

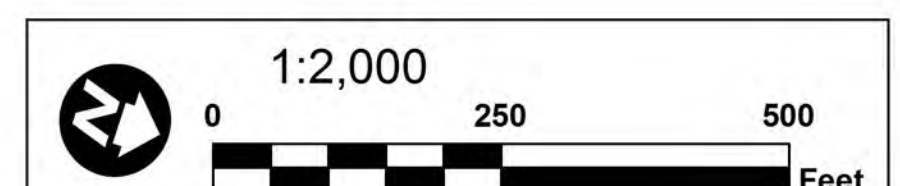
**NOTES:**

- ELEVATIONS ARE IN FEET AND TENTHS AND REFER TO NOAA'S REPORTED MEAN LOWER LOW WATER (MLLW) RELATIVE TO THE 1983-2001 TIDAL EPOCH.
- PROJECT SURVEYED WITH DISTRICT SURVEY VESSEL "KNOWLTON", USING RTK GPS HORIZONTAL POSITIONING EQUIPMENT AND 200 KHZ SOUNDING EQUIPMENT.
- HORIZONTAL DATUM NAD 1983. VERTICAL DATUM M.L.L.W.
- TIDE GAGE LOCATED AT MANTEO TOWN DOCK. USE OF TIDE VALUES FOR THIS GAGE ARE RESTRICTED TO QUALITY ASSURANCE PURPOSES FOR VERIFICATION OF RTK TIDES. THE WILMINGTON DISTRICT WILL ONLY USE STAFF GAGE TIDAL VALUES FOR FINAL MAPPING AND QUANTITY CALCULATIONS IF RTK GPS IS UNAVAILABLE AT THE TIME OF SURVEY.
- THIS PROJECT WAS DESIGNED BY THE WILMINGTON DISTRICT OF THE U.S. ARMY CORPS OF ENGINEERS. THE INITIALS AND SIGNATURES AND REGISTRATION DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER1110-1-8152.
- THE INFORMATION DEPICTED ON THIS SURVEY 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. THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE DUE TO SHOALING EVENTS. A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE INFORMATION PROVIDED HERE. REQUIRED BY 33 CFR 209.325
- NAVIGATION AIDS LOCATED WITH DISTRICT SURVEY VESSEL, ACCURACY +/- 3 METERS.
- FOR THE MOST UP TO DATE INFORMATION PLEASE CHECK OUR WEBSITE AT: WWW.SAW.USACE.ARMY.MIL

WAYPOINTS					
Project	Survey Date	SPF_X	SPF_Y	DMS_X	DMS_Y
Manteo Range 4a - 4b- Waypoint 01	2016-08-04	2989123	813571	75° 39' 28.699" W	35° 56' 22.643" N
Manteo Range 4a - 4b- Waypoint 02	2016-08-04	2989878	811920	75° 39' 20.207" W	35° 56' 6.072" N
Manteo Range 4a - 4b- Waypoint 03	2016-08-04	2991683	806459	75° 39' 0.504" W	35° 55' 11.465" N

**LEGEND**

Green Light	Green Daybeacon	Waypoints
Red Light	Red Daybeacon	Waypoint Lines
Green Lighted Buoy	Red Lighted Buoy	Matchlines
Nun	Mileboard	Navigation Channel
Junction Marker	Tide Gage	



SURVEYED BY: SSS, BRJ	SURVEY DATE: 4 AUGUST 2016
MAPPED: K7OPNSMG	MAP DATE: 05 AUGUST 2016
	MAP SCALE: 1:2,000
MAP FILE NAME: MNI_22_4AB_20160804.MXD	

**HYDROGRAPHIC SURVEY**  
 U.S. ARMY ENGINEER DISTRICT  
 WILMINGTON, NORTH CAROLINA  
**MANTEO CHANNELS**  
**RANGES 4A - 4B**  
 Manteo, North Carolina