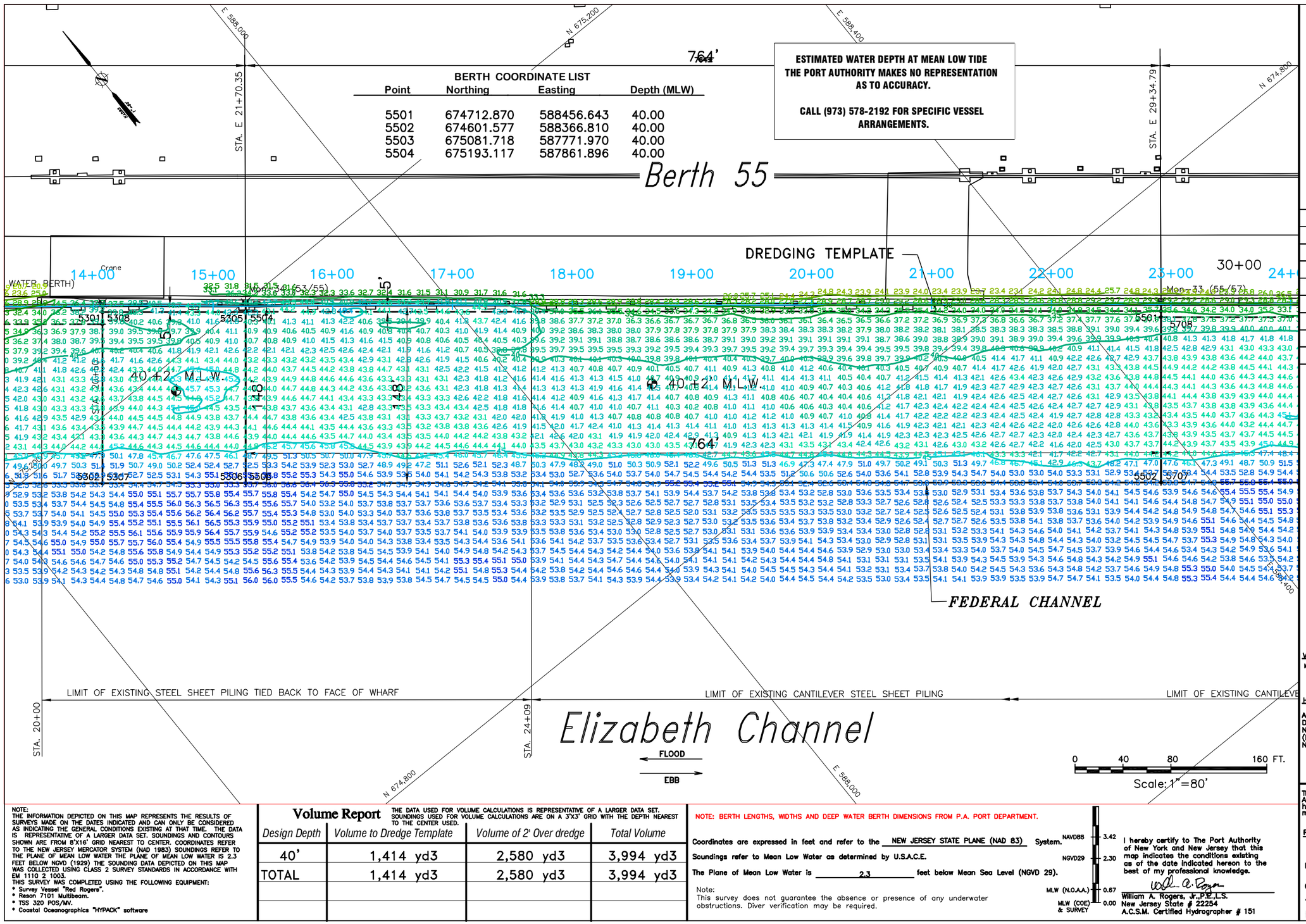


**ESTIMATED WATER DEPTH AT MEAN LOW TIDE**
**THE PORT AUTHORITY MAKES NO REPRESENTATION AS TO ACCURACY.**

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

## BERTH COORDINATE LIST

| Point | Northing | Easting | Depth (MLW) |
|---|---|---|---|
| 5501 | 674712.870 | 588456.643 | 40.00 |
| 5502 | 674601.577 | 588366.810 | 40.00 |
| 5503 | 675081.718 | 587771.970 | 40.00 |
| 5504 | 675193.117 | 587861.896 | 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 |
|---|---|---|---|
| 40' | 1,414 yd3 | 2,580 yd3 | 3,994 yd3 |
| TOTAL | 1,414 yd3 | 2,580 yd3 | 3,994 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.

| | |
|---|---|
| NAVD88 | 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.
New Jersey State # 22254
A.C.S.M. Certified Hydrographer # 151

PREPARED FOR
THE PORT AUTHORITY OF NY & NJ

ROGERS SURVEYING, PLLC
1302 Richmond Terrace
Staten Island, N.Y. 10310
(718) 447-7311
www.rogerssurveying.net

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 37 of 60
BERTH 55