



West Sussex County Council

A29 REALIGNMENT PHASE 1

Environmental Statement - Chapter 10





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10 LANDSCAPE AND VISUAL

10.1 INTRODUCTION

10.1.1. This chapter reports the outcome of the assessment of likely significant effects arising from the Scheme upon the landscape character and sensitive visual receptors.

LANDSCAPE

10.1.2. Landscape assessment considers the effects of change and development on landscape as a resource.

10.1.3. The character of the landscape derives from a combination of physical factors, natural processes and human intervention. Landscape effects are a combination of the physical changes to the fabric of the landscape arising from the Scheme and perceptual changes – the way these physical changes alter how the landscape is perceived.

10.1.4. The landscape assessment considers the effect of the Scheme on the landscape as a whole, effects on significant individual elements of the landscape, and effects on characteristic combinations or patterns of elements and how these are seen to affect its character and quality.

VISUAL

10.1.5. Visual assessment is concerned with the views that are available to people who may be affected by the Scheme, and their perception and responses to changes in these views.

10.1.6. Visual effects arise from changes in the composition and character of views available in the area affected. The assessment considers the likely change that would be experienced, including the effects both on specific views and on general visual amenity – the pleasantness of the view or outlook – that the people affected enjoy.

10.1.7. For the purposes of assessment, whilst it is the people living, working, passing through or enjoying recreational activities in the area who actually see the views and enjoy the visual amenity, it is the places they may occupy that are mapped and described as the visual receptors.

10.2 LEGISLATIVE FRAMEWORK, POLICY AND GUIDANCE

LEGISLATIVE FRAMEWORK

10.2.1. The applicable legislative framework is summarised in **Table 10-1** below.

Table 10-1 – Landscape and Visual: Summary of Legislation

Legislation	Summary
The European Landscape Convention (ELC) 2007 (Ref. 10.1)	The European Landscape Convention (ELC) was ratified in the UK on 21 November 2006 and became binding on 1 March 2007. It provides a basis for closer co-operation on landscape issues across Europe. The Convention highlights the need to recognise landscape in law and encourages the integration of landscape into all relevant areas of policy, including cultural, economic and social policies. The ELC applies to natural, rural, urban and peri-urban areas including land, inland water and marine areas. Its purpose is to promote landscape protection, management and planning in relation to all

	landscapes regardless of whether their quality and condition is considered outstanding, ordinary or degraded.
National Parks and Access to the Countryside Act 1949 (Ref. 10.2)	The National Parks and Access to the Countryside Act 1949 provided the framework for the creation of National Parks and Areas of Outstanding Natural Beauty (AONBs). Section 11A outlines the duties of certain bodies and persons to have regard to the purposes for which National Parks are designated, including social and economic well-being of communities, but shall attach greater weight to conserving and enhancing the natural beauty of the area, which in this case, is the South Downs National Park (SDNP) to the north of the Scheme. Views to and from the SDNP are considered in the conservation of its natural beauty.

POLICY

10.2.2. The applicable policy framework is summarised in **Table 10-2** below.

Table 10-2 – Landscape and Visual: Summary of Policy

Policy	Summary
National	
National Policy Planning Framework 2019 (Ref. 10.3)	<p>The NPPF sets out the government's planning policies for England and how these are expected to be applied. There is an overarching presumption in favour of sustainable development, and it states: <i>“the creation of high-quality buildings and places is fundamental to what the planning and development process should achieve”</i> (Ref. 10.4).</p> <p>The NPPF consolidates all the previous Planning Policy Statements (PPS) and Planning Policy Guidance Notes (PPG) into one document. The following paragraphs/ policies are considered relevant to this assessment:</p> <ul style="list-style-type: none"> ■ The NPPF states that <i>‘Strategic policies should make sufficient provision for conservation and enhancement of the natural, built and historic environment including landscapes and green infrastructure’</i>. (Section 3, Paragraph 20, pp9); ■ When adopting planning policies and making decisions, Local Planning Authorities (LPAs) should <i>‘ensure that developments are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change’</i>. (Section 12, Paragraph 127, pp38); and ■ The planning system should aim to conserve and enhance the natural and local environment, in part through the protection of valued landscapes. LPA’s <i>‘Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) [on] the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development’</i>. (Section 15, Paragraph 180, pp52).
Local Policy	
Arun District Local Plan 2011-31 (Ref. 10.5)	The Arun District Local Plan 2011 – 31 replaced the 2003 Arun District Local Plan. The relevant Local Plan policies include:

	<ul style="list-style-type: none"> ▪ Policy LAN DM1: Protection of Landscape Character whereby developments shall only be permitted where they will not have a demonstrable visual impact on either the landscape character of Arun or the setting of and views into and out of the South Downs National Park; ▪ Policy SD SP3, preventing the coalescence of individual settlements and for retaining the separate identity and amenity of settlements. The policy states that “<i>development will only be permitted within the gaps if it would not undermine the physical and/or visual separation of settlements</i>”. This includes the gaps between Bognor Regis/ Chichester/ Felpham and particularly Barnham to Walberton; and ▪ Policy QE SP1: Quality of the Environment. Requires developments to contribute positively to the quality of the environment and does not have a significantly adverse impact on residential amenity, the natural environment or leisure and recreational activities.
<p>West Sussex Structure Plan 2001-2016 (Ref. 10.6) (saved policies)</p>	<p>The West Sussex Structure Plan 2001-2016 provides a broad planning framework for the West Sussex area. Although it does not hold any formal status in the current planning system it remains a strategic policy statement for future development and land use planning. The document acknowledges the exceptional character of West Sussex and contains a number of 'saved' strategic policies that provide for:</p> <ul style="list-style-type: none"> ▪ Protecting and reinforcing the distinctiveness of the main National Character Areas (NCAs); ▪ Safeguarding the Area of Outstanding Natural Beauty; ▪ Protecting woodlands and forests; ▪ Protecting rivers, waterways and the coast; and ▪ Retaining the separate identity of towns and villages.

10.2.3. In addition to the above Local Plan and strategies, the following items of Supplementary Planning Guidance are relevant to the application:

- Arun Green Infrastructure Study 2012 (Ref. 10.7);
- Bognor Regis Green Infrastructure Framework (Ref. 10.8);
- Barnham and Eastergate Neighbourhood Plan 2014-2029 (Ref. 10.9);
- West Sussex County Council: Breathing Better (Ref. 10.10);
- West Sussex County Council: Adoptable Highway Drainage and SuDS, Guidance Note for Developers (Ref. 10.11);
- West Sussex County Council: Pollinator Action Plan 2019-2022 (December 2018) (Ref. 10.12);
- ADC Open Space Sport and Recreation Study (PMP, March 2009) (Ref. 10.13); and
- Water. People. Places. A Guide for Master Planning Sustainable Drainage into Developments (Ref. 10.14)
- West Sussex County Council – Landscape Character Assessment 2003 (Ref. 10.15).

10.2.4. In addition, this Chapter has been prepared in accordance with the Government’s National Planning Practice Guidance.

GUIDANCE

10.2.5. The applicable guidance documents are summarised in **Table 10-3** below.

Table 10-3 – Landscape and Visual: Summary of Guidance

Policy	Summary
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Design Manual for Roads and Bridges (DMRB) Volume 11 (1993) (Ref. 10.16)	This design manual provides guidance on the assessment of impacts that road projects may have on the landscape and visual resource and the overall principles and techniques for environmental assessment of road projects.
LA 104 Environmental Assessment and Monitoring, Highways England, 2019 (Ref. 10.17)	LA 104 replaces HA 205/08, HD 48/08, IAN 125/15, and IAN 133/10. The document sets out the requirements for environmental assessment of projects, including reporting and monitoring of significant adverse environmental effects.
LA 107 Landscape and Visual Effects, Highways England, 2019 (Revised February 2020) (Ref. 10.18)	This document supersedes DMRB Volume 11, Part 5 <i>Landscape Effects</i> and IAN 135/10 <i>Landscape and visual effects assessment</i> which are now withdrawn. LA107 provides guidance on the assessment of landscape and visual effects of highway projects under DMRB.
Guidelines for Landscape and Visual Impact Assessment, 3rd Edition 2013 (GLVIA3) (Ref. 10.19)	Landscape and Visual Impact Assessment guidance for landscape architects, and others, with substantial sections detailing approach to scope, definition, context, principles, processes, presentation and other topics, on a discipline specific basis.
Government's National Planning Practice Guidance	The National Planning Policy Framework and relevant planning practice guidance setting out the government's planning policies for England and how these are expected to be applied.

10.3 CONSULTATION, SCOPE, METHODOLOGY AND SIGNIFICANCE CRITERIA

CONSULTATION UNDERTAKEN TO DATE

- 10.3.1. **Table 10-4** provides a summary of the consultation activities undertaken in support of the preparation of this chapter.

Table 10-4 – Landscape and Visual: Summary of Consultation Undertaken

Body / organisation	Individual / stat body / organisation	Meeting dates and other forms of consultation	Summary of outcome of discussions
West Sussex County Council	Elaine Martin (Engineering Project Manager - Major Projects)	Plan of proposed viewpoint locations issued to WSCC for approval on 20/02/20.	Long range viewpoints suggested from the SDNP due to its elevated located. It was considered the Scheme alone would not be perceptible from the SDNP and thus excluded from viewpoints. The proposed viewpoints were agreed.

SCOPE OF THE ASSESSMENT

- 10.3.2. The scope of this chapter has been established through an ongoing scoping process. Further information can be found in **Chapter 5: Approach to EIA**.

10.3.3. This section provides an update to the scope of the assessment and re-iterates/ updates the evidence base for scoping out elements of the topic following further iterative assessment.

Elements Scoped Out of the Assessment

10.3.4. The elements shown in

10.3.5. **Table 10-5** are not considered to give rise to likely significant effects as a result of the Scheme and have therefore not been considered within the ES.

Table 10-5 - Elements Scoped Out of the Assessment

Element scoped out	Justification
Views from the South Downs National Park	Views from the SDNP are likely to be further away than the start of the designation, potentially 2.5km. They will be affected by all strategic development in the local plan considered together, not this project alone, which is likely to not be perceptible from this distance. A viewpoint from the SDNP is therefore unlikely to be of value for this particular project.

Elements Scoped into the Assessment

10.3.6. Over time, views within the landscape change due to seasonal variation, changes in light level, human intervention and variation between night and day. When considering the impacts of the Scheme (magnitude of change) upon the perception of landscape character and respective views, the following scenarios have been scoped into assessment:

- Construction phase (~~2021-2024~~ 2022-2023) – during the construction period, assuming a maximum perceived change situation (when construction activity is at its peak);
- Winter (year 1 of opening) – a winter’s day in the year that the Scheme will open or be fully operational (with noise /visual screens and mounds in place but before any planted mitigation has begun to take effect); and
- Summer (year 15) – a summer’s day in the fifteenth year after opening (i.e. when the planted mitigation measures can be assumed to be substantially effective).

10.3.7. The analysis assumes that the visual context applicable at the year of opening is that which will be experienced during winter months when the degree of visual exposure is potentially greatest due to a lack of foliage within the wider landscape and prior to the establishment of mitigation planting. The analysis at fifteen years into operation demonstrates the effectiveness following maturation of any mitigation planting proposals for the Scheme.

EXTENT OF THE STUDY AREA

Landscape Study Area

10.3.8. The extent of the Study Area has been determined by a desk-based review and field work to understand the Scheme’s position in relation to the wider landscape around it which the Scheme may influence in a significant manner (Ref. 10.20). In addition, to initially aid in identifying the extent of visibility of the Scheme in the wider landscape, a Zone of Theoretical Visibility (ZTV) was generated by extrapolating the heights of the built features within the Scheme over a terrain model. The ZTV shows the extent of potential visibility and assist in defining the Study Area. Based on the

desk-based review, findings of field work, ZTV and agreed viewpoints, a 2km Study Area was determined as shown on **Figure 10.2: Context Plan**.

Visual Study Area

10.3.9. The Study Area for the visual assessment is initially defined by the extent to which the Scheme may be visible: by definition, visual effects can only occur where at least some part of the development is visible. The first step in identifying the extent of visibility is to identify the Zone of Theoretical Visibility (ZTV) for the Scheme. The ZTV shows the extent of potential visibility and forms the Study Area, as illustrated in **Figure 10.1: Zone of Theoretical Visibility Plan**.

Zone of Theoretical Visibility

- 10.3.10. The ZTV is produced by drawing 'lines of sight' from high points of the Scheme (target points) using LiDAR 2m DSM surface model with the addition of the proposed 3m noise barrier to analyse where on the ground these points may be seen for a viewer eye at a height of 1.6m above ground, as recommended in GLVIA3.
- 10.3.11. This is a 'with screening' ZTV (**Figure 10.1: ZTV Plan**). Existing buildings and blocks of woodland shown on the Ordnance Survey (OS) 1:20,000 map were modelled to take account of the screening they provide. Buildings were modelled at 6m high (representing a typical two storey house). This is an overrepresentation for single storey buildings and an underrepresentation for buildings above two storeys and overall gives a worst-case scenario for the visual envelop. Woodland is modelled at 12m high (based on observation of average heights in the study area). No allowance has been made for screening from linear features not shown on the OS map such as tall hedges and walls. In addition, there may be minor variations in the landform not represented in the Digital Surface Model that mean that there are small areas with a view not shown, or areas shown as having a view that do not.
- 10.3.12. The ZTV is based on several target points at 100m intervals along the Scheme at a height of 4.5m above the existing ground level to take account of high sided vehicles. The ZTV accounts for earth curvature and atmospheric refraction.

METHOD OF BASELINE DATA COLLATION

DESK STUDY

10.3.13. Information has been gathered primarily from a structured site survey, supported by desk study and consultation with relevant consultees.

10.3.14. The desk study included:

- Identifying natural and built features such as landform, vegetation, settlement patterns and hydrology in relation to the Scheme using Ordnance Survey (OS) mapping;
- Studying aerial photography and online photographic resources;
- Review of relevant national, regional and local planning policy documents; and
- Review of relevant published landscape character assessments.

Site Visit

10.3.15. Detailed landscape and visual site survey work was carried out on Tuesday 25th February 2020. The field survey was designed to collect data for both the landscape and visual impact assessments and the following tasks were undertaken:

- Recording the baseline landscape and its character;
- Checking and ground-truthing the visual receptors;
- Identifying impacts and evaluation of effects, both on the landscape and on visual amenity;
- Consideration of potential design and mitigation proposals; and
- Site photography.

