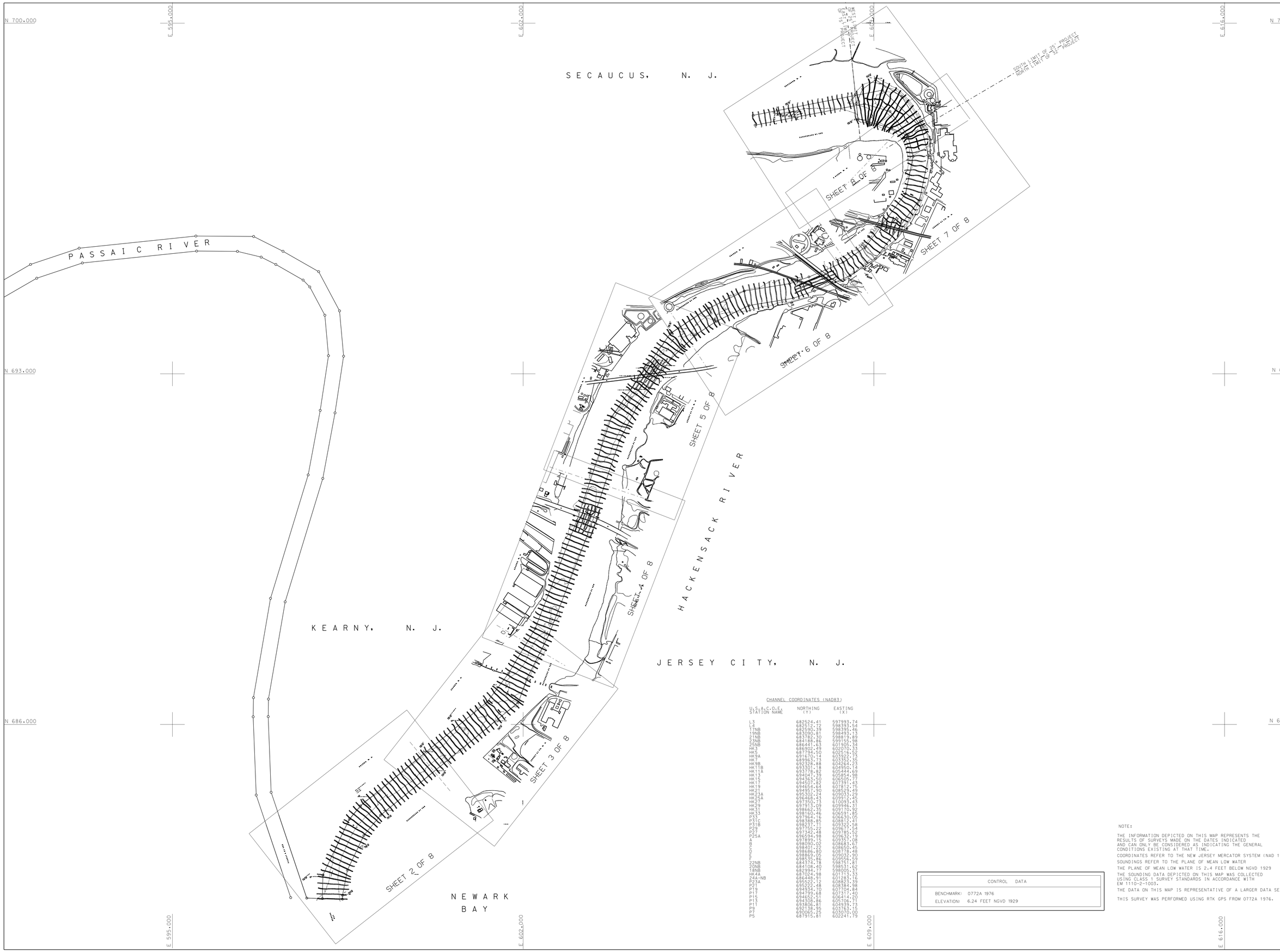


CHANNEL COORDINATES (NAD83)

