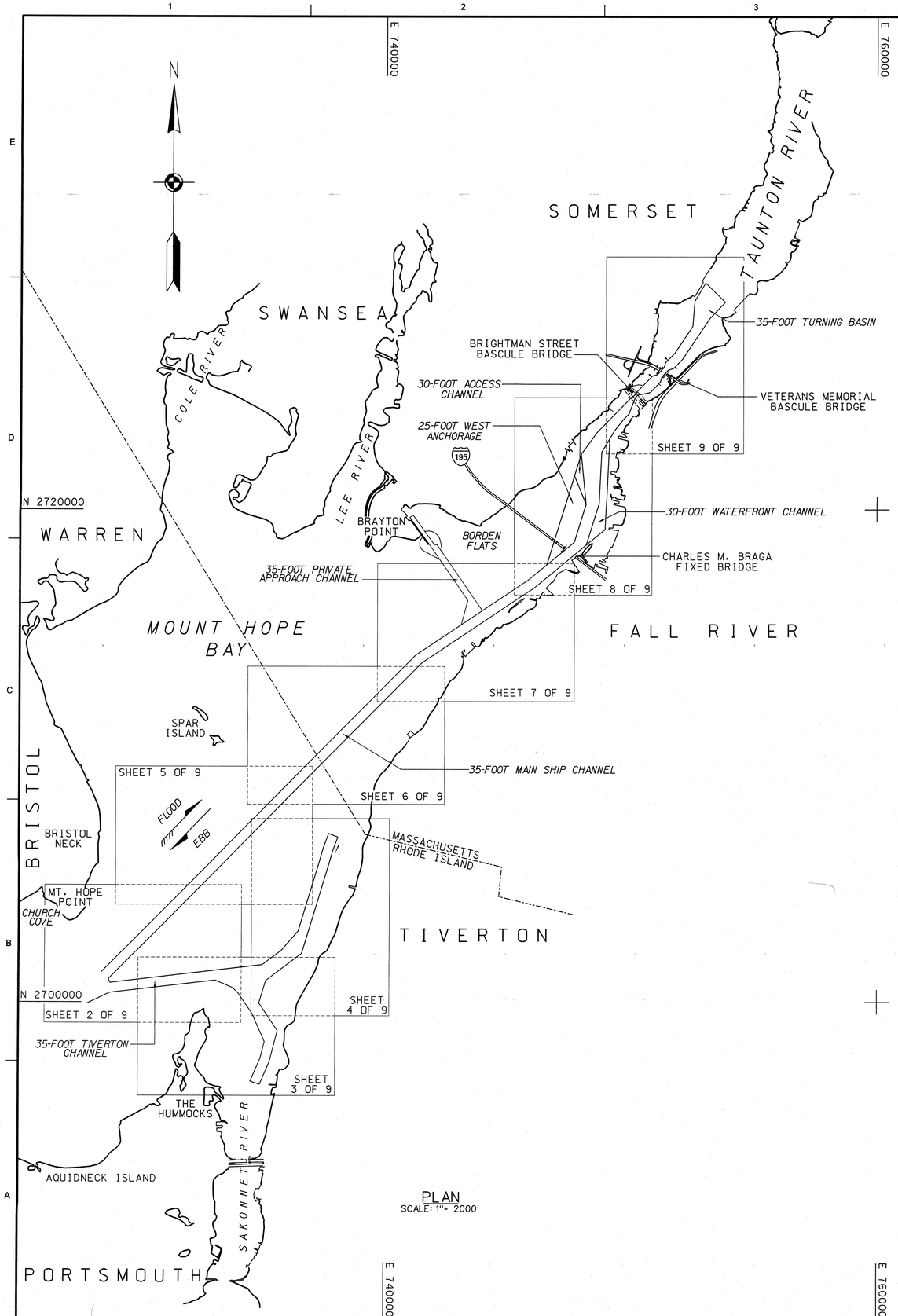
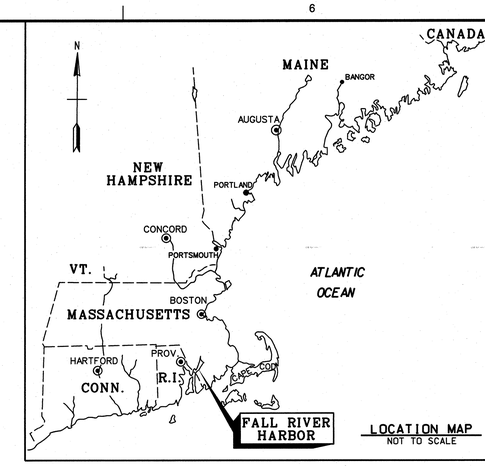


PLAN
SCALE: 1" = 2000'

