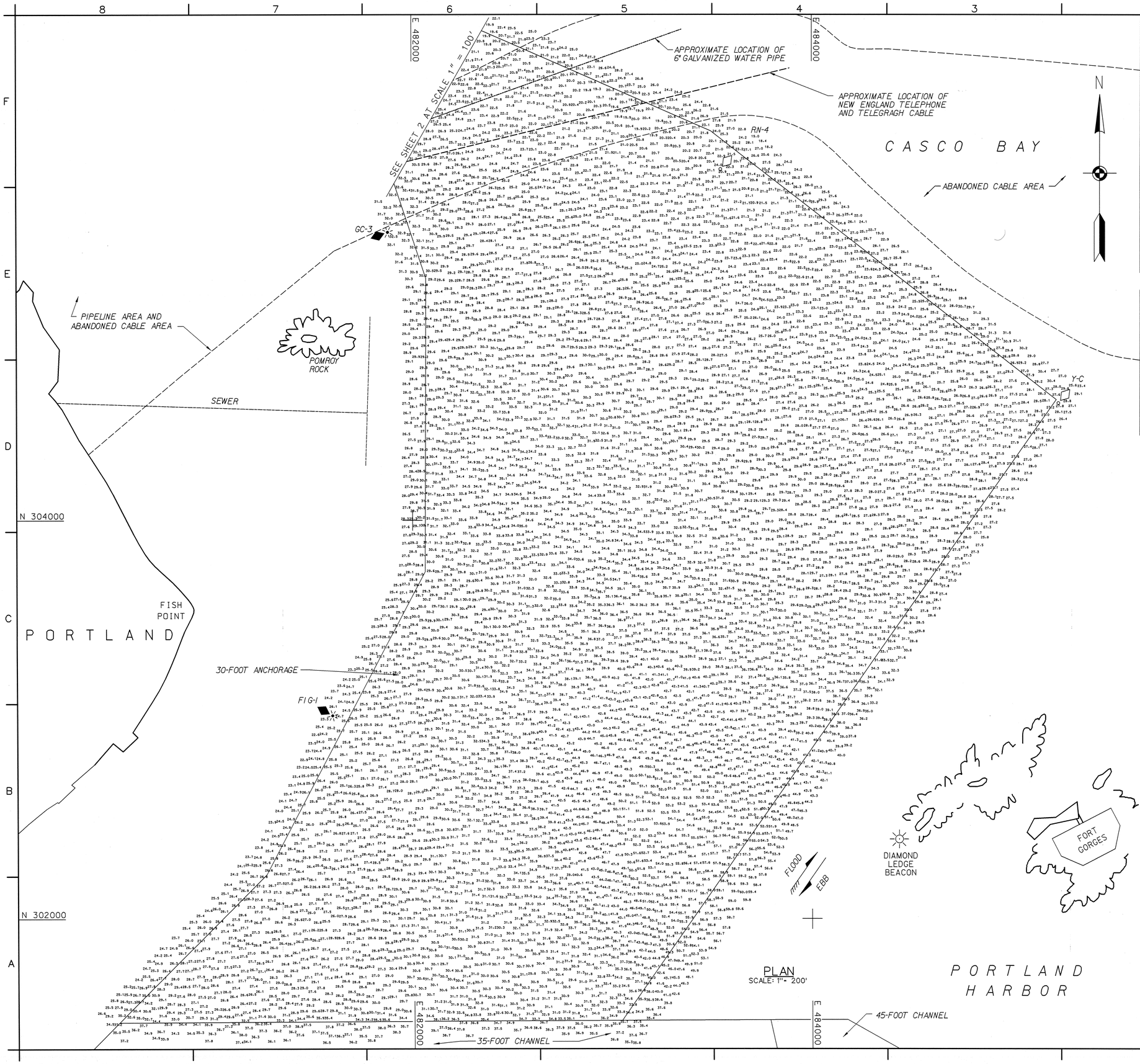
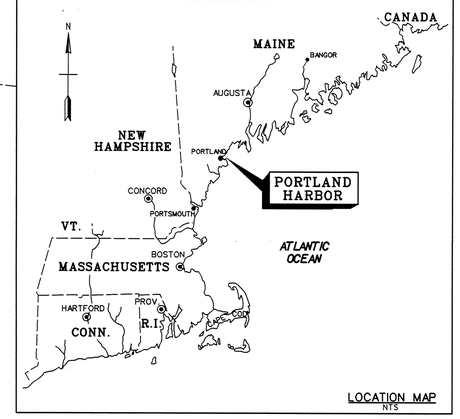


PLAN
SCALE: 1" = 200'



LOCATION MAP
NTS

INDEX OF NAVIGATION AIDS			
NO.	DATE	STATE PLANE COORDINATES	GEOGRAPHIC POSITION
Y-C	03/24/06	N 304588.75 E 485235.30	43° - 40′ - 08.4″N 70° - 13′ - 20.9″W
FI G-1	03/24/06	N 303019.55 E 481593.61	43° - 39′ - 52.9″N 70° - 14′ - 10.4″W
RN-4	03/24/06	N 305761.74 E 483545.13	43° - 40′ - 20.0″N 70° - 13′ - 43.9″W
GC-3	03/24/06	N 305445.96 E 481878.67	43° - 40′ - 16.9″N 70° - 14′ - 06.6″W
FI G-5	03/24/06	N 306679.03 E 480383.71	43° - 40′ - 29.0″N 70° - 14′ - 26.9″W
RN-6	03/24/06	N 307412.09 E 480146.14	43° - 40′ - 36.3″N 70° - 14′ - 30.2″W

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 No. 13292. 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: BM Tidal 2 USE STA 84 is a drill hole in the top of a water table between the bases of two stone columns at the northeast side of the entrance to the U.S. Custom House located at the intersection of Commercial and Pearl Streets, 65.6 feet (20.0 m) northwest of the centerline of Commercial Street, 41.0 feet (12.5 m) northeast of the southwest corner of the Custom House, 28.5 feet (8.7 m) southwest of the northeast corner of the Custom House, and 1.0 foot (0.3 m) above the sidewalk.
Elevation is 18.58 feet above MLLW.
4. Bench Mark Data: BM Ramp (2000) is the center of a chiseled square on the northeast corner of concrete ramp to a wooden float between a double boat ramp at the northwest corner of lower Fort Allen Park accessible from East Promenade.
Elevation is 15.76 feet above MLLW.
5. Coordinates shown are based on the Transverse Mercator Grid System for the State of Maine (West Zone 1802) and NAD 1927.
6. Survey was performed using a Reson 8124 multibeam echosounder system with a 200 kHz transducer. Vessel positioning was obtained utilizing a Trimble 4000 SSE GPS Receiver with the U.S. Coast Guard Beacon System.
7. The sounding information shown on these maps represents the SHOALEST soundings of those obtained from hydrographic surveys conducted during March 2006.
8. 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.
9. 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.
10. Field Books: R&H 4460 and 5075
Refer to Survey No. 06-813

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

US Army Corps of Engineers
New England District

Symbol	Description	Date	Appr.	Symbol	Description	Date	Appr.

