



**BERTH COORDINATE LIST**

Point	Northing	Easting	Depth (MLW)
9001	666490.313	590152.967	50.00
9002	666444.368	590240.723	50.00
9003	665874.147	589942.561	50.00
9004	665920.108	589854.701	50.00

**ESTIMATED WATER DEPTH AT MEAN LOW TIDE  
THE PORT AUTHORITY MAKES NO REPRESENTATION  
AS TO ACCURACY.**

**CALL (973) 578-2192 FOR SPECIFIC VESSEL  
ARRANGEMENTS.**

PREPARED FOR  
**THE PORT AUTHORITY  
OF NY & NJ**

**ROGERS SURVEYING, LLC**  
1802 Michael Terrace  
Rahway, N.J. 07065  
(708) 947-7071  
www.rogerssurveying.net

**Volume Report**

THE DATA USED FOR VOLUME CALCULATIONS IS REPRESENTATIVE OF A LARGER DATA SET. SOUNDINGS USED FOR VOLUME CALCULATIONS ARE ON A 3'X3' GRID WITH THE DEPTH NEAREST TO THE CENTER USED.

Design Depth	Volume to Dredge Template	Volume of 2' Over dredge	Total Volume
50'	1,901 yd <sup>3</sup>	4,198 yd <sup>3</sup>	6,099 yd <sup>3</sup>
<b>TOTAL</b>	<b>1,901 yd<sup>3</sup></b>	<b>4,198 yd<sup>3</sup></b>	<b>6,099 yd<sup>3</sup></b>

**NOTE: BERTH LENGTHS, WIDTHS AND DEEP WATER BERTH DIMENSIONS FROM P.A. PORT DEPARTMENT.**

Coordinates are expressed in feet and refer to the NEW JERSEY STATE PLANE (NAD 83) System.

Soundings refer to Mean Low Water as determined by U.S.A.C.E.

The Plane of Mean Low Water is 2.3 feet below Mean Sea Level (NGVD 29).

Note:  
This survey does not guarantee the absence or presence of any underwater obstructions. Diver verification may be required.

NAVD88 3.42  
NGVD29 2.30  
MLW (N.O.A.A.) 0.67  
MLW (COE) & SURVEY 0.00

I hereby certify to The Port Authority of New York and New Jersey that this map indicates the conditions existing as of the date indicated hereon to the best of my professional knowledge.

*William A. Rogers, Jr., P.E., L.S.*  
New Jersey State # 22254  
A.C.S.M. Certified Hydrographer # 151

Title

**NEW JERSEY  
MARINE  
TERMINAL**

**HYDROGRAPHIC  
SURVEY**

No.	Date	Revision	Approved

**VERTICAL CONTROL**  
Mean Low Water = 2.3' Below 0.00 NGVD '29

**HORIZONTAL CONTROL**

ALL COORDINATES, BEARING AND DISTANCES ARE REFERENCED TO THE NEW JERSEY PLANE COORDINATE SYSTEM (N.A.D. 83) AS SET FORTH IN N.J.S.A. 51:3-7

This drawing subject to conditions in contract. All inventions, ideas, designs and methods herein are reserved to Port Authority and may not be used without it's written consent.

Rogers Surveying BW DWR  
Surveyed by   Drawn by   Checked by  

Date 12/10/12-01/17/13 Scale 1" = 80'  
Contract Number 410-12-037 Drawing Number 56 of 60

**BERTH 90**

**NOTE:**  
THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME. THE DATA IS REPRESENTATIVE OF A LARGER DATA SET. SOUNDINGS AND CONTOURS SHOWN ARE FROM 8'X16' GRID NEAREST TO CENTER. COORDINATES REFER TO THE NEW JERSEY MERCATOR SYSTEM (NAD 1983) SOUNDINGS REFER TO THE PLANE OF MEAN LOW WATER THE PLANE OF MEAN LOW WATER IS 2.3 FEET BELOW NGVD (1929) THE SOUNDING DATA DEPICTED ON THIS MAP WAS COLLECTED USING CLASS 2 SURVEY STANDARDS IN ACCORDANCE WITH EM 1110 2 1003.  
THIS SURVEY WAS COMPLETED USING THE FOLLOWING EQUIPMENT:  
• Survey Vessel "Red Rogers"  
• Reson 7101 Multibeam  
• TSS 320 POS/MV  
• Coastal Oceanographics "HYPACK" software