INDEX OF NAVIGATION AIDS			
NO.	DATE	STATE PLANE COORDINATES	GEOGRAPHIC POSITION
FI RG-MH GONG	08/21/12	N 2700855.11 E 728874.24	41° – 39′– 32.2″N 71° – 14′– 02.2″W
FI G-1	08/21/12	N 2702546.48 E 729771.38	41° – 39′– 48.8″N 71° – 13′– 50.3″W
RN-2	08/21/12	N 2702186.58 E 730165.81	41° – 39′– 45.3″N 71° – 13′– 45.1″W
GC-3	08/21/12	N 2705457.68 E 732686.30	41° – 40′– 17.5″N 71° – 13′– 11.7″W
FI R-4 BELL	08/21/12	N 2705118.39 E 733035.18	41° – 40′– 14.2″N 71° – 13′– 07.2″W
FI G-5	08/21/12	N 2708170.60 E 735388.98	41° – 40′– 44.2″N 71° – 12′– 36.0″W
RN-6	08/21/12	N 2707818.68 E 735624.29	41° – 40′– 40.7″N 71° – 12′– 32.9″W
GC-7	08/21/12	N 2710926.71 E 738092.72	41° – 41′– 11.4″N 71° – 12′– 00.3″W
FI R-8 BELL	08/21/12	N 2710593.17 E 738379.15	41° – 41′– 08.1″N 71° – 11′– 56.5″W
GC-9	08/21/12	N 2713086.18 E 740241.31	41° – 41′– 32.6″N 71° – 11′– 31.8″W
FI R-10 BELL	08/21/12	N 2713776.17 E 741512.41	41° – 41′– 39.4″N 71° – 11′– 15.0″W
FI G-11	08/21/12	N 2715305.88 E 743025.08	41° – 41′– 54.5″N 71° – 10′– 55.0″W
RN-12	08/21/12	N 2714978.78 E 743289.89	41° – 41′– 51.2″N 71° – 10′– 51.6″W
FI G-13	08/21/12	N 2715939.94 E 743938.59	41° – 42′– 00.7″N 71° – 10′– 43.0″W
GC-15	08/21/12	N 2718699.09 E 747692.22	41° – 42′– 27.8″N 71° – 09′– 53.3″W
GC-17	08/21/12	N 2720221.24 E 748161.25	41° – 42′– 42.8″N 71° – 09′– 47.1″W
RN-18	08/21/12	N 2723597.95 E 749563.01	41° – 43′– 16.1″N 71° – 09′– 28.4″W
FI G-19	08/21/12	N 2723841.32 E 749297.85	41° – 43′– 18.5″N 71° – 09′– 31.9″W
RN-20	08/21/12	N 2726132.34 E 752050.65	41° – 43′– 41.1″N 71° – 08′– 55.5″W
GC-21	08/21/12	N 2726417.93 E 751797.95	41° – 43′– 43.9″N 71° – 08′– 58.8″W
RN-2	08/21/12	N 2700413.48 E 728913.55	41° – 39′– 27.8″N 71° – 14′– 01.7″W
GC-3	08/21/12	N 2701247.66 E 732502.11	41° – 39′– 35.9″N 71° – 13′– 14.4″W
FI R-4 BELL	08/21/12	N 2700883.53 E 732966.30	41° – 39′– 32.3″N 71° – 13′– 08.3″W
GC-1	08/21/12	N 2701572.48 E 735232.26	41° – 39′– 39.0″N 71° – 12′– 38.4″W
RN-2	08/21/12	N 2700834.20 E 735159.19	41° – 39′– 31.8″N 71° – 12′– 39.4″W
FI G-3 BELL	08/21/12	N 2702449.63 E 736308.23	41° – 39′– 47.7″N 71° – 12′– 24.2″W
RN-4	08/21/12	N 2701953.41 E 736652.16	41° – 39′– 42.8″N 71° – 12′– 19.6″W
GC-5	08/21/12	N 2706325.47 E 737528.31	41° – 40′– 25.9″N 71° – 12′– 07.9″W
GC-17	08/21/12	N 2696664.04 E 734313.03	41° – 38′– 50.6″N 71° – 12′– 50.7″W
GC-19	08/21/12	N 2700005.50 E 733510.26	41° – 39′– 23.6″N 71° – 13′– 01.1″W



LOCATION MAP
NOT TO SCALE

GENERAL NOTES:

1. Soundings are in feet and tenths and refer to the plane of Mean Lower Low Water (MLLW) 1983-2001 Tidal Epoch.
2. Topography shown is from previous surveys and/or NOAA Chart Nos. 13221, 13226 and 13227. All topography, including shoreline, bridges, piers, etc., is located approximate unless otherwise noted and should be used as a general reference only.
3. Bench Mark Data: Tides were recorded using RTK GPS. A Hypack KTD file was created using the most recent MLLW to NAVD88 corrections established in the vicinity of NOAA Bench Marks at Bay Oil Corporation, Rhode Island (Station ID 8450898, 05/20/2004), Fall River, Hope Bay, Massachusetts (Station ID 8447386, 07/07/2011) and Steepbrook, Massachusetts (Station ID 8447281, 05/20/2004). The corrections are 2.24 feet (GEOID 09) for Bay Oil Corporation, 2.53 feet (GEOID 09) for Fall River and 2.55 feet (GEOID 09) for Steepbrook. No tide gauges were used for this project.
4. Coordinates shown are based on the Lambert Grid System for the Commonwealth of Massachusetts (Mainland Zone 2001) and NAD 1983.
5. Survey was performed using a Reson SeaBat 7125 multibeam sonar system with a 400 kHz transducer. Horizontal positioning and vertical depths were recorded utilizing a Leica 1200 GPS System. An RTK base station was set up on Station Brewer (2012).
6. The sounding information shown on these maps represents the SHOALEST soundings of those obtained from hydrographic surveys conducted from May thru October 2012.
7. The sounding information depicted on these maps should NOT be used to determine volumes. Volumes are determined from more sounding information than shown. Additional sounding information is available upon request.
8. The information depicted on these maps represents the results of surveys made on the dates indicated, and can only be considered as indicating the general conditions existing at that time.
9. Field Books: R&H 4444 and 4546
   35-Foot depth contour shown thus:
   30-Foot depth contour shown thus:
   25-Foot depth contour shown thus:
   Surveyed by: Jeffrey W. Preston and crew
   Refer to Survey No. 13-1245

