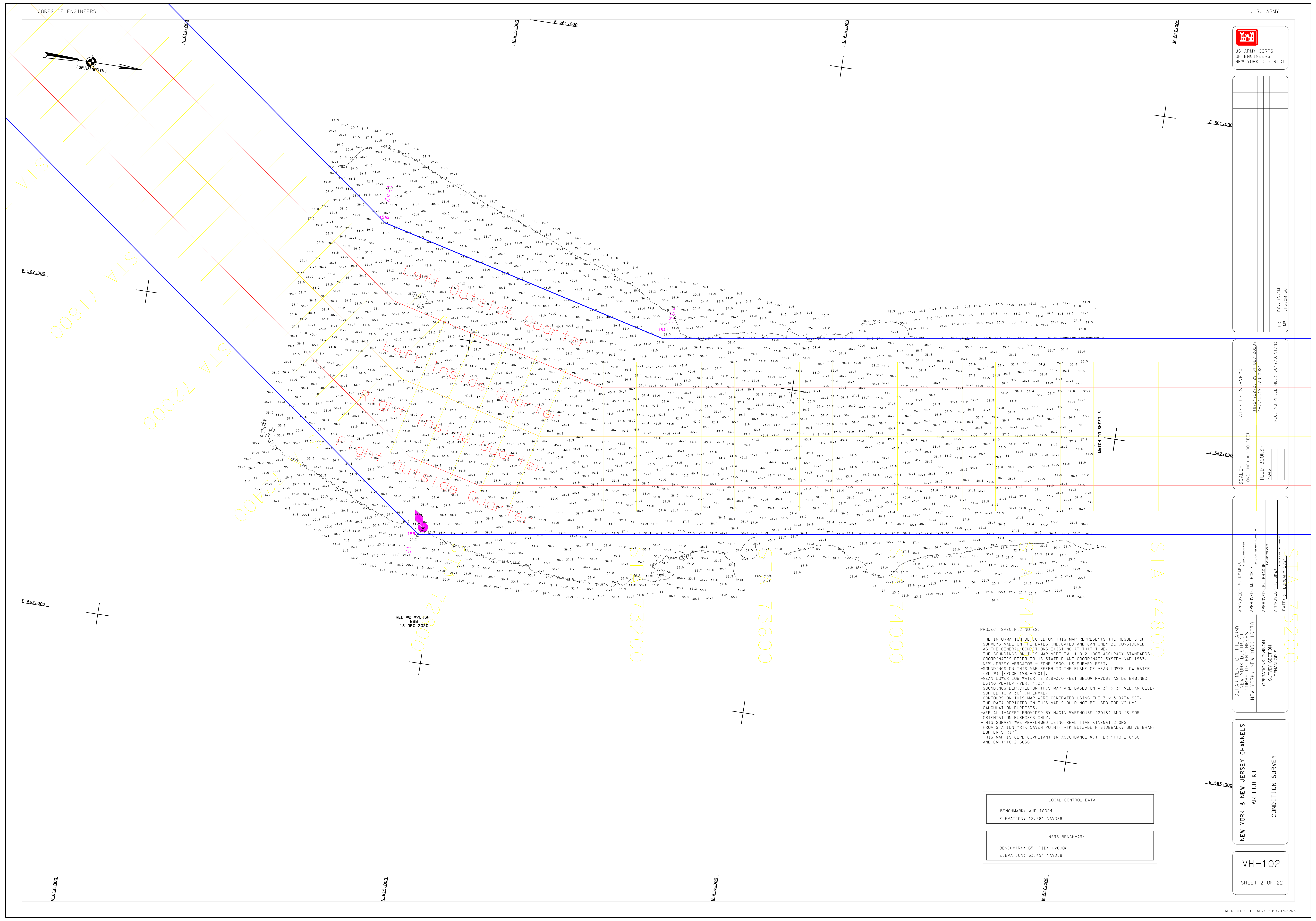


(GRID) NORTH



E 561.000

DATES OF SURVEY:	
18-24-22-28-29-31 DEC 2020	
4-7-15-19 JAN 2021	

SCALES:	
ONE INCH = 100 FEET	
FIELD BOOKS:	
1088	

REG. NO./FILE NO.:	
5017/D/NI/13	

APPROVED:	
P. KEARNS	
M. EDGIE	
J. AMBIZ	
DATE: 5 FEBRUARY 2021	

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS
NEW YORK & NEW JERSEY CHANNELS
ARTHUR KILL
CONDITION SURVEY
VH-102

OPERATIONS DIVISION
SECTION ON
CEANN-CPDS

NEW YORK & NEW JERSEY CHANNELS
ARTHUR KILL
CONDITION SURVEY
VH-102

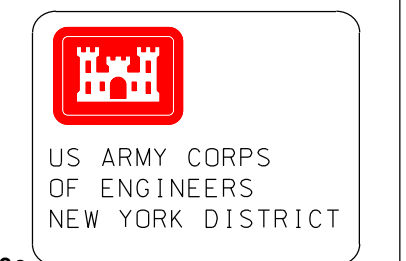
SHEET 2 OF 22

- 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) [EPCH 1983-2001];
 - MEAN LOWER LOW WATER IS 2.9-3.0 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 4.0.1.1);
 - SOUNDINGS 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 NUGIN WAREHOUSE (2018) AND IS FOR ORIENTATION PURPOSES ONLY;
 - THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION RTK CAVEN POINT, RTK ELIZABETH SIDEWALK - BM VETERAN, BUFFER STRIP";
 - THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-B160 AND EM 1110-2-6056.

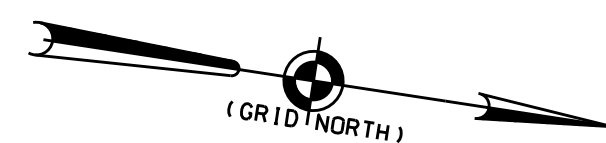
LOCAL CONTROL DATA	
BENCHMARK: AJD 10024	ELEVATION: 12.98' NAVD88
NSRS BENCHMARK	
BENCHMARK: BS (PID: KV0006)	ELEVATION: 63.49' NAVD88

RED #2 W/LIGHT
EBB
18 DEC 2020

E 563.000



E 560.000



Reach L 35ft.

GREEN #5 W/LIGHT
EBB
18 DEC 2020

PORT COCONY REACH

E 561.000

N 620.000

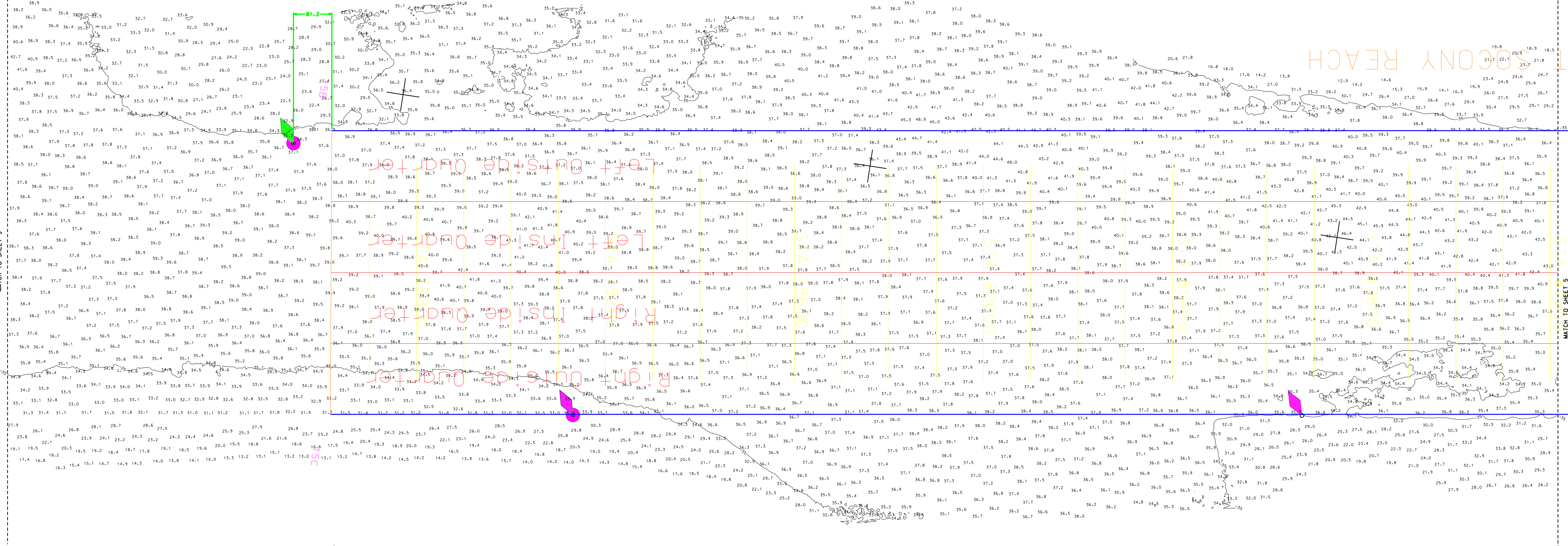
E 562.000

DATES OF SURVEY:
18-21-22-23-24-25-26 DEC 2020
4-7-15-19 JAN 2021

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:
1046

REG. NO./FILE NO.: 8017/D/N1/NS



RED #6 W/LIGHT
EBB
18 DEC 2020

RED #8
EBB
18 DEC 2020

LOCAL CONTROL DATA	
BENCHMARK: AJD 10024	ELEVATION: 12.98' NAVD88
NSRS BENCHMARK	
BENCHMARK: BS (P10: KVD006)	ELEVATION: 63.49' NAVD88

