Port of Southampton

Port Users Information and Navigation Guidelines

Amendments

Amendment No.	Date	Amended By	Signature
New Issue	September 2017		
1/2017	31st October 2017	HM	MP
2/2017	30th November 2017	HM	MP
1/2021	January 2021	CC/SL	SM
2/2021	June 2021	HM	SM
1/2022	April 2022	HM	SM
7/2022	July 2022	HM	SM
10/2022	Oct 2022	HM	SM
12/2022	Dec 2022	PM	JG
1/2023	Jan 2023	JG	SM
4/2023	April 2023	JG	JG
5/2023	May 2023	SM	SM
09/2023	September 2023	JG	SM
10/2023	November 2023	RT	SM
11/2023	November 2023	EP	SM
12/2023	November 2023	EP	SM
13/2023	December 2023	JG	SM
01/2024	February 2024	MW	MW
02/2024	March 2024	RT	

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Introduction

1.1 Purpose

The following guidelines have been established by, and agreed between, the Harbour Master Southampton, CHA Pilots and members of the Southampton Port Marine Users Group (SPMUG). These guidelines supersede all previous versions and amendments.

The Harbour Master Southampton (hereafter referred to as the Harbour Master) is responsible for complying with local rules and national legislation as well as for safely regulating commercial traffic movements within the Statutory Harbour Authority (SHA) limits of the Port of Southampton, which can be broadly defined as The Central Solent, Southampton Water and Rivers Itchen and Test.

Specifically, section 52 of the Harbours, Docks and Piers Clauses Act 1847 is incorporated within the British Transport Docks Act 1969 and sets out the powers of a Harbour Master. The Harbour Master may give direction for the following purposes:

- For regulating the time at which and the manner in which any vessel shall enter into, go out of, or lie in or at the harbour, dock or pier, and within the prescribed limits, if any, and its position, mooring or unmooring, placing and removing whilst therein.

- For removing unserviceable vessels or other obstructions from the harbour, dock, pier and keeping the same clear.

The information contained in these guidelines is intended to bring to your attention the requirements considered necessary for the Harbour Master to discharge these responsibilities.

1.2 Geographical Application

These guidelines are primarily concerned with navigation within the Statutory Harbour Authority limits of the Port of Southampton (*See figure 1, P.9*), over which the Harbour Master has jurisdiction as established at 1.1. However, the Port of Southampton is one of a number of harbours accessed by sea-going vessels via the Solent and its approaches. This creates a relatively complex relationship between a number of adjoining port authorities. The Harbour Master Southampton is also responsible for:

- The provision of Vessel Traffic Services within a part of the Dockyard Port of Portsmouth and a part of the Territorial Sea, under an agreement with the King's Harbour Master Portsmouth and the Maritime and Coastguard Agency.

- The provision of pilotage services within the Southampton Competent Harbour Authority limits (*See figure 2 below, P.9*).

Certain provisions within these guidelines refer to areas outside of the Port of Southampton SHA limits but within the Southampton VTS area. Such provisions apply to all vessels regardless of their port of arrival/departure.

1.3 Promulgation of Navigational Information

The 2003 Port of Southampton Harbour Byelaws are published separately and should be read in conjunction with these guidelines.

Where it is necessary to update, temporarily modify or supersede any of the guidance contained herein, the Harbour Master will publish a Local Notice to Mariners. Local Notices to Mariners may also be used to inform port users of important navigational information and should be read in conjunction with these guidelines.

Issues which are of concern only to a specific group of port users may, instead, be promulgated in the form of a Harbour Master's General Marine Notice. These are, typically, restricted to an internal distribution within the port authority but may, on a case-by-case basis, be shared with other port users.

These guidelines, Harbour Byelaws, Local Notices and Mariners and further information on the port can be found at www.southamptonvts.co.uk

1.4 Review

These guidelines shall be reviewed and amended periodically as determined by the Harbour Master.

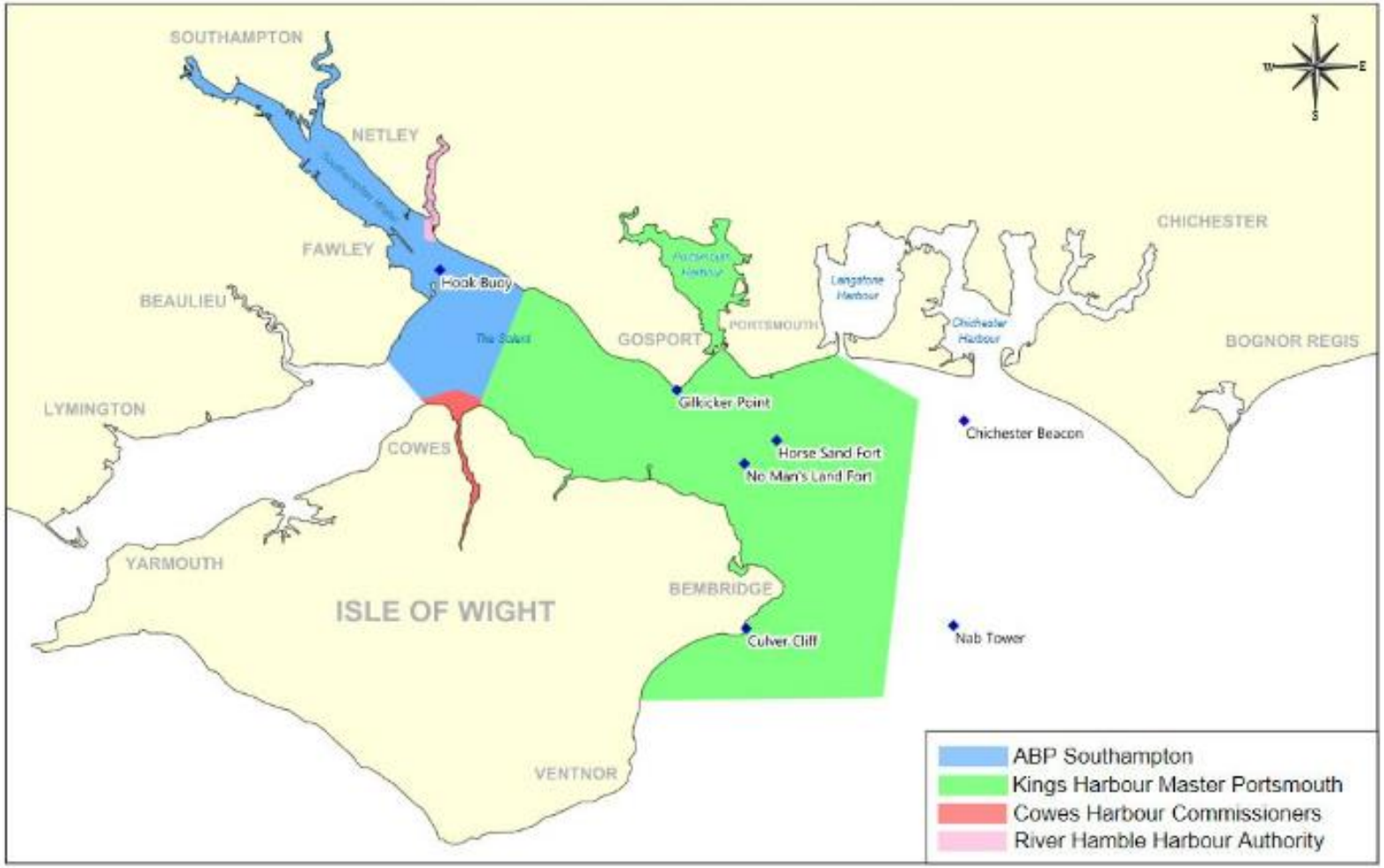


Figure 1: Solent Statutory Harbour Authority Limits

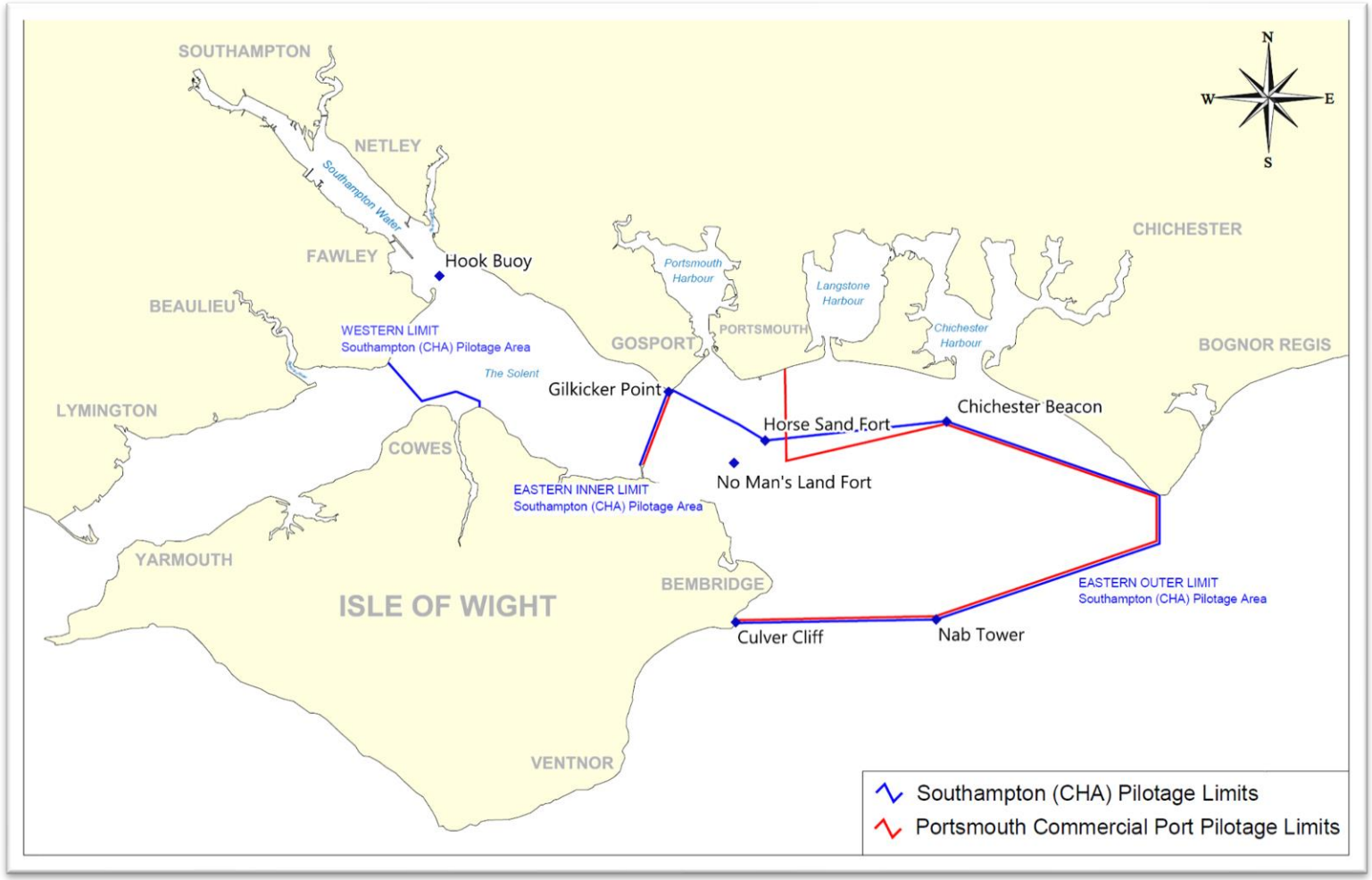


Figure 2: Solent Competent Harbour Authority Limits

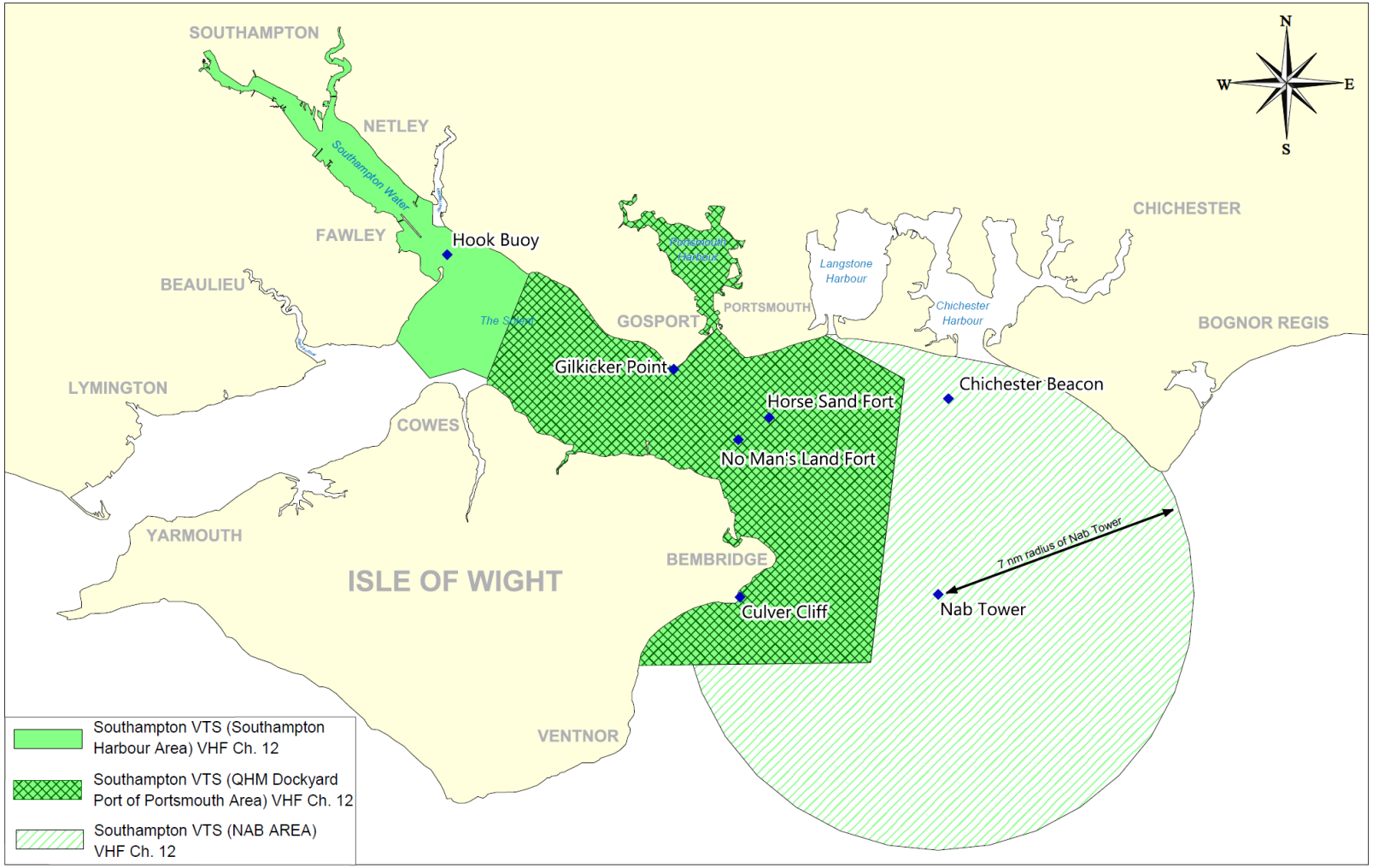


Figure 3: Southampton VTS Area

2. Vessel Traffic Services

2.1 Introduction

The Harbour Master monitors, co-ordinates and controls shipping movements through the establishment and operation of an IALA compliant Vessel Traffic Service (VTS), known as Southampton VTS. Southampton VTS is an information and traffic organisation service covering The Port of Southampton, The Solent, a part of the Dockyard Port of Portsmouth and a part of the Territorial Sea under an agreement with the King's Harbour Master Portsmouth and the Maritime and Coastguard Agency (See Figure 3). VTS procedures have been established in agreement with the stakeholders concerned to ensure continuity of communications and co-ordination of shipping movements. The IALA full description of Southampton VTS is available online at: http://www.southamptonvts.co.uk/Port_Information/Navigation/VTS_Standard_Description/

2.2 VTS – Contact details

The marine operations department of the Port of Southampton, including the Harbour Master, VTS operations room, VTS data centre and berth planning staff are based at Ocean Gate, Atlantic Way, Southampton SO14 3QN.

2.2.1 General Enquiries

The primary means of notifying Southampton VTS of a vessel movement is via the ABPnotify online portal (*See section 2.3.2*). Other enquiries should, in the first instance, be made by email. Urgent enquiries can be made by telephone.

Contact	Email	Telephone	Note
ABP Reception	reception@abports.co.uk	023 8048 8800	Monday – Friday 0900 to 1700
Harbour Masters Mailbox	HMSouthampton@abports.co.uk	023 8060 8208	Monday – Friday 0900 to 1700
VTS	southamptonvts@abports.co.uk		For information relating to movements and transits through the Southampton VTS area occurring in the next 24 hours
Port Planning	Port.planning@abports.co.uk		For information relating to vessel bookings
Dangerous Goods	Sotondg@abports.co.uk		Monday – Friday 0900 to 1700
Berthing Officer	berthingofficers@abports.co.uk		For information on vessel berth allocations in Southampton Docks

2.2.2 VHF Radio

Southampton VTS can be contacted by VHF radio on channel 12 - call sign “SOUTHAMPTON VTS”. Other frequencies used include 09, 14, 16 and 20. Channels 71 and 74 are allocated to tug working and are monitored. Full detail of all VHF radio channels in use in the Southampton VTS area can be found at section 9.

2.3 VTS – Information Required Prior to Movement of a Vessel

All vessels of 20m length overall and greater are required to notify Southampton VTS prior to, during and on completion of any movement within the VTS area. All movements must be approved by Southampton VTS prior to execution. The primary means of making such a notification is via the ABPnotify online portal.

The Master, ship owner, agent or berth operator must make all necessary arrangements for the services required for their vessel's safe movement within the port i.e. Pilots, tugs, linesmen, etc.

2.3.1 ABPnotify – Online Vessel Booking System

ABPnotify is an internet-based portal which allows the required information on vessel movements to be submitted electronically directly to the VTS data centre for review. The information is used by ABP for traffic management, berth allocation and regulatory purposes. The notification is, typically, completed by a ship's agent but may be submitted by a Master, ship owner or berth operator. A login is required and may be obtained, along with instructions for use, from the VTS data centre (*See contact table, P.11*).

2.3.2 Notice Periods

All vessels requiring the services of a pilot must provide a minimum of 24 hours advance notification of arrival or departure through ABPnotify, with a confirmation of ETA 6 hours before arrival. A minimum of 3 hours' notice is required for departure and berth shift notifications. A greater notice period significantly increases the likelihood of a vessel being allocated its desired time slot.

2.3.3 Accuracy of Declared Information

The declared information will be used for passage planning, berth allocation and regulatory purposes. Inaccurate data, particularly in respect of a ship's manoeuvring capabilities, draught and defects may have an adverse effect on passage planning possibly resulting in a delay to the vessel once it presents for arrival/departure. MSN 1899 (M+F) – Vessel Traffic Monitoring Notification and Reporting Requirements for Ships and Ports refers to the information required to make a booking into a port. Further details can be found on the Pilotage Tariff.

2.3.4 CERS

The Consolidated European Reporting System (CERS) is a regulatory requirement for vessels arriving in a UK port and is used to supply information to the European Maritime Safety Agency's SafeSeaNet reporting system. Vessels are required to complete a spreadsheet known as a CERS Workbook containing basic vessel information, estimated and actual times of arrival and departure, last and next port of calls, number of people on-board and information on any dangerous and polluting goods (DPG) the vessel is carrying. It also includes port waste and ISPS declarations. The CERS Workbook should be uploaded via the ABPnotify online portal and will then be automatically forwarded to the MCA.

2.3.4 Dangerous Substances

Vessels carrying dangerous substances are required to make a written declaration to the Harbour Master under the Dangerous Substances in Harbour Areas Regulations 1987. ~~*(See section 10 and Local Notices to Mariners for full details).*~~ This is in addition to a fully and accurately completed ABPnotify declaration and associated CERS Workbook.

2.3.5 ISPS Reporting

A fully and accurately completed ABPnotify declaration and associated CERS Workbook will be considered by ABP as meeting the Port Facility ISPS reporting requirements for ABP operated berths. Vessels should be aware that third party terminals within the port are considered to be separate port facilities and may have different ISPS reporting requirements.

2.4 VTS – Reporting of Vessel Movements

A reporting vessel which has had a movement notification approved by Southampton VTS may navigate within the VTS area complying, where necessary, with the applicable pilotage requirements. Whilst navigating in the VTS area, the vessel is required to continuously monitor VHF radio channel 12 and report to Southampton VTS as follows.

2.4.1 Inbound VHF Reporting

- When arriving from the east - 10nm from the Nab Tower. The vessel may be asked to confirm information given in the pre-arrival notification.
- When passing the Nab Tower, No Man's Land Fort, South Ryde Middle buoy and the Hook buoy.

- When coming from the west – on passing the Needles Fairway buoy. The vessel may be asked to confirm information given in the pre-arrival notification.
- When passing Yarmouth Roads, the East Lepe buoy and the Hook buoy.
- Once all fast at a berth or brought up to anchor.

2.4.2 Outbound VHF Reporting

- 30 minutes prior to departing a berth, or on pilot boarding if taking a pilot.
- Prior to departing a berth or heaving anchor.
- Once underway.
- When passing the Pier Head buoy, Hythe Pier and Hook Buoy.
- In addition, when outbound to the east, on passing No Man's Land Fort and the Nab Tower.
- In addition, when outbound to the west, on passing Yarmouth Roads and the Needles Fairway buoy.