GRAPHIC SCALE:
1" = 2000'
2000 0 2000 4000

US Army Corps of Engineers
New England District

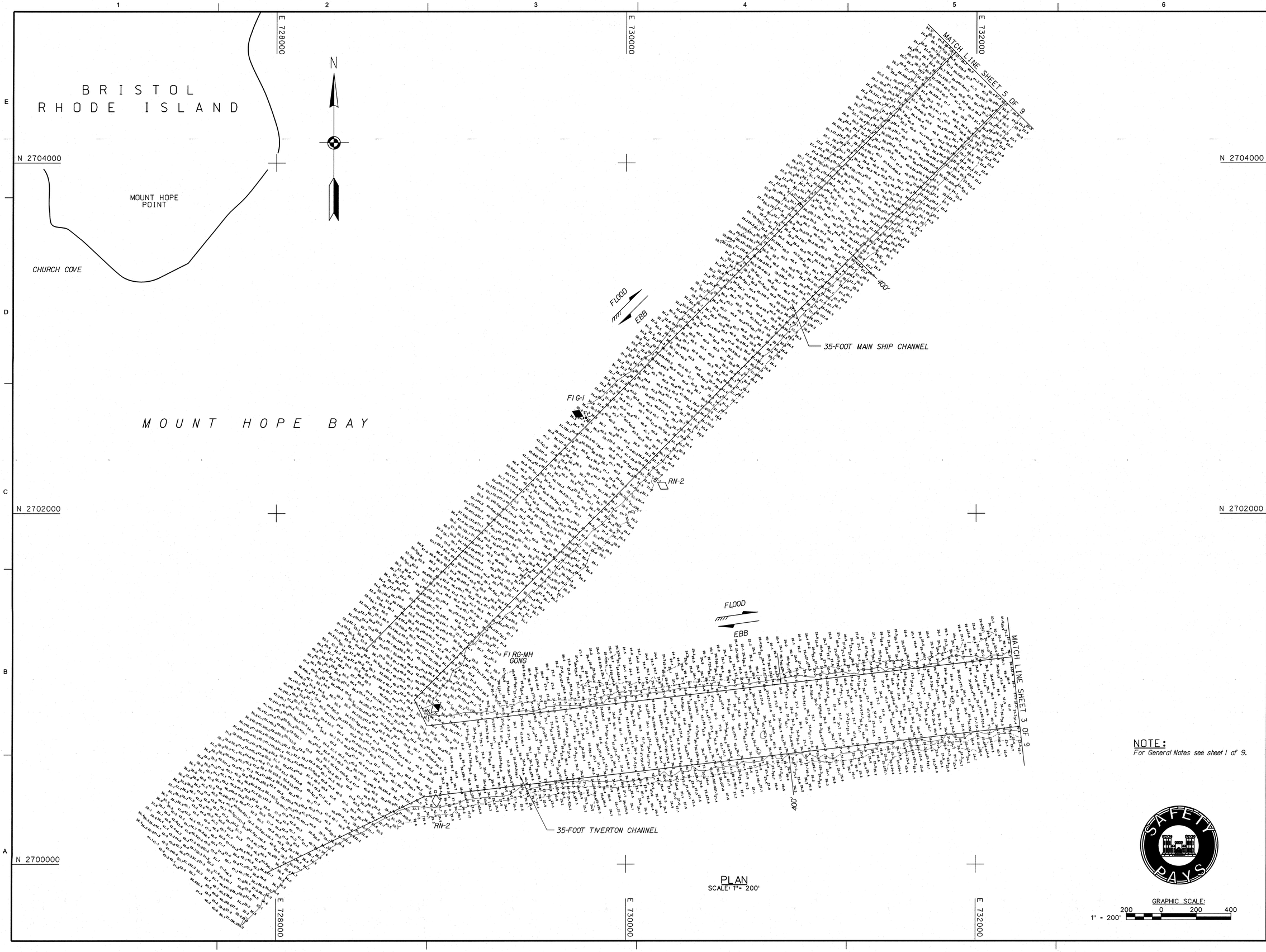
MARK	DESCRIPTION	DATE	APPR.	MARK	DESCRIPTION	DATE	APPR.

U.S. ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
CONCORD, MASSACHUSETTS
www.nae.usace.army.mil

PREPARED BY: Jeffrey W. Preston
Chief, Survey Section
DATE: 8/22/2013
SUBMITTED BY: John F. Tomaszewski
Chief, Survey Section
DWN BY: MAK
CKD BY: SWK
DESIGN FILE: FLRHBR.DGN
PLOT SCALE: 1" = 2000'
PLOT DATE: 9/27/2013
DRAWING CODE: FLD-265
SIZE: ANSI F
FILE NAME: FLRGBSV101.001

FALL RIVER HARBOR
RHODE ISLAND AND MASSACHUSETTS
CONDITION SURVEY
35-FOOT CHANNELS AND TURNING BASIN
30-FOOT CHANNELS AND
25-FOOT ANCHORAGE

SHEET IDENTIFICATION
V-101
SHEET 1 OF 9



PLAN
SCALE: 1" = 200'

NOTE:
For General Notes see sheet 1 of 9.

GRAPHIC SCALE:
1" = 200'
200 0 200 400

US Army Corps of Engineers®
New England District

MARK	DESCRIPTION	DATE	APPR

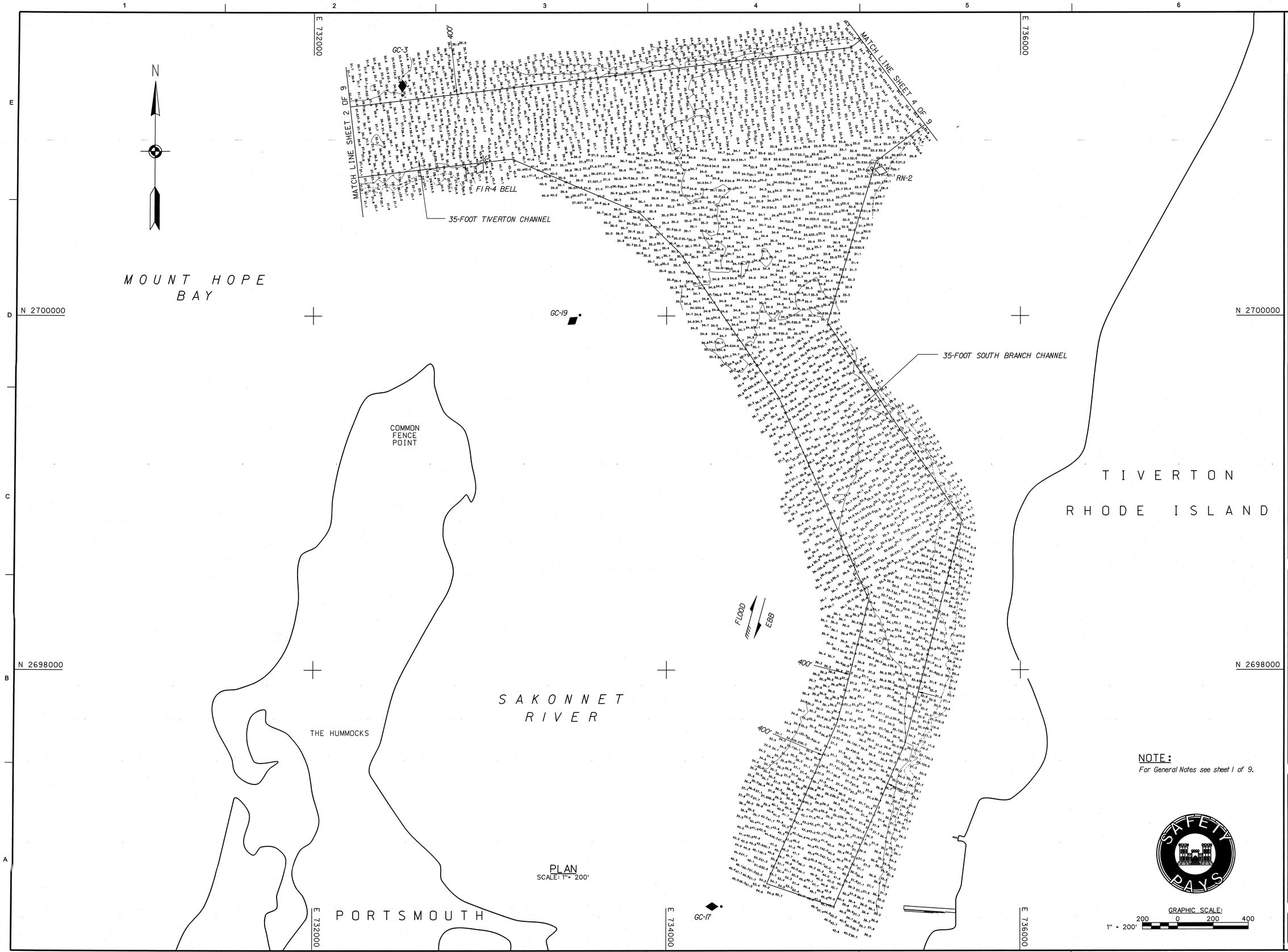
MARK	DESCRIPTION	DATE	APPR

U.S. ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
CONCORD, MASSACHUSETTS
www.nae.usace.army.mil

