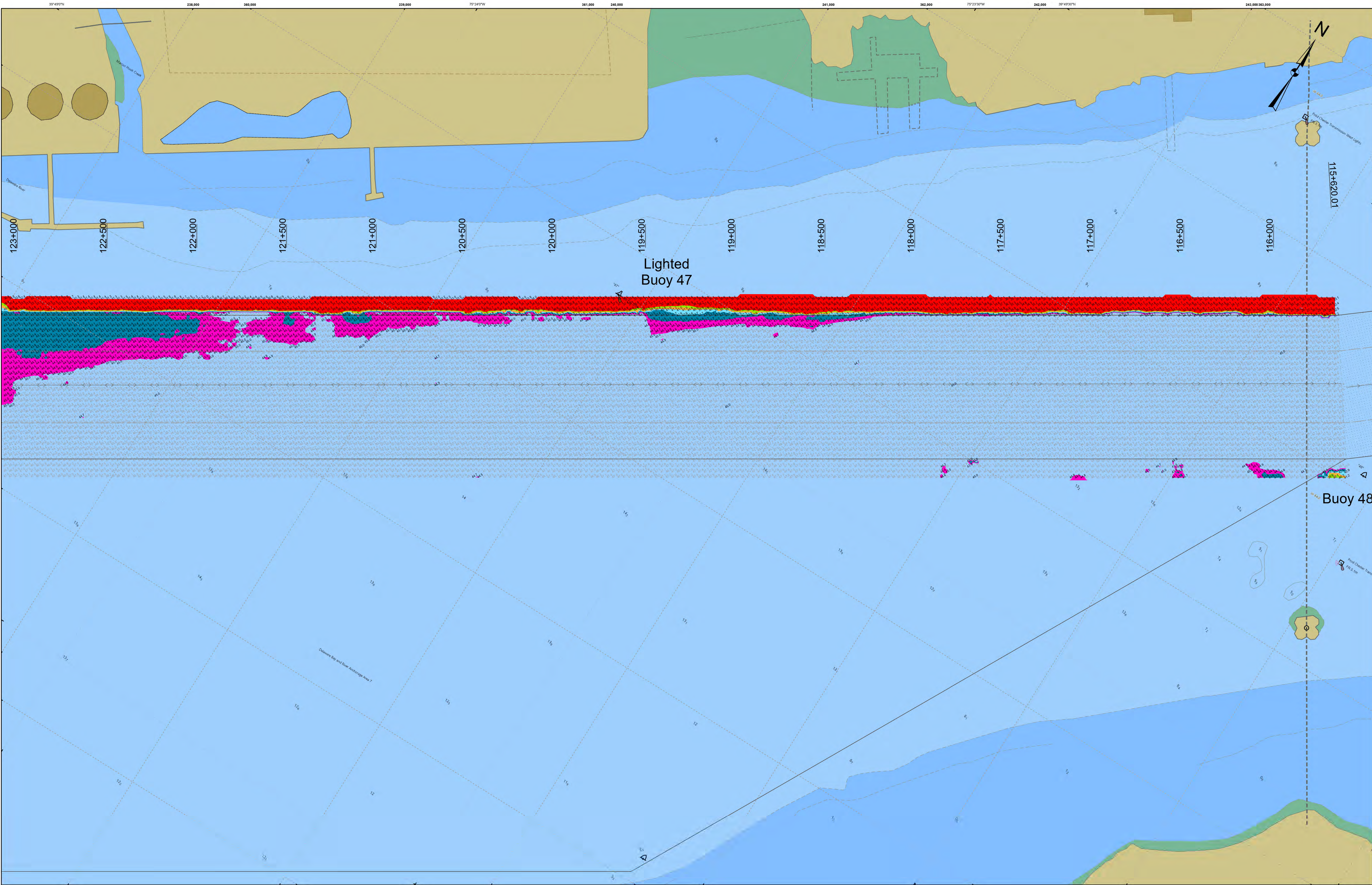




1. THIS SURVEY MEETS STANDARDS AS OUTLINED IN CORPS OF ENGINEERS' HYDROGRAPHIC SURVEY MANUAL EM1110-2-1003, DATED NOVEMBER 30, 2013 FOR NAVIGATION AND DREDGING SUPPORT SURVEYS.
2. HORIZONTAL REFERENCE - NAD 83, NEW JERSEY STATE PLANE, ZONE 2900, U.S. FOOT.
3. VERTICAL REFERENCE - MEAN LOWER LOW WATER, WHICH IS 3.00' BELOW N.A.V.D. 88.
4. GEOID 12B AND NOAA TIDAL EPOCH: 1983 - 2001 WERE USED. SOUNDINGS ARE EXPRESSED IN FEET AND TENTHS AND REFER TO MEAN LOWER LOW WATER.
5. SOUNDINGS WERE SELECTED FOR PLOTTING PURPOSES ONLY, USING THE MINIMUM DEPTH WITHIN A 30'X30' CELL SHIFTED TO THE CELL CENTER.