2.4.3 Vessels Proceeding to/from Anchor

Vessels proceeding to an anchorage in the Solent must report to Southampton VTS when anchored with their approximate position. Whilst at anchor vessels must maintain a listening watch on VHF channel 12.

Vessels leaving an anchorage must report at least 30 minutes before getting underway and advise their intended destination and route.

2.4.4 Vessels Proceeding to/from Portsmouth

Vessels clearing Portsmouth Harbour should establish communications with Southampton VTS when passing Southsea War Memorial.

Vessels proceeding to/from Portsmouth Harbour are also required to report to KHM. Reporting requirements may be found in the Admiralty List of Radio Signals and KHM Local Notices to Mariners.

2.5 Vessels Not Ready to Move at the Agreed Time

In cases where a vessel will not be ready to commence a movement within the VTS area at the agreed slot time the Master, ship owner, agent or berth operator must inform Southampton VTS immediately. The vessel must remain in its present position or proceed to a place of safety until

a revised plan for the vessel's movement has been agreed by the Assistant Harbour Master (AHM). Failure to comply may result in the vessel missing her allocated time slot thus resulting in delay due to other traffic movements, particularly in the case of large and/or deep draught vessels.

2.6 Assistant Harbour Master (Vessel Traffic Services)

The powers of the Harbour Master with respect to the direction of traffic movements, as established at 1.1, are delegated to the Assistant Harbour Master. The AHM's decision with respect to the direction of movement of any ship is final.

2.7 Pilot Ladder Safety

Ships have a duty to rig their pilot ladders in accordance with The International Convention for Safety of Life at Sea (SOLAS) V Regulation 23 and IMO resolution A 1045(27) as amended.

To ensure that pilot ladders are rigged in a safe manner for pilot boarding, in addition to the current initial call on VHF that the Pilot Desk makes to vessels for defects and deficiencies, VTS are also to ask each time whether their pilot boarding arrangements are rigged to SOLAS V Regulation 23 requirements.

3. Navigation Guidelines in The Port of Southampton

3.1 Introduction

Throughout these guidelines the term “large vessel” means any vessel >220m LOA unless otherwise stated.

3.2 Port Passage Planning

3.2.1 Port Passage Planning Guidance – Port Marine Safety Code

The Harbour Master’s powers to regulate the time and manner of a ship’s entry to, departure from and movement within their waters serve to complement port passage planning. Passage plans are, therefore, to be operated and enforced as an adjunct to the powers of direction.

The object of port passage planning guidance, as required by the Port Marine Safety Code, is to ensure that:

- All parties know relevant details of any particular port passage in advance.
- There is a clear, shared understanding of potential hazards, margins of safety, and the ship’s characteristics.
- Intentions and required actions are agreed for the conduct of the port passage – including the use of tugs and their availability – and any significant deviation should it become necessary.

3.2.2 Port Passage Planning - Utilisation of Passage Plans

All vessels manoeuvring within the limits of the Port of Southampton, whether piloted or navigated by a PEC holder, must prepare and utilise appropriately detailed port passage plans in accordance with International Chamber of Shipping Guidelines and in conjunction with IMO Resolution A.893(21). The vessel’s bridge is to be properly manned as required by regulation 11/1 of the STCW Convention.

3.2.3 Port Passage Planning – Pilot / Master Exchange of Information

The careful planning of the movement of every ship in the confines of the port is an essential element of the port’s Safety Management System.

The Pilot / Master exchange of information needs to be both detailed and structured. The VTS supplied information, in conjunction with the Pilot’s and vessel’s passage plan, are to be

integrated to ensure that both the Pilot and Master have the information needed for an agreed port passage plan. Such a plan should, as a minimum, include:

- The provision by the Pilot of relevant VTS traffic information, detailed local navigational knowledge such as the number of tugs to be used, intended berth, side to quay, mooring arrangements and minimum UKC. It should also include a recommended passage plan.

- The provision by the Master of precise information about the ship, its manoeuvring characteristics and its equipment including details of any defects.

3.2.4 Portable Pilot Units

The Competent Harbour Authority has issued each Southampton Pilot with a Portable Pilot Unit and produced a policy for its use. Pilots are required to use a specific type of PPU when navigating certain classes of large vessel.

The CHA expects pilots to use all available means to determine the ship's position and not rely exclusively on one piece of equipment. As such, the PPU should be considered to be an aid to navigation.

The vessel's bridge team is reminded of its duty to maintain an accurate check on the vessel's position as laid down in the ISM Code, STCW Convention, IMO Regulations & ICS Bridge Procedure Guide.

3.2.5 Passage Planning Depths

All berths in the Port of Southampton are liable to siltation. Berth operators are responsible for ensuring their berths are regularly surveyed and any changes to the advertised depth notified to the Harbour Master. The port authority regularly surveys the channels in the port and its approaches. A summary of all berth and approach channel advertised and actual depths is published regularly by the port's hydrographic department and is available from: http://www.southamptonvts.co.uk/Port_Information/Navigation/Hydrography/Passage_Planning_Depths/

3.3 General Navigation Guidelines

3.3.1 Seaworthiness

Vessels manoeuvring within the Southampton VTS area should comply with all applicable legislation to ensure that the ship is in all respects seaworthy and safe to proceed on its passage.

3.3.2 Manoeuvring Equipment

The Master should ensure that all manoeuvring and mooring equipment is checked as fully as possible prior to arrival at the pilot station or departure from the berth to ensure that it is fully operational. Any defects should be reported to Southampton VTS. Engines should be tested in the astern mode.

3.3.3 Testing of Astern Propulsion

Pilots and PEC holders are reminded that before arrival to, or departure from, any berth astern propulsion should be tested or verified as operational. The test should be recorded as part of the Pilot / Master exchange.

Where the vessel`s ability to engage astern propulsion has not been verified then it should be subsequently tested in a safe, non-critical area prior to undertaking any manoeuvre where it may be required.

Where a vessel is engaged on short sea voyages and the Master can confirm astern propulsion has regularly and recently been effective, this will be considered suitable verification. For vessels which may have been alongside for a prolonged period, or if there is any doubt about assurances received, a test should be undertaken as described above.

3.3.4 State of Readiness of Berths

All berths should be inspected by the berth operator prior to a vessel's arrival. If the berth is not ready in all respects to receive the vessel, the berth operator must inform Southampton VTS and the vessel before it passes the South Ryde Middle Buoy to allow for an alternative passage plan to be executed.

3.3.5 Southampton Patrol

The Southampton Patrol (call sign "SP") will be available to patrol vessels over 180m LOA when navigating in the Precautionary Area. In the event of the SP being unavailable for patrol duties

in the Precautionary Area cover will not normally be sourced from the Nab Launches unless the Pilot and AHM agree that it is necessary.

3.3.6 Passing Moored Vessels

Due care should be taken when passing moored vessels within the port. A sufficiently wide berth must be given at a safe speed, which may be the minimum possible to maintain steerage way. If the prevailing weather or tide conditions dictate, the use of a tug should be considered when in close proximity to other moored vessels.

3.3.7 Safety of Vessel Mooring (including: Design and Use of Heaving Lines)

Masters and crews of vessels using the Port of Southampton are advised that self-mooring is not permitted within Southampton Docks. Licensed mooring operators are required to assist with mooring operations for all vessels over 20m LOA unless prior approval is given from the Harbour Authority prior to commencing self-mooring activities.

Masters and crews are also required to use properly constructed heaving lines for all mooring and towing operations. The use of 'weighted' heaving lines is both illegal and dangerous and may cause serious injury or even death to those on the receiving. The Code of Safe Working Practices for Merchant Seamen, Chapter 25 (25.3.2) states:

> *Vessels' heaving lines should be constructed with a 'Monkeys Fist' at one end. To prevent personal injury the 'fist' should be made only with rope and should not contain added weighting material.*

Vessel's mooring crews should always alert shore mooring gangs, tug crews or others in the vicinity prior to throwing a heaving line.

Masters are reminded that heaving lines with inappropriate weighting, such as pieces of metal, are not to be used under any circumstances and, if used, appropriate enforcement action will be taken. The following procedure is to be followed whenever a dangerously weighted heaving line is detected on the ABP estate:

1. The weight is to be removed immediately and confiscated;
2. The weight is to be replaced with a suitable replacement ("*bean bag*");

3. The Master is to be re-issued with a notice explaining why the action has been taken, and issued with a charge for the replacement bag;
4. The incident is to be reported by Spot It, recorded in MarNIS and reported to the MCA.

A charge of £1,000 will be made to the ship. Please email ABPBillingQueries@abports.co.uk with details of the ship to support raising the invoice for the charge.

3.3.8 Safe use of Mooring Launches in Docks

When mooring launches are to be used in a berthing operation, communications should be established as early as possible and the launches given full details of the required mooring arrangements.

The deployment of mooring launches is at the discretion of the conducting Pilot having due regard to wind strength and direction relative to the berth and the position of tugs. Spring lines will not ordinarily be run by boat and will only be run by boat with the agreement of the Pilot, Master and launch crew.

The mooring launch crew, as well as the Pilot, have the option to abort/change the mooring plan if they think there could be any danger to the mooring launch.

The final tie-up will be confirmed fore and aft before the launches are dismissed.

3.3.9 Use of Bow and Stern Thrusters

Masters of vessels should, whenever possible, utilise their thruster units in such a way as to minimize excessive wash.

The safety of all persons using the port, the protection of the marine environment and infrastructure are of paramount importance. Masters are, therefore, urged to avoid using more power on thruster units than required to safely manoeuvre their vessel.

3.3.10 State of Readiness of Vessels Alongside

Any work which will render the vessel immobile must not be commenced without the approval of the Harbour Master and the terminal/ berth operator. Vessels wishing to immobilise should inform the Assistant Harbour Master before they do so.

3.3.11 Moorings to be Tended

The Master of a vessel which is berthed or moored in the Port of Southampton shall ensure that their vessel is securely made fast and that the moorings are adjusted as necessary to allow for the rise and fall of the tide and for the loading and unloading of cargo (*ref: Southampton Harbour Byelaws Part III No 18*).

Masters of high-sided vessels berthed in Southampton are reminded of their responsibility to ensure that the vessel remains securely alongside when strong offshore winds are forecast and/or experienced. Measures to be considered include the adjustment of moorings as necessary, the correct use of tension winches, the use of additional moorings and tug(s) to "push up".

3.3.12 Airbridges

All vessels with an air bridge in place shall ensure that their moorings are tightly secured at all times. Specific procedures exist for moored vessels using an airbridge on berths 38/9 and 104-106 when a large container vessel is passing.

On departure, all moorings are to remain tightly secured until the air bridge has been fully removed and the airbridge is visibly clear of the ship and the indication light is showing green.

3.3.13 Bunkering Operations

Before any bunkering operation commences, the bunker barge Master is to liaise with the Southampton VTS on VHF Ch12. The planned movement of any large vessels during the bunkering operation will be discussed. The Master of the bunker barge must be prepared to cease bunkering operations and, if necessary, shift berth at short notice if required to do so for the passage of a large vessel. The Port of Southampton support LNG bunkering operations, please contact HMSouthampton@abports.co.uk for further information.

3.3.14 Outboard Operations Including Slewing of Cranes & Davits

Masters of vessels moored or anchored in the Port of Southampton and which wish to undertake any outboard operation or which want to slew cranes, davits or any other similar projections outboard, must first obtain permission from Southampton VTS on VHF Ch12. A listening watch shall be maintained on VHF Ch12 for the duration of the operation. When the

outboard operation is complete and when not required for working cargo, cranes or any other similar projections will be slewed inboard.

3.3.15 Shore Cranes – Positioning During Berthing/Unberthing

When vessels are arriving or departing berths (other than at SCT) which have cranes at or close to the quay edge, the cranes shall be moved so as to be within the midships area of the ship's final position, or beyond the fore and aft extremities of the ship. This is to minimize the risk of the ship contacting the crane during its manoeuvre should the flare of the bow or stern pass over the quay edge.

3.3.16 Nab Deep Water Channel

The Nab Deep Water Channel is primarily for vessels constrained by their draught and which can only navigate safely within that channel. Vessels of a lesser draught, which do not need to use the Nab Deep Water Channel, should keep well clear of the channel and not impede vessels which require to use it.

Outward bound vessels which require the use of the Nab Deep Water Channel must inform Southampton VTS of the fact when passing the Hook Buoy and at the Forts reporting point.

When a vessel requiring the use of the Nab Deep Water Channel is navigating in the Channel, no other vessel shall overtake, pass or cross ahead of the vessel within the confines of the Channel.

3.3.17 Nab Tower Weather Matrix

The Nab tower weather matrix is an SMS tool that can be used to support judgement-based operational decision making for the viability of pilot boarding operations. Refer to Sharepoint.

3.4 Precautionary Area – Clear Channel Vessels

3.4.1 Clear Channel Vessels

All vessels navigating within the Port of Southampton shall ensure that all large vessels (>220m LOA) shall be given a "clear channel" between the Hook Buoy and the Prince Consort Buoy. The term "clear channel" is defined as:

A clear channel vessel is one which requires a clear and unimpeded passage ahead when transiting the Precautionary Area.

Vessels may enter the Precautionary Area (*See Figure 4*) maintaining a safe distance astern of a 'clear channel' vessel.

A vessel of any size experiencing manoeuvrability problems may request a 'clear channel'.

See Southampton Local Notices to Mariners for further details - Port of Southampton – Precautionary Area (Thorn Channel).

3.4.2 Tugs Authorised for use within the Port of Southampton

Tugs authorised for use within the Port of Southampton (see Notice to Mariners) may navigate within the Precautionary Area when clear channel vessels are also in this area provided that the tug:

- does not impede the clear channel vessel
- must request traffic clearance from Southampton VTS in agreement with clear channel vessel
- this does not apply during periods of restricted visibility

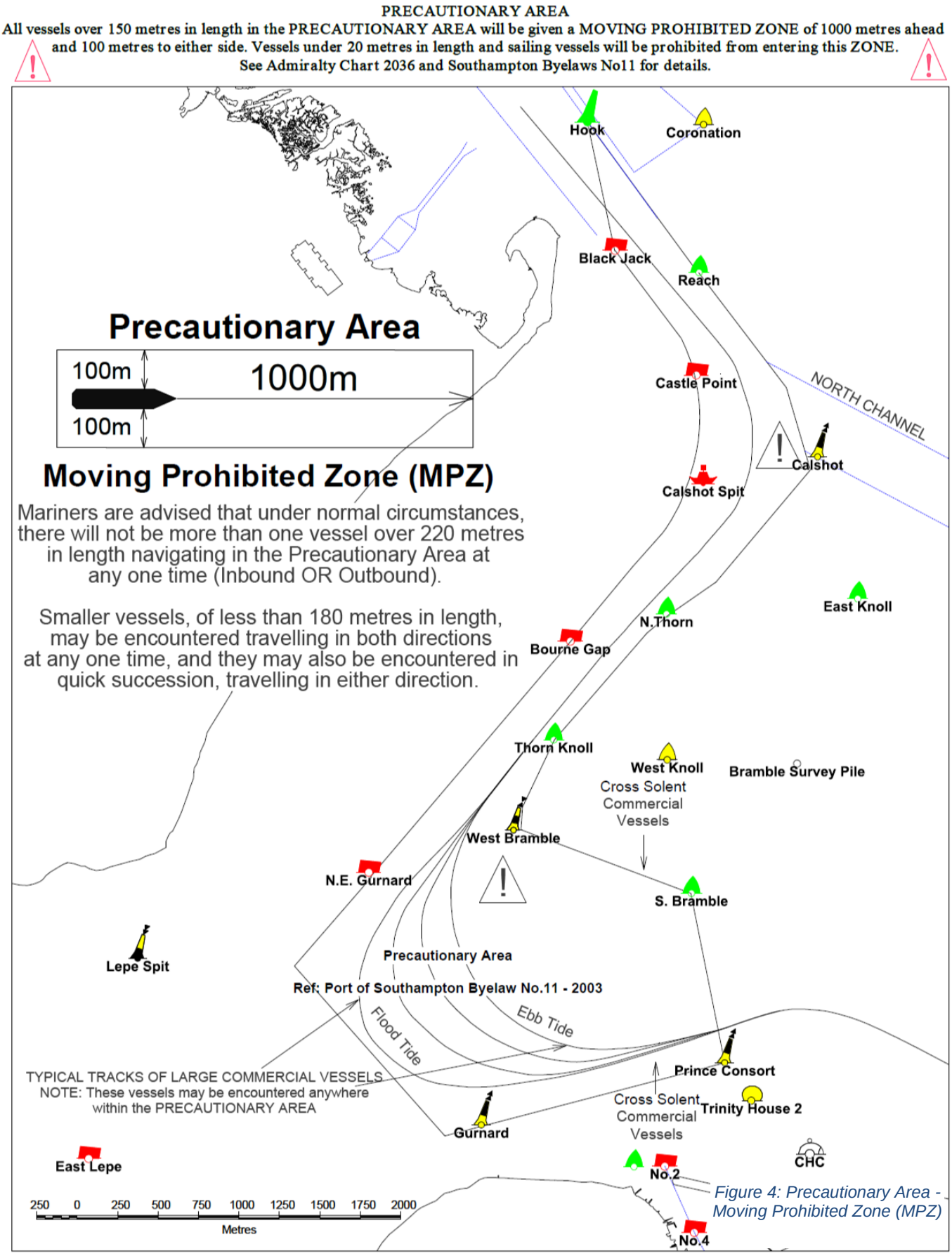


Figure 4: Precautionary Area - Moving Prohibited Zone (MPZ)

3.5 The Movement of Inward Bound Large Vessels

3.5.1 Passage Planning

Attention is drawn to the current Vessel Traffic Services Procedures and Local Notices to Mariners.

Southampton VTS is to ensure that the movements of all large vessels are monitored throughout their passage and that they are advised of all necessary information relating to the movement of other vessels and their own navigational requirements.

The Master and Pilot, in conjunction with Southampton VTS, will agree a passage plan including the following four key details:

- ETAs at various locations throughout the intended route.
- Co-ordination of passing arrangements with other vessels.
- Abort points on the planned passage.
- Other planned shipping movements.

3.5.2 Turning Points

All vessels >220m LOA shall inform Southampton VTS of their planned turning point at the West Bramble turn and, on request, at the Calshot turn. The vessel should establish communication with the AHM on a dedicated radio frequency before passing the Prince Consort Buoy.

Inward bound, the West Bramble turning point should be related to the distance to run to the Gurnard Buoy.

Inward bound, the Calshot turning point should be related to the Calshot Spit Lightfloat / Castle Point Buoy transit.

On approaching each turning point, the vessel will be advised by the AHM of the distance to run at one cable intervals. An indication of left or right of track may also be given. The Pilot will inform the AHM when commencing the turn. The Pilot will make use of all available sea room when making the West Bramble turn.

3.5.3 Berth Availability

In the case of a large container ship, which may not have an abort berth due to her draught, there should be a clear intention from DP World before the vessel passes the South Ryde Middle Buoy that her berth will be clear. If the berth is occupied by another vessel then clear intention from DP World should be ascertained that this vessel will sail on time in order to facilitate a pass at either Dock Head, Fawley or the Solent. It is the responsibility of the Master of the vessel sailing and DP World to declare any problems that may prevent berthing of the inbound vessel before it passes the South Ryde Middle Buoy.

If any problems exist with a large vessel or its intended berth that may prevent the berthing of this vessel, then the vessel will not be permitted to enter the Thorn Channel and will be advised of a suitable anchorage by Southampton VTS in consultation with the Pilot and Master. It is the responsibility of the Master or the intended berth/terminal operator to declare any problems which may prevent berthing before the vessel passes South Ryde Middle Buoy. This will also apply to any vessel bound for the Fawley or BP Oil Terminals.

3.5.4 Large Tankers – Time of Arrival at Hook Buoy

The passage of large tankers inbound for the Fawley or BP Oil Terminals will, in most cases, be planned so that the vessel arrives at the Hook Buoy between 30 minutes before and 45 minutes after first high water. On occasions a vessel may also be planned to berth during the low water period. In all cases the programmed time will be the result of consultation between the Terminal, the Pilot and the AHM.

When two large tankers bound for the Fawley and/or BP Oil Terminals area are to enter on the same high water, the first vessel will be timed to enter the Thorn Channel as early as practicable in order that the second vessel shall be able to enter in sufficient time to clear the Hook Buoy before the end of the slack water period. Further guidance for Fawley Marine Terminal can be found in the terminal manoeuvring criteria, below.

3.5.5 Berthing/Unberthing Restrictions

Berthing of vessels on 46 Berth should take place before another is berthed on 43/44. This can be modified following review of the risk assessment for the Ocean Dock and after consultation with the Harbour Master and Duty Pilot. Restrictions on the combined beam of vessels berthed in the Ocean Dock require that the risk assessment is consulted prior to a second vessel

berthing/unberthing to establish the exact control measures necessary. Please refer to the Ocean Dock Matrix and risk assessment for any deviations.

3.6 Co-ordination of the Movement of Vessels ≥180m LOA in the Thorn Channel and Arriving at the Hook Buoy

3.6.1 Passes to be Confirmed Upon Pilot Boarding

The VTSO (Pilots) shall, on allocation of a vessel ≥180m LOA, brief the Pilot on all relevant, planned movements of other vessels including details of any passes. These should be confirmed with the Pilot by Southampton VTS once the Pilot has boarded the vessel and thereafter updated as necessary.