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CONCORD, MASSACHUSETTS

Surveyed By: Jeffrey W. Preston
Plotted By: Stephen W. Kelley
Survey Section
Asst. Chief, Survey Section

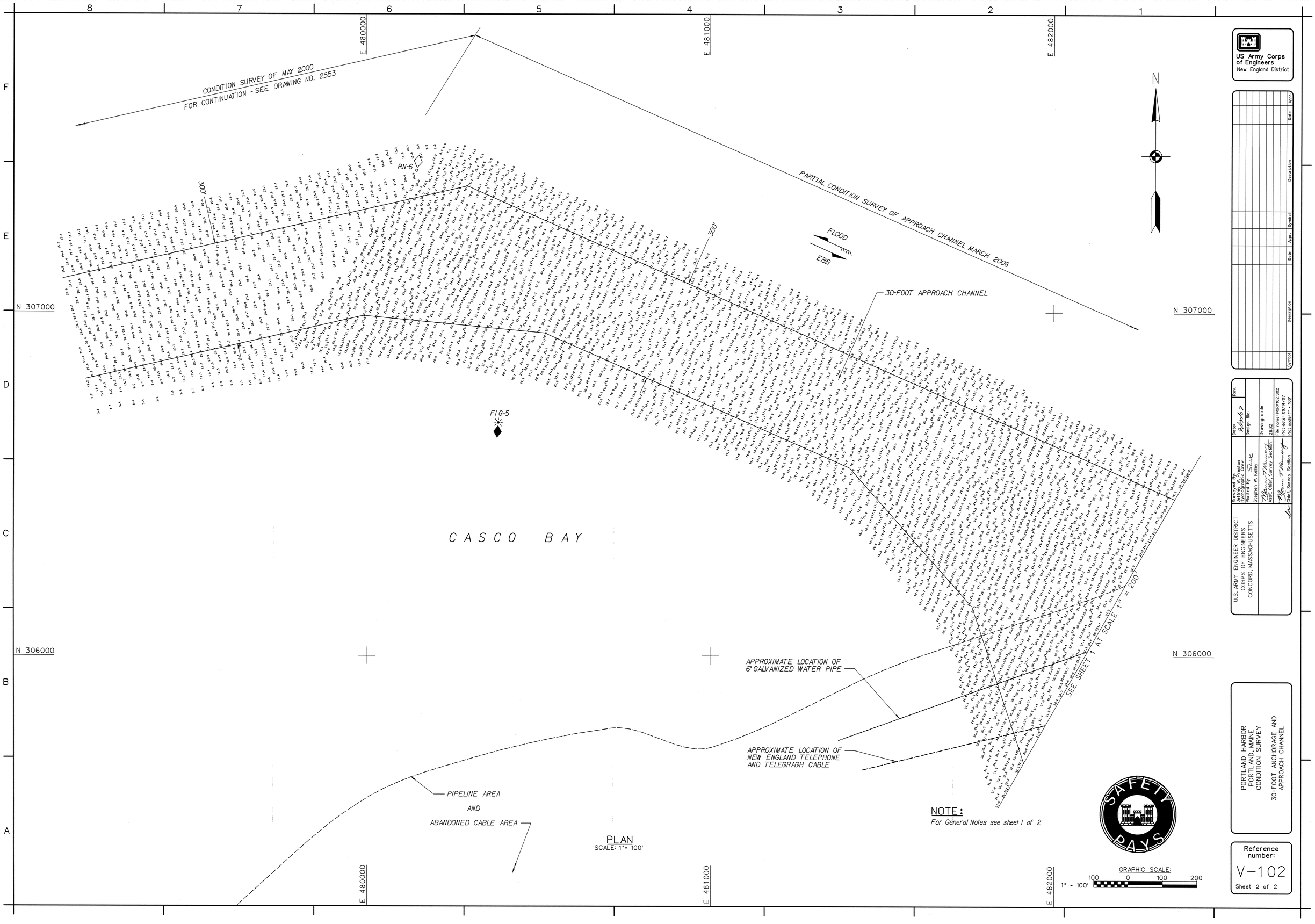
Date: 9/14/07
Design file:
Drawing code: 2632
File name: PORV01S01
Plot date: 09/14/07
Plot scale: 1" = 200'

Rev.

PORTLAND HARBOR
PORTLAND, MAINE
CONDITION SURVEY

30-FOOT ANCHORAGE AND APPROACH CHANNEL

Reference number:
V-101
Sheet 1 of 2



NOTE:
For General Notes see sheet 1 of 2

PLAN
SCALE: 1" = 100'

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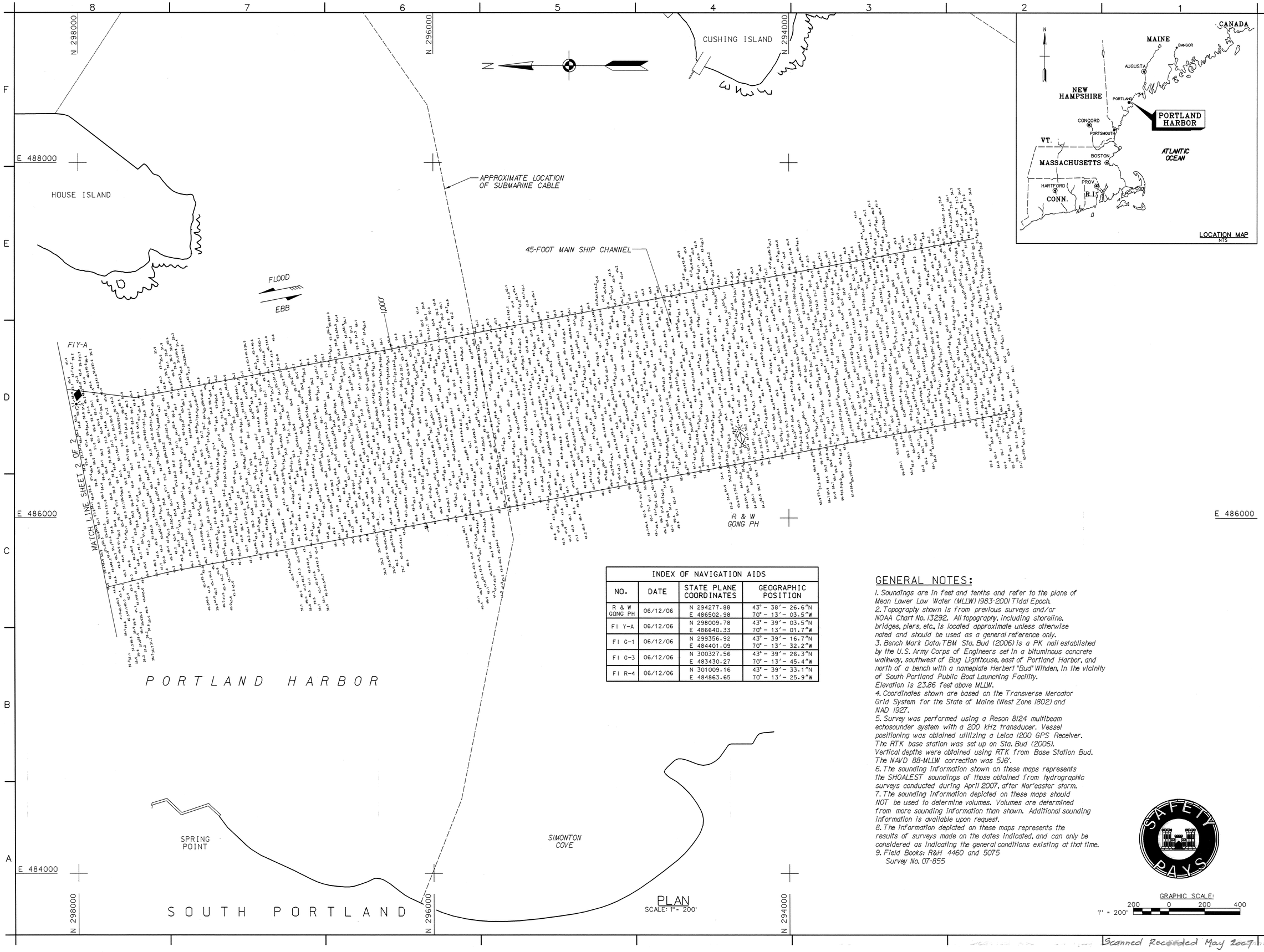

