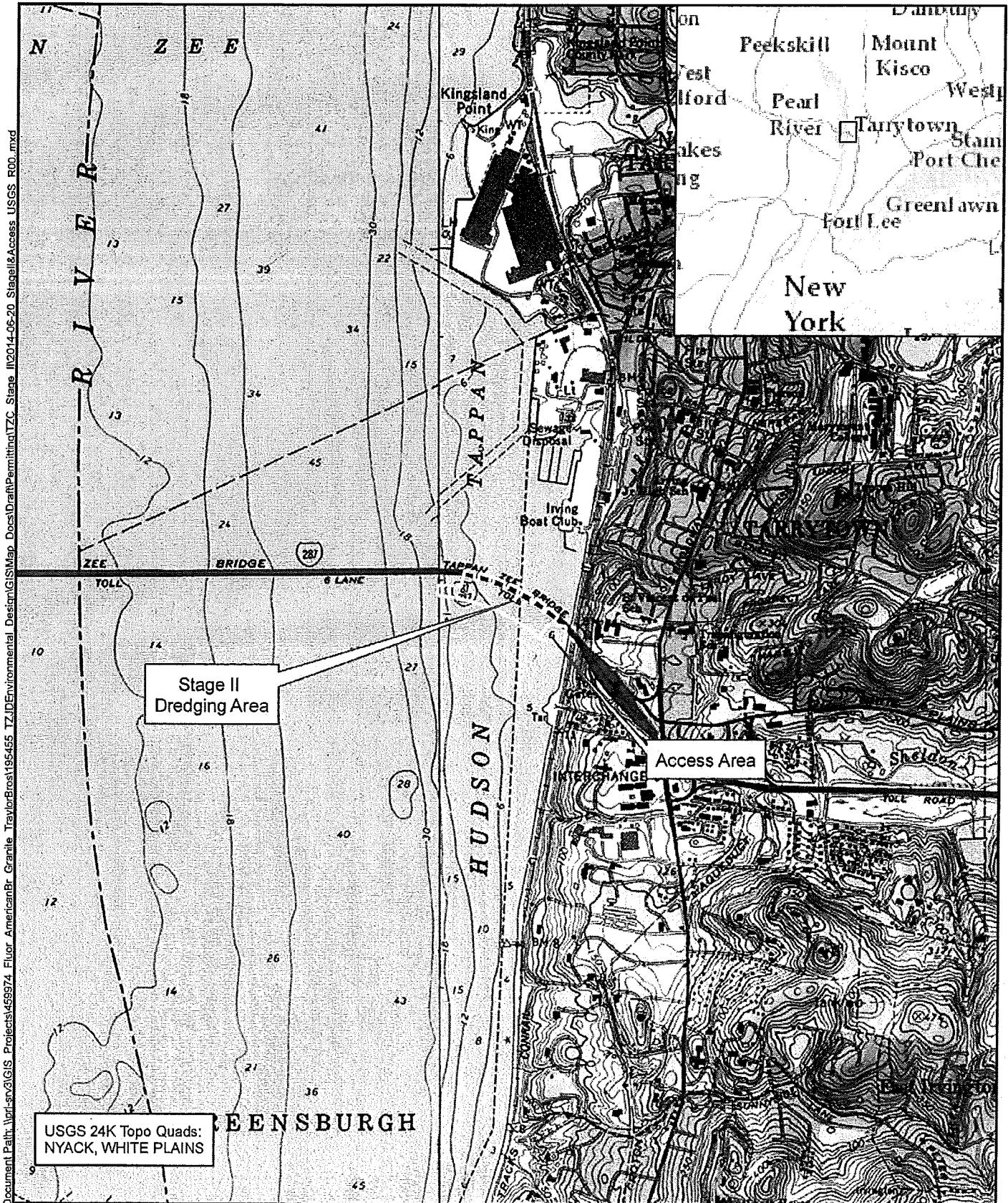


**For and in behalf of  
DAVID A. CALDWELL  
Colonel, U.S. Army  
Commander**

**Enclosures**

**CF: (w/encl)  
CENAN-OP-R  
NYSDEC Region 3 Permit Administrator  
Tappan Zee Constructors, LLC**





The New NY Bridge  
Stage II Dredging Area and Access Area  
Location Map



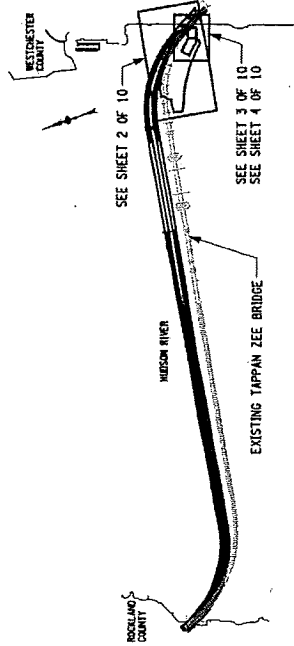


**NEW YORK STATE**  
**THRUWAY AUTHORITY**  
**STAGE II DREDGING PERMITTING PLAN**  
**FOR**  
**THE NEW NY BRIDGE**

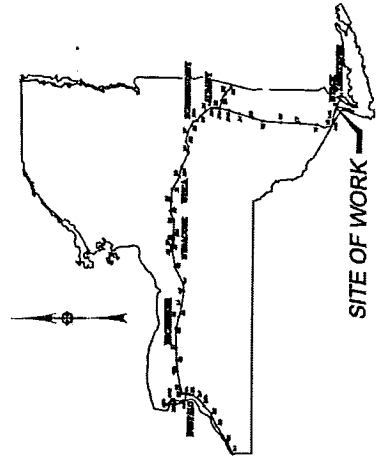
**LIST OF SHEETS**

SHEET NO.	SHEET TITLE
1 OF 10	COVER SHEET
2 OF 10	OVERALL DREDGE PLAN
3 OF 10	ACCESS EXTENSION DREDGING PLAN
4 OF 10	DREDGING PLAN
5 OF 10	DREDGE PROFILE 1 (SHEET 1 OF 2)
6 OF 10	DREDGE PROFILE 1 (SHEET 2 OF 2)
7 OF 10	DREDGE PROFILE 2
8 OF 10	DREDGE CROSS SECTIONS A & B
9 OF 10	DREDGE CROSS SECTIONS C & D
10 OF 10	DREDGE CROSS SECTIONS E & F