3.6.2 Thorn Channel

Inbound vessels ≥180m LOA shall not enter the Thorn Channel unless the following criteria are observed:

- A berth or an abort procedure is in place for the vessel.
- Whatever assistance the ship requires to berth – tugs, mooring gang, etc. are available and will remain so throughout berthing.
- Passing points with other vessels have been coordinated and agreed.

Two vessels each ≥180m LOA shall not pass or overtake each other between the Hook Buoy and a line drawn due south of West Bramble Buoy.

~~When an inbound tanker ≥180m LOA is stemmed for the Fawley or BP Oil Terminals, outbound vessels will not normally be planned to pass south of Dock Head until the inbound vessel is in a controlled situation with tugs secured.~~

A second inbound vessel ≥180m LOA will not normally be planned to pass Prince Consort Buoy until:

- an inbound vessel ≥180m LOA bound for Southampton Docks has passed the Reach Buoy, or;
- an inbound tanker ≥180m LOA for the Fawley or BP Oil Terminals is in a controlled situation with tugs secured.

3.6.3 Central Solent Passes

Vessels ≥180m LOA should be planned to pass port to port either north or south of the Ryde Middle Bank. Passes between the Prince Consort Buoy and the West Ryde Middle Buoy will be avoided.

3.6.4 West Bramble turn – maximum wind speeds for inbound vessels

The Pilot and AHM should ensure that, when passage planning, due allowances are made for the vessel to be able to safely turn at the West Bramble taking into account sufficient reserve of speed in the prevailing weather and traffic conditions.

It is recommended that, at the West Bramble turn, the maximum mean wind speed (in the South West Quadrant) for container ships ≥180m LOA is as follows:

- Draught less than 11 metres - 30/35 knots (force 7)
- Draught more than 11 metres - 35/40 knots (force 8)

This is dependent on sufficient towage being available in the Docks area to allow the vessel to berth safely on arrival.

3.7 Passing Points for Vessels ≥180m LOA Above the Hook Buoy

3.7.1 All Vessels

A vessel ≥180m LOA shall not normally pass another vessel ≥150m LOA in the main channel between the Cadland/Greenland buoys and Dock Head.

Instead, these vessels shall be planned to pass at designated passing points:

- Fawley Reach (*referred to as a "Fawley Pass*") or;
- Gymp Buoy (*referred to as a "Dock Head Pass*")

The following factors shall be considered when planning a pass at Fawley and/or Dock Head:

- Adverse weather, tidal conditions and depth of water.
- Vessels shall not be planned to manoeuvre on/off berths adjacent to the passing areas.
- Availability of separate cover for towage.

The maximum total number of vessels involved in a pass shall be:

- Fawley - 3 vessels.
- Dock Head - 2 vessels.

Passes shall be planned and agreed by the AHM and the Pilots concerned before the acts commence.

It will be the responsibility of the vessels involved to advise each other as well as Southampton VTS of any alterations to their timings. This is of particular importance where a vessel's transit time will be different to the "standard timings" used for planning by VTS.

Additionally, the following are required for a Dock Head Pass:

- The allocated towage must be available for each vessel. Tugs for the inbound vessel must not be working the outbound vessel.
- Vessels on 38/9 and 40 Berth are to be advised of the intended pass.

3.7.2 Container Vessels (Category 4 and above) Passing Vessels at Fawley

The following, additional guidelines have been established for container vessels of category 4 and above when passing any vessel ≥ 150m LOA at Fawley. They do not preclude passes with vessels less than 150m LOA.

Tanker >60,000DWT alongside any of berths FMT 1 to 5:

Container vessel category	Container vessel draught	Container vessel inbound	Container vessel outbound
7	Any	No Fawley Pass with vessels >150m LOA	No Fawley Pass with vessels >150m LOA
6	Any	No Fawley Pass with vessels >150m LOA	No Fawley Pass with vessels >150m LOA
5	> 14m	No Fawley Pass with vessels >150m LOA	No Fawley Pass with vessels >150m LOA
5	≤ 14m	Fawley Pass permitted	Fawley Pass permitted
4	> 14m	Fawley Pass permitted	No Fawley Pass with vessels >150m LOA
4	≤14m	Fawley Pass permitted	Fawley Pass permitted

No tanker >60,000DWT alongside any of berths FMT 1 to 5:

Container vessel category	Container vessel draught	Container vessel inbound	Container vessel outbound
7	Any	No Fawley Pass with vessels >150m LOA	No Fawley Pass with vessels >150m LOA
6	Any	No Fawley Pass with vessels >150m LOA	No Fawley Pass with vessels >150m LOA
5	> 14m	Fawley Pass permitted	No Fawley Pass with vessels >150m LOA
5	≤14m	Fawley Pass permitted	Fawley Pass permitted
4	Any	Fawley Pass permitted	Fawley Pass permitted

FMT Marine Control Room are to be advised of Fawley Passes taking place involving category 4/5/6/7 container vessels. Tankers >60,000 DWT should be fully secured before any Fawley Passes take place involving category 4/5/6/7 container vessels.

Due to their high “dead slow” speed no Fawley Passes are permitted involving MOL “B” class vessels and is also applied to other vessels with a high “dead slow” speed exceeding 6 knots. Fawley Passes are not permitted with container vessels utilising escort towage.

3.7.3 Above Hook Pass

When an inbound tanker ≥180m LOA is stemmed for the Fawley or BP Oil Terminals, the Fawley pass is usually conducted south of Esso 5 and may require minor adjustment to the standard Fawley Pass timing, by the vessels. This is known as the "Above Hook Pass".

3.8 Fog Guidelines

3.8.1 Navigation in Fog

The following guidelines are intended to provide assistance to mariners navigating within the Southampton VTS area when visibility is restricted.

Navigating a ship in restricted visibility requires a full understanding of the COLREGS in particular Part B (Steering and Sailing Rules) both Section iii (Rule 19) - Conduct of vessels in restricted visibility and Section i (Rules 4 to 10 inclusive) - Conduct of vessels in any condition of visibility. Pilots and PEC holders are therefore reminded of the contents of the attached Marine Guidance Note, MGN 369 Navigation in Restricted Visibility.

In restricted visibility Southampton VTS will at all times endeavour to disseminate relevant traffic information in good time as such identifying small craft where possible and informing vessels in the vicinity of such small craft in order to prevent a close quarters situation developing and / or a risk of collision occurring. However, Pilots and PEC holders are reminded not to place over reliance on the service of VTS and to ensure they are using all available means when ascertaining local traffic conditions.

Although the use of AIS as an additional aid to situational awareness in restricted visibility is an accepted good practice it should be remembered that not all small craft will be fitted with AIS and that any information received should not be used for collision avoidance. This reinforces the need for a proper RADAR watch to be maintained at all times.

If the Harbour Master has reason to believe that a vessel may not be equipped to enter, leave or transit the area safely in restricted visibility, he may direct the vessel to an outer anchorage or instruct it to remain alongside.

3.8.2 VTS Procedures When Visibility Less Than 2 Nautical Miles

In the event of the AHM being made aware that the visibility is less than 2 miles, either through visibility sensor equipment or a report received from a vessel within the area, they shall take the following action (*See note 1*):

- Call the contracted meteorological forecaster for a prognosis.
- Issue a 'Visibility Warning' broadcast if the forecaster indicates that the visibility is likely to deteriorate further (*See note 2).*
- Request further visibility reports from other vessels to determine the extent of the reduced visibility.
- Ensure that arriving/departing vessels are kept informed of current conditions and identify possible abort berth/anchorages. (*See note 3*).
- Ensure that, prior to boarding, Pilots are informed of current visibility conditions and that Marine Officers are also kept advised accordingly.
- Review planned Fawley and Dock Head Passes of large vessels taking into account any forecast deterioration in visibility.

3.8.3 VTS Procedures When Visibility Between ½ Nautical Mile and 1 Nautical Mile

The AHM shall ensure all the above measures have been taken and in addition:

- Calshot/Hook fog signals must be switched on when visibility in the Fawley/Thorn Channel area is less than 1 nautical mile.
- High speed ferries when operating in reduced visibility of less than 1 nautical mile must report to Southampton VTS on passing the Hook Buoy.
- Ryde/Fishbourne/Portsmouth/Southsea Ferries must, when visibility between the Forts and Ryde Middle is below 1 nautical mile, call Southampton VTS on leaving Southsea/Swashway (Southbound) and Ryde/Fishbourne (Northbound).
- Both radar surveillance desks in the VTS Centre should be permanently manned.
- Advice on a vessel's position should, in general, be given as a bearing and distance from a known point.
- The Eastern Inner Pilot Station will be relocated to the St Helens boarding area when visibility in the Eastern Solent falls below 1 mile.
- Thorn Channel – All vessels that are confined by draught to navigating only within the Thorn Channel will be given **'clear channel in fog'** status (*See note 5*).
- Transits of the River Itchen above the Itchen Bridge should not be undertaken.
- Laden vessels carrying dangerous or polluting goods in bulk (60,000t DWT or greater) will not normally proceed inwards past the West Bramble buoy or depart from their berth.

- Fawley and Dock Head Passes shall not be planned if the visibility is forecast to remain at this level or lower.
- Vessels engaged in bunkering alongside should cease operations if another vessel is due to pass.
- No vessel shall be permitted to leave a berth or enter VTS limits if, in the consideration of the Harbour Master, it is likely to place one or more vessels at unnecessary risk. In these circumstances the time/manner of entry into port limits shall be adjusted as considered appropriate and the vessel directed accordingly.

3.8.4 VTS Procedures When Visibility Less Than ½ Nautical Mile (5 cables)

The AHM shall ensure all the above measures have been taken and in addition:

- Laden vessels carrying dangerous and polluting cargoes in bulk or vessels which are neither gas free or inerted should not enter an area in which the visibility is less than ½ nautical mile.
- No vessel will be given dispensation to exceed the six-knot speed limit northward of the line between Hythe Pier and the Weston Shelf buoy.
- All vessels that are confined to navigating only within a navigable channel will be given a 'clear channel in fog' status.

3.8.5 Towage in Restricted Visibility

Tugs may have difficulty making fast, in particular on the bow, in visibility of less than 2 cables. Inward vessels requiring tug assistance should consider carefully whether the probability of the visibility reducing to less than 2 cables is such that an abort should be considered before passing the West Bramble buoy.

Inward vessels of 220m LOA or greater requiring tug assistance should consider carefully whether the probability of the visibility reducing further is such that an abort should be considered before passing the West Ryde Middle buoy and committing the vessel to the inward passage.

Should a large vessel, once committed to entering Southampton Water, experience a further reduction in visibility, it must be understood that whilst the dock tugs will endeavour to assist, they will have great difficulty in making fast safely in visibility of less than 2 cables. The decision to make fast will rest solely with the Tug Master.

3.8.6 Notes on Fog Guidelines

1) For the purpose of this notice the Southampton VTS area shall include all waters within the Port of Southampton and that part of the Dockyard Port of Portsmouth which lies to the south of a line between Gilkicker Point, the Outer Spit Buoy and Horse Sand Fort.

2) In the event that these guidelines require a broadcast to be made by VTS, the broadcast shall be made on VHF Channel 14 preceded by a 'Securite' announcement on VHF Channels 16 & 12 to warn mariners in the VTS area of the presence or likely presence of restricted visibility.

3) If visibility is only restricted in small parts of the VTS area, it will be for the Harbour Master, Pilot and Master to determine the extent to which this routine should be implemented.

4) For the purposes of this notice, reference to the Harbour Master shall include his appointed assistants.

5) A 'clear channel in fog' vessel is one that is deemed to require a clear and unimpeded passage ahead whilst transiting a navigable channel. For the purpose of this instruction this will mean that no other vessel should enter a zone around the vessel of 1,000 metres ahead or 100 metres either side of the vessel.

6) If the Harbour Master has reason to believe that a vessel may not be equipped to enter, leave, or transit the area safely in restricted visibility, they should direct the vessel to an outer anchorage or instruct it to remain alongside.

3.9 Procedure for Suspending Passenger Embarkation / Disembarkation Whilst Large Container Vessels are Passing Berths 104 to 106 and 38/9

Container vessels of category 4 have significant displacements and are required to pass close to passenger vessels moored on berths 38/9, 102 and 104-106. Additionally, bunker barge operations cannot take place if a category 6 or greater vessel passes. As a precaution against movement of the passenger vessel causing damage or disconnection of the airbridge/gangway, the following procedure shall be followed when container vessels of category 4 and above are passing passenger vessels using an airbridge/gangway:

- Automated text message sent the Terminal Liaison Officer (TLO) alerting of an expected Cat 4/5/6/7 vessel passing.
- TLO will appropriately holt passenger embarkation/disembarkation on all airbridges and gangways in preparation for Cat 4/5/6/7 vessel passing.
- TLO to inform all necessary landside parties involved; Engineers, Ground Services, Operations Manager, etc.
- Once Cat 4/5/6/7 vessel has passed the TLO will authorise the resuming of embarkation/disembarkation operations.

4 Towage

4.1 Introduction

This section provides information on the tugs available in the Port of Southampton and advice for determining the appropriate total bollard pull of towage required for a given wind speed. Guidance on the number of tugs required for berthing and unberthing at specific berths is given in section 5.

Notwithstanding anything contained in these guidelines, the towage requirement for an individual vessel remains the responsibility of the Master. The number of tugs required may be increased when unfavourable conditions exist or when the handling characteristics of the vessel are in doubt. The Master may, in appropriate circumstances and with the prior approval of the Pilot and/or Harbour Master, decrease the number of tugs recommended in these guidelines. It should be noted however, that in cases where the vessel's Master refuses to accept the Pilot's, or in advance of the Pilot being embarked, the Duty Pilot's advice in respect of the number of tugs required to facilitate a safe operation, the Harbour Master may impose the required number of tugs by Special Direction. These tugs will be for the owner's account.

In order to give towage providers sufficient notice of towage requirements, it is often necessary to determine the number of tugs required for a manoeuvre prior to a Pilot being allocated to the vessel. In this case, the advice of the Duty Pilot shall be sought. The Duty Pilot is an enhanced 2nd Class Pilot or above nominated daily. They are responsible to the Harbour Master and act as a focal point for advice on all professional aspects of pilotage including the planned towage requirements and validating tidal windows.

4.1.1 Sources of Meteorological Information

Information on the wind strength and direction at the Bramble Bank, Calshot, Dock Head, Town Quay and Marchwood can be obtained from Southampton VTS on VHF Ch.12 or via the website https://abports.port-log.net/southampton/Latest.php?theme=Day. The data for the Bramble Bank and Dock Head can also be viewed at http://www.southamptonvts.co.uk/

4.2 Strong Beam Winds

The bollard pull required to safely complete a manoeuvre is dependent on a number of factors including:

- Ship type, draft, windage and handling characteristics.
- Reported ship defects.
- Berth location & construction.
- Traffic density.
- Meteorological conditions/forecast including visibility and tidal streams.
- UKC.
- The method in which the tug will assist.

Nevertheless, an approximation of the required bollard pull can be made using the graph and formula given below. These have been reproduced with permission from *Tug Use In Port* (Hensen, 2003) and are applicable to large, high sided vessels of the types typically manoeuvred in the Port of Southampton. It should be noted that values obtained from this graph are not readily applicable to loaded tankers, due to their low wind area in relation to their displacement, or gas carriers which, due to irregular shape of their cargo tank housings, may require a higher bollard pull for a given wind speed. Further graphs and formulae for calculating the require d bollard pull for manoeuvring in a given current can be found in *Tug Use In Port* (Hensen, 2003).

$$\textit{Required bollard pull in kilogrammes} = 0.08V^2 * A$$

Where:
V = wind speed in metres/second
A = Lateral wind area in square metres

Required Bollard Pull (Tonnes)

Wind Speed (knots)	Lateral Wind Area (m2)														
	1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000	10,000	11,000	12,000	13,000	14,000	15,000
5	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8
10	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30
15	5	9	14	18	23	27	32	36	41	45	50	54	59	63	68
20	8	16	24	32	40	48	56	64	72	80	88	96	104	112	120
22	10	19	29	39	48	58	68	77	87	97	106	116	126	136	145
24	12	23	35	46	58	69	81	92	104	115	127	138	150	161	173
26	14	27	41	54	68	81	95	108	122	135	149	162	176	189	203
28	16	31	47	63	78	94	110	125	141	157	172	188	204	220	235
30	18	36	54	72	90	108	126	144	162	180	198	216	234	252	270
32	20	41	61	82	102	123	143	164	184	205	225	246	266	287	
34	23	46	69	92	116	139	162	185	208	231	254	277			
36	26	52	78	104	130	156	181	207	233	259	285				
38	29	58	87	116	144	173	202	231	260	289					
40	32	64	96	128	160	192	224	256	288						
42	35	71	106	141	176	212	247	282							
44	39	77	116	155	194	232	271								
46	42	85	127	169	212	254	296								
48	46	92	138	184	230	276									
50	50	100	150	200	250	300									
52	54	108	162	216	270										
54	58	117	175	233	292										
56	63	125	188	251											
58	67	135	202	269											
60	72	114	216	288											

4.3 Tugs Available in the Port of Southampton

For visibility of the authorised vessel towage tugs available in the Port of Southampton this can be viewed on the VTS Southampton website:
https://www.southamptonvts.co.uk/Yachting_and_Leisure/Notices_to_Mariners/

All bollard pulls are the maximum available and differences may arise between ahead and astern. Towage providers may add, remove or substitute vessels at short notice subject to their operational requirements. Particulars of tugs new to the port will be supplied to the Harbour Master by the towage provider prior to the tug operating in the port.

4.4 Escort Towage for Very Large Crude Carriers (VLCCs)

VLCCs ⩾60,000 deadweight tonnes (dwt) which are **loaded or part-loaded and bound to or from** the Fawley Marine Terminal or Hamble Oil Terminal are required to be accompanied during their passage by an escort tug. The escort tug will meet the inbound vessel south of Nab Tower and under normal conditions secure a tow wire to the stern of the tanker.

An escort tug will normally accompany departing loaded or part loaded vessels to the Nab. However, mariners should be aware that the escort tug with a tanker ⩾60,000 dwt in ballast departing the Terminals may, depending on circumstances, leave the vessel at Prince Consort Buoy and if arriving at the Terminals, may join the vessel between the South and West Ryde Middle.

Navigators of small vessels including recreational craft are to exercise extreme caution when passing round the stern of a large tanker and are not to pass between the tanker and its escorting tug.

4.5 Escort towage requirements for Ultra Large Container Vessels (ULCVs)

ULCVs are pure container carriers of category 4 or above as defined in section 5.3.3.

Certain ULCVs – identified in table 1 below - are considered at risk of not being able to generate, unassisted, a sufficient rate of turn to complete the turns at the West Bramble Buoy and/or Calshot Lightfloat with an adequate margin of safety. An escort tug is, therefore, required to be made fast at the aft of the vessel to provide an indirect tow to assist the turn.

Table 1 – Categories of ULCV requiring escort towage

Category	Draught (m)	Escort Towage Required
Cat 7	≥ 13.0m	Yes
Cat 6	≥ 15.0m	Yes
Cat 5	≥ 15.0m	Yes
Cat 7	< 13.0m	See notes a-c
Cat 6	< 15.0m	See notes a-c
Cat 5	< 15.0m	See notes a-c
Cat 4	≥ 14.0m	See notes a-c
Cat 4	< 14.0m	No

Notes - Vessels meeting these criteria shall be required to use escort towage:

a) inbound and outbound on the first call of the class of vessel
b) inbound or outbound where a particular vessel or class of vessels is/are known to have manoeuvring characteristics which may restrict their ability to complete the West Bramble turn unassisted.
c) inbound or outbound at the conducting Pilot's discretion, taking account of environmental conditions and vessel specific factors as detailed in the pre-arrival questionnaire including, but not limited to, main engine load control features.

Tugs assigned to escort ULCVs must be certified for escort towage and be capable of generating an indirect steering force ≥ 100 tonnes at the speed *v* given in the tug's classification society notation. Such tugs are identified in Notice to Mariners. Towage operators are advised that the harbour authority may require a tug to undergo manoeuvring trials and/or simulation and for the operator to provide a statement attesting to the crew's competence in performing escort towage prior to it being permitted to undertake such duties.

These provisions shall apply to both inbound and outbound vessels. Inbound the escort tug should meet the vessel in the vicinity of the South Ryde Middle Buoy and remain available to provide escort assistance until the vessel has passed the Hook Buoy. Outbound the escort tug should meet the vessel in the vicinity of the Hook Buoy and remain available to provide escort assistance until the vessel has completed the turn at the West Bramble Buoy.

5 Berth and Terminal Guidance Including Towage and Under Keel Clearance Requirements

5.1 Berths 20 – SCT5 including ABP Solent Gateway

This section details towage and under keel clearance guidance for ABP operated berths in the Port of Southampton.

5.1.1 Towage Guidance

The table below gives the recommended number of tugs to be used for berthing and unberthing at all ABP operated berths in the Eastern, Western Docks and Solent Gateway, as well as for non-Specialist vessels at the DP World Southampton Container Terminal.

