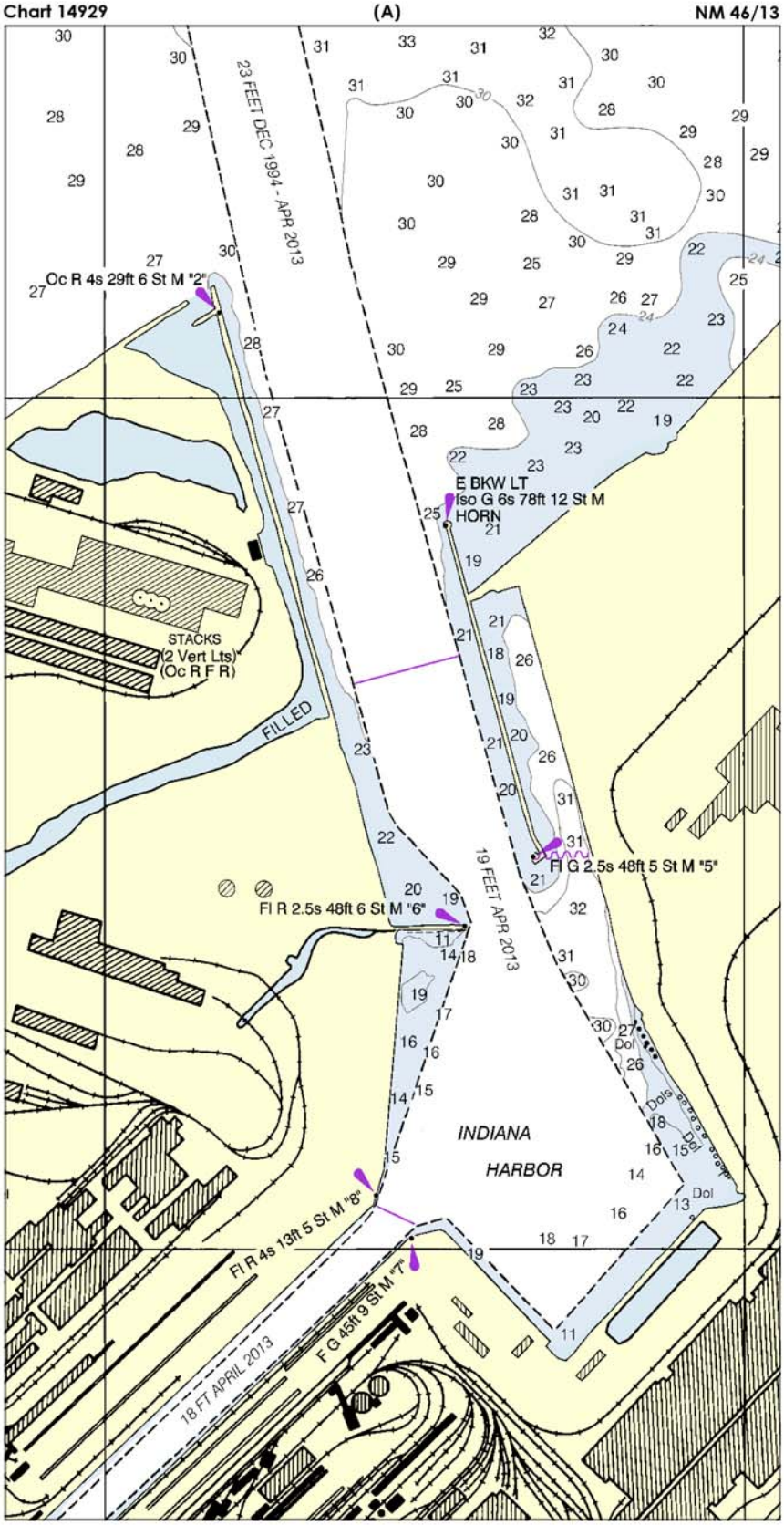


Chart 14929
(A)
NM 46/13
23 FEET DEC 1994 - APR 2013
Oc R 4s 29ft 6 St M "2"
E BKW LT
Iso G 6s 78ft 12 St M
HORN
STACKS
(2 Vert Lts)
(Oc R F R)
FILLED
Fl G 2.5s 48ft 5 St M "5"
19 FEET APR 2013
Fl R 2.5s 48ft 6 St M "6"
INDIANA
HARBOR
Fl R 4s 13ft 5 St M "8"
F G 45ft 9 St M "7"
18 FT APRIL 2013