REVIEWED BY: Alex Chief, Survey Section
SUBMITTED BY: Chief, Survey Section
PLOT SCALE: 1" = 200'
PLOT DATE: 8/22/2013
SIZE: ANSI F
FILE NAME: FLR283V102.SIZ
DATE: 8/22/2013
DWN BY: AEB
CKD BY: SWK
DESIGN FILE: FLRHSP3.DGN
DRAWING CODE: FLR-283

FALL RIVER HARBOR
RHODE ISLAND AND MASSACHUSETTS
CONDITION SURVEY
35-FOOT CHANNELS AND TURNING BASIN
30-FOOT CHANNELS AND
25-FOOT ANCHORAGE

SHEET IDENTIFICATION
V-102
SHEET 2 OF 9



PLAN
SCALE: 1" = 200'

NOTE:
For General Notes see sheet 1 of 9.

GRAPHIC SCALE:
1" = 200'
200 0 200 400

US Army Corps of Engineers®
New England District

MARK	DESCRIPTION	DATE	APPR

MARK	DESCRIPTION	DATE	APPR

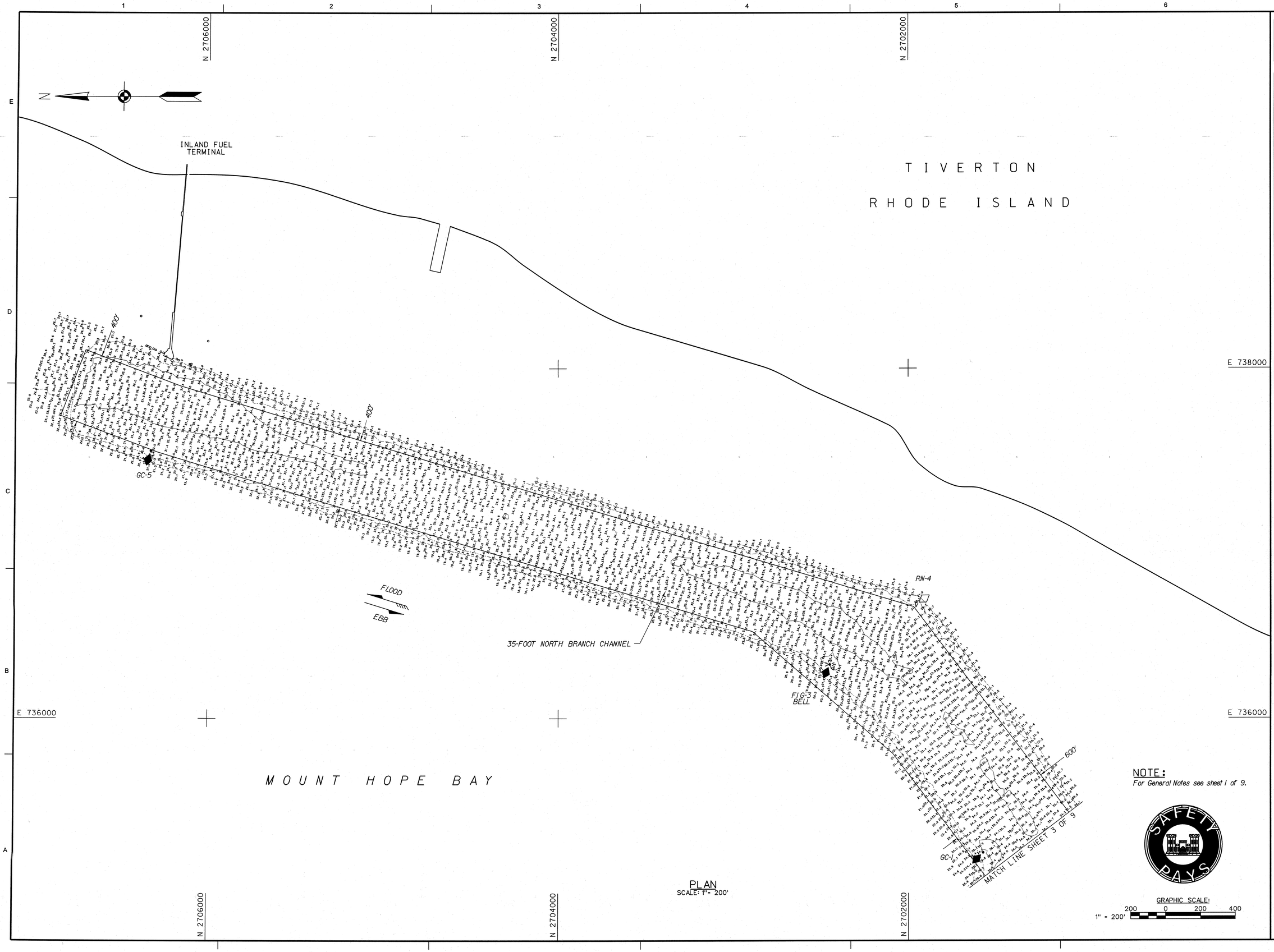
U.S. ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
CONCORD, MASSACHUSETTS
www.nae.usace.army.mil

REVIEWED BY: Chief, Chief Survey Section
SUBMITTED BY: Chief, Survey Section
DATE: 8/22/2013
DWN BY: AEB
CKD BY: SWK
DESIGN FILE: FLRHSP3.DGN
DRAWING CODE: FLR-283
PLOT SCALE: 1" = 200'
PLOT DATE: 8/22/2013
SIZE: ANSI F
FILE NAME: FLR283V103.S03

FALL RIVER HARBOR
RHODE ISLAND AND MASSACHUSETTS
CONDITION SURVEY

35-FOOT CHANNELS AND TURNING BASIN
30-FOOT CHANNELS AND
25-FOOT ANCHORAGE

SHEET IDENTIFICATION
V-103
SHEET 3 OF 9



PLAN
SCALE: 1"= 200'

NOTE:
For General Notes see sheet 1 of 9.

