

Appendix B9.3 – Impact Assessment Methodology

The determination of impacts on heritage assets follows the standard procedures applied to all Environmental Impact Assessments. This entails:

1. The identification of the receptor
2. An assessment of the receptor's importance (heritage significance)
3. The identification of the nature and magnitude of impact on the receptor
4. The identification of the significance of the impact

1: Identification of the receptor

Heritage assets comprise designated and non-designated elements of the historic environment and can be a building, monument, site, place, area or landscape 'positively identified as having a degree of significance' and are valued components of the historic environment. The value of a heritage asset is the level of archaeological interest it holds; the interest can be archaeological, architectural, artistic or historic. A heritage asset can hold one or more of these interests.

Baseline studies to establish the presence of heritage assets are undertaken following the methodologies outlined in the main text i.e. through consultation with HERs/SMRs, map regression exercises, site walkover surveys etc.

2: Assessment of the receptor's heritage significance

NPPF defines the Significance of Heritage Assets as

the value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, historic, Artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting

This definition is amplified in the accompanying English Heritage Practice Guide (2010) where Significance is

'...used as a catch-all term to sum-up the qualities that make an otherwise ordinary place a heritage asset. The significance of a heritage asset is the sum of its architectural, historic, artistic or archaeological interest.' (para 12)

In determining the level of significance for heritage assets, the Practice Guide forwards the principles employed for the designation of Scheduled Monuments and Listed Buildings as providing heritage assets are presented in as basic criteria (*Principles of Selection for Scheduled Monuments* and *Principles for Selection for Listed Buildings* (DCMS 2010).

Further guidance on the determination of the heritage significance of a heritage asset can be found in:

- English Heritage Monument Class Descriptions
- English Heritage Principles of Selection for Designation (2007)
- Regional Archaeological Research Frameworks
- Professional judgement

The designation of an asset as a World Heritage Site, Scheduled Monument, Listed Building, Registered Park or Garden, Historic Battlefield, Historic Wreak or Conservation Area indicates a level of heritage significance. However within the NPPF it is recognised that the absence of a designated status does not necessarily mean that a heritage asset is not of national importance. It is stated that should it be demonstrated that a non-designated asset is equivalent in significance to a scheduled monument it should be treated subject to the policies for a designated asset.

In ascribing levels of Heritage Significance to heritage assets, guidance presented in the Design Manual for Roads and Bridges, Volume II, Section 3, Part 2 (2007) have been used.

Table1: Establishing the ‘significance’ (‘importance’) of the heritage asset

Importance/ Significance	Heritage Asset		
	Archaeological Remains (Archaeological Interest)	Historic Buildings (Architectural/Artistic Interest and/or Historic Interest)	Historic Landscapes (Historic Interest)
Very High	<ul style="list-style-type: none"> • World Heritage Sites • Other sites of acknowledged international importance • Sites that can contribute significantly to acknowledged international research objectives 	<ul style="list-style-type: none"> • World Heritage Sites • Other buildings of recognized international importance 	<ul style="list-style-type: none"> • World Heritage Sites • Historic landscapes of international value, whether designated or not • Extremely well preserved historic landscapes with exceptional coherence, time depth, or other critical factor(s)

