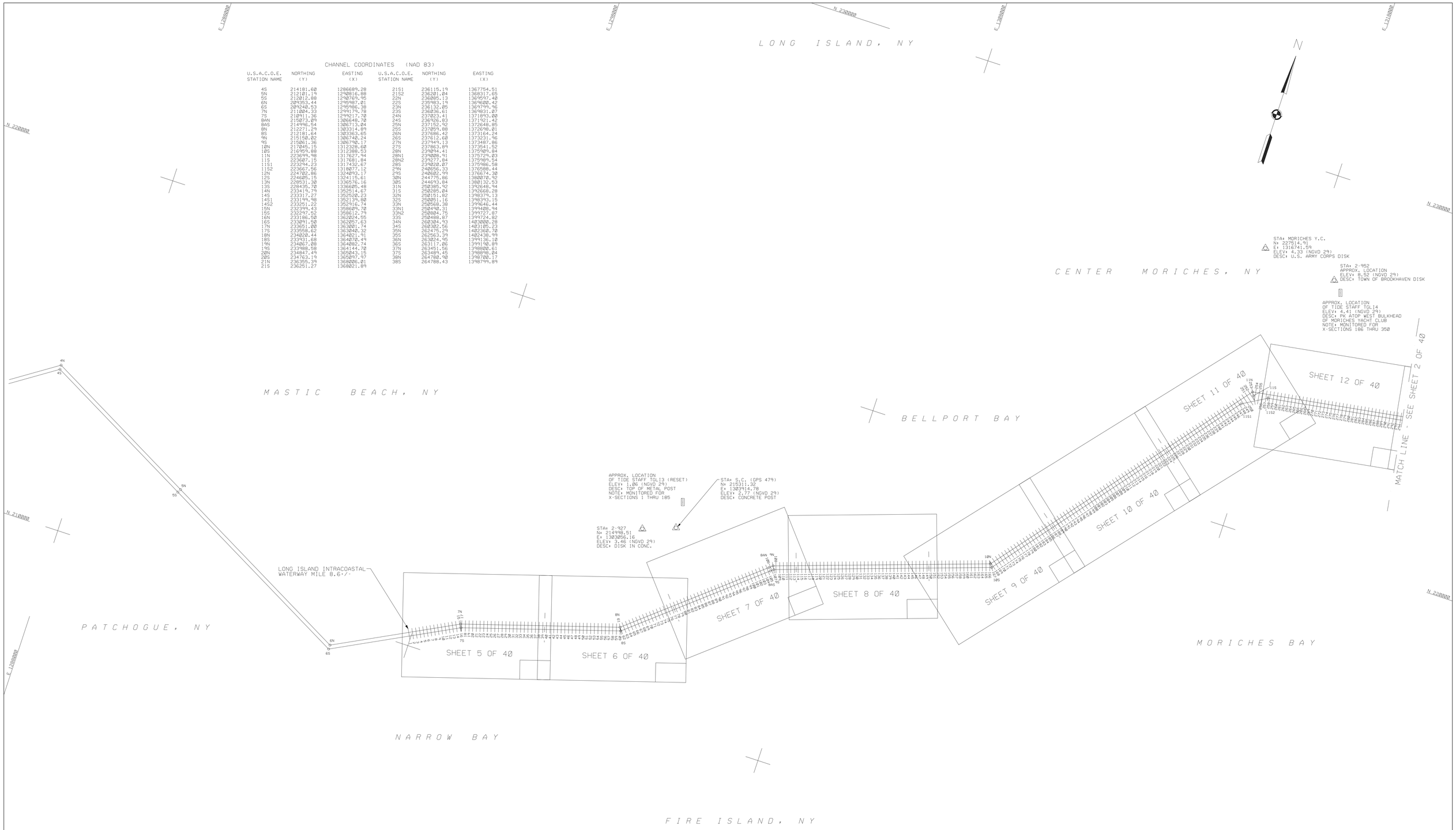

CHANNEL COORDINATES (NAD 83)

U.S.A.C.O.E. STATION NAME	NORTHING (Y)	EASTING (X)	U.S.A.C.O.E. STATION NAME	NORTHING (Y)	EASTING (X)
4S	214181.60	1286689.28	21S1	236115.19	1367754.51
5N	212101.19	1290816.88	21S2	236201.04	1368317.65
5S	212012.88	1290769.95	22N	236085.13	1369597.40
6N	209353.44	1295987.01	22S	235983.19	1369600.42
6S	209240.53	1295986.38	23N	236132.05	1369799.46
7N	211004.33	1299179.78	23S	236036.61	1369831.07
7S	210911.36	1299217.70	24N	237023.41	1371893.00
8AN	215073.05	1306648.70	24S	236926.83	1371921.42
8AS	214996.54	1306713.04	25N	237152.92	1372648.85
8N	212271.29	1303314.89	25S	237059.88	1372698.81
8S	212181.64	1303363.65	26N	237686.42	1373164.24
9N	215150.02	1306740.24	26S	237612.60	1373231.96
9S	215061.36	1306790.17	27N	237949.13	1373487.86
10N	217045.15	1312328.60	27S	237863.89	1373541.52
10S	216959.88	1312388.53	28N	239094.41	1375909.84
11N	223699.98	1317627.94	28N1	239008.91	1375729.03
11S	223607.15	1317681.84	28N2	239277.84	1375984.54
11S1	223294.23	1317432.67	28S	239020.07	1375986.58
11S2	223667.56	1318077.12	29N	240656.33	1376588.44
12N	224702.86	1324093.17	29S	240602.99	1376674.30
12S	224605.15	1324115.61	30N	244775.86	1380870.92
13N	228531.30	1336576.16	30S	244693.84	1380132.53
13S	228435.70	1336605.48	31N	250385.92	1392648.94
14N	233419.74	1352514.67	31S	250285.04	1392668.28
14S	233317.27	1352520.23	32N	250151.82	1398379.13
14S1	233199.98	1352139.80	32S	250051.16	1398393.15
14S2	233251.22	1352916.74	33N	250568.38	1399646.44
15N	232399.43	1358609.70	33N1	250498.31	1399408.94
15S	232297.52	1358612.79	33N2	250804.75	1399727.87
16N	233186.50	1362024.55	33S	250488.87	1399724.82
16S	233091.50	1362057.63	34N	260304.93	1403008.28
17N	233051.00	1363001.74	34S	260302.56	1403188.23
17S	233058.62	1363040.32	35N	262475.29	1402368.70
18N	234020.44	1364021.91	35S	262563.39	1402438.99
18S	233931.68	1364070.49	36N	263024.96	1399136.10
19N	234067.08	1364082.74	36S	263117.06	1399190.89
19S	233988.58	1364144.70	37N	263451.56	1398800.61
20N	234847.49	1365043.15	37S	263489.45	1398898.04
20S	234763.19	1365097.97	38N	264788.90	1398708.17
21N	236355.39	1368006.01	38S	264788.43	1398799.89
21S	236251.27	1368021.89			

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), LONG ISLAND LAMBERT SYSTEM AND ARE EXPRESSED IN U.S.SURVEY FEET
3. ELEVATIONS REFER TO THE U.S.ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM AND ARE EXPRESSED IN U.S.SURVEY FEET.THE MEAN LOW WATER DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS AS FOLLOWS:

   0.30 FEET FROM MILE 0.0 TO MILE 15.2 (PATCHOGUE TO TUTHILL PT.)
   0.45 FEET FROM MILE 15.2 TO MILE 22.7 (TUTHILL PT.TO QUANTUCK BAY)
   0.30 FEET FROM MILE 22.7 TO MILE 29.9 (QUANTUCK BAY TO SHINNECOCK BAY)
   0.20 FEET FROM MILE 29.9 TO MILE33.6 (SHINNECOCK BAY TO SHINNECOCK CANAL)
4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 1110-2-1003 DATED 1 JANUARY 2004.
5. PLANIMETRIC DETAILS WERE SCALED FROM A 7.5 MINUTE U.S.G.S QUADRANGLE MAP.
6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: OMNISTAR 3000 LR DGPS
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
   MOTION COMPENSATOR: TSS DMS25
   NAVIGATION/DATA LOGGING: DESKTOP PC W/ HYPACK MAX SOFTWARE

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF CENTER MORICHES, NY
INDEX / LAYOUT SHEET

1000 0 500 1000 2000 4000

SCALE: 1 INCH = 1000 FEET

PLOTTED BY: S. JULIUS
DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY
FIELD BOOKS: 1415B
APPROVED: R. KISS
DATE: 27 JULY 2004
SHEET 1 OF 40

TVGA CONSULTANTS
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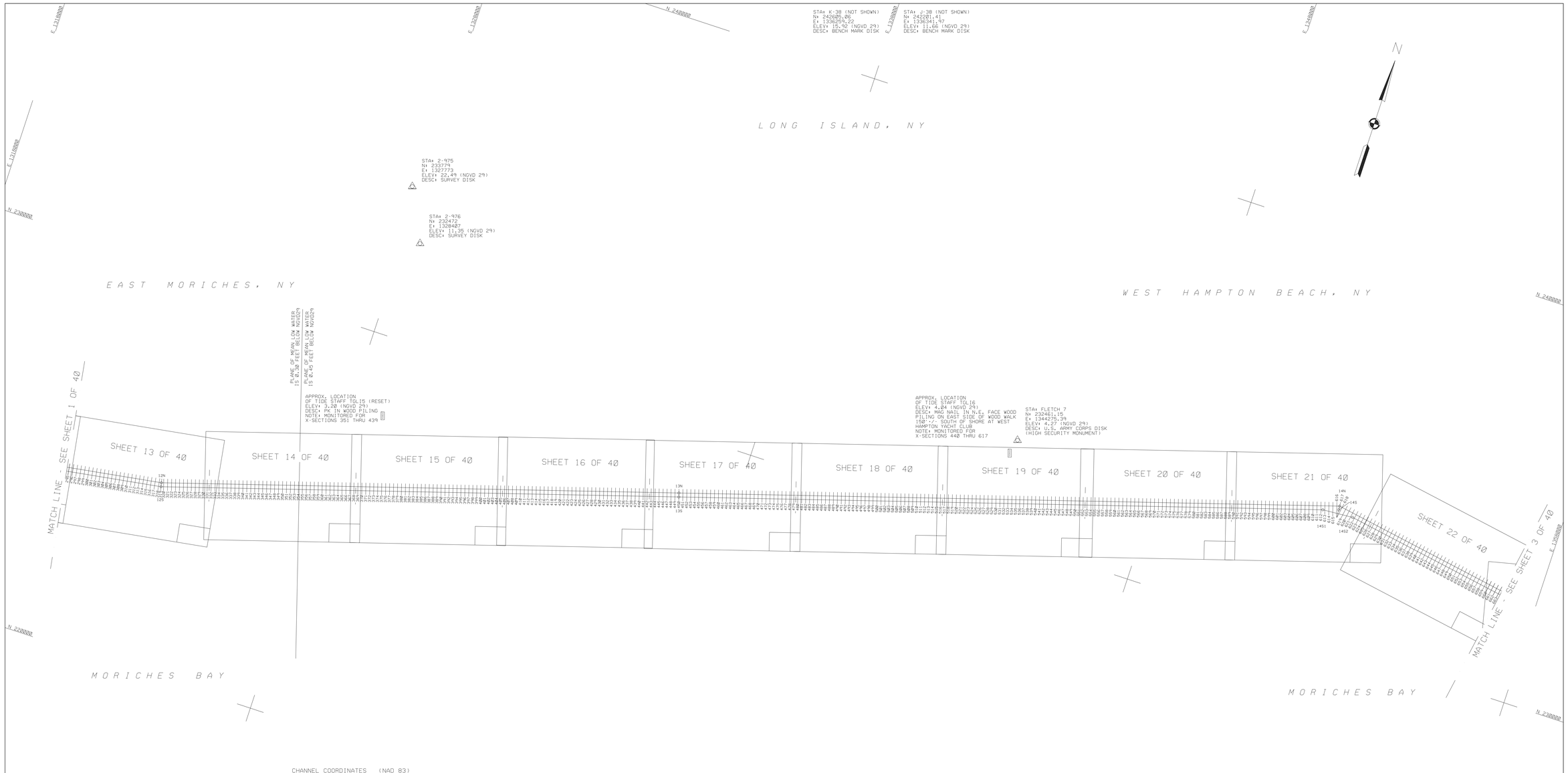
TVGA JOB NO. 2004.0055.08
TVGA SHEET NO. G-3978

REQUEST NO. 2622
FILE NO. 211



CHANNEL COORDINATES (NAD 83)

U.S.A.C.O.E. STATION NAME	NORTHING (Y)	EASTING (X)	U.S.A.C.O.E. STATION NAME	NORTHING (Y)	EASTING (X)
4S	214181.60	1286689.20	21S1	236115.19	1367754.51
5N	212181.19	1290816.88	21S2	236201.04	1368317.65
5S	212012.88	1290769.95	22N	236085.13	1369597.48
6N	209353.44	1295987.01	22S	235983.19	1369600.42
6S	209240.53	1295986.38	23N	236132.05	1369799.96
7N	211004.33	1299179.78	23S	236036.61	1369831.07
7S	210911.36	1299217.70	24N	237023.41	1371893.00
8AN	215073.09	1306648.70	24S	236926.83	1371921.42
8AS	214996.54	1306713.04	25N	237152.92	1372648.85
8N	212271.29	1303314.89	25S	237059.88	1372698.01
8S	212181.64	1303363.65	26N	237686.42	1373164.24
9N	215150.82	1306740.24	26S	237612.68	1373231.96
9S	215061.36	1306790.17	27N	237949.13	1373487.86
10N	217045.15	1312326.68	27S	237863.89	1373541.52
10S	216959.88	1312386.53	28N	239094.41	1375909.84
11N	223699.98	1317627.94	28N1	239009.91	1375929.03
11S	223607.15	1317681.84	28N2	239277.84	1375989.54
11S1	223294.23	1317432.67	29S	239820.87	1376986.58
11S2	223667.56	1318077.12	29N	240656.33	1376588.44
12N	224702.86	1324093.17	29S	240582.99	1376674.38
12S	224605.15	1324115.61	30N	244775.86	1380078.92
13N	228531.38	1336576.16	30S	244693.84	1380132.53
13S	228435.70	1336605.48	31N	250385.52	1392648.94
14N	233419.77	1352514.67	31S	250285.84	1392668.28
14S	233317.22	1352528.23	32N	250151.82	1398375.13
14S1	233199.98	1352139.80	32S	250051.16	1398393.15
14S2	233551.22	1352916.74	33N	250568.38	1399646.44
15N	233399.43	1358629.78	33N1	250498.31	1399408.94
15S	233297.52	1358612.79	33N2	250884.79	1399727.87
16N	233186.58	1362024.55	33S	250488.87	1399724.82
16S	233091.58	1362057.63	34N	268304.43	1403600.28
17N	233651.00	1363201.74	34S	268302.56	1403105.23
17S	233556.62	1363240.32	35N	262475.29	1402368.78
18N	234020.44	1364021.91	35S	262563.39	1402438.99
18S	233931.68	1364078.49	36N	263024.95	1399136.18
19N	234067.08	1364282.74	36S	263117.06	1399198.89
19S	233988.58	1364144.78	37N	263451.56	1398820.61
20N	234847.49	1365243.15	37S	263489.45	1398898.04
20S	234763.19	1365297.97	38N	264780.98	1398705.17
21N	236355.39	1368026.01	38S	264788.43	1398799.89
21S	236251.27	1368021.89			

WEST HAMPTON BEACH, NY

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), LONG ISLAND LAMBERT SYSTEM AND ARE EXPRESSED IN U.S.SURVEY FEET
3. ELEVATIONS REFER TO THE U.S.ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM AND ARE EXPRESSED IN U.S.SURVEY FEET.THE MEAN LOW WATER DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS AS FOLLOWS:

   0.30 FEET FROM MILE 0.0 TO MILE 15.2 (PATCHOGUE TO TUTHILL PT.)
   0.45 FEET FROM MILE 15.2 TO MILE 22.7 (TUTHILL PT.TO QUANTUCK BAY)
   0.30 FEET FROM MILE 22.7 TO MILE 29.9 (QUANTUCK BAY TO SHINNECOCK BAY)
   0.20 FEET FROM MILE 29.9 TO MILE 33.6 (SHINNECOCK BAY TO SHINNECOCK CANAL)
4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 110-2-1003 DATED 1 JANUARY 2004.
5. PLANIMETRIC DETAILS WERE SCALED FROM A 7.5 MINUTE U.S.G.S. QUADRANGLE MAP.
6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: OMNISTAR 3000 LR DGPS
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
   MOTION COMPENSATOR: TSS DMS25
   NAVIGATION/DATA LOGGING: DESKTOP PC W/ HYPACK MAX SOFTWARE

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF WEST HAMPTON BEACH, NY
INDEX / LAYOUT SHEET

1000 0 500 1000 2000 4000

SCALE: 1 INCH = 1000 FEET

PLOTTED BY: S. JULIUS
DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY
FIELD BOOKS: 1458
APPROVED: R. KISS
DATE: 27 JULY 2004
SHEET 2 OF 40

TVGA CONSULTANTS
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TVGA JOB NO. 2004.0055.08
TVGA SHEET NO. G-3979

REQUEST NO. 2622
FILE NO. 211

CHANNEL COORDINATES (NAD 83)

U.S.A.C.O.E. STATION NAME	NORTHING (Y)	EASTING (X)	U.S.A.C.O.E. STATION NAME	NORTHING (Y)	EASTING (X)
4S	214181.60	1286689.20	21S1	236115.19	1367754.51
5N	212101.19	1290816.88	21S2	236201.04	1368317.65
5S	212012.88	1290769.95	22N	236085.13	1369597.48
6N	209353.44	1295987.01	22S	235983.19	1369602.42
6S	209240.53	1295986.38	23N	236132.05	1369799.96
7N	211004.33	1299179.78	23S	236036.61	1369831.07
7S	210911.36	1299217.70	24N	237023.41	1371893.00
8AN	215073.09	1306648.70	24S	236926.83	1371921.42
8AS	214996.54	1306713.04	25N	237152.92	1372648.85
8N	212271.29	1303314.89	25S	237059.88	1372698.01
8S	212181.64	1303363.65	26N	237686.42	1373164.24
9N	215158.82	1306742.24	26S	237612.68	1373231.96
9S	215061.36	1306798.17	27N	237949.13	1373487.86
10N	217045.15	1312328.68	27S	237863.89	1373541.52
10S	216959.88	1312388.53	28N	238984.41	1375984.84
11N	223699.98	1317627.94	28N1	239086.91	1375729.03
11S	223607.15	1317681.84	28N2	239277.84	1375989.54
11S1	223294.23	1317432.67	28S	238920.87	1375986.58
11S2	223667.56	1318077.12	29N	240656.33	1376588.44
12N	224702.86	1324093.17	29S	240682.99	1376674.38
12S	224605.15	1324115.61	30N	244775.86	1380078.92
13N	228531.38	1336576.16	30S	244693.84	1380132.53
13S	228435.78	1336605.48	31N	250385.92	1392648.94
14N	233419.79	1352514.67	31S	250285.04	1392668.28
14S	233317.27	1352538.23	32N	250151.82	1393379.13
14S1	233194.98	1352139.88	32S	250051.16	1393393.15
14S2	233251.22	1352916.74	33N	250568.38	1395646.44
15N	232399.43	1358624.78	33N1	250498.31	1395486.94
15S	232297.52	1358612.79	33N2	250804.75	1395727.87
16N	231186.58	1362824.55	33S	250488.87	1395724.82
16S	231081.50	1362857.63	34N	263304.93	1403002.28
17N	233551.00	1363031.74	34S	263202.26	1403105.23
17S	233558.62	1363048.32	35N	263673.39	1402360.78
18N	234820.44	1364251.91	35S	263563.39	1402438.99
18S	234931.68	1364878.49	36N	263824.95	1391136.18
19N	234867.08	1364862.74	36S	263117.06	1391192.89
19S	233986.58	1364144.78	37N	263451.56	1388802.61
20N	234847.49	1365243.15	37S	263489.45	1388818.04
20S	234763.15	1365297.97	38N	264782.98	1387920.17
21N	236355.39	1368206.01	38S	264788.43	1387899.89
21S	236251.27	1368021.89			

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), LONG ISLAND LAMBERT SYSTEM AND ARE EXPRESSED IN U.S.SURVEY FEET
3. ELEVATIONS REFER TO THE U.S.ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM AND ARE EXPRESSED IN U.S.SURVEY FEET.THE MEAN LOW WATER DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS AS FOLLOWS:

   0.30 FEET FROM MILE 0.0 TO MILE 15.2 (PATCHOGUE TO TUTHILL PT.)
   0.45 FEET FROM MILE 15.2 TO MILE 22.7 (TUTHILL PT.TO QUANTUCK BAY)
   0.30 FEET FROM MILE 22.7 TO MILE 29.9 (QUANTUCK BAY TO SHINNECOCK BAY)
   0.20 FEET FROM MILE 29.9 TO MILE 33.6 (SHINNECOCK BAY TO SHINNECOCK CANAL)
4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 1110-2-1003 DATED 1 JANUARY 2004.
5. PLANIMETRIC DETAILS WERE SCALED FROM A 7.5 MINUTE U.S.G.S QUADRANGLE MAP.
6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: OMNISTAR 3000 LR DGPS
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
   MOTION COMPENSATOR: TSS DMS25
   NAVIGATION/DATA LOGGING: DESKTOP PC W/ HYPACK MAX SOFTWARE

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF WEST HAMPTON BEACH, NY
INDEX / LAYOUT SHEET

1000 0 500 1000 2000 4000

SCALE: 1 INCH = 1000 FEET

PLOTTED BY: S. JULIUS
DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY
FIELD BOOKS: 14158
APPROVED: R. KISS
DATE: 27 JULY 2004
SHEET 3 OF 40

TVGA CONSULTANTS
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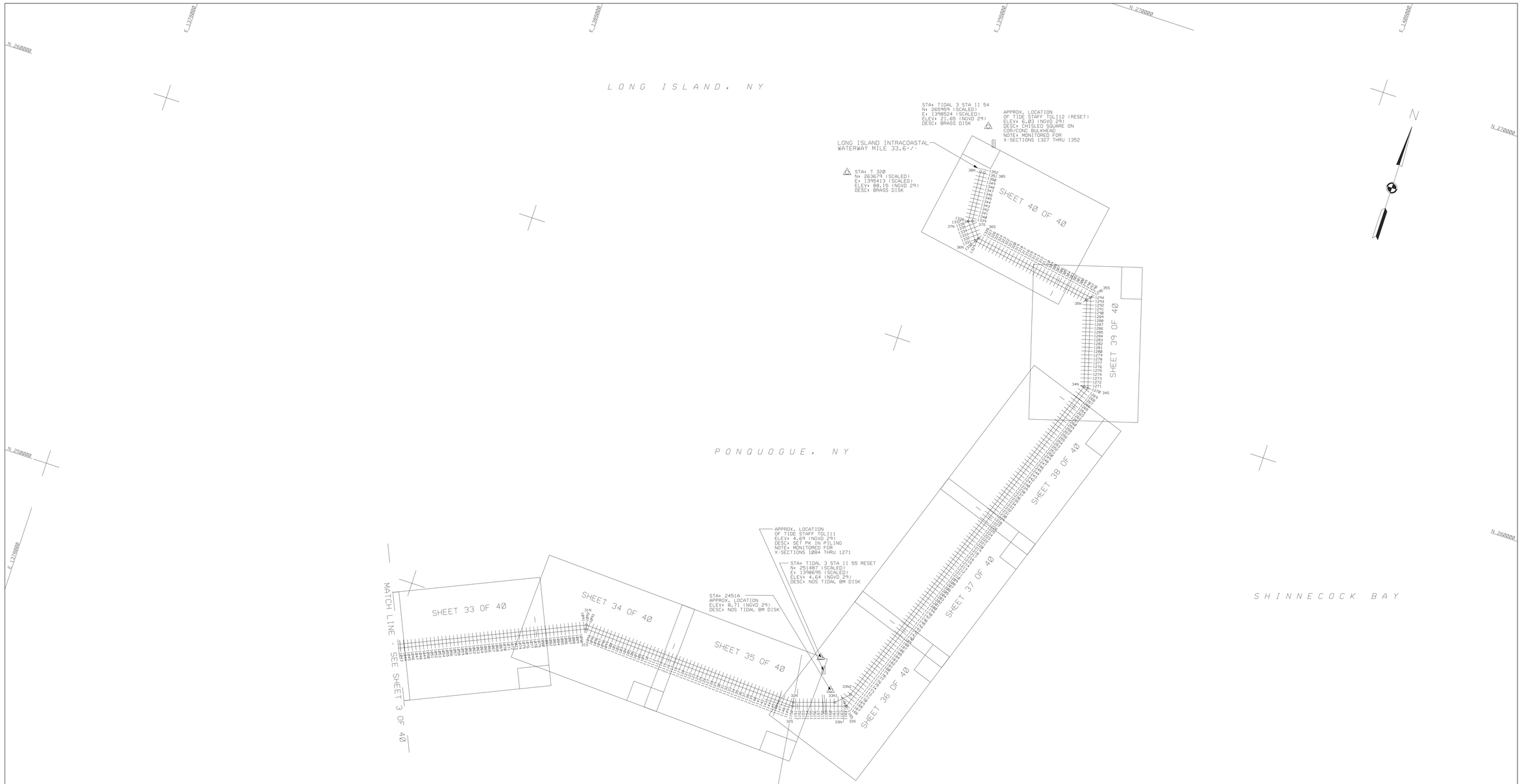
TVGA JOB NO. 2004.0055.08
TVGA SHEET NO. G-3980

REQUEST NO. 2622
FILE NO. 211



CHANNEL COORDINATES (NAD 83)

