

Harbour Handbook – Tunnel Harbour Rødbyhavn 1.4

Prepared: JKL

Version: 1.4

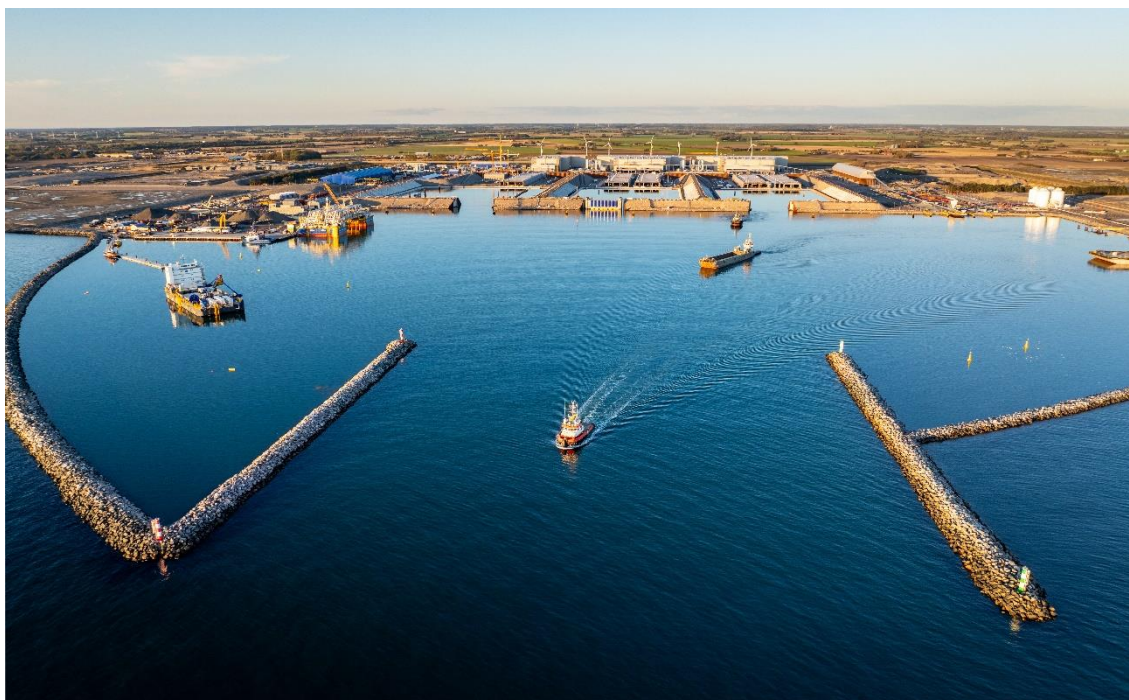
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Contents

1. Introduction..... 3

1.1 Port Authority and Harbour Master 4

1.2 Harbour Basin Water low water levels 5

2. General conditions Tunnel Harbour Rødbyhavn..... 6

2.1 Notification, arrival and departure 6

2.2 Pilotage..... 6

2.3 Speed Limit 6

2.4 Weather limitations..... 6

2.5 Transport and Access to and from Vessels 7

2.6 General Harbour Layout..... 7

2.7 Navigational aids – Fairway and approaches 8

2.7.1 Position Breakwater lights..... 8

2.7.2 Position Basin markers 8

2.7.3 Port Entry Light (PEL) 9

2.7.4 Position Access channel markers 10

3. Operation in the harbour 11

4. Annex..... 11

1. Introduction

The Tunnel harbour Rødbyhavn, is located 1,7 km southeast of Rødby Ferry Port on the position 54°38,2' North; 011°22,8' East. The harbour covers an area of 500,000 square meters with the breakwater extending 500 meters from the coastline.

The harbour is the seaward entrance to the construction area of the tunnel element factory.

The primary purpose of the harbour is to service the production of the Fehmarnbelt Tunnel with following activities from the seaside:

- Shipment of tunnel elements
- Receiving bulk materials for the concrete production
- Receiving bulk filling materials for the tunnel trench
- Receiving general cargo supporting the element factory



Figure 1: Tunnel Harbour Rødbyhavn

The regulations of the Tunnel Harbour Rødbyhavn are described in annex 1, Executive Order on the regulation for Tunnel Harbour Rødbyhavn.



