

5. Port infrastructure

5.1 Port Alma berth information

Berth	Design depth	Swing basin	Maximum LOA	Distance to FWY Beacon (nm)	Comments
PA1	9.2	250 x 5.8 m	169	13.2	These berths are in a continuous line providing a total of 292 metres mooring space. Bulk tallow at PA1
PA2	9.2	250 x 5.8 m	123	13.2	
PA3	9.2	250 x 5.8 m	200	13.2	

Table 8 – Port Alma berth Information

5.2 Vessel berthing restrictions with vessels alongside

Berth	Comments
PA1	If a vessel is berthed at PA1 then another vessel is approved to berth at PA2 or PA3 If a vessel berthed at PA1 encroaches into PA2 then another vessel is not approved to berth at PA2 or PA3
PA2	If a vessel is berthed at PA2 then another vessel is not approved to berth at PA1 or PA3
PA3	If a vessel is berthed at PA3 then no other vessel may berth at PA1 or PA2

Table 9 – Vessel berthing restrictions with vessels alongside

5.3 Anchorage areas

5.3.1 External anchorages

Vessels that require to anchor on arrival should anchor on or about the pilot boarding area in position 23° 24.4'S 151° 0.95'E (approx. 1.0 nm NE of the Timandra Light Buoy).

The attention of masters is also drawn to [Section 10 Work Permits](#), which requires prior permission of the Regional Harbour Master for the immobilisation of propelling machinery and immediate notification in the event of immobilisation as a result of any breakdown or failure of the propelling machinery. Immobilisation of main engines at anchorages within the harbour will not be permitted except under special circumstances as decreed by the Regional Harbour Master.

5.3.2 Internal anchorage

Vessels may anchor off Sea Hill in 11.9m of water with Sea Hill lighthouse bearing 120° distance 0.8 nautical miles (subject to prior approval from the Regional Harbour Master).

5.3.3 Topography

The nature of the seabed alongside Port Alma's wharves and much of the channel approaches is mud. The general topography of the area is salt water couch grasslands, mangroves and salt pans. These are based on saline non-cracking clays and developed on marine sediments.

5.4 Lighthouses and leading lights

5.4.1 Lights

Name	Position		Characteristic
Cape Capricorn light	23°29.2'S	151°14.1'E.	Fl.WR 5s 93 m 17/14M (red sector 305°- 005°- on the summit of Cape Capricorn)
Great Keppel Island light	23°10.80'S	150°59.55'E	Fl(3) 12s 52m 9M (Arc of visibility 150° to 070° –total of 280°)
Sea Hill light	23°29.5'S	150°58.85'E	Fl(2) 6s 33m 7M (On Sea Hill Point)

Table 10 – Lighthouses

5.4.2 Leading lights

Name		Characteristic
Balacava Island Front Lead	Sea Reach	Q.W.17m 10M – Lights in Line 205.1°
Balacava Island Rear Lead	Sea Reach	Iso.W.2s 28m 6M
Kazatch Point Front Lead		Q.13m 8M – Lights in Line 230.7°
Kazatch Point Rear Lead		Iso.4s 13m 10M
Eupatoria Point Front Lead		Q.Bu.7m 5M – Lights in line 248.5°
Eupatoria Point Rear Lead		Iso. Bu. 4s
Shell Point Front Lead	Raglan Creek	Q.Fl. – Lights in line 038° (astern)
Shell Point Rear Lead	Raglan Creek	Iso.2s

Table 11 – Leading light (Port Alma)

5.5 Buoys and beacons at Port Alma

Refer to chartlet Pilot boarding ground (Port Alma)

Navigational aid	Type		
Timandra Light Buoy	By	LFl.10s	Fairway
No 2	By	Fl.R.2s	West extremity of Timandra Bank
No 4	By	Fl.R.4s	West side of North West Bank
No. 6	By	Fl.R.4s	Port lateral
No. 1	By	Fl.G.4s	Starboard lateral
No. 8	By	Fl.R.4s	Port lateral
No. 3	By	Fl.G.4s	Starboard lateral
No 10	By	Fl.R. 2·5s	Port lateral
No. 5	By	Fl.G.2·5s	Starboard lateral
No. 12	By	Fl.R.2·5s	Port lateral
No. 14	By	Fl.R.3s	Port lateral
No. 16	By	Fl.R.2·5s	Port lateral

Table 9 – Buoys and beacons at Port Alma

5.6 Channel and berth depths

	Design depth (metres)	Width
Balaclava leads (Sea Reach)	7.6	90-135 m
Kazatch leads	7.0	90-135 m
Eupatoria leads	7.9	90-135 m
Shell Point leads	7.0	90-135 m
Swing Basin	5.8	240 m
Berth depths	9.2	

Table 10 – Channel and berth depths

Note: channel depths may periodically change and it is recommended that the depths be confirmed with the Regional Harbour Master in Gladstone. RHMGladstone@msq.qld.gov.au