

West Sussex County Council

A29 REALIGNMENT PHASE 1

Environmental Statement - Chapter 5



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5 APPROACH TO EIA

5.1 INTRODUCTION

- 5.1.1. This chapter outlines the approach to the EIA, in particular the objectives and overall strategy for the EIA developed by WSP and the wider Project Team. Scoping has been an ongoing process, which is documented within this chapter alongside the evidence base associated with those topics and elements of topics scoped out of the assessment.
- 5.1.2. The approach to consultation is also clearly outlined in this chapter, together with the approach to proportionate assessment including the assessment criteria and the methodology for assessing cumulative effects.
- 5.1.3. The EIA has been undertaken in accordance with the EIA Regulations (Ref. 5.1), the National Planning Practice Guidance (Ref. 5.2), IEMA's EIA Guide to Shaping Quality Development (Ref. 5.3) and IEMA's EIA Guide to Climate Change Resilience and Adaptation (Ref. 5.4). and DMRB Guidance LA101 104 (Ref. 5.5).
- 5.1.4. A detailed overview of the Site's status in relation to relevant planning policy is discussed within the Planning Statement.

OBJECTIVES OF THE EIA

- 5.1.5. The key objectives of the EIA are as follows:
 - Set the legal framework;
 - Document the consultation process;
 - Consider the reasonable alternatives to the Scheme;
 - Establish baseline environmental conditions at the Site and within the surrounding area;
 - Identify likely significant effects during the design process so that some effects can be avoided, prevented, reduced or, if possible, offset prior to the assessments within the ES (i.e. demonstrating an iterative approach to EIA);
 - Identify, predict and assess the environmental effects associated with the Scheme: beneficial and adverse; permanent and temporary; direct and indirect and short / medium / long term; significant or not significant;
 - Identify, predict and qualitatively assess the cumulative effects of the Scheme including those associated with the other developments;
 - Identify suitable mitigation measures to avoid, prevent, reduce or, if possible, offset likely significant adverse effects on the environment and identify the likely significant residual effects following the implementation of these measures; and
 - Identify monitoring measures where likely significant residual effects are identified.

5.2 SCREENING (REGULATIONS 5, 6 AND 7) AND SCOPING (REGULATION 15)

SCREENING

5.2.1. As set out in Section 1.3 of **Chapter 1: Introduction**, a formal Screening Opinion was not sought from WSCC, however WSCC informally advised that the scheme does require EIA.

SCOPING REPORT

5.2.2. As set out in Section 1.3 of **Chapter 1: Introduction**, a Scoping Report was submitted to WSCC on 2nd April 2019 alongside a preapplication advice request for a formal Scoping Opinion in accordance with the EIA Regulations. As part of WSCC's responsibility under Regulation 15 of the EIA Regulations, they undertook consultation with relevant statutory stakeholders.

SCOPING OPINION

- 5.2.3. The EIA Scoping Report (**Appendix 5.1**) outlined that the Scheme has the potential to result in likely significant effects on the environment associated with the following topic areas or elements:
 - Air Quality (Chapter 6);
 - Noise and Vibration (Chapter 7);
 - Traffic and Transport (Chapter 8);
 - Ecology and Nature Conservation (Chapter 9);
 - Landscape and Visual (Chapter 10);
 - Water Resources and Flood Risk (Chapter 11);
 - Geology and Soils (Chapter 12;
 - Archaeology and Heritage (Chapter 13); and
 - Cumulative Effects (Chapter 14).
- 5.2.4. These topics and their associated likely significant environmental effects have been taken forward and assessed within the ES, with the exception of those topics or topic elements subject to ongoing scoping as described in the following section and summarised in **Table 5.2** below.
- 5.2.5. The scoping responses received from external consultees are also presented in **Appendix 5.2**. The responses relevant to this ES are summarised in **Table 5-1**, together with an indication of how they have been taken into account during the preparation of the ES. The comments generally follow the structure of the EIA Scoping Report.

5.2)			
Consultee	Comments Provided in the Scoping Response	How This Has Been Taken into Consideration in the ES	
WSCC	The ES must provide a full factual description of the development, and consideration of the 'main' or 'significant' environmental effects to which the development is likely to give rise. The ES should, wherever possible avoid the use of jargon and be written in easily-understood language.	This has been provided throughout the ES. Furthermore, the Non-Technical Summary (NTS) (Volume 3) provides a summary of the relevant content and findings of the ES in a clear and concise manner, using non-technical language. The ES is divided into specific topics chapters and this NTS refers to the corresponding chapters of the ES, where the full details of the assessments can be found.	
WSCC	Every ES must also contain all of the information set out in Part 2 of Schedule 4 to the EIA Regulations, along with such information from Part 1 as is reasonably required to assess the effects of	A full description of the Scheme provided in Chapter 3: Description of the Scheme.	

Table 5-1 - Summary of the EIA Scoping Opinion and Post Scoping Discussions (Appendix5.2)

