



7.0 LANDSCAPE EFFECTS

7.1 INTRODUCTION

7.1.1 Landscape Character and Visual Assessments are based on recording and analysing the character, quality, value and sensitivity of landscape in relation to the anticipated change that a proposed development may bring.

7.1.2 Changes within the landscape can have a direct effect on people's surroundings. This chapter examines how and why the components that make up the site are valued, and analyses the potential affects that the scheme may have on the study area and the wider landscape.

7.1.3 In accordance with the requirements of DMRB Volume 11 Section 3, Part 5 1993 (as amended)¹, and with reference to Landscape Institute and the Institute of Environmental, Management & Assessment (2002) *Guidelines for Landscape & Visual Impact Assessment 2nd Edition*², this Chapter aims to compare the impacts of the proposed scheme on the landscape and visual qualities of the study area.

Aim of Assessment

7.1.4 This assessment has four key objectives;

- To describe and evaluate the existing landscape character of the site and wider context;
- To analyse the potential impacts of the scheme with respect to the landscape and visual resources of the area;
- To inform the scheme design in a way that mitigates against any negative impacts to the landscape and visual resources of the study area and the broader landscape, and;
- To determine the significance of effects.

Landscape Character & Visual Impact Assessment

7.1.5 An assessment of the impact of a development on the landscape takes into account the physical elements that make up the landscape, and also the character and quality of the landscape. Thus, landscape assessment needs to consider the human response to the landscape as well as its components. Landscape assessment takes into account individual elements, such as:

- landform and vegetation;
- character, which is the combination of the elements which gives the local or regional area individuality and which may be recognised by designations, and;
- characteristics, which is the combination of elements together with perceptions that contribute to public perception, such as remoteness, tranquillity or beauty.

7.1.6 The value placed on an area is dependant not only on its objective scenic quality but on its situation, rarity and usage. Historical and cultural

¹ Design Manual for Roads and Bridges (DMRB) (1993), Vol 11, Section 3, Part 5 Landscape Effects: <http://www.dft.gov.uk/ha/standards/dmr/vol11/section3/11s3p05.pdf> [Accessed 11/11/2011]

² The Landscape Institute and Institute of Environmental & Assessment (2002) *Guidelines for Landscape and Visual Impact Assessment 2nd Edition* Spon Press: London



associations may contribute to the value placed on a landscape. Landscapes not afforded national or regional designation may be nonetheless of great local value.

- 7.1.7 An assessment of the visual impact of a development is closely related to the landscape assessment, but looks more closely at changes that will occur in the composition of available views from defined viewpoints. Visual assessment takes into account the expected responses of people who will experience changes in the views. People who experience such changes are referred to as receptors.
- 7.1.8 The Landscape & Visual Impact Assessment has been an important part of the development of the scheme, both informing its design and influencing the mitigation of any adverse effects.

Related Areas

- 7.1.9 This chapter should be read in conjunction with Project Description within Chapter 1. Chapter 9 – Noise and Vibration is of particular interest as one of the measures recommended to reduce noise have an effect on landscape character and visual amenity. Also information relating to Ecology Chapter 6 should be considered during this assessment. The scheme is described fully in Chapter 1 and illustrated in General Arrangement Drawing No10/SW/0901/037/013.
- 7.1.10 An Environmental Scoping Study was undertaken by Royal Haskoning UK in November 2008, to produce a Record of Determination (RoD) to ascertain whether an Environmental Impact Assessment (EIA) was required for the scheme. Under the 'Environmental Impact Assessment (Scotland) Amendment Regulations 1999 as amended, the scheme is classed as Annex II which requires that an EIA is undertaken if a significant adverse environmental effect is anticipated. Due to the completed scheme being in excess of 1ha in area and the anticipated significant environmental effects, it was found that the scheme was a 'relevant project' and an EIA was necessary with particular focus on noise and visual impacts.
- 7.1.11 Ewan Oliver Associates were commissioned by Royal Haskoning UK (Engineering and Environmental Consultants) in February 2009, during the early stages of the scheme development, to provide landscape design input and carry out a Landscape & Visual Impact Assessment.
- 7.1.12 Amey have been commissioned by Transport Scotland to review and update the previous Environmental Statement carried out by Royal Haskoning. This report identifies amendments to the scheme design and assesses any additional impacts caused.

7.2 METHODOLOGY

Determination of Baseline Conditions

- 7.2.1 A baseline survey was carried out through a desktop study of maps, relevant documents, and site visits over a number of seasons were undertaken by a Chartered Landscape Architect.



Data Collection

SITE VISIT

- 7.2.2 A site visit was made by Royal Haskoning design team on 9th and 10th February 2009. This involved a walk over the site to take photographs and discuss the design. It should be noted that the site was significantly covered in snow during this site visit and subsequently the site was re-visited in June 2009 to take further photographs. In addition, a number of site visits have been carried out by Amey during October 2011 and December 2011 to carry out similar tasks.
- 7.2.3 A good understanding of the scheme and its objectives was gained by viewing and discussing drawings of the most recent design and a number of resources including site survey drawings were made available.

DESK STUDY

- 7.2.4 Further data and information regarding the scheme and the landscape character of the area was obtained from a number of sources including:
- The Ayrshire Landscape Assessment (1998)³;
 - The Ayrshire Joint Structure Plan (2007)⁴;
 - North Ayrshire Council Local Plan (2005)⁵;
 - Visual impact study of the proposed A737 realignment at The Den (Ash Design + Assessment)⁶;
 - Environmental Report (North Ayrshire Council 2008)⁷; and,
 - Environmental Statement, Realignment of the A737 at The Den (North Ayrshire Council 2010)⁸.

CONSULTATION

- 7.2.5 Consultation was carried out by Amey to discuss changes to the proposals. During the site visit on 14th and 15th December 2011, meetings were attended at the homes of residents from No. 27, No. 29, The Den, Meadowhead Farm (25 The Den) and 25A The Den to discuss alternative design to assist in reducing the noise levels for the proposed road realignment scheme. Landscape design was also proposed in order to retain existing views where possible and screen planting to mitigate any adverse effects, as well as replanting to replace tree removal from Auchengree Road east to Maulside Lodge.

³ The Ayrshire Landscape Assessment, SNH Review NO.111 (Land Use Consultants 1998)

⁴ The Ayrshire Joint Structure Plan (2007). Available at: <http://www.ayrshire-jsu.gov.uk/download/Approved%20AJSP%20Nov%202007.pdf>.

⁵ North Ayrshire Council Local Plan (2005). Available at: <http://www.north-ayrshire.gov.uk/Documents/CorporateServices/LegalProtective/LocalDevelopmentPlan/NAExArranDocument.pdf>

⁶ The Den Trunk Road Improvement to the A737 near Beith. Landscape and Visual Assessment Undertaken on behalf of Royal Haskoning (ASH Design and Assessment)

⁷ Realignment of the A737 at The Den, Environmental Report (North Ayrshire Council, 2008)

⁸ Environmental Statement, Realignment of the A737 at The Den (North Ayrshire Council, May 2010)



7.2.6 Amey also consulted with statutory consultees by letter, to allow them the opportunity to comment on the amended proposals. Mitigation proposals have been provided by SEPA (Scottish Environmental Protection Agency) and SNH (Scottish Natural Heritage). The responses can be found in Chapter 3 Consultation.

Planning Policy, Legislative Context and Standards

7.2.7 More details of relevant designations, policies and standards are given in Chapter 6, Ecology and Chapter 14, Plans and Policies.

Ayrshire Joint Structure Plan

7.2.8 The Ayrshire Joint Structure Plan⁹ was adopted in 2007 and provides a strategic land use framework up until 2025. The following policies are of particular relevance to the scheme:

- ENV1 - Landscape Quality: The quality of Ayrshire's landscape and its distinctive local characteristics shall be maintained and enhanced. In providing for new development, particular care shall be taken to conserve those features that contribute to local distinctiveness including:
 - A) settings of communities and buildings within the landscape;
 - B) patterns of woodland, fields, hedgerows and tree features;
 - C) special qualities of rivers, estuaries and coasts;
 - D) historic landscapes; and
 - E) skylines and hill features, including prominent views.

7.2.9 Local plans shall seek to protect and enhance landscape character and establish criteria for the assessment of future development proposals, with particular reference to the context of the local landscape type where the development is proposed.

- ENV2 - Landscape Protection;
 - A) Development that affects a National Scenic Area will only be permitted where it has demonstrated:
 - a) The overall objectives of the designated area and the overall integrity of the area would not be compromised; or
 - b) Any significant adverse effects on the qualities for which the area has been designated are clearly outweighed by social or economic benefits of national importance.
 - B) In Sensitive Landscape Character Areas the protection and enhancement of the landscape shall be given full consideration in the preparation of local plans and the determination of planning applications.
- ENV5 – Woodland Strategy; proposals for woodland and forestry will be supported where they are consistent with the objectives and key actions of the Ayrshire and Arran Woodland Strategy and consistent with policies in both the structure plan and local plans, and;
- TRANS - 3 Strategic Road Development; the three Ayrshire Councils shall work in partnership with relevant transport bodies to develop and promote improvements to other parts of the strategic road network in

⁹ The Ayrshire Joint Structure Plan (2007). Available at: <http://www.ayrshire-jsu.gov.uk/download/Approved%20AJSP%20Nov%202007.pdf>.



the investment corridors, including traffic relief for communities and the safeguarding of land for strategic road network enhancement where appropriate. They will also support measures to improve safety on the strategic road network and ensure it is maintained to a suitable standard to accommodate long distance traffic and freight movements.

Local Development Plan

- 7.2.10 The North Ayrshire Local Plan¹⁰ was adopted in 2005 and sets out planning policies and allocates land for development.
- 7.2.11 Of particular relevance to this report is Chapter 3: Development Control Statement which sets out the criteria for assessing all development proposals. Guidance is given regarding the importance of:
- Appropriate siting, design and appearance of development within the local context;
 - Local amenity;
 - Impact of noise, vibration, and environmental pollution;
 - Disturbance by reason of vehicular or pedestrian traffic;
 - Preservation and planting of trees and hedgerows;
 - Landscape character and use of The Landscape Character Assessment, March 1998 in assessing significant developments; and
 - Access on foot, cycle, public transport or by road.
- 7.2.12 Chapter 12: Countryside and Natural Environment outlines the importance of the region's rural areas and the balance that must be struck between the protection of the environment and the providing of needs of local communities.
- 7.2.13 Policies of relevance to this landscape & visual impact assessment include:
- ENV 1 – Development in the Countryside; outlines the presumption against development in the countryside unless certain criteria are met, including: (d) development associated with public utility operations that have a specific operational need to be located on site.
 - ENV 5 – Sensitive Landscape Areas; identifies the consideration to be given to the conservation and enhancement of the landscape in determining development proposals. The study area lies 3 km to the south east of a Sensitive Landscape Area.
 - ENV 7 – Ayrshire Local Biodiversity Action Plan (LBAP); seeks to identify protected habitats and species, identify opportunities for enhancing natural heritage, establish 'green corridors' and support management proposals to conserve and enhance the biodiversity of the region.
 - ENV 10 – Access to the Countryside; seeks to establish a local access forum, develop an access strategy and identify and maintain a public record of a Core Path Network.
 - TRA 7 (R) – The Strategic Road Network; recommends that the Scottish Executive fully assesses the need for further improvements on the trunk road network and brings forward schemes for:

¹⁰ North Ayrshire Council Local Plan (2005). Available at: <http://www.north-ayrshire.gov.uk/Documents/CorporateServices/LegalProtective/LocalDevelopmentPlan/NExArranDocument.pdf>



- A737/A738 between Kilwinning and Howwood by-pass; and
- A78 coastal route through West Kilbride, Fairlie and Skelmorlie.

7.2.14 National planning policy on landscape and natural heritage is set out in Scottish Planning Policy (SPP)¹¹, and is supported by Planning Advice Note (PAN) 60 Planning for Natural Heritage¹² Key elements of the policy include:

- Taking a broader approach to landscape and natural heritage than just conserving designated or protected sites and species, taking into account ecosystems and natural processes;
- Facilitating positive landscape change whilst maintaining and enhancing distinctive character;
- Seeking benefits for species and habitats from new development including the restoration of degraded habitats;
- Siting and design of development should be informed by local landscape character;
- Encouraging connectivity between habitats, through green networks;
- Protecting internationally and nationally designated habitats and species.
- Protecting and enhancing woodland and trees of high nature conservation value

Determination of Impact Significance

7.2.15 The criteria for assessing the sensitivity of the landscape and for assessing the magnitude of impacts are defined within the DMRB and set out in Tables 2.1 and 2.2 in Chapter 2 (Environmental Impact Assessment Methodology) of this report. The criteria for assessing the sensitivity of visual receptors are set out in Table 7.1 and the criteria for assessing the magnitude of impact in Table 7.2. The method for assessing the significance of those impacts and the tables which guide the assessment are given in Tables 2.3 and 2.4 within Chapter 2.

