Environment Agency email snapshots attached to Mott MacDonald Response to Cambridgeshire County Council dated 3rd October 2017



Hi Amv.

I am sincerely sorry for the delay, I have managed to catch up with our advisors this week, and can advise for the following sites:

- C03 West River Bridge
- C16 Prickwillow 1
- C17 Prickwillow 2
- · C21 Newmarket Bridge
- C22 Wells Engine
- C24 Cross Keys

Whether or not a permit is required, depends upon the nature of the works to be carried out. Some activities which would not have flood risk implications, may not require a permit from us. Further information can be found on the gov.uk website under Flood Risk Activities: Environmental Permits https://www.gov.uk/guidance/flood-risk-activities-environmental-permits

If having read the information within the above link, you are unsure as to whether or not a permit will be required, then please provide details of what the works will involve, and our teams will be able to advise you further. As details of what is proposed have not been provided to us yet, we are unable to comment on what type of permit may or may not be required at this stage. Please submit any further details to FDCENS@environment-agency.gov.uk.

Requests for Cambridgeshire data can be made to: Enquiries EastAnglia@environment-agency.gov.uk

In answer to your queries:

- CO3
 - o Do you have a historic flood map for this area? Yes see below
 - o Do you have modelled levels for 100+year climate change for this area? Yes, for 100 yr + climate change. Albeit that the node point position may not be fit for all purposes where structures in the floodplain cause local variations. In sensitive areas or around flow constrictions, the new climate change allowances (+55% to 65%) may mean model updates are required. In any event a climate change allowance will need to be considered above the 20% already for the change allowance will need to be considered above the 20% already for the change allowance will need to be considered above the 20% already for the change allowance will need to be considered above the 20% already for the change allowance will need to be considered above the 20% already for the change allowance will need to be considered above the 20% already for the change allowance will need to be considered above the 20% already for the change allowance will need to be considered above the 20% already for the change allowance will need to be considered above the 20% already for the change allowance will need to be considered above the 20% already for the change allowance will need to be considered above the 20% already for the change allowance will need to be considered above the 20% already for the change allowance will need to be considered above the 20% already for the change allowance will need to be considered above the 20% already for the change allowance will need to be considered above the 20% already for the change allowance will need to be considered above the 20% already for the change allowance will need to be considered above the 20% already for the change allowance will need to be considered above the 20% already for the change allowance will need to be considered above the change allowance will need to be considered above the change allowance will need to be considered above the change allowance will need to be considered above the change allowance will need to be considered above the change allowance will need to be considered above the
 - o For the creation of the new footpath, would you recommend a particular surface material that would be acceptable from the EA? A consent would be needed for works. Surfacing would need to consider impact on bank stability and biodiversity. We would not wish to be prescriptive.
 - o Would a small (<1m) reinforced concrete retaining wall be acceptable perpendicular to the span of the bridge going under the underpass or would this significantly influence the watercourse capacity? If there is no impact can be demonstrated then we could look at this further. Flood risk assessment would be needed, and probably detailed hydraulic modelling in such cases where a wall could retain water; impede flow or storage; or restrict access for maintenance near a significant flow constriction. Climate change allowances and biodiversity impacts would need factoring in.
- C1
- o For the creation of the new footpath, would you recommend a particular surface material that would be acceptable from the EA? A consent would be needed for works. Surfacing would need to consider impact on bank stability and biodiversity. We would not wish to be prescriptive.

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C10

- o For the creation of the new footpath, would you recommend a particular surface material that would be acceptable from the EA? A consent would be needed for works. Surfacing would need to consider impact on bank stability and biodiversity. We would not wish to be prescriptive.
- o Do you have a historic flood map for this area? Yes see below
- o Do you have modelled levels for 100+year climate change for this area? Yes, for 100 yr + climate change. Albeit that the node point position may not be fit for all purposes where structures in the floodplain cause local variations. In sensitive areas or around flow constrictions, the new climate change allowances (+55% to 65%) may mean model updates are required. In any event a climate change allowance will need to be considered above the 20% already factored in.

C16/C17

- o Do the EA have any requirements for the step design here? This would be subject to detailed advice perhaps as part of a site meeting or with a range of detailed photographs. Ensuring that there is no impedance of flow, maintenance access or debris collation need considering, amongst other factors.
- Do you have a historic flood map for this area? Yes see below
- o Do you have modelled levels for 100+year climate change for this area? Yes, for 100 yr + climate change. Albeit that the node point position may not be fit for all purposes where structures in the floodplain cause local variations. In sensitive areas or around flow constrictions, the new climate change allowances (+55% to 65%) may mean model updates are required. In any event a climate change allowance will need to be considered above the 20% already factored in.

C21

- o Do you have a historic flood map for this area? Yes see below
- o Do you have modelled levels for 100+year climate change for this area? Yes, for 100 yr + climate change. Albeit that the node point position may not be fit for all purposes where structures in the floodplain cause local variations. In sensitive areas or around flow constrictions, the new climate change allowances (+55% to 65%) may mean model updates are required. In any event a climate change allowance will need to be considered above the 20% already factored in

C22

- o Do you have a historic flood map for this area? Yes see below
- o Do you have modelled levels for 100+year climate change for this area? Yes, for 100 yr + climate change. Albeit that the node point position may not be fit for all purposes where structures in the floodplain cause local variations. In sensitive areas or around flow constrictions, the new climate change allowances (+55% to 65%) may mean model updates are required. In any event a climate change allowance will need to be considered above the 20% already factored in.

C24

- o Do you have a historic flood map for this area? Yes see below
- o Do you have modelled levels for 100+year climate change for this area? Yes, for 100 yr + climate change. Albeit that the node point position may not be fit for all purposes where structures in the floodplain cause local variations. In sensitive areas or around flow constrictions, the new climate change allowances (+55% to 65%) may mean model updates are required. In any event a climate change allowance will need to be considered above the 20% already factored in.

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Historic flood outlines: These are available on our maps, but are not shown to affect the above crossings for the following event map layers:

Flood Event Outlines - 2007 Flood Event Outlines - 2000 Flood Event Outlines - 1998 Flood Event Outlines - 1953 Flood Event Outlines - 1946/1947

Other records may exist that are not mapped, and no doubt Motts will make enquiries as part of the flood risk assessment process.

As a final point would it be acceptable to raise the new PRoWs so they are out of the flood zone?

If there is no impact shown then we would consider each case on its merits. Flood risk assessment would be needed, and modelling in cases where raised levels or works of engineering could retain water, impede flow or storage, such as in or near a flow constriction. In principle development in flood risk areas should be avoided wherever possible (see National Planning Policy Framework flood risk sequential test), suggesting that it should only be as a matter of necessity. Public rights of way do not normally enjoy a water free experience being water compatible, although if PRoWs would be affected by flooding then public safety notices and diversions are an option to consider.

Please let me know if I can be of further assistance.

Chris

Chris Swain MRTPI

Principal Planning Advisor

Environment Agency - East Anglia Area (West) Team

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