**DREDGING KEY PLAN**



**LOCATION MAP**



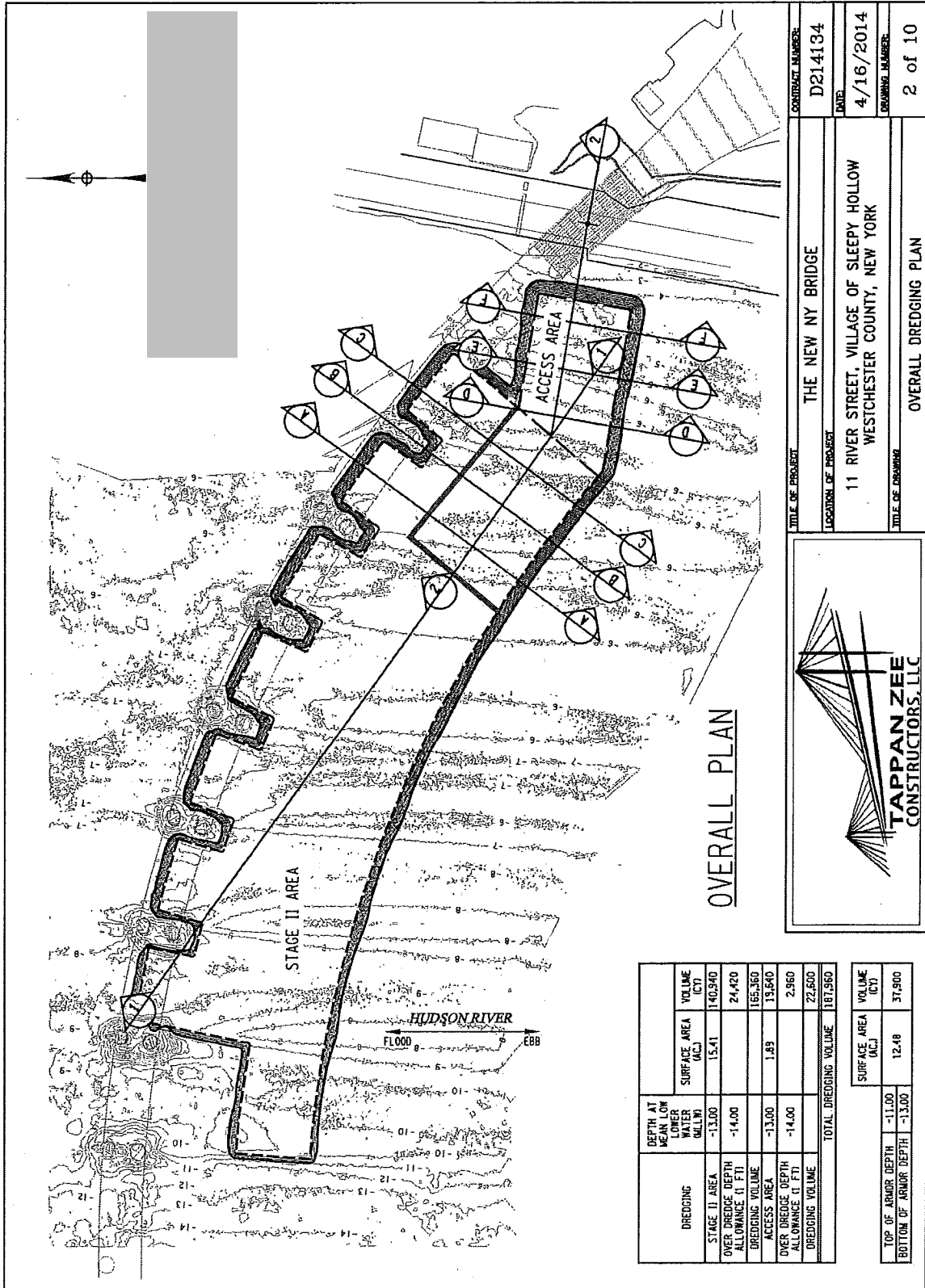
4/16/2014

**HYDROGRAPHIC NOTES**

- NOTES:**
1. SURVEY INFORMATION BASED UPON HYDROGRAPHIC SURVEY PERFORMED BY ROGERS SURVEYING INC. IN SEPTEMBER 2013.
  2. HORIZONTAL DATUM REFERS TO NEW YORK STATE PLANE EAST NAD83 FEET.
  3. VERTICAL DATUM REFERS TO NAVD88 FEET.  
 MLLW = 0.00  
 MHW = +0.19  
 MHHW = +1.50  
 MHHW = 3.67  
 MHW = +3.54
  4. EASTERN EDGE OF THE TARRYTOWN HARBOR CHANNEL DEPICTED HEREIN WAS OBTAINED FROM PLAN PROVIDED BY THE USACE TITLED "TARRYTOWN HARBOR, NEW YORK, CONDITION SURVEY" DATED JUNE 8, 2011.
  5. FLOATING DOCK AND GAUGWAY LOCATIONS DEPICTED HEREIN WERE OBTAINED FROM USACE PERMIT PLAN TITLED "T2C-HH01" AND DATED JUNE 24, 2013.

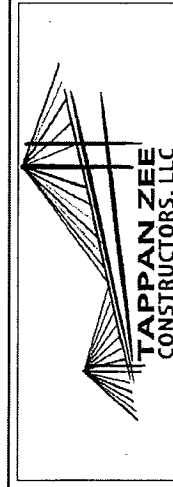
- LEGEND:**
- EXISTING BATHYMETRY MAJOR
  - EXISTING BATHYMETRY MINOR
  - EXISTING NAVIGATION CHANNEL
  - PROPOSED BATHYMETRY
  - MEAN HIGH WATER LINE
  - MEAN HIGH WATER LINE
  - MEAN LOW WATER LINE