 Harbour Handbook – Tunnel Harbour Rødbyhavn 1.4

1.1 Port Authority and Harbour Master

Femern A/S
 Vester Søgade 10
 1601 Copenhagen V
 E-mail: MAROPS@Femern.dk
 Telephone: +45 2361 0670

is the responsible The Port Authority.

The harbourmaster can be contacted:

Mr. Troels Nyerup

E-mail: lol-whm@flc-jv.com
 Telephone: +45 2487 9512

Following areas of responsibility within annex 1 Executive Order on the regulation for Tunnel Harbour Rødbyhavn are delegated to the Harbour Master:

Reference	Subject
§ 1, sec. 1, 4 and 5	Notification
§ 3, sec. 1-5,	Berths
§ 4, sec. 1-5	Anchoring
§ 5, sec. 1	Navigation in the harbour
§ 6, sec. 1	Mooring
§ 7, sec. 1 and 2	Hazardous goods
§ 9, sec. 1	Immediate departure
§ 10, sec. 1 and 2	Loading and unloading provisions
§ 12, sec. 2	Tankers
§ 13, sec. 1 and 3	Ships repairs and maintenance
§ 16, sec. 1-4	Removal of laid-up ships etc.
§ 17, sec. 1 and 2	Storage of goods
§ 18, sec. 1 and 2	Removal of stored goods



Harbour Handbook – Tunnel Harbour Rødbyhavn 1.4

§ 19, sec. 4	Barriers
§ 20, sec. 1-4	Traffic and Parking
§ 21, sec. 1 and 2	Waste
§ 22, sec. 1 and 2	Cleaning and removal
§ 25	Lost property and salvage
§ 27, sec. 1 and 3	Operation Manager
§ 28, sec. 1 and 3	The ship's master

1.2 Harbour Basin Water low water levels

Expected low water levels in the Harbour Basin will variate as show below:

Mean Wave direction (°N)	Return Period	Water Level (m) FCSV(10)
SW/SSW	20	-0,60 m
W/WSW	20	-0,37 m
S/SSE	20	-0,11 m
SE	20	+0,12 m
SW	1	-0,40 m
W/SW	1	-0,30 m
S/SSE	1	-0,07 m
SE	1	+ 0,1 m

For actual and specific water levels in the Femernbelt reference is made to Ægir database where live data on water levels, waves and currents can be found: [ÆGIR - Live data observations \(femern.com\)](https://www.femern.com/EGIR-Live-data-observations). Measure station P1 Rødbyhavn is situated close to the Tunnel Harbour Rødbyhavn.

2. General conditions Tunnel Harbour Rødbyhavn

2.1 Notification, arrival and departure

Reference is made to annex 1 Executive Order on the regulation for Tunnel Harbour Rødbyhavn.

It is mandatory to make a notification - "blind call" on VHF channel 12 before entering the dredged channel in order to inform harbour management and vessels in the area of the approach. While inside the harbour, it is highly recommended to remain on standby on VHF channel 12.

2.2 Pilotage

Following rules of regulation apply for Pilotage unless otherwise agreed, accepted and documented by the Port Authority;

- Vessels longer than 121 meters in length overall (l.o.a.) shall enter the work harbour under the assistance of a pilot.
- Vessels shorter than or equal to 121 meters l.o.a. can enter the work harbour without pilot assistance provided they are equipped with bow-thrusters and sufficient engine power.

It is possible to obtain a pilot exemption certificate after five port calls under the assistance of a Pilot if an individual has served the same vessel at all five calls.

Pilot exemption certificate can only be issued by the port Authority. An application with documentation for the calls, is sent to the Port Authority. The pilot exemption certificate is personal, and the certificate is valid for one year.

2.3 Speed Limit

The maximum allowed speed for sailing in the harbour is 5 knots.

2.4 Weather limitations

The minimum visibility is recommended to be 800m on arrival and departure of the harbour.

It is recommended that further measures should be taken when the mean wind exceeds 12 m/s to 15 m/s depending on the wind direction.

Caution is needed in terms of cross currents, which can be experienced stronger than forecasted in the immediate surroundings of the breakwaters.