The recommended number of tugs to be used will be dependent on:

- the manoeuvrability of the vessel and its draught
- wind and tidal conditions
- the disposition of other vessels and port infrastructure
- agreement between the Master, Pilot, individual company, and Harbour Master
- additional towage guidance as set out in 5.1.2

Vessels with fitted and fully operational enhanced manoeuvring capabilities, such as thrusters, high performance/lift rudders, azimuth drive propellers, etc., in certain circumstances, may reduce towage subject to the agreement of the Master and Pilot.

Manoeuvring of large, high-sided Ro-Ro vessels and large bulk vessels in ballast in the Eastern and Western Docks should not normally be undertaken when the sustained mean wind speed exceeds 35kts. This will not necessarily preclude the movement of these vessels if sufficient reserves of power (towage, thrusters) are available to facilitate a safe passage and will require consultation with the Conducting and Duty Pilot.

Where tug values are not shown, duty pilot and conducting pilot's discretion applies. Section 5.1.2 highlights additional requirements that must be considered with regards to tug allocation		
Length Overall	**Recommended Number of Tugs**	
	Berthing	**Unberthing**
20 to 27 Berths		
High Freeboard Vessels/Ro-Ro/Ferries		
Up to 125m		
Over 125m	2	2
Miscellaneous Vessels		
Any length		
30 to 33 Berths		
High Freeboard/Ro-Ro Vessels		
Up to 125m		
Over 125m	2	2
34 to 36 Berths		
Bulk Vessels		
Up to 125m		
125m - 180m	2	2
Over 180m	3	2
High Freeboard/Ro-Ro Vessels and Miscellaneous		
Up to 125m		
Over 125m	2	2
37 Berth		
All vessels		
38 to 41 Berths **101 to 109 Berths**		
Bulk Vessels		
Up to 125m		
125m – 180m	2	2
Over 180m	3	2
All Other Vessels Except Bulk		
Up to 125m		
Over 125m	2	2
42 to 49 Berths		
Bulk Vessels		
Up to 125m		
125m – 180m	2	2
Over 180m	3	2
All Other Vessels Except Bulk		
Up to 125m		
Over 125m	2	2

KGV Dock
See 5.1.4 for towage guidance.
203 Berth

All vessels		
SCT1 to SCT5 Berths		
Up to 125m		
125m – 240m	2	2
Over 240m	2 or 3	2 or 3
ABP Solent Gateway		
Up to 125m		
Over 125m	2	2

5.1.2 Additional Towage Guidance

1) New vessels to the port or berth may be reviewed on the first arrival and departure. Relevant notes may be made against the vessel notes in the Port Management Information System.

2) For vessels of 60,000 DWT or greater, 1 tug must have a bollard pull of at least 50 tonnes.

3) All vessels of 20,000t deadweight and above are required to have tugs of minimum 30 tonnes bollard pull each. Vessels outside of these parameters are to be discussed with the Conducting and Duty Pilots.

4) For RoRo vessels classified with an R2 or R3 status ~~*(Exceeding PANAMAX 32.3m)*~~ 2 tugs are compulsory on inbound and outbound voyages regardless of their enhanced manoeuvring capabilities.

5) For vessels of 240m LOA or greater the minimum bollard pull for each tug must be 40 tonnes.

6) Berthing of vessels less than 180m LOA may be conducted when 35/36 berth is unoccupied and mean wind speeds are 30 knots or less from any direction as measured from Dock Head.
   Berthing of vessels 180m LOA and over, can be conducted when 35/36 berth is unoccupied, provided mean windspeeds are 25 knots or less from any direction as measured from Dock Head.

7) Berthing of all vessels can be conducted onto 30/31 berth when 35/36 berth is occupied with a vessel with a:

- beam of less than 30m, provided mean windspeeds at Dock Head does not exceed 25 knots.
- beam of 30m or more, provided the mean wind speed at Dock Head does not exceed 20 knots.
- towage is not to be reduced as per 5.1.1 regardless of vessels enhanced manoeuvring capabilities.

8) Berthing of vessels less than 180m LOA may be conducted when 35/36 berth is unoccupied and mean windspeeds are 30 knots or less from any direction as measured from Dock Head.
Berthing of vessels 180m LOA and over, can be conducted when 35/36 berth is unoccupied, provided mean wind speeds are 25 knots or less from any directions as measured from Dock Head.

9) Berthing of vessels can be conducted onto 35 berth when 36 berth is occupied with a vessel with a:
   - beam of less than 30m, provided mean wind speeds at Dock Head (60m) does not exceed 20 knots (from any direction).
   - beam of 30m or more, provided the mean wind speeds at Dock Head does not exceed 20 knots.

10) Vessels on 36 berth not to have a bow/stern position further south than bollard 29 plus 30ft (9 meters), where safe mooring allows.

11) Vessels bound for berths within the Empress Dock shall not exceed 147 meters LOA or exceed a beam of 24 meters. Additionally, Bunker barges are forbidden to be rafted in close proximity to the entrance/exit of the Empress Dock due to the strong probability of restricting other vessels from entering/departing the dock.

12) Ro-Ro vessels bound to/from 25 or 105 berth link spans may consider reducing towage allocation after consultation with either the conducting Pilot or Duty Pilot (when it's a PEC holder) in advance, taking into account the prevailing weather conditions and manoeuvrability of the vessel.

13) Vessels bound for SCT berths 1 to 5 are recommended to take an additional tug if the vessel is swinging. Towage for specialist vessels are determined by a Specialist

Pilot. Further information can be found in DPW Berth manoeuvring criteria in section 5.3.

14) Exceptionally large vessels laying-up or calling for repairs shall have towage determined on a case-by-case basis at the Harbour Master's discretion.

15) Outbound vessels that have been laid up for a period of 30 days or more will take an escort tug until clear of the Prince Consort Buoy.

5.1.2.1 RoRo Categorisation

For the purpose of berth planning and risk assessment, RoRo vessels in Southampton will be categorised based on beam values. RoRo categories will show to ABP on its Port and Vessel Information System.

RoRo Category	Beam From	Beam To	Comments
Uncategorised	00.000	32.710	Inclusive of Panamax vessels (32.710m beam)
Category 1	32.711	35.500	Greater than Panamax beam
Category 2	35.501	38.000	Restrictions on 46/7 berth
Category 3	38.001	40.000	Restrictions on 34/5 berth

5.1.3 Under Keel Clearance

This table lists the advertised depth and recommended minimum under keel clearance for ABP operated berths in the Port of Southampton. All berths are liable to siltation and are regularly surveyed. Up to date passage planning depths are available from: http://www.southamptonvts.co.uk/Port_Information/Navigation/Hydrography/Passage_Planning_Depths/

Berths	Advertised Depth (m)	Suggested Static UKC	Comments
Itchen Quays			
31-32	9.1	0.6	Stable, soft.
33	9.1	0.6	
34-36	9.9	0.6+	
Empress Dock			
20	7.5	0.5	Stable, used by small vessels, berths generally shallower than approaches.
21	7.5	0.5	
22-23	6.8	0.5	
24-25	7.1	0.5	
26	7.1	0.5	

27	7.1	0.5	
Dock Head			
37	7.8	0.6	Stable but rarely dredged.
Test Quays (Eastern Docks)			
38-39	10.5	0.6	Well dredged and levelled, but liable to small debris over side from quay.
40	9.3	0.6	
41	8.7	0.6	
48	7.1	0.5	Small vessels, not liable to heavy siltation.
49	7.1	0.5	
Ocean Dock			
43	11.7	0.6	All berths liable to siltation, and only rarely dredged as required. May be areas of stiffer silt especially in north.
44	11.7	0.6	
45	10.2	0.6	
46	10.5	0.6	
47	11.7	0.6	

Berths	Advertised Depth (m)	Suggested Static UKC	Comments
Western Docks			
101	10.5	0.5	Well dredged and levelled, all berths higher than adjacent channel, not prone to siltation.
102	10.5	0.5	
103	10.5	0.5	
104	10.5	0.5	
105	11.7	0.5	
106	11.7	0.5	
107	11.7	0.5	
108	11.7	0.6	
109	11.7	0.6	Partly in exclusion, prone to overspill of bulks In dredge exclusion zone.
110	10.2	0.5	Not maintained.
DPW Container Terminal			
SCT5	16.5	0.6	Partly in dredge exclusion zone and whole quay length prone to siltation.
SCT4	13.6	0.6	Liable to rapid movement of very soft silt. Very mobile area, but well surveyed and levelled.
SCT3	14.0	0.6	
SCT2	15.1	0.6	
SCT1	15.1	0.6	
203	9.1	0.6	

5.1.4 KGV Dock

Length overall	365.8m
Length at floor level	348.0m
Width at entrance	41.2m
Depth of dock - centre	11.4m
Useable depth at side	9.8m
Minimum recommended UKC	0.9m

The King George V Dock is a former dry dock now used as a berth for the handling of bulk cargoes. Specific risk assessments apply to these berths which place controls on factors including maximum wind speed, wind direction and lighting levels for berthing/unberthing operations.

Towage requirements for KGV Dock (*Limited to PANAMAX 32.3m beam*):

Length Overall	No. of Tugs	Comments
Up to 125m	At Duty Pilot or Conducting Pilots discretion	
125m – 170m	2	
Above 170m	4 plus 2 mooring launches	Suggested – Small tug on bow, large tug on stern, two large tugs at dock entrance. Assistant Pilot as required. See comment above.

Vessels with fitted and fully operational enhanced manoeuvring capabilities, such as thrusters, high performance/lift rudders, azimuth drive propellers, etc., in certain circumstances, may reduce towage subject to the agreement of the Master and Pilot.
When greater than 20,000 deadweight, tugs to be minimum of 30 tonnes bollard pull.

Two vessels may be moored in the dock at the same time provided:

- both vessels are less than 150m LOA.
- the vessel on the west side shall be first in/last out.
- towage shall be allocated as deemed necessary by the Duty Pilot.

Vessels over 150m LOA shall be planned to berth and unberth at slack water.

Due to the stepped design of the dock walls, the maximum usable depth for vessels berthed alongside the dock walls is 9.8m below CD. Maximum draught limitations shall apply:

- 10.65m @ MLWN.
- 9.35m @ MLWS.

Cross-section of King George V Dock:

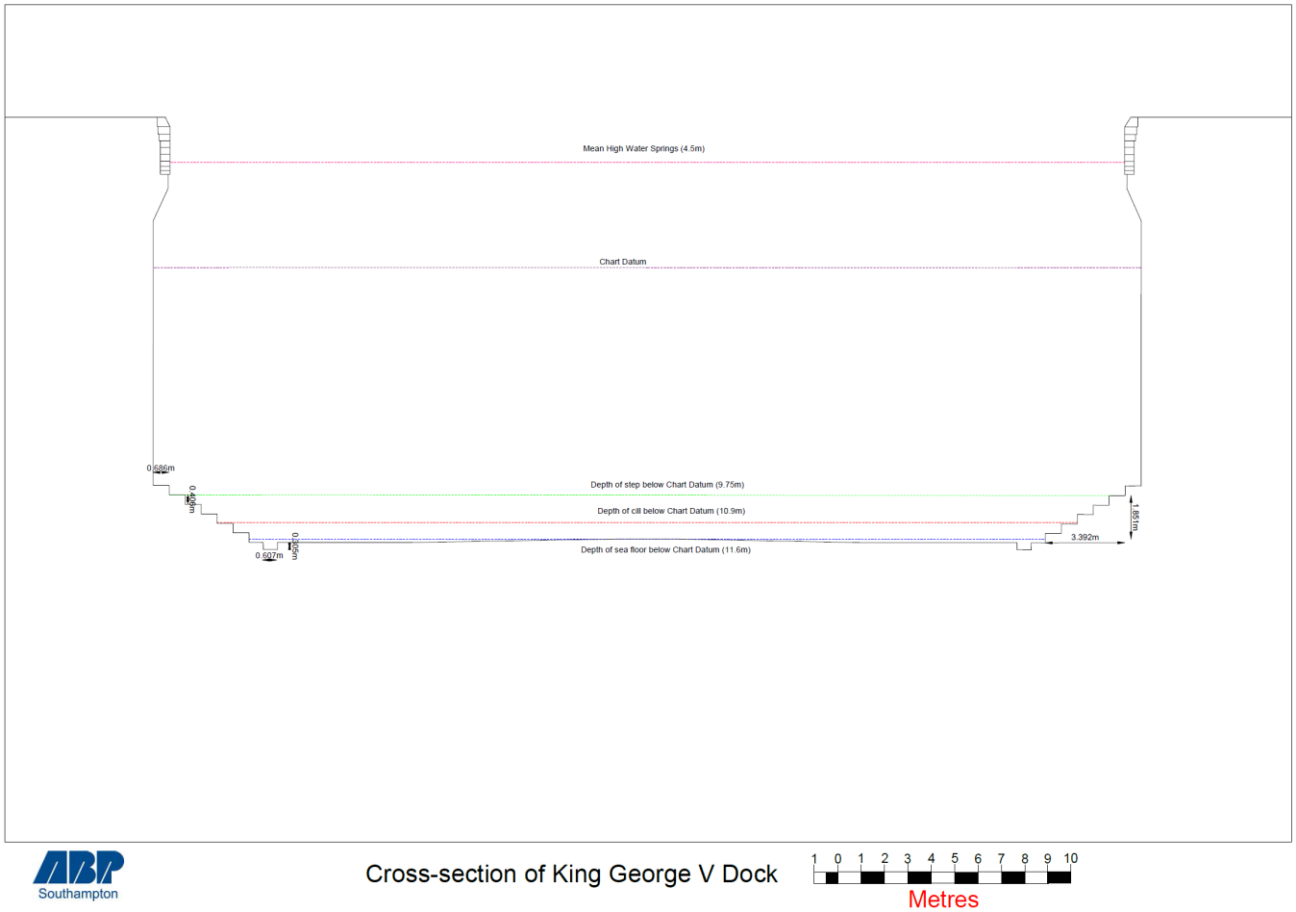


Figure 5: KGV Cross-Section

5.2 Nominated Berths and Moorings on the River Test, River Itchen and Southampton Water

GUIDANCE TO BERTH OPERATORS

The Port of Southampton offers the following guidance to berth operators, highlighting the responsibilities and obligations placed upon them by national legislation and the Port Marine Safety Code. It is also important for berth operators to recognise and oversee those aspects of berth operation, which they have devolved or delegated to ships' agents, since liability remains with the berth operator in cases of non-compliance.

Port Marine Safety Code

The Code is applicable both to statutory harbour authorities and to other marine facilities which may not have statutory powers and duties. These are collectively referred to throughout the Code as 'organisations' and includes marine berths, terminals or jetties.

Conservancy Duty

Berth operators have a duty to conserve their berth so that it is fit for use and have a duty of reasonable care to see that it is in a fit condition for a vessel to utilise it safely. Berth Operators should provide users with adequate information about conditions on the berth.

Notification of Depths on Berths

Whilst ABP carries out general hydrographic surveys and publishes depths in the channels and fairways, depths alongside and the approaches to berths are the responsibilities of the berth operator concerned. To ensure that up-to-date information is held by the Harbour Authority, and that vessels can be programmed safely, berth operators should arrange to have regular surveys carried out and the results passed directly to ABP's Port Hydrographer.

Drying or NAABSA Berths

If an operator wishes to nominate their berth as a drying berth for operations, they are to seek the Harbour Master's permission.

Safe operation of a berth that is declared as NAABSA (Not Always Afloat, But Safely Aground) is the responsibility of the berth operator. This responsibility includes ensuring that when inviting a vessel to take the ground alongside the berth, that it is safe and fit for this purpose:

- NAABSA berths are to be inspected regularly to ensure there are no obstructions or changes to the bed level that could damage the vessel; this is to be completed Bi-Annually, as a minimum and the survey should be of high resolution multibeam quality.
- The berths are kept as reasonably flat as possible and are not known to have any obstructions on them, meaning that vessels may be able to lie safely on the soft mud/silt bottom;
- The decision as to whether it is a safe for a vessel to lay on the berth is the responsibility of the vessel's Master but to help them make that decision, the following advice should be given:
    - The Harbour Authority is not aware of any obstructions on the riverbed on advice provided by the berth owner / operator;
    - The berth owner / operator has the responsibility that the berth has been dredged and monitored for depth and profile including the expectations that undulations may exist.
    - Masters should risk assess the use of the berth taking into account factors including, but not limited to, their vessels hull profile and any protrusions from the hull;
    - The riverbed consists of soft mud and silt at the berth;
    - The Master is advised to keep all watertight openings closed and monitor bilge levels and alarms;
    - The Master is advised to tend the vessel's mooring lines and monitor its attitude and position as the tide falls/floods;
    - Where necessary, the Master is advised to rig extra lines or beaching legs, to ensure the vessel remains upright as the vessel takes the ground.

Prior to arrival the Port Agent must confirm that:

- The vessel calling at the berth is suitable for operating at a NAABSA berth.
- The vessel is capable of providing alternative firefighting arrangements at the berth.
- The vessel uses the appropriate intakes, such as cooling water, so as not to compromise the mechanical performance of the vessel with the intake of siltation and other such matter.

Complying with ABP Requirements in Respect of Dredging at the Berth and the Approaches to the Berth

A berth operator wishing to carry out maintenance dredging must comply with certain requirements in respect of licensing before any work is carried out. It is important that periodic surveys of the berth are carried out on a regular basis, to provide information to support effective maintenance of the facility; and to help to identify the most cost-effective and appropriate form of dredging and to aid anticipating any depth constraints.

Any dredging in the harbour should be covered by a Harbour Works Consent. Dredging may also require a Marine Licence from the Marine management Organisation (MMO). For more information about dredging in the harbour, and to assist with any Marine Licence application, please see Southampton's Baseline Document.

For information on applying for a Marine Licence please refer to the MMO guidance.
The table below gives details of nominated berths and moorings on the River Test, River Itchen and Southampton Water. Limitations with respect to vessel size and towage guidance are also given.
These guidelines shall be applied when using tugs with a minimum bollard pull of 4 tons per tug. If tugs of less than 4 tons are being considered the Duty Pilot must be consulted prior to ordering. The guidelines listed below may be altered when unfavourable weather and/or tidal conditions exist, or the efficiency of the ship's equipment or her manoeuvring capabilities are in doubt. In these cases additional tugs may be used at the discretion of the Master and Pilot or Harbour Master. Where bow & stern thrusters are fitted that produce their designed power output and are in good working order, they may, at the Duty Pilot's discretion, be considered as equivalent to one tug.

5.2.1 River Test

Marchwood Wharf

Length	Min depth (approaches)	Min depth (alongside)
220m	1.7m (2.0m if not swinging)	4.0m

Notes:

- Tug requirements at Pilot/Duty Pilot's discretion.
- All commercial traffic requires a minimum UKC of 0.3m and on an ebb tide 0.5m.

Cracknore (Ex Husbands) Jetty – Discontinued and Non-Operational

Length	Min depth (approaches)	Min depth (alongside)
185.5m	1.9m	4.2m

Notes:

- Maximum length of vessel 176m LOA.
- Vessels over 61.0m LOA to be provided with 2 tugs for arrival and departure.
- All commercial traffic requires a minimum UKC of 0.3m and on an ebb tide 0.5m.
- Berth subject to siltation.

ABP Solent Gateway Marchwood

Berth No. & Name	Length	Min depth (approaches)	Min depth (alongside)
No. 1-2 Mulberry Jetty	135m	4.9m	4.9m
No. 3-4 Falkland Jetty	170m	8.5m	8.5m
No. 5 Gun Wharf Jetty		4.9m	4.9m
No. 6 Gun Wharf Jetty		3.0m	3.0m

Note:

- Mulberry Jetty accommodates vessels of 125m LOA and 8,000 displacement tonnage.
- Falkland Jetty accommodates vessels of 200m LOA and 25,000 displacement tonnage.
- The Falkland Jetty is marked with distances to the floating Ro-Ro pontoon.
- Gun Wharf accommodates small military/service vessels only.
- Vessels should berth onto fenders with negligible ahead or astern motion and may manoeuvre for position once landed.
- Tug Requirements as per PUNG 5.1.1
- New vessels will be reviewed on first arrival and departure and relevant notes made against the vessel in PAVIS.
- Vessels LOA greater than or equal to 170m must use at least 1 mooring launch when berthing at SGL.
- Point-Class vessels do not require mooring launches for berthing.

~~Tug requirements:~~

- ~~<125m LOA; at Pilot/Duty Pilot's discretion.~~
- ~~>125m LOA are to be provided with 2 tugs. This requirement may be amended, after consultation between Master and Pilot once the manoeuvring capabilities of the vessel are known. New vessels will be reviewed on first arrival and departure and relevant notes made against the vessel notes in PAVIS.~~

5.2.2 River Itchen

A minimum of 0.5m vertical clearance must be allowed for passing under the Itchen Bridge. Agents handling vessels bound for berths above the Itchen Bridge are requested to ensure that they confirm an accurate air draught from the Master prior to arrival in the port. The AHM & Duty Pilot should be consulted if doubt exists.

All commercial traffic requires a minimum UKC of 0.3m and on an ebb tide 0.5m.

Transits of the River Itchen should not be normally undertaken if the visibility is less than 1 mile.

When wind speeds exceed 20 knots, transits of River Itchen and associated towage will be at Pilot/Duty Pilot's discretion.