APPROVED: P. KEARNS
APPROVED: M. ERIE
APPROVED: P. BISHOP
APPROVED: J. MAZ
DATE: 3 FEBRUARY 2021

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

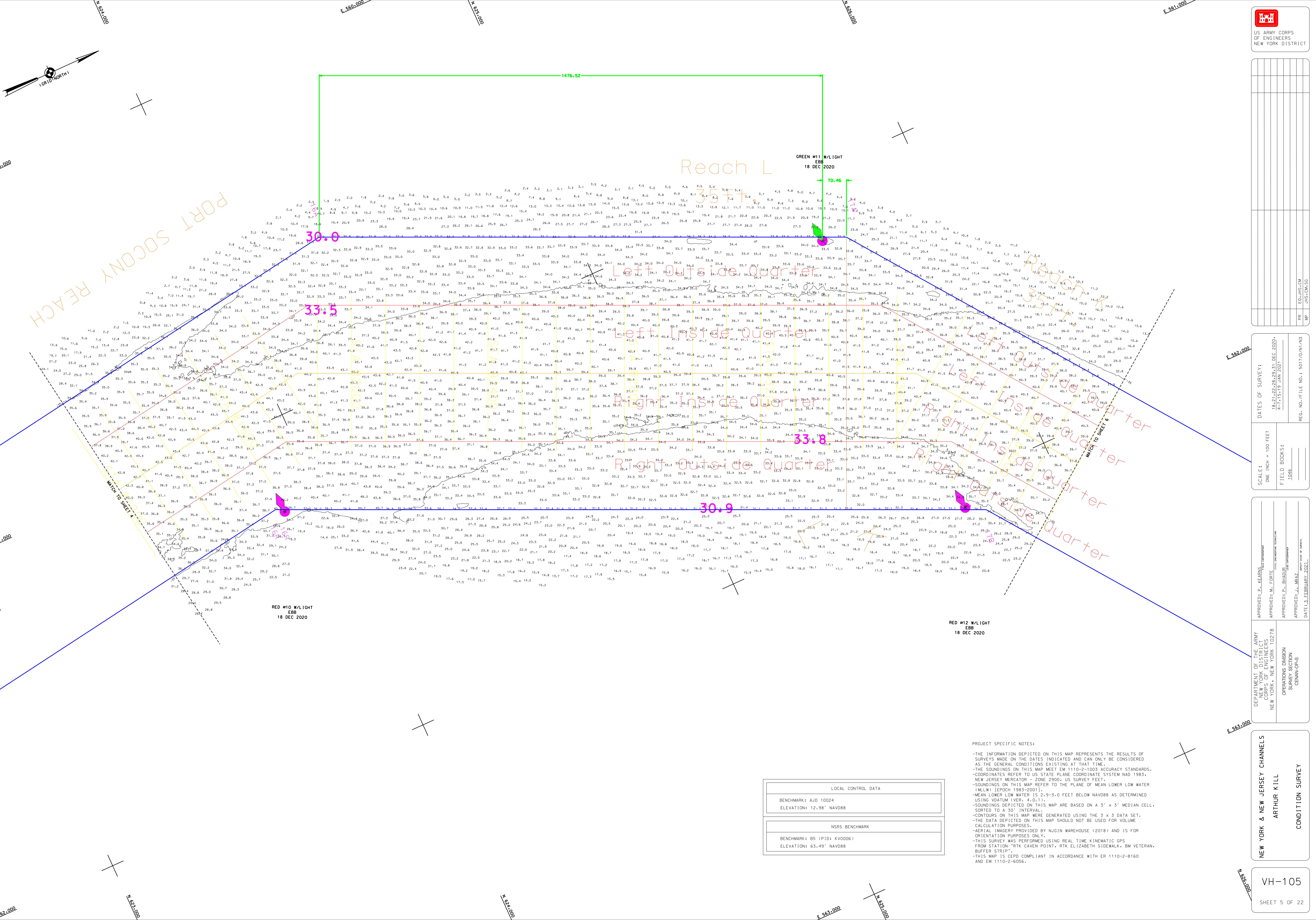
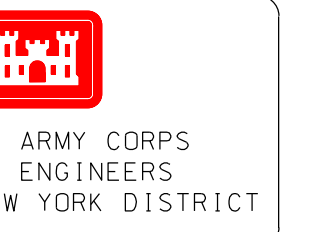
OPERATIONS DIVISION
SURVEYING SECTION
CENACORPS

NEW YORK & NEW JERSEY CHANNELS
ARTHUR KILL
CONDITION SURVEY

VH-104
SHEET 4 OF 22

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 1983-2001].
- MEAN LOWER LOW WATER IS 2.9-3.0 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 4.0.13).
- 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 NJGIS WAREHOUSE (2018) AND IS FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION RTK CAVEN POINT, RTK ELIZABETH SIDEWALK, BM VETERAN, BUFFER STRIP.
- THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.



NO.	DESCRIPTION	DATE	BY
1	ISSUED FOR CONSTRUCTION	18 DEC 2020	EDJ/MS/CM
2	REVISION	4 FEB 2021	JPS/MS/CO

REG. NO. FILE NO.: 5017/D/N/1/3

SCALES:
ONE INCH = 100 FEET
FIELD BOOKS:
1086

APPROVED: P. J. ...
APPROVED: M. ...
APPROVED: P. ...
DATE: 3 FEBRUARY 2021

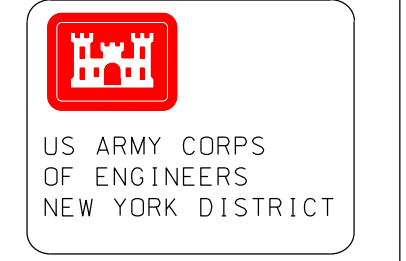
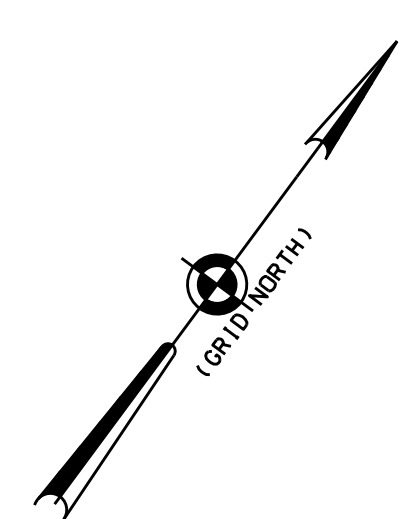
DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS
NEW YORK DISTRICT
OPERATIONS DIVISION
NEW YORK DISTRICT
NEW YORK DISTRICT