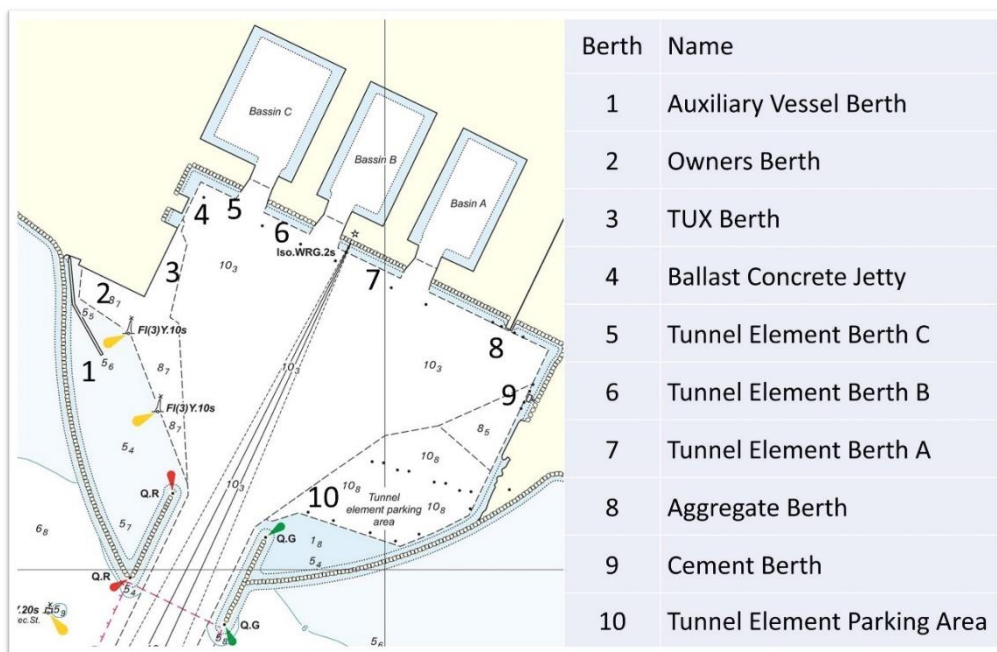
2.5 Transport and Access to and from Vessels

1. **Coordination:** Transport and access to and from vessels must be coordinated by the vessel's agent. Coordination for work vessels can be arranged by FLC Work Vessel Coordination.
2. **Advance Notification:** Access control must be informed in advance about the names of crew and driver, as well as the vehicle's license plate.
3. **Shore Access:** Crew members are not allowed to go ashore unless escorted, but they can go ashore alongside the vessel for tasks such as handling lines or checking draft/marks.
4. **PPE Requirements:** All crew members must wear full personal protective equipment (PPE), including a life jacket, when ashore.

2.6 General Harbour Layout

The entrance is dredged to a depth of 10.3m and the harbour basin is dredged to a depth ranging between 8.7m and 10.3 – where the middle part of the harbour basin is the deepest.

See below for details on quay numbering, lights and other details.



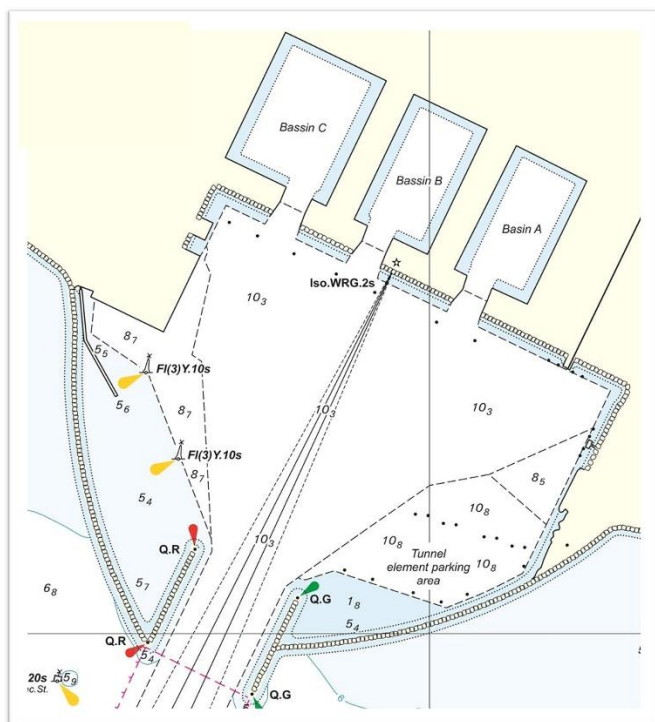


Figure 3: Water depths, breakwater lights and basin markers.