6. CONTOURS DEPICT ACTUAL LOCATION OF BATHYMETRY AND DO NOT NECESSARILY REFLECT PLOTTED SOUNDING LOCATIONS.

7. CONTOURS WERE GENERATED USING THE MINIMUM DEPTH WITHIN A 15'X15' CELL.
8. HYPACK, INC. SOFTWARE WAS USED TO PERFORM THE SOUNDING SELECTION AND CONTOUR GENERATION.

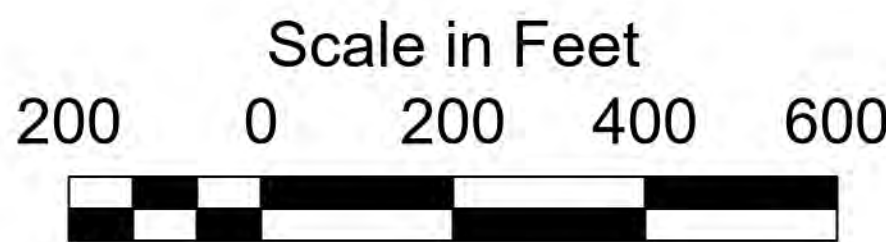
9. THE INFORMATION DEPICTED ON THIS MAP REPRESENT THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.

10. THE POSITIONS OF THE AIDS TO NAVIGATION ARE PROVIDED FOR INFORMATION ONLY, AND SHOULD NOT BE USED FOR NAVIGATION.

11. THE LIMITS OF THE FEDERAL CHANNEL DEPICT THE MOST CURRENT CHANNEL FRAMEWORK AVAILABLE WHICH CAN ALSO BE DOWNLOADED HERE:

<http://navigation.usace.army.mil/Survey/FrameWork>

12. BASE MAPPING LINEWORK OR ORTHOPHOTOGRAPHY HAS BEEN COMPILED FROM A VARIETY OF SOURCES AND DATES AND IS INTENDED TO PORTRAY GENERAL CHARACTERISTICS OF THE SHORELINE AND OTHER FEATURES. TEMPORAL CHANGES MAY HAVE OCCURRED SINCE THIS DATA SET WAS COLLECTED AND SOME PARTS OF THE DATA MAY NO LONGER BE AN ACCURATE REPRESENTATION OF THE SURFACE CONDITIONS.



- Shoalest Sounding per Quarter
- CenterLine
- ToeLine
- Station Lines
- QuarterLine
- 45 - 53.953
- 44 - 45
- 43 - 44
- 42 - 43
- 41 - 42
- 40 - 41
- 26.9 - 40



STA. 115+620 to STA. 122+000 - 08 APR 25  
STA. 122+000 to STA. 130+000 - 09 APR 25  
STA. 130+000 to STA. 136+000 - 05 SEP 24  
STA. 136+000 to STA. 141+460 - 06 SEP 24