NEW YORK & NEW JERSEY CHANNELS
ARTHUR KILL
CONDITION SURVEY

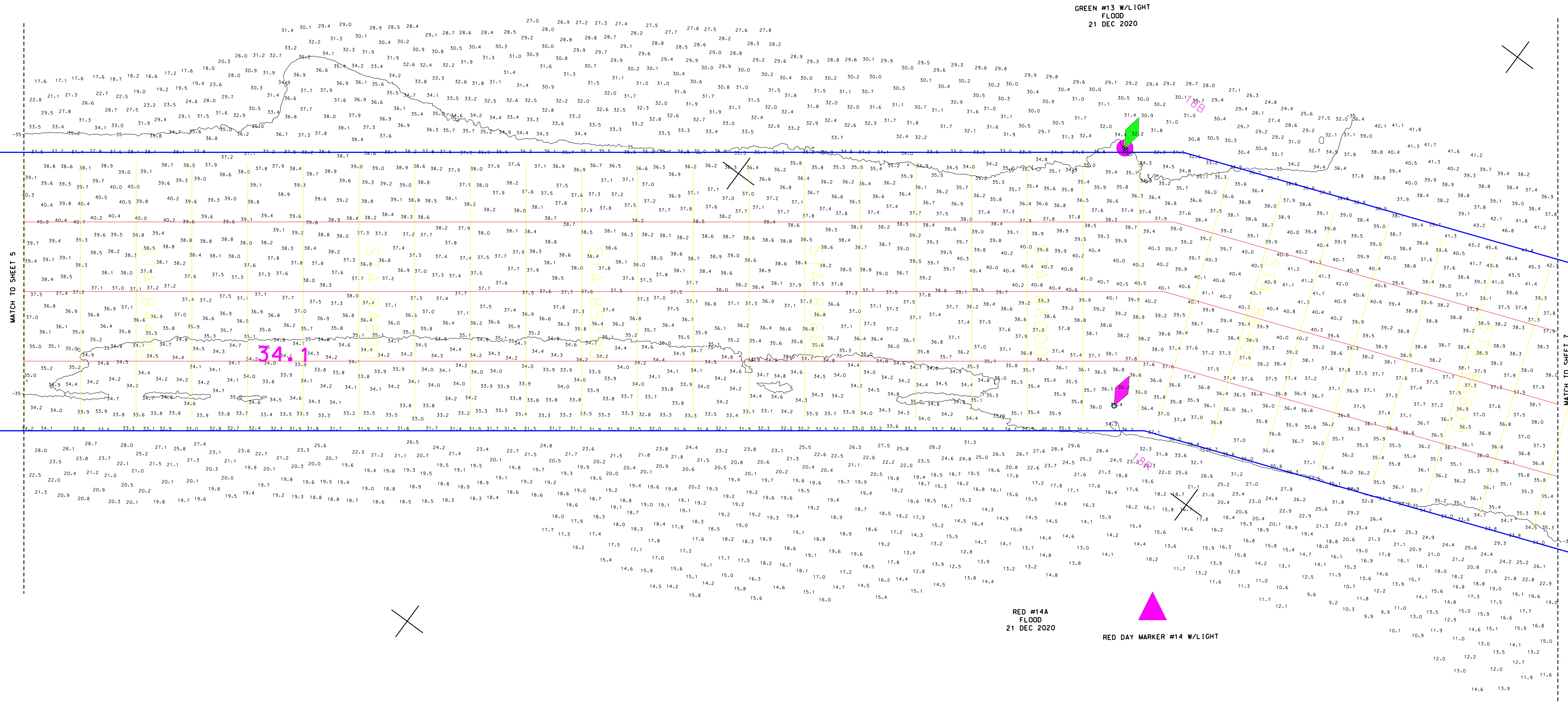
VH-105
SHEET 5 OF 22

LOCAL CONTROL DATA	
BENCHMARK: A1J 10024	ELEVATION: 12.98' NAVD88
NSRS BENCHMARK	
BENCHMARK: B5 (PID: KVD006)	ELEVATION: 631.49' NAVD88

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 1983-2001].
-MEAN LOWER LOW WATER IS 2.9-3.0 FEET BELOW NAVD88 AS DETERMINED USING DATUM EVER 4-0-11.
-SOUNDINGS ON THIS MAP WERE GENERATED USING THE 3' x 3' MEDIAN CELL, SORTED TO A 30' INTERVAL.
-THE DATA DEPICTED ON THIS MAP SHOULD NOT BE USED FOR VOLUME CALCULATION PURPOSES.
-AERIAL IMAGERY PROVIDED BY NUCIN WAREHOUSE (2018) AND IS FOR ORIENTATION PURPOSES ONLY.
-THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "RTK CAVERN POINT" RTK ELIZABETH SIDEWALK - BM VETERAN, BUFFER STRIP".
-THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-B160 AND EM 1110-2-6056.



Reach K
35ft.



REG. NO./FILE NO.: 5017/D/NI/NS

DATE	18-21-22-28-29-31 DEC 2020
TIME	4-7-15-19 JAN 2021
BY	ESJ, JHS, CM
CHK	JHS, CM, SGC

REG. NO./FILE NO.: 5017/D/NI/NS

DATE	18-21-22-28-29-31 DEC 2020
TIME	4-7-15-19 JAN 2021
BY	ESJ, JHS, CM
CHK	JHS, CM, SGC

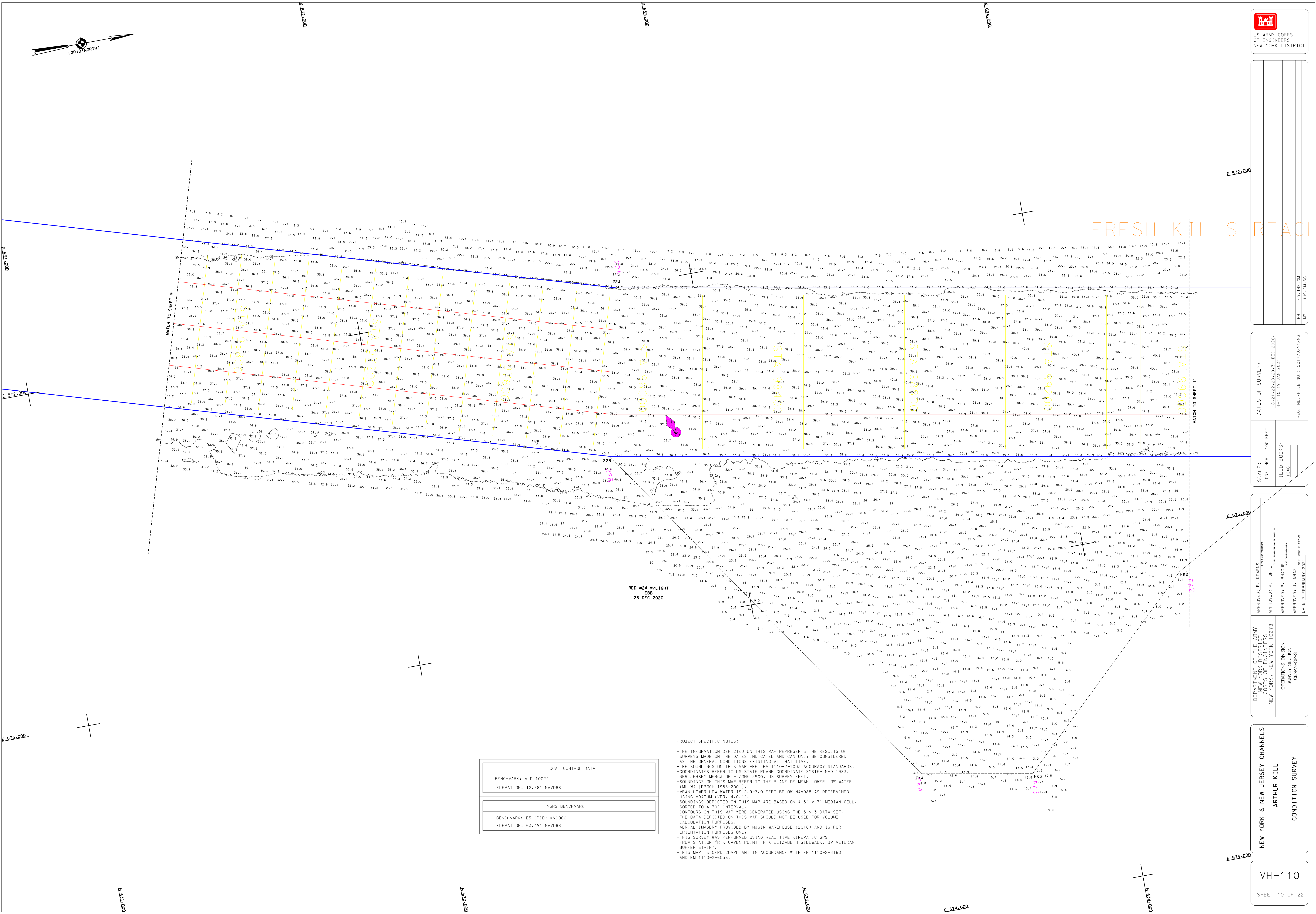
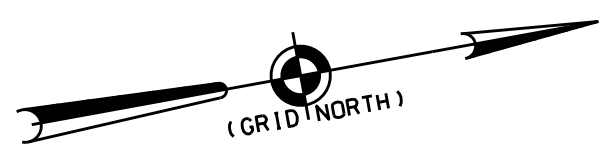
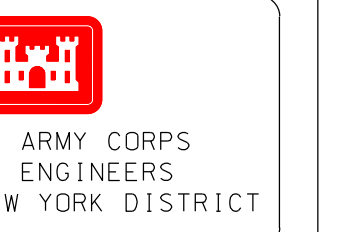
APPROVED: P. KEARNS
APPROVED: M. FORBIE
APPROVED: P. BROADBENT
APPROVED: J. MERRITT
DATE: 3 FEBRUARY 2021

DEPARTMENT OF THE ARMY CORPS OF ENGINEERS NEW YORK, NEW YORK 10278
OPERATIONS DIVISION SURVEY SECTION CENNA-005
NEW YORK & NEW JERSEY CHANNELS ARTHUR KILL CONDITION SURVEY

VH-106
SHEET 6 OF 22

LOCAL CONTROL DATA	
BENCHMARK: AJD 10024	ELEVATION: 12.98' NAVD88
NSRS BENCHMARK	
BENCHMARK: BS (PID: KVD006)	ELEVATION: 63.49' NAVD88

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 1983-2001].
-MEAN LOWER LOW WATER IS 2.9-3.0 FEET BELOW NAVD88 AS DETERMINED USING WATUM EVER: 4.0-1.1.
-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 WAREHOUSE (2018) AND IS FOR ORIENTATION PURPOSES ONLY.
-THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION RTK ELIZABETH SIDEWALK, BM VETERAN, BUFFER STRIP.
-THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.



