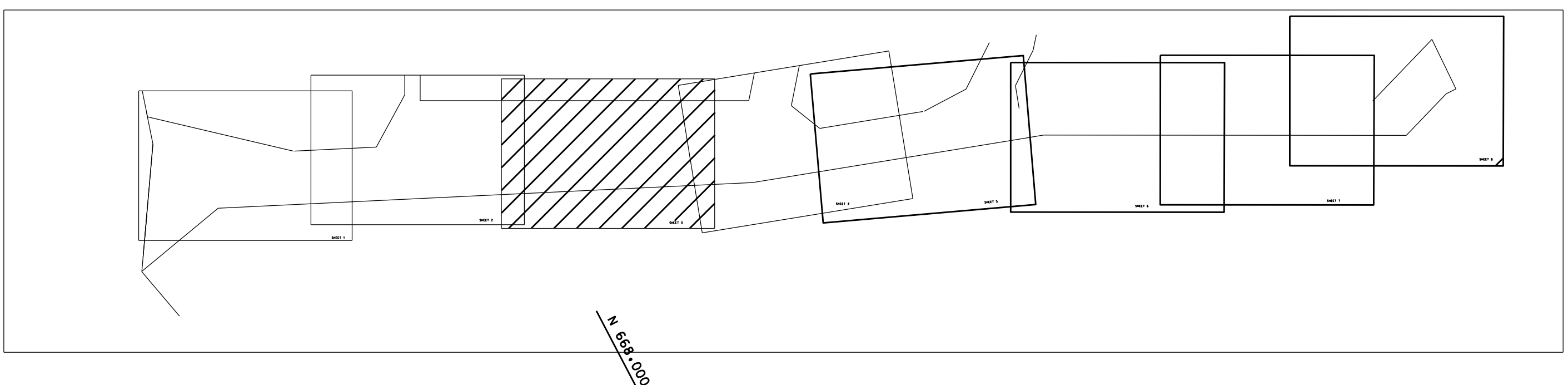


PROJECT SPECIFIC NOTES:

- THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS THE GENERAL CONDITIONS EXISTING AT THAT TIME.
- THE SOUNDINGS ON THIS MAP MEET EMB 1110-2-1003 ACCURACY STANDARDS.
- COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983, NEW JERSEY MERCATOR - ZONE 2900, US SURVEY FEET.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
- MEAN LOWER LOW WATER IS 2.9-3.0 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.51).
- SOUNDINGS DEPICTED ON THIS MAP ARE BASED ON A 3' x 3' MEDIAN CELL, SORTED TO A 30' INTERVAL.
- CONTOURS ON THIS MAP WERE GENERATED USING THE 3 x 3 DATA SET.
- THE DATA DEPICTED ON THIS MAP SHOULD NOT BE USED FOR VOLUME CALCULATION PURPOSES.
- AERIAL IMAGERY PROVIDED BY NADIN 2015 AND IS FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "NAVOD NETWORK".
- THIS MAP IS CEPP COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EMB 1110-2-6056.

NSRS CONTROL DATA	
BENCHMARK: P 38	PID: KV0333
ELEVATION: 21.93'	NAVD 1988
LOCAL CONTROL DATA	
BENCHMARK: NBAY 2	
ELEVATION: 7.42'	NAVD 1988



