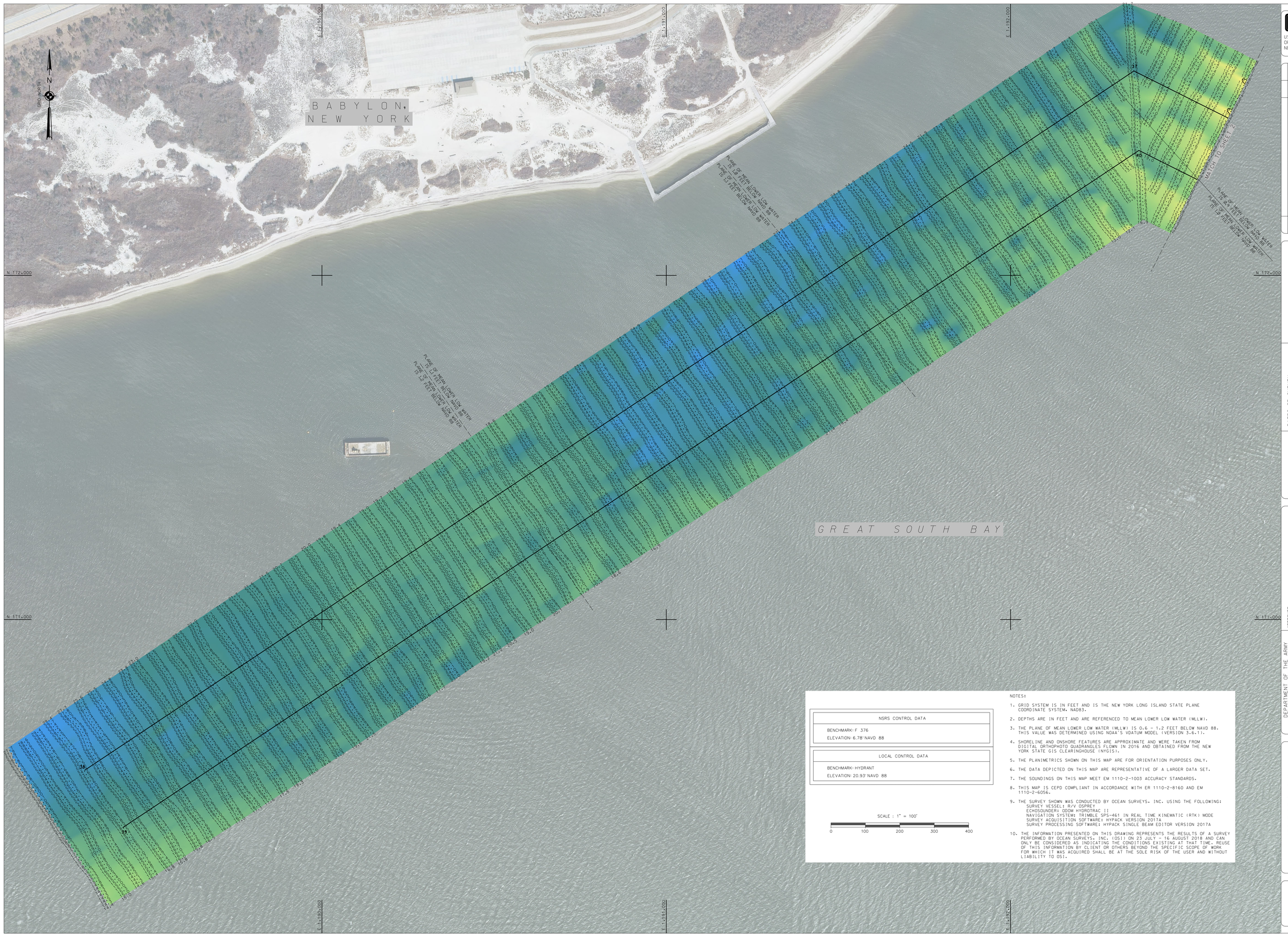

NSRS CONTROL DATA

BENCHMARK: F 376
ELEVATION: 6.78' NAVD 88

LOCAL CONTROL DATA

BENCHMARK: HYDRANT
ELEVATION: 20.93' NAVD 88

SCALE : 1" = 100'

0 100 200 300 400

NOTES:

1. GRID SYSTEM IS IN FEET AND IS THE NEW YORK LONG ISLAND STATE PLANE COORDINATE SYSTEM, NAD83.
2. DEPTHS ARE IN FEET AND ARE REFERENCED TO MEAN LOWER LOW WATER (MLLW).
3. THE PLANE OF MEAN LOWER LOW WATER (MLLW) IS 0.6 - 1.2 FEET BELOW NAVD 88. THIS VALUE WAS DETERMINED USING NOAA'S VDATUM MODEL (VERSION 3.6.1).
4. SHORELINE AND ONSHORE FEATURES ARE APPROXIMATE AND WERE TAKEN FROM DIGITAL ORTHOPHOTO QUADRANGLES FLOWN IN 2016 AND OBTAINED FROM THE NEW YORK STATE GIS CLEARINGHOUSE (NYGIS).
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7. THE SOUNDINGS ON THIS MAP MEET EM 1110-2-1003 ACCURACY STANDARDS.
8. THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.
9. THE SURVEY SHOWN WAS CONDUCTED BY OCEAN SURVEYS, INC. USING THE FOLLOWING:
   SURVEY VESSEL: R/V OSPREY
   ECHOSOUNDER: ODOM HYDROTRAC II
   NAVIGATION SYSTEM: TRIMBLE SPS-461 IN REAL TIME KINEMATIC (RTK) MODE
   SURVEY ACQUISITION SOFTWARE: HYPACK VERSION 2017A
   SURVEY PROCESSING SOFTWARE: HYPACK SINGLE BEAM EDITOR VERSION 2017A
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US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

OCEAN SURVEYS, INC.
A DIVISION OF OSI
OLD SAYBROOK, CONNECTICUT
www.oceansurveys.com

DATES OF SURVEY:
23 JULY - 16 AUGUST 2018

FILE NO.: 101
REQUEST NO.: 4724

SCALE:
1 INCH = 100 FEET

FIELD BOOKS:

APPROVED: _____ FIELD CARTOGRAPHER
APPROVED: R. SMITH, PROJECT MANAGER
APPROVED: D. CLARKE, QUALITY CONTROL CARTOGRAPHER
APPROVED: J. MRAZ, CHIEF OF SURVEY
DATE: 5 FEBRUARY 2019

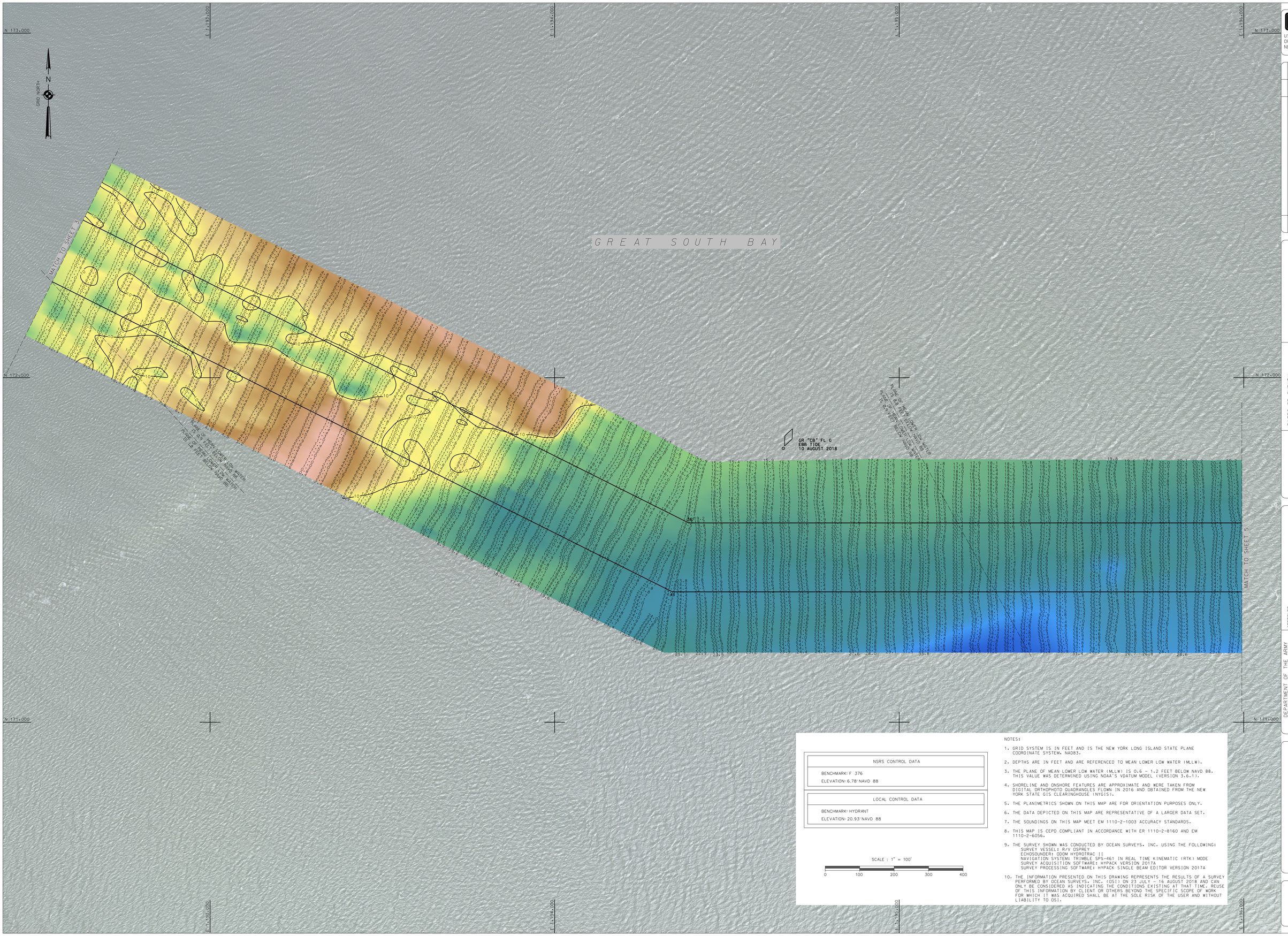
DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

GREAT SOUTH BAY
NEW YORK
CONDITION SURVEY

VH-103

SHEET 3 OF 26



NSRS CONTROL DATA
BENCHMARK: F 376
ELEVATION: 6.78' NAVD 88

LOCAL CONTROL DATA
BENCHMARK: HYDRANT
ELEVATION: 20.93' NAVD 88

SCALE : 1" = 100'

0 100 200 300 400

NOTES:

1. GRID SYSTEM IS IN FEET AND IS THE NEW YORK LONG ISLAND STATE PLANE COORDINATE SYSTEM, NAD83.
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US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

OCEAN SURVEYS, INC.
A DIVISION OF OSI
OLD SAYBROOK, CONNECTICUT
www.oceansurveys.com

DATES OF SURVEY:
23 JULY - 16 AUGUST 2018

FILE NO.: 101
REQUEST NO.: 4724

SCALE:
1 INCH = 100 FEET

FIELD BOOKS:

APPROVED: FIELD OPERATIONS — R. SMITH, PROJECT MANAGER
APPROVED: D. CLARKE, CHIEF, SURVEY SECTION
APPROVED: J.A. MIRAZ, CHIEF, HEAVY EQUIP. & SURVEY
DATE: 5 FEBRUARY 2019

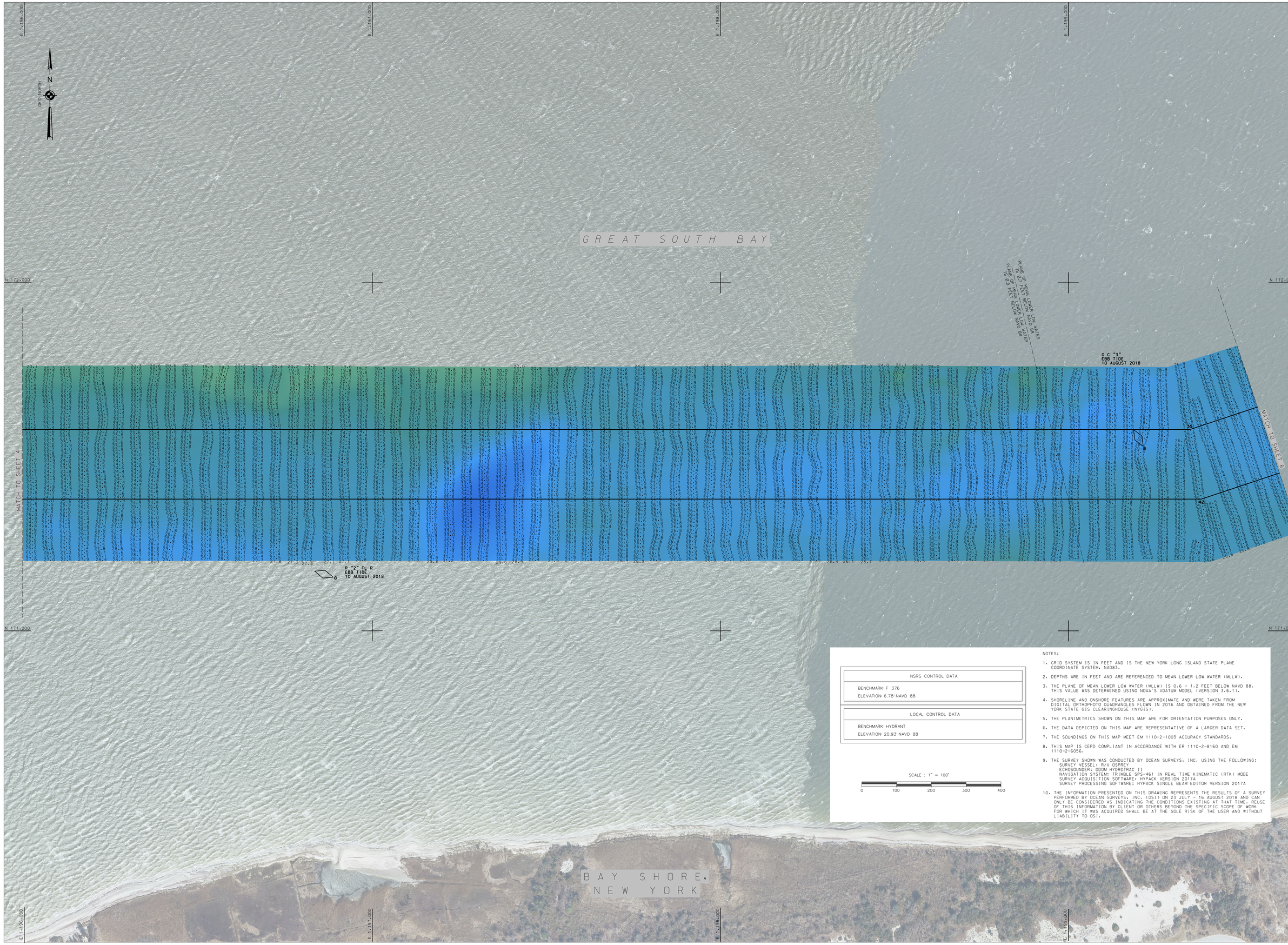
DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

GREAT SOUTH BAY
NEW YORK
CONDITION SURVEY

VH-104

SHEET 4 OF 26



NSRS CONTROL DATA
BENCHMARK: F 376
ELEVATION: 6.78' NAVD 88

LOCAL CONTROL DATA
BENCHMARK: HYDRANT
ELEVATION: 20.93' NAVD 88

SCALE : 1" = 100'