U.S.A.C.O.E. STATION NAME	NORTHING (Y)	EASTING (X)	U.S.A.C.O.E. STATION NAME	NORTHING (Y)	EASTING (X)
4S	214181.60	1286689.28	21S1	236115.19	1367754.51
5N	212101.19	1290816.88	21S2	236201.04	1368317.65
5S	212012.88	1290769.95	22N	236805.13	1369597.42
6N	209353.44	1295987.01	22S	235903.19	1369600.42
6S	209240.53	1295986.38	23N	236132.05	1369799.96
7N	211024.33	1299179.78	23S	236036.61	1369831.07
7S	210911.36	1299217.78	24N	237023.41	1371893.00
8AN	215873.09	1306648.70	24S	236926.83	1371921.42
8AS	214996.54	1306713.04	25N	237152.92	1372648.85
8N	212271.29	1303314.89	25S	237059.88	1372698.01
8S	212181.64	1303363.65	26N	237686.42	1373164.24
9N	215150.02	1306748.24	26S	237612.60	1373231.96
9S	215061.36	1306790.17	27N	237949.13	1373487.86
10N	217045.15	1312328.60	27S	237863.89	1373541.52
10S	216959.88	1312388.53	28N	239294.41	1375924.84
11N	223699.98	1317627.94	28N1	239208.91	1375729.03
11S	223607.15	1317681.84	28N2	239277.84	1375989.54
11S1	223294.23	1317432.67	28S	239220.07	1375986.58
11S2	223667.56	1318077.12	29N	240656.33	1376588.44
12N	224702.86	1324093.17	29S	240602.99	1376674.30
12S	224605.15	1324115.61	30N	244775.86	1380070.92
13N	228531.30	1336576.16	30S	244693.84	1380132.53
13S	228436.70	1336605.49	31N	250385.92	1392648.94
14N	233419.79	1352514.67	31S	250285.04	1392668.28
14S	233317.27	1352538.23	32N	250151.82	1396379.13
14S1	233194.98	1352175.80	32S	250051.66	1396393.15
14S2	233254.22	1352916.74	33N	250568.38	1399646.44
15N	232399.43	1358687.78	33N1	250492.31	1399486.94
15S	232297.53	1358612.79	33N2	250604.71	1399727.87
16N	233186.50	1362624.55	33S	250488.67	1399724.82
16S	233091.50	1362657.63	34N	260304.93	1403020.28
17N	233651.80	1363001.74	34S	260362.56	1403185.23
17S	233558.62	1363048.32	35N	262475.29	1402368.78
18N	234220.44	1364021.91	35S	262563.39	1402438.99
18S	233931.68	1364078.49	36N	263024.95	1399136.10
19N	234067.88	1364852.74	36S	263117.86	1399190.89
19S	233988.58	1364144.78	37N	263451.56	1398820.61
20N	234847.49	1365843.15	37S	263489.45	1398898.04
20S	234763.19	1365897.97	38N	264780.90	1398708.17
21N	236355.39	1368026.01	38S	264788.43	1398794.89
21S	236251.27	1368021.89			

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), LONG ISLAND LAMBERT SYSTEM AND ARE EXPRESSED IN U.S. SURVEY FEET
3. ELEVATIONS REFER TO THE U.S. ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM AND ARE EXPRESSED IN U.S. SURVEY FEET. THE MEAN LOW WATER DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS AS FOLLOWS:

   0.30 FEET FROM MILE 0.0 TO MILE 15.2 (PATCHOGUE TO TUTHILL PT.)
   0.45 FEET FROM MILE 15.2 TO MILE 22.7 (TUTHILL PT. TO QUANTUCK BAY)
   0.30 FEET FROM MILE 22.7 TO MILE 29.9 (QUANTUCK BAY TO SHINNECOCK BAY)
   0.20 FEET FROM MILE 29.9 TO MILE 33.6 (SHINNECOCK BAY TO SHINNECOCK CANAL)
4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 1110-2-1003 DATED 1 JANUARY 2004.
5. PLANIMETRIC DETAILS WERE SCALED FROM A 7.5 MINUTE U.S.G.S. QUADRANGLE MAP.
6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: OMNISTAR 3000 LR DGPS
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
   MOTION COMPENSATOR: TSS DMS25
   NAVIGATION/DATA LOGGING: DESKTOP PC W/ HYPACK MAX SOFTWARE

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF WEST HAMPTON BEACH, NY
INDEX / LAYOUT SHEET

1000 0 500 1000 2000 4000

SCALE: 1 INCH = 1000 FEET

PLOTTED BY: S. JULIUS
DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY
FIELD BOOKS: 14158
APPROVED: R. KISS
DATE: 27 JULY 2004
SHEET 4 OF 40

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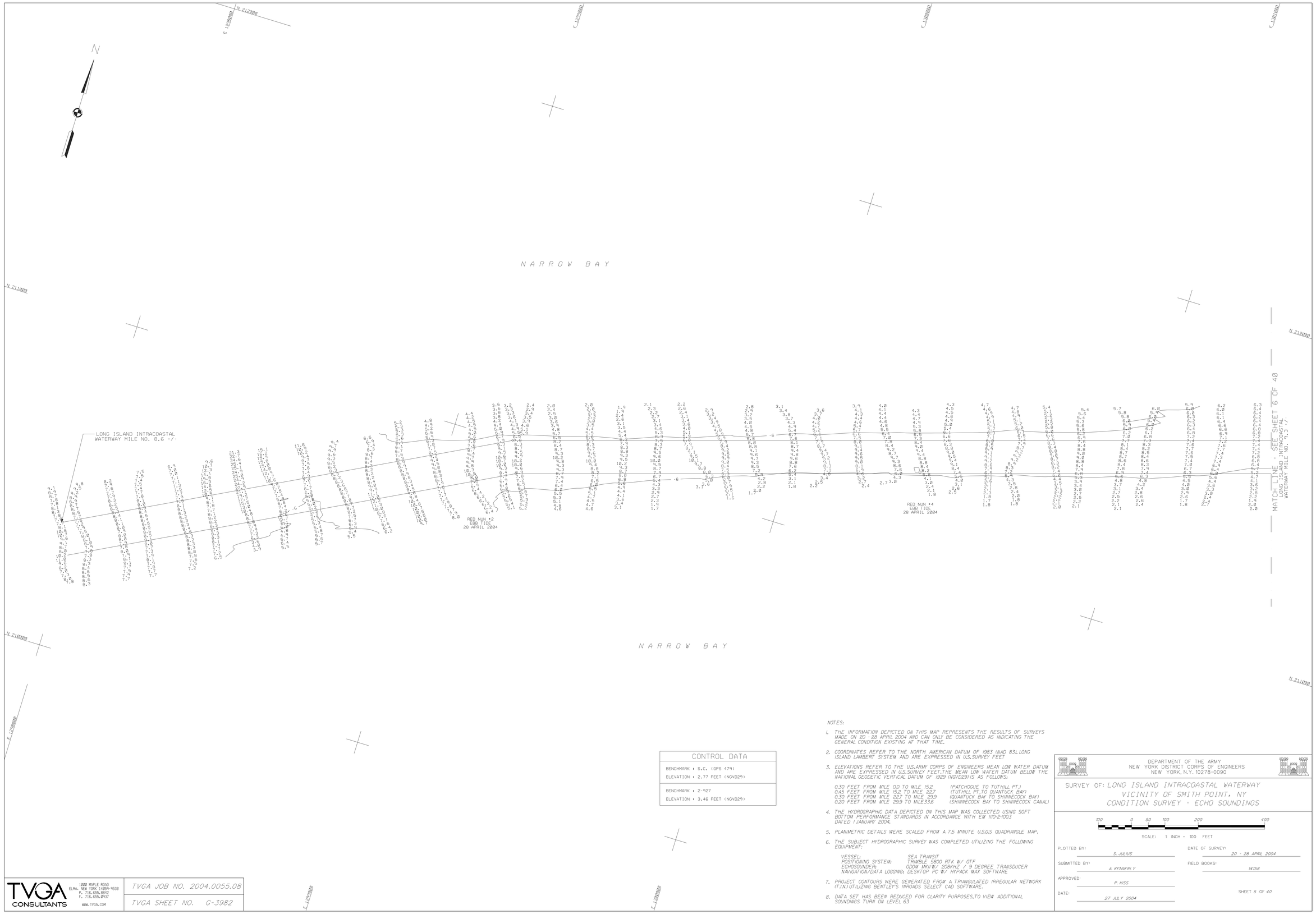
TVGA JOB NO. 2004.0055.08
TVGA SHEET NO. G-3981

REQUEST NO. 2622
FILE NO. 211



CONTROL DATA
BENCHMARK : S.C. (GPS 479) ELEVATION : 2.77 FEET (NGVD29)
BENCHMARK : 2-927 ELEVATION : 3.46 FEET (NGVD29)

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83). LONG ISLAND LAMBERT SYSTEM AND ARE EXPRESSED IN U.S.SURVEY FEET
3. ELEVATIONS REFER TO THE U.S.ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM AND ARE EXPRESSED IN U.S.SURVEY FEET.THE MEAN LOW WATER DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS AS FOLLOWS:

   0.30 FEET FROM MILE 0.0 TO MILE 15.2 (PATCHOGUE TO TUTHILL PT.)
   0.45 FEET FROM MILE 15.2 TO MILE 22.7 (TUTHILL PT.TO QUANTUCK BAY)
   0.30 FEET FROM MILE 22.7 TO MILE 29.9 (QUANTUCK BAY TO SHINNECOCK BAY)
   0.20 FEET FROM MILE 29.9 TO MILE33.6 (SHINNECOCK BAY TO SHINNECOCK CANAL)
4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 1110-2-1003 DATED 1 JANUARY 2004.
5. PLANIMETRIC DETAILS WERE SCALED FROM A 7.5 MINUTE U.S.G.S QUADRANGLE MAP.
6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: TRIMBLE 5800 RTK W/ OTF
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
   NAVIGATION/DATA LOGGING: DESKTOP PC W/ HYPACK MAX SOFTWARE
7. PROJECT CONTOURS WERE GENERATED FROM A TRIANGULATED IRREGULAR NETWORK (TIN) UTILIZING BENTLEY'S INROADS SELECT CAD SOFTWARE.
8. DATA SET HAS BEEN REDUCED FOR CLARITY PURPOSES.TO VIEW ADDITIONAL SOUNDINGS TURN ON LEVEL 63

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF SMITH POINT, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400

SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS	DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY	FIELD BOOKS: 14158
APPROVED: R. KISS	
DATE: 27 JULY 2004	SHEET 5 OF 40

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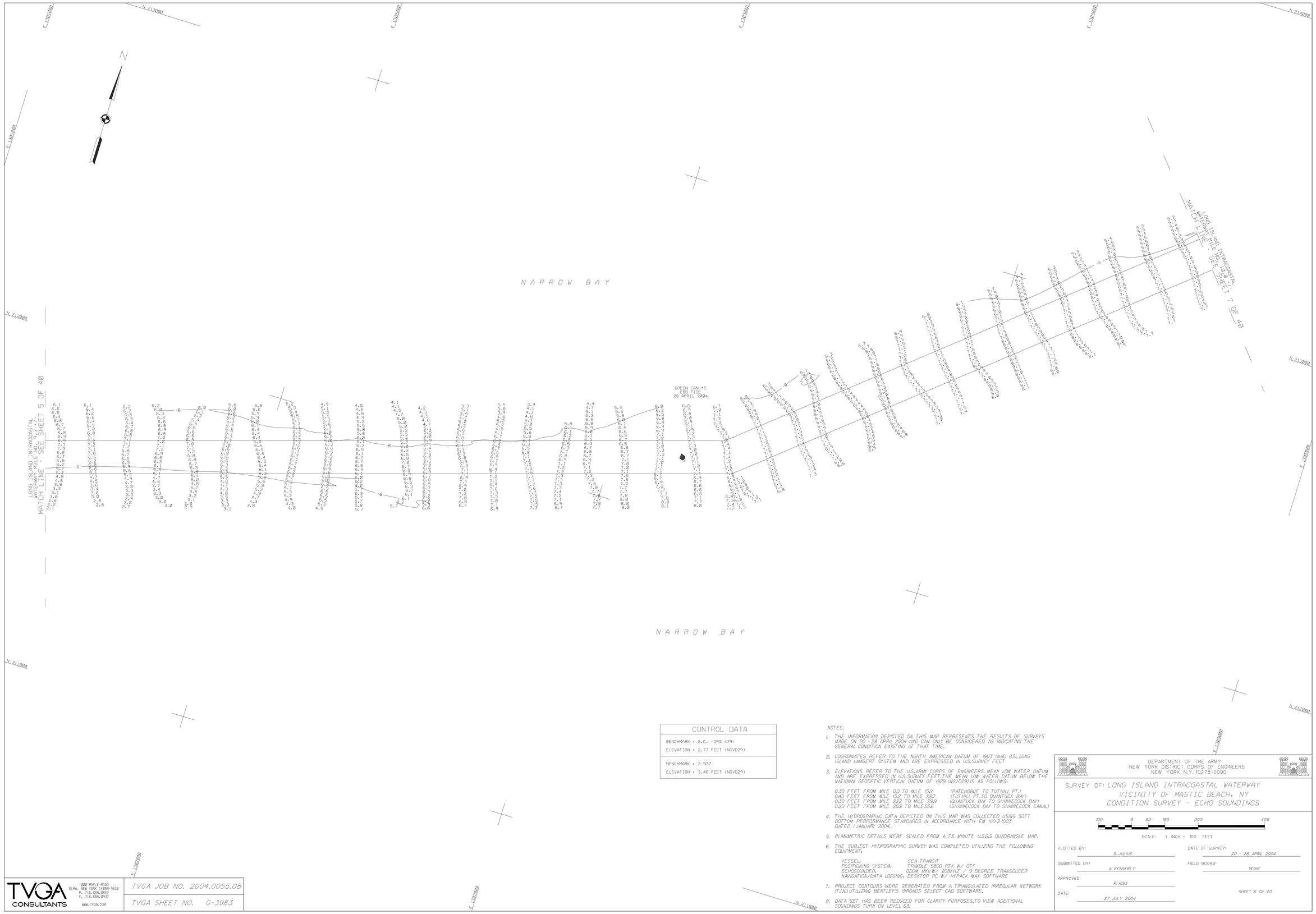
TVGA JOB NO. 2004.0055.08

TVGA SHEET NO. G-3982

REQUEST NO. 2622

FILE NO. 211



CONTROL DATA
BENCHMARK • S.C. (GPS 479)
ELEVATION • 2.77 FEET (NGVD29)
BENCHMARK • 2-927
ELEVATION • 3.46 FEET (NGVD29)

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), LONG ISLAND LAMBERT SYSTEM AND ARE EXPRESSED IN U.S.SURVEY FEET
3. ELEVATIONS REFER TO THE U.S.ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM AND ARE EXPRESSED IN U.S.SURVEY FEET.THE MEAN LOW WATER DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS AS FOLLOWS:

   0.30 FEET FROM MILE 0.0 TO MILE 15.2 (PATCHOGUE TO TUTHILL PT.)
   0.45 FEET FROM MILE 15.2 TO MILE 22.7 (TUTHILL PT.TO QUANTUCK BAY)
   0.30 FEET FROM MILE 22.7 TO MILE 29.9 (QUANTUCK BAY TO SHINNECOCK BAY)
   0.20 FEET FROM MILE 29.9 TO MILE 33.6 (SHINNECOCK BAY TO SHINNECOCK CANAL)
4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 1110-2-1003 DATED 1 JANUARY 2004.
5. PLANIMETRIC DETAILS WERE SCALED FROM A 7.5 MINUTE U.S.G.S QUADRANGLE MAP.
6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: TRIMBLE 5800 RTK W/ OTF
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
   NAVIGATION/DATA LOGGING: DESKTOP PC W/ HYPACK MAX SOFTWARE
7. PROJECT CONTOURS WERE GENERATED FROM A TRIANGULATED IRREGULAR NETWORK (TIN) UTILIZING BENTLEY'S INROADS SELECT CAD SOFTWARE.
8. DATA SET HAS BEEN REDUCED FOR CLARITY PURPOSES.TO VIEW ADDITIONAL SOUNDINGS TURN ON LEVEL 63.

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF MASTIC BEACH, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400
SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS
DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY
FIELD BOOKS: 14158
APPROVED: R. KISS
DATE: 27 JULY 2004
SHEET 6 OF 40

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TVGA JOB NO. 2004.0055.08
TVGA SHEET NO. G-3983

REQUEST NO. 2622
FILE NO. 211

CONTROL DATA
BENCHMARK = S.C. (GPS 479)
ELEVATION = 2.77 FEET (NGVD29)
BENCHMARK = 2-927
ELEVATION = 3.46 FEET (NGVD29)

NOTES:

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF MASTIC BEACH, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400

SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS
DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY
FIELD BOOKS: 1458
APPROVED: R. KISS
DATE: 28 JULY 2004

SHEET 7 OF 40

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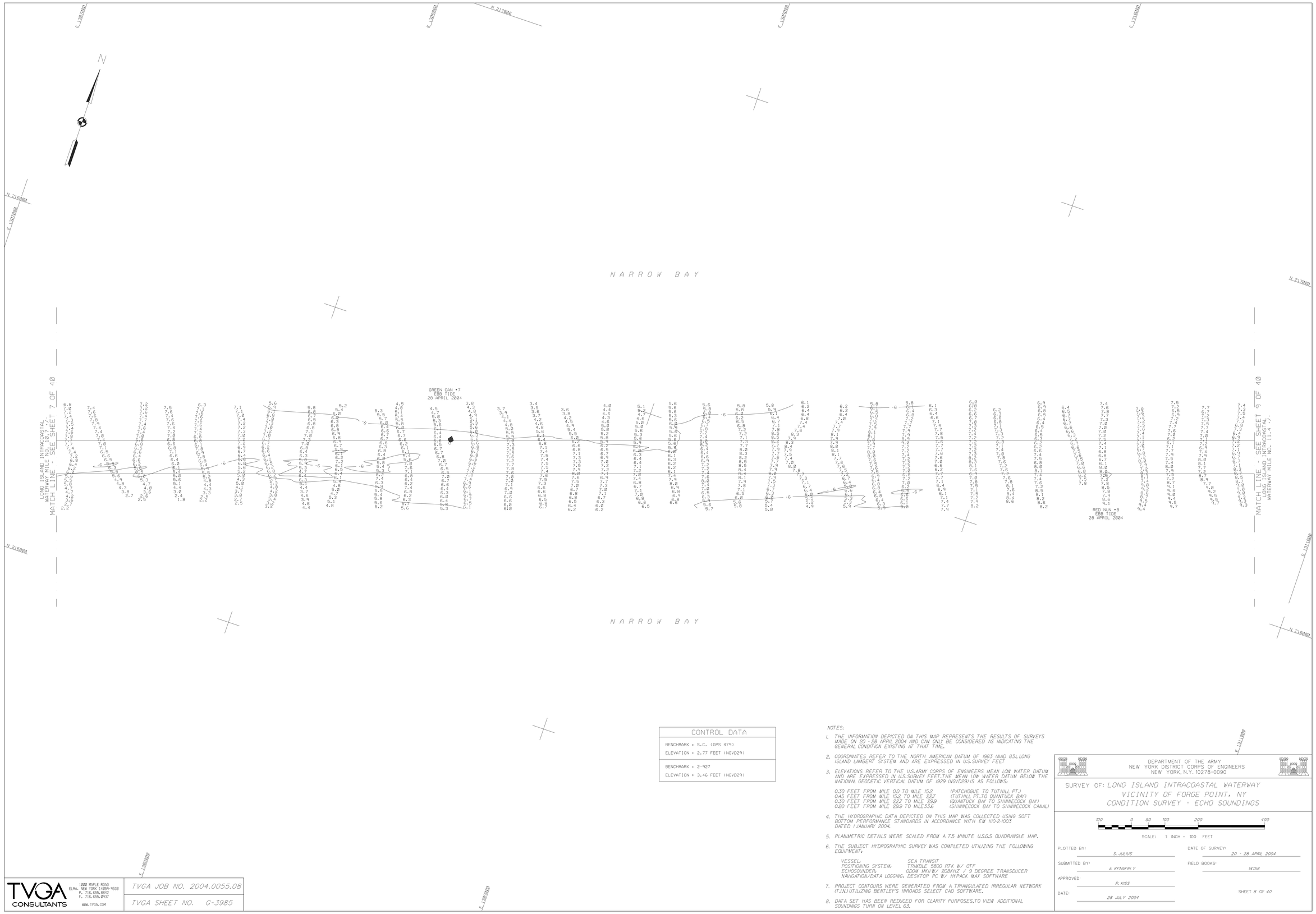
TVGA JOB NO. 2004.0055.08
TVGA SHEET NO. G-3984

REQUEST NO. 2622

FILE NO. 211



CONTROL DATA
BENCHMARK : S.C. (GPS 479)
ELEVATION : 2.77 FEET (NGVD29)
BENCHMARK : 2-927
ELEVATION : 3.46 FEET (NGVD29)

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), LONG ISLAND LAMBERT SYSTEM AND ARE EXPRESSED IN U.S.SURVEY FEET
3. ELEVATIONS REFER TO THE U.S.ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM AND ARE EXPRESSED IN U.S.SURVEY FEET.THE MEAN LOW WATER DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS AS FOLLOWS:

   0.30 FEET FROM MILE 0.0 TO MILE 15.2 (PATCHOGUE TO TUTHILL PT.)
   0.45 FEET FROM MILE 15.2 TO MILE 22.7 (TUTHILL PT.TO QUANTUCK BAY)
   0.30 FEET FROM MILE 22.7 TO MILE 29.9 (QUANTUCK BAY TO SHINNECOCK BAY)
   0.20 FEET FROM MILE 29.9 TO MILE 33.6 (SHINNECOCK BAY TO SHINNECOCK CANAL)
4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 1110-2-1003 DATED 1 JANUARY 2004.
5. PLANIMETRIC DETAILS WERE SCALED FROM A 7.5 MINUTE U.S.G.S QUADRANGLE MAP.
6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: TRIMBLE 5800 RTK W/ OTF
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
   NAVIGATION/DATA LOGGING: DESKTOP PC W/ HYPACK MAX SOFTWARE
7. PROJECT CONTOURS WERE GENERATED FROM A TRIANGULATED IRREGULAR NETWORK (TIN) UTILIZING BENTLEY'S INROADS SELECT CAD SOFTWARE.
8. DATA SET HAS BEEN REDUCED FOR CLARITY PURPOSES.TO VIEW ADDITIONAL SOUNDINGS TURN ON LEVEL 63.

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF FORGE POINT, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400
SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS
DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY
FIELD BOOKS: 14158
APPROVED: R. KISS
DATE: 28 JULY 2004
SHEET 8 OF 40

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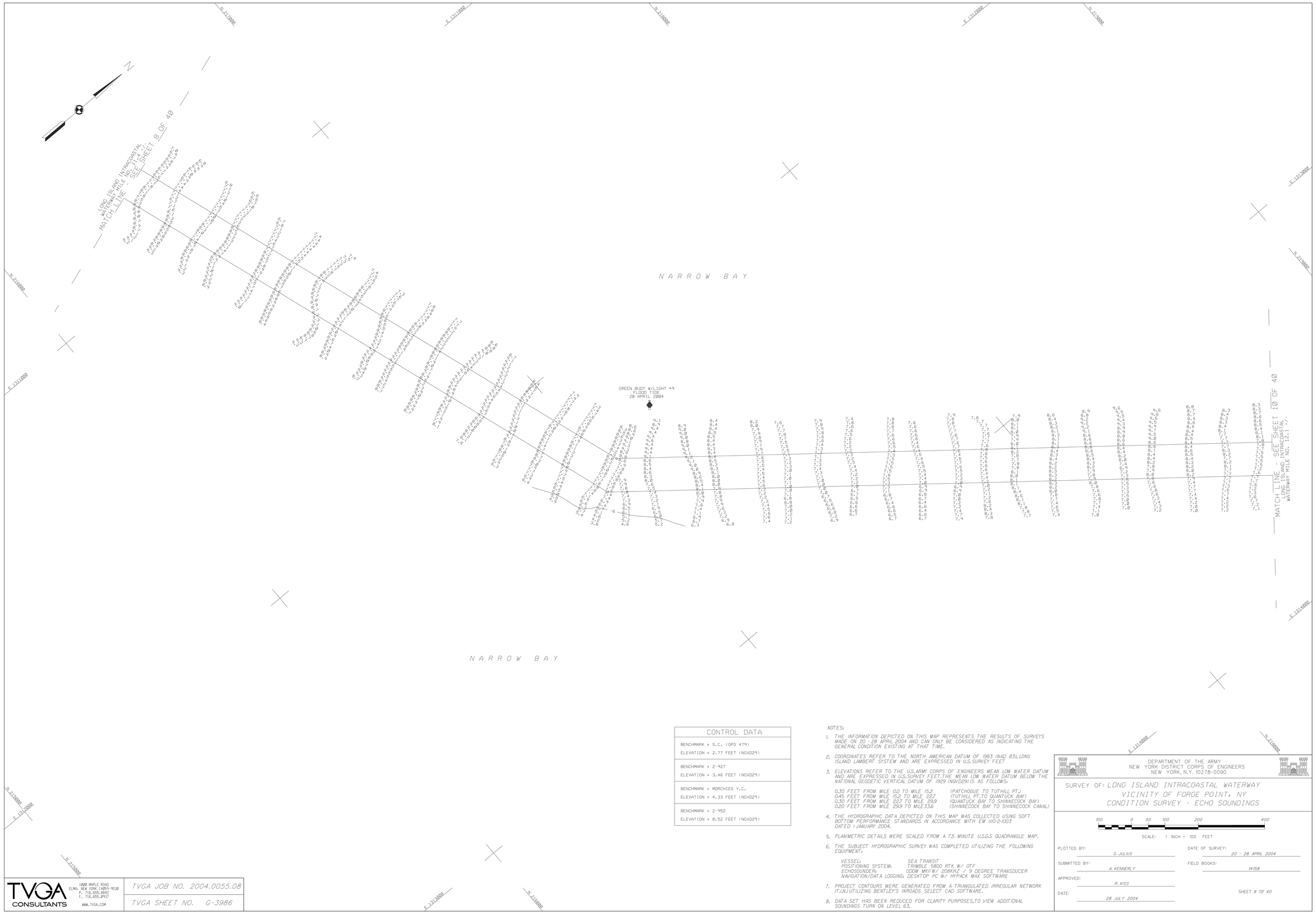
TVGA JOB NO. 2004.0055.08
TVGA SHEET NO. G-3985

REQUEST NO. 2622
FILE NO. 211



CONTROL DATA
BENCHMARK : S.C. (GPS 479) ELEVATION : 2.77 FEET (NGVD29)
BENCHMARK : 2-927 ELEVATION : 3.46 FEET (NGVD29)
BENCHMARK : MORCHIES Y.C. ELEVATION : 4.33 FEET (NGVD29)
BENCHMARK : 2-952 ELEVATION : 8.52 FEET (NGVD29)

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), LONG ISLAND LAMBERT SYSTEM AND ARE EXPRESSED IN U.S.SURVEY FEET
3. ELEVATIONS REFER TO THE U.S.ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM AND ARE EXPRESSED IN U.S.SURVEY FEET.THE MEAN LOW WATER DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS AS FOLLOWS:

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   0.30 FEET FROM MILE 22.7 TO MILE 29.9 (QUANTUCK BAY TO SHINNECOCK BAY)
   0.20 FEET FROM MILE 29.9 TO MILE33.6 (SHINNECOCK BAY TO SHINNECOCK CANAL)
4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 1110-2-1003 DATED 1 JANUARY 2004.
5. PLANIMETRIC DETAILS WERE SCALED FROM A 7.5 MINUTE U.S.G.S QUADRANGLE MAP.
6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: TRIMBLE 5800 RTK W/ OTF
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
   NAVIGATION/DATA LOGGING: DESKTOP PC W/ HYPACK MAX SOFTWARE
7. PROJECT CONTOURS WERE GENERATED FROM A TRIANGULATED IRREGULAR NETWORK (TIN) UTILIZING BENTLEY'S INROADS SELECT CAD SOFTWARE.
8. DATA SET HAS BEEN REDUCED FOR CLARITY PURPOSES.TO VIEW ADDITIONAL SOUNDINGS TURN ON LEVEL 63.