U.S.A.C.O.E. STATION NAME	NORTHING (Y)	EASTING (X)
L3	682524.41	597993.74
L4	682512.72	598393.54
17NB	682590.39	598395.46
19NB	683090.81	598493.13
21NB	683782.30	598819.89
23NB	684188.86	599155.98
25NB	686441.63	601905.34
HK3	686902.49	602070.33
HK5	687794.50	602516.52
HK9A	691670.14	603922.73
HK7	689963.73	603352.35
HK9B	692328.88	604264.23
HK11B	693301.18	604950.14
HK11A	693778.82	605444.69
HK13	694047.39	605854.98
HK15	694363.50	606505.77
HK17	694507.82	607391.43
HK19	694654.64	607812.75
HK21	694957.90	608529.49
HK23A	695302.24	609033.29
HK25A	696468.43	609912.45
HK27	697350.73	610093.43
HK29	697913.09	609946.31
HK31	698662.35	609170.92
HK33	698160.46	606591.85
P33	697964.16	606630.05
P31C	698388.85	608812.41
P31B	698237.71	609322.58
P29	697755.22	609677.54
P27	697342.48	609785.52
P25A	696594.98	609632.19
A	697899.15	609357.08
B	698090.02	608683.67
C	698401.22	608650.45
D	698686.80	608778.48
E	698869.05	609032.90
F	698535.86	609556.59
22NB	684374.78	598751.81
20NB	684108.40	598531.62
18NB	682994.77	598005.37
HK4A	687024.98	602713.33
24A-NB	686448.91	601283.16
P23A	695522.12	608823.39
P21	695222.48	608384.98
P19	694934.70	607704.84
P17	694799.68	607317.40
P15	694652.51	606414.20
P13	694308.86	605706.71
P11	693806.81	604935.73
P9	692138.95	603763.15
P7	690065.25	603070.00
P5	687915.81	602241.79

CONTROL DATA	
BENCHMARK:	0772A 1976
ELEVATION:	6.24 FEET NGVD 1929

NOTE:

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

COORDINATES REFER TO THE NEW JERSEY MERCATOR SYSTEM (NAD 1983)

SOUNDINGS REFER TO THE PLANE OF MEAN LOW WATER

THE PLANE OF MEAN LOW WATER IS 2.4 FEET BELOW NGVD 1929

THE SOUNDING DATA DEPICTED ON THIS MAP WAS COLLECTED USING CLASS 1 SURVEY STANDARDS IN ACCORDANCE WITH EM 1110-2-1003.

THE DATA ON THIS MAP IS REPRESENTATIVE OF A LARGER DATA SET.

THIS SURVEY WAS PERFORMED USING RTK GPS FROM 0772A 1976.

US ARMY CORPS OF ENGINEERS NEW YORK DISTRICT

DATES OF SURVEY: 30 APRIL, 1, 5, 6, 7 & 9 MAY 2008

FILE NO.: 204
REQUEST NO.: 3198N

SCALE: ONE INCH = 700 FEET

FIELD BOOKS:

APPROVED: S. RYSHKEWITCH — FIELD CARTOGRAPHER
APPROVED: M. FORTE — CIVIL ENGINEERING TECHNICIAN
APPROVED: J. MRAZ — CHIEF CARTOGRAPHER
APPROVED: F. POSTIGLIONE — CHIEF OF SURVEY
DATE: 13 MAY 2008