Consultee	Comments Provided in the Scoping Response	How This Has Been Taken into Consideration in the ES
	the project. Regulation 18 states that the ES should contain (in summary), as a minimum:A full description of the development;A description of the likely significant effects of the proposal on the environment;	The baseline / assessment data, a description of the potential for likely significant effects, and the recommended mitigation measures are provided within each of the
	Data to identify and assess the main environmental effects; Measures to avoid/reduce/remedy significant adverse effects;	technical chapters (6 – 13). A summary of the alternatives considered is presented in Chapter 4: Consideration of Reasonable Alternatives.
	An outline of the reasonable alternatives relevant to the proposed development and its specific characteristics, and reasons for the choice made; and A non-technical summary.	The Non-Technical Summary is presented as Volume 3 to this ES.
WSCC	As set out in Part 1 of Schedule 4, the ES should include, as relevant, a description of the aspects of the environment likely to be significantly affected by the development, as confirmed in the following; a description of the likely significant effects on the environment resulting from the development and the methodology used to predict them; and a description of proposed mitigation measures.	Chapter 5 – Approach to EIA and technical chapters (6 – 13).
WSCC	The general approach to assessment set out in sections $2.3 - 2.13$ of the Scoping Request is considered acceptable. I would, however, highlight the importance of being clear about considering the impact of the scheme in cumulation with Phase 2 of the A29 realignment in particular, as well as the nearby housing developments.	Chapter 5 – Approach to EIA Chapter 14 - Cumulative Effects
WSCC	The potential impacts on housing to be located south of the road, as allocated in the Arun Local Plan (2018), should be considered and where appropriate, mitigation provided. The physical scope of the mitigation works (e.g. acoustic fence, SUDs schemes, clearance works to provide visibility splays, and off-site mitigation works to make the development acceptable) should be made clear on the submitted plans so that the impact of these can be considered as part of the Scheme.	Impacts on nearby residents is considered in Chapter 6 – Air Quality, Chapter 7 – Noise and Vibration and Chapter 10 – Landscape and Visual. A full scheme description is provided in Chapter 3 - Description of the Scheme and a set of scheme plans is provided in Appendix 3.1.
WSCC	As identified in the Scoping Request, the Landscape and Visual Impact chapter should be informed by a Landscape and Visual Impact Assessment (LVIA) undertaken in accordance with the Guidelines for Landscape and Visual Impact Assessment (GLVIA) (3rd Edition) (The Landscape	Chapter 10 – Landscape and Visual

Consultee	Comments Provided in the Scoping Response	How This Has Been Taken into Consideration in the ES
	Institute and Institute of Environmental Management and Assessment (GLVIA), 2013), along with the DMRB Interim Advice Note 135/10.	
identified in Table 4-2 of the Scoping Request are agreed with planning officers prior to the assessment being undertaken. No viewpoint		Chapter 10 – Landscape and Visual The landscape viewpoints were confirmed and agreed with the planning officer on 20/02/2020.
WSCC	The impact on future residential in the allocated area to the south should be considered in detail (and mitigation provided if necessary) [with regards to Landscape and Visual].	Chapter 10 – Landscape and Visual
WSCC	The submission should include an accurate zone of theoretical visibility used to highlight potential viewpoint locations and to define the study area which is likely to be affected. Viewpoints should be agreed with WSCC Officers before assessment commences. The assessment of landscape/visual impact should include consideration of mitigation measures such as acoustic fencing, drainage schemes, and the loss of existing planting.	Chapter 10 – Landscape and Visual
WSCC	The impact of road lighting should also be considered, particularly as the eastern part of the site is an area identified in the Arun Local Plan as a 'Green Infrastructure Corridor' and therefore requiring protection 'from the negative effects of light in development' (policy GI SP1).	Chapter 10 – Landscape and Visual
WSCC	A comprehensive landscaping scheme should be submitted, including details of how landscaping will be maintained once the road is operational.	Chapter 10 – Landscape and Visual Appendix 3.3 Landscape Strategy
WSCC	The approach to considering arboricultural impact is considered sufficient, but I would highlight the response of the WSCC Arboriculturalist regarding the disposal of trees removed from the site, encouraging the creation of habitat piles/hibernacula rather than burning as biomass. I would also highlight the need to be clear about the loss of trees due to visibility splays for both the construction (i.e. construction access) and operational phases, and in relation to other mitigation measures such as the provision of drainage ponds and culverts.	Chapter 10 – Landscape and Visual Appendix 3.4 – Arboricultural Report

Consultee	Comments Provided in the Scoping Response	How This Has Been Taken into Consideration in the ES
WSCC	Harvest mice (as per the WSCC Ecologist's response) should be scoped into consideration in the EIA	Chapter 9 – Ecology and Nature Conservation
WSCC Direct and indirect impacts on ecology should be considered for both the construction and operational periods, including the potential for impacts upon ecology resulting from noise, lighting and air/land/water quality. Mitigation measures should be clearly identified in the assessment, as well as in the submitted plans so that the impacts (positive and negative) can be assessed in relation to both ecology and other topics.		Chapter 9 – Ecology and Nature Conservation
WSCC	In accordance with the NPPF, the ES should give consideration to both the preservation and enhancement of biodiversity and demonstrate the opportunities that have been considered for enhancement.	Chapter 9 – Ecology and Nature Conservation
WSCC	The proposed road would be in close proximity to existing noise-sensitive residential and commercial properties, including those at Murrell Gardens, the B2233, the A29 and the Fordingbridge Industrial Estate. The impact of the development on these, as well as future occupants must be fully assessed.	Chapter 7 – Noise and Vibration
WSCC	As noted by Arun District Council's Environmental Health Officer, a comprehensive assessment of noise and vibration impacts must be undertaken by a competent sound consultant, and any mitigation measures required must be clearly set out in the submitted information. Sensitive receptors should be agreed with Arun District Council's Environmental Health team before surveys are undertaken.	Chapter 7 – Noise and Vibration
WSCC	Consideration should be given to the potential impacts of noise upon neighbouring land uses such as businesses and public rights of way. The noise/vibration impact on future occupants of housing to be located south of the proposed road, and beyond Barnham Road to the south must be taken into account in the assessment.	Chapter 7 – Noise and Vibration
WSCC	The potential for noise impact from construction compounds and access roads should be considered in the assessment of noise.	Chapter 7 – Noise and Vibration
WSCC	The assessment should take into account the guidance set out in the National Planning Policy	Chapter 7 – Noise and Vibration

