

**NATTRAN/SE/HAO/297**

**EAST SUSSEX COUNTY COUNCIL**

**HIGHWAYS ACT 1980**

**ACQUISITION OF LAND ACT 1981**

**THE EAST SUSSEX COUNTY COUNCIL (EXCEPT BRIDGE REPLACEMENT – A259 EASTBOURNE ROAD)  
COMPULSORY PURCHASE ORDER 2023**

**THE EAST SUSSEX COUNTY COUNCIL (EXCEPT BRIDGE REPLACEMENT – A259 EASTBOURNE ROAD)  
(CLASSIFIED ROADS) (SIDE ROADS) ORDER 2023**

**THE EAST SUSSEX COUNTY COUNCIL (EXCEPT BRIDGE REPLACEMENT – A259 EASTBOURNE ROAD)  
BRIDGE SCHEME 2023**

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**VOLUME 6- MISCELLANEOUS**

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REPORT

# Exceat Bridge Replacement: Construction Environmental Management Plan

*Prepared for*

**East Sussex County Council**

Date: 5<sup>th</sup> September 2022



East Sussex Highways

The Broyle  
Ringmer  
East Sussex BN8 5NP

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# DOCUMENT ISSUE

## Revision History

Issue	Author	Date	Description
1	P Tomlinson	25/08/22	A259 CEMP

## Technical Check

Role	Name	Signature	Date
Technical Director	P Gambrill		01/09/22

## Approval

Role	Name	Signature	Date
Project Manager	B. Lawal-Shekoni		

## ESH Approval

Role	Name	Signature	Date

# 1. INTRODUCTION

## 1.1 The Proposed Project

- 1.1.1 This Construction Environmental Management Plan (CEMP) sets out the details through which the environmental objectives for the A259 Exceat Bridge Upgrade (the Project) will be managed and delivered during the construction phase. It defines how the proposed Project shall be delivered by The East Sussex Highway Authority without giving rise to significant environmental effects. The CEMP documents the controls that the Delivery Partner and its sub-contractors will implement to manage the environmental effects and details the environmental enhancement opportunities associated with the works.
- 1.1.2 A CEMP is a live document which will be updated as the Project progresses and moves into the pre-construction phase, with environmental aspects and controls closed out and others added in as works progress.
- 1.1.3 The CEMP records how the Delivery Partner intends to deliver the Project in compliance with responsibilities assigned from environmental legislation, Government and the East Sussex Highway Authority policy statements as well as the Project Works Information. The CEMP adopts a risk-based approach to environmental management applying a management method that reflects the risk of significant effects arising. It also provides a basis for the audit to facilitate demonstration of compliance with its requirements.
- 1.1.4 The CEMP is to be used to:
- Act as a continuous link and main reference document for environmental issues between the design, construction, and the maintenance and operation stages of the Project.
  - Report environmental risks and how they are to be avoided and managed.
  - Demonstrate how detailed design and construction activities will integrate the requirements of environmental legislation, policy and good practice principles of the South Downs National Park (SDNP) and the East Sussex Highways Authority.
  - Detail how sensitive areas are to be protected with emphasis given to impacts upon the Site of Special Scientific Interest (SSSI).
  - Provide a framework to ensure that all parties are aware of their responsibilities for delivery of the Scheme, environmental control, communications and training.
  - Establish a checklist of control procedures which must be integrated into the overall environmental management system for the Project.
  - Describe work plans, documents, and procedures (e.g. Risk Assessments and Method Statements (RAMS)) that satisfy applicable environmental clauses. These include measures additionally agreed with statutory and non-statutory environmental organisations for ensuring achievement of the environmental design and for reducing the potential for environment impact during construction.
  - Define the activities that may require licences, consents or permissions.
  - Describe how change management will be accomplished and identify any additional impacts that arise.

- Document the Project's Register of Environmental Actions and Commitments (REAC) recording their date of achievement.
- Detail the review, monitoring and audit mechanism to determine effectiveness of, and compliance with, environmental control measures, objectives and targets as well as the way any necessary corrective action will take place.
- Aid the transfer of environmental information at handover to the body responsible for operational management including provision of an audit trail that can carry through into the Handover Environmental Management Plan (HEMP). This is to ensure the managing agent are aware of the mitigation or commitments have been given and their justification.

- 1.1.5 The Delivery Partner would be required by the provisions of the Planning Consent to develop this version of the CEMP into a version to be submitted for approval before Start of Works, and thereafter to comply with the terms of the approved CEMP. In this way the Delivery Partner undertakes to implement the mitigation measures developed through the environmental assessment process and as set out in this CEMP.
- 1.1.6 The CEMP prepared by the Delivery Partner would be based upon the Delivery Partners corporate Environmental Management System (EMS) to provide the basis for compliance with ISO 14001:2015, the international standard for Environmental Management Systems. Corporate Management Plans frequently contain a series of Control Plans<sup>1</sup> which set out the corporate measures within which the Delivery Partner operates irrespective of Project location.
- 1.1.7 The plans and processes set out in the CEMP are relevant to all contractors undertaking work on the Project. To ensure that all contractors on site are signed up to this document, the CEMP will be added to the Project's integrated "Health Safety and Environmental Management Plan" (HASEMP) as an appendix that is then sent out to all sub-contractors on the scheme, and to which they are contractually bound to comply.
- 1.1.8 The requirements of the CEMP do not remove or overwrite the legal duties, responsibilities and obligations of the Delivery Partner and other parties in accordance with English law and contract documents and issued specification.

## 1.2 The Project Sites

- 1.2.1 The Project comprises two parts. The main part of the site (referred to as 'the Works site') is where the replacement bridge will be located. It is at the western side of the Cuckmere valley, approximately 1km east of Seaford, just over 4km west of Friston and approximately 1.8km north of the coastline at Cuckmere Haven. The second part, the temporary construction compound (referred to as 'the construction compound') is located on the north side of the A259 approximately 0.8km to the west of the Cuckmere River, approximately 0.2km to the east of Seaford.

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<sup>1</sup> The term 'Control Plan' is used in preference to the Highway England's Design Manual for Roads and Bridges (DMRB) LA 120 term 'Method Statement' since the latter can be confused with the 'Risk Assessment & Method Statement' used to inform the site contractors of their duties and responsibilities.

- 1.2.2 The Works site is located within Seaford to Beachy Head Site of Special Scientific Interest (SSSI), predominantly consisting of arable land. It is anticipated that site clearance will commence in Spring 2022 with completion in Winter 2023-2024. All site clearance activities shall be undertaken and managed in accordance with Highway England's Design Manual for Roads and Bridges (DMRB) LA 120 – Environmental Management Plans.
- 1.2.3 Details of the Project, such as the scope and engineering drawings are presented in Chapter 4 of the ES Addendum. Chapter 5 of the ES Addendum further provides detail of the optioneering that has been undertaken with regard to the design and construction methods to be deployed.

## 1.3 The Project Objectives

- 1.3.1 East Sussex Highways were appointed by East Sussex County Council to prepare the planning application documentation for the replacement of Exceat Bridge on A259 (Exceat Bridge Improvements Scheme). As such, the East Sussex Highway Authority has set objectives for the Project which are presented in Table 1-1.

**Table 1-1: The Project Environmental Objectives**

Traffic Movement
<ul style="list-style-type: none"> <li>Reduce congestion within the Cuckmere Valley through the provision of two-way vehicular flow whilst reducing vehicular speeds along the A259.</li> <li>Maintain safety levels for all road users.</li> <li>Promote public transport as a means of access to the Cuckmere Valley and Seven Sisters Country Park.</li> <li>Traffic calming measures to maximise use of landscape tools.</li> </ul>
Greenhouse Gases
<ul style="list-style-type: none"> <li>Demonstrate a contribution towards helping reduce carbon dioxide.</li> </ul>
Air Quality
<ul style="list-style-type: none"> <li>Avoid dispersion of fugitive dust upon sensitive receptors such as housing and the SSSI.</li> </ul>
Biodiversity
<ul style="list-style-type: none"> <li>No adverse effects upon statutory designated sites.</li> <li>Avoid loss or deterioration of irreplaceable habitats beyond that identified in the ES Addendum.</li> <li>Maximise opportunities to deliver beneficial biodiversity outcomes and contribute to the ecological objectives of the SSSI.</li> </ul>
Landscape
<ul style="list-style-type: none"> <li>Create a structure with a visual appearance that is suitable for its setting within the SDNP.</li> <li>Create a structure that complies with the site-specific design parameters aimed at protecting biodiversity and cultural heritage.</li> <li>Provide upgraded lighting that complies with dark skies policies and provides for the potential presence of bat species.</li> <li>Bridge, lighting and street furniture materials to adopt a simple design maximising use of local materials, such as chestnut and flint.</li> <li>Planting and seeding to be of local species to reflect the plants in the surrounding area.</li> <li>Improve the space in front of the Cuckmere Inn for people.</li> </ul>
Water Quality and Flood Risk
<ul style="list-style-type: none"> <li>To avoid any detrimental changes to surface and ground water quality or flood risk.</li> <li>Create a structure that is resilient to the effects of climate change and accords with the future flood risk management of the Cuckmere Valley.</li> </ul>

Population and Public Health
<ul style="list-style-type: none"> <li>• Avoid significant adverse impacts on health and quality of life.</li> <li>• Minimise the stress and disturbance affecting local residents as a result of construction activities.</li> <li>• Create a structure that is fit for purpose and provides safe passage across the river for all users, particularly for pedestrians.</li> <li>• Allow more people to enjoy and learn from the area.</li> </ul>

## 1.4 Structure of the CEMP

1.4.1 This CEMP has been prepared in accordance with the DMRB LA 120 – Environmental Management Plans<sup>2</sup> Revision 1 and draws upon instructions on environmental management within DMRB LA 104 Environmental Assessment and Monitoring<sup>3</sup> paragraph 5.6. While the CEMP has endeavoured to follow the above requirements, Table 1-2 indicates where the requirements are reported and where variations have been made to reflect the specific circumstances of the proposed Project.

**Table 1-2: Alignment with DMRB Requirements**

Requirement	Source	Location	Observation
Audit trail of change from previous EMP.	LA 120 2.5	Annex M	To be provided in subsequent EMPs.
Identify roles and responsibilities.	LA 120 2.5	Chapter 4	Delivery Partner is to align roles and responsibilities with applicable job titles.
Identify risk and control measures, compliance and corrective actions.	LA 120 2.5	Chapter 6	Delivery Partner is to set out proposed measures.
Report date of completion of control measures.	LA 120 2.5.1	Annex D	To be provided by the Delivery Partner within the individual Control Plans.
Detail measures to mitigate and manage/offset environmental effects.	LA 120 2.7 LA 104 5.6.1	Annex D	To be provided by the Delivery Partner within the individual Control Plans.
Provide a Register of Environmental Actions and Commitments.	LA 120 2.8	Annex A	Planning Application REAC is provided in Annex A1.
Describe main difficulties in delivery of mitigation and managing the effects.	LA 120 2.10	Annex D	To be provided by the Delivery Partner within the individual Control Plans.
Describe main uncertainties in the forecasting of management measure outcomes.	LA 120 2.10	Annex A5	List of REAC assumptions is provided in Annex 5. The Delivery Partner may add additional assumptions within individual Control Plans.

