

8.0 LANDSCAPE & VISUAL

Introduction

8.1 The aim of this Chapter is to describe the landscape character and visual amenity associated with the Ryedale Gas Project and its surroundings. Based on desktop studies and field surveys carried out in December 2009, the Chapter firstly sets out the baseline landscape and visual appraisal of the Application Site. It then identifies the likely significant effects of the Proposed Development on these baseline conditions, the scope for mitigating any adverse effects and the residual effects. This Chapter has been prepared by Barton Willmore Landscape Planning and Design.

8.2 This Chapter should be read in conjunction with the following drawings:

- **Figure 8.1, 8.2 and 8.3:** Site Appraisal Plans at 1:5,000 scale
- **Figure 8.4 and 8.5:** Visual Appraisal Plan at 1:10,000 scale
- **Figure 8.6:** Landscape Strategy at 1:1250 scale

8.3 The text also makes reference to photographs of the Application Site and its surroundings, including a series of both Site Appraisal Photographs and Site Context Photographs also contained in **Appendix 8.1**.

8.4 The brief for the preparation of this Chapter of the ES can be summarised as follows:

- To carry out a landscape and visual appraisal of the Application Site and its surroundings in order to assess its character and visibility, and its relationship with adjacent areas;
- To undertake a landscape and visual impact assessment of the Proposed Development in accordance with current best practice guidelines and to quantify the magnitude and significance of the impacts, both before and after mitigation;
- To advise on a landscape strategy for the Site; and
- To give consideration to the proposals in the context of the policies of the Development Plan, insofar as they refer to landscape and visual matters.

Landscape Planning Policy

- 8.5 This Section summarises the issues of landscape significance set out in the main Policy Documents at the National, Regional and Local levels which apply to the Application Site and its surroundings. These policies provide the context against which the landscape impact of the proposals will be considered.
- 8.6 **National Planning Policy:** There are a variety of documents at the National level, which provide the context for developments. For the most part, these relate to Planning Policy Statements and Minerals Policy Statements.
- 8.7 ***Planning Policy Statement 1 (PPS1): Delivering Sustainable Development*** One of the key principles in PPS1 (iv) is to promote high quality inclusive design in the layout of new developments in terms of function and impact, not just for the short term but over the lifetime of the development. PPS1 considers that design which fails to take the opportunities available for improving the character and quality of an area should not be accepted.
- 8.8 Paragraph 14 refers to the Government's commitment to developing strong, vibrant and sustainable communities and to promoting community cohesion in both urban and rural areas.
- 8.9 Paragraph 17 refers to protecting and enhancing the quality of the natural and historic environment, in both rural and urban areas and seeks to protect and enhance the quality, character and amenity value of the countryside and urban area as a whole. Paragraph 18 acknowledges the importance of the local environment and the need to maintain and improve it. Paragraph 20 states that Development Plans should take account of environmental issues such as the protection of the wider countryside and the impact of development on landscape quality and the need to improve the built and natural environment in and around urban areas and rural settlements, including the provision of good quality open space.
- 8.10 In terms of delivering sustainable development, paragraph 27 (ix) advises planning authorities to seek to enhance as well as protect the historic environment and landscape and townscape character.
- 8.11 Paragraphs 33 to 39 discuss the theme of Design and refer to good practice set out in key publications.

8.12 ***Planning Policy Statement 7 (PPS7): Sustainable Development in Rural Areas***

While PPS7 is concerned mainly with development in rural areas, Paragraph 24 also identifies that tools such as landscape character assessments provide protection for landscape outside nationally designated areas that are particularly highly valued locally.

8.13 ***Minerals Policy Statement 1 – Planning and Minerals*** This document provides guidance on the consideration of developments for mineral extraction. One of the national objectives for minerals planning in paragraph 9 is the following:

“to protect and seek to enhance the overall quality of the environment once extraction has ceased, through high standards of restoration, and to safeguard the long-term potential of land for a wide range of after-uses.”

8.14 Paragraph 14 Protection of heritage and countryside advises that major mineral developments in a number of locations, including national parks, should be permitted only in exceptional circumstances and where various criteria have been assessed. One of these relates to landscape:

“any detrimental effect on the environment, the landscape and recreational opportunities and the extent to which that could be moderated.”

8.15 It goes on to state that:

“the development and all restoration should be carried out to high environmental standards, through the application of appropriate conditions, where necessary, and be in character with the local landscape and its natural features.”

8.16 With regard to those minerals developments not considered to be major, it states that:

“great weight [...be...] given in decisions to the conservation of the natural beauty of the landscape and countryside, the conservation of wildlife and the cultural heritage and the need to avoid adverse impacts on recreational opportunities.”

8.17 There is a focus on the protection of SSSIs, statutorily-protected species, **“sites of biodiversity, geodiversity, landscape, historical and cultural heritage”**, listed buildings, ancient woodland, agricultural land and the value of the wider countryside and landscape including opportunities for recreation and access to land. The document stipulates the minimisation of the impact of minerals operations on the quality and character of the wider countryside and consideration of the cumulative effects of local developments.

8.18 Appendix 4 of Minerals Policy Statement 1 – Planning and Minerals deals specifically with oil and gas. With regard to pipelines, paragraph 3.18 states:

“In drawing up proposals, operators should avoid environmentally sensitive locations and take account of any potential impacts on nature conservation, for example the movement of animals.”

8.19 **Regional Planning Policy:** Regional Planning Policy provides strategic guidance for the Yorkshire and Humber Region as follows:

8.20 ***Regional Spatial Strategy (RSS) for Yorkshire and Humber*** The Regional Spatial Strategy (RSS) for Yorkshire and Humber was published and adopted in May 2008 and sets out the relevant regional policy to 2026. A number of policies are relevant to consideration of landscape in this application.

8.21 Policy YH1: Overall Approach and Key Spatial Priorities, sets out the commitment to:

“Protect and enhance the region’s environmental resources including areas of international and national importance, and the character and qualities of the Region’s coast and countryside including for economic and social development”

8.22 Policy ENV6: Forestry, Trees and Woodlands stipulates the protection and enhancement of existing tree and woodland resources and seek to increase the total area of woodland in areas including upland catchments and most parts of functional floodplains.

8.23 Policy ENV8: Biodiversity, states that the Region:

“will safeguard and enhance biodiversity and geological heritage, and ensure that the natural environment functions as an integrated network of habitats.”

- 8.24 Policy ENV10: Landscape focuses on the protection and enhancement of landscapes that contribute to the distinctive character of the region, including North York Moors National Parks and degraded rural landscapes, notably parts of the Vale of York and Humberhead Levels.
- 8.25 **County Planning Policy:** County planning policy is provided in the North Yorkshire Minerals Local Plan.
- 8.26 ***North Yorkshire Minerals Local Plan*** North Yorkshire Minerals Local Plan contains policies which relate to minerals development. The policies were due to expire on the 27th September 2007, but the Secretary of State has saved certain policies for 3 years, or until policies being developed in the Minerals and Waste Development Framework (MWDF) supersedes them. On the 30th March 2009 the Council received confirmation from the Government Office for Yorkshire and the Humber that the draft Minerals and Waste Core Strategies of the MWDF should be withdrawn. A number of the saved policies from the North Yorkshire Minerals Local Plan are relevant to consideration of landscape in this application.
- 8.27 Policy 4/6A Nature Conservation and Habitat Protection – Local aims to preserve wildlife habitats. It states:

“In making decisions on planning applications, the Mineral Planning Authority will protect the nature conservation or geological interest of Local Nature Reserves and of other sites having a nature conservation interest or importance, and will have regard to other wildlife habitats.”

- 8.28 Policy 4/14 Local Environment and Amenity seeks to avoid any unacceptable impact of mining operations on the local environment or residential amenity.
- 8.29 Policy 4/15 Public Rights of Way has regard to ensuring continuity of public rights of way in the vicinity of mining operations. It states that:

“Proposals for mining operations and the associated depositing of mineral waste which would interrupt, obstruct or conflict with use of a public right of way will only be permitted where satisfactory provision has been made in the application for protecting the existing right of way or for providing alternative arrangements both during and after working.”

- 8.30 Policy 4/18 Restoration to Agriculture refers to the after-use restoration of the landscape. It states that:

“Where agriculture is the intended primary afteruse, the proposed restoration scheme should provide for the best practicable standard of restoration. Such restoration schemes should, where possible, include landscape, conservation or amenity proposals provided that these do not result in the irreversible loss of best and most versatile land.”

- 8.31 Policy 4/20 Aftercare deals with landscape management to approved standards in the post-restoration period. It states that:

“Planning permissions which are subject to conditions requiring restoration to agriculture, forestry or amenity (including nature conservation) will additionally be subject to an aftercare requirement seeking to bring the restored land up to an approved standard for the specified after-use. Normally this requirement will run for a period of five years following restoration. Additionally, where forestry and amenity (including nature conservation) afteruses are proposed, the Mineral Planning Authority may seek to secure longer term management agreements.”

- 8.32 Policy 7/10 Restoration provides specific conditions for the restoration of different elements of oil and gas sites. It states that:

“Planning permission for the exploration, appraisal or development of oil or gas resources will only be permitted

when provision is made for the full restoration of the site and its related means of access to a beneficial after use. In particular, the Mineral Planning Authority will impose:

i) a 1 year time limit for the restoration of exploration sites or the submission of proposals for continued appraisal work;

ii) a 2 year time limit for the restoration of appraisal sites or the submission of proposals for development as a production site; and

iii) a 2 year time limit for the restoration of a production site, to run from the cessation of significant oil or gas production from the site."

