Introduction

This Appendix 11.1 'Methodology' details the methodology used for the assessment of the Proposed Development as described in Chapter 4 of this ES.

The assessment has been undertaken with regard to the current best practice, as outlined in published guidance:

- 'Guidelines for Landscape and Visual Impact Assessment. Third Edition' published in April 2013 by the Landscape Institute and the Institute of Environmental Management and Assessment;
- GLVIA3 Statement of Clarification 1/13 – Landscape Institute (2013);
- 'An Approach to Landscape Character Assessment' – Natural England (2014);
- 'The Guidelines for Environmental Impact Assessment' - (2004) Institute for Environmental Management and Assessment; and
- 'Photography and photomontage in landscape and visual assessment' (2011) - Landscape Institute Advise Note 01/11.

The study area for the assessment extends to 5 km from the Application Site boundary. Whilst there may be the potential for effects of the Proposed Development to extend beyond this limit, it is considered that any such effect is unlikely to be significant as the visual perception of the Proposed Development within the landscape diminishes with ever increasing distance and the Proposed Development where visible is seen as increasingly smaller component of a wider composite landscape.

The significance of effects which are likely to occur as a result of the Proposed Development are determined through a combination of the sensitivity of the landscape character, landscape element or visual receptor and the magnitude of change that they would experience. Table 11.1.4 sets out the Significance of Effects Matrix and identifies which effects are considered significant or potentially significant.

Landscape Character Assessment Methodology

The landscape character assessment sets out the landscape baseline under two categories (GLVIA3, page 71):

- Landscape elements and features.
- Landscape character and key characteristics, including landscape value.

The assessment then identifies landscape receptors before assessing the sensitivity of the receptors and the magnitude of the effects on those receptors. Combining sensitivity of the receptor and magnitude of effect leads to an assessment of the significance of landscape effects arising from the Proposed Development.

The landscape assessment evaluates the effects of the Proposed Development on individual landscape elements and features, such as topography, trees and hedges which have been identified within the study area in the baseline survey. The assessment considers the sensitivity of these landscape resources and identifies the magnitude of change that the Proposed Development would create. The sensitivity of an individual

landscape element or feature reflects factors such as its quality, value, contribution to landscape character and the degree to which the element can be replaced. An element or feature may be more sensitive in one location than another. Therefore it is not possible to simply place different types of landscape elements or features into sensitivity bands. Where individual landscape elements or features have been affected professional judgement has been used to give an objective evaluation of its sensitivity. Justification is given for this evaluation where necessary.

Sensitivity of landscape features is determined by a combination of the value that is attached to a landscape feature or element and the susceptibility of the landscape feature/element to changes that would arise as a result of the Proposed Development – see Pages 88-90 of GLVIA3. Both value and susceptibility are assessed as high, medium or low. Professional judgement has been used to determine the magnitude of direct physical impacts on individual existing landscape features as detailed below in Table 11.1.3.

The assessment considers the sensitivity of the landscape character and the magnitude of change which would result from the Proposed Development. The sensitivity of landscape character is an expression of the landscape's ability to accommodate change. It varies depending on factors such as the existing land use, pattern and scale of the landscape, complexity, the degree of openness, condition, the value placed on the landscape and any designations that may apply. In most cases the landscape components in the immediate surroundings strongly influence the landscape character more so than distant elements or features. However, at elevated viewpoints it is possible to feel a sense of exposure or remoteness due to the absence of nearby features.

Sensitivity is determined by a combination of the value that is attached to a landscape and the susceptibility of the landscape to changes that would arise as a result of the Proposed Development – see Pages 88-90 of GLVIA3. Both value and susceptibility are assessed as high, medium or low.

Landscape value is considered in terms of factors such as the condition and quality of the landscape, the scenic quality, the rarity of the landscape in the locality and at a larger scale, the representativeness of the landscape, any particular conservation interests that may be present in the landscape, the recreation or amenity value of the landscape, its perceptual aspects such as wildness or tranquillity, and any associations that may exist between the local landscape and historical people or events. This list is not necessarily exhaustive or definitive. (GLVIA3, Box 5.1, page 84).

The significance of effects on landscape character and landscape elements and features is determined by combining the sensitivity of the landscape character, elements or features with the magnitude of change. Those effects identified as being major and / or moderate may be regarded as significant effects with respect to the Town and Country Planning (Environmental Impact Assessment) Regulations 2011.

