



PORT OF IPSWICH

52° 02.79' North 001° 09.75' East

PILOTAGE MANUAL



REVISED AUGUST 2017

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EMERGENCY PROCEDURES

For all emergencies in the Port of Ipswich or the River Orwell

Contact:

ORWELL NAVIGATION SERVICE (ONS)
(Situated at the Lock Head, Ipswich IP3 0DP)

Telephone: 01473 211066 (24 hours) and Emergency Only 01473 217751

VHF: Channel 68

Fax: 01473 230915

Email onsipswich@abports.co.uk

The Duty Operator will, on receipt of the information of an emergency, make the necessary contacts and carry out the Standing Instructions as laid down in the ABP Port of Ipswich, Port Emergency and Major Incident Plan.

In the event that grounding in the river or engine failure when grounding is likely, two Svitzer Tugs must be called immediately. If a vessel is grounded across the channel, the Ipswich tug must also be called.

SECTION 1

NAVIGATION – THE RIVER ORWELL and the PORT of IPSWICH

Admiralty Chart No 2693

Byelaws

This Pilotage Manual should be read in conjunction with the Port of Ipswich Byelaws 1996

LENGTH and UNDER KEEL CLEARANCE (UKC)

See Section 3 for Arrival and Departure details.

Air Draft under the Orwell Bridge is 43.07 metres above Chart Datum

TOWAGE (Up River from No 5 Buoy)

As per Towage Rules – (See Section 2)

SPEED

A Master of a vessel will at all times navigate with caution at such speed that no damage to the environment will be caused and no hazard will be created to other craft which may be navigating or moored in the vicinity.

The speed of vessels must be reduced to the minimum consistent with safe navigation when passing yacht anchorages at Pin Mill, Woolverstone and other places, or other vessels moored, or dredgers operating or works of repair, maintenance or construction in progress within the harbour and from a point abreast of the East Fen buoy to the Lock Gates and while within the Dock.

The MAXIMUM speed for vessels under 50Tonnes GRT shall be deemed to be 6 knots (*General Direction*)

POSITION REPORTING

A Master shall report to the ORWELL NAVIGATION SERVICE on VHF Channel 68 on entering the River, at the following positions:

- **Passing the Fagbury Buoy**
- **Passing No 4 buoy**
- **Passing cathouse**
- **Passing No 9 Buoy**
- **When secure on berth**

If any such vessel is in a damaged condition which renders such vessel in any way un-seaworthy or inhibits the vessel's ability to manoeuvre, full particulars of the damage shall be reported to the ONS prior to arrival or departure at the Port of Ipswich.

The Harbour Master on receiving a report from a master of a vessel may give directions to the master of such a vessel under powers in that behalf given by Section 59(2) of the Ipswich dock Act 1971

On leaving the Port, at the following positions:

- Prior to leaving the berth
- On clearing the berth and proceeding
- Passing No 9 Buoy
- Passing Cathouse Buoy
- Passing No 4 Buoy
- Passing No 2 Buoy
- Immediately before leaving the port and transferring to Harwich Haven authority control

While navigating within the Port masters of all vessels shall, at all times, maintain a listening watch on VHF Channel 68 or as directed by the Orwell Navigation Service.

If such vessel is not fitted with a VHF radio-telephone or is fitted with one which is not operational at the time of entry into the Port or departure from a berth therein, on arrival at a berth owned or occupied by ABP Port of Ipswich, prior to leaving a berth in the port and before moving from one berth to another, the Master of such a vessel shall report to the Orwell Navigation Service in person or by telephone.

NAVIGATIONAL RESTRICTIONS

Vessels 90M or more LOA

A vessel 90 metres or more LOA ***MUST NOT PASS or OVERTAKE*** another vessel of 90 metres or more in the River Orwell between the Butt Buoy and the Port of Ipswich.

Petroleum Tankers and Chemical Tankers with Hazardous Cargo

These vessels may navigate at any time (Subject to the above and to tidal constraints if appropriate) provided that:-

- Between ***one hour*** after sunset to ***one hour*** before sunrise there is no opposing traffic on the River above the Butt Buoy, the size and draft of which would present a potential hazard.
- Weather and visibility conditions are of a standard acceptable to the master and the pilot concerned.

Inward Bound Vessels

- 1 Masters and/or Pilots of inward bound vessels **MUST** ascertain the position of any outward bound vessel and communicate with it to agree a passing position. The inward bound vessel must ensure ONS is made aware of this agreement. Communication is to be maintained between vessels to ensure the agreed passing point is achieved.

Masters and/or Pilots must agree with ONS berthing requirements and if the vessel is required to swing and which turning circle they intend to utilise.

2 Passing Positions

Vessels are to ensure the passing manoeuvre is not conducted on channel turn points but is carried out in the straight sections of the channel.

3 Poor Visibility Procedures

When the visibility in the River Orwell is reported to be ***Less than 5 cables one-way traffic in the river must*** be instigated whenever possible. (See Estimation of Distances in Restricted Visibility Table).

When the visibility in the harbour and/or the River Orwell is 2 cables or less, commercial vessels arriving or wishing to depart the port will be informed of the visibility and advised that transit of the harbour and/or river is inadvisable.

(SEE General Reduced Visibility Procedures – Instructions to Duty ONS Operators – Section 3.4.9 – Port of Ipswich Operations Manual) (This section has been re-iterated in Section 11 of this manual)

Outward Bound Vessels

- 1 The master and/or pilot of the outward bound vessel **MUST** ascertain the position of any commercial vessels in the Channel from the Orwell Navigation Service, prior to leaving the berth and liaise, if necessary, with any inward bound vessel.

Swinging Areas



The two main swinging areas are off Ro-Ro 1/WBN (Upper turning Circle) and off Ro-Ro 2 (Lower Turning Circle)

Vessels Over 120 metres and up to 136 metres LOA

When swinging off Ro-Ro 1, Cliff Quay Tanker Berths (Bollards 1 – 8) **OR** Ro-Ro 1 and West Bank North Berth **MUST** be clear of berthed vessels.

When swinging off Ro-Ro 2, Cliff Quay Berths (Bollards 8 – 16) **OR** Ro-Ro 2 **MUST** be clear of berthed vessels.

Vessels Over 136 metres LOA

When swinging off Ro-Ro 1, Cliff Quay Tanker Berths (Bollards 1 – 8) **AND** Ro-Ro 1 **AND** the West Bank North **MUST** be clear of berthed vessels.

When swinging off Ro-Ro 2, Cliff Quay Berths (Bollards 8 – 16) **AND** Ro-Ro 2 must be clear of berthed vessels.

EXEMPTIONS and DISPENSATIONS

See MEMORANDA (Section 11):

- 14th January 2005 – Arklow Wind Class of Vessel
- 20th May 2010 – Arklow Wind Class of Vessel (Updated)

- 12th September 2011 – Initial visit for the IPSWICHMAX ferry service – CAPUCINE Class
- 17th February 2012 – Procedure for using swinging pile – IPSWICHMAX Ferries
- 22nd March 2012 – Reviewed transit of IPSWICHMAX ferries

CAUTIONARY NOTE

When any tanker is working on any Liquid Bulk Tank Farm (LTBF) berth and any vessels swinging using the Upper Turning Circle or departing Ro-Ro 1 or West Bank North **MUST** contact operations at (LTBF) to advise of vessels manoeuvring.

ECO OIL: Main Office: 01473 256192
 Duty Mobile: 07918 618892

SOUND SIGNALS

In addition to the Sound Signals required to be made by the Regulations for the Prevention of Collisions at Sea, the following signals will be used by vessels navigating in the River Orwell:-

FOUR (4) SHORT blasts followed by **ONE (1) SHORT** blast = **VESSEL SWINGING TO STARBOARD**

FOUR (4) SHORT blasts followed by **TWO (2) SHORT** blasts = **VESSEL SWING TO PORT**

ONE (1) LONG blast be given when approaching the **WOOLVERSTONE** and **PIN MILL** areas between the hours of Sunrise and Sunset and for **INWARD** bound vessels between No's 4 and 5 buoys and **OUTWARD** bound vessels when passing No 7 buoy.