Princes Wharf

Length	Min depth (approaches)	Min depth (alongside)
146.3m	1.2m (1.8m not swinging)	2.0m

Notes:

- Maximum length of vessel permitted is 100m LOA.
- Vessels over 61m LOA to be provided with one tug when swinging.
- Vessels over 67m LOA to be provided with one tug, two tugs when swinging.
- Vessels over 85m LOA, are to be swung off Millstone Pt, usually at First High Water, and berthed starboard side to the quay.
- Vessels to depart the berth no later than 30 minutes before 2nd High Water.

Saxon Wharf (Upstream Side of Jetty)

Length	Min depth (approaches)	Min depth (alongside)
120m	1.8m	2.5m

Notes:

- Maximum length of vessel permitted is 80m LOA.
- Vessels are to be berthed and unberthed at high water with 2 tugs.

Dibles (River Berth)

Length	Min depth (approaches)	Min depth (alongside)
118.0m	2.4m	2.2m

Notes:

- Maximum length of vessel permitted is 120m LOA.
- Vessels between 84.5m and 100m LOA when arriving loaded to berth port side to quay.
- Vessels 84.5m LOA or greater when leaving and swinging to be provided with one tug.
- Vessels 90m LOA or greater and swinging to be provided with two tugs.
- Vessels between 100m and 120m LOA –
    i) To be provided with 2 tugs.
    ii) If in loaded condition, to arrive at the high water slack period.
    iii) To be swung south of the Itchen Bridge at either high or low water slack period.

Dibles Gut

Length	Effective Breadth	Min depth (approaches)	Min depth (alongside)
62.5m	14.5m	2.0m	1.3m (inner end)

Notes:

- Maximum size of vessel permitted is 91.5m LOA and 14.0m beam.
- Vessels to berth at slack water.
- Vessels up to 75m LOA tug requirement at Pilot/Duty Pilots' discretion.
- Vessels over 75m LOA to be provided with one tug for arrival and departure.

Crown and Leamouth Wharfs

Berth	Length	Min depth (approaches)	Min depth (alongside)
Crown	90.0m	2.4m	2.3m
Leamouth	76.0m	2.4m	2.2m

Note:

- Tug requirements at Pilot/Duty Pilot's discretion.
  Vessels between 100m and 104m LOA with enhanced manoeuvring capabilities as approved by the Harbour Master, may be swung in the vicinity of Crown Wharf subject to the presence of other berthed vessels.

Burnley Wharf

Length	Min depth (approaches)	Min depth (alongside)
155.0m	2.0m	2.0m

Note:

- Tug requirements at Pilot/Duty Pilot's discretion.

Centenary Wharf (Opposite Ocean Village Entrance)

Berth	Length	Min depth (approaches)	Min depth (alongside)
(North)	80.0m	2.3m	6.3m
(South)	169.5m	3.2m	6.7m

Note:

- Tug requirements at Pilot/Duty Pilot's discretion.

5.2.3 Southampton Water

Solent Refit - Hythe

- Maximum permitted LOA 100m.

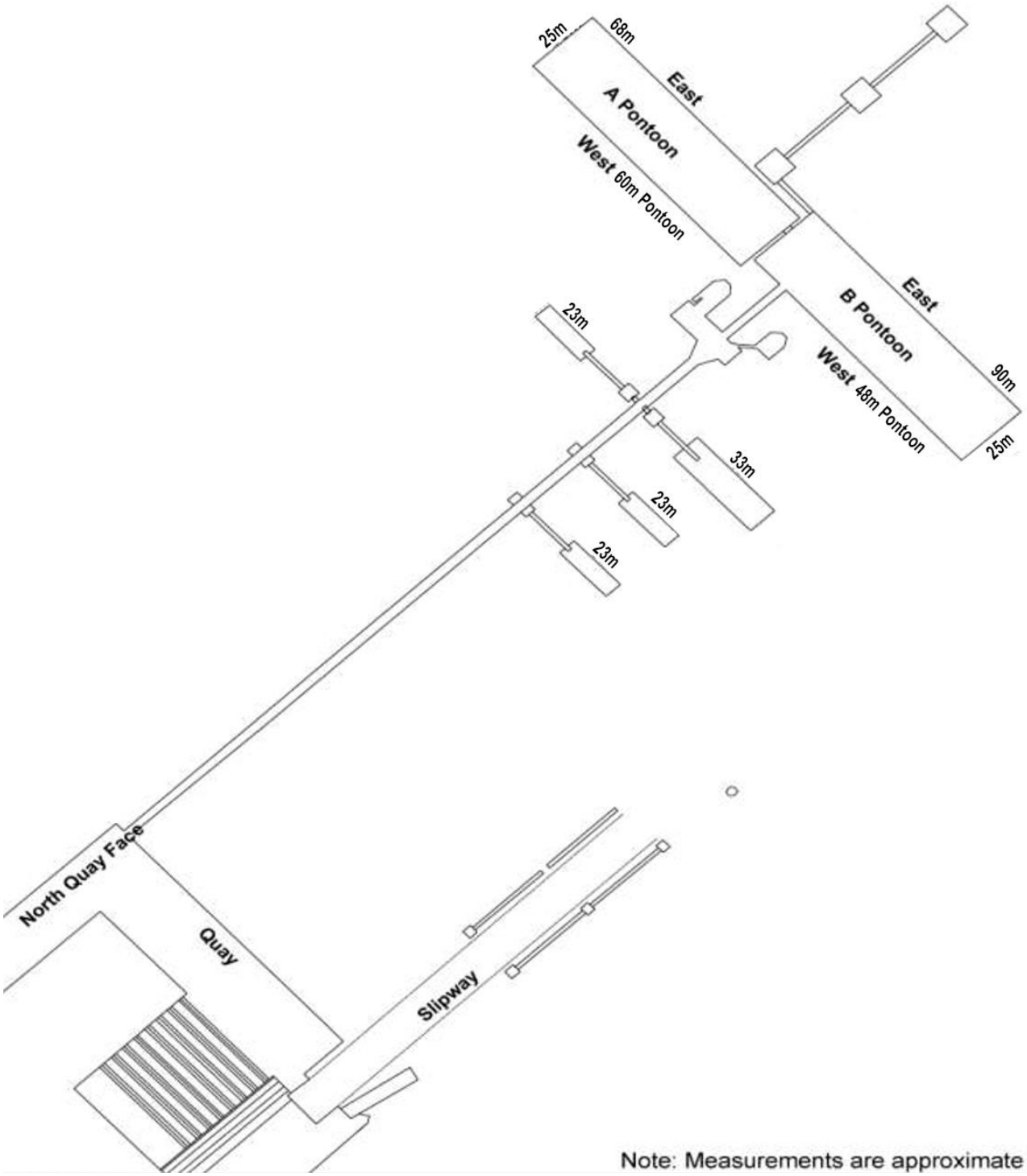


Figure 6: Solent Refit – Hythe Berth Depth Illustration

Fawley Power Station

Length	Min depth (approaches)	Min depth (alongside)	Max beam
70.0m	1.5m	2.4m	14.6m

Notes:

- Maximum length of vessel 68m. This length may be increased to 75m subject to Pilot/Duty Pilot's discretion.
- Tug requirements at Pilot/Duty Pilot's discretion.
- All commercial traffic requires a minimum under keel clearance of 0.3m on a flood tide and on an ebb tide 0.5m.
- Berth is subject to siltation.
- Maximum air draft from chart datum is 22.5m.

5.3 DPW Berth Manoeuvring Guidelines

5.3.1 General Guidelines

Minimum Under Keel Clearance (UKC) for vessels of category 0 & 1 to be as per PUNG 8.7. For category 2 vessels and above, the minimum UKC will be determined on a case-by-case basis by Specialist Pilots.

For berthing / un-berthing, all crane positions that are within the vessel's footprint are to be as per the Berthing Officers' overnight program. Cranes outside of the berthing footprint are to be clear of mooring bollards for the vessel, or no less than 30 meters clear ahead and astern of the planned position. Any deviation from this plan shall only be permitted with the agreement of the conducting pilot. Due to visibility restrictions on container ships a Berthing Officer or berthing representative from DP World is to be in attendance for each vessel's arrival.

5.3.2 Berth definitions

The terminal has 5 operational berths. Berth

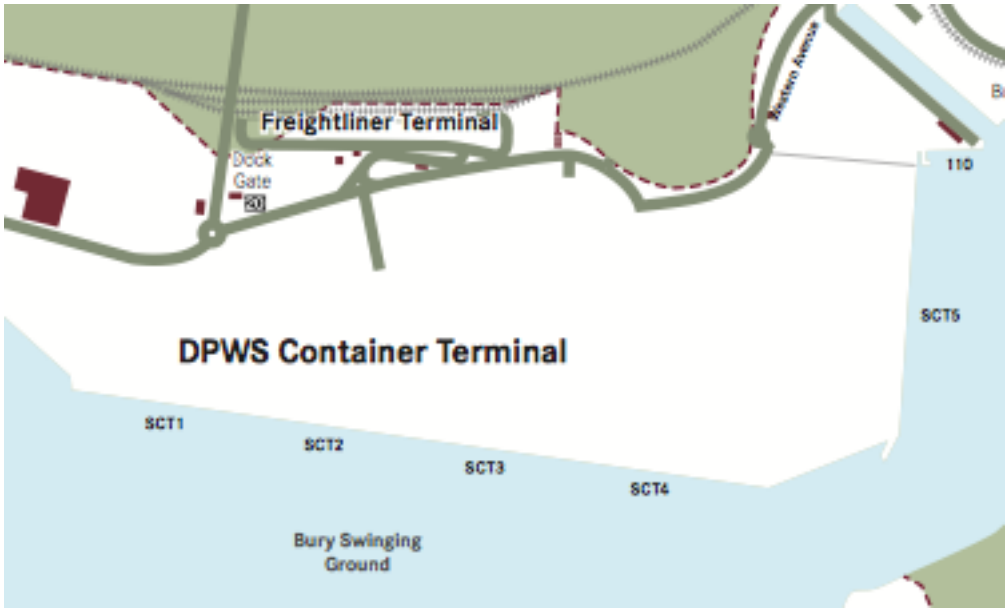


Figure 7: DPW Berth Layout

Berth	Length	Bollard		Berth Pocket*	
		From	To	Width	Depth
SCT5	490m			70m	16.5m
SCT4	310m	216	237	50m	13.6m
SCT3	310m	237	258	70m	14.0m
SCT2	310m	258	277.25	70m	15.1m
SCT1	420m	277.25	258	70m	15.1m

*Berth pocket width not including fender standoff. Width measured at base of dredge box.

On berth SCT4, bollard 223 is located 100 meters clear of “203 corner”. On berths SCT1 to SCT4 bollards on each berth shall be painted a different colour to indicate the different berths. On berth SCT2, bollards 272 and 267 are to be painted yellow to indicate the vessel’s position relative to the Eling Buoy.

5.3.3 Ship Categories

Pure container carriers calling at the terminal will be allocated a category. The category of vessel determines the pilotage requirement and navigation parameters. A vessel will have its assigned category suffixed to its name in PAVIS.

Whilst efforts have been made to provide general dimensions and tonnages for ship categories, these cannot be readily applied universally. Specialist Pilots as a group will assess vessels new to the port and based on equipment fit / handling characteristics will detail the appropriate category for large container vessels operating within the port.

The Southampton Pilots Operational Orders specifies that container vessels of LOA 280m or greater and/or 60,000DWT or greater shall be subject to the requirements of Specialist Pilot allocation.

Category	Pilot	LOA	Beam	DWT
0	Non-specialist	<170m	n/a	<60,000T
1	Non-specialist	<280m	n/a	<60,000T
2	Single Specialist	>280m	<45m	<105,000T
3	Single Specialist	>351m	>45m	>105,000T
4	Two Specialists Container	>365m	>45m	>140,000T
5	Two Specialists Container	>390m	>53m	>180,000T
6	Two Specialists Container	>397m	>55m	>190,000T
7	Two Specialists Container	>400M	>60m	>210,000T

5.3.4 Navigation and Pilotage Parameters

This section details the navigation and pilotage measures to be applied when berthing/unberthing vessels at the terminal. These parameters are subject to exception only at the express satisfaction of the Specialist Pilots and AHM.

5.3.4.1 Parameters for Vessels *of Category 0 & Category 1*

The following shall apply to vessels of category 0 and 1 arriving/departing the terminal:

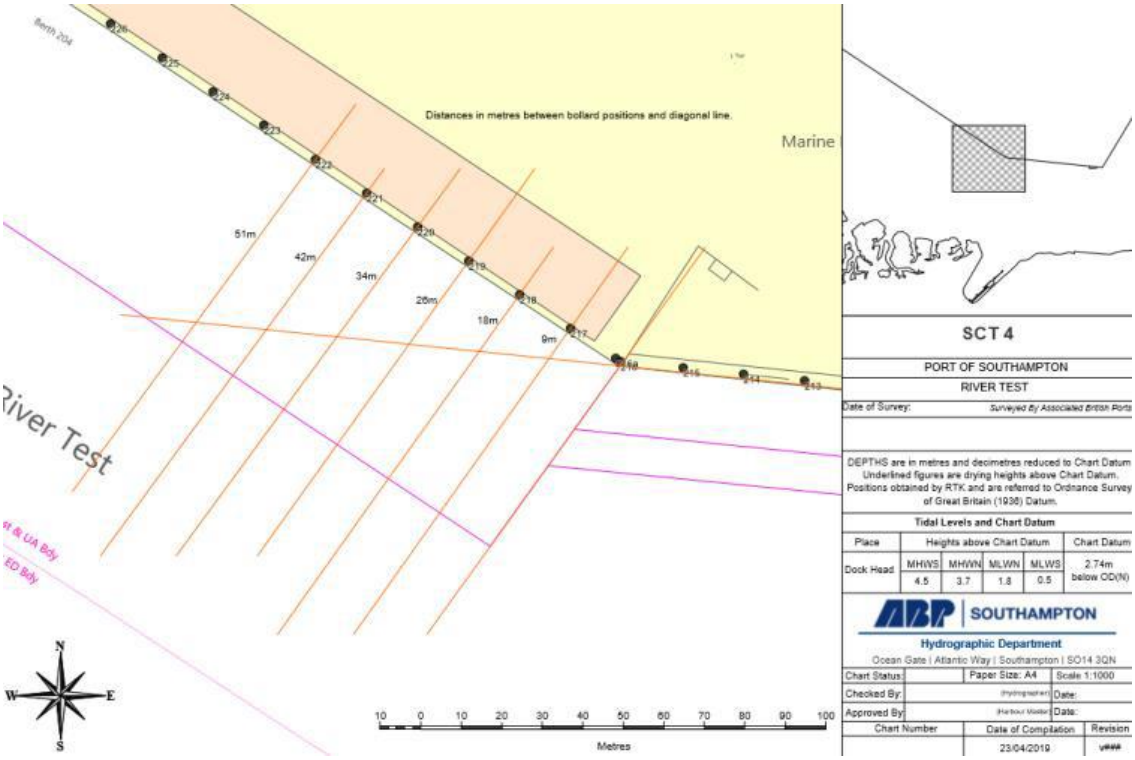
- A suitably qualified Pilot or PEC holder.
- Weather limitations to be determined by the conducting Pilot having due regard to the guidance in PUNG 4.2.
- Tidal windows generated by Duty Pilot. Conducting Pilot may adjust timings based on actual tidal and meteorological conditions.
- Any berth / either side to quay.
- Cranes boomed up on destination berth and east of bollard 223. Cranes may be boomed down on working ships and on other berths unless requested otherwise by the conducting Pilot.

- Tugs as per PUNG 5.1 and as agreed between Pilot / Agent / Master.

5.3.4.2 Parameters for all Vessels of Category 2 and Above

The following shall apply to all vessels of category 2 and above arriving/departing the terminal:

- Container Specialist Pilot.
- Weather limitations to be determined by conducting Pilot(s).
- Tidal windows generated by coordinating Specialist Pilot.
- Conducting Pilots may adjust timings based on actual tidal and meteorological conditions. Adjustments to timings may likely be encountered within 2.5 hours of LW on large spring tides.
- 203 Berth clear except for harbour tugs.
- Cranes boomed up on destination berth. May be boomed down on working ships and on other berths unless requested otherwise by the conducting Pilot.
- No Liebherr or Paceco cranes to be east of bollard 223 whether boom up or down.
- The berthing of vessels towards the Eastern end of SCT4 needs to consider the restriction it places on passing ships. The broader the beam the further West it should be; for example, vessels with a beam >25m are to be berthed no further East than bollard 219, as indicated in the below diagram.



5.3.4.3 Parameters Specific to Category 2 Vessels

In addition to those at 5.3.4.2, the following shall also apply to category 2 vessels arriving/departing the terminal:

- Vessels may berth at any berth, either side to.
- For vessels inbound to SCT1, no cranes boomed down from bollard 274 westwards.
- Tugs as per PUNG 5.1 and as agreed between Pilot / Agent / Master.

5.3.4.4 Parameters Specific to Category 3 Vessels

In addition to those at 5.3.4.2, the following shall also apply to category 3 vessels arriving/departing the terminal:

- SCT 1 - 5 berths at conducting Pilot's discretion.
- Clearance between ships on SCT 1 and SCT 2 should be 105m.
- Outbound - if requested by the conducting Pilot, no bunker barge or garbage barge to be moored on the outboard side of a cruise ship at 106 Berth. Should the bunker barge be given permission to remain in position, it shall stop oil transfer operations during the passage of the outbound vessel.
- Tugs as per PUNG 5.1 and as agreed between Pilot / Agent / Master.

5.3.4.5 Parameters Specific to Category 4 Vessels

In addition to those at 5.3.4.2, the following shall also apply to category 4 vessels arriving/departing the terminal:

Inbound:

- Any cat 5 vessel alongside (to be passed), bow or stern no further east than the projected line of 203 berth, bow or stern approximately 700m from western end (no further west of Bollard 258 (SCT 2 clear))
- SCT 1 - 5 Berths at Pilot's discretion.
- SSTQ if SCT 1 required to be used.
- 2 Container Specialist Pilots onboard
- Berthing Officer in attendance otherwise DPW quayside staff to assist.
- Type 1 Portable Pilot Unit (PPU) operational.
- Fawley Passes as per PUNG section 3.7.2
- Above Cadland Passes with other vessels at conducting Pilot's discretion.
- Either side alongside at conducting Pilot's discretion.
- Must berth SSTQ if SCT 5 occupied or unavailable.
- 3 tugs, one with a minimum of 70T bollard pull and the remaining two with a minimum 60T bollard pull.

Outbound:

- 2 Container Specialist Pilots onboard.
- Type 1 Portable Pilot Unit (PPU) operational.
- If requested by the conducting Pilot, no bunker barge or garbage barge to be moored on the outboard side of a cruise ship at 106 Berth. Should the bunker barge be given permission to remain in position, it shall stop oil transfer operations during the passage of the outbound vessel.
- Above Cadland Passes with other vessels at conducting Pilot's discretion
- Fawley Passes as per PUNG section 3.7.2
- 3 tugs, one with a minimum of 70T bollard pull and the remaining two with a minimum 60T bollard pull. When the vessel is berthed PSTQ, a reduction to 2 tugs may be permitted at the conducting Pilot's discretion.

5.3.4.6 Parameters Specific to Category 5 Vessels

In addition to those at 5.3.4.2, the following shall also apply to category 5 vessels arriving/departing the terminal:

Inbound:

- 2 Container Specialist Pilots onboard.
- Berthing Officer in attendance otherwise DPW quayside staff to assist.
- Type 1 Portable Pilot Unit (PPU) operational.
- Fawley Passes as per PUNG section 3.7.2.
- Above Cadland Passes with other vessels at conducting Pilot's discretion.

C5 No passes

- SSTQ default. If PSTQ, SCT5 must be clear.
- 4 x tugs in and out. Conducting Pilot may reduce to 3 tugs on a case by case basis and at their discretion.

C5 Passing another vessel alongside SCT 3/4

- Wind speed max 20kt mean in any direction as measured at Dock Head;
- SSTQ default. If PSTQ, SCT5 must be clear;
- 4 x tugs in and out. Conducting Pilots may reduce to 3 on case by case basis;
- Max combined beam of both vessels no greater than 110m;
- Any vessel alongside (to be passed), bow or stern no further east than the projected line of 203 berth, bow or stern approximately 700m from western end (no further west of Bollard 258 (SCT 2 clear));
- C5 inbound, vessels bow no further west than 302 bollard.
- Tugs, one with a minimum of 70T bollard pull and the remaining a minimum 60T bollard pull.
- If requested by the conducting Pilot, no bunker barge or garbage barge to be moored on the outboard side of a cruise ship at 106 Berth. Should the bunker barge be given permission to remain in position, it shall stop oil transfer operations during the passage of the outbound vessel.
- Cranes to boom-up on vessel being passed, Pilots may permit lowering subject to suitable weather/experience.