<sup>2</sup> DMRB Update LA 120 Environmental Management Plans

<http://www.standardsforhighways.co.uk/ha/standards/dmrbl/vol11/section2/LA%20120%20Environmental%20management%20plans-web.pdf>

<sup>3</sup> DMRB Update LA 104 Environmental Assessment and Monitoring

<http://www.standardsforhighways.co.uk/ha/standards/dmrbl/vol11/section2/la104.pdf>

Requirement	Source	Location	Observation
Changes to the project.	Table A.2	Section 3.4 & Annex F - Evaluation of Change Register	The Evaluation of Change Register is to be submitted and approved by the client before any individual change is adopted.
A change management process shall be implemented throughout the project life cycle.	LA 104 2.7	Section <b>Error! Reference source not found.</b>	
Set out statutory monitoring commitments; evaluation of monitoring, remedial actions and reporting.	LA 104 5.6.2	Chapter 8.6.1	To be inserted by the Delivery Partner following consenting and licencing processes
Environmental management actions shall include monitoring requirements, success criteria and progress reporting.	LA 104 5.6.4	Chapter 7 Annex A1	Red clauses represent mandatory reporting, while records may be requested for Amber and Green clauses in accordance with the level of environmental risk.
The EMP shall be used as a method of reporting specific monitoring and management measures post consent.	LA 104 5.7	Annex D & Annex G	Details of the way the monitoring and management measures are implemented shall be recorded by the Delivery Partner.
Continually update EMP to reflect progress on achievement of actions and response to change.	LA 104 5.7.1	Annex M	A revised CEMP is to be submitted by the Delivery Partner in response to significant changes to the scope of the Works and to reflect progress on the achievement of actions.

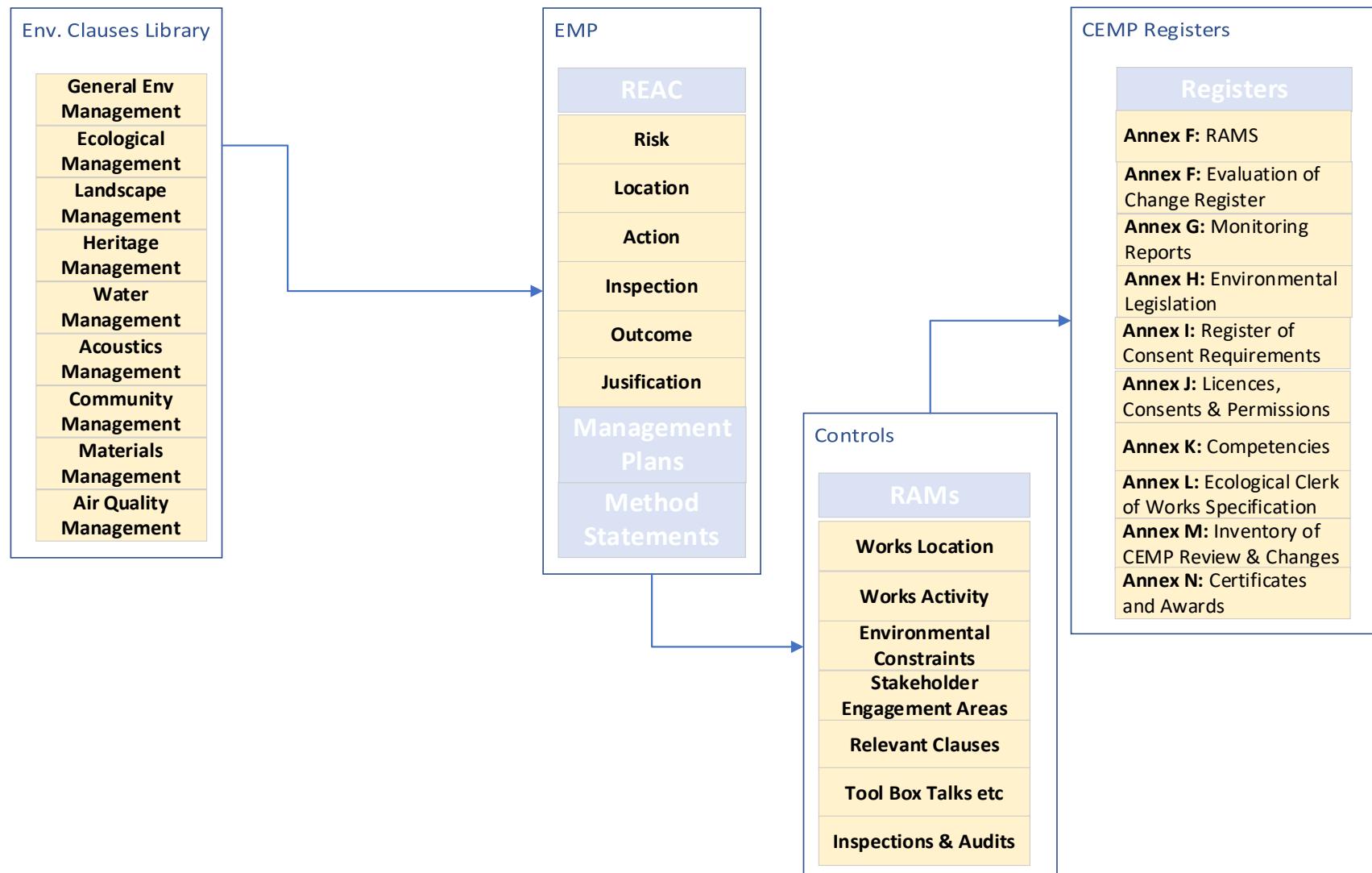
- 1.4.2 The CEMP is structured so that the Register of Environmental Actions and Commitments are delivered through a series of Management Plans and Method Statements before individual RAMS are used to detail the requirements to works managers and site staff (see **Figure 1-1Error! Reference source not found.**). The CEMP also comprises registers or repositories where records and licences are to be retained.

## 1.5 Register of Environmental Actions and Commitments (REAC)

- 1.5.1 The REAC identifies the environmental commitments to be delivered to address the potential environmental effects of the Project. **Annex A** provides the location where PDF copies of each Register of Environmental Actions and Commitments (REAC) to be prepared are then to be presented:
- **Annex A1** – Planning Application REAC.
  - **Annex A2** – Enabling and Preparatory Works REAC.
  - **Annex A3** – Main Works REAC.
  - **Annex A4** – Handover REAC.
  - **Annex A5** – Assumptions supporting the REAC.
  - **Annex A6** – General environmental management clauses.
  - **Annex A7** – Ecological management clauses.
  - **Annex A8** – Landscape management clauses.

- **Annex A9** – Heritage management clauses.
- **Annex A10** – Acoustics management clauses.
- **Annex A11** – Water management clauses.
- **Annex A12** – Materials and waste management clauses.
- **Annex A13** – Population, health and local economy clauses.
- **Annex A14** – Air quality clauses.

**Figure 1-1: Environmental Management Plan Process**



1.5.2 The REAC does not record general legislative requirements. It is assumed that, in addition to compliance with the measures that are set out in the REAC, that the Delivery Partner and its contractors will comply with all applicable legislation in force at the time.

## 1.6 Mapping

1.6.1 The environmental mapping that supports the CEMP at the various stages of evolution is set out below, however given the compact nature of this Project most are not required:

- **Annex B1:** Environmental Constraints.
- **Annex B2:** Environmental Clauses.
- **Annex B3:** Limits of Deviation - Not required.
- **Annex B4:** Environmental Masterplan.
- **Annex B5:** Baseline Biodiversity Condition.
- **Annex B6:** Vegetation Clearance - Enabling Works - Not required.
- **Annex B7:** Vegetation Clearance – Main Works - Not required.
- **Annex B8:** Diversion Routes.
- **Annex B9:** Construction Compound Layout Plan – To be provided by Delivery Partner.

## 1.7 Corporate Management Plans

1.7.1 This section identifies Corporate Management Plans that the Delivery Partner already has within their environmental management system. These Plans set out corporate processes intended to be followed by those delivering the Project and are generic corporate documents rather than being Project specific. The Delivery Partner is to complete this section:

- Health & Safety Management Plan.
- Project Quality Plan.
- The Delivery Partner may record other applicable Plans.

## 1.8 Control Plans/Method Statements

1.8.1 Control Plans or Method Statements set out the actions that the Delivery Partner shall be taking to deliver the Government's and East Sussex Highway Authority environmental objectives as well as those set out in the REAC for the following topics:

- **Annex D1** - Control Plan template.
- **Annex D2** - General site management.
- **Annex D3** - Ecological management.
- **Annex D4** - Landscape.
- **Annex D5** - Heritage.
- **Annex D6** - Noise and vibration.
- **Annex D7** - Water management.
- **Annex D8** - Materials & waste.

- **Annex D9** - Community engagement.
  - **Annex D10** - Air quality.
- 1.8.2 The Control Plans or Method Statements are not to be confused with the Risk Assessment and Method Statements (RAMS) which are prepared for specific site works by the Delivery Partner. Rather these statements aim at ensuring that the REAC measures have been recognised and addressed by the Delivery Partner.
- 1.8.3 Each Control Plan summarises the key information from the CEMP through a consistent reporting style in-line with the requirements of DMRB LA 120, and section 5.6 of DMRB LA 104. The inspection or checking arrangements for each environmental aspect is also documented.

## 1.9 Risk Assessment and Method Statement

- 1.9.1 Risk Assessment and Method Statement (RAMS) describe the processes and measures to be adopted by those involved in the delivery of specific works and aim to deliver the REAC and prevent any negative impact of works activities. Essentially, RAMS translate the committed actions into committed site procedures. They also set out the approach to be taken to fulfil the positive obligations that already exist.
- 1.9.2 The Delivery Partner is to provide a schedule of RAMS to be prepared for the Project as set out in **Table 6-3** with copies of the RAMS placed in **Annex E**.

## 1.10 CEMP Registers

- 1.10.1 The following CEMP Registers have been established as the location where various evidential records for delivery of the CEMP are to be placed:
- **Annex E:** Risk Assessment and Method Statements.
  - **Annex F:** Evaluation of Change Register.
  - **Annex G:** Monitoring Reports.
  - **Annex H:** Environmental Legislation.
  - **Annex I:** Register of consent requirements.
  - **Annex J:** Licences, consents and permissions.
  - **Annex K:** Competencies.
  - **Annex L:** Ecological Clerk of Works Specification.
  - **Annex M:** Inventory of CEMP Review & Changes.
  - **Annex N:** Certificates and Awards.
- 1.10.2 While **Annex H** provides a register of environmental legislation, it does not remove responsibility to be aware of the legislation that is in place at the time that works being undertaken. The Delivery Partner must maintain a central register of applicable legislation and case law. Further assistance can be sought via the Law Society<sup>4</sup> or by review of [www.legislation.gov.uk](http://www.legislation.gov.uk).

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<sup>4</sup> <https://www.lawsociety.org.uk/>

- 1.10.3 **Annex I** (Register of Consent Requirements) documents the planning conditions to which the Delivery Partner is to comply. Where legislation has required consents, licences or permits then they are included within **Annex J** and detail the location for the projects register of Consents and Permits as required by the Delivery Partner's management system.
- 1.10.4 The competencies of key members of the staff including the Environmental Manager and environmental specialists are to be recorded in **Annex K**. While the specification for the ecological clerk of works (EcCoW) in terms of the skills and functions to be performed is to be presented in **Annex L** by the Delivery Partner based upon a draft specification provided in this CEMP.
- 1.10.5 As the CEMP is subject to continual review and revision, **Annex M** provides for a register of such updates. Finally, **Annex N** provides a registry for certificates and awards that the Delivery Partner holds of relevance to the Project.

## 2. THE PROJECT OBJECTIVES

### 2.1 Environmental Context

- 2.1.1 The key environmental risks associated with the Project are presented below.