10.3.16. Photography was undertaken in sunny conditions, with clear air and fair visibility. A full frame digital camera with a 50mm prime lens was used.

ASSESSMENT METHODOLOGY

10.3.17. The assessment considers two distinct but closely related areas: landscape character and visual amenity. Landscape assessment considers the effects of the Scheme on landscape character and landscape as a resource. Visual assessment is concerned with the views that are available to people who may be affected by the Scheme, and their perception and responses to changes in these views.

10.3.18. The assessment involves four key stages:

- Establishment of the baseline conditions: the landscape character and visual context of the receiving environment and the quality, value and sensitivity to change of these resources;
- Contributions to the iterative process of design and mitigation based on understanding the nature, form and features of the Scheme;
- An evaluation of the magnitude of change likely to result from the Scheme, both during construction and at completion on visual amenity and the landscape resource; and
- An assessment of the significance of landscape and visual effects considering the sensitivity of resources and the magnitude of change.

10.3.19. For both the landscape and visual assessments, the significance of effect derives from the combination of the magnitude of change and the sensitivity of the landscape or visual receptor. A full methodology is set out in **Appendix 10.1**.

10.3.20. Effects found to be moderate or greater are normally considered to be significant in the context of the EIA Regulations, whilst effects less than moderate are considered to be not significant.

10.3.21. It should be noted that professional judgement is always used in determining both the sensitivity of a receptor and the magnitude of change. As a result, there are situations where the conclusions regarding significance in this report differ from that suggested by the significance matrix (

10.3.22. Table 10-6).

10.3.23. This is most frequent where there is a low but not negligible magnitude of visual effect on a receptor of high sensitivity, where following the table gives a conclusion of moderate effect but the assessor considers the effect not to be significant. In this circumstance the significance would be found to be 'minor to moderate' or even 'minor', depending on circumstances.

10.3.24. The assessment considers the effects of the Scheme at various stages and the predicted duration of effect - whether these are temporary (short or medium term) or permanent.

Table 10-6 – Landscape and Visual Impact Significance Matrix based on LA 104 (Ref. 10.21)

		MAGNITUDE OF IMPACT (degree of change)				
		No Change	Negligible	Minor	Moderate	Major
ENVIRONMENTAL VALUE (sensitivity)	Very high	Neutral	Slight	Moderate/ Large	Large/ Very Large	Very Large
	High	Neutral	Slight	Slight/ Moderate	Moderate/ Large	Large/ Very Large
	Medium	Neutral	Neutral/ Slight	Slight	Moderate	Moderate/ Large
	Low	Neutral	Neutral/ Slight	Neutral/ Slight	Slight	Slight/ Moderate
	Negligible	Neutral	Neutral	Neutral/ Slight	Neutral/ Slight	Slight

Construction Period

10.3.25. This considers the likely temporary effects specific to the construction process (Ref. 10.22). Details of the specific construction methods to be used on-site will be decided by the construction contractor after planning permission has been granted. However, an outline of the likely construction methodology, compounds and programme is set out in Ch3, upon which this assessment is based.

Operational period

Permanent effects

10.3.26. This considers the permanent effects arising from the existence of the Scheme. The design life of the Scheme is 25+ years. For the purposes of this assessment, 25 years is considered long enough that an ordinary observer would reasonably consider it to be permanent.

Temporary effects

10.3.27. The committed mitigation built into the design ('primary mitigation') includes planting which will take time to mature. The assessment therefore considers the effects in the short term (at the time of completion) as well as the longer-term effects (15 years after completion, once planting has become established).

Operational effects

10.3.28. The effects arising from the operation of the Scheme: the effects from the traffic using the road.

10.4 BASELINE CONDITIONS

INTRODUCTION & LOCAL LANDSCAPE DESCRIPTION

- 10.4.1. The Scheme is located approximately 1.4km to the south of the SDNP and to the north of the coastal town of Bognor Regis within National Character Area 126 – South Coast Plain. It is a transitional landscape characterised by a mix of small to medium sized fields containing traditional orchards and woodland and arable and open areas (including market gardening) interspersed by settlements and scattered farmsteads.
- 10.4.2. Around the periphery of the Site are the settlements of Barnham, Eastergate, Fontwell and Walberton. All four settlements are linear in nature, located on either side of the roads that run through them. The Site is bound on all four sides by the existing road network, which comprises Eastergate Lane, Barnham Lane, Barnham Road and Fontwell Avenue (north, east, south and west respectively). Intermittent views of the higher ground to the north are visible from within the area, although largely blocked by existing vegetation.
- 10.4.3. The Site is currently unlit; however, it is considered that it experiences a degree of light spill due to street lighting installed along the B2233 Barnham Road and A29 Fontwell Avenue. Given the general absence of artificial lighting within the Site, the lighting environment within the Site is considered to be indicative of an E2 Environmental Zone ('low district brightness') (Ref. 10.23).

LAND USE, ROADS AND INFRASTRUCTURE

- 10.4.4. The Site comprises arable fields, woodland, hedgerows, orchard and areas of managed grassland. Eastergate Lane lies to the north of the Site, running in a west to east direction. To the west of the Site the current route for the A29 runs from Capel (south of Dorking) and terminates on the A259 at Bognor Regis (approximately 3.5 miles from the Site).
- 10.4.5. The Site acts as an intermediary, separating the settlements of Eastergate to the south-west and Barnham to the south-east. It is bordered to the north by residential dwellings and several commercial facilities, including a self-storage facility and Eastmere Training Stables, along Eastergate Lane. To the east, primarily two storey residential properties are located within a development with rear gardens backing onto the Site. A mix of residential and commercial properties are located either side of the current A29 alignment to the west of the Site with a grouping of dwellings located to the south-east of the Site.
- 10.4.6. A commercial site (Halo Accident Repair Centre) is located immediately next to the Scheme on the south-western part of the boundary that joins the B2233 Barnham Road. A track road runs from the back of the commercial premises north and joins with a fenced off area of land to the south of Eastergate lane. Fleurie nursery (horticultural) is located to the south of B2233 Barnham Road.
- 10.4.7. There are 10 Public Rights of Way (PRoW) within 1km of the Scheme with one PRoW crossing the proposed A29 route. PRoW (Eastergate 318-1) is a local walking route connecting Barnham Road with Eastergate Lane. It's orientation, running north to south, has the potential to act as part of a wider network connecting the South Downs National Park with the coastal plain to the south. This footway is identified within the Bognor Regis Green Infrastructure Framework and Arun Local Plan as part of a Green Infrastructure corridor linking Bognor Regis with the national park. The nearest railway station is Barnham Station which is located approximately 0.6km to the south-east of the Site boundary.

TOPOGRAPHY AND VEGETATION

- 10.4.8. The Site and its immediate context are located on relatively low-lying ground. The land is flat with regular field patterns, gently rising to the north towards the chalk dip slopes of the South Downs National Park. The Site and its immediate context have a network of small and medium-sized broadleaved woodlands, including ancient and semi-natural woodland, well linked by hedgerows and garden exotics providing an enclosed field framework.
- 10.4.9. There are no other landscape or ecological designations within the study area. There is a network of streams and ditches throughout the study area, increasing in frequency towards the South, although there are no watercourses within the Site. Watercourses in the wider area include Lidsey Rife, Ryebank Rife, and Aldingbourne Rife which flow south towards the coast, meeting at Bognor Regis before reaching the sea.

LANDSCAPE DESIGNATIONS

- 10.4.10. The Scheme is located approximately 1.4km to the south of the SDNP. In 2016, the South Downs National Park was designated as an International Dark Sky Reserve (Ref. 10.24).
- 10.4.11. To the east and north of the Scheme, located within the wider 2km study area, are a number of areas of Ancient Woodland; none of which would be affected by the Scheme.

NATIONAL LANDSCAPE CHARACTERISATION

- 10.4.12. Natural England has developed a series of National Character Area (NCA) profiles. These NCA profiles provide a broad range of information including key characteristics of a given area, description of the natural and cultural features that shape the landscapes, change over time, the current key drivers for ongoing change, a broad analysis of each area's characteristics and ecosystem services, and an array of opportunities for positive environmental change.
- 10.4.13. The whole study area shown on **Figure 10.3** lies within National Character Area Profile 126: South Coast Plain. The relevant key characteristics of South Coast Plain are outlined as follows:
- *“The plain slopes gently southwards towards the coast. From the coastal plain edge there are long views towards the sea and the Isle of Wight beyond.*
 - *The underlying geology of flinty marine and valley gravels extends several miles inland to the dip slope of the South Downs and the South Hampshire Lowlands. This gives rise to deep and well-drained high-quality soils.*
 - *In places, streams and rivers flow south from the higher land of the Downs to the sea.*
 - *Coastal inlets and ‘harbours’ contain a diverse landscape of narrow tidal creeks, mudflats, shingle beaches, dunes, grazing marshes and paddocks. These include the internationally important Chichester, Langstone, Portsmouth and Pagham harbours, the Hamble Estuary and the recent coastal realignment site at Medmerry between Chichester Harbour and Selsey.*
 - *There are stretches of farmed land between developed areas, often with large arable fields defined by low hedges or ditches.*
 - *There are isolated remnants of coastal heath in the west.*
 - *Sand dune grasses and intertidal marsh communities are characteristic of the coastline, while small areas of species-rich meadow remain inland.*
 - *The coastline provides feeding grounds for internationally protected populations of overwintering waders and wildfowl and is also extensively used for recreation.*

- *Along the exposed, open coastal plain and shoreline, tree cover is limited to isolated wind-sculpted woodlands and shelterbelts.*
- *The area has significant urban development, with settlements along the coastline dominated by the Portsmouth conurbation, suburban villages and seaside towns including Bognor Regis, Littlehampton and Worthing linked by major road and rail systems.*
- *Historic fortifications along the coast include the Roman fort at Portchester and 19th-century defences and later naval installations built to protect the Portsmouth naval dockyard.”*

10.4.14. Outside of the Study Area National Character Area Profile 125: South Downs lies around 1.5km to the north. The relevant key characteristics of South Downs are outlined as follows:

- *“A broad elevated east–west chalk ridge with a predominantly steep north-facing scarp slope and a gentle southerly dip slope, breaking into a series of hills in the west and terminating in distinctive chalk cliffs in the east.*
- *Cliffs between Beachy Head and Seaford Head are part of a Geological Conservation Review (GCR) site of international importance for its landscape and for research into coastal geomorphology.*
- *The principal rivers – the Arun, Adur, Cuckmere and Ouse – slice through the eastern half of the downs as wide U-shaped valleys with steep sides and flat alluvial flood plains with intensive dairying and crops, and characterised by criss-crossing ditches and meandering river channels. The meanders of the River Cuckmere by Seven Sisters chalk cliffs are particularly significant. Remnant wetland habitats including flood plain grazing marsh, fens and reed beds.*
- *Chalk streams running off both the north- and south-facing scarp slopes providing a key habitat for the scarp and the flood plain landscape, supporting species such as the brown trout.*
- *Woodland a feature of the central downs and, to a lesser extent, the western downs, also concentrated on the steep scarp slopes, consisting of both broadleaved, mostly ancient, woodland with beech, veteran trees, ash and sycamore, and conifers, with some large plantations. Kingley Vale National Nature Reserve (NNR) contains a wealth of yew woodland.*
- *Several different types of heathland habitat, including wet heath, wooded heath and chalk heath dependent on loess soils. Lullington Heath NNR near Eastbourne is one of the largest areas of chalk heath in the UK.*
- *The eastern downs characterised by large open arable and grassland fields, mostly enclosed by the 16th century, with a general absence of woodland and hedgerow boundaries, creating an open, exposed landscape. To the west of the River Arun, where holdings were smaller and ‘sheep-and-corn’ farming less important, hedgerows enclose medium to large irregular fields between the woodlands and designed parkland landscapes, the latter a particular feature of the central areas.*
- *Poor soils on the north-west area of the downs with patches of birch woodland, conifer plantation, bracken and rough grassland. The Gault Clay forms shallow, gently rolling lowland crossed by many streams flowing northwards. On the chalk hills, the infertile soils are generally thin, well drained and rich in calcium.*
- *Distinctive fragments of semi-natural chalk grassland dotted with chalk springs on scarp and combe slopes, with important associated habitats including rare chalk heath and species-rich chalk scrub. A vast array of wildlife such as otters and barn owls; lesser known species such as the barbastelle bat, the chalk carpet moth, sundews (carnivorous plants) and the round-headed rampion, the county flower of Sussex; threatened species include the bee orchid, small blue butterfly and nightjar.*

- *Roads and villages concentrated in the river valleys, the more elevated areas sparsely settled with scattered farmsteads. The eastern end of the Downs is squeezed against the coastal plain conurbations of Brighton and Hove, and Worthing, which contain a wealth of architecture and give the area a strong sense of identity. There is also an almost continuous string of seaside towns: Rottingdean, Saltdean, Peacehaven, Newhaven and Seaford.*
- *Flint, brick and timber frame conspicuous in the built environment in walls, buildings, churches and barns, while roofs are of tile, slate or traditional thatch. The South Downs was once lined with windmills, some of which survive.*
- *Bronze-age round barrows and prominently sited iron-age hill forts, such as Cissbury Ring and Old Winchester Hill, are notable prehistoric features of the scarp and hill tops, especially in the west, as well as Mount Caburn in the east, and further bronze-age barrows and a causewayed camp at Willingdon (most of which are designated as Scheduled Ancient Monuments).*
- *The Long Man of Wilmington – a large hill figure located on the steep slopes near Eastbourne. One of only two extant human hill figures in England, it is 69 metres tall and is designated as a Scheduled Ancient Monument. Current archaeological research suggests that it dates from the 16th or 17th century. Others believe it to be more ancient, perhaps contemporary with the nearby Neolithic flint mines and barrows, or the work of medieval monks from Wilmington Priory.*
- *Public rights of way following drove roads and ancient routes along the accessible downland tops, benefiting from panoramic views across the downs and the Low Weald NCA. Roads and lanes striking across the downs perpendicularly and following historic tracks that originally brought livestock to their summer grazing.”*

LANDSCAPE CHARACTER TYPES AND CHARACTER AREAS

Regional and Local Landscape Characterisation

10.4.15. The following landscape character assessments provide detail at a local level and have been used to further inform the baseline landscape character description for the assessment.