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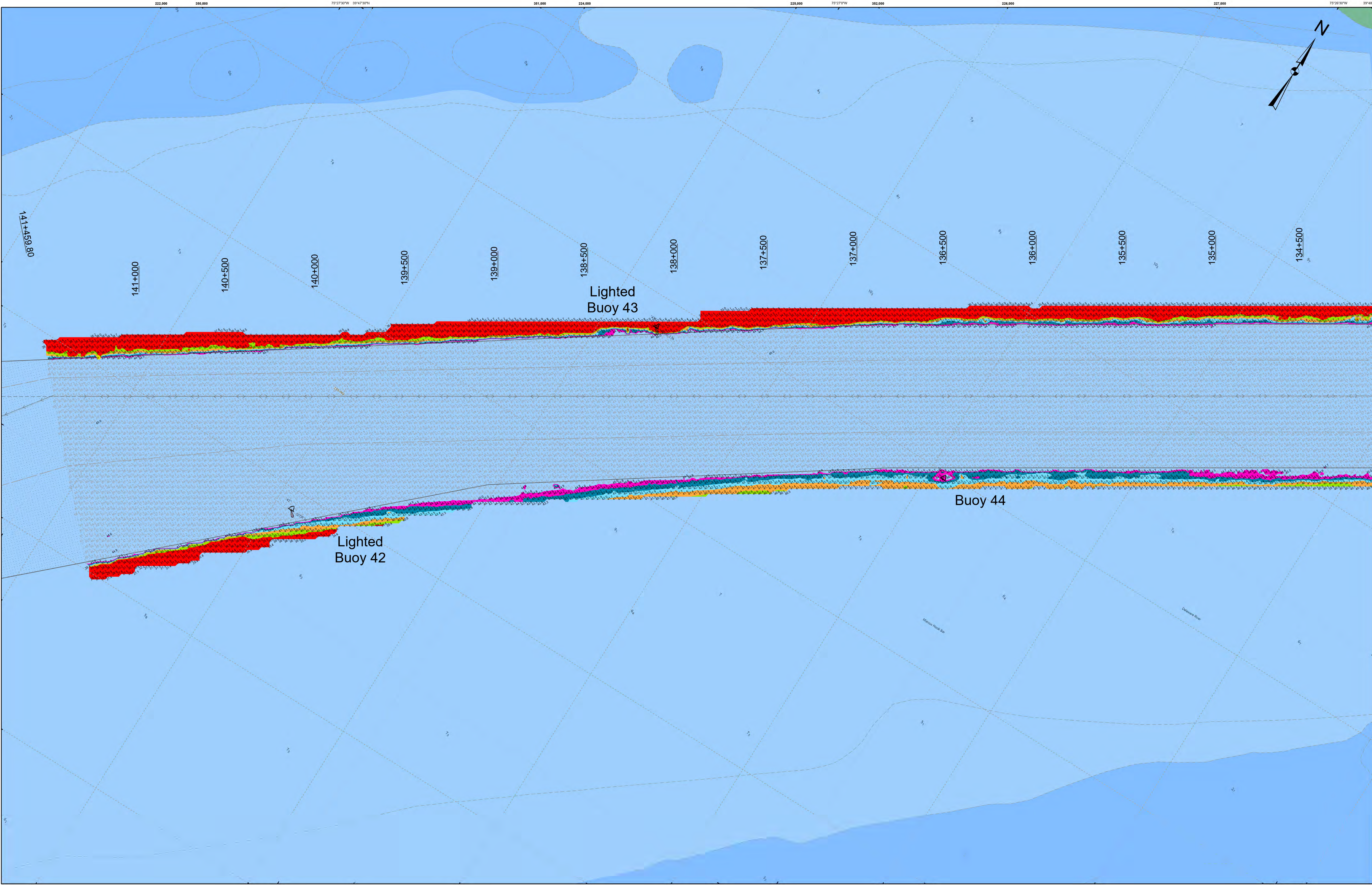
|                       |                                                       |
|-----------------------|-------------------------------------------------------|
| Surveyed By           | U.S. ARMY CORPS OF ENGINEERS<br>PHILADELPHIA DISTRICT |
| Drawn By              |                                                       |
| Print Scale           |                                                       |
| Printed By            | E. Anthony                                            |
| Checked By            |                                                       |
| Approved              |                                                       |
| Chief, Survey Section |                                                       |

DELAWARE RIVER, PHILADELPHIA TO THE SEA  
MARCUS HOOK RANGE  
EXAMINATION  
STA. 115+620.01 to STA. 141+469.80

E-PS-352







1. THIS SURVEY MEETS STANDARDS AS OUTLINED IN CORPS OF ENGINEERS' HYDROGRAPHIC SURVEY MANUAL EM1110-2-1003, DATED NOVEMBER 30, 2013 FOR NAVIGATION AND DREDGING SUPPORT SURVEYS.
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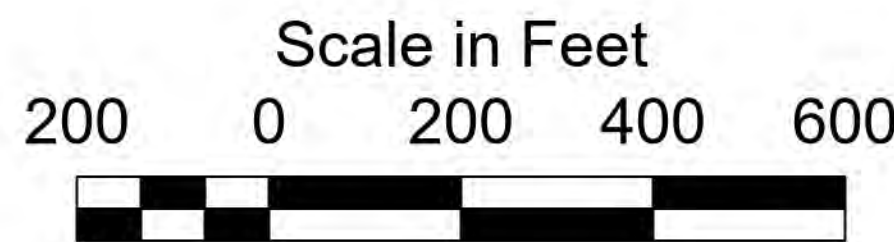
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|             |                       |
|-------------|-----------------------|
| Surveyed By | PHILADELPHIA DISTRICT |
| Drawing No. |                       |
| Print Scale | E. Anthony            |
| Checked By  |                       |
| Approved    | Chief, Survey Section |

DELAWARE RIVER, PHILADELPHIA TO THE SEA  
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E-PS-352