0 100 200 300 400

NOTES:

1. GRID SYSTEM IS IN FEET AND IS THE NEW YORK LONG ISLAND STATE PLANE COORDINATE SYSTEM, NAD83.
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   ECHOSOUNDER: ODOM HYDROTRAC II
   NAVIGATION SYSTEM: TRIMBLE SPS-461 IN REAL TIME KINEMATIC (RTK) MODE
   SURVEY ACQUISITION SOFTWARE: HYPACK VERSION 2017A
   SURVEY PROCESSING SOFTWARE: HYPACK SINGLE BEAM EDITOR VERSION 2017A
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US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

OCEAN SURVEYS, INC.
1726 MILL ROCK ROAD EAST
OLD SAYBROOK, CONNECTICUT
(860) 388-4820

DATES OF SURVEY:
23 JULY - 16 AUGUST 2018

FILE NO.: 101
REQUEST NO.: 4724

SCALE:
1 INCH = 100 FEET

FIELD BOOKS:

APPROVED: FIELD CARTOGRAPHER
APPROVED: R. SMITH PROJECT MANAGER
APPROVED: D. CLARKE LEAD CARTOGRAPHER
APPROVED: J. MRAZ DEPUTY CHIEF OF SURVEY
DATE: 5 FEBRUARY 2019

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

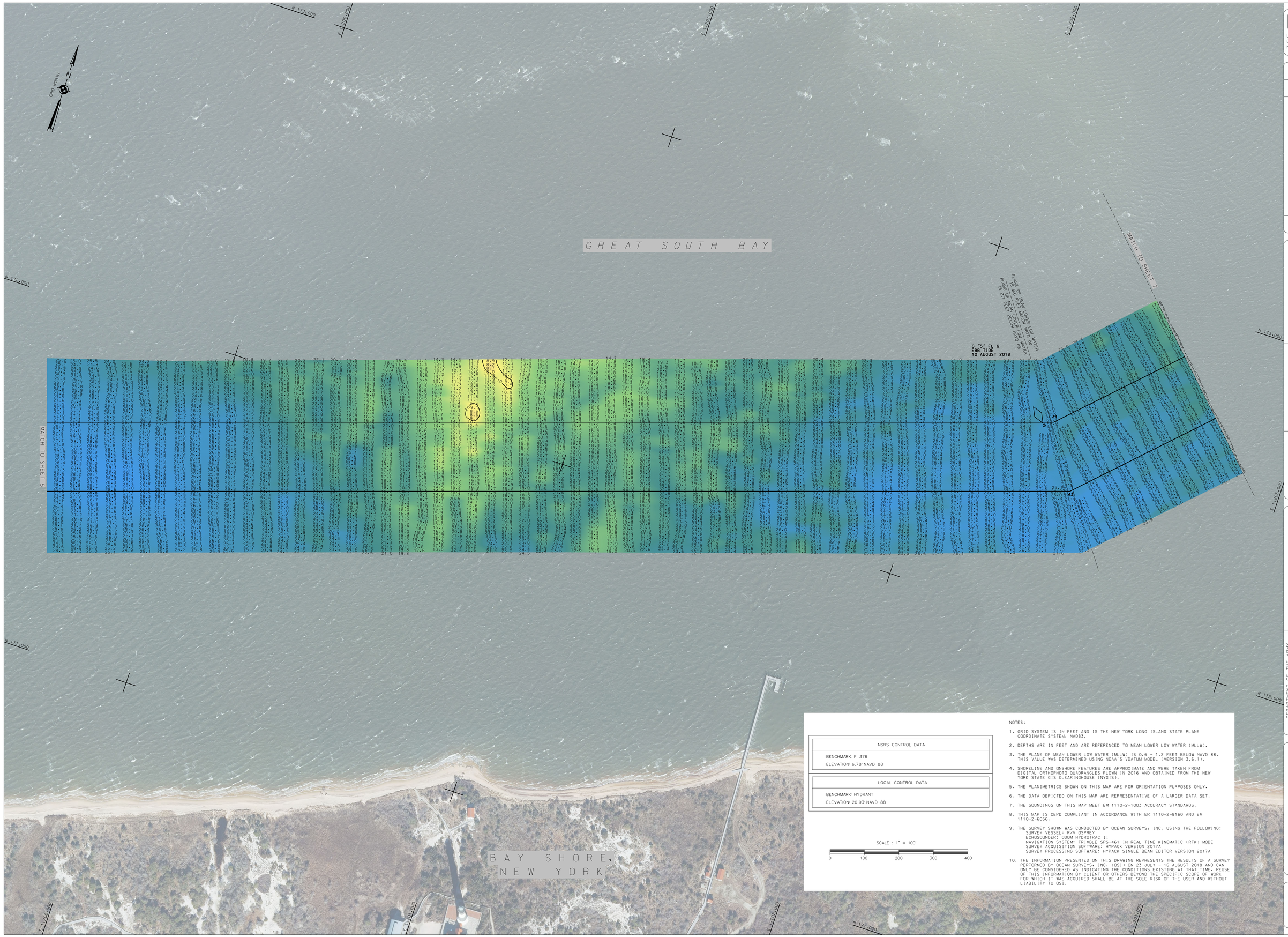
OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

GREAT SOUTH BAY
NEW YORK
CONDITION SURVEY

VH-105

SHEET 5 OF 26

FILE NO.: 101
REQ NO.: 4724



NSRS CONTROL DATA
BENCHMARK: F 376
ELEVATION: 6.78' NAVD 88

LOCAL CONTROL DATA
BENCHMARK: HYDRANT
ELEVATION: 20.93' NAVD 88

SCALE : 1" = 100'

0 100 200 300 400

NOTES:

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US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

OCEAN SURVEYS, INC.
A DIVISION OF OSI
OLD SAYBROOK, CONNECTICUT
www.oceansurveys.com

DATES OF SURVEY:
23 JULY - 16 AUGUST 2018

FILE NO.: 101
REQUEST NO.: 4724

SCALE:
1 INCH = 100 FEET

FIELD BOOKS:

APPROVED: _____ FIELD CHIEF/ENGINEER
APPROVED: R. SMITH PROJECT MANAGER
APPROVED: D. CLARKE CHIEF, SURVEY BRANCH
APPROVED: J. MRAZ CHIEF, SURVEY BRANCH
DATE: 5 FEBRUARY 2019

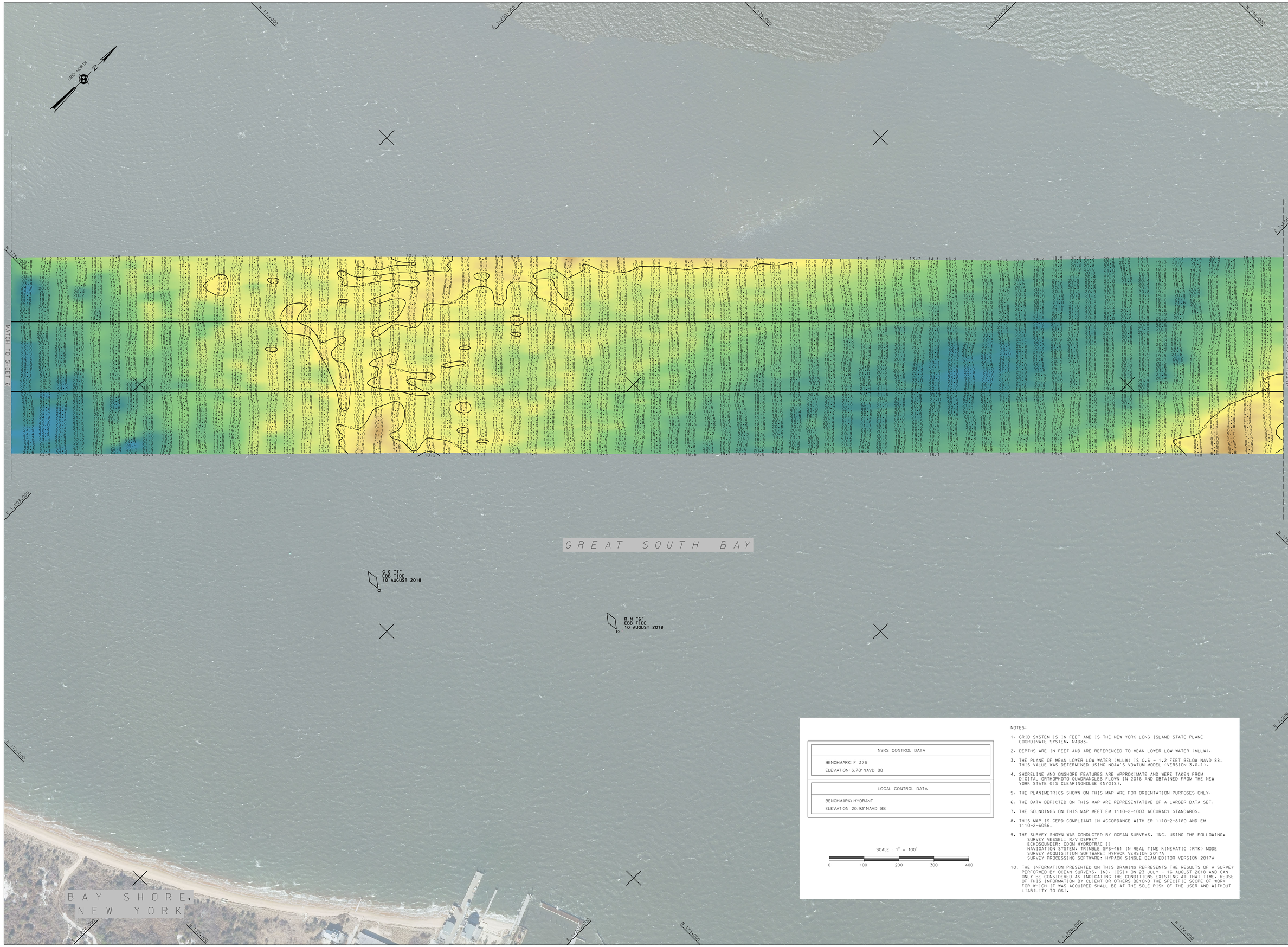
DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

GREAT SOUTH BAY
NEW YORK
CONDITION SURVEY

VH-106

SHEET 6 OF 26



NSRS CONTROL DATA
BENCHMARK: F 376
ELEVATION: 6.78' NAVD 88

LOCAL CONTROL DATA
BENCHMARK: HYDRANT
ELEVATION: 20.93' NAVD 88

SCALE : 1" = 100'

0 100 200 300 400

NOTES:

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US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

OCEAN SURVEYS, INC.
1791 MILL ROCK ROAD EAST
OLD SAYBROOK, CONNECTICUT
(860) 388-4800

DATES OF SURVEY:
23 JULY - 16 AUGUST 2018

FILE NO.: 101
REQUEST NO.: 4724

SCALE:
1 INCH = 100 FEET

FIELD BOOKS:

APPROVED: FIELD CARTOGRAPHER
APPROVED: R. SMITH PROJECT MANAGER
APPROVED: D. CLARKE LEAD CARTOGRAPHER
APPROVED: J. MRAZ DEPUTY CHIEF OF SURVEY
DATE: 5 FEBRUARY 2019

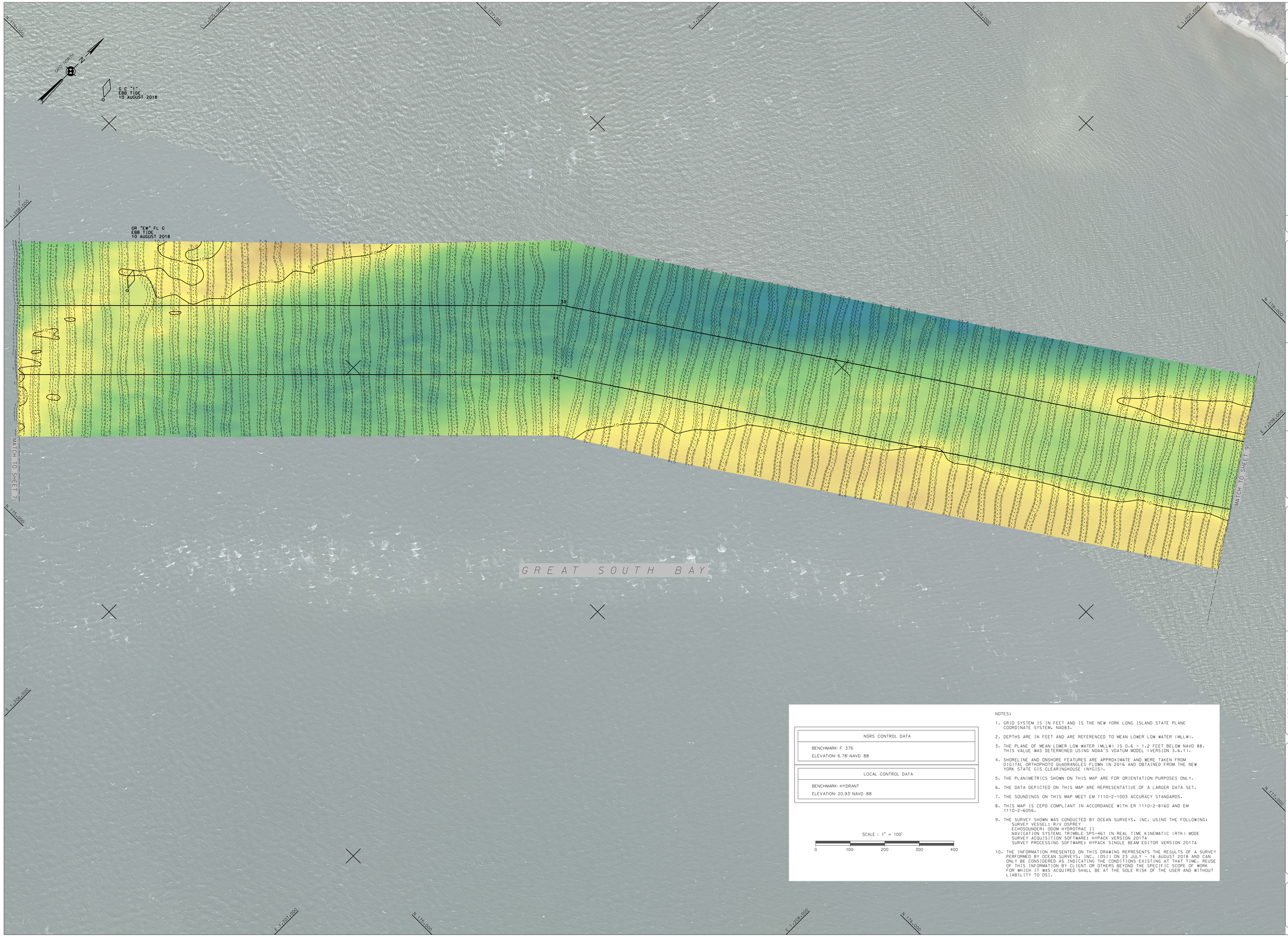
DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

GREAT SOUTH BAY
NEW YORK
CONDITION SURVEY

VH-107

SHEET 7 OF 26



NSRS CONTROL DATA

BENCHMARK: F 376
ELEVATION: 6.78' NAVD 88

LOCAL CONTROL DATA

BENCHMARK: HYDRANT
ELEVATION: 20.93' NAVD 88

SCALE : 1" = 100'

0 100 200 300 400

NOTES:

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US ARMY CORPS
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NEW YORK DISTRICT

OCEAN SURVEYS, INC.
A DIVISION OF OSI
OLD SAYBROOK, CONNECTICUT
www.oceansurveys.com