**Table 2-1: Key Environmental Risks**

Environmental Risk	Relevant Activities	CEMP Section	Control Plan/Method Statement
Designated site and protected species	<ul style="list-style-type: none"> <li>• Site clearance</li> <li>• Earthworks</li> <li>• Site reinstatement</li> </ul>	Section 7.4	Annex D3
Inappropriate handling of SSSI soils	<ul style="list-style-type: none"> <li>• Soil stripping</li> <li>• Soil handling</li> <li>• Soil storage</li> <li>• Soil reinstatement</li> </ul>	Section 7.9	Annex D8
Actual and perceived noise nuisance	<ul style="list-style-type: none"> <li>• Piling works</li> <li>• Bridge demolition</li> <li>• Construction compound</li> </ul>	Section 7.7	Annex D6
Surface water pollution, Source Protection Zones, Flood risk	<ul style="list-style-type: none"> <li>• Ground investigations</li> <li>• Earthworks</li> <li>• Piling works</li> <li>• Concreting</li> <li>• Material storage</li> <li>• Plant refuelling</li> <li>• Bridge works</li> </ul>	Section 7.8	Annex D7
Community disruption	<ul style="list-style-type: none"> <li>• Diversion of rights of way</li> <li>• Complaints</li> <li>• Restricted access to residential properties</li> <li>• Disruption to commercial activities</li> <li>• Disruption to public transport</li> </ul>	Section 7.10	Annex D9
Dust nuisance	<ul style="list-style-type: none"> <li>• Demolition</li> <li>• Site clearance</li> <li>• Earthworks</li> </ul>	Section 7.11	Annex D10

## 2.2 Sustainable Development

- 2.2.1 DMRB GG 103 sets out the approach to sustainable development during the design and delivery of schemes stating that:
- 2.2.2 'Good road design of an inclusive, resilient and sustainable road network appreciated for its usefulness but also its elegance, reflecting in its design the beauty of the natural, built and historic environment through which it passes and enhancing it where possible'.
- 2.2.3 Steps taken to maximise contribution towards the sustainable development goals would be set out by the Delivery Partner in **Table 7.1**.

## 2.3 Environmental Scoping Report

- 2.3.1 A screening and scoping opinion upon the proposed Project was received from the South Downs National Park Authority (SDNPA) in January 2019. This opinion scoped out geology and soils as there would be no effects upon geologically designated or sensitive features. Furthermore, it was recognised that negligible effects could result from ground hazards and contamination, with the latter being avoided or managed through ground investigations and standard mitigation recorded,
- 2.3.2 As noted in **Section 6.4** of the ES Addendum, there is a risk of unexploded ordinance and hence this topic has been addressed within the Materials section (section 7.9) of this CEMP.

## 2.4 Legal and Other Environmental Obligations

- 2.4.1 A register of applicable legal and other requirements relevant to the operations of The Delivery Partner is held within the Delivery Partner's Information Management System. A schedule of those regulations applicable to the Project is to be presented in **Annex H** by the Delivery Partner. The Environmental Manager is responsible for reviewing the register and ensuring that the requirements of legislation are met on this Project.

## 3. SCHEME CONSTRUCTION WORKS

### 3.1 Introduction

3.1.1 This chapter provides a review of those elements of the construction works that have relevance to the achievement of the environmental objectives as well as the Register of Environmental Actions and Commitments. Its purpose is to highlight those activities and locations where particular sensitivities, or opportunities, are considered to exist.

### 3.2 Pre-Construction Surveys

3.2.1 The A259 Exceat Bridge has not been subject to the delivery of Enabling Works prior to commencement of the Main Works.

3.2.2 The Delivery Partner is required to undertake the following survey activities prior to commencement of vegetation clearance and soil stripping:

- **Hydrology, water quality** - Water quality sampling to understand the nutrient levels and salinity within the existing ditch network within the works site shall be undertaken by the Delivery Partner in advance of soil stripping to establish the baseline to which the site is to be restored<sup>5</sup>.
- **Pre-construction botanical survey** - A pre-construction survey would be undertaken by a botanist prior to soil removal activities to confirm the absence/presence of protected plant species including marsh-mallow and bulbous foxtail<sup>6</sup>.
- **Pre-construction surveys for water vole, GCN and reptiles** - A pre-construction survey would be undertaken. No exclusion fencing is required for these species as they are either not present or only in low numbers. An EcCoW would be present for confirming that GCN/ water vole has not moved into the works site<sup>7</sup>.
- **Pre-construction breeding bird survey** – A survey would be undertaken no more than two days from vegetation clearance works commencing within the bird breeding season<sup>8</sup>.
- **Invasive species pre-construction survey** – A survey would be undertaken to identify the presence and extent of invasive species and formulation of a Method Statement for their safe management<sup>9</sup>.
- **Soil Resource Survey** - A soil resource survey would be undertaken to establish the nature of the soils (in particular, the soil moisture content) within any areas of potential disturbance during

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<sup>5</sup> See CEMP clause Wat042

<sup>6</sup> See CEMP clause Nat039 and Nat043

<sup>7</sup> See CEMP clause Nat111

<sup>8</sup> See CEMP clause Nat161

<sup>9</sup> See CEMP clause Nat231

the site preparation and construction phases this would be informed by the ecological requirements associated with the SSSI<sup>10</sup>.

## 3.3 Construction Methodology

- 3.3.1 The Environment Agency (EA) has indicated its requirement for a clause to protect the interests of migratory sea trout and European eel from the potential effects of vibration caused by piling activities. The installation of the mobile water retention technique is also anticipated to be constrained to avoid interference with the peak migratory period. There are months when the translocation of plants is preferably to be undertaken.
- 3.3.2 Given these ecological constraints, the scheduling of the works should be established in accordance with the constraints presented in **Table 3-1** as well as being structured to minimise the level of traffic disruption caused to local residents, businesses, tourism and protected species and habitats<sup>11</sup>.
- 3.3.3 Partly to minimise the amount of construction traffic, the Delivery Partner would utilise prefabricated components to the extent that is feasible<sup>12</sup>.
- 3.3.4 The existing bridge would remain open throughout the construction period for vehicles, pedestrians, equestrians, and cyclists, with the exception of two short term closures of seven and nine days during tie-in operations<sup>13</sup>.
- 3.3.5 Neighbouring residents would be provided with weekly updates on progress of the works with reference to the likelihood of forthcoming activities that would cause disruption to their daily lives such as availability of vehicular access (see **Table 3-4**)<sup>14</sup>.
- 3.3.6 The hours of operation of the site would be agreed with both East Sussex County Council and the SDNPA prior to any works taking place on the site<sup>15</sup>. The standard working hours would be:
  - 07:30 to 16:30 Monday to Friday;
  - No working on weekends or Bank Holidays.
- 3.3.7 Two nightshifts from 21:00 to 05:00 are proposed for placement of the two main bridge girders. Maintenance work outside these hours may be undertaken at the compound subject to approval of the local authority.

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<sup>10</sup> See CEMP clause Mat021

<sup>11</sup> See CEMP clause Gen042 and Nat122

<sup>12</sup> See CEMP clause Mat069

<sup>13</sup> See CEMP clause Com013

<sup>14</sup> See CEMP clause Com007

<sup>15</sup> See CEMP clause Gen022

**Table 3-1: Periodic Environmental Constraints Upon Construction Activities**

Activity	Environmental Constraint	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Pre-construction EPS surveys	Inspection for badgers, bat roosts by licenced ecologist.												
Translocation of plants	Relocation of protected plant species.												
Provision of bird boxes	During vegetation clearance.												
Vegetation clearance	Prior to bird nesting. The first stage of a two-stage cut in areas with GCN and reptile potential, when these species are in hibernation.												
Vegetation clearance	The second stage of a two-stage cut in areas with GCN and reptile potential, during their active period.												
UXO clearance surveys	Avoid periods of heavy rain and waterlogged ground. Awareness of potential for ground nesting birds.												
Soil stripping/ handling	Advanced surveys to establish whether nesting birds are present.												
Archaeological Watching Brief	Supervision of construction site compound												
River Impoundment	Must not be present for more than 12 months. Avoid works during peak sea trout migration.												
Piled bridge foundations	Works to cease 1 hour before dusk to minimise disturbance to sea trout.												
Piled bridge foundations	Disturbance to cease 1 hour before dusk or 16:30 hours whichever the earliest.												
Bridge beam placement	Night-time working should avoid illumination of the river.												

Percussive sheet piling	Avoid disturbance to wintering birds.													
	Preferred Period		Restricted period		Avoidance period									

- 3.3.8 Preparatory works include:
- Erection of temporary advance warning signs, including speed restrictions for traffic approaching construction areas.
  - Opening of access points to the work site and site construction compound.
  - Erection a solid fence or hoarding around working areas for noise mitigation and visual screening<sup>16</sup>.
  - Erection of 2.4m high Heras (or similar) fencing for public safety, protection of utility services and to restrict access onto sensitive areas.
  - Installation of temporary lighting, for working areas during winter working hours and non-standard working arrangements.
  - Lighting orientated to avoid nuisance and illumination of the river as far as is practicable<sup>17</sup>.
  - Soil removal and storage prior to replacement in accordance with an approved Soil Management Strategy<sup>18</sup>.

- 3.3.9 To prevent disturbance to migratory fish during May to August, piling /construction activities would cease at least one hour before dusk or 16:30 whichever is the earliest<sup>19</sup>.

## 3.4 Detailed Design Changes

- 3.4.1 Provision has been made in **Annex F - Evaluation of Change Register** for the Delivery Partner to record a list of design changes or changes to the assumptions underpinning the ES addendum<sup>20</sup>. The Delivery Partner shall record the principal changes introduced affecting an environmental aspect within **Table 3-2**.

**Table 3-2: Evaluation of Change Reporting**

Change id	Element Changed	Date of Proposed Change	Date of Approved Change	Amended Mitigation or Monitoring	Environmental Implications

- 3.4.2 Where there would be either no change or a reduction in environmental risk, then beyond providing a copy of the completed Evaluation of Change Register (EoCR) to East Sussex Highways Authority, no further action would been taken.

<sup>16</sup> See CEMP clause NV049

<sup>17</sup> See CEMP clause Nat195, Land051, Land052 and Land053

<sup>18</sup> See CEMP clause Mat024

<sup>19</sup> See CEMP clause NV045

<sup>20</sup> See CEMP clause Gen006 and Gen007

Approval of the EoCR is required before the proposed change shall be adopted where it has a material effect upon an environmental aspect.

## 3.5 Construction Compounds

- 3.5.1 In addition to the permanent land take for the proposed Project, some land is temporarily required to allow construction activities to take place.
- 3.5.2 A solid fence or hoarding to a height of at least 1.5m high will be provided around all working areas (including the compound) to provide a noise barrier and visual screening<sup>21</sup>.
- 3.5.3 Should the 2022 candidate compound site be selected, given proximity of the river and the storage of soils close to the northern boundary, there is a considerable risk that sediment could be washed into the river unless the site were provided with a robust interception drainage channel along the eastern boundary. A settlement pond would be required to remove sediment before discharge. The design of this important consideration would be agreed with the EA by the Delivery Partner<sup>22</sup>.
- 3.5.4 The Contractor, once appointed, will confirm details of any temporary land take.
- 3.5.5 Prior to development of the compounds the Delivery Partner will provide a Management Plan to East Sussex Highway Authority and SDNPA, dealing with the following:
  - Compound layout and appearance.
  - Vehicle parking.
  - Loading and unloading of plant and materials.
  - Storage of plant and materials used in constructing the development.
  - Erection and maintenance of security hoarding including decorative displays and facilities for public viewing, where appropriate.
  - Wheel washing facilities.
  - Control of dust and dirt during construction.
  - A scheme for recycling/disposing of waste resulting from demolition and construction works.
- 3.5.6 Where appropriate, topsoil would be removed and once soil was stabilised and drainage installed, levelling may be required. All existing material would stay on site with imported material required for hardstanding areas such as a car park, material compounds and office foundations.