West Sussex County Council – Landscape Character Assessment 2003

10.4.16. The study area is covered by Landscape Character Area SC8 Fontwell Upper Coastal Plain to the north and SC9 Chichester to Yapton Coastal Plain to the south, identified at a County level. SC8 Fontwell Upper Coastal Plain is described within the assessment as a transition area between the open lower Coastal Plain to the south and the wooded Downs to the north. Key characteristics of the area include “*clear views to the higher ground of the SDNP, good cover of woodland and trees, and well settled with scattered pattern of rural villages and farmsteads.*” SC9 Chichester to Yapton Coastal Plain is described as a mainly flat, open landscape crossed by meandering rife and dominated by arable fields. It is described as having a fragmented hedgerow and hedgerow tree pattern and the distinctive landscape character eroded by visual confusion and poor definition between town and countryside from large suburban elements such as glasshouses and equestrian facilities.

10.4.17. At a local level the character of the landscape is described within the Arun Landscape Study (2006) (Ref. 10.25). The South Downs Integrated Landscape Character Assessment (2011) (Ref. 10.26) covers the landscape character of land north of the study area.

Arun Landscape Study 2006

- 10.4.18. Arun Landscape Study was developed as part of a wider set of studies to assist work on the Arun District Local Development Framework. The study is “...to inform decision making on where major development might be accommodated within the District without an unacceptable impact on landscape character in general and on the setting of outstanding assets within Arun District”. It outlines the Local Landscape Character Areas (LLCA), along with an indication of each character areas’ capacity to accommodate future development.
- 10.4.19. The report defines landscape capacity as the extent to which a particular area or type of landscape is able to accommodate change without significant effects on character; or overall change in landscape type. It reflects the inherent sensitivity of the landscape itself and its sensitivity to the development in question; and the value attached to the landscape, or to specific elements within it.
- 10.4.20. The Site is located in Landscape Character Area 16 – Fontwell-Eastergate Mosaic Medium described in the Landscape Capacity Appraisal as a ‘*small scale landscape, area contains ancient woodland, ecological and heritage interest and Fontwell racecourse. Provides separation between Westergate and Barnham*’. The site is also located within Zone 2 – Five Villages of the Landscape Structural Analysis which is comprised of the villages of Eastergate, Westergate, Walberton, Barnham and Yapton. The study identifies the settlement pattern of the towns which have developed as linear settlements along a main road. The settlements have limited separation between each other, and land uses in the area are described as “...a mosaic of horticulture: both glasshouses and nurseries, paddocks, pasture and small holdings associated with low density, linear, post war development”.

LOCAL LANDSCAPE CHARACTER AREAS

- 10.4.21. Due to the relatively large geographical extent of existing assessments, and the length of time since the Study Area was characterised, a number of finer grained character areas have been identified within this assessment to provide a better understanding of the local context within which the Scheme lies, and which are specific to the Study Area. These character areas have been identified in accordance with ‘An Approach to Landscape Character Assessment’ (2014) (Ref. 10.27) and Townscape Character Assessment Technical Information Note 05/2017 (Ref. 10.28). The identified Landscape Character Areas (LCAs) within the Study Area are shown in **Figure 10.3** and described below.

LCA1: Eastergate Village

- 10.4.22. Situated to the southwest of the Scheme, LCA1 Eastergate Village is centred on Elm Tree Stores, a two-storey central convenience store that includes the local post office. Eastergate Cricket Club and the playing fields of Ormiston Six Villages Academy and Sports Centre lie either side of Church Lane which leads to a local pub, parish church and a conservation area. The surrounding residential areas are primarily detached bungalows on narrow local streets, setback from the road with grass verges. Some areas such as St. Georges Walk and Cherry Tree Drive have footpaths. Closer to the Scheme there are two storey residential properties on Collins Close and along Fontwell Avenue, where the buildings are setback further from the busier arterial road. Vegetation is mostly within front and back gardens throughout the character area with trees, hedgerows, shrubs and plants.
- 10.4.23. Barnham Road and the A29 are the main roads through the LCA leading to the nearby villages of Westergate to the west and Barnham to the southeast. The A29 continues north from the junction

with Barnham Road towards Fontwell. The western extent of the Scheme is located on the A29 north of Eastergate.

LCA2: Eastergate Semi-Rural Land

10.4.24. Situated in the land through which the Scheme would run, LCA2 is characterised as a semi-rural area with a regular field pattern and a network of small to medium sized woodlands linked by hedgerows. Residential dwellings are primarily located in clusters along the main roads of Eastergate Lane and Barnham Road. Public Right of Way 318 runs from north to south through the centre of the LCA. Commercial premises such as Stoneyfield Nursery and Eastmere Training Stables are located to the northeast of the character area setback from Eastergate Lane. Halo Accident Repair Centre and Fleurie Nursery are located on Barnham Road and represent the gradual creep of development between the two settlements of Eastergate and Barnham. South of Barnham Road there is a grid of arable fields which extend south to the railway line.

LCA3: Barnham Village

10.4.25. Barnham Village LCA is located to the southeast of the Scheme. The village is centred on Barnham Road running from Eastergate in the northwest through Barnham towards Yapton in the southeast. The majority of the village is located north of the railway line with some residential dwellings, a community hall, and a local pub located south of the railway line. The village centre is located around 1km southeast of the Scheme and includes the train station, a pharmacy, supermarkets and take-aways. St. Philip Howard Catholic School is located to the south of the LCA, while Barnham Primary School is located within the residential area to the north. Several large-scale nurseries are located in the land east of Barnham between Barnham Lane and Yapton Lane.

10.4.26. Similar to Eastergate, Barnham residential dwellings are primarily bungalows with some two-storey building throughout, including those in Murrell Gardens, Chantry Mead, and Ewen Gardens near the Scheme. The main roads such as Barnham Road and Orchard Way have pavements, while many of the secondary roads do not. Front and back gardens have extensive vegetation with some street trees seen throughout the character area.

10.5 BASELINE VISUAL CONDITIONS

Overview

10.5.1. As noted above, whilst it is the people living, working, passing through or enjoying recreational activities in the area who actually see the view and enjoy the visual amenity, it is the places they may occupy that are mapped and described as the ‘receptors’ of the views.

10.5.2. **Figure 10.1** shows the ZTV for the wider area, out to beyond 2km from the Site. The extent of potential visibility from residential receptors can be seen from the background map. The main recreational and visitor receptors are highlighted as they are not immediately apparent from the map. The following visual receptors have been identified within the study area, and are considered as part of the LVIA:

- Residential properties located on Fontwell Avenue, Eastergate Lane, Downview Road, Barnham Road, Collins Close, in Murrell Gardens, Chantry Mead, and Upton Brooks, and at Field Place;
- Users of Public Rights of Way 318; and
- Users of the existing road network, including Fontwell Avenue, Eastergate Lane, and Barnham Road.

VIEWPOINTS

- 10.5.3. This assessment includes a series of photographic viewpoints from a range of distances and directions showing a representative sample of the likely views of the Scheme, including key and important views, from the visual receptor groups identified above.
- 10.5.4. These viewpoints were initially identified as part of the desk study, and they were discussed and agreed with the statutory consultees. Some minor changes were made during fieldwork where a better or more representative viewpoint was obtainable or where necessary to ensure a safe location. The viewpoints agreed with the statutory consultees (WSCC) are listed in **Table 10-7**, below.

Table 10-7 - Viewpoints

No.	Location	Reasons for selection	Direction & distance
01	Fontwell Avenue BNG Ref: 587022, 0.655217	Likely effects on transport users of Fontwell Avenue and fixed users of residential properties on Fontwell Avenue	Looking northeast next to the Scheme
02	Eastergate Lane BNG Ref: 587019, 0.655217	Likely effects on transport users of Eastergate Lane	Looking south around 150m north of the Scheme
03	PRoW (Path 318) BNG Ref: 586625, 0.649464	Likely effects on transport users of PRoW 318.	Looking south around 30m north of the Scheme
04	Downview Road BNG Ref: 586431, 0.646594	Likely effects on fixed users of residential properties on Downview Road.	Looking west around 120m east of the Scheme
05	Murrell Gardens BNG Ref: 586585, 0.648611	Likely effects on fixed users of residential properties in Murrell Gardens.	Looking west around 10m east of the Scheme
06	Barnham Road BNG Ref: 586624, 0.649125	Likely effects on transport users of Barnham Road	Looking northwest along the Scheme
07	PRoW (Path 318) BNG Ref: 586802, 0.651772	Likely effects on transport users of PRoW 318.	Looking northeast around 350m southwest of the Scheme

10.6 FUTURE BASELINE

- 10.6.1. Schedule 4 of the EIA Regulations requires consideration of the likely evolution of the current baseline in the absence of the Scheme. Whilst there are considerable limitations to the predictions that can be made about baseline conditions at a future point in time, some topic areas require projections to account for future change. This section summarises the future baseline that will be used to inform these elements of the assessment.

A29 REALIGNMENT PHASE 2

- 10.6.2. The A29 upgrade will be delivered in two phases. The Scheme relates to Phase 1 (North) and is the primary focus of this ES and EIA. The Scheme to be delivered by WSCC is the northern section from the A29 Fontwell Avenue, south of Eastergate Lane, to a new junction with Barnham Road, as described in **Chapter 3: Description of Scheme**.
- 10.6.3. Phase 2 of the A29 Realignment project comprises a combination of road infrastructure and a mixed-use urban extension. Phase 2 will link to Phase 1 (the Scheme) at Barnham Road and will cross the West Coast Mainline and then connect with Lidsey Road near Lidsey. The urban extension is still at the masterplan stage but is anticipated to include new residential development, a primary school, a secondary school, a mixed-use centre, open space and habitat areas. Phase 2 is expected to be constructed fully within 16 years and will be complete in 2036.

ADJACENT PROPOSED SCHEME

- 10.6.4. The Adjacent Proposed Scheme, which is located to the south and west of the Scheme, is expected to comprise up to 500 homes. Construction works are anticipated to begin in 2022 and be completed by 2027. The access to the development will be from Barnham Road, in the south and Fontwell Avenue in the north. The proposed land uses include residential development, a care home, informal open space, planting, a sustainable drainage system and a wildlife corridor. The proposed development would introduce a significant number of additional buildings within the landscape and further separate the Scheme from the residential properties on Barnham Road, Collins Close, and Fontwell Avenue. The development would also alter the landscape character of the area increasing the urban setting of Eastergate and reducing the valuable gaps between settlements. The specific design and layout of the Barratts masterplan is currently unknown.

10.7 SENSITIVE RECEPTORS

LANDSCAPE

- 10.7.1. In determining the sensitivity of the landscape, each of the LCAs is considered regarding the value attached to the LCA and the susceptibility of the LCA to the type of change arising from the Scheme.
- 10.7.2. **Table 10-8** below analyses the value and susceptibility of each LCA to provide an overall sensitivity for each individual LCA.

Table 10-8 - Landscape Sensitivity

Landscape Sensitivity	
LCA 1: Eastergate Village	
Value	The character of LCA1: Eastergate Village is that of a typical rural village. The area is primarily made up of quiet residential developments with a small amount of retail and community uses centred on the junction of Barnham Road, Fontwell Avenue, and Nyton Road. There While there are no landscape designations within or near the LCA such as <u>Area of Outstanding Natural Beauty (AONB), Nature Reserves, Ramsar Sites, or Sites of Special Scientific Interest (SSSI)</u> , there are several listed buildings at the centre of Eastergate around the Elm Tree Stores, as well as around The Wilkes Head pub, Manor Farm, and St. George's Church to the south on Church Lane <u>which add value to the LCA</u> . Eastergate Square and Eastergate (Church Lane) are <u>heritage</u> conservation areas in the LCA. There are also several Tree Protection Orders in the LCA, particularly

	around Old Rectory Drive. The area as whole is of <u>local importance with some distinguishing features worthy of conservation</u> . The medium importance and rarity at a local scale resulting in an overall LCA value of low <u>medium</u> .
Susceptibility	Eastergate Village LCA will continue to undergo development at strategic locations in keeping with local policy. Arun Local Plan (Policy SD SP3) identifies the importance of maintaining the distinctive settlement pattern of the Arun District. The importance of retaining settlement structure is recognised along with the value of gaps between settlements. The Scheme maintains the existing settlement structure through the introduction of a road of a similar scale and nature to the surrounding roads. The landscape characteristics of the LCA are considered tolerant of change of the nature of the Scheme without detriment to the overall present character. The area's ability to accommodate change results in low susceptibility to the proposed change.
Overall Sensitivity	Low
LCA 2: Eastergate Semi-Rural Land	
Value	LCA 2 Eastergate Semi-Rural Land can be characterised as a network of semi-rural fields with scattered vegetation and small to medium sized woodland. The area has <u>no landscape designations</u> although there are several Tree Preservation Orders. The LCA and is bordered by local distributor roads with a Public Right of Way running from north to south through the centre of the LCA. A number of residential and commercial properties are located at the edges of the LCA with Fordingbridge Industrial Estate and Fleurie Nursery located on Barnham Road. There are no listed buildings or conservation areas in the LCA. Although the area comprises open fields, it does not display a meaningful sense of remoteness or tranquillity and there are no landscape designations or areas of local recognition associated with this LCA. The area is an undesignated landscape with limited distinctiveness resulting in an overall value of low.
Susceptibility	Land within LCA 2 is recognised as proposed future growth area 'Barnham-Eastergate-Westergate Growth Area'. The land to the west of the LCA, interfacing with LCA 1: Eastergate Village, is under planning application to be developed. The pressures future growth may have on landscape character, the protection of strategic gaps, identity of settlements, and the prevention of coalescence is an important consideration in the susceptibility of development within the LCA. However, it is considered the Scheme would maintain the existing settlement structure through the introduction of the road and the LCA as a whole would be tolerant of <u>some</u> change of the nature of the Scheme without undo consequences for the landscape characteristics of the area. The area has a low susceptibility to the proposed change.
Overall Sensitivity	Low
LCA 3: Barnham Village	
Value	LCA3: Barnham Village is located to the southeast of the Scheme. The linear village is centred on Barnham Road running northwest to southeast. The village is designated as an Area of Special Character (Ref. 10.29) within the Arun District, considered to be of distinctive character or quality, and therefore worthy of protection through control of new development. The Edwardian style dwellings along with trees and hedgerows in Barnham are of particular importance to the street scene. Closer to the Scheme, the recent residential developments in Murrell Gardens, Chantry Mead and Ewen Gardens interface the Site. The area as whole is of medium importance and rarity at a regional scale with limited potential for substitution, resulting in an overall LCA value of medium.