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF FORGE POINT, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400

SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS
DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY
FIELD BOOKS: 14158
APPROVED: R. KISS
DATE: 28 JULY 2004

SHEET 9 OF 40

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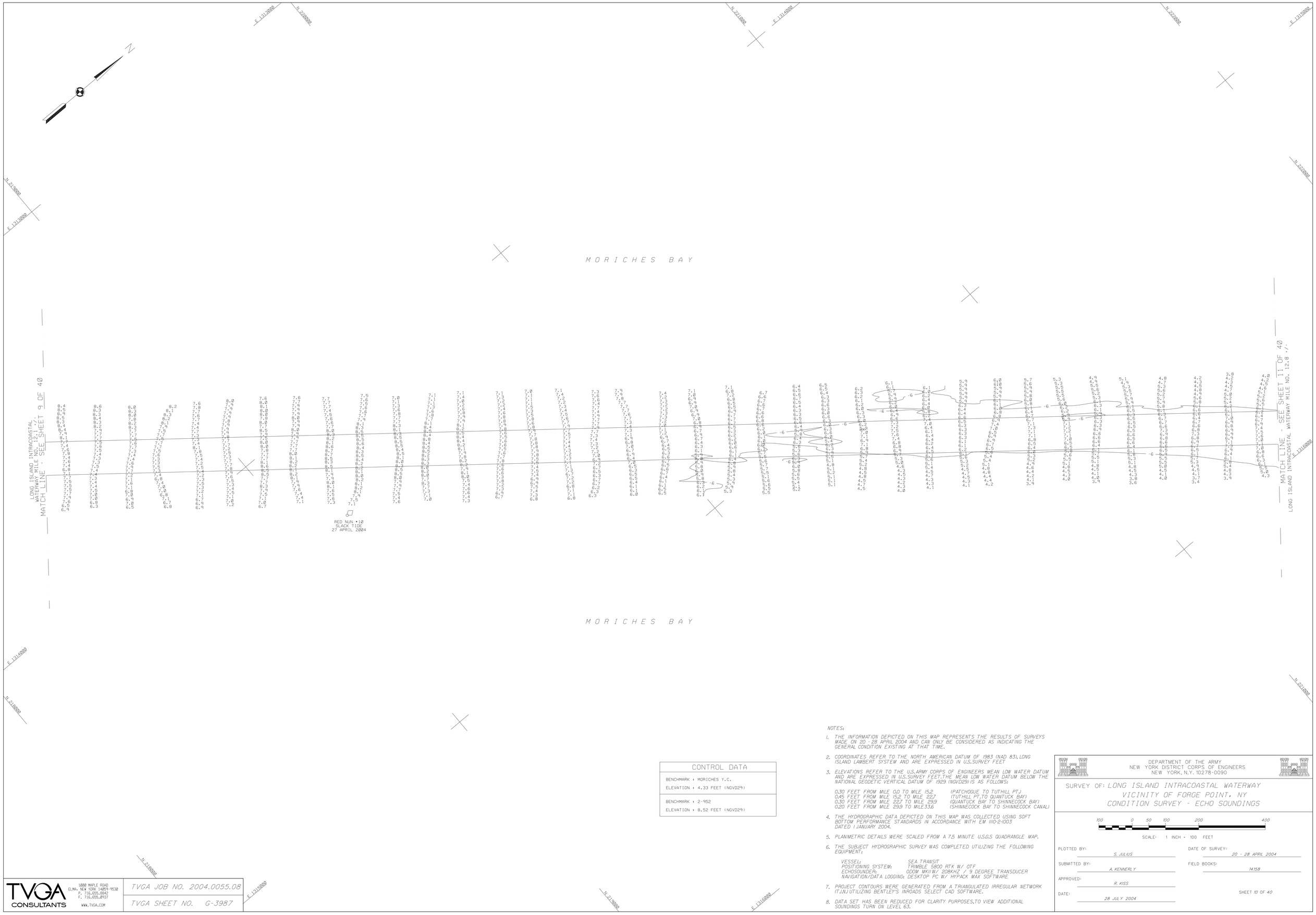
TVGA JOB NO. 2004.0055.08
TVGA SHEET NO. G-3986

REQUEST NO. 2622

FILE NO. 211



CONTROL DATA
BENCHMARK : MORICHES Y.C. ELEVATION : 4.33 FEET (NGVD29)
BENCHMARK : 2-952 ELEVATION : 8.52 FEET (NGVD29)

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), LONG ISLAND LAMBERT SYSTEM AND ARE EXPRESSED IN U.S.SURVEY FEET
3. ELEVATIONS REFER TO THE U.S.ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM AND ARE EXPRESSED IN U.S.SURVEY FEET.THE MEAN LOW WATER DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS AS FOLLOWS:

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   0.30 FEET FROM MILE 22.7 TO MILE 29.9 (QUANTUCK BAY TO SHINNECOCK BAY)
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4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 1110-2-1003 DATED 1 JANUARY 2004.
5. PLANIMETRIC DETAILS WERE SCALED FROM A 7.5 MINUTE U.S.G.S QUADRANGLE MAP.
6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: TRIMBLE 5800 RTK W/ OTF
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
   NAVIGATION/DATA LOGGING: DESKTOP PC W/ HYPACK MAX SOFTWARE
7. PROJECT CONTOURS WERE GENERATED FROM A TRIANGULATED IRREGULAR NETWORK (TIN) UTILIZING BENTLEY'S INROADS SELECT CAD SOFTWARE.
8. DATA SET HAS BEEN REDUCED FOR CLARITY PURPOSES.TO VIEW ADDITIONAL SOUNDINGS TURN ON LEVEL 63.

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF FORGE POINT, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400
SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS
DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY
FIELD BOOKS: 14158
APPROVED: R. KISS
DATE: 28 JULY 2004
SHEET 10 OF 40

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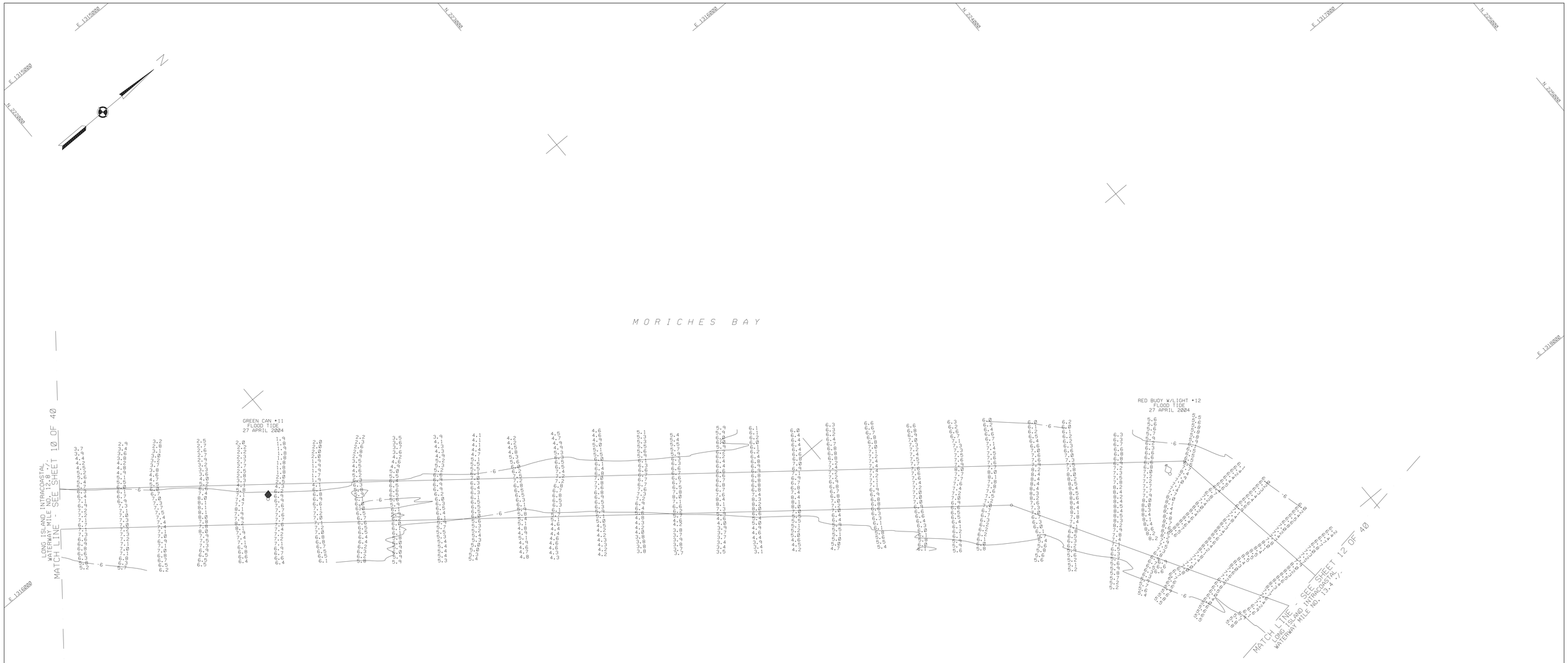
TVGA JOB NO. 2004.0055.08
TVGA SHEET NO. G-3987

REQUEST NO. 2622
FILE NO. 211



NOTES:

CONTROL DATA
BENCHMARK : MORICHES Y.C. ELEVATION : 4.33 FEET (NGVD29)
BENCHMARK : 2-952 ELEVATION : 8.52 FEET (NGVD29)

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF FORGE POINT, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400

SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS

DATE OF SURVEY: 20 - 28 APRIL 2004

SUBMITTED BY: A. KENNERLY

FIELD BOOKS: 14158

APPROVED: R. KISS

DATE: 28 JULY 2004

SHEET 11 OF 40

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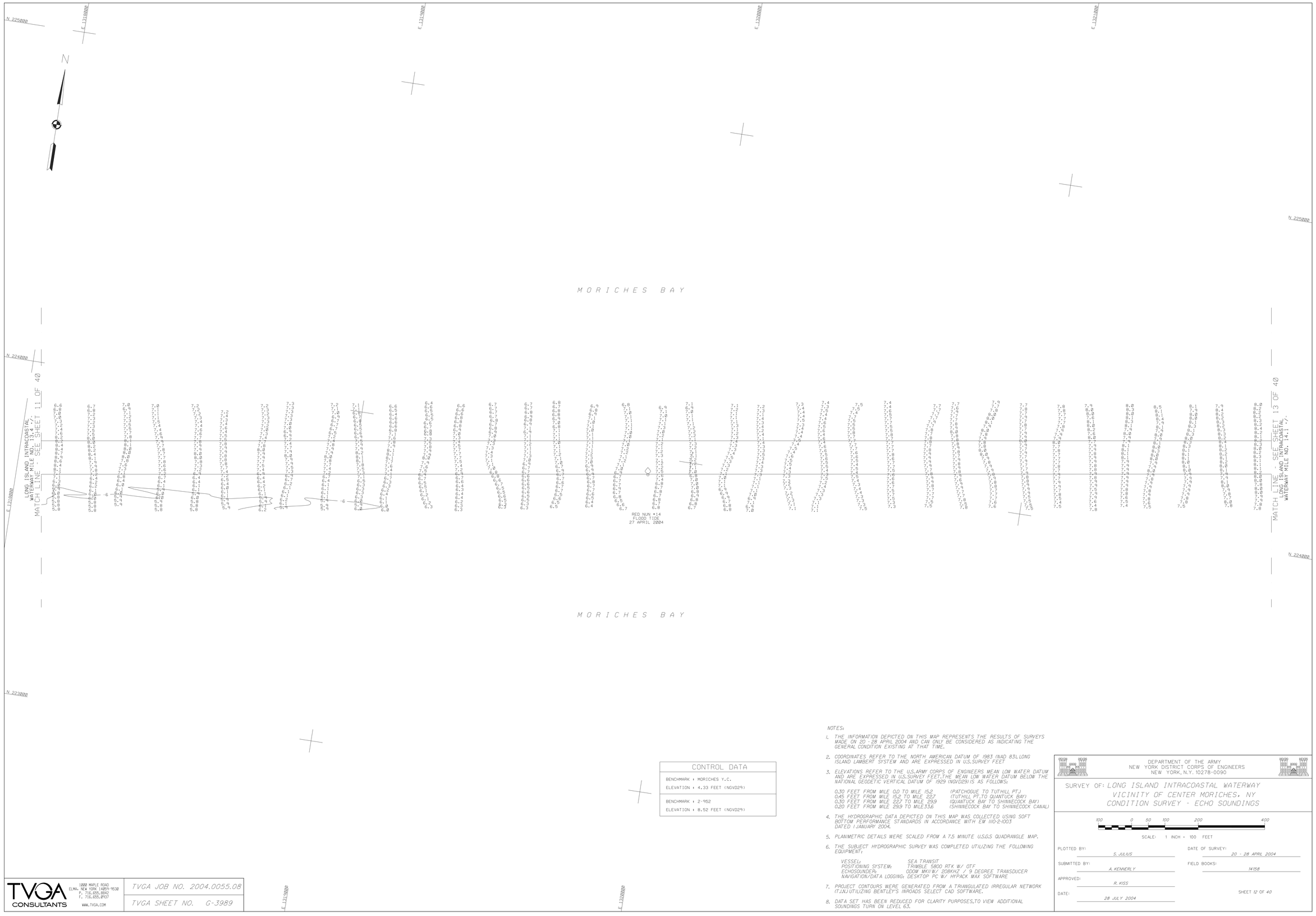
TVGA JOB NO. 2004.0055.08

TVGA SHEET NO. G-3988

REQUEST NO. 2622

FILE NO. 211



CONTROL DATA
BENCHMARK : MORICHES Y.C. ELEVATION : 4.33 FEET (NGVD29)
BENCHMARK : 2-952 ELEVATION : 8.52 FEET (NGVD29)

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), LONG ISLAND LAMBERT SYSTEM AND ARE EXPRESSED IN U.S.SURVEY FEET
3. ELEVATIONS REFER TO THE U.S.ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM AND ARE EXPRESSED IN U.S.SURVEY FEET.THE MEAN LOW WATER DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS AS FOLLOWS:

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   0.45 FEET FROM MILE 15.2 TO MILE 22.7 (TUTHILL PT.TO QUANTUCK BAY)
   0.30 FEET FROM MILE 22.7 TO MILE 29.9 (QUANTUCK BAY TO SHINNECOCK BAY)
   0.20 FEET FROM MILE 29.9 TO MILE 33.6 (SHINNECOCK BAY TO SHINNECOCK CANAL)
4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 1110-2-1003 DATED 1 JANUARY 2004.
5. PLANIMETRIC DETAILS WERE SCALED FROM A 7.5 MINUTE U.S.G.S QUADRANGLE MAP.
6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: TRIMBLE 5800 RTK W/ OTF
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
   NAVIGATION/DATA LOGGING: DESKTOP PC W/ HYPACK MAX SOFTWARE
7. PROJECT CONTOURS WERE GENERATED FROM A TRIANGULATED IRREGULAR NETWORK (TIN) UTILIZING BENTLEY'S INROADS SELECT CAD SOFTWARE.
8. DATA SET HAS BEEN REDUCED FOR CLARITY PURPOSES.TO VIEW ADDITIONAL SOUNDINGS TURN ON LEVEL 63.

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF CENTER MORICHES, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400

SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS	DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY	FIELD BOOKS: 1458
APPROVED: R. KISS	
DATE: 28 JULY 2004	SHEET 12 OF 40

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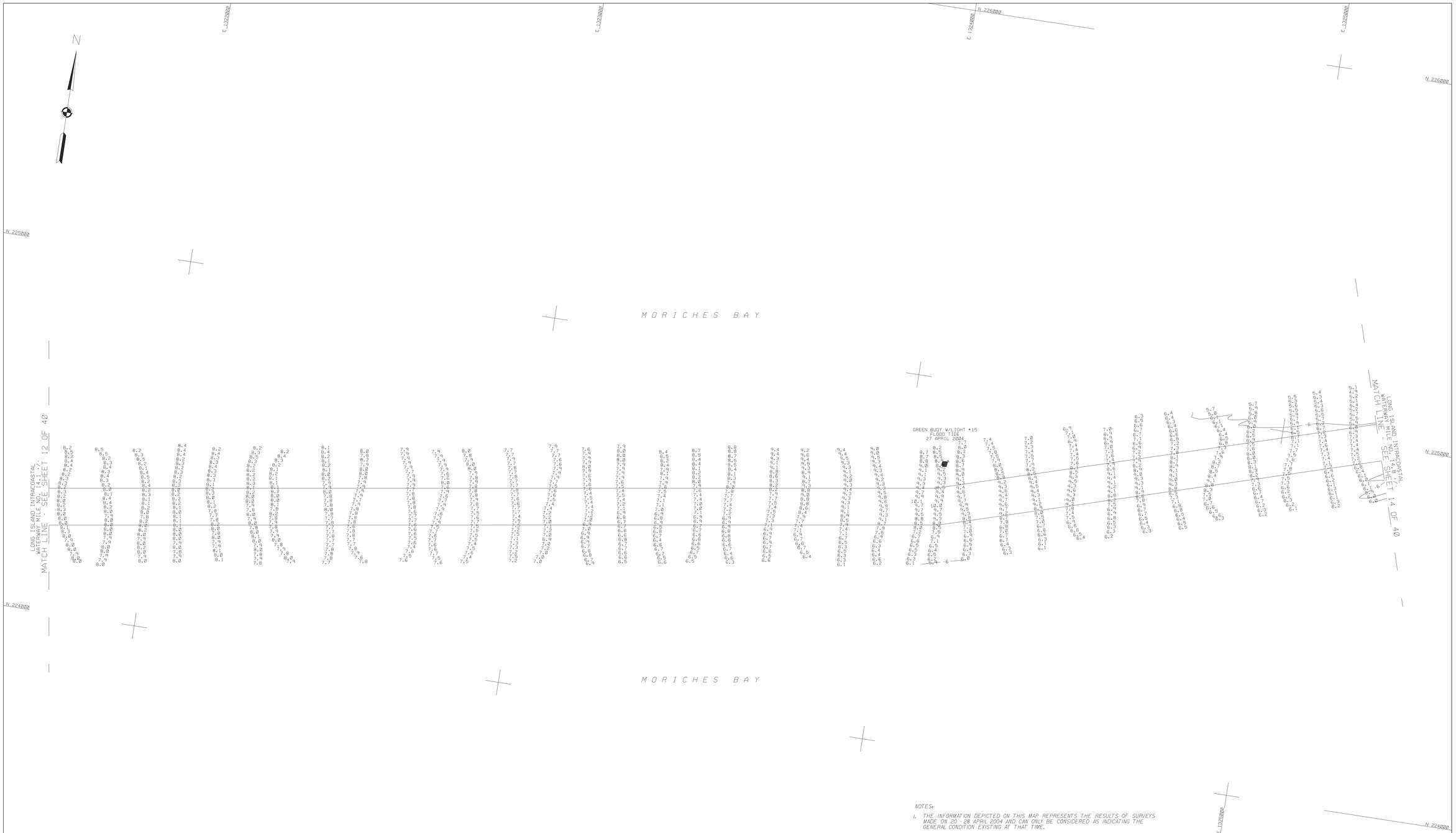
TVGA JOB NO. 2004.0055.08

TVGA SHEET NO. G-3989

REQUEST NO. 2622

FILE NO. 211



CONTROL DATA
BENCHMARK : MORICHES Y.C. ELEVATION : 4.33 FEET (NGVD29)
BENCHMARK : 2-952 ELEVATION : 8.52 FEET (NGVD29)

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), LONG ISLAND LAMBERT SYSTEM AND ARE EXPRESSED IN U.S.SURVEY FEET
3. ELEVATIONS REFER TO THE U.S.ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM AND ARE EXPRESSED IN U.S.SURVEY FEET.THE MEAN LOW WATER DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS AS FOLLOWS:

   0.30 FEET FROM MILE 0.0 TO MILE 15.2 (PATCHOGUE TO TUTHILL PT.)
   0.45 FEET FROM MILE 15.2 TO MILE 22.7 (TUTHILL PT.TO QUANTUCK BAY)
   0.30 FEET FROM MILE 22.7 TO MILE 29.9 (QUANTUCK BAY TO SHINNECOCK BAY)
   0.20 FEET FROM MILE 29.9 TO MILE 33.6 (SHINNECOCK BAY TO SHINNECOCK CANAL)
4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 1110-2-1003 DATED 1 JANUARY 2004.
5. PLANIMETRIC DETAILS WERE SCALED FROM A 7.5 MINUTE U.S.G.S QUADRANGLE MAP.
6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: TRIMBLE 5800 RTK W/ OTF
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
   NAVIGATION/DATA LOGGING: DESKTOP PC W/ HYPACK MAX SOFTWARE
7. PROJECT CONTOURS WERE GENERATED FROM A TRIANGULATED IRREGULAR NETWORK (TIN) UTILIZING BENTLEY'S INROADS SELECT CAD SOFTWARE.
8. DATA SET HAS BEEN REDUCED FOR CLARITY PURPOSES.TO VIEW ADDITIONAL SOUNDINGS TURN ON LEVEL 63.

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF CENTER MORICHES, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400

SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS
DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY
FIELD BOOKS: 14158
APPROVED: R. KISS
DATE: 28 JULY 2004
SHEET 13 OF 40

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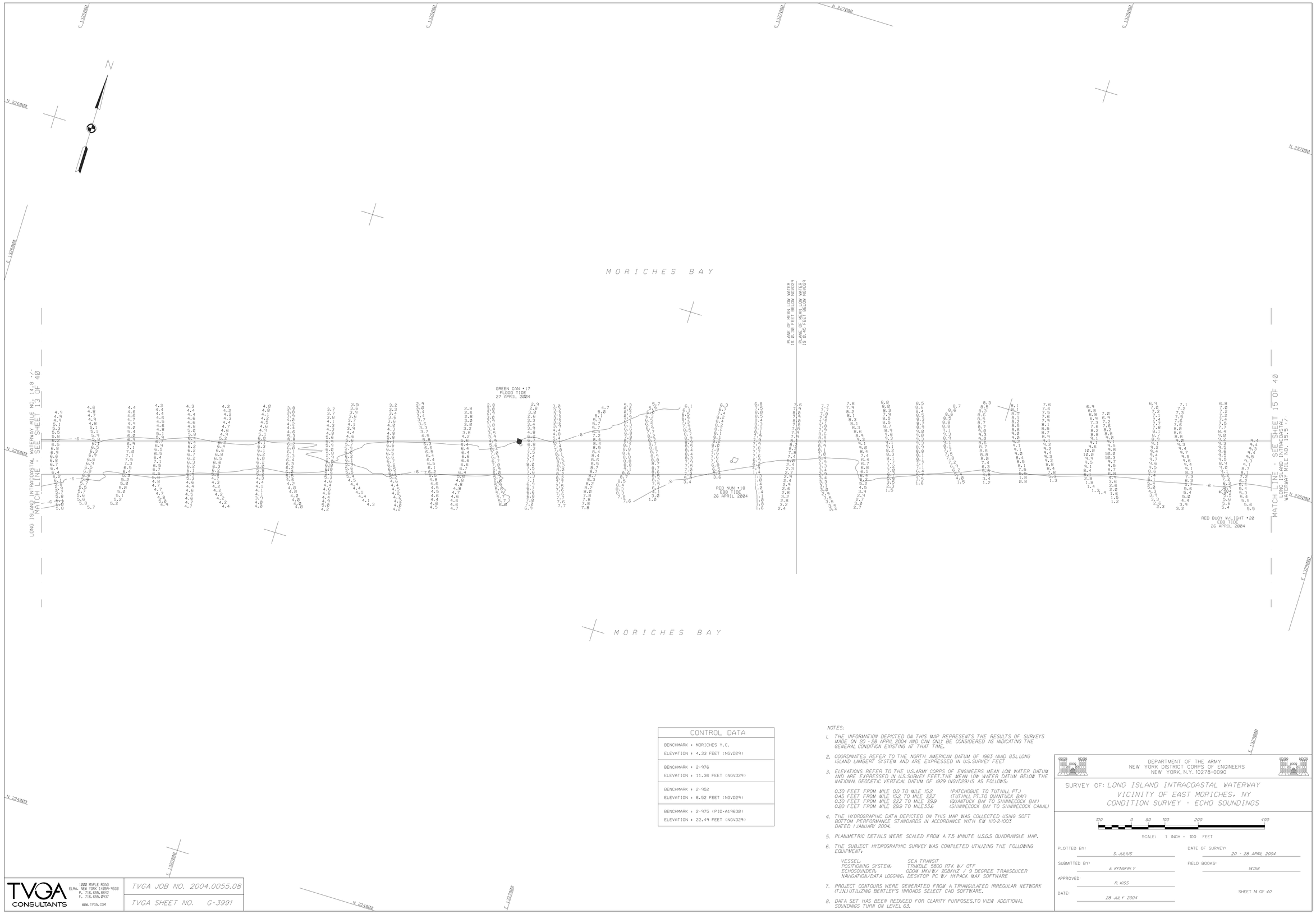
TVGA JOB NO. 2004.0055.08
TVGA SHEET NO. G-3990

REQUEST NO. 2622
FILE NO. 211



CONTROL DATA
BENCHMARK : MORICHES Y.C. ELEVATION : 4.33 FEET (NGVD29)
BENCHMARK : 2-976 ELEVATION : 11.36 FEET (NGVD29)
BENCHMARK : 2-952 ELEVATION : 8.52 FEET (NGVD29)
BENCHMARK : 2-975 (PID-A19630) ELEVATION : 22.49 FEET (NGVD29)

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), LONG ISLAND LAMBERT SYSTEM AND ARE EXPRESSED IN U.S.SURVEY FEET
3. ELEVATIONS REFER TO THE U.S.ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM AND ARE EXPRESSED IN U.S.SURVEY FEET.THE MEAN LOW WATER DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS AS FOLLOWS:

   0.30 FEET FROM MILE 0.0 TO MILE 15.2 (PATCHOGUE TO TUTHILL PT.)
   0.45 FEET FROM MILE 15.2 TO MILE 22.7 (TUTHILL PT.TO QUANTUCK BAY)
   0.30 FEET FROM MILE 22.7 TO MILE 29.9 (QUANTUCK BAY TO SHINNECOCK BAY)
   0.20 FEET FROM MILE 29.9 TO MILE 33.6 (SHINNECOCK BAY TO SHINNECOCK CANAL)
4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 1110-2-1003 DATED 1 JANUARY 2004.
5. PLANIMETRIC DETAILS WERE SCALED FROM A 7.5 MINUTE U.S.G.S QUADRANGLE MAP.
6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: TRIMBLE 5800 RTK W/ OTF
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
   NAVIGATION/DATA LOGGING: DESKTOP PC W/ HYPACK MAX SOFTWARE
7. PROJECT CONTOURS WERE GENERATED FROM A TRIANGULATED IRREGULAR NETWORK (TIN) UTILIZING BENTLEY'S INROADS SELECT CAD SOFTWARE.
8. DATA SET HAS BEEN REDUCED FOR CLARITY PURPOSES,TO VIEW ADDITIONAL SOUNDINGS TURN ON LEVEL 63.