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

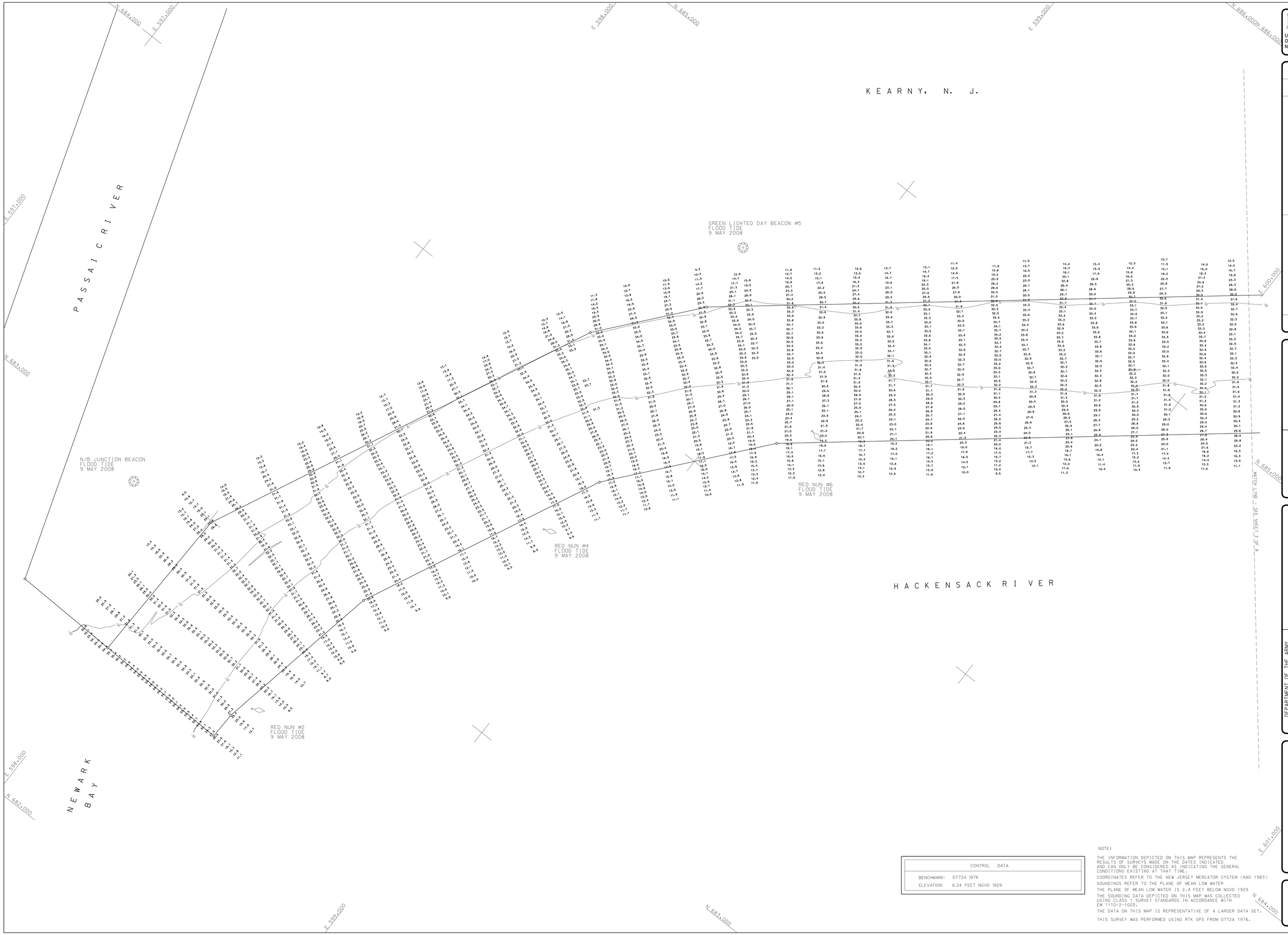
NEWARK BAY, HACKENSACK & PASSAIC RIVERS
HACKENSACK RIVER

CONDTION SURVEY

VH-101

SHEET 1 OF 8

204
3198N



CONTROL DATA	
BENCHMARK:	0772A 1976
ELEVATION:	6.24 FEET NGVD 1929

NOTE:

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

COORDINATES REFER TO THE NEW JERSEY MERCATOR SYSTEM (NAD 1983)

SOUNDINGS REFER TO THE PLANE OF MEAN LOW WATER

THE PLANE OF MEAN LOW WATER IS 2.4 FEET BELOW NGVD 1929

THE SOUNDING DATA DEPICTED ON THIS MAP WAS COLLECTED USING CLASS 1 SURVEY STANDARDS IN ACCORDANCE WITH EM 1110-2-1003.

THE DATA ON THIS MAP IS REPRESENTATIVE OF A LARGER DATA SET.

THIS SURVEY WAS PERFORMED USING RTK GPS FROM 0772A 1976.