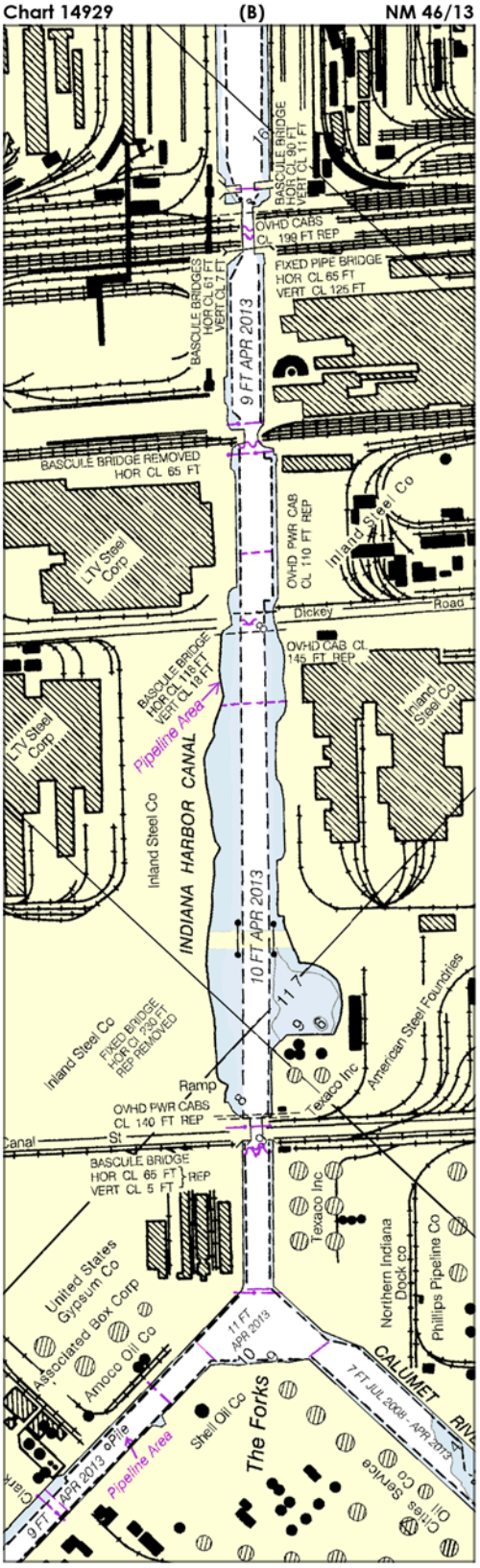


Chart 14929
(B)
NM 46/13
BASCULE BRIDGE
HOR CL 90 FT
VERT CL 11 FT
OVHD CABS
CL 199 FT REP
FIXED PIPE BRIDGE
HOR CL 65 FT
VERT CL 125 FT
BASCULE BRIDGES
HOR CL 61 FT
VERT CL 7 FT
9 FT APR 2013
BASCULE BRIDGE REMOVED
HOR CL 65 FT
LTV Steel Corp
OVHD PWR CAB
CL 110 FT REP
Inland Steel Co
Dickey Road
OVHD CAB Ct
145 FT REP
BASCULE BRIDGE
HOR CL 118 FT
VERT CL 18 FT
Pipeline Area
INDIANA HARBOR CANAL
10 FT APR 2013
FIXED BRIDGE
HOR Cl 239 FT
REP REMOVED
American Steel Foundries
Texaco Inc
Ramp
OVHD PWR CABS
CL 140 FT REP
Canal St
BASCULE BRIDGE
HOR CL 65 FT
VERT CL 5 FT
REP
United States Gypsum Co
Associated Box Corp
Amoco Oil Co
Northern Indiana Dock co
Phillips Pipeline Co
11 FT APR 2013
Shell Oil Co
The Forks
CALUMET RIVER
7 FT JUL 2008 - APR 2013
Cities Service Oil Co
9 FT APR 2013
Pipeline Area