5.3.4.7 Parameters Specific to Category 6

In addition to section 5.3.4.2, the following shall also apply to category 6 vessels arriving/departing the terminal:

Inwards to all berths:

- 2 Container Specialist Pilots onboard
- Berthing Officer in attendance otherwise DPW quayside staff to assist
- Type 1 Portable Pilot Unit (PPU) operational
- Fawley Passes as per PUNG section 3.7.2
- Above Cadland Passes with other vessels at conducting Pilot's discretion

In addition, when inwards to SCT5 only:

- Starboard side to quay preferred
- 3 tugs, one with a minimum of 70T bollard pull and the remaining two each with a minimum 60T bollard pull

In addition, when inwards to berths SCT1-4 only:

- No other vessels to berthed on SCT1-4 east of the final position (first in/last out principle). Vessels may be berthed west of the final position
- Maximum sustained wind speed of 20 knots measured at Dock Head (from any direction)
- 4 tugs, one with a minimum of 80T bollard pull and the remaining three each with a minimum 60T bollard pull
- Vessel's bow no further west than bollard 302
- Starboard side to quay only
- Where the vessel presents in an extraordinary condition - for example (but not limited to) a light draught, a large trim or with an unusual deck stow, the maximum sustained wind speed and towage requirements may be varied at the conducting Pilot's discretion

Outbound from all berths:

- 2 Container Specialist Pilots onboard
- Type 1 Portable Pilot Unit (PPU) operational
- If requested by the conducting Pilot, no bunker barge or garbage barge to be moored on the outboard side of a cruise ship at 106 Berth. Should the bunker barge be given permission to remain in position, it shall stop oil transfer operations during the passage of the outbound vessel
- Above Cadland Passes with other vessels at conducting Pilot's discretion
- Fawley Passes as per PUNG section 3.7.2

In addition, when outwards from SCT5 only:

- 3 tugs, one with a minimum of 70T bollard pull and the remaining two with a minimum 60T bollard pull.

In addition, when outwards from berths SCT1-4 only:

- No other vessels to berthed on SCT1-4 to the east of the vessel's position (first in/last out principle). Vessels may be berthed west of the position
- Maximum sustained wind speed of 20 knots measured at Dock Head (from any direction)
- 4 tugs, one with a minimum of 80T bollard pull and the remaining three each with a minimum 60T bollard pull
- Where the vessel presents in an extraordinary condition - for example (but not limited to) a light draught, a large trim or with an unusual deck stow, the maximum sustained

wind speed and towage requirements may be varied at the conducting Pilot's discretion

5.3.4.8 Parameters Specific to Category 7 Vessels

In addition to those at 5.3.4.2, the following shall also apply to category 7 vessels arriving/departing the terminal:

Inwards:

- 2 Container Specialist Pilots onboard.
- Berthing Officer in attendance otherwise DPW quayside staff to assist.
- Type 1 Portable Pilot Unit (PPU) operational.
- Fawley Passes as per PUNG section 3.7.2
- Above Cadland Passes with other vessels at conducting Pilot's discretion
- Starboard side to preferred.
- 3 tugs, one with a minimum of 70T bollard pull and the remaining two with a minimum 60T bollard pull.
- Vessels to SCT 5 only.

Outbound:

- 2 Container Specialist Pilots onboard.
- Type 1 Portable Pilot Unit (PPU) operational.
- If requested by the conducting Pilot, no bunker barge or garbage barge to be moored on the outboard side of a cruise ship at 106 Berth. Should the bunker barge be given permission to remain in position, it shall stop oil transfer operations during the passage of the outbound vessel.
- Above Cadland Passes with other vessels at conducting Pilot's discretion.
- Fawley Passes as per PUNG section 3.7.2
- 3 tugs, one with a minimum of 70T bollard pull and the remaining two with a minimum 60T bollard pull.
- Vessels to SCT 5 only.

5.3.5 Inbound Arrival Notification & Communications

The AHM shall call the DPW shift manager prior to the vessel reaching South Ryde Middle. Berthing information to be passed to Pilot at South Ryde Middle.

Inward-bound ships are to call DP World using Ch87 when passing the Hook buoy to confirm on-berth time and tug working channel with the shift manager. Due to location and height of DPW's aerial it is recommended that the ship's VHF is used to make contact where possible. Outward-bound ships are to call DP World using Ch87 to advise pilot's arrival on-board and to seek confirmation that cranes are clear, and the vessel is safe to depart.

Pilots are to advise ships alongside the Container Terminal to maintain a listening watch on VHF Ch87 for ease of contact by DPW shift manager in case of emergency.

Automated texts will be sent from VTS to DPW shift manager when vessel passes Dockhead.

5.3.6 Crane and Boom Positions

Crane booms that are required to be boomed up for an inbound vessel shall be up before the inward ship passes 105 Berth unless prior agreement with VTS / Pilot has been made for the cranes to be boomed down. DPW Shift Supervisor / Terminal Manager shall ensure that all cranes are in a safe position at both the start and end of the operation before vessel movement. Please note shoreside employee and contractor access onto a DPW crane where a vessel is berthing or sailing is strictly prohibited, only when completely secured with all mooring lines or fully let go and clear of berth should a crane be accessed.

Berth planner to advise crane park positions for departure as well as arrival.

At berth SCT5 crane booms shall be raised when the berth is vacant. When the berth is occupied and a vessel is arriving/departing another berth at the terminal, crane booms north of bollard 193 may be left down.

At berth SCT4, when a vessel is arriving to or departing from SCT 1 to 4 no crane shall be boomed down east of bollard 223 (within 100m of the "203 corner") except with the permission of the conducting Pilot where it has been determined that the vessel's air draught is insufficient to interfere with crane booms.

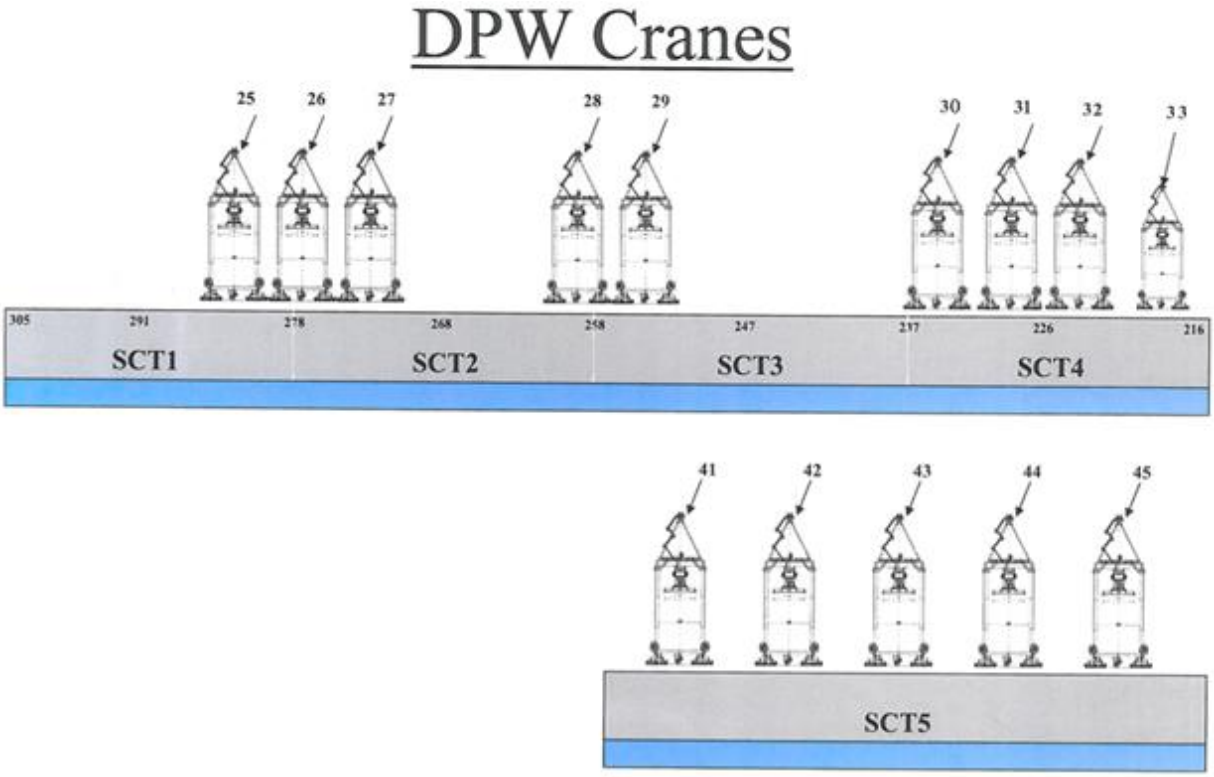
Due to issues with lighting on their booms, Morris cranes are always to be boomed up when vessels are manoeuvring at the terminal.

5.3.7 Vessel Spacing

Normal spacing between vessels:

- Two vessels of category 3 and above shall usually be spaced not less than 4 bollards apart.
- Vessels of category 2 and smaller shall usually be spaced not less than 3 bollards apart.
- Vessels for SCT2 should be planned no further West than Bollard 285 when berthing a ship on SCT1.

These distances may be reduced in exceptional cases, for example where it is necessary to berth a vessel in a specific berth pocket. Due regard should be had to the difficulty of running and handling head/stern lines when smaller spacings between vessels are being considered.



Crane Name	Crane Make	Berth	Height of Jib (Above Quay)	Outreach from Quay Edge (Fender Face)	Outreach (Containers)
25 (H)	Liebherr	SCT 1-4	51.5m	66.7m	23
26 (G)	Liebherr	SCT 1-4	51.5m	66.7m	23
27 (F)	Liebherr	SCT 1-4	51.5m	66.7m	23
28 (U)	Liebherr	SCT 1-4	60m	70.9m	24

29 (V)	Liebherr	SCT 1-4	60m	70.9m	24
30 (E)	Liebherr	SCT 1-4	51.5m	66.7m	23
31 (D)	Liebherr	SCT 1-4	51.5m	66.7m	23
32 (M)	Paceco	SCT 1-4	40.4m	57.5m	20
33 (P)	Paceco	SCT 1-4	40.4m	57.5m	20
41 (C)	Liebherr	SCT 5	51.5m	65m	23
42 (Q)	Liebherr	SCT 5	54.3m	68m	24
43 (R)	Liebherr	SCT 5	54.3m	68m	24
44 (S)	Liebherr	SCT 5	54.3m	68m	24
45 (T)	Liebherr	SCT 5	54.3m	68m	24

5.4 Vessels Manoeuvring in Southampton Water – Fawley & BP Marine Terminals

All vessels manoeuvring in the area between Hook and Cadland Buoys, other than those transiting directly through the area, are required to observe the minimum towage criteria for Fawley and BP Oil Terminals as detailed in the terminal manoeuvring criteria, below.

Large vessels proceeding to Fawley Marine Terminal are not to enter the Thorn Channel on a flood tide when the wind is in excess of 30 knots. Wind speed is to be taken as mean speed, as recorded at the ESSO Marine Terminal Fawley or at the VTS Centre whichever is the strongest. (*See chart 'Wind Speed Criteria at Fawley Marine Terminal' P.73*).

At the BP Hamble terminal, other than in exceptional circumstances and in consultation with the Marine Superintendent, Master, Pilot and VTS, a vessel will not be permitted to berth in winds excess of 25 knots (*mean*). Tankers 60k or greater DWT will not normally depart from the terminal later than 30 minutes before 2nd High Water. UKC must be greater than 10% draught.

5.4.1 Fawley Berth Manoeuvring Criteria

5.4.1.1 Application

FAWLEY MARINE TERMINAL (FMT)

Fawley Marine Terminal is located within the Port of Southampton Harbour Area where Associated British Ports (ABP) acts as the competent harbour authority. This document issued by ExxonMobil Fawley should be read in conjunction with the Port Users Navigation Guide issued by ABP (Southampton) www.southamptonvts.co.uk

The berthing of all ships calling at Fawley Marine Terminal (FMT) will be subject to the requirements and supporting guidelines as contained in this document.

FMT OCEAN BERTHS

Comprise Berths 1, 2, 3, 4 and 5. These berths are numbered from north to south and are situated on the outside (eastern side) of the Terminal complex.

FMT COASTAL BERTHS

Comprise Berths 6, 7, 8 and 9. These berths are also numbered from north to south and are situated on the inside (western side) of the Terminal complex.

TOWAGE

All towage activities will be conducted under the “UK Standard Conditions for Towage and Other Services (revised 1986)”.

5.4.1.2 Cautionary Notices

Masters should exercise caution when manoeuvring in the vicinity of the coastal berths, as the strengths and direction of the tide cannot be determined solely on the prediction for the Standard Port of Southampton. The strength and direction of the tide will be affected by the presence of vessels on the ocean berths, especially large vessels on Berth 5 and by the closeness of the coastal berths to the edge of the dredged area.

Tidal heights are recorded from tide gauges sited at Calshot and Dock Head Southampton. Current readings are available by contacting “Southampton VTS" (VHF ch.12).

Local wind speeds and direction are available from "Esso HQ" (VHF ch.19) utilising anemometers on Berths 1 & 5, effectively covering the extremities of the Terminal.

5.4.1.3 General

Contact with “Esso HQ” should be made at the earliest and most appropriate time prior to a vessel berthing. This will normally follow the pilot/master exchange and will relate to anchor away times, Hook Buoy times, the intended side too, mooring plans, connections and the confirmation of towage / launch requirements.

A vessels “side too” shall be dictated by the prevailing tidal flow and / or wind direction in order to affect the safest manoeuvre. When operational constraints require a deviation to this then it will be subject to full consultation between “Esso HQ”, Master and Pilots.
Large deep drafted vessels shall be planned where possible to berth at slack water.

The vessel’s passage plan should be in accordance with ICS Guidelines in conjunction with IMO Resolution A285 (VIII), with the charts available for viewing by the Marine Superintendent after arrival alongside.
We require the bridge to be manned properly as required in Regulation II/1 of the STWC Convention.

VESSELS GREATER THAN 60,000 DWT BERTHING

Primary timing – vessels greater than 60,000 DWT berthing at FMT should normally be scheduled to pass the Hook Buoy at a time of 30 minutes before the 1st high water and berth SSTQ.

Alternate windows – if circumstances do not allow the use of the primary timing, then alternate windows may be available at the agreement of the duty Specialist Pilot, Marine Superintendent and Assistant Harbour Master (VTS). Draught restrictions may apply and the vessel may be required to berth PSTQ - see table below. Use of the alternate windows is subject to the minimum UKC criteria being met at all times.

The minimum UKC for a vessel greater than 60,000 DWT arriving or departing Fawley Marine Terminal is 1.5 metres throughout the transit of the pilotage area.

	Hook time	Side to Quay	Draught Restriction
Primary Timing	30 minutes before 1st high water	Starboard (Port available if required)	No draught restriction provided minimum UKC requirement is met
Alternate Windows	45 minutes before 1st high water through to 30 minutes before 2nd high water	Starboard (Port available if required)	No draught restriction provided minimum UKC requirement is met

30 minutes before 2nd high water through to 2nd high water	Port only	No draught restriction provided minimum UKC requirement is met
30 minutes before low water through to low water	Starboard (Port available if required)	No draught restriction provided minimum UKC requirement is met
Low water through to 45 minutes before 1st high water	Starboard (Port available if required)	Maximum draught 12.0m. Minimum UKC requirement must be met

Vessels >60000T DWT shall not be planned to pass the Hook Buoy between 2nd high water and 30 minutes before low water.

CONTACT SPEED

At the maximum displacement for a given berth, the contact speed should not exceed 16.32 feet/min (0.16 knots), with a maximum of 21 feet/min (0.21 knots) for Berth 5.
(See P.67 for maximum displacements)

CONTACT ANGLE

This is considered to be less than 10 degrees to the berth face. Large vessels berthing on Berths 4 and 5 the angle should be no more than 4 degrees.

OTHER MOORED VESSELS

Due consideration should be taken when passing other moored vessels on the Marine Terminal and a sufficient wide berth must be given. If prevailing weather or tide conditions dictate the use of a station tug should be considered when in close proximity to other moored vessels.

STATE OF READINESS OF VESSELS ALONGSIDE

Any work which will render the vessel immobile must not be commenced without the approval of the duty Marine Superintendent and the Assistant Harbour Master.

5.4.1.4 Testing of Equipment

It is the Master's responsibility to ensure that all manoeuvring and mooring equipment is checked as FULLY operational, prior to arrival at Fawley and also prior to departure. Engines should be tested in the astern mode before approaching the Pilot station. Any malfunction of equipment must be reported to “Esso HQ” (VHF Ch.19) prior to the pilot boarding.

When arriving / departing in ballast, a vessel should always have its propeller and thrusters (if fitted) fully immersed. The vessel’s trim should allow full manoeuvrability of the vessel to the satisfaction of the Master and Pilot. Any delays caused by a vessel being required to take on extra ballast will be entirely to the vessel’s account.

ANCHORS

Both anchors should be cleared away prior to approaching the Terminal and due consideration should be given to the use of anchors if the vessel is required to swing prior to berthing. No vessel may lay alongside any berth in the Marine Terminal area with an anchor on the bottom. If anchors are used during berthing operations, they must be hove home on completion of securing alongside. If for any reason an anchor is lost prior to arrival or cannot be used during berthing, the duty Marine Superintendent must be informed.

GANGWAY

To maintain a safe access to and from the vessel, at all states of the tide, all ships **MUST** be able to provide a safe and secure gangway or accommodation ladder. All means of access must be provided with a properly rigged safety net and with a lifebuoy standing by. The gangway shall be rigged to the satisfaction of the duty Marine Superintendent.

Shore gangways are provided on Berths 1, 2, 4 and 5, but they are not suitable for use on all vessels.

MOORING EQUIPMENT

Any faults or restrictions in a vessel' s mooring equipment must be communicated to the duty Marine Superintendent, prior to arrival.

5.4.1.5 Communications

Call Sign	Channel	To Be Used
“Southampton VTS”	VHF Ch.12	- When 10 miles from the Nab Tower or NEEDLES inbound. - South Ryde Middle Buoy. - Passing Hook Buoy inbound. - At least 15 mins, before leaving a berth or anchorage
“Southampton Pilots”	09	Contacting pilot station, pilot launch and to relay information such as ETAs, boarding position and arrangements.
“Esso HQ”	19	For establishing terminal communications Operational information Passing HOOK Buoy inbound Prior to leaving berth
Launches "Ibex” "Oryx" Tugs "Lomax" "Apex" "Phenix" Berthing Master "Berth (#)"	Primary VHF Ch.71 or Secondary VHF Ch.10 VHF Ch.74	During vessel' s manoeuvre off berth to establish contact with: Tugs Launches Berthing Master After initial contact made on VHF Ch.19 with “Esso HQ”
N.B. ESSO HQ WORKS CHANNEL 19 BUT ALSO MONITORS CHANNEL 12		

5.4.1.6 The Jetties

Berth	Depth Below Datum (m)	Maximum Berthing Displacement (T)	Maximum Length of Vessel (m)	Berth Lengths (m)	Comments
1	10.2	51,000	220	69m	Max LOA at max draft
2	12.6	83,000	276	69m	Max LOA at max draft
3	12.6	66,000	276	69m	Max LOA at max draft
4	14.9	179,000	276	69m	Max LOA at max draft
5	14.9	244,000	368	92m	Max LOA at max draft
6	5.6	4,900	96	24m	See Note
7	5.6	3,600	96	24m	See Note
8	5.6	3,600	96	24m	See Note
9	6.6	8,200	124	31m	See Note

The maximum length indicated for a ship on berths 6, 7, 8 & 9 is a general guide; this may be increased on a ship by ship basis after assessment.

ADDITIONAL INFORMATION

- Vessels will be advised on any reduction in advertised depth.
- Minimum distance between ships is 30.5m on the five ocean berths and 25m on the four coastal berths.
- The distance allowed for berthing vessels between other vessels already alongside, will be not less than 1.4 x LOA.
- Vessels must maintain 0.5m under keel clearance while alongside with a minimum of 10% of her draught for berthing and sailing, after making due allowance for tide.

Maximum Manifold Air Drafts:	Berths 1, 2, 3	14m
	Berth 4	16m
	Berth 5	24.8m (Arms 2, 4, 6 only)
Berth Spacings:	B1 - B2, B2 - B3, B3 - B4	244m
	B4-B5	305m
	B6-B7, B7-B8	122m
	B8-B9	134m

5.4.1.7 Navigational Aids

NAVIGATION LIGHT`S LOCATION AND CHARACTERISTICS

LIGHT NO.	LOCATION	CHARACTERISTICS
2	NW end of Terminal	2 Fixed Red (Vertical) Lights 2m apart
3	4.6m above deck level, South Trestle Pier	Fixed Green Leading Light Day - Orange
4	6.1m above roof level of Marine Control Building North Trestle Pier	Fixed Green Leading Light Day - Orange
	Ashlett Creek Buoy	
	Tug Pontoon	2 Fixed Red (Vertical) Lights 2m apart

Listed above are the lights to be found on the Marine Terminal. Lights No's 3 and 4 are leading lights which mark the centre of the dredged approach channel for the Coastal Berths (Berths 6, 7, 8 and 9). This channel is approximately 110m in width from berth face to the edge of the dredged channel.

Any alterations / changes to the above will be promulgated through Notices to Mariners in the usual fashion.

5.4.1.8 Towage Guidelines

MINIMUM TOWAGE CRITERIA FOR FAWLEY MARINE TERMINAL

Size of Vessels		Ocean Berths (1-5)	Coastal Berths (6-9)	Comments
UNDER 91.5m	ARR	1 MOORING BOAT		"IBEX" OR "ORYX"
	DEP	At Discretion of Pilot / Master	* 1 MOORING BOAT	
91.5m AND OVER	ARR	2 MOORING BOATS		EFFECTIVE BOW THRUSTER MAY USE "TEMPEST" AS 2ND. BOAT
	DEP	At Discretion of Pilot / Master	* 1 MOORING BOAT	

IBEX or ORYX **MUST BE** used where 1 mooring boat is required. if either boat is not available then a small tug to be used.

