BURO HAPPOLD

Project Note

Project Wellcome Phase 1

Subject Response to Hinxton PC Drainage Comments

Project no 049941

Date 25 January 2022

Revision Description Issued by Date Approved (signature)

1 Introduction

This note has been prepared to respond to the comments raised by Hinxton Parish Council on the Strategic Surface Water Drainage Strategy that was issued to discharge condition 45 of the Outline Planning Permission for the Wellcome Genome Campus expansion. Their response also included a proposal document for the construction of a new weir on River Cam.

2 Hinxton PC Comments

- 2.1 Item 2.3. The flood risk data used in the flood risk assessment that accompanied the outline planning application was not taken from the Cambridge County Council Surface Water Management Plan. The management plan was only referenced in regard to localised surface water flooding not the flooding from River Cam. However, it should be noted that the management plan document has not been updated since its 2014 issue.
- 2.2 Item 3. It has not been recognised that the surface drainage from the expansion land will continue to infiltrate into the ground as occurs at present. There are no existing surface water features (streams/ditches) within the area of the expansion land and therefore no overland hydraulic continuity between the expansion land and River Cam. In addition, recent ground investigations have shown that water levels within the chalk strata underlying the site are considerably lower that the River Cam bed level so there is no sub-surface hydraulic continuity.

Therefore, surface water from the expansion land will not have any impact on the River Cam flow rate and associated flood levels.

The surface water drainage systems will be designed to accommodate predicted climate change, and the proposals for the development of the DA2 land within the existing campus will incorporate sustainable drainage measures such that the discharge to the River Cam will not increase from current rates.

The comments regarding the existing issues of flow control of River Cam within Hinxton are not related to runoff from either the existing campus or the expansion land. The size of the catchment contributing to River Cam upstream of Hinxton is an order of magnitude larger than the catchment

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area of the existing campus. Therefore the contribution to the flood flows in Hinxton from the existing campus is de minimus.

3 Hinxton PC Compound Weir Proposal

- 3.1 The is section within the proposal titled *Estimating the increase in flood impact of the Wellcome Expansion Site* that contain some factual errors as follows
- 3.1.1 Discharge of treated foul flows to the River Cam.

It is assumed that the foul water system will be connected to the existing sewage treatment works at Great Chesterford and thus increase the flow in the Cam. In fact, it will be pumped to Sawston sewage treatment works downstream of Hinxton and so will not contribute to the flow of River Cam at Hinxton

3.1.2 Increase surface water flow to River Cam from expansion land.

It is assumed that there is hydraulic continuity between the expansion land and River Cam. As noted above there is no existing hydraulic continuity between the expansion land either via surface features (ditches/streams) or sub surface. The proposed surface water drainage strategy will not change this and therefore there will be no increase in flow in the River Cam.

3.2 The primary reason stated for the new weir is to address issues arising from the age of the current flow control measures on the River Cam as it passes through Hinxton. Nothing proposed as part of the surface water drainage strategy will have any impact on the age or condition of the control measures.