

G R E A T S O U T H B A Y

PROJECT SPECIFIC NOTES:

1. COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983/2011, NEW YORK, LONG ISLAND LAMBERT US SURVEY FEET.
2. 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.
3. THE SOUNDINGS ON THIS MAP MEET EM 1110-2-1003 ACQUISITION STANDARDS.
4. SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
5. MEAN LOWER LOW WATER IS 0.60-1.25 FEET BELOW NAVD 88 AS DETERMINED USING DATUM (V, 2.1).
6. SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 15' RADIUS WITH CHANNEL PRIORITY.
7. CONTOURS ON THIS MAP WERE GENERATED USING THE MAP DATA SET. PROJECT DEPTH IS 10 FEET.
8. THE DATA DEPICTED ON THIS MAP SHOULD NOT BE USED FOR VOLUME CALCULATION PURPOSES.
9. THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
10. THIS SURVEY WAS PERFORMED USING LOCAL CONTROL ESTABLISHED BY THE CORPS OF ENGINEERS.
11. THIS MAP IS CEDP COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.
12. THE SURVEY WAS CONDUCTED BY MCKIM & CREED USING THE FOLLOWING:
  - ECHOSOUND: ECHOSOUND BEAM ODOV CVM 200KHZ
  - NAVIGATION SYSTEMS: TRIMBLE BRONSON IN REAL TIME KINEMATIC (RTK) MODE.
  - SURVEY ACQUISITION SOFTWARE: HYDAPAC VERSION 2015
  - SURVEY PROCESSING SOFTWARE: HYDAPAC SOUND READER VERSION 2015
  - CTD CAST WERE TAKEN DURING ACQUISITION FOR APPROPRIATE SPEED OF SOUND PROFILES
  - USING AN ACQUISITION SPEED OF SOUND VELOCITY
13. THE INFORMATION PRESENTED ON THIS DRAWING REPRESENTS THE RESULTS OF A SURVEY PERFORMED BY MCKIM & CREED ON AUGUST 13-25, 2016, AND CAN ONLY BE CONSIDERED AS INDICATING THE CONDITIONS EXISTING ON THE DATE THE SURVEY WAS CONDUCTED. THERE IS NO SPECIFIC GUARANTEE DUE TO CHANGING EVENTS; A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE INFORMATION ON MCKIM & CREED'S DRAWING. THE USER'S ACCEPTANCE OF THE DRAWING AND THE SPECIFIC SCOPE OF WORK FOR WHICH IT WAS ACQUIRED SHALL BE AT THE SOLE RISK OF THE USER AND WITHOUT LIABILITY TO MCKIM & CREED.

NSRS/NGS CONTROL DATA				
BENCHMARK:	F-376	PID# KU0772	NORTHING	EASTING
ELEVATION:	6.78' NAVD 88		206,582.52	1,240,024.4
STAMPED:	F-376			

LOCAL CONTROL DATA				
BENCHMARK:	RTK BROWNS COE	PI# ACV 261	NORTHING	EASTING
ELEVATION:	3.91' NAVD 88		206,851.18	1,240,866.1

SCALE 1" = 1000'

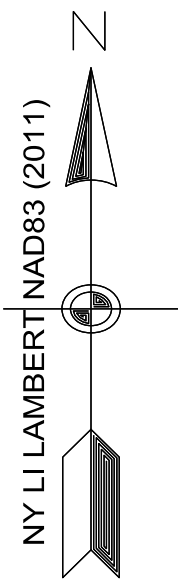
A horizontal scale bar with a black and white alternating pattern. It is marked with numbers 0, 1000, 2000, 3000, and 4000 at regular intervals.

FILE: 99  
REQ: 4493

FILE: 99  
REQ: 4493







N 172+000

G R E A T   S O U T H   B A Y

N 171+000

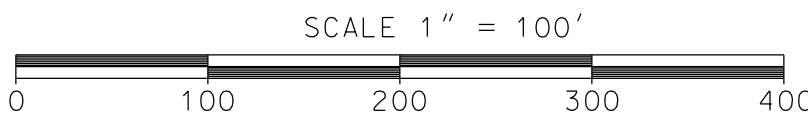
G R E A T   S O U T H   B A Y

N 172+000

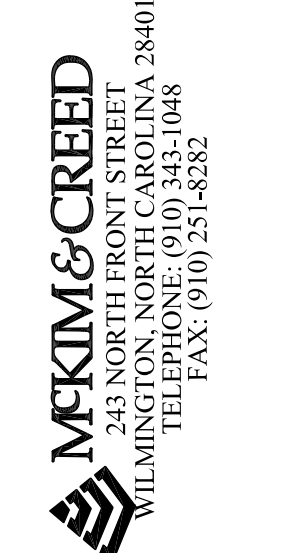
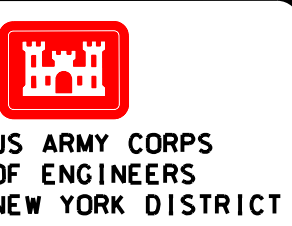
N 171+000

NSRS/NOS CONTROL DATA			
BENCHMARK:	F-376	PID# KU0772	NORTHING    EASTING
ELEVATION:	6.78' NAVD 88		206,582.52    1,240,024.08
STAMPED:	F-376		

LOCAL CONTROL DATA			
BENCHMARK:	RTK BROWNS COE PID# ACV 261	NORTHING    EASTING	
ELEVATION:	3.91' NAVD 88	206,851.18    1,240,866.19	



- PROJECT SPECIFIC NOTES:
1. COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983/2011, NEW YORK, LONG ISLAND LAMBERT US SURVEY FEET.
  2. 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.
  3. THE SOUNDINGS ON THIS MAP MEET EM 1110-2-1003 ACCURACY STANDARDS.
  4. SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
  5. MEAN LOWER LOW WATER IS 0.60-1.25 FEET BELOW NAVD 88 AS DETERMINED USING VDATUM (VER. 2.11).
  6. SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 15' RADIUS WITH CHANNEL PRIORITY USING THE FULL DATA SET.
  7. CONTOURS ON THIS MAP WERE GENERATED USING THE MAP DATA SET, PROJECT DEPTH IS 10 FEET.
  8. THE DATA DEPICTED ON THIS MAP SHOULD NOT BE USED FOR VOLUME CALCULATION PURPOSES.
  9. THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
  10. THIS SURVEY WAS PERFORMED USING LOCAL CONTROL ESTABLISHED BY THE CORPS OF ENGINEERS.
  11. THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.
  12. THE SURVEY WAS CONDUCTED BY MCKIM & CREED USING THE FOLLOWING:  
SURVEY VESSELS: SV SOUNDS DEEP  
ECHOSOUNDER: SINGLE BEAM EDOM CVM 200KHZ  
NAVIGATION SYSTEMS: TRIMBLE RGVSS+, IN REAL TIME KINEMATIC (RTK) MODE.  
SURVEY ACQUISITION SOFTWARE: HYPACK VERSION 2015  
SURVEY PROCESSING SOFTWARE: HYPACK SINGLE BEAM EDITOR VERSION 2015  
CTD CAST WERE TAKEN DURING ACQUISITION FOR ACCURATE SPEED OF SOUND PROFILES USING AN AML OCEANOGRAPHIC SOUND VELOCITY PROBE.
  13. THE INFORMATION PRESENTED ON THIS DRAWING REPRESENTS THE RESULTS OF A SURVEY PERFORMED BY MCKIM & CREED ON AUGUST 13-25, 2016 AND CAN ONLY BE CONSIDERED AS INDICATING THE CONDITIONS EXISTING AT THAT TIME. BECAUSE THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE DUE TO SHOALING EVENTS, A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE INFORMATION PROVIDED HERE. 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 MCKIM & CREED.



DATE OF SURVEY: AUGUST 13-25, 2016	SCALE: ONE INCH = 100 FEET
FILE NO.: 08 PROJECT NO.: 4493	FIELD BOOKS: 

APPROVED: RAYMOND J. LAMBERT CHIEF OF DISTRICT	APPROVED: R. SMITH DISTRICT MANAGER
APPROVED: D. L. CLARKE DISTRICT MANAGER	APPROVED: F. POST DISTRICT MANAGER
DATE: 23 SEPTEMBER 2016	

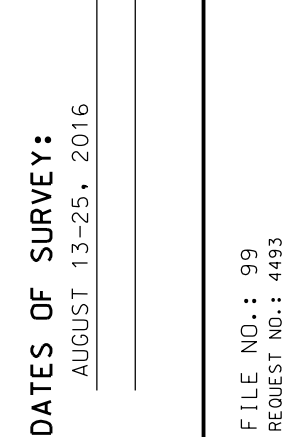
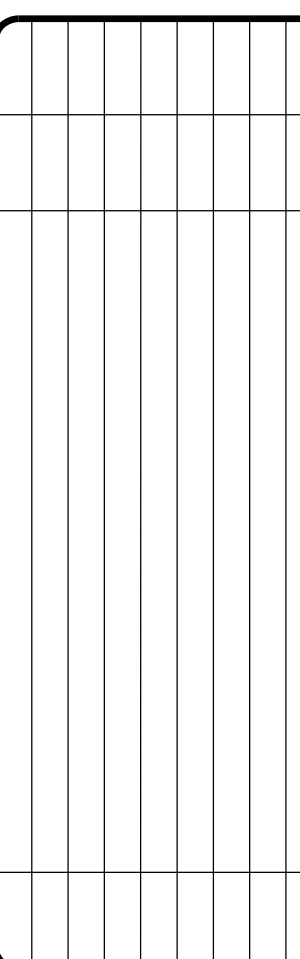
DEPARTMENT OF THE ARMY NEW YORK DISTRICT CORPS OF ENGINEERS NEW YORK, NEW YORK 10278	OPERATIONS DIVISION SURVEY SECTION CEMNA-COS
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HYDROGRAPHIC SURVEY  
OF  
GREAT SOUTH BAY  
NEW YORK

VH-103

SHEET 3 OF 27





**SCALE:**  
ONE INCH = 100 FEET

**FIELD BOOKS:**  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

APPROVED:	RAYMOND B. DAWBER LTD COLLEGE SUPERVISOR
APPROVED:	R. SMITH PROJECT MANAGER
APPROVED:	D. CLARKE LTD COLLEGE SUPERVISOR
APPROVED:	F. POSTIGLIONE CHIEF OF SURVEY

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

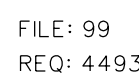
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OPERATIONS DIVISION  
SURVEY SECTION  
CENAN-OP-S

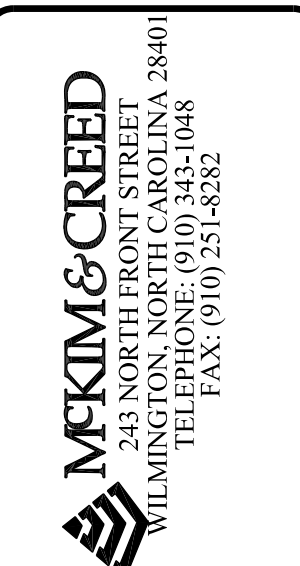
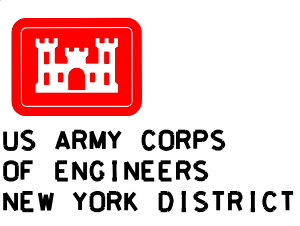
HYDROGRAPHIC SURVEY  
OF  
GREAT SOUTH BAY  
NEW YORK

VH-104

SHEET 4 OF 27







DATES OF SURVEY:  
AUGUST 13-25, 2016

SCALE:  
ONE INCH = 100 FEET

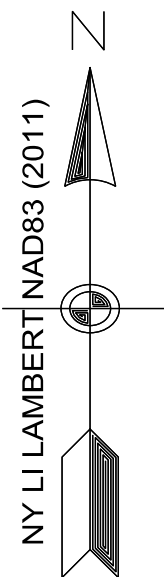
APPROVED: RAYMOND J. KAMBER  
R. SMITH  
D. CLARK  
F. POSTOLONE  
DATE: 23 SEPTEMBER 2016

DEPARTMENT OF THE ARMY  
NEW YORK DISTRICT  
NEW YORK, NEW YORK 10278  
OPERATIONS DIVISION  
SURVEY SECTION  
CENACOPS

HYDROGRAPHIC SURVEY  
OF  
GREAT SOUTH BAY  
NEW YORK

VH-105

SHEET 5 OF 27

FILE: 99  
REQ: 4493

G R E A T   S O U T H   B A Y

G R E A T   S O U T H   B A Y

SCALE 1" = 100'

NSRS/NGS CONTROL DATA			
BENCHMARK: F-376	PID# KU0772	NORTHING	EASTING
ELEVATION: 6.78' NAVD 88		206,582.52	1,240,024.08
STAMPED: F-376			
LOCAL CONTROL DATA			
BENCHMARK: RTK BROWNS COE PID# ACV 261		NORTHING	EASTING
ELEVATION: 3.91' NAVD 88		206,851.18	1,240,866.19