7.2.16 For the purpose of this assessment, impacts that have been classified as having a significance of moderately negative or more severe are considered significant in terms of the Environmental Impact Assessment (Scotland) Regulations 1999 (as amended). Mitigation will be implemented where possible, for impacts greater than moderate.

7.2.17 It is important to note that significance categories are negative (adverse) impacts unless otherwise stated as positive (beneficial).

7.2.18 Landscape and visual assessments although linked, are undertaken as separate procedures within this report due to the complexities of quantifying the landscape. The study assesses the anticipated effects on landscape character and visual amenity during the time when the scheme will be under construction and during its operational life.

¹¹ Scottish Planning Policy (2010). Available at:

<http://www.scotland.gov.uk/Resource/Doc/300760/0093908.pdf>

¹² Planning Advice Note 60 Planning for Natural Heritage (2000). Available at:

<http://www.scotland.gov.uk/Publications/2000/08/pan60-root/pan60>



Landscape

- 7.2.19 Following the survey, an evaluation of the sensitivity of the landscape and magnitude of the proposed changes on the elements of the landscape was carried out through an assessment of the nature, scale and extent of the proposed changes, together with their duration.
- 7.2.20 Because of the complexity of the landscape within the area it was decided to assess the impacts of the route on each of two distinctive areas separately. The two separate landscape study areas are The Den village, and the surrounding rural landscape which is defined as Open Farmland within Figure 7.2.

Visual

- 7.2.21 This assessment has been undertaken in accordance with the guidance detailed in DMRB Volume 11 Section 3, Part 5 1993 (as amended)¹³, Ayrshire Landscape Character Assessment (SNH, 1998) and in accordance with the EIA Directive (Article 3 of the 1997 Directive). 'Guidelines for Landscape and Visual Impact Assessment' (GLVIA), published by The Landscape Institute and The Institute of Environmental Assessment, 2nd Edition 2002) were referred to whilst compiling this assessment.
- 7.2.22 The visual assessment was undertaken on site within an area of 500m width each side of the centre line of the proposed road.
- 7.2.23 The objective of the assessment is to evaluate how the landscape would be affected from all receptors within the Visual Envelope. Receptors include all views from local people from their residential properties, public buildings including work places, recreational buildings and outdoor locations the public have access to. In most cases these will be the same as the landscape features, but this will not always be the case, as the visual assessment concentrates on views from properties and other view-points within the visual corridor.
- 7.2.24 The assessment was undertaken during a site visit in December 2011, although the site has been visited in other seasons and in other weather conditions over a number of years.
- 7.2.25 The sensitivity of the visual receptors was assessed by evaluation of a range of factors, including:
- the type of receptors;
 - the amount of time they are presumed to spend within the study area i.e. whether they are residents or travellers, and;
 - the expectations of users/receptors. Thus tourists are judged to be influenced by scenery whereas workers in an enclosed workspace are assumed to be less sensitive to the views.

¹³ Design Manual for Roads and Bridges (DMRB) (1993), Vol 11, Section 3, Part 5 Landscape Effects: <http://www.dft.gov.uk/ha/standards/dmr/vol11/section3/11s3p05.pdf>



Table 7.1 Criteria for assessing the Sensitivity of Visual Receptors

Value (sensitivity)	Typical Criteria Descriptors – or criteria
Very High	The landscape and view are of very high value and importance to the receptor and any changes will make a significant difference. Value usually allocated to residents and tourists.
High	The landscape and view are of high value and importance to the receptor and any changes are noticeable Value usually allocated to visitors and short-term tourists.
Medium	The landscape and view are of average value to the receptor and any changes are less obtrusive. Value usually allocated to office workers, schools etc.
Low	The landscape and the view are of low value and any changes are insignificant. Value usually allocated to long-distance drivers and commuters.
Negligible	The landscape and the view have no particular relevance to the receptor, and any changes are will not be noticed. Value usually allocated to factory or commercial premises workers. (enclosed premises)

Table 7.2 Magnitude of Impact on Visual Receptors

Magnitude	Typical Criteria Descriptors
Major	The proposals dominate the view which completely changes its components.
Moderate	The proposals dominate the view and fundamentally change its character and components.
Minor	The proposals are noticeable in the view, affecting its character and altering some of its components and features.
Negligible	The proposals are a minor element of the overall view and do not make a significant change to it.
No Change	The proposals are virtually undetectable.



- 7.2.26 In conclusion, impacts that are moderate, large or very large are considered to be significant whilst minor and slight impacts are not.

Determination of Residual Impact Significance

- 7.2.27 The significance of adverse impacts may be mitigated by design or reduced over time, as new surfaces weather or vegetation matures. This is known as the residual impact and is assessed as it may be expected to appear after 15 years.

7.3 BASELINE CONDITIONS

Landscape

- 7.3.1 The majority of the site comprises fields used for grazing with improved and semi-improved grasslands predominating and newly planted mixed deciduous woodland. The highest point of the site is near the centre, with the land sloping gently away to the east and west. At the western end of the site there is a cross roads with a café / restaurant on the roadside just to the north of the site boundary.
- 7.3.2 Directly to the east of the crossroads (still to the north of the site) is a small area of derelict land with areas of hard standing. This area was formerly a hotel, and there are proposals to develop this site as a motel. To the east of the site the land is level and used as grazing for cattle. Field boundaries run across the site and comprise a mixture of fencing, stone walls and hedgerows. The central area of the site has been planted with mixed deciduous woodland and a track from the A737 to Meadowhead Farm cuts across the site.
- 7.3.3 Further east of The Den, the ground slopes gently to the east and there is an area of slightly rougher ground covered with scrub and brambles *Rubus spp.*, and occasional blocks of old stone.
- 7.3.4 Just beyond this a road cuts across the site from north to south. On the eastern side of this is a burn / ditch flowing north, which has been culverted under the existing A737. The eastern end of the site comprises slightly marshy ground.
- 7.3.5 The land use surrounding the site comprises mixed grazing (cattle and horses) and areas of newly planted mixed deciduous woodland towards the centre. There are several detached houses to the south (The Den area). The surrounding land generally slopes gently from north to south, the existing A737 road to the south being the lowest point. There are patches of marshy ground in the fields, particularly in any low points and near the burn.
- 7.3.6 The landscapes within the study area are valuable to many residents and visitors, as discussed during consultation however the area does not have any special designations relating to landscape quality.



Landscape Character

- 7.3.7 According to SNH, Regional Character Areas are recognisable as distinct landscape 'regions' at the broad scale, based on general characteristics such as geology, landform, soils, ecological associations, land cover and historical patterns of settlement and land use. The regional character area within the study area is Ayrshire Basin which is bounded to the north by the Renfrew Heights and to the east and south by the Ayrshire Rim and Carrick Hills and Valleys. The basin varies in elevation however the area's distinctive character is the pattern of settlement and land use. The Ayrshire Basin, in comparison with surrounding areas, is heavily populated with a dense network of roads and settlements. The survival of the hedges and hedgerow trees is a result of the principal land use which is dairy farming.
- 7.3.8 The Ayrshire Landscape Assessment, SNH Review No. 111 (Land Use Consultants 1998)¹⁴ defines the area as Broad Valley Lowlands, and Ayrshire Lowlands (see Figure 7.1 – Landscape Character Areas of Ayrshire).
- 7.3.9 Broad Valley Lowlands in the region are predominantly pastoral in nature. The region is characterised by rolling hills and the patchwork effect of small fields interspersed with copses and narrow shelterbelts, predominately of native deciduous species. The rural landscape is relatively densely settled with a number of minor roads serving the population. Views are enclosed by topography and strips of woodland with often extensive views across the Garnock valley and beyond. Older buildings are generally constructed in stone and slate with newer structures being rendered and painted white or cream.
- 7.3.10 Ayrshire Lowlands in the region are typified by extensive areas of low lying, mainly grassland fields. These fields are generally defined by mixed native hedgerows of hawthorn (*Crataegus monogyna*), cherry (*Prunus spp.*) and beech (*Fagus sylvatica*) that are for the most part well maintained. Small plantations of native woodland, shelterbelts and individual roadside trees are in abundance. As with Broad Valley Lowlands, there is a dense pattern of settlements with small hamlets and villages and more isolated farm steadings distributed throughout the character type.

LANDSCAPE STUDY AREAS

- 7.3.11 To analyse the landscape baseline of the area of the proposed development it was necessary to identify and examine landscape character at a more local scale. The village and the surrounding rural landscape can be defined as having different characteristics and these are discussed below.
- 7.3.12 The landscape character of the village is similar to the Roadside Hamlet characterisation described within the SNH Review 111(1998), whilst the surrounding landscape is rural with few dwellings and is similar to Lowland Farmland.
- 7.3.13 These areas are illustrated in Figure 7.2 – Landscape Study Areas.

¹⁴ Available at: <http://www.snh.org.uk/publications/on-line/LCA/Ayrshire.pdf>

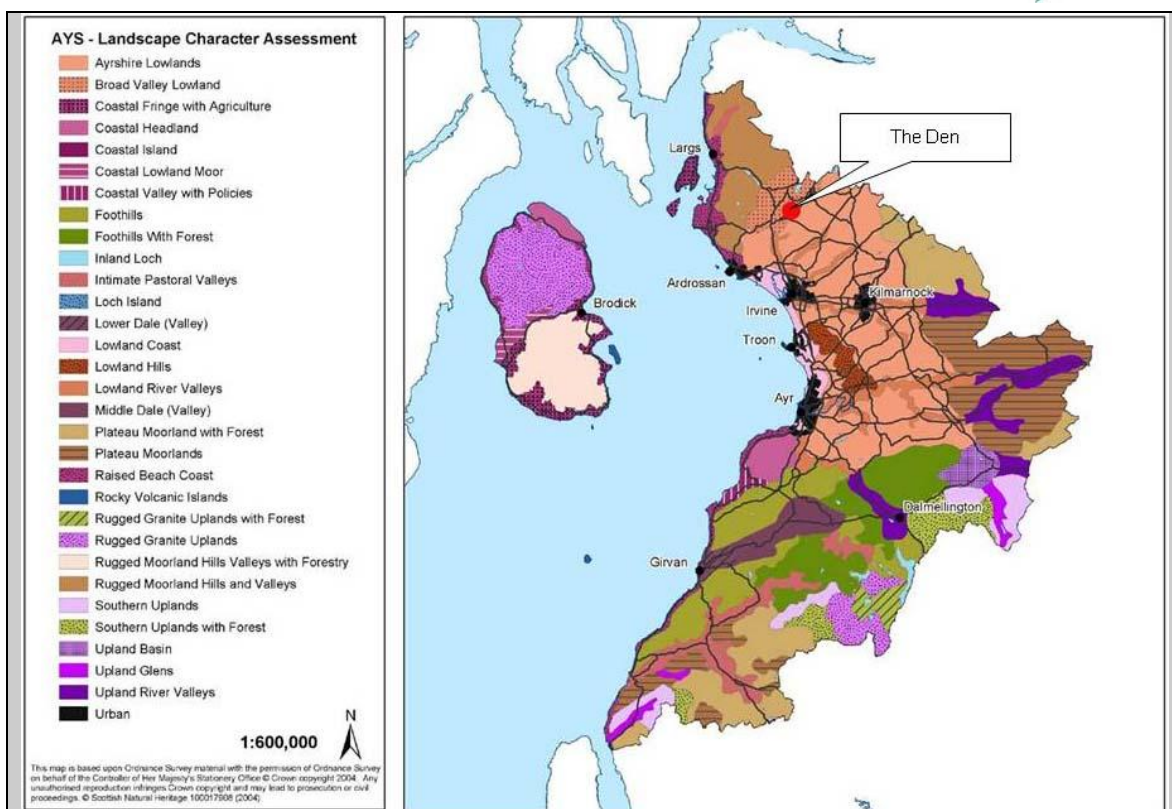


Figure 7.1 Landscape Character Areas of Ayrshire



Figure 7.2 Landscape Study Areas



- 7.3.14 In accordance with Table 2.1 the sensitivity of the landscape character is assessed as low as it is of medium importance on a local scale.

