
Appendix 20.3
Glossary of Impact
Assessment

APPENDIX 20.3 GLOSSARY OF IMPACT ASSESSMENT

Introduction

This assessment methodology has regard to the EPA assessment criteria (EPA 2017) and to the National Roads Authority (NRA) Guidelines for the Assessment of Archaeological Heritage Impact of National Road Schemes (hereafter referred to as the NRA Guidelines) (NRA 2005).

Archaeological and cultural heritage sites are a non-renewable resource and such assets are generally considered to be location sensitive. In this context, any change to their environment, such as construction activity and ground disturbance works, could adversely affect these sites.

Significance / Sensitivity Criteria

In accordance with EPA Guidelines (EPA 2017), the context, character, significance and sensitivity of each archaeological / cultural heritage asset requires evaluation and the significance of the impact is then determined by considering the significance / sensitivity of the asset and the predicted magnitude of the impact.

In accordance with the NRA Guidelines (NRA 2005), the significance criteria used to evaluate an archaeological site, monument or complex take into account the character and integrity of the asset and any available data regarding it. This can be ascertained by looking at the following criteria cited in the NRA Guidelines (NRA 2005): the existing status (level of protection), condition or preservation, documentation or historical significance, group value, rarity, visibility in the landscape, fragility or vulnerability, and amenity value (Table 1). While these criteria contribute to the significance of a feature they should not be treated as definitive. These criteria are indicators which contribute to a wider judgement based on the individual circumstances of these archaeological/cultural heritage assets.

Table 1: Explanation of Archaeology and Cultural Heritage Asset Assessment Criteria

Criteria	Explanation
Existing Status	The level of protection associated with an archaeological / cultural heritage asset is an important consideration.
Condition / Preservation / Integrity	The survival of an archaeological / cultural heritage asset's archaeological potential both above and below ground is an important consideration and should be assessed in relation to its present condition and surviving features. Well-preserved sites should be highlighted, this assessment can only be based on a field inspection.
Documentation / Data	The significance of a an archaeological / cultural heritage asset may be enhanced by the existence of records of previous investigations or contemporary documentation supported by written evidence or historic maps. Sites with a definite historical association or an example of a notable event or person should be highlighted.
Group Value / Character	The value of a single an archaeological / cultural heritage asset may be greatly enhanced by its association with related contemporary monuments or with monuments from different periods indicating an extended time presence in any specific area. In some cases, it may be preferable to protect the complete group, including associated and adjacent land, rather than to protect isolated monuments within that group.

Criteria	Explanation
Rarity / Character	The rarity of some an archaeological / cultural heritage asset types can be a central factor affecting response strategies for development, whatever the condition of the individual feature. It is important to recognise sites that have a limited distribution.
Visibility in the landscape/ Character / Integrity	Archaeological / cultural heritage assets that are highly visible in the landscape have a heightened physical presence. The inter-visibility between monuments may also be explored in this category.
Fragility / Vulnerability / Integrity	It is important to assess the level of threat to an archaeological / cultural heritage asset from erosion, natural degradation, agricultural activity, land clearance, neglect, careless treatment, or development.
Amenity Value / Character	Regard should be taken of the existing and potential amenity value of a an archaeological / cultural heritage asset.

An evaluation of the significance / sensitivity of archaeological / cultural heritage assets is based on their designation and on the extent to which these assets contribute to the archaeological or cultural heritage environment, though their individual or group qualities, either directly or potentially. Table 2 presents the scale of significance / sensitivity together with criteria. It has been compiled by Courtney Deery Heritage Consultancy Ltd, based on standard authorities and guidelines. Undesignated archaeological or cultural heritage sites can be assigned a low, medium or high sensitivity value, taking into consideration the criteria cited in Table 1 (e.g., condition, character, integrity or preservation, data, group value, rarity, visibility in the landscape, fragility or vulnerability, and amenity value).

