

This note has been prepared in response to the Appellants' Construction Method Statement submitted 20th May 2021 and supplementary document to that report received 25th May 2021

It has been prepared following input by the following:

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In response to the Appellants' CMS, the LPA comments as follows:

General

- a) In general, the CMS does not provide a great deal more information than has previously been presented to the Inspector; an experienced engineer would quickly be able to devise the basic construction sequence and hence the method(s) required to go about the builds under review. This information has not been provided in sufficient detail so the Council does not know the Appellants' full intention regarding their construction methods. Different methods have different working area requirements. It is by no means certain that a temporary haul route on one side of the valley crossing bridge will in fact be sufficient and that a second one would not be required on the other side.
- b) No mention has been made in the CMS to the need to construct the SuDS features and the culvert(s) therein in accordance with the standards of good practice set out in CIRIA C768 and the SuDS Manual (CD 8.16).
- c) No information has been provided as to how ground water flow will be maintained during construction for the valley crossing and the Crook's Copse Link.
- d) The main purpose of requesting the CMS was for the Appellants to demonstrate to the Inspector and to the Council that the proposed measures listed could be constructed in a way that limits harm to the sensitive habitats and whilst it is accepted that it is not practical to expect a construction programme and even some phasing details to be provided at this stage, it is nevertheless possible to provide more definitive detail now than has been given in the document.

The Valley Crossing

- e) We acknowledge that in order to construct the valley crossing, there will be harm to the habitat in the valley. The overriding requirement is to minimise this harm. Notwithstanding this, the 4m proposed temporary haul route is considered to be insufficient and impractical. It does not allow for the necessary areas required for a piling rig in order to construct the piers for example. It is a substantial underestimation of what is required. The Council is still not satisfied that this bridge can be entirely constructed from a single temporary haul road on one side of the bridge.
- f) The CMS does not provide details in respect of construction of the bridge abutments. The current location of the south/west abutment dictates that construction access on the northwest side of the abutment will encroach into Barn Copse Ancient Woodland.
- g) In order to construct the proposed twin deck structure, the Appellants only have access to this location from the north; in the absence of a comprehensive proposal, access is not available via Warren Road from the west which limits the method(s) that can be used in order to construct the valley crossing bridge.
- h) Permanent access is only available from the north, which necessitates the provision of the second span for emergency access use to/from DPC. If permanent access was available from the west as part of a comprehensive development, the requirement for the emergency access, and hence the second deck, would be not be necessary, thus reducing the size of the bridge and the overall working footprint.
- i) A single bridge deck which is wider than the larger of the proposed twin decks, but still 2.5m narrower than the twin decks combined, could potentially allow more room for construction to be carried out from on top of the bridge (initially the end span could be constructed from the abutment then further spans could be constructed sequentially from on top of what has already been constructed). The limited width of the largest twin deck span is insufficient on its own (at 8.5m of usable space) to mount a crane on to use this method when considering crane outriggers for stabilisation and other working space around it. However a wider overall single deck (at 12.5m usable width) could be used in this way.
- j) A complete precast concrete deck span cast away from the valley would be too heavy to lift into place given the size of crane required and lack of suitable ground on which to take this huge weight (crane + precast deck could easily weigh 400-500t) so this method must be discounted.
- k) A geotextile base to the temporary haul road is insufficient on its own - it would have to be capped with a substantial layer of crushed rock in order to provide a usable running surface capable of supporting the large weight it will need to carry.
- l) Concrete spillage is always a risk in such construction operations. A smaller bridge deck width would result in less bridge piers. Overall, this would require less concrete pouring, with less risk of spillage as a consequence.

SuDS / Drainage Features

- m) The submitted CMS introduces the use of “*temporary settlement ponds, filter strips, swales and cut-off ditches*” during the construction period. No further detail is given in the CMS, but the interpretation from this statement is that there will be additional excavations carried out within the wet valleys and the 15m buffer zones to the Ancient Woodlands further increasing harm in those locations.
- n) Furthermore “*Simple outlet flow controls [that] will be installed to maintain discharge rates prior to discharging to on-site watercourses*” is also introduced for the first time. No indication as to where these will be located has been given. All permanent flow and pollution control measures that interface between the built development areas and the country park SuDS should be constructed within the built development.
- o) The main proposed SuDS measures set out in the Application documents, namely the conveyance channels and storage basins, are not considered necessary to control surface water discharge into the existing watercourses. If all control of run-off were to be carried out within the built development areas this would remove any need for the damaging proposals within the marshy wet valleys that are contained within the Drainage Strategy and the mitigation measures set out in the CMS. If the Inspector allows the permanent SuDS measures in the country park under the Appeal, these and the control measures in n) above should be constructed at the commencement of any site works in order to minimise overall the level of harm to the receiving watercourses.
- p) The length of the conveyance channels has not been fully considered in the CMS in respect of the use of track matting during construction. These channels are several hundred metres long and it is therefore impractical to provide track matting over such a length. In order to provide and maintain access for a constant procession of plant engaged in loading away excavation arisings out of the wet valleys passing places will be necessary that will extend the temporary work area further into the marsh. The alternative suggestion of an additional temporary haul road laid on a geotextile will involve extensive additional plant movements to construct it in the first place. It must be borne in mind that, as for the central valley crossing temporary haul road, crushed rock will be required over the geotextile to provide a suitably stable base.
- q) The CMS also refers to “*Travel corridors to and from work areas across areas of wetland and established habitats*”. No information is provided as to where and how extensive these construction routes may be.
- r) No consideration has been given to the excavation and construction of the channels and basins on existing sloping ground, with the resultant excavations on the ‘uphill’ side by necessity being much more extensive than on the low side. In respect of the larger basins, it is unlikely to be able to construct these with temporary construction routes on all sides of the basins, with inevitable encroachment into the areas of AW.
- s) It has not therefore been demonstrated in this CMS that there is a way of constructing the conveyance channels and basins in this environment without causing extensive damage to the ecosystem.

- t) It has already been agreed that the proposed permanent development will not lead to flooding. From the limited level of information in the CMS, it is not however certain that any temporary works will not cause localised flooding of important habitat in particular during construction.
- u) In order to enable flow from the conveyance channels to the storage basins/ponds, the new idea of pumping is introduced in the CMS as a temporary measure. However if levels do not permit water flow by gravity in the temporary scenario during construction, it is likely that pumping would then be required for the permanent works as well. Permanent pumping is completely unacceptable since that then requires a permanent power source for the pumps along with maintenance access roads in order to service them. By necessity pumps will be located away from other proposed access routes and will require additional access not previously assessed by the LPA.
- v) Pumping is unlikely to be practical in any case as a long term solution and it is not considered an acceptable SuDS method, so if it is not possible to use gravity throughout for movement of water because of the terrain and the necessity to avoid the 15m Ancient Woodland buffer zones and the 8m stream buffer, the country park SuDS should be removed from the drainage strategy.
- w) Insufficient detail has been provided to demonstrate that the “*risk of water pollution into the adjacent water courses*” for the valley crossing, Crook’s Copse Link and the Country Park SuDS measures has been reduced. Details of how a “*construction phase sediment control plan*” could be implemented should also have been provided to assist in this assessment.

Conclusion

- x) Clearly the Council accepts that the development of the allocated site will have an impact. However, overall the CMS document in the absence of a comprehensive development fails to demonstrate and reassure that the unnecessarily larger central valley crossing structure and the inability to incorporate additional (alternative) construction access from the west (Warren Road) fails to demonstrate that it will minimise the impact of the construction works on the site’s sensitive environment or that the solutions suggested are practical.