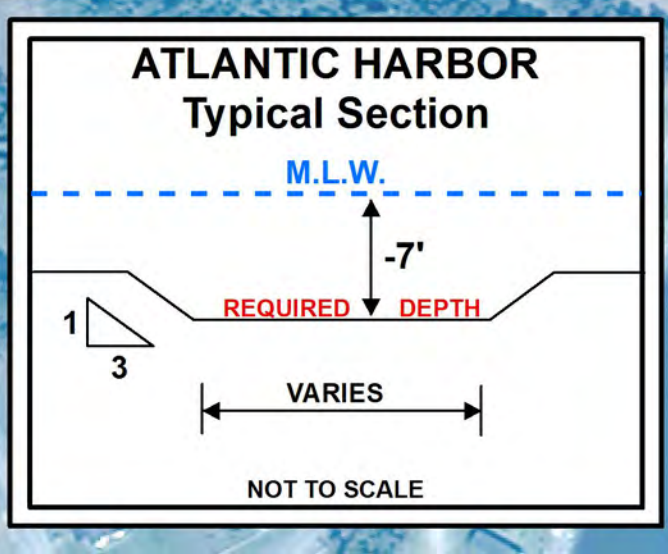


NOTES:

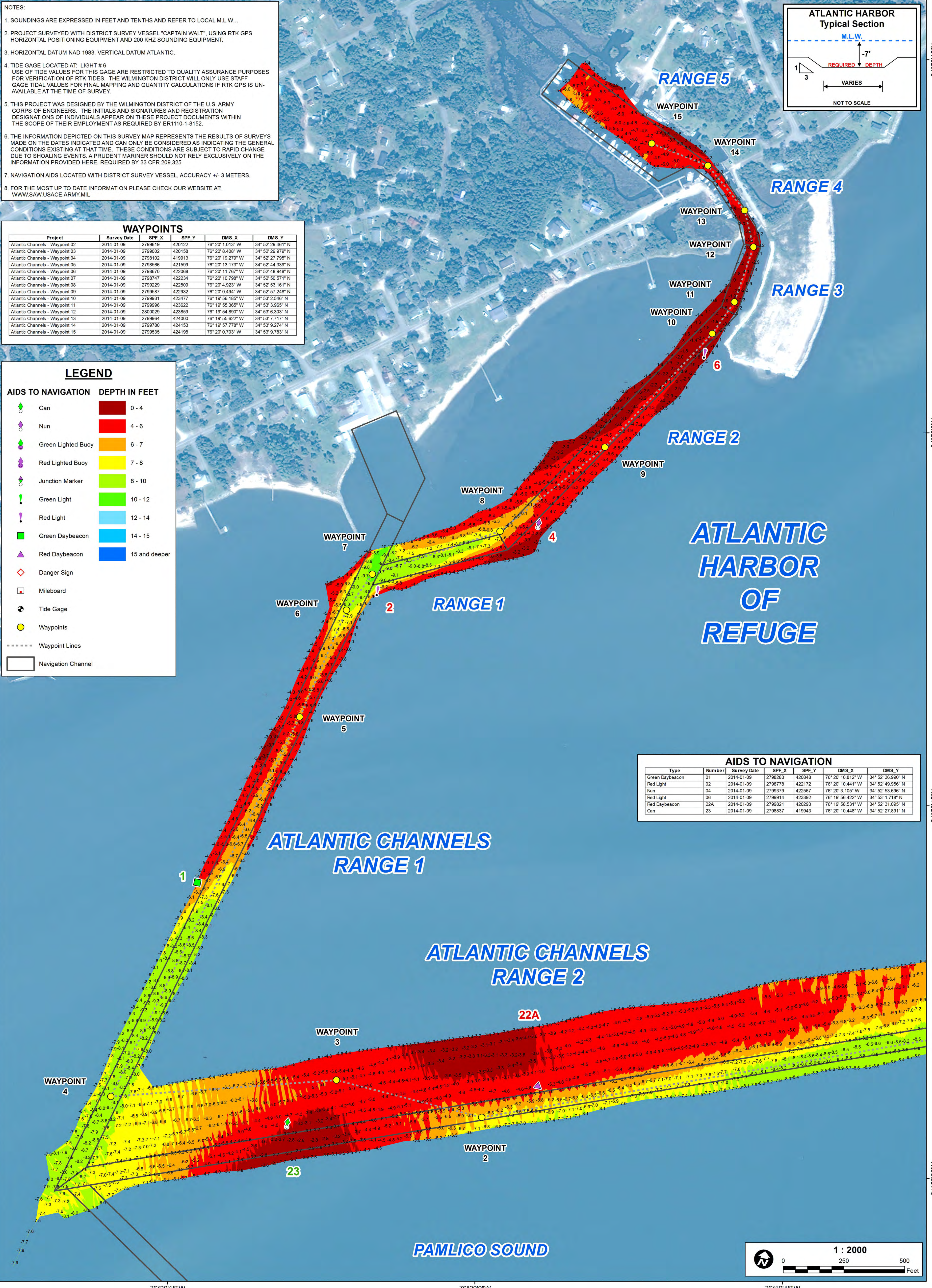
1. SOUNDINGS ARE EXPRESSED IN FEET AND TENTHS AND REFER TO LOCAL M.L.W...
2. PROJECT SURVEYED WITH DISTRICT SURVEY VESSEL "CAPTAIN WALT", USING RTK GPS HORIZONTAL POSITIONING EQUIPMENT AND 200 KHZ SOUNDING EQUIPMENT.
3. HORIZONTAL DATUM NAD 1983. VERTICAL DATUM ATLANTIC.
4. TIDE GAGE LOCATED AT LIGHT # 6
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.
5. 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.
6. 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
7. NAVIGATION AIDS LOCATED WITH DISTRICT SURVEY VESSEL, ACCURACY +/- 3 METERS.
8. 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
Atlantic Channels - Waypoint 02	2014-01-09	2799619	420122	76° 20' 1.013" W	34° 52' 29.461" N
Atlantic Channels - Waypoint 03	2014-01-09	2799002	420158	76° 20' 8.408" W	34° 52' 29.979" N
Atlantic Channels - Waypoint 04	2014-01-09	2798102	419913	76° 20' 19.279" W	34° 52' 27.795" N
Atlantic Channels - Waypoint 05	2014-01-09	2798566	421599	76° 20' 13.173" W	34° 52' 44.339" N
Atlantic Channels - Waypoint 06	2014-01-09	2798670	422068	76° 20' 11.767" W	34° 52' 48.948" N
Atlantic Channels - Waypoint 07	2014-01-09	2798747	422234	76° 20' 10.798" W	34° 52' 50.571" N
Atlantic Channels - Waypoint 08	2014-01-09	2798229	422509	76° 20' 4.923" W	34° 52' 53.161" N
Atlantic Channels - Waypoint 09	2014-01-09	2798587	422932	76° 20' 0.494" W	34° 52' 57.248" N
Atlantic Channels - Waypoint 10	2014-01-09	2799931	423477	76° 19' 56.185" W	34° 53' 2.546" N
Atlantic Channels - Waypoint 11	2014-01-09	2799996	423622	76° 19' 55.365" W	34° 53' 3.965" N
Atlantic Channels - Waypoint 12	2014-01-09	2800029	423859	76° 19' 54.890" W	34° 53' 6.303" N
Atlantic Channels - Waypoint 13	2014-01-09	2799964	424000	76° 19' 55.622" W	34° 53' 7.717" N
Atlantic Channels - Waypoint 14	2014-01-09	2799780	424153	76° 19' 57.778" W	34° 53' 9.274" N
Atlantic Channels - Waypoint 15	2014-01-09	2799535	424198	76° 20' 0.703" W	34° 53' 9.783" N

