



Existing Hard Landscaping 469m2

Proposed Hard Landscaping 409m2

**Response to 3/23/0423/FUL Condition 5** (No development shall take place until a detailed drainage strategy has been submitted to and approved in writing by the local planning authority).

The Flood Risk Assessment ( EAS February 2023) submitted in support of this planning application advised that no detailed drainage strategy was required on account of the nature of the proposed development:

**"P. 7: Existing and Proposed Surface Water Drainage Strategy**

**3.9** As all proposed works to the main property, garage and barn are internal only, there are to be no alterations to the existing arrangements. The property will continue to drain as per the current arrangement and the garage and barn are likely to continue to shed roof runoff to ground.

**3.10** There is no increase in roof area or hardstanding as a result of the proposal therefore there is no increase in runoff from the site."

The adjacent drawing demonstrates that the approved proposal includes a 60m2 reduction in hard landscaping. We are also indicating the addition of three water butts to receive rainwater from both the proposed annex and home office to further attenuate surface water run off.

The following flood resilience measures were considered and where possible are to be incorporated (highlighted in green). Certain measures are dismissed (highlighted in red) on account of the property's listed status and the types of "breathable" construction that have already been approved.

- The use of suspended floors. NO
- A suitable DPM. NO
- Floor insulation of a closed cell type. NO
- Floor types of either water resistant or easily replaceable materials. NO
- Wall construction of either concrete blocks or sacrificial timber framed walls. NO
- Raise air vents/bricks (if required). NO
- Services:
- Pipework: Closed cell insulation should be used for pipes. NO
- Drainage services: non-return valves are recommended in the drainage system to prevent back-flow. YES
- Water, electricity and gas meters: should be located above predicted flood level. YES
- Annex and Home Office electrical services: electrical sockets should be installed above flood level. YES
- Electric ring mains should be installed at first floor level with drops to ground floor sockets and switches. NO
- Heating systems: boiler units and ancillary devices should be installed above predicted flood level. YES
- New communications wiring: wiring for telephone, TV, Internet and other services should be protected by suitable insulation agreed with relevant service. YES

Demountable flood barriers at the threshold of the existing property and home office/gym. As flood depths could reach up to 900mm (0.1% surface water flood depths) a completely water resistant strategy is not recommended as it could result in structural damage. NO

All electrical equipment in the home office should be raised off the ground as high as practically possible with electrical sockets also raised as high as practically possible. YES

Gym equipment should be stored above ground level to prevent flood damage. The use of waterproof or sacrificial materials for the home office/ gym and internal renovations of the property should be considered to minimise the damage caused by floodwaters. YES

**Flood Warning and Evacuation**

The homeowners are recommended to subscribe to the EA flood warning service YES