

US Army Corps of Engineers Norfolk District

NOTES:
 1. PROJECT A CHANNEL 40 FEET DEEP (MAINTAINED AT 35 FEET DEEP) 150 FEET TO 500 FEET WIDE FROM THE NORTHEAST TO SOUTHWEST ALONG MAIN CREEK FROM THE HIGH RISE BRIDGE TURNING BASIN AT THE MOUTH OF ST JULIANS CREEK TO THE MOUTH OF NEWTON CREEK. A TURNING BASIN AT THE MOUTH OF ST JULIANS CREEK, 40 FEET DEEP, 400 TO 600 FEET LONG, AND 800 FEET WIDE. A TURNING BASIN AT THE MOUTH OF NEWTON CREEK, 35 FEET DEEP AND 800 FEET SQUARE. AND A TURNING BASIN AT THE MOUTH OF MAIN CREEK, 35 FEET DEEP AND 35 FEET DEEP AND 800 FEET SQUARE. AND A TURNING BASIN AT THE MOUTH OF MAIN CREEK, 35 FEET DEEP AND 35 FEET DEEP AND 800 FEET SQUARE.

2. NOT FOR NAVIGATION USE. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATE(S) INDICATED & CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.

3. SOUNDINGS SHOWN IN FEET CENTERED ON POINT OF SHALTEST DEPTH IN 75 FT RADIUS GENERATED FROM HYDRO SURVEY DATA.

4. CSRS VES MAPS SERVICE AND ESI TOPOGRAPHIC CSRS VES SERVICE.

5. AIDS TO NAVIGATION LOCATED WITH SURVEY VESSEL +/- 10 FEET ON DATE OF SURVEY.

6. SURVEY XY2 (+, XY2) AND METADATA (.MET) FILE NAME REFERENCED BY eHYDRO FILE NAME.

VERTICAL REFERENCE DATUM: NOS MLLW	STATE PLANE	MONUMENT	MLLW	MEAN RANGE OF TIDE	AREA
IMPLIED VERTICAL ACCURACY +/- 0.5 FEET	VIRGINIA SOUTH ZONE	CE DISTRICT 2009*	6.00'	2.71'	0+00.00, 243+37
IMPLIED HORIZONTAL ACCURACY: +/- 10 FEET	US SURVEY FEET	NAVDBS	4.21(GEOD18)		
HORIZONTAL CONTROL: PPK/POSPAC	PPK/POSPAC				
TIDE APPLICATION: TIDEBANK					
BIN SIZE: 5'x5'					
BIN SELECTION METHOD: AVERAGE CELL CENTER					

NORFOLK HARBOR SOUTHERN BRANCH OF THE ELIZABETH RIVER PROJECT CONDITION SURVEY (PLANS AND SPECIFICATIONS)