GRAPHIC SCALE:
1" = 200'
200 0 200 400

US Army Corps of Engineers®
New England District

MARK	DESCRIPTION	DATE	APPR

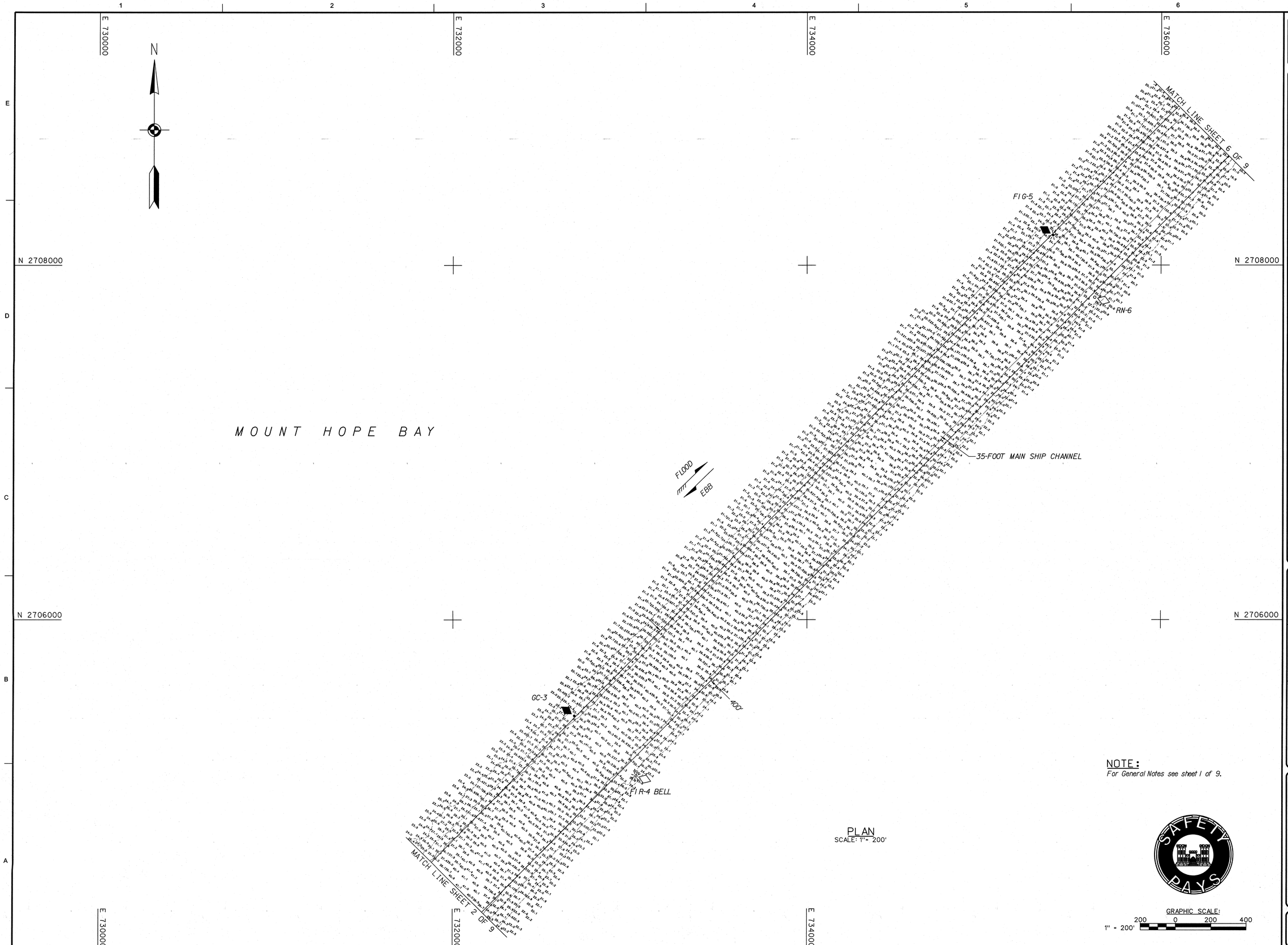
MARK	DESCRIPTION	DATE	APPR

U.S. ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
CONCORD, MASSACHUSETTS
www.nae.usace.army.mil

REVIEWED BY: Jeffrey W. Peterson
Asst. Chief, Survey Section
SUBMITTED BY: Chief, Survey Section
PLOT SCALE: 1" = 200'
PLOT DATE: 8/22/2013
SIZE: ANSI F
FILE NAME: FLR2B3V104.S04
DATE: 8/22/2013
DWN BY: AEB
CKD BY: SWK
DESIGN FILE: FLRHSP3.DGN
DRAWING CODE: FLR-283

FALL RIVER HARBOR
RHODE ISLAND AND MASSACHUSETTS
CONDITION SURVEY
35-FOOT CHANNELS AND TURNING BASIN
30-FOOT CHANNELS AND
25-FOOT ANCHORAGE

SHEET IDENTIFICATION
V-104
SHEET 4 OF 9



PLAN
SCALE: 1" = 200'

NOTE:
For General Notes see sheet 1 of 9.