## PROJECT SPECIFIC NOTES:

- COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983/2011, NEW YORK, LONG ISLAND LAMBERT US SURVEY FEET.
- 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 EN 1110-2-1003 ACCURACY STANDARDS.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
- MEAN LOWER LOW WATER IS 0.60-1.25 FEET BELOW NAVD 88 AS DETERMINED USING VDATUM IVER, 2.1.1.
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 15' RADIUS WITH CHANNEL PRIORITY USING THE FULL DATA SET.
- CONTOURS ON THIS MAP WERE GENERATED USING THE MAP DATA SET, PROJECT DEPTH IS 10 FEET.
- THE DATA DEPICTED ON THIS MAP SHOULD NOT BE USED FOR VOLUME CALCULATION PURPOSES.
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING LOCAL CONTROL ESTABLISHED BY THE CORPS OF ENGINEERS.
- THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH EN 1110-2-8160 AND EN 1110-2-6056.
- THE SURVEY WAS CONDUCTED BY MCKIM & CREED USING THE FOLLOWING:  
SURVEY VESSELS: SV SOUND DEEP  
ECHOSOUNDER: SINGLE BEAM DODM CWM 200KHZ  
NAVIGATION SYSTEMS: TRIMBLE BRONX+ IN REAL TIME KINEMATIC (RTK) MODE  
SURVEY ACQUISITION SOFTWARE: HYPACK VERSION 2015  
SURVEY PROCESSING SOFTWARE: HYPACK SINGLE BEAM EDITOR VERSION 2015  
CTD CASTS WERE TAKEN DURING ACQUISITION FOR ACCURATE SPEED OF SOUND PROFILES USING AN AML OCEANOGRAPHIC SOUND VELOCITY PROBE.
- THE INFORMATION PRESENTED ON THIS DRAWING REPRESENTS THE RESULTS OF A SURVEY PERFORMED BY MCKIM & CREED ON AUGUST 13-25, 2016 AND CAN ONLY BE CONSIDERED AS INDICATING THE CONDITIONS EXISTING AT THAT TIME. BECAUSE THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE DUE TO SHALING EVENTS, A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE INFORMATION PROVIDED HERE. 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 MCKIM & CREED.

E 1:198,000

E 1:198,000

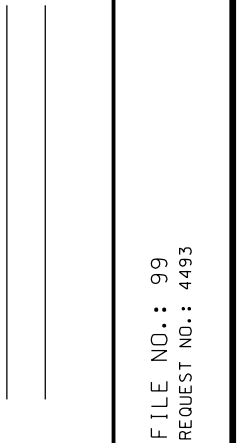
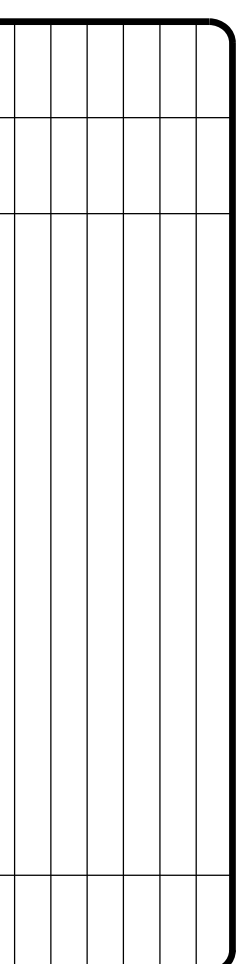
E 1:198,000

E 1:197,000

E 1:198,000

E 1:198,000





**FIELD BOOKS:**

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\_\_\_\_\_

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APPROVED: R. SMITH  
PROJECT MANAGER

APPROVED: D. CLARKE  
LEAD CARTOONIST

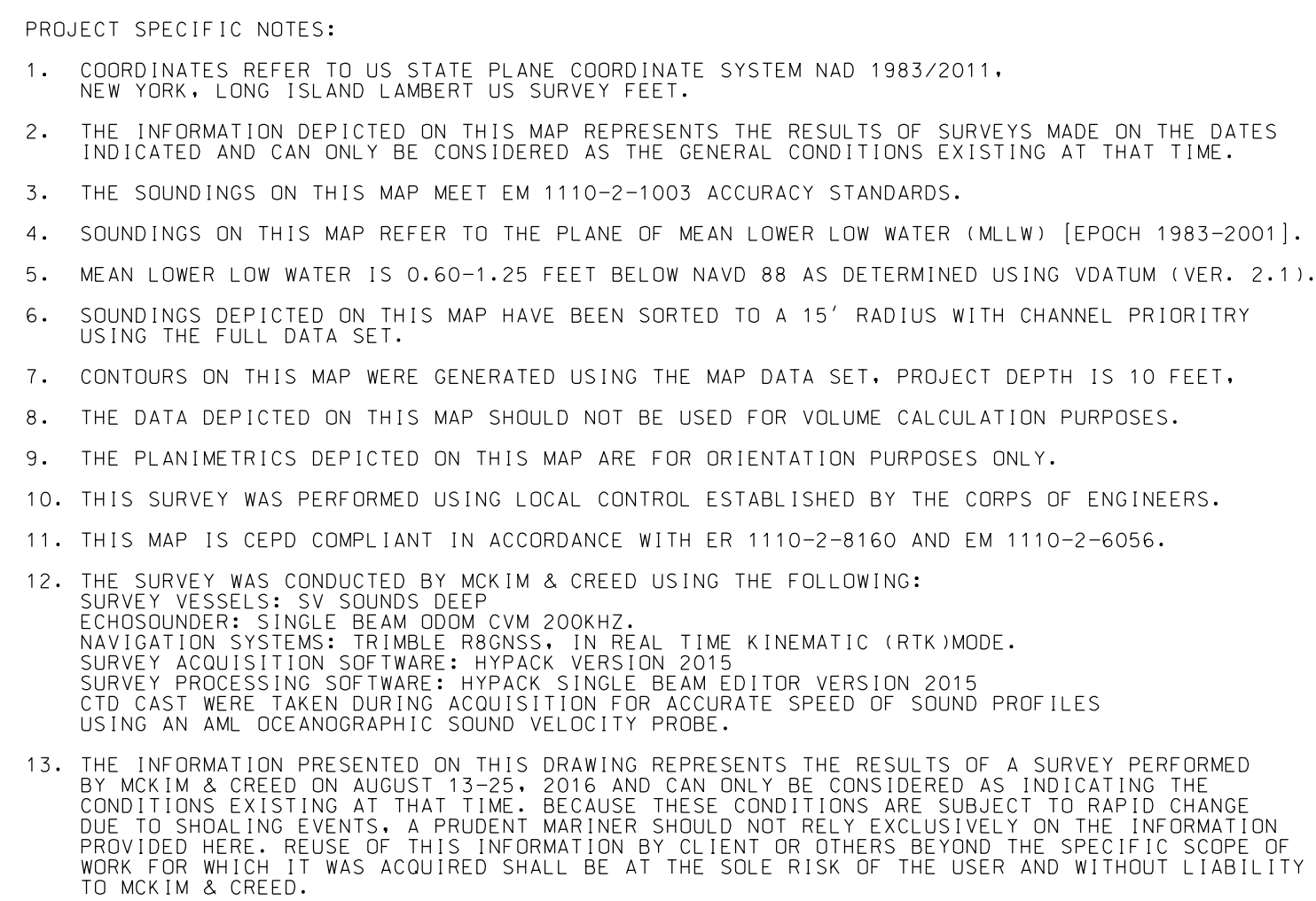
APPROVED: F. POSTILLONE  
CHIEF OF STAFF

DATE: 23 SEPTEMBER 2016

OF  
GREAT SOUTH BAY  
NEW YORK

VH-106

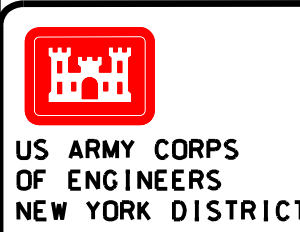
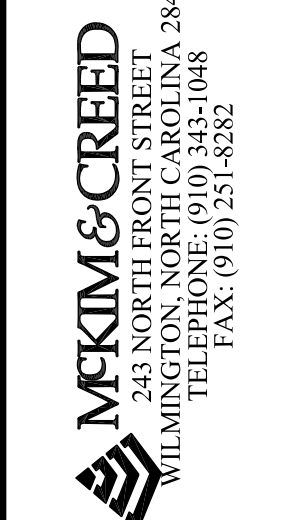
PAGE 6 OF 27





## PROJECT SPECIFIC NOTES:

- COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983/2011, NEW YORK, LONG ISLAND LAMBERT US SURVEY FEET.
- 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.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2011].
- MEAN LOWER LOW WATER IS 0.60-1.25 FEET BELOW NAVD 88 AS DETERMINED USING VDATUM (VER. 2.1).
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 15' RADIUS WITH CHANNEL PRIORITY USING THE FULL DATA SET.
- CONTOURS ON THIS MAP WERE GENERATED USING THE MAP DATA SET. PROJECT DEPTH IS 10 FEET.
- THE DATA DEPICTED ON THIS MAP SHOULD NOT BE USED FOR VOLUME CALCULATION PURPOSES.
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING LOCAL CONTROL ESTABLISHED BY THE CORPS OF ENGINEERS.
- THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.
- THE SURVEY WAS CONDUCTED BY MCKIM & CREED USING THE FOLLOWING:  
SURVEY VESSELS: SV SOUNDS DEEP  
ECHOSOUNDER: SINGLE BEAM ODOM CVM 200KHZ  
NAVIGATION SYSTEMS: TRIMBLE BRUNNEN (IN REAL TIME KINEMATIC (RTK) MODE)  
SURVEY ACQUISITION SOFTWARE: HYPPACK VERSION 2015  
SURVEY PROCESSING SOFTWARE: HYPPACK SINGLE BEAM EDITOR VERSION 2015  
CTD CAST WERE TAKEN DURING ACQUISITION FOR ACCURATE SPEED OF SOUND PROFILES  
USING AN AML OCEANOGRAPHIC SOUND VELOCITY PROBE.
- THE INFORMATION PRESENTED ON THIS DRAWING REPRESENTS THE RESULTS OF A SURVEY PERFORMED BY MCKIM & CREED ON AUGUST 13-25, 2016 AND CAN ONLY BE CONSIDERED AS INDICATING THE CONDITIONS EXISTING AT THAT TIME. BECAUSE THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE DUE TO SHALING EVENTS, A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE INFORMATION PROVIDED HERE. 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 MCKIM & CREED.

US ARMY CORPS  
OF ENGINEERS  
NEW YORK DISTRICTMCKIM & CREED  
245 NORTHERN STREET  
WILMINGTON, DE 19804  
TELEPHONE: (302) 484-1044  
FAX: (302) 484-1882DATES OF SURVEY:  
AUGUST 13-25, 2016SCALE:  
ONE INCH = 100 FEETAPPROVED: RAYMOND B. DUNN  
BY: R. SMITH  
APPROVED: D. CLARK  
APPROVED: F. POSTOLONE  
DATE: 23 SEPTEMBER 2016DEPARTMENT OF THE ARMY  
NEW YORK DISTRICT  
NEW YORK - NEW YORK 10278  
OPERATIONS DIVISION  
SURVEY SECTION  
CEAN-CPSHYDROGRAPHIC SURVEY  
OF  
GREAT SOUTH BAY  
NEW YORKVH-107  
SHEET 7 OF 27

NSRS/NGS CONTROL DATA			
BENCHMARK: F-376	PID# KU0772	NORTHING	EASTING
ELEVATION: 6.78' NAVD 88		206,582.52	1,240,024.08
STAMPED: F-376			

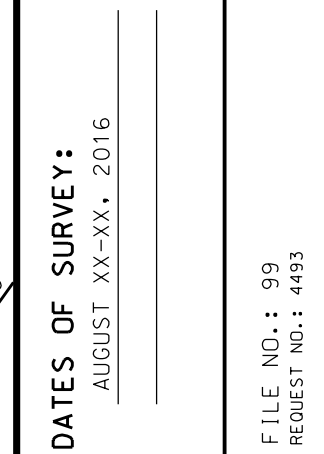
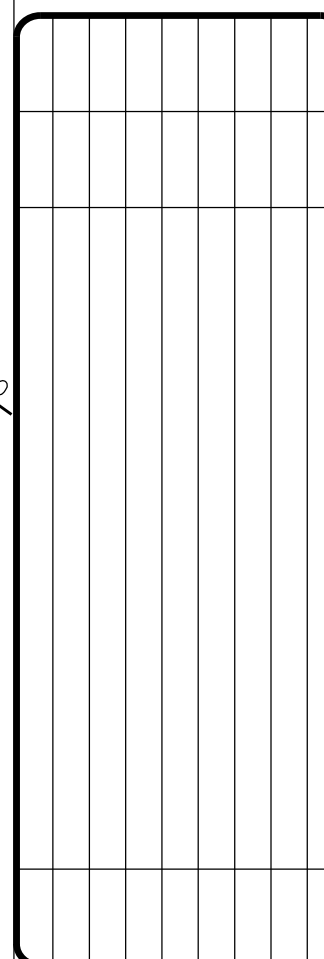
LOCAL CONTROL DATA			
BENCHMARK: RTK BROWNS COE PID# ACV 261		NORTHING	EASTING
ELEVATION: 3.91' NAVD 88		206,851.18	1,240,866.19

SCALE 1" = 100'  
0 100 200 300 400

GREAT SOUTH BAY

GREAT SOUTH BAY





**SCALE:**  
ONE INCH = 100 FEET

**FIELD BOOKS:**  
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\_\_\_\_\_  
\_\_\_\_\_

APPROVED: RAYMOND B. DAWBER  
Vice President

APPROVED: R. SMITH  
Project Manager

APPROVED: D. CLARKE  
Lead Cartographer

APPROVED: F. POSTIGLIONE  
Chief of Survey

DATE: 23 SEPTEMBER 2016.