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<sup>21</sup> See CEMP clause NV049

<sup>22</sup> See CEMP clause Wat022, Wat023, Wat038, Wat045, Wat059

## 3.6 Site Clearance

3.6.1 Prior to commencement of site clearance, the following actions are required:

- As there is a potential for nesting birds, all vegetation suitable for breeding birds would be removed as part of the vegetation clearance programme, outside of the normal bird breeding season (March - August). Where this cannot be achieved, then clearance would be undertaken following the prior checking for nests by the EcCoW<sup>23</sup>.
- No works shall commence until a pre-construction survey by a suitably qualified ecologist has been undertaken. Vegetation clearance shall be undertaken in accordance with the EcCoW instructions, as set out in a Vegetation Clearance Management Plan<sup>24</sup>.
- Site staff would be restricted from walking into the grazing marsh habitat adjacent to the works site<sup>25</sup>.
- Mandatory toolbox talks would inform staff of the importance of the site for ecological interest, and the need for compliance with the mitigation measures<sup>26</sup>.

## 3.7 Construction Lighting

- 3.7.1 Controls would be placed upon construction lighting<sup>27</sup> since the proposed Project is situated within a Dark Skies Area. Furthermore, poorly directed lighting can have an adverse effect upon local ecology, which is of concern as the SSSI status of the works site.
- 3.7.2 As works would normally cease at 16:30 construction lighting would only be required within the works site prior to dusk and for the safety of the workforce. The exceptions to this would be the night-time placement of the bridge girders over two nights.
- 3.7.3 Separately from the works site, the construction compound is anticipated to operate over longer hours than the works site during which time plant maintenance and possibly small-scale fabrication works may take place to minimise fabrication tasks within the works site. Consequently, illumination of the construction compound is anticipated to be a matter agreed between the Delivery Partner and the SDNPA. Nevertheless, the principles set out below would also apply.
- 3.7.4 To achieve the ecological and Dark Skies objectives the following controls would be placed upon construction lighting:

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<sup>23</sup> See CEMP clause Nat161

<sup>24</sup> See CEMP clause Nat032, Nat074, Nat075, Nat174

<sup>25</sup> See CEMP clause Nat173, Nat191

<sup>26</sup> See CEMP clause Nat041, Nat114, Nat145

<sup>27</sup> See CEMP clause Nat112, Nat194, Nat195

- All lighting to be orientated so that illumination of the river and SSSI beyond the works area is restricted to that which is necessary for workforce safety<sup>28</sup>.
- All work sites lighting to be extinguished before 07:00 and after 17:00 unless extensions are agreed with the SDNPA<sup>29</sup>.
- A Lighting Strategy is to be prepared and submitted to SDNPA for approval prior to the commencement of works<sup>30</sup>.
- The Environmental Manager is to undertake weekly inspection of the location and orientation of the construction lighting to address any inadvertent or temporary repositioning of the equipment to ensure the above objectives have been met<sup>31</sup>.

## 3.8 Bridge Construction

- 3.8.1 Should scaffold supports need to be located within Cuckmere River, then the relevant consents will be sought from EA and/or Marine Management Organisation (MMO) prior to installation. The consent application would be supported by a method statement to detail the Delivery Partner's preferred erection method<sup>32</sup>.
- 3.8.2 The way the bridge would be constructed is a consideration for the Delivery Partner, however the following principles are set out in the CEMP:
- Percussive piling would not be undertaken 1 hour prior to dusk or 16:30 whichever is the earliest<sup>33</sup>.
  - Bridge fabrication would take place on an area to the north of the proposed bridge.
  - Multiple cranes would be used rather than a single large crane to place the bridge elements.
  - Protective measures to avoid sediment and debris such as straw bales entering the river would be deployed<sup>34</sup>.
- 3.8.3 An area of approximately 0.026ha to the north of the bridge would be used as the location for the laying down of bridge girders. The girders would be placed onto wooden bearers rather than directly onto the ground to limit damage to the vegetation and reduce the risk of ground compaction<sup>35</sup>.

## 3.9 River Impoundment

- 3.9.1 Should a mobile water retention system not be capable of being deployed, then sheet piling would be used to construct a cofferdam from on the western

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<sup>28</sup> See CEMP clause Nat195

<sup>29</sup> See CEMP clause Land052

<sup>30</sup> See CEMP clause Land053

<sup>31</sup> See CEMP clause Land053

<sup>32</sup> See CEMP clause Wat081, Wat082

<sup>33</sup> See CEMP clause NV045

<sup>34</sup> See CEMP clause Wat022, Wat023, Wa038, Wat044, Wat060

<sup>35</sup> See CEMP clause Mat066

embankment. Either option would require the pumping out of water to a settlement area to remove the sediment prior to the return of the water to the river<sup>36</sup>.

3.9.2 To minimise the risk of disruption to migratory fish the following would be adopted:

- The use of a mobile water retention technique would be sequenced such that a minimum of 50% of the river channel would be available to migratory fish. The works would be undertaken sequentially rather than in parallel to minimise disturbance<sup>37</sup>.
- Removal / rescue of fish would take place from the water behind the mobile water retention technique prior to dewatering under the supervision of the EcCoW<sup>38</sup>.
- Construction lighting would direct lighting away from the river and drainage ditches<sup>39</sup>.

3.9.3 Additional management clauses applicable to the water environment are provided in **Section 7.8**.

## 3.10 Piling Works

3.10.1 Piling works have the potential to cause noise and vibration impacts on local residents. There is also a risk that piling could cause the transmission of vibration through the Cuckmere River thereby affecting migratory sea trout and European eel. Further there is a risk that disturbance to the groundwater regime and spread of contamination could occur unless a Piling Risk Assessment and the measures specified in Sections 7.4 – Ecological Management, Section 7.7 – Noise and Vibration Section 7.8 – Road Drainage and Water Environment are followed.

3.10.2 The bridge piles are anticipated to extend to the depth of the chalk bedrock due to the likely presence of soft alluvial soils, hence the pile depth would be approximately 26m.

3.10.3 A piling risk assessment would be undertaken by the Delivery Partner to establish the potential for the proposed piling works to impact the surrounding environment. This would focus upon the risk to groundwater in the underlying chalk principal aquifer and surface water in the adjacent Cuckmere River – by allowing contaminant migration to occur. The piling risk assessment would require approval by the EA and SDNPA prior to the start of the construction phase<sup>40</sup>.

3.10.4 Should the Delivery Partner elect to use a bentonite system then there would be risks to the groundwater and river water from leakages. The Delivery Partner would then be required to provide a risk assessment demonstrating the

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<sup>36</sup> See CEMP clause Wat081, Wat082

<sup>37</sup> See CEMP clause Nat121, Nat122, Nat123

<sup>38</sup> See CEMP clause Nat124

<sup>39</sup> See CEMP clause Land053, Land051

<sup>40</sup> See CEMP clause Wat065, Wat083

absence of an environmental effect to the satisfaction of the EA<sup>41</sup>. Daily visual checks of surface waters would be required during piling, to check for losses and any other impacts<sup>42</sup>.

- 3.10.5 Piling operations would be constrained to the periods agreed with the Local Environmental Health Officer with the indicative programme provided (refer to Table 3-3) to be revised by the Delivery Partner<sup>43</sup>.
- 3.10.6 The EA has requested that they are consulted on any form of piling for the bridge piers due to concerns over acoustic vibrations passing through the water to disorientate fish. Should the Delivery Partner elect to use percussion piling, the Agency may 'restrict the times when percussion/impact piling may take place to ensure there are no impacts during key migratory periods'.

**Table 3-3: Indicative Sequence of Piling Operations**

Works ID	Task	Start	Finish	Duration (days)
Con10010	East Abutment sheet pile	Nov 23	Nov 23	9
Con11900	East Abutment temporary sheet pile for east embankment	Nov 23	Nov 23	4
Con10710	East Abutment temporary sheet pile for support road for Continuous Flight Auger (CFA) piling	Nov 23	Nov 23	4
Con10050	East Abutment install CFA piles	Jan 24	Feb 24	15
Con10150	West Abutment sheet pile	Jan 24	Jan 24	9
Con10190	West Abutment install CFA piles	Feb 24	Mar 24	10
Con10870	South West Wing Wall sheet piling	Aug 24	Aug 24	5
Con11060	South West Wing Wall sheet piling	Jan 25	Jan 25	3
<b>Total</b>				<b>60</b>

- 3.10.7 European eel may migrate along the Cuckmere River from March to August. Sea trout may migrate from March to November, but most will arrive in the summer and early autumn (June to October) and wait in deep pools or in areas of the river with good overhead tree cover until it is time to spawn. They are hard to see during the day and tend to move at night.
- 3.10.8 It is assumed that a mobile water retention technique can be put in place and removed anytime outside this period as the river at this location is channelised and thus is an area where the sea trout would tend to pass through quickly rather than one where they would reside. This assumption would be checked with the EA by the Delivery Partner<sup>44</sup>.
- 3.10.9 As shown above, bored piling is conceived to take place for 10 days in July with another 10 day period in August/September. While the river in the immediate

<sup>41</sup> See CEMP clause Wat083

<sup>42</sup> See CEMP clause Wat084

<sup>43</sup> See CEMP clause NV054

<sup>44</sup> See CEMP clause Nat124

vicinity of the piling works does not provide tree cover, to reduce potential disturbance to migratory fish bored piling activities would cease at least 1 hour before dusk or 1630 whichever is the earliest<sup>45</sup>.

- 3.10.10 The Delivery Partner while developing the construction schedule would engage with the EA to confirm an acceptable approach to the installation of the bridge piers such that disturbance to the European eel and sea trout is minimised<sup>46</sup>.

## 3.11 Approach Embankments

- 3.11.1 The eastern approach to the bridge was assumed to require 55 bored piles to a depth of 25m which, if fully sleeved to avoid the use of bentonite, would be more expensive. The current design would replace the 55 piles with GEOfoam blocks to raise the embankment.
- 3.11.2 This GEOfoam solution would have the benefit of reducing carbon emissions and being capable of being locally sourced. The Delivery Partner would assess the environmental implications of changing from this approach to a provide a robust assessment demonstrating that the alternative approach performs in a manner that is not environmentally worse than the current design solution<sup>47</sup>.

## 3.12 Bridge Decommissioning

- 3.12.1 As part of bridge removal, it is envisaged that a 'crash deck' would be suspended from the existing bridge structure. The crash deck would be wide enough to capture materials that fall vertically from or to the side of the bridge<sup>48</sup>.
- 3.12.2 A crane would be used to remove large items from the deck and transfer directly to awaiting transportation for recycling/disposal. Smaller materials and dust would be manually swept so that it can also be transferred directly to the waste vehicles.
- 3.12.3 There is to be no sweeping of materials into the river and the ECoW shall be present during the works to ensure compliance with the Bridge Demolition Method Statement to protect the Cuckmere River<sup>49</sup>. Staff working on the demolition shall receive a toolbox talk on the Method Statement that would highlight the sensitivities of the river and the need avoid materials entering the river<sup>50</sup>.

## 3.13 Soil Management

- 3.13.1 Effective soil management is critical to the avoidance of adverse impacts upon the SSSI. The following aspects are dealt with in Section 7.9 – Materials and Waste:

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<sup>45</sup> See CEMP Clause NV045

<sup>46</sup> See CEMP Clause Nat122, Nat124

<sup>47</sup> See CEMP clause Mat069

<sup>48</sup> See CEMP clause Wat087

<sup>49</sup> See CEMP clause Wat087

<sup>50</sup> See CEMP clause Wat085, Wat086

- Soil Management Plan.
- Soil handling.
- Movement of soils.
- Soil storage.
- Soils from the SSSI.
- Soil re-instatement.