Susceptibility	Barnham Village LCA will continue to undergo development at strategic locations in keeping with local policy. The importance of retaining settlement structure is recognised in local policy along with the value of gaps between settlements. The area's urban setting combined with the discernible nature of existing infrastructure similar in scale to the Scheme result in landscape characteristics considered to be tolerant of change to that of the nature of the Scheme without detriment to the overall present character. The area's ability to accommodate change results in low susceptibility to the proposed change.
Overall Sensitivity	Low

VISUAL

- 10.7.3. The expectations and occupation or activity of a visual receptor helps determine their susceptibility to the type of development proposed (GLVIA3, para 6.32). Visual sensitivity is a function of the susceptibility of the different visual receptors to changes in the view and visual amenity they enjoy, and the value attached to views. The following table sets out the value, susceptibility and subsequent sensitivity of the identified visual receptors, with reference to representative viewpoints where relevant.
- 10.7.4. As views from residential receptors are fixed, they can be experienced over long periods of time, so they are generally considered to be of high susceptibility to change. **Table 10-9 - Value, Susceptibility and Overall Sensitivity of Receptors** sets out the sensitivity for each receptor or group of receptors.

Table 10-9 - Value, Susceptibility and Overall Sensitivity of Receptors

R1 – Fontwell Avenue – Transport receptors (VP1)	
Value	The view obtained is considered to be of low value as it is not designated and does not have any cultural or locally important associations.
Susceptibility	The receptors in this locality would include those with some appreciation of their surroundings, but views would be transient and secondary to their employment (typically of getting from A to B). Their susceptibility to the type of development proposed is considered to be low.
Sensitivity	Low
R2 – Fontwell Avenue – Residential receptors	
Value	The view obtained is considered to be of medium value as it is not designated but the open fields with vegetation forms an important factor in enjoyment of views.
Susceptibility	As the receptors in this locality would include those at their place of residence, their susceptibility to the type of development proposed is considered to be high.
Sensitivity	High
R3 R2 - Eastergate Lane – Transport receptors (VP2)	
Value	The view obtained is considered to be of low value as it is not designated and does not have any cultural or locally important associations.

Susceptibility	Receptors in this locality include road travellers with direct but transient, glimpsed views of the wider landscape. Their susceptibility to the type of development proposed is therefore considered to be moderate.
Sensitivity	Low
R4 – Eastergate Lane – Residential receptors	
Value	The view obtained is considered to be of medium value as it is not designated but the open fields with vegetation forms an important factor in enjoyment of views.
Susceptibility	As the receptors in this locality would include those at their place of residence, their susceptibility to the type of development proposed is considered to be high.
Sensitivity	High
R5 – Ryburn Farm – Commercial receptors	
Value	The view obtained is considered to be of low value as it is not designated and does not have any cultural or locally important associations.
Susceptibility	As the receptors in this locality would include those at their place of residence as well as at their place of work, their susceptibility to the type of development proposed is considered to be high.
Sensitivity	High
R6R3 - PRoW (Path 318) – Transport receptors (VP3)	
Value	The view obtained is considered to be of low value as it is not designated and does not have any cultural or locally important associations.
Susceptibility	Receptors in this locality include users of the PRoW with direct but transient, glimpsed views of the landscape. Their susceptibility to the type of development proposed is therefore considered to be moderate.
Sensitivity	Medium
R7 – Field Place – Residential receptors	
Value	The view obtained is considered to be of medium value as it is not designated but the open fields with vegetation forms an important factor in enjoyment of views.
Susceptibility	As the receptors in this locality would include those at their place of residence, their susceptibility to the type of development proposed is considered to be high.
Sensitivity	High
R8-R4 - Downview Road – Residential receptors (VP4)	
Value	The view obtained is considered to be of low value as it is not designated and does not have any cultural or locally important associations.
Susceptibility	As the receptors in this locality would include those at their place of residence, their susceptibility to the type of development proposed is considered to be high.

Sensitivity	High
<u>R9 R5 - Murrell Gardens – Residential receptors (VP5)</u>	
Value	The view obtained is considered to be of low value as it is not designated and does not have any cultural or locally important associations.
Susceptibility	As the receptors in this locality would include those at their place of residence, their susceptibility to the type of development proposed is considered to be high.
Sensitivity	High
<u>R10R6 - Barnham Road – Transport receptors (VP6)</u>	
Value	The view obtained is considered to be of low value as it is not designated and does not have any cultural or locally important associations.
Susceptibility	Receptors in this locality include travellers with direct but transient, glimpsed views of the wider landscape. Their susceptibility to the type of development proposed is therefore considered to be moderate.
Sensitivity	Low
<u>R11 – Upton Brooks – Residential receptors</u>	
Value	<u>The view obtained is considered to be of low value as it is not designated and does not have any cultural or locally important associations.</u>
Susceptibility	<u>As the receptors in this locality would include those at their place of residence, their susceptibility to the type of development proposed is considered to be high.</u>
Sensitivity	High
<u>R12 R7 – PRoW off Barnham Road (Path 318) – Transport receptors (VP7)</u>	
Value	The view obtained is considered to be of low value as it is not designated and does not have any cultural or locally important associations.
Susceptibility	Receptors in this locality include users of the PRoW with direct but transient, glimpsed views of the landscape. Their susceptibility to the type of development proposed is therefore considered to be moderate.
Sensitivity	Medium
<u>R8 – Fontwell Avenue – Residential receptors</u>	
Value	<u>The view obtained is considered to be of medium value as it is not designated but the open fields with vegetation forms an important factor in enjoyment of views.</u>
Susceptibility	<u>As the receptors in this locality would include those at their place of residence, their susceptibility to the type of development proposed is considered to be high.</u>
Sensitivity	High
<u>R9 – Eastergate Lane – Residential receptors</u>	

Value	The view obtained is considered to be of medium value as it is not designated but the open fields with vegetation forms an important factor in enjoyment of views.
Susceptibility	As the receptors in this locality would include those at their place of residence, their susceptibility to the type of development proposed is considered to be high.
Sensitivity	High
R10 – Ryburn Farm – Commercial receptors	
Value	The view obtained is considered to be of low value as it is not designated and does not have any cultural or locally important associations.
Susceptibility	As the receptors in this locality would include those at their place of residence as well as at their place of work, their susceptibility to the type of development proposed is considered to be high.
Sensitivity	High
R11 – Field Place – Residential receptors	
Value	The view obtained is considered to be of medium value as it is not designated but the open fields with vegetation forms an important factor in enjoyment of views.
Susceptibility	As the receptors in this locality would include those at their place of residence, their susceptibility to the type of development proposed is considered to be high.
Sensitivity	High
R12 – Upton Brooks – Residential receptors	
Value	The view obtained is considered to be of low value as it is not designated and does not have any cultural or locally important associations.
Susceptibility	As the receptors in this locality would include those at their place of residence, their susceptibility to the type of development proposed is considered to be high.
Sensitivity	High
R13 – Collins Close – Residential receptors	
Value	The view obtained is considered to be of low value as it is not designated and does not have any cultural or locally important associations.
Susceptibility	As the receptors in this locality would include those at their place of residence, their susceptibility to the type of development proposed is considered to be high.
Sensitivity	High

10.8 PRIMARY MITIGATION

- 10.8.1. The purpose of mitigation is to avoid, reduce and where possible remedy or offset predicted adverse effects on the environment arising from development proposals. This study determines that the Scheme does not impact any landscape designations, does not exhibit any rare or unusual landscape features and lies within a localised landscape setting outlined for future development. The design of the Scheme has included for primary mitigation embedded into the scheme design to reduce potential adverse landscape and visual effects.
- 10.8.2. The principal constraints to the Scheme include:
- The visibility of the Scheme including proposed fencing and ~~its associated~~ noise barrier from close range for residential properties in Murrell Gardens, Ewens Gardens, and Downview Road. This was addressed through considered design of the noise barrier as well as the introduction of new woodland edge planting along with the introduction of a hedge and shrub planting to visually contain the noise barrier;
 - The visibility of the Scheme and its associated attenuation pond from the surrounding arable fields and Field Place. This was addressed through proposals for new specimen tree planting and woodland edge planting to screen views; and
 - PRoW 318 which crosses through the Scheme, however, this was diverted, and its landscape and visual amenity was improved by incorporating new planting along the route.
- 10.8.3. The Landscape General Arrangement Plan ~~s Sheet 1 to 5~~ (**Appendix 3.3**) as listed below ~~accompany the planning application and~~ illustrate the design and principles for the landscape proposals, landscape detail has also been included on the GA drawings (Appendix 3.1):
- A29-CAP-HPN-00-DR-C-0238 S0-P03 (includes the RLB as submitted with the original ES).
 - ~~70060779-WSP-LAN-PLA-Landscape Sheet 1 of 5;~~
 - ~~70060779-WSP-LAN-PLA-Landscape Sheet 2 of 5;~~
 - ~~70060779-WSP-LAN-PLA-Landscape Sheet 3 of 5;~~
 - ~~70060779-WSP-LAN-PLA-Landscape Sheet 4 of 5; and~~
 - ~~70060779-WSP-LAN-PLA-Landscape Sheet 5 of 5.~~
- 10.8.4. It should be noted that A29-CAP-HPN-00-DR-C-0239 S0-P03 as included in the ES Addendum shows the landscape design with the revised RLB and is the landscape design submitted with the revised Planning Statement.
- 10.8.5. A robust landscape-led approach to the Scheme has ensured that it is successfully integrated into the landscape and that it responds positively to the recommendations of the relevant published landscape character assessments.
- 10.8.6. In broad terms the aims of all proposed landscape mitigation measures are:
- To blend the Scheme into the surrounding landscape, minimising adverse effects on landscape character and visual amenity;
 - To enhance and extend the existing landscape framework where this improves the quality and character of the local area, with reference to published landscape character assessments;
 - To protect and incorporate the existing features of the landscape into the wider landscape framework to assist in the assimilation of the new scheme into the local landscape setting; and
 - To create an attractive setting for the Scheme.

10.8.7. The key features of the proposed landscape mitigation include:

- New woodland planting to provide green visual containment in addition to creating habitat for wildlife;
- New specimen tree planting to enhance visual appeal and integrate the Scheme into the surrounding landscape;
- New hedgerow planting to enhance visual amenity of the Scheme, respond positively to the local character and screen the nearby residents from the proposed noise barrier;
- Areas of wildflower grassland planting to enhance the biodiversity along with visual appeal;
- Soft landscape screen to the new noise barrier surface (to be secured via Planning Condition) comprising native climbers such as ivy, honeysuckle and clematis; and
- Established areas of existing vegetation are proposed to be retained and enhanced where possible.

10.8.8. The following construction phase mitigation measures have been identified for the Scheme following fieldwork and are those which are standard best practice and included in the assessment of effects:

- Temporary construction lighting to be minimal in extent and use. The lighting is to be highly directional and seek to minimise light spill and glare into the surrounding landscape. Construction operations to be limited to daylight working hours where possible;
- Noise and dust to be kept to a minimum; and
- Construction working area to be as contained and constrained as possible to minimise land take, vegetation loss and reinstatement requirements, by implementation of a Construction Environmental Management Plan (CEMP)
- A bespoke Arboricultural Method Statement (AMS) for the protection of trees during construction (see Appendix 3.4 Arboriculture Report).

10.9 ASSESSMENT OF EFFECTS, MITIGATION AND RESIDUAL EFFECTS

10.9.1. In this assessment, the likely effects have been appraised at the construction phase of the Scheme, 'Year 1', once the Scheme has been completed, and at 'Year 15' to take into account the ongoing establishment of the planting proposals illustrated in the Landscape General Arrangement Plans Sheet 1 to 5, submitted as part of the planning application.

LANDSCAPE EFFECTS

10.9.2. In determining the significance of effect, the sensitivity to change and magnitude of effect are combined and assessed to give a final judgement on the overall significance of effect that the Scheme would have on the landscape.

NATIONAL

10.9.3. At national level, the extent of landscape components effected by the Scheme would not significantly or materially impact the wider area of National Character Area Profile 126: South Coast Plain or that of National Character Area Profile 125: South Downs to the north of the study area. Whilst the changes are likely to be permanent, the extent of landscape elements lost in relation to the scale of the NCA is minimal and as a result, the effect would be **neutral** at Year 1. By Year 15 the planting proposals would have been established and would form part of a much broader landscape featuring built development nestled amongst vegetation. The effect at Year 15 would remain neutral.

COUNTY

- 10.9.4. At a county level, the impact of the Scheme would be experienced within SC8 Fontwell Upper Coastal Plain and SC9 Chichester to Yapton Coastal Plain Character Areas designated by the Landscape Character Assessment of West Sussex 2003. The Scheme would be consolidated to a localised south-westerly part of LCA SC8 and a small northern part of LCA SC9.
- 10.9.5. The Landscape character assessment of West Sussex characterises the LCA SC8 as having a mostly undeveloped, rural character with undulating farmland enclosed by a good cover of woodland and trees and views to the higher ground to the north. The extent of landscape components lost in relation to the scale of the LCA is small, limited to the Site and not comprised of valued features. As a result, the effect would be **negligible** at Year 1. By Year 15, the planting proposals would have been established and would soften the appearance of the built elements of the Scheme further and allow it to blend the built development into the landscape.
- 10.9.6. The Landscape character assessment characterises the LCA SC9 as a mostly flat, open landscape crossed by meandering rifees and dominated by arable fields. The extent of landscape components lost in relation to the scale of the LCA is very small, limited to the Site and not comprised of valued features. As a result, the effect would be **negligible** at Year 1. By Year 15, the planting proposals would have been established and would soften the appearance of the built elements of the Scheme further and allow it to blend the built development into the landscape.