E 572.000

E 572.000

E 573.000

E 573.000

E 574.000

MATCH TO SHEET 9

MATCH TO SHEET 11

RED #24 W/LIGHT
EBB
28 DEC 2020

LOCAL CONTROL DATA	
BENCHMARK: AJD 10024	ELEVATION: 12.98' NAVD88
NSRS BENCHMARK	
BENCHMARK: BS (PID: KV006)	ELEVATION: 63.49' NAVD88

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. 4.0.1).
- SOUNDINGS DEPICTED ON THIS MAP ARE BASED ON A 3' x 3' METER 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 NJGIN WAREHOUSE (2018) AND IS FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "RTK CAVEN POINT, RTK ELIZABETH SIDEWALK, BM VETERAN, BUFFER STRIP".
- THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

DATES OF SURVEY:	
18.24.2020/29.31 DEC 2020	4.7.15.19 JAN 2021

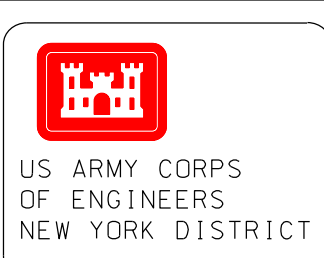
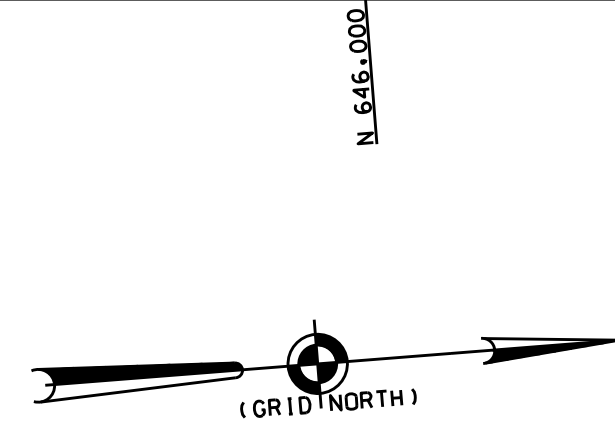
SCALE:	
ONE INCH = 100 FEET	FIELD BOOKS: 1046

APPROVED:	
P. KEARNS	DATE: 3 FEBRUARY 2021
M. EHRLE	
J. BRADY	
J. BRADY	

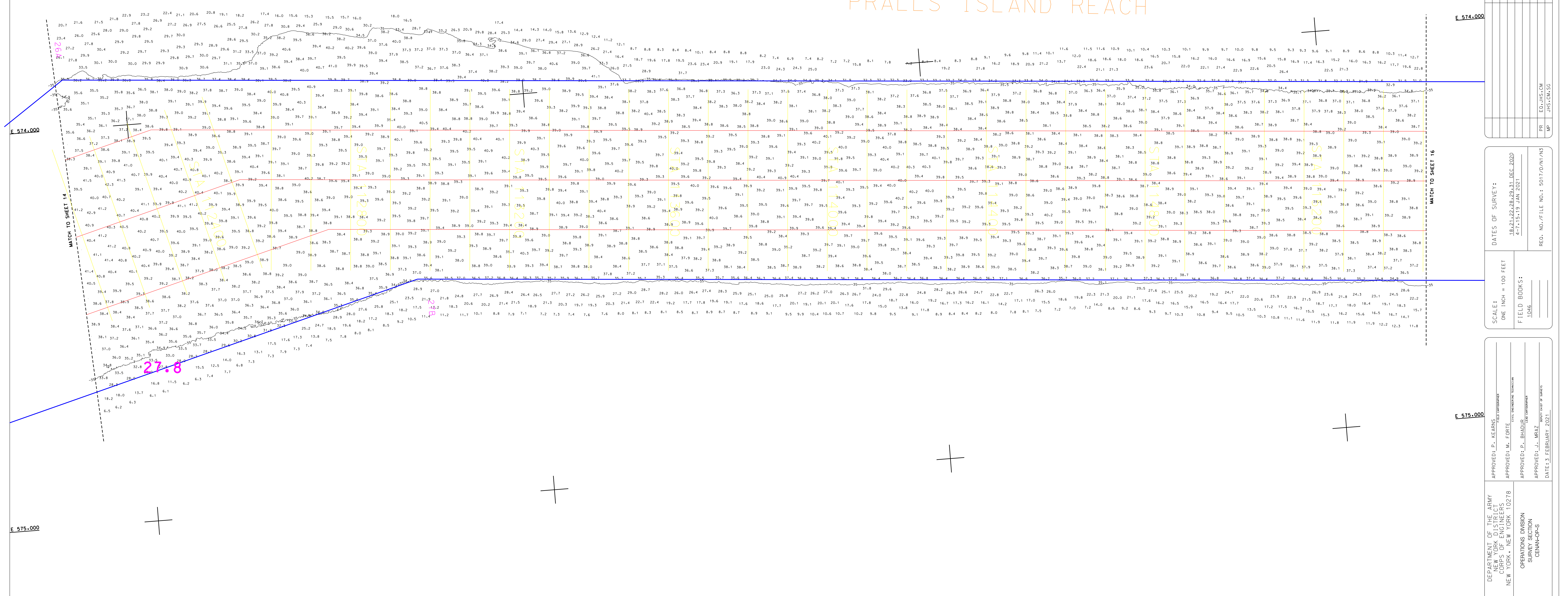
DEPARTMENT OF THE ARMY CORPS OF ENGINEERS NEW YORK & NEW JERSEY CHANNELS	
OPERATIONS DIVISION SOUTH OCEAN NEW YORK	CONDITION SURVEY

