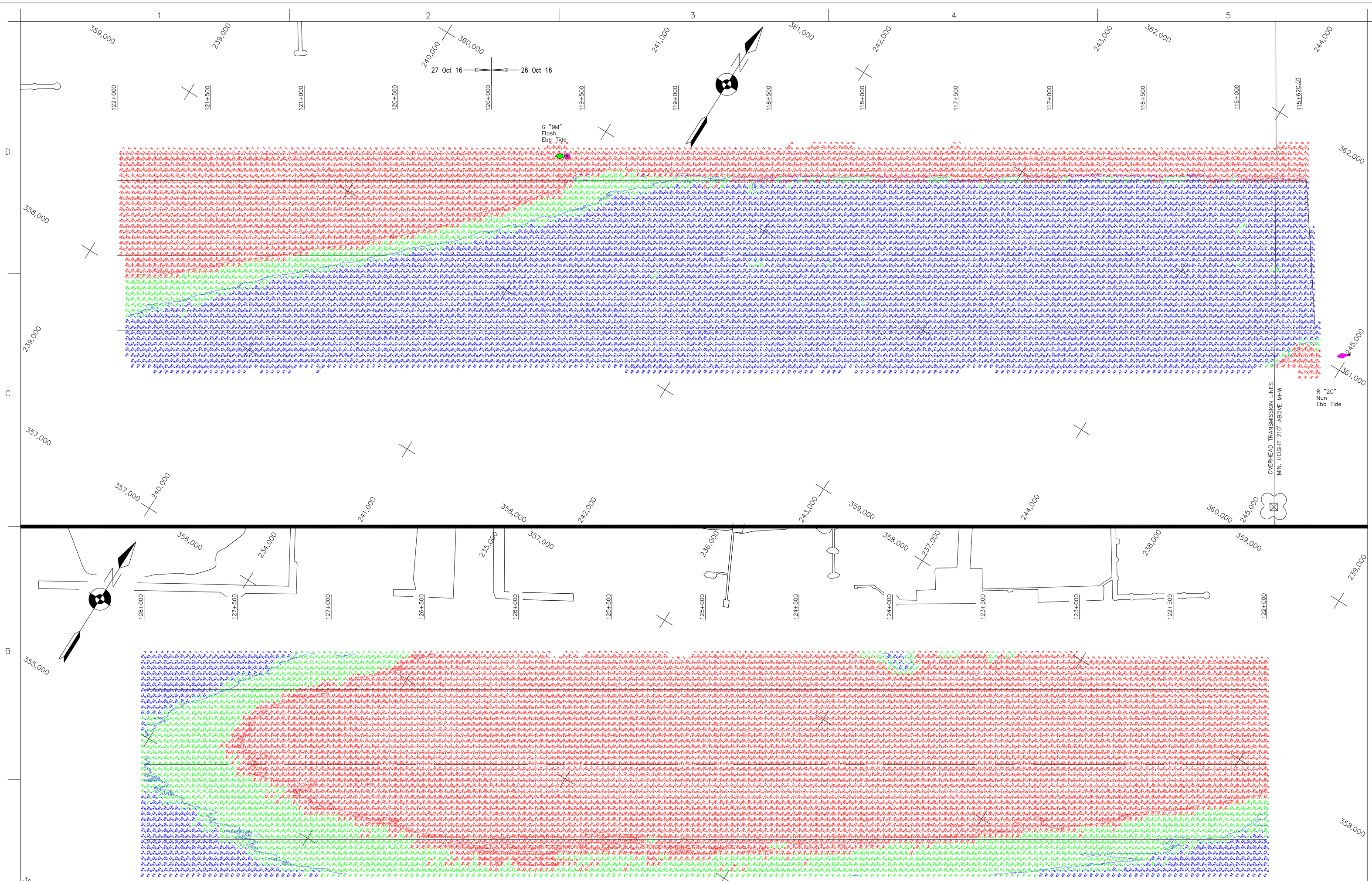


1. THIS SURVEY MEETS STANDARDS AS OUTLINED IN CORPS OF ENGINEERS' HYDROGRAPHIC SURVEY MANUAL EM1110-2-1003, DATED NOVEMBER 30, 2013 FOR NAVIGATION AND DREDGING SUPPORT SURVEYS.
2. HORIZONTAL REFERENCE – NAD 83, NEW JERSEY STATE PLANE, ZONE 2900, U.S.FOOT.
3. VERTICAL REFERENCE – MEAN LOWER LOW WATER, WHICH IS 3.00' BELOW N.A.V.D. 88. GEOID 09 AND NOAA TIDAL EPOCH: 1983 – 2001 WERE USED.
4. SOUNDINGS ARE EXPRESSED IN FEET & TENTHS AND REFER TO MEAN LOWER LOW WATER.
5. SOUNDINGS WERE SELECTED FOR PLOTTING PURPOSES ONLY, USING THE MINIMUM DEPTH WITHIN A 30'X30' CELL, SHIFTED TO THE CELL'S CENTER.
6. CONTOURS DEPICT ACTUAL LOCATION OF BATHYMETRY AND DO NOT NECESSARILY REFLECT PLOTTED SOUNDING LOCATIONS.
7. CONTOURS WERE GENERATED USING THE MINIMUM DEPTH WITHIN A 3' X 3' CELL.

   40' CURVE OF DEPTH SHOWN THUS : ———
   42' CURVE OF DEPTH SHOWN THUS : ———
8. HYPACK, INC. SOFTWARE WAS USED TO PERFORM THE SOUNDING SELECTION AND CONTOUR GENERATION.