Chart 14932 (A) NM 46/13

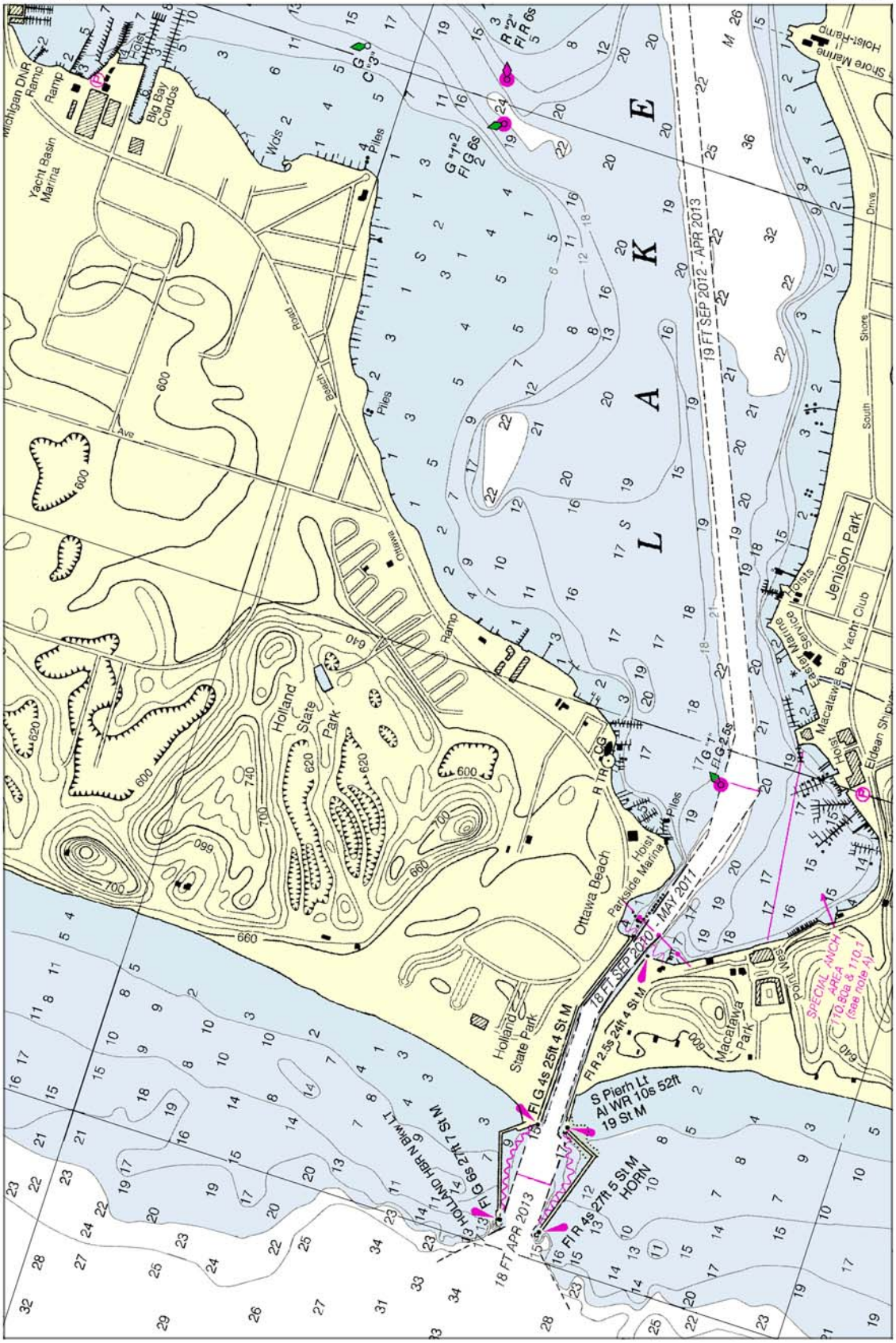
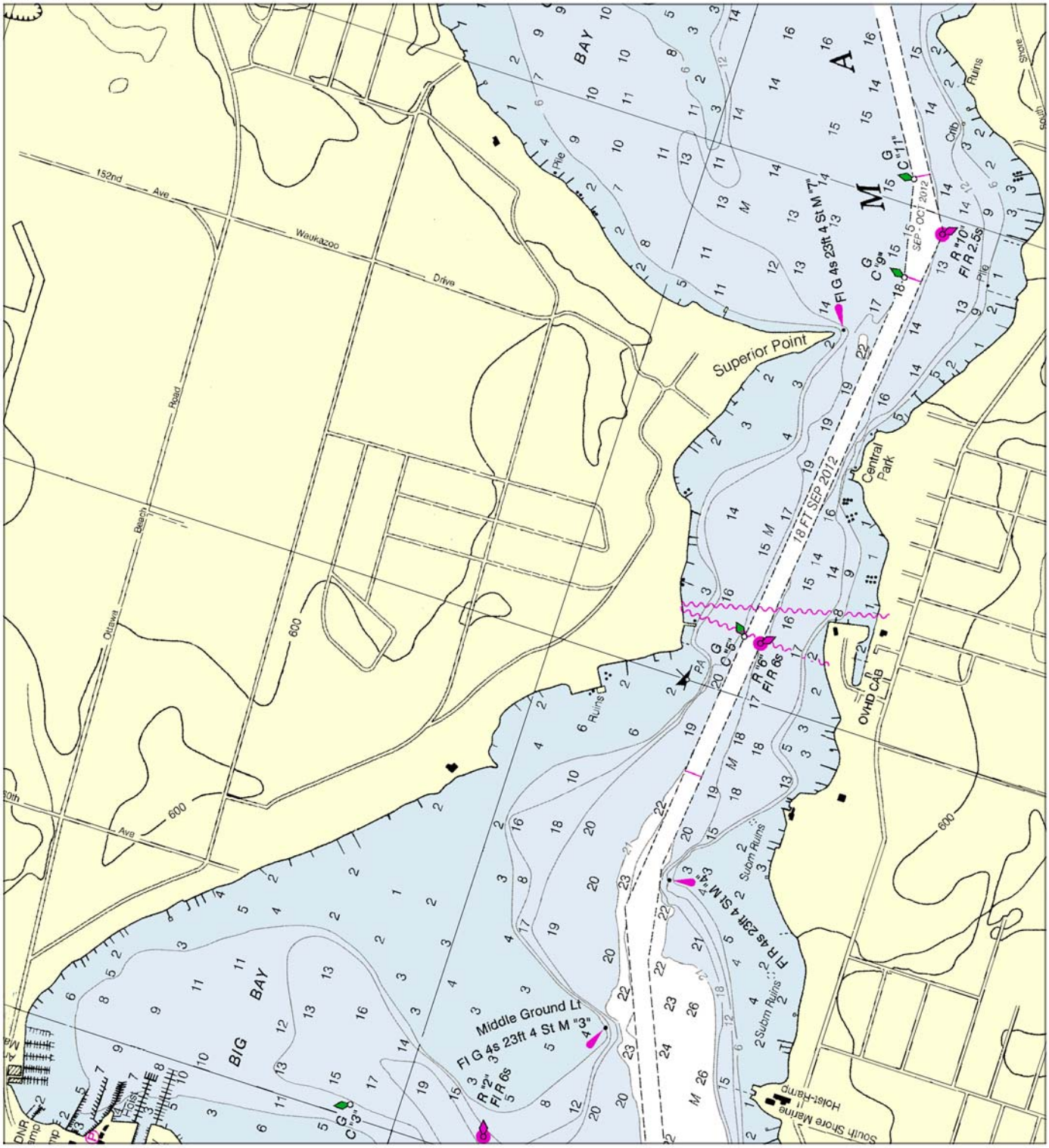