Importance/ Significance	Heritage Asset		
	Archaeological Remains (Archaeological Interest)	Historic Buildings (Architectural/Artistic Interest and/or Historic Interest)	Historic Landscapes (Historic Interest)
High	<ul style="list-style-type: none"> Scheduled Ancient Monuments Undesignated sites of schedulable quality and importance Sites that can contribute significantly to acknowledged national research objectives 	<ul style="list-style-type: none"> Scheduled Ancient Monuments with standing remains All Grade I and all Grade II* Listed Buildings (Scotland Category A) Some Grade II listed buildings that can be shown to have exceptional qualities in their fabric or historical associations not adequately reflected in their listing grade Conservation Areas containing very important buildings Undesignated structures of clear national importance 	<ul style="list-style-type: none"> Designated historic landscapes of outstanding interest Undesignated landscapes of outstanding interest Undesignated landscapes of high quality and importance, and of demonstrable national value Well preserved historic landscapes, exhibiting considerable coherence, time depth or other critical factor(s)
Medium	<ul style="list-style-type: none"> Undesignated assets that contribute to regional research objectives 	<ul style="list-style-type: none"> Some Grade II Listed Buildings (Scotland Category B) Historic (unlisted) buildings that can be shown to have exceptional qualities in their fabric or historical associations Conservation Areas containing buildings that contribute significantly to its historic character Historic townscape or built up areas with important historic integrity in their buildings, or built settings (e.g. including street furniture and other structures) 	<ul style="list-style-type: none"> Designated special historic landscapes Undesignated historic landscapes that would justify special historic landscape designation, landscapes of regional value Averagely well preserved historic landscapes with reasonable coherence, time depth or other critical factor(s)
Low	<ul style="list-style-type: none"> undesignated assets of local importance Assets compromised by poor preservation and/or poor survival of contextual associations Assets of limited value, but with potential to contribute to local research objectives 	<ul style="list-style-type: none"> Locally listed buildings (Scotland Category C) Historic (unlisted) buildings of modest quality in their fabric or historical association Historic townscape or built up areas of limited historic integrity in their buildings, or built settings (e.g. including street furniture and other structures) 	<ul style="list-style-type: none"> Robust undesignated historic landscapes Historic landscapes with importance to local interest groups Historic landscapes whose value is limited by poor preservation and/or poor survival of contextual associations
Negligible*	<ul style="list-style-type: none"> Assets with very little or no surviving archaeological interest 	<ul style="list-style-type: none"> Buildings of no architectural or historical note 	<ul style="list-style-type: none"> Landscapes with little or no significant historic interest

Adapted from Design Manual for Roads and Bridges, Volume II, Section 3, Part 2 (2007)

3: Identification of the magnitude of impact

The magnitude of impact is measured from the condition that would prevail in a 'do nothing' scenario and it is assessed without regard to the importance of the receptor (DMRB 2007).

The worst magnitude of impact would be complete physical removal of the heritage asset. In some instances it is possible to discuss percentage loss when establishing the magnitude of impact. However complex receptors will require a much more sophisticated approach (DMRB 2007).

Heritage assets are susceptible to numerous forms of development and non development impacts both during the construction process and as a consequence of the operational life of the proposed development. These can be either direct (physical) impacts or indirect (non-physical) impacts. Some but not all of potential impacts are listed below:

Direct impacts

- Direct impacts on heritage assets can include one or more of the following. Note this is not an exhaustive list.
- Excavations for demolition, drainage, foundations, borrow pits and decontamination
- Ground investigations (trial pits and boreholes)
- Topsoil removal
- Piling
- Removal of trees and vegetation
- Compaction
- Landscape planting and fencing
- Earth mounding
- Demolition of buildings
- Repairs to and alteration of buildings

Indirect Impacts

- Indirect impacts on heritage assets are those that:
- Alter the setting of heritage assets
- Contaminate buried remains
- Dry out or waterlog buried remains
- Disturb buildings or buried remains through vibration
- Cause damage to structures through pollution

In ascribing the magnitude of impact, guidance presented in the Design Manual for Roads and Bridges, Volume II, Section 3, Part 2 (2007) has been used and tailored in respect of setting impacts with regards to English Heritages publication The Setting of Heritage Assets (2011).

The magnitude of impacts through development upon heritage features as stated by the Design Manual for Roads and Bridges (Volume II, Section 3, Part 2) (2007) can be categorized as follows:

- Major
- Moderate
- Minor
- Negligible
- No Change

These are presented in Table 2 below.