DISTRICT

- 10.9.7. At a district level, there would be direct and permanent physical changes to the components of the landscape within both Landscape Character Area 16 – Fontwell-Eastergate Mosaic Medium and Landscape Character Area 17 Westergate-Barnham Coastal Plain Low/Medium. LCA 16 is described in the Landscape Capacity Appraisal as a small scale landscape area containing ancient woodland, ecological and heritage interest and Fontwell racecourse. The LCA provides separation between Westergate and Barnham. LCA 17 is described as a relatively flat, open arable landscape located south of Westergate/Eastergate/Barnham, but with limited urban influence with limited trees or hedgerows with the exception of settlement edges.
- 10.9.8. The site is also located within Zone 2 – Five Villages of the Landscape Structural Analysis which is comprised of the villages of Eastergate, Westergate, Walberton, Barnham and Yapton. The study identifies the settlement pattern of the towns which have developed as linear settlements along a main road. The settlements have limited separation between each other, and land uses in the area are described as “...a mosaic of horticulture: both glasshouses and nurseries, paddocks, pasture and small holdings associated with low density, linear, post war development”.
- 10.9.9. The notable features within the landscape are limited to small areas of pasture and a limited number of trees within the Site with no direct effect on the setting of the surrounding landscape. The effect of the Scheme would only be perceived in the vicinity of the Site within a landscape influenced by the encroachment of the settlements of Eastgate and Barnham onto the landscape. Visibility is reduced substantially to the local vicinity of the Site due to the extent of existing infrastructure and vegetation containing the Site, combined with topographical variations and built development.
- 10.9.10. As a result, the effect on the landscape at Year 1 is **slight** as the alterations to the existing landscape resource cause a slight adverse impact and are not uncharacteristic within the receiving landscape. Once established by Year 15, the planting proposals would form a robust edge to the

Proposed Scheme and would provide a favourable contribution to the wider landscape by reinforcing the landscape structure and screening the Scheme.

IMMEDIATE SITE AREA

LCA1: Eastergate Village

- 10.9.11. LCA 1: Eastergate Village would experience an indirect change to its landscape character. The Scheme would be located at the northern extents of the LCA on Fontwell Avenue, running south-east through LCA2 to Barnham Road. The Scheme is located in the north of the LCA and would be experienced by properties on Fontwell Avenue and Barnham Road, impacting their setting within the character area.
- 10.9.12. The Scheme would include a new section of single carriageway road with a 3m wide footway and cycleway with landscaping on one side of the carriageway. It would also include post and three rail fencing and badger mesh fencing along with a 3m high noise barrier. It would link Fontwell Avenue at the northern end of the LCA to Barnham Road in LCA2, introducing a three-arm roundabout at the western end at the new junction with the A29 Fontwell Avenue; a three-arm roundabout in the centre of the Scheme to provide future access to housing; and a three-arm roundabout at the southern end, at the new junction with the B2233 Barnham Road. Folly Foot Farm, courtyard and adjacent weatherboard structure on A29 Fontwell Avenue would be demolished as part of the Scheme. Public Right of Way 318 would be accommodated through an uncontrolled pedestrian crossing around 21m east of its existing alignment with a 2.5m wide central island to enable users of the PRow to cross the carriageway.
- 10.9.13. Most of LCA 1: Eastergate Village would be unaffected by the Scheme as the scale and nature of the new road would be in keeping with that of the surrounding roads and sufficiently removed from the village centre as to have minimal impact on the overall character. However, properties and businesses to the north of the character area would interface with the three-arm roundabout at the western end of the Scheme. Some dwellings would have views north-east across the fields to the Scheme impacting their setting. The impact of the Scheme on the landscape character would be mitigated through planting, allowing the Scheme to integrate into the landscape.
- 10.9.14. The construction of the Scheme would include the temporary introduction of additional construction related features, including an increase in construction traffic on the roads, views of construction activities including machinery such as tall cranes from nearby residences and businesses, a reduction in tranquillity from the noise and an increase in the activity of the LCA. The magnitude of effect during construction is considered to be **minor (Adverse)**.
- 10.9.15. The Scheme would constitute a minor loss or alteration to the overall landscape character features and elements. The magnitude of effect (change) is considered to be **minor (adverse)** during operation.

Assessment

Construction

- 10.9.16. The construction of the Scheme would include the introduction of construction related features and activities, particularly around the new roundabout at the junction of A29 Fontwell Avenue. For a semi-rural area these changes are somewhat unusual, however, they would be experienced on a temporary basis. Overall, the effect is considered to be **slight (Adverse) Not Significant** during construction.

Year of Opening

10.9.17. The Scheme would be in the northern extents of the LCA, introducing a new built element along the existing road. The properties interfacing LCA2 along Fontwell Avenue and Barnham Road would have their setting impacted by the introduction of the Scheme, while the remaining areas within the LCA would be unaffected for the most part. The demolition of Folly House on A29 Fontwell Avenue and the removal of areas of vegetation that contribute to the setting of properties within the LCA would add to the effect experienced from the Scheme. Overall, given that the magnitude of change is minor and the sensitivity to change is low, the resulting effect during operation would be **slight (Adverse) Not Significant** at road opening.

Year of Opening + 15 Years

10.9.18. The effect of realignment of A29 Fontwell Avenue to introduce a new junction at the northern extent of the LCA would be slightly softened due to the establishment of new planting. The proposed new planting would establish over time providing screening to residents further south on Fontwell Avenue and Barnham Road and allow the Scheme to blend into the landscape. The effect during operation would remain **slight (Adverse) Not Significant** after 15 years.

LCA2: Eastergate Semi-Rural Land

- 10.9.19. LCA 2: Eastergate Semi-Rural Land would experience a direct and permanent change to its landscape character from the Scheme. The LCA is characterised by arable fields with areas of woodland and orchard, and areas of managed grassland. Public Right of Way 318 runs through the LCA from north to south while Barnham Road bisects the LCA from east to west. The LCA is bordered by Eastergate village to the west and Barnham village to the south-east. Eastergate Lane provides the physical boundary to the north, while West Coast Mainline provides the physical boundary to the south. The introduction of the Scheme would be a new linear feature running through the existing landscape.
- 10.9.20. The Scheme would include a new section of single carriageway road with a 3m shared cycle and footway west of the carriageway. It would link the new roundabout on Fontwell Avenue at the north-west of the LCA to Barnham Road near Fleurie Nursery at the southern end of the LCA. A three-arm roundabout would be included in the centre of the Scheme to provide future access to housing. The Scheme would also include a new access to the Halo site north of Barnham Road.
- 10.9.21. The Scheme includes a 3m high weathered steel noise barrier, 3m from the carriageway edge between chainages 890 – 1200, post and three rail fencing to tie into existing fencing and badger mesh fencing to a maximum height of 1.25m. Public Right of Way 318 would be accommodated through an uncontrolled pedestrian crossing to enable users of the PRoW to cross the carriageway.
- 10.9.22. The construction of the Scheme would include the temporary introduction of additional construction related features, including an increase in construction traffic on the roads, views of construction activities including machinery such as tall cranes from nearby residences and businesses, a reduction in tranquillity from the noise and an increase in the activity of the LCA. The magnitude of effect during construction is considered to be **major (Adverse)**.
- 10.9.23. The Scheme runs through the centre of LCA2 and will unavoidably introduce built elements which are uncharacteristic of this character area. The Scheme will result in the loss of areas of arable land including hedgerows and trees. However, the new planting associated with the Scheme will introduce diverse areas of new landscape connecting to the existing tree and hedgerow structure

within the area. Overall the magnitude of effect (change) is considered to be **major (Adverse)** during operation.

Assessment

Construction

10.9.24. The construction of the Scheme would include the introduction of considerable construction related features and activities. For a semi-rural area these changes would be unusual, however, they would be experienced on a temporary basis. Overall, the effect is considered **moderate (Adverse) Significant** during construction.

Year of Opening

10.9.25. The Scheme would be located through the centre of the LCA. Residential properties to the east within LCA3 and to the north of the Scheme as well as commercial properties on Barnham Road and Eastergate Lane would be directly and permanently impacted by the introduction of a new road into a predominantly arable landscape. The setting of PRow 318 would also be impacted by the introduction of the Scheme through the existing fields. The Scheme would intersect the PRow 318 as it runs south to Barnham Road. Users of the PRow would be diverted around 21m east to cross the Scheme through an uncontrolled crossing before continuing south. The setting of the path would be materially impacted by the Scheme; however, the introduction of new planting would help the Scheme blend into the setting.

10.9.26. No buildings within the LCA would be affected, although areas of vegetation would be removed where the proposed road intersects the field boundaries and existing woodland. Overall, given that the magnitude of change is major and the sensitivity to change is low, the resulting effect during operation would be **moderate (Adverse) Significant** at road opening.

Year of Opening + 15 Years

10.9.27. The proposed planting in the LCA would establish over time providing screening to nearby residents, businesses, and PRow users, and allow the Scheme to integrate into the existing landscape character. The effect during operation would reduce to **slight (Adverse) Not Significant** after 15 years.

LCA3: Barnham Village

10.9.28. LCA 3: Barnham Village would experience an indirect change to its landscape character. The Scheme would be located at the western extents of the LCA on Barnham Road, running north through LCA2 and parallel to the properties in Murrell Gardens, Chantry Mead, and Downview Road before turning west to Fontwell Avenue. The Scheme is not located in the LCA; however, the Scheme would be experienced by properties on the western edge of the LCA which interface LCA2 and would have an impact on their landscape character setting.

10.9.29. The Scheme would include a new single carriageway road with a 3m shared cycle and footway with landscaping on one side of the carriageway and fencing to tie into existing. The new road would link Barnham Road at the southern end of LCA2 introducing a roundabout at the junction. The proposed noise mitigation to protect the dwellings at Murrell Gardens, Chantry Mead and Ewens Gardens in LCA3 would be a 3m high noise barrier.

10.9.30. The majority of Landscape Character Area 3: Barnham Village would be unaffected by the Scheme as the scale and location of the new road would be removed from the setting of most of the

receptors in the LCA. The Scheme is also in keeping with that of the surrounding roads and sufficiently removed from the village centre. The Area of Special Character, located along the Barnham Road, stretches to properties on Downview Road but separated from the Scheme through existing properties in Murrell Gardens. Residential properties that interface LCA2 and have views west to the Scheme would have an impact on their setting. The impact of the Scheme on the landscape character would be mitigated somewhat through woodland planting, screening the road from view and allowing the Scheme to integrate into the landscape.

10.9.31. The construction of the Scheme would include the temporary introduction of additional construction related features, including an increase in construction traffic on the roads, views of construction activities including machinery such as cranes from nearby residences and businesses, a reduction in tranquillity from the noise and an increase in the activity of the LCA. This change would be experienced by a small number of receptors in the LCA. The magnitude of change during construction is considered to be **minor (Adverse)**.

10.9.32. The Scheme would constitute a very minor loss or alteration to the existing landscape character features and elements. Overall the magnitude of change to the landscape character of the area is considered to be **negligible (adverse)** during operation.

Assessment

Construction

10.9.33. The construction of the Scheme would include the introduction of construction related features and activities, particularly around the new roundabout at the junction of Fontwell Avenue. For a semi-rural area these changes are somewhat unusual, however, they would be experienced on a temporary basis. Overall, given that the magnitude of change is minor and the sensitivity to change is low, the resulting the effect is considered **slight (Adverse) Not Significant** during construction.

Year of Opening

10.9.34. The Scheme would be located on the periphery of the LCA running through LCA2. The properties interfacing LCA2 would be directly and permanently adversely impacted by the introduction of the Scheme. The remaining areas within the LCA would be unaffected for the most part. No buildings or vegetation in the LCA would be affected that contribute to the setting of properties within the LCA. Overall, given that the magnitude of change is negligible and the sensitivity to change is low, the resulting effect during operation would be **slight (Adverse) Not Significant** at road opening.

Year of Opening + 15 Years

10.9.35. The proposed planting would establish over time providing screening to residents in LCA1 and allow the Scheme to blend into the existing landscape character. The effect during operation would remain **slight (Adverse) Not Significant** after 15 years.

VISUAL EFFECTS

Overview

10.9.36. Landscape and visual assessments are separate although linked procedures. The landscape baseline information, its analysis and the assessment of landscape effects all contribute to the baseline for visual assessment studies.

10.9.37. Accordingly, the baseline landscape information provided in Section 10.4 has been used in assessing the visual impacts.

10.9.38. The Zone of Theoretical Visibility presented in **Figure 10.1** identifies key views and visual receptors from which the proposed study area is currently visible and, therefore, would potentially be affected by the Scheme.

Visual Impact – Construction Phase

10.9.39. During the construction phase, the visual impacts are likely to include:

- Construction traffic – large vehicles moving along roads and throughout the site;
- Removal of vegetation;
- Visual intrusion of construction compounds & temporary lighting;
- Presence of bare earth before seeding has established;
- Noise from machinery, workmen etc, affecting tranquillity which impacts on the user experience of the view;
- View of partially constructed infrastructure elements;
- Earth-moving – stripping of topsoil, installation of temporary topsoil stores and permanent embankments to proposed road alignment; and
- Installation of road drainage (Water-Sensitive Design Systems).

Visual Impact – Operational Phase

10.9.40. During the operational phase, visual impacts would include:

- Presence of hard-surfaced carriageway and pathway;
- Lighting columns at junctions (**Appendix 10.2**);
- New site furniture;
- New fencing;
- New ponds;
- Areas of new planting (immature at Year 1);
- Traffic – Cars, buses and large vehicles moving along the road in what was a previously static site;
- Traffic headlights at night and movement of people and cyclists (where not screened by noise barrier) in a previously static and unlit landscape; and
- (Depending on detailed proposals) increased tree and shrub cover. Noise barrier and traffic movements would be visible in the short term until planting grows and establishes itself.

Assessment of Visual Receptors

10.9.41. **Fontwell Avenue Road Users (Receptor 1)** would have close distance views of the Scheme looking east from Fontwell Avenue south of Eastergate Lane. The Scheme would introduce a new roundabout junction at Fontwell Avenue and a new road extending east into the arable field network before turning south to Barnham Road. Receptors of this view would be users of Fontwell Avenue and some properties on the western side of Fontwell Avenue.

10.9.42. The existing view from the road is of a single carriageway road with a narrow verge on either side. There is a pavement on the eastern side with a stone wall and tall vegetation beyond providing a sense of enclosure on the eastern side. To the west residential properties are set back from the road with front gardens and brick property boundary walls. Vegetation in the front gardens can also be seen.