US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

DATES OF SURVEY: 30 APRIL, 1, 5, 6, 7 & 9 MAY 2008

FILE NO.: 204
REQUEST NO.: 3198N

SCALE: ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: S. RYSHKEWITCH
FIELD CARTOGRAPHER

APPROVED: M. FORTE
CIVIL ENGINEERING TECHNICIAN

APPROVED: J. MRAZ
LEAD CARTOGRAPHER

APPROVED: F. POSTIGLIONE
CHIEF OF SURVEY

DATE: 13 MAY 2008

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

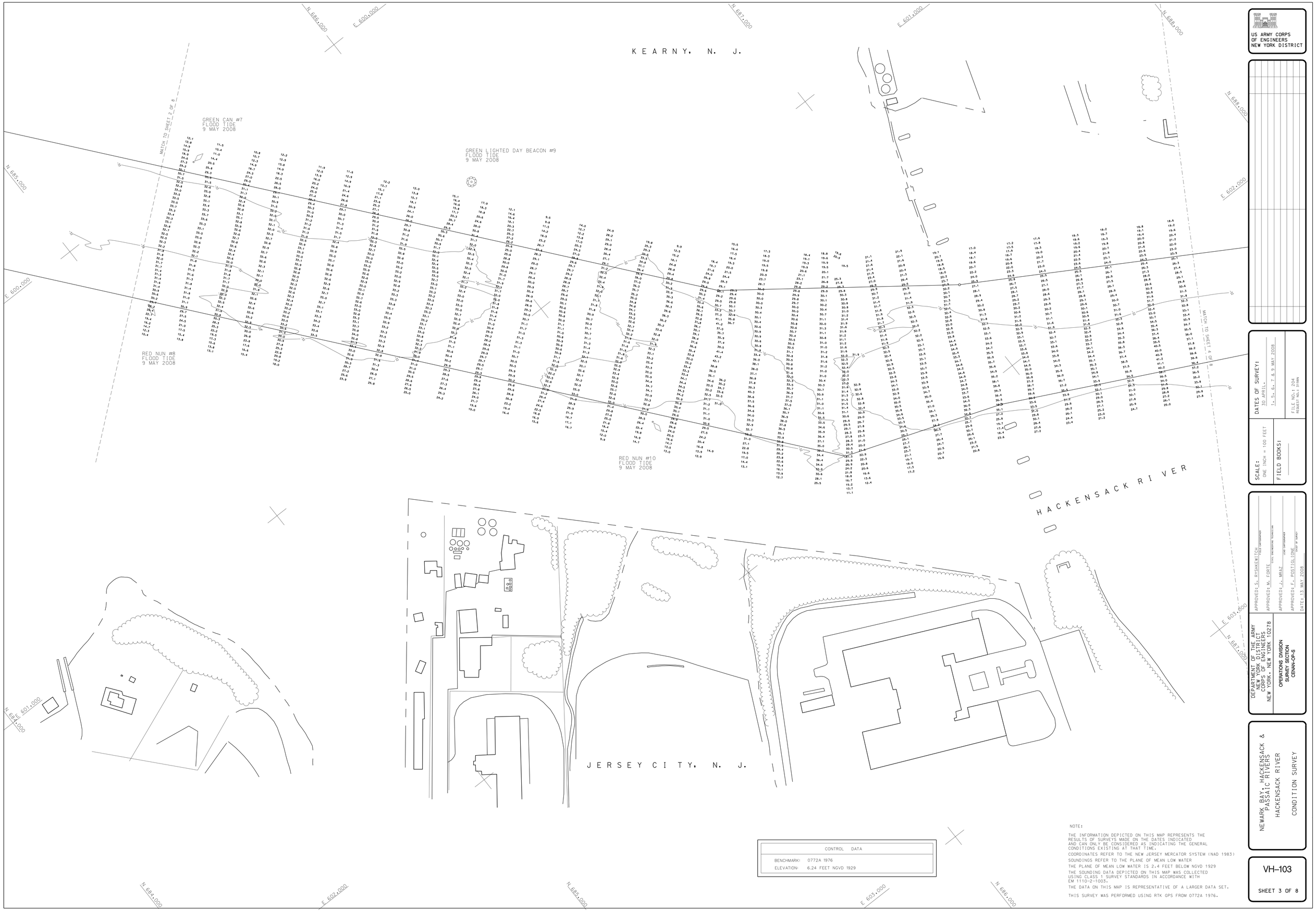
OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

NEWARK BAY, HACKENSACK & PASSAIC RIVERS
HACKENSACK RIVER
CONDITION SURVEY

VH-102

SHEET 2 OF 8

204
3198N



CONTROL DATA	
BENCHMARK:	0772A 1976
ELEVATION:	6.24 FEET NGVD 1929

NOTE:

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

COORDINATES REFER TO THE NEW JERSEY MERCATOR SYSTEM (NAD 1983)

SOUNDINGS REFER TO THE PLANE OF MEAN LOW WATER

THE PLANE OF MEAN LOW WATER IS 2.4 FEET BELOW NGVD 1929

THE SOUNDING DATA DEPICTED ON THIS MAP WAS COLLECTED USING CLASS 1 SURVEY STANDARDS IN ACCORDANCE WITH EM 1110-2-1003.