PLAN
SCALE: 1" = 200'

INDEX OF NAVIGATION AIDS			
NO.	DATE	STATE PLANE COORDINATES	GEOGRAPHIC POSITION
R & W GONG PH	06/12/06	N 294277.88 E 486502.98	43° - 38′ - 26.6″N 70° - 13′ - 03.5″W
FI Y-A	06/12/06	N 298009.78 E 486640.33	43° - 39′ - 03.5″N 70° - 13′ - 01.7″W
FI G-1	06/12/06	N 299356.92 E 484401.09	43° - 39′ - 16.7″N 70° - 13′ - 32.2″W
FI G-3	06/12/06	N 300327.56 E 483430.27	43° - 39′ - 26.3″N 70° - 13′ - 45.4″W
FI R-4	06/12/06	N 301009.16 E 484863.65	43° - 39′ - 33.1″N 70° - 13′ - 25.9″W

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 No. 13292. 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: TBM Sta. Bud (2006) is a PK nail established by the U.S. Army Corps of Engineers set in a bituminous concrete walkway, southwest of Bug Lighthouse, east of Portland Harbor, and north of a bench with a nameplate Herbert "Bud" Wihden, in the vicinity of South Portland Public Boat Launching Facility. Elevation is 23.86 feet above MLLW.
4. Coordinates shown are based on the Transverse Mercator Grid System for the State of Maine (West Zone 1802) and NAD 1927.
5. Survey was performed using a Reson 8124 multibeam echosounder system with a 200 kHz transducer. Vessel positioning was obtained utilizing a Leica 1200 GPS Receiver. The RTK base station was set up on Sta. Bud (2006). Vertical depths were obtained using RTK from Base Station Bud. The NAVD 88-MLLW correction was 5.16′.
6. The sounding information shown on these maps represents the SHOALEST soundings of those obtained from hydrographic surveys conducted during April 2007, after Nor'easter storm.
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 4460 and 5075
   Survey No. 07-855

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

US Army Corps of Engineers
New England District

Symbol	Description	Date	Appr.	Symbol	Description	Date	Appr.

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CONCORD, MASSACHUSETTS

Surveyed By: J.W. Preston
Hydrographic Crew
Plotted By: V.J. Gardenhion
Date: 5/5/07
Design File:
Drawing code: 2842
Project Number: P061V03.501
Plot date: 05/09/2007
Plot scale: 1" = 200'
Asst. Chief, Survey Section
Chief, Survey Section

PORTLAND HARBOR
PORTLAND, MAINE
CONDITION SURVEY

45-FOOT CHANNEL

Reference number:
V-101
Sheet 1 of 2

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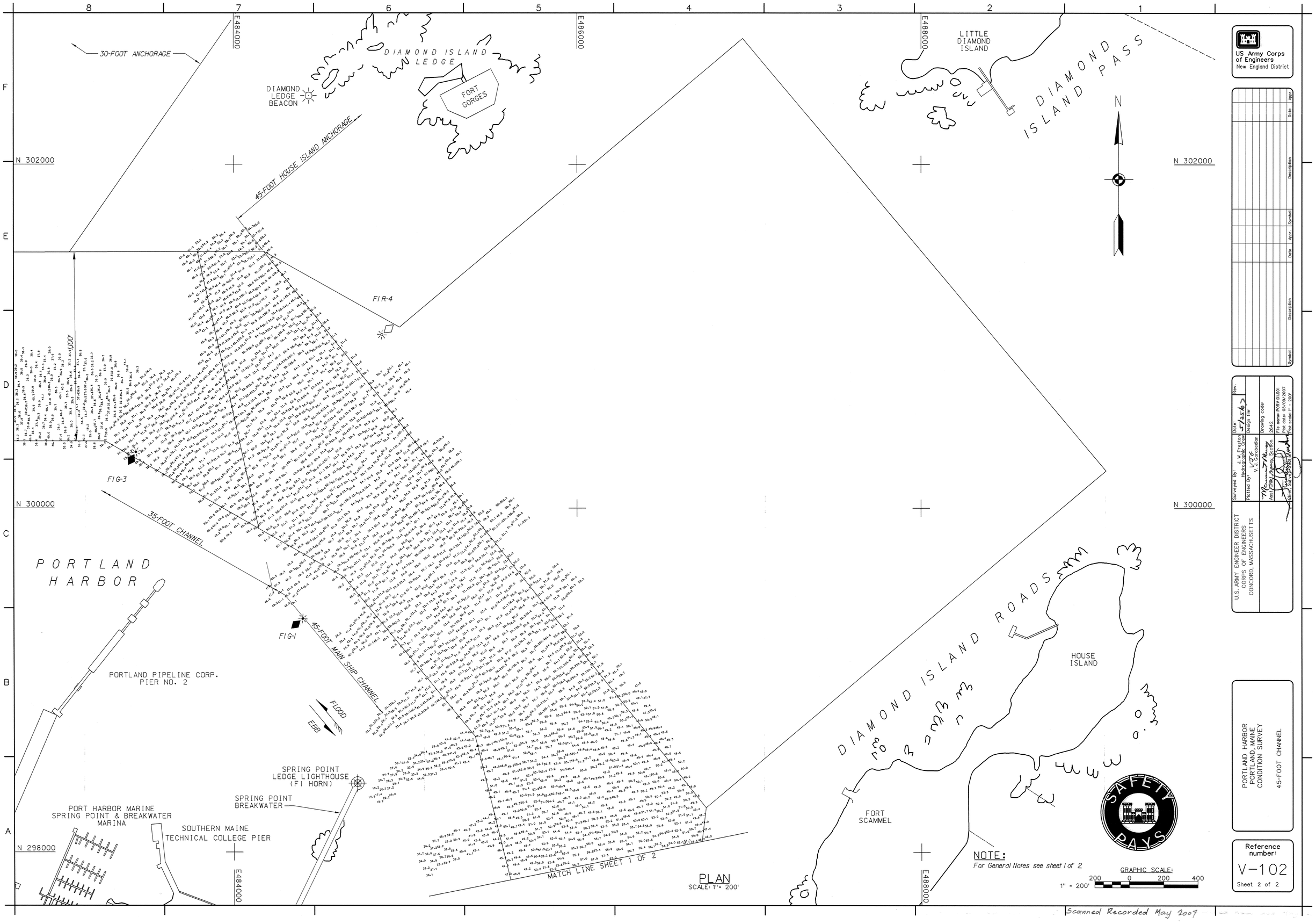