Consultee	Comments Provided in the Scoping Response	How This Has Been Taken into Consideration in the ES
	Framework and the World Health Organisation Community Noise Guidelines.	
noise mitigation measures such as fences or Appendix 3.1, Chapter		See scheme plans provided in Appendix 3.1, Chapter 3 – Description of the Scheme and Chapter 7 – Noise and Vibration
WSCC	Given the proximity of residential and commercial properties to the site, 'increased dust deposition and soiling rates', it is considered this should be scoped into consideration through the EIA.	Chapter 6 - Air Quality
WSCC	Sensitive receptors should be agreed with Arun District Council's Environmental Health Officers before any surveys or assessments are undertaken. The assessment should take into account both Arun DC's requirements and guidance set out in the National Planning Policy Framework.	
WSCC The impact of the air quality of future residents of housing allocated to the south of the road must be assessed.		Chapter 6 - Air Quality
WSCC The developments to be considered for the purposes of traffic modelling (Table 8-1) are broader than those which need to be considered in relation to other cumulative impacts, or the potential for cumulative impact should be clearly ranked. It is unclear what 'in proximity' has been taken to mean in relation to this tale, but some of the development are a significant distance from the site.		Chapter 14 – Cumulative Effects
	Paragraph 8.2.1 notes that the study area would be identified for each topic but this has not been clarified in this chapter relating to the overall approach, so it is unclear how the assessment would be carried out.	Chapter 14 – Cumulative Effects
WSCC	For the purposes of realistically and usefully considering the cumulative impact of the proposed development, the cumulative impact chapter should focus on existing/approved/allocated development within the allocations north and south of the application site, including phase 2 of the A29, along with this proposal. It is considered that these will form the main cumulative impacts resulting from the project.	Chapter 14 – Cumulative Effects

Consultee	Comments Provided in the Scoping Response	How This Has Been Taken into Consideration in the ES
WSCC/ADC	The Arun District Council response to the Scoping Request in relation to cumulative impacts should be taken into account.	Chapter 14 – Cumulative Effects
WSCC	The impact on built heritage assets, both negative and positive (i.e. fewer vehicles travelling past/close to listed buildings/conservation areas) should also be clarified.	Chapter 13 – Archaeological and Heritage
WSCC	The DBA will clarify the extent of work required, but it should include an adequate geo- archaeological desk-based assessment, making use of a recent report on geo-archaeologists' monitoring of part of the site (see WSCC Archaeologist's response to the Scoping Request). Appropriate and proportionate proposals for mitigation of anticipated adverse impacts of development upon heritage assets, below and above ground, should be identified.	Chapter 13 – Archaeological and Heritage
WSCC	The scope of archaeological investigation should not be limited to designated sites and listed buildings, whether designated or undesignated, including landscapes of historical, cultural or archaeological significance. This requirement is set out in the National Planning Policy Framework (NPPF) paragraph 184.	Chapter 13 – Archaeological and Heritage
WSCC	The Phase 1 Contaminated Land Assessment should include consideration of existing and historical land uses (including enquiries with the LPAs and Environment Agency, as well as historical mapping); the sensitivity of the site (with reference to hydrogeology, ecological features, proximity of watercourses, neighbouring land uses, and geology); development of a conceptual site model, following analysis of environmental risks via the source-pathway-receptor approach; and identification of suitable mitigation measures to minimise any significant risks.	Chapter 12 – Geology and Soils
WSCC	The ES chapter should also include consideration of the impact of the loss of agricultural land (in DMRB terms – land use), and consideration of the potential impact on an area safeguarded in the West Sussex Joint Minerals Local Plan (2018) for its sand and gravel resource.	Due to the size of the Scheme and the future plans for the surrounding area (urban development), the impacts on agricultural land have been scoped out of the assessment. Consideration of potential impact on the safeguarded area in the West Sussex Joint Minerals Local Plan (2018) is considered in the Minerals Safeguarding Statement submitted

Consultee	Comments Provided in the Scoping Response	How This Has Been Taken into Consideration in the ES
		with the Planning Application documents.
site is more than 1 hectare in area. This should feed into the ES. The potential impact of the development on ground and surface water quality and quantities (i.e. flood risk) should be considered		Chapter 11 - Water Resources and Flood Risk Appendix 11.1 – Flood Risk Assessment (including Surface Water Drainage Strategy).
WSCC	The Traffic and Transport chapter should be informed by the Transport Assessment which should also consider the Department for Transport's Guidance (2007), with the full scope agreed with WSCC Highways at an early stage It should use the most up-to-date figures and be informed by a non-motorised user survey.	Chapter 8 – Transport and Access Appendix 8.1 – Transport Assessment
WSCC	The Traffic and Transport section of the ES should also refer to any proposed street lighting, speed limit, traffic signals, visibility splays, road signing, road lining, and connection with existing roads and Phase 2 of the A29.	Chapter 8 – Transport and Access
WSCC	A Road Safety Audit (including designer's response) will also be required.	The Road Safety Audit and Designers response is submitted with the Planning Application documents.
WSCC	The [Traffic and Transport] assessment should give consideration to the potential for wider impacts upon the Strategic Road Network in terms of safety and capacity, and the potential for positive impacts in terms of providing cycle/foot- paths and connections to the wider network of cycle paths. The linkages to the cycle/foot-paths beyond the site should be made clear in the submission.	Chapter 8 – Transport and Access
WSCC	The implications of the new road on the public right of way which crosses through the site, and the wider public right of way network should be considered in the EIA where relevant (and this should be discussed at an early opportunity with WSCC's PRoW Officers).	Chapter 8 – Transport and Access
WSCC	An appraisal of the potential interaction of impacts should also be set out either in this character or in	Chapter 5 – Approach to EIA