NEW YORK & NEW JERSEY CHANNELS	
ARTHUR KILL	
CONDITION SURVEY	

VH-110
SHEET 10 OF 22



PRALLS ISLAND REACH



LOCAL CONTROL DATA

BENCHMARK: A3D 10024
ELEVATION: 12.98' NAVD88

NSRS BENCHMARK

BENCHMARK: B5 (PID: KV006)
ELEVATION: 63.49' NAVD88

OPERATIONS DIVISION
SURVEY SECTION
CORPS OF ENGINEERS

APPROVED: P. KEARNS
DATE: 5, FEBRUARY 2021

APPROVED: M. FRIE
DATE: 14, JAN 2021

APPROVED: J. MRAZ
DATE: 3, FEBRUARY 2021

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
NEW YORK, NEW YORK 10278

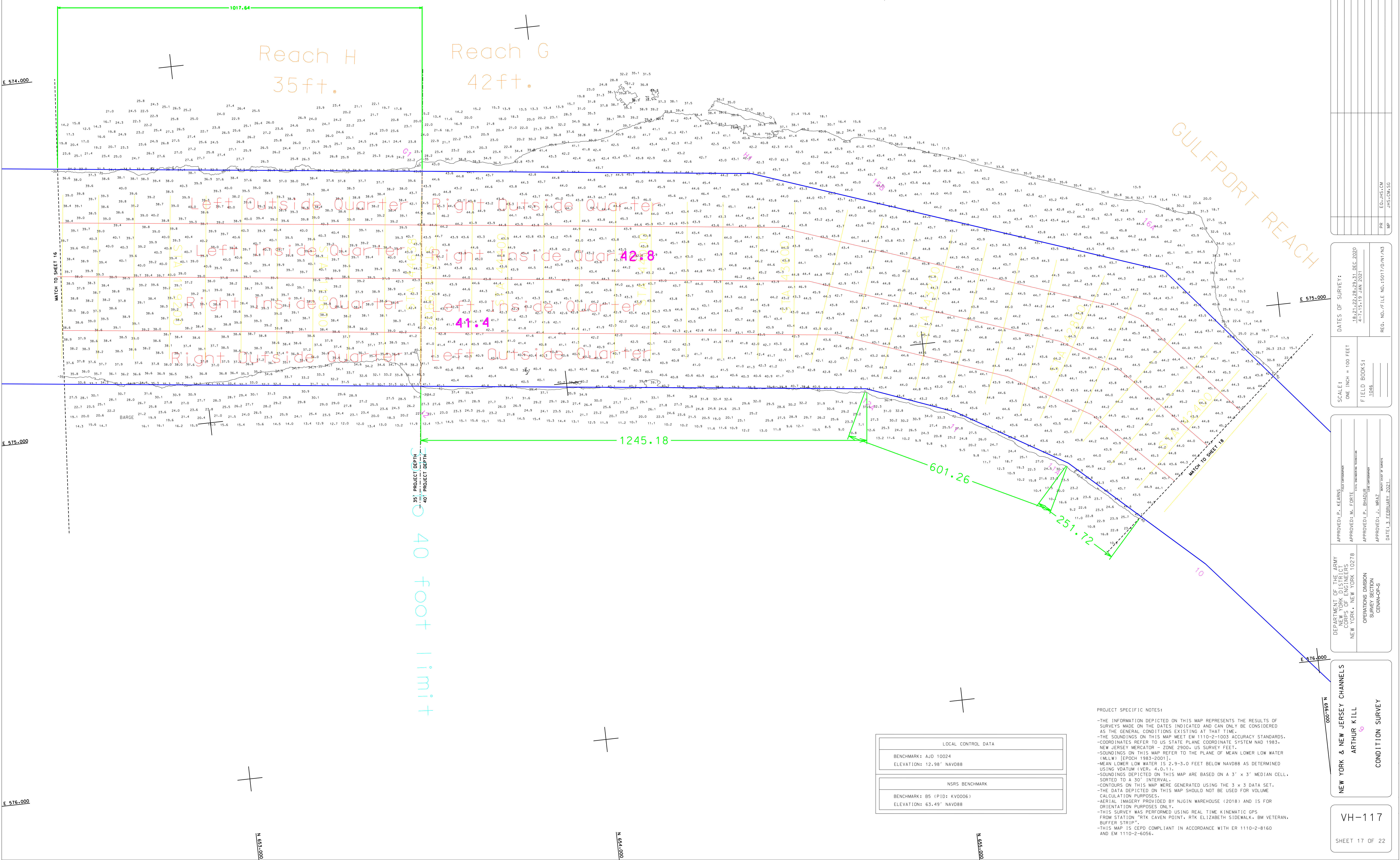
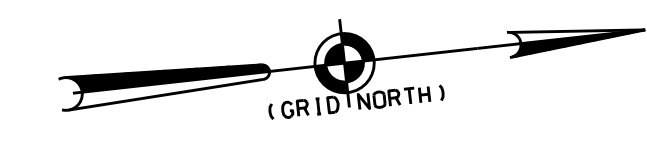
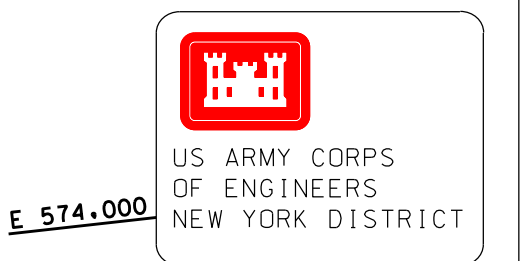
OPERATIONS DIVISION
SURVEY SECTION
CORPS OF ENGINEERS

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 2000 - 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: 4.0.1).
- 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 NJGIN WAREHOUSE (2018) AND IS FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "RTK CAVEN POINT, RTK ELIZABETH SIDEWALK, BM VETERAN, BUFFER STRIP".
- THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

NEW YORK & NEW JERSEY CHANNELS
ARTHUR KILL
CONDITION SURVEY

VH-115
SHEET 15 OF 22



LOCAL CONTROL DATA	
BENCHMARK: AJD 10024	ELEVATION: 12.99' NAVD88
NSRS BENCHMARK	
BENCHMARK: B5 (PID: KV006)	ELEVATION: 63.49' NAVD88

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) (PERIOD 1983-2001).
- MEAN LOWER LOW WATER IS 2-9-3.0 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 4.0.11).
- 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 NGJIN WAREHOUSE (2018) AND IS FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION: RTK CAVEN POINT, RTK ELIZABETH SIDEWALK, BM VETERAN, BUFFER STRIP.
- THIS MAP IS CEPP COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

DATES OF SURVEY:	
18-21-22-28-29-31 DEC 2020	4-7-15-19 JAN 2021

SCALES:	
ONE INCH = 100 FEET	FIELD BOUNDS: 1:846

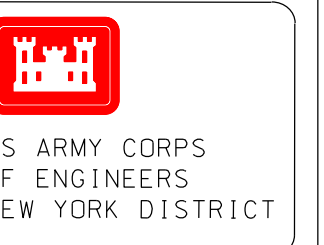
APPROVED:	
P. KEARNS	18 FEBRUARY 2021
M. EDITE	18 FEBRUARY 2021
P. BRIDGES	18 FEBRUARY 2021
J. WRAZ	18 FEBRUARY 2021

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

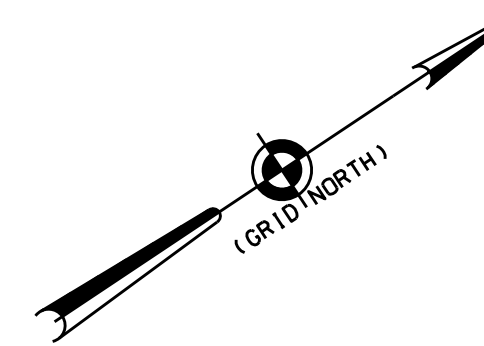
OPERATIONS DIVISION
SOUTH ATLANTIC DISTRICT
CENNAPOCS

NEW YORK & NEW JERSEY CHANNELS
ARTHUR KILL
CONDITION SURVEY

VH-117
SHEET 17 OF 22



US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT



GULFPORT REACH

Reach G
42ft.

Reach F
50ft.

STA 42400

47.1

49.6

223.66

615.62

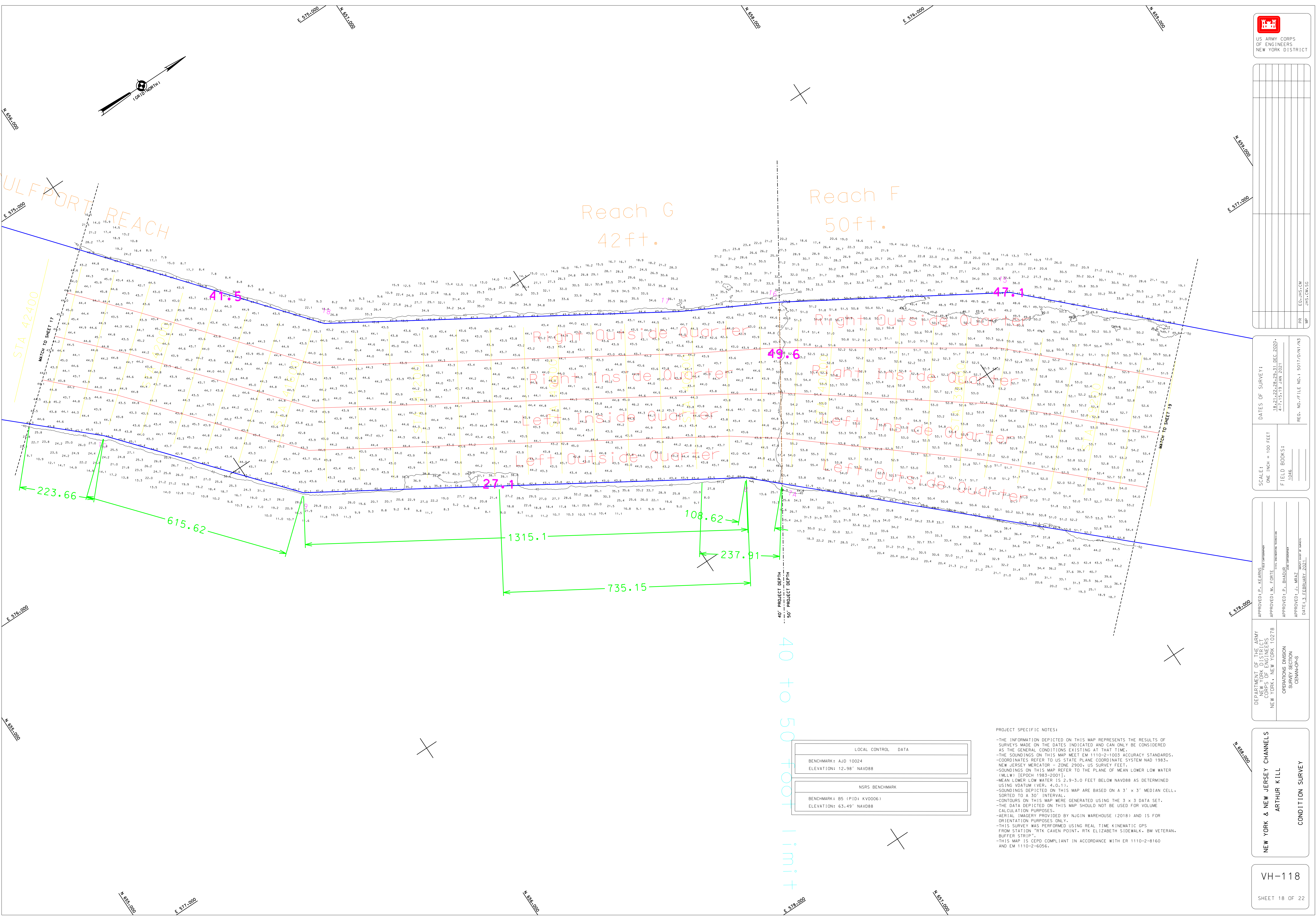
1315.1

108.62

237.91

735.15

40 to 50 FOOT LIMIT



LOCAL CONTROL DATA	
BENCHMARK: AJD 10024	ELEVATION: 12.98 NAVD88
NSRS BENCHMARK	
BENCHMARK: BS (PID: KVO006)	ELEVATION: 63.49 NAVD88