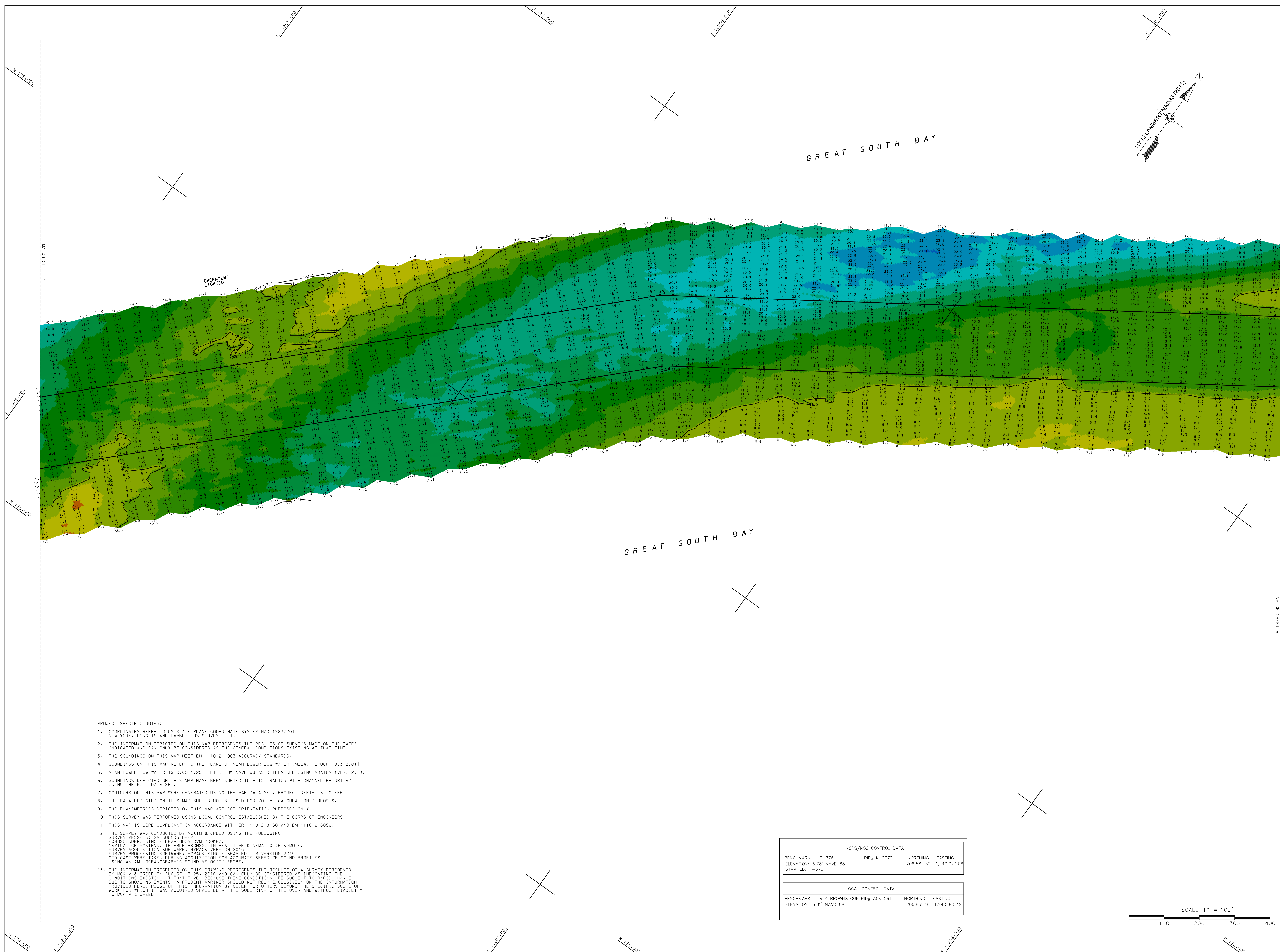
DEPARTMENT OF THE ARMY  
NEW YORK DISTRICT  
CORPS OF ENGINEERS  
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION  
SURVEY SECTION  
CENAN-OP-S

HYDROGRAPHIC SURVEY  
OF  
GREAT SOUTH BAY  
NEW YORK

VH-108

SHEET 8 OF 27



1. COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983/2011.
2. NEW YORK STATE PLAND LAMBERT US SURVEY 1811/1813.
3. 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.
4. THE SOUNDINGS ON THIS MAP MEET EN 1110-2+1003 ACCURACY STANDARDS.
5. SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
6. MEAN LOWER LOW WATER IS 0.60-1.25 FEET BELOW NAVD 88 AS DETERMINED USING VDATUM (VER. 2.1).
7. SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 15' RADIUS WITH CHANNEL PRIORITY.
8. US STATE PLANE COORDINATE SYSTEM NAD 1983/2011.
9. CONTOURS ON THIS MAP WERE GENERATED USING THE MAP DATA SET. PRODUCTION DEPTH IS 10 FEET.
10. THE DATA DEPICTED ON THIS MAP SHOULD NOT BE USED FOR VOLUME CALCULATION PURPOSES.
11. THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
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13. THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH EN 1110-2+8160 AND EN 1110-2+6056.
14. THE SURVEY WAS CONDUCTED BY MCKIM & CREED USING THE FOLLOWING:  
SURVEY VESSELS: SV SOUNDINGS  
EQUIPMENT: SINGLE BEAM ECHOSOUNDING  
NAVIGATION SYSTEMS: TRIMBLE RBN30S, IN REAL TIME KINEMATIC (RTK) MODE.  
POSITION FIXATION: SINGLE BEAM ECHOSOUNDING  
SURVEY PROCESSING SOFTWARE: HYPACK SINGLE BEAM EPOCH VERSION 2015  
USING THE SAME DATA ACQUIRING ACQUISITION RATE AND SPEED OF SOUND PROFILES  
USING AN AC OCEANOGRAPHIC SOUND VELOCITY PROBE.
15. THE INFORMATION PRESENTED ON THIS DRAWING REPRESENTS THE RESULTS OF A SURVEY PERFORMED BY MCKIM & CREED ON 2015. THE INFORMATION IS PROVIDED AS IS AND WITHOUT WARRANTY OF THE CONDITIONS EXISTING AT THAT TIME. BECAUSE THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE, THE INFORMATION IS NOT GUARANTEED TO BE CURRENT. THE USER SHALL BE RESPONSIBLE FOR THE INFORMATION PROVIDED HERE. REUSE OF THIS INFORMATION BY ANY OTHER OR OTHERS BEYOND THE SPECIFIC SCOPE OF PROJECT FOR WHICH IT WAS ACQUIRED SHALL BE AT THE SOLE RISK OF THE USER AND WITHOUT LIABILITY TO MCKIM & CREED.

NSRS/NGS CONTROL DATA			
BENCHMARK:	F=576	PID# KU0772	NORTHING EASTING
ELEVATION:	6.78' NAVD 88		206,582.52 1,240,024.06
STAMPED:	F=376		

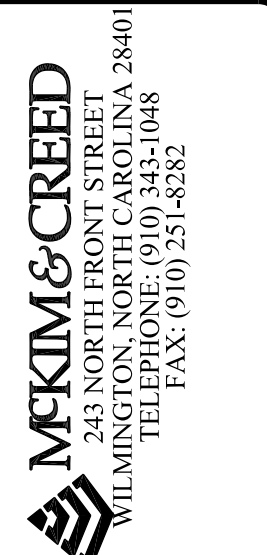
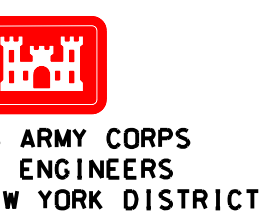
  

LOCAL CONTROL DATA			
BENCHMARK:	RTK BROWNS COE PID# ACV 261	NORTHING	EASTING
ELEVATION:	3.91' NAVD 88	206,851.18	1,240,866.19

SCALE 1" = 100'

A horizontal scale bar with a black line and white tick marks. The bar is divided into four equal segments by three vertical tick marks. Below the bar, the numbers 0, 100, 200, 300, and 400 are printed at regular intervals, corresponding to the tick marks.





DATES OF SURVEY:  
AUGUST 13-25, 2016

SCALE:  
ONE INCH = 100 FEET

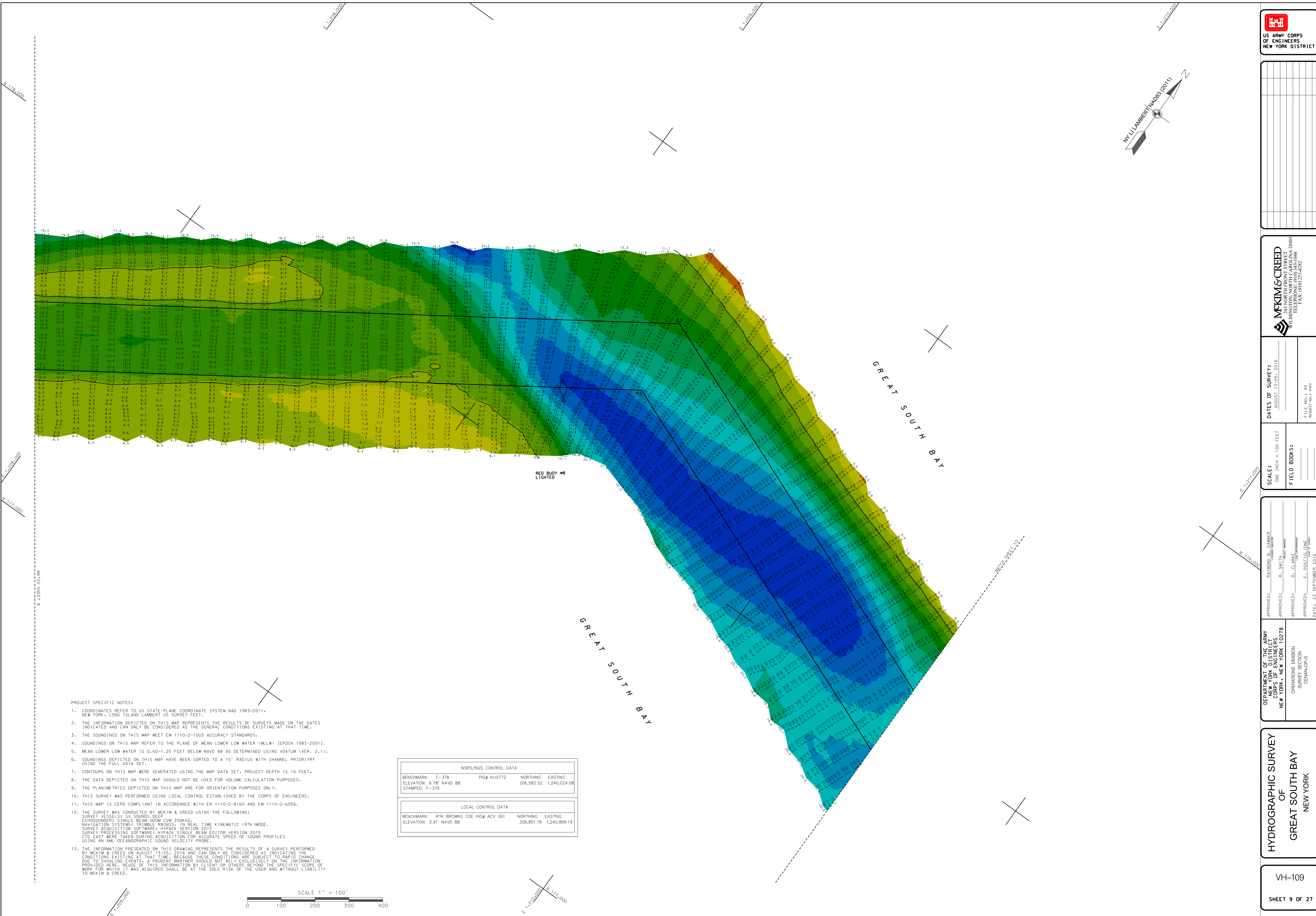
APPROVED: RAYMOND B. JAWORSKI  
BY: SMTH  
APPROVED: D. CLARKE  
BY: F. COSLOVE  
DATE: 23 SEPTEMBER 2016