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF EAST MORICHES, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400
SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS
DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY
FIELD BOOKS: 14158
APPROVED: R. KISS
DATE: 28 JULY 2004
SHEET 14 OF 40

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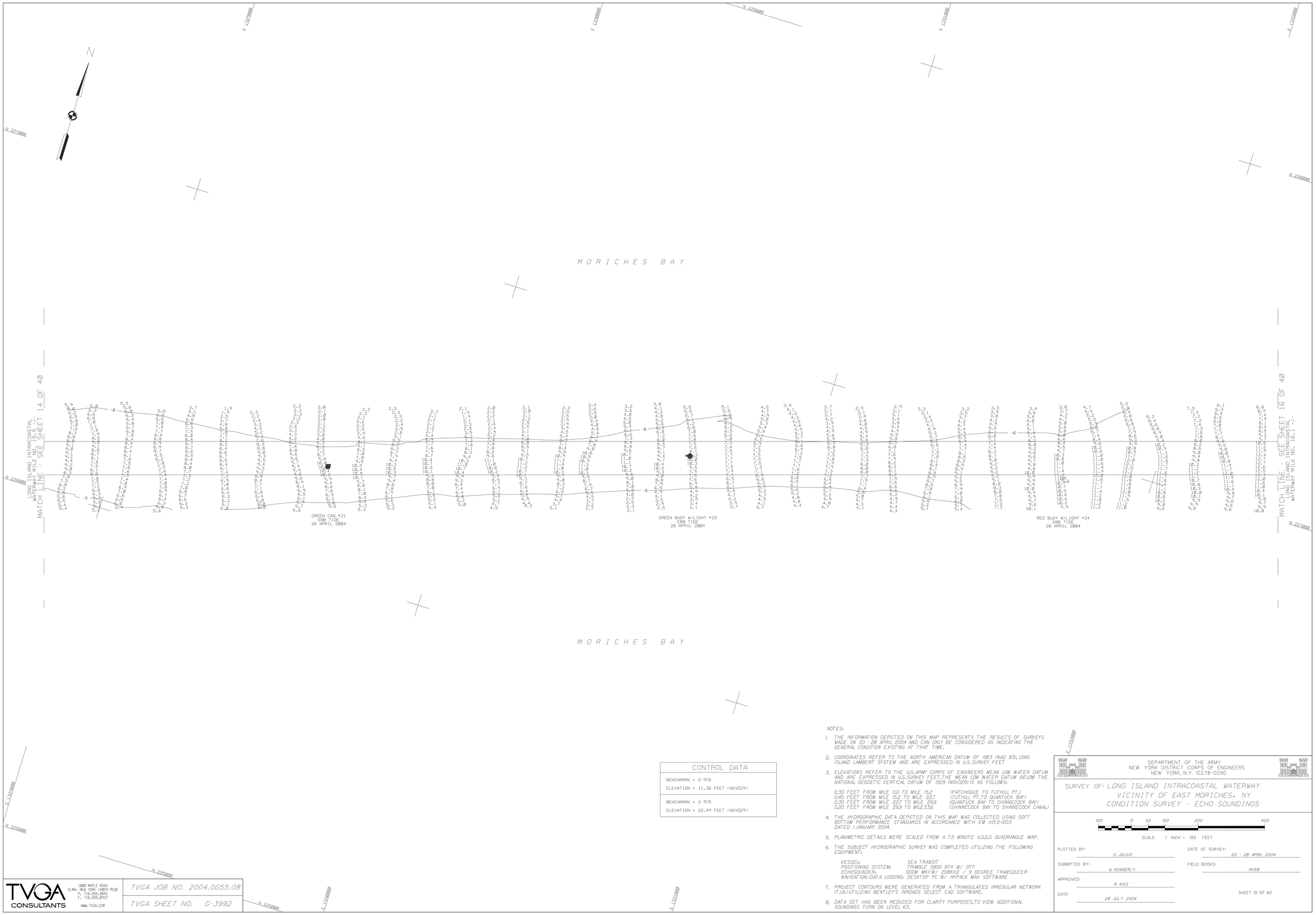
TVGA JOB NO. 2004.0055.08
TVGA SHEET NO. G-3991

REQUEST NO. 2622
FILE NO. 211



CONTROL DATA
BENCHMARK : 2-976 ELEVATION : 11.36 FEET (NGVD29)
BENCHMARK : 2-975 ELEVATION : 22.49 FEET (NGVD29)

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), LONG ISLAND LAMBERT SYSTEM AND ARE EXPRESSED IN U.S.SURVEY FEET
3. ELEVATIONS REFER TO THE U.S.ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM AND ARE EXPRESSED IN U.S.SURVEY FEET.THE MEAN LOW WATER DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS AS FOLLOWS:

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   0.45 FEET FROM MILE 15.2 TO MILE 22.7 (TUTHILL PT.TO QUANTUCK BAY)
   0.30 FEET FROM MILE 22.7 TO MILE 29.9 (QUANTUCK BAY TO SHINNECOCK BAY)
   0.20 FEET FROM MILE 29.9 TO MILE 33.6 (SHINNECOCK BAY TO SHINNECOCK CANAL)
4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 1110-2-1003 DATED 1 JANUARY 2004.
5. PLANIMETRIC DETAILS WERE SCALED FROM A 7.5 MINUTE U.S.G.S QUADRANGLE MAP.
6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: TRIMBLE 5800 RTK W/ OTF
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
   NAVIGATION/DATA LOGGING: DESKTOP PC W/ HYPACK MAX SOFTWARE
7. PROJECT CONTOURS WERE GENERATED FROM A TRIANGULATED IRREGULAR NETWORK (TIN) UTILIZING BENTLEY'S INROADS SELECT CAD SOFTWARE.
8. DATA SET HAS BEEN REDUCED FOR CLARITY PURPOSES.TO VIEW ADDITIONAL SOUNDINGS TURN ON LEVEL 63.

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF EAST MORICHES, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400
SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS	DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY	FIELD BOOKS: 1458
APPROVED: R. KISS	
DATE: 28 JULY 2004	SHEET 15 OF 40

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TVGA JOB NO. 2004.0055.08
TVGA SHEET NO. G-3992

REQUEST NO. 2622

FILE NO. 211

CONTROL DATA
BENCHMARK : 2-976 ELEVATION : 11.36 FEET (NGVD29)
BENCHMARK : 2-975 ELEVATION : 22.49 FEET (NGVD29)
BENCHMARK : FLETCH 7 ELEVATION : 4.27 FEET (NGVD29)
BENCHMARK : K-38 ELEVATION : 15.92 FEET (NGVD29)
BENCHMARK : J-38 ELEVATION : 11.66 FEET (NGVD29)

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), LONG ISLAND LAMBERT SYSTEM AND ARE EXPRESSED IN U.S.SURVEY FEET
3. ELEVATIONS REFER TO THE U.S.ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM AND ARE EXPRESSED IN U.S.SURVEY FEET.THE MEAN LOW WATER DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS AS FOLLOWS:

   0.30 FEET FROM MILE 0.0 TO MILE 15.2 (PATCHOGUE TO TUTHILL PT.)
   0.45 FEET FROM MILE 15.2 TO MILE 22.7 (TUTHILL PT.TO QUANTUCK BAY)
   0.30 FEET FROM MILE 22.7 TO MILE 29.9 (QUANTUCK BAY TO SHINNECOCK BAY)
   0.20 FEET FROM MILE 29.9 TO MILE 33.6 (SHINNECOCK BAY TO SHINNECOCK CANAL)
4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 1110-2-1003 DATED 1 JANUARY 2004.
5. PLANIMETRIC DETAILS WERE SCALED FROM A 7.5 MINUTE U.S.G.S QUADRANGLE MAP.
6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: TRIMBLE 5800 RTK W/ OTF
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
   NAVIGATION/DATA LOGGING: DESKTOP PC W/ HYPACK MAX SOFTWARE
7. PROJECT CONTOURS WERE GENERATED FROM A TRIANGULATED IRREGULAR NETWORK (TIN) UTILIZING BENTLEY'S INROADS SELECT CAD SOFTWARE.
8. DATA SET HAS BEEN REDUCED FOR CLARITY PURPOSES.TO VIEW ADDITIONAL SOUNDINGS TURN ON LEVEL 63.

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF EAST MORICHES, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400
SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS
DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY
FIELD BOOKS: 14158
APPROVED: R. KISS
DATE: 28 JULY 2004
SHEET 16 OF 40

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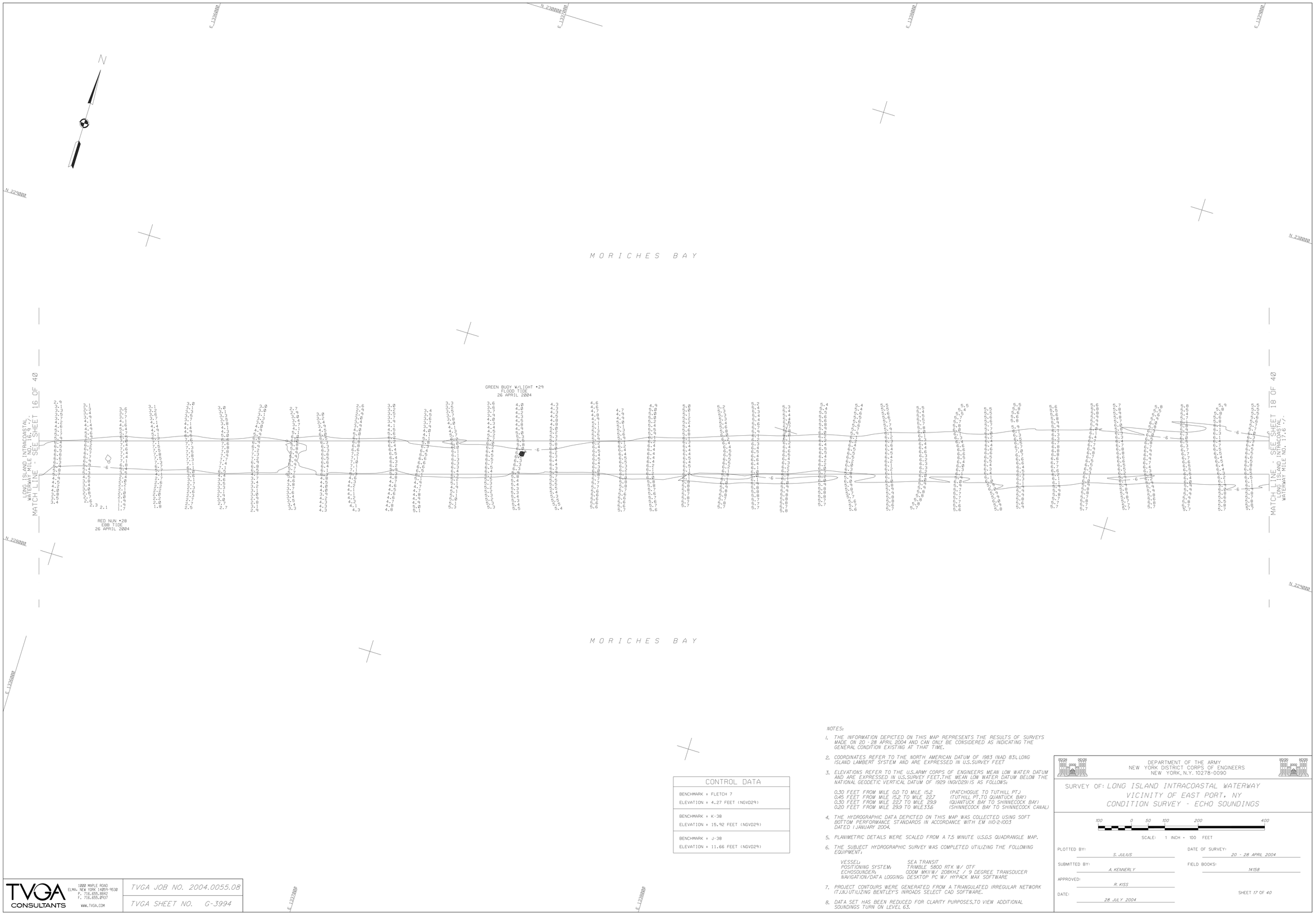
TVGA JOB NO. 2004.0055.08
TVGA SHEET NO. G-3993

REQUEST NO. 2622
FILE NO. 211



CONTROL DATA
BENCHMARK : FLETCH 7 ELEVATION : 4.27 FEET (NGVD29)
BENCHMARK : K-38 ELEVATION : 15.92 FEET (NGVD29)
BENCHMARK : J-38 ELEVATION : 11.66 FEET (NGVD29)

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
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   0.30 FEET FROM MILE 22.7 TO MILE 29.9 (QUANTUCK BAY TO SHINNECOCK BAY)
   0.20 FEET FROM MILE 29.9 TO MILE 33.6 (SHINNECOCK BAY TO SHINNECOCK CANAL)
4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 1110-2-1003 DATED 1 JANUARY 2004.
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6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: TRIMBLE 5800 RTK W/ OTF
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
   NAVIGATION/DATA LOGGING: DESKTOP PC W/ HYPACK MAX SOFTWARE
7. PROJECT CONTOURS WERE GENERATED FROM A TRIANGULATED IRREGULAR NETWORK (TIN) UTILIZING BENTLEY'S INROADS SELECT CAD SOFTWARE.
8. DATA SET HAS BEEN REDUCED FOR CLARITY PURPOSES.TO VIEW ADDITIONAL SOUNDINGS TURN ON LEVEL 63.

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF EAST PORT, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400
SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS
DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY
FIELD BOOKS: 14158
APPROVED: R. KISS
DATE: 28 JULY 2004
SHEET 17 OF 40

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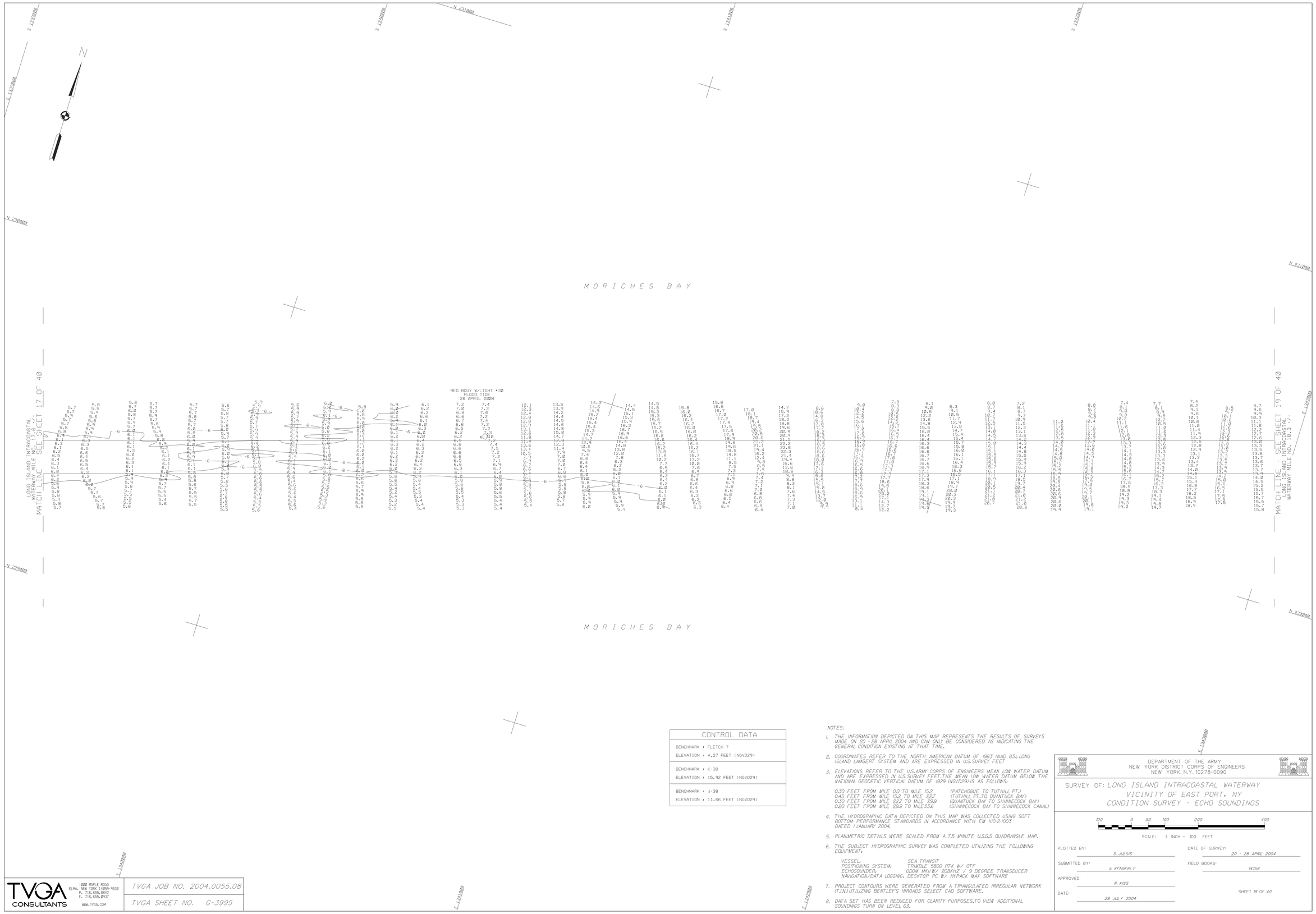
TVGA JOB NO. 2004.0055.08
TVGA SHEET NO. G-3994

REQUEST NO. 2622
FILE NO. 211



CONTROL DATA
BENCHMARK : FLETCH 7 ELEVATION : 4.27 FEET (NGVD29)
BENCHMARK : K-38 ELEVATION : 15.92 FEET (NGVD29)
BENCHMARK : J-38 ELEVATION : 11.66 FEET (NGVD29)

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
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   0.45 FEET FROM MILE 15.2 TO MILE 22.7 (TUTHILL PT.TO QUANTUCK BAY)
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4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 1110-2-1003 DATED 1 JANUARY 2004.
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6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: TRIMBLE 5800 RTK W/ OTF
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8. DATA SET HAS BEEN REDUCED FOR CLARITY PURPOSES.TO VIEW ADDITIONAL SOUNDINGS TURN ON LEVEL 63.

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF EAST PORT, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400

SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS
DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY
FIELD BOOKS: 14158
APPROVED: R. KISS
DATE: 28 JULY 2004
SHEET 18 OF 40

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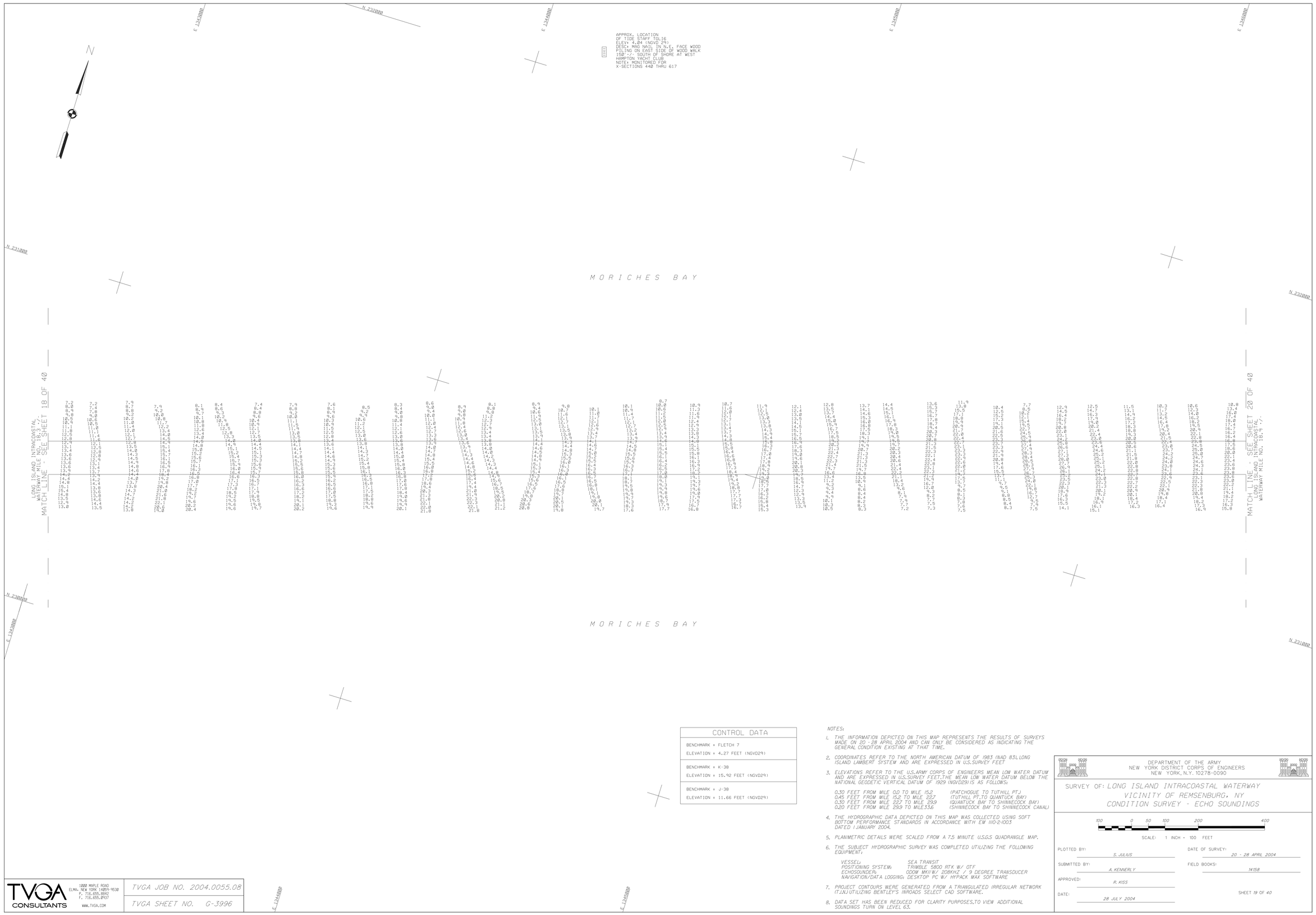
TVGA JOB NO. 2004.0055.08
TVGA SHEET NO. G-3995

REQUEST NO. 2622
FILE NO. 211



CONTROL DATA
BENCHMARK : FLETCH 7 ELEVATION : 4.27 FEET (NGVD29)
BENCHMARK : K-38 ELEVATION : 15.92 FEET (NGVD29)
BENCHMARK : J-38 ELEVATION : 11.66 FEET (NGVD29)

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
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6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: TRIMBLE 5800 RTK W/ OTF
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
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8. DATA SET HAS BEEN REDUCED FOR CLARITY PURPOSES.TO VIEW ADDITIONAL SOUNDINGS TURN ON LEVEL 63.

