

Manning Elliott Partnerships
Langlands,
Pallet Hill,
Penrith,
Cumbria,
CA11 0BY

11th October 2023

APPLICATION REF. 4/22/2364/OF1 - CLEATOR MILLS

FLOOD RISK INFORMATION

Further to our discussions, we have undertaken a review of the detailed response from the Planning Authority and write to confirm our findings and make comment on the issues raised.

The statement from the Planning Authority is as follows :

Ecology

Natural England have commented on the submitted Shadow Habitats Regulations Assessment (HRA) to assess the potential impacts of the development on the River Ehen Special Area of Conservation (SAC) and Site of Special Scientific Interest (SSSI).

They have requested further consideration of impacts of any future requirement for works to the existing flood defences and their impact upon the River Ehen Special Area of Conservation (SAC) and Site of Special Scientific Interest (SSSI).

It will be necessary to liaise with your Engineers to ascertain the importance/reliance placed upon the flood defences in making the development acceptable in flood risk terms and thus any potential requirement for work to the flood defences to maintain the development as safe/acceptable."

We shall consider the above comments associated with the proposed scheme seeking consent and having reviewed the submitted Flood Risk Assessment produced by Unda Consulting Limited.

FILENAME

Kingmoor Consulting Ltd, Suite 4, Atlantic House, Fletcher Way, Parkhouse, Carlisle, Cumbria, CA3 0LJ

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Company Registration 06442980 - VAT No 263 8130 10

EXISTING FLOOD DEFENCES

Within the flood risk assessment, the analysis undertaken by Unda Consulting Ltd reviews both the defended and undefended scenario for the site under a number of varying storm events. Principally the modelled levels for the site remain similar as the existing flood defences are only partially protecting the site and have been installed without regard to the expected fluvial conditions in the river channels. The defences are non-continuous and are maintained only by the landowner, rather than the Environment Agency, Lead Flood Authority or other statutory authorities.

In reviewing the existing defences, we consider that any work required to the defences would be in the form of limited maintenance and not be a requirement to protect the development from flood waters. Any works to the defences would be required to be undertaken under the appreciated licensing from the Environment Agency and other stakeholders.

FLOOD RESILIENCE

The detailed flood risk assessment produced by Unda Consulting Ltd states that the proposed buildings associated with the development shall consider appropriate flood resilience measures to be adopted in the design. This includes :

- Closed-cell foam used in wall cavities;
- Waterproof ground floor internal render;
- Exterior ventilation outlets, utility points and air bricks fitted with removable waterproof covers;
- Ground floor electrical main ring run from at least 1.18m above finished ground floor level;
- Electrical incomer and meter situated at least 1.18m above finished ground floor level;
- Boilers, control and water storage / immersion installed at least 1.18m above finished ground floor level;
- Gas meter installed at least 1.18m above finished ground floor level;
- Raised sensitive electrical equipment, wiring and sockets at least 1.18m above finished ground floor level;
- Plumbing insulation of closed-cell design;
- Non-return valves fitted to all drain and sewer outlets;
- Manhole covers secured;

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- Anti-syphon fitted to all toilets;
- Kitchen units of solid, water resistant material;
- Use of MDF carpentry (i.e. skirting, architrave, built-in storage) avoided at ground floor level;
- The use of demountable flood defence barriers to defend ground level doorways and low windows.

We consider that all of the above are appropriate and should be considered in the detailed design regulated under the Building Regulation Standards.

We trust this is satisfactory for your needs at present and please do not hesitate to contact us if you require any more information.

Yours Sincerely

Colin Aimers
BEng Hons CENG CENV MICE
Kingmoor Consulting Ltd

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