DATES OF SURVEY:
23 JULY - 16 AUGUST 2018

FILE NO.: 101
REQUEST NO.: 4724

SCALE:
1 INCH = 100 FEET

FIELD BOOKS:

APPROVED: _____ FIELD SURVEYANCE
R. SMITH
PROJECT MANAGER

APPROVED: _____
D. CLARKE
CHIEF SURVEYANCE

APPROVED: _____
A. MRAZ
CHIEF, SURVEY BRANCH

DATE: 5 FEBRUARY 2019

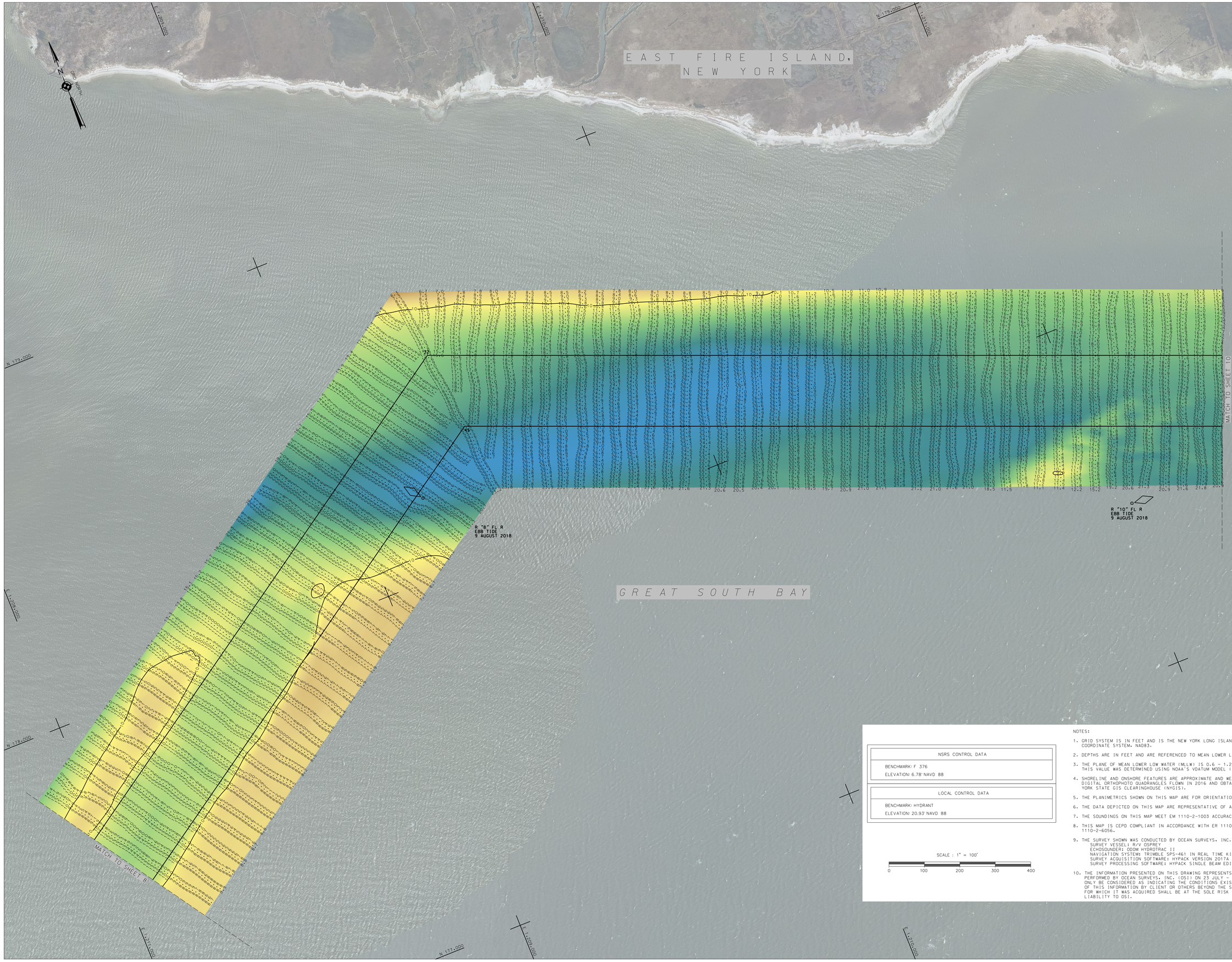
DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

GREAT SOUTH BAY
NEW YORK
CONDITION SURVEY

VH-108

SHEET 8 OF 26



NSRS CONTROL DATA
BENCHMARK: F 376
ELEVATION: 6.78' NAVD 88

LOCAL CONTROL DATA
BENCHMARK: HYDRANT
ELEVATION: 20.93' NAVD 88

SCALE : 1" = 100'

0 100 200 300 400

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US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

OCEAN SURVEYS, INC.
1 IN MILL ROCK ROAD EAST
OLD SAYBROOK, CONNECTICUT
(860) 388-4163

DATES OF SURVEY:
23 JULY - 16 AUGUST 2018

FILE NO.: 101
REQUEST NO.: 4724

SCALE:
1 INCH = 100 FEET

FIELD BOOKS:

APPROVED: FIELD CARTOGRAPHER
APPROVED: R. SMITH PROJECT MANAGER
APPROVED: D. CLARKE LEAD CARTOGRAPHER
APPROVED: J. MRAZ DEPUTY CHIEF OF SURVEY
DATE: 5 FEBRUARY 2019

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

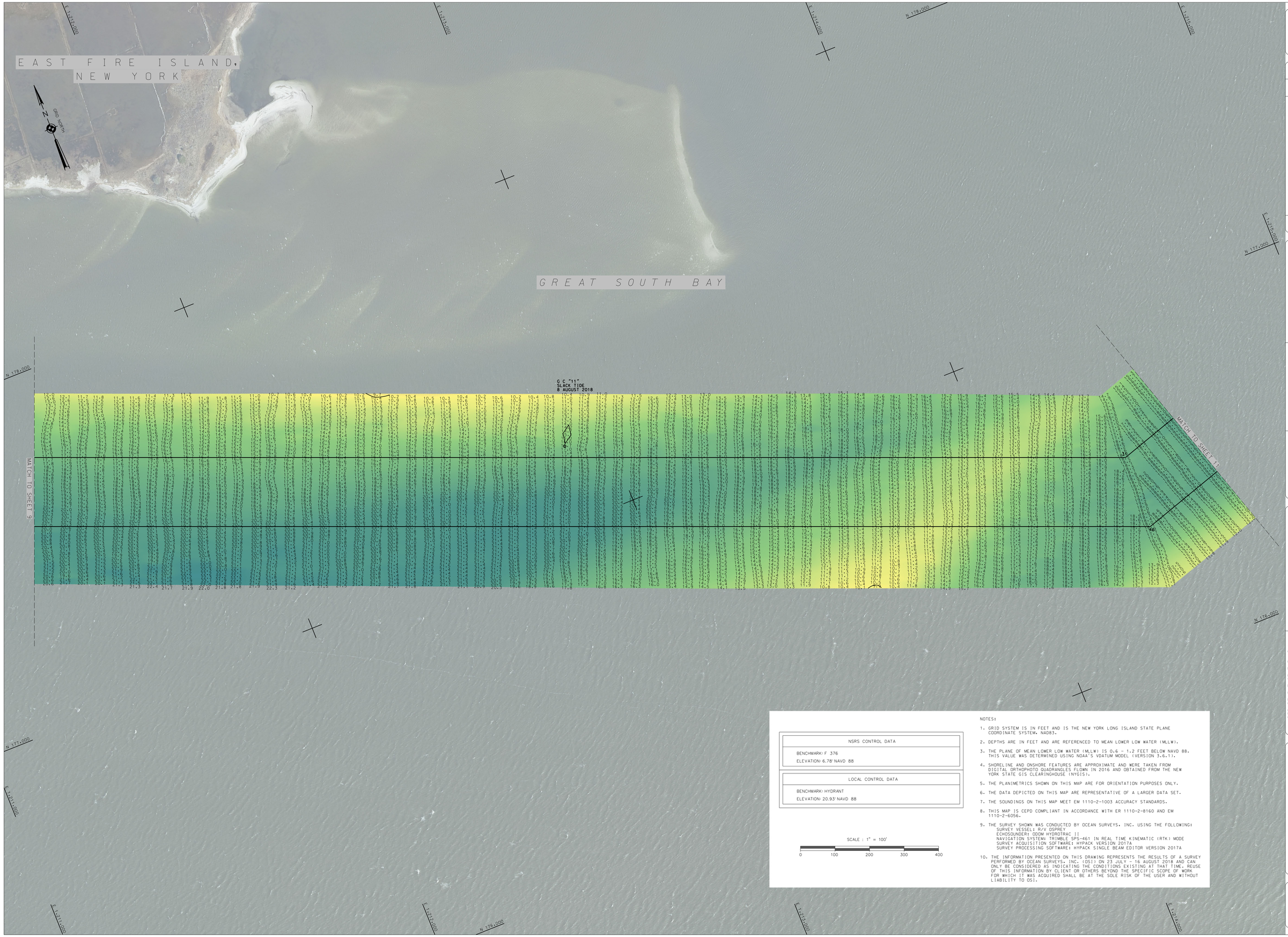
OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

GREAT SOUTH BAY
NEW YORK
CONDITION SURVEY

VH-109

SHEET 9 OF 26

FILE NO.: 101
REQ NO.: 4724



NSRS CONTROL DATA
BENCHMARK: F 376
ELEVATION: 6.78' NAVD 88

LOCAL CONTROL DATA
BENCHMARK: HYDRANT
ELEVATION: 20.93' NAVD 88

SCALE : 1" = 100'

0 100 200 300 400

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   SURVEY VESSEL: R/V OSPREY
   ECHOSOUNDER: ODOM HYDROTRAC II
   NAVIGATION SYSTEM: TRIMBLE SPS-461 IN REAL TIME KINEMATIC (RTK) MODE
   SURVEY ACQUISITION SOFTWARE: HYPACK VERSION 2017A
   SURVEY PROCESSING SOFTWARE: HYPACK SINGLE BEAM EDITOR VERSION 2017A
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US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

OCEAN SURVEYS, INC.
A SUBSIDIARY OF
OLD SAYBROOK, CONNECTICUT
www.oceansurveys.com

DATES OF SURVEY:
23 JULY - 16 AUGUST 2018

FILE NO.: 101
REQUEST NO.: 4724

SCALE:
1 INCH = 100 FEET

FIELD BOOKS:

APPROVED: _____ FIELD OPERATIONS
DATE:

APPROVED: R. SMITH
PROJECT MANAGER

APPROVED: D. CLARKE
FIELD OPERATIONS

APPROVED: J. MRAZ
CHIEF OF SURVEY
DATE: 5 FEBRUARY 2019

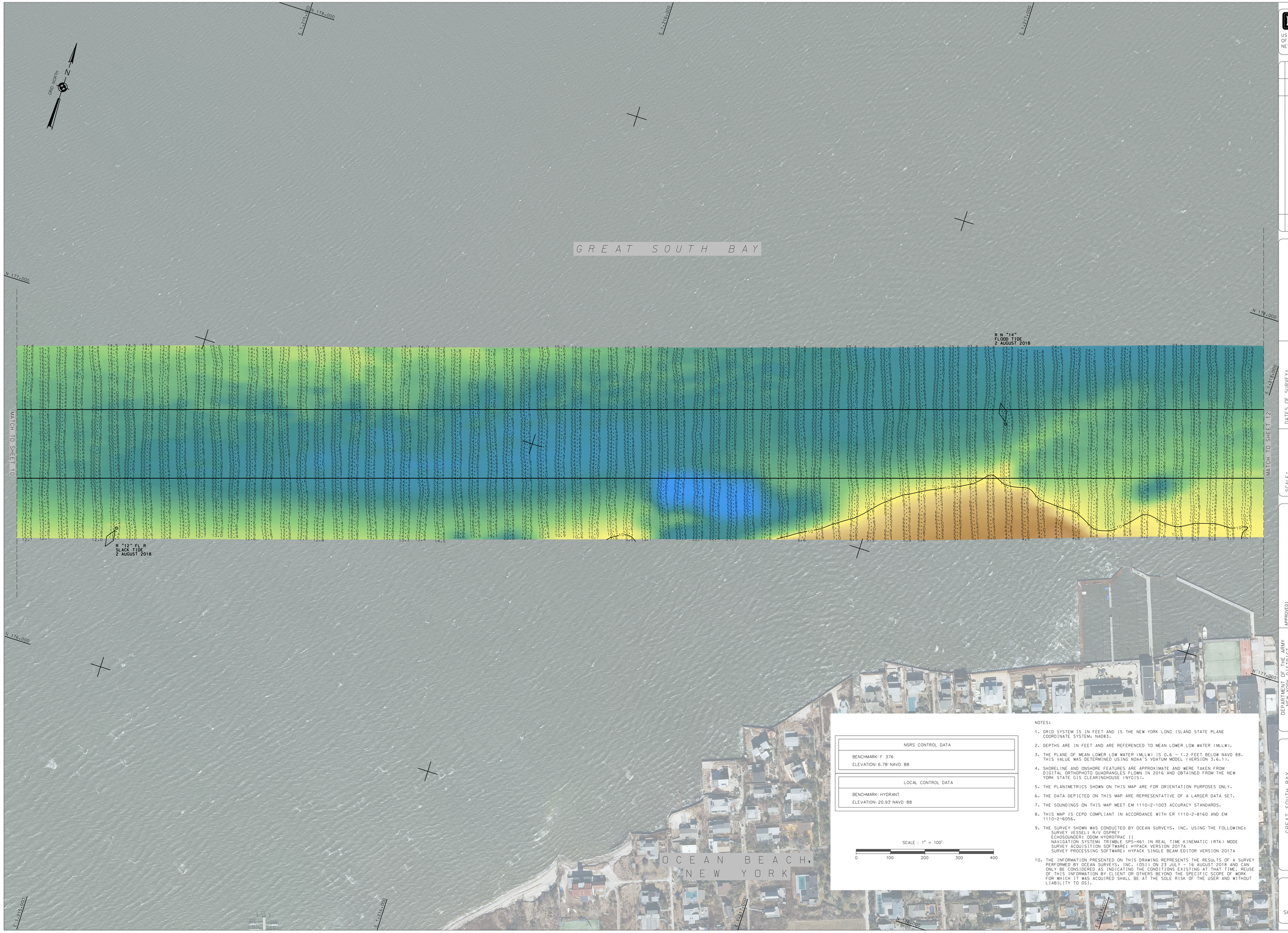
DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

GREAT SOUTH BAY
NEW YORK
CONDITION SURVEY

VH-110

SHEET 10 OF 26



NSRS CONTROL DATA
BENCHMARK: F 376
ELEVATION: 6.78' NAVD 88

LOCAL CONTROL DATA
BENCHMARK: HYDRANT
ELEVATION: 20.93' NAVD 88

SCALE : 1" = 100'

0 100 200 300 400

NOTES:

1. GRID SYSTEM IS IN FEET AND IS THE NEW YORK LONG ISLAND STATE PLANE COORDINATE SYSTEM, NAD83.
2. DEPTHS ARE IN FEET AND ARE REFERENCED TO MEAN LOWER LOW WATER (MLLW).
3. THE PLANE OF MEAN LOWER LOW WATER (MLLW) IS 0.6 - 1.2 FEET BELOW NAVD 88. THIS VALUE WAS DETERMINED USING NOAA'S VDATUM MODEL (VERSION 3.6.1).
4. SHORELINE AND ONSHORE FEATURES ARE APPROXIMATE AND WERE TAKEN FROM DIGITAL ORTHOPHOTO QUADRANGLES FLOWN IN 2016 AND OBTAINED FROM THE NEW YORK STATE GIS CLEARINGHOUSE (NYGIS).
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US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