8.33 Policy 7/11 Retention of Features requires a clear demonstration of benefit in the non-restoration of certain elements of a gas or oil scheme. It states that:

"Proposals to retain sections of access road, hardstandings, fencing and screening as an exception to the full restoration of exploration, appraisal or production sites will be approved only where a clear agricultural or other benefit can be demonstrated."

8.34 ***North York Moors Local Development Framework (2008)*** (~~Ref 8.6~~) Adopted in November 2008, the North York Moors National Park Local Development Framework Core Strategy and Development Policies Development Plan Document supersedes the policies in the North York Moors Local Plan (2003).

8.35 Development Policy 1 Environmental Protection focuses on the conservation and enhancement of the special qualities of the North York Moors National Park. It states that development will only be permitted where:

- **"It will not have an unacceptable adverse impact on surface and ground water, soil, air quality and agricultural land;**
- **It will not generate unacceptable levels of noise, vibration, activity or light pollution;**

- **There will be no adverse effects arising from sources of pollution which would impact on the health, safety and amenity of the public and users of the development; and**
- **Land stability can be achieved without causing unacceptable environmental or landscape impact."**

8.36 Core Policy C Natural Environment, Biodiversity and Geodiversity focuses on the conservation and enhancement of the natural environment of the National Park. It states that all development proposals will be expected to:

- **"Provide an appropriate level of protection to legally protected sites and species;**
- **Maintain, and where appropriate enhance, conditions for priority habitats and species identified in the North York Moors Local Biodiversity Action Plan;**
- **Maintain, and where appropriate, enhance recognised geodiversity assets;**
- **Maintain and where appropriate enhance other sites, features, species or networks of ecological or geological interest and provide for the appropriate management of these;**
- **Maximise opportunities for enhancement of ecological or geological assets, particularly in line with the North York Moors Local Biodiversity Action Plan, Tees Valley and North East Yorkshire Geodiversity Action Plans and the regional Habitat Enhancement Areas; and**
- **Mitigate against any necessary impacts through appropriate habitat creation, restoration or enhancement on site or elsewhere."**

8.37 Core Policy E Minerals focuses on the extraction of stone including aggregate production. For policy regarding oil and gas extraction it makes reference to a number of other documents. These include Minerals Policy Statement 1 – Planning and Minerals and its Appendix 4 which have been reference above.

8.38 Core Policy G Landscape, Design and Historic Assets seeks high quality sustainable design:

“which conserves or enhances the landscape setting, settlement layout and building characteristics of the landscape character areas identified in the North York Moors Landscape Character Assessment. Particular protection will be given to those elements which contribute to the character and setting of:

- **Conservation Areas;**
- **Listed Buildings;**
- **Historic Parks and Gardens; and**
- **Scheduled Monuments and other sites of archaeological importance.”**

8.39 Development Policy 3 Design specifies the need for a landscaping scheme as an integral part of development proposals.

8.40 Development Policy 5 Listed Buildings stipulates that development will only be permitted where it does not have an unacceptable impact on the special historic or architectural interest or setting of a listed building.

8.41 Development Policy 7 Archaeological Assets protects the integrity and setting of a Scheduled Monument or other sites or remains of national importance. In the case of sites or remains of regional or local importance the archaeological interest must be preserved in situ. In all cases an archaeological assessment is required.

8.42 ***North York Moors - Supplementary Planning Documents*** In addition, the North York Moors Design Guide contains guidance on landscape setting and sustainable design as well as treatment of trees and landscape in development proposals. Extracts of this design guide can be found in **Appendix 8.2**.

8.43 **District Planning Policy:** Pending completion of the Ryedale Local Development Framework, local planning policies are set out in the 'saved' policies of the Ryedale Local Plan as follows:

8.44 ***Ryedale Local Plan (2002) saved policies*** The Ryedale Local Plan was adopted in March 2002. On commencement of the Planning and Compulsory Purchase Act 2004, all existing adopted local plans and relevant structure plans were automatically saved for 3 years. As the progress for adoption of new Local Development Framework has not progressed at the speed envisaged in the Act, Local Planning Authorities wishing to retain specific policies beyond the expiry of the above mentioned 3 year period i.e. 27 September 2007, needed to receive the Secretary of State's agreement in the form of a direction to save such policies until the Local Development Documents are in place. Pending the adoption of the Ryedale District Local Development Framework, the Secretary of State directed that a number of policies should be saved beyond 27th September 2007. These include the following which are of relevance to the consideration of landscape with regard to the Proposed Development.

8.45 Policy ENV3 Development within the Areas of High Landscape Value directs that within the Wolds and the Fringe of the Moors Areas of High Landscape Value (in which part of the Proposed Development is located):

“(i) Development which would materially detract from the special scenic quality of the landscape will be resisted;

...

(iii) Large-scale development will only be permitted where it can be clearly demonstrated that the proposal would have significant economic or social benefits, is incapable of being located outside the Areas of High Landscape Value and is designed to do as little damage to the environment as practicable;

(iv) Non-agricultural buildings and development will be required to reflect the traditional character of buildings and landscape form in terms of siting, design, and use of materials traditional to the area.

...

(v) Landscaping schemes will be required to reflect local landscape character in terms of form and extent of planting and in terms of species used;

(vi) The conservation and appropriate management of features important to the local landscape such as trees, hedges, copses, woodlands and grassland will be encouraged."

8.46 Policy ENV7 Landscaping stipulates that development proposals include a high-quality landscape scheme that complements the local environment, does not detract from archaeological or ecological value in the vicinity and includes native, locally appropriate plant species. Existing trees, including veteran trees, should be retained wherever possible, based on survey and tree protection information and method statements where necessary. With regard to the removal of existing trees, the policy states:

"Proposals to remove existing trees or hedges will only be permitted if they represent a material threat to public safety or property, are diseased or dying, involve a species which is detrimental to landscape quality or where the benefits of the development would clearly outweigh the importance of the trees and hedges on the site.

Where it is appropriate to remove a tree or hedgerow, the District Council will require the planting of sufficient replacements to compensate for the detrimental effect on the landscape, on wildlife and on atmospheric quality.

In some cases, off-site landscaping may be required as an alternative to, or in conjunction with, on-site landscaping."

8.47 Policy ENV12 Sites of importance for nature conservation states that:

"Proposals for development that would have a material direct or indirect detrimental effect on a Site of Importance for Nature Conservation or a Local Nature Reserve will only be approved:

- Where conditions and/or planning obligations can be used to prevent material damage to the value of the site; or
- Where it can be demonstrated that the benefits of the development clearly outweigh the significant importance of the site and that no suitable alternative site is available. In such cases, the District Council will use conditions and/or planning obligations to ensure that damage to the site is kept to an absolute minimum and that appropriate compensatory habitat creation and/or enhancement measures are carried out on or close to the site.”

8.48 Policy ENV18 Ponds stipulates similar conditions to ENV12 for instances where development would have a negative impact on an important pond.

Ryedale Supplementary Planning Guidance (Ref 8.9): The Ryedale Rural Design Guide is largely focused on residential development and is therefore not applicable to the Proposed Development. Landscaping on Development Sites (adopted January 2005) contains detailed guidance on hard and soft landscape treatments that are appropriate to the District and prescription on the information relating to landscape proposals that will be required by the council.

Assessment Methodology

- 8.49 The landscape and visual impact assessment has been prepared in accordance with the guidelines set out in the Landscape Institute and Institute of Environmental Management and Assessment’s “Guidelines for Landscape and Visual Impact Assessment” (Spon Press 2002). The methodology for the landscape and visual appraisal is set out in **Appendix 8.3**. Landscape impact assessment, in common with any assessment of environmental effects, includes a combination of objective and subjective judgements and it is therefore important that a structured and consistent approach is used.
- 8.50 The Scoping Opinion was submitted on behalf of Moorland, in accordance with Regulation 10 of the EIA Regulations 1999, to North Yorkshire County Council on the 18th November 2009.

Limitations, Constraints and Assumptions

- 8.51 In undertaking the Landscape and Visual assessment of the Application Site and wider surrounding area, there are a number of limitations and constraints affecting the outputs from this work. These include:
- i) The baseline assessment has been based on information readily available at the time of undertaking the assessment using sources listed in the methodology – Appendix 8.3;
 - ii) During site visits, weather conditions, the time of day and seasonal factors have influenced the visual assessment and photographic record of the Application Site. Every effort has been made to ensure that the photographs and their locations are “representative” of the Application Site and its surroundings;
 - iii) Access to assess the predicted visual effects from private individual properties has not been possible for all the residential dwellings surrounding the Application Site and the assessment of likely visual effects has been made from vantage points and representative views taken from the nearest available public viewpoint.
- 8.52 In undertaking the assessment of landscape and visual effects of the Proposed Development, the following assumptions have been made:
- i) That the establishment and growth rates for the landscape mitigation proposals are based on established forestry (Forestry Commission / Enterprise) methods and it is assumed that new planting of trees and shrubs will achieve a height of 10 metres after 10 - 15 years unless planted as semi – mature specimens;
 - ii) That the implementation of the landscape/habitat creation proposals will be phased and implemented either in advance (where possible) or immediately at the end of construction works or phase it relates to.