GRAPHIC SCALE:
1" = 200'
200 0 200 400

US Army Corps of Engineers®
New England District

MARK	DESCRIPTION	DATE	APPR

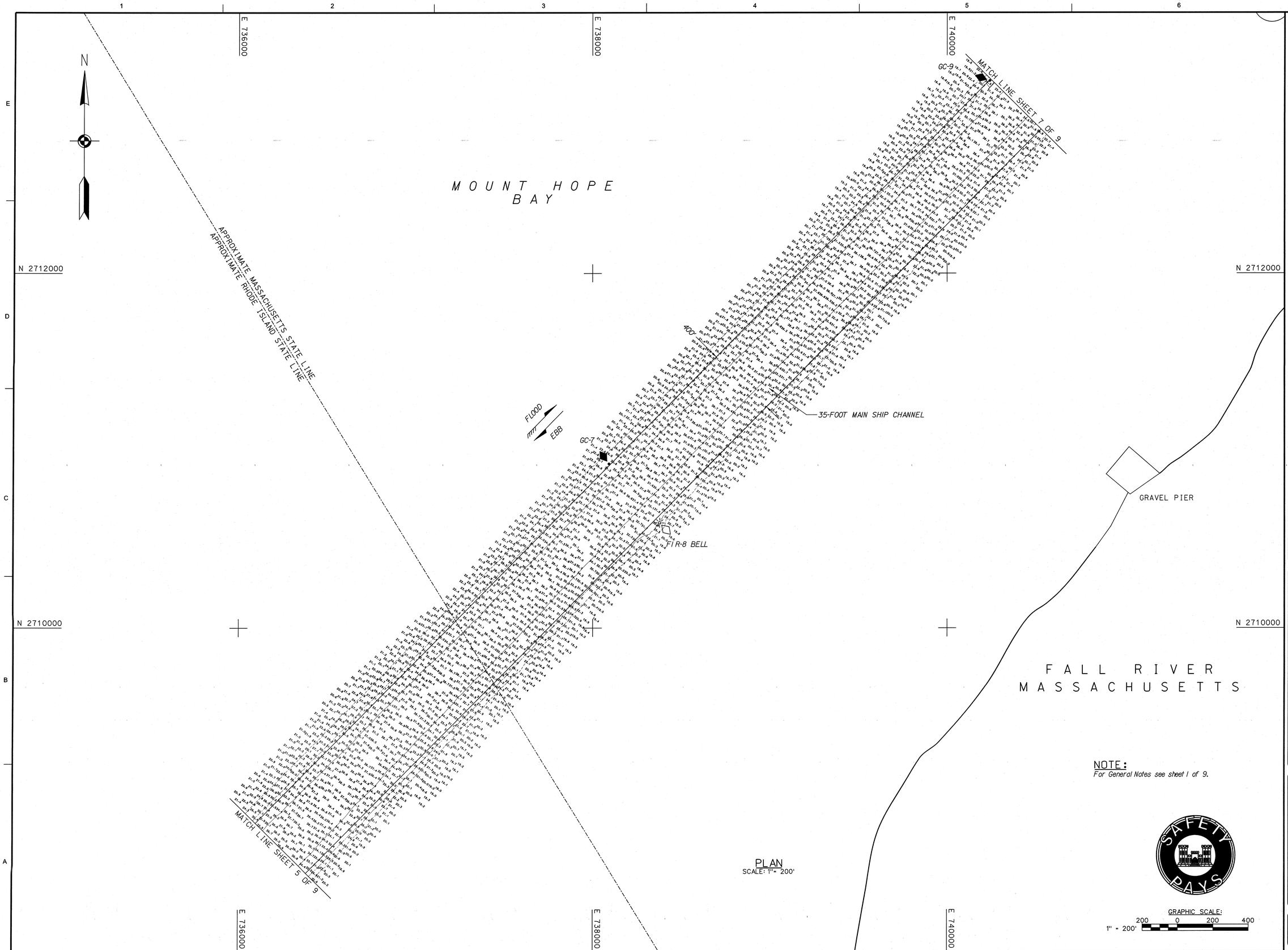
MARK	DESCRIPTION	DATE	APPR

U.S. ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
CONCORD, MASSACHUSETTS
www.nae.usace.army.mil

REVIEWED BY: Chief, Survey Section
SUBMITTED BY: Chief, Survey Section
PLOT SCALE: 1" = 200'
PLOT DATE: 8/22/2013
SIZE: ANSI F
FILE NAME: FLR283V105.S05
DATE: 8/22/2013
DWN BY: AEB
CKD BY: SWK
DESIGN FILE: FLRHSP3.DGN
DRAWING CODE: FLR-283

FALL RIVER HARBOR
RHODE ISLAND AND MASSACHUSETTS
CONDITION SURVEY
35-FOOT CHANNELS AND TURNING BASIN
30-FOOT CHANNELS AND
25-FOOT ANCHORAGE

SHEET IDENTIFICATION
V-105
SHEET 5 OF 9



PLAN
SCALE: 1" = 200'

NOTE:
For General Notes see sheet 1 of 9.

GRAPHIC SCALE:
1" = 200'
200 0 200 400

US Army Corps of Engineers®
New England District

MARK	DESCRIPTION	DATE	APPR

MARK	DESCRIPTION	DATE	APPR

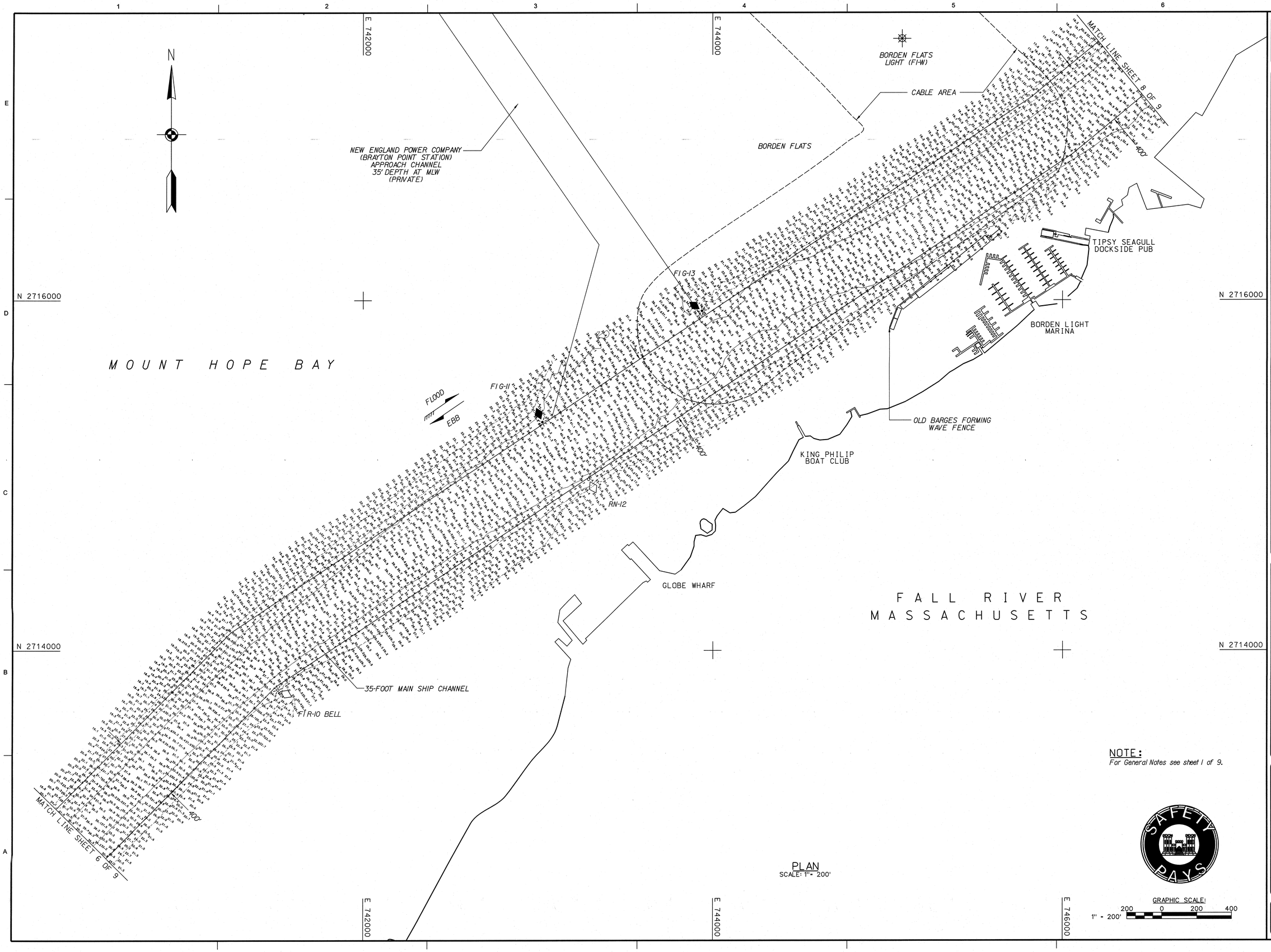
U.S. ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
CONCORD, MASSACHUSETTS
www.nae.usace.army.mil