2.7 Navigational aids – Fairway and approaches

2.7.1 Position Breakwater lights

BEACON	COORDINATES (WGS84)		LIGHT CHARATER	TYPE
WH-L-08	54°38.0855'N	011°22.5925'E	Fl.R.5s	Red / white
WH-L-06	54°37.9929'N	011°22.5152'E	Fl.R.3s	Red / white
WH-L-05	54°37.9425'N	011°22.6945'E	Fl.G.3s	Green / white
WH-L-07	54°38.0357'N	011°22.7712'E	Fl.G.5s	Green / white

2.7.2 Position Basin markers

BUOYS	COORDINATES (WGS84)		LIGHT CHARATER	TYPE
BM-05	54°38.2246'N	011°22.6092'E	Fl(4)W.10s	Special Mark
BM-06	54°38.2635'N	011°22.5106'E	Fl(4)W.10s	Special Mark

2.7.3 Port Entry Light (PEL)

BEACON	COORDINATES (WGS84)		LIGHT CHARACTER	TYPE
WH-PEL	54° 38,3736'N	011°22.9426'E	Oc.5s (4+1)	PEL

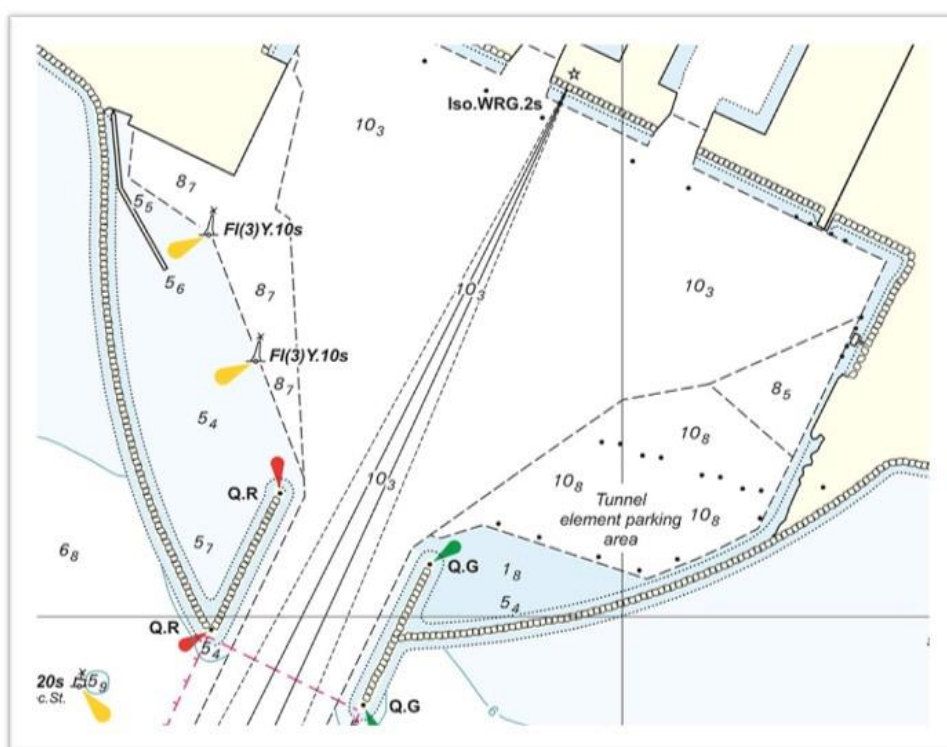


Figure 4 Position breakwater lights, basin markers and PEL



 Harbour Handbook – Tunnel Harbour Rødbyhavn 1.4

2.7.4 Position Access channel markers