OCEAN SURVEYS, INC.
1291 MILL ROCK ROAD EAST
OLD SAYBROOK, CONNECTICUT
(860) 388-4820
www.oceansurveys.com

DATES OF SURVEY:
23 JULY - 16 AUGUST 2018

FILE NO.: 101
REQUEST NO.: 4724

SCALE:
1 INCH = 100 FEET

FIELD BOOKS:

APPROVED: FIELD CARTOGRAPHER
APPROVED: R. SMITH PROJECT MANAGER
APPROVED: D. CLARKE LEAD CARTOGRAPHER
APPROVED: J. MRAZ DEPUTY CHIEF OF SURVEY
DATE: 5 FEBRUARY 2019

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

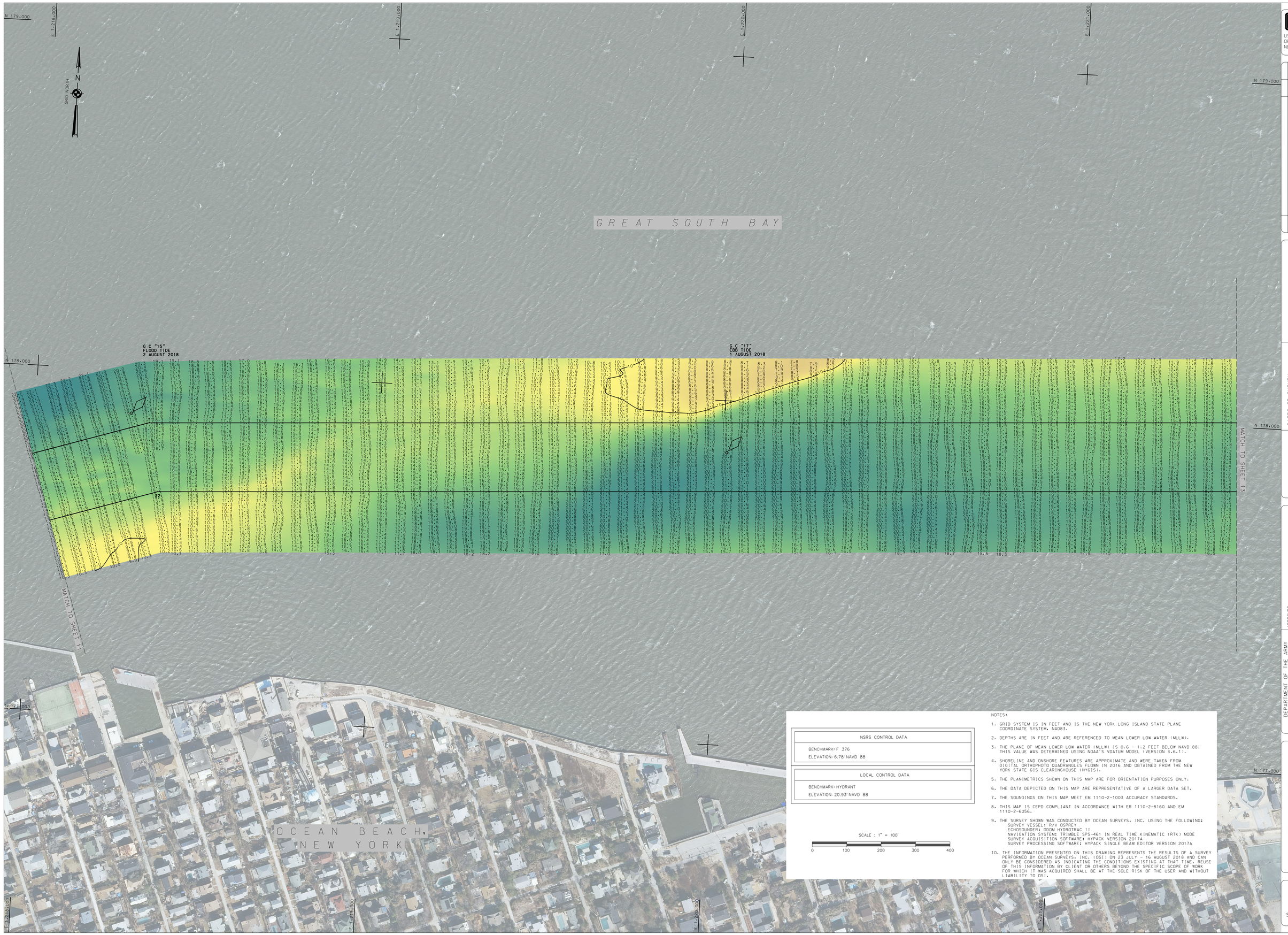
OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

GREAT SOUTH BAY
NEW YORK
CONDITION SURVEY

VH-111

SHEET 11 OF 26

FILE NO.: 101
REQ NO.: 4724



NSRS CONTROL DATA
BENCHMARK: F 376
ELEVATION: 6.78' NAVD 88

LOCAL CONTROL DATA
BENCHMARK: HYDRANT
ELEVATION: 20.93' NAVD 88

SCALE : 1" = 100'

0 100 200 300 400

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US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

OCEAN SURVEYS, INC.
1724 MILL ROCK ROAD EAST
OLD SAYBROOK, CONNECTICUT
(860) 388-4820

DATES OF SURVEY:
23 JULY - 16 AUGUST 2018

FILE NO.: 101
REQUEST NO.: 4724

SCALE:
1 INCH = 100 FEET

FIELD BOOKS:

APPROVED: FIELD CARTOGRAPHER
APPROVED: R. SMITH PROJECT MANAGER
APPROVED: D. CLARKE LEAD CARTOGRAPHER
APPROVED: J. MRAZ DEPUTY CHIEF OF SURVEY
DATE: 5 FEBRUARY 2019

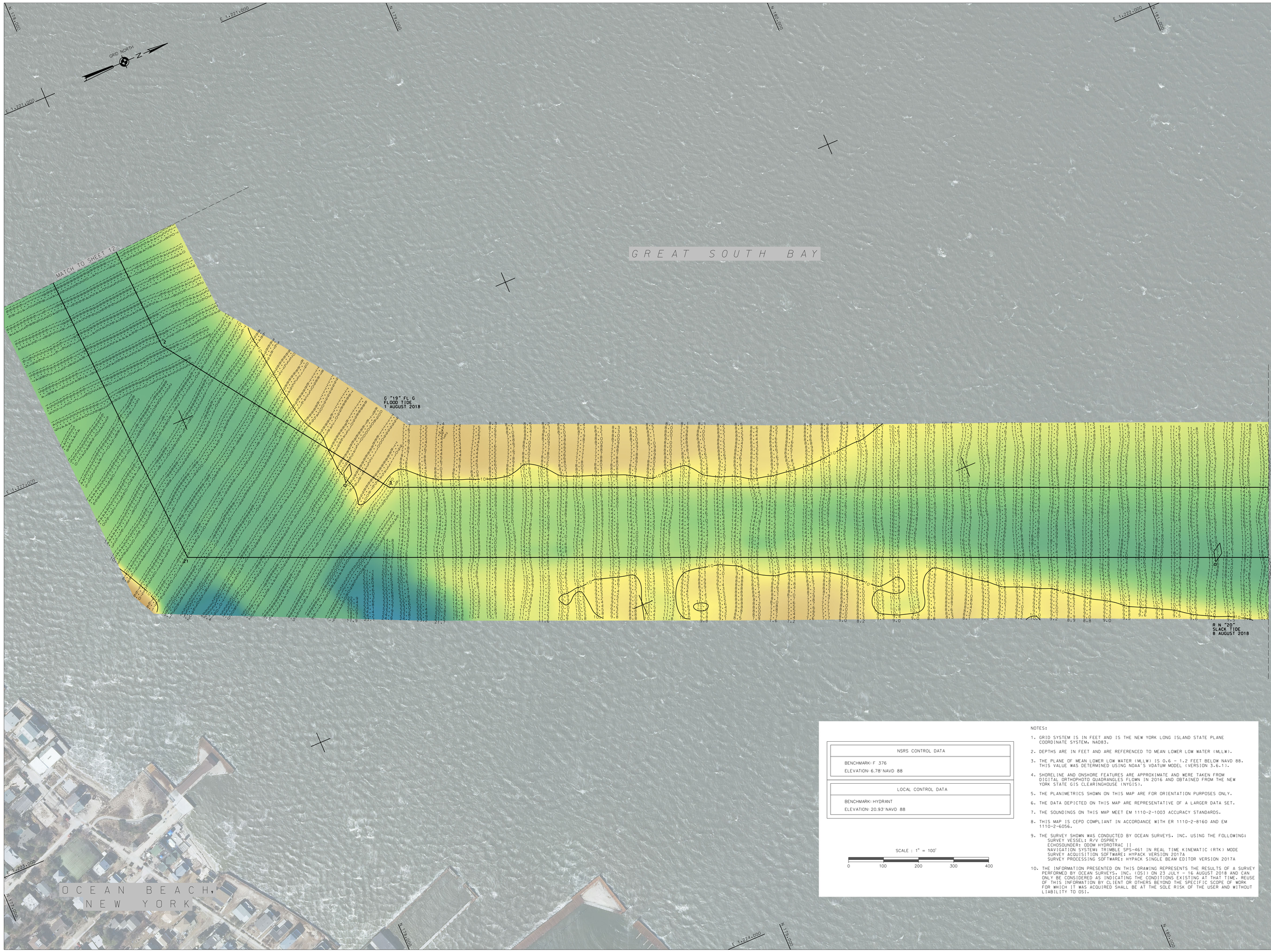
DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

GREAT SOUTH BAY
NEW YORK
CONDITION SURVEY

VH-112

SHEET 12 OF 26



NSRS CONTROL DATA
BENCHMARK: F 376 ELEVATION: 6.78' NAVD 88

LOCAL CONTROL DATA
BENCHMARK: HYDRANT ELEVATION: 20.93' NAVD 88

SCALE : 1" = 100'

0 100 200 300 400

NOTES:

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US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

OCEAN SURVEYS, INC.
1730 MILL ROCK ROAD EAST
OLD SAYBROOK, CONNECTICUT
(860) 388-4820

DATES OF SURVEY:
23 JULY - 16 AUGUST 2018

FILE NO.: 101
REQUEST NO.: 4724

SCALE:
1 INCH = 100 FEET

FIELD BOOKS:

APPROVED: FIELD CARTOGRAPHER
APPROVED: R. SMITH PROJECT MANAGER
APPROVED: D. CLARKE LEAD CARTOGRAPHER
APPROVED: J. MRAZ DEPUTY CHIEF OF SURVEY
DATE: 5 FEBRUARY 2019

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

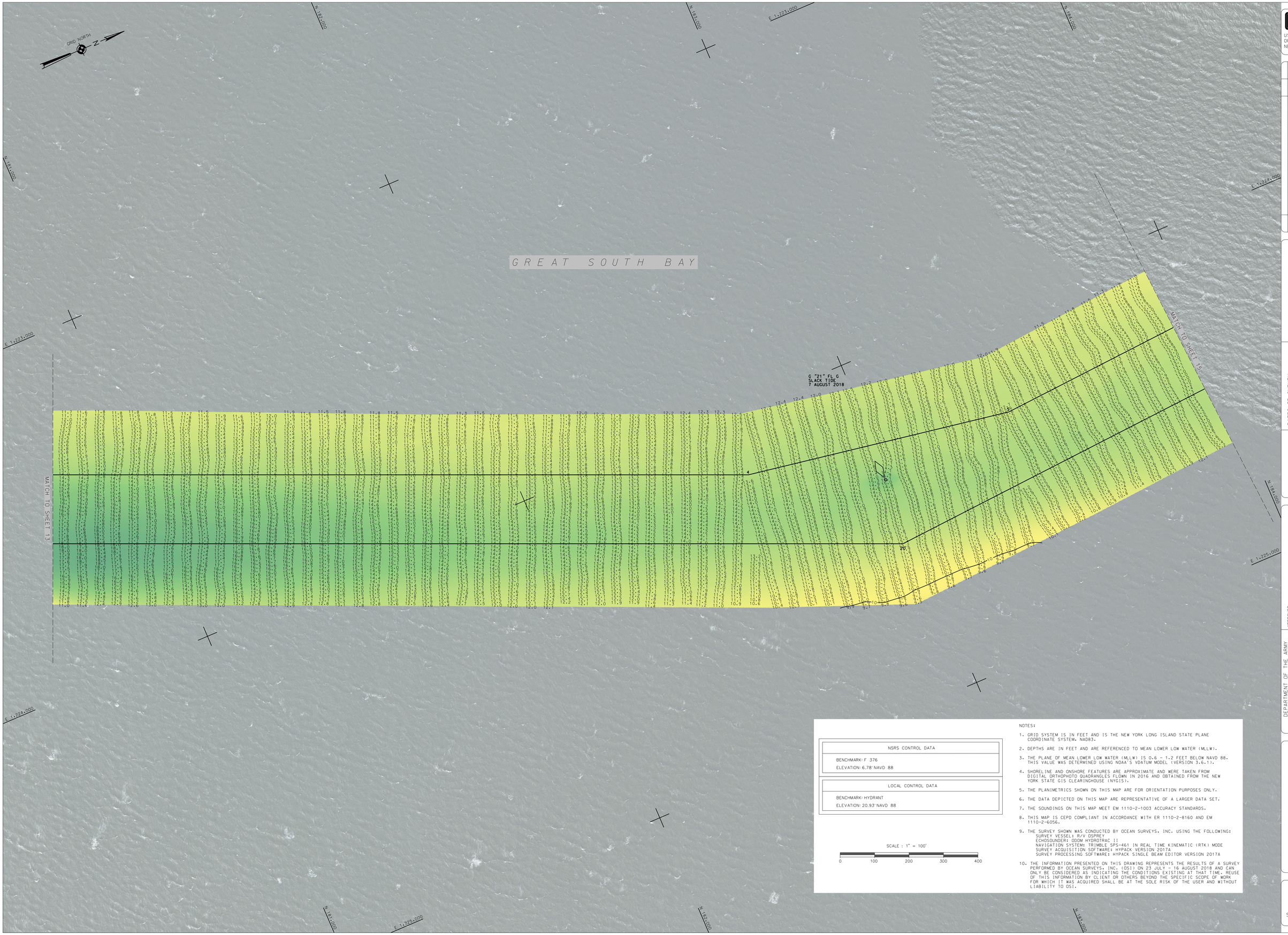
OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

GREAT SOUTH BAY
NEW YORK
CONDITION SURVEY

VH-113

SHEET 13 OF 26

FILE NO.: 101
REQ NO.: 4724



NSRS CONTROL DATA
BENCHMARK: F 376
ELEVATION: 6.78' NAVD 88

LOCAL CONTROL DATA
BENCHMARK: HYDRANT
ELEVATION: 20.93' NAVD 88

SCALE : 1" = 100'

0 100 200 300 400

NOTES:

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US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

OCEAN SURVEYS, INC.
A DIVISION OF OSI
OLD SAYBROOK, CONNECTICUT
www.oceansurveys.com

DATES OF SURVEY:
23 JULY - 16 AUGUST 2018

FILE NO.: 101
REQUEST NO.: 4724

SCALE:
1 INCH = 100 FEET

FIELD BOOKS:

APPROVED: _____ FIELD SURVEILLANCE

APPROVED: R. SMITH PROJECT MANAGER

APPROVED: D. CLARKE QUALITY ASSURANCE

APPROVED: J. MIRAZ CHIEF OF SURVEY

DATE: 5 FEBRUARY 2019

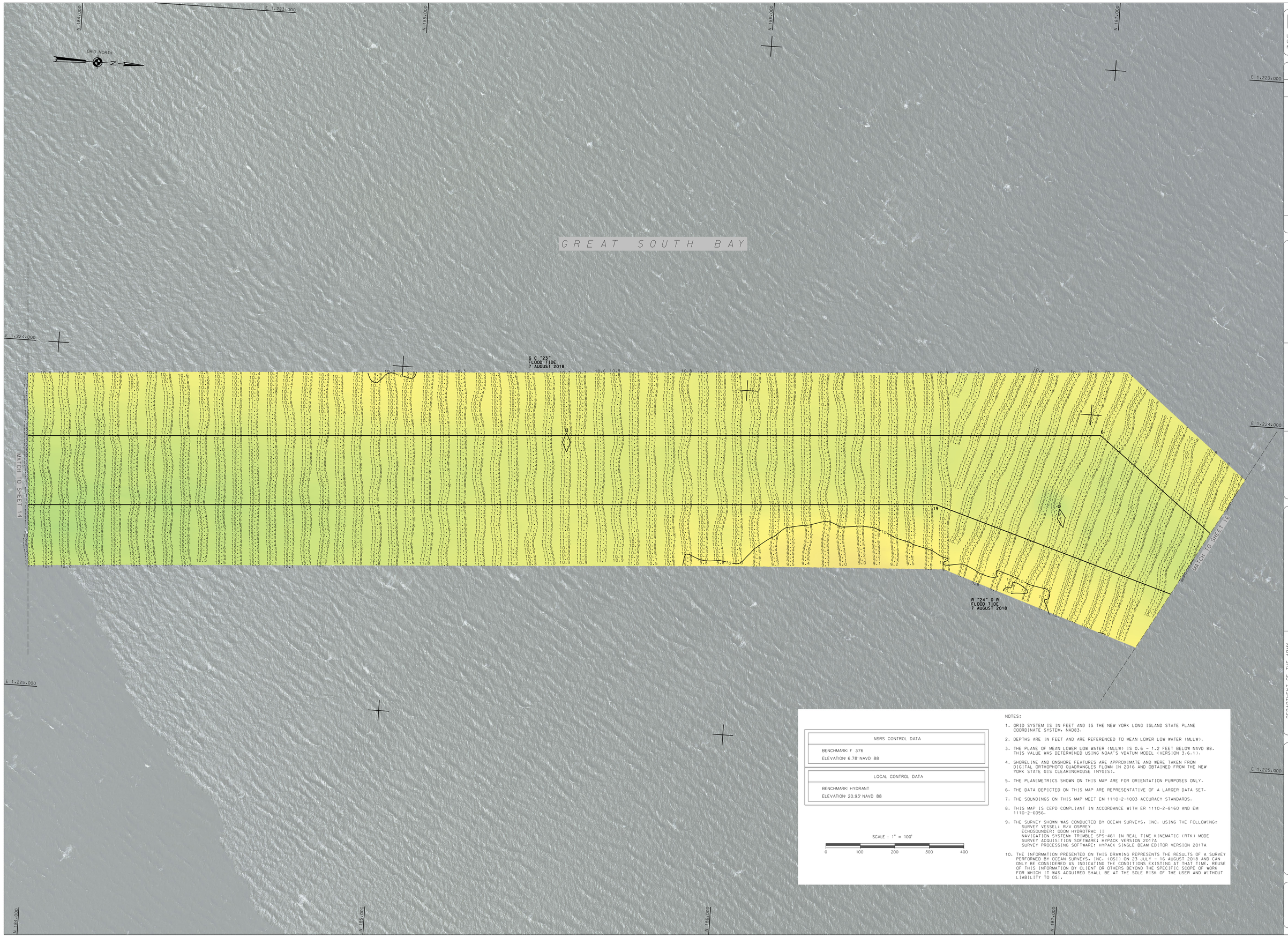
DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278-0090

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

GREAT SOUTH BAY
NEW YORK
CONDITION SURVEY

VH-114

SHEET 14 OF 26



NSRS CONTROL DATA
BENCHMARK: F 376
ELEVATION: 6.78' NAVD 88

LOCAL CONTROL DATA
BENCHMARK: HYDRANT
ELEVATION: 20.93' NAVD 88

SCALE : 1" = 100'

0 100 200 300 400

NOTES:

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US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

OCEAN SURVEYS, INC.
1724 MILL ROCK ROAD EAST
OLD SAYBROOK, CONNECTICUT
(860) 388-4820
www.oceansurveys.com

DATES OF SURVEY:
23 JULY - 16 AUGUST 2018

FILE NO.: 101
REQUEST NO.: 4724

SCALE:
1 INCH = 100 FEET

FIELD BOOKS:

APPROVED: FIELD CARTOGRAPHER
APPROVED: R. SMITH PROJECT MANAGER
APPROVED: D. CLARKE LEAD CARTOGRAPHER
APPROVED: J. MRAZ DEPUTY CHIEF OF SURVEY
DATE: 5 FEBRUARY 2019

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

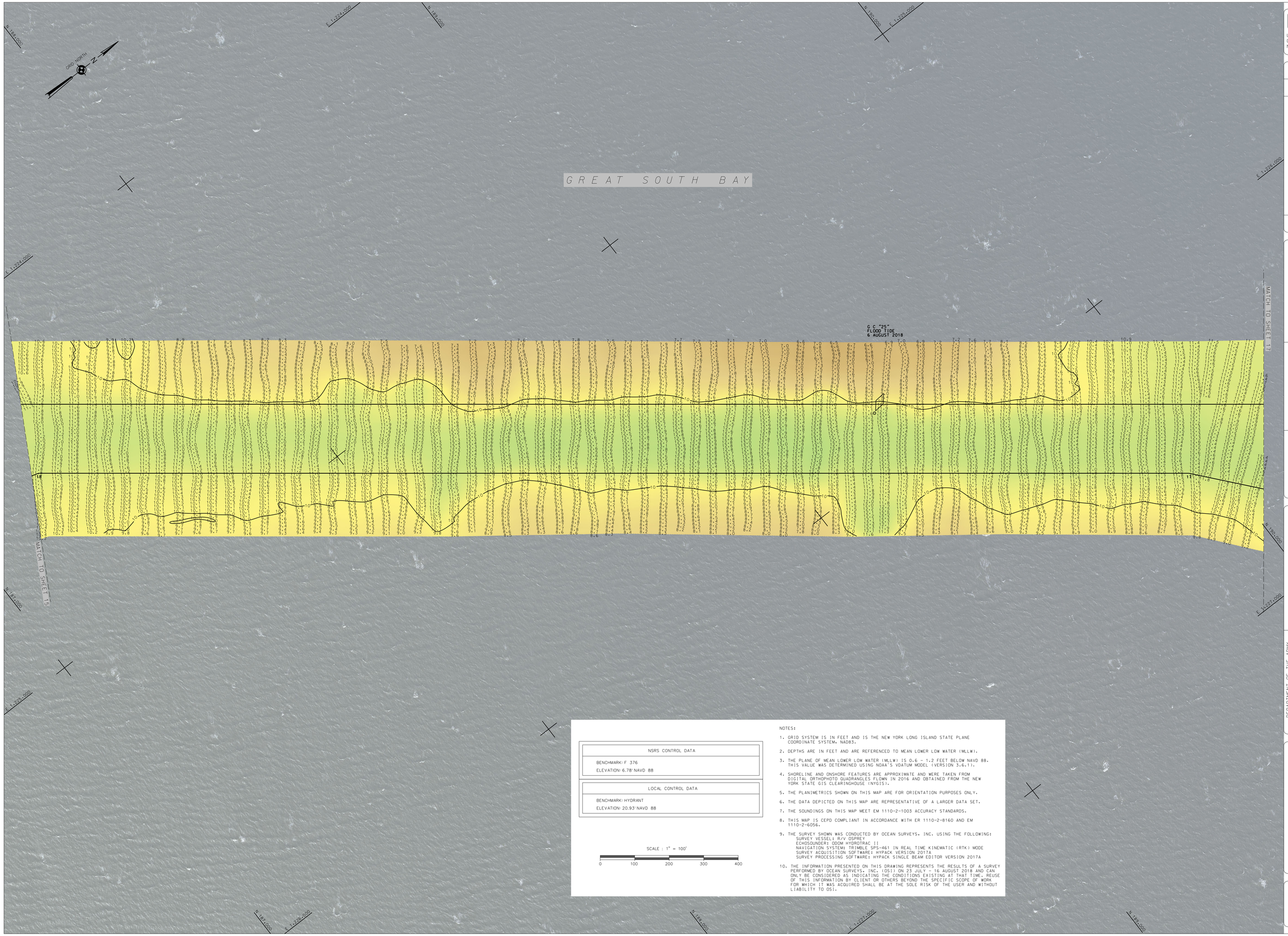
OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

GREAT SOUTH BAY
NEW YORK
CONDITION SURVEY

VH-115

SHEET 15 OF 26

FILE NO.: 101
REQ NO.: 4724



NSRS CONTROL DATA
BENCHMARK: F 376 ELEVATION: 6.78' NAVD 88

LOCAL CONTROL DATA
BENCHMARK: HYDRANT ELEVATION: 20.93' NAVD 88

SCALE : 1" = 100'

0 100 200 300 400

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OLD SAYBROOK, CONNECTICUT
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DATES OF SURVEY:
23 JULY – 16 AUGUST 2018

FILE NO.: 101
REQ'ST NO.: 4724

SCALE:
1 INCH = 100 FEET

FIELD BOOKS:

APPROVED: _____ FIELD SURVEYOR

APPROVED: R. SMITH PROJECT MANAGER

APPROVED: D. CLERKE QUALITY ASSURANCE

APPROVED: J. MIRAZ DEPUTY CHIEF OF SURVEY

DATE: 5 FEBRUARY 2019

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

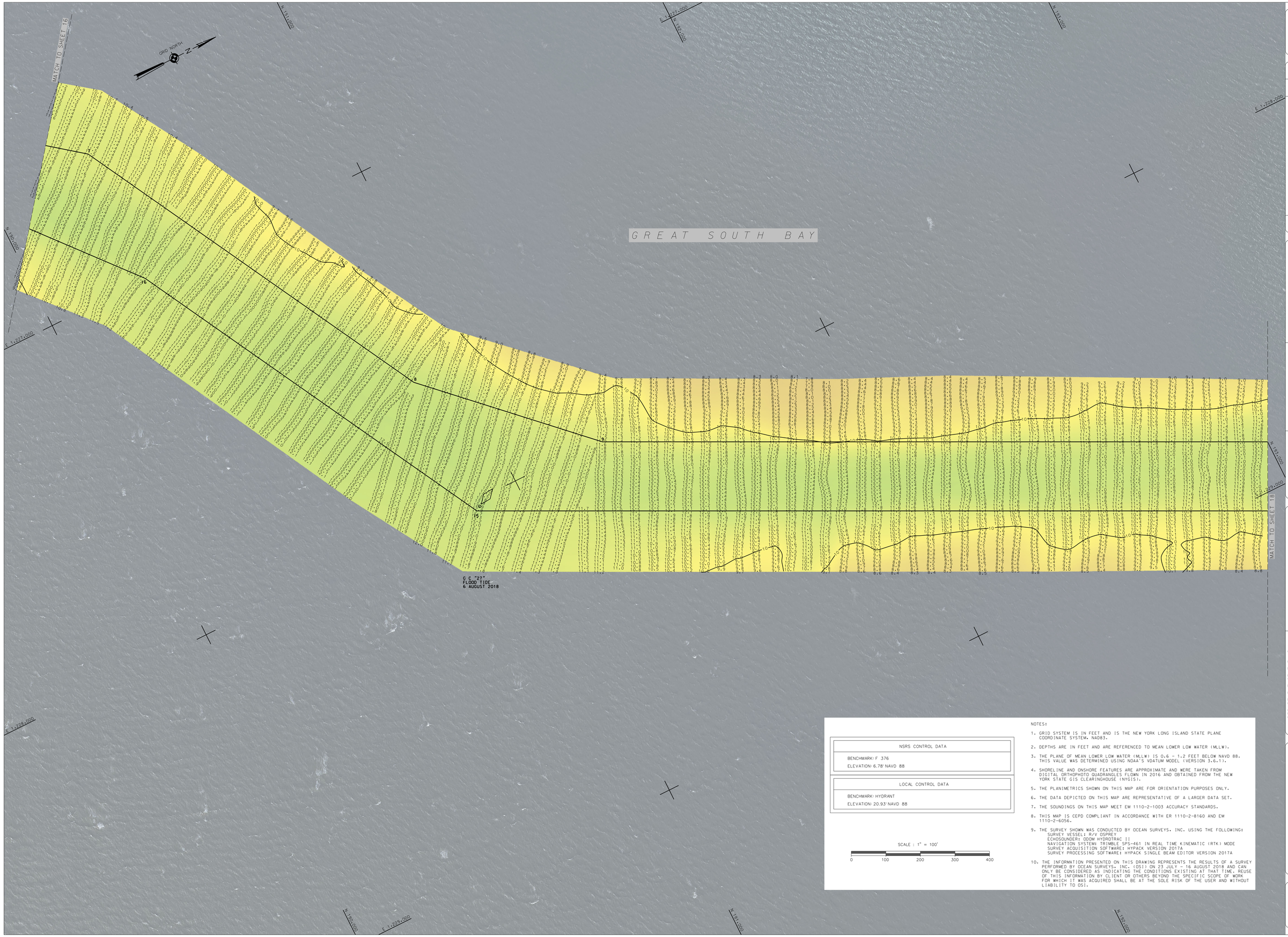
OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

GREAT SOUTH BAY
NEW YORK
CONDITION SURVEY

VH–116

SHEET 16 OF 26

FILE NO.: 101
REQ NO.: 4724



NSRS CONTROL DATA
BENCHMARK: F 376
ELEVATION: 6.78' NAVD 88

LOCAL CONTROL DATA
BENCHMARK: HYDRANT
ELEVATION: 20.93' NAVD 88

SCALE : 1" = 100'

0 100 200 300 400

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NEW YORK DISTRICT

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A DIVISION OF OSI
OLD SAYBROOK, CONNECTICUT
www.oceansurveys.com

DATES OF SURVEY:
23 JULY - 16 AUGUST 2018

FILE NO.: 101
REQ'ST NO.: 4724

SCALE:
1 INCH = 1,000 FEET

FIELD BOOKS:

APPROVED: _____ FIELD CARTOGRAPHER
APPROVED: R. SMITH PROJECT MANAGER
APPROVED: D. CLARKE QUALITY ASSURANCE
APPROVED: J. MRAZ SURVEY CHIEF OF PARTY
DATE: 5 FEBRUARY 2019