Consultee	Comments Provided in the Scoping Response	How This Has Been Taken into Consideration in the ES
	each topic chapter, acknowledging the potential for a combination of impacts to result in an impact of greater significance.	
WSCC	Each chapter in the EIA should include consideration of Schedule 4(5) to the EIA Regulations relating to the likely significant effects of the project on the environment resulting from matters such as the use of natural resources, risks to human health, and the vulnerability of the project to climate change.	Chapter 5 – Approach to EIA and technical chapters (6-13)

ONGOING SCOPING

- 5.2.6. As EIA is an iterative process taking place alongside the design of the Scheme, the process of scoping the assessment has been ongoing.
- 5.2.7. Following receipt of the formal Scoping Opinion, on the 3rd May 2019 a meeting was held with the WSCC Planner on 9th May 2019, to discuss details, including a strategy to keep the scope of the EIA proportionate. Email correspondence was sent to WSCC on 25th March 2020 documenting those discussions. In this correspondence a request was made to remove the following chapters from the EIA as there are unlikely to be significant effects in these areas subject to the results of the baseline surveys:
 - Archaeology and heritage; and
 - Geology and soils.
- 5.2.8. It was noted that these topics would be covered in standalone technical reports submitted in support of the planning application. A response to the request to remove these chapters was received on 25th March 2020, which stated that these topics should be included within the ES, even if initial surveys have confirmed there would be no significant effect. The information in the relevant chapter presenting that conclusion. These topics are included as **Chapter 12: Geology and Soils** and **Chapter 13: Archaeology and Heritage**.

TOPICS SCOPED INTO THE ASSESSMENT

5.2.9. Following receipt of the Scoping Opinion, consultation and ongoing scoping, the topics and topic elements scoped into the EIA are set out in **Table 5.2** below.

Торіс	Elements scoped into the assessment
Air Quality	Construction dust, machinery and vehicle emissions Operational road traffic emissions
Noise and Vibration	Disturbance to sensitive receptors from the generation of noise and vibration from on-site activities during the construction phase of the Scheme.

Table 5-2 - Topics and elements scoped into the assessment

Торіс	Elements scoped into the assessment				
	Disturbance to noise sensitive receptors from noise generated by road traffic on the Scheme;				
	Disturbance to noise sensitive receptors from noise level changes generated by a combination of changes in road traffic flow and / or composition on existing roads as a result of the Scheme; and				
	Disturbance to noise sensitive receptors from noise generated by the relocated substation				
Transport and Access	Construction Traffic				
	Construction impacts on Public Rights of Way				
	Operational road safety				
	Change in Traffic Flows				
Ecology and Nature	Permanent and temporary land-take within the footprint of the Scheme.				
Conservation	Permanent manipulation of habitats such as landscaping.				
	Temporary storage of construction materials within / adjacent to ecological resources with associated habitat contamination and compaction.				
	Habitat loss and fragmentation disrupting connectivity, species movement and dispersal, causing expenditure of extra energy and genetic isolation.				
	Direct injury/mortality during site clearance and construction.				
	Disturbance from construction activities including visual, noise, vibration and lighting.				
	Degradation through airborne pollution.				
	Pollution caused by use of hazardous materials and incidental release of dust, chemicals, fuels or waste materials.				
	Direct mortality during operational use.				
	Displacement, species loss and isolation.				
	Habitat fragmentation disrupting connectivity, species movement and dispersal, causing expenditure of extra energy and genetic isolation.				
	Direct disturbance from operational use visual, noise, vibration and lighting.				
	Degradation through airborne and waterborne pollution.				
Landscape and Visual	Visual and landscape effects during construction				
·	Visual and landscape effects during operation.				
Water Resources and Flood	Short-term increase in flood risk due to construction activities;				
Risk	Potential effects on the water quality of surface water and groundwater resources due to construction activities or accidental leaks and spillages;				
	Potential increase in physical contamination (i.e. sedimentation) of surface water bodies due to ground disturbance.				

Торіс	Elements scoped into the assessment		
	Potential increase in on and off-site flood risk, due to an increase in impermeable surface areas, interception of overland surface water flows and the disturbance of groundwater flow paths;		
	Potential effects on the water quality of water resources associated with routine runoff and spillage, including watercourses and groundwater. This effect includes both potential chemical and physical contamination).		
Geology and Soils	Pre-existing contamination		
	Contamination occurring as a result of the operation of the Scheme.		
	Commentary on Agricultural Land and Mineral Safeguarding (see Table 5-3).		
Archaeology and Heritage	Loss of prehistoric remains during construction.		
	Loss of roman remains during construction.		

TOPICS SCOPED OUT OF THE ASSESSMENT

5.2.10. As part of ongoing scoping, a number of topics or elements have been scoped out of the EIA and are therefore not reported in the ES. **Table 5-3** summarises this aspect of the process and the justification for scoping out these topics/elements.

Topic/element scoped out	Justification
Population and health/socio- economic impact	The ES assesses the potential effect of the Scheme on the environment and human health, including through emissions to air and water, and through noise. The Scheme would not otherwise result in significant demographic changes or otherwise affect large populations, so it is not considered that there is a need to separately consider impacts on population and health in the ES.
Geology and Soils – Agricultural Land Classification and Mineral Safeguarding	A worst case of Grade 1 agricultural land can be assumed and weighed up in the planning decision without being informed by further assessment.
	The principal of the loss of this land to the Scheme has therefore already been accepted in the adopted local development and transport plans. Its loss is appropriately accounted for in the sustainability appraisal of the local plans, rather than at project level. This is set out in the Planning Statement.
	The area is safeguarded for soil and gravel in the West Sussex Joint Minerals Local Plan (2018) (Ref. 5.6.). A Minerals Safeguarding Statement is included within the Planning Statement and therefore a separate ES chapter is not required.
Climate	It was agreed that the impact of climate change (and resilience to it) could be covered in relation to topic chapters, particularly flood risk, and that the impact resulting from the Scheme on climate change would not result in significant effects. Therefore this topic has been be scoped out.

