

**SITE:** Land to the North of Ashperton Village Hall, Ashperton, Herefordshire, HR8 2RY

**TYPE:** Approval of Reserved Matters

**DESCRIPTION:** Application for approval of reserved matters following Outline 152041 (Proposed residential development of 10 dwellings (amendment to original application)) for the approval of Appearance, Landscaping and Scale including details to address conditions 3, 5, 7, 9, 10, 14, 15, 16, 17, 18, 19, 21, 22 & 22)

**APPLICATION NO:** 191013

**GRID REFERENCE:** OS 364379, 242019

**APPLICANT:** Mr Harvey Davies

**AGENT:** Mrs Sharon Edgar

Our knowledge of the development proposals has been obtained from the following sources:

- Application for Planning Permission;
- Location Plan (Ref: 8120PL001 Rev B);
- Proposed Site Plan (Ref: 8120 PL003 Rev C);
- General Arrangement and Levels Plan (Ref: 413-CLA-00-00-DR-L-1000 Rev 01);
- Drainage Design Technical Note (Ref: 1218 – Ashperton);
- Proposed Drainage Profiles (Ref: 1189-109);
- Proposed Drainage (Ref: 1189-108);
- Drainage Design Report Calculations (Causeway, report produced on 15<sup>th</sup> March 2019);
- Contour Plan (Ref: 1189-102);

### Overview of the Proposal

We provided comments for the planning application 152041 on 28<sup>th</sup> April 2016. The proposals have since changed to construct 10 dwellings. The location of the attenuation pond has also been amended.

### Site Location

Figure 1: Environment Agency Flood Map for Planning (Rivers and Sea), April 2019



The relevant conditions are as follows:

**Condition 5:**

Prior to the occupation of the development details of the proposed foul and surface water drainage arrangements shall be submitted to and approved in writing by the local planning authority. The approved scheme shall be implemented before the first occupation of any buildings hereby permitted.

Reason: In order to ensure that satisfactory drainage arrangements are provided and to comply with Policies SD3 and SD4 of the Herefordshire Local Plan – Core Strategy and the National Planning Policy Framework.

**Flood Risk**

The planning application was supported by a Flood Risk Assessment which confirmed that this site is not at risk of flooding from fluvial, surface water and other sources.

Flood exceedance routes have not been demonstrated for the proposed site layout.

**Surface Water Drainage**

The proposals are to dispose of private roof runoff and the majority of the highway runoff into a pond in the northwest of the site. The attenuation pond provides 117m<sup>3</sup> of storage (designed to cope with the 1 in 100 year + 40% climate change event). We appreciate that the required volume is less than this. The maximum flood level is 87.9m and we note that on the drainage layout drawing that 300mm freeboard has been provided. An emergency overflow should be designed into the pond (300mm above the maximum flood level). If a weir is proposed, additional freeboard may be required to ensure the integrity of the bund while the overflow is in operation.

The base of the pond is set at 86.35m AOD and will have a permanent water level of 600mm for ecological purposes.

The flows from the pond are to be restricted to 1.9l/s. It is stated that a 100mm orifice is required to restrict these flows, however we note from the drainage system design that a hydrobrake with 64mm orifice has been selected. This should be clarified and understood. The simulation has demonstrated that the surface water drainage system has been designed to cope with the 1 in 100 year + 40% climate change event.

Runoff from approx. 160m<sup>2</sup> of the highway (in the west) is not able to be directed to the attenuation pond due to topographic levels of the site. Approx. 80m<sup>2</sup> will discharge directly into the ditch (at a rate of 3.9l/s, thus the total site will have a discharge rate of 5l/s). The other 80m<sup>2</sup> will be directed to a new gully at the junction in the west. This is shown to be directed under the road and will connect to an existing manhole. The ownership of this existing manhole, into which this runoff is to connect to, is not clear. This should be established through discussions with BBLP.

We do note that the proposals require a significant amount of regrading to install the attenuation basin. A crest should be provided around the pond to allow for maintenance. This should be a minimum of 1.5m to ensure integrity of the bund. The bund should be built using clay. We note that the western boundary of the pond then falls away to the east at 1 in 2. There may be practical difficulties in maintaining a slope of this gradient (particularly cutting the grass). The Applicant should clarify how this slope will be maintained.