Table 2: Significance / Sensitivity Criteria

Sensitivity / Significance	Criteria
High	Sites of international significance: World Heritage Sites. National Monuments. Protected Structures (assessed by the NIAH to be of international and national importance), where these are also National Monuments. Undesignated archaeological and cultural heritage sites.
Medium	Recorded Monuments (RMP sites & SMR sites scheduled for inclusion in the next revision of the RMP) Protected Structures / NIAH sites (assessed by the NIAH to be of regional importance), where these are also Recorded Monuments. Newly identified archaeological sites, confirmed through archaeological investigation, to be added to the SMR. Undesignated archaeological and cultural heritage sites.
Low	Sites listed in the Dublin City Industrial Heritage Record (DCIHR) and National Inventory of Architectural Heritage (NIAH) Building for which there are no upstanding remains. Undisturbed greenfield areas and riverine environs, which have an inherent archaeological potential. Undesignated archaeological and cultural heritage sites.

Sensitivity / Significance	Criteria
Negligible	Assets with very little or no surviving archaeological and / or cultural heritage interest.

Definition of site destinations

National Monument

The National Monuments Act (1930, Section 2) defines a 'National Monument' as:

'a monument or the remains of a monument the preservation of which is a matter of national importance by reason of the historical, architectural, traditional, artistic or archaeological interest attaching thereto'.

The National Monuments legislation legally protects access to and the visual amenity associated with National Monuments and requires consent from the Minister for invasive works in their vicinity.

The defenses / town walls of medieval Dublin are a National Monument in accordance with national policy on town defenses (Department of Environment, Heritage and Local Government 2008).

Recorded Monuments

The primary source of information for archaeology is the Record of Monuments and Places (RMP) maintained by the Department of Housing, Local Government and Heritage (DHLGH). The RMP documents known upstanding archaeological monuments, their original location (in cases of destroyed monuments) and the position of possible sites in rural areas identified as cropmarks on vertical aerial photographs dating to before 1700 AD (with some later ones also being included). It is based on a comprehensive range of published and publicly available documentary and cartographic sources.

For the purpose of the assessment, the Sites and Monument Record (SMR) data and mapping as updated by the Archaeological Survey of Ireland (www.archaeology.ie) was examined so it could be used within an interactive identification and mapping system developed for Proposed Project.

Zones of Archaeological Potential

Zones of archaeological potential (ZAP) can be defined as areas within the urban and rural landscape that possess the potential to contain archaeological remains due to the settlement history of a place and or to the presence of topographical features such as rivers, lakes and high, defensible ground. An example of this is the RMP designated Historic City of Dublin, which is designated as a zone of archaeological potential covering an extensive area (RMP DU018-020).

Non-Designated Sites

Newly identified archaeological sites that have been confirmed through archaeological investigation (monitoring, testing, excavation, geophysical survey) are considered to be of medium importance. Such sites are undesignated as they have yet to be added to the SMR.

Potential or undesignated archaeological sites identified through aerial photography, historic mapping, stray finds are considered to be of low sensitivity, as they have yet to be ground-truthed through archaeological investigation. Similarly, undisturbed greenfield areas and riverine environs, which have an inherent but as yet unproven archaeological potential are considered to be of low sensitivity.

Magnitude of Impact

When assessing the impact magnitude, the following criteria need to be considered:

- Extent – size, scale and spatial distributions of the impact;
- Duration – period of time over which the impact will occur;
- Frequency – how often the impact will occur; and
- Context – how will the extent, duration, and frequency contrast with the accepted baseline conditions (see Table 1).

Table 3: Magnitude of Impact Criteria

Criteria	Impact Magnitude
These impacts arise where an archaeological / cultural heritage asset is completely and irreversibly destroyed by a proposed development. A change such that the value of the asset is totally altered or destroyed, leading to a complete loss of character, integrity, and data about the site.	High
An impact which, by its magnitude, duration or intensity alters an important / significant aspect of the environment. An impact like this would be where an archaeological / cultural heritage asset would be impacted upon leading to a significant loss of character, integrity and data about the site. Or an impact which by its magnitude results in the partial loss of a historic structure (including fabric loss or alteration) or grounds including the part removal of buildings or features or part removal of demesne land (e.g. severance, visual intrusion or degradation of setting and amenity). A permanent positive impact that enhances or restores the character and / or setting of a cultural heritage site or upstanding archaeological heritage site in a clearly noticeable manner.	Medium
A low impact arises where a change to the site is proposed which though noticeable is not such that the archaeological / cultural heritage character / integrity of the site is significantly compromised, and where there is no significant loss of data about the site. A positive impact that results in partial enhancement of the character and / or setting of a cultural heritage site or upstanding archaeological heritage site in the medium to long-term.	Low
An impact which causes very minor changes in the character of the environment and does not directly impact an archaeological / cultural heritage asset or affect the appreciation or significance of the asset. There would be very minor changes to the character and integrity of the asset and no loss of data about the site.	Negligible

Significance of Impact

The likely significance of impacts is determined by considering the baseline rating or sensitivity value of the asset upon which the impact has an impact and the magnitude of the impact

(Image 1). The impact significance is defined as Imperceptible, Not Significant, Slight, Moderate, Significant, Very Significant, or Profound (Table 4).

