

Environmental Statement

7 LANDSCAPE AND VISUAL EFFECTS

7.1 Introduction

This chapter summarises the key potential landscape and visual impacts likely to occur as a result of the proposed Scheme, including a consideration of opportunities to improve the Scheme's appearance and mitigate potential adverse landscape and visual impacts. Residual landscape and visual effects, those that remain after mitigation (as at year 15), are included.

There were no technical or access difficulties encountered when visiting the site. Visual assessments were undertaken on Tuesday 3rd October 2006 in bright sunshine, with fine visibility; and Wednesday 22nd October 2006, in poorer visibility and periodic rain. On both occasions, long distance views were good (although intermittent on the 22nd October site visit), the period of assessment was throughout the morning and early afternoon, traffic conditions were relatively light and there were no obstructions during the visit.

7.2 Methodology

The assessment incorporates the identification of landscape and visual impacts, predicts the magnitude of those effects, and assesses their significance.

The methodology for this assessment is based on the Design Manual for Roads and Bridges Volume 11 and the Environmental Impact Assessment (Scotland) Regulations 1999 as amended and best practice guidance from the following sources:

- 'Guidelines for Landscape and Visual Impact Assessment' Second Edition, The Landscape Institute/Institute of Environmental Management and Assessment (Spon Press 2002)-(GLVIA);
- 'Landscape Character Assessment' Guidance for England and Scotland, Carys Swanwick and Land Use Consultants (SNH and the Countryside Agency, 2002); and
- PAN 58 Environmental Impact Assessment.

In accordance with the GLVIA, impacts upon the landscape character and visual amenity are assessed separately. Landscape effects are the changes to the physical landscape (which is considered an environmental resource); visual effects are the modifications to views and how the landscape is experienced. The process adopted for this assessment is outlined below:

7.3 Baseline

This baseline assessment includes presentation of relevant information about the site in the year of Scheme commencement and about foreseeable future conditions, i.e. planned and committed developments, in order to determine how the Scheme will affect the existing situation. Both the landscape and visual baselines are examined.

Environmental Statement

The study involved a desk review of relevant information such as designations from the Local Plan relating to landscape and visual issues, and a field survey. Information was collected about the landscape patterns, vegetation, extent of visibility, land use etc. and the sensitivity of landscape and visual receptors.

The study area for the visual analysis is determined by the zone of visual influence (ZVI), the extent to which the section of the road is a significant feature in the view, shown in Figure 7.2. Following initial desk-based drafting, the ZVI was refined by site visit, so that local variations in topography could be taken into account. Minor areas of planting which act as a partial screen were not included. The landscape analysis looks at a wider area to show how the route interacts with the wider landscape context and geographical features.

The landscape baseline examines the landscape character as identified in the relevant SNH Landscape Character Assessment study, including an assessment of landscape value (based on the presence of designations and a subjective assessment), and sensitivity (based on a subjective assessment of the capacity of the landscape to absorb development).

This assessment uses the five-point scale to describe the quality of the landscape in accordance with the Design Manual for Roads and Bridges Volume 11; Environment Assessment i.e. high quality, very attractive, good landscape, ordinary landscape and poor landscape.

The visual baseline identifies the extent of visibility, the location of receptors, their approximate distance from the Scheme and the current condition of the landscape as it affects visual amenity. An assessment of the level of sensitivity of the receptors is then made based on these factors.

7.3.1 Assessment

The landscape effects comprise the sources, nature and degree of change to the landscape resource. The sensitivity assessment is taken from the baseline assessment. A rating for the magnitude of the effect is based on a judgement of the scale, nature, i.e. adverse or beneficial, and the duration of the effects on the key elements and features that define the landscape character. The magnitude is then set against the sensitivity of receptors to produce the significance of the effects, which is a professional judgement.

The visual effects are the changes to the views of groups of receptors identified during the field survey. The level of sensitivity is taken from the baseline study. The magnitude of visual effect is the degree of change to the existing view including intrusion into or obstruction of the view. The same procedures are adopted as for assessing the landscape effects but the judgements are made as they relate to the visual amenity of the groups of receptors.

The stages used for the assessment are as follows:

- Existing Conditions, 2006 – No Proposal (06NP): to show the present baseline in the year that the assessment work was undertaken, representing the existing conditions around the proposed Scheme;

Environmental Statement

- Construction Phase – to show the temporary impacts including the removal of vegetation specifically for construction, and the installation of temporary works compounds, temporary road access/traffic control, road works, turning areas, signing and lighting;
- Planning Year, 2009 – With Proposal (09WP): to show the Scheme as implemented including mitigation measures, (one year after the completion of the Scheme);
- Future Baseline Condition, 2024 – No Proposal (24NP): To assess future conditions at year 15 should the proposals not be implemented; and
- Proposed Development, 2024 – With Proposal (24WP): To show the established Scheme fifteen years after completion, when vegetation has reached some level of maturity and therefore mitigation measures will have become effective.