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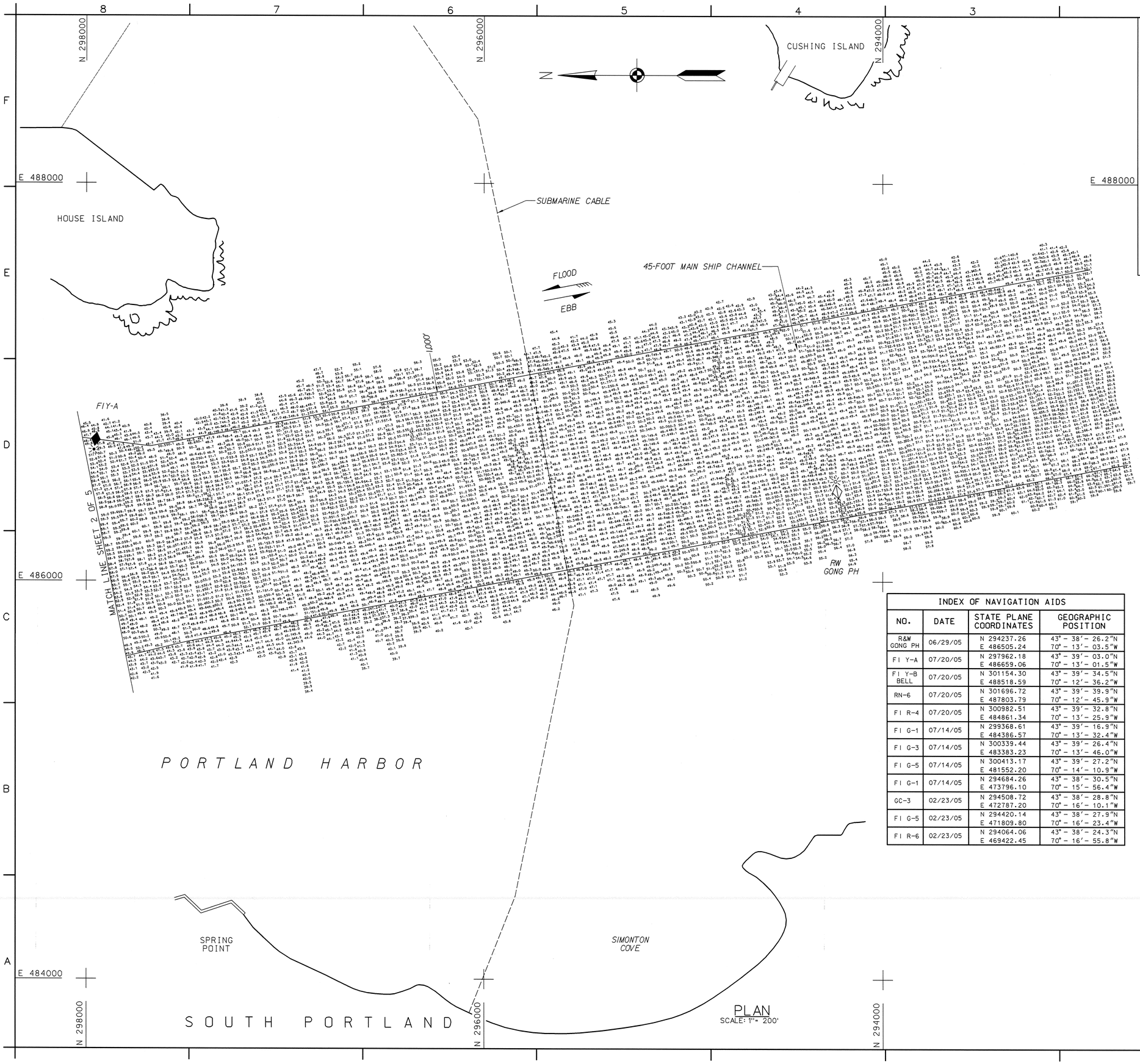
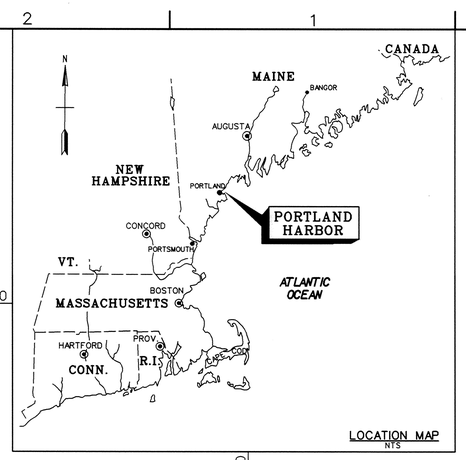


PLAN
SCALE: 1" = 200'



LOCATION MAP
NTS

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 No. 13292. 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: BM 8417997 D (1979) is a standard NOS disk stamped "8417997 D 1979", set flush in the top of a seawall north of the end of the pier, 40.6 feet (12.4 m), northwest of the Bench Mark 2, 25.3 feet (7.7 m) southeast of the centerline of the paved road, 12.3 feet (3.8 m) northwest of the shoreline and 6.8 feet (2.1 m) west of a 1 foot square block of granite located in the seawall. This bench used for 45-Foot Channel and Anchorage.
Elevation is 17.49 feet above MLLW.
4. Bench Mark Data: BM "3 (1971) is a standard NOS disk stamped "No. 3 1971", set in the granite seawall located along the northeast side of Commercial Street north of the Bath Iron Works Pier, 58.5 feet (17.83 m) northeast of the northeast corner formed by the pier and seawall intersection, 20.0 feet (6.1 m) southwest of the northwest corner formed by the edge of the seawall and a projection out from the seawall, and 1 foot (0.3 m) east of the concrete parking lot barrier. This benchmark used for 35-Foot Channel seaward of Portland Casco Bay Bridge.
Elevation is 15.53 feet above MLLW.
5. Bench Mark Data: BM 8418268 C (1979) is a standard NOS disk stamped "8418268 C 1979" set flush in the northwest corner of a concrete sewer tank holding bin, located in the northeast corner of the depot, 41.5 feet (12.7 m) northwest of the fire hydrant adjacent to the bin, 35.0 feet (10.7 m) west of the shoreline 8.9 feet (2.7 m) east of the northwest corner of the bin, and 0.5 foot west of the northeast corner of the bin. This benchmark used for 35-Foot Channel upstream of Portland Casco Bay Bridge.
Elevation is 15.69 feet above MLLW.
6. Coordinates shown are based on the Transverse Mercator Grid System for the State of Maine (West Zone 1802) & NAD 1927.
7. The sounding information shown on these maps represents the SHOALEST soundings of those obtained from hydrographic surveys conducted during February, May, June and July 2005
8. 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.
9. 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.
10. Field Book: R&H 4460
Depthsounder Rolls: 05-781/01-19

INDEX OF NAVIGATION AIDS

NO.	DATE	STATE PLANE COORDINATES	GEOGRAPHIC POSITION
R&W GONG PH	06/29/05	N 294237.26 E 486505.24	43° - 38′ - 26.2″N 70° - 13′ - 03.5″W
FI Y-A	07/20/05	N 297962.18 E 486659.06	43° - 39′ - 03.0″N 70° - 13′ - 01.5″W
FI Y-B BELL	07/20/05	N 301154.30 E 488518.59	43° - 39′ - 34.5″N 70° - 12′ - 36.2″W
RN-6	07/20/05	N 301696.72 E 487803.79	43° - 39′ - 39.9″N 70° - 12′ - 45.9″W
FI R-4	07/20/05	N 300982.51 E 484861.34	43° - 39′ - 32.8″N 70° - 13′ - 25.9″W
FI G-1	07/14/05	N 299368.61 E 484386.57	43° - 39′ - 16.9″N 70° - 13′ - 32.4″W
FI G-3	07/14/05	N 300339.44 E 483383.23	43° - 39′ - 26.4″N 70° - 13′ - 46.0″W
FI G-5	07/14/05	N 300413.17 E 481552.20	43° - 39′ - 27.2″N 70° - 14′ - 10.9″W
FI G-1	07/14/05	N 294684.26 E 473796.10	43° - 38′ - 30.5″N 70° - 15′ - 56.4″W
GC-3	02/23/05	N 294508.72 E 472787.20	43° - 38′ - 28.8″N 70° - 16′ - 10.1″W
FI G-5	02/23/05	N 294420.14 E 471809.80	43° - 38′ - 27.9″N 70° - 16′ - 23.4″W
FI R-6	02/23/05	N 294064.06 E 469422.45	43° - 38′ - 24.3″N 70° - 16′ - 55.8″W

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

US Army Corps of Engineers
New England District

Symbol	Description	Date	Appr.	Symbol	Description	Date	Appr.