THE DATA ON THIS MAP IS REPRESENTATIVE OF A LARGER DATA SET.

THIS SURVEY WAS PERFORMED USING RTK GPS FROM 0772A 1976.

US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

DATES OF SURVEY:
20 APRIL, 1, 5, 6, 7 & 9 MAY 2008

FILE NO.: 204
REQUEST NO.: 3198N

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: S. RYSHKEWITCH
FIELD CARTOGRAPHER

APPROVED: M. FORTE
CIVIL ENGINEERING TECHNICIAN

APPROVED: J. MRAZ
LAB CARTOGRAPHER

APPROVED: F. POSTIGLIONE
CHIEF OF SURVEY

DATE: 13 MAY 2008

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

NEWARK BAY, HACKENSACK & PASSAIC RIVERS

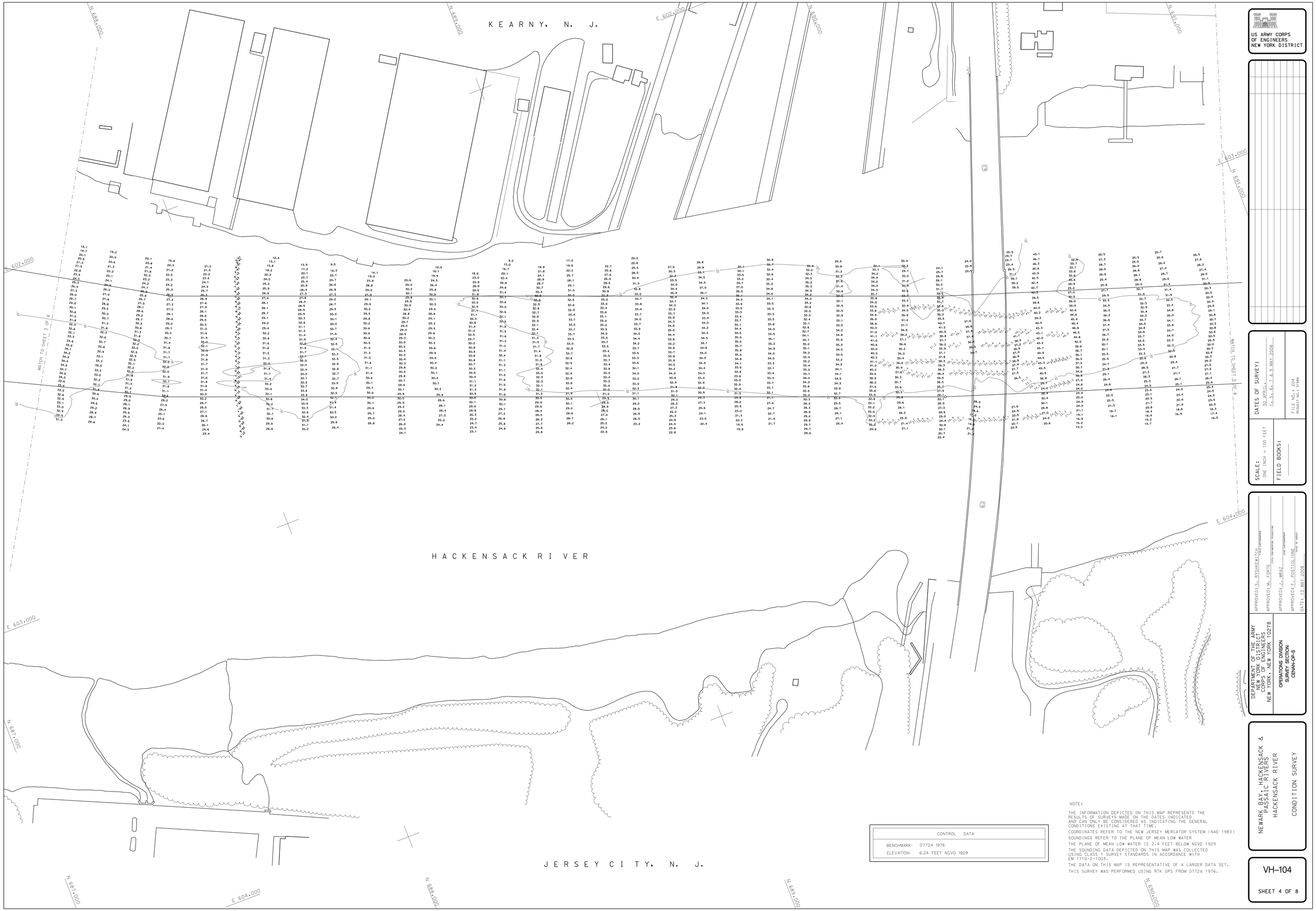
HACKENSACK RIVER

CONDITION SURVEY

VH-103

SHEET 3 OF 8

204
3198N



NOTE:

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

COORDINATES REFER TO THE NEW JERSEY MERCATOR SYSTEM (NAD 1983)

SOUNDINGS REFER TO THE PLANE OF MEAN LOW WATER

THE PLANE OF MEAN LOW WATER IS 2.4 FEET BELOW NGVD 1929

THE SOUNDING DATA DEPICTED ON THIS MAP WAS COLLECTED USING CLASS 1 SURVEY STANDARDS IN ACCORDANCE WITH EM 1110-2-1003.

THE DATA ON THIS MAP IS REPRESENTATIVE OF A LARGER DATA SET.

THIS SURVEY WAS PERFORMED USING RTK GPS FROM 0772A 1976.

CONTROL DATA	
BENCHMARK:	0772A 1976
ELEVATION:	6.24 FEET NGVD 1929

US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

DATES OF SURVEY:
30 APRIL - 1, 5, 6, 7, & 9 MAY 2008

FILE NO.: 204
REQUEST NO.: 3198N

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: S. RYSHKEWITCH
FIELD CARTOGRAPHER

