

To the Planning Inspectorate

The Yarmouth third River Crossing

Following the discussion held by the Inspector on 19 November 2019 with regard to the consequences of the operation of the proposed lifting bridge at Great Yarmouth and having heard the responses to the questions which I had previously raised with the applicant, the Norfolk County Council, I would like to record the following areas of concern for a need for further information or explanations.

HR Wallingford Hydraulic Model

I am experienced with the process of commissioning hydraulic models within the Port Authority jurisdiction within the river port and outside in the area of the outer harbour from my experience on watch as Chief Executive of the Port Authority in the case of utilising my commissioned previous models from HRS Wallingford and the Delft University in the Netherlands.

I have noted that the Port Authority and the Port Company have quite correctly raised their own concerns about some of the model transits of vessels through a new bridge with a narrowed navigational channel. From my own experience of such models I share this concern and will be interested to see how these concerns are alleviated. I believe that the Port Authority, the Port Company and Peel Ports are collectively the proper parties to resolve this issue, since navigation has primacy in any construction scheme and these bodies will be looking to secure safe navigation for its users with regard for any new structure placed in the river.

Berthing arrangements for incoming commercial vessels

I share the Port Authority's and Port Company's concerns on this and I do not think that the applicants have provided a satisfactory scheme at the present time. This is the point I had raised on a number of occasions with the applicants during consultation with the past months. During the construction of the Breydon Bridge, on my watch, a proper piled and dedicated berthing facility, not affecting operational quays, was constructed up river of the bridge itself. In the current circumstances I would feel it is necessary to construct a dedicated waiting berth in a proper and safe position to deal with the new proposed bridge transits as requested by the Port Authority and Company interests. As far as I can see at the present time, having raised this point some considerable time ago, it does not appear from the evidence given at the last hearing that this is yet been satisfactorily agreed. The earlier proposals by the applicants, even having taken account of its navigation adviser, disclosed a lack of knowledge on the operation the port and the river regime.

I noted the Group Harbourmaster's comments about risk assessment for passage of vessels coming in by sea. If a safe passage was demanded and it was necessary that the bridge be raised before the vessel entered the port as this was the only safe way of proceeding that this would be a proper and safe attitude to take. This would occur have direct implications on the lifting times of the bridge and consequent road traffic disruption which I will refer to later.

Passage of vessels through bridge

I noted, from the users present, at the meeting concerns expressed as to how recreational vessels and commercial vessels would pass through the bridge on either an opening on demand, in the case of commercial vessel and also requested openings in the case of recreational vessels. This is entirely a matter for the Port Authority and the associated navigation interests and any bridge would have to lift in accordance with the port's needs.

During the discussion there were scenarios of various types of passage raised and I noted one that postulated recreational vessels passing through the bridge opening first followed by a commercial vessel. If an up river passage took place at the time of a heavy ebb tide, and it was suggested that the recreational vessels would pass through the navigational channel slowly to be followed safely by a commercial vessel it was suggested that the passage time would be likely to be considerably in excess of the five-minute raising and lowering of the bridge put forward by the applicants. This again would have implications on the road traffic position. As navigation has priority the lifting and raising of the bridge would be properly in the hands of the Port Authority and collective bridge lifts appears to be planned to be controlled from a control centre at the new bridge. I would like to see the outcome of further discussions on the implication of bridge lifting times, having heard these points raised in various scenarios, regarding the passage of vessels and its consequent effect on road traffic.

Potential failure of lifting bridge and its implications on river traffic

In the case of the bridge not operating properly in lifting and lowering as a result of some fault and the new bridge's positioning significantly further down the river Yare than any other constraints on navigation it would appear that the bridge would have to remain in the opening position to respect navigational priority if there were difficulties in lifting it.