Table 2: Establishing the magnitude of impact

Magnitude of Impact	Heritage Asset		
	Archaeological Remains (Archaeological Interest)	Historic Buildings (Architectural/Artistic Interest and/or Historic Interest)	Historic Landscapes (Historic Interest)
Major	<ul style="list-style-type: none"> • Change to most or all key archaeological materials, such that the resource is totally altered 	<ul style="list-style-type: none"> • Change to key historic building elements, such that the resource is totally altered 	<ul style="list-style-type: none"> • Major change to historic landscape character resulting from: <ul style="list-style-type: none"> • Changes to most key historic landscape elements, parcels or components • Extreme visual effects • Major change to noise or change to sound quality • Major changes to use or access
	<ul style="list-style-type: none"> • <i>Substantial or moderate changes to setting where setting elements affected make a high contribution to the significance of the asset</i> 		
Medium	<ul style="list-style-type: none"> • Changes to many key archaeological materials, such that the resource is clearly modified 	<ul style="list-style-type: none"> • Changes to many key historic building elements, such that the resource is significantly modified 	<ul style="list-style-type: none"> • Moderate change to historic landscape character resulting from: <ul style="list-style-type: none"> • Changes to many key historic landscape elements, parcels or components • Visual change to many key aspects of the historic landscape • Noticeable differences in noise or sound quality • Considerable changes to use or access
	<ul style="list-style-type: none"> • <i>Slight changes to the setting where setting elements affected make a high contribution to the significance of the asset</i> • <i>Substantial or moderate changes to setting where setting elements affected make a moderate contribution to the significance of the asset</i> 		
Low	<ul style="list-style-type: none"> • Changes to key archaeological materials, such that the asset is slightly altered 	<ul style="list-style-type: none"> • Change to key historic building elements, such that the asset is slightly different 	<ul style="list-style-type: none"> • Limited change to historic landscape character resulting from: <ul style="list-style-type: none"> • Changes to few key historic landscape elements, parcels or components • Slight visual changes to few key aspects of the historic landscape • Limited changes to noise levels or sound quality

			<ul style="list-style-type: none"> Slight changes to use or access
			<ul style="list-style-type: none"> <i>Slight changes to setting where setting elements affected make a moderate contribution to the significance of the asset</i> <i>Substantial, moderate or minor changes to setting where setting elements make a slight contribution to the significance of the asset</i>
Negligible	<ul style="list-style-type: none"> Very minor changes to archaeological materials 	<ul style="list-style-type: none"> Slight changes to historic buildings elements 	<ul style="list-style-type: none"> Very small change to historic landscape character resulting from: Very minor changes to key historic landscape elements, parcels or components Virtually unchanged visual effects Very slight changes to noise levels or sound quality Very slight changes to use or access
			<ul style="list-style-type: none"> <i>Any change to setting elements when setting elements make a negligible contribution to the significance of the asset</i>
No change	No change		

Adapted from Design Manual for Roads and Bridges, Volume II, Section 3, Part 2 (2007)

4: Identification of the significance of impact

The significance of an impact is devised by cross referencing the importance of the receptor with the magnitude of the impact, see Table 3. Please note that these can be adverse or beneficial which should be stated as appropriate.

Table 3: Establishing the significance of impact

Magnitude of impact	Importance of Heritage Asset				
	Very High	High	Medium	Low	Negligible
No change	Neutral	Neutral	Neutral	Neutral	Neutral
Negligible	Slight	Slight	Neutral/ Slight	Neutral/Slight	Neutral
Low	Moderate/Large	Moderate/ Slight	Slight	Neutral/Slight	Neutral/Slight
Medium	Large/ Very Large	Moderate/ Large	Moderate	Slight	Neutral/Slight
Major	Very Large	Large/ Very Large	Moderate/Lar ge	Slight/ Moderate	Slight

Adapted from Design Manual for Roads and Bridges, Volume II, Section 3, Part 2 (2007)