Landform

AREA 1: THE DEN VILLAGE

- 7.3.15 There are approximately eight houses within the village arranged in a linear pattern along each side of the A737 road and clustered at the crossroads. The road sits within a cutting at the centre of the village with houses arranged on land that gently rises up on both sides of the carriageway.

AREA 2: OPEN FARMLAND

- 7.3.16 The topography is gently rolling with scattered stands of pine or beech trees interrupting the predominantly horizontal elements of the landscape. Due to the predominance of open grassland and the relatively low density of wooded areas, the landscape feels open and exposed with far reaching views out of the study area especially towards the North West (see Photographs 7.1 and 7.2 below).
- 7.3.17 Meadowhead Farm is situated on a hill approximately 200 metres to the North West of the village. The peaks of Burnt Hill (1084m) and Irish Law (1586m) are the most prominent feature on the horizon to the north.
- 7.3.18 In accordance with Table 2.1 the sensitivity of the landform is assessed as low as it is of medium importance on a local scale.

Land Use and Vegetation

AREA 1: THE DEN VILLAGE

- 7.3.19 There are pockets of woodland or agricultural land between many of the residences giving the village a rural characteristic. The condition of the landscape within the village is predominantly good, with trees hedges and gardens being generally well kept and maintained.
- 7.3.20 During consultation with residents it was evident that The Den Village is a locally valued resource as a place to live.

AREA 2: OPEN FARMLAND

- 7.3.21 The landscape surrounding the village is for the most part under permanent pasture and for the production of grass crops for winter feeding. The predominant land use is livestock farming as is typical of this region. A number of native mixed hedges mark field boundaries running perpendicularly and parallel to the main A737 road that dissects the village.
- 7.3.22 At Meadowhead Farm the setting is rural with the majority of the surrounding fields being in permanent pasture. Much of the land to the east and south of the steading has been planted in the last 5 years with trees of native species. These trees are establishing well as a result of good maintenance practice and it is anticipated that they will contribute to changing the landscape character significantly in the next 5-10 years by closing off some views and reducing the exposed nature of the study area.
- 7.3.23 The condition of the surrounding rural landscape is good with trees, hedgerows, fences and buildings being generally well kept and maintained.



- 7.3.24 The residents value the local resource however in accordance with Table 2.1, the sensitivity of land use and vegetation is of importance, but mainly on a local scale therefore they are assessed as having low sensitivity.

Built Environment

AREA 1: THE DEN VILLAGE

- 7.3.25 The density of housing is low, with houses in the village having generally been constructed with similar materials. The houses have stone walls with a 'harled' render finish (painted in some cases) with grey slate roofs. Housing stock generally dates from the 18th and 19th Centuries (with evidence of 20th Century modifications in most cases) and can be described for the most part to be of the typical vernacular style of architecture for rural Ayrshire (see Photographs 7.3 and 7.4 below).
- 7.3.26 The intensity of road noise experienced from the A737 detracts from the landscape character of the study area.

AREA 2: OPEN FARMLAND

- 7.3.27 Buildings within the open farmland are restricted to four areas. These are located at Maulside Lodge, Meadowhead Farm, and West Muirhouse Farm and at the junction of the A737 with Brownhill Road. The buildings at each location consist mainly of a dwelling house with outbuildings. The only exception to this is at the area around the junction with Brownhill Road where buildings include the Graze Restaurant with a private residence (Fernside) located diagonally opposite.
- 7.3.28 There is a section of dry stone wall along the west bound lane between No.s 18/20 The Den and Fernside. This wall appears to be a retaining wall and is obscured by vegetation in some areas. The eastbound lane of the existing road is bound by a dry stone wall between Auchengree Road and Maulside Lodge. The wall disappears from view in some areas and also appears to be falling into a state of dis-repair.
- 7.3.29 It is therefore considered that the sensitivity of the built environment for The Den Village and the surrounding area are assessed as low in accordance with Table 2.1.



Photograph 7.1 View to North-west of village



Photograph 7.2 View to North from 1 The Den



Photograph 7.3 View of cottage opposite 27 The Den



Photograph 7.4 View into village from the West

The Road in the Landscape

- 7.3.30 Travelling from the west past The Graze Restaurant, there are open views across the surrounding landscape mainly to the north. After passing Fernside, the views become restricted in all directions due to the landform. The road continues through The Den Village in cutting with restricted views. On passing Dungoyle, the views become intermittent due to roadside vegetation. Open views are only experienced again on passing Maulside Lodge, beyond the scheme extents.
- 7.3.31 The road is in cutting through the majority of the scheme extents and it is not obtrusive in the landscape. The sensitivity of the road in the landscape is assessed as low as it is of medium importance on a local scale.
- 7.3.32 Overall, In accordance with Table 2.1 the sensitivity of the landscape is assessed as low as all the landscape components are of medium importance on a local scale.

Visual

- 7.3.33 The relevant receptors and the nature of the views from their viewpoints were identified during site visits in October and December 2011, in accordance with DMRB, Volume 11. A Visual Impact Drawing (VID) was prepared and identifies potential receptors within 500m of the scheme that would be affected (see Drawing No 10/SW/0901/037/212. Visual Impact



Drawing). A Visual Impact Schedule (VIS) can be found in Appendix E. The VIS describes the type of visual receptor, distance from the centre line of the existing road and to the proposed road alignment, as well as stating the visual impact and residual impact significance.

7.3.34 Although the development may be visible beyond this distance, it is considered that any potential effects outside this zone would not be significant due to:

- Screening by features within the landscape such as woodland and hedgerows;
- Interruption of view by existing woodland plantations close to the proposed development;
- The effect of increased distance from the development, and;
- The low lying nature of the development with few significant vertical elements.

7.3.35 There are also at least four properties that are within the visual impact zone but do not have a view of the proposals and therefore these are not included in the list of visual receptors.

7.3.36 There are a total of 15 visual receptors within the study area. The residents and users of these buildings are likely to have views of the proposed scheme and associated works. These properties are listed below:

- Maulside Lodge;
- Dungoyle;
- Nidaros;
- 24 The Den;
- 22 The Den;
- 29 The Den;
- 27 The Den;
- Meadowhead Farm - 25 The Den;
- 25a The Den;
- 18-20 The Den
- 17-19 The Den
- 1 The Den
- West Muirhouse Farm
- Fernside
- The Graze Restaurant

7.3.37 Drawing No. 10/SW/0901/037/212 (Visual Impact Drawing) illustrates the location of the receptors and viewpoints across the study area.

7.3.38 There are no public footpaths or transport routes (other than the A737 itself) within the visual study and therefore it was not seen as necessary to analyse additional receptors.

7.3.39 View 1 from Maulside Lodge has narrow views of the A737 to the south through the entrance gate and long distance views to the east past the boundary fence/hedge. The views from the garden grounds to the west are restricted by field/road boundary vegetation. These views are more open during the winter months when the leaves have fallen from the trees.

7.3.40 View 2 is from Dungoyle, which is a detached property. The majority of the garden is bound by coniferous trees which prevent clear views north onto

the A737. The house is located approximately 40m from the edge of the A737.

7.3.41 View 3 is from Nidaros, a detached property located approximately 45m from the A737. Views to the north are restricted from the dwelling due to the existing vegetation; however there are clear and open views of the A737 from the garden.

7.3.42 View 4 is from 24 The Den. This receptor is located approximately 65m south of the A737. However there is a small paddock bounded by coniferous trees immediately to the north of this property which prevents views towards the A737. Views to the west, Muirhouse Road are oblique and narrow through the driveway of properties 22 and 24 The Den.

7.3.43 View 5 is from 22 The Den and is located approximately 60m south of the A737. The views from this receptor are restricted to the north due to the boundary of coniferous trees located in the garden grounds. There are oblique and narrow views of the A737 along Muirhouse Road. Meadowhead Farm is visible in the distance (see photograph 7.5).



Photograph 7.5: View 5 looking from No. 22, The Den in a north easterly direction (Photograph taken December 2011)

7.3.44 View 6 is from the rear garden of 29 The Den. The view to the north is open only being intercepted by a hedge and two trees (See Photograph 7.6). A mature stand of trees can be seen in the distance to the left, with a row of electricity pylons to the right. The views south onto the existing A737 are open as there is no existing vegetation and although a stone wall bounds the property, the land falls gently to the road. The view east towards Auchengree Road is open over the adjacent paddock. This receptor is approximately 20m from the existing A737 to the south.



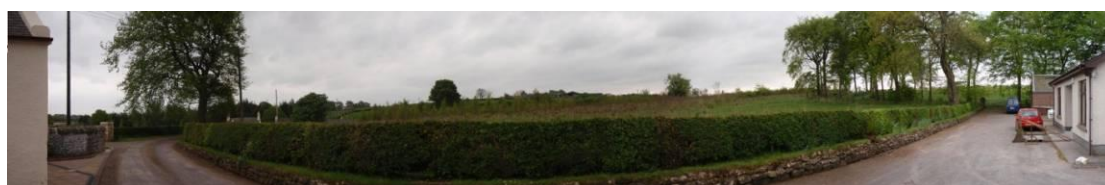
Photograph 7.6: View 6 looking from No. 29, The Den in a north easterly direction (Photograph taken June 2009)

- 7.3.45 View 7 is from the side of 27 The Den, looking in a westerly direction the view is restricted by a mixed hedge in the foreground and trees in the mid ground. A neighbouring property can be seen on the opposite side of the main road. In the distance a wooded ridge to the south west of the village is visible (see Photograph 7.7). Views north from the kitchen window of the property are severely restricted due to a timber fence.



Photograph 7.7: View 7 looking from No. 27, The Den in a south westerly direction (Photograph taken June 2009)

- 7.3.46 View 8 (Photograph 7.8) is from the front of the main dwelling at Meadowhead Farm (25 The Den), looking in a south westerly direction the view is open across a well maintained mixed native hedge in the foreground. A grass field (for the most part planted with semi mature tees) and stand of mature trees can be seen in the mid ground. In the distance a grassed ridge with sporadic pockets of woodlands can be seen on the horizon.



Photograph 7.8: View 8 looking from Meadowhead Farm in a southerly direction, 25a The Den can be seen to the right (Photograph taken June 2009).

- 7.3.47 View 9 is from 25a The Den and is afforded similar views to that of Meadowhead Farm (see Photograph 7.9) over the mixed native hedge, the grass field leading to the semi-mature trees and beyond towards the sparse planted grassed ridge.



Photograph 7.9: View 9 looking from 25a The Den in a southerly direction (Photograph taken December 2011).



Photograph 7.10: View 10 looking from 18-20, The Den north over the A737 to No. 27 and No. 29 The Den (Photograph taken December 2011).

7.3.48 View 10 is from 18-20, The Den, which is located at the crossroads within The Den, approximately 5m from the A737. The property is located on the westbound side of the road and is afforded very close and open views of the existing A737 (see Photograph 7.10). Further north beyond the road are views of 27 and 29 The Den where the land rises gently to meet the houses. Further north beyond 27 and 29 The Den, existing semi-mature woodland

planting is visible. There is an open view to the east of the A737 from the gable end of the property.

7.3.49 View 11 is from 17-19, The Den. The view of the existing road is open and very close as the property is located approximately 5m from the east bound side of the carriageway. The land rises steeply behind this property with overgrown vegetation clothing the banking. Views further north are restricted due to existing semi-mature woodland planting.

7.3.50 View 12 is located at the rear of 1 The Den, looking in a north westerly direction across a grass field in the foreground with mixed native hedges and tree planting in the mid ground (Photograph 7.11 below). In the distance hills rising up to approximately 1200 metres are visible on the horizon.



Photograph 7.11: View 12 looking from No. 1 The Den in a north westerly direction (Photograph taken June 2009)



Photograph 7.12: View 14 looking in a north easterly direction from Fernside (Photograph taken December 2011)

7.3.51 View 13 is located from West Muirhouse Farm, located approximately 200m from the existing road. No views can be seen of the existing road however, oblique and distant views may be afforded from this receptor of the study area.

7.3.52 View 14 is from Fernside, a private residence located adjacent to the A737 at the western scheme extents. The view north is open and is of the existing road and surrounding fields (see Photograph 7.12). There are oblique views west towards The Graze Restaurant.

7.3.53 In accordance with Table 7.1, the sensitivity of views 1 to 14 is very high as they are from a private residence.



Photograph 7.13: View 15 looking in an easterly direction from The Graze Restaurant (Photograph taken December 2011)

7.3.54 View 15 is from The Graze Restaurant, which is located to the west of the scheme extents. The view is looking east along the proposed road alignment (see photograph 7.13). Views to the west are of the surrounding countryside. This building is frequented by the public during the day.