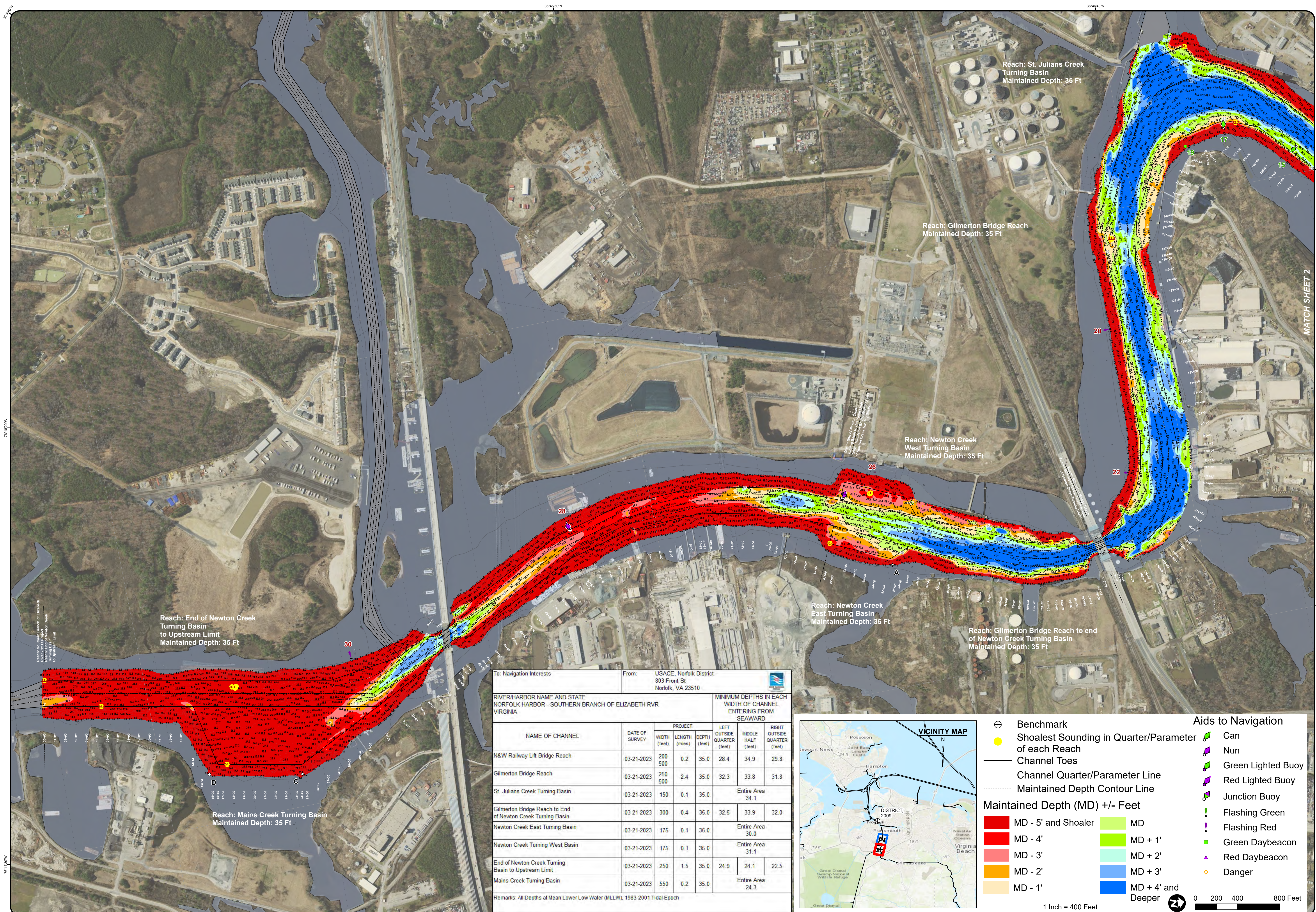
SURVEY DATES:
 March 21, April 12 & 13, 2023

SURVEY BY: USACE Team Lead: Joseph Moore
 eHYDRO FILE: NH_06_S35_2023021_CS

SHEET 1 of 2
Map Produced: 7/18/2023

APPROVED: _____
 Chief, Navigation Analysis Section

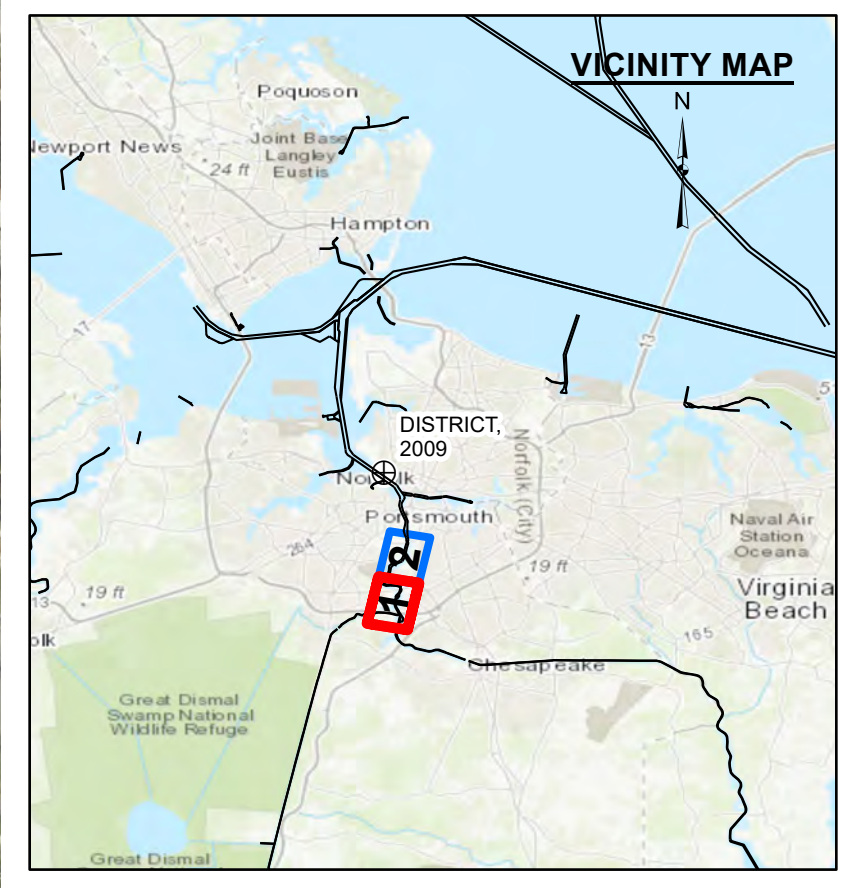
APPROVED: _____
 Chief, Navigation Support and Survey Section