- 10.9.43. Receptors here would experience a change in view introducing a new roundabout which would re-orientate the road east to accommodate a slip road for access to residential properties. The new junction would be the dominant feature and focal point of the view. It would be mitigated, in part, by proposed wildflower, shrub, and woodland edge planting along the road.
- 10.9.44. Based on the above, a **major (Adverse)** magnitude of impact would arise. Given that the magnitude of change is major, and the sensitivity of the receptor is low, the resulting effect would be **moderate (Adverse) Significant**.
- 10.9.45. During construction, views of construction activities including machinery such as cranes, boring drills, and HGVs would be very noticeable, resulting in a **major (Adverse)** magnitude of impact. Given that the magnitude of impact is major, and the sensitivity of the receptor is low, the resulting effect during construction will be **moderate (adverse) Significant**.
- 10.9.46. The proposed planting would establish over time providing some screening to the sensitive receptors and help integrate the Scheme into the landscape, however, the Scheme would remain dominant within the view. The effect during operation would remain **moderate (Adverse) Significant** after 15 years.
- ~~10.9.47. **Fontwell Avenue (Receptor 2)** residents would experience direct close views of the Scheme looking north-east. The Scheme would introduce a new road in the landscape through the arable fields with woodland, hedgerows, and orchards to the rear of the properties. A two-storey residential property would be demolished as part of the Scheme, while the front access to Folly House would be redesigned and landscaped. The Westview, Ndirande, and Fairfields properties have existing open views of the fields, partly blocked by garden fences and some vegetation. The receptors would experience a change in view from some of their gardens and the ground and first floor. The change in view would be mitigated through proposed woodland edge planting along the southern side of the proposed road providing some screening to the receptors in this location.~~
- ~~10.9.48. Based on the above, a **moderate (Adverse)** magnitude of effect would arise. Given that the magnitude of effect is moderate, and the sensitivity of the receptor is high, the resulting effect would be **moderate (Adverse) Significant**.~~
- ~~10.9.49. During construction, views of construction activities including machinery such as cranes, boring drills, and HGVs would be very noticeable, resulting in a **major (Adverse)** magnitude of effect. Given that the magnitude of effect is major, and the sensitivity of the receptor is high, the resulting effect during construction will be **large (adverse) Significant**.~~
- ~~10.9.50. The proposed tree planting would establish over time providing further screening to the sensitive receptors and help integrate the Scheme into the landscape, however, the Scheme would remain a noticeable element within the receptor view. The effect during operation would remain **moderate (Adverse) Significant** after 15 years.~~
- 10.9.51. **Eastergate Lane Road Users (Receptor 2)** would experience indirect yet close views of the Scheme looking south. The Scheme would introduce a new road within the landscape through the arable fields to the south of the road. The users of Eastergate Lane would have periodical views south towards the proposed road, fencing, and junction with Fontwell Avenue, partly blocked by an existing roadside hedgerow. Folly Foot Farm can be seen beyond the open field with an existing orchard on the left of view and Lyndhurst residential property on the right of the view. The receptors would experience a change in view looking south as they travel along the road. The change in view

would be intermittent as users travel along the road and mitigated through proposed woodland planting along the Scheme providing screening to the receptors in this location.

- 10.9.52. Based on the above, a **moderate (Adverse)** magnitude of impact would arise. Given that the magnitude of change is moderate, and the sensitivity of the receptor is low, the resulting effect would be **slight (Adverse) Not Significant**.
- 10.9.53. During construction, views of construction activities would be noticeable, although experienced temporarily as users are transient, resulting in a **minor (Adverse)** magnitude of effect. Given that the magnitude of effect is minor, and the sensitivity of the receptor is low, the resulting effect would be **slight (Adverse) Not Significant**.
- 10.9.54. The proposed planting would establish over time providing further screening to the sensitive receptors and help integrate the Scheme into the landscape. The effect during operation would reduce to **neutral Not Significant** after 15 years.
- ~~10.9.55. **Eastergate Lane Residents (Receptor 4)** would experience direct close views of the Scheme looking south-west. The Scheme would introduce a new road within the landscape through the arable fields to the rear of the properties. The residential properties on Eastergate Lane between Wayside and Keepers Cott have existing open views south-west towards the proposed junction with Fontwell Avenue, partly blocked by an existing orchard. Views south are blocked by garden fences and an area of woodland. The receptors would experience a change in view from some of their gardens and the ground and first floor. The change in view would be mitigated through proposed woodland planting along the Scheme providing screening to the receptors.~~
- ~~10.9.56. Based on the above, a **moderate (Adverse)** magnitude of impact would arise. Given that the magnitude of change is moderate, and the sensitivity of the receptor is high, the resulting effect would be **moderate (Adverse) Significant**.~~
- ~~10.9.57. During construction, views of construction activities including machinery such as cranes, boring drills, and HGVs would be noticeable, resulting in a **moderate (Adverse)** magnitude of effect. Given that the magnitude of effect is moderate, and the sensitivity of the receptor is high, the resulting effect would be **moderate (Adverse) Significant**.~~
- ~~10.9.58. The proposed tree planting would establish over time providing further screening to the sensitive receptors and help integrate the Scheme into the landscape, however, the Scheme would remain a noticeable element within the receptor view. The effect during operation would remain **moderate (Adverse) Significant** after 15 years.~~
- ~~10.9.59. **Ryburn Farm (Receptor 5)** residents would experience direct middle distance views of the Scheme looking south. The Scheme would introduce a new road within the landscape around 350m to the south, through the arable fields to the rear of the property. The residential property located on Eastergate Lane near PRow 318 has existing open views of the arable and pastoral fields, partly blocked by garden fences and some vegetation including field boundary hedgerows. The receptors would experience a change in view from their garden and the ground and first floor. The change in view would be mitigated through proposed tree and shrub planting along the proposed road providing screening to the receptors in this location.~~
- ~~10.9.60. Based on the above, a **moderate (Adverse)** magnitude of effect would arise. Given that the magnitude of effect is moderate, and the sensitivity of the receptor is high, the resulting effect would be **moderate-large (Adverse) Significant**.~~

- 10.9.61. During construction, views of construction activities including machinery such as cranes, boring drills, and HGVs would be noticeable but at a distance and through existing vegetation, resulting in a **moderate (Adverse)** magnitude of effect. Given that the magnitude of effect is moderate, and the sensitivity of the receptor is high, the resulting effect would be **moderate-large (Adverse) Significant**.
- 10.9.62. The proposed woodland planting would establish over time providing screening to the sensitive receptors and blend the Scheme into the landscape. The effect during operation would reduce to **moderate (Adverse) Significant** after 15 years.
- 10.9.63. **Public Right of Way 318 (Receptor 3)** users would experience direct close views of the Scheme looking south. The Scheme would introduce a new section of road linking Fontwell Avenue with Barnham Road. Receptors of this view would be users of PRoW 318. The existing view is of a narrow, enclosed, and unpaved path, bound to the east by a hedgerow and trees and bound to the west by a chain-link fence and vegetation. Several of the trees on the eastern side of the path are designated under Tree Preservation Orders (TPO). The receptors would experience a change in view and considerable change in noise, introducing a built element with moving vehicles and fencing within the landscape which would intersect the PRoW around 50m to the south, diverting the path east before crossing the new road through an uncontrolled pedestrian crossing and continuing south to Barnham Road. The Scheme would introduce a pond to the west of the receptor with a new roundabout beyond. The new road would become the dominant feature and focal point of the view despite the retention of existing vegetation around the TPO trees. The change in view would be mitigated, in part, by proposed planting along the road.
- 10.9.64. Based on the above, a **major (Adverse)** magnitude of impact would arise. Given that the magnitude of change is major, and the sensitivity of the receptor is medium, the resulting effect would be **large (Adverse) Significant**.
- 10.9.65. The magnitude of effect from construction related activities such as cranes, boring drills, and HGVs would be very noticeable, resulting in a **major (Adverse)** magnitude of impact. A major magnitude of effect along with a medium sensitivity for the receptor will result in a **large (adverse) Significant** effect.
- 10.9.66. The proposed tree planting would establish over time providing some limited additional screening to the sensitive receptors and help integrate the Scheme into the landscape, however, the Scheme would form a noticeable feature or element of the view which is readily apparent to the receptor. The effect during operation would reduce to **moderate (Adverse) Significant** after 15 years.
- 10.9.67. **Field Place (Receptor 7)** residents would experience indirect, medium distance views of the Scheme looking west. The Scheme would introduce a new linear feature within the landscape including moving elements around 350m west of the residential property. Existing views from the residential properties are limited to the first floor due to the presence of up to three hedgerows and existing garden fences and vegetation between the Scheme and the property. Existing views are of the predominantly flat and open arable field network to the west with field boundary hedgerows and trees. Properties to the south on Downview Road are screened by existing vegetation. The property would experience a minor change in view from their first floor with intermittent and infrequent views of transitory elements screened for the most part by existing vegetation. The Scheme would be mitigated through proposed shrub and tree planting along the proposed road.

- 10.9.68. It is considered the Scheme, or a part of it, would be perceptible but not alter the overall balance of features and elements that comprise the existing view. As a result, a **minor (Adverse)** magnitude of impact would arise. Given that the magnitude of change is minor, and the sensitivity of the receptor is high, the resulting effect would be **slight (Adverse) Not Significant**.
- 10.9.69. During construction, views of construction activities including machinery such as cranes, boring drills, and HGVs would be noticeable but from a medium distance and screened by existing vegetation, resulting in a **minor (Adverse)** magnitude of effect. A minor magnitude of effect along with a high sensitivity for the receptor will result in a **moderate (adverse) Significant** effect.
- 10.9.70. The proposed tree planting would establish over time providing further screening to the sensitive receptors and help integrate the Scheme into the landscape. The effect during operation would remain **slight (Adverse) Not Significant** after 15 years.
- 10.9.71. **Downview Road (Receptor 84)** residents would experience close views of the Scheme looking west. The properties have a north-south orientation with views west from front and rear gardens and oblique views from ground and first floor windows. The Scheme would be a noticeable intrusion in the westward view with the addition of the new road, noise and visual disturbance of moving vehicles, and attenuation basin with associated access road. A proposed noise barrier and fencing would be located next to the Scheme and within view of the receptors.
- 10.9.72. The residential properties at Downview Road have existing open, static views of the arable fields with hedgerows and woodland beyond. The properties would experience a substantial change of their view from their gardens and ground and first floor. The change in view would be mitigated through proposed woodland and wildflower meadow planting, helping to screen the road and noise barrier from the resident's view.
- 10.9.73. Based on the above, a **major (Adverse)** magnitude of effect would arise. Given that the magnitude of effect is major, and the sensitivity of the receptor is high, the resulting effect would be **large (Adverse) Significant**.
- 10.9.74. During construction, views of construction activities including machinery such as cranes, boring drills, and HGVs would be very noticeable, resulting in a **major (Adverse)** magnitude of effect. Given that the magnitude of effect is major, and the sensitivity of the receptor is high, the resulting effect would be **large (Adverse) Significant**.
- 10.9.75. The proposed tree planting would establish over time providing screening to the sensitive receptors and help integrate the Scheme into the landscape, however, the Scheme would remain a noticeable element within the receptor view. The effect during operation would remain **large (Adverse) Significant** after 15 years.
- 10.9.76. **Murrell Gardens (Receptor 95)** residents would experience close views of the Scheme looking west. The properties have an east-west orientation with rear gardens backing onto the Scheme. The receivers would have views west from rear gardens and from their ground and first floor. The Scheme would be a noticeable introduction in the view with the addition of the new road fronted by a proposed 3m noise barrier.
- 10.9.77. The residential properties at Murrell Gardens have existing views of a strip of open land with an existing earth bund and vegetation along the eastern boundary of the Fordingbridge Industrial Estate. Buildings within the industrial estate can be partly seen beyond the bund. Oblique views south include Barnham Road and Fleurie Nursery beyond. The properties views are partially

blocked by garden fences and some vegetation. The properties would experience a substantial change in view from some of their gardens and the ground and first floor, including views of the noise barrier and moving traffic. The change in view would be mitigated through proposed woodland, helping to screen the road and noise barrier from the residents.

- 10.9.78. Based on the above, a **major (Adverse)** magnitude of impact would arise. Given that the magnitude of change is major, and the sensitivity of the receptor is high, the resulting effect would be **large (Adverse) Significant**.
- 10.9.79. During construction, views of construction activities would be very noticeable and from a close range, resulting in a **major (Adverse)** magnitude of effect. Given that the magnitude of effect is major, and the sensitivity of the receptor is high, the resulting effect would be **large (Adverse) Significant**.
- 10.9.80. The proposed woodland edge and shrub planting would establish over time providing some screening to the sensitive receptors and help integrate the Scheme into the landscape, however, the Scheme would remain the dominant element within the receptor view. The effect during operation would remain **large (Adverse) Significant** after 15 years.
- 10.9.81. **Barnham Road (Receptor 406)** users would experience close distance views of the Scheme looking west from Barnham Road near the entrance to Fleurie Nursery. The Scheme would introduce a new three arm roundabout junction at Barnham Road at the existing entrance to the nursery and a new road extending north through the strip of open land between Fordingbridge Industrial Estate and Murrell Gardens before turning west to Fontwell Avenue. Receptors of this view would be users of Barnham Road.
- 10.9.82. The existing view for these receptors is of a single carriageway road with a narrow verge and pavement on the northern side. Tall vegetation lines the southern side of the road before giving way to hedgerow further west. The properties on the northern side of the road are set back from the road with low brick boundary walls, fences and some vegetation.
- 10.9.83. The receptors would experience a change in view introducing a new roundabout which would re-orientate the road south. The new junction would be the dominant feature and focal point of the view mitigated, in part, by proposed wildflower meadow and shrub planting along the road.
- 10.9.84. Based on the above, a **major (Adverse)** magnitude of impact would arise. Given that the magnitude of change is major, and the sensitivity of the receptor is low, as well as the nature of change from a road environment to that of a similar scale and character, the resulting effect would be **moderate (Adverse) Significant**.
- 10.9.85. The magnitude of effect from construction related activities will be **major (Adverse)** as they will dominate the view and traffic management requirements will alter the experience of the road users. A major magnitude of effect along with a low sensitivity for the receptor will result in a **moderate (adverse) Significant** effect.
- 10.9.86. The proposed planting would establish over time; however, the Scheme would remain dominant within the view. The effect during operation would remain **moderate (Adverse) Significant** after 15 years.
- ~~10.9.87. **Upton Brooks (Receptor 11)** residents would experience close views of the Scheme looking west. The properties have an east-west orientation with rear gardens backing onto Fleurie Nursery. The receivers would have views west from rear gardens and from their ground and first floor. The~~

Scheme would be a noticeable introduction in the view including the addition of the new Barnham Road junction to the northwest and an attenuation pond to the southwest.

