181943 - OUTLINE PLANNING APPLICATION FOR UP TO 6 DWELLINGS. ALL MATTERS RESERVED APART FROM ACCESS. AT LAND TO THE NORTH OF SCHOOL ROAD (U66207), TARRINGTON, HEREFORDSHIRE

For: Tatintune Ltd per Mrs Kate Girling, Canalside House, Brewery Lane, Skipton, BD23 1DR

UPDATE TO OFFICER REPORT

The following internal consultation responses were omitted from the published Officer Report.

Land Drainage Team – comment
23/1/23 - We have been reconsulted on the above site as we understand that the proposals have been amended to 6 new dwellings rather than 9. The drainage proposals appear to remain unchanged. Under the same application number, we provided a consultation response in July 2022 whereby the proposed foul water drainage system was approved in principle with further details to be confirmed at Discharge of Condition stage. Further investigations of the Welsh Water Sewer Network show that a gravity fed connection may be achieved to the northwest of the site . As per our previous response (attached), this option must be explored. Our previous comments still stand.

14/7/22 - The Applicant proposes the construction of up to 15 dwellings. The site covers an area of approx.0.85ha and is currently a Greenfield site. An ordinary watercourse flows along the eastern boundary of the site. The topography of the site slopes down from approx. 90.5m AOD in the southwest to the northern, eastern and southern site boundaries at 83m AOD, 82m AOD and 85m AOD respectively.

Review of the Environment Agency's Flood Map for Planning (Figure 1) indicates that the site is located within the low risk Flood Zone 1. This application has been supported by a Flood Risk Assessment (FRA).

The FRA has considered the risk of flooding from fluvial flooding, surface water, groundwater, sewers, reservoirs and any other manmade sources.

Flood risk; -
Review of the EA's Risk of Flooding from Surface Water map indicates that the site is not located
within an area at risk of surface water flooding. The flows are demonstrated to be contained within the Tarrington Brook. It has been stated in the Planning Statement that the Finished Floor Levels will be raised by 300mm.

We agree with this proposal. The overland flow routes have been considered to direct flows towards the Tarrington Brook (located to the East of the site).

Local residents have raised concerns of flooding in the area. It is thought that this development may have a detrimental effect on the area. The Applicant has demonstrated that the surface water runoff can be controlled to below QBAR, thus no additional flows will be discharged into the brook.

There was mention of the culvert under School Lane and how this has been unable to cope with flows in the past. There are two culverts under School Lane. It is assumed that the downstream culvert is being referred to (as this development will have no bearing on the flows through the upstream culvert).

Review of the EA's Groundwater map indicates that the site is not located within a designated Source Protection Zone or Principal Aquifer.

Surface water drainage; -
The Applicant has not undertaken infiltration testing. It was assumed that infiltration is not viable as the ground was boggy upon site visit. It may be that there is a permeable layer of soil beneath the surface.

In line with the drainage hierarchy, the Applicant should undertake infiltration testing in accordance with BRE365 to establish whether infiltration techniques are a viable option. The groundwater level should also be established to be a minimum of 1m below the base of any unlined infiltration features. Where site conditions and groundwater levels permit, the use of combined attenuation and infiltration features are promoted to provide treatment and reduce runoff during smaller rainfall events. The drainage strategy should be redesigned to include soakaways if infiltration rates permit.

It should be noted that soakaways should be designed for a minimum 1 in 30 year design standard, be located a minimum of 5m from building foundations, that the base of soakaways and unlined storage/conveyance features should be a minimum of 1m above groundwater levels, and must have a half drain time of no greater than 24 hours.

The Applicant is currently proposing to provide an attenuation pond (92m3) in the lowest part of the site with restricted outfall into the Tarrington Brook at 21/s (62mm hydrobrake). QBAR has been calculated to be 3.41/s/ha. The impermeable area for the site is 0.326ha, thus the discharge rate is approx. 1.11/s. When the QBAR value is less than 21/s/ha, it is considered acceptable to use the higher value of 21/s/ha for events up to the 100 year return period.

10% urban creep has been accounted for. This is to account for possible replacement of permeable driveways with non-permeable driveways in the future by homeowners who may be unaware of the purpose of permeable driveways. It also accounts for the additional of any impermeable area to gardens etc.