APPROVED: M. FORTE
CIVIL ENGINEERING TECHNICIAN

APPROVED: J. MRAZ
LEAD CARTOGRAPHER

APPROVED: F. POSTIGLIONE
CHIEF OF SURVEY

DATE: 13 MAY 2008

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

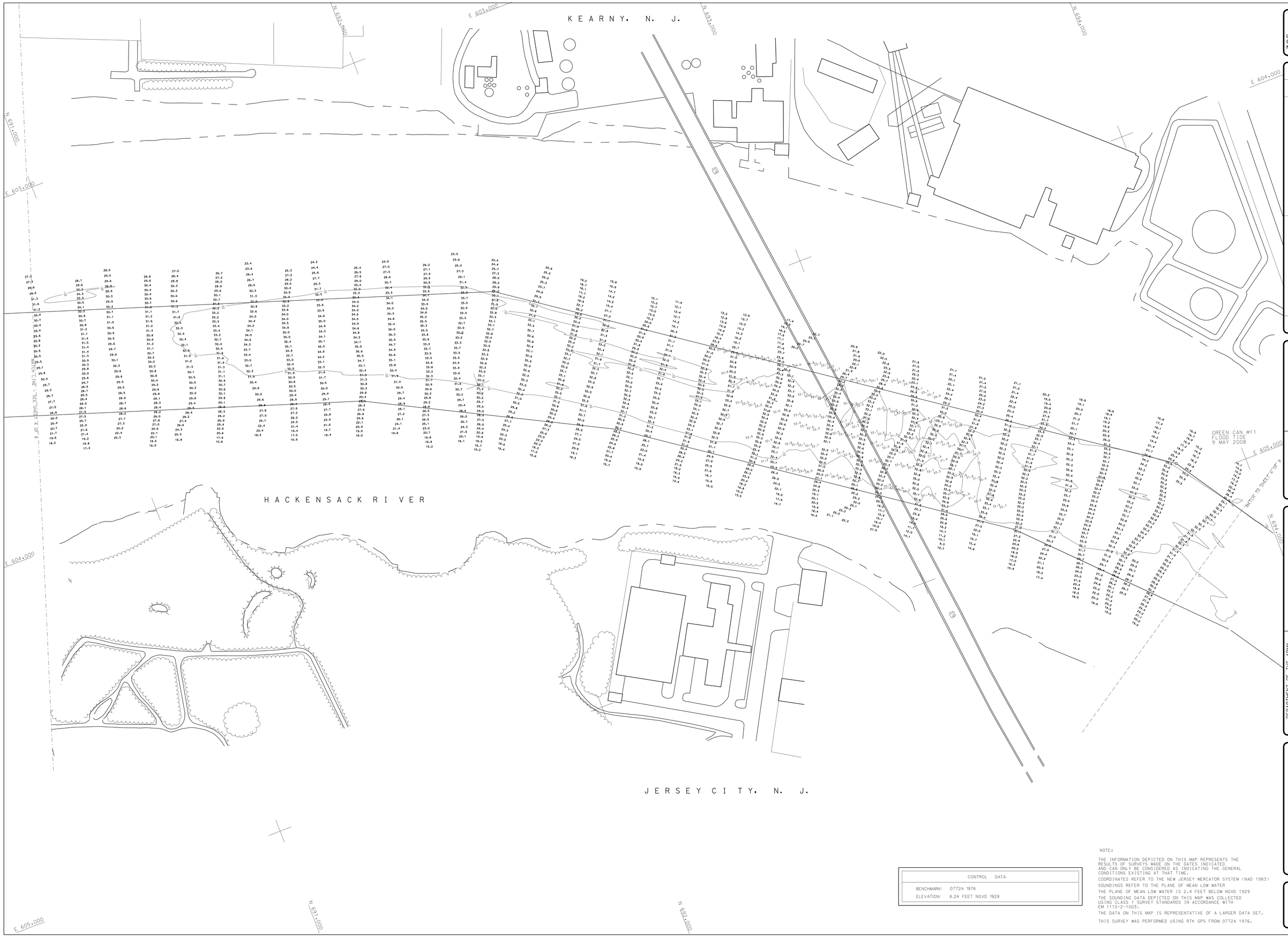
OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

NEWARK BAY, HACKENSACK & PASSAIC RIVERS
HACKENSACK RIVER

CONDITION SURVEY

VH-104

SHEET 4 OF 8



US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

DATES OF SURVEY:
30 APRIL, 1, 5, 6, 7 & 9 MAY 2008

FILE NO.: 204
REQUEST NO.: 31984

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: S. RYSHEWITCH
CHIEF, ENGINEERING DIVISION

APPROVED: M. FORTE
CHIEF, ENGINEERING TECHNICIAN

APPROVED: J. MRAZ
CHIEF CARTOGRAPHER

APPROVED: F. POSTIGLIONE
CHIEF OF SURVEY

DATE: 13 MAY 2008

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

NEWARK BAY, HACKENSACK & PASSAIC RIVERS
HACKENSACK RIVER
CONDITION SURVEY

VH-105

SHEET 5 OF 8

CONTROL DATA	
