CHART 62394 NM 6/00

CAUTIONS

1. Tor'eh-ye Khowran is navigable for ships, but very intricate. It is not safe to attempt the passage without a pilot due to strong currents.
2. Anchoring, fishing, diving and swimming are prohibited within the Hovercraft Approach Area.

CHART 62395 NM 6/00

CAUTIONS

1. Tor'eh-ye Khowran is navigable for ships, but very intricate. It is not safe to attempt the passage without a pilot due to strong currents.
2. Anchoring, fishing, diving and swimming are prohibited within the Hovercraft Approach Area.

Chart 97251 NM 6/00

CAUTION

Depths of up to 0.8 meter less than charted may exist in the area.

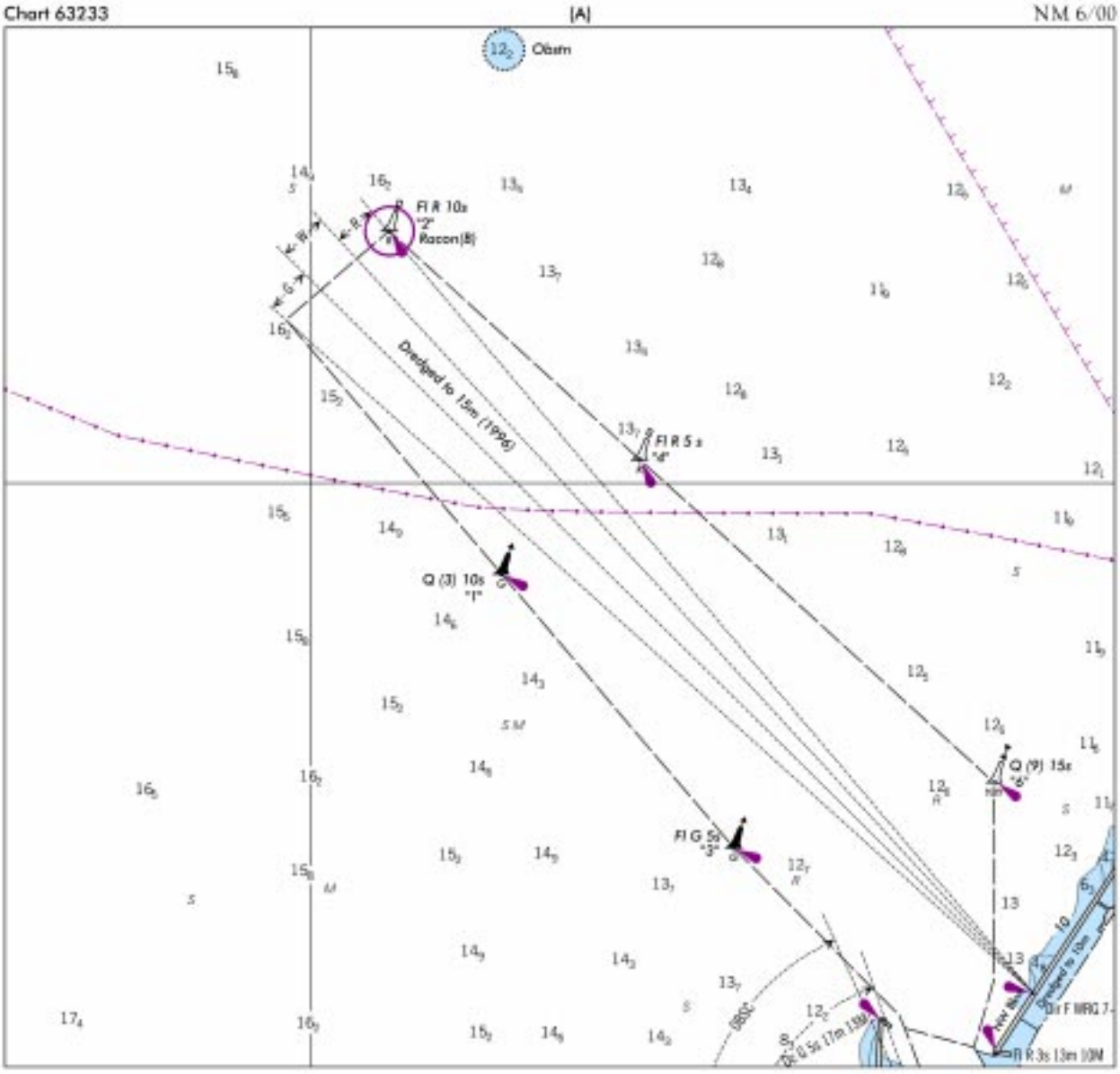
Chart 63233
(A)
NM 6/00
Obstn
Fl R 10s
"2"
Racon(B)
Dredged to 15m (1996)
Fl R 5 s
"4"
Q (3) 10s
"1"
Fl G 5s
"3"
Q (9) 15s
"6"
Dredged to 10m
Fl R 3s 13m 10M