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF REMSENBURG, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400
SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS
DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY
FIELD BOOKS: 14158
APPROVED: R. KISS
DATE: 28 JULY 2004
SHEET 19 OF 40

TVGA CONSULTANTS
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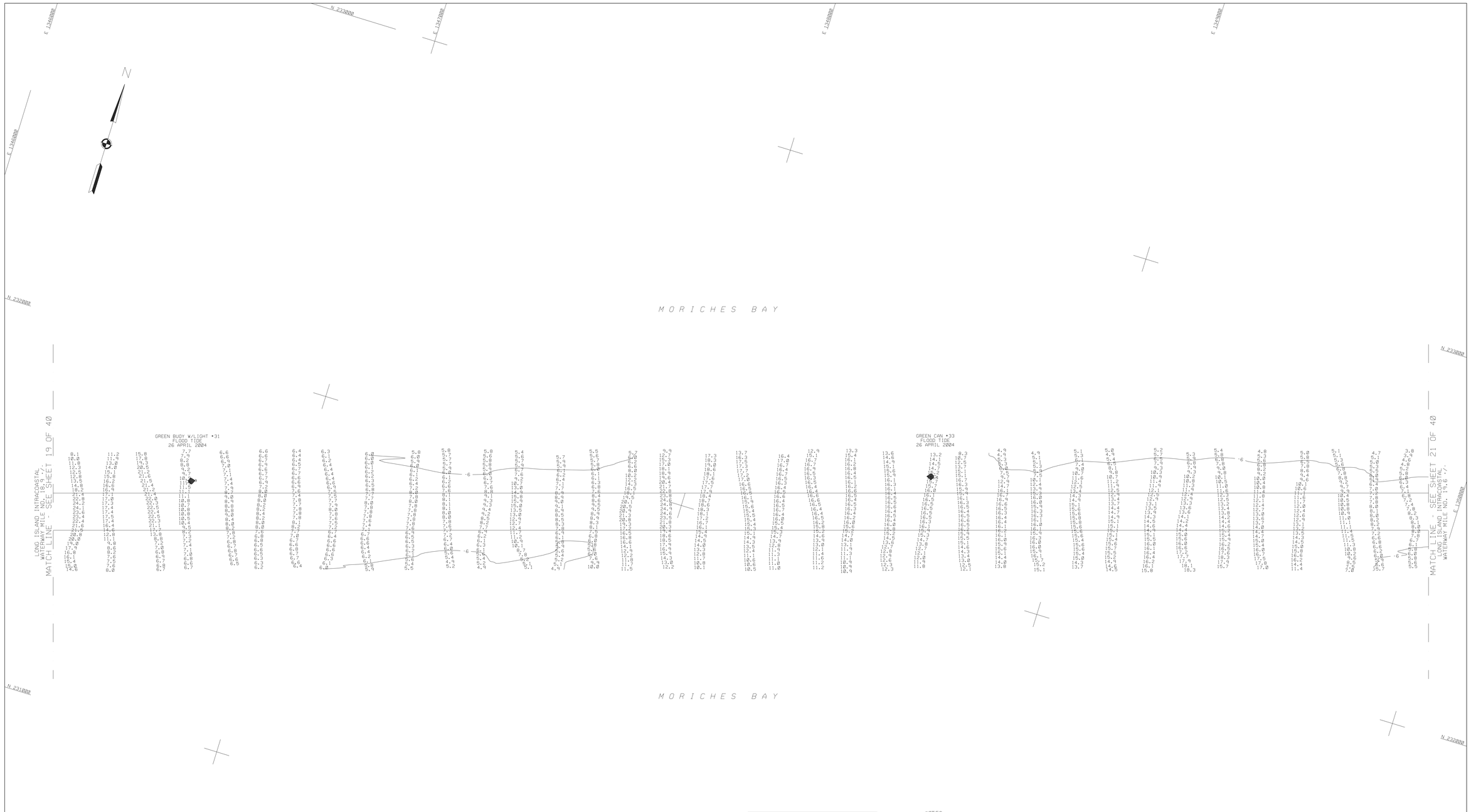
TVGA JOB NO. 2004.0055.08
TVGA SHEET NO. G-3996

REQUEST NO. 2622
FILE NO. 211



CONTROL DATA
BENCHMARK : FLETCH 7 ELEVATION : 4.27 FEET (NGVD29)
BENCHMARK : K-38 ELEVATION : 15.92 FEET (NGVD29)
BENCHMARK : J-38 ELEVATION : 11.66 FEET (NGVD29)

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83). LONG ISLAND LAMBERT SYSTEM AND ARE EXPRESSED IN U.S. SURVEY FEET.
3. ELEVATIONS REFER TO THE U.S. ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM AND ARE EXPRESSED IN U.S. SURVEY FEET. THE MEAN LOW WATER DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS AS FOLLOWS:

   0.30 FEET FROM MILE 0.0 TO MILE 15.2 (PATCHOGUE TO TUTHILL PT.)
   0.45 FEET FROM MILE 15.2 TO MILE 22.7 (TUTHILL PT. TO QUANTUCK BAY)
   0.30 FEET FROM MILE 22.7 TO MILE 29.9 (QUANTUCK BAY TO SHINNECOCK BAY)
   0.20 FEET FROM MILE 29.9 TO MILE 33.6 (SHINNECOCK BAY TO SHINNECOCK CANAL)
4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 1110-2-1003 DATED 1 JANUARY 2004.
5. PLANIMETRIC DETAILS WERE SCALED FROM A 7.5 MINUTE U.S.G.S QUADRANGLE MAP.
6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: TRIMBLE 5800 RTK W/ OTF
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
   NAVIGATION/DATA LOGGING: DESKTOP PC W/ HYPACK MAX SOFTWARE
7. PROJECT CONTOURS WERE GENERATED FROM A TRIANGULATED IRREGULAR NETWORK (TIN) UTILIZING BENTLEY'S INROADS SELECT CAD SOFTWARE.
8. DATA SET HAS BEEN REDUCED FOR CLARITY PURPOSES. TO VIEW ADDITIONAL SOUNDINGS TURN ON LEVEL 63.

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF SPEONK POINT, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400
SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS
DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY
FIELD BOOKS: 14158
APPROVED: R. KISS
DATE: 28 JULY 2004
SHEET 20 OF 40

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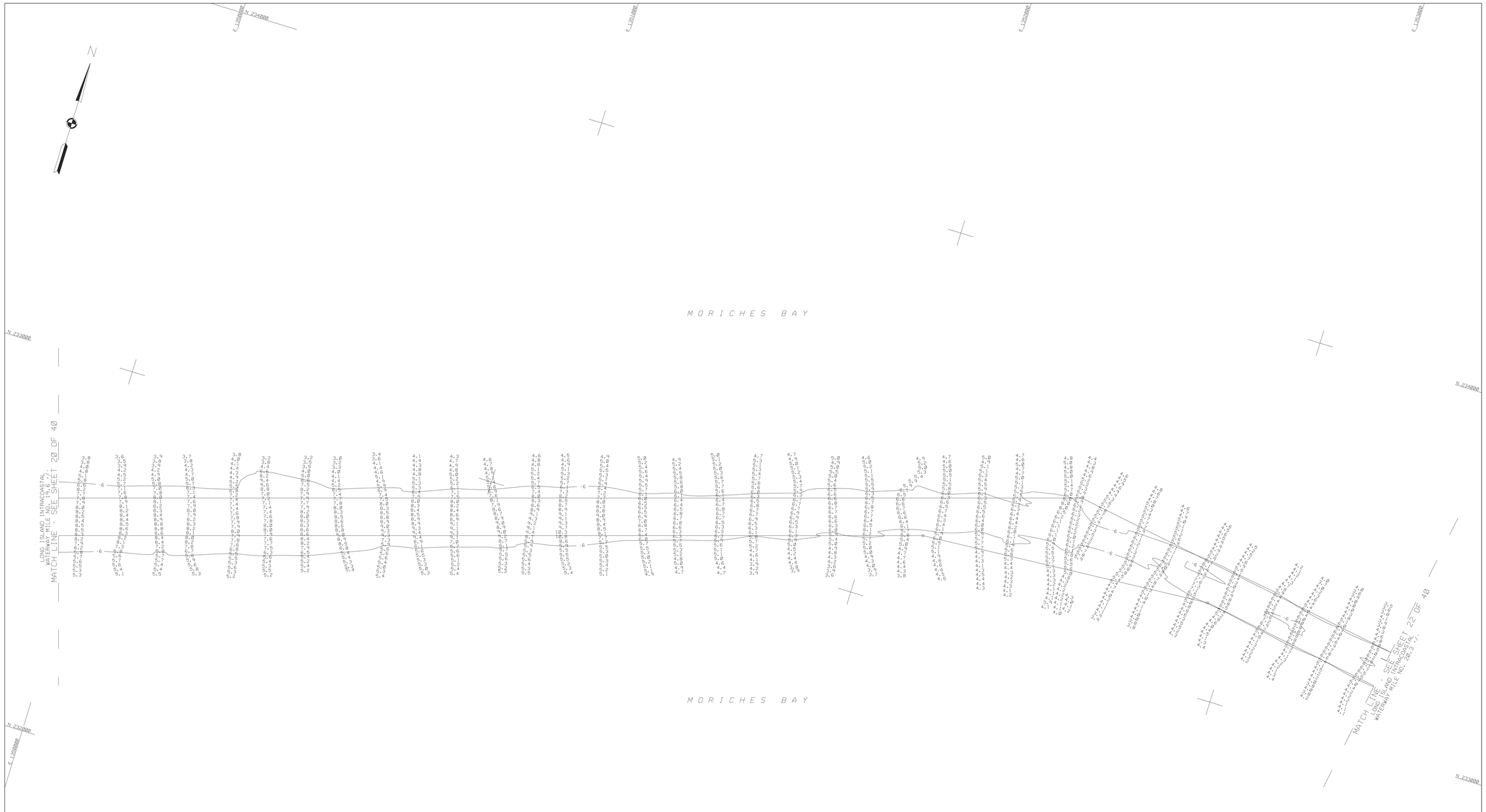
TVGA JOB NO. 2004.0055.08
TVGA SHEET NO. G-3997

REQUEST NO. 2622
FILE NO. 211



CONTROL DATA
BENCHMARK : FLETCH 7 ELEVATION : 4.27 FEET (NGVD29)
BENCHMARK : WHAM 2 1981 ELEVATION : 9.50 FEET (NGVD29)
BENCHMARK : WHAM 2 RM 4 1981 ELEVATION : 9.39 FEET (NGVD29)
BENCHMARK : K-38 ELEVATION : 15.92 FEET (NGVD29)
BENCHMARK : J-38 ELEVATION : 11.66 FEET (NGVD29)

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), LONG ISLAND LAMBERT SYSTEM AND ARE EXPRESSED IN U.S.SURVEY FEET
3. ELEVATIONS REFER TO THE U.S.ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM AND ARE EXPRESSED IN U.S.SURVEY FEET.THE MEAN LOW WATER DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS AS FOLLOWS:

   0.30 FEET FROM MILE 0.0 TO MILE 15.2 (PATCHOGUE TO TUTHILL PT.)
   0.45 FEET FROM MILE 15.2 TO MILE 22.7 (TUTHILL PT.TO QUANTUCK BAY)
   0.30 FEET FROM MILE 22.7 TO MILE 29.9 (QUANTUCK BAY TO SHINNECOCK BAY)
   0.20 FEET FROM MILE 29.9 TO MILE 33.6 (SHINNECOCK BAY TO SHINNECOCK CANAL)
4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 110-2-1003 DATED 1 JANUARY 2004.
5. PLANIMETRIC DETAILS WERE SCALED FROM A 7.5 MINUTE U.S.G.S. QUADRANGLE MAP.
6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: TRIMBLE 5800 RTK W/ OTF
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
   NAVIGATION/DATA LOGGING: DESKTOP PC W/ HYPACK MAX SOFTWARE
7. PROJECT CONTOURS WERE GENERATED FROM A TRIANGULATED IRREGULAR NETWORK (TIN) UTILIZING BENTLEY'S INROADS SELECT CAD SOFTWARE.
8. DATA SET HAS BEEN REDUCED FOR CLARITY PURPOSES.TO VIEW ADDITIONAL SOUNDINGS TURN ON LEVEL 63.

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF APAUCUCK POINT, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400

SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS
DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY
FIELD BOOKS: 1458
APPROVED: R. KISS
DATE: 28 JULY 2004
SHEET 21 OF 40

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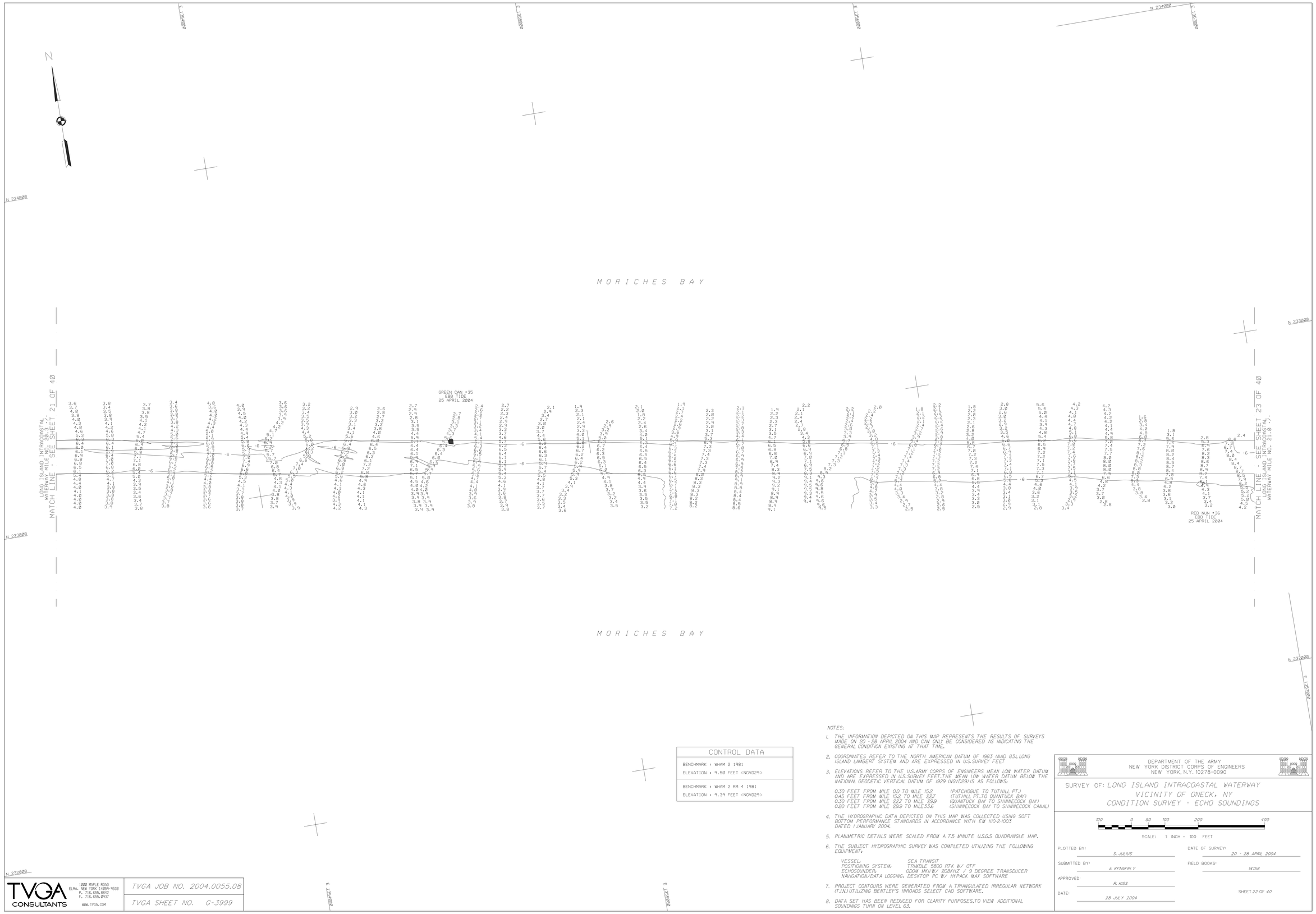
TVGA JOB NO. 2004.0055.08
TVGA SHEET NO. G-3998

REQUEST NO. 2622
FILE NO. 211



CONTROL DATA
BENCHMARK : WHAM 2 1981
ELEVATION : 9.50 FEET (NGVD29)
BENCHMARK : WHAM 2 RM 4 1981
ELEVATION : 9.39 FEET (NGVD29)

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), LONG ISLAND LAMBERT SYSTEM AND ARE EXPRESSED IN U.S.SURVEY FEET
3. ELEVATIONS REFER TO THE U.S.ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM AND ARE EXPRESSED IN U.S.SURVEY FEET.THE MEAN LOW WATER DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS AS FOLLOWS:

   0.30 FEET FROM MILE 0.0 TO MILE 15.2 (PATCHOGUE TO TUTHILL PT.)
   0.45 FEET FROM MILE 15.2 TO MILE 22.7 (TUTHILL PT.TO QUANTUCK BAY)
   0.30 FEET FROM MILE 22.7 TO MILE 29.9 (QUANTUCK BAY TO SHINNECOCK BAY)
   0.20 FEET FROM MILE 29.9 TO MILE 33.6 (SHINNECOCK BAY TO SHINNECOCK CANAL)
4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 1110-2-1003 DATED 1 JANUARY 2004.
5. PLANIMETRIC DETAILS WERE SCALED FROM A 7.5 MINUTE U.S.G.S QUADRANGLE MAP.
6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: TRIMBLE 5800 RTK W/ OTF
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
   NAVIGATION/DATA LOGGING: DESKTOP PC W/ HYPACK MAX SOFTWARE
7. PROJECT CONTOURS WERE GENERATED FROM A TRIANGULATED IRREGULAR NETWORK (TIN) UTILIZING BENTLEY'S INROADS SELECT CAD SOFTWARE.
8. DATA SET HAS BEEN REDUCED FOR CLARITY PURPOSES.TO VIEW ADDITIONAL SOUNDINGS TURN ON LEVEL 63.

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF ONECK, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400
SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS
DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY
FIELD BOOKS: 14158
APPROVED: R. KISS
DATE: 28 JULY 2004
SHEET 22 OF 40

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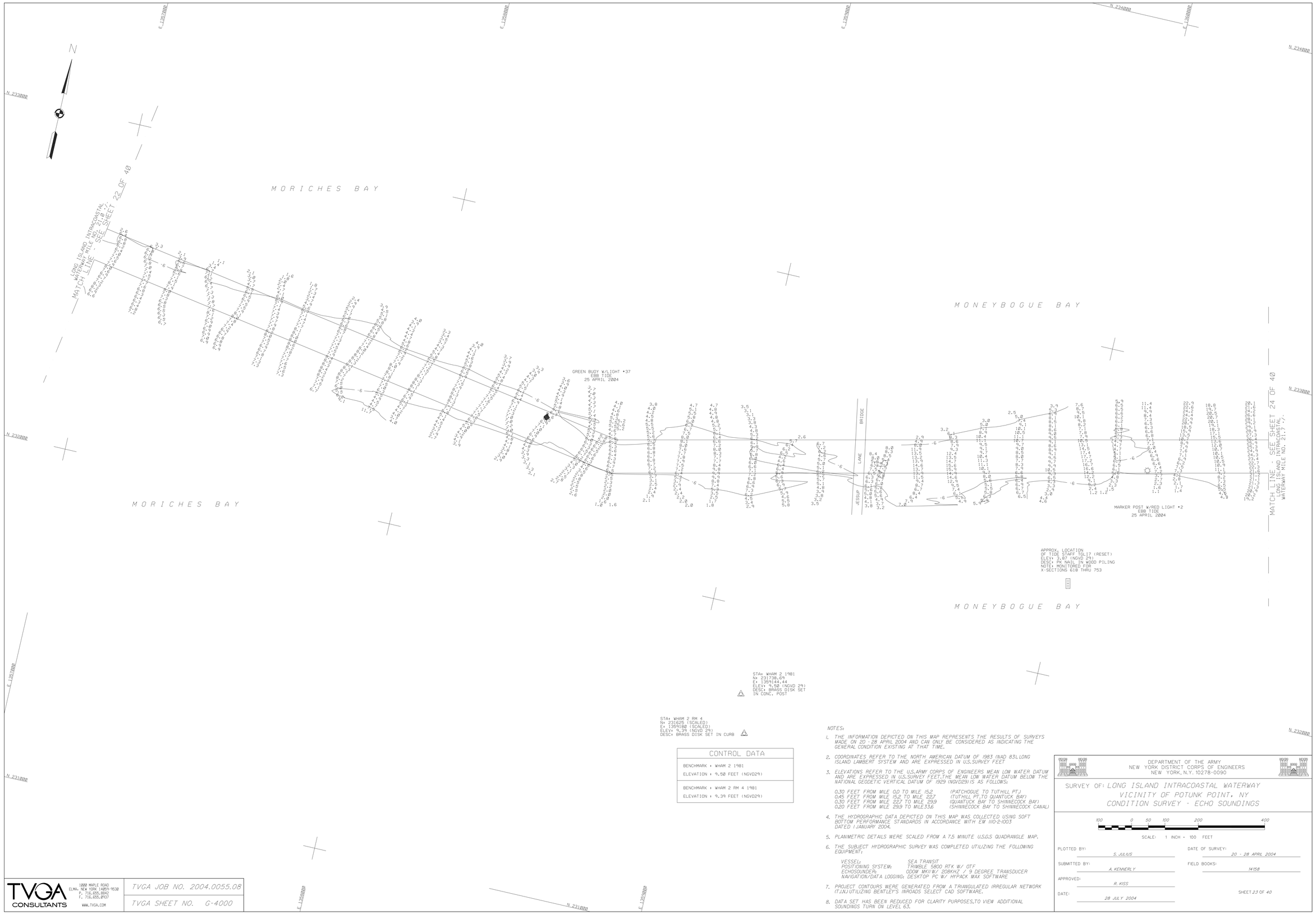
TVGA JOB NO. 2004.0055.08
TVGA SHEET NO. G-3999

REQUEST NO. 2622
FILE NO. 211



CONTROL DATA
BENCHMARK : WHAM 2 1981
ELEVATION : 9.50 FEET (NGVD29)
BENCHMARK : WHAM 2 RM 4 1981
ELEVATION : 9.39 FEET (NGVD29)

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), LONG ISLAND LAMBERT SYSTEM AND ARE EXPRESSED IN U.S.SURVEY FEET
3. ELEVATIONS REFER TO THE U.S.ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM AND ARE EXPRESSED IN U.S.SURVEY FEET.THE MEAN LOW WATER DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS AS FOLLOWS:

   0.30 FEET FROM MILE 0.0 TO MILE 15.2 (PATCHOGUE TO TUTHILL PT.)
   0.45 FEET FROM MILE 15.2 TO MILE 22.7 (TUTHILL PT.TO QUANTUCK BAY)
   0.30 FEET FROM MILE 22.7 TO MILE 29.9 (QUANTUCK BAY TO SHINNECOCK BAY)
   0.20 FEET FROM MILE 29.9 TO MILE33.6 (SHINNECOCK BAY TO SHINNECOCK CANAL)
4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 1110-2-1003 DATED 1 JANUARY 2004.
5. PLANIMETRIC DETAILS WERE SCALED FROM A 7.5 MINUTE U.S.G.S QUADRANGLE MAP.
6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: TRIMBLE 5800 RTK W/ OTF
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
   NAVIGATION/DATA LOGGING: DESKTOP PC W/ HYPACK MAX SOFTWARE
7. PROJECT CONTOURS WERE GENERATED FROM A TRIANGULATED IRREGULAR NETWORK (TIN) UTILIZING BENTLEY'S INROADS SELECT CAD SOFTWARE.
8. DATA SET HAS BEEN REDUCED FOR CLARITY PURPOSES.TO VIEW ADDITIONAL SOUNDINGS TURN ON LEVEL 63.

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF POTUNK POINT, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400
SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS
DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY
FIELD BOOKS: 1458
APPROVED: R. KISS
DATE: 28 JULY 2004
SHEET 23 OF 40

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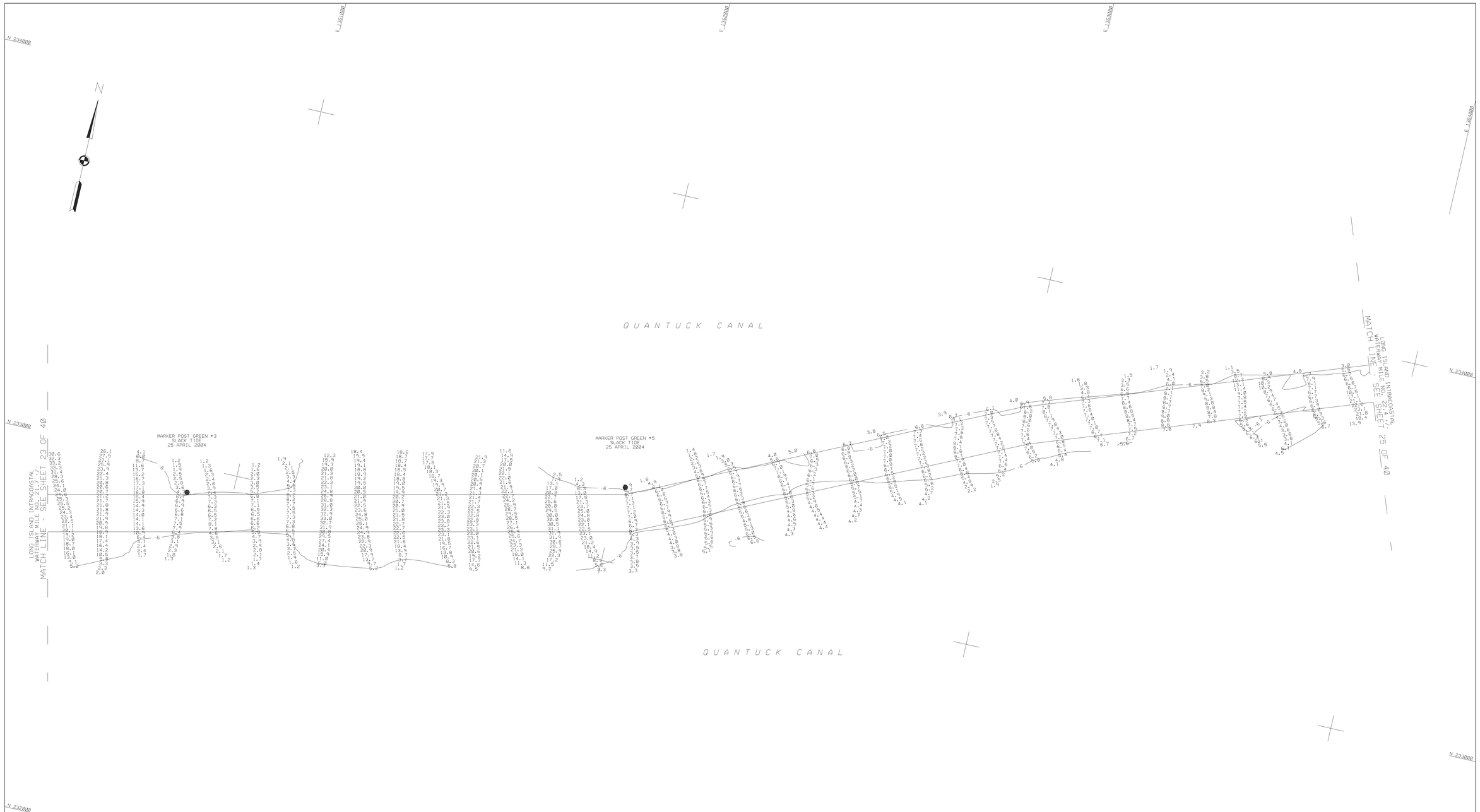
TVGA JOB NO. 2004.0055.08
TVGA SHEET NO. G-4000

REQUEST NO. 2622
FILE NO. 211



CONTROL DATA
BENCHMARK : WHAM 2 1981 ELEVATION : 9.50 FEET (NGVD29)
BENCHMARK : WHAM 2 RM 4 1981 ELEVATION : 9.39 FEET (NGVD29)

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), LONG ISLAND LAMBERT SYSTEM AND ARE EXPRESSED IN U.S.SURVEY FEET
3. ELEVATIONS REFER TO THE U.S.ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM AND ARE EXPRESSED IN U.S.SURVEY FEET.THE MEAN LOW WATER DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS AS FOLLOWS:

   0.30 FEET FROM MILE 0.0 TO MILE 15.2 (PATCHOGUE TO TUTHILL PT.)
   0.45 FEET FROM MILE 15.2 TO MILE 22.7 (TUTHILL PT.TO QUANTUCK BAY)
   0.30 FEET FROM MILE 22.7 TO MILE 29.9 (QUANTUCK BAY TO SHINNECOCK BAY.)
   0.20 FEET FROM MILE 29.9 TO MILE 33.6 (SHINNECOCK BAY TO SHINNECOCK CANAL)
4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 1110-2-1003 DATED 1 JANUARY 2004.
5. PLANIMETRIC DETAILS WERE SCALED FROM A 7.5 MINUTE U.S.G.S QUADRANGLE MAP.
6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: TRIMBLE 5800 RTK W/ OTF
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
   NAVIGATION/DATA LOGGING: DESKTOP PC W/ HYPACK MAX SOFTWARE
7. PROJECT CONTOURS WERE GENERATED FROM A TRIANGULATED IRREGULAR NETWORK (TIN) UTILIZING BENTLEY'S INROADS SELECT CAD SOFTWARE.
8. DATA SET HAS BEEN REDUCED FOR CLARITY PURPOSES.TO VIEW ADDITIONAL SOUNDINGS TURN ON LEVEL 63.

