Sustainable Surface Water Drainage Assessment

The Proposed Development: Proposed Repowering of an existing 46.5m to blade tip Wind Turbine by installing a replacement 77m to blade tip Wind Turbine

Application Site: Land west of The Energy Coast Business Park, off A595, Haile, Egremont, CA22 2NH

This assessment considers sustainable surface water drainage considerations applicable to the proposed repowering of an existing wind turbine at the Application Site.

The proposed development will, other than the base of the proposed wind turbine and the substation building, be comprised of permeable materials such as the gravel track leading to the wind turbine. The access from the A595 to the Application Site is already in situ.

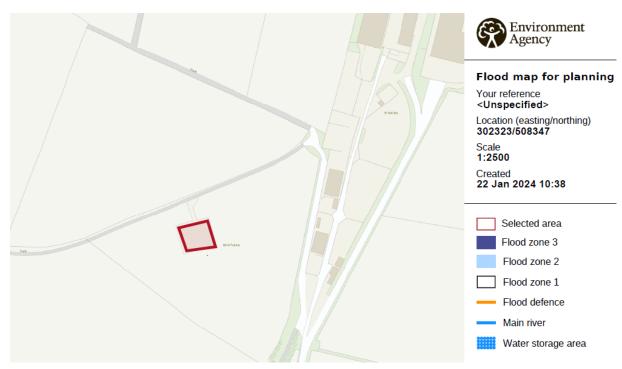
The development would replace the existing wind turbine and substation which are of a comparable floor area. As such the ability of the site to generate additional surface water drainage impacts is negligible.

In any event the Application Site is located within an area which is identified as being within Flood Zone 1 according to: <u>https://flood-map-for-planning.service.gov.uk/location</u> : see Figure 1 below.

The red square on Figure 1 below denotes the location of the existing wind turbine: the proposed repowered wind turbine is located 24.3m to the south-east of the existing wind turbine as shown via the image below:

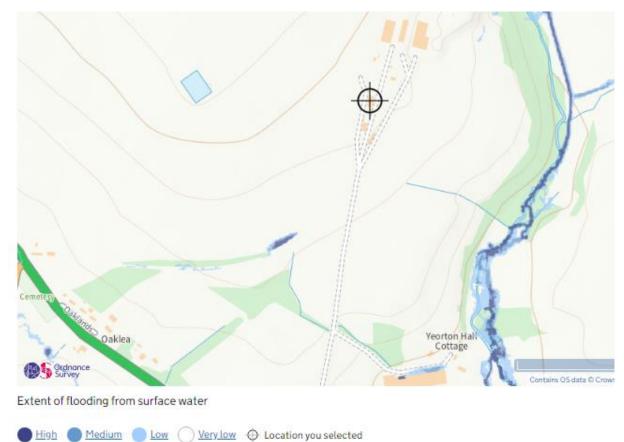


Figure 1 – Environment Agency Flood Map for Planning



Having regard to surface water mapping the Application Site is located within a Very Low extent of surface water flooding area according to: <u>https://check-long-term-flood-</u> <u>risk.service.gov.uk/search?postcode=CA22%202NH#</u> : see Figure 2 below.

Figure 2 – Gov UK Flood Risk Maps for Surface Water



The Proposed Development is therefore located at an Application Site which is at the lowest risk of flooding.

In light of the above the proposal would have a negligible and fully acceptable impact with regard to surface water drainage considerations.

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