DEPARTMENT OF THE ARMY  
NEW YORK DISTRICT  
NEW YORK, NEW YORK 10278  
OPERATIONS DIVISION  
SURVEY SECTION  
CEMAN-CO-S

HYDROGRAPHIC SURVEY  
OF  
GREAT SOUTH BAY  
NEW YORK

VH-109

SHEET 9 OF 27



PROJECT SPECIFIC NOTES:

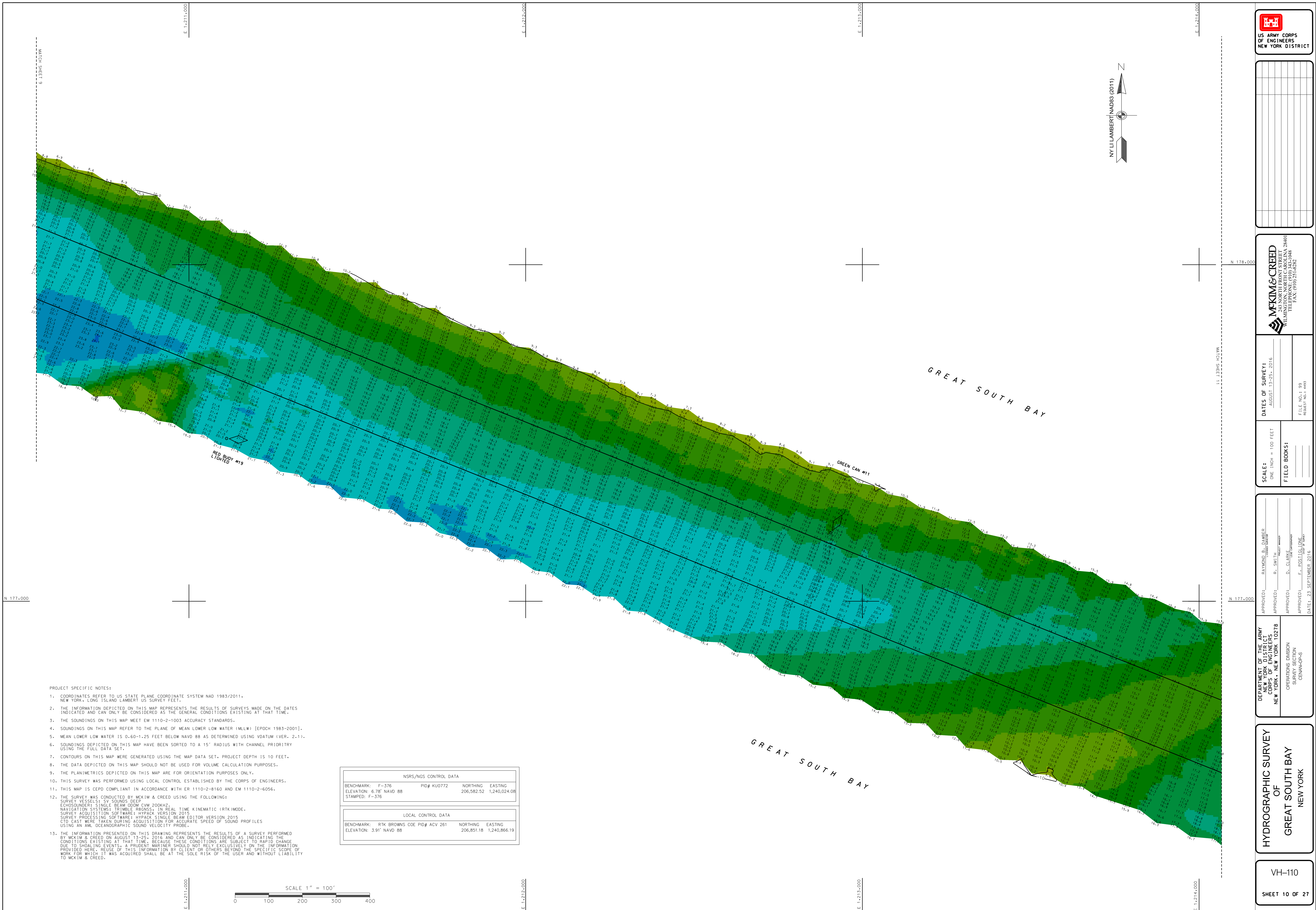
- COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983/2011, NEW YORK, LONG ISLAND LAMBERT US SURVEY FEET.
- THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS THE GENERAL CONDITIONS EXISTING AT THAT TIME.
- THE SOUNDINGS ON THIS MAP MEET EM 1110-2-1003 ACCURACY STANDARDS.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1993-2001].
- MEAN LOWER LOW WATER IS 0.60-1.25 FEET BELOW NAVD 88 AS DETERMINED USING VDATUM (VER. 2.11).
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 15' RADIUS WITH CHANNEL PRIORITY USING THE FULL DATA SET.
- CONTOURS ON THIS MAP WERE GENERATED USING THE MAP DATA SET, PROJECT DEPTH IS 10 FEET.
- THE DATA DEPICTED ON THIS MAP SHOULD NOT BE USED FOR VOLUME CALCULATION PURPOSES.
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING LOCAL CONTROL ESTABLISHED BY THE CORPS OF ENGINEERS.
- THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.
- THE SURVEY WAS CONDUCTED BY MCKIM & CREED USING THE FOLLOWING:  
SURVEY VESSELS: SV SOUNDS DEEP  
ECHOSOUNDER: SINGLE BEAM ECHOSOUNDER CVM 200KHZ  
NAVIGATION SYSTEMS: TRIMBLE RAGNOS, IN REAL TIME KINEMATIC (RTK) MODE  
SURVEY ACQUISITION SOFTWARE: HYDRACK VERSION 2015  
SURVEY PROCESSING SOFTWARE: HYDRACK SINGLE BEAM EDITOR VERSION 2015  
CTD CASTS WERE TAKEN DURING ACQUISITION FOR ACCURATE SPEED OF SOUND PROFILES USING AN AML OCEANOGRAPHIC SOUND VELOCITY PROBE.
- THE INFORMATION PRESENTED ON THIS DRAWING REPRESENTS THE RESULTS OF A SURVEY PERFORMED BY MCKIM & CREED ON AUGUST 13-25, 2016 AND CAN ONLY BE CONSIDERED AS INDICATING THE CONDITIONS EXISTING AT THAT TIME. BECAUSE THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE DUE TO CHANGING WEATHER, A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE INFORMATION PROVIDED HERE. 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 MCKIM & CREED.

NSRS/NGS CONTROL DATA			
BENCHMARK:	F-376	PID# KU0772	NORTHING EASTING
ELEVATION:	6.78' NAVD 88		206,582.52 1,240,024.08
STAMPED:	F-376		

LOCAL CONTROL DATA			
BENCHMARK:	RTK BROWNS COE PID# ACV 261	NORTHING EASTING	
ELEVATION:	3.91' NAVD 88	206,851.18 1,240,866.19	

SCALE 1" = 100'





- PROJECT SPECIFIC NOTES:
1. COORDINATES REFER TO U.S. STATE PLANE COORDINATE SYSTEM NAD 1983/2011, NEW YORK, LONG ISLAND LAMBERT US SURVEY FEET.
  2. 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.
  3. THE SOUNDINGS ON THIS MAP MEET EM 1110-2-1003 ACCURACY STANDARDS.
  4. SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
  5. MEAN LOWER LOW WATER IS 0.60-1.25 FEET BELOW NAVD 88 AS DETERMINED USING VDATUM (VER. 2.1).
  6. SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 15' RADIUS WITH CHANNEL PRIORITY USING THE FULL DATA SET.
  7. CONTOURS ON THIS MAP WERE GENERATED USING THE MAP DATA SET. PROJECT DEPTH IS 10 FEET.
  8. THE DATA DEPICTED ON THIS MAP SHOULD NOT BE USED FOR VOLUME CALCULATION PURPOSES.
  9. THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
  10. THIS SURVEY WAS PERFORMED USING LOCAL CONTROL ESTABLISHED BY THE CORPS OF ENGINEERS.
  11. THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-B160 AND EM 1110-2-6056.
  12. THE SURVEY WAS CONDUCTED BY MCKIM & CREED USING THE FOLLOWING:  
SURVEY VESSELS: SV SOUNDS DEEP  
ECHOSOUNDER: SINGLE BEAM ECHOSOUNDER CVM 200KHZ  
NAVIGATION SYSTEMS: TRIMBLE RBBN55 IN REAL TIME KINEMATIC (RTK) MODE  
SURVEY ACQUISITION SOFTWARE: HYPPACK VERSION 2015  
SURVEY PROCESSING SOFTWARE: HYPPACK SINGLE BEAM EDITOR VERSION 2015  
CTD EAST WERE TAKEN DURING ACQUISITION FOR ACCURATE SPEED OF SOUND PROFILES USING AN AML OCEANOGRAPHIC SOUND VELOCITY PROBE.
  13. THE INFORMATION PRESENTED ON THIS DRAWING REPRESENTS THE RESULTS OF A SURVEY PERFORMED BY MCKIM & CREED ON AUGUST 13-25, 2016 AND CAN ONLY BE CONSIDERED AS INDICATING THE CONDITIONS EXISTING AT THAT TIME, BECAUSE THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE DUE TO CHANGING EVENTS. A PRUDENT WARNER SHOULD NOT RELY EXCLUSIVELY ON THE INFORMATION PROVIDED HERE. 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 MCKIM & CREED.

NSRS/NGS CONTROL DATA			
BENCHMARK:	F-376	PID# KU0772	NORTHING EASTING
ELEVATION:	6.78' NAVD 88		206,582.52 1,240,024.08
STAMPED:	F-376		

LOCAL CONTROL DATA			
BENCHMARK:	RTK BROWNS COE PID# ACV 261	NORTHING EASTING	
ELEVATION:	3.91' NAVD 88	206,851.18	1,240,866.19

US ARMY CORPS OF ENGINEERS  
NEW YORK DISTRICT

DATE OF SURVEY:  
AUGUST 13-25, 2016

SCALE:  
ONE INCH = 100 FEET

FIELD BOOKS:  
FILE NO. 1: 01  
REHEET NO. 1: 4493

APPROVED: RAYMOND L. LAMBERT  
R. SMITH  
D. CLARK  
F. POST  
DATE: 23 SEPTEMBER 2016

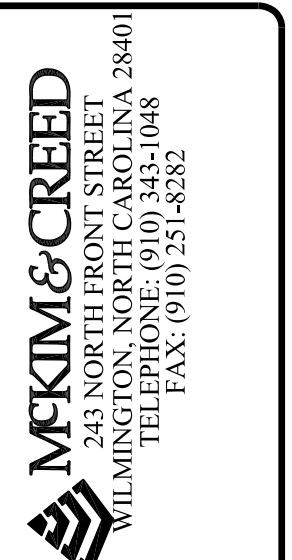
DEPARTMENT OF THE ARMY  
NEW YORK DISTRICT  
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION  
SURVEY SECTION  
CEM-CP-S