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF POTUNK POINT, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400
SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS
DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY
FIELD BOOKS: 14158
APPROVED: R. KISS
DATE: 28 JULY 2004
SHEET 24 OF 40

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TVGA JOB NO. 2004.0055.08
TVGA SHEET NO. G-4001

REQUEST NO. 2622
FILE NO. 211

CONTROL DATA
BENCHMARK : WHAM 2 1981 ELEVATION : 9.50 FEET (NGVD29)
BENCHMARK : WHAM 2 RM 4 1981 ELEVATION : 9.39 FEET (NGVD29)
BENCHMARK : FLETCH 2 ELEVATION : 5.26 FEET (NGVD29)
BENCHMARK : FLETCH 1 ELEVATION : 4.26 FEET (NGVD29)

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), LONG ISLAND LAMBERT SYSTEM AND ARE EXPRESSED IN U.S.SURVEY FEET
3. ELEVATIONS REFER TO THE U.S.ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM AND ARE EXPRESSED IN U.S.SURVEY FEET.THE MEAN LOW WATER DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS AS FOLLOWS:

   0.30 FEET FROM MILE 0.0 TO MILE 15.2 (PATCHOGUE TO TUTHILL PT.)
   0.45 FEET FROM MILE 15.2 TO MILE 22.7 (TUTHILL PT.TO QUANTUCK BAY)
   0.30 FEET FROM MILE 22.7 TO MILE 29.9 (QUANTUCK BAY TO SHINNECOCK BAY)
   0.20 FEET FROM MILE 29.9 TO MILE33.6 (SHINNECOCK BAY TO SHINNECOCK CANAL)
4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 1110-2-1003 DATED 1 JANUARY 2004.
5. PLANIMETRIC DETAILS WERE SCALED FROM A 7.5 MINUTE U.S.G.S QUADRANGLE MAP.
6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: TRIMBLE 5800 RTK W/ OTF
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
   NAVIGATION/DATA LOGGING: DESKTOP PC W/ HYPACK MAX SOFTWARE
7. PROJECT CONTOURS WERE GENERATED FROM A TRIANGULATED IRREGULAR NETWORK (TIN) UTILIZING BENTLEY'S INROADS SELECT CAD SOFTWARE.
8. DATA SET HAS BEEN REDUCED FOR CLARITY PURPOSES.TO VIEW ADDITIONAL SOUNDINGS TURN ON LEVEL 63.

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF WEST HAMPTON BEACH, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400

SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS
DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY
FIELD BOOKS: 14158
APPROVED: R. KISS
DATE: 28 JULY 2004
SHEET 25 OF 40

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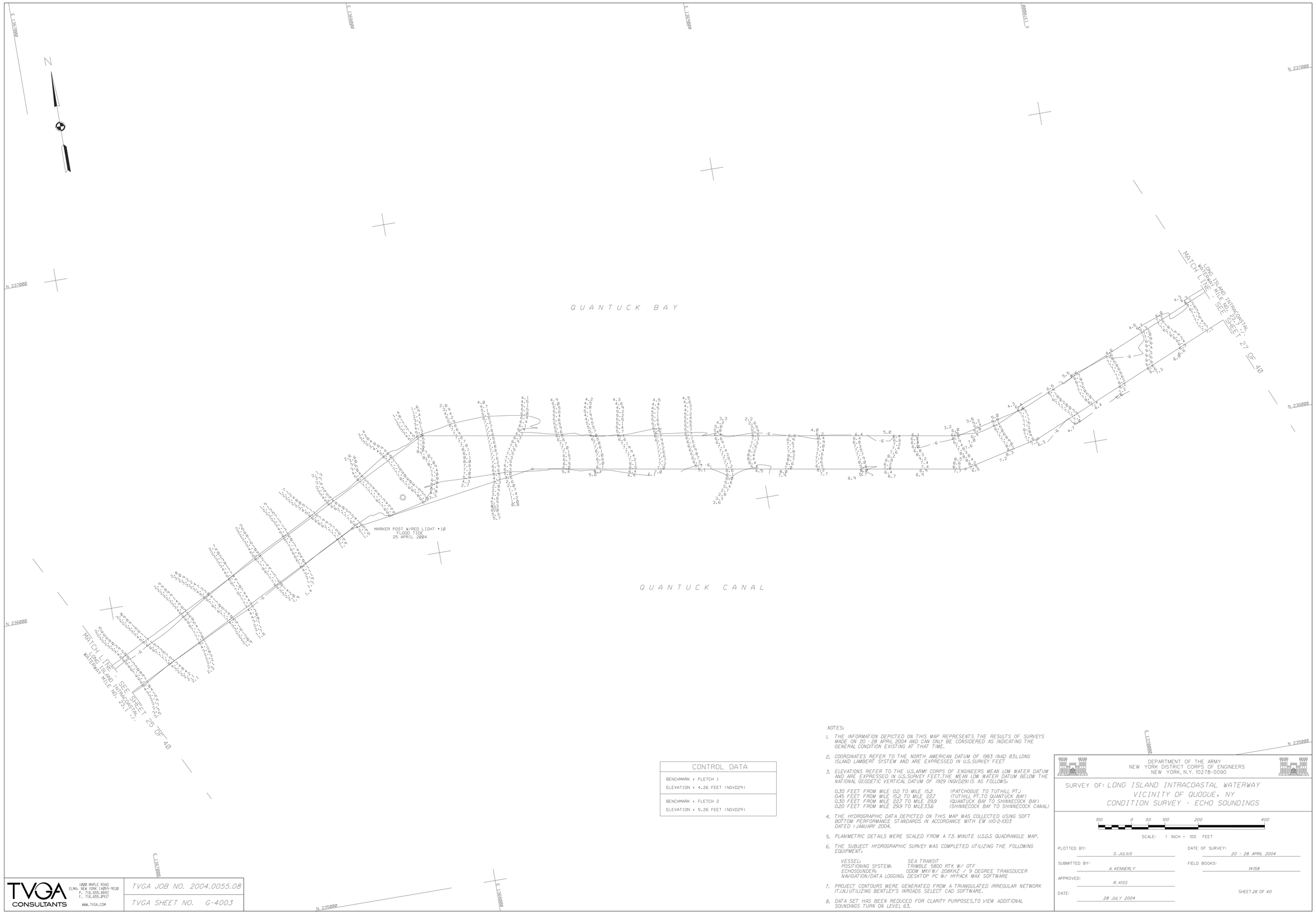
TVGA JOB NO. 2004.0055.08
TVGA SHEET NO. G-4002

REQUEST NO. 2622
FILE NO. 211



CONTROL DATA
BENCHMARK : FLETCH 1 ELEVATION : 4.26 FEET (NGVD29)
BENCHMARK : FLETCH 2 ELEVATION : 5.26 FEET (NGVD29)

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83). LONG ISLAND LAMBERT SYSTEM AND ARE EXPRESSED IN U.S. SURVEY FEET.
3. ELEVATIONS REFER TO THE U.S. ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM AND ARE EXPRESSED IN U.S. SURVEY FEET. THE MEAN LOW WATER DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS AS FOLLOWS:

   0.30 FEET FROM MILE 0.0 TO MILE 15.2 (PATCHOGUE TO TUTHILL PT.)
   0.45 FEET FROM MILE 15.2 TO MILE 22.7 (TUTHILL PT. TO QUANTUCK BAY)
   0.30 FEET FROM MILE 22.7 TO MILE 29.9 (QUANTUCK BAY TO SHINNECOCK BAY)
   0.20 FEET FROM MILE 29.9 TO MILE 33.6 (SHINNECOCK BAY TO SHINNECOCK CANAL)
4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 1110-2-1003 DATED 1 JANUARY 2004.
5. PLANIMETRIC DETAILS WERE SCALED FROM A 7.5 MINUTE U.S.G.S QUADRANGLE MAP.
6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: TRIMBLE 5800 RTK W/ OTF
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
   NAVIGATION/DATA LOGGING: DESKTOP PC W/ HYPACK MAX SOFTWARE
7. PROJECT CONTOURS WERE GENERATED FROM A TRIANGULATED IRREGULAR NETWORK (TIN) UTILIZING BENTLEY'S INROADS SELECT CAD SOFTWARE.
8. DATA SET HAS BEEN REDUCED FOR CLARITY PURPOSES. TO VIEW ADDITIONAL SOUNDINGS TURN ON LEVEL 63.

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF QUOGUE, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400

SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS
DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY
FIELD BOOKS: 14158
APPROVED: R. KISS
DATE: 28 JULY 2004
SHEET 26 OF 40

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TVGA JOB NO. 2004.0055.08

TVGA SHEET NO. G-4003

REQUEST NO. 2622

FILE NO. 211

CONTROL DATA
BENCHMARK : FLETCH 1 ELEVATION : 4.26 FEET (NGVD29)
BENCHMARK : FLETCH 2 ELEVATION : 5.26 FEET (NGVD29)
BENCHMARK : 2769B ELEVATION : 6.19 FEET (NGVD29)
BENCHMARK : PENN ELEVATION : 10.70 FEET (NGVD29)

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), LONG ISLAND LAMBERT SYSTEM AND ARE EXPRESSED IN U.S.SURVEY FEET
3. ELEVATIONS REFER TO THE U.S.ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM AND ARE EXPRESSED IN U.S.SURVEY FEET.THE MEAN LOW WATER DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS AS FOLLOWS:

   0.30 FEET FROM MILE 0.0 TO MILE 15.2 (PATCHOGUE TO TUTHILL PT.)
   0.45 FEET FROM MILE 15.2 TO MILE 22.7 (TUTHILL PT.TO QUANTUCK BAY)
   0.50 FEET FROM MILE 22.7 TO MILE 29.9 (QUANTUCK BAY TO SHINNECOCK BAY)
   0.20 FEET FROM MILE 29.9 TO MILE 33.6 (SHINNECOCK BAY TO SHINNECOCK CANAL)
4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 1110-2-1003 DATED 1 JANUARY 2004.
5. PLANIMETRIC DETAILS WERE SCALED FROM A 7.5 MINUTE U.S.G.S QUADRANGLE MAP.
6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: TRIMBLE 5800 RTK W/ OTF
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
   NAVIGATION/DATA LOGGING: DESKTOP PC W/ HYPACK MAX SOFTWARE
7. PROJECT CONTOURS WERE GENERATED FROM A TRIANGULATED IRREGULAR NETWORK (TIN) UTILIZING BENTLEY'S INROADS SELECT CAD SOFTWARE.
8. DATA SET HAS BEEN REDUCED FOR CLARITY PURPOSES.TO VIEW ADDITIONAL SOUNDINGS TURN ON LEVEL 63.

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF QUOGUE, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400
SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS
DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY
FIELD BOOKS: 1458
APPROVED: R. KISS
DATE: 28 JULY 2004
SHEET 27 OF 40

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TVGA JOB NO. 2004.0055.08
TVGA SHEET NO. G-4004

REQUEST NO. 2622
FILE NO. 211

CONTROL DATA
BENCHMARK : 2769B ELEVATION : 6.19 FEET (NGVD29)
BENCHMARK : PENN ELEVATION : 10.70 FEET (NGVD29)

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), LONG ISLAND LAMBERT SYSTEM AND ARE EXPRESSED IN U.S.SURVEY FEET
3. ELEVATIONS REFER TO THE U.S.ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM AND ARE EXPRESSED IN U.S.SURVEY FEET.THE MEAN LOW WATER DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS AS FOLLOWS:

   0.30 FEET FROM MILE 0.0 TO MILE 15.2 (PATCHOGUE TO TUTHILL PT.)
   0.45 FEET FROM MILE 15.2 TO MILE 22.7 (TUTHILL PT.TO QUANTUCK BAY)
   0.30 FEET FROM MILE 22.7 TO MILE 29.9 (QUANTUCK BAY TO SHINNECOCK BAY)
   0.20 FEET FROM MILE 29.9 TO MILE 33.6 (SHINNECOCK BAY TO SHINNECOCK CANAL)
4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 1110-2-1003 DATED 1 JANUARY 2004.
5. PLANIMETRIC DETAILS WERE SCALED FROM A 7.5 MINUTE U.S.G.S QUADRANGLE MAP.
6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: TRIMBLE 5800 RTK W/ OTF
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
   NAVIGATION/DATA LOGGING: DESKTOP PC W/ HYPACK MAX SOFTWARE
7. PROJECT CONTOURS WERE GENERATED FROM A TRIANGULATED IRREGULAR NETWORK (TIN) UTILIZING BENTLEY'S INROADS SELECT CAD SOFTWARE.
8. DATA SET HAS BEEN REDUCED FOR CLARITY PURPOSES.TO VIEW ADDITIONAL SOUNDINGS TURN ON LEVEL 63.

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF QUOGUE, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400

SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS
DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY
FIELD BOOKS: 1158
APPROVED: R. KISS
DATE: 28 JULY 2004
SHEET 28 OF 40

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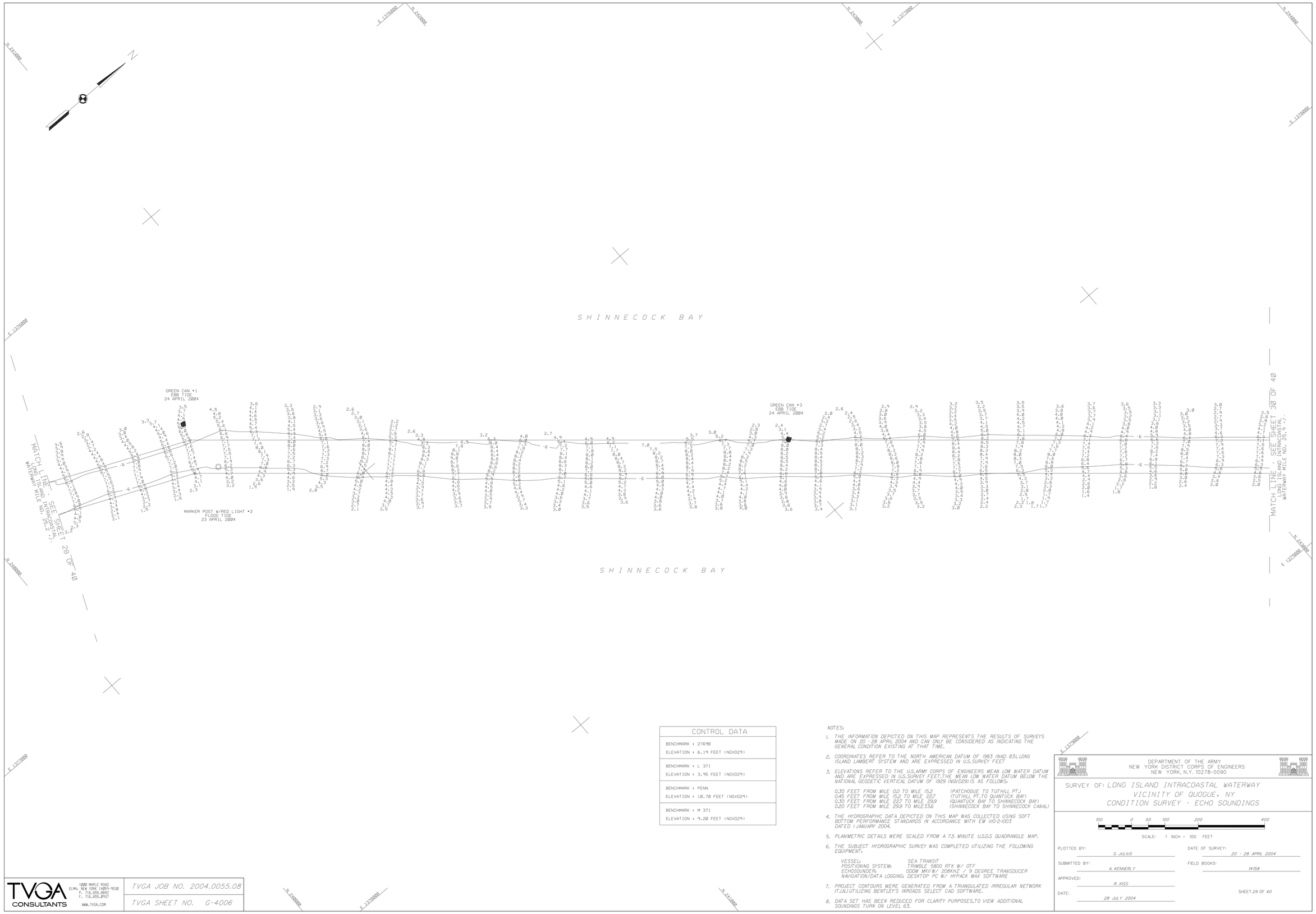
TVGA JOB NO. 2004.0055.08
TVGA SHEET NO. G-4005

REQUEST NO. 2622
FILE NO. 211



CONTROL DATA
BENCHMARK : 27698 ELEVATION : 6.19 FEET (NGVD29)
BENCHMARK : L 371 ELEVATION : 3.95 FEET (NGVD29)
BENCHMARK : PENN ELEVATION : 10.70 FEET (NGVD29)
BENCHMARK : M 371 ELEVATION : 9.20 FEET (NGVD29)

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), LONG ISLAND LAMBERT SYSTEM AND ARE EXPRESSED IN U.S.SURVEY FEET
3. ELEVATIONS REFER TO THE U.S.ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM AND ARE EXPRESSED IN U.S.SURVEY FEET.THE MEAN LOW WATER DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS AS FOLLOWS:

   0.30 FEET FROM MILE 0.0 TO MILE 15.2 (PATCHOGUE TO TUTHILL PT.)
   0.45 FEET FROM MILE 15.2 TO MILE 22.7 (TUTHILL PT.TO QUANTUCK BAY)
   0.30 FEET FROM MILE 22.7 TO MILE 29.9 (QUANTUCK BAY TO SHINNECOCK BAY)
   0.20 FEET FROM MILE 29.9 TO MILE33.6 (SHINNECOCK BAY TO SHINNECOCK CANAL)
4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 1110-2-1003 DATED 1 JANUARY 2004.
5. PLANIMETRIC DETAILS WERE SCALED FROM A 7.5 MINUTE U.S.G.S QUADRANGLE MAP.
6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: TRIMBLE 5800 RTK W/ OTF
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
   NAVIGATION/DATA LOGGING: DESKTOP PC W/ HYPACK MAX SOFTWARE
7. PROJECT CONTOURS WERE GENERATED FROM A TRIANGULATED IRREGULAR NETWORK (TIN) UTILIZING BENTLEY'S INROADS SELECT CAD SOFTWARE.
8. DATA SET HAS BEEN REDUCED FOR CLARITY PURPOSES.TO VIEW ADDITIONAL SOUNDINGS TURN ON LEVEL 63.

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF QUOGUE, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400
SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS
DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY
FIELD BOOKS: 14158
APPROVED: R. KISS
DATE: 28 JULY 2004
SHEET 29 OF 40

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TVGA JOB NO. 2004.0055.08
TVGA SHEET NO. G-4006

REQUEST NO. 2622
FILE NO. 211

CONTROL DATA
BENCHMARK = L 371 ELEVATION = 3.95 FEET (NGVD29)
BENCHMARK = M 371 ELEVATION = 9.20 FEET (NGVD29)

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), LONG ISLAND LAMBERT SYSTEM AND ARE EXPRESSED IN U.S.SURVEY FEET
3. ELEVATIONS REFER TO THE U.S.ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM AND ARE EXPRESSED IN U.S.SURVEY FEET.THE MEAN LOW WATER DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS AS FOLLOWS:

   0.30 FEET FROM MILE 0.0 TO MILE 15.2 (PATCHOGUE TO TUTHILL PT.)
   0.45 FEET FROM MILE 15.2 TO MILE 22.7 (TUTHILL PT.TO QUANTUCK BAY)
   0.30 FEET FROM MILE 22.7 TO MILE 29.9 (QUANTUCK BAY TO SHINNECOCK BAY)
   0.20 FEET FROM MILE 29.9 TO MILE 33.6 (SHINNECOCK BAY TO SHINNECOCK CANAL)
4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 110-2-1003 DATED 1 JANUARY 2004.
5. PLANIMETRIC DETAILS WERE SCALED FROM A 7.5 MINUTE U.S.G.S QUADRANGLE MAP.
6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: TRIMBLE 5800 RTK W/ OTF
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
   NAVIGATION/DATA LOGGING: DESKTOP PC W/ HYPACK MAX SOFTWARE
7. PROJECT CONTOURS WERE GENERATED FROM A TRIANGULATED IRREGULAR NETWORK (TIN)UTILIZING BENTLEY'S INROADS SELECT CAD SOFTWARE.
8. DATA SET HAS BEEN REDUCED FOR CLARITY PURPOSES.TO VIEW ADDITIONAL SOUNDINGS TURN ON LEVEL 63.

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF QUOGUE, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400
SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS
DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY
FIELD BOOKS: 1458
APPROVED: R. KISS
DATE: 28 JULY 2004
SHEET 30 OF 40

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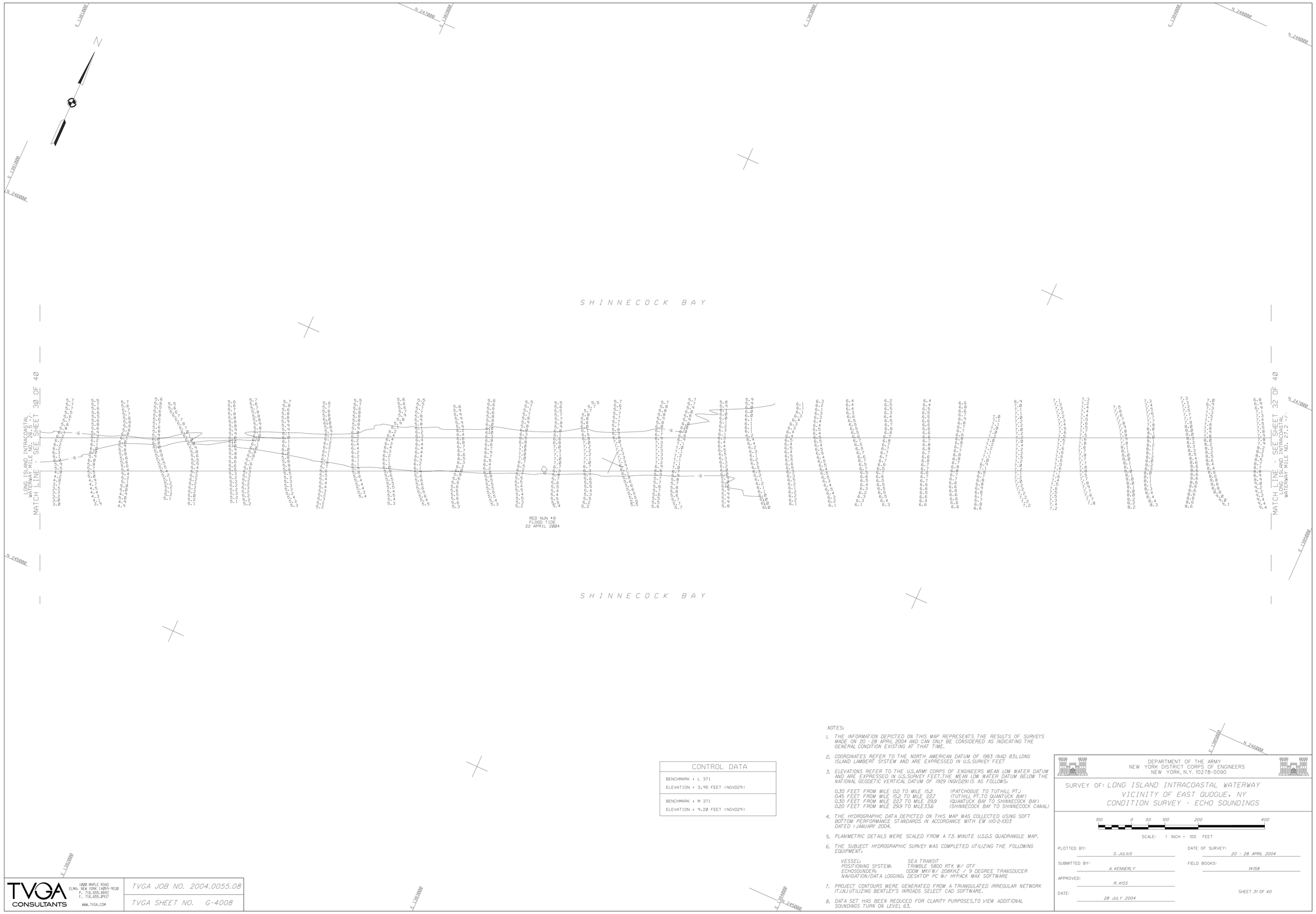
TVGA JOB NO. 2004.0055.08
TVGA SHEET NO. G-4007

REQUEST NO. 2622
FILE NO. 211



CONTROL DATA
BENCHMARK : L 371
ELEVATION : 3.95 FEET (NGVD29)
BENCHMARK : M 371
ELEVATION : 9.20 FEET (NGVD29)

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), LONG ISLAND LAMBERT SYSTEM AND ARE EXPRESSED IN U.S. SURVEY FEET
3. ELEVATIONS REFER TO THE U.S. ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM AND ARE EXPRESSED IN U.S. SURVEY FEET. THE MEAN LOW WATER DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS AS FOLLOWS:

   0.30 FEET FROM MILE 0.0 TO MILE 15.2 (PATCHOGUE TO TUTHILL PT.)
   0.45 FEET FROM MILE 15.2 TO MILE 22.7 (TUTHILL PT. TO QUANTUCK BAY)
   0.30 FEET FROM MILE 22.7 TO MILE 29.9 (QUANTUCK BAY TO SHINNECOCK BAY)
   0.20 FEET FROM MILE 29.9 TO MILE 33.6 (SHINNECOCK BAY TO SHINNECOCK CANAL)
4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 1110-2-1003 DATED 1 JANUARY 2004.
5. PLANIMETRIC DETAILS WERE SCALED FROM A 7.5 MINUTE U.S.G.S. QUADRANGLE MAP.
6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: TRIMBLE 5800 RTK W/ OTF
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
   NAVIGATION/DATA LOGGING: DESKTOP PC W/ HYPACK MAX SOFTWARE
7. PROJECT CONTOURS WERE GENERATED FROM A TRIANGULATED IRREGULAR NETWORK (TIN) UTILIZING BENTLEY'S INROADS SELECT CAD SOFTWARE.
8. DATA SET HAS BEEN REDUCED FOR CLARITY PURPOSES. TO VIEW ADDITIONAL SOUNDINGS TURN ON LEVEL 63.