ONE (1) LONG blast when leaving **CLIFF QUAY** or **WEST BANK** berths during daylight hours on **SATURDAYS, SUNDAYS** and **BANK HOLIDAYS**.

VESSELS OVER 150 metres to 155 metres LOA – CONDITIONS OF OPERATION

Notwithstanding anything contained in arrangements regarding the navigation of the River Orwell, vessels up to **155 metres LOA** may, under certain special circumstances, navigate in the river, subject to prior consultation with the Ipswich Harbour Master.

Vessels in excess of 155 metres LOA will not be accepted under any conditions (Other than those currently being handled with certain pre-conditions)

The following conditions are to be complied with:-

- The pilotage act is accepted on a voluntary basis
- The pilot is to be stood down prior to the [Pilotage Act](#) to allow for planning time and communication with ONS and VTS
- The passage is to be made in daylight only

- The vessel must be accompanied up river by two tugs and must have a third (Ipswich) tug available to assist when swinging
- The weather conditions must be considered suitable by the designated pilot. If not suitable the vessel will remain anchored or berthed until conditions are such.
- The vessel may only swing if the conditions are met for vessels over 136 metres LOA swinging.
- A minimum (UKC) of 1.0 metre is to be achieved throughout the passage.
- In the summer months if large numbers of leisure craft are present a patrol launch may precede the vessel during the river passage.

Nothing in these guidelines will remove from any pilot the right to advise masters against navigating in the river if they consider a proposed course of action to be imprudent.

Nothing in these guidelines shall preclude the Ipswich Harbour Master, from giving consideration to the exemption of a specific vessel from any of the Conditions and requirements herein afore mentioned.

ESTIMATION of DISTANCES in RESTRICTED VISIBILITY

FROM ONS	DISTANCE (Cables)
Yacht Waiting pontoon	1.0
Corner Cliff Quay (LBTF)	2.0
Ro-Ro 1 Ramp	3.0
Ro-Ro 2 Ramp	4.0
West Bank South	4.5
500ft Berth	5.0
FROM BRIDGE CAMERA	
No 9 Buoy	5.0
Bridgewood Buoy	7.0
Priory Buoy	10
FROM SUFFOLK YACHT HARBOUR (Camera 1)	
Stratton Buoy	3.5
Trimly Buoy	7.5
FROM SUFFOLK YACHT HARBOUR (Camera 2)	
Channel Marker Posts (Inner)	1.0
Channel Marker Posts (Outer)	1.5
Safe Water Mark Buoy	2.0
Stratton Buoy	3.5
No 3 Buoy	4.5

These distances are for a guide only

When requested by a vessel for an estimation of the visibility in the river be specific on the area you are talking about and if in any doubt let the vessel know. If you observe a major improvement or reductions in the visibility pass this on to the vessel.

Take time to learn the positions of the buoys relative to the views on the cameras, so that they may be more easily recognised when the visibility starts to fall.

Safe Passing Areas



SECTION 2

TOWAGE RULES FOR THE PORT of IPSWICH

The following rules are set out to remove ambiguity and provide comfort to the Ipswich Tug Operators:

Vessels 150 metres or Over	3 Tugs to Swing, 2 Tugs to Sail or Arrive
Vessels OVER 136 – 149.99 metres	2 Tugs to Swing, 1-2 Tugs to Sail or Arrive
Vessels 130 metres or Over – 135.99 metres, <u>Without Bow Thruster</u>	2 Tugs to Swing, 1 to Sail or Arrive
Vessels 130 metres or Over – 135.99 metres, <u>With Bow Thruster</u>	1 Tug to Swing
Vessels 120 -129.99metres	1 Tug to Swing
Vessels Below 120 metres	At Masters/Pilots discretion
Backing Out of Wet Dock	2 Tugs
Vessels swinging from Ro-Ro 1 with Tankers on the Liquid Bulk Tank Farm Terminal (formerly VOPAK)	1 Tug in attendance if the wind exceeds 25 knots (As recorded by ONS)
Vessels OVER 130 metres on maximum draft for the tide or 8 metres or over Arriving or Sailing	2 Tugs Arriving or Sailing
Ipswichmax Ferries	1 Tug for arrival and departure if wind is a sustained 20 knots (As recorded by ONS)

These are the minimum tug requirements for the Port of Ipswich, but these criteria do not remove the right of a Ship's Master/Pilot or the Ipswich Harbour Master to increase the tug requirement should conditions or vessel circumstances demand otherwise.

Vessels of 145 metres in length or over with drafts of 7.5 metres or over will berth Starboard side alongside if operationally possible.

Shifting Berth at the Port of Ipswich

- a) When a vessel is required to shift berth and the vessel can always remain attached to the quay with one or more rope, there is no requirement to take a pilot or tug(s). The vessel Master can if required request a Pilot and Tug(s) via Orwell Navigation Service or Agent.
- b) If a vessel is required to shift berth and all ropes will be let go, and the wind speed is 20knts or greater, the vessel Master must consult with the duty ONS operator and discuss the possibility of taking a Pilot and Tug(s).
- c) If a vessel is required to shift berth and all ropes will be let go, and the wind speed is 25knts or greater. It will be compulsory to take a Pilot. Tug(s) may also be required depending on vessel length/manoeuvrability/weather conditions.

Vessels should always put safety first and be aware that the turning circle can be reduced by the presence of vessels on the West Bank or Tanker berths.

One Ipswich tug is available at 60 minutes notice subject to availability. A second tug requires 2 hours notice subject to availability.

TUGS BASED AT IPSWICH

GRAY SALVOR (see Table below for details)

SVITZER TUGS (FELIXSTOWE)

TUG DETAILS

Name	Svitzer Sky	Svitzer Kent	Svitzer Shotley	Svitzer Deben	Gray Test	Gray Salvor
Built	2008	2015	2005	2015	1996	1993
P of Reg	St Vincent	UK	UK	UK	UK	Harwich
CQ	J8B3955	2IVK9	MNQJ6	2IVL5		
IMO No.	9460708	9695602	9366873	9695585		
Owner	Svitzers	Svitzers	Svitzers	Svitzers	Svitzers	Svitzers
Bollard Pull	70.0T	80.0T	70.0T	80.0T	18.0T	12.0T
Max. Dft	4.60	4.25	4.6	4.25	2.60	2.00
Speed	12.8 knots	14.0 knots	12.8 knots	14.0Knts	10.9 Knots	10 Knots
Engines	2 x Caterpillar	2 x Caterpillar	2 x Caterpillar	2 x Caterpillar	2 x Caterpillar 34 12A TA/B	2 x450 hp Cummins

- Svitzer Tugs available by arrangement
- 1 Svitzer Tug available on request
- 2nd Svitzer Tug may require 2 days notice

EXEMPTIONS

See MEMORANDA (SECTION 11):

- 14th January 2005 – Arklow Wind Class of Vessel
- 20th May 2010 – Arklow Wind Class of Vessel (Updated)
- 12th September 2011 – Ipswichmax ferries (Capucine Class)

SECTION 3

IPSWICH UNDER KEEL CLEARANCE

INWARD TRANSIT (FLOOD TIDE)

- Calculation should be based on minimum allowance of 0.5 metres or 10% of the vessels deepest draft (whichever is the greater) at the River Orwell entrance, assuming dredged channel depth of **5.6 metres Above Chart Datum (ACD)**. Surveys indicate estuary depths generally not less than 6.0 metres (ACD) as far up as No 3 Buoy. High Water at Ipswich varies from 1 hour 15 minutes to 1 hour 25 minutes (Neaps) after time of passing Fagbury Buoy.
- Currently, the maximum draft of vessels using the Port of Ipswich is **8.5 metres**, the maximum depth on Ipswich berths is **8.6 metres**.
- As a guide, a vessel bound for Ipswich on the flood tide may enter the river with a **(UKC) of 0.5/0.85 metres**, a minimum allowance of 1 hours passage to reach the port with an extra 30 minutes allowed for swinging should be made.
- Pilot/Masters of vessels, should ensure that a minimum (UKC) of 10% of the vessels deepest draft is maintained at all times in the River Orwell (where charted water is not less than 5.6 metres). Accordingly, due consideration should be given to the *minimum expected* height of tide during the whole river transit, particularly if the tide will ebbing at any time. Timings involved in the passage plan may need to be revised if the tide cuts or is early/late.