LEGEND	
AIDS TO NAVIGATION	DEPTH IN FEET
Can	0 - 4
Nun	4 - 6
Green Lighted Buoy	6 - 7
Red Lighted Buoy	7 - 8
Junction Marker	8 - 10
Green Light	10 - 12
Red Light	12 - 14
Green Daybeacon	14 - 15
Red Daybeacon	15 and deeper
Danger Sign	
Mileboard	
Tide Gage	
Waypoints	
Waypoint Lines	
Navigation Channel	

AIDS TO NAVIGATION						
Type	Number	Survey Date	SPF_X	SPF_Y	DMS_X	DMS_Y
Green Daybeacon	01	2014-01-09	2798283	420648	76° 20' 16.812" W	34° 52' 36.990" N
Red Light	02	2014-01-09	2798778	422172	76° 20' 10.441" W	34° 52' 49.956" N
Nun	04	2014-01-09	2799379	422567	76° 20' 3.105" W	34° 52' 53.996" N
Red Light	06	2014-01-09	2799914	423392	76° 19' 56.422" W	34° 53' 1.718" N
Red Daybeacon	22A	2014-01-09	2799821	420293	76° 19' 58.531" W	34° 52' 31.095" N
Can	23	2014-01-09	2798837	419943	76° 20' 10.448" W	34° 52' 27.891" N



HYDROGRAPHIC SURVEY
 U.S. ARMY ENGINEER DISTRICT
 CORPS OF ENGINEERS
 WILMINGTON, NORTH CAROLINA

**ATLANTIC CHANNELS
 &
 HARBOR OF REFUGE**

ATLANTIC, NORTH CAROLINA

SURVEY DATE(S): JANUARY 8 & 9, 2014	SURVEYED BY: CRP, JBG
MAP DATE: JANUARY 14, 2014	MAPPED BY: MSA
SCALE: 1 : 2,000	
IMAGERY DATE:	MAP FILE NAME:
SEPTEMBER 10, 2013 © DIGITALGLOBE, INC.	ATLANTIC-HBR-REFUGE_2014-01-09_CS.MXD