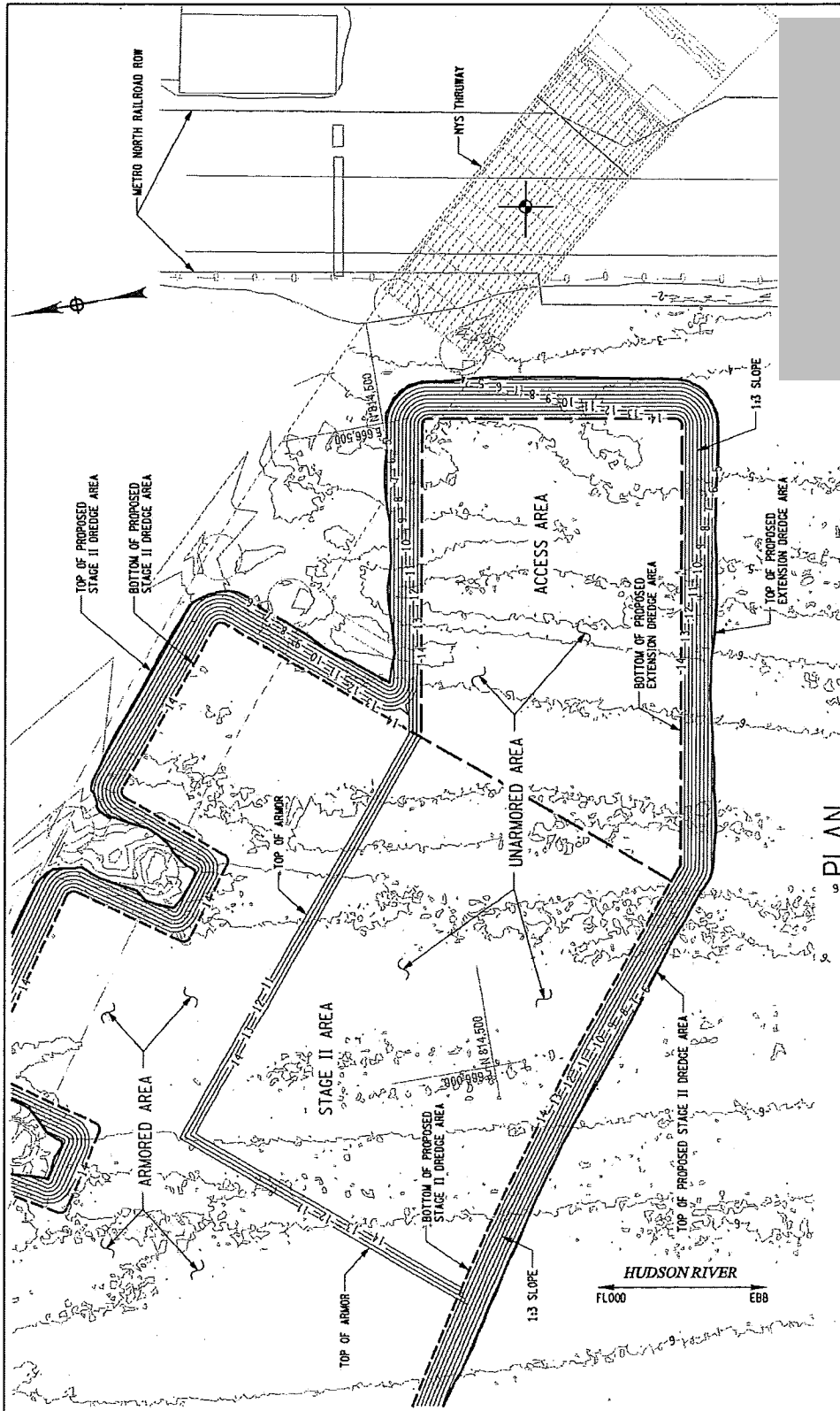
DEPTH AT MEAN LOW WATER (M.L.W.)	SURFACE AREA (AC)	VOLUME (CY)
STAGE II AREA	15.41	140,340
OVER DREDGE DEPTH ALLOWANCE (1 FT)	-14.00	24,420
DREDGING VOLUME		165,360
ACCESS AREA	1.89	13,640
OVER DREDGE DEPTH ALLOWANCE (1 FT)	-14.00	2,960
DREDGING VOLUME		22,600
TOTAL DREDGING VOLUME		187,960

DEPTH AT MEAN LOW WATER (M.L.W.)	SURFACE AREA (AC)	VOLUME (CY)
TOP OF ARMOR DEPTH	-11.00	12.48
BOTTOM OF ARMOR DEPTH	-13.00	37,900



CONTRACT NUMBER:	D214134
DATE:	4/16/2014
DRAWING NUMBER:	2 of 10
TITLE OF PROJECT:	THE NEW NY BRIDGE
LOCATION OF PROJECT:	11 RIVER STREET, VILLAGE OF SLEEPY HOLLOW WESTCHESTER COUNTY, NEW YORK
TITLE OF DRAWING:	OVERALL DREDGING PLAN