INWARD TRANSIT (EBB TIDE)

As a guide, a vessel bound for Ipswich on an Spring ebb tide may enter the river with a (UKC) of 2.0 metres, this equates to approximately 1 metre (UKC) at Ipswich port, extra time should be allowed for vessels swinging.

OUTWARD TRANSIT

The **MAXIMUM RECOMMENDED DRAFT** for a vessel to leave Ipswich during neap Tides will be based on the prevailing tidal conditions, so that the vessel must be **'READY TO SAIL' AT LEAST 1 HOUR BEFORE HIGH WATER** (See **Memorandum (Section 11)** – Vessels Loading to Maximum Draft for Tide – June 2010) Channel maintained to 5.6 metres (ACD) **MAXIMUM DRAFT ALLOWED 8.5 metres**

- Calculation should be based on a minimum 0.5/0.85 metres (UKC) at Orwell entrance, assuming dredged depth of 5.6 metres (ACD). Surveys indicate estuary depths generally not less than 6.0 metres (ACD) as far up as no 3 buoy. High Water at Ipswich varies from 1 hour 15 minutes to 1 hour 25 minutes (Neaps) after time of passing Fagbury Buoy.
- Currently, maximum depth on Ipswich berths is **8.6 metres**
- Vessels must be turned and actually ready to leave half an hour before high water to take advantage of these increased drafts.

- As a guide, a vessel leaving Ipswich on an ebb tide should have **1.5/1.85 metres (UKC)** on leaving the port. This equates to approximately **0.5/0.85 at Shotley**.
- As a guide vessels leaving Ipswich on a flood tide may leave with **0.5/0.85 metres (UKC)**, this equates to approximately **1.5/1.85 metres (UKC) at Shotley**.
- Pilot/Master of vessels, should ensure that a minimum (UKC) of 0.5/0.85 metres is maintained at all times in the River Orwell [where charted water is not less than 5.6 (ACD)]. Accordingly, due consideration should be given to the *minimum expected* height of tide during the whole river transit, particularly if the tide will be ebbing at any time. Timings involved in the passage plan may need to be revised if the tide cuts or is earl/late.
- If (UKC) parameters are in danger of being breached or vessel is over 136 metres (LOA) it should receive additional planning consideration.

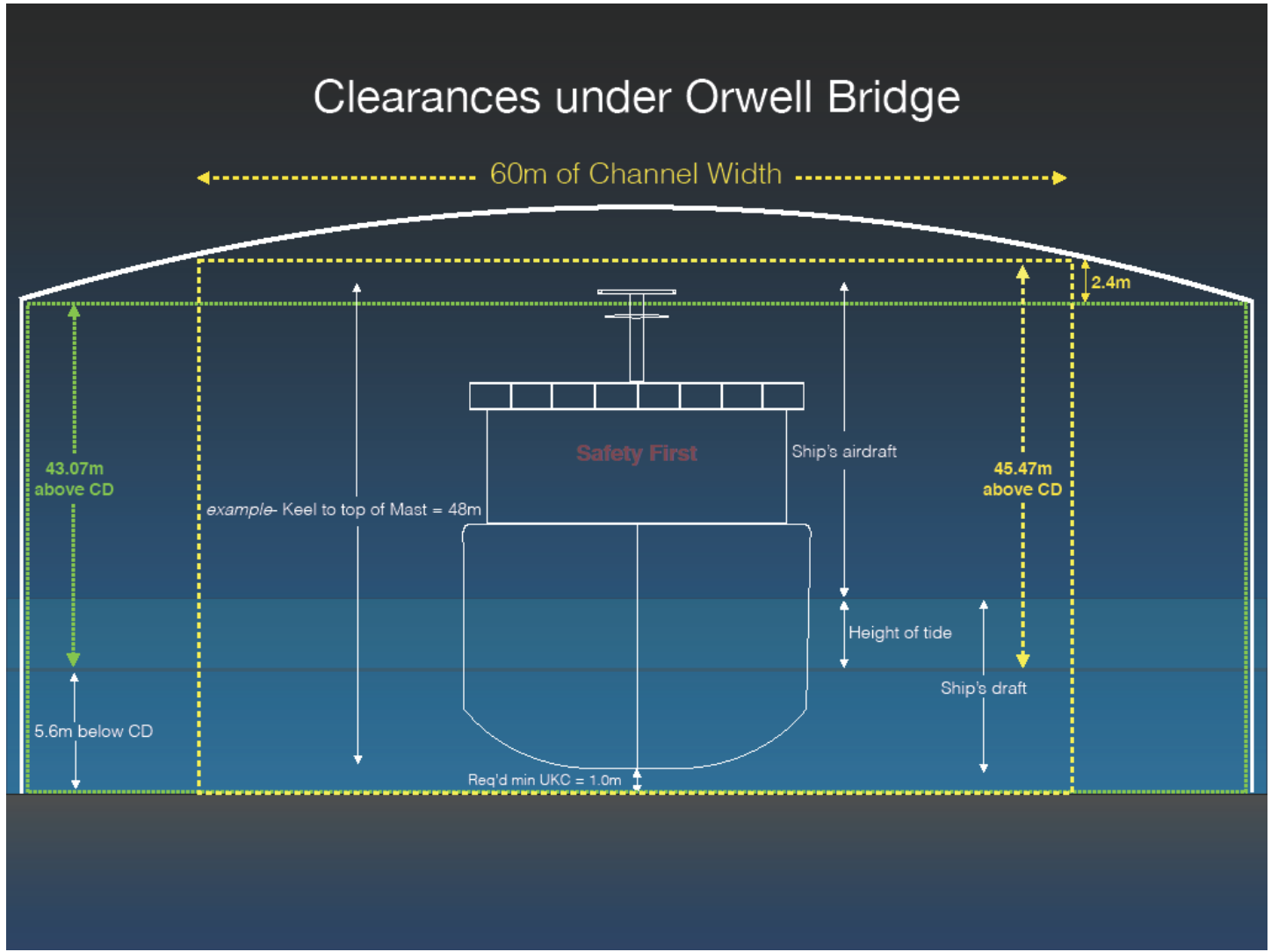
EXEMPTIONS

See MEMORANDA (SECTION 11):

- **14th January 2005 – ARKLOW WIND Class of Vessel**
- **20th May 2010 – ARKLOW WIND Class of Vessel (Updated)**

SECTION 4

ORWELL BRIDGE



The Orwell Bridge has an advertised clearance as per the above drawing of 43.07m above CD. Providing large Commercial vessels are navigating within 30m either side of the centre of the channel then we have an additional 2.4m clearance.

Example of D Class of Splietoff Vessel, although the design height from owners is 47.2m, The vessels are using a keel to top of mast distance of 48m as above drawing.