7.3.2 Mitigation

Mitigation comprises suggested measures to reduce or remove significant adverse impacts. Mitigation proposals are recommended for both landscape and visual effects, and illustrated in Figures 7.5. The residual effects after mitigation measures are fully effective at year 24WP are recorded.

7.4 Consultations

For a complete summary of the organisations, which have been consulted, see Chapter 1.

The following organisations have been consulted and gave comment in relation to landscape and visual issues:

- Scottish Natural Heritage –The assessment refers to the Ayrshire Landscape Assessment.
- South Ayrshire Council – SAC contributed towards the Stage 2, Part 2 Environmental Report, with respect to the improvement proposals.
- Farming and Wildlife Advisory Group (FWAG) Scotland - Mitigation should include the creation of wildlife habitats and the use of native species of local origin.
- Forestry Commission Scotland - Within the Scheme boundaries there are no known areas of woodland, which are the subject of any grant scheme or felling licence.

7.5 Baseline

7.5.1 Planning, Context, Landscape and Visual Designations

Information was obtained from the following plans:

- Ayrshire Joint Structure Plan (2000);
- Ayrshire Joint Structure Plan (to be approved March 2007);

Environmental Statement

- South Ayrshire Local Plan (2002); and
- Finalised South Ayrshire Local Plan (to be adopted 2007)

Although the study area is not specifically designated for landscape quality the attractive landscape is recognised and protected by a number of general policies relating to the landscape. The A77 is part of an important tourist route to the Firth of Clyde and Irvine Bay and is a main arterial access for Prestwick Airport.

The revised Ayrshire Joint Structure Plan (JSP), submitted to Scottish Ministers in June 2006, for approval in March 2007, indicates that the area southwest of Kilmarnock, through which the A77 passes, is within the proposed Green Belt and covered by policies ENV1, ENV2 and ENV3.

Policy “ENV1 – Landscape Quality” acknowledges the attractive and high quality environment and landscape character of Ayrshire and seeks to maintain and enhance it.

Policy “ENV2 – Landscape Protection” recognises the landscape character as a key element in promoting development and providing an attractive setting for existing communities and new investment’. Positive landscape management to achieve improved landscape quality and landscape protection is proposed in relation to new development including improvements to infrastructure.

Policy “ENV3 – Core Investment Area Landscape” proposes landscape protection and potential development should protect the character and landscape settings of communities and give access to open space as part of the wider structure of green space.

The existing South Ayrshire Local Plan will be superseded by the revised and finalised Local Plan, to be adopted in February 2007, prior to commencement of works. The environmental objectives of the South Ayrshire Local Plan include the preservation of “the landscape character generally, and provide a setting for settlements; in particular to ensure the integrity of the landscape and environment”.

7.5.2 Trees

There are no Tree Preservation Orders within the Scheme boundaries. However, Coodham Estate is covered by Tree Preservation Order T.P.O. 3/98- Coodham Estate, and there are a number of areas of mixed species and single species woodlands / plantations within the near vicinity of the site. Although these are not directly affected by the works, they serve to limit views both into and out of the site.

There are two designed landscapes adjacent to the A77 road corridor along the site area. Coodham Hall is included in the Inventory of Gardens and Designed Landscapes in Scotland, and there is also a designed landscape at Rosemount, which is not included in the Inventory. The trees within these two designed landscapes are not near areas of the site that would require works to the trees. Part of Coodham Estate is identified as a provisional wildlife site.

Environmental Statement

7.5.3 Landscape Character

The Ayrshire Landscape Assessment commissioned by SNH (1998), identifies the site within the 'Ayrshire Basin' Regional Character Area and the 'Ayrshire Lowlands and Lowland Hills' Landscape Classification Types, see Figure 7.1.

The Ayrshire Lowlands (G) Landscape Classification Type occupies much of the Ayrshire Basin, and is characterised by:

- Comparatively large scale landscapes;
- Extensive areas of agricultural lowland, being predominately arable in nature south of Kilmarnock;
- Many of the hedgerows are in good condition, with an intact matrix of hedgerow trees;
- Most of the farm locations are historic, self-contained farmsteads, within a hinterland of managed fields with occasional copses;
- Localised variation is often due to topographical or geological differences, although in general, there is little deviation due to the generally fertile soil conditions, and regular field pattern; and
- Large-scale woodland is rare within areas of this landscape character, tree cover being generally being limited to isolated copses. However, the retention of hedgerow trees gives the area a more wooded overall appearance than may be expected considering the limited tree stands.

