

5. Port infrastructure

5.1 Berth information

Berth	Design Depth ¹	Length Berth Face	Berth Pocket Dimensions	Maximum Air Draft at LAT ²	Maximum DWT ³	Maximum Fender Load ⁴
Hay Point 1	16.6 m	203.6 m	342.9x60.96x16.6 m	27.8 m	180,000 t	150,000 t
Hay Point 2	16.7m	188.7 m	365.7x60.96x16.7 m	24.3 m	200,000 t	180,000 t
Hay Point 3	19.0m	255.65 m	460.0x70.0x19.0 m	30.9m	220,000 t	180,000 t
Dalrymple Bay 1 & 2	19.6 m	662 m (combined)	838.0x65.0x19.6 m	31.14 m	220,000 t	220,000 t
Dalrymple Bay 3 & 4	19.0 m	676 m (combined)	890.0 x65.0x19.0 m	31.14 m	220,000 t	220,000 t

Table 10 - Berth Information

Notes:

- Depths are subject to change; consult the [Queensland Notices to Mariners](#) for latest information.
- The actual air draft must consider the vessel's draft and the tide height.
- Terminal approval is required for DWT in excess of these figures on a case by case basis.
- Fender design based on Port of Hay Point maximum displacement berthing limits which can be found in [section 3.15.1](#).

5.2 Coal loading gantries

For berthing a ship, the terminal must have the loader parked out of the way at its designed securing site for berthing.

Berthings/sailings at DBCT are permitted with the boom retracted at least 60 degrees above the horizontal with the gantry secured at the strong point adjacent the vessel's bow.

Shipping officers are to ensure that there is sufficient clearance prior to sailing the vessel.

When there is no vessel alongside the berth and any such equipment is required to have the main boom or structure down for maintenance etc, and it protrudes out from the berth, the Terminal Operator is required to notify the Regional Harbour Master or his delegate of the times that the particular piece of equipment will be in this condition. The equipment must be adequately lit during night hours.

5.3 Anchorage areas

The pilotage limits for the port of Hay Point are divided between a Pilotage area and a Compulsory Pilotage area. Vessels may anchor within the designated Pilotage area without utilising the services of a Pilot.

Vessels arriving off the Port of Hay Point will be assigned either an offshore anchorage position ([section 16.8](#)) or a 'port limit' anchorage position ([section 16.10](#)) in the Northern or Southern anchorages by VTS, whilst awaiting berthing instructions. These 'port limit' anchorages are shown on chart AUS 249 and are identified by both a northern or southern prefix and a numeral. Anchoring is prohibited in the restricted area shown on chart AUS 249.

5.3.1 Anchoring off Australian ports

Masters should apply the basic tenets of good seamanship and common sense when anchoring in offshore and exposed anchorages.

There are 41 gazetted anchorages within port limits and 59 gazetted offshore anchorages. More details on these anchorages can be found in [16.8 Offshore anchorages](#) and chart AUS 249.

Mariners are advised that anchor positions have been established within port limits. These anchor positions, numbers and swing circles are as follows:

Anchorage Sites within Port Limits (WGS84)			
Name	Latitude	Longitude	Diameter (Nm)
N01	21° 11.000' S	149° 20.000' E	0.864
N02	21° 11.000' S	149° 21.000' E	0.864
N03	21° 11.000' S	149° 22.000' E	0.864
N04	21° 11.000' S	149° 23.000' E	0.864
N05	21° 11.000' S	149° 24.000' E	0.864
N06	21° 11.000' S	149° 25.000' E	0.864
N07	21° 11.000' S	149° 26.000' E	0.864
N08	21° 11.000' S	149° 27.000' E	0.864
N09	21° 11.000' S	149° 28.000' E	0.864
N10	21° 11.000' S	149° 29.000' E	0.864
N11	21° 12.000' S	149° 20.000' E	0.864
N12	21° 12.000' S	149° 21.000' E	0.864
N13	21° 12.000' S	149° 22.000' E	0.864
N14	21° 12.000' S	149° 23.000' E	0.864
N15	21° 12.000' S	149° 24.000' E	0.864
N16	21° 12.000' S	149° 25.000' E	0.864