Vessels 85m or greater shall not swing north west of a line between the tug pontoons and Ashlett Creek entrance. Exceptions may be made only after consultation between the duty Marine Superintendent / Pilot / Master. Due account must be made for wind, tide and weather at the time of the manoeuvre.

*The above criteria must be used in conjunction with the "wind speed criteria".

The above table shows the **MINIMUM** criteria; if a Master / Pilot requests additional towage then it will be allocated accordingly.

MINIMUM TOWAGE CRITERIA FOR FAWLEY MARINE TERMINAL

Size of Vessel	Arrival & Departure	Ocean Berths Minimum Bollard Pull Required	Comments
10 - 19,999 DWT	ARR	30 TONNES	
	DEP	30 TONNES	
20 - 29,999 DWT	ARR / DEP	60 TONNES	Minimum bollard pull of individual tugs must be 30t.
30 - 59,999 DWT	ARR / DEP	80 TONNES	Minimum bollard pull of individual tugs must be 40t.
60 - 109,999 DWT	ARR	100 TONNES	Minimum bollard pull of individual tugs must be 40t.
	DEP	100 TONNES (a)	
110 - 144,999 DWT	ARR	120 TONNES	Minimum bollard pull of individual tugs must be 40t.
	DEP	100 TONNES (a)	
145 - 275,000 DWT	ARR	160 TONNES	Minimum bollard pull of individual tugs must be 40t.
	DEP	100 TONNES	
	PSTQ DEP	120 TONNES	
➢ 275,000 DWT	ARR	230 TONNES	Minimum bollard pull of individual tugs must be 40t.
	DEP	100 TONNES	
	PSTQ DEP	160 TONNES	

Tugs that are permanently stationed at FMT shall be used for all berthing / un-berthing operations with additional towage available from Southampton Docks subject to operational requirements.

The above criteria are subject to favourable weather / tidal conditions and the ships engines, thrusters and equipment are in good working order. Further towage may be requested at the discretion of the Master, Pilot, duty Marine Superintendent, and informing “Esso HQ” of any requirements.

Vessels up to 30,000 DWT with enhanced manoeuvring capabilities, such as thrusters, high performance rudders, azimuth drive propellers etc., may consider each of these enhancements as the equivalent of 30T bollard pull; the requirements in the above table can be adjusted accordingly provided they are fully functional.

For vessels between 10,000 dwt and 30,000 dwt and not using station tugs then Oryx may be used in a pushing role only to assist vessels near the berth on arrival and departure.

Ibex may be used in a pushing role only for vessels between 16,000 dwt and 30,000 dwt. Communication between the vessel and the launches should be established early to discuss their usage.

If there is any doubt in manoeuvring capabilities a station tug should be used.

Vessels of 30000dwt or more **MUST** use tugs to the requirements in the table above even if enhancements are fitted.

Subject to availability, tugs for vessels less than 10,000 dwt will be in the 6 to 16 tonne range.
All vessels may be required to take a suitable tug if the prevailing conditions require it.
All vessels will be provided with 2 launches for berthing.

Towage / berthing procedure to be fully communicated by the vessels Master or Pilot and understood by Tug Master / Coxswain.

(a) Subject to favourable weather conditions and at the discretion of the Master, Pilot, duty Marine Superintendent, a North Sea Shuttle tanker, which is equipped with more than one operational thruster need only take 1 x 60t bollard pull tug on departure.

ESCORTING

Any fully or part laden tanker in excess of 60,000 dwt visiting Fawley Marine Terminal will be escorted on inward and outward passages from/to the Nab Pilot station. In adverse weather conditions, in the vicinity of the Nab, the escort pick up/drop off point will be at the discretion of the Master and Pilot. Vessels in excess of 60,000 dwt in ballast will be escorted out from Fawley to the Prince Consort or in to Fawley from the West Ryde Middle.

The tug will have a minimum of 60 tonne bollard pull and will be attached by a towing line to the stern of the vessel.

Note: For Maximum loading forces on ships bits for escorting, Section 3 of the OCIMF Guidelines (Mooring Arrangements and Layout) should be consulted.

Note:

- For Maximum loading forces on ship's bitts for escorting, Section 3 of the OCIMF Guidelines (Mooring Arrangements and Layout) should be consulted.

  For Example: - Minimum SWL of bitts and chocks on ships of 50,000 DWT and above, to be 46MT. At 46MT, the maximum rope loading will be 92MT when using the single eye of a tug's towline.
- Each fitting which is intended for tug use should be clearly marked with the SWL in tonnes.

5.4.1.9 Standby Tug Requirements

The Fawley station tugs provide waterborne standby services at the terminal and will normally stay on station within an area bounded by the Prince Consort Buoy and Netley Dome.

There will normally be two tugs on station, but this may be reduced to one when a tug is involved in escort duties from the Nab.

If a vessel of 60,000 dwt or above is at the terminal and is discharging / loading or connected to hard arms on berth 5, two tug cover can be reduced providing:

The vessel discharging / loading is a shuttle tanker with proven thrusters which are immediately available.

or

The wind speeds OFF the ocean berths is less than 20kts.

If both station tugs are off station at the same time, a tug engaged for stand-by services must have fire-fighting capability.

The decision to release tugs from the terminal area is the responsibility of the duty Marine Superintendent, any additional tugs to be ordered by the tug master as per the towage criteria.

FAWLEY STATION TUGS

"PHENIX", APEX"	Each has 2 x Voith Schneider propulsion units giving a total output of 6936 bhp, with a bollard pull of 70ts and stopping and steering forces of 150ts at 10kts.

“LOMAX”	2 x Caterpillar 2350kW propulsion units. Bollard pull 80ts.

FAWLEY STATION LAUNCHES AND TUGS FOR SMALL VESSELS

"IBEX"	1199 HP mooring launch / small tug with a bollard pull of 16.0 tonnes.
“ORYX”	600 HP mooring launch / small tug with a bollard pull of 8.0 tonnes.

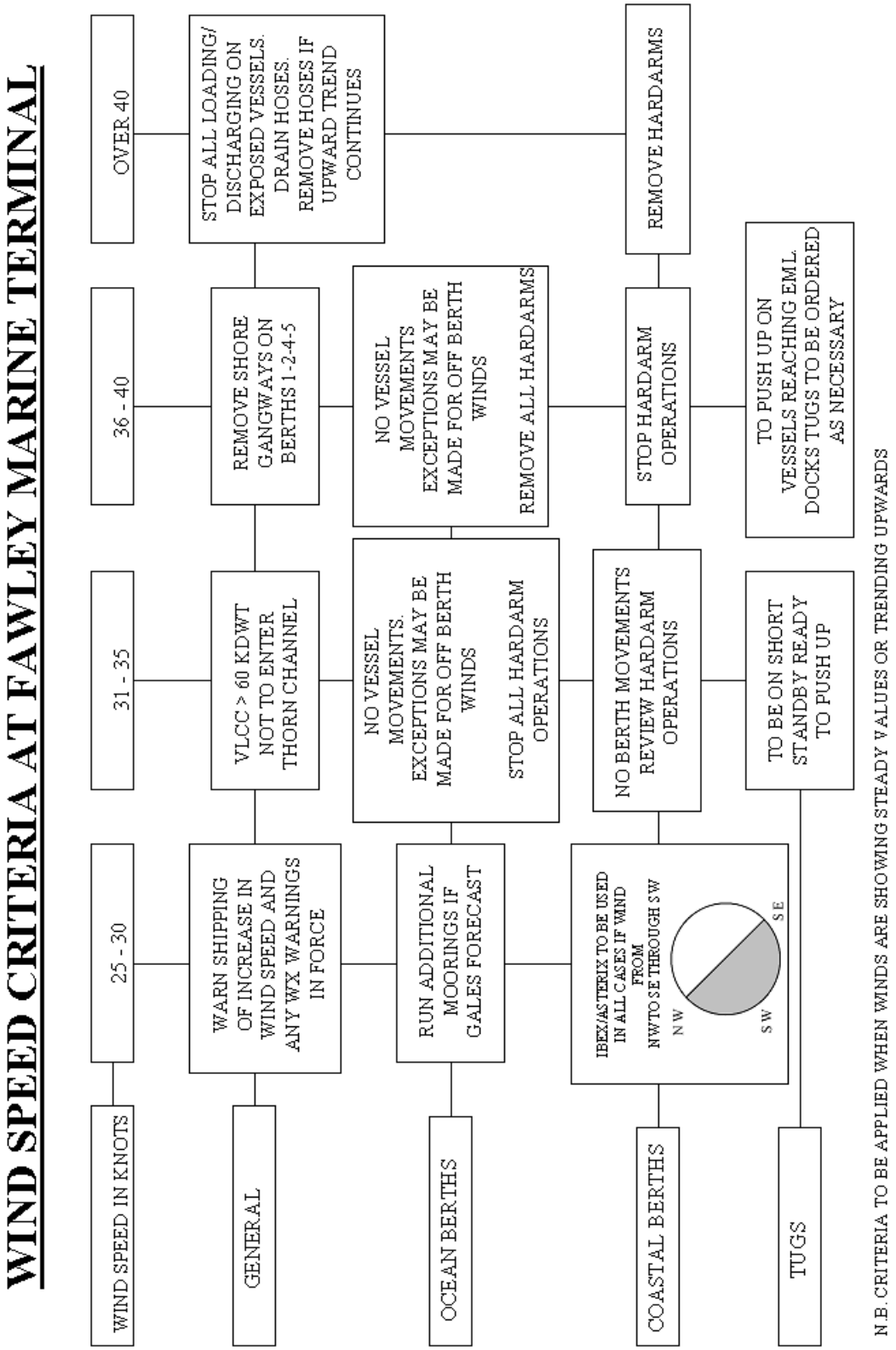
5.4.1.10 Mooring Criteria

Class 0f Vessel	Springs Each End	Breast Lines Each End	Head / Stern Lines Each Eend
VESSELS UP TO 4,000 DWT	2	3 or 2	
VESSELS FROM 4,000 to 8,000 DWT	2	3 or 2	
VESSELS FROM 8,000 to 12,000 DWT	2	2	2
VESSELS IN EXCESS OF 12,000 DWT	2	3	2

- Mooring Criteria to be read in conjunction with Section K of the Marine Environmental, Safety and Quality Assurance Criteria.
- Vessels over 60,000dwt. will have individual mooring plans developed by the Marine Superintendents Group, prior to arrival.
- Typical mooring patterns and the berthing distance planning sheet can be referenced in the Appendix of this guide.
- Other mooring patterns may occasionally be used to that shown in the above table but should be discussed with the Marine Superintendent prior to berthing.
- Vessels (typically in the range 25 - 45kdwt) where maindeck winch to manifold distance is short, may have to run springs from poopdeck and breast lines from maindeck. Berth front stag horns are not suitable for vessels of this size. This should be discussed by Pilot with Master prior to arrival off berth.

- Mixed moorings should be avoided whenever possible. Where wires and ropes are to be used, they should be of the same material in the same direction.
- Rope tails may be used on wires on all berths, provided they meet OCIMF Mooring Equipment Guidelines.
- Prior to the arrival off of the berth, the Master should ensure that the eyes of the moorings are OUTBOARD of the fairlead.
- Moorings must be regularly tended to ensure the vessel remains in position at all times.
- The Master's attention is drawn to the OCIMF publication "EFFECTIVE MOORING", in particular to the importance of the correct reeling of ropes / wires onto mooring winch drums, the condition and testing of winch brakes and the correct use of storage / tension drums on split mooring drums.

5.4.1.11 Windspeed Criteria



5.4.2 Towage & Pilotage Guidelines for BP Hamble (BPJ)

The requirements for escort towage and Specialist Pilotage for vessels proceeding to/from BP Hamble are given in the table below:

Size of Ship	Specialist Pilot	Second Pilot	Escort Tug
Less than 50,000t loaded displacement	NO	NO	NO
50,000t or greater loaded displacement	YES (Inbound only)	NO	NO
60,000t or greater summer deadweight (vessel in ballast)	YES	YES	YES * Note 1
60,000t or greater summer deadweight (vessel part loaded or loaded)	YES	YES	YES * Note 2

Notes:

1. Inbound the escort tug shall make fast between the South Ryde Middle and West Ryde Middle Buoys. Outbound the escort tug shall be let go in the vicinity of the Prince Consort Buoy.

2. Inbound the escort tug shall generally be from 4nm south of the Nab Tower. Outbound the escort tug shall be let go in the vicinity of the Nab Tower.

Where escort towage is required, Southampton VTS is to be given as much notice as possible of this requirement and certainly not less than 3 hours before arrival or departure

Minimum tug requirements for manoeuvring at BP Hamble are detailed below but, when the vessel is fitted with bow/stern thrusters which allow greater manoeuvrability, the Harbour Master and Terminal may agree to dispense with one tug.

Minimum towage requirements for berthing/unberthing at BP Hamble:

Vessel DWT	Inbound	Outbound
16,000t or less	Pilot discretion	Pilot discretion
16,000 – 17,999t	2	1
18,000 – 49,999t	2*	2
50,000 – 59,999t	3	3
60,000t or greater	4	3

Mooring boat requirements for berthing at BP Hamble:

LOA	No. of Boats
87m or less	None
88m – 120m	One
120m or greater	Two

* Note: If berthing displacement is greater than 50,000t a 3rd tug will be employed.

6 Port information

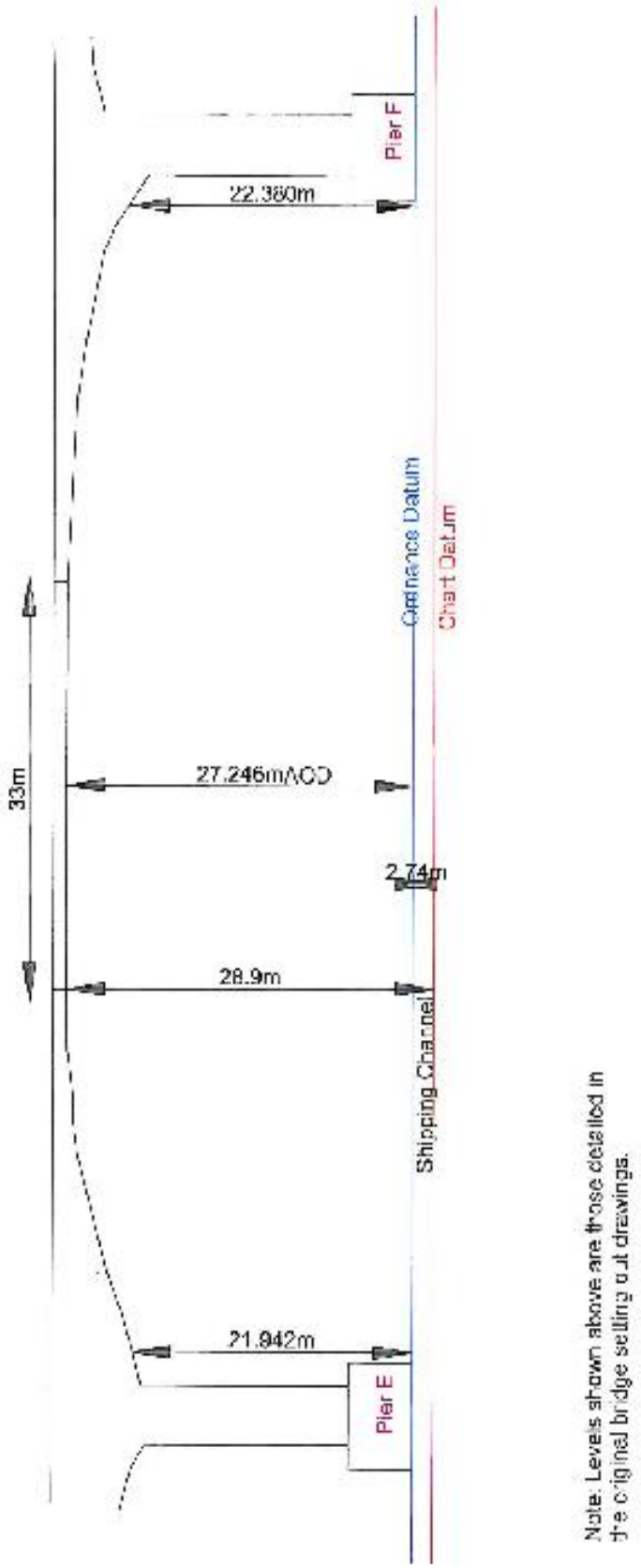
This section contains information on various features of the port such as bridges, linkspans and anchorages.

6.1 Overhead Bridge Clearances

This table gives the height above chart datum of the lowest point at the centre of the middle arch of each bridge in the port area.

Name of Bridge	Height Above	
	Chart Datum	H.A.T
Itchen Bridge	28.9m	23.0m
Northam Bridge	9.2m	4.2m
Railway (Itchen)	9.0m	4.0m
Cobden Bridge	9.1m	4.1m

Diagram of the Itchen Bridge including heights above Chart Datum & Ordnance Datum.



6.2 Linkspans on ABP Operated Berths

	25 Berth	105 Berth
Capacity	120 te (Check with ABP Engineers > 100 te)	100 te Check with Engineers > 60 te
Useable Width of Bridge	6.5m	7m
Height Restrictions	None	None
Type of Linkspan	Floating	Floating
Door Landing Width	17m	18.7m
Range	N/A	N/A
Length of Bridge	41m	40m
Berth LOA	170m	200m+
Max Vessel LOA	147m	200m+
Max Beam	24m	32.9m
Draft on Berth	7.1m	11.7m
Approach	7.4m	12.6m
Note		

6.3 Anchoring in the Southampton VTS Area

Numerous cables, pipelines and underwater obstructions exist in the Southampton VTS area. Any vessel intending to anchor must contact Southampton VTS by VHF ch.12 before dropping their anchor to obtain permission. The table below details protocols to be observed when anchoring in the VTS area.

7 Pilotage Arrangements

7.1 Pilotage Directions for the ABP Competent Harbour Authority (CHA) Area

The following is a summary of the Pilotage Directions which apply to vessels bound to or from the Port of Southampton or transiting the Solent navigating in the Competent Harbour Authority (CHA) Pilotage area, as set out in the Pilotage Act 1987. The Pilotage Directions in full are available on www.southamptonvts.co.uk

Pilotage in the ABP Southampton CHA area is compulsory for the following vessels.

- All vessels >61m LOA.
- Vessels more than 12 passengers >20m in length.

Bona fide Deck Officers with sufficiently high levels of skill and experience of all vessels subject to compulsory Pilotage within limits defined in the schedules may apply for and be issued with Pilotage Exemption Certificates for the area, or specified parts of the area, subject to their fitness and qualification both by examination and experience in the appropriate parts of the area.

Pilotage Exemption Certificates may be revoked if considered justified. In this event, the holder would have a right to appeal to the Competent Harbour Authority.

PROTOCOL FOR THE USE OF ANCHORAGES IN THE SOLENT

LOCATION	REQUIREMENTS – FORECAST MEAN WIND SPEED LESS THAN 25KNOTS	REQUIREMENTS –FORECAST MEAN WIND SPEED MORE THAN 25KNOTS	SPECIAL RULES FOR LADEN OR PARTLY LADEN TANKERS
"A" & "B" Anchorages, Nab Anchorages 2, 3 and 4, Ryde Roads and Mother Bank Anchorages and other non designated anchorages in the Solent	VTS has QHM's approval to allocate these anchorages for unrestricted use to vessels without the need to confirm with QHM, providing the vessels are free from defects and the weather forecast is predicting mean winds less than 25 knots. If a vessel with defects wishes to anchor or a vessel wishes to immobilise its engines in any of these anchorages or in a non designated anchorage then VTS must seek the approval of QHM. Occasionally QHM will ask VTS to keep NAB 3 and 4 (which lie within the Dockyard Port of Portsmouth) clear for use by QEC class vessels, as much notice of the requirement as possible will be given.	All vessels at anchor are to be monitored on VTS/Harbour Control radars to ensure that early detection of dragging is possible. If the forecast mean wind speed or actual mean wind speed when measured by the Bramble Weather Station is greater than 25 knots all vessels are to be instructed to have their engines ready for immediate use and to ensure their windlass is also tested and ready for immediate use. Bunkering operations will not be allowed and any current operations may be suspended. The possible requirement for towage for vessels at anchor in strong winds needs to be considered at an early stage.	In all cases where fully or partly laden tankers in excess of 60,000 dwt enter the Eastern/Central Solent bound for A or B anchorages, or another non-designated anchorage within QHM's area of responsibility, or depart that anchorage bound for sea, escort towage and use of an Assistant Pilot will apply to that vessel.
"C" Anchorage	Use of this military anchorage always requires QHM's permission. QHM acknowledges Southampton VTS' use of the anchorage as a traffic management tool for VLCCs and large container ships entering or leaving Southampton. QHM Harbour Control will normally authorise Southampton VTS' use of the anchorage for this purpose, seeking guidance from the Duty QHM as required, using the following operating parameters: • The anchorage will not be available when a QE Class vessel movement into or out of Portsmouth is due within 24 hours. • QHM may also preclude its use when it is deemed necessary for use by QE Class ships or other military vessels. • QHM will keep Southampton VTS fully appraised of any restrictions (usually with 24 hours' notice) so that the anchorage's availability, or otherwise, can be included in any planning.	As for A & B anchorages above.	
St Helen's Roads	Vessels may anchor here without prior approval of QHM but VTS shall follow the guidelines for A & B anchorages in the event that vessels with defects wish to anchor or if vessels wish to immobilise to undertake repairs.	As for A & B anchorages above.	