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF EAST QUOGUE, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400

SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS	DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY	FIELD BOOKS: 14158
APPROVED: R. KISS	
DATE: 28 JULY 2004	SHEET 31 OF 40

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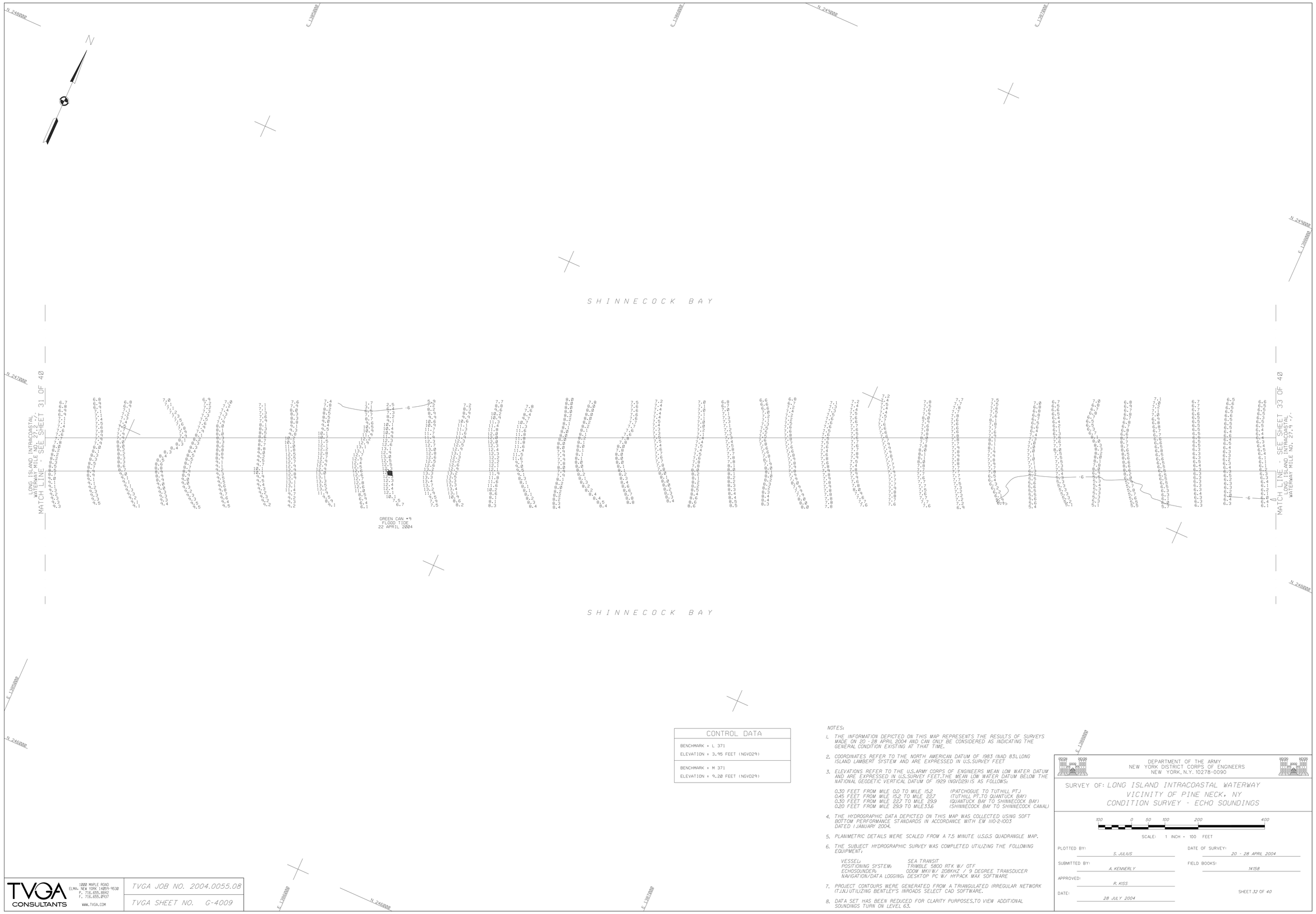
TVGA JOB NO. 2004.0055.08

TVGA SHEET NO. G-4008

REQUEST NO. 2622

FILE NO. 211



CONTROL DATA
BENCHMARK : L 371
ELEVATION : 3.95 FEET (NGVD29)
BENCHMARK : M 371
ELEVATION : 9.20 FEET (NGVD29)

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83). LONG ISLAND LAMBERT SYSTEM AND ARE EXPRESSED IN U.S. SURVEY FEET
3. ELEVATIONS REFER TO THE U.S. ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM AND ARE EXPRESSED IN U.S. SURVEY FEET. THE MEAN LOW WATER DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS AS FOLLOWS:

   0.30 FEET FROM MILE 0.0 TO MILE 15.2 (PATCHOGUE TO TUTHILL PT.)
   0.45 FEET FROM MILE 15.2 TO MILE 22.7 (TUTHILL PT. TO QUANTUCK BAY)
   0.30 FEET FROM MILE 22.7 TO MILE 29.9 (QUANTUCK BAY TO SHINNECOCK BAY)
   0.20 FEET FROM MILE 29.9 TO MILE 33.6 (SHINNECOCK BAY TO SHINNECOCK CANAL)
4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 1110-2-1003 DATED 1 JANUARY 2004.
5. PLANIMETRIC DETAILS WERE SCALED FROM A 7.5 MINUTE U.S.G.S QUADRANGLE MAP.
6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: TRIMBLE 5800 RTK W/ OTF
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
   NAVIGATION/DATA LOGGING: DESKTOP PC W/ HYPACK MAX SOFTWARE
7. PROJECT CONTOURS WERE GENERATED FROM A TRIANGULATED IRREGULAR NETWORK (TIN) UTILIZING BENTLEY'S INROADS SELECT CAD SOFTWARE.
8. DATA SET HAS BEEN REDUCED FOR CLARITY PURPOSES. TO VIEW ADDITIONAL SOUNDINGS TURN ON LEVEL 63.

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF PINE NECK, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400

SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS
DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY
FIELD BOOKS: 14158
APPROVED: R. KISS
DATE: 28 JULY 2004
SHEET 32 OF 40

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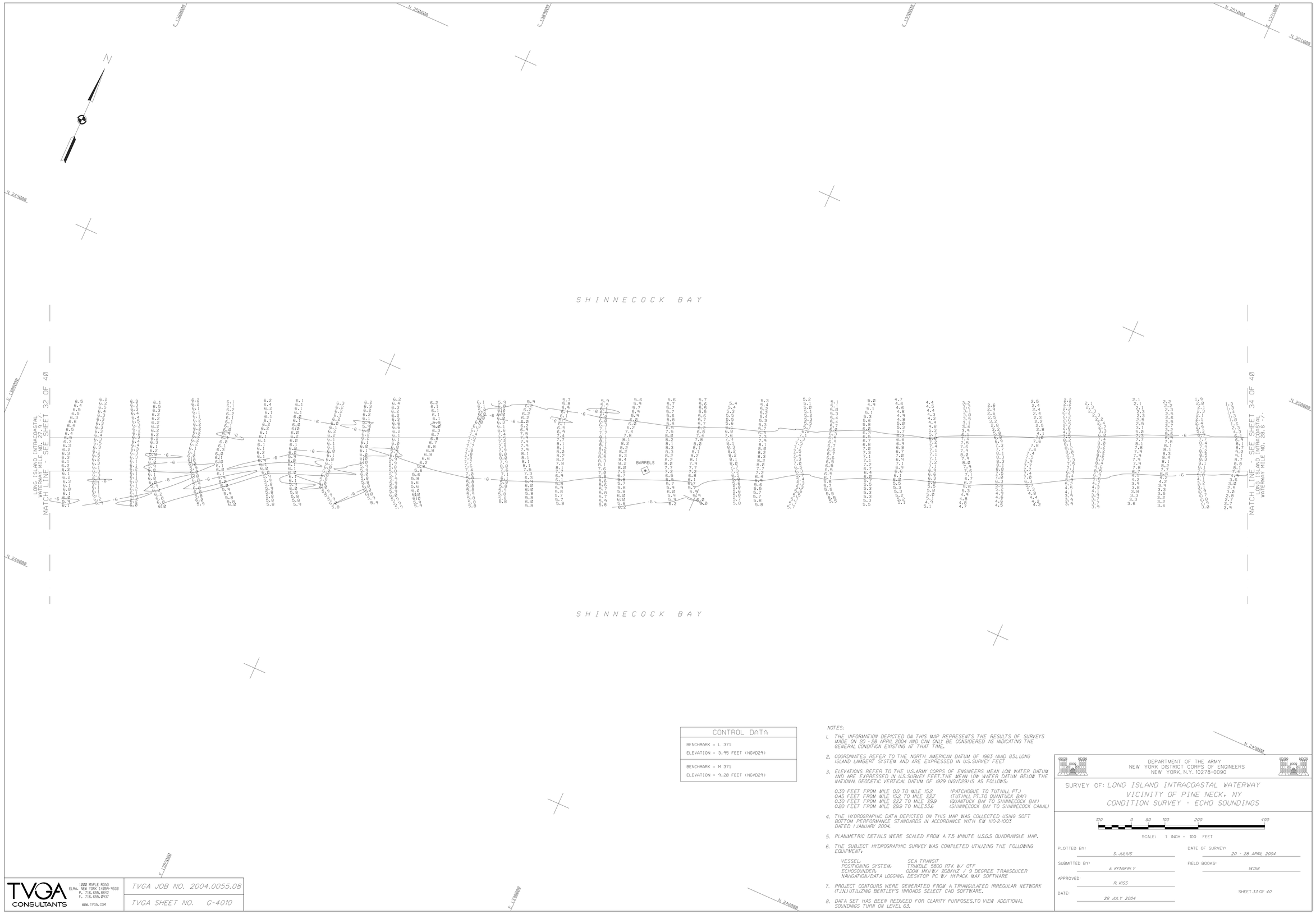
TVGA JOB NO. 2004.0055.08
TVGA SHEET NO. G-4009

REQUEST NO. 2622
FILE NO. 211



CONTROL DATA
BENCHMARK : L 371 ELEVATION : 3.95 FEET (NGVD29)
BENCHMARK : M 371 ELEVATION : 9.20 FEET (NGVD29)

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), LONG ISLAND LAMBERT SYSTEM AND ARE EXPRESSED IN U.S.SURVEY FEET
3. ELEVATIONS REFER TO THE U.S.ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM AND ARE EXPRESSED IN U.S.SURVEY FEET.THE MEAN LOW WATER DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS AS FOLLOWS:

   0.30 FEET FROM MILE 0.0 TO MILE 15.2 (PATCHOGUE TO TUTHILL PT.)
   0.45 FEET FROM MILE 15.2 TO MILE 22.7 (TUTHILL PT.TO QUANTUCK BAY)
   0.30 FEET FROM MILE 22.7 TO MILE 29.9 (QUANTUCK BAY TO SHINNECOCK BAY)
   0.20 FEET FROM MILE 29.9 TO MILE 33.6 (SHINNECOCK BAY TO SHINNECOCK CANAL)
4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 1110-2-1003 DATED 1 JANUARY 2004.
5. PLANIMETRIC DETAILS WERE SCALED FROM A 7.5 MINUTE U.S.G.S QUADRANGLE MAP.
6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: TRIMBLE 5800 RTK W/ OTF
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
   NAVIGATION/DATA LOGGING: DESKTOP PC W/ HYPACK MAX SOFTWARE
7. PROJECT CONTOURS WERE GENERATED FROM A TRIANGULATED IRREGULAR NETWORK (TIN) UTILIZING BENTLEY'S INROADS SELECT CAD SOFTWARE.
8. DATA SET HAS BEEN REDUCED FOR CLARITY PURPOSES.TO VIEW ADDITIONAL SOUNDINGS TURN ON LEVEL 63.

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF PINE NECK, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400
SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS
DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY
FIELD BOOKS: 14158
APPROVED: R. KISS
DATE: 28 JULY 2004
SHEET 33 OF 40

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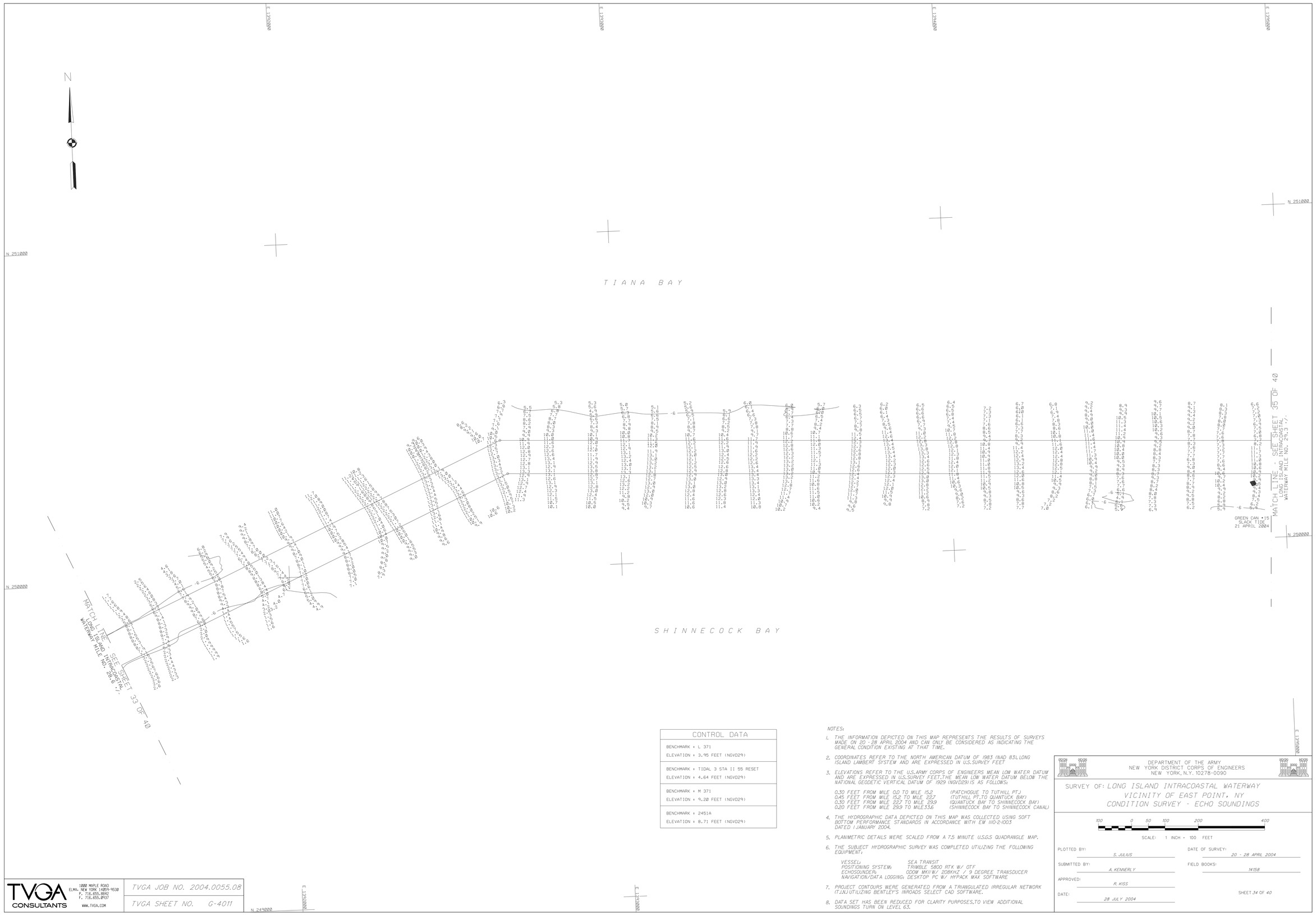
TVGA JOB NO. 2004.0055.08
TVGA SHEET NO. G-4010

REQUEST NO. 2622
FILE NO. 211



CONTROL DATA
BENCHMARK : L 371 ELEVATION : 3.95 FEET (NGVD29)
BENCHMARK : TIDAL 3 STA II 55 RESET ELEVATION : 4.64 FEET (NGVD29)
BENCHMARK : M 371 ELEVATION : 9.20 FEET (NGVD29)
BENCHMARK : 2451A ELEVATION : 8.71 FEET (NGVD29)

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), LONG ISLAND LAMBERT SYSTEM AND ARE EXPRESSED IN U.S.SURVEY FEET
3. ELEVATIONS REFER TO THE U.S.ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM AND ARE EXPRESSED IN U.S.SURVEY FEET.THE MEAN LOW WATER DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS AS FOLLOWS:

   0.30 FEET FROM MILE 0.0 TO MILE 15.2 (PATCHOGUE TO TUTHILL PT.)
   0.45 FEET FROM MILE 15.2 TO MILE 22.7 (TUTHILL PT.TO QUANTUCK BAY)
   0.30 FEET FROM MILE 22.7 TO MILE 29.9 (QUANTUCK BAY TO SHINNECOCK BAY)
   0.20 FEET FROM MILE 29.9 TO MILE 33.6 (SHINNECOCK BAY TO SHINNECOCK CANAL)
4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 110-2-1003 DATED 1 JANUARY 2004.
5. PLANIMETRIC DETAILS WERE SCALED FROM A 7.5 MINUTE U.S.G.S. QUADRANGLE MAP.
6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: TRIMBLE 5800 RTK W/ OTF
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
   NAVIGATION/DATA LOGGING: DESKTOP PC W/ HYPACK MAX SOFTWARE
7. PROJECT CONTOURS WERE GENERATED FROM A TRIANGULATED IRREGULAR NETWORK (TIN)UTILIZING BENTLEY'S INROADS SELECT CAD SOFTWARE.
8. DATA SET HAS BEEN REDUCED FOR CLARITY PURPOSES.TO VIEW ADDITIONAL SOUNDINGS TURN ON LEVEL 63.

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF EAST POINT, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400
SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS
DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY
FIELD BOOKS: 1458
APPROVED: R. KISS
DATE: 28 JULY 2004
SHEET 34 OF 40

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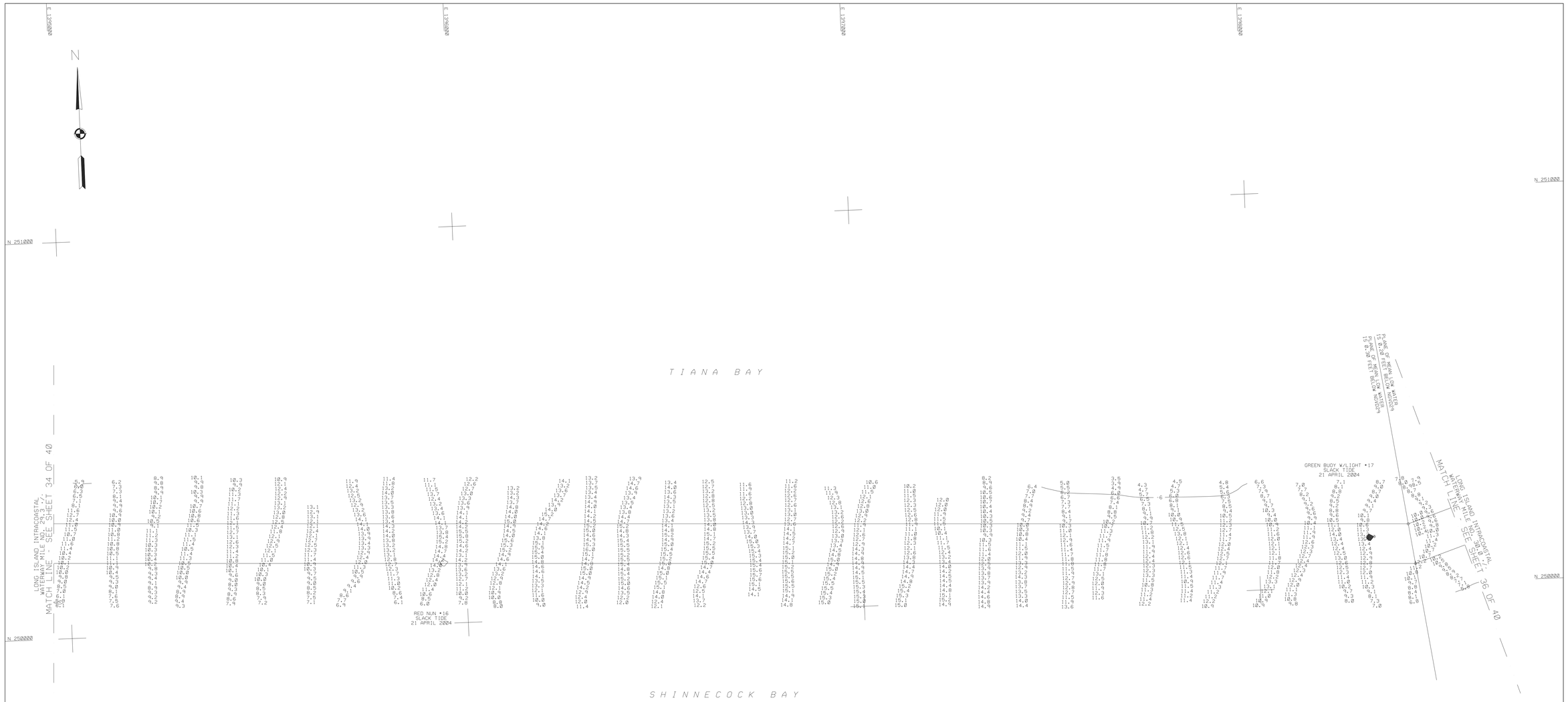
TVGA JOB NO. 2004.0055.08
TVGA SHEET NO. G-4011

REQUEST NO. 2622
FILE NO. 211



CONTROL DATA
BENCHMARK : TIDAL 3 STA II 55 RESET ELEVATION : 4.64 FEET (NGVD29)
BENCHMARK : 2451A ELEVATION : 8.71 FEET (NGVD29)

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), LONG ISLAND LAMBERT SYSTEM AND ARE EXPRESSED IN U.S.SURVEY FEET
3. ELEVATIONS REFER TO THE U.S.ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM AND ARE EXPRESSED IN U.S.SURVEY FEET.THE MEAN LOW WATER DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS AS FOLLOWS:

   0.30 FEET FROM MILE 0.0 TO MILE 15.2 (PATCHOGUE TO TUTHILL PT.)
   0.45 FEET FROM MILE 15.2 TO MILE 22.7 (TUTHILL PT.TO QUANTUCK BAY)
   0.30 FEET FROM MILE 22.7 TO MILE 29.9 (QUANTUCK BAY TO SHINNECOCK BAY.)
   0.20 FEET FROM MILE 29.9 TO MILE33.6 (SHINNECOCK BAY TO SHINNECOCK CANAL)
4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 1110-2-1003 DATED 1 JANUARY 2004.
5. PLANIMETRIC DETAILS WERE SCALED FROM A 7.5 MINUTE U.S.G.S QUADRANGLE MAP.
6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: TRIMBLE 5800 RTK W/ OTF
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
   NAVIGATION/DATA LOGGING: DESKTOP PC W/ HYPACK MAX SOFTWARE
7. PROJECT CONTOURS WERE GENERATED FROM A TRIANGULATED IRREGULAR NETWORK (TIN) UTILIZING BENTLEY'S INROADS SELECT CAD SOFTWARE.
8. DATA SET HAS BEEN REDUCED FOR CLARITY PURPOSES.TO VIEW ADDITIONAL SOUNDINGS TURN ON LEVEL 63.