- 10.9.88. The residential properties at Upton Brooks have existing views of buildings associated with Fleurie Nursery, screened in part by rear garden trees and vegetation along their western boundary. The Scheme includes the demolition of the buildings associated with Fleurie Nursery with no proposed planting. The properties would experience a change in view from first floor as well as potential changes in views from ground floor and rear gardens. Mitigation would be limited to wildflower meadow grass at the new roundabout at Barnham Road and wetland grass at the new attenuation pond. There is no planting proposed between the residential properties and the Proposed Scheme as it runs south from Barnham Road.
- 10.9.89. Based on the above, a **moderate (Adverse)** magnitude of impact would arise. Given that the magnitude of change is major, and the sensitivity of the receptor is high, the resulting effect would be **moderate-large (Adverse) Significant**.
- 10.9.90. During construction, views of construction activities including machinery such as cranes, boring drills, and HGVs would be very noticeable, resulting in a magnitude of **major (Adverse)** impact. Given that the magnitude of impact is major, and the sensitivity of the receptor is high, the resulting effect during construction will be **large (adverse) Significant**.
- 10.9.91. The proposed planting would establish over time; however, this would provide no further screening to the receptors and the Scheme would remain readily apparent within the receptor view. The effect during operation would remain **moderate-large (Adverse) Significant** after 15 years **Public Right of Way 318 off Barnham Road (Receptor 427)** users would experience medium to long distance views of the Scheme looking northeast. The Scheme would introduce a new section of road linking Fontwell Avenue with Barnham Road, crossing the open field to the northeast of the receptor. Receptors of this view would be users of PRoW 318. The view is also representative of views experienced by some of the residents on Barnham Road that back onto the field.
- 10.9.92. The existing view is of an unpaved path bound to the west by a chain-link fence and vegetation. Broken hedgerows and trees on the eastern side of the path provide intermittent views northeast. The existing view is of an open field with hedgerows and trees associated with Fordingbridge Industrial Estate (Halo) to the east. Views northeast provide longer distance views to residential properties in Downview Road and Ewens Gardens. The receptors would experience a change in view introducing a built element within the landscape which would cross the field around 350m to the northeast as it turns south towards Barnham Road. The Scheme would include a new section of single carriageway road with a 3m shared cycle and footway on the western side of the carriageway. The change in view would be partially mitigated through the provision of planting along the road.
- 10.9.93. Based on the above it is considered the Scheme would be perceptible but not alter the overall balance of features and elements that comprise the existing view. A **minor (Adverse)** magnitude of impact would arise. Given that the magnitude of change is minor, and the sensitivity of the receptor is medium, the resulting effect would be **slight (Adverse) Not Significant**.
- 10.9.94. During construction, views of construction activities including machinery such as cranes, boring drills, and HGVs would be partly noticeable, resulting in a magnitude of **moderate (Adverse)** effect. Given that the magnitude of effect is moderate, and the sensitivity of the receptor is medium, the resulting effect during construction will be **moderate (adverse) Significant**.

- 10.9.95. The proposed tree planting would establish over time providing screening to the receptors in this location and helping to integrate the Scheme into the landscape. Only a very small part of the Scheme would be discernible and would be at such a distance it would form a barely noticeable feature of the view. The effect during operation would reduce to **neutral Not Significant** after 15 years.
- 10.9.96. Fontwell Avenue (Receptor 8) residents would experience direct close views of the Scheme looking north-east. The Scheme would introduce a new road and associated fencing in the landscape through the arable fields with woodland, hedgerows, and orchards to the rear of the properties. A two-storey residential property would be demolished as part of the Scheme, while the front access to Folly House would be redesigned and landscaped. The Westview, Ndirande, and Fairfields properties have existing open views of the fields, partly blocked by garden fences and some vegetation. The receptors would experience a change in view from some of their gardens and the ground and first floor. The change in view would be mitigated through proposed woodland edge planting along the southern side of the proposed road providing some screening to the receptors in this location.
- 10.9.97. Based on the above, a **moderate (Adverse)** magnitude of effect would arise. Given that the magnitude of effect is moderate, and the sensitivity of the receptor is high, the resulting effect would be **moderate (Adverse) Significant**.
- 10.9.98. During construction, views of construction activities including machinery and HGVs would be very noticeable, resulting in a **major (Adverse)** magnitude of effect. Given that the magnitude of effect is major, and the sensitivity of the receptor is high, the resulting effect during construction will be **large (adverse) Significant**.
- 10.9.99. The proposed tree planting would establish over time providing screening to the sensitive receptors and help integrate the Scheme into the landscape, however, the Scheme would remain a noticeable element within the receptor view. The effect during operation would remain **moderate (Adverse) Significant** after 15 years.
- 10.9.100. **Eastergate Lane Residents (Receptor 9)** would experience direct close views of the Scheme looking south-west. The Scheme would introduce a new road within the landscape through the arable fields to the rear of the properties including proposed badger fencing. The residential properties on Eastergate Lane between Wayside and Keepers Cott have existing open views south-west towards the proposed junction with Fontwell Avenue, partly blocked by an existing orchard. Views south are blocked by garden fences and an area of woodland. The receptors would experience a change in view from some of their gardens and the ground and first floor. The change in view would be mitigated through proposed woodland planting along the Scheme providing screening to the receptors.
- 10.9.101. Based on the above, a **moderate (Adverse)** magnitude of impact would arise. Given that the magnitude of change is moderate, and the sensitivity of the receptor is high, the resulting effect would be **moderate (Adverse) Significant**.
- 10.9.102. During construction, views of construction activities including machinery and HGVs would be noticeable, resulting in a **moderate (Adverse)** magnitude of effect. Given that the magnitude of effect is moderate, and the sensitivity of the receptor is high, the resulting effect would be **moderate (Adverse) Significant**.

- 10.9.103. The proposed tree planting would establish over time providing further screening to the sensitive receptors and help integrate the Scheme into the landscape, however, the Scheme would remain a noticeable element within the receptor view. The effect during operation would remain **moderate (Adverse) Significant** after 15 years.
- 10.9.104. **Ryburn Farm (Receptor 10)** residents would experience direct middle distance views of the Scheme looking south. The Scheme would introduce a new road within the landscape around 350m to the south, through the arable fields to the rear of the property. The residential property located on Eastergate Lane near PRow 318 has existing open views of the arable and pastoral fields, partly blocked by garden fences and some vegetation including field boundary hedgerows. The receptors would experience a change in view from their garden and the ground and first floor. The change in view would be mitigated through proposed tree and shrub planting along the proposed road providing screening to the receptors in this location.
- 10.9.105. Based on the above, a **moderate (Adverse)** magnitude of effect would arise. Given that the magnitude of effect is moderate, and the sensitivity of the receptor is high, the resulting effect would be **moderate-large (Adverse) Significant**.
- 10.9.106. During construction, views of construction activities including machinery and HGVs would be noticeable but at a distance and through existing vegetation, resulting in a **moderate (Adverse)** magnitude of effect. Given that the magnitude of effect is moderate, and the sensitivity of the receptor is high, the resulting effect would be **moderate-large (Adverse) Significant**.
- 10.9.107. The proposed woodland planting would establish over time providing screening to the sensitive receptors and blend the Scheme into the landscape. The effect during operation would reduce to **moderate (Adverse) Significant** after 15 years.
- 10.9.108. **Field Place (Receptor 11)** residents would experience indirect, medium distance views of the Scheme looking west. The Scheme would introduce a new linear feature within the landscape including moving elements around 350m west of the residential property. Existing views from the residential properties are limited to the first floor due to the presence of up to three hedgerows and existing garden fences and vegetation between the Scheme and the property. Existing views are of the predominantly flat and open arable field network to the west with field boundary hedgerows and trees. Properties to the south on Downview Road are screened by existing vegetation. The property would experience a minor change in view from their first floor with intermittent and infrequent views of transitory elements screened for the most part by existing vegetation. The Scheme would be mitigated through proposed shrub and tree planting along the proposed road.
- 10.9.109. It is considered the Scheme, or a part of it, would be perceptible but not alter the overall balance of features and elements that comprise the existing view. As a result, a **minor (Adverse)** magnitude of impact would arise. Given that the magnitude of change is minor, and the sensitivity of the receptor is high, the resulting effect would be **slight (Adverse) Not Significant**.
- 10.9.110. During construction, views of construction activities including machinery and HGVs would be noticeable but from a medium distance and screened by existing vegetation, resulting in a **minor (Adverse)** magnitude of effect. A minor magnitude of effect along with a high sensitivity for the receptor will result in a **moderate (adverse) Significant** effect.
- 10.9.111. The proposed tree planting would establish over time providing further screening to the sensitive receptors and help integrate the Scheme into the landscape. The effect during operation would remain **slight (Adverse) Not Significant** after 15 years.

- 10.9.112. Upton Brooks (Receptor 12) residents would experience close views of the Scheme looking west. The properties have an east-west orientation with rear gardens backing onto Fleurie Nursery. The receivers would have views west from rear gardens and from their ground and first floor. The Scheme would be a noticeable introduction in the view including the addition of the new Barnham Road junction to the northwest and an attenuation pond to the southwest.
- 10.9.113. The residential properties at Upton Brooks have existing views of buildings associated with Fleurie Nursery, screened in part by rear garden trees and vegetation along their western boundary. The Scheme includes the demolition of the buildings associated with Fleurie Nursery with no proposed planting. The properties would experience a change in view from first floor as well as potential changes in views from ground floor and rear gardens. Mitigation would be limited to wildflower meadow grass at the new roundabout at Barnham Road and wetland grass at the new attenuation pond. There is no planting proposed between the residential properties and the Scheme as it runs south from Barnham Road.
- 10.9.114. Based on the above, a **moderate (Adverse)** magnitude of impact would arise. Given that the magnitude of change is major, and the sensitivity of the receptor is high, the resulting effect would be **moderate-large (Adverse) Significant**.
- 10.9.115. During construction, views of construction activities including machinery and HGVs would be very noticeable, resulting in a magnitude of **major (Adverse)** impact. Given that the magnitude of impact is major, and the sensitivity of the receptor is high, the resulting effect during construction will be **large (adverse) Significant**.
- 10.9.116. The proposed planting would establish over time; however, this would provide no further screening to the receptors and the Scheme would remain readily apparent within the receptor view. The effect during operation would remain **moderate-large (Adverse) Significant** after 15 years.
- 10.9.117. **Collins Close (Receptor 13)** residents would experience indirect, medium to long distance views of the Scheme looking north and northeast. The Scheme would introduce a new linear feature within the landscape including moving elements around 300m north and around 500m northeast of the residential properties. Existing views from the residential properties are limited to the first floor due to the presence of existing garden fences and vegetation as well as large areas of existing vegetation between the Scheme and the properties. Existing views are of the predominantly flat and open arable field network to the north and east with field boundary hedgerows and trees and woodland beyond. The properties would experience a minor change in view from their first floor with intermittent and infrequent views of transitory elements screened for the most part by existing vegetation. The Scheme would be mitigated through proposed shrub and tree planting along the proposed road.
- 10.9.118. It is considered the project, or a part of it, would be perceptible but not alter the overall balance of features and elements that comprise the existing view. As a result, a **minor (Adverse)** magnitude of impact would arise. Given that the magnitude of change is minor, and the sensitivity of the receptor is high, the resulting effect would be **slight (Adverse) Not Significant**.
- 10.9.119. During construction, views of construction activities including machinery such as cranes, boring drills, and HGVs would be noticeable but from a medium distance and screened by existing vegetation, resulting in a **minor (Adverse)** magnitude of impact. A minor magnitude of impact along with a high sensitivity for the receptor will result in a **moderate (adverse) Significant** effect.

- 10.9.120. The proposed tree planting would establish over time providing further screening to the sensitive receptors and help integrate the Scheme into the landscape. The effect during operation would remain **slight (Adverse) Not Significant** after 15 years.

LIGHTING EFFECTS

- 10.9.121. Street lighting is proposed at the three roundabouts (Fontwell Avenue, Barnham Road and the New Road central roundabout), along the entire section of cycle way from Fontwell Avenue to Barham Road and at the proposed pedestrian crossing at the PRow (Footpath 318).
- 10.9.122. The Lighting Assessment (Appendix 10.2 – Table 3-2) has set out the site specific locations, which have the potential to be adversely affected by lighting and includes a number of receptors also considered for the LVIA assessment such as A29 Fontwell Avenue, Downview Road, Murrell Gardens, Barnham Road, and Cherry Tree Drive (Collins Close receptor in LVIA). In addition to these sensitive locations, consideration of the night-time views towards and from within the South Downs National Park, Dark Skies Reserve are given. The general area is indicative of an E2 Environmental Zone ('low district brightness').
- 10.9.123. The lighting assessment is both quantitative and qualitative in nature and is based on an anticipated deviation from the baseline lighting conditions alongside calculations to understand the levels of obtrusive light.
- 10.9.124. The assessment evaluated the effects on existing residential receptors, users of the local PRow and national trail network based on the following factors:
- Existing lighting conditions and indicative Environmental Zone;
 - Anticipated future sources of lighting, including type, purpose, location and orientation;
 - Distance from receptor to light source(s); and
 - Screening (both existing and proposed) between light source(s) and receptor(s).
- 10.9.125. The assessment of changes in the night-time scene has considered the above factors alongside:
- The anticipated sources of lighting (temporary and permanent) viewed alongside existing sources of lighting;
 - The extent or absence of lighting within the overall field of view and the degree to which this would change; and
 - The main focus of views from the receptors that contribute toward the night-time scene.
- 10.9.126. The street lighting design prepared by SSE on behalf of WSCC can be found on the Street Lighting Layout Drawings, numbered SSE281768-1300-002 to 006 attached to **Appendix 10.2 – Lighting Assessment Report** of the Revised ES.

Construction

- 10.9.127. The lighting design adopted principles which provided a methodology to ensure that lighting during construction does not cause a nuisance and is not obtrusive to the surrounding environment. If the guidance is implemented appropriately then the residual effects of construction lighting are considered likely to be negligible and short term.