Chart 14932 (B) NM 46/13



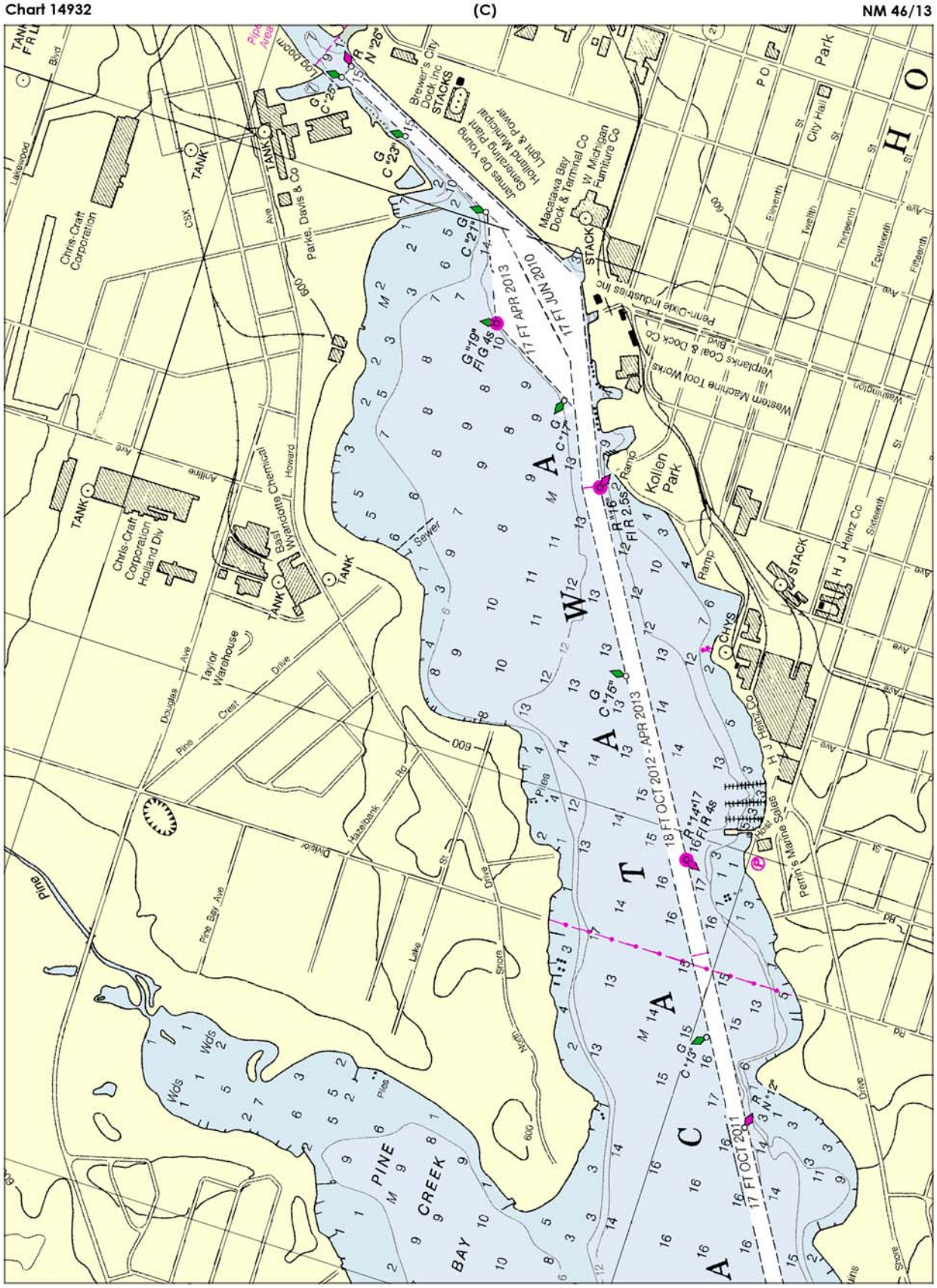


Chart 14932
(C)
NM 46/13
PINE CREEK BAY
Chris-Craft Corporation
Chris-Craft Corporation Holland Div
Taylor Warehouse
Parke, Davis & Co
Log Boom
Brewer's City Dock Inc
STACKS
James De Young Generating Plant Holland Municipal Light & Power
Macatawa Bay Dock & Terminal Co
W Michigan Furniture Co
Penn-Dixie Industries Inc
Veltplanks Coal & Dock Co
Western Machine Tool Works
Kollen Park
City Hall
Park
H J Heinz Co
Pelton's Marine Sales
Holiday Sales
Wolverine Chemical
17 FT JUN 2010
17 FT APR 2013
18 FT OCT 2012 - APR 2013
17 FT OCT 2011