HYDROGRAPHIC SURVEY  
OF  
GREAT SOUTH BAY  
NEW YORK

VH-110  
SHEET 10 OF 27



FILE NO.: 99  
 REFERENCE NO.: 5003

\_\_\_\_\_

\_\_\_\_\_

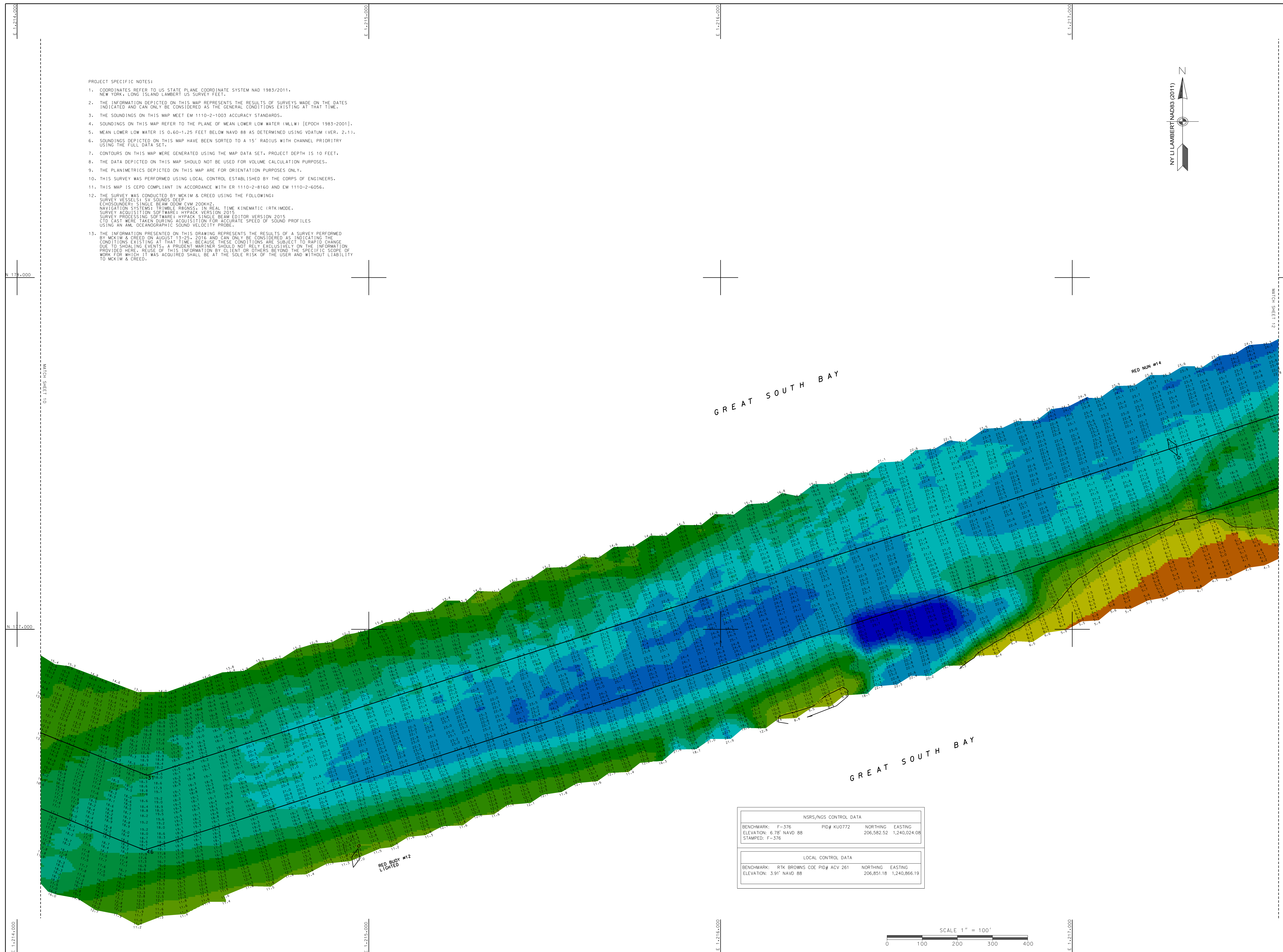
APPROVED: D. CLARKE  
LEAD CARTOGRAPHER

APPROVED: F. POSTIGLIONE  
CHIEF OF SURVEY

OPERATIONS DIVISION  
SURVEY SECTION  
CENAN-OP-S

VH-111

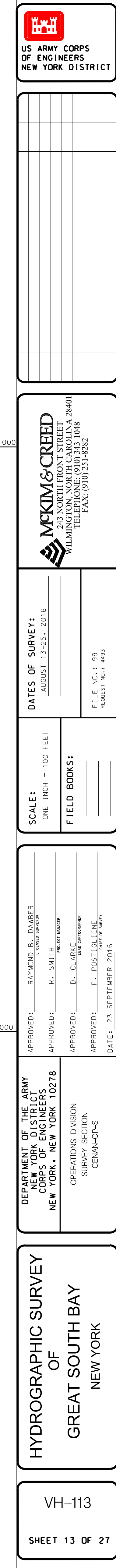
FILE: 99  
EQ: 4493



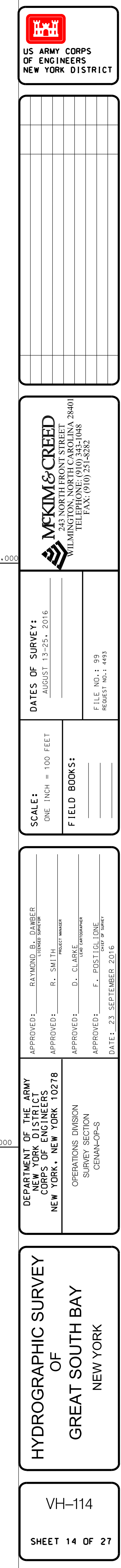




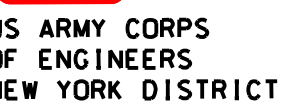












**DATES OF SURVEY:**  
AUGUST 13-25, 2016

**DATES OF SURVEY:**  
AUGUST 13-25, 2016

SCALE:  
ONE INCH = 100'

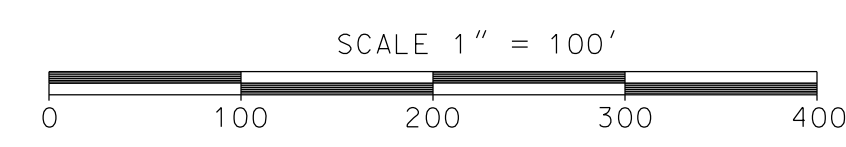
DEPARTMENT OF THE ARMY  
NEW YORK DISTRICT  
CORPS OF ENGINEERS  
NEW YORK  
APPROVED: RAYMOND B. DAWBER  
LICENSED SURVEYOR  
APPROVED: C. OWEN  
NEW YORK 40070

DEPARTMENT OF THE ARMY  
NEW YORK DISTRICT  
CORPS OF ENGINEERS

DROGRAPHIC SURVEY  
OF  
GREAT SOUTH BAY  
NEW YORK

VH-115

SHEET 15 OF 15



PROJECT SPECIFIC NOTES

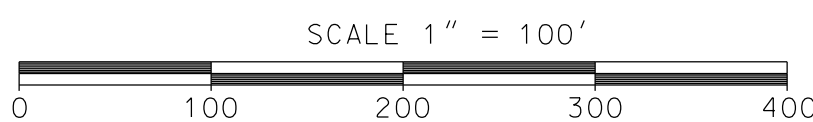
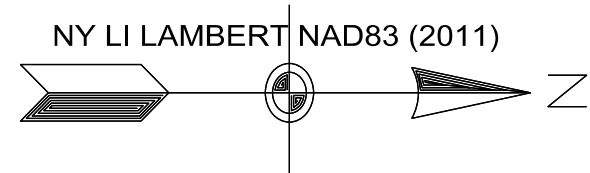
1. COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983/2011.  
NEW YORK - LONG ISLAND LAMBERT US SURVEY FEET.
2. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED. ANY CHANGES TO THE INFORMATION SHOWN AS GENERAL CONDITIONS EXISTING AT THAT TIME.
3. THE SOUNDINGS ON THIS MAP MEET EN 1110-2-1003 ACQUISITION STANDARDS.
4. SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPDCH 1983-2001].
5. MEAN LOWER LOW WATER IS 0.60-1.25 FEET BELOW NAVD 88 AS DETERMINED USING VDATUM (VER. 2.1).
6. SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 15' RADIAL WITH CHANNEL PRIORITY USING THE FULL DATA SET.
7. CONTOURS ON THIS MAP WERE GENERATED USING THE MAP DATA SET. PROJECT DEPTH IS 10 FEET.
8. THE DATA DEPICTED ON THIS MAP SHOULD NOT BE USED FOR VOLUME CALCULATION PURPOSES.
9. THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
10. THIS SURVEY WAS PERFORMED USING LOCAL CONTROL ESTABLISHED BY THE CORPS OF ENGINEERS.
11. THIS MAP IS CEPP COMPLIANT IN ACCORDANCE WITH EN 1110-2-8160 AND EN 1110-2-6056.
12. THE SURVEY WAS CONDUCTED BY MCKIM & CREED USING THE FOLLOWING:  
SURVEY MODEL: SV SOUNDINGS  
ECHO/SOUNDING: SINGLE BEAM DOPM CM 200KHZ  
NAVIGATION SYSTEM: TRIMBLE BRONOS  
IN REAL TIME KINEMATIC (RTK/MODE)  
SURVEY ACQUISITION SOFTWARE: HYPPACK VERSION 2015  
POST PROCESSING SOFTWARE: HYPPACK SINGLE BEAM EDITOR VERSION 2015  
CTD CASTS WERE TAKEN DURING ACQUISITION FOR ACCURATE SATELLITE SOUND PROFILES  
AND A MLW DOPM CM 200KHZ SOUND VELOCITY
13. THE INFORMATION PRESENTED ON THIS DRAWING REPRESENTS THE RESULTS OF A SURVEY PERFORMED BY MCKIM & CREED ON AUGUST 13-29, 2016 AND CAN ONLY BE CONSIDERED AS INDICATING THE CONDITIONS EXISTING AT THAT TIME. BECAUSE SURVEY CONDITIONS ARE SUBJECT TO RAPID CHANGE DUE TO SHALING EVENTS, A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE INFORMATION PRESENTED HEREIN. ANY CONSULTANT 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 MCKIM & CREED.

NSRS/NGS CONTROL DATA			
BENCHMARK:	F-376	PID# KU0772	NORTHING EASTING
ELEVATION:	6.78' NAVD 88		206,582.52 1,240,024.03
STAMPED:	F-376		

LOCAL CONTROL DATA			
BENCHMARK:	RTK BROWNS COE	PID# ACV 261	NORTHING EASTING
ELEVATION:	3.91' NAVD 88		206,851.18 1,240,866.19





1. COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983/2011, NEW YORK, LONG ISLAND LAMBERT US SURVEY FEET.
2. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS AN APPROXIMATE INDICATION OF CONDITIONS EXISTING AT THAT TIME.
3. THE SOUNDINGS ON THIS MAP MEET EM 1110-2-1003 ACCURACY STANDARDS.
4. SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
5. MEAN LOWER LOW WATER IS 0.60-1.25 FEET BELOW NAVD 85 AS DETERMINED USING VDatum (VER, 2.11).
6. SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 15' RADIUS WITH CHANNEL PRIORITY USING THE FULL DATA SET.
7. CONTOURS ON THIS MAP WERE GENERATED USING THE MAP DATA SET. PROJECT DEPTH IS 10 FEET.
8. THE DATA DEPICTED ON THIS MAP SHOULD NOT BE USED FOR VOLUME CALCULATION PURPOSES.
9. THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
10. THIS SURVEY WAS PERFORMED USING LOCAL CONTROL ESTABLISHED BY THE CORPS OF ENGINEERS.
11. THIS MAP IS CECP COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.
12. THE SURVEY WAS CONDUCTED BY MCKIM & CREED USING THE FOLLOWING:  
SURVEY VESSELS: SV SOUNDPS DEEP  
HYDROGRAPHIC: SINGLE BEAM ECHO DOIM CDM 200KHZ  
NAVIGATION SYSTEMS: TRIMBLE ROPCON, IN REAL TIME KINEMATIC (RTK) MODE.  
POSITIONING SOFTWARE: HYPPACK VERNION 2015  
SURVEY PROCESSING SOFTWARE: HYPPACK SINGLE BEAM EDITOR VERSION 2015  
DATA ACQUISITION: 1000 HZ SAMPLE RATE, 1000 HZ DATA RATE, 1000 HZ SPEED OF SOUND PROFILES  
USING AN AM. OCEANOGRAPHIC SOUND VELOCITY PROFILE.
13. THE INFORMATION PRESENTED ON THIS DRAWING REPRESENTS THE RESULTS OF A SURVEY PERFORMED ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS AN APPROXIMATE INDICATION OF CONDITIONS EXISTING AT THAT TIME. BECAUSE THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE, THE USER OF THIS DRAWING ASSUMES ALL LIABILITY FOR ANY DAMAGE OR LOSS OF INFORMATION PROVIDED HEREIN. 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 MCKIM & CREED.