## 3.14 Construction Traffic

- 3.14.1 Construction traffic would usually be directed to the construction compound. The movement of vehicles between the construction compound and the works area would be required and is anticipated to necessitate temporary traffic light control of non-construction traffic movements.
- 3.14.2 A Construction Traffic Management Plan would be prepared by the Delivery Partner and submitted to the Highway Authority for approval. The Construction Traffic Management Plan would address the following:
- Safety of cyclists, pedestrians and horse-riders.
  - Parking of construction vehicles out with the construction compound.
  - Movement of staff and materials between the compound and works site.
  - Controls on Heavy Goods Vehicle (HGV) movements to and from the site.
  - Minimisation of congestion in Seaford.
  - Access of residents and business.
  - Minimisation of disruption to public transport and visitors<sup>51</sup>.
- 3.14.3 All deliveries would be confirmed 24 hours in advance of the intended delivery, when the Site Manager and Construction Team would confirm and acknowledge the requested delivery, scheduling time slots to avoid any site-based issues and any need for 'holding' of vehicles on local highways<sup>52</sup>.
- 3.14.4 All supply chain or merchant deliveries would be required to comply with the following specifications to allow control over multiple vehicle movements in peak periods<sup>53</sup>:
- No deliveries before 09:00.
  - No deliveries after 15.30.
- 3.14.5 Estimates of construction traffic and deliveries of materials have been based generated for assessment purposes. These would be confirmed by the appointed contractor. It has been estimated that:
- An average of 21 HGVs per day (i.e., 42 two-way movements).
  - HGV movements would be restricted to between 09.30 and 15.30 to avoid peak traffic hence approximately seven HGV movements per hour on average over the six-hour period<sup>54</sup>.

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<sup>51</sup> See CEMP clause Gen043

<sup>52</sup> See CEMP clause Gen044

<sup>53</sup> See CEMP clause Gen045

<sup>54</sup> See CEMP clause Com022

- No HGV movements on the local highway network during morning or evening peak hours.
  - No abnormal vehicles are expected on the local highways except for the cranes and piling rigs being delivered on site.
- 3.14.6 The route(s) to be used by construction vehicles to gain access to the construction compound and work site would be determined by agreement with ESCC and SDNPA prior to commencement of any works on the site<sup>55</sup>.
- 3.14.7 Bridge girders are expected to arrive on site via the M23, onto the A27 and A26 to join the A259 at Newhaven to approach the construction compound via Seaford from the west.

## 3.15 Road Closures, Diversions and Traffic Management

- 3.15.1 The A259 and Exceat Bridge would operate with single lane closures with contraflows controlled via a temporary traffic light system for most of the time. Nevertheless, as set out in Table 3-4 either full or directional closures are required for numerous occasions. This would result in diversions with traffic directed off the A259 at the junction with the A26 linking to the A27 and the A2270 towards Eastbourne. The Delivery Partner would confirm the diversion route with East Sussex Highway Authority<sup>56</sup>.
- 3.15.2 The Delivery Partner may organise normal vehicular access outside the working hours rather than adopt the assumed 24-hour closures.
- 3.15.3 There would be no restrictions on parking at the Seven Sisters Visitor Centre. Whilst the Cuckmere Inn would have restrictions in place for the duration of the works.

**Table 3-4: Indicative Sequence of Constraints to Vehicular Access**

Task	Constraint	Start	Finish	Duration (days)
Western approach verge widening	No 24-hour access from west	Oct 23	Jan 24	46
BT cabling and connection works	No 24-hour vehicular access	Dec 24	Jan 25	5
BT construction tie in east end	No 24-hour access from west	Dec 24	Dec 24	5
BT construction tie in west end	No 24-hour access from east	Dec 24	Dec 24	5
Electrical works	No 24-hour vehicular access	Jan 25	Jan 25	5
Phase 1 Traffic switch tie in	No 24-hour vehicular access	Jan 25	Jan 25	5
Phase 2 Traffic switch tie in	No 24-hour vehicular access	Aug 25	Aug 25	6
Bridge demolition	No 24-hour vehicular access	Jan 25	Feb 25	5
Finishing works to Cuckmere Inn access	No 24-hour vehicular access	Aug 25	Aug 25	6

<sup>55</sup> See CEMP clause Gen046

<sup>56</sup> See CEMP clause Gen047

Task	Constraint	Start	Finish	Duration (days)
<b>Total</b>				<b>88</b>

## 3.16 Road Drainage and Water Environment

- 3.16.1 As the Project is located over a river within a SSSI (the Cuckmere River), the watercourse is at risk from earthworks or drainage works having the potential to cause increased sediment loading. This requires all works to be undertaken in accordance with the EA's guidance and recommendations within the Flood Risk Assessment (FRA). Section 7.8 provides details of the measures to be taken to protect the water environment.

## 3.17 Consents and Permissions

- 3.17.1 Environmental consents are needed to be in place prior to commencement of the Project. A schedule of licences, consents and permissions as set out below shall be prepared by the Delivery Partner (see Table 3-5). Copies of licences and consents are to be presented within

3.17.2 Annex I - Register of Consent Requirements

- 3.17.3 Annex J - Licences, Consents & Permissions, while their requirements are to be outlined within the relevant RAMS.
- 3.17.4 Annex D3 – Ecological Management; Annex D7 – Water management and Annex D8 – Materials & Waste provides the location where the Delivery Partner sets out the measures associated with environmental licencing and consents.
- 3.17.5 Where licence applications require extensive habitat creation measures or ongoing monitoring or management, the Delivery Partner shall present these to the East Sussex Highway Authority PM for their consideration prior to licence application<sup>57</sup>.
- 3.17.6 Not all local authorities welcome a Section 61 application and hence discussion would take place by the Delivery Partner in advance of the start of works to determine whether an application is appropriate<sup>58</sup>.

**Table 3-5: Schedule for Licences, Consents and Permissions**

Topic	Need for Licence	Date Required	Commentary
SSSI Assent	Yes	Prior to start of works	<ul style="list-style-type: none"> <li>Suggest early discussions with Natural England to appreciate timescale to achieve the Assent.</li> </ul>
Great Crested Newts	No	N/A	<ul style="list-style-type: none"> <li>Precautionary method statement required.</li> </ul>
Hazel Dormouse	No	N/A	<ul style="list-style-type: none"> <li>No action.</li> </ul>
Bats	No	N/A	<ul style="list-style-type: none"> <li>Precautionary method statement required.</li> </ul>
Badger	No	N/A	<ul style="list-style-type: none"> <li>Pre-construction survey.</li> </ul>
Riparian Species (Otter/Water Vole)	No	N/A	<ul style="list-style-type: none"> <li>Precautionary method statement required.</li> </ul>
Flood Risk Activity Permits	Yes	Prior to Start of Works	<ul style="list-style-type: none"> <li>Suggest early discussions with EA to appreciate needs and timescales for consent.</li> </ul>
Surface Water Discharge Consents	Yes	Prior to Start of Works	<ul style="list-style-type: none"> <li>Suggest early discussions with EA to appreciate needs and timescales for consent.</li> </ul>
Trade Effluent Discharge Consents	<Y/N>	Prior to Start of Works	<ul style="list-style-type: none"> <li>Suggest early discussions with EA to appreciate needs and timescales for consent.</li> </ul>
Section 61 Agreements (Noise):	<Y/N>	Prior to Start of Works	<ul style="list-style-type: none"> <li>The Delivery Partner shall explore the need for a S61 with the Local Environmental Health Authority.</li> </ul>
Waste Exemptions	<Y/N>	Prior to Start of Works	<ul style="list-style-type: none"> <li>Delivery Partner to consider need for exceptions.</li> </ul>
WFD compliance assessment	No	Prior to Start of Works	<ul style="list-style-type: none"> <li>Compliance assessment undertaken but would need re-visiting should engineering solutions change.</li> </ul>

<sup>57</sup> See CEMP clause Gen003

<sup>58</sup> See CEMP clause NV029

Topic	Need for Licence	Date Required	Commentary
Other consents / permits / licences	<Y/N>	<insert date>	<ul style="list-style-type: none"> <li>Delivery Partner to consider need for other consents/permits/licences.</li> </ul>

## 3.18 Mitigation Measures

- 3.18.1 As required by DMRB LA 104 (paragraph 5.6.1), the EMP sets out the measures needed to manage the environmental effects of the Project within Chapter 7. Table 3-6 provides a high-level view of the measures that the Delivery Partner will need to address.

**Table 3-6: Mitigation Measures**

Topic	Within Scope	Commentary
<b>General</b>		
Disruption to access	Yes	<ul style="list-style-type: none"> <li>Delivery Partner to minimise disruption to users of the A259. (<b>Annex D2</b> to be provided by the Delivery Partner).</li> </ul>
Scheduling of works	Yes	<ul style="list-style-type: none"> <li>Works shall be scheduled to avoid adverse effects upon aquatic environment, the SSSI and local residents. (<b>Annex D2</b> to be provided by the Delivery Partner).</li> </ul>
Working hours	Yes	<ul style="list-style-type: none"> <li>Restrictions on working hours to protect amenity and ecological interests. (<b>Annex D2</b> to be provided by the Delivery Partner).</li> </ul>
Materials Selection	Yes	<ul style="list-style-type: none"> <li>The Delivery Partner to summarise key measures to reduce embedded carbon in construction materials. (<b>Annex D2</b> to be provided by Delivery Partner).</li> </ul>
Low carbon cement	Yes	<ul style="list-style-type: none"> <li>Delivery Partner to estimate quantity of low carbon cement as a percentage of total) carbon saving.</li> </ul>
Materials Transportation	Yes	<ul style="list-style-type: none"> <li>Delivery Partner to summarise key measures to reduce carbon in transport of materials. (<b>Annex D2</b> to be provided by Delivery Partner).</li> </ul>
<b>Ecological Management</b>		
Protected habitat	Yes	<ul style="list-style-type: none"> <li>Extensive measures required for the SSSI particularly for soil management - See <b>Section 7.4 – Ecological Management and Section 7.9 – Materials and Waste</b></li> </ul>
Badger <sup>59</sup>	Yes	<ul style="list-style-type: none"> <li>Pre-construction survey to confirm absence.</li> </ul>
Bats roosts and foraging	Yes	<ul style="list-style-type: none"> <li>Pre-construction survey to confirm absence.</li> <li>Scheduling of vegetation clearance of foraging areas to minimise disturbance.</li> </ul>
Great Crested Newts	Yes	<ul style="list-style-type: none"> <li>Two stage vegetation clearance.</li> </ul>
Hazel Dormouse	No	<ul style="list-style-type: none"> <li>No actions.</li> </ul>
Riparian species (Otter/Water Vole)	Yes	<ul style="list-style-type: none"> <li>Pre-construction survey for otter to confirm absence with subsequent checks for maternal holts being established.</li> <li>Pre-construction survey for water vole in drainage ditches to confirm absence.</li> </ul>

<sup>59</sup> Setts to be protected/moved within 30m of works.