Baseline Conditions

- 8.53 The initial step in any landscape or visual impact assessment is to review the existing landscape and visual resource in the vicinity of the Proposed Development. The data collected will form the basis from which the magnitude and significance of the landscape and visual effects of the development may be identified and assessed. The

purpose of the baseline studies is to record and analyse existing landscape features and characteristics, and the value or importance of the landscape and visual resources in the vicinity of the Proposed Development. Subsequent field survey work, including the assessment of the approximate visibility of the Application Site as existing (its Zone of Visual Influence), identifies and records specific sensitive receptors.

- 8.54 Landscape effects include the direct and indirect impacts of the development on individual landscape elements and features, as well as the effect upon the general landscape character and quality of the surrounding area. Visual effects consider the changes in the character of the available views resulting from the development and changes in the visual amenity of the visual receptors (which includes residents, users of public open spaces, PRsOW, and roads). A study has been carried out which systematically identifies all the visual receptors that are likely to be affected by the development and seeks to assess the impact of the development on these receptors, including its magnitude of effect and significance. These have been recorded systematically within Visual Impact Tables appended to this Chapter, in **Appendix 8.4**.

Landscape Character

- 8.55 Planning Policy Statement 7 (PPS7), August 2004, at paragraphs 13 and 24 acknowledges the role of landscape character assessments in informing Local Planning Authorities on policy and guidance. National landscape guidance has now moved from concentrating efforts on designating and protecting those areas of the countryside which are most important for landscape and wildlife, that is the quality approach, to a character approach as a way of enriching the quality of the whole countryside whilst accommodating appropriate development, in order to complement the protection which designations offer.
- 8.56 The following descriptions of landscape character within the study area form a hierarchy of assessment. The descriptions start at a national level, then move through regional and district scales leading to detailed descriptions of the landscape character which applies to the Application Site and its surroundings and against which the Proposed Development can be considered. These are not intended to be an exhaustive list, but highlight those aspects of the Proposed Development which need the most careful consideration.

National Character Assessment

8.57 The Countryside Agency and English Nature (which have now been amalgamated to form Natural England) have produced a Countryside Character Map of England and the landscape of which encompasses the Site is described in Volume 1: The North East and in Volume 3: Yorkshire and the Humber.

8.58 The northern area of the Application Site which includes the majority of the proposed pipeline is identified as Character Area 25: North Yorkshire Moors and Cleveland Hills. The detailed extracts of this assessment are included in **Appendix 8.5** with the key features relevant to this assessment identified below:

- **Upland plateau landscape underlain mainly by sandstone and mudstone of Middle Jurassic age, and in the south, calcareous sandstone and limestone of Upper Jurassic age, with areas of undulating land arising from deposits of glacial till, sand and gravel;**
- **Arable landscape to south and east, but part still on elevated, sweeping plateaus and hills;**
- **Sparsely settled, with population concentrated in the dales and around the fringes;**
- **Valley landscapes characterised by predominantly pastoral farming with clear demarcation between the enclosed fields, farms, settlements and the moorland ridges above. The transition is often marked by bracken fringes;**
- **Extensive areas of coniferous plantations, especially on the Tabular Hills in the south-east and Hackness north of Pickering; with remnant areas of predominantly ancient semi-natural woodland occurring mainly on valley side slopes, on escarpments and fringing hills; and**
- **Traditional stone walls and hedgerows enclosing fields in the dales and lower fringing farmland - now often replaced by fences.**

8.59 Within the 'Shaping the Future' section of this landscape character area, it is acknowledged that most of the area is designated as a National Park and so many of the issues relating to change in the landscape are already being considered. In this context, it is noted that development issues need to be addressed, explicitly identifying those relating to tourism and infrastructure.

8.60 The southern area of the Application Site which includes the southern end of the proposed pipeline, the proposed Hurrell Lane Gas Processing Facility the associated proposed access road and the Above Ground Installation (AGI) to the immediate south of New Ings Lane, are located within Landscape Character Area 26: Vale of Pickering (Volume 3: The Yorkshire and the Humber). The detailed extracts of this assessment are included in Appendix 8.5, and key characteristics of this landscape include:

- **“Low-lying flat or gently undulating Vale with land rising gently to the foothills of the North York Moors and Cleveland Hills in the north, and to the steep scarp of the Yorkshire Wolds and the Howardian Hills in the south.**
- **Enclosed high ground on all sides except the east where the Vale opens to the coast between Scarborough and Filey.**
- **Pastoral floodplains of the rivers Rye and Derwent and their predominantly northern tributaries.**
- **Landscape contrast between eastern and western parts of the Vale. In the east, predominantly flat, arable farmland in medium to large size rectangular fields enclosed by low hedges, drainage ditches and dykes on the peat soils in the east, colonised by reeds and willows. The clay areas in the west characterised by more grassland and tree cover.**
- **Relatively sparse tree cover and few woodlands overall with those which do occur being mainly mixed or coniferous in character and located more to the north and west of the Vale.**

- **Settlement concentrated along main transport routes on higher ground around the fringes with small nucleated settlements on lower ground in the Vale especially in the western clay area.**
- **Varied building materials including brick and hard sandstone brought in from surrounding uplands.**
- **Some parkland and historic landscapes concentrated around perimeter."**

- 8.61 The 'changing countryside' notes that development related to the inland gas field which has been discovered in the area could affect this landscape. Plans for a gas treatment plant and possibly a gas-fired power station in the vicinity are explicitly acknowledged alongside impact of pylons which already added an intrusive appearance in this flat landscape. Pressures for housing development are not at present a major concern but infill in some rural villages is having an effect in changing their character.
- 8.62 Opportunities also exist to enhance the landscape through hedgerow restoration, new woodland planting and re-creation of wetland habitats.

County Character Assessment

North York Moors Landscape Character Assessment (2003)

- 8.63 White Young Green Environmental in association with North York Moors National Park Authority has produced a Landscape Character Assessment of the area that includes the Application Site. This is dated December 2003 and was adopted in September 2004. This Landscape Character Assessment has also been referred to in the North York Moors National Park Authority Design Guide, Part 3: Trees and Landscape Supplementary Planning Document, Adopted June 2008. Within the Landscape Character Assessment, the northern portion of the Site is identified as being contained within the Forest Landscape Character Area, in particular the Dalby Forest (Area 3C). The detailed extracts of this assessment are included in Appendix 8.5 and includes the following landscape characteristics of the Dalby Forest (Area 3C) which are apparent in the vicinity of the Site:

- A large and diverse area of coniferous and deciduous forest, situated on the Tabular Hills and overlying Middle and Lower Calcareous Grit from the Corallian Group.
- Landform is typical of the Tabular Hills landscape; a gently graded plateau towards the north of the forest (at a maximum height of 240m) falls away towards the Vale of Pickering in the south. The plateau is deeply incised by river valleys with steep sides and occasional clifflines and by shallow dry valleys mainly orientated in a north east to south west direction. The forest extends down the edge of the north facing scarp with its irregular wavelike form, the top edge of which allows views across Langdale Forest to the north.
- The extensive forestry includes large area of recently felled and newly planted areas. The forest contains a diverse range of habitats, including sizable blocks and linear belts of deciduous woodland are present particularly within valleys and on steeper slopes. Species present include larch, Scots pine, birch, cherry, ash, rowan and oak. A small area of upland heath – Troutdale Moor – is included to the east of the character area. Small areas of rough pasture and fen occur. In some areas there is an abrupt geometric edge to the forest.
- Some areas of remnant farmland occur within openings in the forest. Fields of pasture are divided by both stone walls and fences.
- The public vehicular access to the forest is via Dalby Forest Drive, a toll road, with numerous car parking, picnic areas and other facilities for tourists located along its length, or via Ebberston. Tracks through the woodland, in a loose grid pattern, provide access for forestry vehicles.

- **The small hamlet of Low Dalby is the main settlement in the area situated in a narrow opening in the forest in the valley of Dalby Beck. Other settlements are limited to very occasional isolated farms within the open areas.**

District County Character Assessment

The Landscapes of Northern Ryedale: An Assessment of the Vale of Pickering and the Fringe of the North York Moors National Park, with Management Guidelines for their Future

- 8.64 Gillespies, in association with Ryedale District Council prepared *The Landscapes of Northern Ryedale: An Assessment of the Vale of Pickering and the Fringe of the North York Moors National Park, with Management Guidelines for their Future*, published in August 1999. The proposed pipeline route runs through four landscape types, with the existing Ebberston Well Site and start of the pipeline commencing in the High Eastern Farmland (CharacterType G) of the Fringes of the Moors., then passes down through the Linear Scarp Farmland (Character Type F) to the Linear Vale Farmland (Character Type K) and Open Vale Farmland (Character Type H) of the Vale of Pickering.
- 8.65 A description and guidelines are provided for each character type, along with an overarching strategy guidelines for The Fringe of the Moors and The Vale of Pickering respectively.

