

# APPENDIX V2-7.1 – SIGNIFICANCE CRITERIA

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## 1.0 Appendix V2-7.1: Significance Criteria

### 1.1 Introduction

An assessment has been undertaken on the geology and soils environment during the construction and operational phases of the Proposed Development.

The significance of effects of the Proposed Development has been assessed by considering two factors: the sensitivity of the receiving environment and the potential magnitude of impact, should that effect occur.

This approach provides a mechanism for identifying the areas where mitigation measures are required and for identifying mitigation measures appropriate to the significance of likely effects presented by the Proposed Development.

Criteria for determining the significance of effect are provided in the following sections.

### 1.2 Significance Criteria

#### 1.2.1 Sensitivity of Receptor

The sensitivity of the receiving environment (i.e. the baseline quality of the receiving environment) is defined as its ability to absorb an effect without a detectable change and can be considered through a combination of professional judgement and a set of pre-defined criteria which is set out in Table 1-1. Receptors in the receiving environment only need to meet one of the defined criteria to be categorised at the associated level of sensitivity.

It should be noted that the sensitivity criteria adopted for land quality relating to contamination was based on the tolerance of the site to change i.e. that known contaminated sites will be more sensitive to the ground-breaking aspects of development, during the construction phase, than those areas where no contamination is present.

**Table 1-1: Criteria for Assessing Sensitivity of Receptor**

Sensitivity	Definition
High	<ul style="list-style-type: none"> <li>Special Area of Conservation (SAC) with important geomorphological or geological features. Sites of Special Scientific Interest (SSSI) with important geomorphological or geological features.</li> <li>ALC Classes 1, 2 - Excellent to Good Quality agricultural land.</li> <li>Peat Classes 1,2 – Nationally important carbon-rich soils, deep peat and priority peatland habitat.</li> <li>Presence of regulatory determined contaminated land (Part 2A EPA designated).</li> </ul>
Medium	<ul style="list-style-type: none"> <li>Regionally Important Geological Site (RIGS) or Geological Conservation Review sites (GCR).</li> <li>Soils supporting non-statutory designated sites (Local Nature Reserves (LNR))</li> <li>ALC Classes 3a and 3b -Moderate to Good Quality Land capable of producing a moderate range of crops.</li> </ul>

Sensitivity	Definition
	<ul style="list-style-type: none"> <li>Peat Classes 3, 5 – Occasional peatland habitats can be found. Most soils are carbon-rich, with some areas of deep peat.</li> <li>Areas of potential concern identified by Local Authority under their statutory investigation of contaminated land (under Part 2A; EPA).</li> </ul>
Low	<ul style="list-style-type: none"> <li>Common geological features of limited use for knowledge/study</li> <li>ALC Classes 4 and 5 Poor to Very Poor Quality– Improved grassland and rough grazing.</li> <li>Peat Classes 4 – Areas unlikely to be associated with peat or carbon rich soils. Unlikely to include carbon-rich soils.</li> </ul>
Not Sensitive	<ul style="list-style-type: none"> <li>No areas of previously developed land with no areas of potential concern relating to contaminated land identified.</li> <li>Peat Class 0 - Mineral rich or no soils peatland habitats not recorded.</li> </ul>

### 1.2.2 Magnitude of Impact

The potential magnitude of impact would depend upon whether the potential effect would cause a fundamental, material or detectable change. In addition, the timing, scale, size and duration of the potential effect resulting from the Proposed Development are also determining factors. The criteria that have been used to assess the magnitude of impact are defined in Table 1-2.

**Table 1-2: Criteria for Assessing Magnitude of Impact**

Magnitude	Criteria	Definition
High	Results in a loss of attribute	Fundamental (long term or permanent) loss of resource and/or quality and integrity of resource; likely to cause exceedance of statutory objectives and/or breaches of legislation; severe damage to key characteristics, features or elements.
Medium	Results in impact on integrity of attribute or loss of part of attribute	Loss of resource, but not adversely affecting the overall integrity; partial loss of/damage to key characteristics, features or elements with/without exceedance of statutory objectives or with/without breaches of legislation.
Low	Results in minor impact on attribute	Some measurable change in attributes, quality or vulnerability; reversible or minor loss of, or alteration to, one (maybe more) key characteristics, features or elements.
Negligible	Results in an impact on attribute but of insufficient magnitude to affect the use / integrity	Very minor or no loss or detrimental alteration to one or more characteristics, features or elements; impact of insufficient magnitude to affect the overall use/integrity.

### 1.2.3 Significance of Effect

The sensitivity of the receiving environment together with the magnitude of the impact determines the significance of the effect, which can be categorised into level of significance as identified in Table 1-3. This also considers good practice measures implemented and embedded as part of the design and construction of the Proposed Development and use of professional judgement where appropriate.

The table provides a guide to assist in decision making. However, it should not be considered as a substitute for professional judgment and interpretation. In some cases, the potential sensitivity of the receiving environment or the magnitude of potential impact cannot be quantified with certainty and, therefore, professional judgement remains the most robust method for identifying the predicted significance of a potential effect.

**Table 1-3: Significance of Effect**

Magnitude of Impact	Sensitivity			
	High	Medium	Low	Negligible
High	<b>Major</b>	<b>Major</b>	<b>Moderate</b>	Negligible
Medium	<b>Moderate</b>	<b>Moderate</b>	Minor	Negligible
Low	<b>Moderate</b>	Minor	Minor	Negligible
Negligible	Negligible	Negligible	Negligible	Negligible

Effects of ‘**major**’ and ‘**moderate**’ significance are considered to be ‘significant’ in terms of the EIA Regulations.

A statement of residual effects, following consideration of any further specific mitigation measures where identified, is then given.

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