7.3.55 In accordance with Table 7.1, the sensitivity of this view is high as receptors are considered to be visitors and short-term tourists.

7.4 IMPACT ASSESSMENT

Landscape

7.4.1 This section assesses the anticipated impacts on the landscape as a result of the construction and operation of the scheme.



During Construction

AREA 1: THE DEN VILLAGE

- 7.4.2 During the construction phase increased vehicle movements associated with construction plant are anticipated. The movement of spoil from site as well as importing of materials and the operation of heavy plant for a period of approximately 32 weeks will have an adverse impact on the landscape character of the village. It is anticipated that the noise from machinery and disruption to normal traffic movements will detract from the landscape character of the village however; the majority of the new alignment will be constructed off-line and remote from the existing carriageway.
- 7.4.3 The Den will experience an increase in traffic flow associated with construction works.
- 7.4.4 In accordance with Table 2.2 the impact magnitude on all topics is assessed as minor as there will be some measureable change; however this will not affect the integrity of the landscape within the village.
- 7.4.5 The sensitivity of the landscape is assessed as low and the impact magnitude is assessed as minor. Therefore the impact significance on the landscape is determined to be slight in accordance with Table 2.4.

AREA 2: OPEN FARMLAND

- 7.4.6 The landform will be impacted by the presence of excavations, stock piling of soils and construction materials, and the formation of road embankments, drainage ditches and detention basins.
- 7.4.7 Impacts on land use will include the loss of some agricultural land and a large area of newly planted woodland. Additional roadside vegetation in the form of mature trees will be lost from the area between Auchengree Road and Maulside Lodge. Small sections of hedgerow will be lost from existing field boundaries.
- 7.4.8 The dry stone wall located between Auchengree Road and Maulside Lodge and at Fernside will be lost as a result of construction works. The construction works and associated materials, vehicles and traffic management, emphasises the presence of the road in the landscape.
- 7.4.9 In accordance with Table 2.2 the impact magnitude on all topics is assessed as moderate as some components will be lost; however the loss of these components will not affect the integrity of the landscape in the local area.
- 7.4.10 The sensitivity of the landscape is assessed as low and the impact magnitude is assessed as moderate. Therefore the impact significance on the landscape is determined to be slight in accordance with Table 2.4.

Post Construction

AREA 1: THE DEN VILLAGE

- 7.4.11 During operation of the scheme it is likely that The Den as a whole will experience an immediate beneficial change in landscape character due to the absence of fast moving traffic and HGVs through the village centre. This will result in the village becoming more peaceful and tranquil and will result in a considerably safer environment.



- 7.4.12 The landform, land use and built environment within the village will not be affected by operation of the new alignment, and there will be no impact.
- 7.4.13 The new alignment is mainly in cutting with small embankments at each tie-in. This will result in restricted views from The Den with the new alignment being unobtrusive.
- 7.4.14 In accordance with Table 2.2, the impact magnitude on landscape character is assessed as moderate beneficial as there will be an improvement to elements such as visual attractiveness and tranquillity due to the removal of through traffic.
- 7.4.15 Overall the impact magnitude on the landscape is assessed as moderate beneficial as this is the only perceivable change. In accordance with Table 2.4, the impact significance is assessed as slight beneficial.

AREA 2: OPEN FARMLAND

- 7.4.16 The majority of the new road will be in cutting and although it will be of a much larger scale than the current embankments it will be unobtrusive in the landscape as it follows the existing shape of the land. The two areas of tie-in will be on small embankments and will be more prominent, until new planting matures and integrates with the immediate surroundings.
- 7.4.17 In addition, the depth of the cutting will cause only a small portion of the top of any high-sided vehicles to be viewed. This negative visual amenity will only be viewed by residents in 1 The Den and although there is the possibility that these views may be further enhanced due to proposals to build dormer windows to the rear of the property. Proposed planting will further reduced negative visual amenity in the future as planting matures.
- 7.4.18 The land form will be altered slightly by the new road embankments, drainage ditches and detention basins.
- 7.4.19 Impacts on land use (details can be found in Chapter 8 Land Use) will include the loss of some agricultural land and a large area of newly planted woodland.
- 7.4.20 Two separate basins will be created at the east end of the scheme, one at the end of the severed Auchingree Road and the other adjacent to the new access road to the village. The basins will be approximately 750 mm below the existing ground level and approximately 1.75 m below the proposed road level. The north basin has a low bund round it. Both basins take the surface water from the carriageway for treatment and attenuation.
- 7.4.21 This provides a second treatment for the surface water before discharging to the ditch alongside Auchengree Road. For the purpose of safety both ponds will be surrounded with post and wire fencing.
- 7.4.22 There also three small treatment basins forming a wetland located southwest of 1 The Den. These basins are a second treatment for carriageway surface water which will over-spill and entering the ditch just west of 1 The Den, This water will be used to assist the flushing of the ditch/culvert which passes through the village and takes the overflow from the septic tanks of the houses there.
- 7.4.23 The pond is situated within a small area of rough grassland which has been previously partially fenced off. The new proposals will fence off the whole area including the new road to the north. There are limited views of this



- pond, mainly from receptors of 1 The Den and those travelling to and from Fernside.
- 7.4.24 The creation of the basins and associated fencing will be permanent and will include direct and physical change to the landscape such as changes in the landform and vegetation. Indirect effects on the quality and character of the landscape will be minimal due to their percentage cover in relation to the scheme and the location of the basins.
- 7.4.25 The new dry stone wall along with new planting will conserve the landscape character between Auchengree Road and Maulside Lodge and at Fernside.
- 7.4.26 In accordance with Table 2.2, the impact magnitude on the landscape character is assessed as negligible as there will be very minor alterations within the area. The impact magnitude on landform is assessed as minor as there will be some measureable changes resulting from the new road cutting through the land and the formation of high steep embankments resulting in removal of agricultural land and newly formed woodlands as well as formation of detention basins. The majority of these works will be unobtrusive in the landscape.
- 7.4.27 The impact magnitude on land use and vegetation is assessed as minor as there will be a loss of some agricultural land and the newly planted woodland. Although vegetation lost will be re-instated as part of the design, it will integrate better with the immediate surroundings as the planting matures.
- 7.4.28 The buildings within the area will not change due to the new alignment. The re-instated sections of dry stone wall between Auchengree Road and Maulside, and immediately to the east of Fernside will conserve the character of the area, but will integrate better with the surroundings over time. The impact magnitude on the built environment is assessed as minor as there will be some measureable change to the stone walls within the area.
- 7.4.29 The impact magnitude on the road in the landscape is assessed as minor as prominence of the road is increased. Over time as the planting establishes, the road will integrate better with the immediate surroundings.
- 7.4.30 Overall the impact magnitude on the landscape is assessed as minor as there will be a minor loss and measureable change to some features within the area. In accordance with Table 2.4, the impact significance is assessed as slight.
- 7.4.31 A summary of the impacts on the landscape that are anticipated during construction and operation of the scheme is provided in Table 7.3 below.



Table 7.3 Summary of Impacts on Landscape

Receptor	Sensitivity	Magnitude of Change		Significance of Impact	
		Construction	Post Construction	Construction	Post Construction
Area 1: The Den Village	Low	Minor	Moderate beneficial	Slight	Slight beneficial
Area 2: Open Farmland	Low	Moderate	Minor	Slight	Slight

Visual

During Construction

- 7.4.32 The majority of the new alignment will be constructed off-line and remote from the existing carriageway. Traffic will be subject to some delays during construction operations. Work will be conducted under lane restrictions using temporary traffic management.
- 7.4.33 View 1 from Maulside Lodge – Construction traffic will be visible within the long distance views to the east. It will be necessary to remove the boundary wall from Auchengree Road west of Maulside Lodge, and the majority of vegetation located alongside. The views to the west will become more open due to the removal of vegetation. Therefore there will be close and distant views of the works from the garden grounds.
- 7.4.34 In accordance with Table 7.2, the impact magnitude on the view is assessed as moderate as there will be a loss of resource to the west adjacent to Auchengree Road. The works will dominate the view to the west with close views out through the entrance to Maulside Lodge and possibly east of queuing traffic, traffic management and delivery of materials through the boundary vegetation. In accordance with Table 2.4, the impact significance is assessed as large.
- 7.4.35 View 2 from Dungoyle – The majority of the garden is bound by coniferous trees which prevent clear views of the A737; however the deciduous tree located opposite Auchengree Road junction will create narrow views onto the A737 during the winter months and therefore, views of the works at this location.
- 7.4.36 In accordance with Table 7.2 the impact magnitude is assessed as negligible as the narrow view is a minor element of the overall view from the garden. In accordance with Table 2.4, the impact significance is assessed as slight.
- 7.4.37 View 3 from Nidaros - Views from the dwelling are restricted due to the evergreen vegetation. Construction works will dominate the view north from the garden.
- 7.4.38 In accordance with Table 7.2, the impact magnitude is assessed as minor as the works will only be noticeable from the garden. In accordance with Table 2.4, the impact significance is assessed as moderate as only views from the garden will be affected.



- 7.4.39 View 4 from 24, The Den – There is no clear view of the A737 from this property; however there are oblique and narrow views to Muirhouse Road. Traffic management may cause vehicles to queue on Muirhouse Road and this may be visible from the property.
- 7.4.40 In accordance with Table 7.2, the impact magnitude is assessed as negligible as there will be no significant change to the view. In accordance with Table 2.4, the impact significance is assessed as slight.
- 7.4.41 View 5 from 22, The Den – There are oblique and narrow views of the A737 along Muirhouse Road. Traffic management may cause vehicles to queue on Muirhouse Road and this may be visible from the property. Construction works between The Den and Meadowhead may be visible in the distance through existing vegetation.
- 7.4.42 In accordance with Table 7.2, the impact magnitude is assessed as negligible as the works will be a minor element of the overall view. In accordance with Table 2.4, the impact significance is assessed as slight.
- 7.4.43 View 6 from the rear garden of 29, The Den – The construction works will be visible in the view to the north. The works will dominate this view while excavation work is undertaken to form the new cutting. The visual impact of these works should reduce as the work progresses. Views to the south will remain relatively unchanged.
- 7.4.44 The works will be clearly visible in the view to the east towards Auchengree Road.
- 7.4.45 In accordance with Table 7.2, the impact magnitude is assessed as moderate as the proposals will dominate the views to the north and east. In accordance with Table 2.4, the impact significance is assessed as large, as the impact associated with views to the north will decrease as the works progress.
- 7.4.46 View 7 from the side of 27, The Den – There will be construction traffic visible in the view to the south west during construction of the turning head west of the property. The works will not be visible in views to the north as these views are restricted by a timber fence.
- 7.4.47 In accordance with Table 7.2, the impact magnitude is assessed as negligible as only construction traffic will be noticeable in the view. In accordance with Table 2.4, the impact significance is assessed as slight.
- 7.4.48 View 8 from Meadowhead Farm (No. 25) – The works will dominate the view to the south west while excavation work is undertaken to form the new cutting. The visual impact of these works should reduce as the work progresses. The works will also dominate the views south along the access road.
- 7.4.49 In accordance with Table 7.2, the impact magnitude is assessed as moderate as the works will dominate the view. In accordance with Table 2.4, the impact significance is assessed as large as the impact associated with views to the south west will decrease as the works progress.
- 7.4.50 View 9 from No. 25a The Den – The visual impact at this receptor will be very similar to Meadowhead Farm (No. 25).
- 7.4.51 In accordance with Table 7.2, the impact magnitude is assessed as moderate as the works will dominate the view. In accordance with Table 2.4,



the impact significance is assessed as large as the impact associated with views to the south west will decrease as the works progress.