Operation

- 10.9.128. In addition to the spill light contours shown on the Street Lighting Layout Drawings, the results for the calculated levels of light intrusion and luminous intensity along are provided in Appendix C of

Appendix 10.2 Lighting Assessment. Table 5-1 gives a summary of predicted impacts on the receptors against baseline conditions. The summary of likely impacts describes the levels of obtrusive light including sky glow, light intrusion and luminous intensity is likely to either meet the requirements of the ILP Guidance Notes for the Reduction of Obtrusive Light (ILP, 2020) or are likely to show a decrease in existing levels of obtrusive light. Residents on the B2233 Barnham Road will likely see a **minor beneficial** effect from improvements to the lighting in this area.

Other existing residential areas such as Chantry Mead, Downview Road, Ewens Gardens and Murrell Gardens are likely to see a slight increase in the visibility of the site resulting in **minor adverse** effects. It is predicted that there will be a noticeable increase in the visibility of the Scheme for some residents located near to the proposed A29 Fontwell Avenue roundabout leading to a **moderate adverse** effect.

10.10 CUMULATIVE EFFECTS

10.10.1. Following a review of the Arun District Council and WSCC online planning portal and the list of potential committed developments outlined in the EIA Scoping Report, an agreed list of committed developments has been identified, these are presented in Appendix 14.1 – Table 14-1. This section considers the potential in-combination effects that are likely to arise as a result of the Scheme in combination with committed developments considered likely to have an impact on sensitive landscape and visual receptors.

10.10.2. Two committed developments were identified as potential cumulative schemes for consideration against landscape and visual receptors, A29 Realignment Phase 2 and Barratts Development – “Adjacent Proposed Scheme”.

CONSTRUCTION PHASE

A29 Realignment Phase 2

10.10.3. The A29 upgrade will be delivered in two phases. The Scheme relates to Phase 1 (North) and is the primary focus of this ES and EIA. Phase 2 of the A29 Realignment project comprises a combination of road infrastructure and a mixed-use urban extension. Phase 2 will link to Phase 1 (the Scheme) at Barnham Road and will cross the West Coast Mainline and then connect with Lidsey Road near Lidsey. The urban extension is still at the masterplan stage but is anticipated to include new residential development, a primary school, a secondary school, a mixed-use centre, open space and habitat areas.

10.10.4. The development of Phase 2 will materially alter the landscape character of the area from open agricultural fields to infrastructure and residential properties. Construction of Phase 2 of the A29 realignment is likely to continue throughout the area alongside the construction of the Scheme with Phase 2 expected to be constructed fully within 16 years and will be complete by 2036. Construction activities of the Scheme (Phase 1) will stretch south to the interface with Phase 2 and is likely to be read collectively with the construction works of Phase 2 as one entity, resulting in an extended area of visual intrusion and change impacting each of the landscape character areas and much of the wider region with overall adverse effect on the character as a result of the presence of machinery and HGVs. This will impact upon the local landscape character, and medium and longer distance views from all directions, particularly from Eastergate, Westergate and Barnham.

10.10.5. The overall cumulative effect on landscape character and visual amenity is therefore considered to be of **major (adverse)** significance, but temporary in nature.

ADJACENT PROPOSED SCHEME

- 10.10.6. The Adjacent Proposed Scheme, which is located to the south and west of the Scheme, is expected to comprise up to 500 homes. Construction works are anticipated to begin in 2022 and be completed by 2027. The access to the development will be from Barnham Road, in the south and Fontwell Avenue in the north. The proposed land uses include residential development, a care home, informal open space, planting, a sustainable drainage system and a wildlife corridor.
- 10.10.7. The development of the Adjacent Proposed Scheme will materially alter the landscape character of the area from open fields to residential properties. Construction of the Adjacent Proposed Scheme is likely to be carried out alongside the construction of the Scheme. Construction activities of the Scheme (Phase 1) will interface directly with the Adjacent Proposed Scheme and is likely to be read collectively as one entity, resulting in an extended area of visual intrusion and change impacting primarily LCA 2 with reduced impacts on LCA1 and LCA3. Overall adverse effect will be experienced on the landscape character as a result of the presence of machinery and HGVs. This will impact upon the local landscape character, and short distance views from nearby receptors, particularly from Barnham Village interfacing the Site, properties on Fontwell Avenue, and properties on Eastergate Lane.
- 10.10.8. The overall cumulative effect on landscape character and visual amenity is therefore considered to be of **moderate (adverse)** significance, but temporary in nature.

OPERATIONAL PHASE

A29 Realignment Phase 2

- 10.10.9. Phase 2 of the A29 Realignment project comprises a combination of road infrastructure and a mixed-use urban extension. Phase 2 will link to Phase 1 (the Scheme) at Barnham Road and will be visible from the southern extent of the Scheme south of Barnham Road once built. The area is designated for future residential development in the Arun Local Plan, which with the introduction of significant areas of built form in the place of open agricultural fields will result in a permanent and negative change in the landscape character and visual amenity of the area. The intervisibility is limited by properties on Barnham Road between the two developments, however it is still considered the two developments would be read as one, particularly from Eastergate and Barnham Village west. While the area is outlined as land to be redeveloped for residential development, the introduction of significant built forms on open agricultural fields alongside the Proposed Scheme is considered to be detrimental to the setting and visual amenity of surrounding receptors. The cumulative effects of the Proposed Scheme in combination with the A29 realignment Phase 2 along with the associated urban expansion on landscape character and visual amenity at operation will be permanent and negative in nature.
- 10.10.10. The overall cumulative effect on landscape character and visual amenity at operation therefore has the potential to result in permanent, long-term effects of **moderate to major (adverse)**.

ADJACENT PROPOSED SCHEME

- 10.10.11. The Adjacent Proposed Scheme, which is located to the south and west of the Scheme, is expected to comprise up to 500 homes. The proposed land uses include residential development, a care home, informal open space, planting, a sustainable drainage system and a wildlife corridor. The proposed development would introduce a significant number of additional buildings within the landscape and further separate the Scheme from the residential properties on Barnham Road,

Collins Close, and Fontwell Avenue. The development would also alter the landscape character of the area increasing the urban setting of Eastergate and reducing the valuable gaps between settlements. The specific design and layout of the Barratts masterplan is currently unknown but the introduction of significant built forms on open fields alongside the Scheme is considered to be detrimental to the setting and visual amenity of surrounding receptors. The cumulative effects of the Scheme in combination with the Adjacent Proposed Scheme on landscape character and visual amenity at operation will be permanent and negative in nature.

- 10.10.12. The overall cumulative effect on landscape character and visual amenity at operation therefore has the potential to result in permanent, long-term effects of **major (adverse)**.

10.11 LIMITATIONS AND ASSUMPTIONS

10.11.1. The following limitations and assumptions have been identified for the Scheme;

- Assumed loss of agricultural land and scrub is perceived by the majority of dispassionate observers as a negative landscape and visual effect;
- The assessment of visual effects has been undertaken from publicly accessible areas only; and
- The assessment is based on the plans outlined in Section 10.8.3.

10.12 SUMMARY

10.12.1. Landscape Character and Visual Assessment has been undertaken to inform the iterative design process of the Scheme and assess the likely effects on identified landscape and visual receptors.

10.12.2. From the Landscape and Visual Assessment, the Scheme is considered not to be located in a landscape covered by any landscape designations, does not exhibit any rare or unusual landscape features and is within a localised landscape which already experiences existing infrastructure of a similar scale and nature as that of the Scheme. The effects of the Scheme on the existing landscape character and local visual amenity have been assessed against the existing baseline conditions.

10.12.3. The design of the Scheme has included for primary mitigation measures embedded into the scheme design to reduce the potential landscape and visual effects. The primary mitigation measures include:

- New woodland planting to create habitat for wildlife in addition to provide green visual containment;
- New specimen tree planting to enhance visual appeal and integrate the Scheme into the surrounding;
- New hedgerow planting to enhance visual amenity of the Scheme and respond positively to the local character; and
- Areas of wildflower grassland planting to enhance the biodiversity along with visual appeal.



10.12.4. The following tables provide a summary of the effects on landscape character and visual amenity at both construction and operational phase.

Table 10-10 - Summary of Effects Table for Landscape Character

LCA No.	Landscape Character Area	Sensitivity	Magnitude of Effect (Change)		Significance of Effect		
			Construction	Operation	Construction	Operation (Year 1)	Operation (Year 15)
LCA1	Eastergate Village	Low	Minor (Adverse)	Minor (Adverse)	Slight (Adverse) Not Significant	Slight (Adverse) Not Significant	Slight (Adverse) Not Significant
LCA2	Eastergate Semi-Rural Land	Low	Major (Adverse)	Major (Adverse)	Moderate (Adverse) Significant	Moderate (Adverse) Significant	Slight (Adverse) Not Significant
LCA3	Barnham Village	Low	Minor (Adverse)	Negligible (Adverse)	Slight (Adverse) Not Significant	Slight (Adverse) Not Significant	Slight (Adverse) Not Significant

Table 10-11 - Summary of Effects Table for Visual Amenity

Receptor No.	Visual Receptor	Representative Viewpoint	Sensitivity	Magnitude of Effect (Change)		Significance of Effect		
				Construction	Operation	Construction	Operation (Year 1)	Operation (Year 15)
R1	Fontwell Avenue Road Users	1	Low	Major (Adverse)	Major (Adverse)	Moderate (Adverse) Significant	Moderate (Adverse) Significant	Moderate (Adverse) Significant
R2	Fontwell Avenue	N/A	High	Major (Adverse)	Moderate (Adverse)	Large (Adverse) Significant	Moderate (Adverse) Significant	Moderate (Adverse) Significant
R3R2	Eastergate Lane Road Users	2	Low	Minor (Adverse)	Moderate (Adverse)	Slight (Adverse) Not Significant	Slight (Adverse) Not Significant	Neutral Not Significant
R4	Eastergate Lane Residents	N/A	High	Moderate (Adverse)	Moderate (Adverse)	Moderate (Adverse) Significant	Moderate (Adverse) Significant	Moderate (Adverse) Significant
R5	Ryburn Farm	N/A	High	Moderate (Adverse)	Moderate (Adverse)	Moderate (Adverse) Significant	Moderate (Adverse) Significant	Moderate (Adverse) Significant
R6R3	PRoW (Path 318)	3	Medium	Major (Adverse)	Major (Adverse)	Large (Adverse) Significant	Large (Adverse) Significant	Moderate (Adverse) Significant
R7	Field Place	N/A	High	Minor (Adverse)	Minor (Adverse)	Moderate (Adverse) Significant	Slight (Adverse) Not Significant	Slight (Adverse) Not Significant

<u>R8R4</u>	Downview Road	4	High	Major (Adverse)	Major (Adverse)	Large (Adverse) Significant	Large (Adverse) Significant	Large (Adverse) Significant
<u>R9R5</u>	Murrell Gardens	5	High	Major (Adverse)	Major (Adverse)	Large (Adverse) Significant	Large (Adverse) Significant	Large (Adverse) Significant
<u>R10R6</u>	Barnham Road	6	Low	Major (Adverse)	Major (Adverse)	Moderate (Adverse) Significant	Moderate (Adverse) Significant	Moderate (Adverse) Significant
<u>R11</u>	Upton Brooks	N/A	High	Major (Adverse)	Moderate (Adverse)	Large (Adverse) Significant	Moderate-Large (Adverse) Significant	Moderate-Large (Adverse) Significant
<u>R12R7</u>	PRoW off Barnham Road (Path 318)	7	Medium	Moderate (Adverse)	Minor (Adverse)	Moderate (Adverse) Significant	Slight (Adverse) Not Significant	Neutral Not Significant
<u>R8</u>	<u>Fontwell Avenue</u>	<u>N/A</u>	<u>High</u>	<u>Major (Adverse)</u>	<u>Moderate (Adverse)</u>	<u>Large (Adverse) Significant</u>	<u>Moderate (Adverse) Significant</u>	<u>Moderate (Adverse) Significant</u>
<u>R9</u>	<u>Eastergate Lane Residents</u>	<u>N/A</u>	<u>High</u>	<u>Moderate (Adverse)</u>	<u>Moderate (Adverse)</u>	<u>Moderate (Adverse) Significant</u>	<u>Moderate (Adverse) Significant</u>	<u>Moderate (Adverse) Significant</u>
<u>R10</u>	<u>Ryburn Farm</u>	<u>N/A</u>	<u>High</u>	<u>Moderate (Adverse)</u>	<u>Moderate (Adverse)</u>	<u>Moderate – Large (Adverse) Significant</u>	<u>Moderate – Large (Adverse) Significant</u>	<u>Moderate (Adverse) Significant</u>

R11	Field Place	N/A	High	<u>Minor (Adverse)</u>	<u>Minor (Adverse)</u>	<u>Moderate (Adverse) Significant</u>	<u>Slight (Adverse) Not Significant</u>	<u>Slight (Adverse) Not Significant</u>
R12	Upton Brooks	N/A	High	<u>Major (Adverse)</u>	<u>Moderate (Adverse)</u>	<u>Large (Adverse) Significant</u>	<u>Moderate-Large (Adverse) Significant</u>	<u>Moderate-Large (Adverse) Significant</u>
R13	Collins Close	N/A	High	Minor (Adverse)	Minor (Adverse)	Moderate (Adverse) Significant	Slight (Adverse) Not Significant	Slight (Adverse) Not Significant

10.13 REFERENCES

- Ref. 10.1: Council of Europe, 2006, European Landscape Convention (<https://www.coe.int/en/web/landscape/publications>)
- Ref. 10.2: The National Parks Commission, 1949, National Parks and Access to the Countryside Act 1949
- Ref. 10.3: Department for Communities and Local Government, Revised National Planning Policy Framework (Feb 2019)
- Ref. 10.4: Ministry of Housing, 2019, Communities and Local Government
- Ref. 10.5: Arun District Council, The Arun Local Plan 2011-2031 (2018) <https://www.arun.gov.uk/adopted-local-plan> [Accessed April 2019]
- Ref. 10.6: West Sussex County Council, West Sussex Structure Plan 2001-16 (Feb 2005) https://www.westsussex.gov.uk/media/7125/structure_plan_05.pdf
- Ref. 10.7: Arun District Council, 2012, Arun Green Infrastructure Study
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