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF EAST POINT, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400
SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS
DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY
FIELD BOOKS: 14158
APPROVED: R. KISS
DATE: 28 JULY 2004
SHEET 35 OF 40

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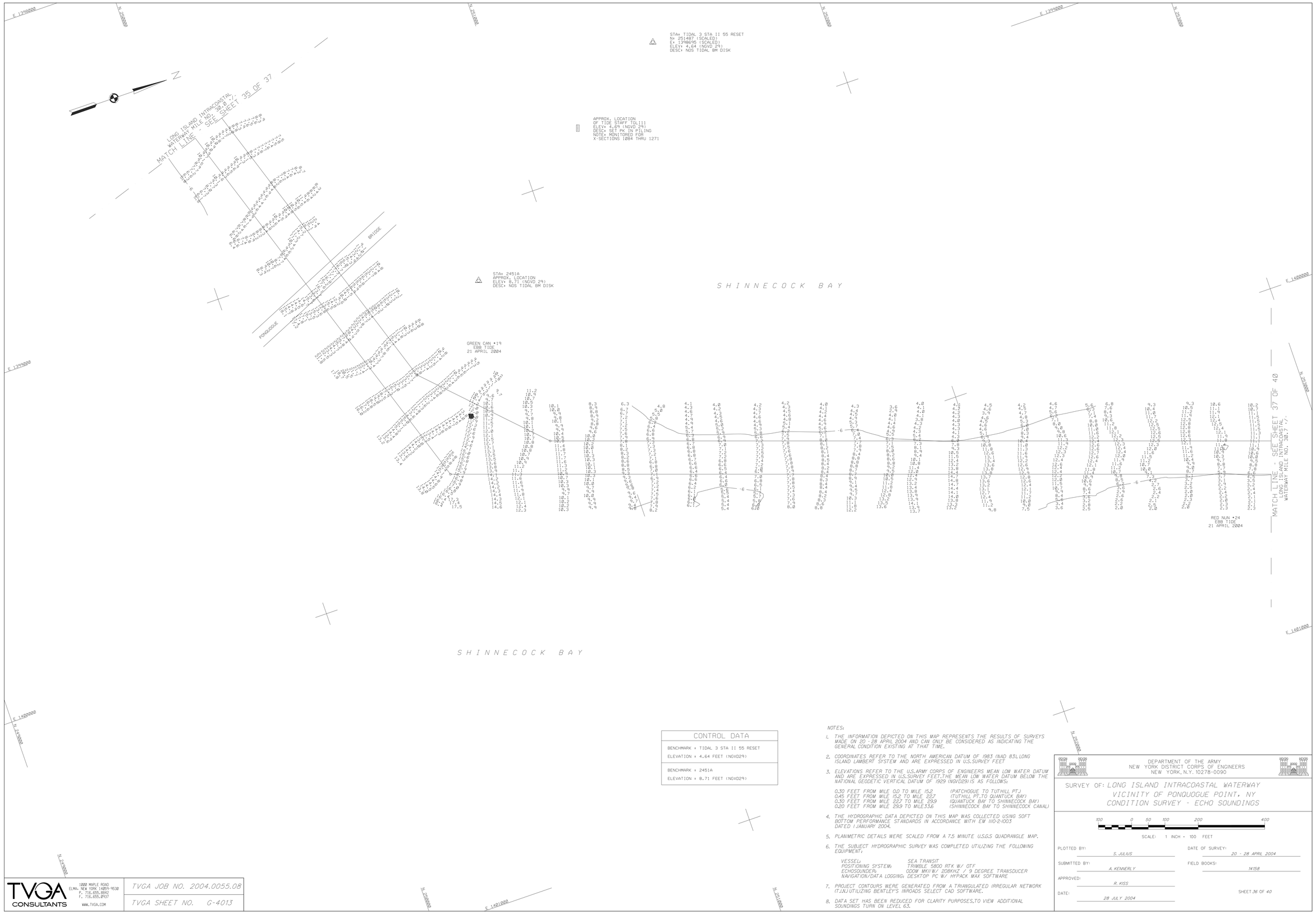
TVGA JOB NO. 2004.0055.08
TVGA SHEET NO. G-4012

REQUEST NO. 2622
FILE NO. 211



CONTROL DATA
BENCHMARK : TIDAL 3 STA II 55 RESET ELEVATION : 4.64 FEET (NGVD29)
BENCHMARK : 2451A ELEVATION : 8.71 FEET (NGVD29)

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), LONG ISLAND LAMBERT SYSTEM AND ARE EXPRESSED IN U.S.SURVEY FEET
3. ELEVATIONS REFER TO THE U.S.ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM AND ARE EXPRESSED IN U.S.SURVEY FEET.THE MEAN LOW WATER DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS AS FOLLOWS:

   0.30 FEET FROM MILE 0.0 TO MILE 15.2 (PATCHOGUE TO TUTHILL PT.)
   0.45 FEET FROM MILE 15.2 TO MILE 22.7 (TUTHILL PT.TO QUANTUCK BAY)
   0.30 FEET FROM MILE 22.7 TO MILE 29.9 (QUANTUCK BAY TO SHINNECOCK BAY)
   0.20 FEET FROM MILE 29.9 TO MILE 33.6 (SHINNECOCK BAY TO SHINNECOCK CANAL)
4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 1110-2-1003 DATED 1 JANUARY 2004.
5. PLANIMETRIC DETAILS WERE SCALED FROM A 7.5 MINUTE U.S.G.S QUADRANGLE MAP.
6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: TRIMBLE 5800 RTK W/ OTF
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
   NAVIGATION/DATA LOGGING: DESKTOP PC W/ HYPACK MAX SOFTWARE
7. PROJECT CONTOURS WERE GENERATED FROM A TRIANGULATED IRREGULAR NETWORK (TIN) UTILIZING BENTLEY'S INROADS SELECT CAD SOFTWARE.
8. DATA SET HAS BEEN REDUCED FOR CLARITY PURPOSES.TO VIEW ADDITIONAL SOUNDINGS TURN ON LEVEL 63.

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF PONQUOGUE POINT, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400
SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS	DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY	FIELD BOOKS: 1458
APPROVED: R. KISS	
DATE: 28 JULY 2004	SHEET 36 OF 40

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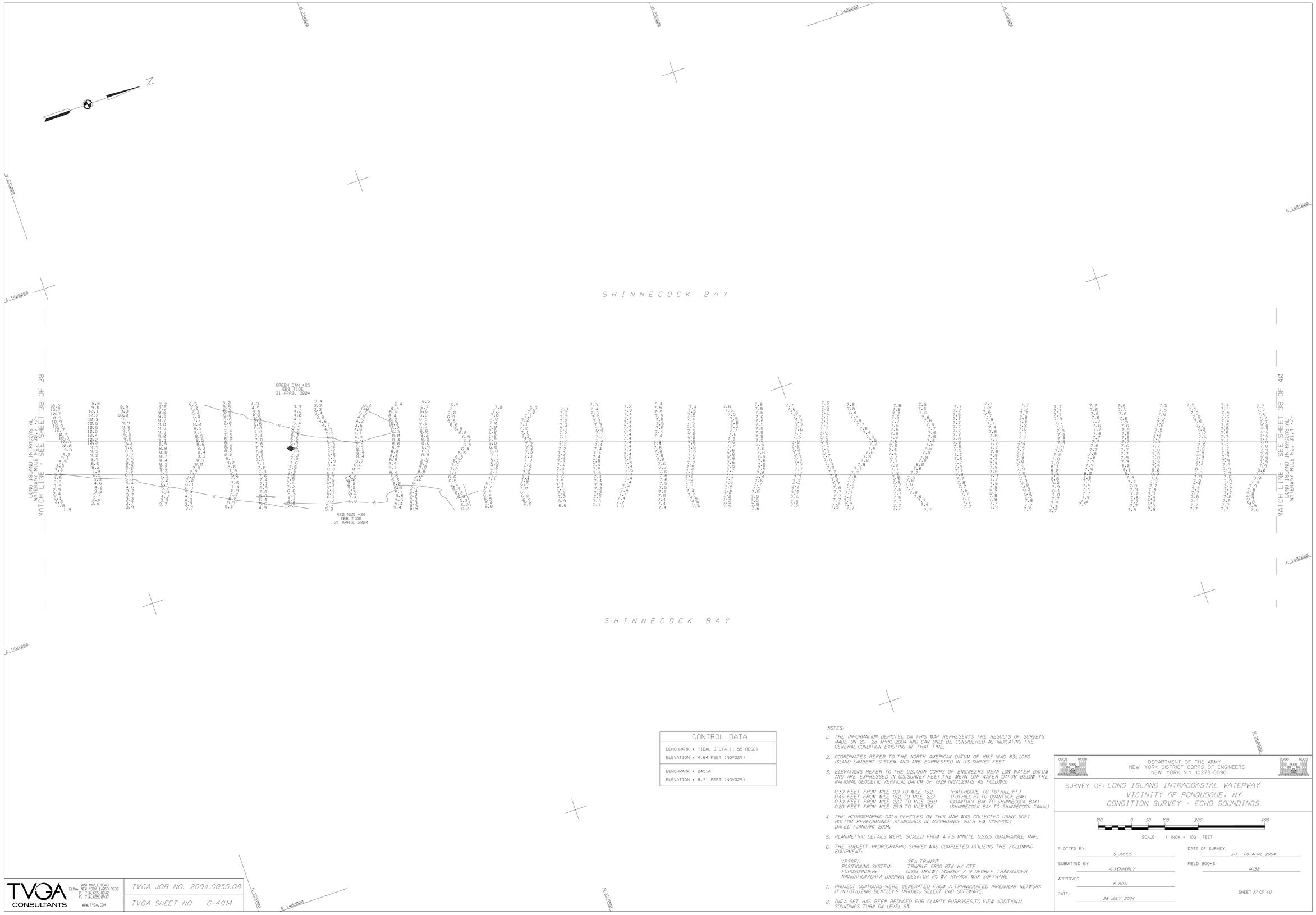
TVGA JOB NO. 2004.0055.08

TVGA SHEET NO. G-4013

REQUEST NO. 2622

FILE NO. 211



CONTROL DATA
BENCHMARK : TIDAL 3 STA II 55 RESET ELEVATION : 4.64 FEET (NGVD29)
BENCHMARK : 2451A ELEVATION : 8.71 FEET (NGVD29)

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), LONG ISLAND LAMBERT SYSTEM AND ARE EXPRESSED IN U.S.SURVEY FEET
3. ELEVATIONS REFER TO THE U.S.ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM AND ARE EXPRESSED IN U.S.SURVEY FEET.THE MEAN LOW WATER DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS AS FOLLOWS:

   0.30 FEET FROM MILE 0.0 TO MILE 15.2 (PATCHOGUE TO TUTHILL PT.)
   0.45 FEET FROM MILE 15.2 TO MILE 22.7 (TUTHILL PT.TO QUANTUCK BAY)
   0.30 FEET FROM MILE 22.7 TO MILE 29.9 (QUANTUCK BAY TO SHINNECOCK BAY)
   0.20 FEET FROM MILE 29.9 TO MILE 33.6 (SHINNECOCK BAY TO SHINNECOCK CANAL)
4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 1110-2-1003 DATED 1 JANUARY 2004.
5. PLANIMETRIC DETAILS WERE SCALED FROM A 7.5 MINUTE U.S.G.S QUADRANGLE MAP.
6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: TRIMBLE 5800 RTK W/ OTF
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
   NAVIGATION/DATA LOGGING: DESKTOP PC W/ HYPACK MAX SOFTWARE
7. PROJECT CONTOURS WERE GENERATED FROM A TRIANGULATED IRREGULAR NETWORK (TIN) UTILIZING BENTLEY'S INROADS SELECT CAD SOFTWARE.
8. DATA SET HAS BEEN REDUCED FOR CLARITY PURPOSES.TO VIEW ADDITIONAL SOUNDINGS TURN ON LEVEL 63.

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF PONQUOGUE, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400

SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS
DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY
FIELD BOOKS: 1458
APPROVED: R. KISS
DATE: 28 JULY 2004
SHEET 37 OF 40

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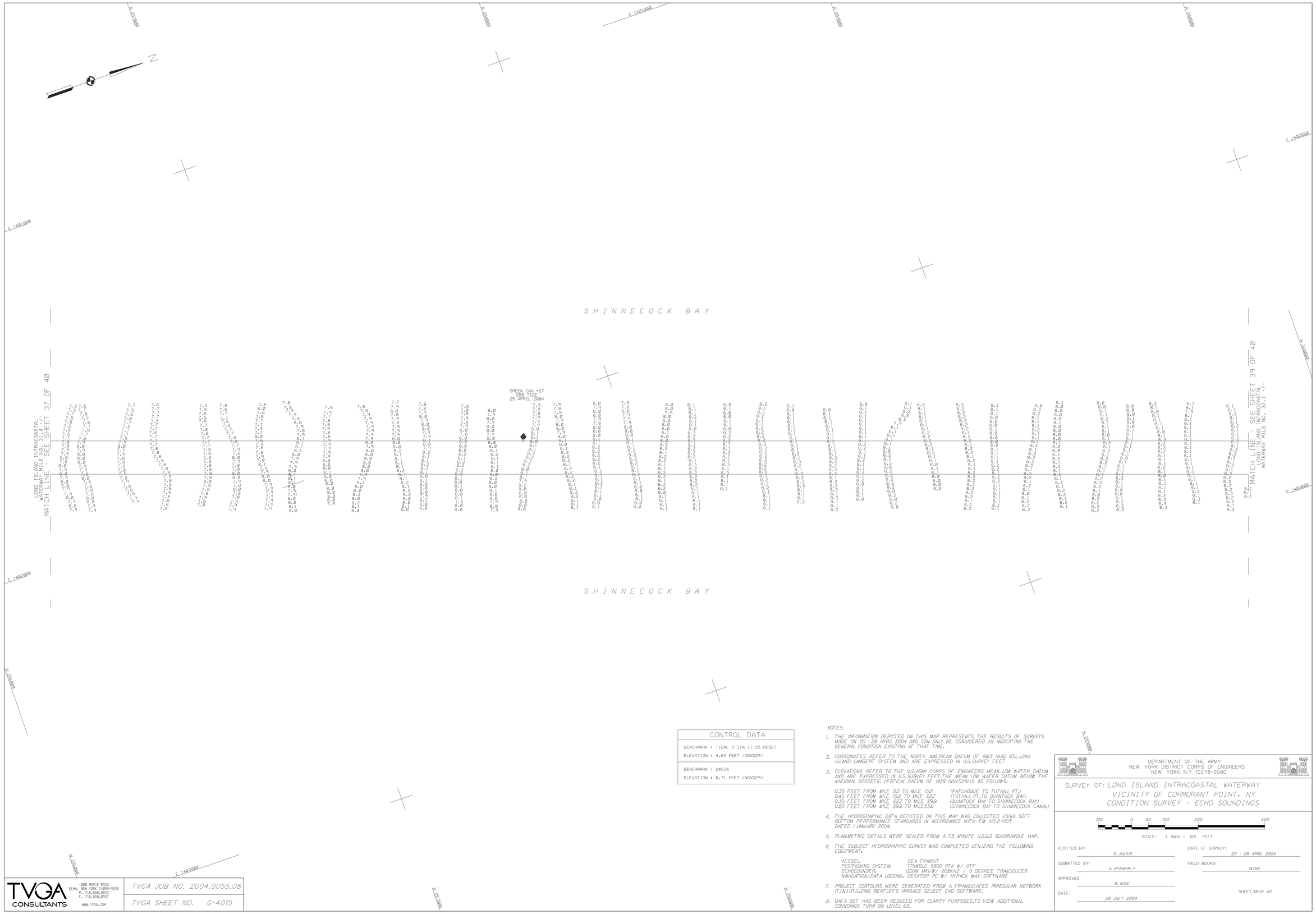
TVGA JOB NO. 2004.0055.08
TVGA SHEET NO. G-4014

REQUEST NO. 2622

FILE NO. 211



CONTROL DATA
BENCHMARK : TIDAL 3 STA II 55 RESET
ELEVATION : 4.64 FEET (NGVD29)
BENCHMARK : 2451A
ELEVATION : 8.71 FEET (NGVD29)

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), LONG ISLAND LAMBERT SYSTEM AND ARE EXPRESSED IN U.S.SURVEY FEET
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   0.45 FEET FROM MILE 15.2 TO MILE 22.7 (TUTHILL PT.TO QUANTUCK BAY)
   0.30 FEET FROM MILE 22.7 TO MILE 29.9 (QUANTUCK BAY TO SHINNECOCK BAY)
   0.20 FEET FROM MILE 29.9 TO MILE 33.6 (SHINNECOCK BAY TO SHINNECOCK CANAL)
4. THE HYDROGRAPHIC DATA DEPICTED ON THIS MAP WAS COLLECTED USING SOFT BOTTOM PERFORMANCE STANDARDS IN ACCORDANCE WITH EM 1110-2-1003 DATED 1 JANUARY 2004.
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6. THE SUBJECT HYDROGRAPHIC SURVEY WAS COMPLETED UTILIZING THE FOLLOWING EQUIPMENT:

   VESSEL: SEA TRANSIT
   POSITIONING SYSTEM: TRIMBLE 5800 RTK W/ OTF
   ECHOSOUNDER: ODOM MKII W/ 208KHZ / 9 DEGREE TRANSDUCER
   NAVIGATION/DATA LOGGING: DESKTOP PC W/ HYPACK MAX SOFTWARE
7. PROJECT CONTOURS WERE GENERATED FROM A TRIANGULATED IRREGULAR NETWORK (TIN) UTILIZING BENTLEY'S INROADS SELECT CAD SOFTWARE.
8. DATA SET HAS BEEN REDUCED FOR CLARITY PURPOSES.TO VIEW ADDITIONAL SOUNDINGS TURN ON LEVEL 63.

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TVGA JOB NO. 2004.0055.08

TVGA SHEET NO. G-4015

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF CORMORANT POINT, NY
CONDITION SURVEY - ECHO SOUNDINGS

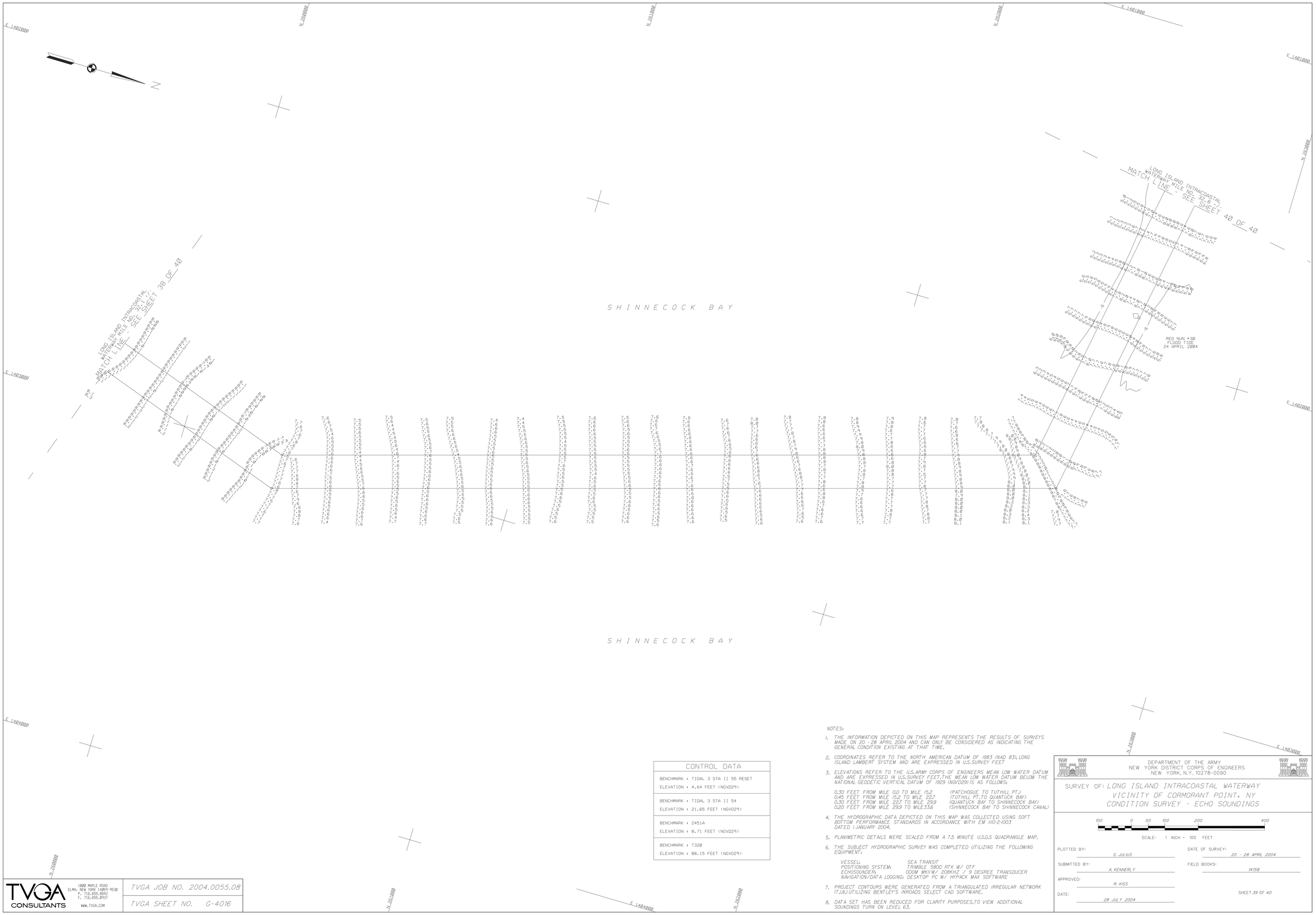
100 0 50 100 200 400

SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS	DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY	FIELD BOOKS: 1158
APPROVED: R. KISS	
DATE: 28 JULY 2004	SHEET 38 OF 40

REQUEST NO. 2622

FILE NO. 211



CONTROL DATA
BENCHMARK : TIDAL 3 STA II 55 RESET ELEVATION : 4.64 FEET (NGVD29)
BENCHMARK : TIDAL 3 STA II 54 ELEVATION : 21.65 FEET (NGVD29)
BENCHMARK : 2451A ELEVATION : 8.71 FEET (NGVD29)
BENCHMARK : T320 ELEVATION : 88.15 FEET (NGVD29)

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON 20 - 28 APRIL 2004 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. COORDINATES REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83). LONG ISLAND LAMBERT SYSTEM AND ARE EXPRESSED IN U.S. SURVEY FEET.
3. ELEVATIONS REFER TO THE U.S. ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM AND ARE EXPRESSED IN U.S. SURVEY FEET. THE MEAN LOW WATER DATUM BELOW THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) IS AS FOLLOWS:

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF CORMORANT POINT, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400
SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS
DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY
FIELD BOOKS: 14158
APPROVED: R. KISS
DATE: 28 JULY 2004
SHEET 39 OF 40

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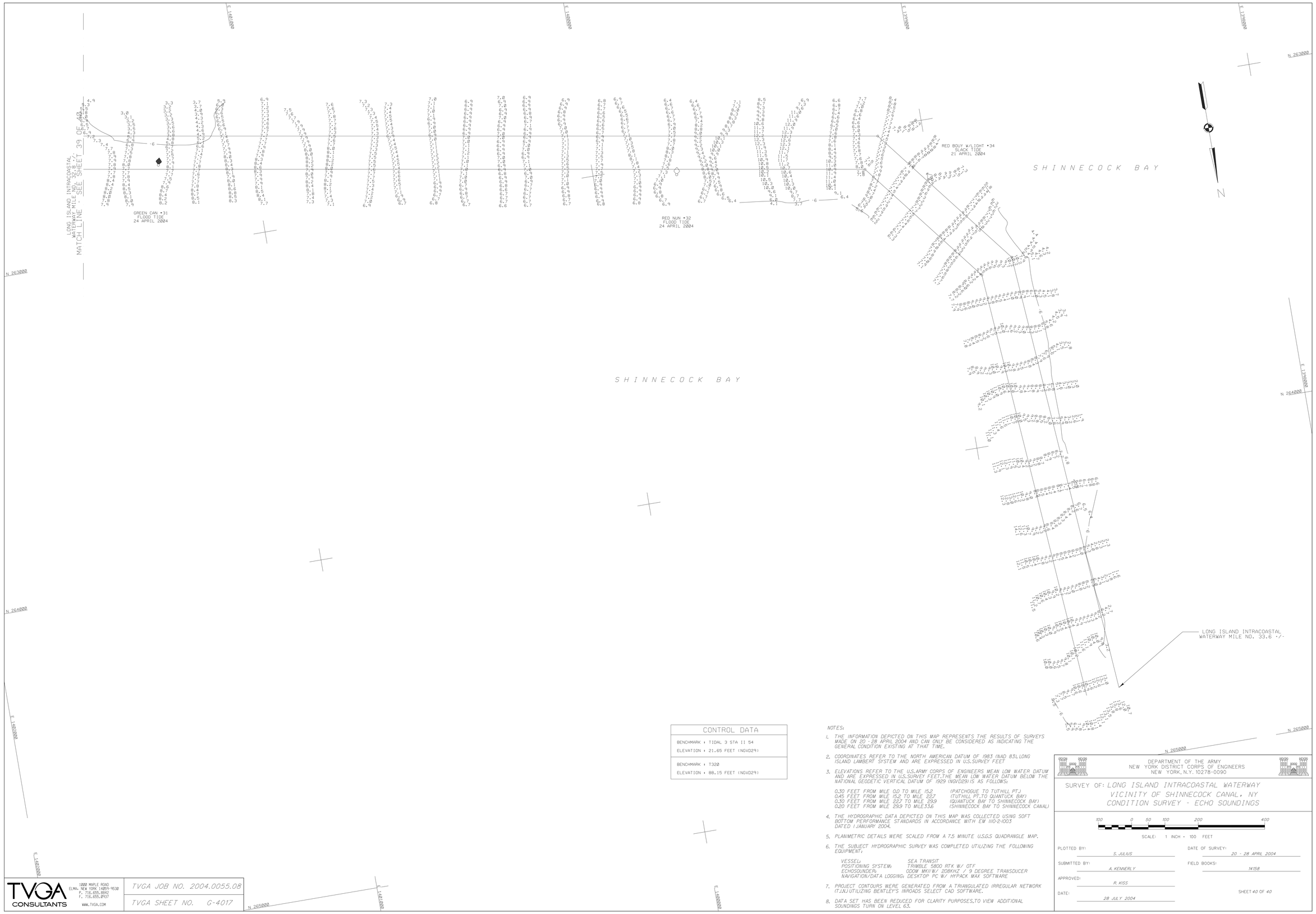
TVGA JOB NO. 2004.0055.08
TVGA SHEET NO. G-4016

REQUEST NO. 2622
FILE NO. 211



CONTROL DATA
BENCHMARK : TIDAL 3 STA II 54
ELEVATION : 21.65 FEET (NGVD29)
BENCHMARK : T320
ELEVATION : 88.15 FEET (NGVD29)

NOTES:

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

SURVEY OF: LONG ISLAND INTRACOASTAL WATERWAY
VICINITY OF SHINNECOCK CANAL, NY
CONDITION SURVEY - ECHO SOUNDINGS

100 0 50 100 200 400
SCALE: 1 INCH = 100 FEET

PLOTTED BY: S. JULIUS	DATE OF SURVEY: 20 - 28 APRIL 2004
SUBMITTED BY: A. KENNERLY	FIELD BOOKS: 14158
APPROVED: R. KISS	
DATE: 28 JULY 2004	SHEET 40 OF 40

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TVGA JOB NO. 2004.0055.08
TVGA SHEET NO. G-4017

REQUEST NO. 2622

FILE NO. 211