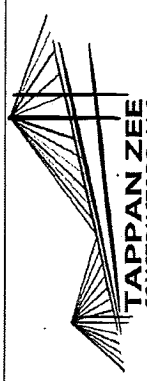




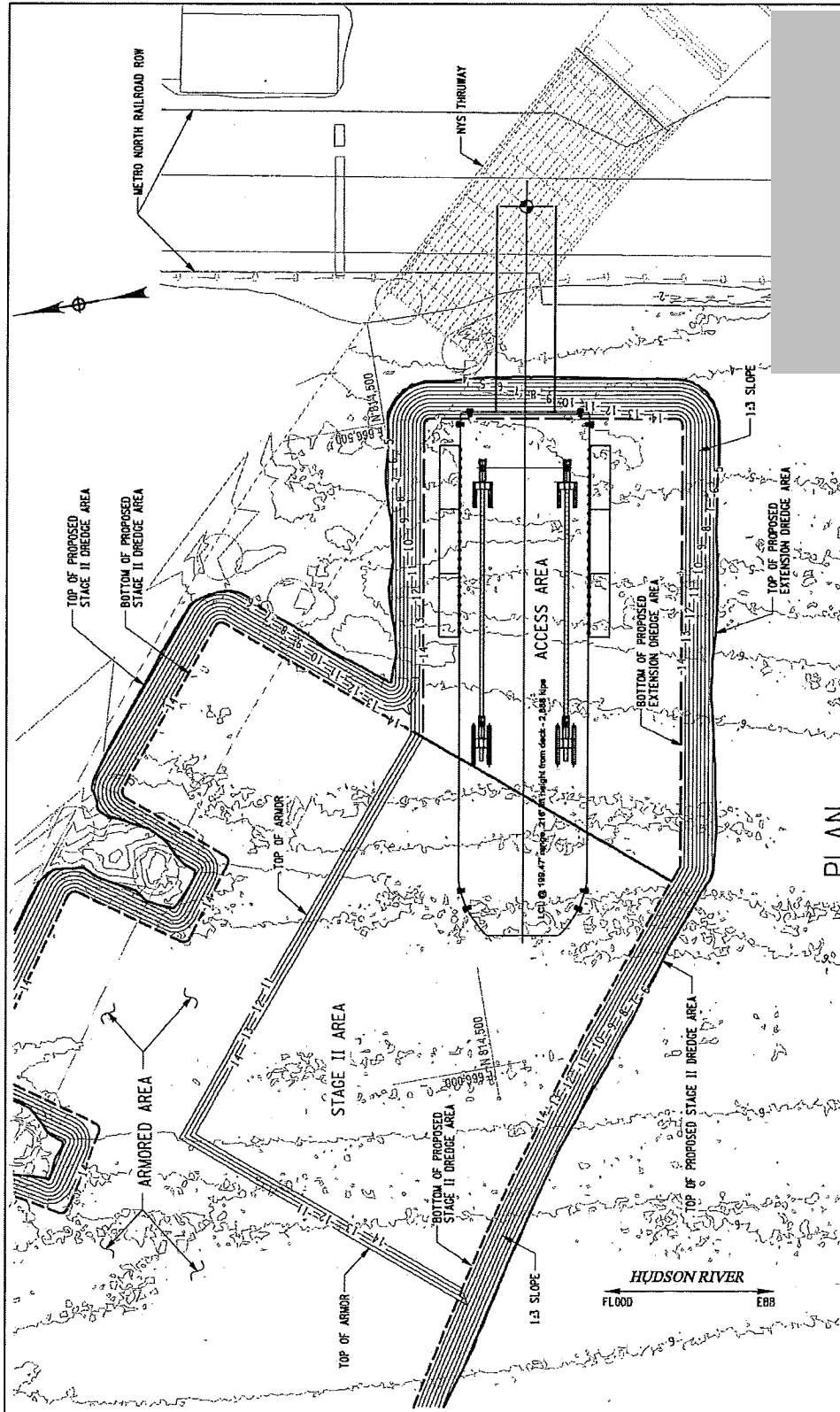
PLAN

CONTRACT NUMBER:		D214134	
TITLE OF PROJECT:		THE NEW NY BRIDGE	
LOCATION OF PROJECT:		11 RIVER STREET, VILLAGE OF SLEEPY HOLLOW WESTCHESTER COUNTY, NEW YORK	
DATE:		4/16/2014	
DRAWING NUMBER:		3 of 10	
TITLE OF DRAWING:		ACCESS EXTENSION DREDGING PLAN	

 <p><b>TAPPAN ZEE</b> CONSTRUCTORS, LLC</p>	DEPTH AT MEAN LOW WATER (MLW)	SURFACE AREA (AC)	VOLUME (CY)
	DREDGING ACCESS AREA	1.89	15,640
	OVER DREDGE DEPTH ALLOWANCE (1 FT)		2,960
	DREDGING VOLUME		22,600

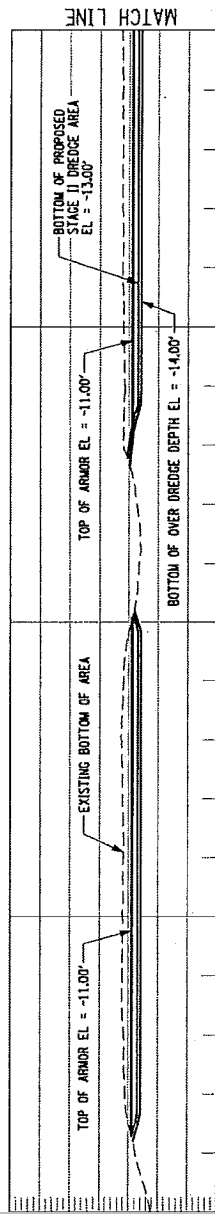




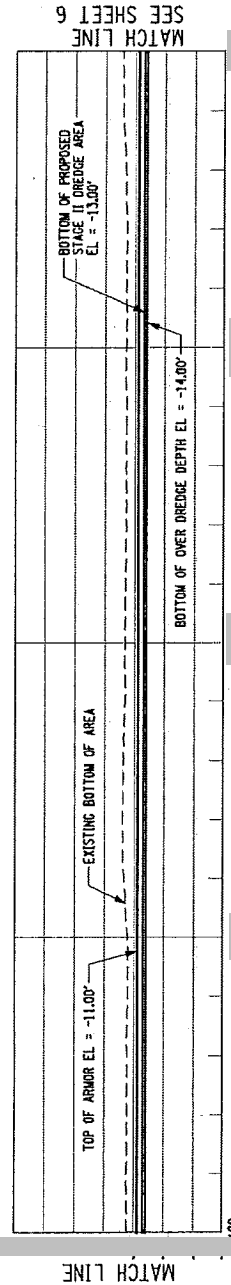
PLAN

THE NEW NY BRIDGE		CONTRACT NUMBER:	D214134
11 RIVER STREET, VILLAGE OF SLEEPY HOLLOW WESTCHESTER COUNTY, NEW YORK		DATE:	4/16/2014
DREDGING PLAN		DRAWING NUMBER:	4 of 10
TAPPAN ZEE CONSTRUCTORS, LLC			
DEPTH AT MEAN LOW WATER (ULLW)	SURFACE AREA (AC)	VOLUME (CY)	
DREDGING ACCESS AREA	1.89	15,640	
OVER DREDGE DEPTH ALLOWANCE (1 FT)		2,960	
DREDGING VOLUME		22,600	

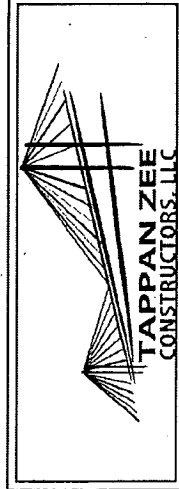




PROFILE 1

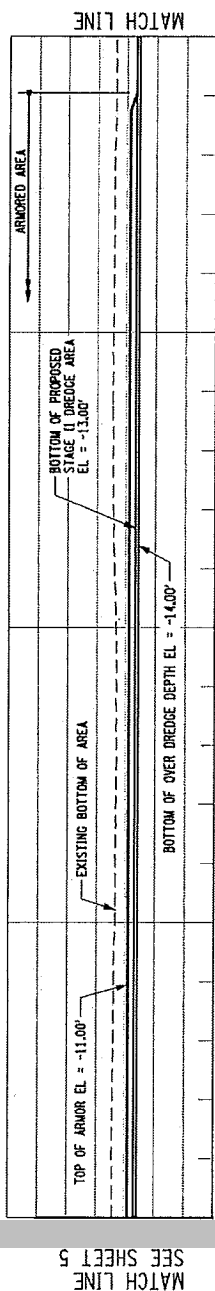


PROFILE 1

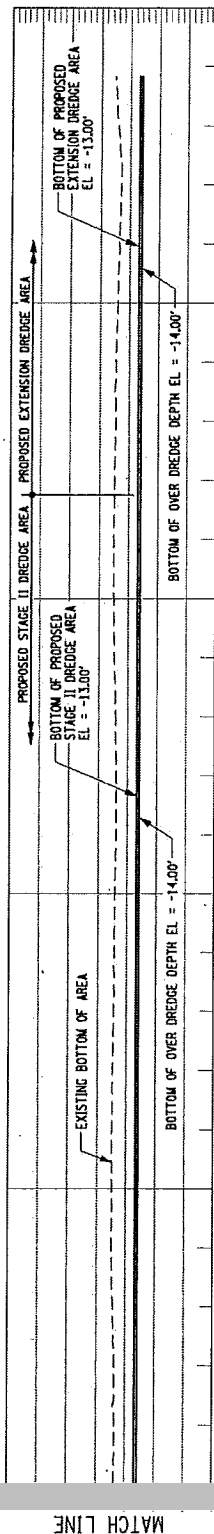


TITLE OF PROJECT	THE NEW NY BRIDGE	CONTRACT NUMBER	D214134
LOCATION OF PROJECT	11 RIVER STREET, VILLAGE OF SLEEPY HOLLOW WESTCHESTER COUNTY, NEW YORK	DATE	4/16/2014
TITLE OF DRAWING	DREDGE PROFILE 1 (1 OF 2)	DRAWING NUMBER	5 of 10