Table 5-3 - Topics and elements scoped out of the assessment

Topic/element scoped out	Justification			
	A review has been undertaken regarding the likely effects deriving from the vulnerability of the Scheme to risks of major accidents and disasters. An initial list of major accidents and disasters has been compiled using a variety of sources including the Cabinet Office National Risk Register of Civil Emergencies 2015 Edition (Ref. 5.7) and UK Government Emergency Response and Recovery Guidance (Ref. 5.8.). This list has been screened in two stages to identify risks which would be applicable to the Scheme: firstly based on the location and use/nature of the Scheme; and secondly based on the likelihood of the event and consequence of the outcome. This review did not identify likely significant effects from major accidents or disasters that would require assessment under the EIA Regulations and therefore this topic is no longer considered in this ES.			
Material and waste	It is agreed that there would not be significant effects in relation to the use of materials and creation of waste, and that this can be covered through other chapters, and through a Construction Environmental Management Plan which is included as Appendix 3.4.			
Risk of Major Accidents/Disaster	It is not considered that there is a high probability of major accidents resulting from the Scheme, and certainly not so significant as to warrant inclusion in the EIA.			
Heat and Radiation	It is not considered the project would result in significant heat/radiation impacts. This has therefore been scoped out of consideration. The Scheme is also expected to decrease the potential for accidents from the existing scenario			

5.3 CONSULTATION

5.3.1. In addition to the formal consultation undertaken in conjunction with the scoping process, technical and public consultation has been undertaken as described below.

TECHNICAL CONSULTATION

- 5.3.2. As part of the EIA process technical consultation with a range of statutory and non-statutory consultees has been ongoing. Details of the technical consultation undertaken for each topic area is provided in the respective Chapters.
- 5.3.3. Details of the edits to the ES as a result of the Regulation 25 request for clarifications are detailed in the Environmental Statement explanatory note at the start of Chapter 1 and response to the clarifications requested summarised in **Appendix 1.1 Reg25 Table**.

PUBLIC CONSULTATION

- 5.3.4. West Sussex County Council held a full public consultation for the A29 Realignment (Phases 1 and 2) in conjunction with the developers, over a period of more than 8 weeks from 26 February to 26 April 2019.
- 5.3.5. The Consultation Findings Report has now been published at this link:

https://haveyoursay.westsussex.gov.uk/highways-and-transport/a29realignment/

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- 5.3.6. The Cabinet Member's proposed decision about the A29 Realignment Scheme was called-in by the Environment, Communities and Fire Select Committee on 13 March 2019.
- 5.3.7. In response, the Cabinet Member confirmed that comments received during the consultation would be taken into account before the scheme design was finalised. No substantive changes have been required to Phase 1 of the scheme, however the preliminary design has considered all comments.
- 5.3.8. Further engagement with stakeholders has also taken place on more localised issues. On 16 July 2020 WSCC held a meeting with localised residents to discuss the noise mitigation for the scheme.

5.4 APPROACH TO THE ASSESSMENT OF THE SCHEME

- 5.4.1. This section outlines the phases of the Scheme that have been assessed, together with the approach to the baseline conditions, future baseline conditions, cumulative effects and design tolerances. It also sets out the overarching approach to the EIA, together with project specific requirements for the assessment of effects.
- 5.4.2. The Scheme has been assessed against the description, design principles and tolerances and supporting plans as detailed in **Chapter 3: Description of the Scheme**. The maximum extent of the planning application boundary and building footprint / height has been assessed as the worst-case situation. There is therefore some degree of flexibility to allow the Scheme to evolve (i.e. reduce in size) if necessary.
- 5.4.3. In order to avoid duplication of assessment, assumptions have been made in relation to measures to be implemented under existing or pending consents.

BASELINE SCENARIO

- 5.4.4. Baseline information (the existing environmental characteristics and conditions of the Site and surrounding area) has been collated, based upon surveys undertaken and desk based information available at the time of the assessment. Technical chapters 6 13 provide details of the baseline information and a summary is provided in Chapter 2: The Existing Site. Any limitations establishing the baseline are described in technical chapters 6 13.
- 5.4.5. There are slight variances across the ES depending on the use of existing data obtained through other sources and the dates when surveys were undertaken, which represent baseline scenarios earlier or later than 2020. This has been clearly outlined within technical chapters 6 13.
- 5.4.6. The dates of surveys and the dates when data sources have been accessed are provided within technical chapters 6 13.

FUTURE BASELINE

- 5.4.7. The assessment has also taken into consideration how the current baseline conditions may change in the future without the presence of the Scheme, known as the 'future baseline'. The future baseline scenario is summarised in Chapter 2: The Existing Site and technical chapters 6-13.
- 5.4.8. Due to the limitations, necessary assumptions and lack of evidence associated with the future baseline (i.e. it cannot be accurately measured), a detailed consideration of the effects of the Scheme against the future baseline would generally not result in a robust assessment. However, consideration has been given, in descriptive terms, within each topic chapter to likely significant effects arising in relation to the future baseline.