The A77 corridor passes across an area of Lowland Hills (P) Character Classification Type, occurring on a series of low hills, reflecting the presence of igneous intrusions in the surrounding coal measures. The hills are a significant feature of the Ayrshire Basin and are characterised by:

- Low, gradual slopes, mostly under 150m AOD; and
- The groundcover is generally sparse, with some minor woodland planting, and areas of poorer, more species rich grassland. This provides some diversity from the surrounding farmed field pattern.

Road developments such as the A77 are identified in the Ayrshire Landscape Assessment as elements which have changed the landscape character through the scale of their construction works and volumes of traffic generated. They have also changed the way in which motorists perceive the landscape by increasing traffic speeds and creating a 'corridor effect.'

The relevant guidelines identified by the Landscape Character Assessment are as follows:

- The landscape design should reflect and enforce the character of the landscape traversed; and
- The scenic qualities of the certain landscapes might be acknowledged by innovative road engineering, which avoids crude cutting and filling.

Environmental Statement

The Assessment also suggests that a phased programme of tree replanting should be encouraged, especially to replace felled trees, and in association with new development, in order to maintain and restore the historic legacy of trees. A policy of establishing an integrated pattern of new small woodlands and woodland belts in the most open areas is also to be encouraged.

The landscape baseline is described in Table 7.1. This table also includes professional judgements about the quality and sensitivity of the landscape in order to give an indication of the capacity of the landscape to absorb the development. Images of typical landscape character are shown in Figure 7.4.

The study area conforms to the Ayrshire Lowlands Landscape Classification Type although there is an insignificant intrusion of the Lowland Hills Landscape Classification Type, which does not represent a change in the local landscape character. Therefore the baseline has been assessed as one area.

Table 7.1: Landscape Baseline (continued over)

Landscape Components	Characteristics
Geology	Dominated by The carboniferous Westphalian "Coal Measures" of Ayrshire basin, with sporadic intrusions of resistant carboniferous lavas (basalt and spilite). The ridge underlying the belt of Lowland Hills (P) landscape character type is comprised of this lava rock.
Landform	The site lies within the Ayrshire Basin, a large expanse of coal measure lowland, bordered to the east and south by low hills. The basin is wide, level, and is mostly cultivated land, extending east from the Firth of Clyde and Irvine Bay areas. Within the basin area, there are a number of basalt, sandstone, limestone, millstone grit and volcanic intrusions, one of which crosses the road corridor.
Land Use / Landscape Pattern	The proposed Scheme is surrounded by fertile farmland of the Ayrshire Basin, small residential developments and lightly wooded slopes. The Lowland Hill section of the road corridor is partly wooded with Hansel Village to the south, as the road corridor crosses the ridge caused by the underlying volcanic intrusion.
Vegetation	The area surrounding the site is dominated by cultivated farmland, with a formal field system delineated by hedgerows with hedgerow trees. There are scattered copses of minor woodland and larger groups of trees associated with the settlements and the lowland hill ridge.
Planned and committed developments which will affect landscape	<i>South Ayrshire Local Plan 2002</i> There do not appear to be any policies that advocate development within the site area, or immediate surroundings, that would visually impact upon the landscape setting of the site. Planning applications. There are no planning applications that affect the visual appearance of the site, or will be affected by the proposals.
Value	Although there are no statutory designations applying to the location of the Scheme, the regional landscape is considered to be of high scenic value, due to its formal field pattern and retention of hedgerows and hedgerow trees. <i>Good Landscape</i>
Sensitivity	Although classified as a Good Landscape, it has been changed by development in the past therefore the landform, houses and field patterns are of varying age. The localised landscape has previously experienced impacts from the major roads (A77, A735, A736 and the A76), which have served to

Environmental Statement

<i>Landscape Components</i>	<i>Characteristics</i>
	conflict with the general pastoral character of the area, and set a precedent for further similar development. Further sympathetic change will not significantly alter its character. <i>Medium</i>

7.5.4 Visual Baseline

The visual receptors for this study have been identified by site survey. The zone of visual influence (ZVI) is shown in Figure 7.2. Landform, trees, woodland plantations, infrastructure corridors, buildings and structures, all determine the extent of visibility of the proposed development. Within the ZVI, visibility of the Scheme work areas is locally limited by vegetation.

Figure 7.2 also shows viewpoints from which the location photographs were taken to depict the visual baseline. These photographs are presented in Figure 7.4. Viewpoints were chosen to include those principal receptors, which have been identified by site survey and are listed in Table 7.3, and illustrate areas of most extreme impact due to the proposals.

Table 7.3 presents the visual baseline together with the predicted environmental effects. The list of receptors includes their locations, their approximate numbers, approximate distance from the proposed development and a judgement of their level of sensitivity. Each receptor's sensitivity to visual change is rated according to the following criteria:

- The receptor's proximity to the scheme;
- The extent to which the receptor's view is screened, (by vegetation - including during winter die back, barriers, topography etc);
- Whether the receptor is residential or commercial; and
- The importance of the receptor's unique view.