Site Appraisal

- 8.66 As shown on **Figures 8.1, 8.2 and 8.3: Site Appraisal Plans**, the Application Site comprises the existing Ebberston Well Site; the proposed Hurrell Lane Gas Processing Facility and associated access road and AGI; and the pipeline route. A number of photographs of the Application Site were taken, and these are enclosed as the Site Appraisal Photographs in Appendix 8.1. These photographs serve to demonstrate the character of the Application Site and proposed pipeline route. The locations from which the photographs were taken are shown on Figures 8.1, 8.2, and 8.3: Site Appraisal Plans.
- 8.67 The route of the proposed pipeline is considered in relation to the features identified in the landscape character assessments described above. Due to the length and nature of

the Application Site and proposed pipeline route, the following paragraphs discuss the assessment of each section of the pipeline route as it progresses from the Ebberston Well Site, along the proposed pipeline route to the proposed Hurrell Lane Gas Processing Facility, addressing the elements such as built form, vegetation, topography and other features accordingly.

- 8.68 There is no existing built form associated with the site of the proposed Hurrell Lane Gas Processing Facility or at any point along the preferred pipeline route. However, as demonstrated in **Site Appraisal Photograph A**, the Ebberston Well Site has already been constructed for the purpose of gas extraction.

Proposed Pipeline Route

Ebberston Well Site to Warren House Farm

- 8.69 The route of the proposed pipeline extends westwards aligning the Ebberston Well Site access track for approximately 670 metres, within the North York Moors National Park, until crossing the metalled access road from Ebberston to Dalby Forest. **Site Appraisal Photograph B** demonstrates the screening effect of plantation woodland surrounding the Ebberston Well Site, the substantial hedgerow including species of birch and cherry aligning the North York Moors National Trail alongside the Well Site access track, punctuated by the group of mature Scots Pine forming a distinct landmark located adjacent to the metalled road, and the vegetation to the north of the proposed pipeline route which covers Oxmoor Dyke.
- 8.70 The proposed pipeline route crosses the Ebberston to Dalby Forest Road, then passing south west between the Oxmoor Dike and Givendale Dike, both Scheduled Ancient Monuments, before turning south to the west of the Givendale Dike, and then turning west passing through historic earthworks which have been previously ploughed and then running along the northern edge of a plantation within the Dalby Forest. **Chapter 13: Cultural Heritage** provides a detailed assessment on the predicted effects of the proposed development on the cultural heritage resource. **Site Appraisal Photograph C** demonstrates the topographical character of dry valleys orientated north-east to south-west, with a series of ridges and valleys with woodland on the higher ground, and on the valley sides rough pasture and occasional dikes, characteristic in this part of the North Yorkshire Moors.

- 8.71 The elements described above combine to strongly reflect the landscape character of Area 3C: Dalby Forest as identified in the North Yorkshire Moors Landscape Character Assessment (LCA).
- 8.72 The proposed pipeline route then follows an existing wide track through Dalby Forest, extending south-westwards to Warren House Farm, where the land slopes downwards towards the Vale of Pickering. **Site Appraisal Photograph D** illustrates the enclosed nature of the existing corridor, which forms the boundary of the North York Moors National Park in this vicinity and accommodates an existing pipeline and PROW 25.4/6/1.

Warren House Farm to A170

- 8.73 The proposed pipeline route emerges from the southern edge of Dalby Forest, where it passes through an existing arable field to the east of Warren House Farm as seen in **Site Appraisal Photograph E**, before turning sharply westwards where it maintains a south-westerly route traversing the open farmland of Wilton Heights, passing through several hedgerows towards the grass escarpment formed above the Vale of Pickering. In contrast to the enclosed landscape within the forest, **Site Appraisal Photograph F** taken from the route of the proposed pipeline as it runs along the top of Wilton Heights in the vicinity of PRsOW 25.111/11/2, 25.111/1/1 and 25.111/1/2, demonstrates that along this part of the pipeline route there is little vegetation other than hawthorn hedgerows tightly trimmed to between 1.5m and 1.8 metres in height. The agricultural farmland over which the proposed through which pipeline route traverses is intensively farmed for both arable and pasture farming – the latter requiring electric fences to separate fields into smaller units. **Site Appraisal Photograph F** also illustrates the topography of the landscape where the forest plateau meets the Vale of Pickering, creating a steep escarpment, the Wilton Heights, incised by dry valleys running south.
- 8.74 On crossing the escarpment at approximately 110 metres AOD, the pipeline route then traverses the land as it falls comparatively quickly down into the Vale of Pickering, again passing through a series of fields bounded by hedgerows, to cross the A170.

A170 to the proposed Hurrell Lane Gas Processing Facility

- 8.75 The landscape to the south of the A170 demonstrates a gently undulating vale typical of the character of the Vale of Pickering. The proposed pipeline route continues south, crossing the A170 and the associated wide managed grass verges. On crossing the A170, the proposed pipeline then passes through an existing gated access to adjacent

fields. The fields are generally rectilinear, and bounded by neat trimmed hedgerows, with a few tree belts. Several large mature trees are located close to the edge of the pipeline easement route. The proposed access track to the Hurrell Lane Gas Processing Facility runs parallel with the proposed pipeline route, providing access off the A170 through the existing gated field access and running south adjacent to the eastern field boundary to the dismantled railway embankment further south. The proposed pipeline route crosses underneath the dismantled railway embankment and the proposed access track passes through an existing gap in the dismantled railway embankment to access the proposed gas processing site. **Site Appraisal Photograph G** taken from the dismantled railway embankment illustrates the typical character of the vale landscape rising up to the forest plateau.

- 8.76 The proposed Hurrell Lane Gas Processing Facility is located within a flat arable field surrounded by similar fields of arable farmland, with the AGI located to the immediate south of the Hurrell Lane Gas Processing Facility. There are few built influences in the immediate vicinity of the site with the exception of a brick and tile barn along New Ings Lane. Aligning the northern boundary, the dismantled railway embankment approximately 7 metres in height extends east – west. The southern boundary of the processing facility is formed by a hedgerow which aligns New Ings Lane, with the AGI to the immediate south of New Ings Lane. Hurrell Lane aligns the hedgerow along the western boundary of the site. **Site Appraisal Photograph H** demonstrates the agricultural nature of the site and the enclosure formed by the trimmed hedgerows. There are a greater number of mature hedgerow trees in this area, seen both along the hedgerow aligning New Ings Lane and along the dismantled railway embankment. A copse of mature trees is situated opposite the proposed processing facility adjacent to Hurrell Lane.

Tree Condition Survey

- 8.78 A tree condition survey of existing vegetation on the Application Site has been undertaken by Forbes – Laird Arboricultural Consultancy (FLAC), and is reported in **Chapter 15: Arboriculture**. The condition and management recommendations for woodland, tree belts, individual trees and hedgerows has been provided for the vegetation that occurs at the existing Ebberston Well Site and the proposed Hurrell Lane Gas Processing Facility, and along route of the proposed pipeline. The tree condition survey classifies trees within the Application Site according to the following grading system:

- R Trees identified for removal for reasons of sound arboricultural management;
- A Trees of high quality and value that should be prioritised for retention;
- B Trees of moderate quality and value; and
- C Trees of low quality and value.

8.79 The FLAC tree condition survey also confirmed that none of the hedgerows crossed by the proposed pipeline merit the 'Important' designation under the Hedgerow Regulations, 1997, on arboricultural grounds. The FLAC tree condition survey is included in Appendix 15.2.

Tree Preservation Orders

8.80 There are no trees covered by Tree Preservation Orders (TPOs) either within or immediately adjoining the Application Site, including the existing Ebberston Well Site, the proposed Hurrell Land Gas Processing Facility and the proposed pipeline route.

Visual Appraisal

8.81 A visual appraisal has been undertaken to determine the relationship of the Application Site with its surroundings and its visibility within the wider landscape. An assessment of the visibility of the Application Site from existing properties, roads, footpaths and public open space was carried out in December 2009, and a set of annotated photographic panoramas are included in the supporting illustrative material. These photographs illustrate the current appearance of the Application Site and its surroundings and were taken from areas to which the public can gain access. This also represents the 'worst case scenario' with regard to screening afforded by intervening vegetation with the majority of such vegetation within the landscape devoid of foliage.

8.82 In the sections which follow the character and visibility of the Application Site are described. **Figures 8.4 and 8.5: Visual Appraisal Plans** at 1:10,000 scale, illustrate the location of the photographic viewpoints and identify the key views towards and into the Application Site from properties, roads and main paths within the surrounding landscape. The potential visibility of the Application Site is largely determined by landform or topography as adjacent areas of elevated land, such as ridgelines, may block or curtail views towards a site. In addition, land cover plays a role in determining potential visibility, as areas of woodland, tree belts or built form within the landscape may contribute further to blocking, filtering or controlling views.

8.83 The effectiveness of vegetation as a screen depends to a considerable extent on its scale. A large mature feature, such as Dalby Forest, will be a significant screen throughout the year, but a hedge or an intermittent tree belt may only be effective during the summer months. Whilst smaller features, such as hedgerows and individual trees can be very important, particularly when their cumulative effect is taken into account, they cannot be considered to be substantial or wholly effective screening features or visual barriers, in part due to the seasonal nature of their effect. Of the larger features adjacent to the Application Site, the plantation planting within Dalby Forest to the north, south and west, Wilton Heights Plantation to the south-west of Warren House Farm and the tree belt along the dismantled railway north of the proposed Hurrell Lane Gas Processing Facility are all considered significant visual barriers within the local landscape, along with the escarpment between the forest plateau and the Vale of Pickering including Thornton High Fields, Wilton Heights and Snainton Heights. These are illustrated on Figures 8.4 and 8.5: Visual Appraisal Plans.