NRSR/NGS CONTROL DATA			
BENCHMARK:	F-376	PID# KU0772	NORTHING EASTING
ELEVATION:	6.78' NAVD 88		206,582.52 1,240,024.08
STAMPED:	F=376		

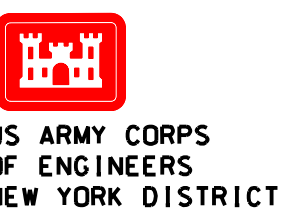
  

LOCAL CONTROL DATA			
BENCHMARK:	RTK BROWN'S COE	PID# ACV 261	NORTHING EASTING
ELEVATION:	3.91' NAVD 88		206,851.18 1,240,866.19

VH-116

SHEET 16 OF 27





DATES OF SURVEY:  
AUGUST 13-25, 2016

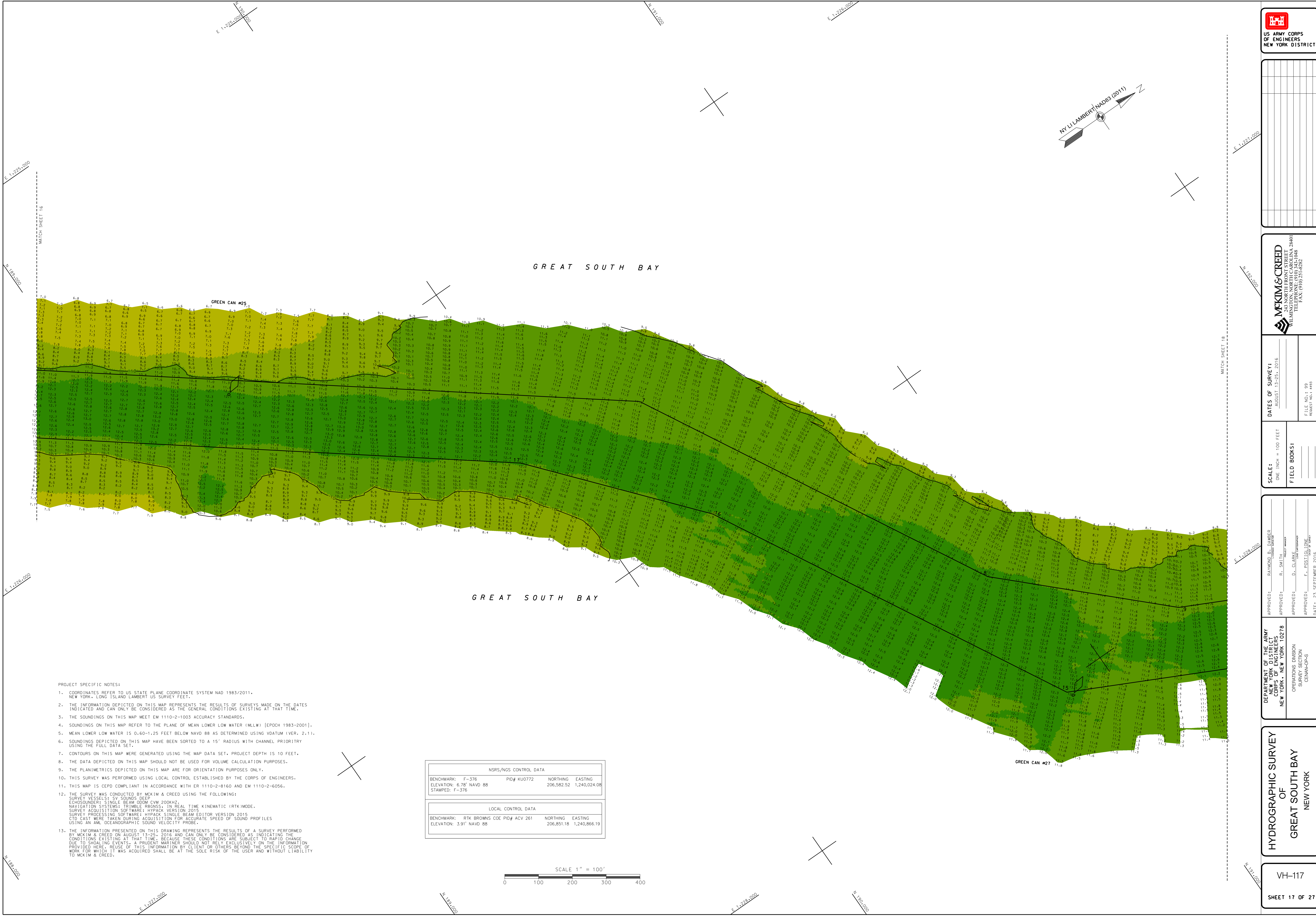
SCALE:  
ONE INCH = 100 FEET

APPROVED: RAYMOND BROWN, CHIEF OF DISTRICT  
APPROVED: R. SMITH, DISTRICT MANAGER  
APPROVED: D. CLARKE, DISTRICT MANAGER  
APPROVED: F. JONES, DISTRICT MANAGER

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

HYDROGRAPHIC SURVEY  
OF  
GREAT SOUTH BAY  
NEW YORK

VH-117  
SHEET 17 OF 27



- PROJECT SPECIFIC NOTES:
- COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983/2011.
  - NEW YORK - LONG ISLAND LAMBERT US SURVEY FEET.
  - 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.
  - SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPDCH 1983-2001].
  - MEAN LOWER LOW WATER IS 0.60-1.25 FEET BELOW NAVD 88 AS DETERMINED USING VDATUM (VER. 2.1).
  - SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 15' RADIUS WITH CHANNEL PRIORITY USING THE FULL DATA SET.
  - CONTOURS ON THIS MAP WERE GENERATED USING THE MAP DATA SET. PROJECT DEPTH IS 10 FEET.
  - THE DATA DEPICTED ON THIS MAP SHOULD NOT BE USED FOR VOLUME CALCULATION PURPOSES.
  - THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
  - THIS SURVEY WAS PERFORMED USING LOCAL CONTROL ESTABLISHED BY THE CORPS OF ENGINEERS.
  - THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.
  - THE SURVEY WAS CONDUCTED BY MCKIM & CREED USING THE FOLLOWING:  
SURVEY VESSELS: SV SOUNDS DEEP  
ECHO/SOUNDER: SINGLE BEAM CDM 200KHZ  
NAVIGATION SYSTEMS: TRIMBLE RBNSS, IN REAL TIME KINEMATIC (RTK) MODE  
SURVEY ACQUISITION SOFTWARE: HYPPACK VERSION 2011  
SURVEY PROCESSING SOFTWARE: HYPPACK SINGLE BEAM EDITOR VERSION 2015  
CTD CASTS WERE TAKEN DURING ACQUISITION FOR ACCURATE SPEED OF SOUND PROFILES  
USING AN AML OCEANOGRAPHIC SOUND VELOCITY PROBE.
  - THE INFORMATION PRESENTED ON THIS DRAWING REPRESENTS THE RESULTS OF A SURVEY PERFORMED BY MCKIM & CREED ON AUGUST 13-25, 2016 AND CAN ONLY BE CONSIDERED AS INDICATING THE CONDITIONS EXISTING AT THAT TIME. BECAUSE THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE DUE TO CHANGING EVENTS, A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE INFORMATION PROVIDED HERE. 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 MCKIM & CREED.

NSRS/NGS CONTROL DATA			
BENCHMARK:	F-376	PID# KU0772	NORTHING EASTING
ELEVATION:	6.78' NAVD 88		206,582.52 1,240,024.08
STAMPED:	F-376		

LOCAL CONTROL DATA			
BENCHMARK:	RTK BROWNS CODE PID# ACV 261	NORTHING EASTING	
ELEVATION:	3.91' NAVD 88		206,851.18 1,240,866.19

SCALE 1" = 100'





**McKIM & CREED**  
243 NORTH FRONT STREET  
WILMINGTON, NORTH CAROLINA 28401  
TELEPHONE: (910) 343-1048  
FAX: (910) 251-8282

**SCALE:**  
ONE INCH = 100 FEET

APPROVED:	RAYMOND B. DANBER	VICE PRESIDENT
APPROVED:	R. SMITH	PROJECT MANAGER
APPROVED:	D. CLARKE	LEAD ARCHITECTS
APPROVED:	F. POSTIGLIONE	CHIEF OF SURVEY
DATE:	23 SEPTEMBER 2016	

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

OPERATIONS DIVISION  
SURVEY SECTION  
CENAN-OP-S

HYDROGRAPHIC SURVEY  
OF  
GREAT SOUTH BAY  
NEW YORK

SHEET 18 OF 27







FILE NO.: 99  
REQUEST NO.: 4493

**SCALE:**  
ONE INCH = 100 FEET

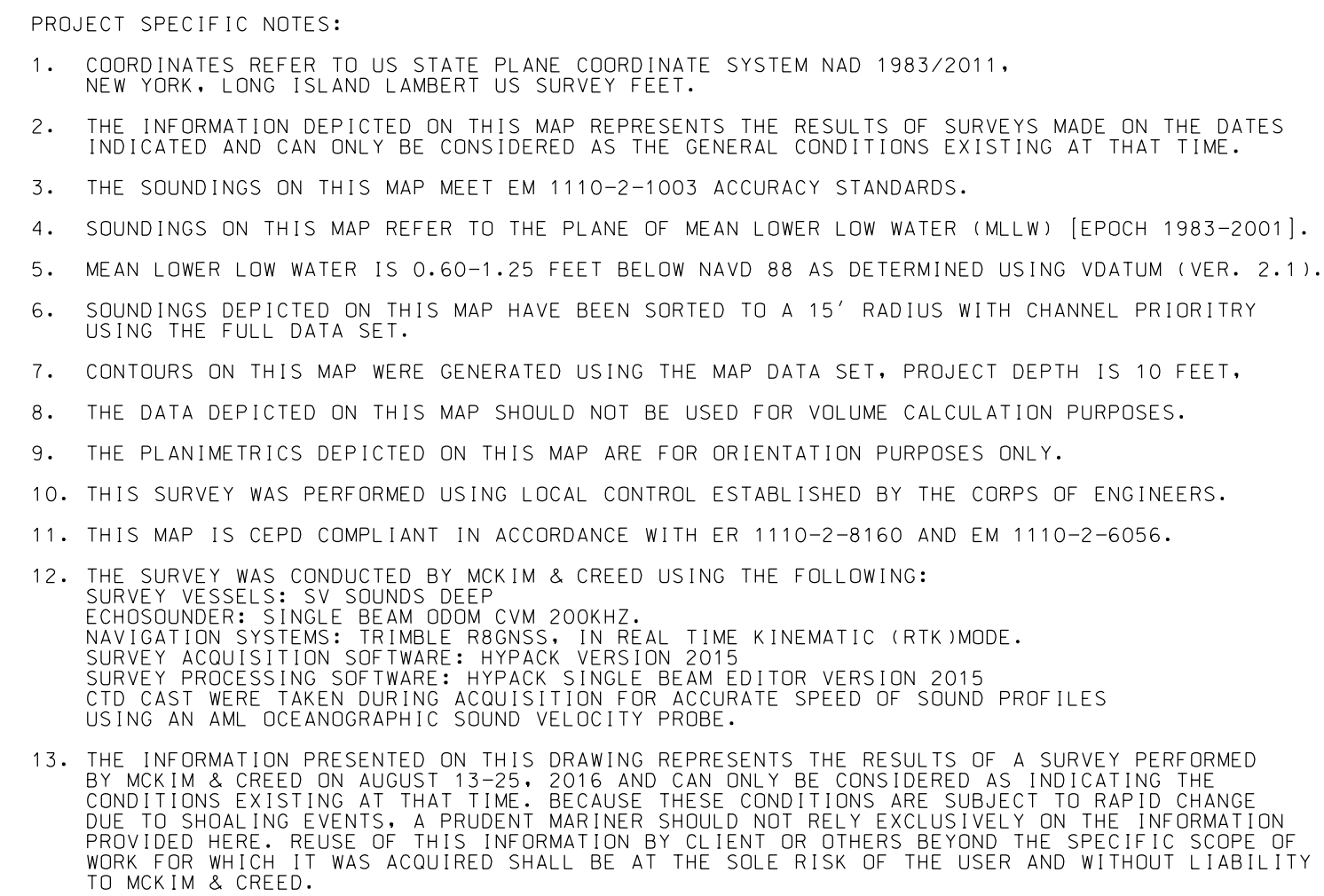
**FIELD BOOKS:**  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

APPROVED:	RAYMOND B. DAWBE
	LICENSEE SUPERVISOR
APPROVED:	R. SMITH
	PROJECT MANAGER
APPROVED:	D. CLARKE
	LEAD CARPENTER
APPROVED:	F. POSTIGLIONE
	CHIEF OF SURVEY
DATE: 23 SEPTEMBER 2016	

HYDROGRAPHIC SURVEY  
OF  
GREAT SOUTH BAY  
NEW YORK

/H-119

SHEET 19 OF 27



NSRS/NGS CONTROL DATA			
BENCHMARK: F-376	PID# KU0772	NORTHING	EASTING
ELEVATION: 6.78' NAVD 88		206,582.52	1,240,024.08
STAMPED: F-376			

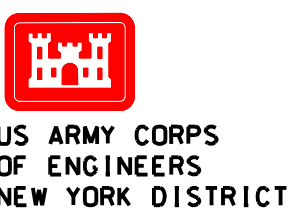
LOCAL CONTROL DATA			
BENCHMARK: RTK BROWN'S COE PID# ACV 261		NORTHING	EASTING
ELEVATION: 3.91' NAVD 88		206,851.18	1,240,866.19

SCALE 1" = 100'

A horizontal scale bar with a black top line and a white bottom line. The top line has tick marks at 0, 100, 200, 300, and 400. The bottom line has tick marks at 0, 100, 200, 300, and 400. The numbers 0, 100, 200, 300, and 400 are printed below the bottom line. The text "SCALE 1" = 100'" is printed above the top line.