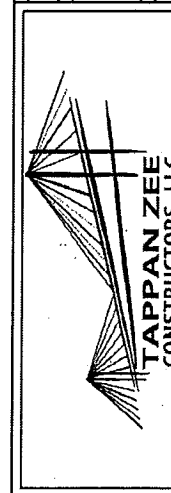




PROFILE 1

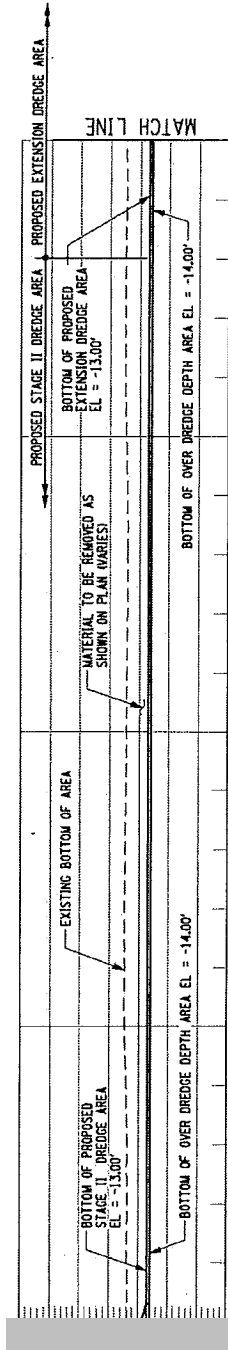


PROFILE 1

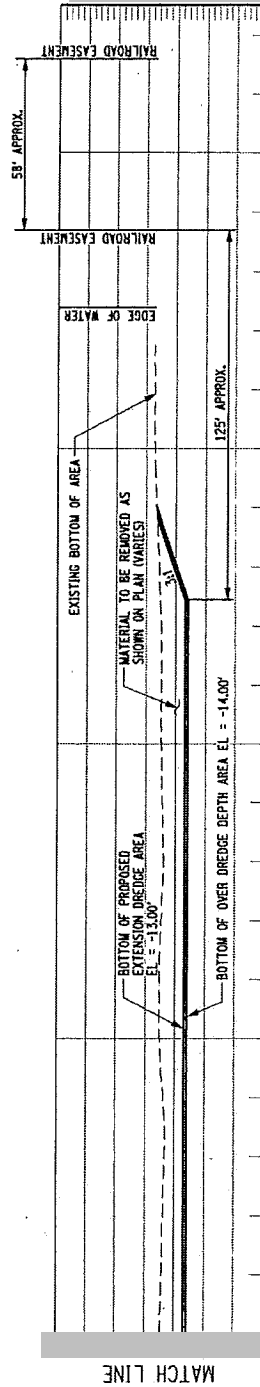


TITLE OF PROJECT	THE NEW NY BRIDGE	CONTRACT NUMBER	D214134
LOCATION OF PROJECT	11 RIVER STREET, VILLAGE OF SLEEPY HOLLOW WESTCHESTER COUNTY, NEW YORK	DATE	4/16/2014
TITLE OF DRAWING	DREDGE PROFILE 1 (2 OF 2)	DRAWING NUMBER	6 of 10

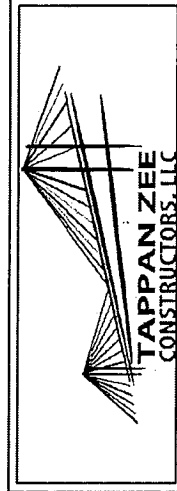




PROFILE 2

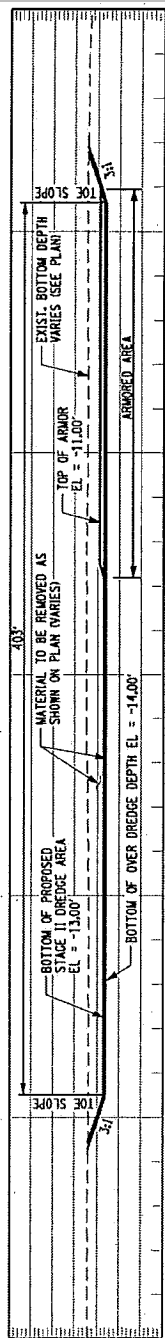


PROFILE 2

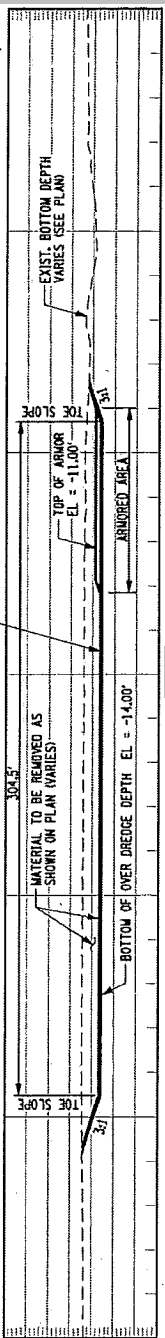


TITLE OF PROJECT	THE NEW NY BRIDGE	CONTRACT NUMBER	D214134
LOCATION OF PROJECT	11 RIVER STREET, VILLAGE OF SLEEPY HOLLOW WESTCHESTER COUNTY, NEW YORK	DATE	4/16/2014
TITLE OF DRAWING	DREDGE PROFILE 2	DRAWING NUMBER	7 of 10