Bridge Height	43.07
Curve	2.4
Dredged Depth	<u>5.6</u>
Total	51.07
Vessel	48.0
UKC	<u>1.0</u>
Clearance	2.07m

SECTION 5

DEPTH of BERTHS and HEIGHT of QUAYS (As at 22/05/17)

DECLARED DEPTHS (IN METRES) ABOVE ADMIRALTY CHART DATUM

HEIGHTS of QUAYS (IN METRES) BELOW CHART DATUM

BERTH	DEPTH (M)	BOL No	HTS (M)	QUAY HDS DEG (T)	QUAY Lengths (M)
CLIFF QUAY					
BLT BERTH	8.4	1 - 8	6.27	023.5/203.5	165
GRAIN TERMINAL	8.4	8 - 12	6.27	023.5/203.5	165
EAST BANK TERMINAL NORTH	8.4	12 - 15	6.27	023.5/203.5	90
EAST BANK CONTAINER TERMINAL	8.4	15 - 19	6.27	023.5/203.5	120
500' NORTH	8.4	19 - 23	6.27	012.5/192.5	95
500' SOUTH	8.4	23 - 27	6.27	012.5/192.5	95
No 1 SHED	8.4	27 - 31	6.27	000.5/180.5	137
No 2 SHED	7.6	31 - 35	6.27	000.5/180.5	141
POWER STATION	7.5		6.34	335/155	143
WEST BANK					
WEST BANK NORTH	6.3	1 - 4	5.72	032/212	80
RO-RO 1	6.2	4 - 9	5.72	030/310	171
RO-RO 2	6.3	14 - 18	5.72	034/214	140
WEST BANK SOUTH	6.3		5.68	022.5/202.5	70
ENCLOSED DOCK (DEPTHS/HEIGHTS IN METERS @ MDL of 6.4 M)					
ORWELL QUAY	5.0		1.89	177/357	190
GASWORKS QUAY	4.2		1.89	177/357	
NEW EAGLE WHARF	4.0		1.89	177/357	
OLD CUSTOM HOUSE	3.0		1.89	N/A	

SECTION 6

NAVIGATION – THE ENCLOSED DOCK

VHF RADIO

The Lock Master is equipped with a VHF marine radio and maybe contacted through the Orwell Navigation Service (Ipswich Port Radio) on Channel 68.

MAXIMUM SIZED VESSELS

- Lock in or out **82 metres (LOA) by 13.8 metres beam**
- Enter the Dock and Swing **40 metres (LOA) maximum by 13.8 metres beam**

Vessels over 82 metres (LOA) can only enter the dock when the outer and inner lock gates are open i.e. for approximately one hour prior to high water on most tides, but not guaranteed.

Vessels of a suitable size to lock may do so at any state of the tide provided that the draft does not exceed the tide by more than 1.5 metres

- **Longer vessels than 40 metres with a suitable beam and draft may enter so long as either the entering or exit is made stern first with two tugs. The two tug rule will only be relaxed if both master and pilot request an alternative arrangement. ONS to be informed of likely tug requirements for departure, upon a vessels arrival at a Wet Dock berth**
- **Maximum Draft** owing to the shape of the lock pit, modern vessels require a minimum under keel clearance (UKC) depending upon their beam. To ascertain the maximum permissible draft, add the following to the height of the tide above chart datum at the time of entry **(the table below is to be used by vessels on free-flow only and keeping to the centre of the lock).** For vessels locking in the additional draft allowance is lost when alongside the lock wall.

SEE MEMORANDUM REF: SUNTIS departing wet dock during easterly wind

VESSELS BEAM (Metres)	MAXIMUM DRAFT [Height of Tide (metres)]
12.0	+2.09
12.1	+2.03
12.2	+1.97
12.3	+1.91
12.4	+1.86
12.5	+1.81
12.6	+1.76
12.7	+1.72
12.8	+1.67
12.9	+1.68

13.0	+1.59
13.1	+1.56
13.2	+1.52
13.3	+1.49
13.4	+1.46
13.5	+1.43
13.6	+1.40
13.7	+1.37
13.8	+1.34

SEE TABLE BELOW FOR VESSELS LOCKING IN:

IPSWICH LOCK DRAFT ALLOWANCE TABLE

(FOR MAXIMUM BEAM VESSELS AND ALL VESSELS LOCKING IN)

DRAFT	UKC	TOTAL	CILL CLEAR	TIDE REQUIRED
5.50	1.50	7.00	2.87	4.13
5.40	1.50	6.90	2.87	4.03
5.30	1.50	6.80	2.87	3.93
5.20	1.50	6.70	2.78	2.83
5.10	1.50	6.60	2.87	3.73
5.00	1.50	6.50	2.87	3.63
4.90	1.50	6.40	2.87	3.53
4.80	1.50	6.30	2.87	3.43
4.70	1.50	6.20	2.87	3.33
4.60	1.50	6.10	2.87	3.23
4.50	1.50	6.00	2.87	3.13
4.40	1.50	5.90	2.87	3.03
4.30	1.50	5.80	2.87	2.93
4.20	1.50	5.70	2.87	2.83
4.10	1.50	5.60	2.87	2.73
4.00	1.50	5.50	2.87	2.63
3.90	1.50	5.40	2.87	2.53
3.80	1.50	5.30	2.87	2.43
3.70	1.50	5.20	2.87	2.33
3.60	1.50	5.10	2.87	2.23
3.50	1.50	5.00	2.87	2.13
3.40	1.50	4.90	2.87	2.03
3.30	1.50	4.80	2.87	1.93
3.20	1.50	4.70	2.87	1.83
3.10	1.50	4.60	2.87	1.73
3.00	1.50	4.50	2.87	1.63

2.90	1.50	4.40	2.87	1.53
2.80	1.50	4.30	2.87	1.43
2.70	1.50	4.20	2.87	1.33
2.60	1.50	4.10	2.87	1.23
2.50	1.50	4.00	2.87	1.13
2.40	1.50	3.90	2.87	1.03
2.30	1.50	3.80	2.87	0.93
2.20	1.50	3.70	2.87	0.83
2.10	1.50	3.60	2.87	0.73
2.00	1.50	3.50	2.87	0.63
1.90	1.50	3.40	2.87	0.53
1.80	1.50	3.30	2.87	0.43
1.70	1.50	3.20	2.87	0.33
1.60	1.50	3.10	2.87	0.23

LOCKING TIMES

Locking may take place at any time subject to length and draft.

ENTRY SIGNALS

Lights fixed at the Dock Head (North and South) on the East side of the lock indicate to vessels whether the lock is open or closed for entry from the river or the dock as appropriate.

ONE RED LIGHT - LOCK CLOSED TO VESSELS ENTRY

ONE GREEN LIGHT - LOCK OPEN FOR VESSELS ENTRY

FLOOD PROTECTION GATE

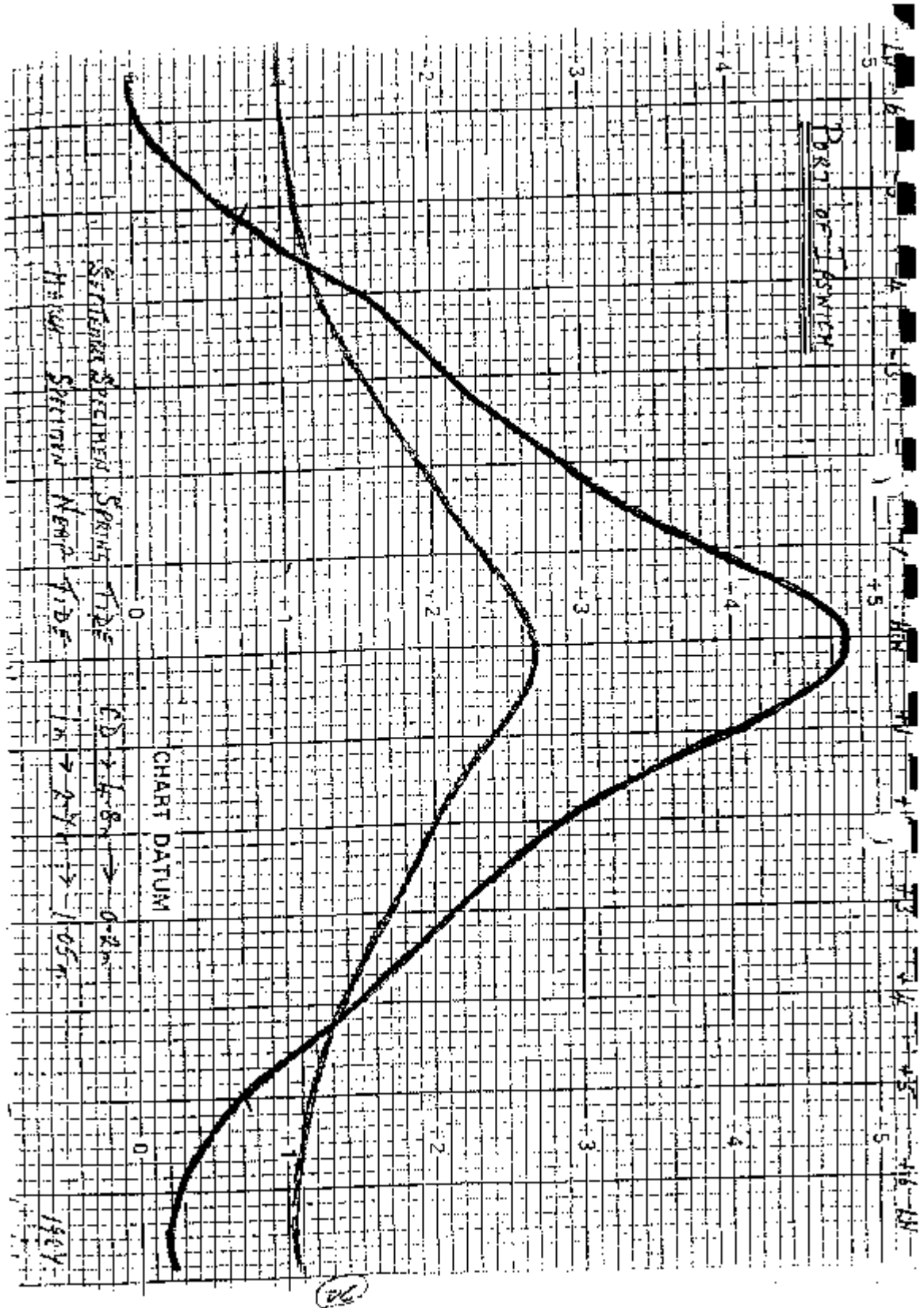
These gates are closed when the tide level is 4.6 metres or more above chart datum. During this period the dock entrance is closed to navigation.

