

Our ref: [REDACTED]

1 December 2010

[REDACTED]

Dear [REDACTED]

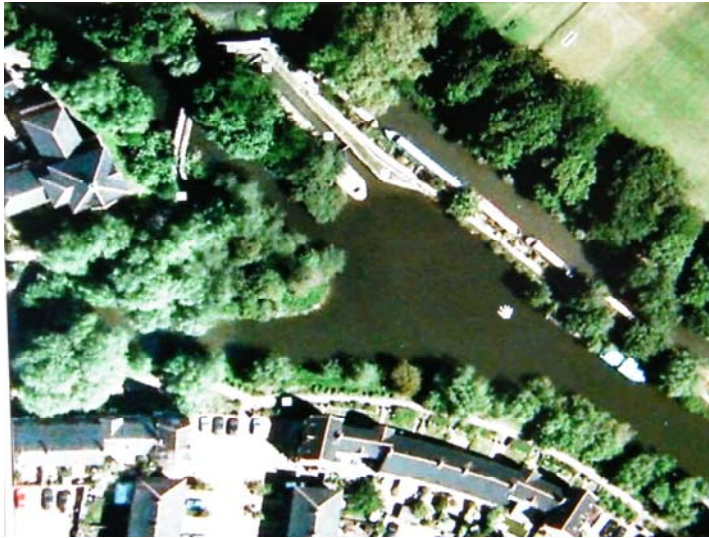
ISIS LOCK

My name is George Ballinger and I am Head of Engineering for British Waterways. I have been asked to investigate your complaint which has now been raised to the second level.

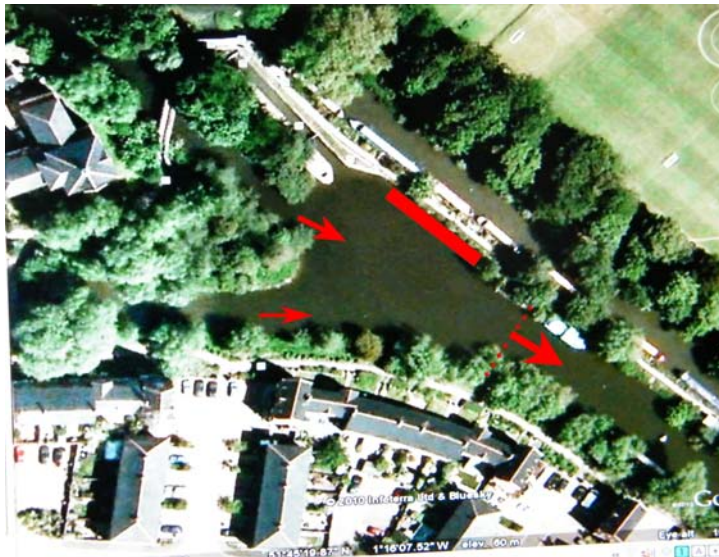
The first thing I would like to say is "thank you" for meeting me at ISIS Lock on the [REDACTED]. It was very useful to be part of the demonstration given by [REDACTED] and yourself and you made your arguments firmly but politely.

The background to your complaint is that British Waterways actions have, you believe, hindered your ability to turn, either in to the Thames or back to the Oxford Canal, after leaving ISIS Lock. Many boats can turn within the Oxford Canal at a winding hole just before ISIS Lock. This, however, only caters for craft of up to around about 50ft in length. The nearest turning point for larger craft is 3½ miles away at Duke's Cut.

British Waterways have undertaken two specific actions which affect turning in the area. The first is to install a pontoon alongside the embankment between the Oxford Canal and the Castle Mill Stream which prevents you pointing your bow into this embankment which had over many years suffered severe erosion. The second is to install a weir boom across the southern section of the Castle Mill Stream and you state that this action hinders the turning movement and may, in fact, put craft in jeopardy. The before and after layouts are shown below.



Photograph 1 – Site prior to works



Photograph 2 – Site showing moorings, weir boom and direction of flow

The area is unique in the waterway network and the navigation authority is in fact the Environment Agency, not British Waterways. The EA operate a weir about ½ mile downstream and this weir tends to operate continually throughout the winter and sometimes, after heavy rain. There can be a considerable flow/draw generated in both the Castle Mill Stream and the cut to the Thames. The nature and direction of the flow further accentuates the turning difficulties experienced by boaters in this area.

There are several strands to your complaint and I will try and go through them in some sort of order.

- 1 Repairs to the Existing Bank: you highlight that the new bank protection has failed and I met with our contractor, Land & Water, on the morning of the 18th November at 0800 hours along with our Project

Manager. I informed them that the design and the construction of the bank were totally unacceptable and subsequently they have emailed British Waterways accepting full responsibility and liability for the situation, along with an assurance that they will put matters right in the very near future.

Without your complaint and photographs it is possible that this problem would not have been brought to my attention and I would not have been able to take immediate corrective action as well as issuing a stern warning to our contractors.

- 2 EA Agreement: As you will have heard on site the EA were closely involved in the design and fully approved the scheme prior to its construction but they did not construct any of the Works. Their statement to you that "The Environment Agency have not taken part in any of the works" and "it is solely British Waterways carrying out the works" are factually correct but, as the navigation authority their consultation and approval were all in place prior to the commencement of the Works.
- 3 Requirement for the Pontoon: The pontoon is designed for the EA requirement to withstand a 1 in 200 year flood event – hence the height of the piles. It is also in place to give safe access and egress to any boater using the lock. The existing bank slopes down from the towpath to the edge of the stream, the top sits about 1m above the normal water level. It also allows for disabled access to and from the bank. By using a pontoon the cross sectional area of the channel is maintained so the speed of any flow is not increased.