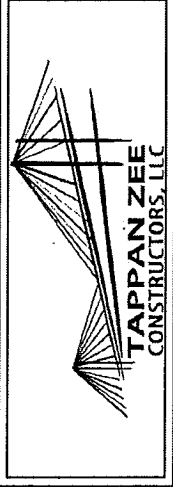




CROSS SECTION A

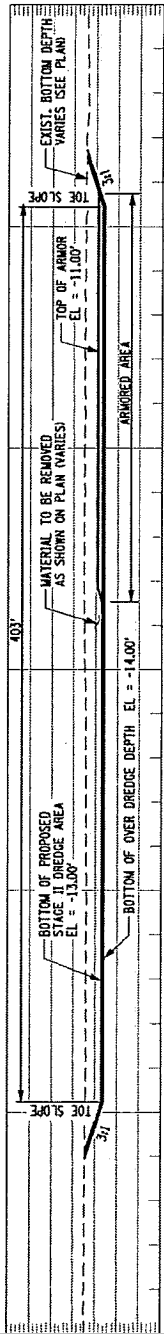


CROSS SECTION B

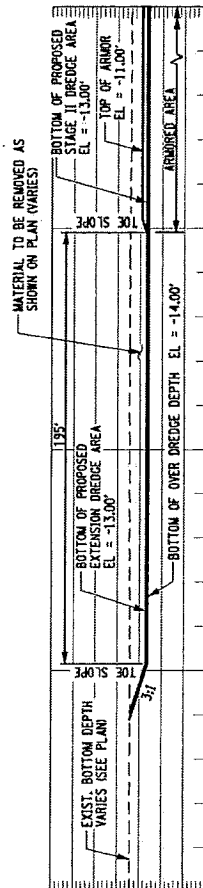


TITLE OF PROJECT		THE NEW NY BRIDGE	CONTRACT NUMBER	D214134
LOCATION OF PROJECT		11 RIVER STREET, VILLAGE OF SLEEPY HOLLOW WESTCHESTER COUNTY, NEW YORK	DATE	4/16/2014
TITLE OF DRAWING		DREDGE SECTIONS A & B	DRAWING NUMBER	8 of 10

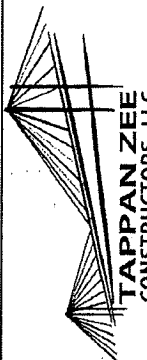




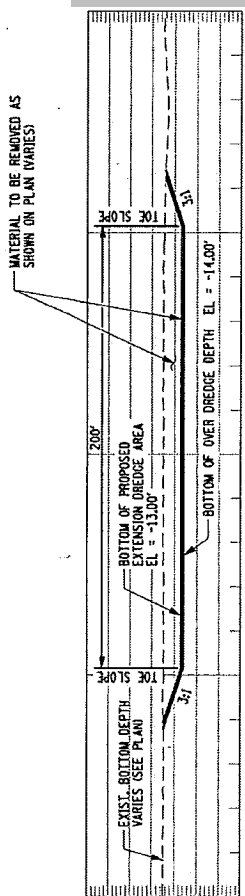
CROSS SECTION C



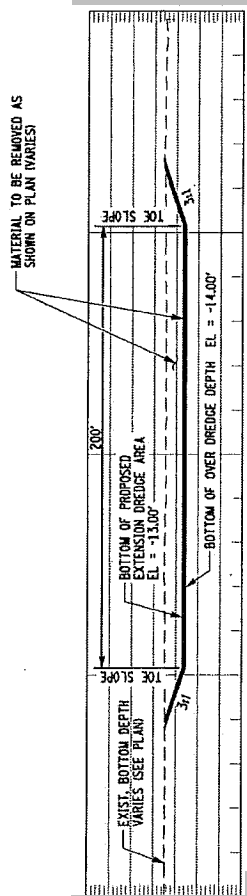
CROSS SECTION D

 <p>TAPPAN ZEE CONSTRUCTORS, LLC</p>	TITLE OF PROJECT	THE NEW NY BRIDGE	CONTRACT NUMBER	D214134
	LOCATION OF PROJECT	11 RIVER STREET, VILLAGE OF SLEEPY HOLLOW WESTCHESTER COUNTY, NEW YORK	DATE	4/16/2014
	TITLE OF DRAWING	DREDGE SECTIONS C & D	DRAWING NUMBER	9 of 10