9. THE INFORMATION DEPICTED ON THIS MAP REPRESENT THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
10. THE POSITIONS OF THE AIDS TO NAVIGATION ARE PROVIDED FOR INFORMATION ONLY, AND SHOULD NOT BE USED FOR NAVIGATION.
11. THE LIMITS OF THE FEDERAL CHANNEL DEPICT THE MOST CURRENT CHANNEL FRAMEWORK AVAILABLE WHICH CAN BE DOWNLOADED HERE: http://navigation.usace.army.mil/survey/framework
12. BASE MAPPING LINEWORK OR ORTHOPHOTOGRAPHY HAS BEEN COMPILED FROM A VARIETY OF SOURCES AND DATES AND IS INTENDED TO PORTRAY GENERAL CHARACTERISTICS OF THE SHORELINE AND OTHER FEATURES. TEMPORAL CHANGES MAY HAVE OCCURRED SINCE THIS DATASET WAS COLLECTED AND SOME PARTS OF THE DATA MAY NO LONGER BE AN ACCURATE REPRESENTATION OF THE SURFACE CONDITIONS.

US Army Corps of Engineers
Philadelphia District

Mark	Description	Date	Appr.

Designed by:		Date:	Rev.
Dwn by:	Ckd by:	IFB DACW61–	
Reviewed by:		Drawing code:	
Submitted by:		File name: Plot date: 2 Dec 16 Plot scale: 1in to 200 ft	
Chief, Arch. Branch			

