Date of Response: 01/02/2022

SITE: Land adjacent to Whitestone Business Park, Hereford, HR1 3SE

TYPE: Planning Permission

**DESCRIPTION:** Proposed development of 33 dwellings with associated works and

infrastructure

APPLICATION NO: 213634

**GRID REFERENCE**: OS 356663 - 242579 **APPLICANT**: Michaela Eaves **AGENT**: Mr Rob Wall

Our knowledge of the development proposals has been obtained from the following additional sources since our previous comments provided in October 2021:

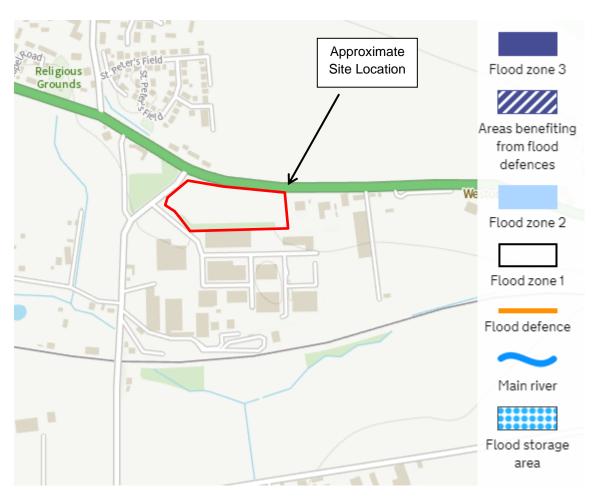
- Amended Site Location Plan 24.1.22 (Ref: Rev B);
- Amended Proposed Site Plan 24.1.22 (Ref: Rev L);
- Amended Proposed Boundary Plan 24.1.22 (Ref: Rev D);
- Amended Indicative Drainage Strategy Plan 07.01.22 (Ref: 19258-BGC-PL DS01 C);
- Amended Impermeable Area Plan 07.01.22 (Ref: 19258-BGC-PL 171 A);
- Amended Flood Routing Exceedance Plan 07.01.22 (Ref: 19258-BGC-PL 161 A);
- Amended Design & Access Statement 07.01.22 (Ref: zeb 1382 Rev A);
- Flood Risk Assessment & Drainage Strategy 07.01.22;
- Letter from Enzygo Geoenvironmental Ltd RE Trial pits for Soakaway Results 07.01.22;
- Surface Water Network Design Settings and Nodes 07.01.22.

### **Overview of the Proposal**

The Applicant proposes the construction of 36 dwellings with associated works and infrastructure. The site covers an area of approx. 1.38ha and is currently greenfield. Two ordinary watercourse, tributaries of the River Lugg, flow 130m and 220m to the west and southwest of the site, respectively. The topography of the site slopes down from northeast to southwest by approx. 6m.

#### **Site Location**

Figure 1: Environment Agency Flood Map for Planning (Rivers and Sea), October 2021



### Flood Risk

# Fluvial Flood Risk

Review of the Environment Agency's Flood Map for Planning (Figure 1) indicates that the site is located within the low probability Flood Zone 1. In accordance with Environment Agency standing advice, the planning application has been supported by a Flood Risk Assessment (FRA) undertaken in accordance with National Planning Policy Framework (NPPF) and its supporting Planning Practice Guidance. This is summarised in Table 1:

Table 1: Scenarios requiring a FRA

	Within Flood Zone 3	Within Flood Zone 2	Within Flood Zone 1
Site area less than 1ha	FRA required	FRA required	FRA not required*
Site area greater than 1ha	FRA required	FRA required	FRA required

<sup>\*</sup>except for changes of use to a more vulnerable class, or where they could be affected by other sources of flooding

#### Surface Water Flood Risk

Review of the EA's Risk of Flooding from Surface Water map indicates that the site is not at risk of surface water flooding.

#### **Other Considerations**

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

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### **Surface Water Drainage**

Infiltration testing has been undertaken at the site whereby two trial holes were excavated. Three tests were scheduled for each hole however only one was executed due to poor infiltration. The water fell approx. 0.04m over 24 hours which proves poor soakage. Surface water drainage using infiltration techniques will not be viable for this site.

We understand that the development proposals have changed since our previous comments whereby the number of proposed dwellings has reduced from 36 to 33.

The Drainage Strategy does not disclose any detail regarding the proposals; in fact, the proposals are not clarified at all in this document. The Drainage Layout has been used to make the following observations.

Despite reference to an unnamed tributary of the River Lugg as a viable discharge point, we understand that the surface water is proposed to connect to an existing private surface water sewer located in the southwest corner of the site. Looking at our records, we can confirm this is, in fact, an adopted highway drain. The disposal of roof water from the development to a highway drain is not consistent with council policy and cannot be accepted. Unless Welsh Water are willing to adopt the roof water drainage proposals, this proposal cannot be accepted.

In our comments under planning application 213634 we highlighted that the proposals for the discharge point were not clearly defined. We note that the site adjacent to Ramblers Court utilised soakaways for the disposal of surface water. A new foul sewer was laid for this development but there was no similar provision for a surface water network.

The preliminary attenuation storage requirements for a 1 in 30yr event is 162m³, and 357m³ is required for a 1 in 100yr + 40% CC event. An online attenuation basin is proposed to provide storage for a 1 in 100yr + 40% CC event. The bed level is 69.05m and the top of the bank is 70.35m. The maximum rainfall for a 1 in 100yr + 40% CC event is modelled to be 70.046m which provides a 304mm freeboard for the basin. A Hydro-Brake is proposed for the basin outlet to limit the discharge rate to 5l/s. The invert level provided in the Appendix calculations states that the invert is 68.980m, which is below the proposed bed level of the basin, however the Drainage Layout states this to be 69.98m which seems more appropriate to drain the basin to the sewer network when the water level is higher.

Offline cellular storage crates are also proposed to provide additional storage of 167.2m³ for a 1 in 100yr + 40% CC event. This will have an inspection chamber in the form of a 1500mm catchpit.

An impermeable area plan has been submitted however a key to interpret the information being shown is not, preventing interpretation of this drawing. The Drainage Layout shows that the dwelling access roads and parking areas will be constructed using porous tanked paving. We assume that the main access road will be impermeable however the associated drainage arrangements are unclear. The Flow Exceedance Routing Plan indicates a flow path of water along the main access road towards the pond. Drop kerbs with 25mm exposed kerb face are proposed to direct the water flowing along the exceedance route towards the basin.

The Finished Floor Levels are stated to be 150mm above the ground levels however this is not consistent with those shown on the Drainage Strategy Plan. For example, for Plot 5, the topographic level for the dwelling is 72.35 whereas the proposed FFL is 71.85 which is in fact lower than the current ground level. This is the case for numerous dwellings. The drawing should be corrected with appropriate FFL's for clarification during construction.

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# **Foul Water Drainage**

We note that Welsh Water has advised and confirmed that the foul flows produced by the proposed development can be accommodated within the public sewerage network. An indicative drainage layout plan has been submitted showing how the proposed development will connect to the existing drainage via gravity.

# **Overall Comment**

We object to the current surface water drainage arrangements on the grounds that roof water cannot discharge to an adopted highway drain, in line with the council policy.