- 7.4.52 View 10 from No. 18-20, The Den – The works will be visible in the views north beyond the existing A737, however the visual impact should reduce as the works progress. Works will also be visible in the view to the east however these will be distant.
- 7.4.53 In accordance with Table 7.2, the impact magnitude is assessed as minor as the works will be noticeable in the view. In accordance with Table 2.4, the impact significance is assessed as moderate as the impact associated with views to the north will decrease as the works progress.
- 7.4.54 View 11 from No. 17-19, The Den – The works will not be visible in the views from this property; however traffic management may cause vehicles to queue on the A737 at times.
- 7.4.55 In accordance with Table 7.2, the impact magnitude is assessed as negligible as vehicles associated with the works may be noticeable in the view. In accordance with Table 2.4, the impact significance is assessed as slight.
- 7.4.56 View 12 from No. 1, The Den – The works will dominate the open views to the north and west of the property.
- 7.4.57 In accordance with Table 7.2, the impact magnitude is assessed as moderate as the works will dominate the views. In accordance with Table 2.4, the impact significance is assessed as large as the impact associated with views to the north will decrease as the works progress.
- 7.4.58 View 13 from West Muirhouse Farm – Distant views of the works will be visible to the north from this property.
- 7.4.59 In accordance with Table 7.2, the impact magnitude is assessed as negligible as the works will be a minor element in the views. In accordance with Table 2.4, the impact significance is assessed as slight.
- 7.4.60 View 14 from Fernside – The works will dominate the open views to the north and northwest. There will also be views of the works at the junction with Brownhill Road. The works to form the private access immediately east of the property will not be visible from the dwelling but will be visible from the garden.
- 7.4.61 In accordance with Table 7.2, the impact magnitude is assessed as moderate as the works will dominate the views. In accordance with Table 2.4, the impact significance is assessed as large as the impact associated with views to the north will decrease as the works progress.
- 7.4.62 View 15 from The Graze Restaurant – There will be open views of the works to the east along the proposed road alignment and of the new access from Brownhill Road. This will dominate this view. The view south is open towards the existing access and A737. Construction of the access to farmland opposite the Graze will be visible in this view as works are undertaken. The views west of the surrounding countryside are unlikely to be affected by the works.
- 7.4.63 In accordance with Table 7.2, the impact magnitude is assessed as moderate as the works will dominate the views. In accordance with Table



2.4, the impact significance is assessed as large as the views experienced by customers will be affected throughout the construction period.

Post Construction

7.4.64 The change to views from a number of the properties within The Den will be similar in nature during operation of the new road alignment and are discussed together in the following paragraphs. These properties are:

- View 3 from Nidaros
- View 4 from 24, The Den
- View 5 from 22, The Den
- View 10 from No.s 18-20, The Den
- View 11 from No.s 17-19, The Den
- View 13 from West Muirhouse Farm

7.4.65 There will be no change to Views 4, 5 and 13. There are no direct views of the new alignment from any of these properties.

7.4.66 There are no direct views from the dwelling at Nidaros. The view from the garden will be improved by the reduction of traffic from the old A737. The views from No. 18-20 and 17-19, The Den will also be improved due to the reduction of traffic from the old A737.

7.4.67 In accordance with Table 7.2, the impact magnitude on Views 4, 5 and 13 is assessed as no change, as the new alignment is undetectable in the view. In accordance with Table 2.4, the impact significance is assessed as neutral.

7.4.68 In accordance with Table 7.2, the impact magnitude on Views 3, 10 and 11 is assessed as minor beneficial as the reduction in traffic will be noticeable in the view. In accordance with Table 2.4, the impact significance is assessed as moderate beneficial as not all traffic will be eliminated.

7.4.69 View 1 from Maulside Lodge – The views to the south through the entrance gate will remain unchanged. The new alignment will be more noticeable in the view to the west as the new alignment will sit higher than the surrounding fields. This impact will be reduced over time as the planting matures.

7.4.70 In accordance with Table 7.2, the impact magnitude on the view is assessed as minor, as the new alignment is noticeable in the view to the west. The views to the south remain relatively unchanged and therefore in accordance with Table 2.4, the impact significance is assessed as moderate.

7.4.71 View 2 from Dungoyle – The view from this property is restricted by boundary vegetation. The deciduous tree located opposite the new access to The Den village will allow narrow views of the new alignment during the winter months and may also result in lights from vehicles entering the junction shining into the garden grounds.

7.4.72 In accordance with Table 7.2 the impact magnitude is assessed as negligible as the narrow view is a minor element of the overall view from the garden. In accordance with Table 2.4, the impact significance is assessed as slight.

7.4.73 View 6 from the rear garden of 29, The Den - A view of the top of the embankment is partially visible through the existing newly planted woodland from the northern part of the garden during the winter months when the leaves have fallen from the trees. Views to the east will be available of the



new junction to The Den village and views to the south remain relatively unchanged with the exception of reduced traffic on the old A737.

- 7.4.74 As the road is in cutting only the top of any high-sided vehicles may be seen however the established woodland will help screen these views and continue to reduce the impact as the woodland matures. There will be improved views for the receptor to the south due to the reduction of traffic from the old A737.
- 7.4.75 In accordance with Table 7.2, the impact magnitude is assessed as minor as the proposals will be noticeable to the north and east of the receptor. In accordance with Table 2.4, the impact significance is assessed as moderate as the impact will reduce over time as the woodland matures.
- 7.4.76 View 7 from the side of 27, The Den – The access to Meadowhead Farm and 25a The Den alongside this receptor will be severed. Views of the proposals are virtually undetectable as they are to the north of this receptor which is screened by a timber fence. However, the views will be improved to the south due to the reduction of traffic from the old A737.
- 7.4.77 In accordance with Table 7.2, the impact magnitude is assessed as negligible beneficial due to the reduced traffic to the south and to the access road to the west which will be a minor element of the overall view. In accordance with Table 2.4, the impact significance is assessed as slight beneficial.
- 7.4.78 View 8 from Meadowhead Farm (No. 25) – After construction it is anticipated that high-sided vehicles will be visible through the existing newly planted woodland. HGV's currently make up 4% of the current traffic composition on this route and this is not expected to increase in future years.
- 7.4.79 In accordance with Table 7.2, the impact magnitude is assessed as minor as high-sided vehicles will be noticeable in the view altering some of its components. In accordance with Table 2.4, the impact significance is assessed as moderate due to the low percentage of high-sided vehicles and the established woodland will continue to reduce the impact as the woodland matures.
- 7.4.80 View 9 from No. 25a The Den – The visual impact at this receptor will be very similar to Meadowhead Farm (No. 25). Views of high-sided vehicles will also be visible through the existing newly planted woodland.
- 7.4.81 In accordance with Table 7.2, the impact magnitude is assessed as minor as the high-sided vehicles will be noticeable in the view altering some of its components. In accordance with Table 2.4, the impact significance is assessed as moderate due to the low percentage of high-sided vehicles and the established woodland will continue to reduce the impact as the woodland matures.
- 7.4.82 View 12 from No. 1, The Den – The close views to the north will be of the top of the embankment and at times high-sided vehicles will be visible from this viewpoint. Low level native shrub planting has been proposed on the embankments north of this receptor to retain open views across the countryside.
- 7.4.83 The views will be improved to the south due to the reduction of traffic from the old A737.



- 7.4.84 In accordance with Table 7.2, the impact magnitude is assessed as minor as the proposals are noticeable in the view to the north. However, the views will be improved to the south due to the reduction of traffic from the old A737. In accordance with Table 2.4, the impact significance is therefore assessed as moderate.
- 7.4.85 View 14 from Fernside – The view west from this receptor remains relatively unchanged as it consists of the road and The Graze Restaurant, however the new access to the restaurant will be visible. The view north will still be of the road and surrounding fields, but a new area of trees will be planted diagonally opposite the property, on the other side of the road. This area of planting will restrict the views to the north east as it matures.
- 7.4.86 As the majority of the road is in cutting the views of the road to the east are restricted. There are no views of the turning head directly to the east of the receptor from the dwelling. This property will now be accessed via the old road which will be closed off at Fernside allowing only one access from the new junction north of Dungoyle to The Den village.
- 7.4.87 In accordance with Table 7.2, the impact magnitude is assessed as minor. Although the views north and west remain relatively unchanged (being of the road and The Graze Restaurant), the new access to the restaurant will be visible and new planting will restrict views to the north east over time. Therefore in accordance with Table 2.4, the impact significance is assessed as moderate.
- 7.4.88 View 15 from The Graze Restaurant – There will be direct views from this receptor across the A737 to the new access for the Crossroads which was previously located opposite Brownhill Road. Both close and long distance views are afforded to the east along the new road. The associated planting is visible from this property however it will not screen the road alignment. Views of the new turning head adjacent to Fernside will be restricted due to new and existing vegetation east of this private residence.
- 7.4.89 In accordance with Table 7.2, the impact magnitude is assessed as moderate as receptors within the property will have views along most of the new alignment, and direct views of the new access to Crossroads which will dominate the views. In accordance with Table 2.4, the impact significance is assessed as moderate as this property also has views towards the west, which are not affected by the new alignment.
- 7.4.90 Table 7.4 shows a summary of visual impacts.



Table 7.4 - Summary of Visual Impacts

Receptor	Sensitivity	Magnitude of Change		Significance of Impact	
		Construction	Post Construction	Construction	Post Construction
View 1 Maulside	Very High	Moderate	Minor	Large	Moderate
View 2 Dungoyle	Very High	Negligible	Negligible	Slight	Slight
View 3 Nidaros	Very High	Minor	Minor beneficial	Moderate	Moderate beneficial
View 4 24 The Den	Very High	Negligible	No change	Slight	Neutral
View 5 22 The Den	Very High	Negligible	No change	Slight	Neutral
View 6 29 The Den	Very High	Moderate	Minor	Large	Moderate
View 7 27 The Den	Very High	Negligible	Negligible beneficial	Slight	Slight beneficial
View 8 Meadowhead Farm	Very High	Moderate	Minor	Large	Moderate
View 9 25a The Den	Very High	Moderate	Minor	Large	Moderate
View 10 18-20 The Den	Very High	Minor	Minor beneficial	Moderate	Moderate beneficial
View 11 17-19 The Den	Very High	Negligible	Minor beneficial	Slight	Moderate beneficial
View 12 1 The Den	Very High	Moderate	Minor	Large	Moderate
View 13 West Muirhouse Farm	Very High	Negligible	No change	Slight	Neutral
View 14 Fernside	Very High	Moderate	Minor	Large	Moderate
View 15 The Graze Restaurant	High	Moderate	Moderate	Large	Moderate



- 7.4.91 In summary, impacts of moderate significance or greater are considered to be significant. Slight or neutral impacts are considered to be insignificant.
- 7.4.92 During construction, the views from six properties experience a slight impact, views from two properties experience a moderate impact, and views from seven properties experience a large impact. Therefore views from nine properties will experience a significant impact.
- 7.4.93 During operation, the views from three properties experience a neutral impact, the views from one property experiences a slight impact, and views from seven properties experience a moderate impact.
- 7.4.94 The views from four properties were found to have a positive impact with the view from one property having a slight beneficial impact and three properties experiencing a moderate beneficial impact.
- 7.4.95 Overall, the view from ten properties will experience a significant impact with three of these having a beneficial impact.

7.5 MITIGATION

Landscape

During Construction

AREA 1: THE DEN VILLAGE

- 7.5.1 The following mitigation measures will be implemented:
- The works entrance and site compound should be located out with the village to minimise disruption to the character of the village;
 - Keep plant and HGVs out of the village as far as practically possible and designate haul routes to cause minimum disruption;
 - Organise spoil heaps and material storage areas effectively to cause minimal disruption to the village;
 - Minimise use of flood lighting and direct lighting away from the village, and;
 - Efficient and effective traffic management systems should be implemented to minimise vehicles queuing within the village.

AREA 2: OPEN FARMLAND

- Ensure an effective road diversion system (including temporary signage) during construction, to ensure that the region is disrupted to a minimum;
- Ensure heavy plant and lorries keep to designated haul routes and designated work areas to cause minimum disruption, and;
- Minimise use of flood lighting and direct lighting away from surrounding landscape.
- Organise spoil heaps and material storage areas effectively to cause minimal disruption to the village.
- The dry stone walls will be dismantled and the stone stockpiled for re-use when building the replacement walls at Fernside and Maulside Lodge. Some matching imported stone will be required. This will help to conserve the landscape character of the area.



- The removal of vegetation should be minimised where possible to minimise any impact on the area.
- Retain and protect existing trees where possible in accordance with BS 5837: 2012 Trees in Relation to Design, Demolition and Construction) and carry out remedial works in accordance with BS3988: Tree Work Recommendations (2010).