To: Navigation Interests From: USACE, Norfolk District
 803 Front St Norfolk, VA 23510

NAME OF CHANNEL	DATE OF SURVEY	PROJECT			MINIMUM DEPTHS IN EACH WIDTH OF CHANNEL ENTERING FROM SEAWARD		
		WIDTH (feet)	LENGTH (miles)	DEPTH (feet)	LEFT OUTSIDE QUARTER (feet)	MIDDLE HALF (feet)	RIGHT OUTSIDE QUARTER (feet)
N&W Railway Lift Bridge Reach	03-21-2023	200	0.2	35.0	28.4	34.9	29.8
Gilmerton Bridge Reach	03-21-2023	250	2.4	35.0	32.3	33.8	31.8
St. Julians Creek Turning Basin	03-21-2023	150	0.1	35.0	Entire Area 34.1		
Gilmerton Bridge Reach to End of Newton Creek Turning Basin	03-21-2023	300	0.4	35.0	32.5	33.9	32.0
Newton Creek East Turning Basin	03-21-2023	175	0.1	35.0	Entire Area 30.0		
Newton Creek Turning West Basin	03-21-2023	175	0.1	35.0	Entire Area 31.1		
End of Newton Creek Turning Basin to Upstream Limit	03-21-2023	250	1.5	35.0	24.9	24.1	22.5
Mains Creek Turning Basin	03-21-2023	550	0.2	35.0	Entire Area 24.3		

Remarks: All Depths at Mean Lower Low Water (MLLW), 1983-2001 Tidal Epoch



- Benchmark**
- Yellow circle: Shoalest Sounding in Quarter/Parameter of each Reach
 - Grey line: Channel Toes
 - Grey line: Channel Quarter/Parameter Line
 - Dotted line: Maintained Depth Contour Line
- Maintained Depth (MD) +/- Feet**
- Red: MD - 5' and Shoaler
 - Orange: MD - 4'
 - Yellow: MD - 3'
 - Light Green: MD - 2'
 - Green: MD - 1'
 - Light Blue: MD
 - Blue: MD + 1'
 - Dark Blue: MD + 2'
 - Very Dark Blue: MD + 3'
 - Black: MD + 4' and Deeper
- Aids to Navigation**
- Green circle: Can
 - Purple circle: Nun
 - Green circle with light: Green Lighted Buoy
 - Red circle with light: Red Lighted Buoy
 - Purple circle with light: Junction Buoy
 - Green circle with light and sound: Flashing Green
 - Red circle with light and sound: Flashing Red
 - Green circle with light and sound: Green Daybeacon
 - Red circle with light and sound: Red Daybeacon
 - Yellow diamond: Danger
- 1 Inch = 400 Feet

Reach: End of Newton Creek Turning Basin to Upstream Limit Maintained Depth: 35 Ft

Reach: Mains Creek Turning Basin Maintained Depth: 35 Ft

Reach: Newton Creek East Turning Basin Maintained Depth: 35 Ft

Reach: Newton Creek West Turning Basin Maintained Depth: 35 Ft

Reach: Gilmerton Bridge Reach to end of Newton Creek Turning Basin Maintained Depth: 35 Ft