Surveyed by: Paul O'Brien, Hydrographic Crew Member
Reduced by: Stephen W. Kelley
Date: 11/14/2005
Rev.
Drawing code: Design file:
File name: POR101.501
Plot date: 11/10/05
Plot scale: 1" = 200'
Chief, Survey Section

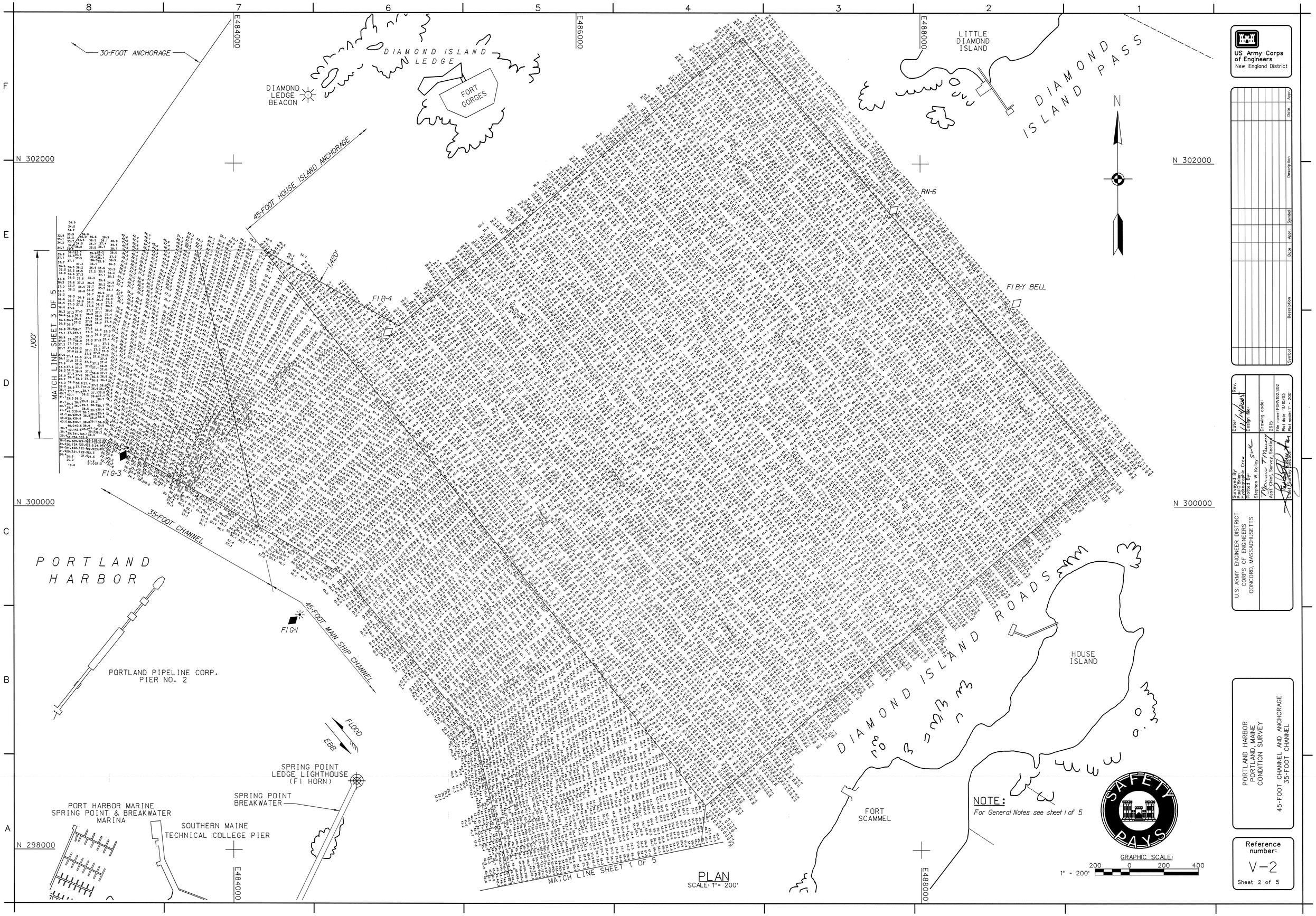
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CONCORD, MASSACHUSETTS

PORTLAND HARBOR
PORTLAND, MAINE
CONDITION SURVEY

45-FOOT CHANNEL AND ANCHORAGE
35-FOOT CHANNEL

Reference number:
V-1
Sheet 1 of 5

SAFETY PAYS



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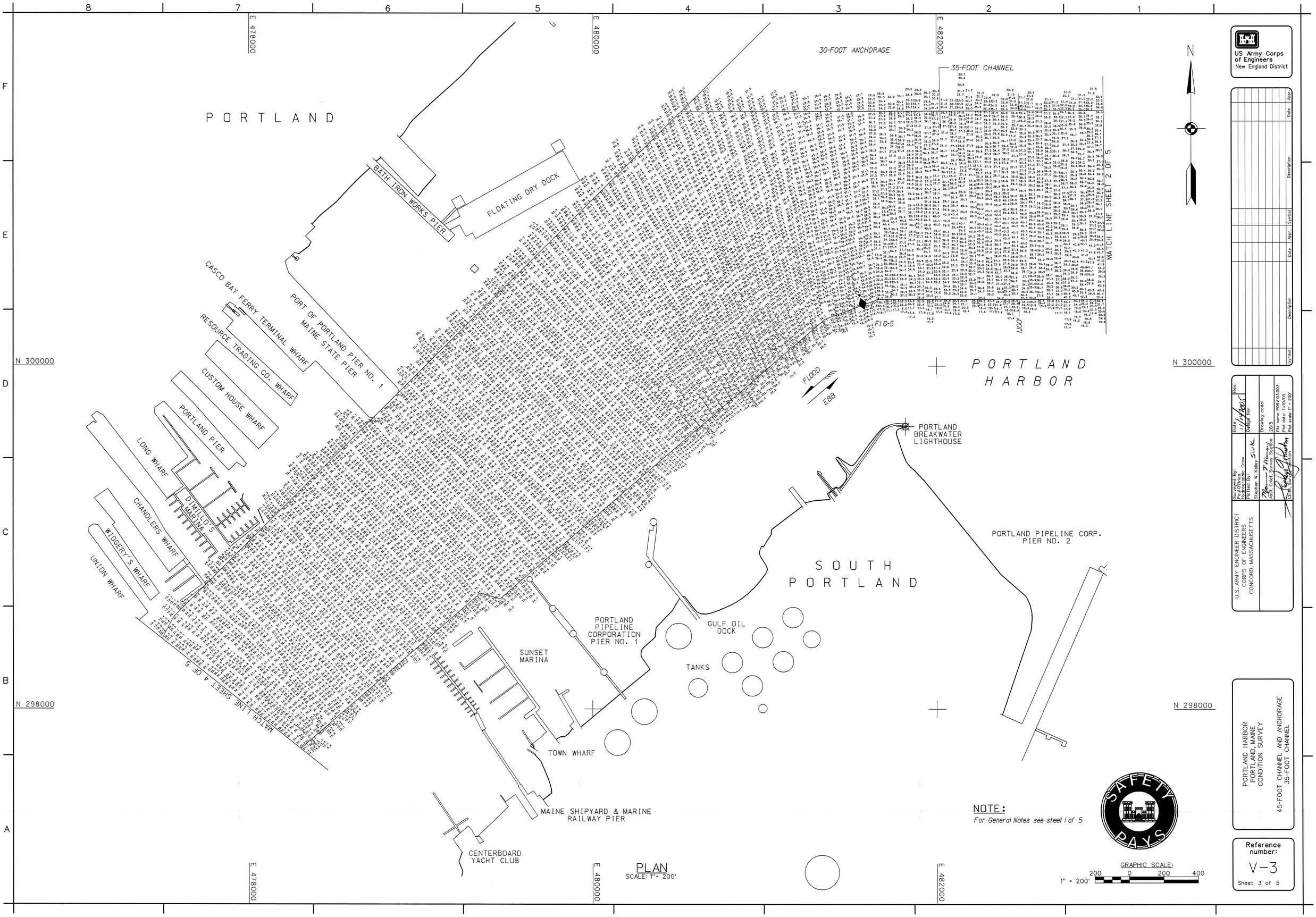