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- 5.4.9. For some topics, such as Chapter 6 Air Quality, Chapter 7 Noise and Chapter and Chapter 8 Transport and Access, projections are a required part of the methodology. These include:
 - 2017 base year;
 - 2023 do minimum (comparable to Future Baseline);
 - 2023 Phase 1 (with the Scheme);
 - 2023 Phase 1 + 2 (the wider project);
 - 2038 do minimum (comparable to Future Baseline);
 - 2038 Phase 1 (with the Scheme); and
 - 2038 Phase 1 + 2 (the wider project).
- 5.4.10. The key changes to the surrounding area in the Future Baseline scenario will be as a result of the adjacent Barratt's scheme and Phase 2 of the A29 Realignment project (which includes a mix of road infrastructure and mixed-use development).

A29 Realignment Phase 2

- 5.4.11. The A29 realignment scheme 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.
- 5.4.12. 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

5.4.13. The Barratts David Wilson Homes development, which is located to the south and west of the Scheme, is expected to comprise approximately 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.

CLIMATE CHANGE

5.4.14. Where relevant, the effect of climate change has been considered within the assessment. This is of particular relevance for **Chapter 11: Water Resources and Flood Risk**.

PHASES OF THE SCHEME

5.4.15. Consideration has been given to demolition activities and the construction and operation of the Scheme. <u>Construction which</u> is assumed to be implemented over a <u>12 month</u> 3-year period as described in **Chapter 3: Description of the Scheme**.

ASSESSMENT CRITERIA

- 5.4.16. The classification of each effect identified has been assessed based on the magnitude of change (or impact) due to the Scheme and the sensitivity/value of the affected receptor to change, as well as a number of other factors that are outlined in more detail below. The classification of residual effects has been assessed with regard to the extent to which secondary mitigation measures will avoid, prevent, reduce or, if possible, offset adverse effects or enhance beneficial effects.
- 5.4.17. The assessment of likely effects for each of the technical topics are presented in technical chapters 6 13 and have taken into account a number of criteria to determine whether or not the likely effects are significant in terms of the EIA Regulations. Wherever possible and appropriate, the effects have been assessed quantitatively. The following criteria have been taken into account when classifying the likely effects:
 - Relevant legislation and planning policy;
 - International, national, regional and local standards;
 - Likelihood of occurrence of the effect;
 - Geographical extent of effect;
 - Sensitivity and/or value of the receptor;
 - Magnitude and complexity of effect;
 - Whether the effect is temporary or permanent;
 - Duration (short, medium or long-term), frequency and reversibility of effect;
 - Whether the effect is direct or indirect, secondary or transboundary;
 - Inter-relationship between different effects (both cumulatively and in terms of likely effect interactions); and
 - The outcomes of consultations.

SENSITIVITY/VALUE OF RECEPTORS

5.4.18. The sensitive receptors considered within the ES are identified within technical chapters 6 – 13. The sensitivity of these receptors to change is also defined within technical chapters 6 – 13 and has been determined where available and appropriate by quantifiable data, the consideration of existing designations and professional judgement. The categories used to classify the sensitivity of receptors (very high, high, medium, low, and negligible), unless otherwise stated, are shown in **Table 5-4** Where topic specific methodology deviates from this approach, for example as a result of following topic specific guidance, this is set out in the methodology section of the technical chapter.

MAGNITUDE OF IMPACT

- 5.4.19. The magnitude of impact for each identified effect is predicted as a deviation/change from the established baseline conditions, as a result of the Scheme. The magnitude of these impacts are also defined within technical chapters 6 13 and has been determined where available and appropriate by quantifiable data, available appropriate national and international standards or limits (World Health Organisation (WHO) Limits, European Union (EU) Quality Standards, etc.) and professional judgement. The scale used (large, medium, small, negligible and no change), unless otherwise stated, is shown in **Table 5-4**.
- 5.4.20. The magnitude of impact identified is based on the peak potential magnitude of change, i.e. the greatest likely magnitude of impact that may be experienced by a sensitive receptor (existing or proposed).

CLASSIFYING EFFECTS

5.4.21. The classification of effects has been undertaken using professional judgements (assumptions and value systems) that underpin the attribution of significance. Each effect has been assessed against Significance Criteria as shown in **Table 5-4**, unless otherwise stated, based on the receptor sensitivity and the magnitude of the impact as a result of the Scheme.

Table 5-4 - Significance Criteria

	Magnitude of impact (degree of change)					
Environmental		No change	Negligible	Small	Medium	Large
value (sensitivity)	High	Negligible	Minor	Moderate	Major	Major
(conoliting)	Medium	Negligible	Minor	Minor or Moderate	Moderate	Major
	Low	Negligible	Negligible or Minor	Minor	Moderate	Moderate
	Negligible	Negligible	Negligible or Minor	Neutral or Slight	Slight	Minor or Moderate

- 5.4.22. The terms as used within **Table 5-4** have been defined below, applying to both beneficial and adverse effects:
 - Major effect: where the Scheme could be expected to have a substantial improvement or deterioration on receptors;
 - Moderate effect: where the Scheme could be expected to have a noticeable improvement or deterioration on receptors;
 - Minor effect: where the Scheme could be expected to result in a perceptible improvement or deterioration on receptors; and
 - **Negligible**: where no discernible improvement or deterioration is expected as a result of the Scheme on receptors, including instances where no change is confirmed.
- 5.4.23. Unless otherwise stated in the technical chapters of this ES, effects that are classified as **moderate** or above are considered to be **significant**. Effects classified as minor or below are considered to be **not significant**.
- 5.4.24. Where topic specific methodology deviates from this approach, for example as a result of following topic specific guidance, this is set out in the methodology section of the technical chapter. Tables summarising the likely significant effects associated with each technical topic area, required mitigation measures and residual effects are provided at the end of each technical chapter. The tables provide a clear distinction of the type of effect:
 - Beneficial or adverse;
 - Permanent or temporary;
 - Direct or indirect;
 - Short, medium or long-term;
 - Secondary, cumulative or transboundary; and
 - Significant or not significant.