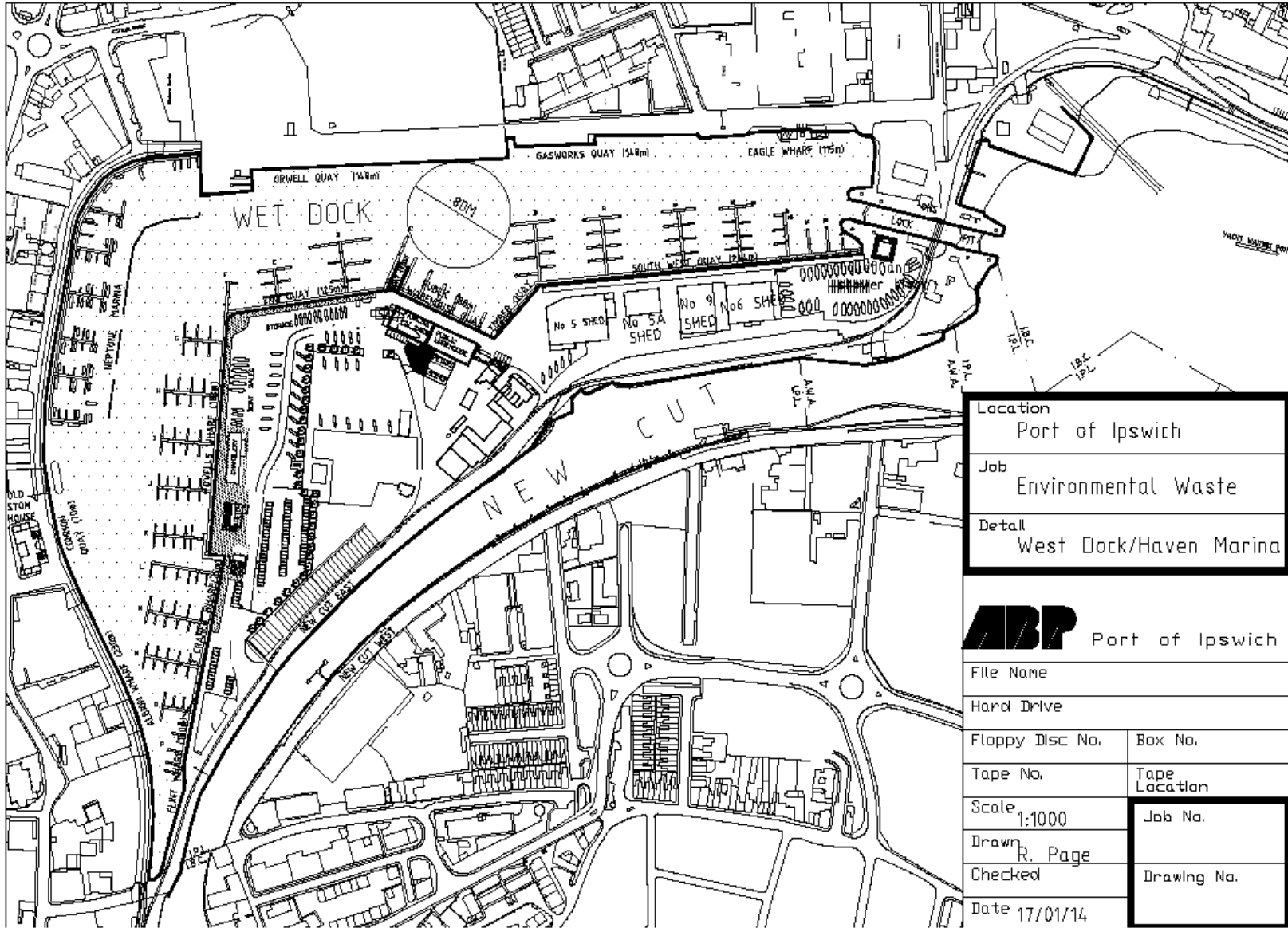
MOORING IN PRINCE PHILIP LOCK

All vessels requiring the assistance of Linesmen in the lock must give at least one hours notice to the duty Lock Master, so that arrangements can be made with the mooring gang. The charges for this service can be found in the current ABP Port of Ipswich Charges book.

All commercial trading vessels being stevedored on private quays by companies other than ABP Port of Ipswich, will incur a locking charge.