Table 11.1.1 Sensitivity of Landscape Features, Character and Views

		VALUE		
		HIGH	**MEDIUM**	**LOW**
SUSCEPTIBILITY	**HIGH**	High	High	Medium
	MEDIUM	High	Medium	Low
	LOW	Medium	Low	Low

Tables 11.1.2 – 11.1.5 set out the criteria and significance thresholds for measuring the effects of the Proposed Development on the landscape character and landscape elements and features (the landscape resource) of the Application Site and surrounding area together with the definition of significance. The nature of the effects can be either, adverse or beneficial.

Unless otherwise stated the effects of the Proposed Development are assessed to be of an adverse nature.

Table 11.1.2 Generic Criteria for Sensitivity

HIGH	Areas that exhibit a strong positive character with valued elements or features that combine to give unity, richness and harmony. These are landscapes that may be considered to be of particular importance to conserve and which may be particularly sensitive to change in general and which may be detrimental if change is inappropriate. High quality or nationally recognised landscapes such as AONBs and National Parks.
MEDIUM	Areas that exhibit positive character but which may have evidence of past alteration to/degradation/erosion of elements or features resulting in areas of more mixed character. Potentially sensitive to change in general; again change may be detrimental if inappropriate but it may require special or particular attention to detail. Regionally or locally recognised landscapes such as SLAs.
LOW	Areas generally negative in character with few, if any valued elements or features. Scope for positive enhancement.

Table 11.1.3 Criteria for Magnitude of Change for Landscape Character and Landscape Resource Receptors

HIGH	Total loss or major alteration to (an) existing landscape character, element or feature characteristic to the Application Site or a specific landscape type / area.
MEDIUM	Partial loss or alteration to (an) existing landscape character element or feature characteristic to the Application Site or a specific landscape type / area.
LOW	Minor loss or alteration to part of (an) existing landscape character, element or feature characteristic to the Application Site or a specific landscape type / area.
NEGLIGIBLE/NO CHANGE	No notable loss or alteration to (an) existing landscape character, element or feature characteristic to the Application Site or a specific landscape type / area.

Table 11.1.4 Significance Matrix of Effects for Landscape Character and Landscape Resource Receptors

Magnitude of Change	Sensitivity of Receptor			
	High	**Medium**	**Low**	**Negligible**
High	Major	Major	Moderate	Negligible
Medium	Major	Moderate	Minor to Moderate	Negligible
Low	Moderate	Minor to Moderate	Minor	Negligible
Negligible	Negligible	Negligible	Negligible	Negligible

Table 11.1.5 Definition of Significance criteria for Landscape Character and Landscape Resource Receptors

MAJOR ADVERSE EFFECT	The proposed scheme would result in effects that are at complete/considerable variance with the landform, scale and pattern of the landscape that cannot be fully mitigated; would permanently degrade, diminish or destroy the integrity of valued characteristic features, elements and/or setting; would cause a very high quality landscape of recognised value to be permanently changed and its quality diminished.
MODERATE ADVERSE EFFECT	The proposed scheme would be out of scale with the landscape or at odds with the local pattern and landform; will leave an adverse impact on a landscape of recognised quality.
MINOR ADVERSE EFFECT	The proposed scheme would not quite fit into the landform and scale of the landscape; affect an area of recognised landscape quality.
NEUTRAL/NOT SIGNIFICANT	The proposed scheme would complement the scale, landform and pattern of landscape, maintain existing landscape quality.
MINOR BENEFICIAL EFFECT	The proposed scheme has the potential to improve the landscape quality and character; fit in with the scale, landscape and the pattern of the landscape; enable the restoration of valued characteristic elements or features partially lost through other land uses.
MODERATE BENEFICIAL EFFECT	The proposed scheme would have the potential to fit in very well with the landscape character; improve the quality of the landscape through removal of damage caused by existing lands uses.
MAJOR BENEFICIAL EFFECT	The proposed scheme would fit in very well with the landscape character and would significantly improve the quality of the landscape through removal of damage caused by existing land uses.

Visual Assessment Methodology

The comprehensive visual assessment identifies the visual effects that the Proposed Development would have upon the visual amenity of receptors located within the surrounding landscape and townscape. The visual assessment is based on the Proposed Development detailed in the parameters plans and assesses the change in the view that would result if the scheme were to be constructed.