7.5.2 Further general mitigation measures that will be implemented are:

- Traffic management, site vehicles and machinery will have a temporary negative visual impact on the local landscape, local community, road users and visual receptors. Traffic management to be carried out to avoid lengthy queues of traffic and traffic idling for long periods outside residential areas reducing any negative visual amenity.
- Consideration should be given to the direction and height of any temporary traffic lights as not to cause nuisance to local residents. Light should be directed to minimise and preferably avoid light spillage onto neighbouring properties.
- Where possible works carried out on vegetation should commence out with the bird nesting season (April to September), otherwise bird survey will be required.
- A number of trees located along the scheme boundary are within the resident's gardens or other landowner's property. There is the potential that the tree roots and canopy may be affected by the works. Mitigation should ensure that no damage occurs to the tree roots or canopy due to the works. Where works are anticipated to pass close to trees and hedging, and potentially within their rooting zone, then it will be necessary to follow guidance set out in BS 5837: 2012 Trees in Relation to Design, Demolition and Construction. Plan works to avoid any damage to tree roots and/or canopy. This information should be made available to sub-contractors.
- The site poster from Arboricultural Information Exchange (AIE) – "Common causes of tree death" should be available to site workers and be included in toolbox talks to raise awareness of tree protection and prevent damage to existing trees and hedging both within the scheme extents and those in neighbouring properties. The poster "Construction and Trees" should be displayed and explained to site workmen that works should not take place in close proximity to the trees/hedging for the reasons highlighted in the posters¹⁵. There should be no storage of materials or soil within the base of the trees, hedges or along grass verges.
- Avoid damage to boundary treatments such as fences and/or stone walls however if damage occurs then re-instatement should be carried out immediately.
- No storage of materials on grass verge as this may destroy the soil structure and damage the grass. If damage occurs proper re-instatement should be carried out.
- Use best practice to minimise dust and reduce the negative visual amenity. See Air Quality Chapter 4 for further recommendations.
- Careful consideration should be given for the final location of new sign posts, avoid close proximity to trees/shrubs.

¹⁵ Available at: http://www.aie.org.uk/vault/a_index_r.htm



Post Construction

AREA 1: THE DEN VILLAGE

- Ensure plant/equipment keeps to designated maintenance access areas/routes during maintenance operations to eliminate any unnecessary movements within the village

7.5.3 No further mitigation is required within the village as there will be a beneficial impact associated with the removal of through traffic.

AREA 2: OPEN FARMLAND

- Use of low noise road surface will help to reduce noise pollution and minimise impacts to landscape character;
- Replacement dry stone walls will be built with re-used stone from dismantled walls and matching imported stone. This will help to conserve the landscape character of the area;
- Management scheme to ensure new and existing planting is well maintained and continues to provide screen for engineered infrastructure;
- Ensure plant/equipment keeps to designated maintenance access areas/routes during maintenance operations;
- Plantations of mixed native woodland will be planted along the embankments of much of the proposed carriageway to assist in softening profiled slopes. The trees will be planted as 40-60cm whips and will take approximately 10 years to establish and become an effective screening measure should adequate maintenance procedures take place. Species have been chosen to fit with existing woodland in the area and will assist the scheme with the local landscape character, and;
- In addition to new plantings, the scheme footprint will take in ready established mixed native plantations that were planted approximately 8 years ago. These trees have been well maintained and are already providing an effective screen. Drawing 10/SW/0901/037/026 shows mitigation planting and existing planting to be taken into the footprint of the scheme.

Visual

During Construction

7.5.4 The impacts experienced on the views are all in relation to the presence of the works and associated vehicles and equipment. The following mitigation measures are considered appropriate to minimise the impact on views from all properties affected by the works.

- The works entrance and site compound will be located out with the village to minimise disruption to the residents of the village;
- Keep plant and HGVs out of the village as far as practically possible and designate haul routes to cause minimum disruption;
- Organise spoil heaps and material storage areas effectively to cause minimal disruption to the village;
- Minimise use of flood lighting and direct lighting away from the village;



- Efficient and effective traffic management systems will be implemented to minimise vehicles queuing within the village;
- Keep the works organised, with adequate storage areas clearly designated and no equipment or activity occurring out with the essential site area, and;
- Careful siting of flood lighting directed away from properties during night operations.

Post Construction

- 7.5.5 The two basins to the east of the scheme may be seen from the road at different aspects along the route. The proposed mitigation, which includes mainly tree planting surrounding the basins and wetland planting to the side slopes and base of the basins, will help mitigate a large proportion of the visual impact.
- 7.5.6 In addition, there will be a large amount of tree planting that will help mitigate the loss of trees to accommodate the scheme in general. For example, in relation to the Ancient Woodland Inventory (site number 9369) where the proposed road alignment cuts along the southern edge of the designated area, there will be a loss of 0.429 Ha of mature broadleaf woodland. However, proposals show approximately 90% of trees will be replanted within this area to compensate for this loss. There will also be specimen tree planting in addition to the general tree planting which will further reduce the overall loss of trees.
- 7.5.7 The scale of the basins complements the surrounding environment as do their location to allow connection with the stream along Auchengree Road. Although basins do not currently feature within the existing route, their inclusion increases the diversity of habitats and with the proposed planting will result a positive feature. The trees will provide a screen or at the very least create intermittent and very brief views, if any into the northern basin and surrounding fencing. The visual impact will also be reduced as the planting matures. There has also been wetland and tree planting proposed for the southern basin which will help to mitigate views from the road. However, there will be clearer, more open views from the access road to The Den, but the addition of the wetland planting will help soften this visual impact and also increase the positive visual amenity as you enter and exit the village.
- 7.5.8 There are a minimal amount of visual receptors and their views out to the road and basins will be screened by existing boundary vegetation and buildings and the proposed planting will help to further mitigate the scheme. Road users and walkers crossing over to use Auchengree Road will experience the majority of the visual impact along the route from the SUDS ponds. The basins and associated planting will help improve the positive visual amenity of the area as well as the tree planting which will mitigate for any trees that will be removed to accommodate this scheme.
- 7.5.9 The following mitigation measures include the following:
- Woodland planting will assist in screening high sided vehicles, slopes and embankments and assist in integrating the scheme visually with the surrounding landscape;
 - Existing semi-established tree planting to be taken into scheme footprint to help minimise impact to landscape character, and;



- Management scheme to ensure new and existing planting is well maintained and continues to provide screen for engineered infrastructure.
- 7.5.10 The change to views from a number of the properties within The Den will be similar in nature during operation of the new road alignment and are discussed together in the following paragraphs. These properties are:
- View 3 from Nidaros
 - View 4 from 24, The Den
 - View 5 from 22, The Den
 - View 10 from 18-20, The Den
 - View 11 from 17-19, The Den
 - View 13 from West Muirhouse Farm
- 7.5.11 As there is no change to the views from 24, The Den, 22, The Den and West Muirhouse Farm no mitigation will be necessary for these locations.
- 7.5.12 There is a moderate beneficial impact on the views from Nidaros, No. 18-20 and No. 17-19 The Den; therefore no mitigation will be necessary for these locations.
- 7.5.13 View 1 from Maulside Lodge –The impact at this location will be reduced over time as planting matures. No further mitigation is required.
- 7.5.14 View 2 from Dungoyle – No appropriate mitigation within the scheme extents is available to reduce the slight impact experienced at this property.
- 7.5.15 View 6 from the rear garden of 29, The Den – Mitigation in the form of areas of retained and new planting is proposed. This will help to screen the new embankment to the north and new access junction to the east over time as it matures. This will also help to screen high-sided vehicles using the new road.
- 7.5.16 View 7 from the side of 27, The Den – No appropriate mitigation is required as a negligible beneficial impact is experienced at this property.
- 7.5.17 View 8 from Meadowhead Farm (No. 25) – Mitigation in the form of areas of retained and new planting is proposed. This will help to screen the new embankment to the south and high-sided vehicles using the new road, over time as it matures.
- 7.5.18 View 9 from No.25a The Den) – Mitigation in the form of areas of retained and new planting is proposed. This will help to screen the new embankment to the south and high-sided vehicles using the new road over time as it matures.
- 7.5.19 View 12 from No. 1, The Den – Planting of native shrub species is proposed to the north of this receptor to retain open views across the countryside. No further appropriate mitigation is available to reduce the impact experienced at this property.
- 7.5.20 View 14 from Fernside – No appropriate mitigation is available to reduce the impact experienced at this property.
- 7.5.21 View 15 from The Graze Restaurant – A combination of new and replacement hedging is proposed. This will help to screen the new access road to Crossroads from users of the restaurant.



7.6 RESIDUAL IMPACT

7.6.1 This section examines the residual impacts following implementation of mitigation during the construction period and during operation on the fifteenth year after opening.

Landscape

During Construction

AREA 1: THE DEN VILLAGE

7.6.2 Implementation of the mitigation measures detailed in paragraphs 7.5.1 to 7.5.4 will reduce the impact magnitude on all landscape topics from minor to negligible as there will be very minor alterations to the landscape features within the village.

7.6.3 The sensitivity of the landscape is assessed as low, therefore, in accordance with Table 2.4 the residual impact significance is assessed as slight.

AREA 2: OPEN FARMLAND

7.6.4 Implementation of the mitigation measures detailed in paragraphs 7.5.2 to 7.5.4 will reduce the impact magnitude on all landscape topics from moderate to minor as there will be some measureable change to features and quality during the construction period.

7.6.5 The sensitivity of the landscape is assessed as low, therefore, in accordance with Table 2.4 the residual impact significance is assessed as slight.

Post Construction

AREA 1: THE DEN VILLAGE

7.6.6 It is anticipated that the beneficial impact on landscape character within the village as a whole will persist over time.

7.6.7 No impact is predicted to landform, land use and the built environment within the village. Therefore in accordance with Table 2.2 the impact magnitude will remain as no change.

7.6.8 Overall the impact magnitude on the landscape is assessed as moderate beneficial as this is the only perceivable change. In accordance with Table 2.4, the residual impact significance is assessed as slight beneficial.

AREA 2: OPEN FARMLAND

7.6.9 After 15 years, mature vegetation will screen the new embankments and detention basins, and the replacement stone walls located between Auchengree Road and Maulside Lodge and at Fernside will have weathered. It is considered that the road will integrate into the surrounding landscape and therefore prominence of the road will be reduced.

7.6.10 In accordance with Table 2.2, the impact magnitude on landscape character will remain as negligible. The impact magnitude on landform, land use and vegetation, the built environment and the road in the landscape will reduce from minor to negligible as the road becomes less prominent.



- 7.6.11 In accordance with Table 2.4, the residual impact significance is assessed as slight.
- 7.6.12 A summary of the residual impacts on landscape is provided in Table 7.5 below.

Table 7.5 Summary of Residual Landscape Impact Assessment

Receptor	Sensitivity	Magnitude of Change		Significance of Impact	
		Construction	Operation	Construction	Operation
Area 1: The Den Village	Low	Negligible	Moderate beneficial	Slight	Slight beneficial
Area 2: Open Farmland	Low	Minor	Negligible	Slight	Slight

Visual

During Construction

- 7.6.13 The visual impacts associated with construction works are unavoidable, but temporary in nature. It is considered that implementation of the general mitigation measures detailed in paragraph 7.5.4 will help to minimise the visual impact, but will not reduce it by a significant degree.
- 7.6.14 It is considered that the impact magnitude and therefore overall residual impact significance during construction, for all visual receptors will remain unchanged from the previous impact assessment. The residual impact significance is summarised in Table 7.6.

Post Construction

- 7.6.15 No mitigation is proposed at the following properties:
- View 2 from Dungoyle
 - View 3 from Nidaros
 - View 4 from 24, The Den
 - View 5 from 22, The Den
 - View 7 from 27, The Den
 - View 10 from 18-20, The Den
 - View 11 from 17-19, The Den
 - View 12 from 1 The Den
 - View 13 from West Muirhouse Farm
 - View 14 from Fernside
- 7.6.16 It is considered that the residual impact at these properties will remain unchanged from the previous impact assessment. The residual impact significance is summarised in Table 7.6.



Table 7.6 Summary of Residual Visual Impact Assessment

Receptor	Sensitivity	Magnitude of Change		Significance of Impact	
		Construction	Operation	Construction	Operation
View 1 Maulside Lodge	Very High	Moderate	Negligible	Large	Slight
Area 2 Dungoyle	Very High	Negligible	Negligible	Slight	Slight
View 3 Nidaros	Very High	Minor	Minor Beneficial	Moderate	Moderate Beneficial
View 4 24 The Den	Very High	Negligible	No change	Slight	Neutral
View 5 22 The Den	Very High	Negligible	No change	Slight	Neutral
View 6 29 The Den	Very High	Moderate	Negligible	Large	Slight
View 7 27 The Den	Very High	Negligible	Negligible Beneficial	Slight	Slight Beneficial
View 8 Meadowhead Farm	Very High	Moderate	Negligible	Large	Slight
View 9 25a The Den	Very High	Moderate	Negligible	Large	Slight
View 10 18-20 The Den	Very High	Minor	Minor Beneficial	Moderate	Moderate Beneficial
View 11 17-19 The Den	Very High	Negligible	Minor Beneficial	Slight	Moderate Beneficial
View 12 1 The Den	Very High	Moderate	Minor	Large	Moderate
View 13 West Muirhouse Farm	Very High	Negligible	No change	Slight	Neutral
View 14 Fernside	Very High	Moderate	Minor	Large	Moderate
View 15 The Graze Restaurant	High	Moderate	Minor	Large	Moderate

7.6.17 Mitigation in the form of new hedge and tree planting and re-instatement of stone walls is proposed to mitigate the negative visual impact from the remaining properties. After fifteen years the planting will have grown and



matured, and the stone walls will have weathered. It is considered that these components of the view will reduce the impacts from each property as detailed below.