7.2 Port and Pilotage Limits

Chartlets found on page 10/104.

7.3 Pilotage Charges

A copy of the current Pilotage Charges is obtainable from the ABP Marketing Manager at Ocean Gate, (023 8048 8840) or the website www.southamptonvts.co.uk

7.4 Ships Requiring Pilots

The Port of Southampton is responsible for providing Pilots throughout the Eastern and Central Solent, Southampton Water and Rivers Itchen and Test. Pilots are not available in the Western Solent/Needles.

Ships requiring a Pilot must inform Southampton VTS not less than 12 hours in advance of ETA. Notification should include:

- ETA.
- Maximum draught.
- Destination within Pilotage area.
- Boarding position of Pilot.

A further ETA shall be sent no later than 3 hours before arrival at the Pilot Station by VHF (Channel 09, 'Southampton Pilots').

ETA's may be sent by telephone, e-mail or fax at the numbers stated in Section 2 of these Guidelines.

7.5 Boarding Points

7.5.1 Pilot Embarkation / Disembarkation Positions in the Solent:

For vessels ⩾ 61m and <150m LOA and for vessels ⩾20m LOA when carrying more than 12 passengers, the pilot boarding place will be in the vicinity of North Sturbridge Buoy – Pilot Station "F" (Foxtrot).

For vessels <150m LOA when carrying dangerous or polluting goods in bulk the pilot boarding place will be in the vicinity of St Helen's buoy – Pilot Station "E" (Echo). This also applies to

vessels having carried dangerous or polluting goods, which are neither gas free nor inerted. Deep drafted vessels <150m LOA carrying dangerous or polluting goods in bulk that cannot board at St. Helen's due to lee will board in the vicinity of the New Ground buoy – Pilot Station "D" (Delta).

For laden VLCCs (i.e. *those requiring escort towage*) and deep draught container vessels the pilot boarding place will be 4nm due South of the Nab Tower – Pilot Station "A" (Alpha).

For Wightlink ferries pilot transfers are not conducted by launch and will require berth to berth pilot boarding.

For all other vessels ⩾150m LOA (*draft, arrival direction and weather dependent*) the pilot boarding station will be either;

- Nab West – Pilot Station "C" (Charlie) – In an area between 0.5nm and 1.5nm from the Nab Tower, in a sector bounded by bearings of 270° and 195° from the Nab Tower or;
- Nab East – Pilot Station "B" (Bravo) Pilot Boarding Area – In an area between 1.0nm and 2.0nm from the Nab Tower, in a sector bounded by bearings of 090° and 145° from the Nab Tower.

For all vessels subject to compulsory pilotage using the West Solent, the Pilot boarding place is in the vicinity of the West Lepe Buoy.

7.5.2 Restricted Visibility, Traffic Congestion and Draught Constrained Vessels

In the event of visibility falling below 1 nautical mile or traffic congestion occurring in the vicinity of the North Sturbridge buoy then the North Sturbridge boarding position will be temporarily relocated to the St Helens pilot boarding area.

A vessel of 150m LOA or less which would normally embark/disembark its pilot at St Helen`s or the North Sturbridge Buoy will, when it`s draught in relation to the available depth of water is such that it will require the use of the Nab Deep Water Channel, board or disembark it`s pilot in the vicinity of the Nab Tower.

Southampton Pilots will confirm pilot boarding arrangements when contact is made with the vessel on VHF Channel 09.

8. Emergency Plans/Procedures

This section provides port users with an overview of the various emergency plans and procedures in place across the Southampton VTS area and surrounding ports.

8.1 SOLENT MARITIME FRAMEWORK

The Solent Maritime Framework is a marine contingency plan developed to manage any marine emergency occurring within the ports of Southampton, Portsmouth or Cowes, Southampton Water or The Central and Eastern Solent.

This plan will be supplemented by other local contingency and action plans held by the individual Port Authority, Emergency Services, Local Authorities, Commercial facilities and marine related companies which will be activated as necessary.

8.2 Port of Southampton Oil Spill Contingency Plan

The Oil Spill Contingency Plan has been developed to conform to the Merchant Shipping (Oil Pollution Preparedness, Response and Co-operation Convention) Regulations 1998, which entered into effect 15 May 1998. The plan is designed to meet the statutory responsibilities placed on the Harbour Authority for responding to oil pollution within the harbour area.

The plan is provided to assist the Harbour Authority and other organisations in dealing with an accidental discharge of oil. Its primary purpose is to set in motion the necessary actions to stop or minimise the discharge and to mitigate its effects. Effective planning ensures that the necessary actions are taken in a structured, logical and timely manner.

The plan uses a tiered response to Oil Spill Incidents and is designed to deal with Tier One and Tier Two and Tier Three incidents and to provide guidance on likely Maritime and Coastguard Agency and Secretary of States` Representative (SOSREP) assistance in an incident up to and including at Tier Three level.

Where a spillage is associated with a wider emergency, then additional factors involving the safety of personnel will take precedence over the pollution response. In this case reference will be made to the Solent Maritime Framework Plan.

8.3 Port of Southampton Emergency Plan

The purpose of the Port of Southampton Emergency Plan is, in the event of an emergency, to specify means of raising alarm, summoning assistance, and establishing the role of those organisations involved in order to co-ordinate the activities necessary to safeguard life, property and the environment.

It is specifically written to satisfy the requirement of 'The Dangerous Substances in Harbour Areas Regulations 1987'. The plan provides a framework for dealing with other emergencies which may occur within the Port of Southampton.

In the context of the plan, an emergency means:

> *'An unplanned incident such as a serious toxic or flammable vapour emission, fire, explosion or major breach of containment of any dangerous substance, which might*

lead to a serious danger to persons, property or the environment inside or outside the harbour area'.

8.4 Portsmouth and Southampton Reactor Emergency Plan

The Portsmouth and Southampton Reactor Emergency Plan is a requirement of the Radiation (Emergency Preparedness and Public Information) Regulations 2001.The plan replaces the previous SOTONSAFE and PORTSAFE Plans and interfaces with the Operator's Emergency Plans produced by the MOD.

The Plan includes automatic and pre-planned response actions to mitigate the consequences of an accident involving a nuclear powered vessel within the Ports of Portsmouth and Southampton. In addition, the plan involves the establishment of the required command, control and liaison organisation, at the local and national level, capable of the successful implementation of these early measures. This organisation allows consideration, by all relevant authorities, of the later follow-on and recovery aspects of the accident for which detailed pre-planning is not considered appropriate.

The Plan can be found on the Southampton City Council web site:
http://www.southampton.gov.uk

9 VHF R/T Communication Schedule

This table lists all VHF radio telephone frequencies in use in the Southampton VTS area.

VHF R/T Communication Schedule			
Station	**Channel**	**Frequency MHZ**	**Details**
Southampton Vessel Traffic Services **Call Sign** **SOUTHAMPTON VTS**	16	156.30	CALLING, SAFETY AND DISTRESS Continuous watch
	12	156.60	PORT OPERATIONS Calling and working
	14	156.70	PORT OPERATIONS Secondary working channel
	All vessels are required to establish communications with Southampton VTS on one of these channels when 10nm from the NAB TOWER or approaching the NEEDLES inbound, when passing SOUTHSEA WAR MEMORIAL outbound from Portsmouth and at least 30 minutes before leaving a berth or anchorage.		
	20	157.00 161.60	PORT OPERATIONS Selected working and harbour radar information
	71	156.575	PORT OPERATIONS Manoeuvring – Ship/Tug – Pilot/Berthing Master
	74	156.725	PORT OPERATIONS Manoeuvring – Ship/Tug – Pilot/Berthing Master
Southampton Patrol **Call Sign** **SP**	16	156.80	CALLING, SAFETY AND DISTRESS Continuous Watch
	12	156.60	PORT OPERATIONS Continuous Watch
	All	All	MARITIME INTERNATIONAL VHF BAND All channels available as applicable for PORT OPERATIONS and Maritime use

Station	Channel	Frequency MHZ	Details
Pilots Call Sign SOUTHAMPTON PILOT, NAB PILOT, STURBRIDGE PILOT, LEPE PILOT	9	156.45	WORKING CHANNEL
Southampton Container Terminal (DP World)	87	157.375	WORKING CHANNEL
Tug Boats	19	156.95 161.55	WORKING CHANNEL ESSO Marine Terminal Fawley and BP Oils Ltd. Terminals Hamble
	71	156.575	MANOEUVRING Ship/Tug – Pilot/Berthing Master
	74	156.725	MANOEUVRING Ship/Tug – Pilot/Berthing Master
Esso Marine Terminal Fawley	19	156.95 161.55	WORKING CHANNEL
BP Oil Terminal Hamble Call Sign BP HAMBLE	12	156.60	WORKING CHANNEL Occasional
	71 or	156.575	
	74	156.725	
KHM Portsmouth	11	156.55	PORT OPERATIONS Calling and Working – all vessels
	13	156.65	WORKING as directed
	73	156.675	Alternate WORKING as directed
Note: Consult DOCKYARD PORT OF PORTSMOUTH Notice to Mariners http://www.khmportsmouth.com/			

10 Advanced Notice of Entry of Dangerous Substances into the Port of Southampton

10.1 Introduction

This section is intended to assist Masters, ship owners, agents and transport operators in preparing the information required by the Harbour Master with respect to the movement of dangerous substances within the port area.

Notification and reporting requirements for ships carrying dangerous substances to and from UK ports are laid down in MSN 1831 (M+F) Vessel Traffic Monitoring Notification and Reporting Requirements for Ships and Ports. This document also provides guidance for ships and port authorities who are required to provide ship related information under the Merchant Shipping (Vessel Traffic Monitoring and Reporting Requirements) Regulations 2004, as amended by the Merchant Shipping (Vessel Traffic Monitoring and Reporting Requirements) (Amendment) Regulations 2011, as well as SI 2005/1092 and SI 2008/3145. These regulations also cover compliance with certain EU provisions.

ABP, being the Statutory Harbour Authority, also has a responsibility for enforcing the Dangerous Substances in Harbour Areas Regulations 1987 in the harbour area against persons other than itself. Regulation No. 6, which falls within Part 2 of the regulations, deals with the notice of entry of dangerous substances into the harbour area.

10.2 Notice of Entry of Dangerous Substances Arriving by Sea for Discharge or In Transit

The following information is required by the Harbour Master, in writing, in respect of all dangerous substances arriving by sea into the Port of Southampton, for discharge or in transit. Notification must be received at least 24 hours prior to the vessel's arrival at the VTS limit. Where the passage time is less than 24 hours, the report should be sent as soon as possible on departure from the last port of call to ensure that the details have been received prior to the vessel's arrival at the VTS limit.

Vessel Details

- Name and call sign of vessel.
- Nationality of vessel.
- Overall length, draught and beam of vessel.

- Intended destination within the harbour area.
- ETA.
- Last port of call.
- Number of passengers and crew.

Dangerous Substances Being Carried (Specify for Discharge or in Transit)

- Correct technical name of dangerous substances.
- UN number.
- Quantity of each substance.
- Classification.
- Details of the number and type of packages to be individually handled (where appropriate).

In the Case of Explosives (Specify for Discharge or In Transit)

- UN number.
- Class.
- Division.
- Compatibility group.
- Net explosive content.

10.3 Notice of Entry of Dangerous Substances from an Inland Source Entering the Harbour Area

Dangerous substances being brought into the harbour area for loading on to a vessel must be notified to the by the berth operator at least 24 hours prior to the dangerous substances entering the harbour area. Consideration may be given for a lesser time period in exceptional circumstances.

Dangerous Substances (For Loading)

- Correct technical name of dangerous substance.
- UN number.
- Quantity or weight of each substance.
- Classification.
- Name of loading vessel and berth number (if known).

In the Case of Explosives (For Loading) for Direct Shipment

- UN number.
- Class.
- Compatibility Group.
- Not explosive content.
- Name of loading vessel.
- Date/time of loading.

10.4 Method of Reporting

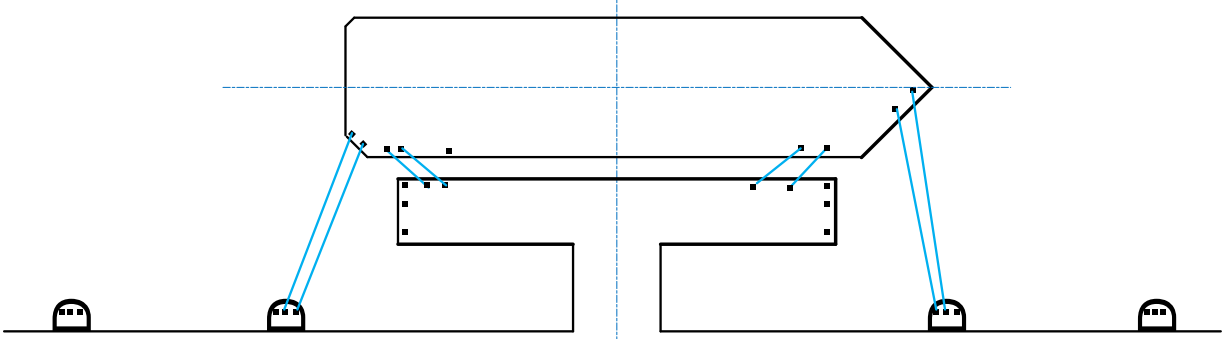
In the majority of cases it is anticipated that the ship's Masters will provide the notice of entry of dangerous substances arriving by sea. In order that this information is received in advance of the vessel's arrival, it is recommended that this is transmitted via email to the addresses listed in section 2.

In the case of advance notification for the entry of dangerous substances entering the harbour area from an inland source the berth operator should contact the VTS data centre for details on the required method of reporting (*See section 2*).

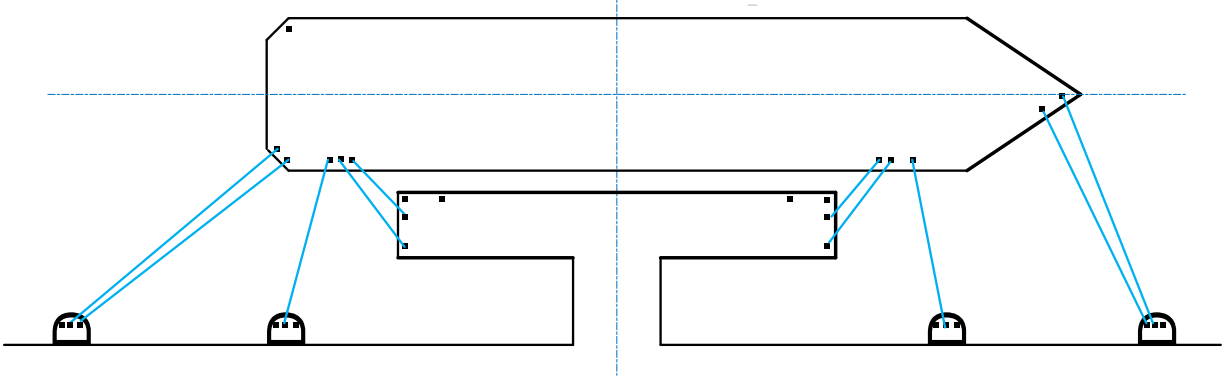
Appendices

1.0 Fawley Mooring Plan Examples

Mooring Plan For Vessels Less Than 4kDWT



Mooring Plan For Vessels Between 4kDWT and 8kDWT (Version 1)



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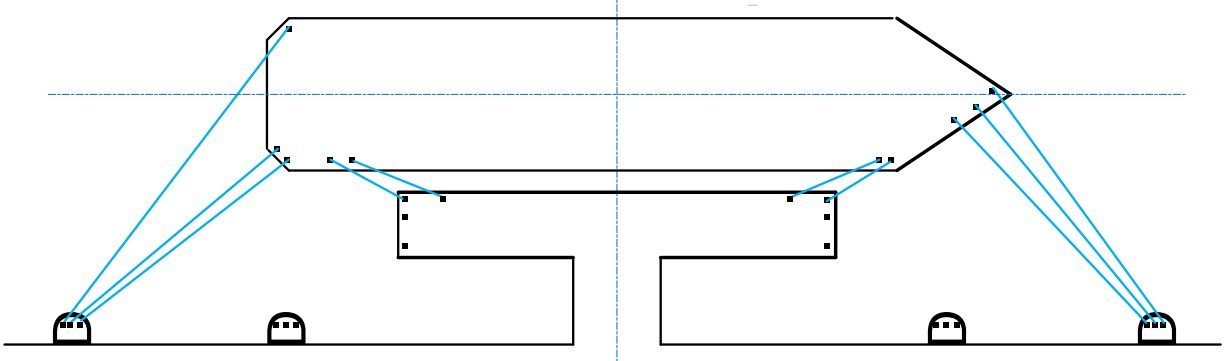

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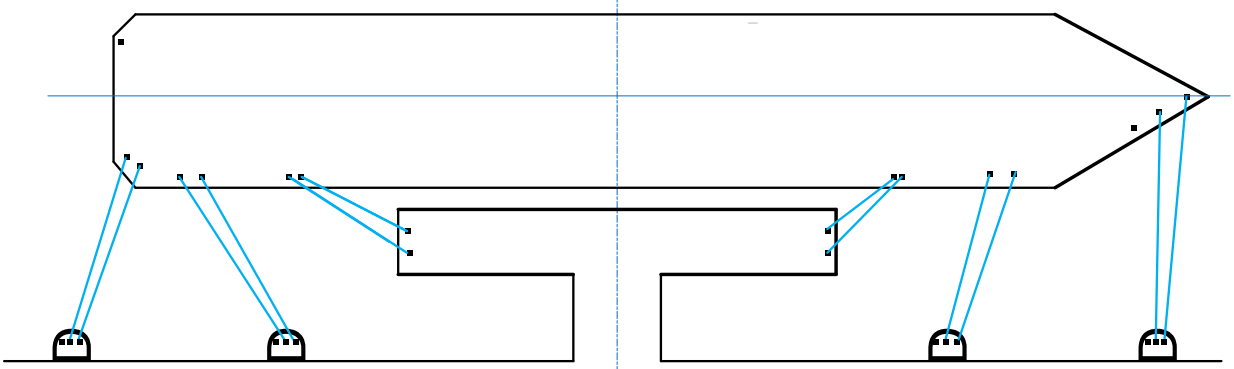
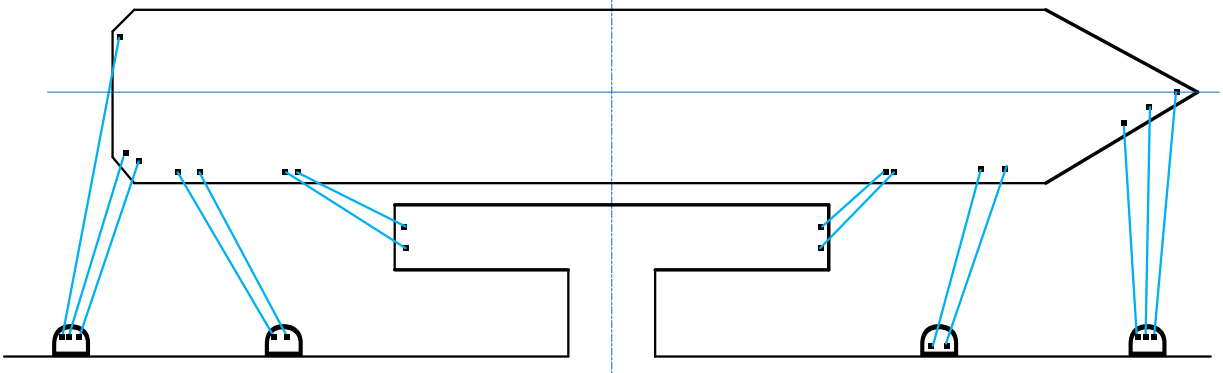


Mooring Plan For Vessels Greater Than 12kDWT (Version 1)



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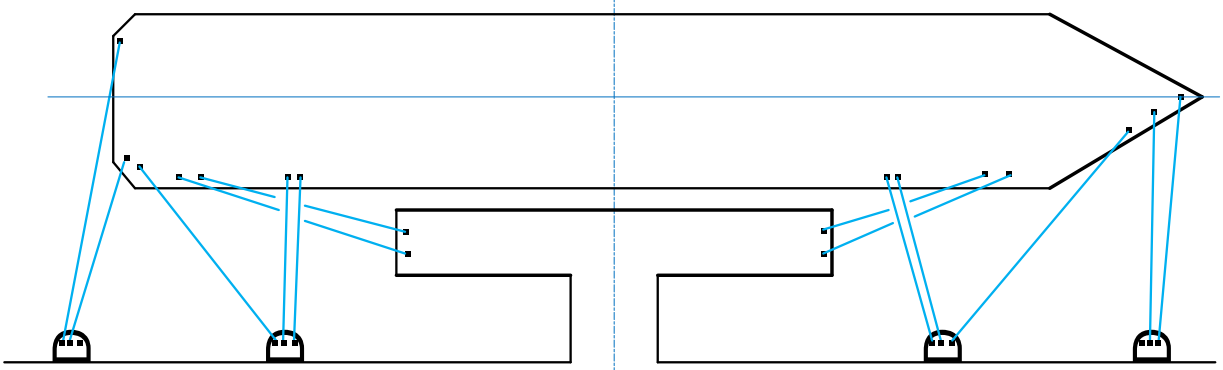

Mooring Plan For Vessels Greater Than 12kDWT (Version 3)