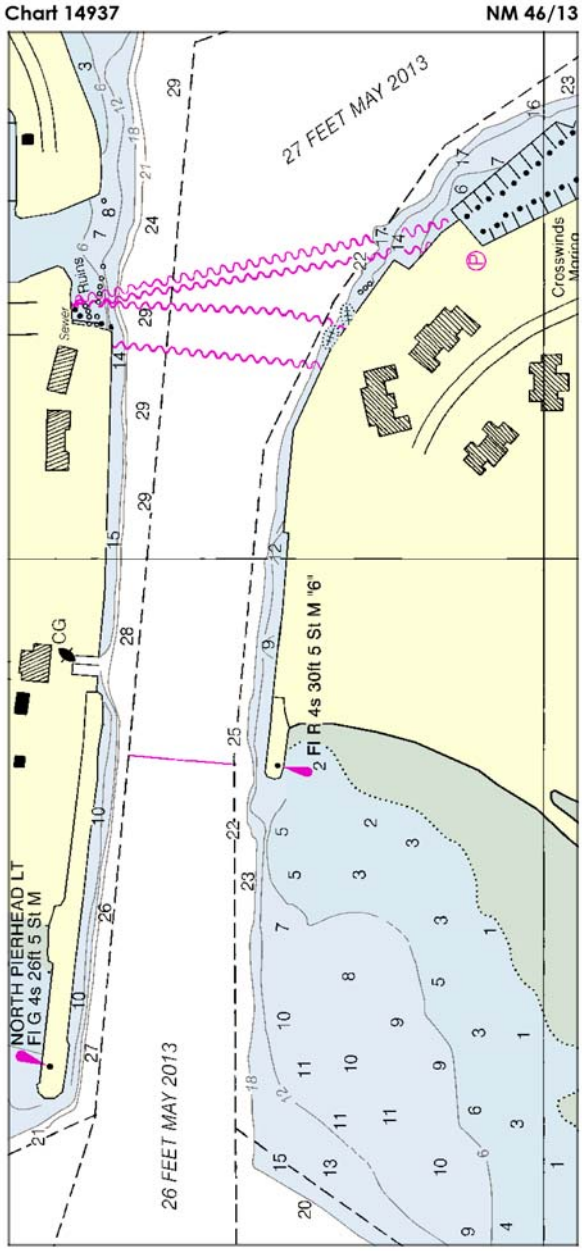


Chart 14937
NM 46/13
27 FEET MAY 2013
26 FEET MAY 2013
NORTH PIERHEAD LT
Fl G 4s 26ft 5 St M
Fl R 4s 30ft 5 St M "6"
CG
Ruins
Sewer
Crosswinds
Marina

Chart 11467 (Side A) NM 46/13

PORT EVERGLADES CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO DEC 2012

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (MILES)	DEPTH MLLW (FEET)
ENTRANCE CHANNEL (FROM 200 FEET SEAWARD OF RED BUOY-2 TO EAST END OF THE JETTIES)	43.4	47.2	43.3	21.1	12-12	500-450	1.0	45
BAR CUT (FROM EAST END OF JETTIES TO TURNING BASIN)	39.2	44.5	42.3	32.4	12-12	450	0.5	42

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 11470 NM 46/13

PORT EVERGLADES CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO DEC 2012

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (MILES)	DEPTH MLLW (FEET)
ENTRANCE CHANNEL (FROM 200 FEET SEAWARD OF RED BUOY-2 TO EAST END OF THE JETTIES)	43.4	47.2	43.3	21.1	12-12	500-450	1.0	45
BAR CUT (FROM EAST END OF JETTIES TO TURNING BASIN)	39.2	44.5	42.3	32.4	12-12	450	0.5	42

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 11478 NM 46/13

PORT CANAVERAL CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO APR 2013

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
OUTER REACH	39.8	38.5	37.7	37.0	4-13	400	4.7	44
MIDDLE REACH	40.8	38.5	37.9	36.7	4-13	400	0.9	44
INNER REACH	39.7	42.4	41.8	37.3	4-13	400	0.7	40
WEST ACCESS CHANNEL (EAST PORTION)	36.6	40.1	40.4	37.0	4-13	400	0.3	39
WEST ACCESS CHANNEL (WEST PORTION)	38.2	38.2	38.5	38.5	4-13	400	0.3	31

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 11481 NM 46/13

PORT CANAVERAL CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO APR 2013

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
OUTER REACH	39.8	38.5	37.7	37.0	4-13	400	4.7	44
MIDDLE REACH	40.8	38.5	37.9	36.7	4-13	400	0.9	44
INNER REACH	39.7	42.4	41.8	37.3	4-13	400	0.7	40
WEST ACCESS CHANNEL (EAST PORTION)	36.6	40.1	40.4	37.0	4-13	400	0.3	39
WEST ACCESS CHANNEL (WEST PORTION)	38.2	38.2	38.5	38.5	4-13	400	0.3	31

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 11521 NM 46/13

CHARLESTON HARBOR ENTRANCE

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO JUN 2013

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (MILES)	DEPTH MLLW (FEET)
ENTRANCE CHANNEL	43.3	48.1	48.3	43.7	6-13	A1000	17.5	B47
MOUNT PLEASANT RANGE	46.6	50.0	50.2	48.9	3-13	1000-600	1.8	45

A. MAINTAINED 800 FEET WIDE.
B. FOR WIDTH OF 1000 FEET, THE PROJECT DEPTH IS 42 FEET FOR OUTER 100 FEET.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 11523 NM 46/13

CHARLESTON HARBOR ENTRANCE

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO JUN 2013

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (MILES)	DEPTH MLLW (FEET)
ENTRANCE CHANNEL	43.3	48.1	48.3	43.7	6-13	A1000	17.5	B47
MOUNT PLEASANT RANGE	46.6	50.0	50.2	48.9	3-13	1000-600	1.8	45
REBELLION REACH	46.0	47.9	49.8	46.2	3-13	600	1.6	45

A. MAINTAINED 800 FEET WIDE.
B. FOR WIDTH OF 1000 FEET, THE PROJECT DEPTH IS 42 FEET FOR OUTER 100 FEET.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 12273 NM 46/13

BALTIMORE HARBOR CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO JUN 2013

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW) *						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (MILES)	DEPTH MLLW (FEET)
CRAIGHILL ENTRANCE	45.0	50.0	51.0	46.0	6-13	700	3.79	50
CRAIGHILL CHANNEL	47.0	51.0	51.0	46.0	6-12	700	3.24	50
CRAIGHILL ANGLE	50.0	51.0	50.0	50.0	2-12	700-1870	1.88	50
CRAIGHILL CHANNEL UPPER RANGE	49.0	51.0	52.0	49.0	6-12	700	2.00	50
CUTOFF ANGLE	51.0	51.0	51.0	51.0	11-12	700-1740	1.14	50
BREWERTON CHANNEL	47.0	52.0	51.0	47.0	4-13	700	3.50	50
EASTERN EXTENSION	36.0	36.0	36.0	35.0	2,3-12	600	6.33	35
SWAN POINT CHANNEL	33.0	34.0	34.0	34.0	4-12	600	3.13	35
TOLCHESTER CHANNEL	31.0	35.0	35.0	34.0	5-12	450-600	10.87 **	35