Reach: Gilmerton Bridge Reach Maintained Depth: 35 Ft

Reach: St. Julians Creek Turning Basin Maintained Depth: 35 Ft

MATCH SHEET 2



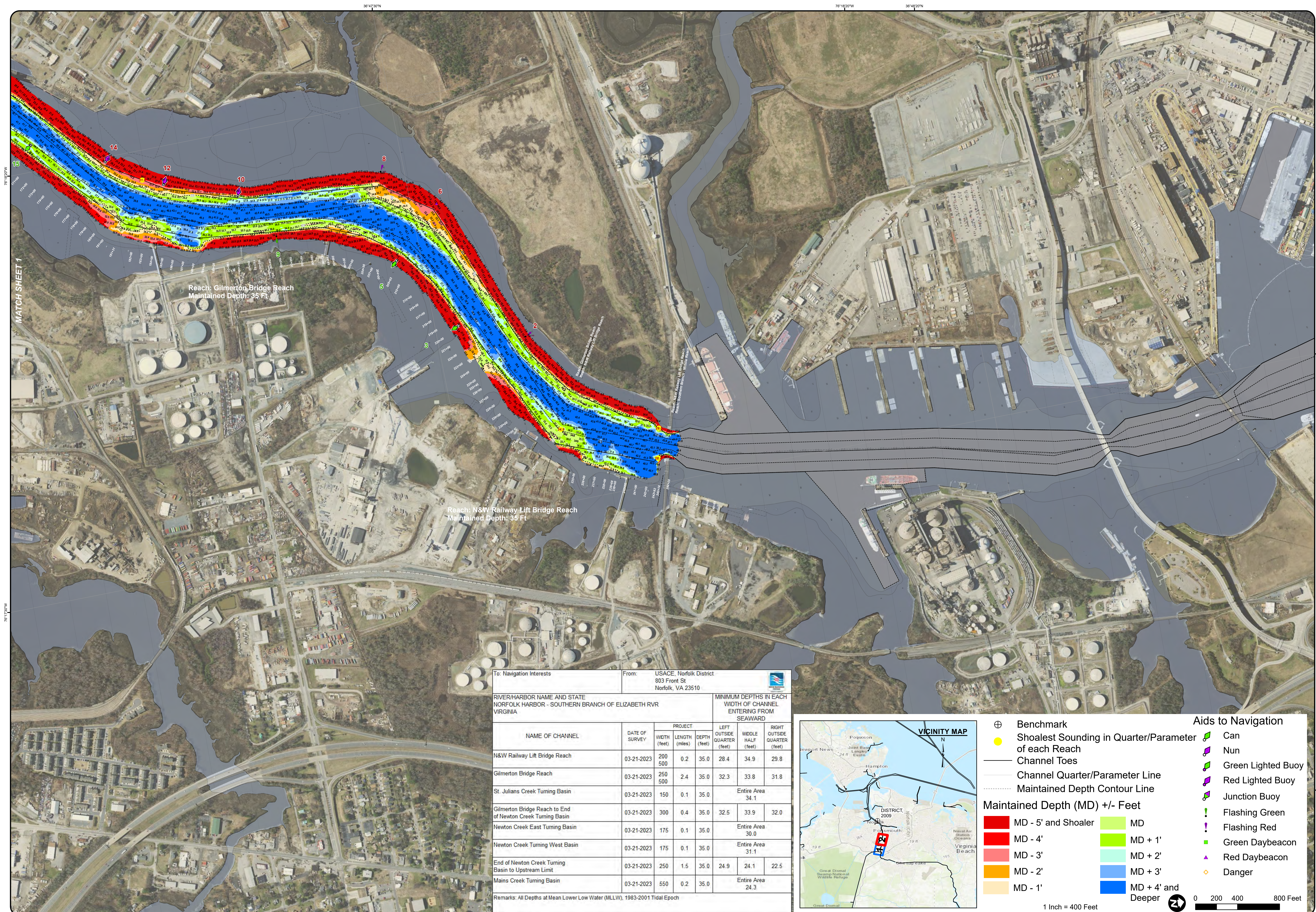
US Army Corps of Engineers Norfolk District