8.84 The visibility study of the Application Site was carried out during December 2009, and commenced with a desktop identification of areas of land from which potentially there could be views of the Application Site. This was followed by visits to the Application Site and surrounding area to check the extent of the Visual Envelope of the Application Site, and to confirm the most exposed/contained parts of the Application Site in visual terms.

i) Near Distance Views (0 – 400 metres)

8.85 Near distance views of the existing Ebberston Well Site are obtained from the roads and public paths which abut its boundaries, although the extent of such visibility is contained by intervening vegetation. Site Context Photographs 1 to 10 inclusive, in Appendix 8.1, illustrate the near distance views. **Site Context Photograph 1** is taken from the access road from Ebberston to Givendale Head Farm, High Scamridge Farm and the Dalby Forest. The view illustrates the land gently rising up to the Dalby Forest, with woodland vegetation on the surrounding ridges in the landscape. The substantial hedgerow and tree belt along the southern edge of the access track from the access road to Dalby Forrest and the existing Ebberston Well Site is distinctive, with the vegetated Givendale Dike and the Dalby Forrest visible to the north-west. The proposed pipeline passes in a westerly direction, located behind the vegetation along the access track to the Well Site and the Givendale Dike, and into the Dalby Forest.

8.86 **Site Context Photograph No. 2** is taken from the National North York Moors Trail which runs parallel with the access track to the existing Ebberston Well Site. From this

vantage point, the Ebberston Well Site forms part of the view on the approach into the south-eastern flank of Dalby Forest. A low, stone wall and scrub planting separates the National Trail from the access track and the proposed pipeline route and in places this separation is more pronounced by the size and density of the intervening vegetation of medium sized native trees including hawthorn and birch. The view is limited by tall vegetation screening views to the south and by plantation woodland screening views to the east and north.

- 8.87 **Site Context Photograph 3** is taken from Oxmoor Dike, looking south-east along access road from Givendale Head and High Scamridge Farms towards Ebberston. The vegetated bank forming Oxmoor Dike runs across the view, with Givendale Dike visible to the south-east. The distinctive vegetation aligning the access track to the Well Site (and aligning the North York Moors National Trail) is visible adjoining the access road in the centre of the view. The proposed pipeline runs parallel with the access track to the Well Site, and crosses the access road to the immediate south of Oxmoor Dike, and then runs parallel with Givendale Dike. It then runs parallel with Oxmoor Dike crossing through an opening between Oxmoor Dike and Givendale Dike.
- 8.88 The proposed pipeline route then runs west, across rough arable grassland to the south of Givendale Head Farm. **Site Context Photograph 4** is taken from taken from PROW 25.4/6/1, from within the North York Moors National Park, south of the Givendale Head Farm, looking eastwards. In this view the proposed pipeline runs in front of the Givendale Dike, before turning west across the open fields and running along the northern edge of the Dalby Forest. The open, undulating topography of the gentle valley which the pipeline crosses is visible, as are the vegetated banks of Oxmoor Dike and Givendale Dike which cross the landscape. Givendale Head Farm is visible set against the backdrop of the Dalby Forest, which also extends round to enclose the view to the south.
- 8.89 The proposed pipeline route then turns south, passing through a wooded ridge, along an existing corridor within the Dalby Forrest, which accommodates an existing pipeline and PROW 25.4/6/1, and is visually contained by woodland plantation either side of the corridor. **Site Context Photograph 5** is taken from the PROW25.4/6/1, on the alignment of the proposed pipeline route as it emerges from the wooded corridor into an opening within the Dalby Forest. PROW 25.4/6/1 runs along the boundary of the North Yorks National Park, which is located to the west (right) of the path in the view. The elevated open nature of the ridge in this location is evident, with views out to the wider landscape just visible above the woodland on the lower slopes of the ridge. The proposed pipeline runs south along the along the alignment of PROW 25.4/6/1, and

then passes back into the Dalby Forest, through an existing break in the woodland, visible in the centre of the view.

- 8.90 **Site Context Photograph No. 6** is located further south, where the proposed pipeline again emerges from the woodland plantation of the Dalby Forest, and is taken from the access drive for Warren House Farm, off the road between Dalby Forest and Allerston. From this vantage point, the proposed pipeline crosses the falling hillside, as it drops down from the open forest plateau to the Vale of Pickering. To the east, the southern extent of Dalby Forest is visible, forming a screen for views to and from the east. In the foreground, the land rises slightly, before falling sharply creating the escarpment slope between the open forest plateau down to the Vale of Pickering. However the gently rising land screens both the escarpment and views to the immediate south. There are views out to more distant wider landscape, over the open forest plateau to the Vale of Pickering. The proposed pipeline route passes across the centre of this view.
- 8.91 The proposed pipeline route then passes along the top of the escarpment formed between the forest plateau and the Vale of Pickering. **Site Context Photograph 7** is taken from PROW 25.11/2/1 approximately 130m to the north-west of the proposed pipeline route, and illustrates the view over the open forest plateau to the south-east. The Wilton Plantation and Dalby Forest to the north of the footpath are visible in the view, as is the hedgerow-lined field pattern of the forest plateau. However, views out to the wider landscape of the Vale of Pickering, to the south, are screened by the intervening topography. The route of the proposed pipeline cuts diagonally across the field to the immediate left of PROW 25.111/2/1 in the view, also cutting across PROW 25.111/1/1 and the associated hedgerow which run along the east boundary of this field.
- 8.92 **Site Context Photograph 8** illustrates the view east from PROW 25.111/11/2, at the edge of the escarpment between the forest plateau and the Vale of Pickering north of Wilton, known as the Wilton Heights in this location. It illustrates how the sharply falling topography of the escarpment screens views to the immediate south, with generally only the forest plateau landscape at a similar elevation visible against the back drop of the woodland of the Dalby Forest and the Wilton Plantation, to the further north. Some vegetation located in the valleys that dissect the escarpment is visible where it appears above the landform, and the northern edge of the settlement of Wilton is just visible above the edge of the escarpment. The proposed pipeline crosses the open, elevated plateau landscape.

- 8.93 **Site Context Photograph 9** is taken from the lay-by adjacent to the A170, between Allerston and Thornton-le-Dale on the Scarborough to Pickering Road. The view demonstrates the gently undulating character of the Vale of Pickering, and the screening effect of topography, and hedgerows and trees along field boundaries. The proposed pipeline crosses the A170 in the vicinity of the lay-by and continues south, passing through the gated access of the field to the immediate south to the A170. The proposed pipeline route runs parallel with the eastern boundary of the field to the immediate north of the A170 in the view, delineated by hedgerow. This view also illustrates the location of the junction of the A170 with the access track to the proposed Hurrell Lane Gas Processing Facility which would be located in the immediate centre of the view. The access track runs south towards the proposed Hurrell Lane Gas Processing Facility, also aligned through the access gate to the immediate south of the A170, and running parallel with the field boundary.
- 8.94 **Site Context Photograph 10** is taken from the southern boundary of the proposed Hurrell Lane Gas Processing Facility, looking north. The dismantled railway embankment and associated vegetation forms the northern site boundary, with Hurrell Lane and New Ings Lane and their associated vegetation to the west and south respectively, and trimmed hedgerow forming the eastern site boundary. The photograph illustrates the view from the valley floor of the Vale of Pickering, north towards the forest plateau, demonstrating the effect of the vegetation along the boundaries of the site in limiting views to the immediate north, but with views to the elevated Dalby Forest on the skyline and the partial views of the escarpment where there are breaks in vegetation. The elevated spur of land extending south from Thornton-le Dale is also visible beyond Hurrell Lane and the associated roadside vegetation, to the west.

ii) Middle Distance Views (400 – 1000 metres)

- 8.95 Middle distance views towards the Application Site are limited. This is due mainly to the containing nature of the undulating topography which the proposed pipeline route occupies in addition to intervening topography, vegetation and built form. Site Context Photographs 11 and 12, in Appendix 8.1, illustrate middle distance views.
- 8.96 **Site Context Photograph 11** is taken from Hurrell Lane on the south-eastern edge of Thornton-le-Dale. From this vantage point, views are gained across the Vale of Pickering. Trimmed hedgerows with several mature hedgerow trees create filtered views into the valley floor. The dismantled railway embankment can be partially seen in the distance beyond Hurrell Lane, with the proposed Hurrell Lane Gas Processing Facility

located immediate beyond the embankment, This photograph serves to demonstrate that views towards the proposed Hurrell Lane Gas Processing Facility are predominantly screened by the field boundary vegetation and vegetation along the dismantled railway embankment. Views to the immediate east are generally contained through a combination of topography and hedgerows and trees along field boundaries.