* ALL DEPTHS REPORTED TO NEAREST FOOT
** THE LAST 1.88 NM OVERLAPS WITH THE CHESAPEAKE AND DELAWARE CANAL CHANNEL
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 12278 NM 46/13

BALTIMORE HARBOR CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO JUN 2013

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW) *						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (MILES)	DEPTH MLLW (FEET)
CRAIGHILL ENTRANCE	45.0	50.0	51.0	46.0	6-13	700	3.79	50
CRAIGHILL CHANNEL	47.0	51.0	51.0	46.0	6-12	700	3.24	50
CRAIGHILL ANGLE	50.0	51.0	50.0	50.0	2-12	700-1870	1.88	50
CRAIGHILL CHANNEL UPPER RANGE	49.0	51.0	52.0	49.0	6-12	700	2.00	50
CUTOFF ANGLE	51.0	51.0	51.0	51.0	11-12	700-1740	1.14	50
BREWERTON CHANNEL	47.0	52.0	51.0	47.0	4-13	700	3.50	50
BREWERTON ANGLE	51.0	51.0	51.0	51.0	11-12	700-1460	1.10	50
FORT MCHENRY CHANNEL	46.0	50.0	50.0	49.0	3,4-13	700	4.22	50
CURTIS BAY CHANNEL	49.0	50.0	50.0	50.0	4-11	400-1275	2.25	50
BREWERTON CHANNEL								
EASTERN EXTENSION	36.0	36.0	36.0	35.0	2,3-12	600	6.33	35
SWAN POINT CHANNEL	33.0	34.0	34.0	34.0	4-12	600	3.13	35
TOLCHESTER CHANNEL	31.0	35.0	35.0	34.0	5-12	450-600	10.87 **	35

* ALL DEPTHS REPORTED TO NEAREST FOOT
** THE LAST 1.88 NM OVERLAPS WITH THE CHESAPEAKE AND DELAWARE CANAL CHANNEL
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 12281 NM 46/13

BALTIMORE HARBOR CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO JUN 2013

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW) *						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (MILES)	DEPTH MLLW (FEET)
BREWERTON CHANNEL	47.0	52.0	51.0	47.0	4-13	700	3.50	50
BREWERTON ANGLE	51.0	51.0	51.0	51.0	11-12	700-1460	1.10	50
FORT MCHENRY CHANNEL	46.0	50.0	50.0	49.0	3,4-13	700	4.22	50
FERRY BAR CHANNEL	36.0	39.0	42.0	41.0	6-13	600	1.50	42
CURTIS BAY CHANNEL	49.0	50.0	50.0	50.0	4-11	400-1275	2.25	50
NORTHWEST HARBOR								
EAST CHANNEL	41.0	45.0	47.0	45.0	2-13	600-950	1.52	49
WEST CHANNEL	40.0	40.0	37.0	38.0	2-13	600-1068	1.38	40

* ALL DEPTHS REPORTED TO NEAREST FOOT
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 12282 NM 46/13

BALTIMORE HARBOR CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO JUN 2013

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW) *						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (MILES)	DEPTH MLLW (FEET)
CRAIGHILL ENTRANCE	45.0	50.0	51.0	46.0	6-13	700	3.79	50
CRAIGHILL CHANNEL	47.0	51.0	51.0	46.0	6-12	700	3.24	50

* ALL DEPTHS REPORTED TO NEAREST FOOT

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 18521 NM 46/13

COLUMBIA RIVER CHANNEL DEPTHS

ENTRANCE TO MILLER SANDS RANGE

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF 24-Jun-13

Controlling Depths in Feet at Columbia River Datum (CRD) * SEE FOOTNOTE						PROJECT DIMENSIONS		
NAME OF CHANNEL	Left Outside Quarter	Left Inside Quarter	Right Inside Quarter	Right Outside Quarter	Date of Survey	Width (Feet)	Length STAT (Miles)	Depth (Feet)
Entrance Range **	57	57	52	**	19-Jun-13	2000	3.3	55
	**	**	**	43	19-Jun-13	640	3.3	48
Sand Island Range **	51	53	50	**	19-Jun-13	2000	2.2	55
	**	**	**	43	19-Jun-13	640	2.2	48
Lower Desdemona Sands	45	48	49	51	22-May-13	600	3.4	43
Upper Desdemona Sands	44	45	44	42	23-May-13	600	3.6	43
Tansy Point Turn & Range	40	43	45	36	6-Jun-13	600	4.8	43
Astoria Range	42	44	44	42	5-Jun-13	600	2.7	43
Tongue Point Channel	40	42	44	44	30-May-13	600	2.2	43
Harrington Point Range	39	43	41	36	30-May-13	600	2.6	43
Miller Sands Range	35	43	42	40	28-May-13	600	2.2	43

* For Controlling Depth Information, consult the Local Notice to Mariners and/or the following Portland District US Army Corps of Engineers website: http://www.nwp.usace.army.mil/Missions/Navigation.aspx Channel status reports

** Channel is 2640 feet wide with Right Outside Quarter (640 feet) maintained at only 48 feet depth.

Chart 18521 NM 46/13

BAKER BAY WEST CHANNEL

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO APR 2013 AND REPORTS TO JUN 2013