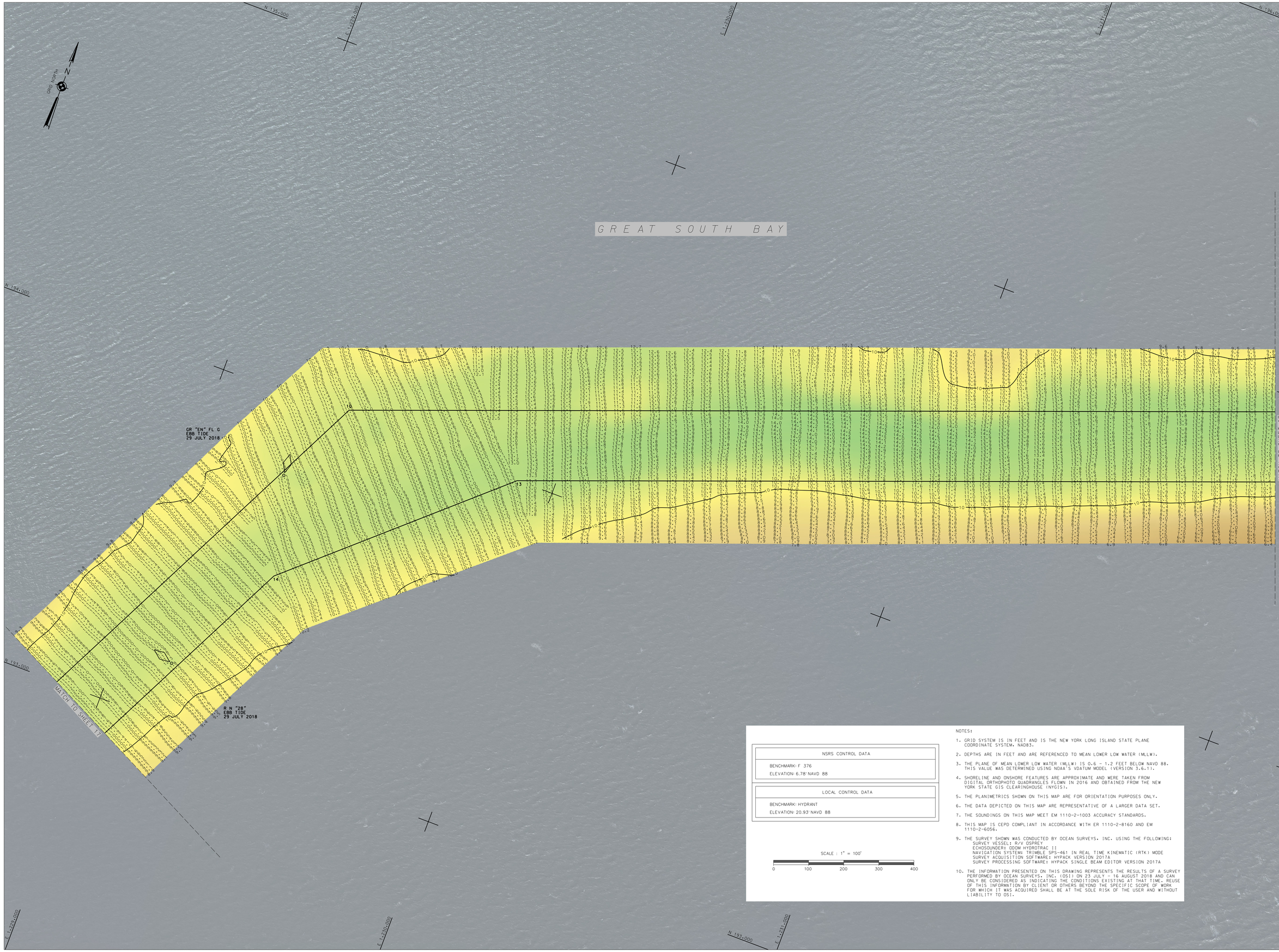
DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OPS

GREAT SOUTH BAY
NEW YORK
CONDITION SURVEY

VH-117

SHEET 17 OF 26



NSRS CONTROL DATA

BENCHMARK: F 376
ELEVATION: 6.78' NAVD 88

LOCAL CONTROL DATA

BENCHMARK: HYDRANT
ELEVATION: 20.93' NAVD 88

SCALE : 1" = 100'

0 100 200 300 400

NOTES:

1. GRID SYSTEM IS IN FEET AND IS THE NEW YORK LONG ISLAND STATE PLANE COORDINATE SYSTEM, NAD83.
2. DEPTHS ARE IN FEET AND ARE REFERENCED TO MEAN LOWER LOW WATER (MLLW).
3. THE PLANE OF MEAN LOWER LOW WATER (MLLW) IS 0.6 – 1.2 FEET BELOW NAVD 88. THIS VALUE WAS DETERMINED USING NOAA'S VDATUM MODEL (VERSION 3.6.1).
4. SHORELINE AND ONSHORE FEATURES ARE APPROXIMATE AND WERE TAKEN FROM DIGITAL ORTHOPHOTO QUADRANGLES FLOWN IN 2016 AND OBTAINED FROM THE NEW YORK STATE GIS CLEARINGHOUSE (NYGIS).
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7. THE SOUNDINGS ON THIS MAP MEET EM 1110-2-1003 ACCURACY STANDARDS.
8. THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.
9. THE SURVEY SHOWN WAS CONDUCTED BY OCEAN SURVEYS, INC. USING THE FOLLOWING:
   SURVEY VESSEL: R/V OSPREY
   ECHOSOUNDER: ODOM HYDROTRAC II
   NAVIGATION SYSTEM: TRIMBLE SPS-461 IN REAL TIME KINEMATIC (RTK) MODE
   SURVEY ACQUISITION SOFTWARE: HYPACK VERSION 2017A
   SURVEY PROCESSING SOFTWARE: HYPACK SINGLE BEAM EDITOR VERSION 2017A
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US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

OCEAN SURVEYS, INC.
A DIVISION OF OSI
OLD SAYBROOK, CONNECTICUT
www.oceansurveys.com

DATES OF SURVEY:
23 JULY – 16 AUGUST 2018

FILE NO.: 101
REQUEST NO.: 4724

SCALE:
1 INCH = 100 FEET

FIELD BOOKS:

APPROVED: _____ FIELD CONFORMANCE
APPROVED: R. SMITH PROJECT MANAGER
APPROVED: D. CLARKE QUALITY CONFORMANCE
APPROVED: J. MRAZ SENIOR CHIEF OF SURVEY
DATE: 5 FEBRUARY 2019

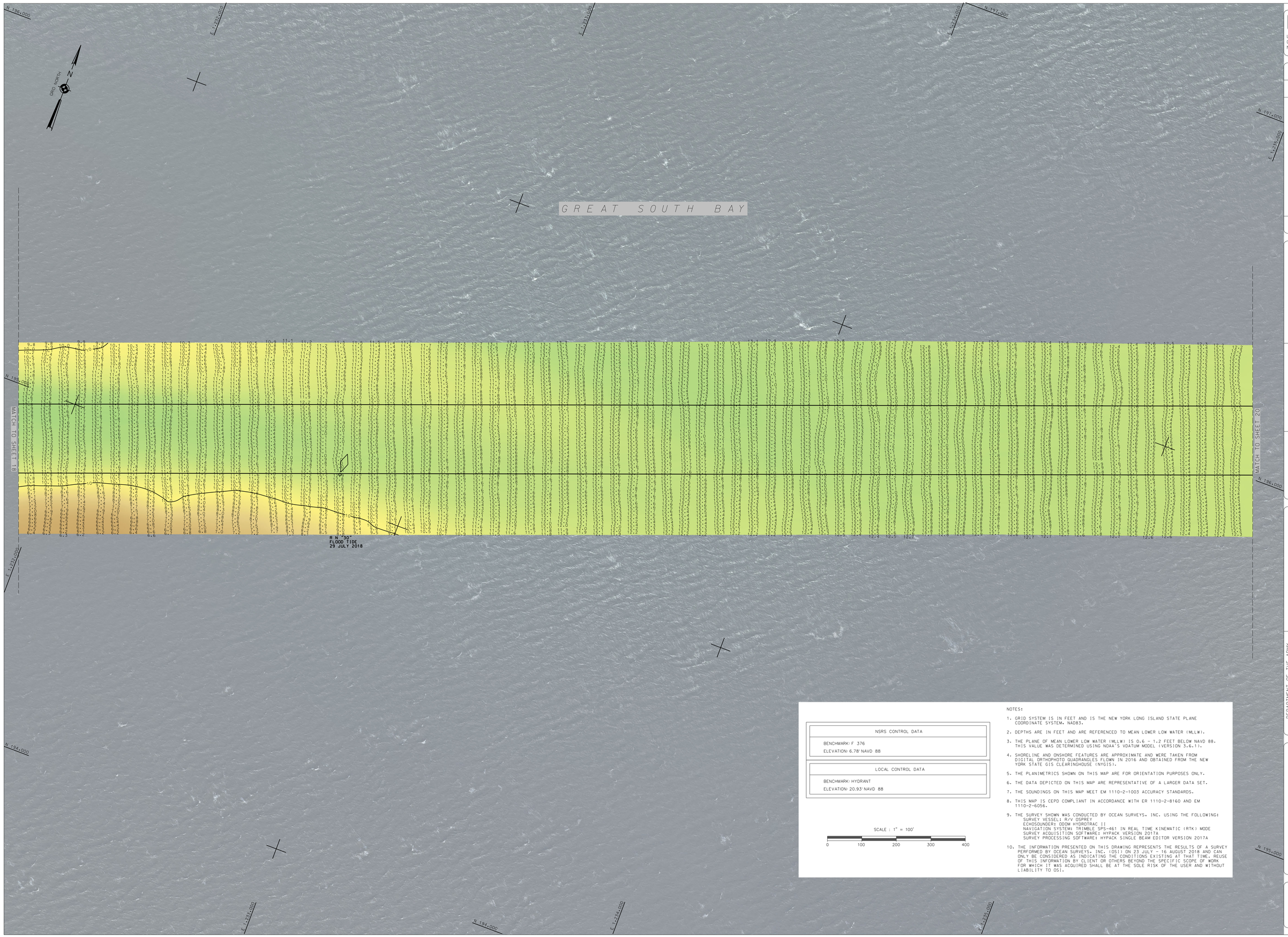
DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

GREAT SOUTH BAY
NEW YORK
CONDITION SURVEY

VH–118

SHEET 18 OF 26



NSRS CONTROL DATA
BENCHMARK: F 376 ELEVATION: 6.78' NAVD 88

LOCAL CONTROL DATA
BENCHMARK: HYDRANT ELEVATION: 20.93' NAVD 88

SCALE : 1" = 100'

0 100 200 300 400

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   NAVIGATION SYSTEM: TRIMBLE SPS-461 IN REAL TIME KINEMATIC (RTK) MODE
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US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

OCEAN SURVEYS, INC.
1726 MILL ROCK ROAD EAST
OLD SAYBROOK, CONNECTICUT
(860) 388-4163

DATES OF SURVEY:
23 JULY - 16 AUGUST 2018

FILE NO.: 101
REQUEST NO.: 4724

SCALE:
1 INCH = 100 FEET

FIELD BOOKS:

APPROVED: FIELD CARTOGRAPHER
APPROVED: R. SMITH PROJECT MANAGER
APPROVED: D. CLARKE LEAD CARTOGRAPHER
APPROVED: J. MRAZ DEPUTY CHIEF OF SURVEY
DATE: 5 FEBRUARY 2019

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

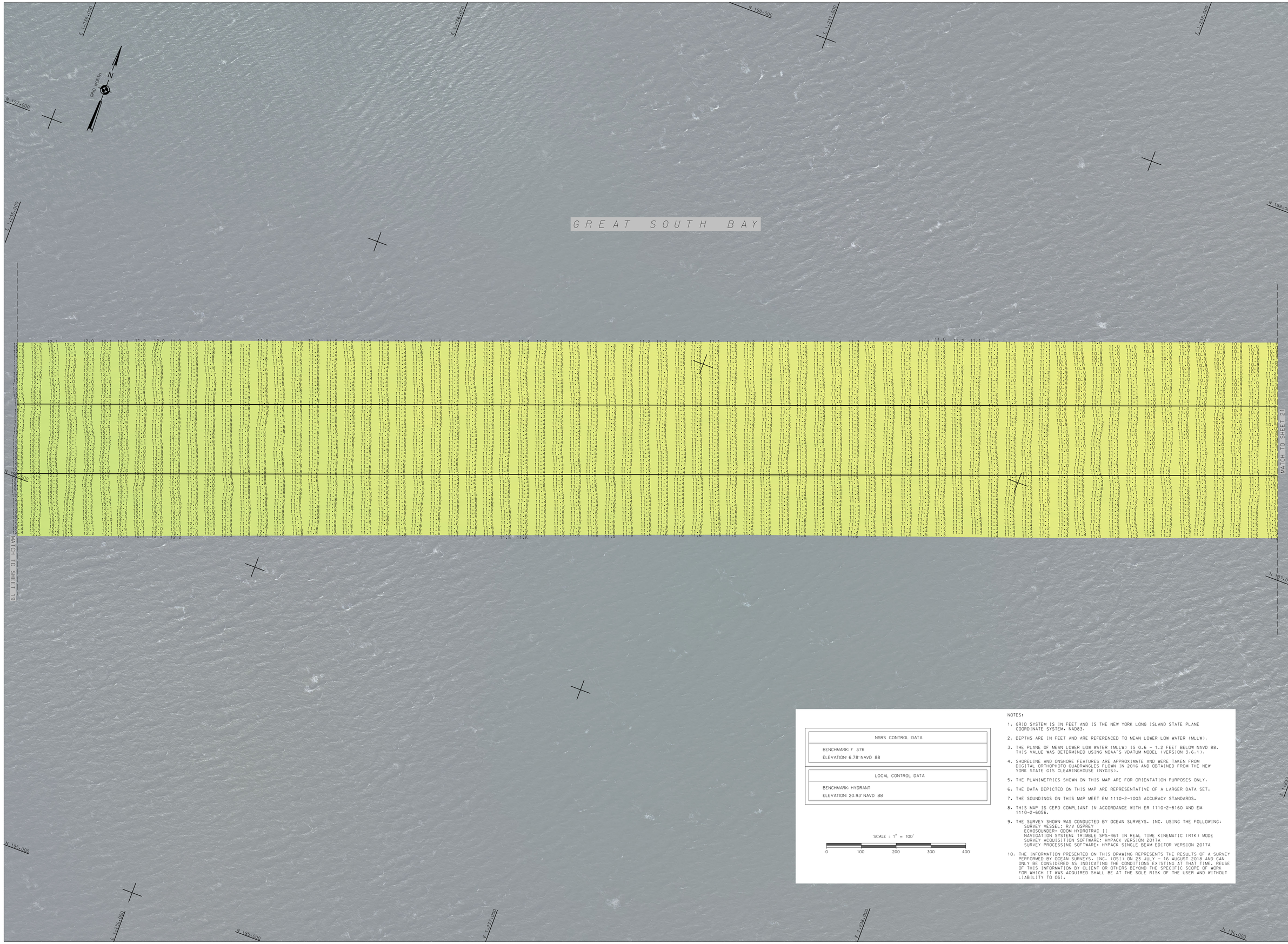
OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

GREAT SOUTH BAY
NEW YORK
CONDITION SURVEY

VH-119

SHEET 19 OF 26

FILE NO.: 101
REQ NO.: 4724



NSRS CONTROL DATA
BENCHMARK: F 376
ELEVATION: 6.78' NAVD 88

LOCAL CONTROL DATA
BENCHMARK: HYDRANT
ELEVATION: 20.93' NAVD 88

SCALE : 1" = 100'

0 100 200 300 400

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US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

OCEAN SURVEYS, INC.
1724 MILL ROCK ROAD EAST
OLD SAYBROOK, CONNECTICUT
(860) 388-4830

DATES OF SURVEY:
23 JULY - 16 AUGUST 2018

FILE NO.: 101
REQUEST NO.: 4724

SCALE:
1 INCH = 100 FEET

FIELD BOOKS:

APPROVED: FIELD CARTOGRAPHER
APPROVED: R. SMITH PROJECT MANAGER
APPROVED: D. CLARKE LEAD CARTOGRAPHER
APPROVED: J. MRAZ DEPUTY CHIEF OF SURVEY
DATE: 5 FEBRUARY 2019