- 8.97 **Site Context Photograph 12** is taken from the verge of the A170 as this passes approximately 970 metres to the south of the proposed pipeline route. This photograph serves to demonstrate how the rising land of the escarpment between the open forest plateau and the Vale of Pickering curtails views towards the proposed pipeline crossing the plateau. A small copse surrounding a quarry lies on the edge of a sharply incised valley, Weas Dale, on the escarpment between the forest plateau and the Vale of Pickering and which curtails views of the pipeline route from traffic along the A170.

iii) Long Distance Views (+1000 metres)

- 8.98 Long distance views towards the proposed pipeline route are obtained from a limited number of publicly accessible locations, where distant views are obtained beyond the screening effect of the topography of the escarpment; that is views from the south, within the valley floor of the Vale of Pickering looking north towards the Application Site. Long distance views towards the existing Ebberston Well Site and the proposed Hurrell Land Gas Processing Facility are limited by the screening effect of the undulating topography and woodland of the Dalby Forest, and the flat nature of the valley floor and the hedgerow and tree-lined field pattern of the Vale of Pickering, respectively. Site Context Photographs 13 and 14, Appendix 8.1, illustrate the long distance views.
- 8.99 **Site Context Photograph 13** is taken from PROW 25.111/3/1, south of Cliff Lane in Wilton, looking north towards the Dalby Forest and North York Moors National Park, over properties on the southern edge of the settlement of Wilton. The Dalby Forest is visible on the distant skyline, with the forest plateau and escarpment visible dropping down to meet the Vale of Pickering, partly screened by the residential properties of Wilton. The proposed pipeline route runs along the distant hillside, and the valley floor of the Vale of Pickering is visible extending to the south of the view.
- 8.100 Further south of Wilton, **Site Context Photograph 14**, taken from Cliff Lane adjacent to Wilton Carr Houses, looking north-west towards the proposed pipeline route and the Hurrell Lane Gas Processing Facility and AGI. The view illustrates the screening effect of the intervening topography of Wilton Cliff within the Vale of Pickering screening

views to the north towards the proposed pipeline route, and the effect of the combination of topography and vegetation in screening views west towards the proposed Hurrell Land Gas Processing Facility and the AGI.

- 8.101 A summary of the visual appraisal is shown on Figure 8.4 and 8.5: Visual Appraisal Plans, and these drawings demonstrate the features which control views towards the Application Site (the proposed pipeline route, the existing Ebberston Well Site, the proposed Hurrell Lane Gas Processing Facility and the associated access road and the AGI). The combination of the wooded character of the Dalby Forest, the elevation of the open forest plateau, the steeply sloping escarpment dropping down to the Vale of Pickering and the pattern of hedgerow and tree-lined fields within the valley floor, act as visual barriers, partially screening views towards the Application Site, from surrounding PROWs and roads, and in particular, properties which are generally clustered in the settlements of Allerston, Wilton and Thorton-le-Dale on the lower valley-side slopes or valley floor. Figures 8.4 and 8.5: Visual Appraisals Plans show where open and partial views to and across the Application Site are obtained, and the areas and properties which are likely to obtain views towards the Application Site have been identified.
- 8.102 Views in the locality of the Ebberston Well Site, and along lengths of the proposed pipeline route within the Dalby Forest, are well contained to the immediate vicinity by the existing vegetation of the Dalby Forest. The woodland plantations effectively curtail views to the Application Site from within the North York Moors National Park, with views limited to the fringes of the Dalby Forest and a few more open locations on the edge of the North York Moors National Park, such as around Givendale Head and Scamridge High Farms and north of Warren House Farm.
- 8.103 Where the proposed pipeline crosses the elevated open forest plateau, views to the Application Site are again limited to the immediate locality. Land falls sharply to the north and south of the Application Site, such that views from the North York Moors National Park to the north are curtailed by the combination of topography and vegetation, and to the south the escarpment between the open forest plateau and the Vale of Pickering curtails views to immediate elevated locations or long distance views from the valley floor.
- 8.105 As the proposed pipeline traverse down the escarpment, partial views of the Application Site are obtained where the orientation of the view, intervening topography and breaks in vegetation allow views.

- 8.106 Views of the Application Site, accommodating the Hurrell Lane Gas Processing Facility and AGI from the north, are screened by the existing vegetated railway embankment which runs along the northern boundary of the Application Site. To the south-east, south and south-west, the strong network of hedgerows along field boundaries, combined with the flat topography, screen the majority of the views towards the Application Site.

Summary of Visual Appraisal

- 8.107 In summary, the visibility study demonstrates that the Application Site, including the proposed pipeline, the existing Ebberston Well Site and the Hurrell Lane Gas Processing Facility, is generally well screened. Limited views are obtained from publicly accessible locations in immediate proximity, that is near distance, to the Application Site; and from publicly accessible locations (generally PRsOW) from middle distance, open locations to the north west on the elevated forest plateau and from very limited locations within the Vale of Pickering; or from more distant locations to the south on the valley floor of the Vale of Pickering.

Sensitivity of Visual Receptors to Change

- 8.108 When considering the potential visibility of the Proposed Development, a number of visual receptors have been identified within the visual envelope of the Application Site, including residential properties, listed buildings, other properties and PRsOW and roads with potential to observe the Proposed Development and determines their corresponding sensitivity to visual effects using the methodology outline in Appendix 8.3.

Likely Significant Effects

- 8.109 In this section, an assessment of the landscape and visual effects of the Proposed Development without mitigation has been undertaken for the predicted effects during construction and those effects on completion. In latter sections, the residual effects of the Proposed Development after mitigation are described.
- 8.110 The effects are assessed at three stages during the course of the Proposed Development. These include:

- Construction phase including retention and protection of existing vegetation, site clearance, ground clearance, the erection of temporary construction plant and compounds, and the installation of gas processing facilities and AGI;
- On completion – Year 1; it is assumed that many of the landscape mitigation measures that have been undertaken will start to establish; and
- Residual effects – 15 years after completion.

8.111 For the assessment of the majority of developments, the permanent effects of the development are usually more significant than the temporary effects during construction. However, in the case of the underground pipeline, the main visual and landscape affect will be during construction, as, following development, restoration to existing landscape conditions (as far as possible) will mitigate the impact. Conversely, the landscape and visual impact of the Gas Processing Facility will be permanent and long-term.

Landscape Effects

Landscape effects during construction

- 8.112 It is anticipated that the construction of the proposed pipeline will be phased, between the existing Ebberston Wellsite to the proposed Hurrell Lane Gas Processing Facility. The landscape effects during construction would therefore progress, section by section, along the proposed pipeline route, with restoration of completed sections undertaken immediately on completion, and sections yet to be undertaken undisturbed. Therefore, at any point in time landscape effects arising from construction will only affect a portion of the route. There will also be the temporary erection of construction compounds within the western portion of the Hurrell Lane Gas Processing Facility Site, and to the immediate east of the Hurrell Lane Gas Processing Facility site and southern end of access road.
- 8.113 Of paramount importance is the protection of existing valued landscape features, during the construction period. This includes existing woodland, mature trees and hedgerows, and Scheduled Ancient Monuments immediately adjoining the Application Site. Accordingly these should be identified and protected in accordance with the requirements of the relevant British Standard and arboriculture advice notes.

- 8.114 The potential effects of the construction activities on the landscape would be mitigated to some extent by the retention of the existing vegetation within the Application Site, particularly along the proposed pipeline route, where it could be accommodated within the easement corridor without compromising construction activity. However, parts of existing hedgerow and some trees would need to be removed to accommodate the proposed pipeline route and proposed access road. Tree loss will be limited to 1no. tree group of an estimated 4no. Category B trees. However the larger tree group, to which they these trees join, will be unaffected and their loss is not considered significant. 356 metres of A & B graded hedgerow, and the loss of a further 235 metres of lower quality hedgerow. However, as it is the intention that all sections of hedgerow unavoidably removed, to accommodate the construction of the proposed pipeline, will be reinstated, such as the reinstated hedgerows mature, there will be no permanent adverse effect. 1 no. tree of special value (Grade A) will require precautionary working and 2no. Grade B tree groups will require precautionary working, for their satisfactory retention.
- 8.115 Two Scheduled Ancient Monuments (SAM) coincide with the proposed pipeline route and would be affected by construction activity. Special techniques of pipeline construction and outlined in the Project Description (Chapter 4) would be used to avoid disturbance of the SAMs, and mitigation measures set out in Chapter 13: Cultural Heritage will be adopted to limit adverse effects on the SAMs and their setting.
- 8.116 The construction period will generate a number of landscape changes; however, as much of the Application Site is associated with the construction of the proposed pipeline located underground, the effects are not wholly irreversible, as on completion of construction the land will be restored to a similar condition to that prior to construction, and the majority of landscape features reinstated. However, construction of the proposed Hurrell Lane Gas Processing facility and associated access road would have an irreversible effect on the landscape. The principle activities that could have an effect upon the fabric, quality and character of the landscape during the enabling works and construction phases of the Proposed Development are set out in **Table 8.1** below. The table facilitates a brief consideration of the potential landscape changes for each identified construction activity.