Topic	Within Scope	Commentary
Reptiles	Yes	<ul style="list-style-type: none"> <li>Pre-construction survey to confirm absence.</li> </ul>
Fish	Yes	<ul style="list-style-type: none"> <li>Protection of migratory sea trout and European eel.</li> </ul>
Breeding birds	Yes	<ul style="list-style-type: none"> <li>Pre-vegetation clearance survey for nesting birds.</li> </ul>
Protected plant species	Yes	<ul style="list-style-type: none"> <li>Pre-construction survey.</li> <li>Translocation of protected species to area beyond works.</li> </ul>
Invasive species	Yes	<ul style="list-style-type: none"> <li>Pre-construction survey and protective measures should invasive species be found.</li> </ul>
Biodiversity Net Gain (BNG)	Yes	<ul style="list-style-type: none"> <li>Minimise loss of habitat.</li> <li>Should river impoundment works extend beyond 12 months then BNG to be re-calculated and losses compensated for.</li> </ul>
Habitat creation	Yes	<ul style="list-style-type: none"> <li>Creation of gaps and use of bat bricks to create new habitat.</li> <li>Artificial nest box designs would be targeted for specific species: lesser whitethroat, Cetti's warbler, dunnock and house sparrow.</li> </ul>
<b>Landscape</b>		
Landmark vegetation	Yes	<ul style="list-style-type: none"> <li>Vegetation to be of local species, with seed sown by green hay method source within a few hundred meters of the bridge. Native species tree and scrub planting to extend the scrub along the sides of the Causeway.</li> <li>A two-year maintenance period shall be provided for. (<b>Annex D4</b> to be provided by Delivery Partner).</li> </ul>
Construction lighting	Yes	<ul style="list-style-type: none"> <li>Lighting to be orientated to avoid illumination of River and drainage ditches.</li> <li>All work site lighting to be extinguished before 07:00 and after 17:00 unless extensions are agreed with the SDNPA. (<b>Annex D4</b> to be provided by Delivery Partner).</li> </ul>
Screening vegetation	Yes	<ul style="list-style-type: none"> <li>Tree and scrub planting on the north-west, north-east and south-east sides of the bridge to help screen the bridge structure and road traffic. (<b>Annex D4</b> to be provided by Delivery Partner).</li> </ul>
<b>Heritage</b>		
Construction compound	Yes	<ul style="list-style-type: none"> <li>Assess archaeological potential of selected construction compound. (<b>Annex D5</b> to be provided by Delivery Partner).</li> </ul>
<b>Noise &amp; Vibration</b>		
Temporary barrier removal	No	<ul style="list-style-type: none"> <li>Not applicable.</li> </ul>
Diversion routes	Yes	<ul style="list-style-type: none"> <li>Delivery Partner to minimise disruption to users of the A259. (<b>Annex D2</b> to be provided by the Delivery Partner).</li> </ul>
Piling operations	Yes	<ul style="list-style-type: none"> <li>Delivery Partner to summarise measures to reduce disturbance to human and ecological receptors. (<b>Annex D3, Annex D6 and Annex D7</b> to be provided by Delivery Partner).</li> </ul>
Retaining wall construction	Yes	<ul style="list-style-type: none"> <li>Adopt construction technique to minimise disturbance to local residents. (<b>Annex D6</b> to be provided by the Delivery Partner).</li> </ul>

Topic	Within Scope	Commentary
Construction plant	Yes	<ul style="list-style-type: none"> <li>Selection of plant to be 'sound reduced' models to respect the amenity considerations of the area.</li> </ul>
Vegetation clearance <sup>60</sup>	No	<ul style="list-style-type: none"> <li>Unlikely to be a source of noise disturbance.</li> </ul>
<b>Water</b>		
Priority outfalls	No	<ul style="list-style-type: none"> <li>No priority outfalls affected.</li> </ul>
Flood risk	Yes	<ul style="list-style-type: none"> <li>Works situated within flood risk zone3 hence construction materials shall not be stored in the floodplain. (<b>Annex D7</b> to be provided by the Delivery Partner).</li> </ul>
Soakaways	No	<ul style="list-style-type: none"> <li>None.</li> </ul>
Source protection zones (SPZ)	No	<ul style="list-style-type: none"> <li>SPZ located 1.4km to the east and 2km to north-west.</li> </ul>
Surface water	Yes	<ul style="list-style-type: none"> <li>Extensive measures required to prevent release of sediment and construction debris into the river. (<b>Annex D7</b> to be provided by the Delivery Partner).</li> </ul>
Groundwater	Yes	<ul style="list-style-type: none"> <li>Pre-construction survey of groundwater properties.</li> </ul>
<b>Materials &amp; Waste</b>		
Secondary resource use	Yes	<ul style="list-style-type: none"> <li>Delivery Partner to advise on secondary resources to be used. (<b>Annex D8</b> to be provided by Delivery Partner).</li> </ul>
Soil survey	Yes	<ul style="list-style-type: none"> <li>Pre-construction soil survey to inform soil management practices and site restoration.</li> </ul>
Soil management	Yes	<ul style="list-style-type: none"> <li>Extensive requirements on the removal, transport, storage and replacement of soils. (<b>Annex D8</b> to be provided by the Delivery Partner).</li> </ul>
Unexploded ordnance (UXO)	Yes	<ul style="list-style-type: none"> <li>Pre-construction survey for UXO.</li> </ul>
Contamination	Yes	<ul style="list-style-type: none"> <li>Prepare an unexpected contamination plan.</li> </ul>
Community use of surplus	Yes	<ul style="list-style-type: none"> <li>Delivery Partner to summarise potential community use of surplus material otherwise intended for landfill. (<b>Annex D8</b> to be provided by Delivery Partner).</li> </ul>
Waste minimisation	Yes	<ul style="list-style-type: none"> <li>Delivery Partner to provide waste minimisation target. (<b>Annex D8</b> to be provided by Delivery Partner).</li> </ul>
<b>Population, Health and Local Economy</b>		
Local economy	Yes	<ul style="list-style-type: none"> <li>Minimise disruption to businesses.</li> </ul>
Stakeholder Engagement	Yes	<ul style="list-style-type: none"> <li>Preparation of a Stakeholder Communication and Engagement Plan.</li> <li>Regular notification of progress to residents during the construction works. (<b>Annex D9</b> to be provided by the Delivery Partner).</li> </ul>
Traffic disruption	Yes	<ul style="list-style-type: none"> <li>Discussions prior to construction to minimise impact of constraints on vehicular access and construction noise. (<b>Annex D9</b> to be provided by the Delivery Partner).</li> </ul>
Disruption to Public Rights of Way (PRoW)	Yes	<ul style="list-style-type: none"> <li>Advanced notice to users of Vanguard Way, the Coastal Path and National Cycle Route 2.</li> </ul>

<sup>60</sup> Estimate based upon number of dwellings within 100m.

Topic	Within Scope	Commentary
HGV traffic	Yes	<ul style="list-style-type: none"> <li>• Restrictions on HGV site deliveries to minimise congestion in Seaford.</li> </ul>
<b>Air Quality</b>		
Dust suppression	Yes	<ul style="list-style-type: none"> <li>• Adopt measures to reduce fugitive dust while preventing sediment laden runoff entering the watercourse. (<b>Annex D10</b> to be provided by the Delivery Partner).</li> </ul>

## 3.19 Site Documentation

3.19.1 Copies of the following documents would be held on site:

- Planning consent conditions where applicable.
- CEMP.
- Traffic Management Plan and construction routing documents'
- Sustainable Travel Plan.
- Licences, consents and permits.
- Stakeholder Engagement and Communications Plan.
- Communications register.
- Pollution spillage response plans and site emergency procedures.
- Monitoring records.
- Staff training records.

## 4. SCHEME ROLES AND RESPONSIBILITIES

### 4.1 The Delivery Team

- 4.1.1 Construction of the Project for East Sussex Highway Authority would be delivered by the Delivery Partner as Principal Contractor being the Principal Designer, as defined under the Construction (Design and Management) Regulations 2015 (CDM 2015).
- 4.1.2 As Principal Contractor, the Delivery Partner is responsible for all activities on site and for ensuring that any delegated consultants acting on their behalf, abide by their responsibilities to comply with the Project's environmental policies, relevant environmental legislation, regulations and the CEMP.
- 4.1.3 To ensure that environmental standards are maintained throughout the works, the Delivery Partner shall ensure every person working is aware of their role and responsibilities insofar as the specific environmental risks they are to encounter. The Delivery Partner shall deliver an ISO 14001 compliant Environmental Management System with supporting training and resources.
- 4.1.4 The Delivery Partner shall delegate responsibilities to personnel including sub-contractors within key areas of the construction site and compounds. All of whom are bound to the requirements set out within this CEMP through the HASEMP. The delegation of responsibility shall be clearly identified within relevant documents and site files. To do this all persons on site shall be made aware of their duty of care to the environment and shall be provided with training, supervision or instruction through site inductions, toolbox talks and specific method statements as necessary.
- 4.1.5 The Delivery Partner shall detail the organisations and contacts that it has appointed within an organogram.
- 4.1.6 All site personnel shall have the responsibility and authority to halt works in any activity where environmental commitments are not being successfully delivered or where legal requirements are at risk of being breached.

### 4.2 Organisations Involved in Delivery

- 4.2.1 Reflecting upon sensitive nature of the works site, the Delivery Partner would be responsible for appointing specialists to specific surveys in advance of vegetation clearance and soil stripping. The specialists shall be named by the Delivery Partner for the following surveys:
  - Water levels and flows.
  - Water quality.
  - Pre-construction botanical survey.
  - Pre-construction surveys for Water Vole, GCN and reptiles.
  - Pre-construction breeding bird survey.
  - Invasive species pre-construction survey.
  - Soil resource survey.
  - UXO Detailed Risk and Threat Assessment.

## 4.3 Competency

### 4.3.1

**Table 4-1** sets out the competent named individuals responsible for coordinating, responding to and managing the delivery of the approach to sustainable development. Evidence of competence comprising the following shall be provided in Error! Reference source not found.:

- Experience of sustainable development and design.
- Membership of a relevant professional body.
- Evidence of continuing professional development or relevant qualifications.

**Table 4-1: Environmental Team Roles and Responsibilities**

Activity	Responsible Person	Names Persons
Ensuring resources are available to carry out environmental responsibilities	Contractor's Project Manager	<DP to provide>
Ensuring measures detailed in the CEMP are carried out	Contractor's Project Manager	
Producing CEMP	Contractor's Environmental Manager	
Reviewing CEMP	Contractor's Construction Manager/SHE Manager	
Carrying out Environmental Induction Training on site	Contractor's Site Supervisor	
Ensuring that all environmental standards and commitments are adhered to	Contractor's Environmental Manager	
Carrying out site specific environmental training	Contractor's Environmental Manager	
Carrying out monthly Site Environmental Inspections	Contractor's Environmental Manager	
Carrying out Quarterly/Biannual Environmental Audits	Contractor's Environmental Manager	
Carrying out Waste Management Duties on Site	Contractor's Site Waste Representative	
Carrying out regular site environmental checks e.g., spills/leaks, housekeeping, material storage	Environmental Manager	
Ensuring Risk Assessments/Method Statements (RAMS) consider environmental aspects and risks on site	Contractor's Construction Manager/Site Agent	
Review/Provide environmental input to RAMS	Contractor's Environmental Manager	
Identifying requirements for/ input into/coordinating specific environmental RAMS for the works	Contractor's Environmental Manager	
Producing specific environmental RAMS e.g., ecology, archaeology etc.	Contractor's Environment Team Specialists	

Activity	Responsible Person	Names Persons
Ensuring instructions from the Client are implemented	Contractor's Project Manager	
Carrying out Emergency Procedures	Contractor's Project Manager	
Investigating Environmental Incidents	Contractor's Environmental Manager	
Liaison with the EA	Contractor's Environmental Manager	
Liaison with other interested Parties/Statutory Bodies	Contractor's Environmental Manager	

## 4.4 East Sussex Highway Authority's Project Manager

4.4.1 East Sussex Highway Authority's Project Manager (PM) has overall responsibility for monitoring the performance of the proposed Project against statutory requirements and the agreed objectives recorded in the ES Addendum and this CEMP. The duties associated with this role include, but are not limited to, the following:

- Supporting the Delivery Partner's Environmental Advisor in preparing the CEMP, construction method statements, work instructions and other procedures.
- Reviewing and approving the final CEMP and identifying the need for any improvements based upon the advice of an Environmental Advisor.
- Reviewing and approving construction method statements with regards to environmental aspects prior to works commencing.
- The Project Manager shall need to have completed the Site Management Safety Training Scheme.
- Providing advice and liaising with construction teams to ensure that environmental risks are identified, and appropriate controls developed on site.
- Monitoring implementation of the CEMP throughout the construction of the proposed Project and notifying East Sussex Highway Authority of any major environmental incident.