Anchorage Sites within Port Limits (WGS84)			
Name	Latitude	Longitude	Diameter (Nm)
N17	21° 12.000' S	149° 26.000' E	0.864
N18	21° 12.000' S	149° 27.000' E	0.864
N19	21° 12.000' S	149° 28.000' E	0.864
N20	21° 12.000' S	149° 29.000' E	0.864
N21	21° 10.000' S	149° 21.000' E	0.864
N22	21° 10.000' S	149° 22.000' E	0.864
N23	21° 10.000' S	149° 23.000' E	0.864
N24	21° 10.000' S	149° 24.000' E	0.864
N25	21° 10.000' S	149° 25.000' E	0.864
N26	21° 10.000' S	149° 26.000' E	0.864
N27	21° 10.000' S	149° 27.000' E	0.864
N28	21° 10.000' S	149° 28.000' E	0.864
N29	21° 10.000' S	149° 29.000' E	0.864
S01	21° 16.000' S	149° 24.000' E	0.864
S02	21° 16.000' S	149° 25.000' E	0.864
S03	21° 16.000' S	149° 26.000' E	0.864
S04	21° 16.000' S	149° 27.000' E	0.864
S05	21° 16.000' S	149° 28.000' E	0.864
S06	21° 16.000' S	149° 29.000' E	0.864
S09	21° 17.000' S	149° 24.000' E	0.864
S10	21° 17.000' S	149° 25.000' E	0.864
S11	21° 17.000' S	149° 26.000' E	0.864
S12	21° 17.000' S	149° 27.000' E	0.864
S13	21° 17.000' S	149° 28.000' E	0.864
S14	21° 17.000' S	149° 29.000' E	0.864

Table 11 - Anchorages within Port Limits (WGS84)

Mariners are advised that anchor positions have been established within the offshore anchorage area east of the Hay Point pilotage area. These anchor positions, numbers and swing circles are as follows:

Anchorage Sites outside Port Limits (WGS84)			
Name	Latitude	Longitude	Diameter (Nm)
OS1	21° 12.925' S	149° 32.917' E	1.5
OS2	21° 12.925' S	149° 34.569' E	1.5
OS3	21° 12.925' S	149° 36.228' E	1.5
OS4	21° 12.925' S	149° 37.881' E	1.5
OS5	21° 12.925' S	149° 39.544' E	1.5
OS6	21° 12.925' S	149° 41.212' E	1.5
OS7	21° 11.364' S	149° 33.481' E	1.5
OS8	21° 11.364' S	149° 35.140' E	1.5
OS9	21° 11.364' S	149° 36.805' E	1.5
OS10	21° 11.364' S	149° 38.463' E	1.5
OS11	21° 11.364' S	149° 40.116' E	1.5
OS12	21° 11.364' S	149° 41.767' E	1.5
OS13	21° 09.780' S	149° 34.651' E	1.5
OS14	21° 09.780' S	149° 36.298' E	1.5
OS15	21° 09.780' S	149° 37.945' E	1.5
OS16	21° 09.780' S	149° 39.609' E	1.5
OS17	21° 09.780' S	149° 41.268' E	1.5
OS18	21° 08.195' S	149° 35.816' E	1.5
OS19	21° 08.195' S	149° 37.477' E	1.5
OS20	21° 08.195' S	149° 39.136' E	1.5
OS21	21° 08.195' S	149° 40.780' E	1.5
OS22	21° 06.640' S	149° 36.955' E	1.5
OS23	21° 06.651' S	149° 38.589' E	1.5
OS24	21° 06.640' S	149° 40.226' E	1.5
OS25	21° 05.081' S	149° 38.105' E	1.5
OS26	21° 05.052' S	149° 39.746' E	1.5
OS27	21° 03.454' S	149° 39.299' E	1.5
OS28	21° 12.653' S	149° 43.178' E	2.0
OS29	21° 12.653' S	149° 45.394' E	2.0
OS30	21° 12.653' S	149° 47.704' E	2.0
OS31	21° 12.653' S	149° 50.021' E	2.0
OS32	21° 10.492' S	149° 43.481' E	2.0
OS33	21° 10.485' S	149° 45.664' E	2.0

