

Legend

- Benchmark
- Shoalest Sounding in Quarter/Parameter of each Reach
- Channel Toes
- Channel Quarter/Parameter Line
- Maintained Depth Contour Line

Bathymetry

	0' - 1.9'		8' - 8.9'
	2' - 3.9'		9' - 9.9'
	4' - 5.9'		10' - 10.9'
	6' - 6.9'		11' and Deeper
	7' - 7.9'		

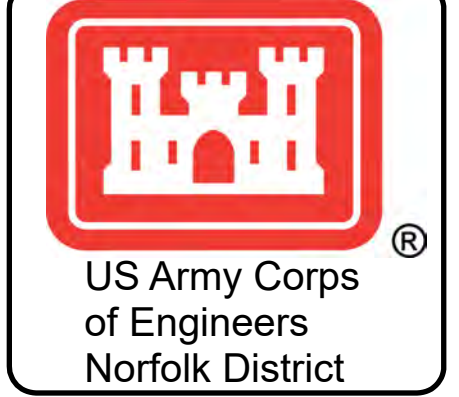
Aids to Navigation

- Can
- Nun
- Green Lighted Buoy
- Red Lighted Buoy
- Junction Buoy
- Flashing Green
- Flashing Red
- Green Daybeacon
- Red Daybeacon
- Danger

0 50 100 200 Feet
1 in = 100 feet

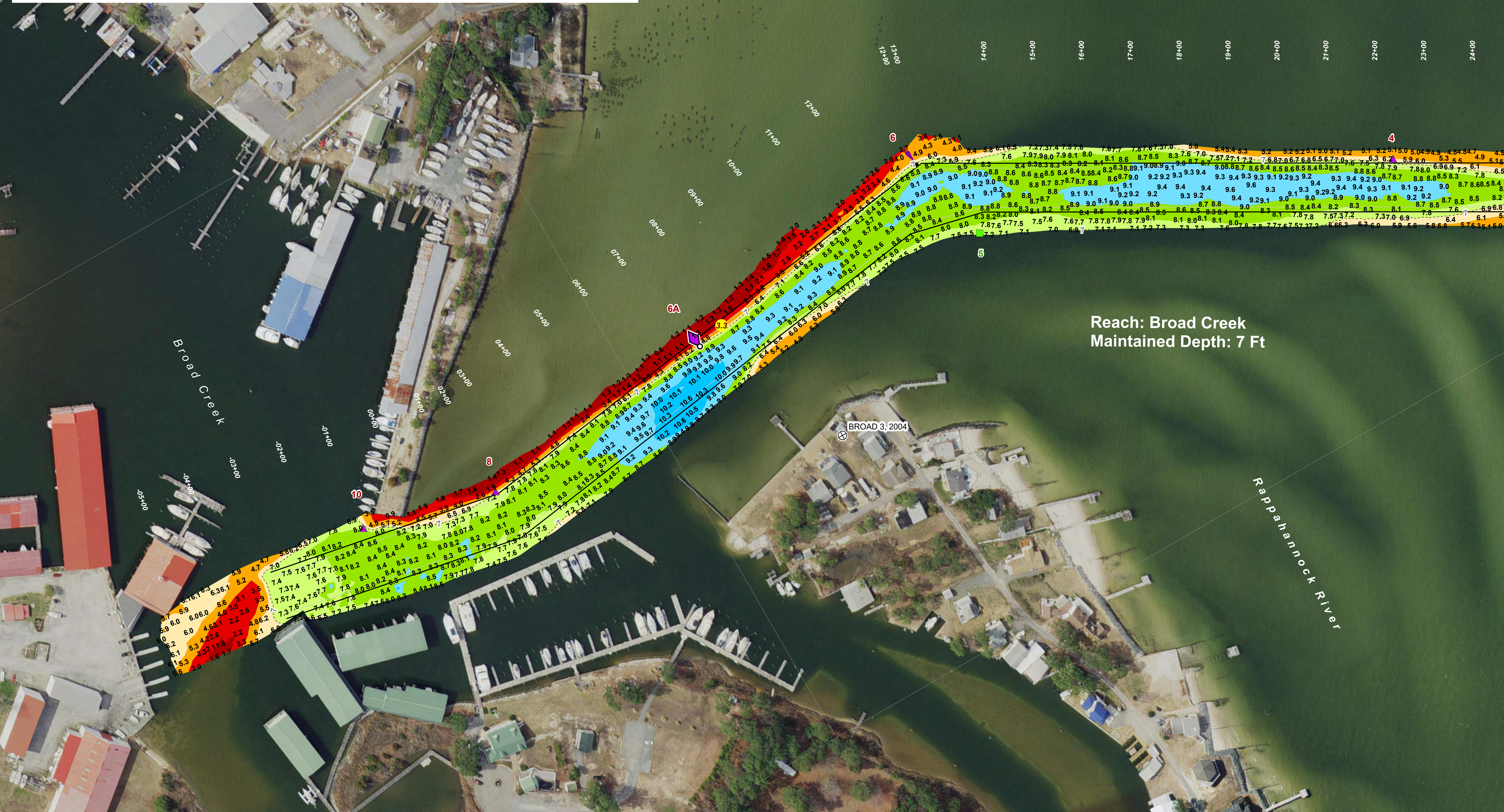
To: Navigation Interests		From: USACE, Norfolk District 803 Front St Norfolk, VA 23510			
RIVER/HARBOR NAME AND STATE BROAD CREEK MIDDLESEX COUNTY VIRGINIA		MINIMUM DEPTHS (FT) 80% OF CHANNEL ENTERING FROM SEAWARD			
NAME OF CHANNEL	DATE OF SURVEY	PROJECT			80% of Project Width - 40% on Either Side of Center Line
		WIDTH (feet)	LENGTH (miles)	DEPTH (feet)	
Broad Creek Channel	09-21-2023	100	0.9	7.0	3.3