REVIEWED BY: Jeffrey W. Paxton, Asst. Chief, Survey Section
SUBMITTED BY: Michael M. Murray, Chief, Survey Section
PLOT SCALE: 1" = 200'
PLOT DATE: 8/22/2013
SIZE: ANSI F
FILE NAME: FLR283V106.S06
DATE: 8/22/2013
DWN BY: AEB
CKD BY: SWK
DESIGN FILE: FLRHSP3.DGN
DRAWING CODE: FLR-283

FALL RIVER HARBOR
RHODE ISLAND AND MASSACHUSETTS
CONDITION SURVEY

35-FOOT CHANNELS AND TURNING BASIN
30-FOOT CHANNELS AND
25-FOOT ANCHORAGE

SHEET IDENTIFICATION
V-106
SHEET 6 OF 9



NOTE:
For General Notes see sheet 1 of 9.

PLAN
SCALE: 1" = 200'

GRAPHIC SCALE:
1" = 200'
200 0 200 400

US Army Corps of Engineers®
New England District

MARK	DESCRIPTION	DATE	APPR

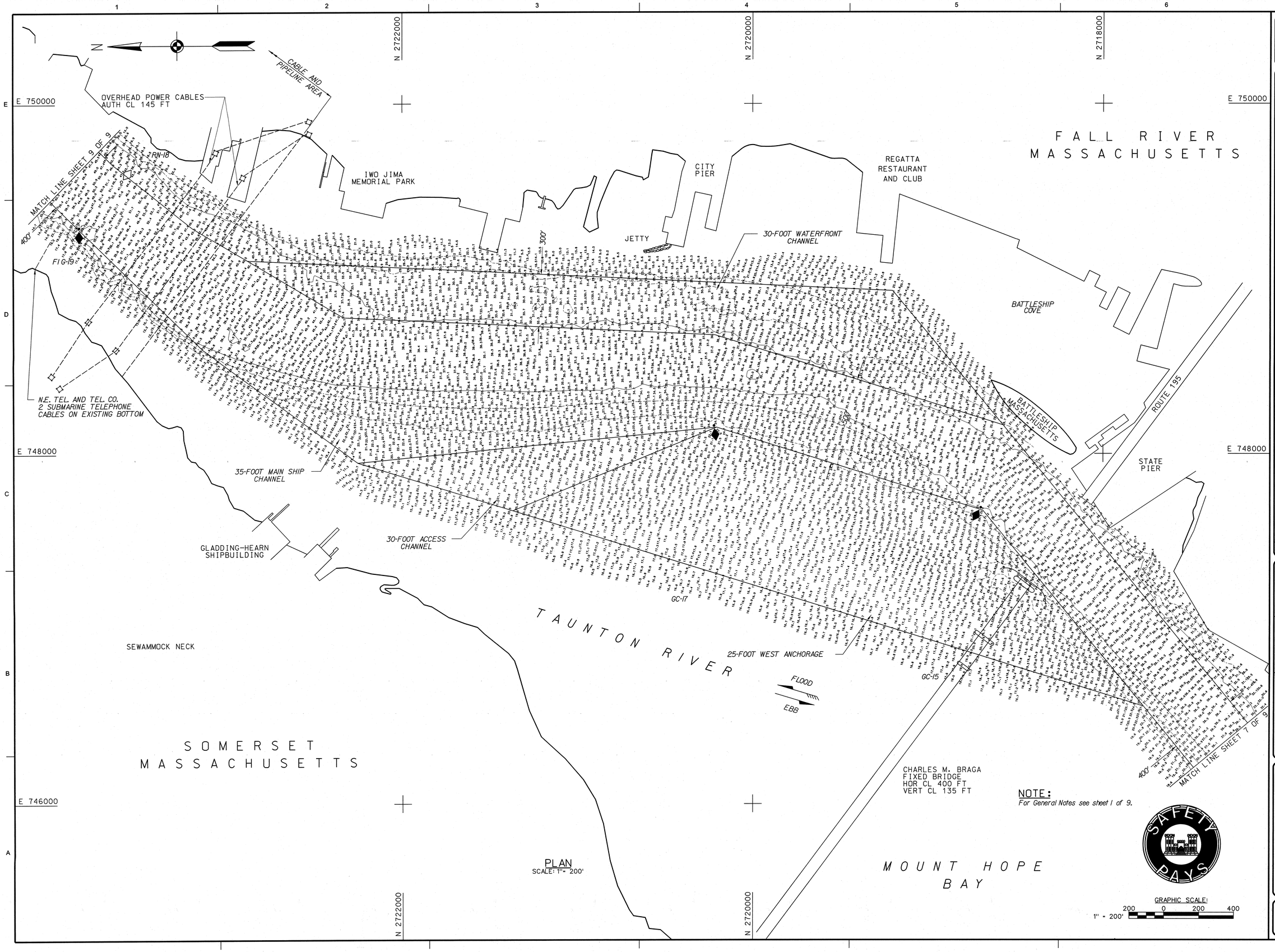
MARK	DESCRIPTION	DATE	APPR

U.S. ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
CONCORD, MASSACHUSETTS
www.nae.usace.army.mil

REVIEWED BY: Mark Chief, Survey Section
SUBMITTED BY: Chief, Survey Section
PLOT SCALE: 1" = 200'
PLOT DATE: 8/22/2013
FILE NAME: FLR2833V107.S07
SIZE: ANSI F
DATE: 8/22/2013
DWN BY: AEB
CKD BY: SWK
DESIGN FILE: FLRHSP3.DGN
DRAWING CODE: FLR-283

FALL RIVER HARBOR
RHODE ISLAND AND MASSACHUSETTS
CONDITION SURVEY
35-FOOT CHANNELS AND TURNING BASIN
30-FOOT CHANNELS AND
25-FOOT ANCHORAGE

SHEET IDENTIFICATION
V-107
SHEET 7 OF 9



PLAN
SCALE: 1"= 200'

NOTE:
For General Notes see sheet 1 of 9.