- 7.6.18 View 1 from Maulside – Views to the south through the entrance gate will remain unchanged however the impact on views to the west will be reduced as matured planting will screen the road.
- 7.6.19 In accordance with Table 7.2 the impact magnitude will be reduced to negligible as the road will be a minor element of the overall view. In accordance with Table 2.4, the residual impact significance is assessed as slight.
- 7.6.20 View 6 from the rear garden of 29, The Den – It is anticipated that after a period of 15 years the impact on views to the north will be reduced as the existing woodland planting matures and screens the tops of high sided vehicles on the new road. The new access junction will be visible in views to the east, while views to the south will be improved with the reduction of traffic from the old A737.
- 7.6.21 In accordance with Table 7.2 the impact magnitude will be reduced to negligible as the road will be a minor element of the overall view. In accordance with Table 2.4, the residual impact significance is assessed as slight.
- 7.6.22 View 8 from Meadowhead Farm (No. 25 The Den) – After fifteen years it is considered that the existing (partially established) planting and the additional tree and hedge planting will have matured and will obscure the majority of high sided vehicles on the road. The composition of HGV's is expected to remain at 4%.
- 7.6.23 In accordance with Table 7.2 the impact magnitude will be reduced to negligible as the road will be a minor element of the overall view. In accordance with Table 2.4, the residual impact significance is assessed as slight.
- 7.6.24 View 9 from No. 25a The Den – The visual impact at this receptor will be very similar to Meadowhead Farm (No. 25). After fifteen years it is considered that the existing (partially established) planting and the additional tree and hedge planting will have matured and will obscure the majority of high sided vehicles on the road. The composition of HGV's is expected to remain at 4%.
- 7.6.25 In accordance with Table 7.2 the impact magnitude will be reduced to negligible as the road will be a minor element of the overall view. In accordance with Table 2.4, the residual impact significance is assessed as slight.
- 7.6.26 View 15 from The Graze Restaurant - Hedge planting will have matured and will help to screen the new access road to Crossroads in views to the south from users of the restaurant. Views to the east will remain open along the new alignment. The views to the west will remain unaffected.
- 7.6.27 In accordance with Table 7.2 the impact magnitude will be minor as the road will be noticeable in views to the east. In accordance with Table 2.4, the residual impact significance is assessed as moderate.



7.7 CUMULATIVE EFFECTS

- 7.7.1 Cumulative effects are those that may result from the combined effects of past, present or future activities. While a single activity may result in an insignificant impact, it may, when combined with other impacts in the same area and occurring at the same time, result in a cumulative impact that is significant.
- 7.7.2 A search on North Ayrshire Council's online planning website¹⁶ has shown that within the past five years there are currently four live planning applications within the scheme extents. These are as follows:
- Proposed hotel, east of the existing restaurant has full planning with conditions applied;
 - Proposed dwelling house with outline planning with conditions applied, and;
 - Proposed overhead power line has full planning with no conditions.
 - Proposed formation of dormer windows to the front and rear of the existing dwelling house at No. 1, The Den is pending consideration.
- 7.7.3 It should be noted that although two areas of land have planning approval, development of the sites may not progress further.
- 7.7.4 Development of the overhead power line is not considered to result in any cumulative impacts.
- 7.7.5 There are no other known proposals for other developments within the area of the new alignment.

7.8 CONCLUSION

- 7.8.1 No significant long-term impacts are predicted on the landscape.
- 7.8.2 It is anticipated that the beneficial impact on landscape character within the village as a whole will persist over time. There will be a slight impact within the open farmland as the new alignment will be slightly more prominent in the landscape than the existing road.
- 7.8.3 The long-term residual impacts on the views of the road from the defined viewpoints are considered to be more significant than the impacts on the landscape.
- 7.8.4 Three properties will experience a moderate beneficial impact, and one will experience a slight beneficial impact. A further three properties will experience a neutral impact, with five properties experiencing a slight adverse impact. Three properties (No. 1, The Den, Fernside and The Graze Restaurant) will experience a moderate adverse impact with these properties having either direct views along the new alignment or close direct views of the road.
- 7.8.5 In the case of No. 1, The Den, the resident has requested that no planting be included along the northern property boundary as they wish to retain open views over the open countryside. The new alignment however, is

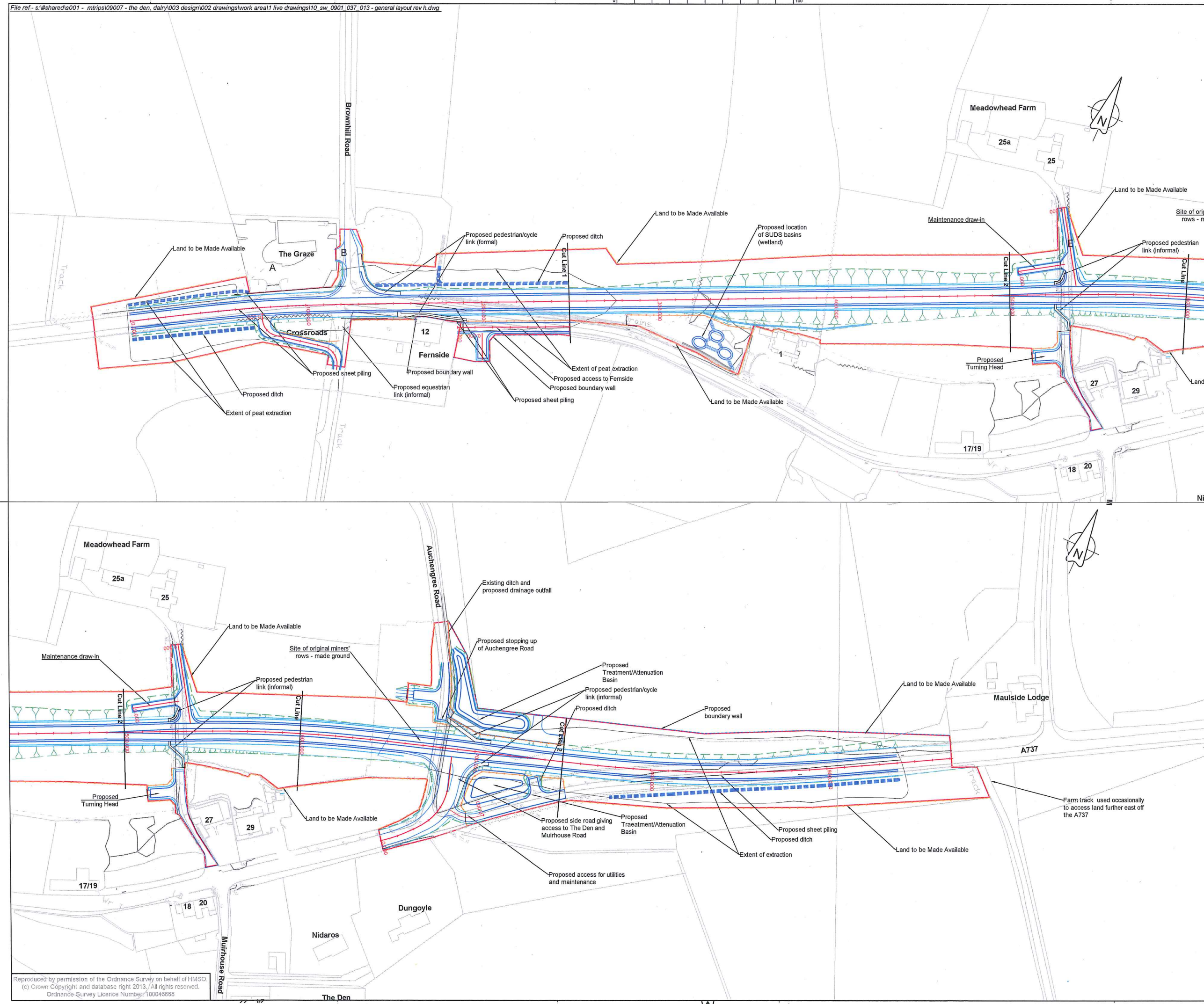
¹⁶ North Ayrshire Council online planning website. Available at: <http://www.north-ayrshire.gov.uk/BusinessAndTrade/PlanningAndBuildingStandards/PlanningAndBuildingStandards.aspx> [Accessed 11/11/2011]



located directly north of the property and it is considered that high sided vehicles will be visible in this view at times.

- 7.8.6 Although there is an increase in the height of the embankment this integrates better with the surrounding environment. At Fernside, the resident will have direct views onto the A737 and of the new access to The Graze Restaurant.
- 7.8.7 At The Graze Restaurant the views to the west over open countryside will remain unchanged. The view south will be of the new access road to Crossroads however the new hedge will help to partially screen direct views. The view east will be dominated by the new access to the restaurant and the main alignment of the A737.
- 7.8.8 It is considered that only No. 1, The Den, Fernside and The Graze Restaurant will experience significant residual visual impacts due to the scheme.

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Legend

- Land to be Made Available
- Area of Peat Extraction
- Location of Demolished Houses - Made Ground
- Location of Sheet Piling
- Land made available

H	Pond adjusted at Auchengree Road	Q.L.	I.H.	27/09/12
G	Land Made Available added	I.H.	I.H.	27/09/12
F	OS licence changed	I.H.	I.H.	07/02/12
E	Drainage, earthworks, junction adjustments & additional text	I.H.	I.H.	12/12/11
D	North verge widened at east to permit construction	Q.L.	I.H.	06/10/11
C	Layout changed at Fernside and Meadowhead Road	Q.L.	I.H.	28/09/11
B	Layout changed at Fernside	Q.L.	I.H.	25/08/11
A	Layout changed at west & ped links added	Q.L.	I.H.	16/08/11
Rev	Revision details	Chkd	Appd	Date

Drawn:	QL	Preliminary	<input checked="" type="checkbox"/>
Design:	QL	For comment	<input type="checkbox"/>
Chkd:	I.H.	For tender	<input type="checkbox"/>
Appd:	I.H.	For construction	<input type="checkbox"/>
Date:	15/06/11	As constructed	<input type="checkbox"/>



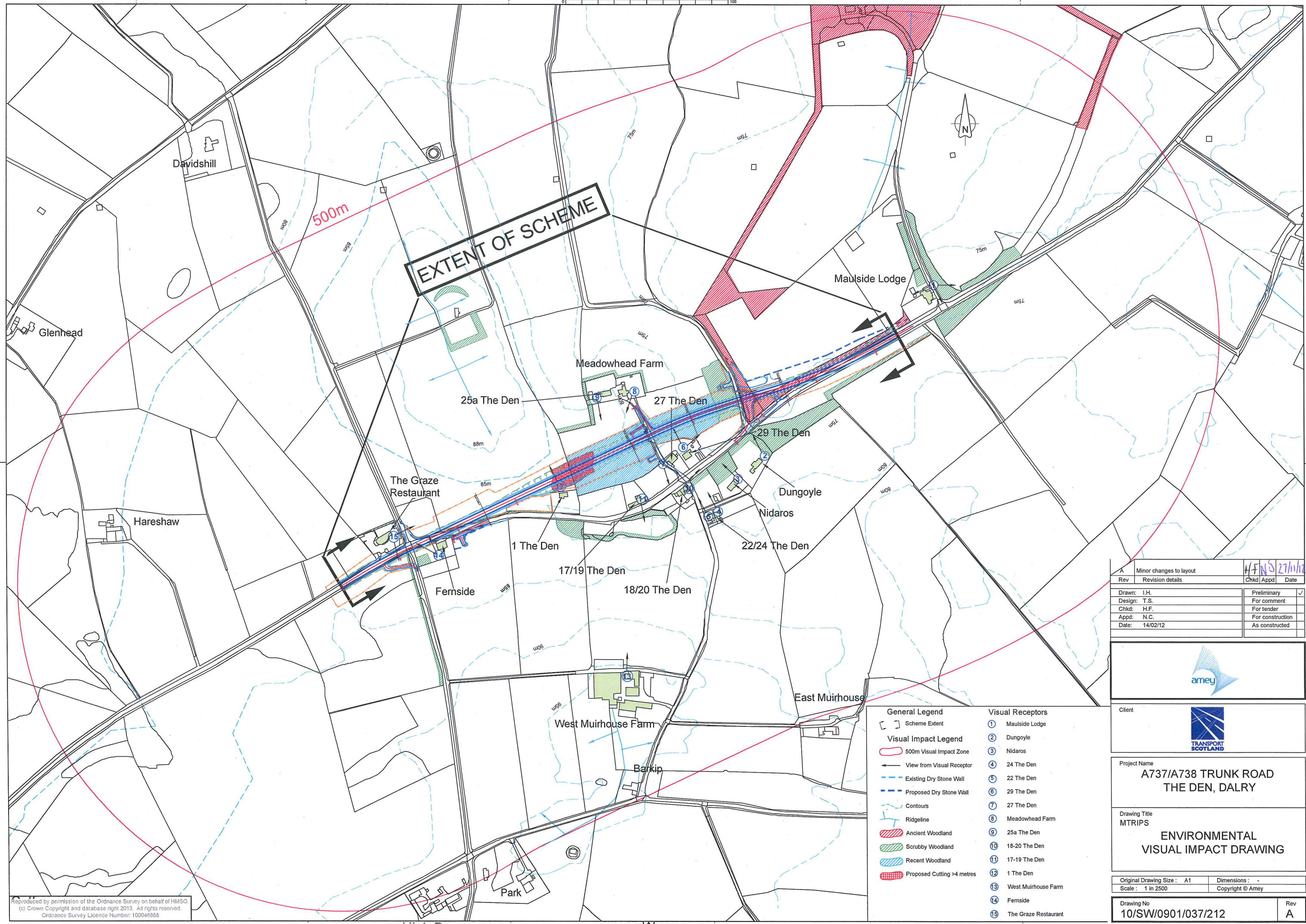
Project Name
**A737 TRUNK ROAD
THE DEN, DALRY**