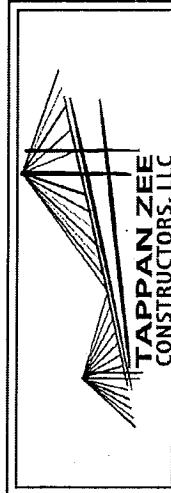




CROSS SECTION E

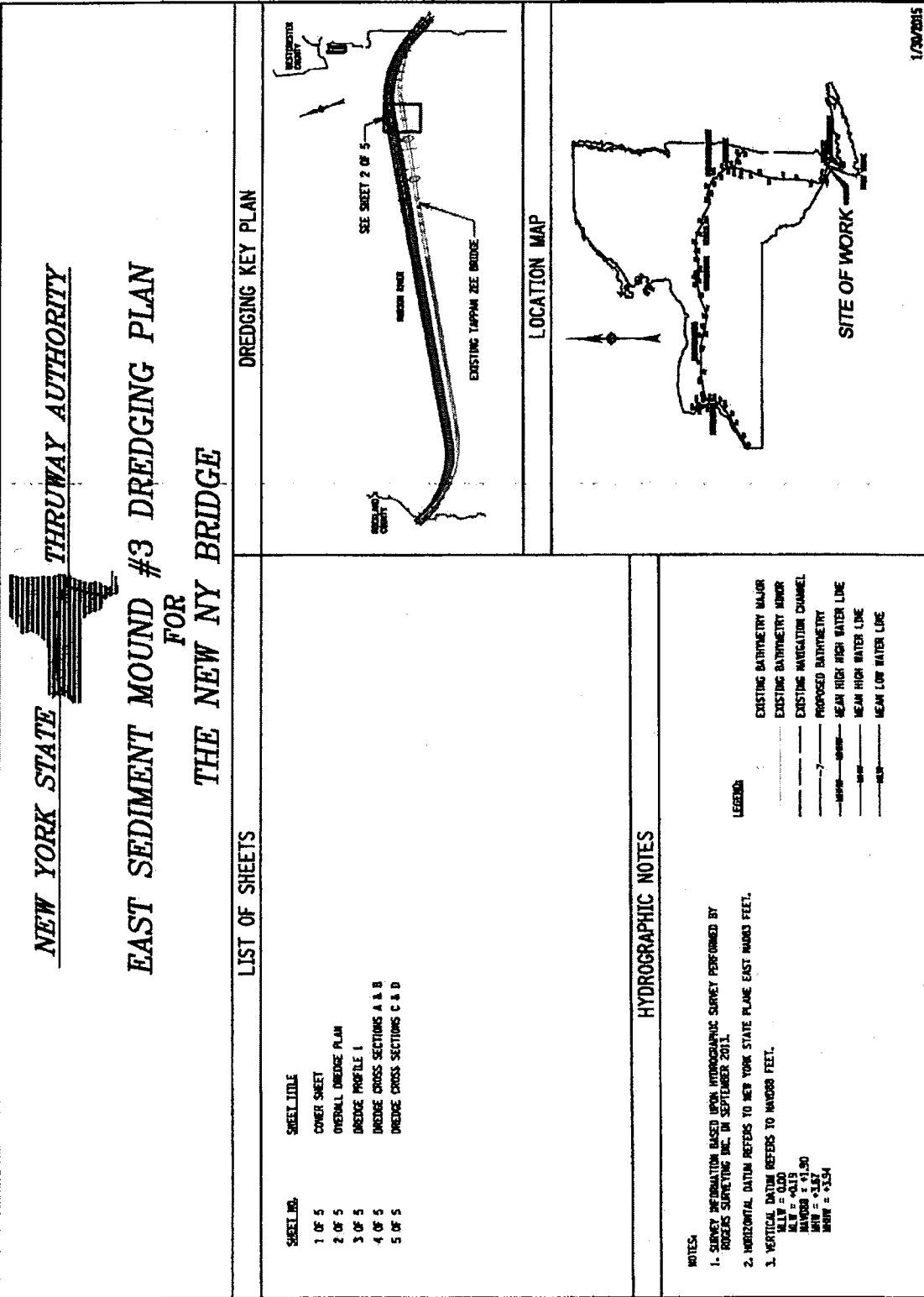


CROSS SECTION F



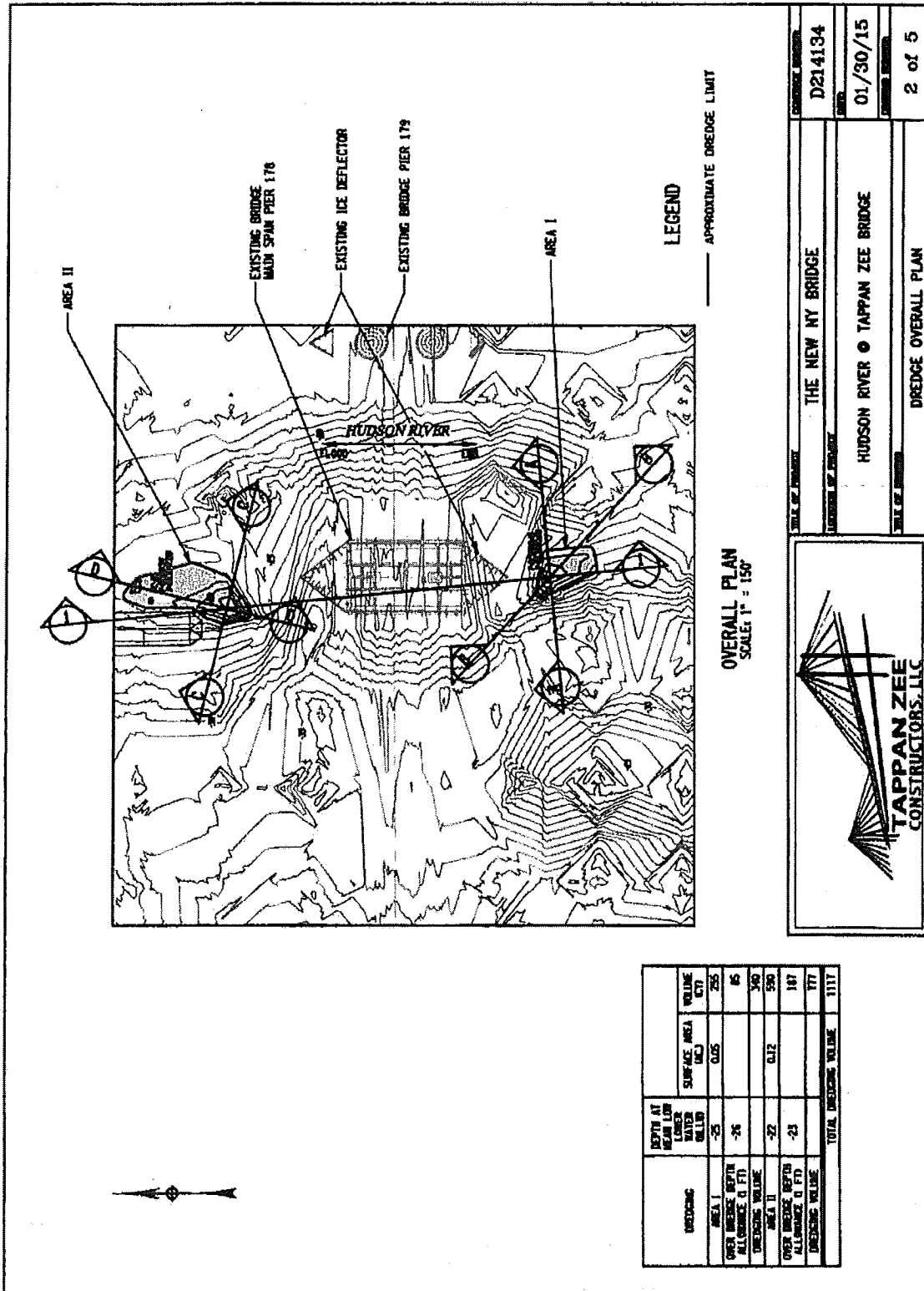
TITLE OF PROJECT	THE NEW NY BRIDGE	CONTRACT NUMBER	D214134
LOCATION OF PROJECT	11 RIVER STREET, VILLAGE OF SLEEPY HOLLOW WESTCHESTER COUNTY, NEW YORK	DATE	4/16/2014
TITLE OF DRAWING	DREDGE SECTIONS E & F	DRAWING NUMBER	10 of 10





