

## Flood Risk Assessment

Staffordshire Moorlands District Council (SMDC)

Planning Department

<By Email>

30<sup>th</sup> June 2023

Dear Sir / Madam,

### **23-06: Agricultural / Forestry purpose buildings at: Land at Wood Farm, Red Road, Alton, Staffordshire, ST10 4BT**

#### **1.0 Flood Risk Mapping Analysis**

- 1.1 The River Churnet runs alongside the application site to the East of the 'Agricultural Land' where a standalone secure equipment store is proposed for the purpose of 'Agricultural / Forestry'. This is submitted to Staffordshire Moorlands District Council under planning reference: SMD/2023/0200.
- 1.2 The application site is described to have 'Medium-High' levels of risk of Flooding from 'Rivers and Seas'. Red Road falls within the medium boundary also although this is higher land than the field / application site. The applicant notes the fields develop pools of water annually during the winter, the proposal has taken account of this fact.

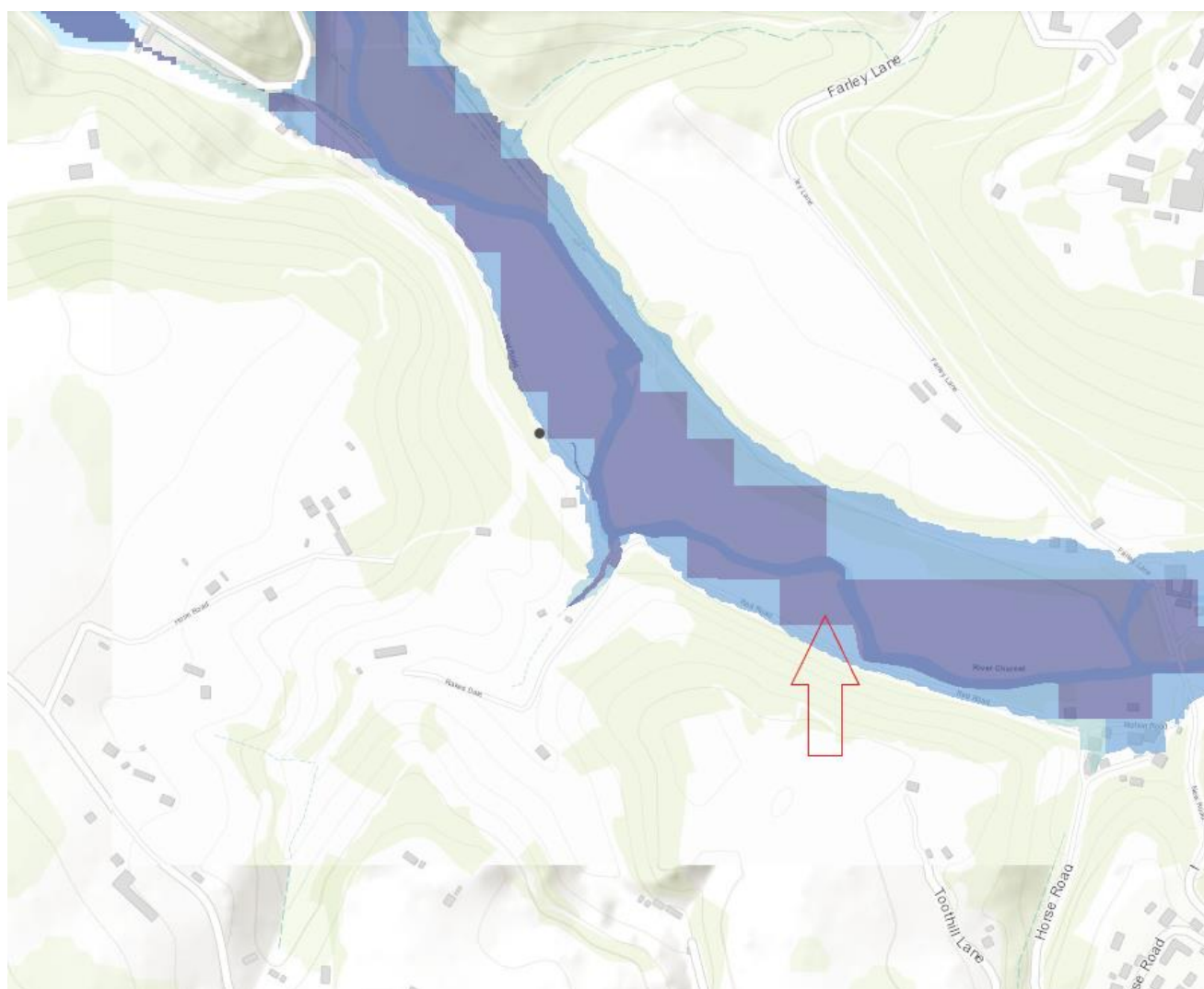


Figure 1: Extract of Flood Risk Mapping from Rivers and Seas for the application site