I heard the explanations given at the meeting the first time by the applicant of the backup systems of electrical alternative lifting mechanisms and the use of a generator. This appeared to be the best scenario put forward to try and alleviate any electrical failure of the main lifting system. However, during my extensive discussions with the applicants, I was told that the contractor for the bridge would be compelled as a condition of the contract to guarantee the ability of being able to lift the bridge in one hour should it fail. I'm not convinced yet that this is a viable proposition and obviously this is something of great concern to the navigation interests. Having heard the explanation of the backup electrical lifting system for the first time I shall be seeking further information from the applicant, I would add to the points made by Alan Goodchild, referring to the time on my watch at the Port Authority when the Breydon Bridge, whose construction with the DOT I had negotiated, had been in a similar position about how quickly failures would be alleviated.

At the time part of the agreement for the construction of the Breydon Bridge was a guarantee from the DOT that spares, which would be crucial to any mechanical failures, would be instantly on hand and would be able to be fitted quickly to restore the operation of the lifting bridge. The Breydon Bridge in its position above the Haven Bridge at the entrance to Breydon water becoming out of order and needing to be repaired was not quite so crucial for commercial

vessels as a number though relatively few went up and down river to Cantley and to Norwich in my time and an interruption to navigation could be more easily planned. However, the failure of a mechanical part did take place and there was no spare available and the unit had to be especially machined and as a consequence the agent Breydon Bridge was out of action for a considerable period of time. This was the point I was trying to make at the last hearing which needs to be addressed. It is considerably more crucial in the in the question of the construction of a downriver bridge in the heart of the commercial operations.

Bridge lifting times and effects on traffic flows

The effect on my observations on traffic flows and congestion of road traffic following current bridge lifts seem to be at odds with the traffic models explained at the last hearing. There seem to be a view expressed by the applicant that after the new bridge had lifted for a five-minute period all road congestion would then be eliminated back to a 'normal' flow in another five minutes. This has not been the experience of the town and in what I've observed during the summer of 2019, even taking account of the late autumn roadworks on Southtown Road, which caused further problems.

The summer traffic congestion has resulted from nose to tail traffic on the western bypass, stretching back to considerably beyond the Harfreys roundabout in Gorleston, being exacerbated by the lifting of the Haven and Breydon bridges even this though these lifts had been timed to avoid peak traffic flows. The fact that the new bridge crossing will be further down river means that the Port Authority will need to lift it more regularly in the interests of the passage of vessels. The current estimate is 15 times a day. I've already made the point, arising out of the last hearing, that the passage itself, which is under n control of the Port Authority. could take considerably longer to ensure safe transits which would be more than the five minutes planned by the applicant. This would have a knock-on effect of the clearance of the traffic close by the lifting of the bridge. In addition to this in discussions with the Highway Agency I gather that it is currently reassessing traffic flows on the bypass following its earlier assessment and the remodelling of the roundabouts. This of course was the base modelling information which was taken by the applicant to consider traffic flows in a consideration of the installation of a further bridge together with a turn across the bypass on a comparatively short approach with regard to the construction of the new bridge. I think a clear explanation is necessary at the present time as to how the practical traffic flows experienced in Great Yarmouth will be catered for by the remodelled roundabouts and then as a consequence how those flows would be dealt with by the necessity and consequences of lifting the new bridge.

Restriction of the tidal flow by the construction of the bridge

The question I raised at the last hearing as the effects of the profile of the new proposed bridge restricting the tidal flow and its effect upon the town in conditions of high and surge tides was not answered satisfactorily. I don't think the response of the applicant at the hearing that the Environment Agency has this in hand is an adequate answer for those of us who live in the area without more information. I do not know whether the hydraulic model is sufficiently adaptable as to deal with this problem but it could be if in fact its scope covers the area river from the proposed bridge to the harbour entrance. I have observed over a number of years the local peculiarity of the narrow-piled river receiving one floodtide, not receiving an adequate ebb, and then receiving another floodtide on top of the first one causes overtopping of the river on the West Bank. The figures given at the last hearing for the constriction of flow by the

construction of the bridge were variously mentioned at 36% and 40%. I feel that this situation requires the Environment Agency to thoroughly investigate the effects of the throttle caused by the construction of the bridge and provide adequate answers since I know from my watch at the Port Authority, having participated in their construction, that the flood defences on the west bank of the river are now low and vulnerable.