BENCHMARK:	0772A 1976
ELEVATION:	6.24 FEET NGVD 1929

NOTE:

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

COORDINATES REFER TO THE NEW JERSEY MERCATOR SYSTEM (NAD 1983)

SOUNDINGS REFER TO THE PLANE OF MEAN LOW WATER

THE PLANE OF MEAN LOW WATER IS 2.4 FEET BELOW NGVD 1929

THE SOUNDING DATA DEPICTED ON THIS MAP WAS COLLECTED USING CLASS 1 SURVEY STANDARDS IN ACCORDANCE WITH EM 1110-2-1003.

THE DATA ON THIS MAP IS REPRESENTATIVE OF A LARGER DATA SET.

THIS SURVEY WAS PERFORMED USING RTK GPS FROM 0772A 1976.

CONTROL DATA	
BENCHMARK:	0772A 1976
ELEVATION:	6.24 FEET NGVD 1929

NOTE:

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

COORDINATES REFER TO THE NEW JERSEY MERCATOR SYSTEM (NAD 1983)

SOUNDINGS REFER TO THE PLANE OF MEAN LOW WATER

THE PLANE OF MEAN LOW WATER IS 2.4 FEET BELOW NGVD 1929

THE SOUNDING DATA DEPICTED ON THIS MAP WAS COLLECTED USING CLASS 1 SURVEY STANDARDS IN ACCORDANCE WITH EM 1110-2-1003.