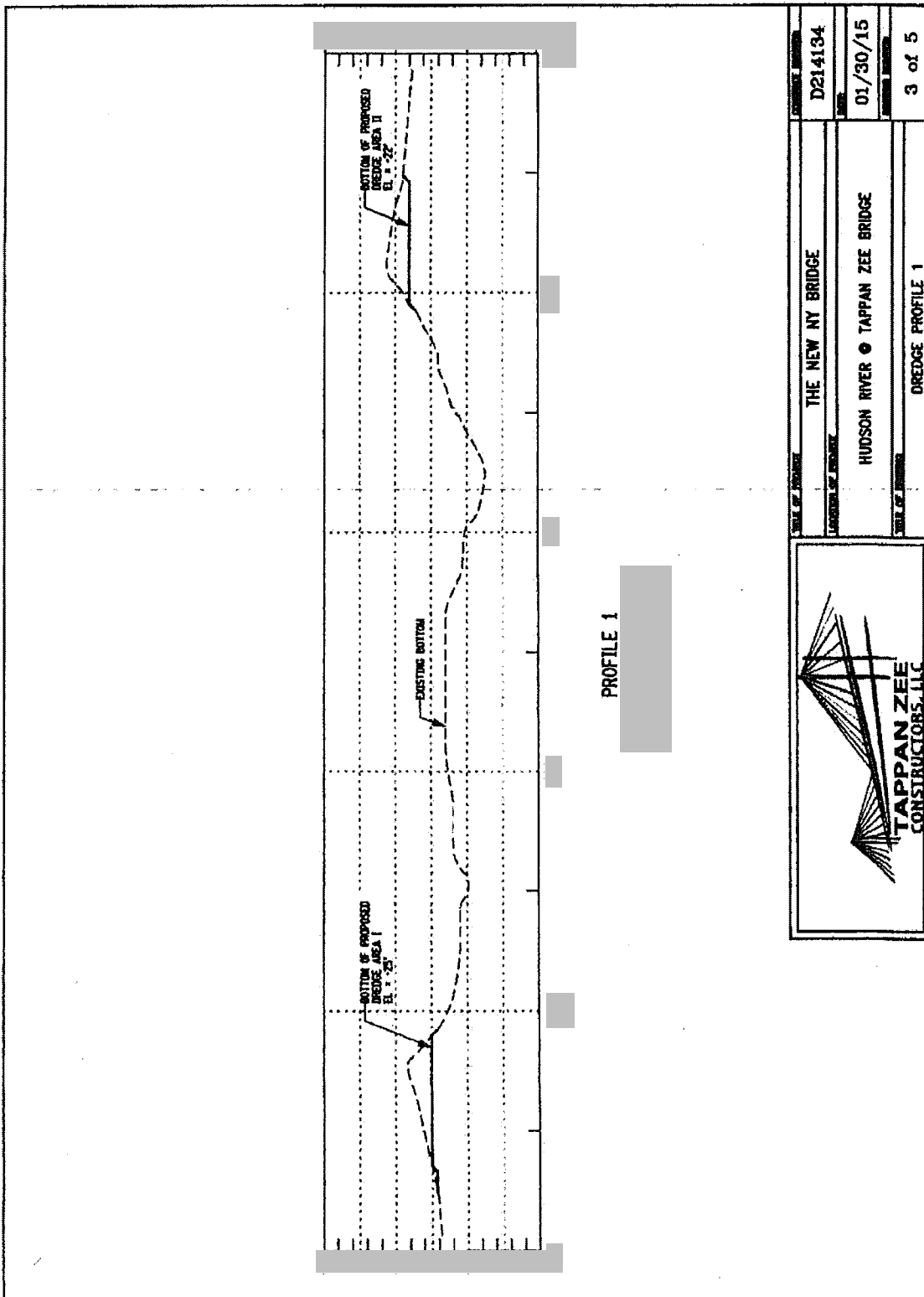
1/30/2015



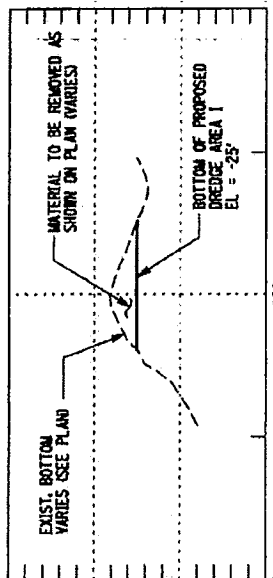




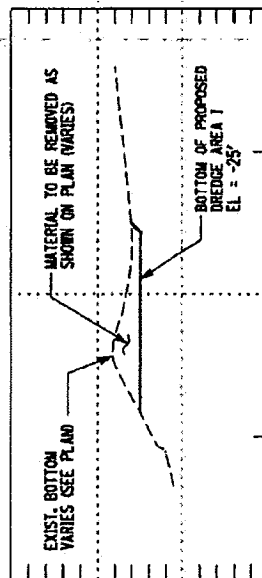
NAN-2012-00090-M7



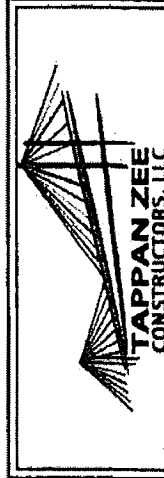




SECTION A

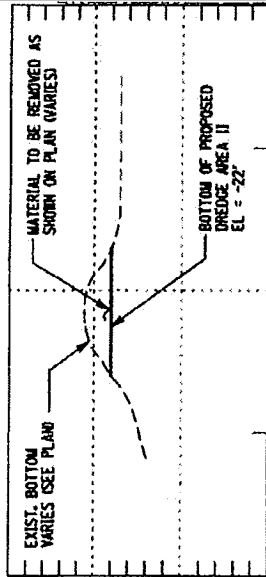


SECTION B

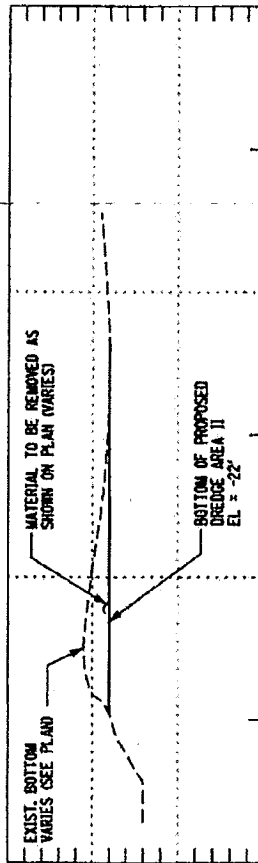


PROJECT NUMBER	D214134
DATE	01/30/15
LOCATION OF PROJECT	HUDSON RIVER @ TAPPAN ZEE BRIDGE
SHEET NUMBER	4 of 5
SHEET DESCRIPTION	DREDGE SECTIONS A & B






SECTION C



SECTION D

 <b>TAPPAN ZEE</b> CONSTRUCTORS, LLC	THE NEW NY BRIDGE	CONTRACT NUMBER D214134
	HUDSON RIVER • TAPPAN ZEE BRIDGE	DATE 01/30/15
DREDGE SECTIONS C & D		PAGE 5 of 5



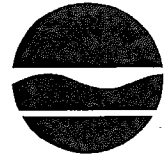
**New York State Department of Environmental Conservation**

**Division of Environmental Permits, 4<sup>th</sup> Floor**

625 Broadway, Albany, NY 12233-1750

Phone: (518) 402-9167 • Fax: (518) 402-9168

Website: [www.dec.ny.gov](http://www.dec.ny.gov)



Joe Martens  
Commissioner

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.

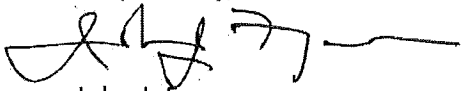
The approved work must comply with the Department's permit and its conditions. Of particular relevance are conditions associated with Dredging (conditions 19-35); Armoring (36-39); and Water Quality Monitoring (59-64), and the plans approved thereunder by the Department, including all revisions. Further, 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,

A handwritten signature in black ink, appearing to read 'John J. Ferguson', followed by a horizontal line.

John J. Ferguson  
Chief Permit Administrator

ecc: K. Edwards  
J. Duschang