Photograph 3 –
General view of
Lock Landing

Your position is that the pontoon should be completely removed and protection put along the existing line of the bank. In addition you feel that the access to the bank, being at the furthestmost point from the

lock, will lead people to try and climb from the pontoon onto the sloping bank with the resultant possibility that they may slip into the water.

Taking everything into account I am of the opinion that the pontoon structure is the appropriate solution for this location. My reasons are that it is designed to withstand impact from craft, unlike the severely damaged original structural embankment. Furthermore it meets all the requirements of the navigation authority and permits disabled access. I do agree that the access point would be better located at the end nearest the lock and I will ask the Project Manager to incorporate a further, albeit steeper, ramp or step arrangement at that end of the Pontoon.

- 4 Signage: I am of the opinion that, although the EA and British Waterways work well together at this location, the signage requires radical improvement. I think the signage problems start back at the Duke's Cut where red and green boards could be shown as this is the last turning point for a craft greater than 50ft in length. Clear signage indicating this is the last full size turning point is also essential.

There also needs to be advisory signage to tell boaters what is the recommended way to turn as the inexperienced boater trying to turn into the Thames will naturally turn to starboard and end up cutting across the flows of both channels. The directional arrow on the lock side currently exacerbates the problem.



Photograph 4 –
Signage at
Lock Side

Some of the people at our site meeting were keen to assist us in developing a proper signage strategy and I will pass this on to Jeff Whyatt so he can form a small team to take this forward.

- 5 Turning of Craft: The diagrams on your complaint letter are a good guide to the problems faced by craft trying to turn at this site. I found

these sketches most helpful in assisting my understanding of the issues. It was also apparent to me during the narrow boat demonstration that “sliding” along the pontoon is a major issue.

This sliding action forces the boat further along the pontoon before it “bites” enough to allow the flow to help turn the boat. British Waterways will now investigate what alterations can be made to the pontoon to provide a “notch” or a “vee” to hold the bow during the turning operation. It may be that a few of these are required to suit boats of different lengths.

I would very much appreciate it if [REDACTED] and you could assist us with this somewhat unusual design so as we get the best fit possible for this unique location.

I believe an inexperienced boater will tie up to the pontoon and, by passing a line around one of the piles, they will be able to turn their boat while retaining control. This would be difficult for a single handed boater but such boaters tend to be more experienced and, while I accept there is a loss of about 6ft in turning width, I believe there is still sufficient room left to turn the largest craft. However, there are areas of vegetation on the banks which I will again ask the Project Manager/Waterway to remove even although it is actually the responsibility of the EA to maintain the navigation.



Photograph 5 -
Bank side
vegetation
obstructing
turning
manoeuvre

- 6 Weir Boom: It was evident during the trials that it is possible to turn a 70ft craft within the space allowed between the lock and the proposed weir boom location. This was achieved while a small craft was moored to the pontoon. However, the turn was only possible due to the considerable skill displayed by [REDACTED] and I would expect a “single-handed” novice or occasional boater to find it difficult to undertake such a manoeuvre. It is absolutely essential that no craft is

moored to the pontoon when another is trying to turn in this area and signage must be erected to emphasise this point. It is also vital that this convenient location does not become a haven for illegal craft.

There are positives and negatives associated with the weir boom. The main positives are the restriction of access for illegal mooring and the ability of the boom to prevent craft being swept downstream towards the weir. The negatives are that the central piles necessarily impinge on the navigation, particularly for a single-handed inexperienced boater.

I conclude that BW did seek to ensure that there was adequate turning space upstream of the boom. I have also examined the design of the boom (drawing enclosed) and that shows that any craft getting into difficulties will naturally be drawn to the side of the channel. Again, it is vital that the boat which is currently illegally moored alongside the bank immediately upstream of the boom is removed.

The photographs in your letter of the [REDACTED] navigating between the piles will simply not be possible once the boom is completed.

I appreciate that any obstruction in the Castle Mill stream can be viewed as a potential hazard to navigation. Currently however, if a craft does end up being swept downstream it will become wedged across Hythe Bridge where the channel is at it narrowest and the water flows are at their greatest.



Photograph 6 -
Hythe Bridge

At present there is also an illegal craft moored in the centre of the channel just downstream of the weir boom location – a considerable danger to navigation.



Photograph 7 -
Boat moored in the
centre of Castle
Mill Stream

I therefore believe, taking everything into account, that the weir boom should represent an improvement to the safety of the area by preventing boats being carried downstream and channelling them in towards the banks.

I appreciate that you may feel my response does not sufficiently address your complaint against British Waterways, and if you remain dissatisfied then you are of course eligible to take your complaint further to the Waterways Ombudsman, at any time within six months of the date of this letter. Details of how to contact the Waterways Ombudsman are as follows:

Hilary Bainbridge
The Waterways Ombudsman
PO Box 35
York
YO60 6WW
Tel: 01347 879075
E-mail: enquiries@waterways-ombudsman.org

Yours sincerely

GEORGE BALLINGER B.Sc., C.Eng., M.Sc., M.I.Struct.E
Head of Engineering
British Waterways