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5.4.25. In terms of the duration of an effect, short-term has been considered as 1 year or below (at points during the construction phase), a medium-term effect has been considered to be between 2 and 5 years in duration and a long-term effect has been considered to be greater than 6 years in duration. Any variation to these definitions arising for example from differences in topic methodology or guidance is explained in technical chapters 6 – 13.

DESIGN AND ENVIRONMENTAL INTERFACE

5.4.26. Through the EIA process, primary mitigation has fed into the design of the Scheme. These key topic areas which have influenced the design of the Scheme are: Chapter 7 - Noise and Vibration,
Chapter 9 - Ecology and Nature Conservation and Chapter 10 - Landscape and Visual. These aspects are included in the Preliminary Design Plans (Appendix 3.1) and Landscape Strategy (Appendix 3.3).

MITIGATION AND MONITORING

- 5.4.27. Primary mitigation is mitigation that forms part of the Scheme itself. These measures include items specified in the preliminary design to mitigate adverse effects. Examples of primary mitigation include landscape plans, noise barriers and attenuation basins.
- 5.4.28. Secondary mitigation describes actions that will require further activity in order to achieve the anticipated outcome. Examples include additional items to include in the detailed design, for example to comply with proposed lighting limits or developing a travel plan for the Scheme. Secondary mitigation also includes construction phase plans to mitigate (reduce) construction phase impacts.
- 5.4.29. Where likely significant adverse effects have been identified in the assessment, measures to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment are described. Monitoring is required where there are significant adverse residual effects. In some cases, for instance where there is uncertainty of residual effects remain, it may also be appropriate to implement monitoring.
- 5.4.30. Proposed secondary mitigation and monitoring measures are set out within technical chapters where necessary. **Chapter 3: Description of the Scheme** sets out the primary mitigation required as part of the Scheme. The mechanism by which the measures are to be secured and implemented and the party responsible for their delivery is also recorded.

5.5 CUMULATIVE EFFECTS

5.5.1. Schedule 4, Paragraph 5(e) of the EIA Regulations states that the ES should include a description of the likely significant effects of the development on the environment resulting from:

'the cumulation of effect with other existing and / or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources.'

5.5.2. Sub-paragraph 4, 2 (e) refers to the need to assess:

'the interaction between the factors referred to in sub-paragraphs (a) to (d) [where these subparagraphs refer to topic-specific factors].'

5.5.3. There is no widely accepted methodology or best practice for assessing cumulative effects although various guidance documents exist. The following approach has been adopted for the assessment of

cumulative effects, based on previous experience, the types of receptors being assessed, the nature of the Scheme, the other developments under consideration and the information available to inform the assessment. The approach was outlined in the EIA Scoping Report (**Appendix 5.1**) and through discussion with WSCC. The assessment of cumulative effects is presented in technical chapters 6-13 and **Chapter 14: Cumulative Effects**.

- 5.5.4. Effect interactions, or intra-project effects, are the combined or synergistic effects caused by the combination of effects of the Scheme on a particular receptor which may collectively cause a greater effect than individually. In-combination, or inter-project effects are the combined effects of the Scheme on a common receptor together with other developments.
- 5.5.5. Further details regarding the scope and methodology of the assessment of cumulative effects, the identification of relevant committed developments and a description of those included within the assessment are provided in **Chapter 14: Cumulative Effects**.
- 5.5.6. Through analysis of Arun District Council (ADC) online planning portal (Ref. 5.9), a number of other developments have been identified and are considered within this ES. These are presented in Table 5-5. Agreement upon these other developments has been sought and received from ADC.

Planning Ref	Address	Date Valid	Status	Proposal
WA/44/17/OUT & WA/95/18/RES	Land east of Tye Lane Walberton, 1.8 km north-east	February 2018	Approved	Outline application with some matters reserved for up to 175 dwellings new vehicular access, together with associated car parking, landscaping and community facilities to include allotments, play space and community facilities to include allotments, play space and community orchard. This application is a departure from the Development Plan and may affect the character and appearance of the Walberton Village Conservation Area at Land east of Tye Land Walberton.
WA/22/15/OUT	Land to the East of Fontwell Avenue Fontwell, 0.6 km north	July 2017	Approved	Outline application with some reserved matters to provide up to 400 new dwellings, up to 500 m2 of non-residential floorspace (A1, A2, A3, D1 and/or D2), 5,000 m2 of light industrial floorspace (B1 (b)/(c)) and associated works including access, internal road network, highway network, highway works, landscaping, selected tree removal, informal and formal open space and play areas, pedestrian and cyclist infrastructure, car and cycle parking and waste storage. This application is a departure from the Development Plan.
Y/1/17/OUT	Bonhams Field Main Road Yapton	December 2017	Approved	Outline Application with some matters reserved for the erection of 56 dwellings with associated open space and creation of new access. This application is a departure

