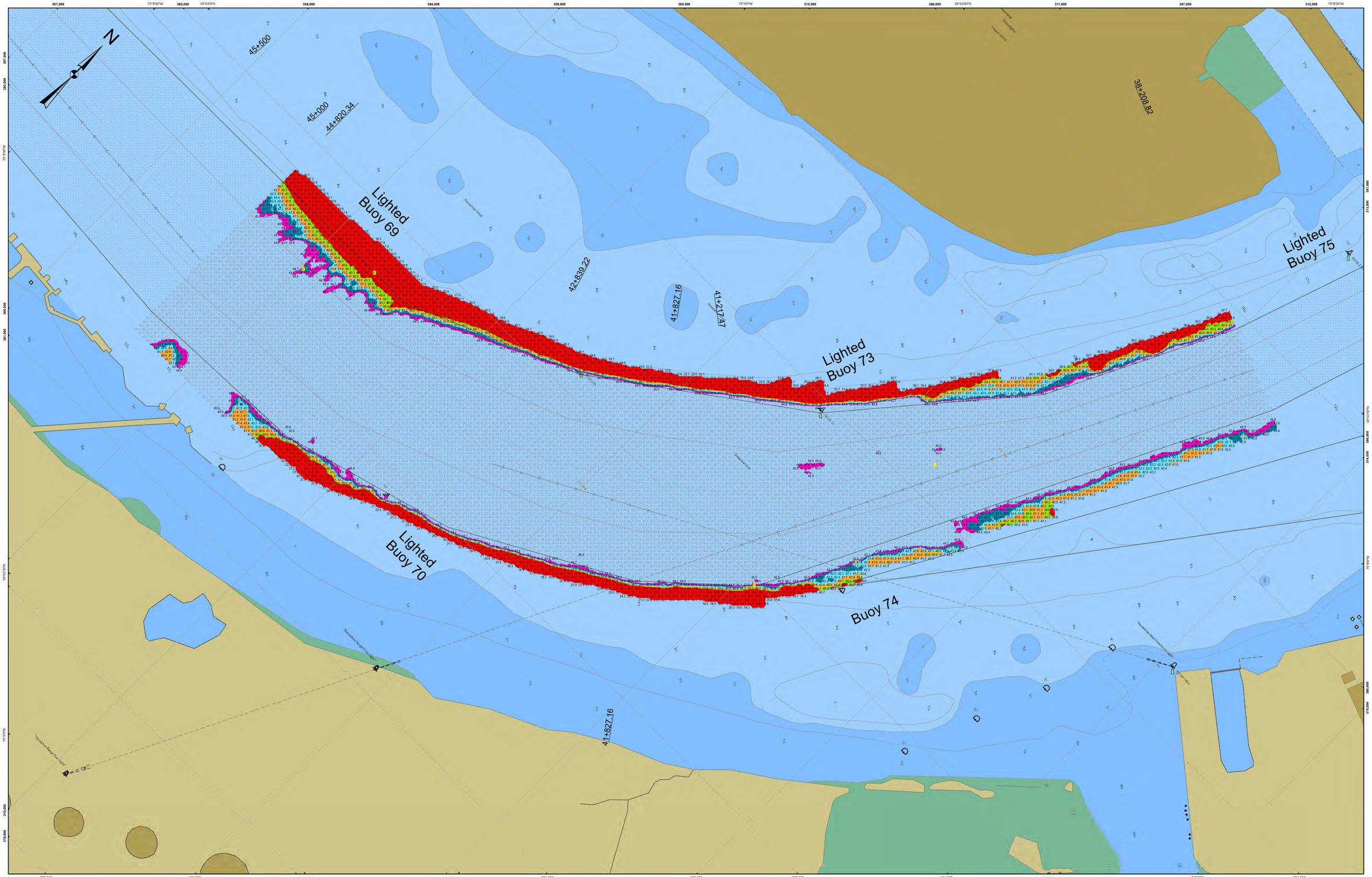

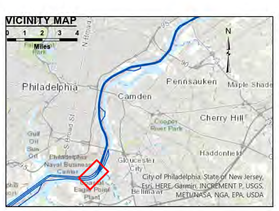

1. THIS SURVEY MEETS STANDARDS AS OUTLINED IN CORPS OF ENGINEERS' HYDROGRAPHIC SURVEY MANUAL EM1110-2-1003, DATED NOVEMBER 30, 2013 FOR NAVIGATION AND DREDGING SUPPORT SURVEYS.

2. HORIZONTAL REFERENCE - NAD 83, NEW JERSEY STATE PLANE, ZONE 2900, U.S. FOOT.

3. VERTICAL REFERENCE – MEAN LOWER LOW WATER, WHICH IS BELOW N.A.V.D. 88 BY THE FOLLOWING:
3.10' from STA. 32+754.80 to STA. 41+217.47
3.09' from STA. 41+217.47 to STA. 44+820.34

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.

Scale in Feet
200 0 200 400 600

- Shoalest Sounding per Quarter
- CenterLine
- ToeLine
- QuarterLine
- StationLine
- 45 - 59.42
- 44 - 45
- 43 - 44
- 42 - 43
- 41 - 42
- 40 - 41
- 13.58 - 40

US Army Corps of Engineers
Philadelphia District

STA. 38+209 to STA. 44+820 -- 03 MAR 25

DISCLAIMER
This data is provided for general information only. It was compiled from the best information the USACE publishes the official navigation charts be used in navigation. Some of the information included in this data by others than the Corps of Engineers contributes to the overall quality of the data. While it is believed accurate only at the time they are measured and only represent conditions at the time of measurement. Errors in measurements, printers, and other tools and equipment used to produce the data, as well as omissions in data, can have adverse effects are constantly changing the topography of the waterways and oceans. Furthermore, the software used to compose plotting software have inherent inaccuracies, and printers and digitizers add their own inaccuracies.

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U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT

Surveyed By:
Plotted By: E. Anthony
Checked By:
Drawing No.
Plot Scale
Approved: Chief, Survey Section

DELAWARE RIVER, PHILADELPHIA TO THE SEA
HORSESHOE BEND & EAST HORSESHOE
EXAMINATION
STA. 38+209 to STA. 44+820

E-PS-348