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



NOTES:

- PROJECT A CHANNEL 7 FT DEEP AND 100 FT WIDE FROM THAT DEPTH IN THE RAPPAHANNOCK RIVER TO DEEP WATER IN BROAD CREEK, APPROXIMATELY 4,100 FT.
- NOT FOR NAVIGATION. USE THE INFORMATION DESCRIBED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED & CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
- SOUNDINGS SHOWN IN FEET CENTERED ON POINT OF SHOALEST DEPTH IN 15 FT RADIIUS GENERATED FROM HYDROSWATH DATA.
- BACKGROUND VIRGINIA BASE MAPPING PROGRAM MOST RECENT IMAGERY GIS WEB SERVICE.
- AIDS TO NAVIGATION LOCATED WITH SURVEY VESSEL +/- 10 FEET ON DATE SHOWN ON MAP.
- SURVEY XYZ (.XYZ) AND METADATA (.MET) FILE NAME REFERENCED BY #HYDRO FILE NO.



Reach: Broad Creek
Maintained Depth: 7 Ft

VERTICAL REFERENCE DATUM: NOS MLLW	VERTICAL ACCURACY: +/- 0.5 FEET	MEAN RANGE OF TIDE	AREA
IMPLIED VERTICAL ACCURACY: +/- 0.5 FEET	PPK/POSAC		-05+00 to 46+00
TIDE CONTROL: PPK/POSAC	PPK/POSAC		
TIDE APPLICATION: PPK/POSAC	PPK/POSAC		
BIN SIZE: 3x3	BIN SELECTION METHOD: AVERAGE CELL CENTER		
PROJECTED COORDINATE SYSTEM: STATE PLANE		GEOGETIC CONTROL MONUMENTS	
HORIZONTAL CONTROL: US SURVEY FEET		MONUMENT	MLLW
IMPLIED HORIZONTAL ACCURACY: +/- 1 FOOT		CE "BROAD 3, 2004"	3.75'
HORIZONTAL CONTROL: PPK/POSAC		NAV/D88	2.67'(GEOD18)

BROAD CREEK
PROJECT CONDITION SURVEY

SURVEY DATE:
September 21, 2023

SURVEY BY: USACE Team Lead: Joseph M. Moore Jr
#HYDRO FILE: BD_01_BDC_20230821_CS



Benchmark

- Yellow circle: Shoalest Sounding in Quarter/Parameter of each Reach
- Black line: Channel Toes
- Grey line: Channel Quarter/Parameter Line
- Dotted line: Maintained Depth Contour Line

Bathymetry

0' - 1.9'	8' - 8.9'
2' - 3.9'	9' - 9.9'
4' - 5.9'	10' - 10.9'
6' - 6.9'	11' and Deeper
7' - 7.9'	

0 50 100 200 Feet
1 in = 100 feet

Aids to Navigation

- Green flag: Can
- Purple flag: Nun
- Green flag with light: Green Lighted Buoy
- Purple flag with light: Red Lighted Buoy
- Purple flag with light: Junction Buoy
- Green flag with light: Flashing Green
- Purple flag with light: Flashing Red
- Green square: Green Daybeacon
- Purple triangle: Red Daybeacon
- Yellow diamond: Danger