- 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 2000, 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. 4.0.1).
 - 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.
 - DATA DEPICTED ON THIS MAP SHOULD NOT BE USED FOR VOLUME CALCULATION PURPOSES.
 - AERIAL IMAGERY PROVIDED BY NJGIM WAREHOUSE (2018) AND IS FOR ORIENTATION PURPOSES ONLY.
 - THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "RTK CAVEN POINT, RTK ELIZABETH SIDEWALK, BM VETERAN, BUFFER STRIP".
 - THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

DATES OF SURVEY:
18.02.2019, 26.03.21, REC-2020-
4.14.15.19 JAN 2021

SCALE:
ONE INCH = 100 FEET

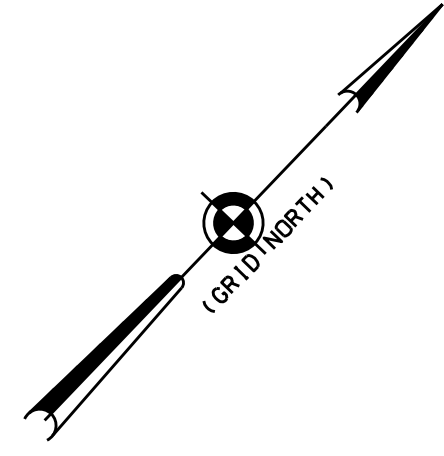
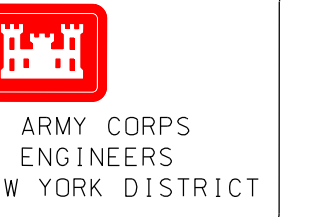
FIELD BOOKS:
LOGS

APPROVED: P. KEENE
APPROVED: M. FORTE
APPROVED: J. MAZ
DATE: 11 FEBRUARY 2021

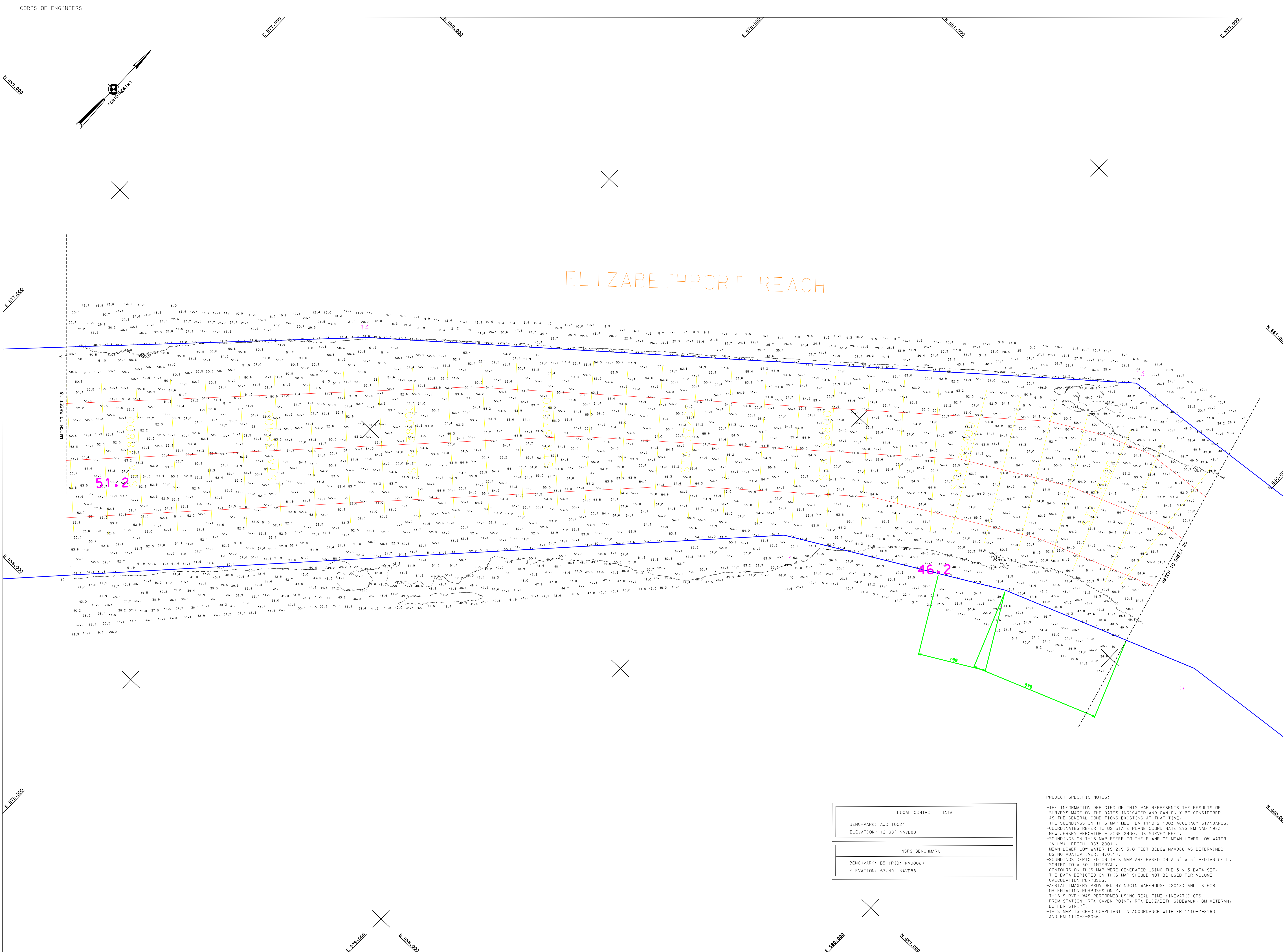
DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
NEW YORK - NEW YORK 10278
OPERATIONS DIVISION
SURVEY SECTION
CENR-OPS

NEW YORK & NEW JERSEY CHANNELS
ARTHUR KILL
CONDITION SURVEY

VH-118
SHEET 18 OF 22



ELIZABETHPORT REACH



LOCAL CONTROL DATA
BENCHMARK: A/JD 10024
ELEVATION: 12.98' NAVD88
NSRS BENCHMARK
BENCHMARK: B5 (PID: K0006)
ELEVATION: 63.49' NAVD88

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) [EPDCH 1983-2001].
- MEAN LOWER LOW WATER IS 2.9-3.0 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 4.0.1.1).
- 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 NUGIN WAREHOUSE (2018) AND IS FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "RTK CAVEN POINT", RTK ELIZABETH SIDEWALK, BM VETERAN, BUFFER STRIP".
- THIS MAP IS CECP COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