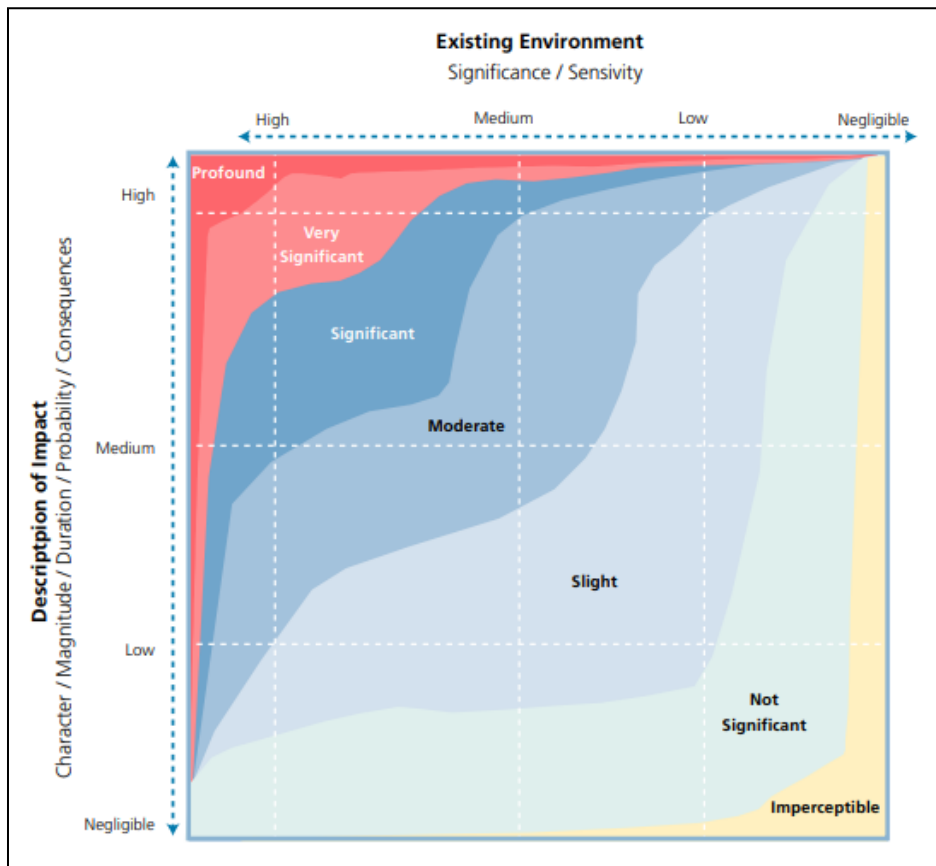


Image 1: Figure 3.5 Description of Impacts from the Draft EPA Revised Guidelines on Information to be Contained in EIS (EPA 2015)

Table 4: Defining Significance of Impacts

Impact	Definition
Imperceptible	An impact capable of measurement but without noticeable consequences.
Not Significant	An impact which causes noticeable changes in the character of the environment but without significant consequences.
Slight	An impact which causes minor changes in the character of the environment and does not affect an archaeological / cultural heritage asset in a moderate or significant manner.
Moderate	A moderate impact arises where a change to the site is proposed which though noticeable, does not lead to a significant loss of character, integrity and data about the archaeological / cultural heritage asset.
Significant	An impact which, by its magnitude, duration or intensity, alters an important aspect of the environment. An impact like this would be where part or all of a site would be permanently impacted upon, leading to a significant loss of character, integrity and data about the archaeological / cultural heritage asset.
Very Significant	An impact which, by its character, magnitude, duration or intensity significantly alters most of a sensitive aspect of the environment.
Profound	Applies where mitigation would be unlikely to remove adverse impacts. Reserved for adverse, negative impacts only. These impacts arise where an archaeological / cultural