NOTES:
 1. PROJECT A CHANNEL 40 FEET DEEP (MAINTAINED AT 35 FEET DEEP) 250 FEET TO 500 FEET WIDE FROM THE NORTHEAST PROJECTIONS CHANNEL 300 FEET DEEP (MAINTAINED AT 25 FEET DEEP) 300 FEET WIDE TO A POINT 0.8 MILES ABOVE THE 164 HIGH RISE BRIDGE. A TURNING BASIN AT THE MOUTH OF ST JULIANS CREEK, 40 FEET DEEP, 400 TO 600 FEET LONG, AND 800 FEET WIDE. A TURNING BASIN AT THE MOUTH OF NEWTON CREEK, 38 FEET DEEP AND 600 FEET SQUARE, AND A TURNING BASIN AT THE MOUTH OF MAINS CREEK, 35 FEET DEEP AND 400 FEET DEEP AND 600 FEET SQUARE.
 2. NOT FOR NAVIGATION USE. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATE(S) INDICATED & CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
 3. SOUNDINGS SHOWN IN FEET CENTERED ON POINT OF SHOALEST DEPTH IN 7.5 FT RADIUS GENERATED FROM HYDRO SURVEY DATA. CS VES MAPS SERVICE AND ESI TOPOGRAPHIC CS VES SERVICE.
 4. AID TO NAVIGATION LOCATED WITH SURVEY VESSEL +/- 10 FEET ON DATE OF SURVEY.
 5. SURVEY XY2 ('_XY2) AND METADATA ('_MET) FILE NAME REFERENCED BY eHYDRO FILE NAME.

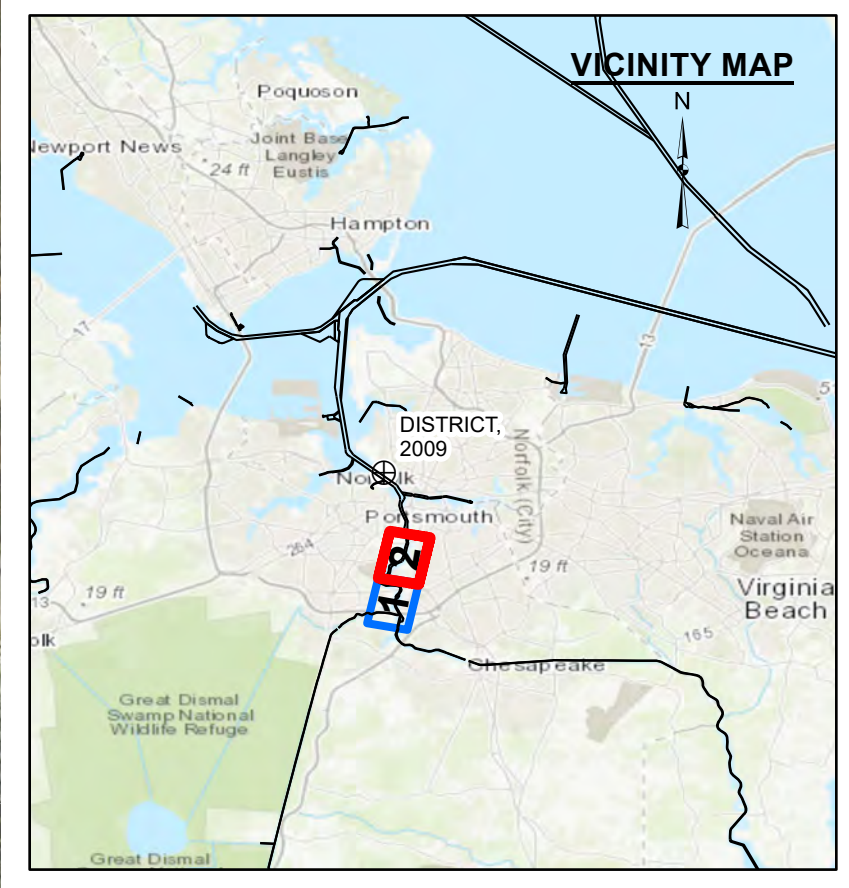
VERTICAL REFERENCE DATUM: NOS MLLW	VERTICAL ACCURACY: +/- 0.5 FEET	IMPLIED VERTICAL ZONE: US SURVEY FEET	MEAN RANGE OF TIDE: 2.71'
PROJECTED COORDINATE SYSTEM: STATE PLANE	PROJECTED COORDINATE UNITS: US SURVEY FEET	PROJECTED HORIZONTAL ACCURACY: +/- 10 FEET	AREA: 0+00.00, 243+37
DISTRICT NAME: NORFOLK DISTRICT	PROJECTED HORIZONTAL ACCURACY: +/- 10 FEET	HORIZONTAL CONTROL: PPK/POSAC	MONUMENT: NAVD83
STATE PLANE: VIRGINIA SOUTH ZONE	IMPLIED HORIZONTAL ACCURACY: +/- 10 FEET	VERTICAL CONTROL: PPK/POSAC	MEAN RANGE OF TIDE: 2.71'
PROJECTED COORDINATE UNITS: US SURVEY FEET	PROJECTED HORIZONTAL ACCURACY: +/- 10 FEET	VERTICAL CONTROL: PPK/POSAC	AREA: 0+00.00, 243+37
PROJECTED HORIZONTAL ACCURACY: +/- 10 FEET	HORIZONTAL CONTROL: PPK/POSAC	VERTICAL CONTROL: PPK/POSAC	MONUMENT: NAVD83
HORIZONTAL CONTROL: PPK/POSAC	VERTICAL CONTROL: PPK/POSAC	BIN SIZE: 5'x5'	MEAN RANGE OF TIDE: 2.71'
BIN SELECTION METHOD: AVERAGE CELL CENTER			AREA: 0+00.00, 243+37