We note that the proposed surface for the road is tarmac. We are unsure as to whether the proposed road is to be put forward for adoption. We note that the drainage simulation makes reference to a number of the drainage features as 'adoptable'. The Applicant should be aware that the proposed drainage strategy does not allow Herefordshire Council to adopt the road. If the road is to be put

forward for adoption, further discussions could be held with ourselves and a highways representative to establish the requirements.

There is mention of realigning the ditch (into which the surface water is proposed to outfall). Any realignment of the ditch should ensure that any existing drainage which outfalls into this ditch is able to be retained. Further details should be provided of the ditch realignment to allow us to understand the extent of the works.

Consideration should be given as to whether a ditch would be required along the southern boundary of the entry to the site to capture runoff from higher land. It may be necessary to provide a culvert beneath the access road.

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.

The Applicant must confirm the proposed adoption and maintenance arrangements for the surface water drainage system. The Drainage Layout plan should reflect the ownership of the respective drainage components. If the surface water sewer network is to be presented for Section 104 adoption, then the balancing pond will need to be maintained by a statutory authority such as Herefordshire Council.

### **Foul Water Drainage**

There are no public sewers in this area. The proposals are to install a package treatment plant and discharge the treated effluent to the unused canal to the North of the site. We note that ecology have raised that discharge into the canal is not in line with the Binding Rules.

The Proposed Drainage Layout demonstrates the location of the 'package treatment works' with an outgoing pipe and a note to state this will be disposed of into the existing unused canal.

The Proposed Drainage Profiles drawing (Ref: 1189-109) demonstrates a different scenario in which an outfall is not included. For completeness and clarity, all proposed plans should demonstrate the up-to-date proposals.

The Applicant should demonstrate that alternative proposals are compliant with the general Binding Rules and are in accordance with the Building Regulations Part H Drainage and Waste Disposal.

We appreciate that individual package treatment plants with individual drainage fields may prove difficult due to the steep nature of this site, however the Applicant should undertake percolation tests in accordance with BS6297 to determine whether infiltration techniques are a viable option for managing treated effluent (see Section 1.32 of Building Regulations Part H Drainage and Waste Disposal). An assessment of the construction of the drainage fields should be undertaken to determine whether drainage fields could be installed.

If infiltration testing results prove soakage is viable, the following must be adhered to for Package Treatment Plants:

- The drainage field should be located a minimum of 10m from any watercourse, 15m from any building, 50m from an abstraction point of any groundwater supply and not in any Zone 1 groundwater protection zone;
- Drainage fields should be constructed using perforated pipe, laid in trenches of uniform gradient which should not be steeper than 1:200. The distribution pipes should have a minimum 2m separation.
- Drainage fields should be set out in a continuous loop, i.e. the spreaders should be connected. If this feature is missed, it will gradually clog with debris and the field will become increasingly ineffective.

The Applicant should review the package treatment plant checklist for plants serving multiple properties. This will be attached with this response.

### **Overall Comment**

Condition 5: Cannot yet be discharged.

**Given that treated effluent cannot be disposed of into the unused canal, we request that a viable foul water drainage strategy is submitted prior to the council granting Planning Permission.**

In summary, the following information should be provided in regards to the surface water drainage strategy:

- It should be confirmed that an emergency overflow has been designed into the pond;
- It should be clarified that the orifice will be 64mm in diameter (as opposed to 100mm diameter as stated in the drainage report);
- Clarity around the construction of the pond, in particular the gradient of the land to the west (currently proposed to be at a gradient of 1 in 2). A crest (1.5m minimum width) should be provided around the pond to allow for maintenance;
- The ownership of the system, into which the 80m<sup>2</sup> from the junction is to be drained, should be clarified and confirmation should be confirmed that flows can discharge into this system;

The Applicant should also confirm whether the road is to be put forward for adoption. If the road is to be put forward for adoption, further amendments will be required to the drainage strategy to allow Herefordshire Council to adopt the road.

In addition to the above, an exceedance flood route plan should also be provided to demonstrate the flows within the site in extreme events.