Generally, the land north of the A77 corridor rises to a ridge just north of the corridor for the lengths that will be subject to the proposed major works, thereby enclosing views of the site from the north. The land south of the A77 corridor is relatively flat with minor ridges, with an extensive hedgerow and tree field pattern, thereby considerably limiting the potential views into the site. There are very few locations within the Ayrshire Basin providing elevated views of the site.

Whilst the land is generally flat, the road corridor is locally hidden along a minor depression, thereby reducing views of the site to being those within this depression. Views outside this depression are long-distance views, where the minor areas of the Scheme, such as the central reserve gap and access closures, will not be seen. The only elements of the Scheme visible from these long-distance viewpoints will be the road crossing bridges and the hedgerows adjacent to the new access roads.

Environmental Statement

The visual baseline can be summarised as follows:

- The largest group of receptors will be those using the A77, many of whom use the road on a daily basis as an arterial route for access throughout Ayrshire. This frequency of use will increase this group's familiarity with the road corridor and their ability to identify change;
- There are a small number of residential receptors (mainly farmsteads) in close proximity to the A77 dual carriageway and the various side roads. Currently, each of these receptors experience small sections of the proposed works areas;
- There are residential and commercial receptors within Hansel village, south of the A77. Currently, there is extensive woodland in a belt separating the Hansel Village buildings from the road corridor, effectively screening these receptors views of the Scheme;
- There will be limited, partial views of the western most areas of the Scheme from the A77 to Ayr, south of the roundabout marking the western limit of the site area. These views are glimpsed and of the Brocket area only; it is unlikely that any of the works will be seen during construction, and the works will not be visible from these receptors following completion;
- There are residential receptors at Bogend Toll, Trynlaw and Stockbridge, who have extensive views of the site area east of Hansel Village, who will be significantly affected by the proposed works;
- There are important views from the A77 when travelling southwest. In particular, as vehicles progress past Hansel Village (to the south of the A77), and across the Ayrshire Basin out towards the Firth of Clyde and Arran;
- Users of the B730 south of the Bogend Toll junction have some limited visibility of the site of the proposed Whitelees link road. These glimpsed views are only partial due to both the localised topography and the extensive hedgerow and tree lines on the western hedge line to the B730; and
- There are partial, distant views from hilltops to the east and south of the Scheme, mostly obscured by intervening topography and vegetation.

Presently the A77 road corridor is lit in the evenings and at night along the site area. This establishes a precedent to light the corridor, and the lighting continues into adjacent settlements. Access roads off the main road corridor, to individual dwellings and minor groups of buildings, are not generally lit.

7.6 Environmental Effects

7.6.1 Effects of Construction

The construction process is itself temporary; therefore construction related effects will also be temporary. Detailed information about the effects on the landscape resource and the visual impacts on individual receptor groups is given in Tables 7.2 and 7.3 respectively. The following activities during the construction period will cause landscape and visual effects:

- Siting of the contractor's main offices and works compound areas;

Environmental Statement

- The movement of construction vehicles, machinery, etc;
- Traffic Management in order to facilitate the undertaking of the side road “stopping up” and central reservation works;
- General site clearance and topsoil strip of the major works sites at Symington and Bogend Toll. The vegetation will be cut back and cleared where the new link roads and A77 crossing structures are located;
- Fencing, signage, roadwork, etc;
- Security lighting at night;
- Construction of embankments and structures; and
- Remedial earthworks to marry the structures and link roads into the adjacent landform.

Landscape Effects

The landscape effects of the construction works are described in Table 7.2.

Visual Effects

The visual effects of the construction works are described in Table 7.3.

7.6.2 Effects of Operation

A description of the Scheme is given in Chapter 2. The Scheme design and Landscape Plan shows the proposed road alignment and details of planting proposals (see Figure 7.5). Cross sections presented in Figure 7.6 show the vertical alignment of the Scheme.

Landscape Effects

The sensitivity of the landscape resource, magnitude of landscape effects and significance of landscape effects have been assessed, and this information is summarised in Table 7.2. The landscape effects are presented below.

The A77 – A78(T) junction is already a well-defined and prominent feature in the landscape. The primary impacts will occur on the Symington and Bogend Toll stretch of the A77, where there will be new connector roads and bridges, and the link road at Whitelees. These new structures require the formation of embankments over existing low-lying fields both south and north of the road corridor.

The design and location of additional luminaires will be selected to minimise light cast outside the road corridor, in order to reduce the impact of the additional lighting.

The Scheme proposes minor alterations to the central reservation and some side roads to be stopped up as part of the proposed Scheme. There are also localised changes in access routes from some houses and farmsteads in the vicinity of the new junctions. These accesses will feed the new link roads rather than exiting directly onto the A77 carriageways.