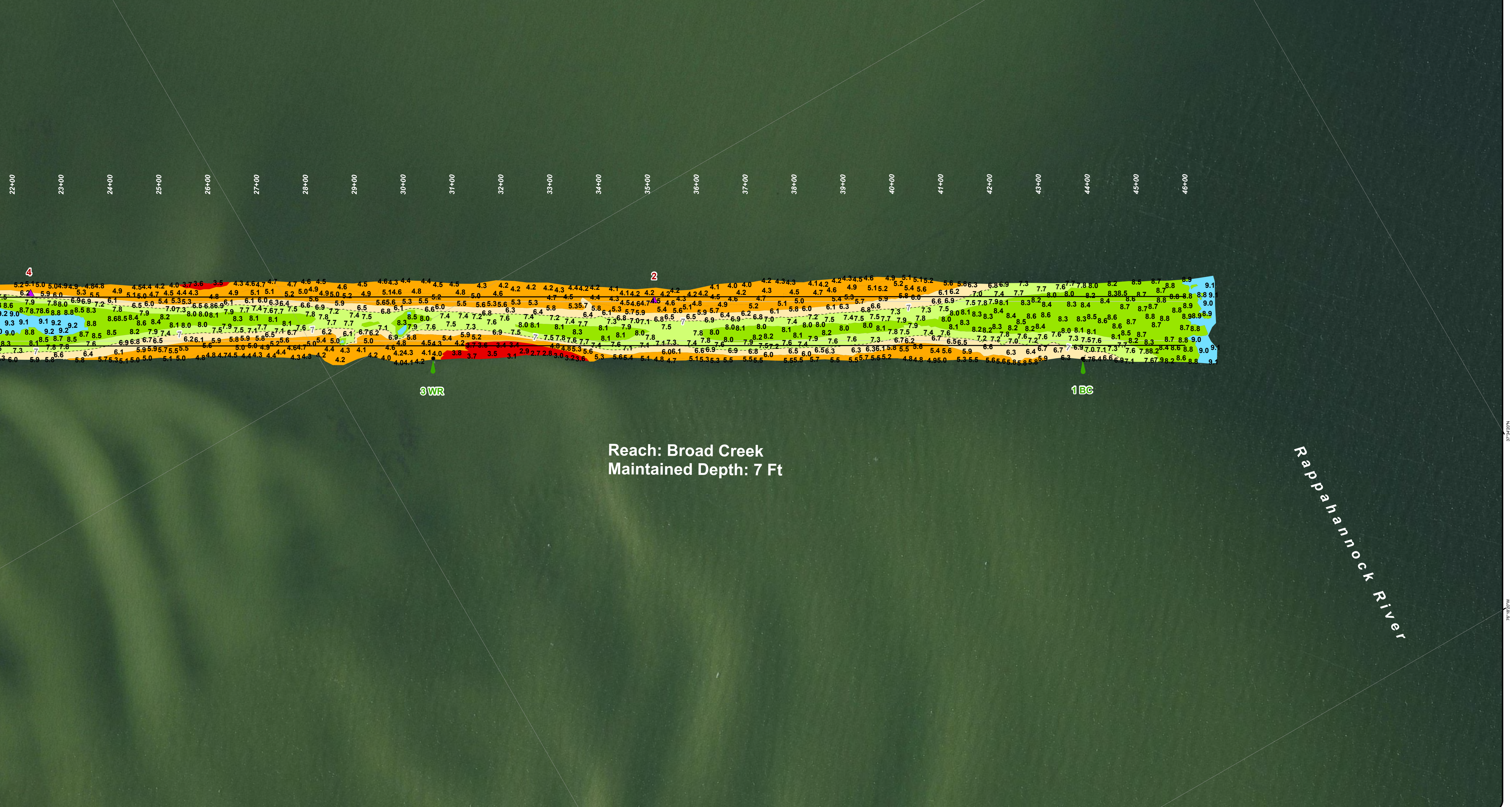
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NAME OF CHANNEL	DATE OF SURVEY	PROJECT			80% of Project Width - 40% on Either Side of Center Line
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- AIDS TO NAVIGATION LOCATED WITH SURVEY VESSEL +/- 10 FEET ON DATE SHOWN ON MAP.
- SURVEY XYZ (.XYZ) AND METADATA (.MET) FILE NAME REFERENCED BY HYDRO FILE NO.



Reach: Broad Creek
Maintained Depth: 7 Ft

VERTICAL REFERENCE DATUM: NOS MLLW	MEAN RANGE OF TIDE	AREA
IMPLIED VERTICAL ACCURACY: +/- 0.5 FEET	1.2'	-05+00 to 46+00
VERTICAL CONTROL: PPK/POS/AC		
TIDE APPLICATION: PPK/NOAA DATUM MSL		
BN SIZE: 3x3		
BN SELECTION METHOD: AVERAGE CELL CENTER		
PROJECTED COORDINATE SYSTEM: STATE PLANE	MONUMENT	MLLW
HORIZONTAL CONTROL: VIRGINIA SOUTH ZONE	CE "BROAD 3, 2004"	3.75'
PROJECTED COORDINATE UNITS: US SURVEY FEET		
IMPLIED HORIZONTAL ACCURACY: +/- 1 FOOT		
HORIZONTAL CONTROL: PPK/POS/AC		
GEODETIC CONTROL MONUMENTS	NAVD88	2.67'(GEOD18)

BROAD CREEK
PROJECT CONDITION SURVEY
SURVEY DATE:
September 21, 2023
SURVEY BY: USACE Team Lead: Joseph N Moore Jr
eHYDRO FILE: BD_01_BDC_20230921_CS