PLAN
SCALE: 1" = 200'

NOTE:
For General Notes see sheet 1 of 5

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

US Army Corps of Engineers
New England District

Symbol	Description	Date	Appr.

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CONCORD, MASSACHUSETTS

Surveyed By: Paul O'Brien, Hydrographic Crew
Plotted By: Stephen W. Kelley
Asst. Chief, Survey Section
Chief, Survey Section
Date: 11/14/2005
Drawing code: 2615
File name: PORV103.S03
Plot date: 11/10/05
Plot scale: 1" = 200'

PORTLAND HARBOR
PORTLAND, MAINE
CONDITION SURVEY
45-FOOT CHANNEL AND ANCHORAGE
35-FOOT CHANNEL

Reference number:
V-3
Sheet 3 of 5

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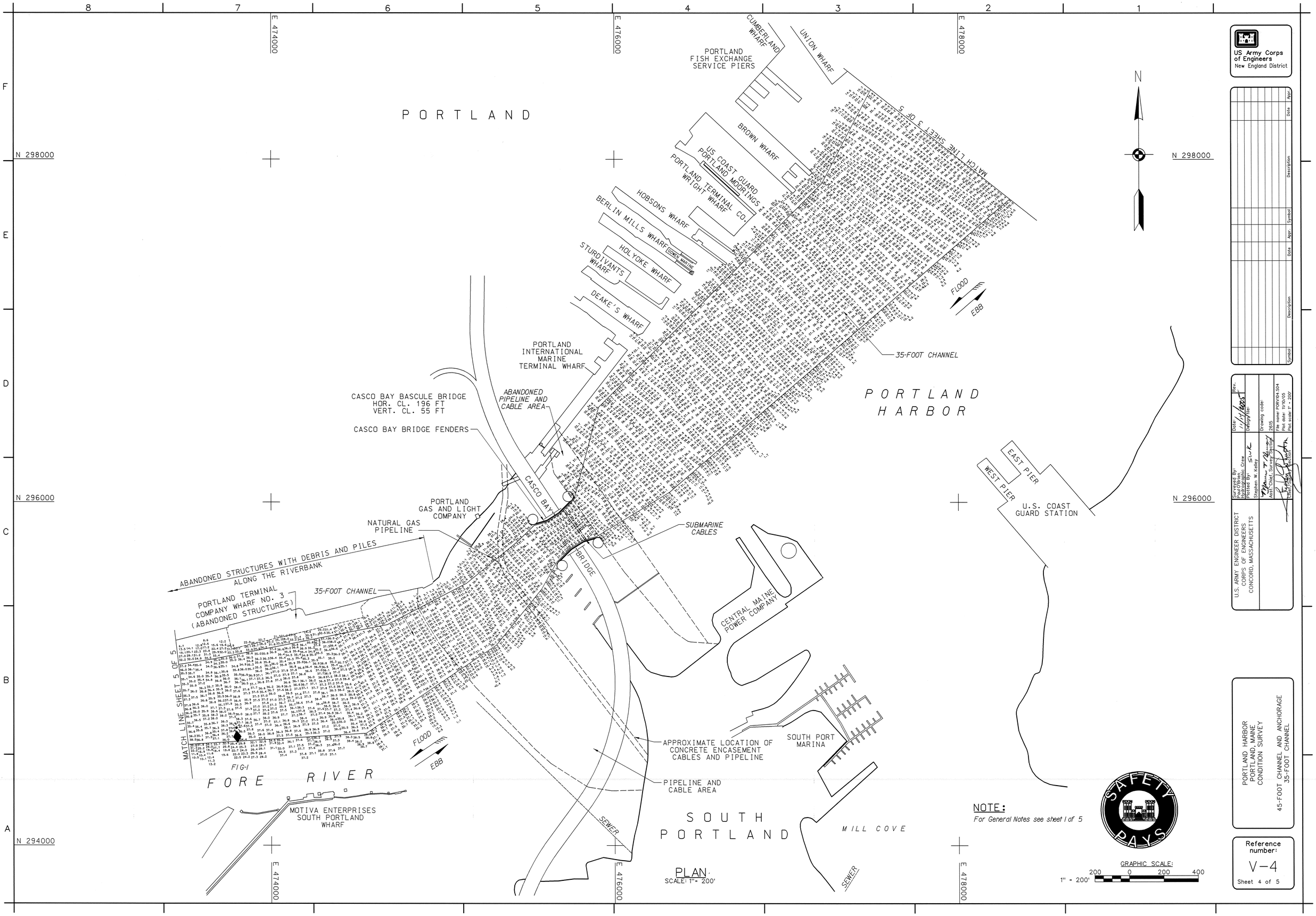

PLAN
SCALE: 1" = 200'

NOTE:
For General Notes see sheet 1 of 5

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

US Army Corps of Engineers
New England District

Symbol	Description	Date	Appr.	Symbol	Description	Date	Appr.

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CONCORD, MASSACHUSETTS

Surveyed by: Paul O'Brien, Hydrographic Crew
Plotted By: Stephen W. Kelley
Asst. Chief, Survey Section
Chief, Survey Section
Date: 11/14/2005
Rev.
Design file:
Drawing code: 2615
File name: PORV104.S04
Plot date: 11/10/05
Plot scale: 1" = 200'