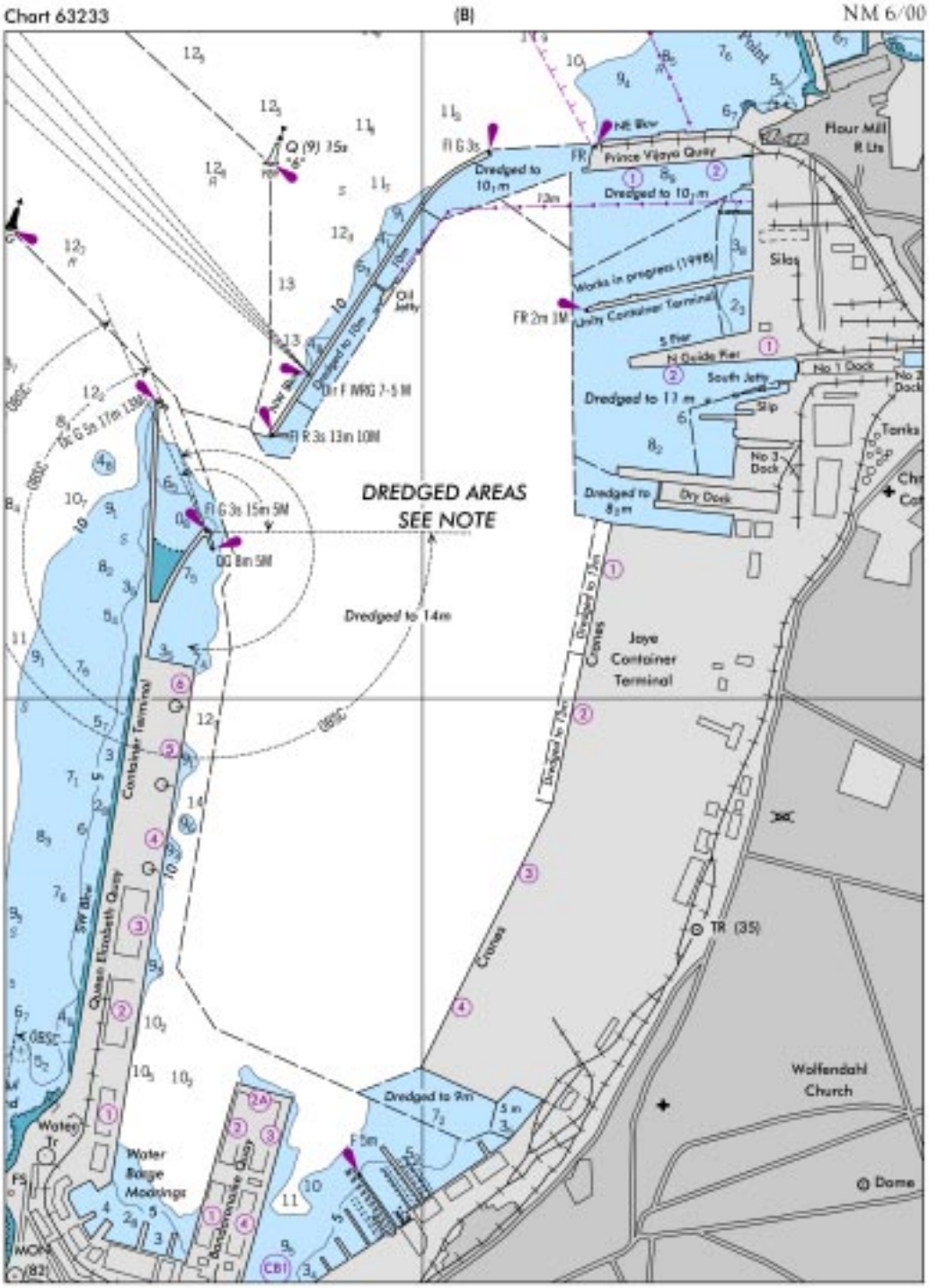
Chart 63233
(B)
NM 6/00
DREDGED AREAS
SEE NOTE
Dredged to 14m
Dredged to 10m
Dredged to 17 m
Dredged to 9m
Prince Vijaya Quay
Flour Mill
R Lts
Silos
Works in progress (1998)
Unity Container Terminal
South Jetty
No 1 Dock
No 3 Dock
Dry Dock
Tanks
Joye
Container
Terminal
Container Terminal
Queen Elizabeth Quay
Water
Barge
Moorings
Wolfendahl
Church
Dome
TR (35)
Cranes
Oil
Jetty
Dir F WRG 7-5 M
Fl R 3s 13m 10M
Fl G 3s 15m 5M
DG 8m 5M
Q (9) 15s
Fl G 3s
FR 2m 1M
F 5m