Environmental Statement

New drainage elements included in the Scheme will have no landscape or visual effects as the residual structures are all sub-surface. However, should attenuation ponds be incorporated into the final Scheme design, the ponds may be visible to some immediately adjacent receptors. Should this be the case, new planting around the ponds will mitigate these views.

The Scheme includes two new bridges over the A77 corridor, at Symington and Bogend Toll, which will remain significant but local features in the landscape following completion of the proposals. The design of the bridges will be in keeping with the local landscape scale and context. Mitigation planting will help to absorb the scale of the new bridges and reduce their impact on the local landscape character.

There will be some cutting back and removal of existing vegetation for preparation of the site works, which will slightly diminish the volume of hedgerow in the area. However, this will be kept to a minimum and affected hedgerows restored as part of the mitigation planting proposals.

As the majority of the Scheme is located at the periphery of the village of Symington, it will have negligible impact on the fabric of the townscape. However, the Scheme does include alterations to existing accesses to the village, including a new bus turning area, which will have negligible effects on the localised townscape, and no effect on the surrounding landscape.

Overall, the Scheme will be introduced into a landscape pattern already changed and fragmented by the original A77 corridor development. The general effect of the Scheme will increase the amount of hardscape and infrastructure, in the construction of the link roads and the bridge structures. In light of the precedent set by previous A77 expansions, the development will not alter the character of the landscape. With appropriate mitigation, these proposed developments can be successfully absorbed into the existing landscape character.

The magnitude of the landscape effects will initially, (at 09WP), be moderate to severe. However, eventually, the significance of the effect on landscape character will be minor at 24WP, (i.e. 15 years from the Scheme completion) when mitigation measures have taken effect and new vegetation will be well established. The significance of the landscape effects will be negligible at year 09WP and negligible at year 24WP.

Visual Effects

The visual effects, the magnitude of these effects and their significance for the visual receptors are listed in Table 7.3. The visual effects can be summarised as follows:

- There are a small number of residential receptors living within close proximity to the Scheme, who will experience moderate to substantial changes to their middle and close distance views during the construction period. However, upon completion of construction, the Scheme includes mitigation measures to lessen any new adverse visual effects; and
- There are a large number of travelling receptors (cars and cyclists), who will view the Scheme from the road. These receptors will experience slight

Environmental Statement

changes to their middle and close distance views. However, these views are already affected by existing infrastructure, and adverse visual effects will be mitigated by new vegetation;

- There are a small number of residential receptors located in the village of Symington who will experience moderate changes to their middle and long distance views. However, their views south and towards the locations of the major works, are already significantly reduced by existing tree planting, and new planting will further mitigate any residual adverse visual effects;
- There are a small number of residential receptors at Knockendale, north east of Symington, who will experience moderate to substantial changes to their medium and long-distance views of the Bogend Toll overbridge. These adverse visual effects will be lessened by mitigation planting measures; and
- Additional lighting to the main structures and new link roads will slightly increase the existing level of lit road corridor. This is an increase in a feature for which there is already a precedent. However, this additional lighting may increase the overall impact of the highway lighting, as it will be on elevated sections of carriageway, therefore increasing its prominence as a feature in the landscape.

The significance of the visual effects is given in Table 7.3. The overall significance of the environmental effects are as follows:

- Effects of construction: the visual effects will be Substantial Adverse.
- Effects of Operation: the overall significance of the visual effects for the whole Scheme will be Moderate Adverse at year 09WP and Minor adverse/beneficial at year 24WP (i.e. there will be both adverse and beneficial effects).

7.7 Mitigation

The mitigation proposals are in accordance with the principles contained within the following guidelines:

- Scotland's Native Trees & Shrubs, (Scottish Executive, 2001);
- Cost Effective Landscape: Learning from Nature (Scottish Executive, 1998);
- DMRB Volume 10; and
- The Ayrshire Landscape Character Assessment.

Replacement planting and additional screen planting is proposed to set the Scheme into both the landscape and the existing vegetation patterns, and to soften its visual impact. This comprises extensive tree, shrub and hedgerow planting along the proposed embankments, slip roads and link roads. Proposed species include a mix of native broadleaf and native coniferous species to maintain the existing landscape character of hedgerows, trees and mature copses. All proposed trees and shrubs are to be native species of local provenance. The proposed landscape treatment is shown in Figures 7.5 and 7.6.

It is likely that the Scheme will be constructed using a Design and Build Contractor and the Contractor will carry out much of the detailed design at a later stage.