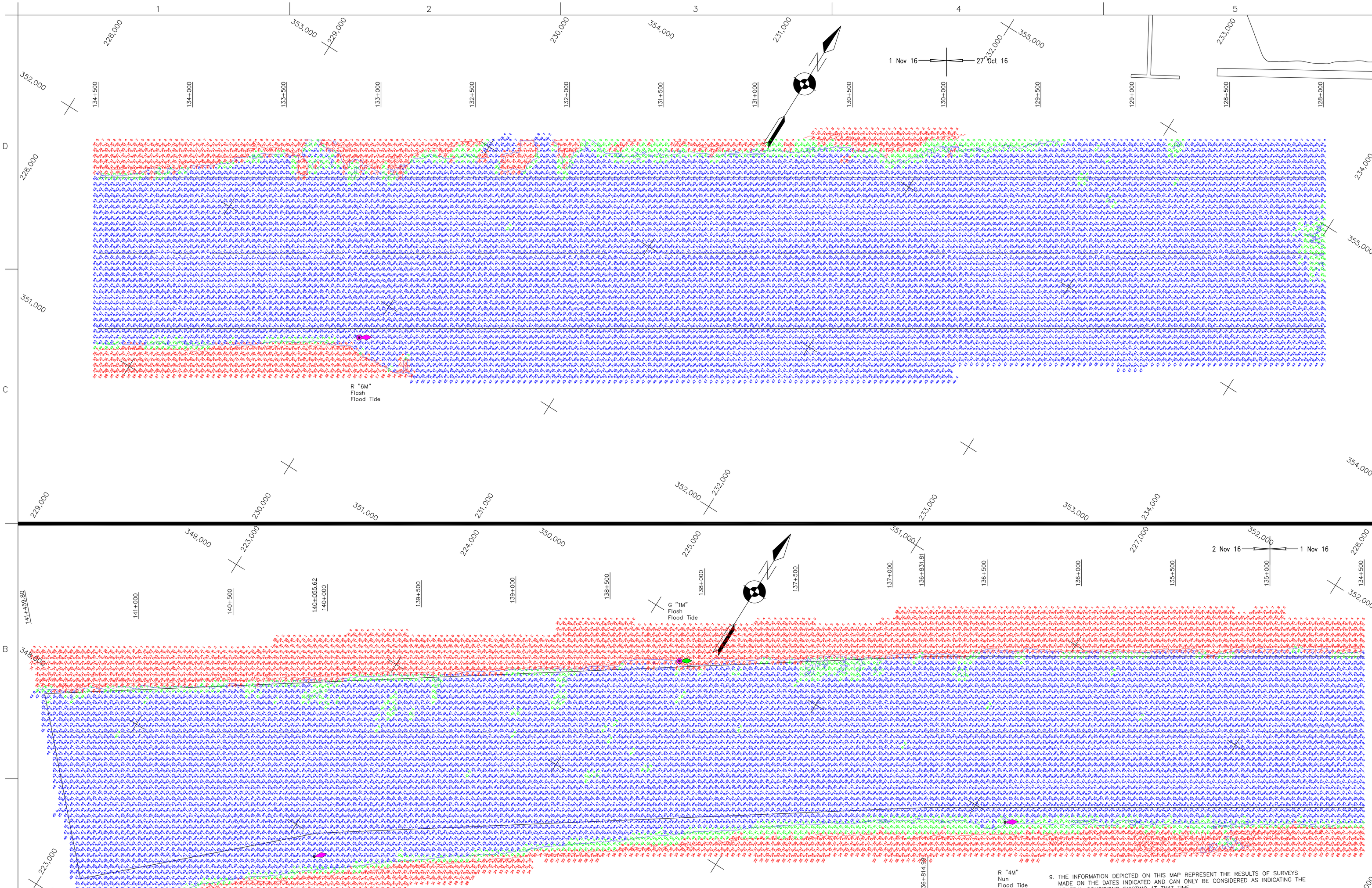
U.S. ARMY ENGINEER DISTRICT, PHILADELPHIA
CORPS OF ENGINEERS
PHILADELPHIA, PENNSYLVANIA

TRACED BY	PLOTTED BY	DRAWING NO.	
J.A.Groch	W.Miller	65835	
SURVEYED BY	DATE SURVEYED	APPROVED	
Chernetski	As Shown	CHIEF, SURVEY BRANCH	

DELAWARE RIVER
PHILADELPHIA TO THE SEA
MARCUS HOOK RANGE
STA.115+620.01 TO STA.128+000
EXAMINATION

Sheet reference number:

Sheet 1 of 2



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Scale in Feet
200 0 200 400 600

US Army Corps of Engineers
Philadelphia District

Mark	Description	Date	Appr.

Mark	Description	Date	Appr.

U.S. ARMY ENGINEER DISTRICT, PHILADELPHIA
CORPS OF ENGINEERS
PHILADELPHIA, PENNSYLVANIA

TRACED BY J.A.Groch	PLOTTED BY W.Miller	DRAWING NO. 65844	
SURVEYED BY Cherneski	DATE SURVEYED As Shown	APPROVED CHIEF, SURVEY BRANCH	

Designed by: | Dwn by: | Ckd by: | Date: | Rev.
Reviewed by: | Drawing code: | IFB DACW61–
Submitted by: Chief, Arch. Branch | File name: Plot date: 7 Dec 16 Plot scale: 1in to 200 ft

DELAWARE RIVER
PHILADELPHIA TO THE SEA
MARCUS HOOK RANGE
STA.128+000 TO SAT.141+459.80
EXAMINATION

Sheet reference number:

Sheet 2 of 2