1.3 In summary the GOV website / Environment Agency say the following types of Flood Risk are present for the application site:

Rivers and the sea: Medium-High risk (High Risk means more than 3.3% chance of Flooding annually)

Surface water: Low Risk

Reservoirs: There is a risk of flooding from reservoirs in this area

Groundwater: Flooding from groundwater is unlikely in this area

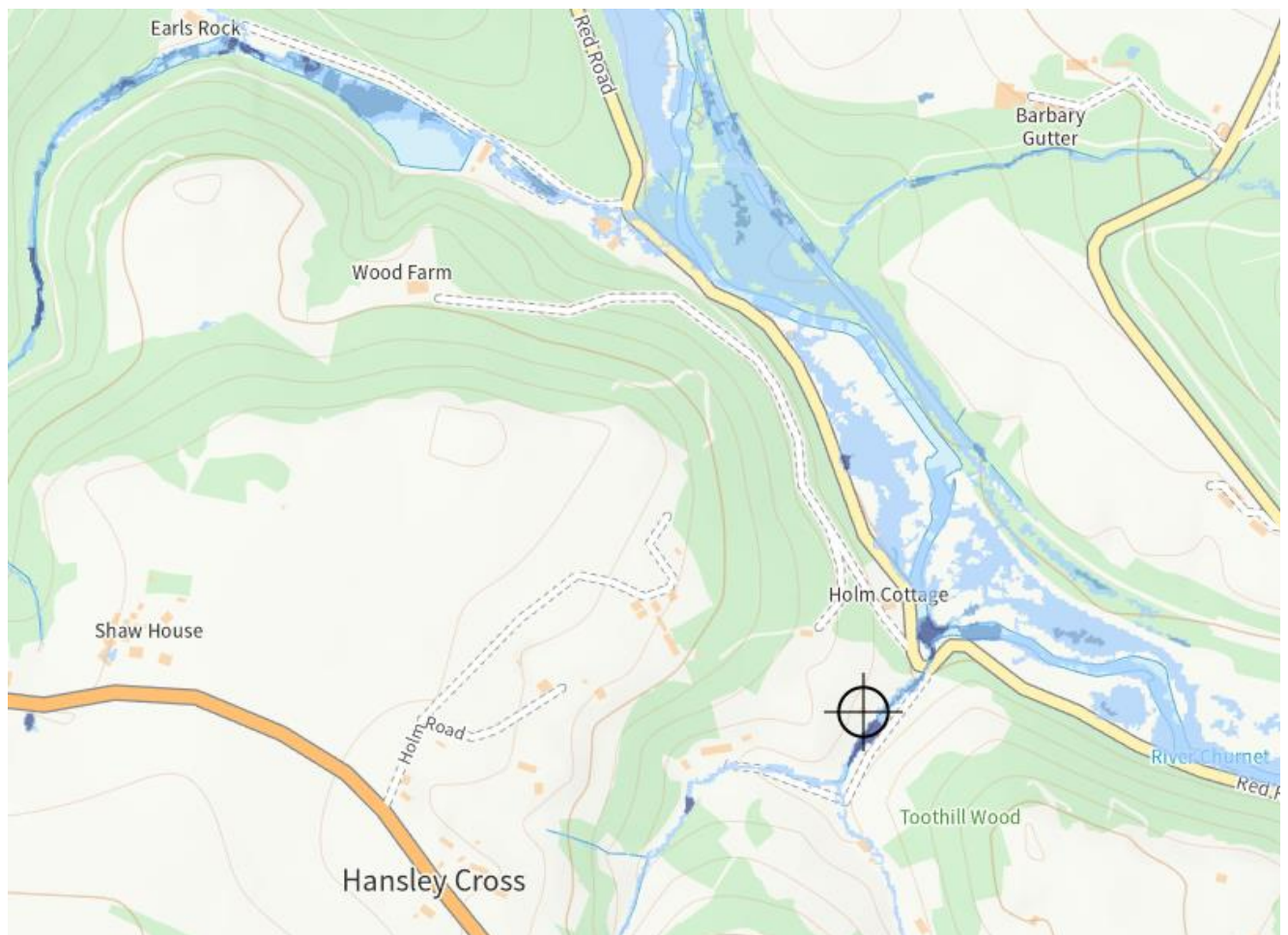


Figure 2: Extract of Flood Risk Mapping from Surface Water for the application site



