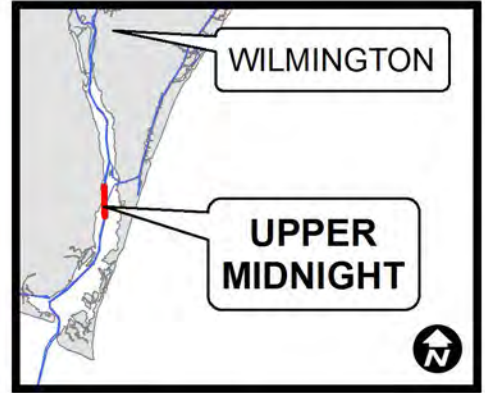
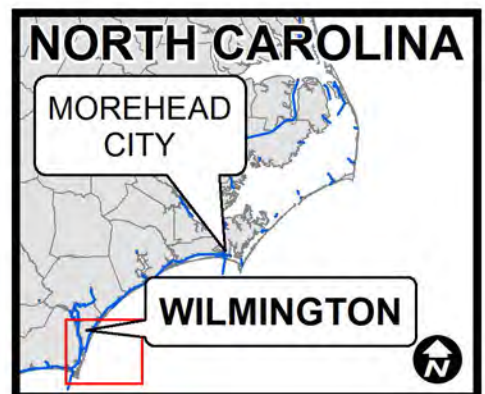


US Army Corps of Engineers
Wilmington District

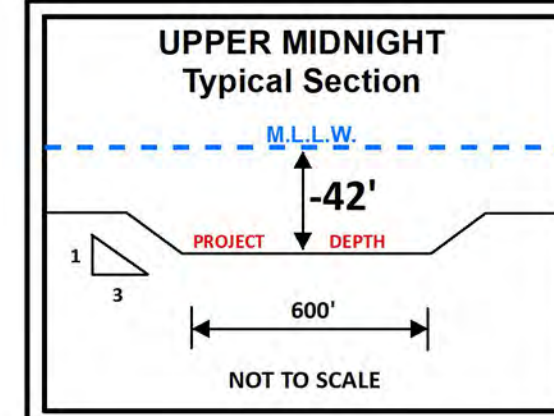


SURVEYED BY: MAS, WWW, JBD	SURVEY DATE: 14 SEPTEMBER 2016
MAPPED BY: K7PDPGSD	
MAP FILE NAME: WH_14_UMI_20160914.MXD	MAP SCALE: 1:2,000

HYDROGRAPHIC SURVEY
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
WILMINGTON, NORTH CAROLINA
WILMINGTON HARBOR
UPPER MIDNIGHT CHANNEL
WILMINGTON, NORTH CAROLINA

LEGEND

Aids to Navigation	Depth In Feet
Can	20 and Shallower
Nun	20 - 25
Green Lighted Buoy	25 - 32
Red Lighted Buoy	32 - 35
Junction Marker	35 - 38
Green Light	38 - 42
Red Light	42 - 44
Green Daybeacon	44 - 45
Red Daybeacon	45 - 47
Danger Sign	47 and Deeper
Mileboard	Navigation Channel
Tide Gage	



- NOTES:**
- ELEVATIONS ARE IN FEET AND REFER TO NOAA'S REPORTED MEAN LOWER LOW WATER (MLLW) RELATIVE TO THE 1985-2001 TIDAL EPOCH.
 - PROJECT SURVEYED WITH DISTRICT SURVEY VESSEL "SWART", USING RTK GPS HORIZONTAL POSITIONING EQUIPMENT AND 28 KHZ SOUNDING EQUIPMENT.
 - HORIZONTAL DATUM NAD 1983. VERTICAL DATUM M.L.L.W..
 - TIDE GAGE LOCATED AT UPPER MIDNIGHT. 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 TIDE 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 ER 1110-1.8152.
 - 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 209.235.
 - 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