The Applicant has provided MicroDrainage submissions for the ICP SUDS (QBAR calculation) and Network Calculations, however no evidence of providing storage for the 1 in 100 year + 40% cc storm event has been provided.

The invert level of the outlet (box culvert 15OOmm0) into the pond has not been stated, however it must be lower than 82.638. The hydrobrake invert level is set at 82.600, this is 38mm below the box culvert before the pond. This means that the pond will be dry for the majority of the time. In storm events, it is likely that the system will back up as water will be above the inlet. This should be redesigned to ensure that the pond is providing storage for flood events.

The Applicant should confirm the level of the outfall into the Brook. The Applicant should also provide details of how the respective box culvert sections will be jointed.

The Applicant must provide a MicroDrainage submission to demonstrate that the system has been designed to cope with the 1 in 100 year + 40% climate change event.

For the proposed outfall to the adjacent watercourse, the Applicant must consider the risk of water backing up and/or not being able to discharge during periods of high river levels in the receiving watercourses. The ownership of the land either side of the watercourse should be clarified as permission may be needed from adjoining houses.

The drainage system should be designed to ensure no flooding from the drainage system (which can include on-the-ground conveyance features) in all events up to the 1 in 30 year event. The Applicant must consider the management of surface water during extreme events that overwhelm the surface water drainage system (including temporary surcharging of gullies) and/or occur as a result of blockage. Surface water should either be managed within the site boundary or directed to an area of low vulnerability. Guidance for managing extreme events can be found within CIRIA C635: Designing for exceedance in urban drainage: Good practice.

Consideration has been given to the control of potential pollution of ground or surface waters from wash down and vehicles. The Applicant is providing trapped gullies, permeable paving and an attenuation basin.

The Applicant must confirm the proposed adoption and maintenance arrangements for the shared surface water drainage system. The Applicant should confirm whether this road is to be put forward for adoption, an approval in principle will be required for the box culvert.

Foul water drainage; -
The Applicant is proposing to connect to the existing public foul sewer located to the east of the site.

This will require a pumping station (proposed to be located adjacent to the pond), which will be put forward to Welsh Water for adoption.

We note that in a response from Welsh Water (dated 15/06/2018), the utilisation of a foul water pumping station should be explored and discussed further with Welsh Water Engineers as part of the Adoption Agreement.

Prior to a pumping station being confirmed, the Application should show that all other gravity fed/direct discharge options have been explored.

Overall comment; -
In principle we do not object to the proposals, however we recommend that the following information provided within suitably worded planning conditions:

- Results of infiltration testing undertaken in accordance with BRE365 and confirmation of groundwater levels to demonstrate that the invert level of any soakaways or unlined attenuation features can be located a minimum of 1m above groundwater levels in accordance with Standing Advice;

- If infiltration techniques are a viable option, the drainage strategy should be revised to demonstrate that opportunities for the use of SUDS features have been maximised, where possible, including use of infiltration techniques and on-ground conveyance and storage features:

- A revised detailed surface water drainage strategy (please review comments in 'Surface Water Drainage' section^ with supporting calculations and evidence that there is sufficient onsite attenuation storage to ensure that site-generated surface water runoff is controlled and limited to agreed discharge rates for all storm events up to and including the 1 in 100 year rainfall event including climate change;

- Provision of a revised foul water drainage strategy which considers a gravity fed discharge;

- Evidence that the Applicant has sought and agreed permissions to discharge foul water from the site with the relevant authorities:

- Confirmation of the proposed authority responsible for the adoption and maintenance of the proposed surface water and foul water drainage systems. The Applicant

should confirm whether the access road is to be put forward for adoption, an approval in principal will be required for the box culvert.

ADDITIONAL REPRESENTATIONS

A further representation from a local resident has been received following the publishing of the Officer Report / Agenda pack, raising concerns with respect to flooding from the Tarrington Brook to the north of the site. The comments can be summarised as follows;

- Flooding at Sparchall Farm has been increased by the discharge from housing developments in Tarrington.

- Copies of correspondence from Malvern Hills District Council between 1976 and 1982 relate to the Council's efforts to mitigate known flooding problems on Sparchall Farm land. This relates to housing at Barrs Orchard.

- Flooding would be exacerbated by more water coming from the Barrs Court development with matters worsened further after the development of Pound Close.

- Situation need urgent consideration and also should be taken into account on planning application 181943.