## 4.5 Delivery Partner Project Manager<sup>61</sup>

4.5.1 The Delivery Partner PM will have responsibility for coordinating and managing all the activities during the construction works. The duties associated with this role include, but are not limited to, the following:

- Overall responsibility for management of environmental matters.
- Allocation of sufficient resources to deliver the CEMP.
- Ensure that all required consents/licenses are in place prior to work commencing on site.

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<sup>61</sup> Delivery Partner to edit roles for their organisation and edit/move responsibilities as necessary.

- Main point of contact with the design team, regulatory bodies and key stakeholders.
- Support and approve the CEMP construction method statements, work instructions and other procedures prior to construction commencing and ensure that all controls specified within this CEMP are implemented by employees and sub-contractors.
- Approval and review of the Site Waste Management Plan<sup>62</sup> ('SWMP').
- Review and approval of direct and sub-contract documentation (including Work Package Plans/Method Statements, Risk Assessments etc.);
- Deliver the sustainability objectives such as those dealing with energy use, waste, recycled material etc.
- Ensure environmental and waste requirements are included on requisitions and in subcontracts and orders.
- Ensure employees and sub-contractors receive Induction Training (including environmental) and toolbox talks, as appropriate.
- Undertake inspections alongside the Delivery Partner's Environmental Manager to ensure that the environmental controls as set out within the CEMP are in place and working effectively.
- Verify actions resulting from non-compliances and observations raised during audits are completed by the deadlines set.
- Resolution of findings from functional audits and/or reviews.
- Notifying East Sussex Highway Authority and the relevant regulatory authority of any major environmental incident, environmental complaints or failure to deliver against the CEMP.
- Ensure that residents are not subject to elevated levels of night-time disturbance and that measures have been taken to minimise annoyance.
- Identify and promote measures intended to deliver the Government's sustainable development objectives.
- Provide an initial point of contact for members of the public/local community who have queries regarding the works.
- Ensure all records are retained and readily available on site with the timely provision of evidence of delivery of Red and Amber risk environmental clauses.
- Production of monthly reports on environmental performance and compliance.
- Chairing of monthly site Safety, Health and Environment meeting(s) (SHE).

#### 4.5.2 The Project Manager shall be responsible in providing an environmental management system that delivers:

- Real time notification of "live" environmental constraints to construction staff.
- Evidence of compliance with environmental clauses.

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<sup>62</sup> SWMP are no longer a legal requirement following the repeal of The Site Waste Management Plans Regulations 2008, but their use is still considered to be best practice across the construction industry.

- Dynamic reporting of the completion of environmental clauses.
- Electronic incident reporting systems.
- Engagement with residents in response to construction noise and vibration.

## 4.6 Construction Manager<sup>63</sup>

### 4.6.1 The Construction Manager shall be responsible for:

- The management of the construction of the Project.
- Responsibility for the environmental performance of the Project and all staff.
- Providing information on contract requirements to the Environmental Advisor following contract award and prior to start of works on site.
- Verifying actions resulting from non-compliances and observations raised during audits are completed by the deadlines set.
- Approval of the CEMP prior to construction and any subsequent updates.
- Ensuring environmental and waste requirements are included on requisitions and in subcontracts and orders.
- Ensuring that all required consents/licenses are in place prior to work commencing on site.
- Ensuring that the East Sussex Highway Authority PM is informed of all environmental complaints and proposed mitigatory actions.
- Managing and monitoring of incidents and non-compliances. Report incidents and non-compliances to the East Sussex Highways Authority PM as per the internal management systems.
- Ensuring all records are retained and readily available on-site.
- Providing an initial point of contact for members of the public/local community who have queries regarding the Works.
- Ensuring employees and sub-contractors receive induction training (including environmental) and toolbox talks, as appropriate.
- Undertaking inspections alongside the Environmental Manager to ensure that the environmental controls as set out within the CEMP are in place and working effectively.
- Implementing the Site Waste Management Plan ('SWMP') throughout the construction of the Project and to ensure that waste is disposed of in line with all relevant legislation, the SWMP, safely and economically.
- Reviewing and updating the Evaluation of Change Register and obtaining consent for the change prior to works commencing.

## 4.7 Managerial and Supervisory Staff

### 4.7.1 Managerial and supervisory staff shall be responsible for:

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<sup>63</sup> Insert appropriate title or and delete responsibilities as appropriate.

- Ensuring that environmental management measures are implemented during all phases of construction and activities take place in accordance with the environment management system.
- Undertaking inductions and briefings.
- Promoting site environmental initiatives.
- Reporting accident, incidents, near misses, corrective actions and unsafe conditions.
- Incorporation of environmental issues and management into day-to-day construction works.
- Management of specialists on site.
- Preparation of Consents, Licenses and Exemptions, following all necessary consultation with environmental team and specialists.
- Review of Scheme Risk Register.
- Co-ordination of environmental compliance monitoring.
- Co-ordination and management of the site files.
- Managing logistics including material handling, communications, transport, plant and equipment.
- Managing production of 'As Built' records.
- Obtaining design information from sub-contractors.
- Reviewing sub-contractor and supplier documentation.

## 4.8 Site Staff (including sub-contractors)

### 4.8.1 Site staff shall be responsible for:

- Only undertaking tasks such as refuelling plants and equipment, managing the stores, water quality monitoring and supervising the segregation and collection of waste if suitably trained and assigned responsibility.
- Acting in accordance with all environmental awareness training provided and undertaking work in accordance with all works Method Statements and toolbox talks.
- Organising work to be carried out to the required standard with minimum risk to the environment. All site personnel shall receive instructions on their responsibilities to ensure correct environmental practice in line with the CEMP.
- Reporting all environmental incidents immediately to the direct supervision and initiating emergency procedures when necessary.
- Complying with all the relevant legal requirements, commitments and targets agreed for the Project.
- Providing information relevant to construction that may assist the Environmental Manager to manage environmental aspects of the Project.

## 4.9 Environmental Manager

### 4.9.1 The Delivery Partner Environmental Manager will have responsibility for co-ordinating and managing all the environmental activities during the construction

works including developing and updating the CEMP with the Delivery Partner's PM. The duties associated with this role include, but are not limited to, the following:

- Assisting in the preparation and implementation of environmental permits, licences and consents as required.
- Developing the CEMP with the Delivery Partner's PM, construction method statements, work instructions and other specialist procedures.
- Approval of Method Statements and any changes to the CEMP in consultation with East Sussex Highway Authority's PM, and appropriate statutory bodies.
- Maintaining and updating the CEMP at regular intervals and following any changes to the design or nature of the Project.
- Co-ordination of all environmental documentation.
- Ensuring provision of training, toolbox talks and environmental content for inductions to all staff involved in the Project.
- Ensuring that all environmental aspects of the Project are undertaken in compliance with all environmental legislation, consents, objectives, targets and other environmental commitments.
- Monitoring construction activities to ensure that identified and appropriate control measures are effective and ensuring compliance with the CEMP.
- Proposing measures to further the Government's sustainable development objectives.
- Co-ordination of all the environmental aspects of the work and environmental documentation for the duration of the contract.
- Acting as the main point of contact between the regulatory authorities and the proposed Project on environmental issues.
- Providing appropriate professional and practical advice to sub-contractors, consultants and team members associated with environmental and ecological issues and, where appropriate, resolving issues in a practical and efficient way.
- Ensuring that all environmental incidents are reported and investigated fully.
- Undertaking weekly inspections and producing inspection reports.
- Liaising with the environmental specialists to achieve the objectives of the CEMP.
- Ensuring that environmental quality standards are adhered to throughout construction.
- Monitoring and consultation regarding environmental training.
- Ensuring an appropriate inspection regime is undertaken, and subsequent reports are completed, communicated and closed out as per the Delivery Partner's internal management systems.
- Managing environmental audits, either internal or external.
- Monitoring works including the sub-contractors for compliance against Environmental Management Plans and Method Statement control measures.
- Attending SHE meetings.

- Advising East Sussex Highway Authority's PM on the implementation of the environmental management system.

## 4.10 Ecological Clerk of Works

- 4.10.1 Given the ecological sensitivity of the site, an EcCoW would be appointed with responsibility for:
- Reviewing and agreeing areas of vegetation clearance prior to commencement and supervision of works.
  - Providing technical oversight and be on-hand to resolve any ecological queries.
  - Advising on ecological issues during the design development and prepare any required drawings, Method Statements and reports.
  - Advising on seasonal constraints upon the work programme imposed by species' life cycles, stages in breeding, nesting, hibernation or any other stage of vulnerability.
  - Overseeing the implementation, maintenance and monitoring of the ecological design proposals.
  - Advising on the licensing requirements of Statutory Bodies for all works affecting protected habitat and species.
  - Monitoring and assessing the works in its ecological context.
  - Advising construction personnel on the implementation of ecological mitigation measures contained in the CEMP.
  - Attending site to provide ecological watching briefs and surveys as required.
- 4.10.2 Reflecting upon the unique ecological challenges faced by works within the SSSI, an EcCoW would be appointed with expertise in botanical and aquatic expertise. The CV for the individual shall be presented in **Annex L**.

## 4.11 Specialist Environmental Staff

- 4.11.1 The Delivery Partner often is expected to call upon the following specialist environmental skills<sup>64</sup>:
- **Principal Landscape Architect:** A specialist landscape architect is only required should the Environmental Manager not be able to ensure that retained trees are properly protected during the works and that changes in delivery don't have an adverse impact.
  - **Acoustician:** There is no requirement for an acoustician to be appointed to supervise construction activities generating high levels of noise and vibration.
  - **Arboriculturist:** Not required.

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<sup>64</sup> The senior environmental staff need have appropriate academic qualifications as well as at least 5 years site-based experience.

- **Archaeological Works Supervisor:**<sup>65</sup> Responsible for ensuring that archaeological evaluation of the site, all necessary archaeological surveys, including watching briefs for subsoil and topsoil strip, are undertaken, as appropriate.
- 4.11.2 The Delivery Partner is expected to provide appropriate notice of their duties to the specialist staff such that either their safety or achievement of the REAC is not compromised.
- 4.11.3 The Delivery Partner is encouraged to consider the use of remote visual inspection and electronic management regimes to provide effective use of such specialist staff.

## 4.12 Stakeholder Liaison Officer<sup>66</sup>

- 4.12.1 The Stakeholder liaison officer would be responsible for:
- Communicating with the public and interested parties, outreach and education, where appropriate.
  - Responding to any concerns or complaints raised by the public in relation to the Project.
  - Liaising with the construction team on landowner and community concerns relating to the Project.
  - Ensuring that the East Sussex Highways Authority PM is informed of any complaints relating to the environment.
  - Keeping the public informed of scheme progress and any construction activities that may cause inconvenience.

## 4.13 Supplier Project Information Manager<sup>67</sup>

- 4.13.1 Responsible for the delivery of environmental survey results including:
- Compiling and uploading of relevant environmental data to the East Sussex Highways Authority.
  - Collation of up-to-date records for future environmental maintenance of the Project.

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<sup>65</sup> Delivery Partner to provide reason if role not required.

<sup>66</sup> Delivery Partner to provide reason if role not required.

<sup>67</sup> Delivery Partner to provide reason if role not required.

## 5. ENVIRONMENTAL ACTIONS AND COMMITMENTS

### 5.1 Introduction

5.1.1 This Chapter documents the environmental management requirements within the Register of Environmental Actions and Commitments (REAC).

### 5.2 Register of Environmental Actions and Commitments

5.2.1 The REAC is an essential element of the Project delivery process as it defines the elements necessary for the Delivery Partner to provide a scheme in conformity with the “consented” scheme.