PORTLAND HARBOR
PORTLAND, MAINE
CONDITION SURVEY

45-FOOT CHANNEL AND ANCHORAGE
35-FOOT CHANNEL

Reference number:
V-4
Sheet 4 of 5

SAFETY PAYS

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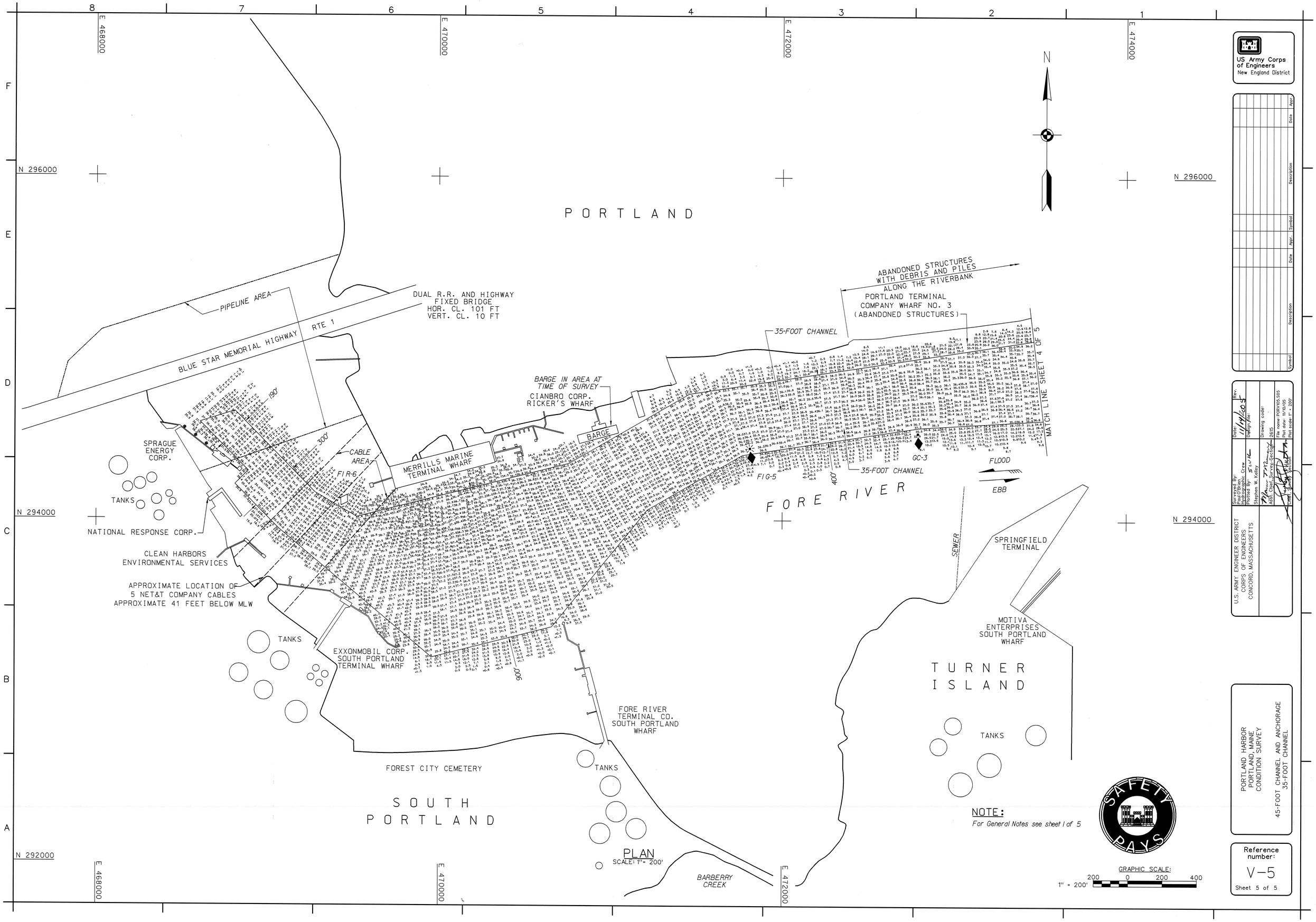

PLAN
SCALE: 1" = 200'

NOTE:
For General Notes see sheet 1 of 5

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

US Army Corps of Engineers
New England District

Symbol	Description	Date	Appr.	Symbol	Description	Date	Appr.

Surveyed By: Paul O'Brien, Crew
Plotted By: Stephen W. Kelley
Chief, Survey Section: Robert J. Smith
Date: 11/14/2005
Drawing code: 2615
File name: PORV105.S05
Plot date: 11/10/05
Plot scale: 1" = 200'
Rev:

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CONCORD, MASSACHUSETTS

PORTLAND HARBOR
PORTLAND, MAINE
CONDITION SURVEY

45-FOOT CHANNEL AND ANCHORAGE
35-FOOT CHANNEL

Reference number:
V-5
Sheet 5 of 5

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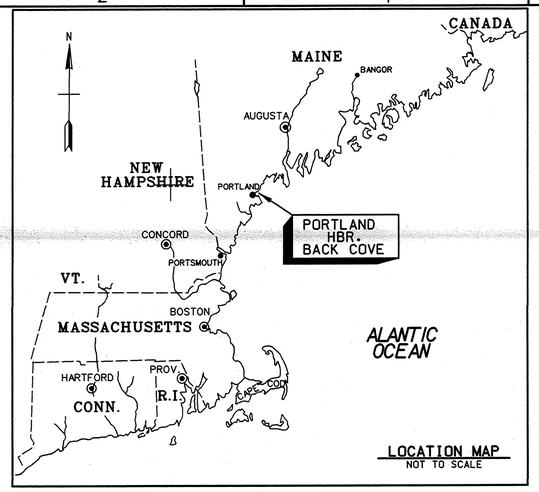
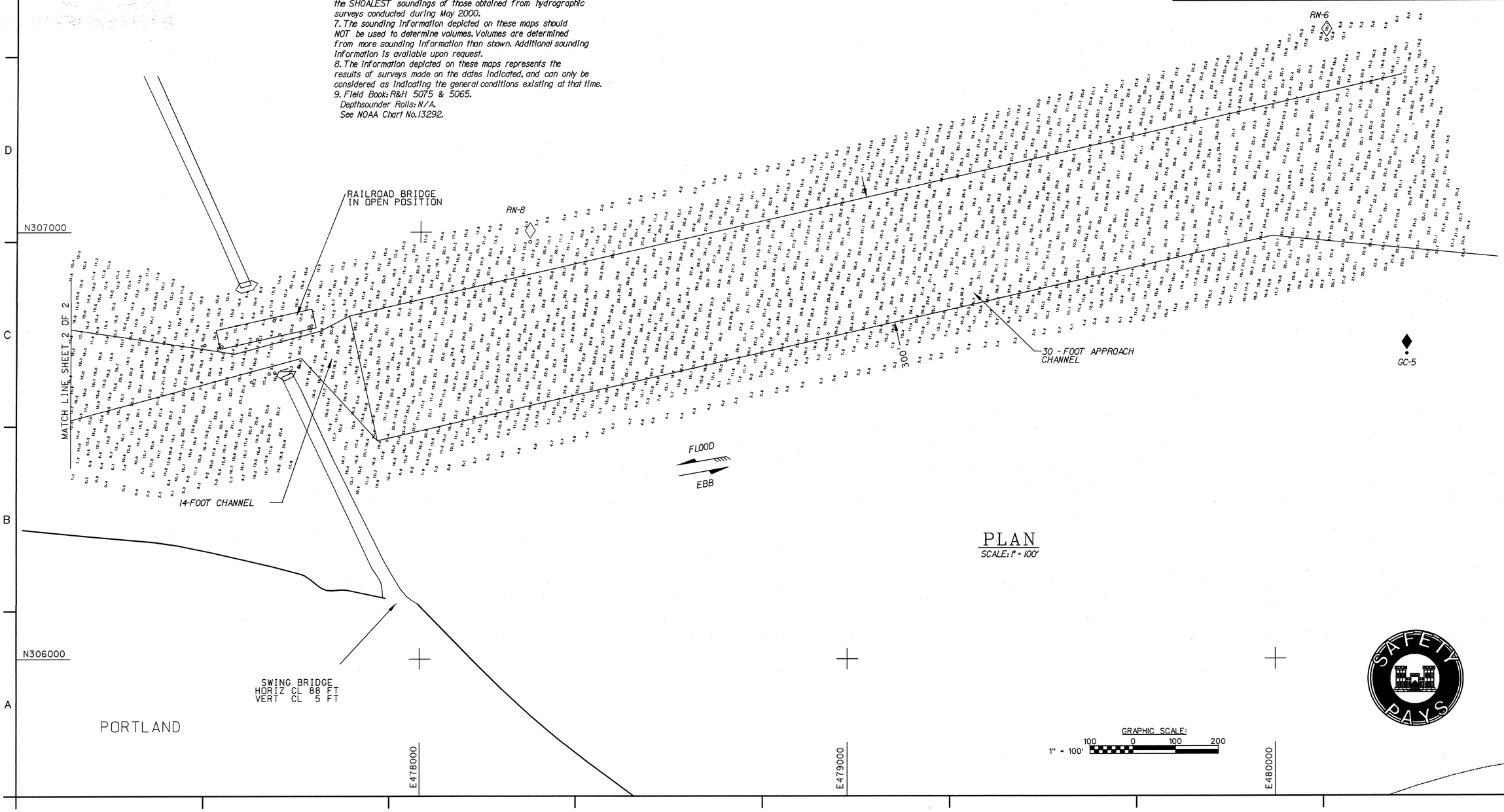
GENERAL NOTES:

1. Soundings are in feet and tenths and refer to the plane of Mean Lower Low Water (MLLW).
2. Topography shown is from previous surveys and/or NOAA Chart No.13292. All topography, including shoreline, bridges piers, etc. is located approximate and should be used as a general reference only.
3. Bridges, piers, dolphins, piles and metal sheathing etc., was located during the May of 2000 condition survey.
4. Bench Mark Data: No Stamping 1: The benchmark is a drill hole located at the intersection of Commercial Street and Pearl Street, on the northeast of center of entrance to US Custom House, 55.5 feet (16.9 m) northeast of the northeast curb of Pearl Street, 11.5 feet (3.5 m) northwest of the northwest curb of Commercial Street, and 6.5 feet (2.0 m) northeast of center of entrance. The bench mark is a 0.5 inch drill hole in the sill about 1 foot (0.3 m) above the sidewalk. (Note: bench mark historically referred to as No.2 U.S.E.(1901). Elevation is 18.62 feet (5.7 m) above MLLW.
5. Coordinates shown are based on the Transverse Mercator Grid System for the State of Maine (West Zone) and NAD 27.
6. The sounding information depicted on these maps represents the SHOALEST soundings of those obtained from hydrographic surveys conducted during May 2000.
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 Book: R&H 5075 & 5065.
   Depthsounder Rolls: N/A.
   See NOAA Chart No.13292.

INDEX OF NAVIGATION AIDS			
NO.	DATE	STATE PLANE COORDINATES	GEOGRAPHIC POSITION
RN-6	05/10/00	N 307447 E 480118	43° - 40' - 36.6"N 70° - 14' - 30.5"W
RN-8	05/10/00	N 306977 E 478257	43° - 40' - 32.0"N 70° - 14' - 55.9"W
GC-5	05/10/00	N 306714 E 480307	43° - 40' - 29.4"N 70° - 14' - 28.0"W



LOCATION MAP
NOT TO SCALE



PLAN
SCALE: 1" = 100'

US Army Corps of Engineers
New England District

Symbol	Description	Date	Appr.	Symbol	Description	Date	Appr.

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
CONCORD, MASSACHUSETTS

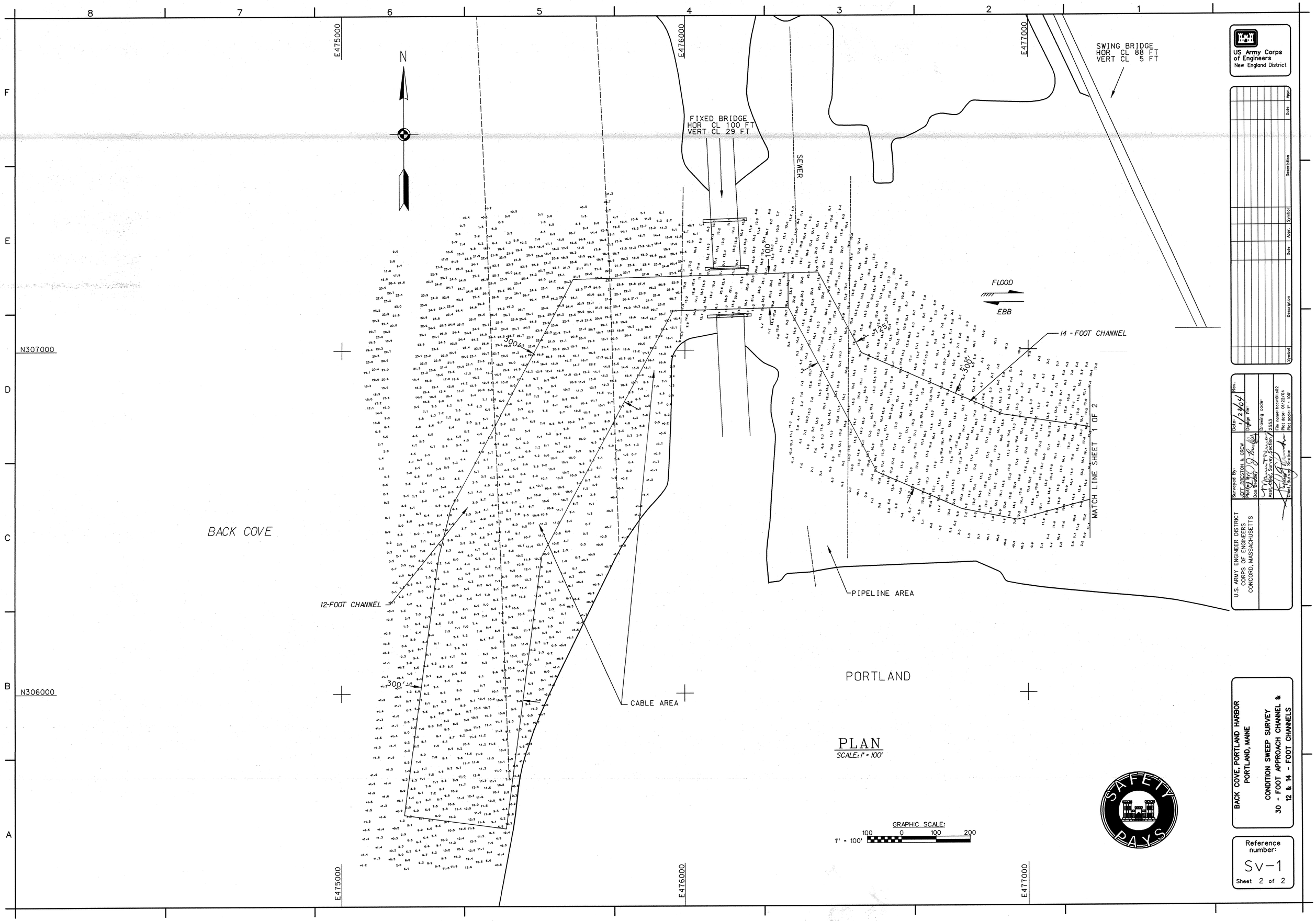
Surveyed By: JEFF PRESTON & CREW
Plotted By: Don Sedley
Asst. Chief, Survey Section
Chief, Survey Section
Date: 1/22/04
Design file:
Drawing code: 2553
File name: bcov101s.01
Plot date: 01/22/04
Plot scale: 1" = 100'
Rev.

BACK COVE, PORTLAND HARBOR
PORTLAND, MAINE

CONDITION SWEEP SURVEY
30 - FOOT APPROACH CHANNEL &
12 & 14 - FOOT CHANNELS

SAFETY PAYS

Reference number:
Sv-1
Sheet 1 of 2



PLAN
SCALE: 1" = 100'