Anchorage Sites outside Port Limits (WGS84)			
Name	Latitude	Longitude	Diameter (Nm)
OS34	21° 10.468' S	149° 47.847' E	2.0
OS35	21° 10.467' S	149° 50.043' E	2.0
OS36	21° 08.447' S	149° 42.692' E	2.0
OS37	21° 08.435' S	149° 44.885' E	2.0
OS38	21° 08.409' S	149° 47.085' E	2.0
OS39	21° 06.317' S	149° 42.145' E	2.0
OS40	21° 06.318' S	149° 44.357' E	2.0
OS41	21° 04.245' S	149° 41.483' E	2.0
OS42	21° 14.500' S	149° 32.500' E	1.5
OS43	21° 14.500' S	149° 34.200' E	1.5
OS44	21° 14.500' S	149° 42.000' E	1.5
OS45	21° 14.600' S	149° 44.300' E	2.0
OS46	21° 14.600' S	149° 46.550' E	2.0
OS47	21° 14.600' S	149° 48.800' E	2.0
OS48	21° 14.600' S	149° 51.050' E	2.0
OS49	21° 14.600' S	149° 53.300' E	2.0
OS50	21° 12.650' S	149° 52.300' E	2.0
OS51	21° 10.470' S	149° 52.300' E	2.0
OS52	21° 08.410' S	149° 49.400' E	2.0
OS53	21° 08.410' S	149° 51.600' E	2.0
OS54	21° 06.320' S	149° 46.600' E	2.0
OS55	21° 06.320' S	149° 48.800' E	2.0
OS56	21° 06.320' S	149° 51.000' E	2.0
OS57	21° 04.250' S	149° 43.700' E	2.0
OS58	21° 04.250' S	149° 45.900' E	2.0
OS59	21° 04.250' S	149° 48.100' E	2.0

Table 12 - Dalrymple anchorage sites coordinates (WGS84)

5.4 Navigation aids

5.4.1 Fixed navigation aids

Departure Channel				
Hay Point Channel #2	Beacon	21° 14.92's	149° 24.77'e	FI R 4sec
Hay Point Channel #4	Beacon	21° 15.30's	149° 23.18'e	FI R 4sec
Hay Point Channel #6	Beacon	21° 15.96's	149° 20.80'e	FI R 4sec
Hay Point Channel #1	Beacon	21° 15.70's	149° 20.73'e	FI G 4sec

Table 13 - Navigation aids

Please be advised of the following notations:

- Hay Point Channel #2 (Fairway Beacon) is fitted with a tide gauge and an electronic weather station.
- The beacons are fitted with GPS synchronisation.
- Mount Griffiths Light — established on the Port Administration Building located 330° (T) from Mount Griffiths. Elevation 78 metres – FI (2) 10 sec – Range 20 miles.
- The wharves and dolphins of both terminals exhibit fixed blue berthing leads at night and yellow by day at their extreme ends.

5.4.2 Virtual navigation aids

Virtual aids to navigation beacons have been established at Hay Point to aid the safe pilotage and navigation of deep draft vessel departing via the shipping channel. The virtual beacons broadcast on the Automatic Identification System (AIS) adopted by IALA and IMO.

A “virtual navigation beacons signal” will appear on vessels fitted with AIS 'a' or AIS 'b' receivers and indicate the following positions within the port of Hay Point:

Virtual aid name	Latitude	Longitude	MMSI
Hay Point V.07	21° 15.9577' s	149° 19.7005' e	995036068
Hay Point V.08	21° 16.2201' s	149° 19.7759' e	995036069
Hay Point V.R	21° 15.6081' s	149° 19.5386' e	995036067
Hay Point V.04	21° 15.3267' s	149° 23.1767' e	995031021

Table 14 - Virtual navigation aids

The virtual AIS system commenced operation on Thursday 17 October 2013. For reference, the virtual navigation aid 'Hay Point v.04' has been established in the same position as the existing fixed beacon number 4 in the channel.