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (STAT. MILES)	DEPTH MLLW (FEET)
ENTRANCE (0.0 - 0.7)	3	6	17	4-13	200	0.7	16
ENTRANCE TO FORT CANBY (0.7 - 1.9)	10	14	13	4-13	150	1.2	16
FT CANBY TO ILWACO (1.9 - 3.2)	11	8	5	4-13	150	1.3	16
MOORING BASIN A B	4	4	4	6-06	-	-	-

A. SHOALING TO 2 FEET ON RIGHT HALF, BETWEEN THE BREAKWATERS.

B. BASIN LOCALLY MAINTAINED.

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 18523 **NM 46/13**

COLUMBIA RIVER CHANNEL DEPTHS
PILLAR ROCK LOWER RANGE TO GULL ISLAND TURN AND CHANNEL
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF 17-Jun-13

CONTROLLING DEPTHS IN FEET AT COLUMBIA RIVER DATUM (CRD) * SEE FOOTNOTE						PROJECT DIMENSIONS		
NAME OF CHANNEL	Left Outside Quarter	Left Inside Quarter	Right Inside Quarter	Right Outside Quarter	Date of Survey	Width (Feet)	Length STAT (Miles)	Depth (Feet)
Miller Sands Range	35	43	42	40	28-May-13	600	2.2	43
Pillar Rock Lower Range	41	42	43	39	29-May-13	600	3	43
Pillar Rock Upper Range	42	44	44	43	4-Jun-13	600	1.9	43
Welch Island Reach	46	47	44	31	4-Jun-13	600	3.2	43
Skamokawa Channel	39	42	41	39	13-May-13	600	3.3	43
Steamboat Reach	48	45	44	44	14-May-13	600	1.4	43
Puget Island Range & Turn	42	42	41	37	14-May-13	600	3.5	43
Wauna Range	39	42	40	38	15-May-13	600	2	43
Driscoll Range	40	42	43	41	15-May-13	600	1.7	43
Westport Turn & Range	38	42	43	43	16-May-13	600	2	43
Westport Channel	40	41	40	39	20-May-13	600	2.4	43
Eureka Lower Channel	45	46	46	45	20-May-13	600	2.1	43
Eureka Upper Channel	41	43	41	39	20-May-13	600	0.8	43
Oak Point Channel	42	45	42	43	16-May-13	600	3	43
Gull Island Turn and Channel	46	45	44	36	16-May-13	600	2.2	43

* For Controlling Depth Information, consult the Local Notice to Mariners and/or the following Portland District US Army Corps of Engineers website: http://www.nwp.usace.army.mil/Missions/Navigation.aspx *Channel status reports*

Chart 18524 (Left Panel) **NM 46/13**

COLUMBIA RIVER CHANNEL DEPTHS
GULL ISLAND TURN AND CHANNEL TO ST HELENS TURN
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF 17-Jun-13

CONTROLLING DEPTHS IN FEET AT COLUMBIA RIVER DATUM (CRD) * SEE FOOTNOTE						PROJECT DIMENSIONS		
NAME OF CHANNEL	Left Outside Quarter	Left Inside Quarter	Right Inside Quarter	Right Outside Quarter	Date of Survey	Width (Feet)	Length STAT (Miles)	Depth (Feet)
Gull Island Turn and Channel	46	45	44	36	16-May-13	600	2.2	43
Stella Range	37	41	41	40	15-May-13	600	3.0	43
Fisher Island Channel	38	44	45	39	15-May-13	600	0.8	43
Walker Island Channel	43	42	41	38	15-May-13	600	1.4	43
Barlow Pt Channel	48	46	47	43	15-May-13	600	1.6	43
Slaughters Channel	40	41	42	41	14-May-13	600	2.2	43
Slaughters Turn and Channel	43	43	42	41	14-May-13	600	1.7	43
Cottonwood Island Lower Rge	39	39	42	41	13-Jun-13	600	1.7	43
Cottonwood Island Turn	44	43	43	38	13-Jun-13	600	2.7	43
Cottonwood Island Upper Rge	41	41	46	38	12-Jun-13	600	1.6	43
Kalama Lower Range	43	46	44	29	11-Jun-13	600	1.8	43
Kalama Upper Range	38	42	42	40	11-Jun-13	600	2.2	43
Bybee Ledge Channel	41	44	43	40	10-Jun-13	600	2.1	43
Martin Island Channel	44	41	40	38	10-Jun-13	600	2	43
Martin Island Range	41	43	43	42	6-Jun-13	600	1.4	43
Columbia City Channel	38	43	42	41	6-Jun-13	600	1.2	43
St. Helens Range	41	42	40	37	5-Jun-13	600	2.0	43
St. Helens Turn	41	42	41	35	5-Jun-13	600	1.7	43

* For Controlling Depth Information, consult the Local Notice to Mariners and/or the following Portland District US Army Corps of Engineers website: http://www.nwp.usace.army.mil/Missions/Navigation.aspx *Channel status reports*

Chart 18525 NM 46/13

COLUMBIA RIVER CHANNEL DEPTHS
SAINT HELENS TURN TO TOMAHAWK BAR
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF 17-Jun-13