FILE: 99  
REQ: 4493



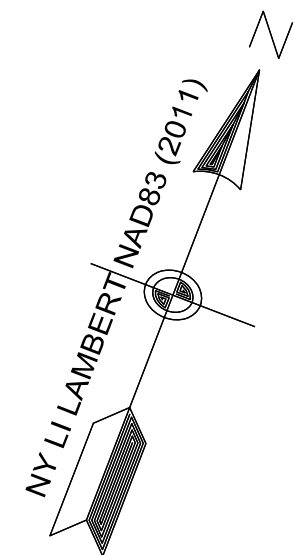
US ARMY CORPS  
OF ENGINEERS  
NEW YORK DISTRICTMCKIM & CREED  
243 NORTH FRONT STREET  
WILMINGTON, NORTH CAROLINA 28401  
TEL: (910) 251-4388  
FAX: (910) 251-4383DATES OF SURVEY:  
AUGUST 13-25, 2016SCALE:  
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: R. SMITH  
BY: R. SMITH  
DATE: 23 SEPTEMBER 2016DEPARTMENT OF THE ARMY  
NEW YORK DISTRICT  
NEW YORK, NEW YORK 10278OPERATIONS DIVISION  
SURVEY SECTION  
CEMAN-OPSHYDROGRAPHIC SURVEY  
OF  
GREAT SOUTH BAY  
NEW YORK

VH-120

SHEET 20 OF 27

FILE: 99  
REG: 4493SCALE 1" = 100'  
0 100 200 300 400

## PROJECT SPECIFICATIONS:

- COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983/2011, NEW YORK - LONG ISLAND LAMBERT US SURVEY FEET.
- 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.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
- MEAN LOWER LOW WATER IS 0.60-1.25 FEET BELOW NAVD 88 AS DETERMINED USING VDATUM (VER. 2.11).
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 15' RADIUS WITH CHANNEL PRIORITY USING THE FULL DATA SET.
- CONTOURS ON THIS MAP WERE GENERATED USING THE MAP DATA SET, PROJECT DEPTH IS 10 FEET.
- THE DATA DEPICTED ON THIS MAP SHOULD NOT BE USED FOR VOLUME CALCULATION PURPOSES.
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING LOCAL CONTROL ESTABLISHED BY THE CORPS OF ENGINEERS.
- THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.
- THE SURVEY WAS CONDUCTED BY MCKIM & CREED USING THE FOLLOWING:  
SURVEY VESSELS: SV SOUNDS DEEP  
ECHO SOUNDERS: SINGLE BEAM ECHOSOUNDING CVM 200KH2  
NAVIGATION SYSTEMS: SIMPLER BRASSER IN REAL TIME KINEMATIC (RTK) MODE  
SURVEY ACQUISITION SOFTWARE: HYPPACK VERSION 2015  
SURVEY PROCESSING SOFTWARE: HYPPACK SINGLE BEAM EDITOR VERSION 2015  
CTD DATA WERE TAKEN DURING ACQUISITION FOR ACCURATE SPEED OF SOUND PROFILES USING AN AMI OCEANOGRAPHIC SOUND VELOCITY PROBE.
- THE INFORMATION PRESENTED ON THIS DRAWING REPRESENTS THE RESULTS OF A SURVEY PERFORMED BY MCKIM & CREED ON AUGUST 13-25, 2016 AND CAN ONLY BE CONSIDERED AS INDICATING THE CONDITIONS EXISTING AT THAT TIME. BECAUSE THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE DUE TO SHOULDER EVENTS, A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE INFORMATION PROVIDED HERE. 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 MCKIM & CREED.

NSRS/NGS CONTROL DATA			
BENCHMARK: F-376	PID# KU0772	NORTHING	EASTING
ELEVATION: 6.78' NAVD 88		206,582.52	1,240,024.08
STAMPED: F-376			

LOCAL CONTROL DATA			
BENCHMARK: RTK BROWNS CODE PID# ACV 261		NORTHING	EASTING
ELEVATION: 3.91' NAVD 88		206,851.18	1,240,866.19

GREAT SOUTH BAY

GREAT SOUTH BAY

N 196,000

E 1,234,000

N 196,000

E 1,234,000

E 1,234,000

N 196,000

E 1,234,000

MATCH SHEET 21

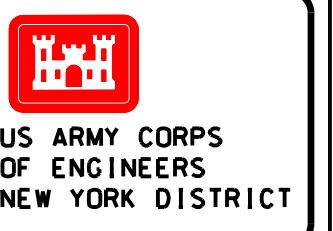
N 197,000

E 1,234,000







DATES OF SURVEY:  
AUGUST 13-25, 2016SCALE:  
ONE INCH = 100 FEETFIELD BOOKS:  
ONEDEPARTMENT OF THE ARMY  
NEW YORK DISTRICT  
NEW YORK - NEW YORK 10278  
APPROVED: R. SMITH  
OPERATIONS DIVISION  
SURVEY SECTION  
CENAL-OPS  
DATE: 23 SEPTEMBER 2016HYDROGRAPHIC SURVEY  
OF  
GREAT SOUTH BAY  
NEW YORK

VH-122

SHEET 22 OF 27

FILE: 99  
REQ: 4493

G R E A T   S O U T H   B A Y

G R E A T   S O U T H   B A Y

## NSRS/NGS CONTROL DATA

BENCHMARK: F-376      PID# KU0772      NORTHING      EASTING  
ELEVATION: 6.78' NAVD 88      206,562.52      1,240,024.08  
STAMPED: F-376

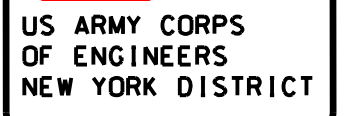
## LOCAL CONTROL DATA

BENCHMARK: RTK BROWNS COE PID# ACV 261      NORTHING      EASTING  
ELEVATION: 3.91' NAVD 88      206,851.18      1,240,866.19SCALE 1" = 100'  
0 100 200 300 400

## PROJECT SPECIFIC NOTES:

- COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983/2011, NEW YORK - LONG ISLAND LAMBERT US SURVEY FEET.
- 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.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLW) [EPOCH 1983-2001].
- MEAN LOWER LOW WATER IS 0.60-1.25 FEET BELOW NAVD 88 AS DETERMINED USING VDATUM (VER. 2.1).
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 15' RADIUS WITH CHANNEL PRIORITY USING THE FULL DATA SET.
- CONTOURS ON THIS MAP WERE GENERATED USING THE MAP DATA SET. PROJECT DEPTH IS 10 FEET.
- THE DATA DEPICTED ON THIS MAP SHOULD NOT BE USED FOR VOLUME CALCULATION PURPOSES.
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING LOCAL CONTROL ESTABLISHED BY THE CORPS OF ENGINEERS.
- THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH EM 1110-2-8160 AND EM 1110-2-6056.
- THE SURVEY WAS CONDUCTED BY MCKIM & CREED USING THE FOLLOWING:  
SURVEY VESSELS: SV SOUNDERS DEEP  
ECHOSOUNDER: SINGLE BEAM EDOIM CUM 200KHZ  
NAVIGATION SYSTEM: TRIMBLE BRADSHAW IN REAL TIME KINEMATIC (RTK) MODE  
SURVEY ACQUISITION SOFTWARE: HYPACK VERSION 2015  
SURVEY PROCESSING SOFTWARE: HYPACK SINGLE BEAM EDITOR VERSION 2015  
CTD CASTS WERE TAKEN DURING ACQUISITION FOR ACCURATE SPEED OF SOUND PROFILES USING AN AML OCEANOGRAPHIC SOUND VELOCITY PROBE.
- THE INFORMATION PRESENTED ON THIS DRAWING REPRESENTS THE RESULTS OF A SURVEY PERFORMED BY MCKIM & CREED ON AUGUST 13-25, 2016 AND CAN ONLY BE CONSIDERED AS INDICATING THE CONDITIONS EXISTING AT THAT TIME. BECAUSE THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE DUE TO SHOALING EVENTS, A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE INFORMATION PROVIDED HERE. 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 MCKIM & CREED.





**DATES OF SURVEY:**  
AUGUST 13-25, 2016

**SCALE:**  
ONE INCH = 100

**FIELD BOOKS:**

APPROVED: RAYMOND B. DAWBER  
LICENSED SAVOR

APPROVED: R. SMITH  
PROJECT MANAGER

APPROVED: D. CLARKE  
LEAD ENTERTAINER

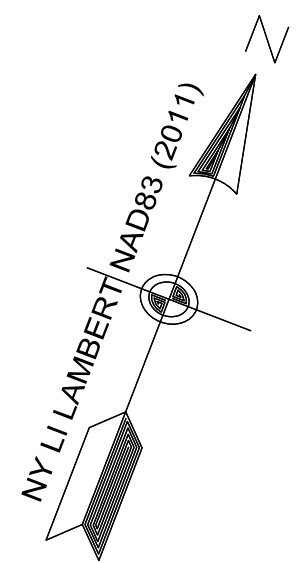
APPROVED: F. POSTiglione  
CHIEF OF SAVOR

DATE: 23 SEPTEMBER 2016

HYDROGRAPHIC SURVEY  
OF  
GREAT SOUTH BAY  
NEW YORK

VH-123

SHEET 23 OF 27



G R E A T   S O U T H   B A Y

G R E A T   S O U T H   B A Y

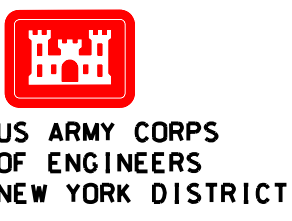
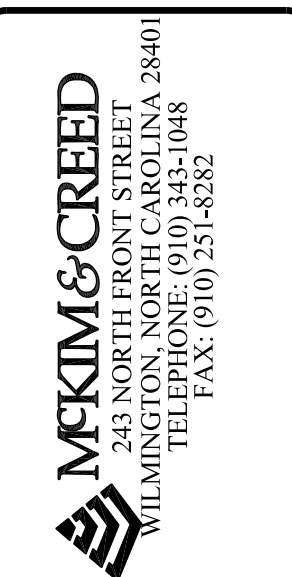
RED BUOY #34  
LIGHTED FL R

PROJECT SPECIFIC NOTES:

1. COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM MAP 1983/2011, NEW YORK, LONG ISLAND LAMBERT SURVEY FRAME.
2. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES AND LOCATIONS AND ONLY BEING CONSIDERED AS EVIDENCE AS TO CONDITIONS EXISTING AT THAT TIME.
3. THE SOUNDINGS ON THIS MAP MEET EM 1110-2-1003 ACCURACY STANDARDS.
4. SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001]
5. MEAN LOWER LOW WATER IS 0.60-1.25 FEET BELOW NAVD 88 AS DETERMINED USING VDATUM (VER. 2.11).
6. SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 15' RADIUS WITH CHANNEL PRIORITY USING THE FULL DATA SET.
7. CONTOURS ON THIS MAP WERE GENERATED USING THE MAP DATA SET, PROJECT DEPTH IS 10 FEET.
8. THE DATA DEPICTED ON THIS MAP SHOULD NOT BE USED FOR VOLUME CALCULATION PURPOSES.
9. THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
10. THIS SURVEY WAS PERFORMED USING LOCAL CONTROL ESTABLISHED BY THE CORPS OF ENGINEERS.
11. THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.
12. THE SURVEY WAS CONDUCTED BY MCKIM & CREED USING THE FOLLOWING:  
SURVEY VESSELS: SV SOUNDSPED  
ECHO/SOUNDER: SINGLE BEAM EDOIM CUM 200KHZ  
NAVIGATION SYSTEMS: TRIMBLE BROMBERG, IN REAL TIME KINEMATIC (RTK) MODE.  
DATA ACQUISITION SOFTWARE: HYPPACK VER 2.0  
SURVEY PROCESSING SOFTWARE: HYPPACK SINGLE BEAM EDITOR VERSION 2015  
DATA REDUCTION SOFTWARE: HYPPACK ACQUISITION FILE TO ECHO EDITOR VERSION 2015  
USING AN AM. OCEANOGRAPHIC SOUND VELOCITY PROBE.
13. THE INFORMATION PRESENTED ON THIS DRAWING REPRESENTS THE RESULTS OF A SURVEY PERFORMED BY MCKIM & CREED. MCKIM & CREED DOES NOT WARRANT OR GUARANTEE THE ACCURACY OF THE CONDITIONS EXISTING AT THAT TIME, BECAUSE THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE DURING SHALING EVENTS, A FUTURE INVESTIGATION SHOULD NOT RELY EXCLUSIVELY ON THE INFORMATION PROVIDED HEREIN. THE INFORMATION IS FOR INFORMATION ONLY AND NOT THE SPECIFIC SCOPE OF WORK FOR WHICH IT WAS ACQUIRED SHALL BE AT THE SOLE RISK OF THE USER AND WITHOUT LIABILITY TO MCKIM & CREED.