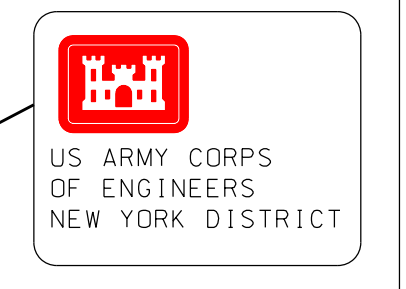
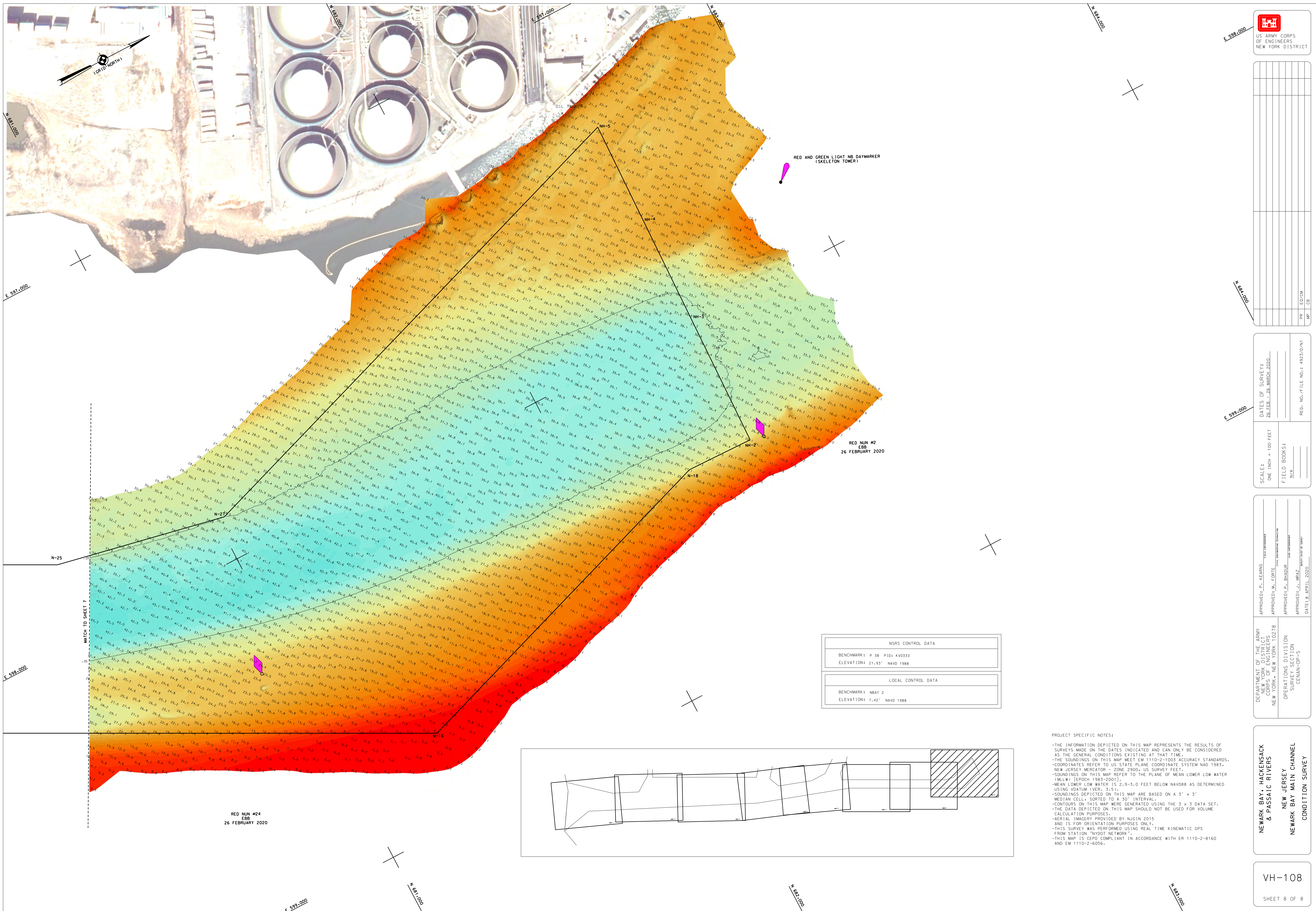
DATE OF SURVEY:	26 FEB - 28 MARCH 2020
SCALE:	ONE INCH = 100 FEET
FIELD BOOKS:	N/A
REG. NO./FILE NO.:	4923/D/INT
PR:	BP
ED/CM:	CB

APPROVED: P. KEARNS	DATE: 8 APRIL 2020
APPROVED: M. EBBE	
APPROVED: P. BIRDOR	
APPROVED: J. WRAZ	

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION
SHIPLETT-CC-ON
CENAN-OP-S

NEWARK BAY, HAVENSACK & PASSAIC RIVERS
NEW JERSEY
NEWARK BAY MAIN CHANNEL
CONDITION SURVEY



DATE OF SURVEY: 26 FEB - 28 MARCH 2020	RED. NO./FILE NO.: 4923/D/N1
SCALE: ONE INCH = 100 FEET	
FIELD BOOKS: N/A	

APPROVED: P. KEARNS SUPERVISOR	
APPROVED: M. EDGIE IN-CHARGE	
APPROVED: P. BIRDOR SUPERVISOR	
APPROVED: J. WRAZ IN-CHARGE	
DATE: 8 APRIL 2020	

NSRS CONTROL DATA	
BENCHMARK: P 38 P10: KVD333	
ELEVATION: 21.93' NAVD 1988	
LOCAL CONTROL DATA	
BENCHMARK: NBAY 2	
ELEVATION: 7.42' NAVD 1988	

- PROJECT SPECIFIC NOTES:
- THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS THE GENERAL CONDITIONS EXISTING AT THAT TIME.
 - THE SOUNDINGS ON THIS MAP MEET EM 1110-2-1003 ACCURACY STANDARDS.
 - COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983 - NEW JERSEY MERCATOR - ZONE 2900, US SURVEY FEET.
 - SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1985-2001].
 - MEAN LOWER LOW WATER IS 2.9-3.0 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 3.5).
 - SOUNDINGS DEPICTED ON THIS MAP ARE BASED ON A 3' x 3' MEDIAN CELL, SORTED TO A 30' INTERVAL.
 - CONTOURS ON THIS MAP WERE GENERATED USING THE 3 x 3 DATA SET.
 - THE DATA DEPICTED ON THIS MAP SHOULD NOT BE USED FOR VOLUME CALCULATION PURPOSES.
 - AERIAL IMAGERY PROVIDED BY NGIN 2015.
 - THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "NYDOT NETWORK".
 - THIS MAP IS CEPO COMPLIANT IN ACCORDANCE WITH ER 1110-2-8060 AND EM 1110-2-6056.

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION
SIGNALS SECTION
CENAN-OP-5

NEWARK BAY - HACKENSACK & PASSAIC RIVERS
NEW JERSEY
NEWARK BAY MAIN CHANNEL
CONDITION SURVEY

VH-108
SHEET 8 OF 8