CHART 14975 NM 6/00

DULUTH HARBOR

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF MAR 1968 AND SURVEYS TO AUG 1999

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT GREAT LAKES LOW WATER DATUM (LWD)						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 LWD (FEET)
DULUTH ENTRY	A	A	A	A				
1	28.2	32.6	32.8	30.4	5-99	245-1000	.13	32
2	28.9	34.3	33.4	33.6	5-99	245	.08	31
3	27.5	33.2	32.7	33.3	5-99	245	.07	30
4	31.4	31.6	30.9	32.7	5-99	245	.07	29
5	29.0	32.2	32.8	28.4	5-99	245-480	.07	28
DULUTH HARBOR BASIN								
NORTHERN SECTION	24.9	26.8	27.3	26.3	5,6-99	1100-2700	.64	28
SOUTHERN SECTION	24.9	25.2	25.9	26.9	7-98	1200-2700	.91	27
EAST GATE BASIN (NORTH)	26.3	25.8	25.8	26.3	7,8,10-98	1500-3300	.33	27
WEST GATE BASIN	25.3	28.5	27.5	23.0	10-98;8-99	400-850	.66	27
HOWARDS BAY	23.1	23.5	24.8	21.2	8-99	100-750	.99	27
NORTH CHANNEL								
EASTERN SECTION	19.8	19.3	19.4	B18.1	9,10,11-98	400	1.68	27
WESTERN SECTION	20.2	20.7	20.4	20.3	7-99	400	.59	21
21ST AVE WEST CHANNEL	6.3	21.1	21.1	16.6	6-71;10-91	200	.33	20
SOUTH CHANNEL								
EASTERN SECTION	21.7	24.4	26.1	25.7	9,10-98;7-99	400-600	.74	27
WESTERN SECTION	22.0	22.7	23.4	21.9	7-99	400	.83	23
CROSS CHANNEL	21.2	27.5	28.9	20.8	10,11-98;7-99	1000	.33	27
UPPER CHANNEL	20.1	23.8	20.4	19.5	7-99	500	1.00	23
MINNESOTA CHANNEL								
EASTERN SECTION	20.4	22.9	23.2	C21.8	11-98	600	.95	23
WESTERN SECTION	12.1	14.7	14.7	D17.9	10-98;10-97	200	2.38	20

A. CHANNEL DIVIDED INTO QUARTERS WHEN ENTERING FROM LAKE

B. SHOALING TO 4.3 FT IN THE OUTSIDE HALF OF THE QUARTER EAST OF 21ST AVE W CHANNEL

C. SHOALING TO 9.0 FT IN THE OUTSIDE HALF OF THE QUARTER FOR THE NORTHER 700 FT OF THE REACH.

D. SHOALING TO 9.7 FT IN THE OUTSIDE HALF OF THE QUARTER.

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