The assessment has examined views which would be observed from public locations of which some are representative or illustrative of views from residential properties. Three visual assessments have been made (a) during the construction phase; (b) during the operational phase at year one and (c) during the operational phase at year fifteen. A year-one assessment considers the effect that the Proposed Development would have upon views after completion and before the proposed planting would have a significant mitigating effect. The second visual assessments consider views after 15 years, taking into account vegetation growth during the intervening period. The visual assessment is based on the site visit supported by photographs and photomontages prepared based on the photographic evidence as recorded in early February 2015.

The sensitivity of receptor groups depends on factors such as duration of view, the angle at which they would see the Application Site and the nature of the viewer e.g. resident, tourist or worker. The sensitivity of receptors is established based on the value attached to a particular view and susceptibility of receptors to a particular type of development. In general residential receptors, tourists, recreational users of public rights of way and receptors gaining views from recognised vantage points are considered to attach a higher value to their views than people travelling along highways or at places of work.

Determining levels of magnitude depends on how prominent, or noticeable, the development would be in the landscape. This is affected by factors such as distance, angle of view, visual screening, the focus of the view and the nature and scale of other landscape features within the view. In order to establish the magnitude of change the assessment needs to consider such factors as scale and size of the visual effects, their duration and reversibility. The assessment of magnitude of change would also consider the degree of contrast and integration of the Proposed Development into the landscape perceived, its scale, mass and colour. With regard to the Proposed Development the duration of effects would be long term and considered, at this stage, not reversible.

The significance of effects on visual receptors is determined by combining the sensitivity of the visual receptor with the magnitude of change. Those effects identified as being of major significance may be regarded as significant effects with regard to the Town and Country Planning (Environmental Impact Assessment) Regulations 2011.

Tables 11.1.6 – 11.1.9 below set out the criteria and significance thresholds for visual receptors. Effect on visual amenity is determined by the relationship between the sensitivity of the receptor and the magnitude of change that would result from the Proposed Development. Effects may be adverse, beneficial or neutral.

Unless otherwise stated the effects of the Proposed Development are assessed to be of an adverse nature.

Table 11.1.6 Criteria for Sensitivity

HIGH	For example, residential properties and public rights of way.
MEDIUM	For example, sporting and recreational facilities, places of worship, public open space.

LOW	For example, industrial, highway users and commercial premises.

Table 11.1.7 Criteria for Magnitude of Change

HIGH	A major change in the view which has a defining influence on the overall view.
MEDIUM	Some change in the view that is clearly visible and forms an important but not defining element in the view.
LOW	Some change in the view that is not prominent but visible to some visual receptors.
NEGLIGIBLE/NO CHANGE	No change or negligible change in views.

Table 11.1.8 Significance Matrix of Effects for Visual Receptors

Magnitude of Change	**Sensitivity of Receptor**				
		High	**Medium**	**Low**	**Negligible**
	High	Major	Major	Moderate	Negligible
	Medium	Major	Moderate	Minor to Moderate	Negligible
	Low	Moderate	Minor to Moderate	Minor	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

Table 11.1.9 Definition of Significance Criteria for Visual Effects

MAJOR ADVERSE EFFECT	Where the scheme would cause a significant deterioration in the existing view.
MODERATE ADVERSE EFFECT	Where the scheme would cause a noticeable deterioration in the existing view.
MINOR ADVERSE EFFECT	Where the scheme would cause a barely perceptible deterioration in the existing view.
NEUTRAL/NOT SIGNIFICANT	No discernible improvement or deterioration in the existing view.
MINOR BENEFICIAL EFFECT	Where the scheme would cause a barely noticeable improvement in the existing view.
MODERATE BENEFICIAL EFFECT	Where the scheme would cause a noticeable improvement in the existing view.
MAJOR BENEFICIAL EFFECT	Where the scheme would cause a significant improvement in the existing view.

Table 11.1.9 gives the overall degree of significance threshold for visual receptors. Effects are determined by the relationship between the sensitivity of the receptor and the magnitude of change that would result from the Proposed Development.

Photographs have been taken digitally using a 50mm fixed focal length lens with a full frame camera Canon 5D II on a static tripod. All of the representative viewpoints have been taken at 1.7m above ground level. Viewpoints include, where relevant, residential properties, highways, public footpaths, bridleways, recreation and places of work.

A plan showing three Zones of Theoretical Visibility (ZTVs) (see **Figure 11.2**) has been prepared for the purpose of the assessment. It is based on the extent of the built form associated with the Proposed Development which is likely to fall within the area known as the Southern Bomb Stores. It is acknowledged that the ZTV does not relate the full extent of the Application Site as the development proposed in its southern part, such as the access and road junction, are likely to be less visually evident across the study area.