TIDAL SPECIMEN BELOW



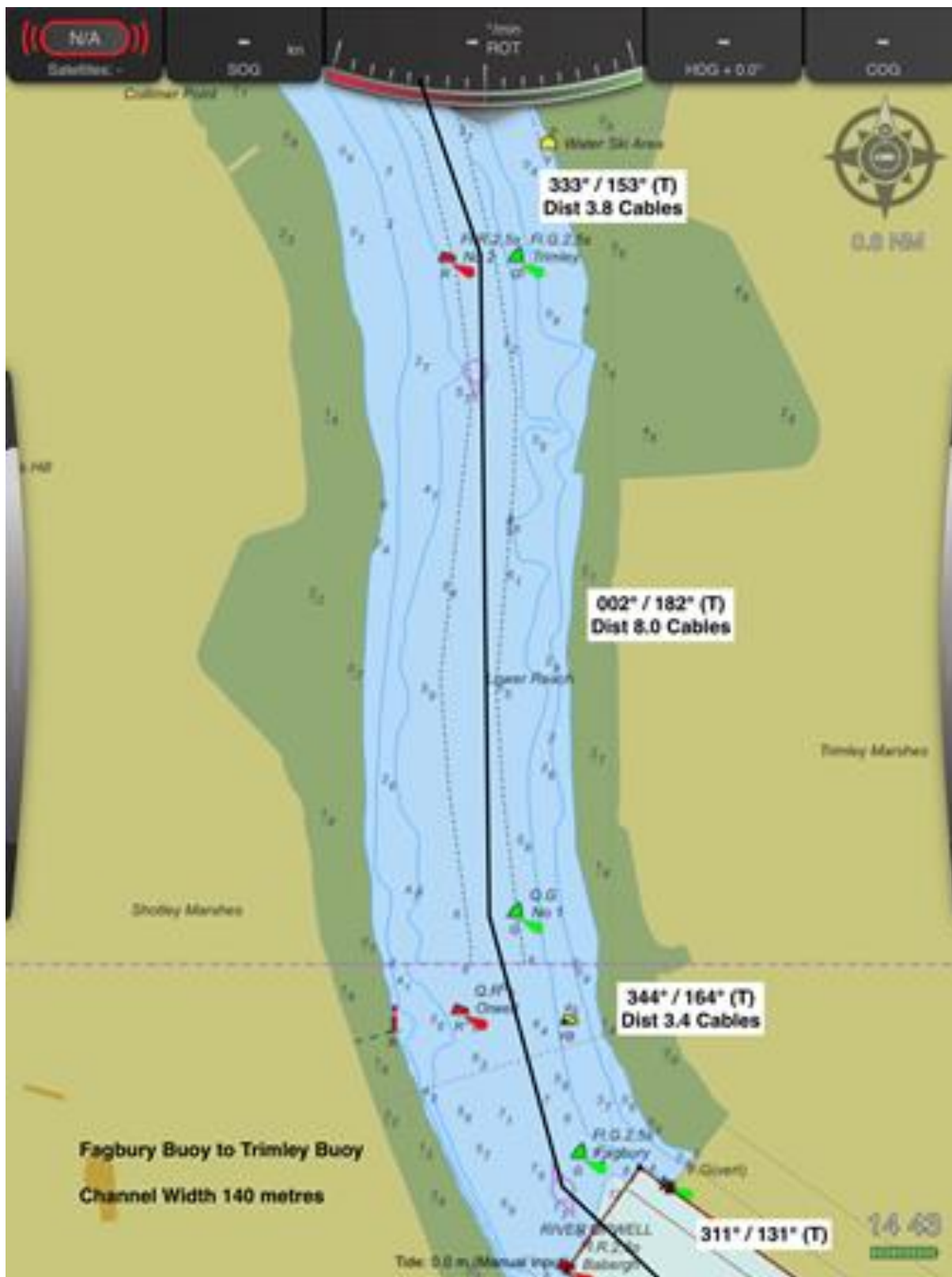


Location	Port of Ipswich
Job	Environmental Waste
Detail	West Dock/Haven Marina

ABP Port of Ipswich	
File Name	
Hard Drive	
Floppy Disc No.	Box No.
Tape No.	Tape Location
Scale 1:1000	Job No.
Drawn R. Page	Drawing No.
Checked	
Date 17/01/14	

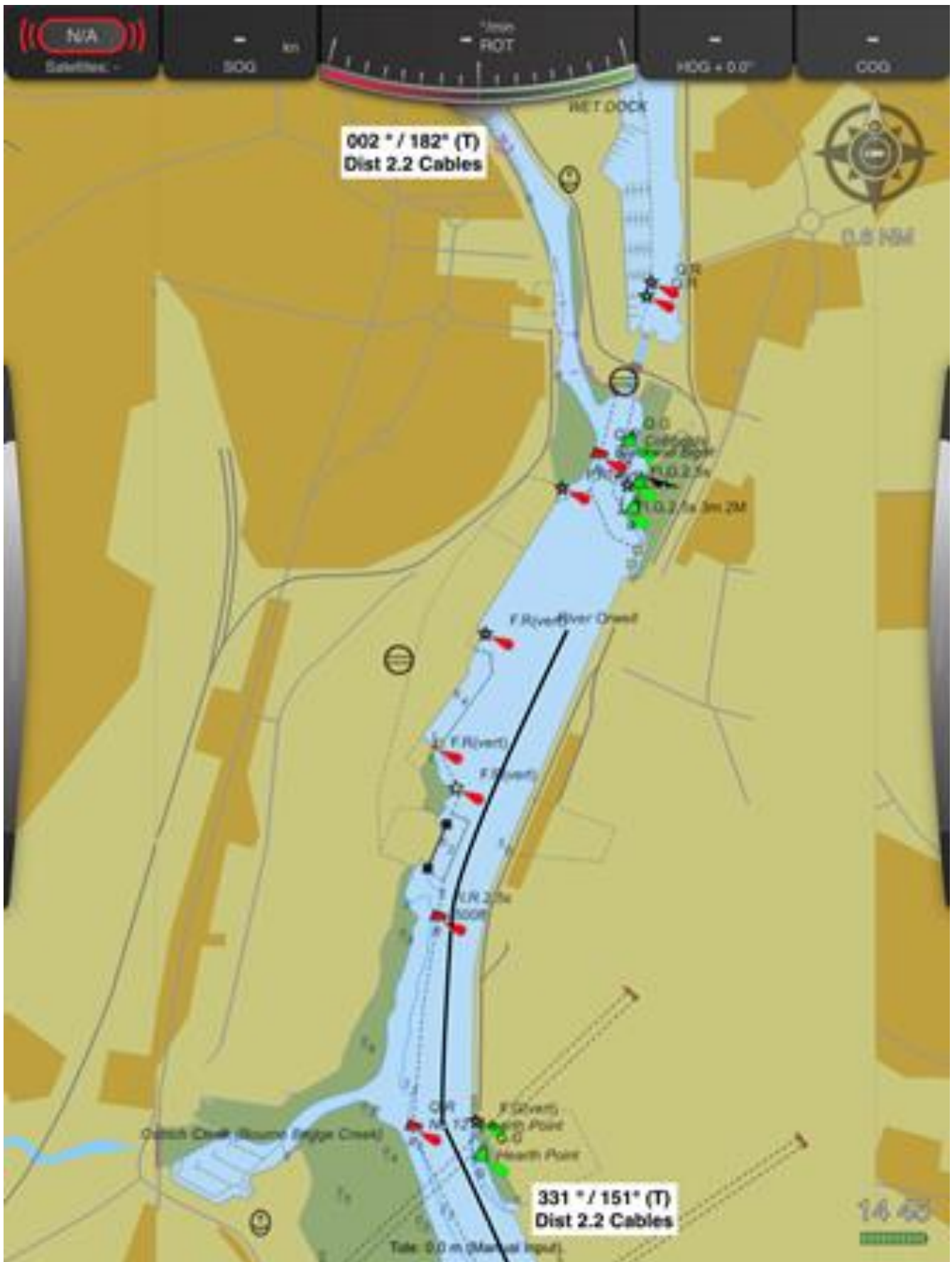
SECTION 7

BOUYS	LIGHTS
No 1	FL G 1s
ORWELL	FL R 1s
TRIMLEY	FL G 2.5s
No 2	FL R 2.5s
STRATTON	FL G 1s
COLLIMER	FL R 1s
No 3	FL G 2.5s
BAY	FL G 1s
No 4	FL R 1s
FOXES BOTTOM	FL R 2.5s
BUTT	FL R 5s
No 5	FL G 1s
GROG	FL G 2.5s
PARK BIGHT	FL G 1s
No 6	FL R 1s
CATHOUSE	FL G 2.5s
No 7	FL G 1s
MARINA	FL R 1s
DOWNHAM	FL G 2.5s
DEER PARK	FL R 2.5s
MULBERRY	FL G 5s
PRIORY	FL G 1s
No 8	FL R 1s
BRIDGEWOOD	FL G 2.5s
FRESTON	FL R 2.5s
No 9	FL G 1s
HILL	FL R 1s
POND OOZE	FL G 2.5s
REDGATE	FL R 2.5s
EAST BRIDGE	FL G 1s
WEST BRIDGE	FL R 1s
SEWER	FL G 2.5s
WHERSTEAD	FL R 2.5s
EAST FEN	FL G 2.5s
WEST POWER	FL R 5s
HEARTH POINT	FL G 1s
No 12	FL R 1s
500 FT	FL R 2.5s
COBOLDS	FL G 1s
BLACKWALL BIGHT	FL R 1s









SECTION 8

LIGHT and MARKS – RIVER ORWELL (Not covered under Buoyage)