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

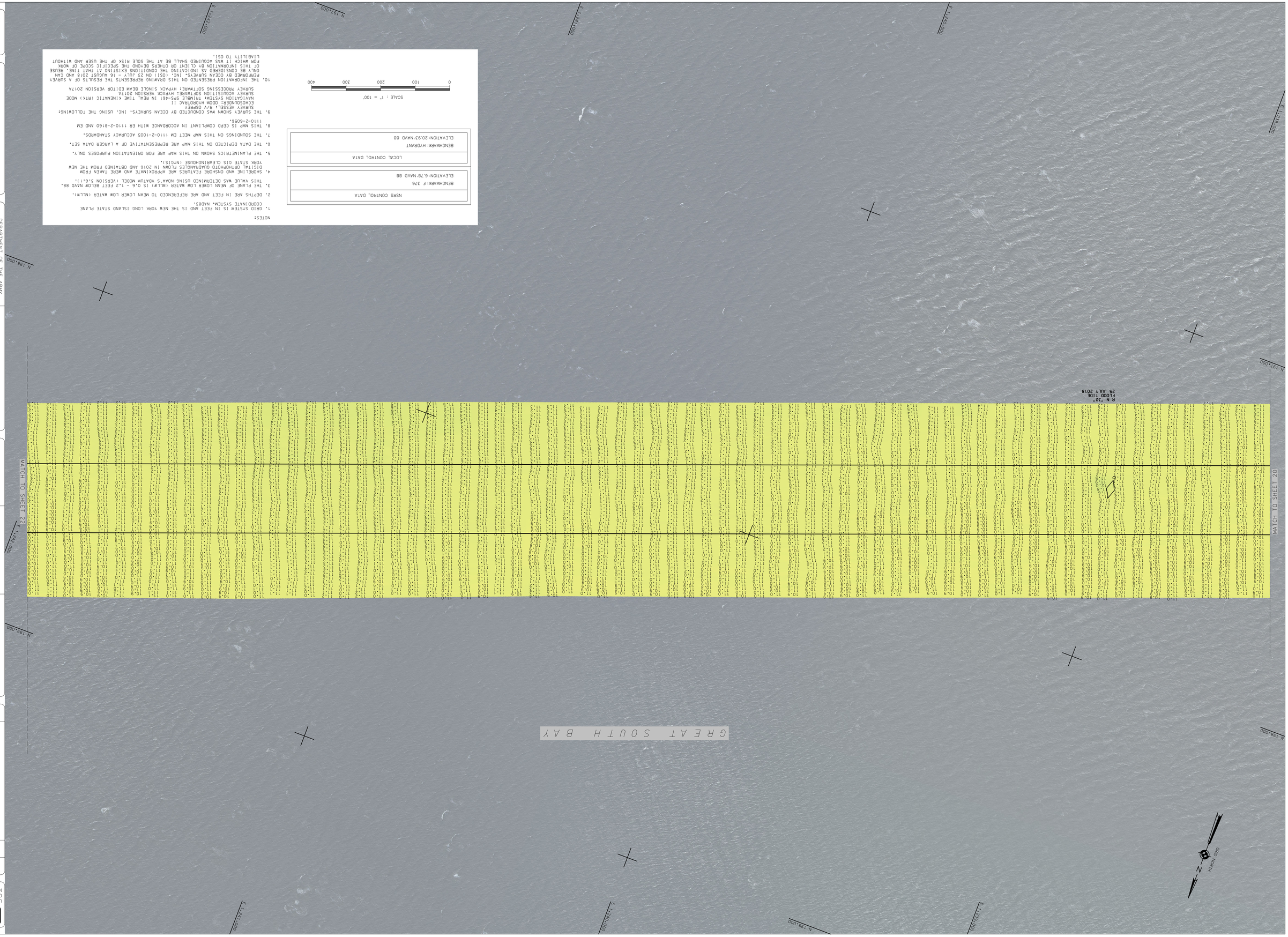
OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

GREAT SOUTH BAY
NEW YORK
CONDITION SURVEY

VH-120

SHEET 20 OF 26

FILE NO.: 101
REQ NO.: 4724



NSRS CONTROL DATA

BENCHMARK: F 376

ELEVATION: 6.78'NAVD 88

LOCAL CONTROL DATA

BENCHMARK: HYDRANT

ELEVATION: 20.93'NAVD 88

SCALE : 1" = 100'

0 100 200 300 400

NOTES:

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VH-121

SHEET 21 OF 26

GREAT SOUTH BAY
NEW YORK
CONDITION SURVEY

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

APPROVED:_____ FIELD SUPERVISOR
APPROVED: R. SMITH PROJECT MANAGER
APPROVED: D. CLARKE SUPERINTENDENT
APPROVED: J. MRAZ BRANCH CHIEF OF SURVEY
DATE: 5 FEBRUARY 2019

OCEAN SURVEYS, INC.
A DIVISION OF
OLD SAYBROOK CONNECTICUT
www.oceansurveysinc.com

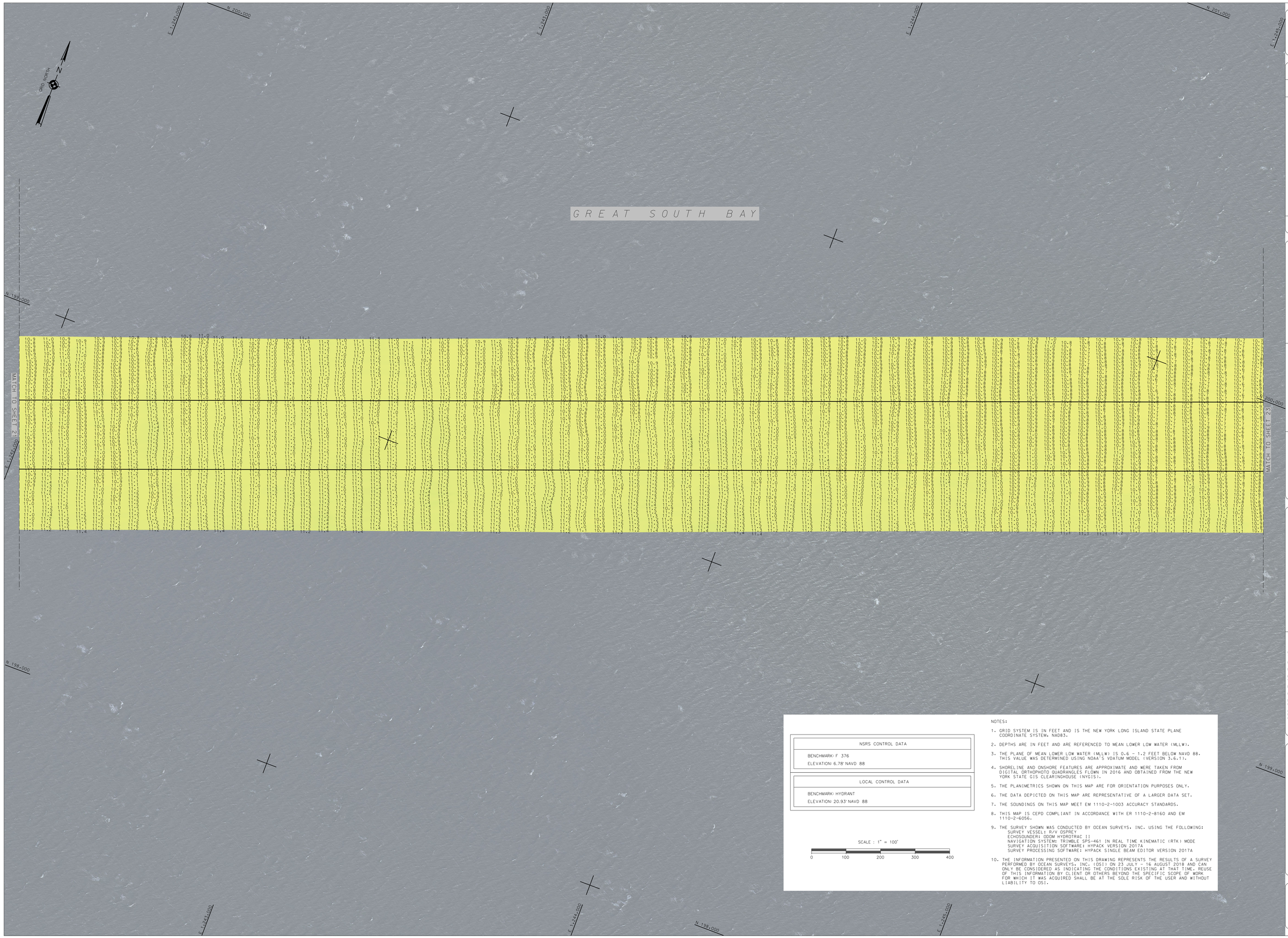
SCALE:
1 INCH = 100 FEET

FIELD BOOKS:

DATES OF SURVEY:
23 JULY - 16 AUGUST 2018

FILE NO.: 101
REGISTRY NO.: 4724

US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT



NSRS CONTROL DATA
BENCHMARK: F 376 ELEVATION: 6.78' NAVD 88

LOCAL CONTROL DATA
BENCHMARK: HYDRANT ELEVATION: 20.93' NAVD 88

SCALE : 1" = 100'

0 100 200 300 400

NOTES:

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US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

OCEAN SURVEYS, INC.
1726 MALL ROCK ROAD EAST
OLD SAYBROOK, CONNECTICUT
(860) 388-4820

DATES OF SURVEY:
23 JULY - 16 AUGUST 2018

FILE NO.: 101
REQUEST NO.: 4724

SCALE:
1 INCH = 100 FEET

FIELD BOOKS:

APPROVED: FIELD CARTOGRAPHER
APPROVED: R. SMITH PROJECT MANAGER
APPROVED: D. CLARKE LEAD CARTOGRAPHER
APPROVED: J. MRAZ DEPUTY CHIEF OF SURVEY
DATE: 5 FEBRUARY 2019

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

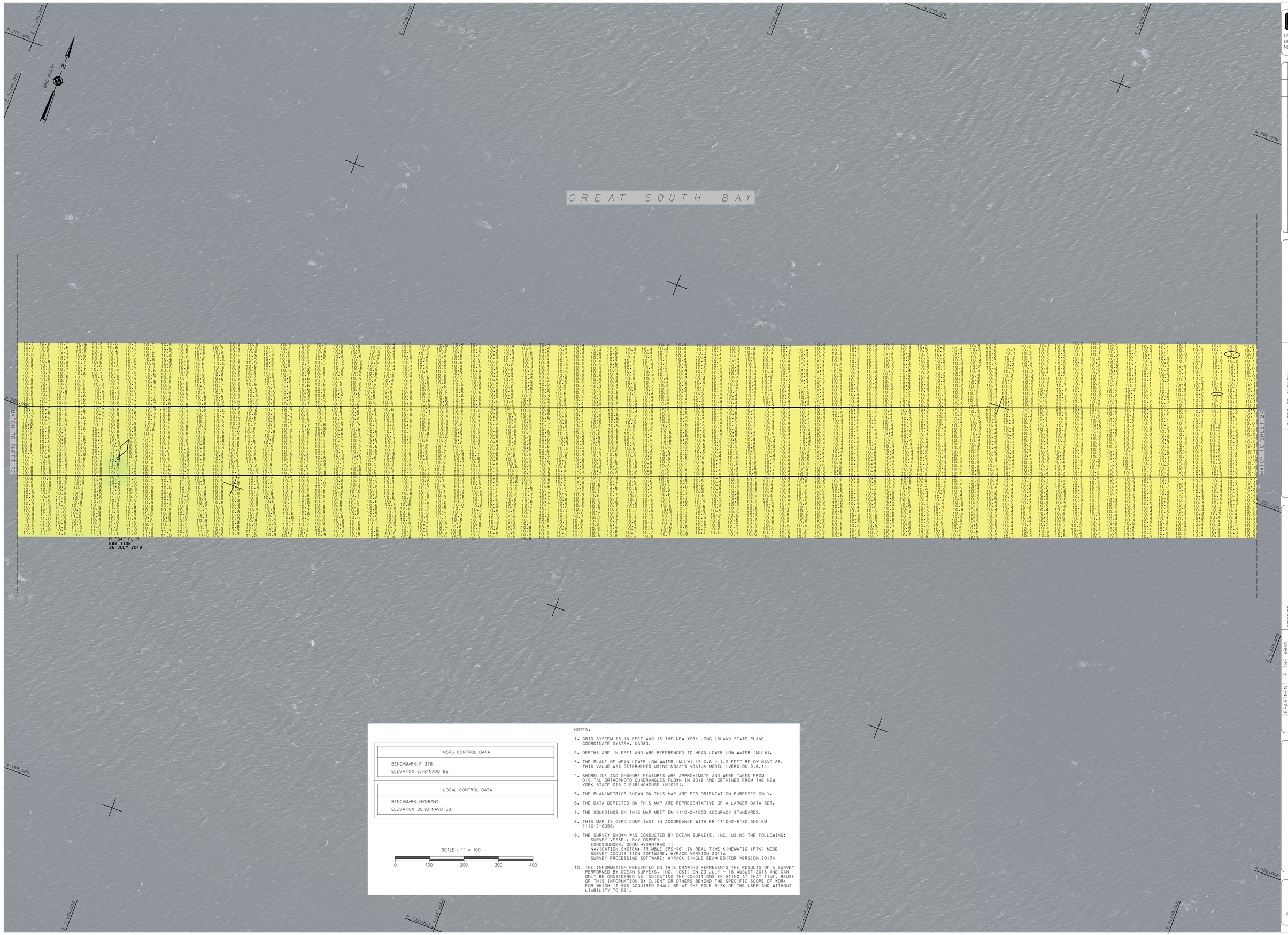
OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

GREAT SOUTH BAY
NEW YORK
CONDITION SURVEY

VH-122

SHEET 22 OF 26

FILE NO.: 101
REQ NO.: 4724



NSRS CONTROL DATA
BENCHMARK: F 376
ELEVATION: 6.78' NAVD 88

LOCAL CONTROL DATA
BENCHMARK: HYDRANT
ELEVATION: 20.93' NAVD 88

SCALE : 1" = 100'

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US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

OCEAN SURVEYS, INC.
A DIVISION OF OSI
OLD SAYBROOK, CONNECTICUT
www.oceansurveys.com

DATES OF SURVEY:
23 JULY – 16 AUGUST 2018

FILE NO.: 101
REQ'S NO.: 4724

SCALE:
1 INCH = 100 FEET

FIELD BOOKS:

APPROVED: _____ FIELD SURVEYANCE

APPROVED: R. SMITH PROJECT MANAGER

APPROVED: D. CLARKE QA/QC SURVEYANCE

APPROVED: J. MRAZ CHIEF, FIELD OPERATIONS BRANCH

DATE: 5 FEBRUARY 2019

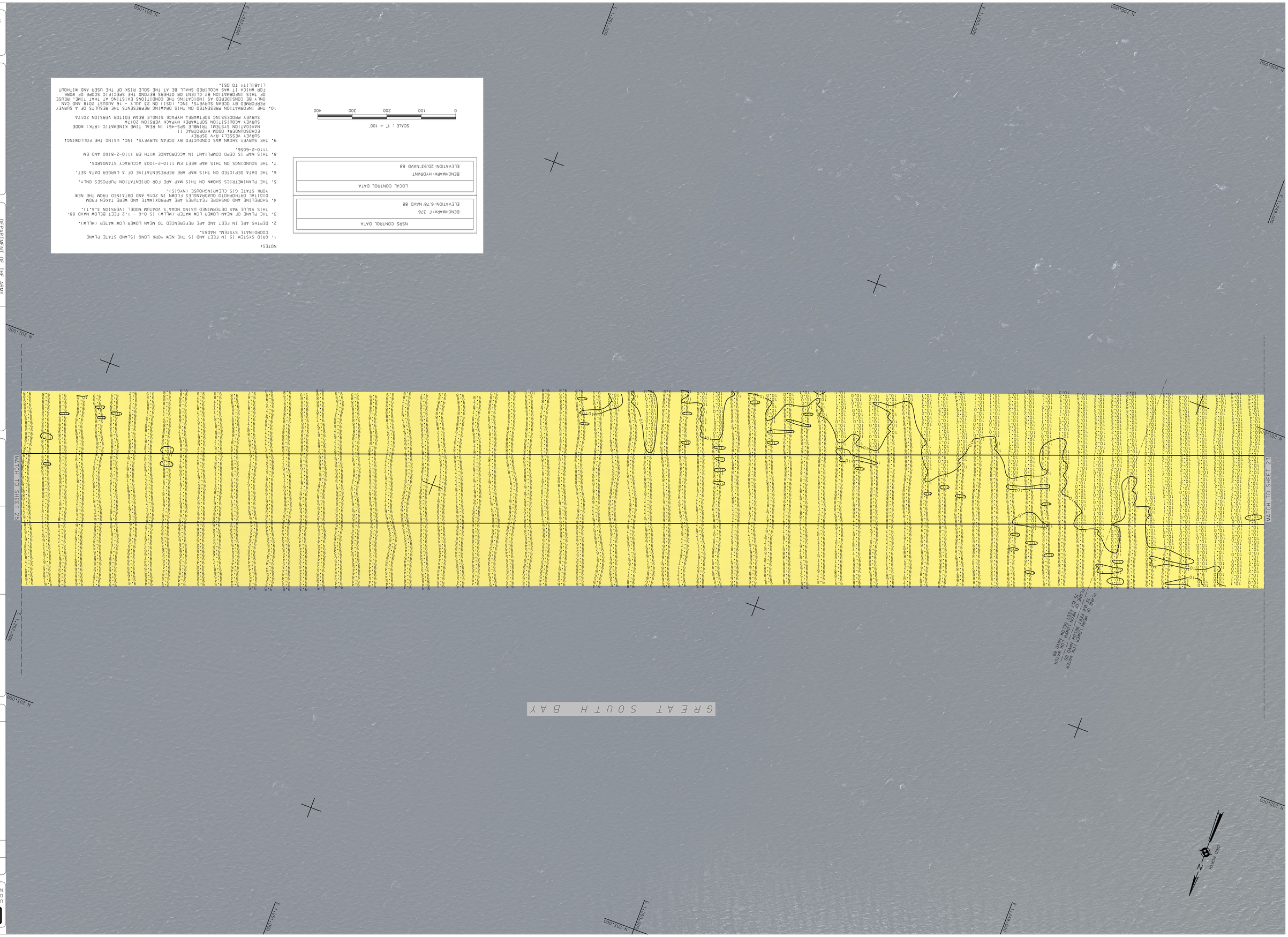
DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OPS

GREAT SOUTH BAY
NEW YORK
CONDITION SURVEY

VH-123

SHEET 23 OF 26



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SCALE : 1" = 100'

0 100 200 300 400

NSRS CONTROL DATA
BENCHMARK: F 376
ELEVATION: 6.78' NAVD 88

LOCAL CONTROL DATA
BENCHMARK: HYDRANT
ELEVATION: 20.93' NAVD 88

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

APPROVED: _____ FIELD SUPERVISOR

APPROVED: R. SMITH, PROJECT MANAGER

APPROVED: D. CLARKE, CHIEF SURVEYOR

APPROVED: J. MRAZ, BRANCH CHIEF OF SURVEY

DATE: 5 FEBRUARY 2019

SCALE:
1 INCH = 100 FEET

FIELD BOOKS:

DATES OF SURVEY:
23 JULY – 16 AUGUST 2018

FILE NO.: 101
REQUEST NO.: 4724

OCEAN SURVEYS, INC.
OLD SAYBROOK, CONNECTICUT
WWW.OCEANSURVEYSINC.COM

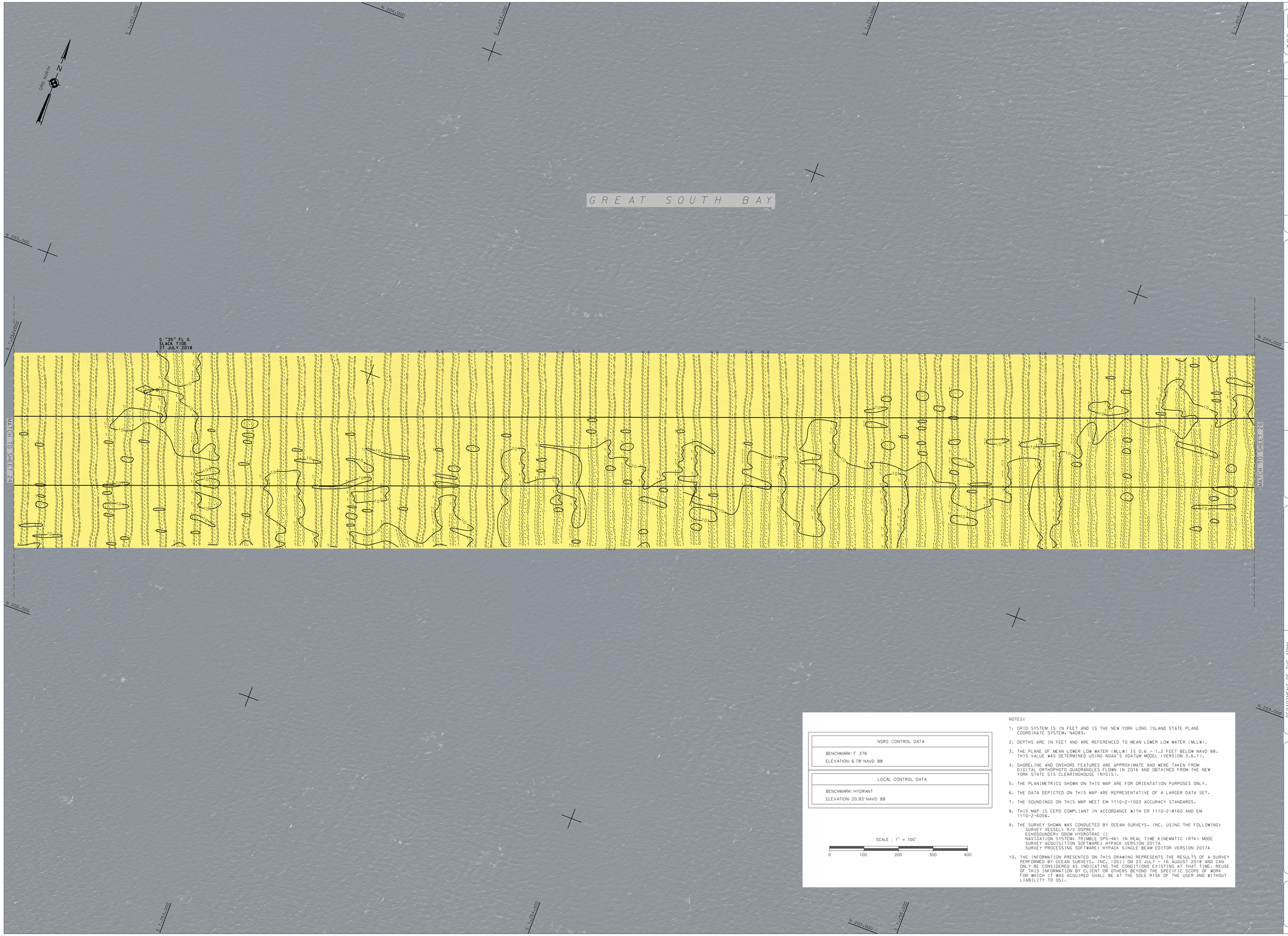
US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

GREAT SOUTH BAY
NEW YORK
CONDITION SURVEY

VH-124

SHEET 24 OF 26

FILE NO.: 101
REQUEST NO.: 4724



NSRS CONTROL DATA

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BENCHMARK: HYDRANT
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7. THE SOUNDINGS ON THIS MAP MEET EM 1110-2-1003 ACCURACY STANDARDS.
8. THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.
9. THE SURVEY SHOWN WAS CONDUCTED BY OCEAN SURVEYS, INC. USING THE FOLLOWING:
   SURVEY VESSEL: R/V OSPREY
   ECHOSOUNDER: ODOM HYDROTRAC II
   NAVIGATION SYSTEMS: TRIMBLE SPS-461 IN REAL TIME KINEMATIC (RTK) MODE
   SURVEY ACQUISITION SOFTWARE: HYPACK VERSION 2017A
   SURVEY PROCESSING SOFTWARE: HYPACK SINGLE BEAM EDITOR VERSION 2017A
10. THE INFORMATION PRESENTED ON THIS DRAWING REPRESENTS THE RESULTS OF A SURVEY PERFORMED BY OCEAN SURVEYS, INC. (OSI) ON 23 JULY - 16 AUGUST 2018 AND CAN ONLY BE CONSIDERED AS INDICATING THE CONDITIONS EXISTING AT THAT TIME. REUSE OF THIS INFORMATION BY CLIENT OR OTHERS BEYOND THE SPECIFIC SCOPE OF WORK FOR WHICH IT WAS ACQUIRED SHALL BE AT THE SOLE RISK OF THE USER AND WITHOUT LIABILITY TO OSI.

US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

OCEAN SURVEYS, INC.
A DIVISION OF OSI
OLD SAYBROOK, CONNECTICUT
www.oceansurveys.com

DATES OF SURVEY:
23 JULY - 16 AUGUST 2018

FILE NO.: 101
REQUEST NO.: 4724

SCALE:
1 INCH = 100 FEET

FIELD BOOKS:

APPROVED: _____ FIELD OPERATIONS
APPROVED: R. SMITH PROJECT MANAGER
APPROVED: D. CLARKE CHIEF, FIELD OPERATIONS
APPROVED: J. MIRAZ CHIEF, SURVEY SECTION
DATE: 5 FEBRUARY 2019

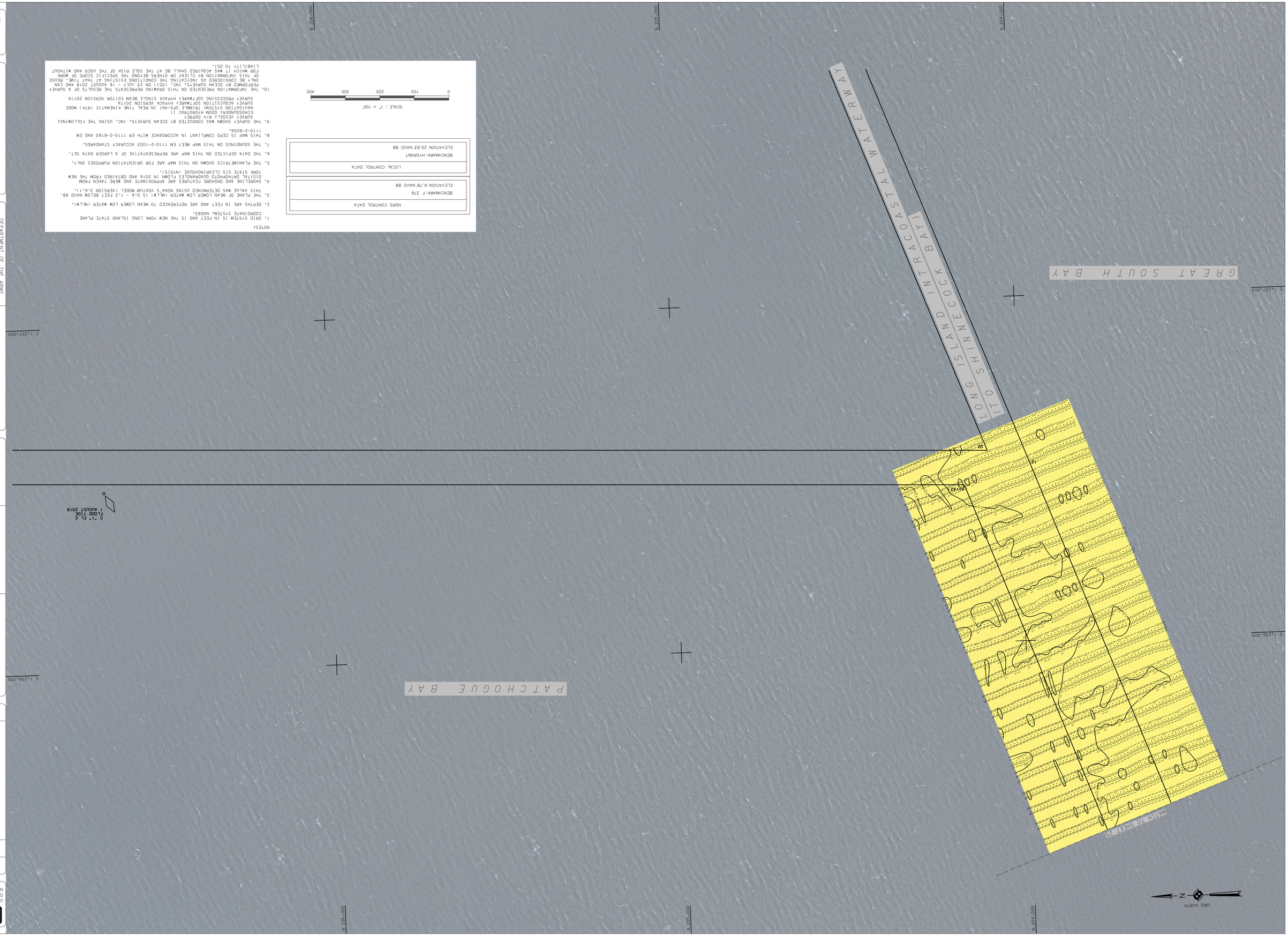
DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

GREAT SOUTH BAY
NEW YORK
CONDITION SURVEY

VH-125

SHEET 25 OF 26



NOTES:

1. GRID SYSTEM IS IN FEET AND IS THE NEW YORK LONG ISLAND STATE PLANE COORDINATE SYSTEM, NAD83.
2. DEPTHS ARE IN FEET AND ARE REFENENCED TO MEAN LOWER LOW WATER (MLLW).
3. THE PLANE OF MEAN LOWER LOW WATER (MLLW) IS 0.6 - 1.2 FEET BELOW NAVD 88. THIS VALUE WAS DETERMINED USING NOAA'S VDATUM MODEL (VERSION 3.6.1).
4. SHORELINE AND ONSHORE FEATURES ARE APPROXIMATE AND WERE TAKEN FROM DIGITAL ORTHOPHOTO QUADRANGLES FLOWN IN 2016 AND OBTAINED FROM THE NEW YORK STATE GIS CLEARINGHOUSE (NYGIS).
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NSRS CONTROL DATA

BENCHMARK: F 376

ELEVATION: 6.78' NAVD 88

LOCAL CONTROL DATA

BENCHMARK: HYDRANT

ELEVATION: 20.93' NAVD 88

0 100 200 300 400
SCALE : 1" = 100'

VH-126

SHEET 26 OF 26

GREAT SOUTH BAY
NEW YORK
CONDITION SURVEY

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278
OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

APPROVED: _____ FIELD SUPERVISOR
APPROVED: R. SMITH PROJECT MANAGER
APPROVED: D. CLARKE CHIEF, OPERATIONS
APPROVED: J. MRAZ CHIEF, FIELD OF SURVEY
DATE: 5 FEBRUARY 2019

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OCEAN SURVEYS, INC.
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