CONTROLLING DEPTHS IN FEET AT COLUMBIA RIVER DATUM (CRD) * SEE FOOTNOTE						PROJECT DIMENSIONS		
NAME OF CHANNEL	Left Outside Quarter	Left Inside Quarter	Right Inside Quarter	Right Outside Quarter	Date of Survey	Width (Feet)	Length STAT (Miles)	Depth (Feet)
St. Helens Turn	41	42	41	35	5-Jun-13	600	1.7	43
Warrior Rock Range	41	41	40	42	4-Jun-13	600	1.3	43
Duck Club Turn	40	44	44	44	4-Jun-13	600	1.4	43
Henrici Range	40	41	41	40	3-Jun-13	600	2.6	43
Fales Channel	43	43	42	40	3-Jun-13	600	1.1	43
Knapp Point Channel	43	43	41	40	3-Jun-13	600	1.8	43
Willow Lower Range	40	41	42	41	3-Jun-13	600	2.1	43
Willow Upper Range	41	43	45	43	2-May-13	600	1.1	43
Morgan Bar	43	48	50	50	2-May-13	600	1.0	43
Morgan Channel	45	44	45	42	2-May-13	600	1.5	43
Vancouver Lower Channel	48	48	49	37	1-May-13	500	1.0	43
Vancouver Range	44	43	43	42	1-May-13	500	1.3	43
Vancouver Upper Channel	47	44	43	42	1-May-13	500	0.9	43
Vancouver Lower Turning Basin	34	39	37	42	30-May-13	800	1.0	43
Vancouver Upper Turning Basin	35	29	24	21	30-May-13	800	0.9	35
	Mid Channel for Half Project Width							
		L Outside	Mid Channel	R Outside				
Tomahawk Bar		16	16	17	29-Apr-13	300	3.7	27

* For Controlling Depth Information, consult the Local Notice to Mariners and/or the following Portland District US Army Corps of Engineers website: http://www.nwp.usace.army.mil/Missions/Navigation.aspx *Channel status reports*

Chart 18526 NM 46/13

COLUMBIA RIVER CHANNEL DEPTHS
MORGAN CHANNEL TO TOMAHAWK BAR
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF 17-Jun-13

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT COLUMBIA RIVER DATUM (CRD)*					PROJECT DIMENSIONS			
NAME OF CHANNEL	Left Outside Quarter	Left Inside Quarter	Right Inside Quarter	Right Outside Quarter	Date of Survey	Width (Feet)	Length STAT (Miles)	Depth (Feet)
Morgan Channel	45	44	45	42	2-May-13	600	1.5	43
Vancouver Lower Channel	48	48	49	37	1-May-13	500	1.0	43
Vancouver Range	44	43	43	42	1-May-13	500	1.3	43
Vancouver Upper Channel	47	44	43	42	1-May-13	500	0.9	43
Vancouver Lower Turning Basin	34	39	37	42	30-May-13	800	1.0	43
Vancouver Upper Turning Basin	35	29	24	21	30-May-13	800	0.9	35
	Mid Channel for Half Project Width							
		L Outside	Mid Channel	R Outside				
Tomahawk Bar		16	16	17	29-Apr-13	300	3.7	27

* For Controlling Depth Information, consult the Local Notice to Mariners and/or the following Portland District US Army Corps of Engineers website: http://www.nwp.usace.army.mil/Missions/Navigation.aspx *Channel status reports*

Chart 18531 (Lower Panel) **NM 46/13**

COLUMBIA RIVER CHANNEL DEPTHS
TOMAHAWK BAR TO BONNEVILLE LOCKS
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF 17-Jun-13

CONTROLLING DEPTHS IN FEET AT COLUMBIA RIVER DATUM (CRD) * SEE FOOTNOTE					Project Dimensions		
Name of Channel	Left Outside Quarter	Middle Half of Channel	Right Outside Quarter	Date of Survey	Width (feet)	Length STAT (Miles)	Depth (feet)
Tomahawk Bar	16	16	17	29-Apr-13	300	3.7	27
Airport Bar	18	16	18	30-Apr-13	300	2.8	27
Government Island Lower Range	16	16	16	30-Apr-13	300	1.0	27
Government Island Middle Range	17	17	18	2-Oct-12	300	1.7	27
Fisher Quarry Channel Range	29	28	25	2-Oct-12	300	1.0	27
Government Island Range	11	25	29	2-Oct-12	300	1.1	27
Government Island Upper Range	12	16	19	2-Oct-12	300	0.8	27
Lady Island Range	14	19	20	2-Oct-12	300	2.1	27
Lady Island Channel and Upper Rge	28	29	24	2-Oct-12	300	0.9	27
Washougal Lower Range	22	27	29	3-Oct-12	300	1.5	27
Washougal Upper Range	19	21	26	3-Oct-12	300	1.1	27
Gary Island Range	16	16	16	3-Oct-12	300	0.6	27
Reed Island Range	13	16	13	3-Oct-12	300	2.2	27
Tunnel Point Channel	25	25	26	19-Jul-12	300	0.8	27
Rooster Rock Channel	25	25	27	16-Aug-12	600	1.5	27
Cape Horn Channel	34	33	30	16-Aug-12	300	2.1	27
Candiana Channel	29	38	32	16-Aug-12	300	1.0	27
Fashion Reef Lower Range	17	18	19	3-Oct-12	300	2.4	27
Multnomah Falls Bar Range	16	23	17	3-Oct-12	300	1.1	27
Multnomah Falls Turn	16	16	21	31-Oct-12	600	0.8	27
Multnomah Falls Upper Range	22	25	25	31-Oct-12	300	3.2	27
McGowans Channel	35	29	24	9-Aug-12	300	1.1	27
Warrendale Lower Range	20	21	21	9-Aug-12	300	0.9	27
Warrendale Upper Range	20	27	23	9-Aug-12	300	0.7	27
Hamilton Island Reach	23	28	28	9-Aug-12	300	1.0	27
Entrance to Bonneville Locks	20	18	22	7-Aug-12	300	1.2	27

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