The effect of the bridge construction on the need to protect the rail alignment to the port on the east bank of the river.

During discussions with the applicant, the Norfolk County Council, I mentioned the fact of the existence of the long-protected rail alignment on the east bank to ensure if necessary, a future construction of the line between the outer harbour itself and the Vauxhall rail station. I was told by the applicants that this could be accommodated within the roundabout arrangement on the east bank of the river.

At the hearing I was rather alarmed to hear the applicants now state that they could not find any evidence of the planned a long-standing rail alignment within the Borough's own Borough Wide Local Plan of 2003. I know from my watch that this alignment had been protected for many years and also that the Great Yarmouth Borough Wide Local Plan is currently under review. In this situation opportunities are not lost.

I carried out some further investigation in this respect and I understand as a condition of the European Grant which was made by the Commission being the key financial point to enable the construction of the outer harbour which I planned was that a rail study within the peninsular at Great Yarmouth was a condition of the award. I understand that a study of the practicality of a rail alignment from the outer harbour itself along the existing protected alignment on the east bank of the river was carried out by a grant from the European Commission supported by contributions from the Norfolk County Council, the Great Yarmouth Borough Council and the Great Yarmouth Port Authority. This is in the time when the first company to develop the outer harbour was Eastport under the chairmanship of Sir Richard Jewson. The study itself was carried out by a Norfolk County Council officer. I was very alarmed that I have not managed to locate a copy of this key report at the present time despite having asked for from the applicants following the hearing. Following the meeting on 19 November 2019 I mentioned to the applicant that the report needs to be located within its own offices to confirm the protection of the alignment in the construction of the roundabout on the east bank during the planned construction of the bridge as it had been previously stated was possible. I have heard nothing further

Communications to ports on a multimodal basis are extremely important as I know from my past life serving on national UK and European port committees. Great Yarmouth Borough Council has just entered the beginnings of a cultural relationship with a number of key European ports which as a consequence may also may provide trading opportunities in due course. In these circumstances there is a need to protect that the rail alignment for the future and I feel that this is essential. Most of the major ports in the Baltic and in Western Europe with whom Great Yarmouth may resume an opportunity for trading in the future, with whom they traded in the past, and also after post Brexit are rail connected. On my watch as Chief Executive of the Port Authority I particularly travelled to the North German ports and in

particular Lübeck in North Germany and observed in this instance how the rail lines ran within the road itself and the Lübeck Port Authority ensured that any movement at out of hours' time did not disturb the flows of road traffic. This was the significant practical solution of a rail connection from the outer harbour to the railhead in Great Yarmouth.

In my experience I think this is a strategic point looking at how rail connections from the ports, when in an age of planned carbon reductions on climatic protection grounds, rail will become a significant mode of transport from the European ports. In these circumstances I would not wish the port and town of Great Yarmouth to lose the opportunity of being able to move with the times at the appropriate moment. The alignment needs at least protection, within the period in future years, when it may be required in the planned construction of the current proposed bridge crossing works.

This I was given to understand can be accommodated in the construction of the bridge and its associated roadworks works as confirmed by the applicant, the Norfolk County Council, and needs to be done, in my view, strategically to protect the future interests of the port of Great Yarmouth.

At short notice I've obtained to reports on multimodal transport, one from Europe and one of the United Kingdom which I have now passed both to the Port authority and Company and to applicant and I would be pleased to pass on to the Inspector if he so wishes as well. These indicate a strategic position for the future with regard to the rail port transport mode.

Further discussions and explanations

I have had no discussion with the applicant, the Norfolk County Council for many months since it issued some general rebuttals to the points I had made during our previous discussions.

I understand that the applicant would be prepared to have further discussions on the points I feel that the not yet satisfied and I would welcome an invitation on the elaboration of meaningful response to my views.

Michael Boon

28 November 2019