$$= 100'$$



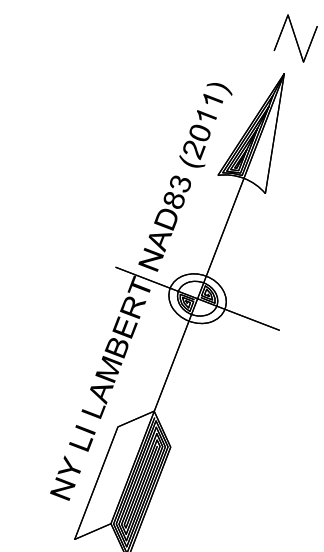
US ARMY CORPS  
OF ENGINEERS  
NEW YORK DISTRICTMcKIM & CREED  
243 NORTH FRONT STREET  
WILMINGTON, NORTH CAROLINA 28401  
TEL: (910) 341-4300  
FAX: (910) 341-4302DATES OF SURVEY:  
AUGUST 13-25, 2016SCALE:  
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: R. SMITH  
APPROVED: D. CLARKE  
APPROVED: F. POST  
DATE: 23 SEPTEMBER 2016DEPARTMENT OF THE ARMY  
NEW YORK DISTRICT  
NEW YORK, NEW YORK 10278  
OPERATIONS DIVISION  
SURVEY SECTION  
CENNA-OPSHYDROGRAPHIC SURVEY  
OF  
GREAT SOUTH BAY  
NEW YORK

VH-124

SHEET 24 OF 27

FILE: 99  
REQ: 4493

G R E A T   S O U T H   B A Y

G R E A T   S O U T H   B A Y

NSRS/NOS CONTROL DATA			
BENCHMARK: F-376	PID# KUJ0772	NORTHING	EASTING
ELEVATION: 6.78' NAVD 88		206,582.52	1,240,024.08
STAMPED: F-376			

LOCAL CONTROL DATA			
BENCHMARK: RTK BROWNS COE PID# ACV 261		NORTHING	EASTING
ELEVATION: 3.91' NAVD 88		206,851.18	1,240,866.19

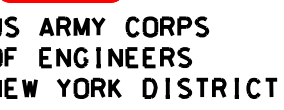
## PROJECT SPECIFIC NOTES:

- COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983/2011, NEW YORK, LONG ISLAND LAMBERT U.S. SURVEY FEET.
- 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.
- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPCHD 1983-2001].
- MEAN LOWER LOW WATER IS 0.60-1.25 FEET BELOW NAVD 88 AS DETERMINED USING VDATUM (VER. 2.1.).
- SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 15' RADIUS WITH CHANNEL PRIORITY USING THE FULL 360 DEGREE SOUNDED AREA.
- CONTOURS ON THIS MAP WERE GENERATED USING THE MAP DATA SET. PROJECT DEPTH IS 10 FEET.
- THE DATA DEPICTED ON THIS MAP SHOULD NOT BE USED FOR VOLUME CALCULATION PURPOSES.
- THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
- THIS SURVEY WAS PERFORMED USING LOCAL CONTROL ESTABLISHED BY THE CORPS OF ENGINEERS.
- THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.
- THE SURVEY WAS CONDUCTED BY McKim & Creed USING THE FOLLOWING:  
SURVEY VESSEL: SV SOUNDS DEEP  
ECHO SOUNDER: SINGLE BEAM ECHOSOUNDING SYSTEM (SBS) IN REAL TIME KINEMATIC (RTK) MODE.  
SURVEY ACQUISITION SOFTWARE: HYPACK VERSION 2015  
SURVEY PROCESSING SOFTWARE: HYPACK SINGLE BEAM EDITOR VERSION 2015  
CTD (CAST) WERE TAKEN DURING ACQUISITION FOR ACCURATE SPEED OF SOUND PROFILES  
USING AN AML OCEANOGRAPHIC SOUND VELOCITY PROFILE
- THE INFORMATION PRESENTED ON THIS DRAWING REPRESENTS THE RESULTS OF A SURVEY PERFORMED BY McKim & Creed ON AUGUST 13-25, 2016 AND CAN ONLY BE CONSIDERED AS INDICATING THE CONDITIONS EXISTING AT THAT TIME. BECAUSE THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE DUE TO CHANGING EVENTS, A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE INFORMATION PROVIDED HERE. 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 McKim & Creed.

SCALE 1" = 100'

0 100 200 300 400





**MCKIM & CREED**  
243 NORTH FRONT STREET  
WILMINGTON, NORTH CAROLINA 28401  
TELEPHONE: (910) 343-1048  
FAX: (910) 251-8282

FILE NO.: 99  
REQUEST NO.: 4493

**SCALE:**  
ONE INCH = 100

**FIELD BOOKS:**  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

APPROVED: RAYMOND B. DAMBER  
LICENSED SAVOR

APPROVED: R. SMITH  
PROJECT MANAGER

APPROVED: D. CLARKE  
LEAD CARTOGRAPHER

APPROVED: F. POSTICIONE  
CHIEF OF STAFF

DATE: 23 SEPTEMBER 2016

NEW YORK DISTRICT  
CORPS OF ENGINEERS  
NEW YORK, NEW YORK 10278

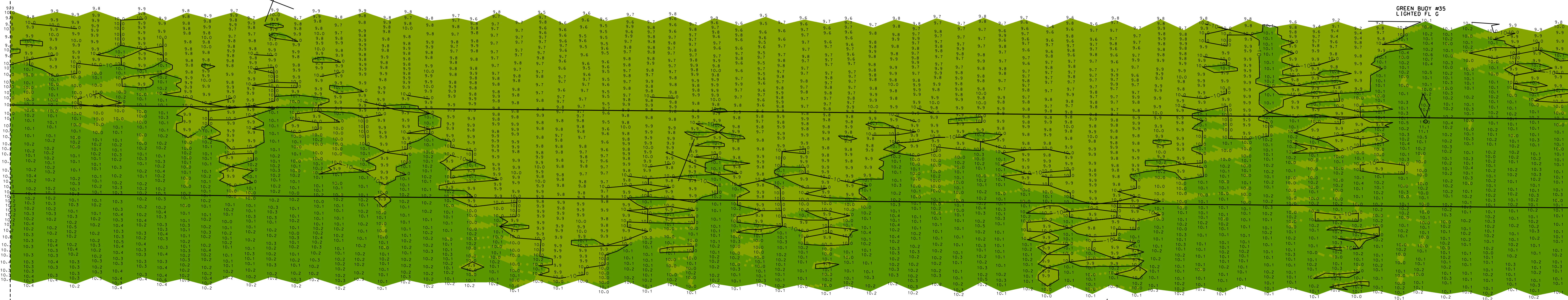
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OPERATIONS DIVISION  
SURVEY SECTION  
CENAN-OP-S

HYDROGRAPHIC SURVEY  
OF  
GREAT SOUTH BAY  
NEW YORK

VH-125

SHEET 25 OF 27



01. PROJECT SPECIFIC NOTES:

02. COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983/2011,  
03. NEW YORK LONG ISLAND LAMBERT US SURVEY FEET.

04. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES  
05. INDICATED AND CAN ONLY BE CONSIDERED AS THE GENERAL CONDITIONS EXISTING AT THAT TIME.

06. THE SOUNDINGS ON THIS MAP MEET EM 1110-2-1003 ACCURACY STANDARDS.

07. SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].

08. MEAN LOWER LOW WATER IS 0.60'-1.25 FEET BELOW NAVD 80 AS DETERMINED USING DATUM (VER. 2.1).

09. SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 15' RADIUS WITH CHANNEL PRIORITY.

10. CONTOURS ON THIS MAP WERE GENERATED USING THE MAP DATA SET. PROJECT DEPTH IS 10 FEET.

11. THE DATA DEPICTED ON THIS MAP SHOULD NOT BE USED FOR VOLUME CALCULATION PURPOSES.

12. THE PLANNIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.

13. THIS SURVEY WAS PERFORMED USING LOCAL CONTROL ESTABLISHED BY THE CORPS OF ENGINEERS.

14. THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

15. THE SURVEY WAS CONDUCTED BY MCKIM & CREED USING THE FOLLOWING:

16. SURVEY VESSELS: SV SOUNDERS  
17. SURVEY INSTRUMENTS: SINGLE BEAM HYDRA CMM 2000X  
18. NAVIGATION SYSTEMS: TRIMBLE RIONSS, IN REAL TIME KINEMATIC (RTK/MODE)  
19. POSITIONING SYSTEMS: GPS  
20. SURVEY PROCESSING SOFTWARE: HYPAACK SINGLE BEAM EDITOR VERSION 2015  
21. DATA ACQUISITION: HYDRA CMM 2000X  
22. USING AN AML OCEANOGRAPHIC SOUND WAVELENGTH PROBE.

23. THE INFORMATION PRESENTED ON THIS DRAWING REPRESENTS THE RESULTS OF A SURVEY PERFORMED  
24. BY MEANS ADJUSTED 13-12-13. IT CAN ONLY BE CONSIDERED AS THE GENERAL CONDITIONS EXISTING AT  
25. THAT TIME. THE CONDITIONS ARE SUBJECT TO RAPID CHANGE  
26. DUE TO CHANGING EVENTS, A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE INFORMATION  
27. HEREON FOR NAVIGATION. THE USER ASSUMES ALL RESPONSIBILITY FOR THE PROPER USE OF THE DATA  
28. OF WORK FOR WHICH IT WAS ACQUIRED SHALL BE AT THE SOLE RISK OF THE USER AND WITHOUT LIABILITY

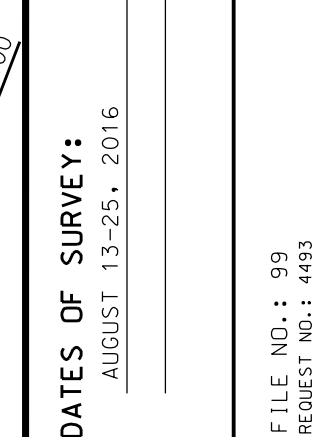
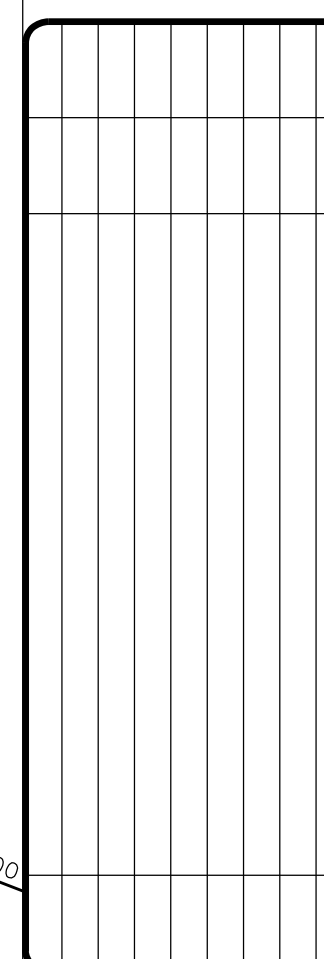
NSRS/NGS CONTROL DATA			
BENCHMARK: F-376	PID# KU0772	NORTHING	EASTING
ELEVATION: 6.78' NAVD 88		206,582.52	1,240,024.08
STAMPED: F-376			

LOCAL CONTROL DATA			
BENCHMARK: RTK BROWNS COE	PID# ACV 261	NORTHING	EASTING
ELEVATION: 3.91' NAVD 88		206,851.18	1,240,866.19

SCALE 1" = 100'





**SCALE:**  
ONE INCH = 100 FEET

**FIELD BOOKS:**  
\_\_\_\_\_  
\_\_\_\_\_

APPROVED: \_\_\_\_\_  
RAYMOND B. DAMBER  
CLOOTED SUBCOM

APPROVED: \_\_\_\_\_  
R. SMITH  
PROJECT MANAGER

APPROVED: \_\_\_\_\_  
D. CLARKE  
LOCAL COORDINATOR

APPROVED: \_\_\_\_\_  
F. POSTOLONE  
CHIEF OF SURVEY

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

OPERATIONS DIVISION  
SURVEY SECTION  
CENAN-OP-S

# HYDROGRAPHIC SURVEY OF GREAT SOUTH BAY NEW YORK

VH-126

SHEET 26 OF 27

FILE: 99  
REQ: 4493

