



Sarah de la Coze  
Principal Planner  
Oxford City Council  
St. Aldates Chambers  
109-113 St. Aldates  
Oxford, OX1 1DS

Electronic Submission

Colin Field  
Town Planning Manager  
Temple Point, Redcliffe Way  
Bristol  
BS1 6NL

07515 626 431  
colin.field@networkrail.co.uk

5 November 2021

Dear Sarah,

**Application for Prior Approval – Part 18 of GPDO at Oxford Railway Station  
21/02007/PA18  
Response to Environment Agency letter dated 1 November 2021**

I write with reference to the recent Environment Agency (EA) letter received 1<sup>st</sup> Nov (which a copy was sent directly to me) which was a direct response to my earlier letter of the 23 September 2021.

The EA have provided a technical letter which has many positive statements embedded however it also highlighted further queries, therefore, we have responded with some input from our consultant Flood Engineers who produced the modelling data and wrote both the original Flood Risk Assessment and secondly the summary report that was requested.

Firstly, reading the letter from the EA, as stated above, it was really positive to see that nowhere in their response do they use the words “object” and secondly towards the end of the letter they refer to the use of planning conditions “should the LPA be minded to approve the scheme”. Our reading of this is that they are therefore not objecting and are now leaving to the LPA to decide whether or not to approve this “prior approval” application if you are satisfied of the proposals submitted and the mitigations proposed.

In response to the queries that the EA have posed within their letter with the input of our flood engineers we respond to these in turn using new bullet points for each of the issues;

- We acknowledge that the Environment Agency guidance has changed since flood modelling was undertaken and the Environmental Statement was written and we have not modelled the latest uplifts that would apply to the Thames catchment, e.g. 41 % uplift. We have however modelled the 35 % and 70 % uplifts for the 1 % AEP event.

**This should be enough to understand the potential impact of the Scheme with the 41% uplift.**

**Please refer to Chapter 14 – Water and Flood Risk and Appendix 14.1 - Flood Risk Assessment within the Environmental Statement, for discussion of impacts of the +35% and +70% uplifts.**

- The maximum water level difference at the Osney Cemetery between baseline and scheme is adverse for the 1 % AEP + 35 % Climate Change, as well as 0.1 % AEP event.

The 1 % AEP+41 % event would fall between these two events. Above that (for the 1 % AEP event +70 % Climate Change), maximum level difference becomes negligible.

As stated in the Flood Model Technical Report submitted to the EA and OCC (on 5 October by email), this is the consequence of a very limited volume of water pooling in a topographic depression area (the cemetery). Once the depression is full (as for the +70 % event) there is no more difference between baseline and with Scheme.

Please see below for extracts from the Flood Model Technical Report (1 % AEP+35 % and 0.1 % AEP) with Osney Cemetery at the bottom of the images, showing in yellow:

Figure B 3: 1% AEP event +35%CC water level difference map

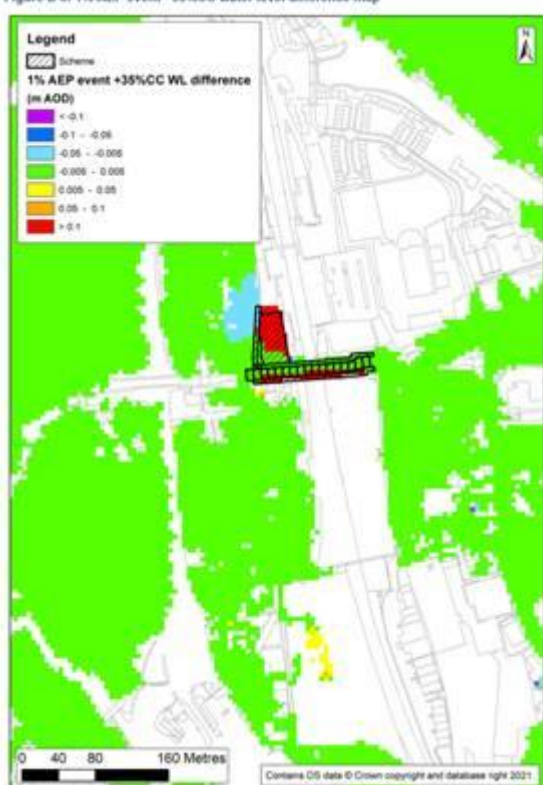


Figure B 4: Baseline 0.1% AEP event water level difference map



Network Rail believe that these changes in flood risk are of an acceptable level as:

- a. there are no properties at risk in the area of concern
- b. this happens for a small range of events
- c. the area of concern floods anyway, but the Scheme causes a slightly greater depth or slightly earlier onset
- We welcome the acknowledgement that *'the applicant is proposing to improve access along Botley Road for pedestrian and cycle users, which will provide a betterment over the existing access/egress arrangements with respect to flood hazards'*



- The scheme includes the lowering of Roger Dudman Way up to a chainage of 110m before tying in with existing ground levels. In the model, the road has been lowered up to approximately 55m chainage. Between chainages 55 and 110m, the scheme road levels in the long section of Roger Dudman Way should be 58.8-59m AOD. For the largest event (1 % AEP +70 % CC uplift), maximum water levels along Cripsey Road do not exceed 57.62m AOD.

**Therefore, lowering of Roger Dudman Way to the correct levels proposed would have no effect on model results as the Scheme road level is well above maximum water level adjacent to it (e.g. alongside Cripsey between chainage 55m and 110m).**

**It is therefore not necessary to model the alteration in levels.**

- Osney Bridge has been identified as the source of the 1D model instability in our remodelling for any event (baseline and with scheme) greater than 1 % AEP. In the incoming Oxford FAS baseline model, such instabilities were identified for any event higher than during the 1 % AEP + 35 % Climate Change event only. During such events, the results of the remodelled baseline and the scheme are identical between the Oxford FAS baseline model and the updated baseline model.

**This indicates that this instability has no effect on the 1D results, and hence on the 2D results. For all other AEP events, the model instabilities are identical to those of the Oxford FAS model.**

We consider the above additional clarification is sufficient to address the queries highlighted in the EA 1<sup>st</sup> Nov response.

Network Rail would like to draw attention to the requirements of paragraph 167 of the National Planning Policy Framework (the actual wording from the NPPF in italics below). Although the paragraph refers to planning applications rather than prior approvals, we would like to reassure yourselves that the Scheme either does or will meet the requirements of this document. It asks demonstration that:

- 1) *'The most vulnerable development is located in areas of lowest flood risk, unless there are overriding reasons to prefer a different location'*. **The Scheme is located within a flood risk area, however, there is an overriding need for it to be located at the Oxford Station site as it is an expansion of that infrastructure.**
- 2) *'The development is appropriately flood resistant and resilient such that, in the event of a flood, it could be quickly brought back into use without significant refurbishment'*. **The Scheme has been designed so that in the event of a flood, water would enter the building and station subway. Although such features would be designed at a later stage of the development, fixtures and fittings such as electric points would be situated above the flood line, hard furnishings would be specified and drainage would be appropriately designed to enable flood waters to be efficiently emptied from the subway and buildings.**

**Botley Road under the railway bridge already floods and following the completion of this project it will still flood albeit slightly deeper. However, the road and bridge abutment are designed to be resilient to this flood water and in addition the existing**



flood water pumping system will be replaced with a more efficient fit for purpose system.

- 3) *'It incorporates sustainable drainage systems, unless there is clear evidence that this would be inappropriate'*. **The drainage system is currently not designed in detail but will need engagement with Oxford County Council Highways during detail design as part of the S278 agreement which will be in place before works commence.**
- 4) *'Any residual risk can be safely managed'*. A long-term emergency plan for flood events would be designed and implemented. **This would be for both the western entrance to the station and Botley Road. This would include signing up to the Environment Agency's Floodline flood alert and flood warning system and potential road and facility closures to mitigate the risk associated with flooding i.e. a continuation of the flood risk measures within the Code of Construction Practice. For Botley Road as this is the public Highway NR will work closely with the County Council on the emergency plan and whether other mechanisms such as additional signage or safety barriers to be used to stop vehicles from passing under the railway.**
- 5) *'Safe access and escape routes are included where appropriate as part of an agreed emergency plan'*. **An emergency plan would include measures to be taken in the event of a flood.**

I trust that these responses fully answer the Environment Agency's queries, the additional text in relation to paragraph 167 in the NPPF and that no objections now remain with regards to flood risk for the Scheme.

If you have any queries regarding the contents of this letter or require further information, please do not hesitate to contact me.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Colin Field', enclosed within a thin black rectangular border.

**Colin Field MRTPI**  
Town Planning Manager  
Wales and Western Region

Cc. Katie Newton, Planning Specialist, EA