Table 8.1: Construction Phase – Predicted Landscape Changes and Effects

| Identified Activity | Predicted Changes and Consequent Landscape Effects (Construction Phase) |
|---|---|
| Loss of landscape elements and features due to construction activities | Loss of some existing elements such as arable crops, isolated trees and sections of existing hedgerow along the length of the proposed pipeline. The removal of existing agricultural land uses will have the consequence of creating a new temporary landscape of differing landscape character and elements throughout the construction period as construction progresses along the length of the pipeline, with continual change over the construction period. |
| Introduction of new temporary elements including materials stockpiles, pipeline laying plant and site compounds, lighting, fencing/hoardings along the route of the proposed pipeline, around the perimeter of the proposed Ebberston Well Site and Hurrell Lane Processing Facility, and along the length of the proposed access road. | Introduction of new, contrasting temporary elements within the Application Site area which will form a new landscape pattern and temporary change to the character of the Application Site. The change will result in a temporary change to different parts of the Application Site. |
| Increased movement of plant and vehicles on public/private roads and within the Site and surrounding area. | Increases in movement and noise levels will generate a series of shifting patterns across the Application Site, as works progresses along the proposed pipeline route, with a temporary change for much of the route of the proposed pipeline and a permanent change for the Ebberston Well Site and proposed Hurrell Lane Gas Processing Facility and associated access track. |
| Highway works associated with the construction of the access road to the proposed processing facility. | Temporary disruption to traffic flow patterns and increased traffic during construction may have a consequential landscape effect. |

8.117 The magnitude of landscape change would be medium across parts of the Application Site during the construction phases. The northern extent of the proposed pipeline, in the vicinity of the Ebberston Well Site and passing through the Dalby Forest, is on the boundary of the North York Moors National Park, and the length of proposed pipeline from where it exits the Dalby Forest to the Hurrell Lane Gas Processing Plant and AGI is in the Wolds and Fringe of Moors Areas of High Landscape Value. The are located outside the Areas of High Landscape Value. This would have a moderate adverse effect on surrounding receptors with a high level of sensitivity to such change. Most receptors, however, will experience a low or negligible magnitude of change, therefore

limiting the significance of this effect. The effects of construction works on the landscape would generally be adverse due to the temporary and/or permanent introduction plant, lighting, earthwork, fencing and the associated increase in vehicular activity associated with the various construction activities phased across the Application Site. Overall construction activity is assessed to have minor / moderate adverse significance on landscape character during construction.

Landscape effects on completion

- 8.118 As much of the proposal is associated with the development of an underground pipeline, landscape effects on completion would be generally limited to the Hurrell Lane Gas Processing Facility. For the majority of the route of the proposed pipeline, the objective would be to restore the Site to the landscape character and condition of that existing prior to construction, with a subsequent limited landscape impact.
- 8.119 The change in character of the area accommodating the proposed Hurrell Lane Gas Processing Facility and the access road, would be from agricultural fields to that of the built forms of utilitarian compounds and highway features. The principle activities that could have an effect upon the fabric, quality and character of the landscape on completion and in the longer term are set out in **Table 8.2** below.

Table 8.2 On completion - Predicted Landscape Changes and Effects

| Identified Activity | Predicted Changes and Consequent Landscape Effects (On Completion) |
|--|--|
| Introduction of above ground engineering plant associated with the extraction and transport of gas for the proposed pipeline | The arrangement of engineering features will generate a utilitarian landscape character in contrast to the surrounding landscape character. This will, for the proposed Hurrell Lane Gas Processing Facility, replace an area previously associated with agricultural land use |
| Introduction of an access track, associated permanent earthworks and highway features associated with a | The introduction of a road into an agricultural field, creating a permanent change to the landscape components in the immediate vicinity, with a subsequent effect on landscape character |

| | |
|--|--|
| junction with the A170 | |
| Introduction of lighting and fencing to provide security for the engineering installations | The introduction of uncharacteristic utilitarian components into an otherwise largely agricultural landscape |

Effects on identified Landscape Character

- 8.120 As identified above, the landscape character of the northern extent of the Application Site, including the existing Ebberston Well Site, is considered within, at a national scale, the North Yorkshire Moors and Cleveland Hills Countryside Character Assessment Report (No. 25) and within the Dalby Forest Landscape Character (Area 3C) at the regional scale. The southern extent of the Application Site, including the proposed Hurrell Lane Gas Processing Facility and the associated access road, is considered within the Vale of Pickering Countryside Character Area (No. 26) at a national scale.
- 8.121 The proposals do not change the character of the existing Ebberston Well Site as it already functions as a gas Wellsite. The permanent effects from the proposed pipeline within the Dalby Forest Landscape Character Area are limited to loss of field boundary hedgerows and any associated trees along the alignment of the proposed pipeline, where vegetation removed cannot be reinstated. Within the proposed pipeline corridor, it is the intention to, following development, restore to existing landscape conditions (as far as possible), thus having a limited effect on landscape character. The extent of loss is limited such that the loss of landscape components will not have a significant adverse effect on landscape character
- 8.122 The proposed Hurrell Lane Gas Processing Facility and access road will introduce utilitarian components into an otherwise agricultural landscape of the Vale of Pickering with the subsequent detrimental effect on landscape character. However, the extent the Application Site affected is limited to a short length of access road aligned along an existing field boundary, with the Hurrell Lane Gas Processing Facility and AGI accommodated within 3 fields, containing them within the existing landscape framework, and as such the overall the effect on landscape character at completion is assessed as having minor adverse significance.

Visual Effects

8.123 The visual effect of a development on a viewer will depend upon a number of factors. These can be summarised as:

- a) The nature of the proposal;
- b) Its siting in the landscape;
- c) Its size and design parameters; and
- d) The position and distance from which it is viewed.

8.124 A study has been carried out encompassing all properties or groups of properties, roads and PRsOW that lie within the visual envelope of the Proposed Development. The Visual Impact Table which quantifies the impact of the Proposed Development on sensitive visual receptors surrounding the Application Site, is included as Appendix 8.4 to the ES with impacts identified in this table described in the following sections.

Visual effects during construction

8.125 The likely visual effects arising from construction of the development proposals have been assessed on the basis that the proposed pipeline will be, for the most part, constructed using an open cut method. A trench is dug to accommodate the pipe, with excavated topsoil and subsoil separated, and stockpiled either side of the trench. Lengths of pipe are welded together, laid and the trench back filled. A running track is required along the length of the proposed pipeline route to accommodate construction plant and activity. Other visible activity will be associated with the construction of required for installations at the proposed Hurrell Lane Gas Processing Facility.

8.126 The visual effects arising from construction activity will be progressive and temporary and, as discussed, of greater effect as for that of the completed proposals for the Application Site.

8.127 Sensitive receptors nearest to the Application Site are likely to experience the most severe detrimental impact to their visual amenities. PRsOW on the edge of the North York Moors National Park, and within the immediate vicinity of the Ebberston Well Site and proposed pipeline, will be adversely affected during construction. However, where apparent, these impacts would be short term as the Application Site would be developed and restored progressively. A few residential properties within the vicinity of the Application Site, in locations where orientation and lack of intervening topography ,

built form or vegetation allow views of construction activity, will generally experience a moderate adverse impact, with only 1no. property, Warren House Farm, experiencing a major adverse impact. The impact on adjacent residential properties could also be minimised by controlling the lighting of construction and by agreeing appropriate working hours with the Local Planning Authority. Other mitigation measures that could be put in place include the control of arisings and therefore the movement of surplus excavated material from one part of the Application Site to another and the use of soil improvement techniques to treat subsoils, therefore resulting in the re-use of materials on site.

Visual Effects on completion

- 8.128 This section describes the visual impacts of the development proposals on completion, but necessarily comments on the proposed mitigation measures, which are an intrinsic part of the development proposals. In later sections, the residual impacts of development after mitigation are described.

Visual Effects on Residential Properties

- 8.129 The Visual Impact Table records the changes to the views from residential properties experiencing visual impact, with accordingly a high magnitude recorded where the scheme records a significant change in the existing view, and low impact where the scheme would cause a barely perceptible change in the existing view. The impact is classified as being either adverse i.e. negative, or beneficial i.e. positive. The impact assessment necessarily takes into account the “worse case” scenario and has recorded all of the impacts on the existing views as adverse, i.e. negative.
- 8.130 The detailed assessment of the impact of the development on views from properties is set out in the Visual Impact Table in Appendix 8.4. This identifies properties affected after completion of the Proposed Development, assuming that planting has introduced limited visual benefits. This is the “worst case” scenario as it is proposed that the introduction of planting forms an intrinsic part of the development proposals that assist setting development within the wider landscape.
- 8.131 Very few residential properties experience permanent adverse visual effects, generally limited to isolated residential components of farms, located in close proximity to the permanent development of the proposed Hurrell Lane Gas Processing Facility.

Visual Effect on Listed Buildings

- 8.132 No Listed Buildings are affected by the proposals.

Visual Effect on Other Properties

- 8.133 Other properties in the vicinity of the Application Site include farm properties scattered through the surrounding landscape. No significant adverse visual effects are identified on these receptors.

Visual Effect on PRsOW and Roads

- 8.134 The detailed assessment of the impact of the development on views from roads is set out in the Visual Impact Tables in Appendix 8.4. The most significant adverse visual effects will be apparent from PRsOW which traverse or are located close to the Application Site. However, where these are located close to the proposed pipeline route, including those on the edge of the North York Moors National Park, visual effects will be limited to views of immature restoration proposals along the pipeline route, representing a low magnitude of change at year 1. Where PrsOW are located in close proximity to the permanent development associated with the Well Site, proposed Hurrell Lane Gas Processing Facility and access road, visual effects will represent at most a low magnitude of change at year 1, with a subsequent moderate adverse effect.
- 8.135 The views from the roads surrounding the Application Site would generally, at most, experience a minor adverse effect at year 1, with the exception of sections of the A170 in the immediate vicinity of the proposed access road.