Drawing Title
GENERAL LAYOUT

Original Drawing Size:	A1	Dimensions:	m
Scale:	1 in 1000 @ A1	Copyright:	Amey
Drawing No	10/SW/0901/037/013	Rev	H

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EXTENT OF SCHEME

500m

- General Legend**
- [] Scheme Extent
- Visual Impact Legend**
- [Red Circle] 500m Visual Impact Zone
 - [Blue Arrow] View from Visual Receptor
 - [Dashed Blue Line] Existing Dry Stone Wall
 - [Dashed Red Line] Proposed Dry Stone Wall
 - [Blue Dotted Line] Contours
 - [Blue Dotted Line] Ridgeline
 - [Red Hatched Box] Ancient Woodland
 - [Green Hatched Box] Scrubby Woodland
 - [Blue Hatched Box] Recent Woodland
 - [Red Hatched Box] Proposed Cutting >4 metres

- Visual Receptors**
- ① Malside Lodge
 - ② Dungoyle
 - ③ Nidaros
 - ④ 24 The Den
 - ⑤ 22 The Den
 - ⑥ 29 The Den
 - ⑦ 27 The Den
 - ⑧ Meadowhead Farm
 - ⑨ 25a The Den
 - ⑩ 18-20 The Den
 - ⑪ 17-19 The Den
 - ⑫ 1 The Den
 - ⑬ West Muirhouse Farm
 - ⑭ Fernside
 - ⑮ The Graze Restaurant

Rev	Revision details	Chkd	Appd	Date
A	Minor changes to layout			

Drawn: J.H.	Preliminary	<input checked="" type="checkbox"/>
Design: T.S.	For comment	<input type="checkbox"/>
Chkd: H.F.	For tender	<input type="checkbox"/>
Appd: N.C.	For construction	<input type="checkbox"/>
Date: 14/02/12	As constructed	<input type="checkbox"/>



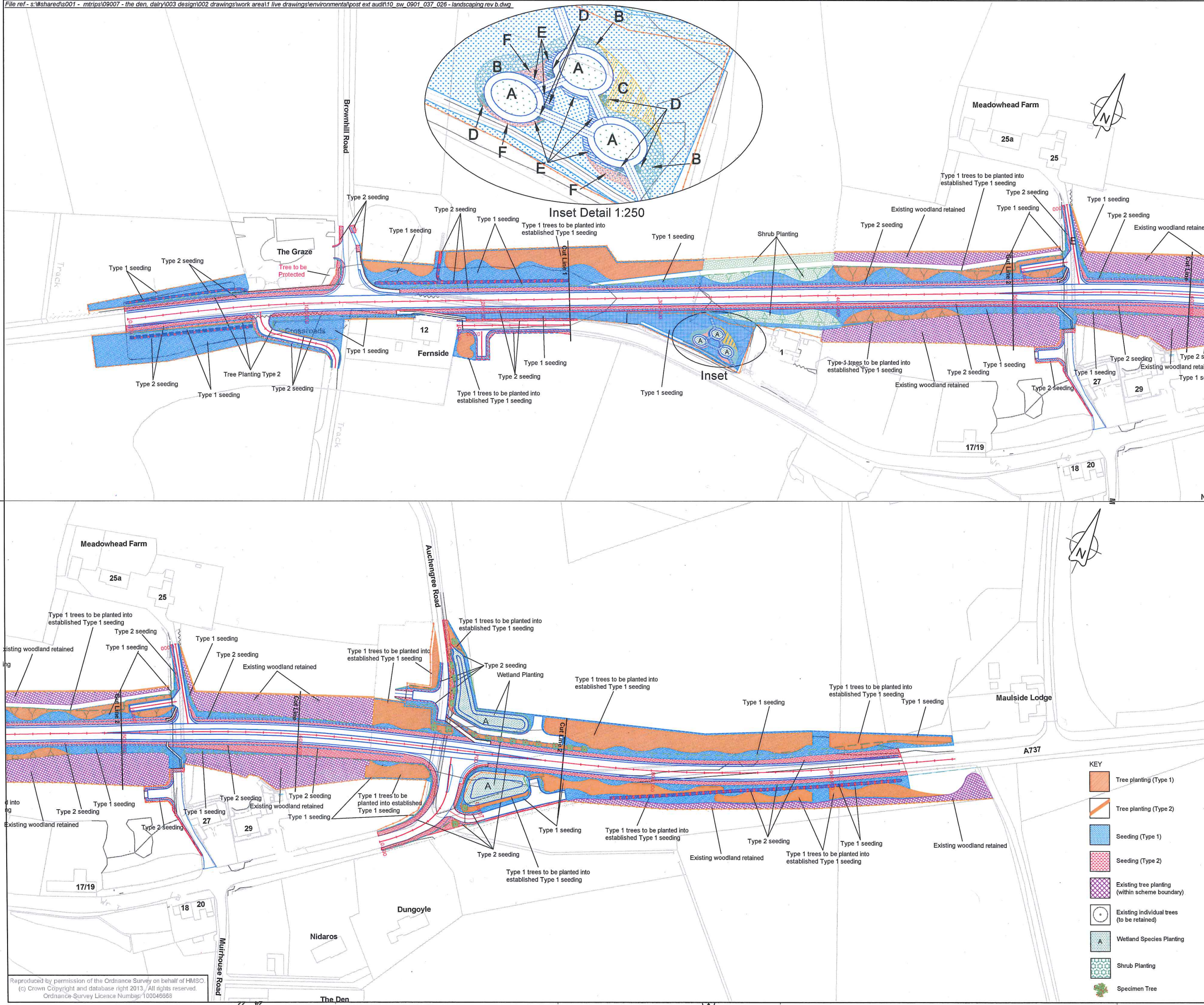
Project Name
**A737/A738 TRUNK ROAD
THE DEN, DALRY**

Drawing Title
**MTRIPS
ENVIRONMENTAL
VISUAL IMPACT DRAWING**

Original Drawing Size : A1	Dimensions : -
Scale : 1 in 2500	Copyright © Amey
Drawing No 10/SW/0901/037/212	Rev A

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General notes:

- Refer to specification document for detailed guidance on ground preparation, planting and seeding times and maintenance.
- Refer to the Specification document for areas and quantities of materials.
- All bare root transplants shall be planted in random groups of 5-7no. with guards and canes in accordance with specification.

Tree Planting Type 1			
Species	%	Size	Rate /Cs
Betula pendula	20	40-60cm bare root w hips	0.45m ² 15000mm Cs
Alnus glutinosa	20	40-60cm bare root w hips	0.45m ² 15000mm Cs
Fagus sylvatica	15	40-60cm bare root w hips	0.45m ² 15000mm Cs
Sorbus aucuparia	15	40-60cm bare root w hips	0.45m ² 15000mm Cs
Prunus avium	10	40-60cm bare root w hips	0.45m ² 15000mm Cs
Crataegus monogyna	10	40-60cm bare root w hips	0.45m ² 15000mm Cs
Ulmus glabra	5	40-60cm bare root w hips	0.45m ² 15000mm Cs
Viburnum opulus	5	40-60cm bare root w hips	0.45m ² 15000mm Cs

Tree Planting Type 2			
Species	%	Size	Rate /Cs
Crataegus monogyna	50	40-60cm w hips	450mm (row) 300mm (Cs)
Prunus avium	20	40-60cm w hips	450mm (row) 300mm (Cs)
Fagus sylvatica	25	40-60cm w hips	450mm (row) 300mm (Cs)
Rosa canina	5	40-60cm w hips	450mm (row) 300mm (Cs)

Specimen Tree Planting		
Species	Size	Rate /Cs
Sorbus aucuparia (Sheever after Seeding)	12-14cm Girth Staked and Tied	

Wetland Planting		
Species	Rate /Cs	Notes
Phragmites australis - A (Common reed)	100%	Call grown in stock - well rooted plugs
Is pseudocircus - B (Yellow flag)	100%	9cm pots
Stachys palustris - C (Marsh w. pennywort)	100%	9cm pots
Carex pendula - D (Pendulous sedge)	100%	9cm pots
Ranunculus acris - E (Marsh marigold)	100%	9cm pots
Juncus effusus - F (Hard rush)	100%	9cm pots

Shrub Planting		
Species	Rate /Cs	Notes
Sambucus nigra (elder)	25	40-60cm bare root w hips
Corylus avellana (hazel)	20	40-60cm bare root w hips
Prunus spinosa (Blackthorn)	30	40-60cm bare root w hips

Seeding (Type 1):

- The following wild flower & grass seed mixture will be sown in the areas indicated:

80% Grasses:

- Sheeps Fescue
- Chewings Fescue
- Crested Dogtail
- Browntop Bent
- Smooth Stalked Meadow Grass
- Sweet Vernal Grass
- Wavy Hair Grass

Flowers 20%

- Ox-eye Daisy (*Leucanthemum vulgare*)
- Lady's Bedstraw (*Galium verum*)
- Red Campion (*Silene dioica*)
- Self Heal (*Prunella vulgaris*)
- Yarrow (*Achillea millefolium*)
- Meadow Buttercup (*Ranunculus acris*)
- Black Knapweed (*Centaurea nigra*)
- Birdsfoot Trefoil (*Lotus corniculatus*)
- Devil-bit Scabious (*Succisa pratensis*)

Seeding (Type 2):

- The following grass seed mixture will be sown in the areas indicated:

100% Grasses:

- Strong Creeping Red Fescue 60%
- Chewings Fescue 25%
- Flattened Meadow Grass 10%
- Browntop Bent 5%

2. Sowing rate for type 2 seeding shall be 35 g/m²

3. Over seeding rate for type 2 seeding shall be 20 g/m²

B	Minor adjustments to design layout	T.S.	I.H.	27/11/12
A	Minor adjustments to design layout	T.S.	I.H.	27/11/12
Rev	Revision details	Chkd	Appd	Date

Drawn:	I.H.	Preliminary	✓
Design:	T.S.	For comment	
Chkd:	H.F.	For tender	
Appd:	N.C.	For construction	
Date:	14/02/2012	As constructed	

KEY

- Tree planting (Type 1)
- Tree planting (Type 2)
- Seeding (Type 1)
- Seeding (Type 2)
- Existing tree planting (within scheme boundary)
- Existing individual trees (to be retained)
- Wetland Species Planting
- Shrub Planting
- Specimen Tree

amey

Client

Project Name
**A737/A738 TRUNK ROAD
THE DEN, DALRY**

Drawing Title
LANDSCAPE LAYOUT

Original Drawing Size : A1	Dimensions : m
Scale : 1 in 1000 @ A1	Copyright © Amey

Drawing No 10/SW/0901/037/026	Rev B
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