BUOYS	COORDINATES (WGS84)		LIGHT CHARATER	TYPE
WH-AB-01	54°36.1805'N	011°21.1946'E	LFL.G.10s (2 + 8)	Green 1 st. fair-way buoy access canal
WH-L-01	54°37.0793'N	011°21.9424'E	Q.G. synchronized (0.3+0,7)	Green - Lateral mark starboard
WH-L-02	54°37.1050'N	011°21.8095'E	Q.R. synchronized (0.3+0.7)	Red - Lateral mark port
WH-L-03	54°37.5125'N	011°22.3138'E	Q.G. synchronized (0.3+0.7)	Green- Lateral mark starboard
WH-L-04	54°37.5446'N	011°22.1676'E	Q.R. synchronized (0.3+0.7)	Red- Lateral mark port

Femern *Sund ≈ Bælt*

Harbour Handbook – Tunnel Harbour Rødbyhavn 1.4

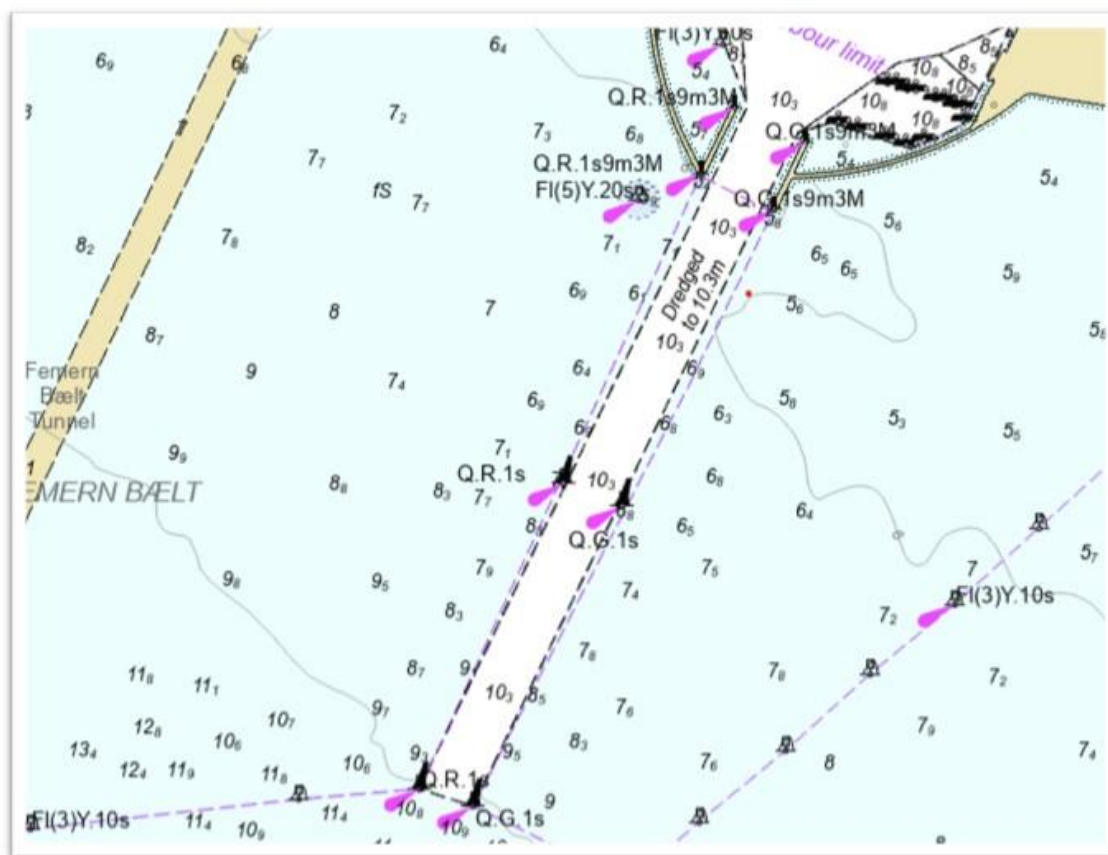


Figure 5: Position of access channel markers

3. Operation in the harbour

See annex 1 Executive Order on the regulation for Tunnel Harbour Rødbyhavn.

4. Annex

Annex 1: Executive Order on the regulation for Tunnel Harbour Rødbyhavn