Mitigation Measures

- 8.136 The main landscape features within the context of the Application Site are the topographical transition from the elevated plateau of the Dalby Forest to the Vale of Pickering, passing down through a prominent escarpment, and the covering network of woodland, tree belts and hedgerow bounded fields. Landscape proposals would include the replanting of vegetation removed through the construction of the pipeline and additional planting to the existing Ebberston Well Site, between the existing National Trail and the Well Site Boundary (subject to agreement with the North York Moors National Park Authority); around the proposed Hurrell Lane Gas Processing Facility and AGI and along the access road. New planting would reinforce and enhance the existing landscape framework and compensate for limited areas of vegetation loss.

Landscape Strategy / Mitigation

8.137 The landscape objectives for the proposals are as follows:

- To retain landscape features such as woodlands, tree belts and hedgerows on the Application Site, and to ensure the long term management of these features;
- To restore the agricultural landscape through which the proposed pipeline route passes to agricultural land of equivalent quality to that prior to construction, at the earliest opportunity following construction;
- To reinstate and enhance the landscape features within the Application Site, to restore the landscape character to that existing prior to construction, reflecting the objectives set out in the guidance provided in the national and regional landscape character assessments, and in particular with reference to the The Landscape of Northern Ryedale;
- To provide a landscape setting to the proposed Hurrell Lane Gas Processing Facility, AGI and the access road, through the provision of a robust landscape infrastructure that reflects the existing landscape framework and assimilates the proposals within the wider landscape;
- To provide ecological and amenity enhancement through the introduction and appropriate management of new grassland, woodland, tree belt, hedgerow and individual tree planting, linked to existing landscape features wherever possible; and
- To establish a recessive colour / material pallet for permanent built elements or structures as part of the proposals.

8.138 Planting to be included within the overall landscape strategy to include predominately native and locally endemic species, in accordance saved Policy ENV 3 of the Ryedale Local Plan, and with reference to the Supplementary Planning Document Design Guide: Trees and Landscape. In addition, a landscape maintenance programme would be adopted to ensure the long-term survival of existing and proposed features in order to enhance their biodiversity and amenity value. The details of the landscape maintenance programme would be agreed with the Local Authorities at the appropriate time.

Effects of Mitigation/Residual Impacts

Landscape Effects

- 8.139 The existing structure of woodlands on the boundaries of the Application Site would be retained providing a landscape framework encompassing the Proposed Development. The reinforcement of the existing pattern of vegetation with reinstatement planting for vegetation removed for construction of the proposed pipeline and, with the consent of landowners, the gapping-up of existing hedgerows adjacent to the pipeline route and Hurrell Lane Gas Processing Facility and AGI, with respect to local landscape character, and the appropriate management of existing landscape features, would ensure that the positive landscape structure would be retained and enhanced. As a result, the pattern or "grain" of the landscape would be retained and reflected within the mitigation proposals for the Application Site, and this would serve to reinforce local distinctiveness and landscape character.
- 8.140 The mitigation measures proposed would also "soften" the edge of the permanent development, and assist in assimilating it into its landscape setting, and increase tree cover over the wider area encompassing the Application Site. Accordingly the residual effect of the Proposed Development on landscape character is assessed as having a low magnitude of change on an area of high / medium sensitivity. Once established the overall landscape improvements proposed are assessed as having no detrimental effect.

Visual Effects

- 8.141 The effectiveness of the measures proposed in mitigating the impacts on the view from properties, roads and PRsOW is demonstrated by comparing the visual impacts on completion, i.e. Year 1 with the impacts when the proposed structure planting has matured, i.e. by Year 15 residual effects (after mitigation). The visual effect of Proposed Development at completion and at Year 15 are summarised in Appendix 8.5
- 8.142 The comparison between Year 1 and Year 15 demonstrates that there would be a reduction in the impact on views from receptors in close proximity to the Application Site as proposed landscape measures, including the restoration of agricultural land and, in particular, new woodland and hedgerow planting reaches maturity. At maturity, the planting across the proposed pipeline route and around the proposed Hurrell Lane Gas Processing Facility would either reinstate the existing landscape character so that there was no significant change in view, or the landscape buffers would provide an effective

screen in views towards the permanent development, during both the summer and in winter months and remove significant adverse visual effects.

8.143 From longer distance views, in particular, from the south across the Application Site to the North York Moors National Park, it is considered that the significance of the impact of the development would generally be minor to negligible, even at Year 1. This is due primarily to the distance of identified properties, roads and footpaths from the Application Site. Intervening vegetation and topography within the landscape surrounding the Application Site are also of considerable assistance in curtailing views towards the Proposed Development. No significant adverse effects have been identified after mitigation has established at 15 years.

Management and Monitoring

8.144 The monitoring of the successful establishment and growth of the proposed planting measures is a long term process. This will be ensured through the establishment of an ongoing management regime in respect of the landscape infrastructure and open spaces associated with the development. Part of the management regime plan would be to monitor the successful establishment of new planting and to replace plant failures for up to five years until the tree and shrub areas are well established. Following this, growth rates would be monitored and after ten years, periodic selective thinning would encourage strong growth in the remaining trees. The long term objectives would be:

- To allow selected trees to grow on to maturity;
- To encourage "wildlife corridors", particularly along river margins, which will provide important nature conservation benefits; and
- To create a high quality landscape setting to the development.

8.145 The aim is to promote a sensitive management approach, which protects and improves landscape and visual amenity value and the nature conservation interests of the Application Site in a manner that is compatible with the proposed land uses.

Conclusions

8.146 On the basis of the landscape and visual appraisal of the proposed pipeline, the landscape character of the northern extent of the Application Site, including the existing Ebberston Well Site, is considered within, at a national scale, the North Yorkshire Moors and Cleveland Hills Countryside Character Assessment Report (No. 25)

and within the Dalby Forest Landscape Character (Area 3C) at the regional scale. The southern extent of the Application Site, including the proposed Hurrell Lane Gas Processing Facility and the associated access road, is considered within the Vale of Pickering Countryside Character Area (No. 26) at a national scale.

- 8.147 At a District level, the proposed pipeline route runs through four landscape types, with the existing Ebberston Well site and start of the pipeline commencing in the High Eastern Farmland (Character Type G) of the Fringes of the Moors., then passes down through the Linear Scarp Farmland (Character Type F) to the Linear Vale Farmland (Character Type K) and Open Vale Farmland (Character Type H) of the Vale of Pickering
- 8.148 The proposals do not change the character of the existing Ebberston Well Site as it already functions as a gas Well site. The permanent effects from the proposed pipeline are limited to loss of field boundary hedgerows and any associated trees along the alignment of the proposed pipeline, where vegetation removed cannot be reinstated. Tree loss will be limited to 1 no. tree group of an estimated 4 no. Category B trees. However the larger tree group, to which they these trees join, will be unaffected and their loss is not considered significant. 356 metres of A & B graded hedgerow, and the loss of a further 235 metres of lower quality hedgerow. No hedgerows considered important under the Hedgerow Regulations 1997 would be adversely affected, and as it is the intention that all sections of hedgerow unavoidably removed, to accommodate the construction of the proposed pipeline, will be reinstated, such as the reinstated hedgerows mature, there will be no permanent adverse effect. 1 no. tree of special value (Grade A) will require precautionary working and 2 no. Grade B tree groups will require precautionary working, for their satisfactory retention.
- 8.150 The proposed Hurrell Lane Gas Processing Facility and access road will introduce utilitarian components into an otherwise agricultural landscape of the Vale of Pickering with the subsequent detrimental effect on landscape character. However, the extent the Application Site affected is limited, and contained within the existing landscape framework, such that the overall the effect on landscape character at completion is assessed as having minor adverse significance. However, once the proposed landscape improvements are established the residual effect is assessed being negligible.
- 8.151 The visibility study demonstrates that the Application Site, including the proposed pipeline, the existing Ebberston Well Site and the Hurrell Lane Gas Processing Facility, is generally well screened. Limited views are obtained from publicly accessible locations in immediate proximity to the Application Site (the existing Ebberston Well Site, the proposed pipeline route, and proposed Hurrell Lane Gas Processing Facility),

and from publicly accessible locations (generally PRsOW) from open locations to the north west on the elevated forest plateau, or from more distant locations to the south on the valley floor of the Vale of Pickering.

- 8.152 Very few residential properties experience permanent adverse visual effects, generally limited to isolated residential components of farms, located in close proximity to the permanent development of the proposed Hurrell Lane Gas Processing Facility. Where PRsOW are located in close proximity to the permanent development associated with the Well Site, proposed Hurrell Lane Gas Processing Facility and access road, visual effects will represent at most a minor/moderate magnitude of change at year 1. The views from the roads surrounding the Application Site would generally, at most, experience a minor adverse effect at year 1, with the exception of sections of the A170 in the immediate vicinity of the proposed access road.
- 8.153 However, on maturity of the planting across the proposed pipeline route and around the proposed Hurrell Lane Gas Processing Facility the existing landscape character would be reinstated so that there was no significant change in view, or the landscape buffers would provide an effective screen in views towards the permanent development, and remove significant adverse visual effects.
- 8.154 In summary, it is considered that the Proposed Development could be effectively assimilated successfully within the landscape and visual context, with no long term significant landscape or visual adverse effect.