Environmental Statement

However, the following mitigation is recommended for specific elements which will be subject to details to be provided by the Contractor:

- New bridges: the form and principal dimensions of the structures will be prescribed in the Contract. Mitigation will include the use of high quality, sympathetic facing materials to complement the existing built features in the area and to improve the appearance of the Scheme.
- New Lighting - mitigation: the use of high quality minimum spillage lighting to minimise light pollution, visual intrusion, and improve the appearance of the Scheme.
- New signage - mitigation: new signage should be grouped on a minimum number of poles where possible.
- Construction compounds - mitigation: location and scale of the construction compound to be determined by the Contractor. The compound area will be restored following completion of the Scheme.

7.8 Residual Impacts

At year 24WP, when mitigation will be fully effective, there will be minor residual impacts. The Scheme will introduce local changes into the landscape pattern. There will be ongoing visual effects including the increase in ambient light levels and new directional signage.

7.9 Summary

The proposed Scheme is located along the A77 road corridor from Dutch House roundabout to Spittalhill junction, incorporating works to the central reservation, two new grade separated junctions and revised accesses to local settlements. The landscape is that of wide plain dominated by arable cultivation and a mature hedgerow matrix, transected by the A77 road corridor.

There are no areas designated for their landscape value within the boundaries of the proposed Scheme, although the attractiveness of the landscape character is recognised and protected within regional structure local development plans. The region is considered to be overall of *good landscape value*.

The landscape pattern has previously experienced change by development of the roads, associated buildings and a footbridge spanning the road corridor; consequently, with mitigation, the addition of the new Scheme roads could be successfully absorbed into the surrounding landscape.

Although substantial at construction, the significance of the landscape effects will be minor beneficial and moderate adverse at 09WP. At 24WP there will be both minor adverse and minor beneficial effects. The overall significance of the landscape effects will be negligible at 09WP and 24WP.

The proposed Scheme will be most visible from the A77 road corridor, can be observed from some of the minor road network surrounding the site, is overlooked by some residential and commercial receptors within adjacent settlements and lies close to several stand-alone residential receptors.

Environmental Statement

There are a small number of visual receptors that will initially experience substantial adverse effects during the construction period, followed by medium-term moderate adverse, degrading to minor adverse once mitigation measures mature. A large number of visual receptors with low sensitivity will experience only minor adverse effects at 24WP.

Table 7.2: Summary of Landscape Effects

Quality of the Landscape	Good			
Sensitivity of the landscape	Medium			
Landscape Effects	<p>Minor Works: Removal of breaks in central reserve of road, reinstatement to match existing. Removal of minor access roads from A77, turn-off areas to be reinstated to match existing. Removal of signage along the verges and within the central reservation.</p> <p>Major Works: 2 new bridges over the road corridor, including associated lighting at Bogend Toll and Symington south. Safety railings and abutment structures to new bridges, creation of new link roads and new planting.</p>			
Magnitude of effects	<p>Minor Works: During the construction phase, there will be minimal landscape effect, as accesses are removed and the areas reinstated. There will be some disruption to the landscape character caused by construction traffic, but this is temporary, and following completion of the minor works, the effect will be Low beneficial.</p> <p>09WP: <i>Low – Minor Beneficial</i></p> <p>Major Works: During the construction phase, the major works will require removal and mounding of soil, and considerable earthworks to construct the elevated link roads and bridge abutments. The bridge structures will remain a significant feature in the landscape, one that is not in sympathy with the present landscape character of the Ayrshire Basin. Link roads will also require considerable earth moving, but on completion the new planting, including hedgerows and hedgerow trees will minimise any adverse impact of these roads, as they are in keeping with local character.</p> <p>09WP: <i>High – Substantially adverse</i></p> <p>Overall 09WP: <i>Moderately Adverse</i></p>			
Mitigation (not including mitigation of the effects on individual visual receptors - see Table 7.3)	Tree and hedgerow planting will soften the impact of the new roads, and link with the existing landscape character, field boundary pattern and reduce the visual intrusion of the new structures. Where possible, new features such as link roads will align with the existing field structure, the new pavement running alongside existing landscape features such as hedgerows. Existing features will be enhanced in line with the existing landscape character by gapping up hedges and planting hedgerow trees.			
Significance of Effects	Construction, 2006 (06NP) <i>Substantially adverse</i>	2009 (09WP) <i>Moderately adverse</i>	2024 (24NP) <i>Minor beneficial</i>	2024 (24WP) <i>Minor adverse</i>
Residual Effects	The new roads, bridges, and embankments will cause localised changes in the landscape pattern. However, mitigation works, including new vegetation will establish and help absorb adverse effects.			