Maximum extent of flooding from reservoirs:

● when river levels are normal 
 ▨ when there is also flooding from rivers 
 ⊕ Location you selected

Figure 3: Extract of Flood Risk Mapping from Reservoirs for the application site

- 1.4 In summary there is a risk of a variety of types of flooding due to the proximity to the River Churnet, however, this has been mitigated against by the design of the proposals and the building use intended is not at any threat from occasional flooding.

## 2.0 Flood Risk Mitigation at the application site

- 2.1 The proposed structure is intended to provide a 'Cropping Area' with 13m<sup>2</sup> internal floor area. The building will be a secure structure built from timber with cladding. The building is non-habitable, and its purpose is to securely store hand tools and when harvesting to provide a working area to crop the harvested Birch trees. As result there is no threat posed to the building contents even if it were to flood.
- 2.2 The proposed structure will not require any services (no electric connection / gas, no lighting necessary) again this reduces any risk if the building were to be flooded.
- 2.3 By designing the proposal to be raised from the external ground levels by circa 300mm this completely mitigates against any possibility that the building could flood. 'Auger driven 'Ground Screws' will be used to achieve the raised floor deck. This is also done to remove any requirement to dig or alter the existing natural ground levels which is positive from an ecological perspective.

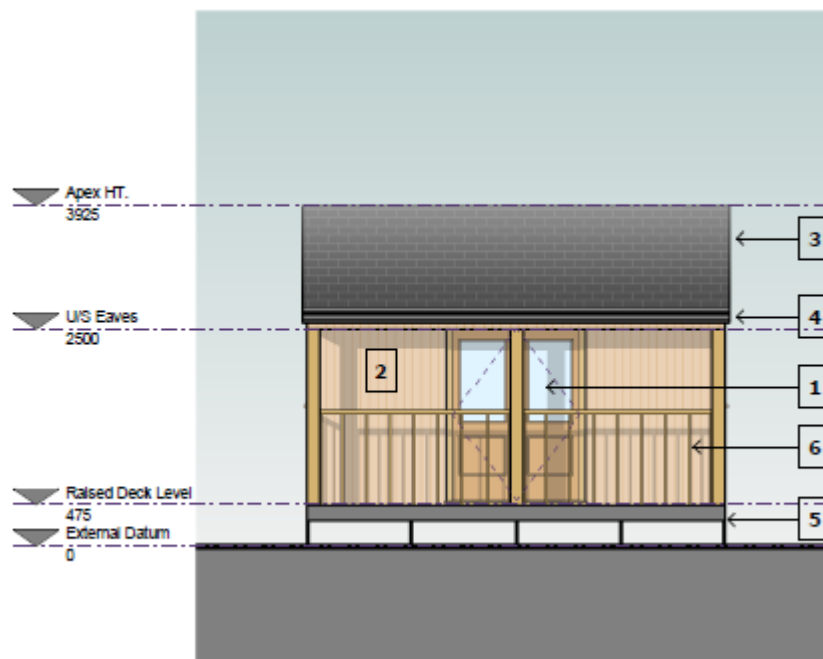


Figure 4: Extract from submitted drawing reference: 23-06-b3-XX-XX-DR-A-0203

### 3.0 Conclusion

- 3.1 Section 1.0 finds that the application site is at significant risk of flooding by virtue of its proximity to the River Churnet. The site has a historic use as agricultural land and this will remain, the land will be planted with a fast-growing coppice of deciduous trees (Birch & Chestnut). This will be harvested for Biomass Pellets, Firewood & Brash Faggots for weaving / fencing etc. The fact that the land tends to flood annually will benefit these trees.
- 3.2 The proposed building for which planning permission is sought is a simplistic, low-cost building for agricultural purpose. Its design is practical, being raised above the land levels to entirely mitigate against flood risk. As result, there is no reason to resist the proposals.
- 3.3 For the reasons rehearsed above it is respectfully suggested that the application should be recommended for **approval**.

Yours Faithfully,

A handwritten signature in black ink, appearing to read 'B Johnson', written in a cursive style.

**Bruce Johnson** BSc (1st Hons), PGDip, MSc

on behalf of the applicant: Mr M. Halsey