Table 5-5 - Other Developments

Planning Ref	Address	Date Valid	Status	Proposal
	BN18 0DX, 2.6 km south-east			from the Development Plan and affects the character and appearance of the Yapton (Main Road) Conservation Area at Bonhams Field Main Road Yapton.
EG/71/14/OUT	Land at former Eastergate Fruit Farm Eastergate PO20 3RP, 0.3 km west	February 2015	Approved	Outline application for the erection of 60 residential dwellings with new vehicular access, open space and other ancillary works at Land at former Eastergate Fruit Farm.
BN/16/12	Pollards Nursery Lake Lane Barnham PO22 0AF, 1.3 km south- east	October 2013	Approved	Outline application with some reserved matters for development of up to 107 residential units (this application is a departure from the Development Plan) at Pollards Nursery Lake Lane.
AL/107/16/RES	Land West of Westergate Street & East of Hook Lane Westergate PO20 3TE, 1.4 km south-west	May 2017	Approved	Reserved matters application following outline planning permission AL/39/13 for the demolition of Oakdene and all other structures within the site and the erection of 79 dwellings, public open space, children's play areas, landscaping, drainage measures, sub-station, pumping station and all other associated works at Land West of Westergate Street and East of Hook Lane.
BN/43/16/PL	Angels Nursery Yapton Road Barnham PO22 0AY, 1.3 km south-east	May 2017	Approved	Application for 95 dwellings together with access, landscaping open space and associated works at Angels Nursery.
EG/6/18/RES	Eastergate Fruit Farm Barnham Road Eastergate PO20 3RP, adjacent to the west of	May 2018	Approved	Approval of reserved matters following outline consent EG/71/14/OUT for the construction of 60 dwellings with new vehicular access, open space and ancillary works at Eastergate Fruit Farm.

Planning Ref	Address	Date Valid	Status	Proposal
	the Scheme			
WA/23/17/OUT	Barnfield House Arundel Road Fontwell BN18 0SD, 1.3 km north	February 2018	Approved	Outline application with all matter reserved for residential development comprising of 22 dwellings involving demolition of Barnfield House and existing outbuildings. This application is a departure from the development plan at Barnfield House.
BN/6/18/RES and BN/32/15/OUT	Lillies Yapton Road PO22 0AY, 1.4 km south-east	January 2019	BN/6/18/RES Refused and Appealed BN/32/15/OUT Approved	Approval of reserved matters following outline consent BN/32/15/OUT relating to appearance, landscaping, layout and scale for construction of 38 dwellings including open space, landscaping and new access (resubmission following BN/28/17/RES) at Lillies.
WA/63/19/PL	Land South of Arundel Road Walberton BN18 0QP, 1.3 km north	November 2019	Approved	Erection of 8 dwellings with garaging and open resident and visitor parking, with a new access from Arundel Road, provision of hard and soft landscaping and open space, foul and surface water drainage systems and other works. This application is a departure from the Development Plan.
WA/26/18/OUT	Former Lanes End House Adjacent to West Walberton Lane & Arundel LaneBN18 0QS, 1.1 km north	December 2018	Approved	Outline application with all matters reserved for 6 detached houses with detached garages. This application is a departure from the Development Plan.
WA/75/17/PL	Land adjacent to Sunny Corner Copse Lane Walberton BN18 0QH, 1.3 km north-east	June 2019	Approved	9 dwellings with associated car parking, bin storage and landscaping and creation of a new access road from existing access onto West Walberton Lane. This application is a departure from the Development Plan.

Planning Ref	Address	Date Valid	Status	Proposal
Arun District Strategic Housing Allocation – SD5	Barnham / Eastergate / Westergate (see policy map 2)	N/A	N/A	Masterplan includes provision of two schools and 4,300 homes.
Arun District Strategic Housing Allocation – SD6	Fontwell (see policy map 2)	N/A	N/A	Local Plan Allocation for 400 units
Arun District Strategic Housing Allocation – SD7	Yapton (see policy map 2)	N/A	N/A	Local Plan Allocation for 500 units
Barratts Development	Barnham Road / Fontwell Avenue, Adjacent to the Scheme	n/a	n/a	The Barratts David Wilson Homes development, which is located to the south and west of the Scheme, is expected to comprise approximately 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.

5.6 LIMITATIONS AND ASSUMPTIONS

5.6.1. Item 6 of Schedule 4 of the EIA Regulations states that an ES should include

'...details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved.'

5.6.2. Where there are limitations or assumptions used within the EIA these are clearly identified in this ES. Assumptions specific to certain topics have been identified in the appropriate technical chapters 6 - 13.

5.7 REFERENCES

- Reference 5.1: Town and Country Planning (Environmental Impact Assessment) Regulations 2017. Statutory Instrument 2017 No. 571.
- Reference 5.2: Planning Practice Guidance. [Online] Accessed via <u>https://www.gov.uk/government/collections/planning-practice-</u> <u>guidancehttps://www.gov.uk/government/collections/planning-practice-guidance</u>, 11th March 2020.

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- Reference 5.3: IEMA Environmental Impact Assessment Guide to Shaping Q^{ua}lity Development. [Online] Accessed via <u>https://www.iema.net/assets/uploads/iema_guidance_documents_eia_guide_to_shaping_quality_development_v7.pdf</u>, 11th March 2020.
- Reference 5.4: IEMA Environmental Impact Assessment Guide to Climate Change Resilience and Adaptation. [Online] accessed via <u>https://www.iema.net/assets/templates/documents/iema_guidance_documents_eia_climate_chan_ge_resilience_and_adaptation%20(1).pdf</u>, 11th March 2020.
- Reference 5.5: Planning Portal [Online] Accessed via <u>https://www.planningportal.co.uk/</u>, 29 November 2018.
- Reference 5.6: West Sussex County Council, 2018, Joint Minerals Local Plan. [Online] accessed via <u>https://www.westsussex.gov.uk/about-the-council/policies-and-reports/environment-planning-and-waste-policy-and-reports/minerals-and-waste-policy/joint-minerals-local-plan/</u> 16th September 2020
- Reference 5.7: Cabinet Office, 2015, National Risk Register of Civil Emergencies, ^{Ma}rch 2015
- Reference 5.8: Cabinet Office, Emergency Response and Recovery Non statutory guidance accompanying the Civil Contingencies Act 2004, October 2013
- Reference 5.9: Arun District Council Planning Portal [Online] accessed via: https://www.arun.gov.uk/weekly-lists/

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