7.10

Table 7.3: Visual Baseline and Visual Effects (continued over)

Location of Receptors	Approx Nos.	Baseline Conditions	Approx. Distance from Proposed Scheme at closest visible point	Level of Sensitivity	Visual Effects	Magnitude of Effects at 09WP	Mitigation	Significance of Effects				
								Construction	O9WP	24NP	24WP	Residual Effects at 24WP
Houses fronting or adjacent to the new highway bridges and embankments – Bogend Toll – i.e. Bogend Toll,	20	Residential receptors located at A77-B730 junction and immediately adjacent to Bogend Toll access structures.	50m	High	New embankments and bridge structures. Remedial earthworks, new landscaping and new highway lighting. Temporary works and associated compound. All visible from close range.	Moderate adverse	Provision of new screen planting. Use of high quality sympathetic facing materials on bridge. New access route	Substantial adverse	Moderate Adverse	Negligible adverse / Negligible beneficial	Minor adverse / Minor beneficial	The new route and structures will be visible, though screened by new planting. The bridge will remain visible.
Houses fronting or adjacent to the new highway bridges and embankments – Symington south access – i.e. Jeanfield, Danepark, Trynlaw and Stockbridge	8	Residential receptors located at Symington South access junction, immediately adjacent to access structures.	50m	High	New embankments and bridge structures. Remedial earthworks, new landscaping and new highway lighting. Temporary works and associated compound. All visible from close range.	Moderate adverse	Provision of extensive new screen planting. Use of high quality sympathetic facing materials on bridge. New access route	Substantial adverse	Moderate Adverse	Negligible adverse / Negligible beneficial	Minor adverse / Minor beneficial	The new route and structures will be visible, though screened by new planting. The bridge will remain visible.
Coodham Estate (included in the inventory of gardens and designed landscapes in Scotland)	-	Site areas are visible from within Coodham Estate woodlands, but heavily screened in public access areas.	50m	Medium	Minimal visual effects due to the considerable screening afforded by the existing woodland.	Negligible adverse	Provision of additional screen planting to embankments	Minor adverse	Negligible adverse	None	Negligible adverse	Minor views of the bridge structure may be visible from areas within Estate woodlands, with minimal public access.
Whitelees Properties (inc. Balbir's restaurant)	16	Existing access is from the A77.	500m	High	Minimal visual effects from the new bridges. Closure of direct accesses onto the A77 from these properties and the construction of a new access road to the rear will all impact upon the visual amenity of these properties.	Moderate adverse minor beneficial	New planting to the new access roads (towards Bogend Toll), and removal of the pavement to the former access, reinstatement with new footpath and grass verge.	Moderate adverse	Minor adverse / minor beneficial	None	Minor beneficial	New access road to the south of the properties. Improved appearance of the properties from the A77.
Symington Town	-	No existing views to the site of any proposed development due to existing landform, hedgerows and tree planting.	500m	High	None due to existing vegetation and landform. However, considerable visual impact on receptors accessing Symington – either residential, or visiting	Moderate adverse	Provision of extensive new screen planting. Use of high quality sympathetic facing materials on bridges. New access route	Substantial adverse	Moderate Adverse	Negligible adverse / Negligible beneficial	Minor adverse / Minor beneficial	The new route and structures will be visible, though screened by new planting. The bridges will remain visible.
Muirend House and Helentongate	4	Residential properties, with existing accesses onto the A77 to be retained	750m	High	Neither site will have substantial views of either bridge crossing. Both properties will retain their accesses to the A77, and they will have direct views of minor works to remove central reservation accesses and stopping up works to the Trynlaw A77 access.	Minor beneficial	None	Minor adverse	Minor beneficial	None	Minor beneficial	An improvement to the linear character of the A77 road corridor. The removal of some signage, and minor