US Army Corps of Engineers®
New England District

MARK	DESCRIPTION	DATE	APPR.

MARK	DESCRIPTION	DATE	APPR.

DATE: 8/22/2013
DWN BY:
CKD BY:
DATE:
DESIGN FILE: FLRIS09.DGN
DRAWING CODE: FLR-09
PLOT DATE: 10/28/2013
PLOT SCALE: 1:1
FILE NAME: FLRIS09V108.dgn
SIZE: ANSI F

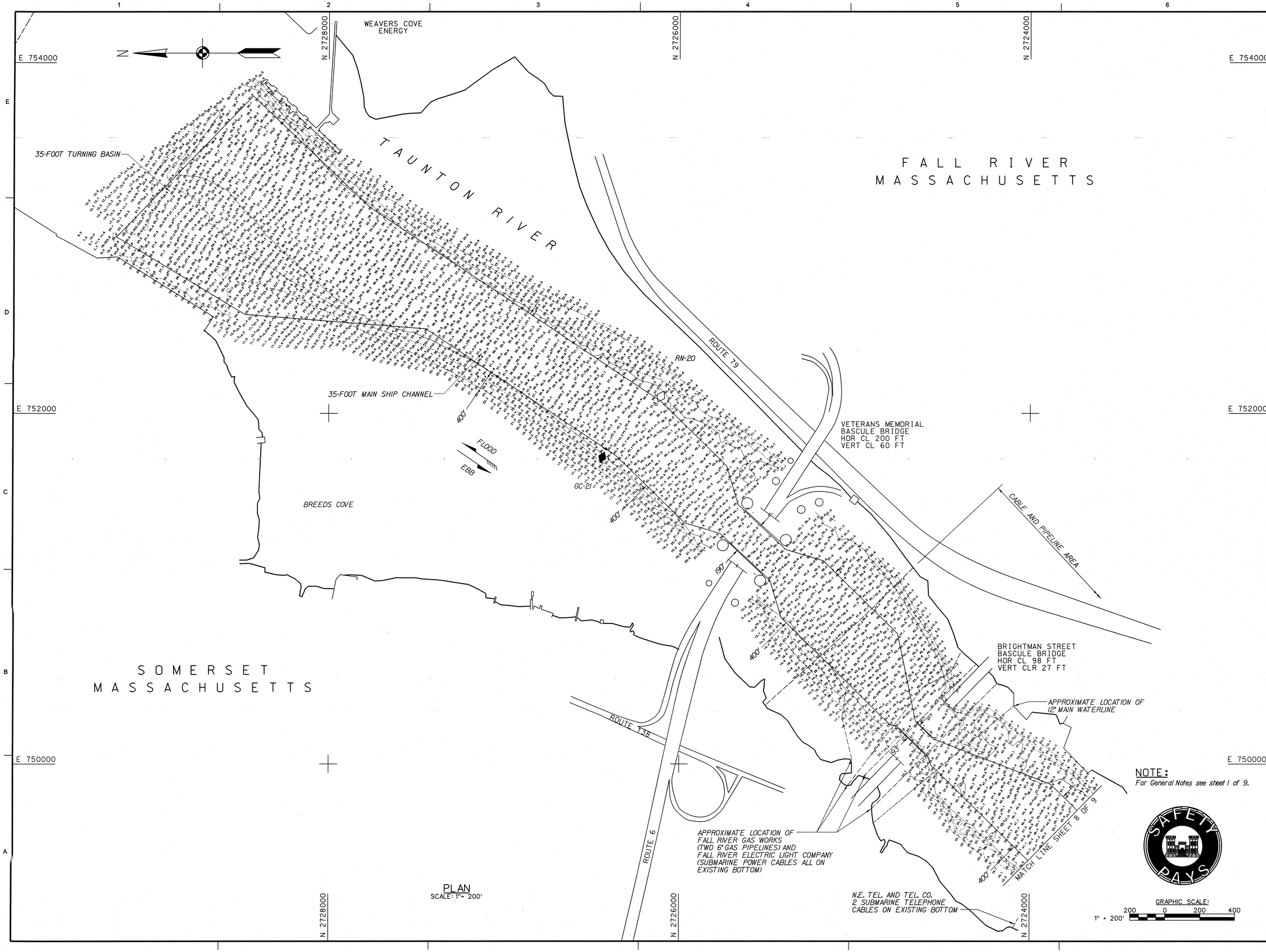
REVIEWED BY: Kent Clark, Survey Section
SUBMITTED BY: Chad Spooner, Survey Section

U.S. ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
CONCORD, MASSACHUSETTS
www.nae.usace.army.mil

FALL RIVER HARBOR
RHODE ISLAND AND MASSACHUSETTS
CONDITION SURVEY

35-FOOT CHANNELS AND TURNING BASIN
30-FOOT CHANNELS AND
25-FOOT ANCHORAGE

SHEET IDENTIFICATION
V-108
SHEET 8 OF 9



PLAN
SCALE: 1" = 200'

NOTE:
For General Notes see sheet 1 of 9.

US Army Corps of Engineers®
New England District

MARK	DESCRIPTION	DATE	APPR

MARK	DESCRIPTION	DATE	APPR

U.S. ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
CONCORD, MASSACHUSETTS
www.nae.usace.army.mil

REVIEWED BY: Anthony W. Paxton, Asst. Chief, Survey Section
SUBMITTED BY: Chief, Survey Section
PLOT SCALE: 1" = 200'
PLOT DATE: 8/22/2013
SIZE: ANSI F
FILE NAME: FLR2E3V109.S09
DATE: 8/22/2013
DWN BY: AEB
CKD BY: SWK
DESIGN FILE: FLRHSP3.DGN
DRAWING CODE: FLR-283

FALL RIVER HARBOR
RHODE ISLAND AND MASSACHUSETTS
CONDITION SURVEY

35-FOOT CHANNELS AND TURNING BASIN
30-FOOT CHANNELS AND
25-FOOT ANCHORAGE

SHEET IDENTIFICATION
V-109
SHEET 9 OF 9