

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



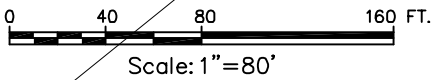
ROGERS SURVEYING, LLC
1902 Michael Thomas
Rahon Island, N.Y. 10919
(716) 442-5911
www.rogerssurveying.net

Title

**NEW JERSEY
MARINE
TERMINAL**

**HYDROGRAPHIC
SURVEY**

BERTH COORDINATE LIST			
Point	Northing	Easting	Depth (MLW)
5201	675438.786	586316.433	37.00
5202	675444.029	586341.813	37.00
5203	675070.561	586805.641	37.00
5204	675054.991	586793.089	37.00
5205	675444.029	586341.813	38.00
5206	675447.961	586360.847	38.00
5207	675082.240	586815.055	38.00
5208	675070.561	586805.641	38.00
5209	675447.961	586360.847	40.00
5210	675474.507	586489.362	40.00
5211	675160.655	586878.188	40.00
5212	675082.240	586815.055	40.00



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

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
37'	996 yd3	894 yd3	1,890 yd3
38'	480 yd3	642 yd3	1,122 yd3
40'	2,932 yd3	3,201 yd3	6,133 yd3
TOTAL	4,408 yd3	4,737 yd3	9,145 yd3

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.

NAVDB 3.42
NGVD29 2.30
MLW (N.O.A.A.) 0.87
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.
William A. Rogers, Jr., P.E., L.S.
New Jersey State # 22254
A.C.S.M. Certified Hydrographer # 151

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 34 of 60
BERTH 52