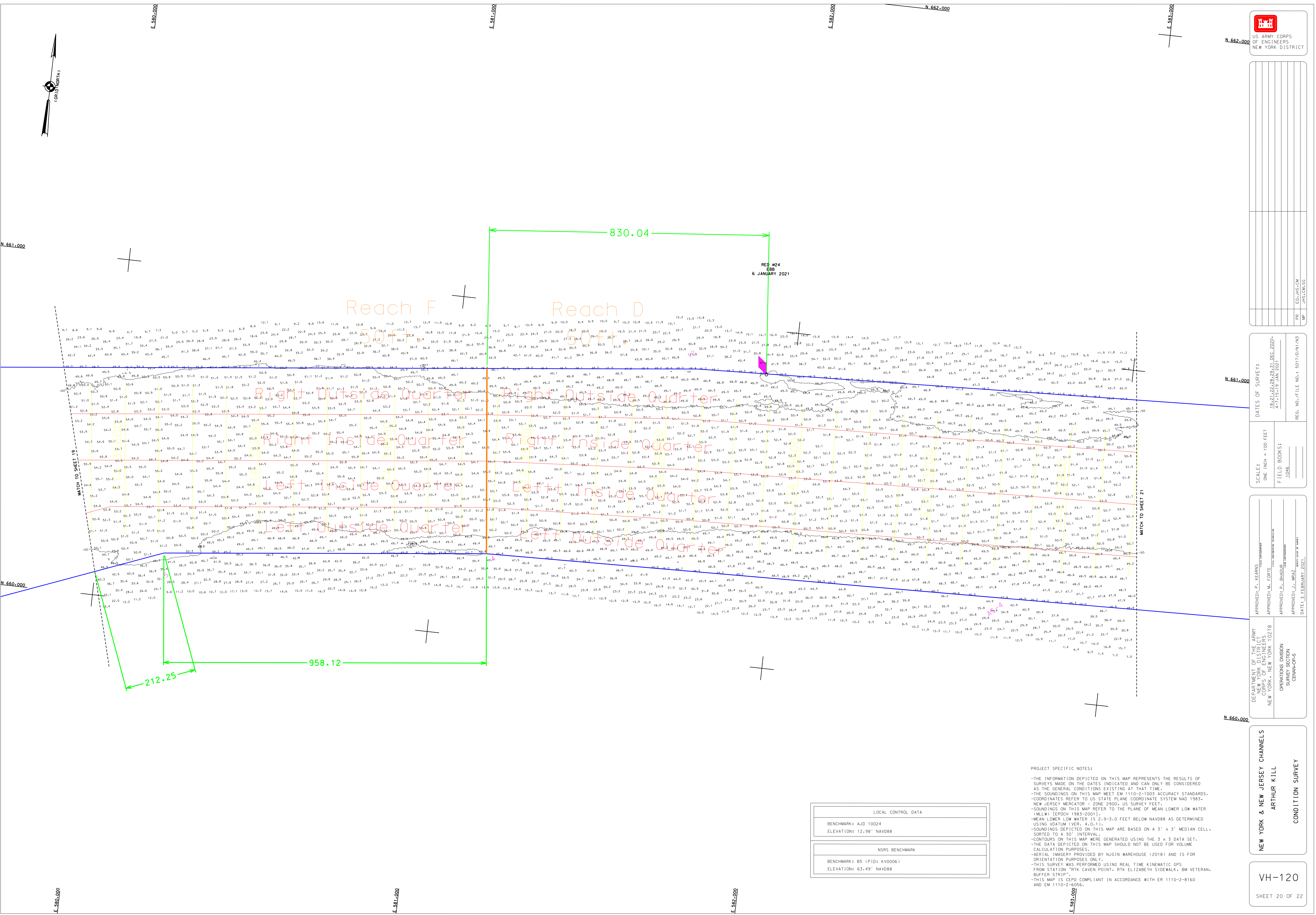
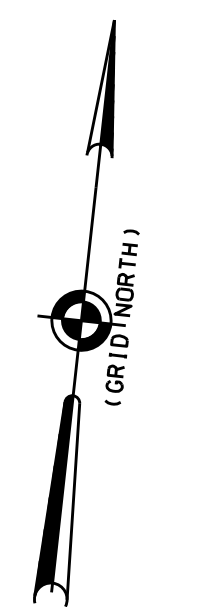
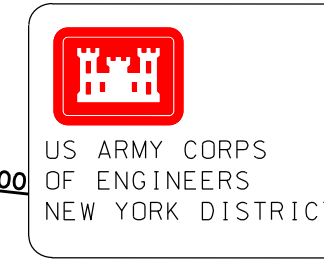
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DATES OF SURVEY:	18-21-22-28-29-31 DEC 2020- 4-7-15-19 JAN 2021
SCALE:	ONE INCH = 100 FEET
FIELD BOOKS:	LOG66
EL:JMS:DR JMS:CAF:66	

DATES OF SURVEY:	18-21-22-28-29-31 DEC 2020- 4-7-15-19 JAN 2021
SCALE:	ONE INCH = 100 FEET
FIELD BOOKS:	LOG66

APPROVED: P. - KEARNS
APPROVED: M. - EDIE
APPROVED: P. - BRADSHAW
APPROVED: J. - MELZ
DATE: 3 FEBRUARY 2021

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS
OPERATIONS DIVISION
SURVEY SECTION
CENAH-OP-S

NEW YORK & NEW JERSEY CHANNELS
ARTHUR KILL
CONDITION SURVEY



830.04

RED #24
6 JANUARY 2021

Reach F

Reach D

Right Outside Quarter

Right Inside Quarter

Right Outside Quarter

Right Inside Quarter

Left Outside Quarter

Left Inside Quarter

Left Outside Quarter

Left Inside Quarter

Left Outside Quarter

Left Inside Quarter

Left Outside Quarter

Left Inside Quarter

Left Outside Quarter

Left Inside Quarter

Left Outside Quarter

Left Inside Quarter

212.25

958.12

LOCAL CONTROL DATA	
BENCHMARK:	AJD 10024
ELEVATION:	12.98' NAVD88
NSRS BENCHMARK	
BENCHMARK:	BS (PID: KVD006)
ELEVATION:	63.49' NAVD88

PROJECT SPECIFIC NOTES:

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- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPCH 1983-2001].
- MEAN LOWER LOW WATER IS 2-9-3.0 FEET BELOW NAVD88 AS DETERMINED USING VDATUM (VER. 4.0-11).
- SOUNDINGS DEPICTED ON THIS MAP ARE BASED ON A 3' X 3' MEDIAN CELL, SORTED TO A 30' INTERVAL.
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- THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

DATES OF SURVEY:	
18-21-22-28-29-31 DEC 2020	4-7-15-19 JAN 2021

SCALE:	
ONE INCH = 100 FEET	F. FIELD BOOKS: 1048

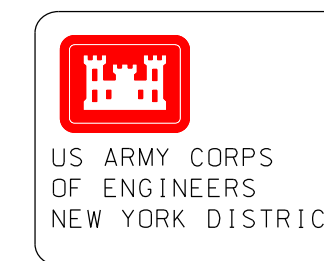
APPROVED:	
P. KEARNS	P. BHADUR

DEPARTMENT OF THE ARMY	
CORPS OF ENGINEERS	OPERATIONS DIVISION
NEW YORK - NEW YORK 10218	SURVEY SECTION
CENNA-OPS	ARTHUR KILL
DATE: 3 FEBRUARY 2021	CONDITION SURVEY