NORFOLK HARBOR SOUTHERN BRANCH OF THE ELIZABETH RIVER PROJECT CONDITION SURVEY (PLANS AND SPECIFICATIONS)
 SURVEY DATES: March 21, April 12 & 13, 2023
 SURVEY BY: USACE Team Lead: Joseph Moore
 eHYDRO FILE: NH_06_S35_20230221_CS

SHEET 2 of 2
 Map Produced: 7/18/2023
 APPROVED: Chief, Navigation Analysis Section
 APPROVED: Chief, Navigation Support and Survey Section



To: Navigation Interests	From: USACE, Norfolk District 803 Front St Norfolk, VA 23510						
RIVER/HARBOR NAME AND STATE NORFOLK HARBOR - SOUTHERN BRANCH OF ELIZABETH RVR VIRGINIA							
MINIMUM DEPTHS IN EACH WIDTH OF CHANNEL ENTERING FROM SEAWARD							
NAME OF CHANNEL	DATE OF SURVEY	PROJECT			LEFT OUTSIDE QUARTER (feet)	MIDDLE HALF (feet)	RIGHT OUTSIDE QUARTER (feet)
		WIDTH (feet)	LENGTH (miles)	DEPTH (feet)			
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Remarks: All Depths at Mean Lower Low Water (MLLW), 1983-2001 Tidal Epoch							



- ⊕ Benchmark
 - Shoalest Sounding in Quarter/Parameter of each Reach
 - Channel Toes
 - Channel Quarter/Parameter Line
 - Maintained Depth Contour Line
- Maintained Depth (MD) +/- Feet**
- | | | | |
|-------------|---------------------|--------------|--------------------|
| Red | MD - 5' and Shoaler | Light Green | MD |
| Orange | MD - 4' | Yellow-Green | MD + 1' |
| Yellow | MD - 3' | Light Blue | MD + 2' |
| Light Green | MD - 2' | Medium Blue | MD + 3' |
| Blue | MD - 1' | Dark Blue | MD + 4' and Deeper |
- Aids to Navigation**
- Can
 - Nun
 - Green Lighted Buoy
 - Red Lighted Buoy
 - Junction Buoy
 - Flashing Green
 - Flashing Red
 - Green Daybeacon
 - Red Daybeacon
 - Danger
- 1 Inch = 400 Feet

MATCH SHEET 1

7818207N

7818207N

7614207W

36°47'30"N

76°18'40"W

36°48'20"N

76°18'20"W

36°48'20"N