F = FIXED R = RED G = GREEN Y = YELLOW

POSITION	LIGHT/MARK
SUFFOLK YACHT HARBOUR	LIGHTS – 2FY LEADING LIGHTS
SUFFOLK YACHT HARBOUR	BEACONS – ENTRANCE CHANNEL 2 CAN R, 2 CONICAL G
BROKE HALL HARD	BEACON – CONICAL G
PIN MILL HARD	BEACON – CAN R
WOOLVERSTONE JETTY	LIGHTS – 2 FR (Vertical)
WOOLVERSTONE MARINA (East)	LIGHTS – 2 FR (Vertical)
WOOLVERSTONE MARINA (West)	LIGHTS – 2FR (Vertical)
PRIORY PARK FENCE	BEACON – CONICAL G
ORWELL BRIDGE (Centre Span)	LIGHT – FY (On upper and lower sides)
ORWELL BRIDGE (West Pier South)	LIGHTS – 2 FR (Vertical)
ORWELL BRIDGE (West Pier North)	LIGHTS – 2 FR (Vertical)
ORWELL BRIDGE (East Pier South)	LIGHTS – 2 FR (Vertical)
ORWELL BRIDGE (East Pier North)	LIGHTS – 2 FG (Vertical)
SEWER JETTY (South East)	LIGHTS – 2 FG (Vertical)
SEWER JETTY (North West)	LIGHTS – 2 FG (Vertical)
POWER STATION QUAY (South East)	LIGHTS – 2 FG (Vertical)
POWER STATION QUAY (North West)	LIGHTS – 2 FG (Vertical)
CLIFF QUAY (South)	LIGHTS – 2 FG (Vertical)
WEST BANK (South)	LIGHTS – 2 FR (Vertical)
WEST BANK (North)	LIGHTS – 2 FR (Vertical)
DOLPHIN WEST BANK	LIGHTS – 2 FR (Vertical)
RO-RO 2	LIGHTS – 2 FR (Vertical)
NEW CUT EAST (Velocity Control – Indicate [E Bank entrance to New Cut])	LIGHTS – 3 FR (Vertical) Occasional to that the New Cut is closed to shipping
LOCK ENTRANCE (ONS)	LIGHTS – FR – Lock closed to vessel entry FG – Lock open for vessel entry

SECTION 9

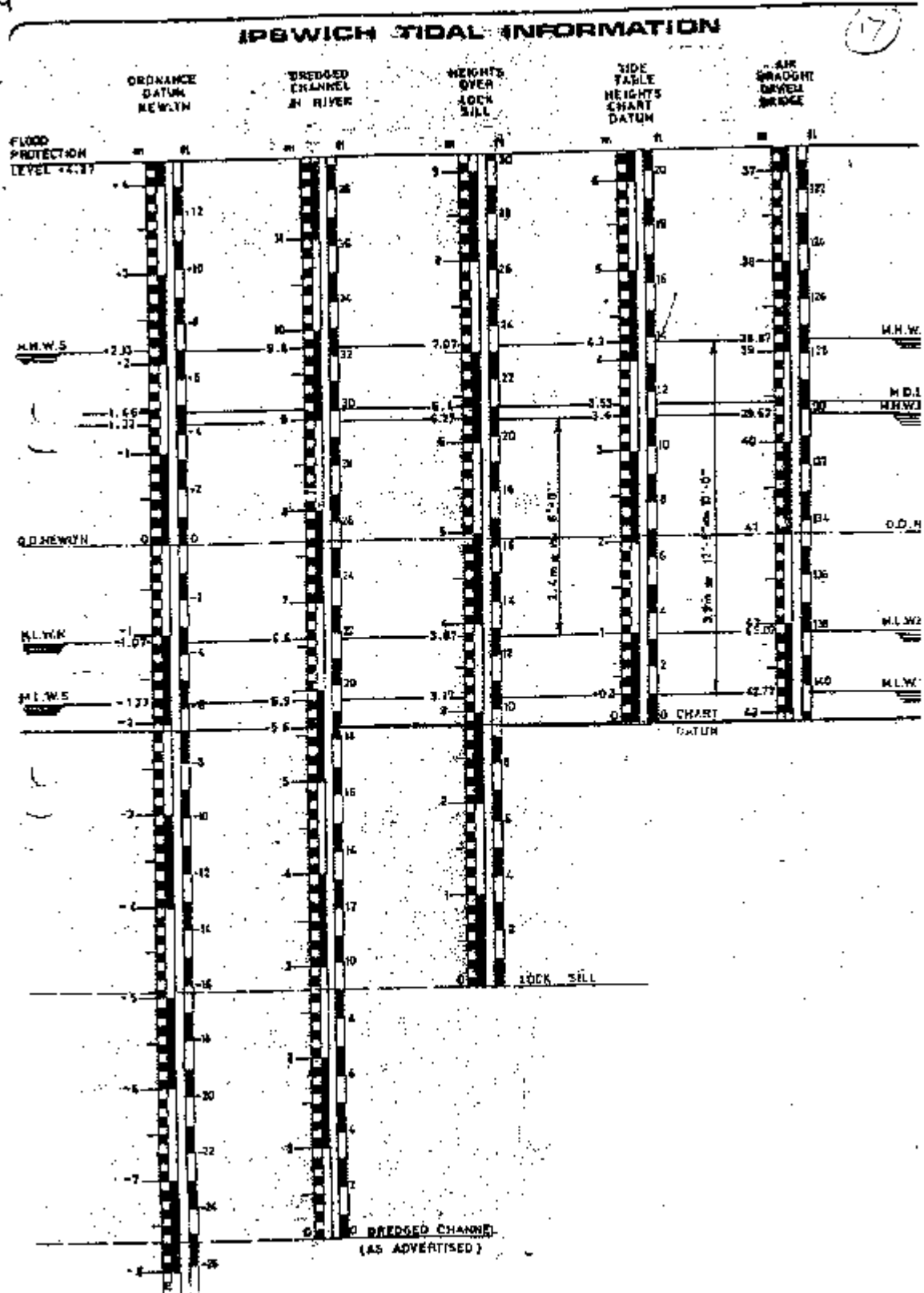
CLIFF REACH – CHANNEL WIDTHS

Measured at Right Angles to Cliff Quay Bollards (In Metres)		
Bollard No.	Channel Width Distance	Comments
1	173	
2	178	Opposite VO 3 Min. 173
3	183	
4	187	Opposite VO 2 Min. 183
5	192	
6	180	Opposite VO 1 Min. 180
7	200	
8	188	
9	190	
10	184	Opposite IGT Min. 184
11	194	
12	200	
13	208	Opposite EBN Min. 180
14	180	
15	160	
16	124	West Bank Dolphin
17	120	Opposite EBCT Min. 115
18	115	
19	115	
20	112	
21	85	Opposite 500Ft (N) Min. 85
22	85	
23	82	
24	82	
25	82	Opposite 500ft (S) Min. 82
26	85	
27	91	
28	92	
29	98	Opposite No. 1 Shed min. 85
30	100	
31	102	
32	107	No 12 Buoy
33	95	Opposite No. 2 Shed Min. 95
35	95	

Measured at Right Angles to the Power station Quay		
1		95
2		95
3		95
4		99
5		92
6		95
7		88

SECTION 10

TIDAL INFORMATION (See Overleaf)



SECTION 11

PLAN of IPSWICH PORT (See Overleaf)

SECTION 12

MEMORANDA and DISPENSATIONS



PORT of IPSWICH MEMORANDUM

14th January 2005

ATTENTION: Orwell Navigation Service

CC Berthing Office
CC Harwich Haven Authority

Exemption from Clearing Berths for Arklow Wind Class of Vessel on both East and West Banks Ipswich, when swinging.

The Arklow Wind & Wave shortly to be followed by the Willow (LOA 136.4) metres are becoming frequent users at ABP Ipswich. Experience has shown this class of vessels is highly manoeuvrable with its 750 HP bow thrust and CPP

Taking into account the experience from this class of vessel at Ipswich, these vessels will now be **exempt** from the operational instruction requiring that both the Cliff Quay tanker berths (bollards 1 to 8) **and** the Ro-Ro berth **and** West Bank North are clear of berthed vessels.

This class of vessel **will** be permitted to swing using the same operational procedures for a vessel 120m LOA to 135.9m LOA. In this case the Cliff Quay tanker berths (bollards 1 to 8) **or** the Ro-Ro berth and West Bank North must be clear of berthed vessels.

The decision to swing will always be dependent on the prevailing conditions at the time. In addition to providing the clear berth on Cliff quay or west Bank, when possible the berthing officer will liaise with ONS provide as much clear space as is practicable for when a vessel swings, on the opposing quay.