APPROVED:	
P. KEARNS	P. BHADUR

APPROVED:	
P. KEARNS	P. BHADUR

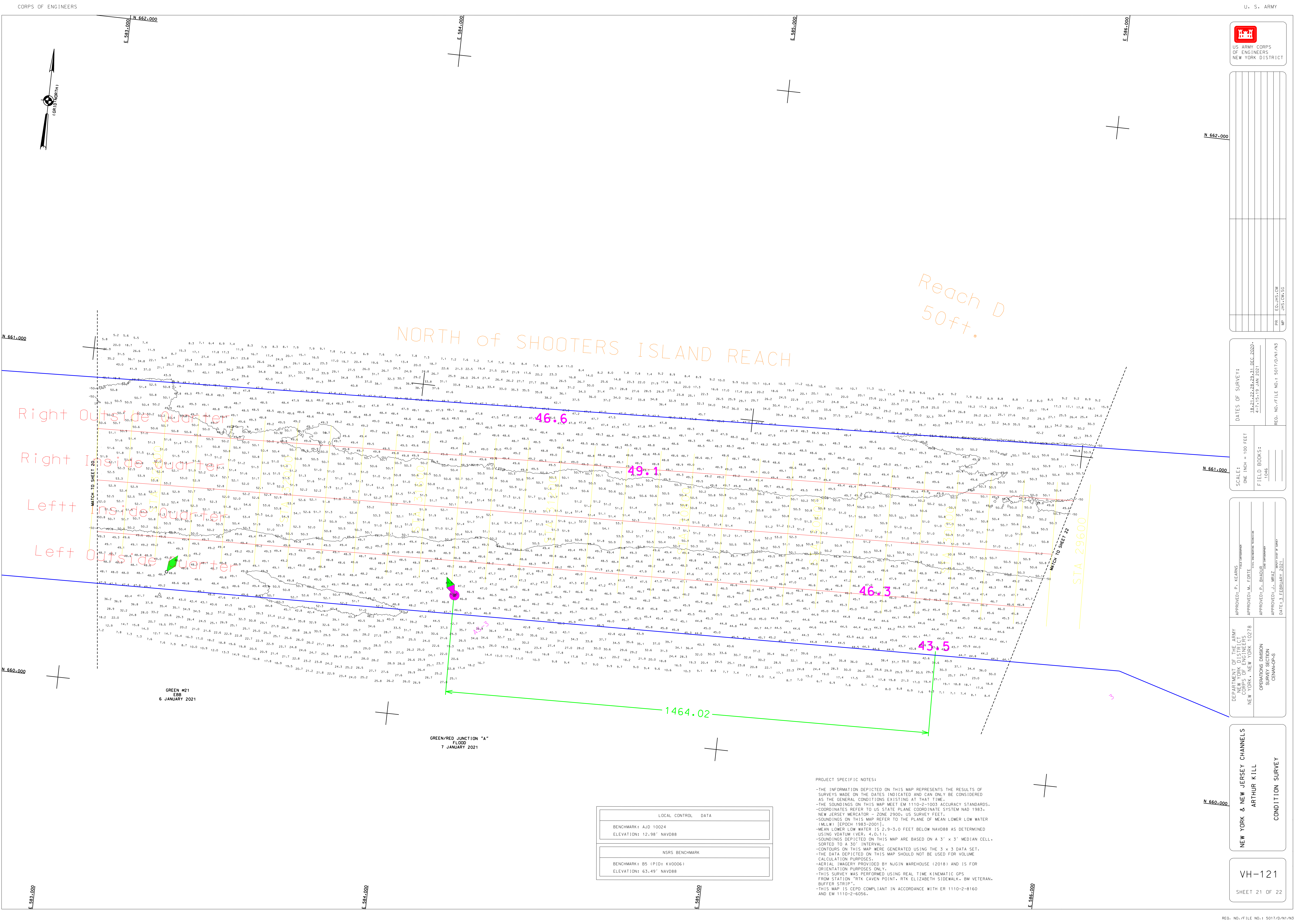
VH-120
SHEET 20 OF 22



DATE OF SURVEY:	18-24-22-28-29-31 DEC 2020-4-7-15-19 JAN 2021
SCALE:	ONE INCH = 100 FEET
FIELD BOOKS:	1046
REG. NO./FILE NO.:	5017/D/NI/NS
PREP:	EDJ/JHG/CM
APP:	JHG/CM/SD

NORTH OF SHOOTERS ISLAND REACH

Reach D
50ft.



LOCAL CONTROL DATA	
BENCHMARK:	AJD 10024
ELEVATION:	12.98' NAVD88
NSRS BENCHMARK	
BENCHMARK:	B5 (PID: KY0061)
ELEVATION:	63.49' NAVD88

PROJECT SPECIFIC NOTES:

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- THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-9160 AND EM 1110-2-6056.

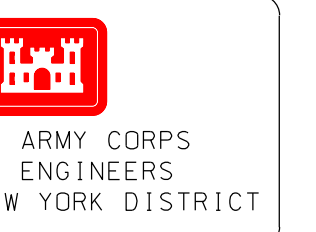
DATE OF SURVEY:	18-24-22-28-29-31 DEC 2020-4-7-15-19 JAN 2021
SCALE:	ONE INCH = 100 FEET
FIELD BOOKS:	1046
REG. NO./FILE NO.:	5017/D/NI/NS
PREP:	EDJ/JHG/CM
APP:	JHG/CM/SD

APPROVED:	P. KEARNS
APPROVED:	M. EDLIE
APPROVED:	P. BRIDGES
APPROVED:	J. WRZ
DATE:	3 FEBRUARY 2021

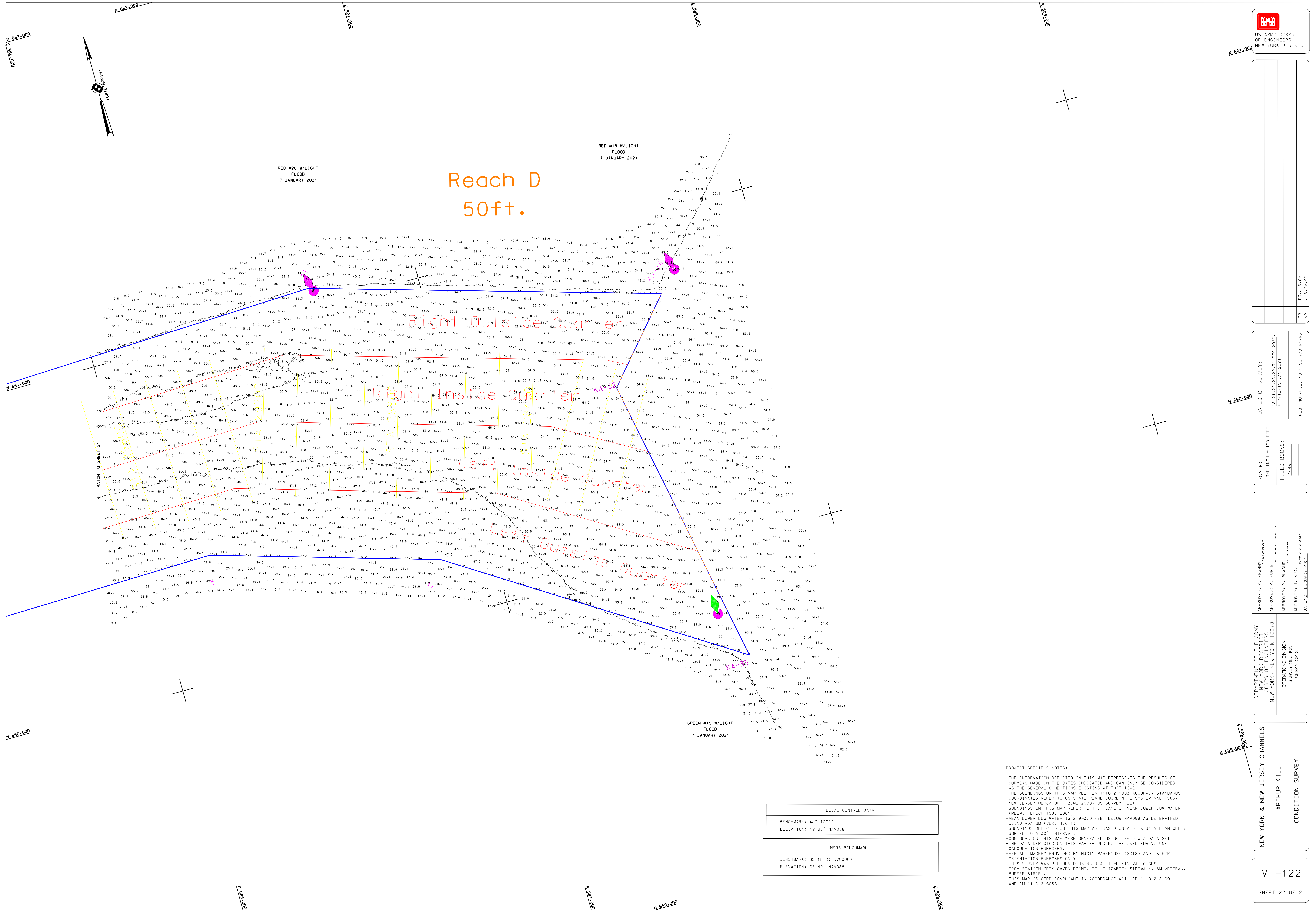
DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS
NEW YORK - NEW YORK 10278

OPERATIONS DIVISION
SURVEY SECTION
CENNAPOCS

NEW YORK & NEW JERSEY CHANNELS
ARTHUR KILL
CONDITION SURVEY



Reach D 50ft.



DATE OF SURVEY:			
18-21-22-28-29-31 DEC 2020- 4-7-15-19 JAN 2021			
SCALE:			
ONE INCH = 100 FEET			
FIELD BOOKS:			
1006			
ED. INS. / D.M.	REG. NO. / FILE NO. : 5017/D/NI/V3		
JRS/CHS/D			

APPROVED: P. SEARNS	APPROVED: M. EDRIE	APPROVED: P. BROAD	APPROVED: J. MARZ
(Signature)	(Signature)	(Signature)	(Signature)
DATE: 3 FEBRUARY 2021	DATE: 3 FEBRUARY 2021	DATE: 3 FEBRUARY 2021	DATE: 3 FEBRUARY 2021

DEPARTMENT OF THE ARMY	OPERATIONS DIVISION
CORPS OF ENGINEERS	SURVEY SECTION
NEW YORK, NEW YORK 10278	CEMANNOPS

NEW YORK & NEW JERSEY CHANNELS
ARTHUR KILL
CONDITION SURVEY

LOCAL CONTROL DATA
BENCHMARK: AJD 10024
ELEVATION: 12.98' NAVD88
NSRS BENCHMARK
BENCHMARK: B5 (PID: KV0006)
ELEVATION: 63.49' NAVD88

PROJECT SPECIFIC NOTES:

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