THE DATA ON THIS MAP IS REPRESENTATIVE OF A LARGER DATA SET.

THIS SURVEY WAS PERFORMED USING RTK GPS FROM 0772A 1976.

US ARMY CORPS OF ENGINEERS NEW YORK DISTRICT

DATES OF SURVEY: 30 APRIL, 1, 5, 6, 7 & 8 MAY 2008

FILE NO.: 204
REQUEST NO.: 3198N

SCALE: ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: S. RYSHKEWITCH, FIELD CARTOGRAPHER
APPROVED: M. FORTE, CIVIL ENGINEERING TECHNICIAN
APPROVED: J. MRAZ, LAB CARTOGRAPHER
APPROVED: F. POSTIGLIONE, CHIEF OF SURVEY
DATE: 13 MAY 2008

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

NEWARK BAY, HACKENSACK & PASSAIC RIVERS
HACKENSACK RIVER

CONDITION SURVEY

VH-106

SHEET 6 OF 8

204
3198N

US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

DATES OF SURVEY:
30 APRIL,
1, 5, 6, 7, & 9 MAY 2008

FILE NO.: 204
REQUEST NO.: 3198N

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: S. RYSHKEWITCH
FIELD CARTOGRAPHER

APPROVED: W. FORTE
CIVIL ENGINEERING TECHNICIAN

APPROVED: J. WRAZ
CHIEF CARTOGRAPHER

APPROVED: F. PISTIOLONE
CHIEF OF SURVEY

DATE: 13 MAY 2008

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

NEWARK BAY, HACKENSACK &
PASSAIC RIVERS
HACKENSACK RIVER

CONDITION SURVEY

VH-107

SHEET 7 OF 8

CONTROL DATA	
BENCHMARK:	0772A 1976
ELEVATION:	6.24 FEET NGVD 1929

NOTE:

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

COORDINATES REFER TO THE NEW JERSEY MERCATOR SYSTEM (NAD 1983)

SOUNDINGS REFER TO THE PLANE OF MEAN LOW WATER

THE PLANE OF MEAN LOW WATER IS 2.4 FEET BELOW NGVD 1929

THE SOUNDING DATA DEPICTED ON THIS MAP WAS COLLECTED USING CLASS 1 SURVEY STANDARDS IN ACCORDANCE WITH EM 1110-2-1003.

THE DATA ON THIS MAP IS REPRESENTATIVE OF A LARGER DATA SET.

THIS SURVEY WAS PERFORMED USING RTK GPS FROM 0772A 1976.

CONTROL DATA	
BENCHMARK:	AI7796 (D1392590 A)
ELEVATION:	12.812 FEET NGVD 1929

NOTE:

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

COORDINATES REFER TO THE NEW JERSEY MERCATOR SYSTEM (NAD 1983)

SOUNDINGS REFER TO THE PLANE OF MEAN LOW WATER

THE PLANE OF MEAN LOW WATER IS 2.4 FEET BELOW NGVD 1929

THE SOUNDING DATA DEPICTED ON THIS MAP WAS COLLECTED USING CLASS 1 SURVEY STANDARDS IN ACCORDANCE WITH EM 1110-2-1003.

THE DATA ON THIS MAP IS REPRESENTATIVE OF A LARGER DATA SET. THIS SURVEY WAS PERFORMED USING RTK GPS FROM AI7T96 (D1392590 A)

US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

DATES OF SURVEY:
30 APRIL, 1-5,6,7 & 9 MAY 2008

FILE NO.: 204
REQUEST NO.: 3198N

SCALE:
ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: S. RYSHKEWITCH
FIELD CARTOGRAPHER

APPROVED: M. FORTE
CIVIL ENGINEERING TECHNICIAN

APPROVED: J. MRAZ
CHIEF CARTOGRAPHER

APPROVED: F. POSTIGLIONE
CHIEF OF SURVEY

DATE: 13 MAY 2008

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

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

NEWARK BAY, HACKENSACK & PASSAIC RIVERS
HACKENSACK RIVER

CONDITION SURVEY

VH-108

SHEET 8 OF 8