Harbour Master



PORT of IPSWICH MEMORANDUM

11th June 2010

ATTENTION: Orwell Navigation Service
CC Berthing Office
CC Harwich Haven Authority

Vessels loading to Maximum Draft for Tide

After consultation with Harwich Haven Authority (Pilots), and in order to guarantee sufficient under keel clearance, it has been agreed that that vessels which are loading to or near to a maximum draft for that tide, must be **ready to sail** at least one hour before high water **at Ipswich.**

This means that cargo work is completed, hatches closed and all relevant paperwork is in order. The usual 2 hours notice for ordering a pilot is still required.

Harbour Master

Ipswich



PORT of IPSWICH

MEMORANDUM

20th May 2010 (Updated)

ATTENTION: Orwell Navigation Service
CC Berthing Office
CC Harwich Haven Authority

Exemption from Clearing Berths for Arklow Wind Class of Vessel on both East and West Banks Ipswich when swinging

The following vessels will be **exempt** from the operational instruction requiring that both Cliff Quay tanker berths (bollards 1 – 8) **and** Ro-Ro 1 Berth and West Bank North are clear of berthed vessels.

Arklow Marsh
Arklow Manor
Arklow Mill
Arklow Meadow
Arklow Moor
Arklow Muse

When these vessels are using upper swinging area off Ro-Ro 1, Cliff Quay berths (bollards 1 – 8) **or** Ro-Ro 1 and West Bank North must be clear of berthed vessels.

When these vessels are using lower swinging area off Ro-Ro 2, Cliff Quay berths (bollards 8 – 16) **or** Ro-Ro 2 must be clear of berthed vessels.

These vessels **will** be permitted to swing the same operational procedures for a vessel 120m LOA to 135.9 LOA.

The decision to swing will always depend on prevailing weather conditions at the time.

As a consequence these vessels will be permitted to use the Towage Rules for the Port of Ipswich for vessels in the category 120.0 m LOA to 130.0m LOA.

A minimum requirement is 1 Tug to swing and 1Tug to sail. (If Draft is 8.0m or greater.)

Harbour Master
Ipswich



PORT of IPSWICH

MEMORANDUM

21st December 2010

ATTENTION: Orwell Navigation Service (Updated)
CC Harwich VTS/Pilots

Ref – Suntis departing Wet Dock during Easterly Wind

Following the installation of new pontoons and hammerheads in the vicinity of South West Quay in the Wet Dock, it has been determined that there is a requirement to carry out a Risk Assessment for the departure of the Suntis during an Easterly wind due to the close proximity of the new pontoons.

We have determined that if the wind direction is between **North East** and **South East** and sustained wind speed of **16 knots or greater** then there is a requirement for the Ipswich Tug to be in attendance for departure and transit through the lock.

Due to restricted space on the portside of Suntis, Ipswich Tug will be required to be made fast, centre as directed by Master/Pilot with line slack. Ipswich Tug can then assist as directed by Master/Pilot.

Harbour Master
Ipswich



PORT of IPSWICH

MEMORANDUM

15th November 2011

DISPENSATION for IPSWICHMAX FERRIES (CAPUCINE CLASS)

The following recommendations were made for the initial voyage of the ‘Cappucine’ Ipswichmax class vessels:

- Daylight Transit
- Escort vessel
- Maximum sustained wind to be 20 Knots (At Ipswich)
- Tug in attendance initially for inward/outward passages
- ONS to operate a full river one-way traffic flow
- Compulsory pilot until PEC’s are certificated
- Swinging wire to be utilised for all departures

These vessels may now operate with PEC’s and day/night passages. Tugs are only required if wind is a sustained 20 knots (At Ipswich) or if Master/pilot make a request. The swinging wire is to be used when the wind is a sustained 20 Knots (At Ipswich) and/or if any part of Cliff Quay Bollards 10- 15 are in use.

(PLEASE SEE – “PROCEDURE for USING SWINGING PILE” – MEMORANDUM – Section 11)

J Coleman

Harbour Master



PORT of IPSWICH MEMORANDUM

17th February 2012

PROCEDURE for USING SWINGING PILE

To: Masters of Cobelfret Ipswichmax Vessels

CC. Harwich VTS/Pilots/ONS.

From. Harbour Masters Ipswich and Harwich haven Authority

- **Swinging pile must be used when any part of Cliff Quay (Bollards 10-15) are in use or when weather conditions dictate.**
- **Tug(s) as required by Master**
- **Vessel to warp ahead on after spring (Bollard 16) keeping stern close in alongside quay, where swinging rope is then secured on vessel. Utilise tugs/thrusters to ensure stern of vessel remains close to the quay face.**
- **Once swinging rope is secured, aft spring is then let go.**
- **Vessel to creep ahead slowly to pick up slack in swing rope.**
- **When weight on rope, vessel to commence swing using bow thruster, rudder hard to port and main engine minimum ahead.**
- **Vessel may only commence swing when stern is adjacent or North of swinging pile to avoid the swinging rope leading around the stern of the vessel**

J Coleman
Harbour Master Ipswich

N. Glendinning
Harbour Master (HHA)



PORT of IPSWICH

MEMORANDUM

GENERAL REDUCED VISIBILITY PROCEDURES

In the event of reduced visibility or as instructed by the Harbour Master or his authorised person the following procedure is to be followed:

- An INFORMATION Warning Broadcast will be made on VHF Channel 68 stating the Reduced Visibility Procedure is in operation.
- The Duty ONS Operator will consider the inward traffic disposition and will when necessary, delay the arrival or departure of vessels to ensure a one-way flow of traffic is achieved in the river between the Port of Ipswich and Harwich Harbour.
- All commercial vessels wishing to navigate in reduced visibility conditions must undertake a suitable risk assessment. Vessels must declare to ONS if they have serviceable radars and no defects in their navigation equipment, steering or propulsion systems. If so they are to remain at anchor or alongside.
- Vessels alongside will exercise extreme caution when communicating with vessels underway.
- No vessel will leave the berth without, first, acquiring all information on traffic movements and visibility conditions from the Duty ONS operator.
- Regular contact shall be maintained with Harwich VTS to ascertain the conditions in Harwich Harbour.
- As a rough guide on visibility distances the cameras under ONS control can be used for estimating visibility (See also Estimation Tables in Section 1). Details can also be obtained from vessel underway in the vicinity or from marinas or yacht club staff situated along the river.
- Small craft wishing to depart from the wet dock will be advised to remain on their berths in reduced visibility conditions. When there are known commercial vessel movements between the bridge and the lock, vessels wishing to leave the will be advised to remain in the lock until it is deemed to do so by the Duty ONS operator.

Harbour Master – Port of Ipswich

SECTION 13

NOTICES to MARINERS (Current and in Force)

As of: August 2017

YEAR	DATE	NUMBER	DESCRIPTION
2004	26/11/04	11	Dangers of unattended Moorings
2005	17/02/05	5	Health and Safety During Ships mooring operations
2005	09/06/05	9	Dangers of ships wash at low water – River Orwell
2006	01/11/06	10	Vessels overtaking and passing in the River Orwell
2008	03/03/08	3	Dipping Ships mooring lines
2008	23/05/08	5	Impeding safe navigation to large vessels
2008	07/08/08	8	Use of lifejackets
2008	18/08/08	9	Bunkering procedure safety checklist
2009	05/05/09	6	Buoy movements – Ipswich Port
2009	12/05/09	7	Speed restrictions – River Orwell
2010	09/03/10	3	Speed Limit – River Orwell
2010	22/06/10	8	Water Ski Area – Boundary buoys
2010	21/09/10	9	Works at Pin Mill
2011	16/02 11	2	Hot Work permission
2011	14/12/11	13	Haven Marina Extension – Additional Pilings
2012	24/05/12	6	500' Buoy River Orwell
2015	13/03/15	1	New 6Knt Speed Limit Buoy
2016	27/06/16	8	Foxes Marina Entrance Buoyage
2016	21/09/16	9	Cable Markers –Ipswich Lock
2017	22/05/16	5	Berth Depths