Environmental Statement

Location of Receptors	Approx Nos.	Baseline Conditions	Approx. Distance from Proposed Scheme at closest visible point	Level of Sensitivity	Visual Effects	Magnitude of Effects at 09WP	Mitigation	Significance of Effects					
								Construction	O9WP	24NP	24WP	Residual Effects at 24WP	
													screened views of the road bridges.
Farmstead south of Trynlaw	11	Residential and business properties in a complex south of the A77 corridor – south of Trynlaw	Immediately adjacent to new access road	High / medium	The properties are located with a new access running along their northern boundary. They will have direct views of the new access road south of Symington, serving Trynlaw. The properties will have direct views of the Symington south access and road bridge.	Moderate adverse	Planting to the Symington south access bridge and embankments, the Trynlaw access road and the Helentongate access road.	Significant adverse	Moderate adverse	Negligible adverse / Negligible beneficial	Minor adverse / Minor beneficial		The access roads, bridges and embankments will continue to be a feature in the visual amenity, although their impact will continue to reduce as the associated hedgerows and trees mature.
Hansel Village	-	Mixture of residential, seasonal holiday homes and business premises, set in a wooded estate.	Immediate to minor access improvements	High / Medium	The central reservation access is to be stopped up and reinstated to marry into adjacent, although access onto the westbound carriageway is to be retained to both existing village entrances.	Minor adverse / minor beneficial	Reinstatement to areas of stopped up access.	Minor adverse	Minor adverse / minor beneficial	Minor beneficial	Minor beneficial		Removal of break in central reservation, resulting in access from the southbound carriageway of the A77 only.
Brocket properties	3	Existing properties on southern kerbline of A77, with fields and Rosemount woodland to south	0m	High	Minor changes to views north – stopping up of accesses and central reservation gaps.	Minor beneficial	Locations of removed central reservation breaks and access points to be reinstated to match adjacent	Minor adverse	Minor beneficial	None	Minor beneficial		Improved continuity in road corridor.
Rosemount (designed landscape not included on register of gardens and designed landscapes in Scotland)	10	No existing view of any site areas on the A77.	400m	High / Medium	Views of proposals largely obscured by existing mature tree cover.	Negligible beneficial	Locations of removed central reservation breaks and access points to be reinstated to match adjacent.	Substantial adverse	Negligible beneficial	None	Negligible beneficial		Improved continuity in road corridor.
Hillhouse	2	Views south over the A77 corridor, to the Brocket properties and Rosemount woodland	300m	High	Likely to see stopped up accesses, removed central reservation gaps.	Negligible beneficial	Locations of removed central reservation breaks and access points to be reinstated to match adjacent	Minor adverse	Negligible beneficial	None	Negligible beneficial		Improved continuity in road corridor.
Vehicular users of the A77	-	Existing road corridor, providing fleeting glimpses of the works areas.	0m	Medium	A fleeting view of the new junctions and associated link roads, bridges and landscaping.	Minor adverse	Landscaping and use of high quality sympathetic facing materials on bridges.	Substantial adverse	Minor adverse	Negligible adverse / Negligible beneficial	Negligible adverse / Negligible beneficial		A change in the existing road pattern will be discernible. The impact of this change will diminish over time.

Environmental Statement

Location of Receptors	Approx Nos.	Baseline Conditions	Approx. Distance from Proposed Scheme at closest visible point	Level of Sensitivity	Visual Effects	Magnitude of Effects at 09WP	Mitigation	Significance of Effects				
								Construction	O9WP	24NP	24WP	Residual Effects at 24WP
Vehicular users of B730	-	Existing road travelling roughly perpendicular to A77 corridor, over varying topography, giving prolonged glimpses in places of the site of the Whitelees and Helentongate link roads	Views at 1200m and 2600m	Medium	Glimpsed views will reduce the impact of the proposed works. The vehicles are in motion, towards the B730/A77 junction at Bogend Toll. Unlikely to experience impact other than when works are being undertaken, excepting the introduction of the new roundabout.	Minor adverse	Hedgerow planting with hedgerow trees to the link roads.	Moderate adverse	Minor adverse	None	Negligible beneficial	Slight increase in the amount of hedgerows and hedgerow trees
Burnbank	1	Exiting views towards the A77 corridor	1000m to both bridge crossings, 450m to Whitelees and Helentongate link roads	High	Burnbank will have extensive views over the construction and compound areas for the bridged crossings and link roads south of the A77.	Moderate adverse	Plant up embankments for the bridged crossings. Hedgerow planting with hedgerow trees to the link roads.	Substantial adverse	Moderate adverse	None	Minor adverse	The new routes and structures will be visible, though screened by new planting. The bridges will remain visible.
Baillieston, Underhills, Heughmill, Craigie Mains and users of access roads to these properties	12	Existing elevated views over woodland towards A77 and location of Helentongate / Whitelees link roads	1600m	Moderate	The Helentongate and Whitelees link roads will be visible under and following construction, although the bridged A77 crossings should be hidden, excepting middle distance glimpses of the access roads from the B730.	Minor adverse	Gap up existing hedgerows south of proposed link roads, and plant hedgerow trees	Moderate adverse	Minor adverse	None	Negligible adverse	As the hedges and trees mature, the impact of the new link roads will reduce until they become part of the existing landscape structure.
Craigie Hill, High Langcraig, Laigh Langcraig, and Witch Knowe transmitter access road.	5	Some long-distance elevated views of the Helentongate and Whitelees link roads, very long distance views of Symington South bridge	3000m	Moderate	Some construction work may be visible, especially from some of the more elevated sections of access road.	Negligible adverse	Hedgerow and tree planting at Bogend Toll	Minor adverse	Negligible adverse	None	Negligible beneficial	The long term impact of the works will be to increase the level of hedgerow and tree planting visible from these locations
Muirhouse, dwellings on the road to Safflar.	5	The access to Coodham Estate that is to be closed is visible	500m	High	The access will be closed, pavement removed to be reinstated.	Minor beneficial	None	Minor adverse	Minor beneficial	none	Minor beneficial	The continuity of the A77 corridor will be enhanced.