5.2.2 **Annex A – Register of Environmental Actions and Commitments**, provides the REAC prepared to support the Planning Application (**Annex A1**). Should the Delivery Partner or East Sussex Highways Authority elect to undertake site works in advance of the Main Works then a separate CEMP and REAC would be prepared and recorded in **Annex A2**. The Main Works CEMP is to be presented by the Delivery Partner in **Annex A3**.

5.2.3 The REAC specifies the environmental risks associated with the Project. For each environmental risk, an environmental management measure (referred to as a ‘clause’) has been selected to avoid or mitigate those risks. An objective or implementation outcome is provided along with the monitoring and inspections that are required. The REAC also identifies the role within the Delivery Partner organisation that the specific action resides as well as the delivery phase within which the action is to be closed out.

5.2.4 The table below provides a definition of the terms used in the REAC as required by DMRB LA 120.

**Table 5-1: REAC Terminology**

Field	Explanation
Activity/Action Category	<ul style="list-style-type: none"><li>The actions and commitments are grouped according to individual environmental themes, such as a protected species, flood risk, pollution control</li></ul>
Aspect	<ul style="list-style-type: none"><li>The environmental aspect for which an action or management measure is required such as soil storage, retaining works, etc.</li></ul>
Location	<ul style="list-style-type: none"><li>The area in which specific environmental actions or management measures are to be implemented, such as scheme-wide, western embankment, construction compound site etc.</li></ul>
Pre-Mitigation Risk	<ul style="list-style-type: none"><li>An assessment of the risk based upon severity and likelihood are assigned pre-mitigation to provide a RAG rating for each environmental aspect.</li></ul>
Clause ID	<ul style="list-style-type: none"><li>A unique identifier defined within the REAC to enable simple reference to individual environmental actions or measures grouped by theme.</li></ul>
Objective	<ul style="list-style-type: none"><li>A statement as to the desired outcome that the actions and management measures seek to achieve.</li></ul>
Action Required	<ul style="list-style-type: none"><li>The action that is required is presented in headline terms.</li></ul>

Field	Explanation
Post-Mitigation Risk	<ul style="list-style-type: none"> <li>An assessment of the risk based upon severity and likelihood are assigned following mitigation to provide a RAG rating for each environmental aspect.</li> </ul>
Mitigation and Inspections	<ul style="list-style-type: none"> <li>Summary of the monitoring, checking/inspections to be undertaken to ensure implementation of the environmental action or management measure to achieve the desired objective and post-mitigation RAG rating.</li> </ul>
Corporate owner	<ul style="list-style-type: none"> <li>The person (role) or body responsible for delivery of the action is presented.</li> </ul>
Delivery Phase	<ul style="list-style-type: none"> <li>The phase during which the action is to be implemented.</li> </ul>
Assumptions	<ul style="list-style-type: none"> <li>A series of assumptions that underpin the REAC are presented by reference to an assumption identifier. The assumptions are presented in <b>Annex A5</b>.</li> </ul>

- 5.2.5 To ensure that the REAC remains usable, other aspects of the DMRB LA 120 reporting requirements are set out via CEMP Control Plans. Such Control Plans are prepared for environmental clauses that are grouped around various activities. They are set out in a manner that aid activity-based communication to others in the supply chain and to the site crews during toolbox talks.
- 5.2.6 The Control Plans are to be prepared by the Delivery Partner and presented in **Annex D** grouped according to the various activities. For example as illustrated in **Table 5-2** below, this Plan dealing with Designated Sites would be located in **Annex D3.2**.
- 5.2.7 It should be noted that the layout of the Control Plans are generic to be applied to all highway schemes at either the enabling or advanced works stage or in support of the main works CEMP.
- 5.2.8 The key risks presented in the REAC should be reported in the Project's Risk Register by the Delivery Partner

**Table 5-2: Indicative Layout of CEMP Control Plan**

Annex D3	Table D3.2: Ecological Management - Designated sites
Reporting Level	<Select highest reporting level and colour based upon CEMP clause list>
Works Operations	Geotechnical investigations - soft estate Aquifer survey/monitoring Site compound(s) Site clearance - Habitat removal Earthworks Cross carriageway ducting Electrical interfaces Works to structures Hard shoulder repairs - deep construction Drainage works
Facilities, Vehicles and Plant	<High level recognition of facilities, vehicles and plant that are relevant to works, impacts and clauses.>
CEMP Requirements	
Nat011	Where works are likely to damage the condition or special features of a SSSI, then advice shall be sought from Natural England and evidence of an assent shall be provided. A method statement demonstrating how the works shall be delivered in compliance with the assent conditions shall be provided to East Sussex Highways Authority PM prior to the commencement of works.
Nat012	Works in or adjacent to a SSSI shall be demonstrated to the East Sussex Highways Authority Environmental Advisor as being designed so as to minimise direct or indirect habitat loss supported by measures being to offset such losses.

Nat014	Where it is intended to adopt a construction or recovery compound that is not a candidate construction compound and not subject to a planning application, then such sites shall be screened for direct and/or indirect effects and submitted for approval by East Sussex Highways Authority before a decision is taken to proceed with the site.					
Nat013	Habitats and vegetation in areas of high ecological sensitivity to be retained shall be appropriately fenced off from construction activities under Ecological Clerk of Works (EcCoW) or Environmental Manager's supervision.					
<b>Environmental Management Measures</b>						
<ul style="list-style-type: none"> <li>• &lt;insert proposed mitigation response/methods to meet the above requirements&gt;</li> <li>•</li> </ul>						
Applicable Corporate Management Plans	Corporate Reference	Date Issued	Within Annex C			
None						
Applicable Risk Assessment & Management Statement (RAMS)	Corporate Reference	Date Issued	Ownership			
			<Individual responsible>			
Assumptions, Uncertainties and Risks to Delivery	Location(s)	Ownership				
<Insert risks to achievement of environmental objectives>			<Individual responsible>			
Communications	Ownership					
<State who (role) is to be made aware of the requirement, measures and risks etc and how – internal and external communications. Refer to Chapter 11 where generic using this entry for any communications needs specific to these clauses>			<Individual responsible>			
Stakeholder Engagement	Ownership					
High	<Note Not applicable/ location and number of receptors within 50m and 200m>		<Individual responsible>			
Normal	<Note Not applicable/ location and number of receptors within 50m and 200m>					
Environmental Monitoring and Inspections	Ownership					
Check that East Sussex Highways Authority PM views are received prior to commencement of works potentially affecting a SSSI.			<Individual responsible>			
Check measures to protect SSSI's are delivering protection.						
Check environmental screening is in place for construction compounds not subject to a planning application or assessed as a candidate construction compound.						
Check vegetation to be retained has been protected.						
Mitigation and Change Management	Ownership					
<State what difficulties have arisen by date>			<Individual responsible>			
<Section 10.5> sets out how mitigation and change management will be addressed.						

Achievement Criteria		Achievement Date
Nat011	Avoidance of adverse effects upon a SSSI that have not been subject to an assent.	<insert target date>
Nat012	Assented impacts to be the minimum achievable impact upon a SSSI.	<insert target date>
Nat014	Avoidance of direct or indirect effects upon SSSI from the location of candidate construction compounds.	<insert target date>
Nat013	Avoidance of encroachment into designated sites.	N/A
Client Reporting		Close Out Date
The following shall be provided to the client's PM on request: <insert text> <insert text>		<March 2022>
Additional Documentation and Drawings		
<include hypertext links where possible>		

5.2.9

**Table 5-3** below provides an explanation of the various fields comprising the Control Plan illustrated above.

**Table 5-3: Control Plan Terminology**

Field	Explanation
Reporting level	<ul style="list-style-type: none"> <li>Reporting level represents the level of reporting that the Delivery Partner is to provide to the client. A Red reporting level represents those situations where the environmental clause carries a mandatory reporting requirement. In the case of Amber and Green reporting levels, the Delivery Partner is required to retain evidence since the client may request information associated with implementation of the environmental clause. Where the environmental risk is perceived to be elevated, then the client may elect to adopt a high sampling rate of clauses to evidence compliance with the CEMP. A Green reporting level indicates a low sampling rate can be anticipated as the environmental risk is considered to be low.</li> <li>Reporting levels are set independently of the pre-mitigation RAG rating and are illustrated by the colour coding of the clause ID within the Control Plan.</li> <li>The Delivery Partner is to select the reporting level based upon the highest level of reporting assigned to environmental clauses that are applicable to the task.</li> </ul>
Works Operations	<ul style="list-style-type: none"> <li>A summary of the works operations that interact with the environmental aspect are to be recorded by the Delivery Partner.</li> </ul>
Facilities, Vehicles and Plant	<ul style="list-style-type: none"> <li>This section provides for recognition of the principal sources of interaction with the environmental aspect in terms of whether it for example represents a construction compound, HGV or earth moving equipment, compressors or piling rigs etc.</li> </ul>
CEMP (OEMP) requirements	<ul style="list-style-type: none"> <li>This section sets out the environmental clauses that are applicable to address the interaction between the works operations, facilities, vehicles and plant with the environmental attributes of the site.</li> <li>OEMP stands for Outline Environmental Management Plan a document that is typically submitted in support of an application for consent. However, for this scheme a CEMP has been requested to support consideration of the planning application.</li> </ul>

Field	Explanation
Environmental clauses	<ul style="list-style-type: none"> <li>The environmental clauses applicable to each activity are set out within Chapter 7 where each environmental management theme is supported by a table recording the environmental topic, the aspect, pre-mitigation risk, reporting levels and the title of the Control Plan to be provided by the Delivery Partner.</li> <li>A full description of the environmental action or management measure is presented to provide added detail to that within the REAC.</li> <li>The Delivery Partner is provided with a full description of the environmental clauses in <b>Annex A6 to Annex A14</b>.</li> </ul>
Environmental Management Measures	<ul style="list-style-type: none"> <li>This section provides for the Delivery Partner to present in summary their proposed environmental management actions and measures response to the environmental management clauses set out for the Project.</li> </ul>
Available Corporate Management Plans	<ul style="list-style-type: none"> <li>As most Delivery Partners will be registered to ISO 14001, so they will have corporate environmental management plans in place. Although these are not specific to the Project, nevertheless, they do provide high level policy and support for actions that may be applicable to the Project.</li> <li>The Delivery Partner is expected to list relevant Corporate Management Plans to include their reference ID, the date it was issued and to confirm whether the relevant section or management clause is documented within <b>Annex C</b> of the CEMP.</li> </ul>
Applicable RAMS	<ul style="list-style-type: none"> <li>The Delivery Partner is to provide a list of Risk Assessment and Management Statements (RAMS) that are applicable to the Project along with the reference ID, issue date.</li> <li>Each RAMS may be standard or bespoke to the Project.</li> <li>The title of the Delivery Partner owner of the RAMS for the environmental clauses applicable to the works activities is to be provided.</li> </ul>
Assumptions, Uncertainties and Risks to Delivery	<ul style="list-style-type: none"> <li>The REAC identifies a preliminary set of assumptions which are then presented in <b>Annex A5</b>.</li> <li>It is anticipated that the Delivery Partner would be aware of other assumptions, risks and uncertainties that could affect the likelihood of successfully achieving the desired outcome specified in the REAC.</li> <li>The Delivery Partner is to provide key assumptions, uncertainties and risks along with whether there are specific locations where they are applicable within the Control Plans. Frequently, this would be scheme-wide, but also specific locations may be evident such as works within the river.</li> <li>The Delivery Partner owner of the risks is to be recorded.</li> </ul>
Communications	<ul style="list-style-type: none"> <li>This section provides for the Delivery Partner to summarise the specific internal and external communications that are required to secure the successful achievement of the REAC objective.</li> <li>Reference is to be made to <b>Chapter 11</b> to avoid this section becoming repetitious.</li> </ul>

Field	Explanation
Stakeholder Engagement	<ul style="list-style-type: none"> <li>Two levels of stakeholder engagement are to be provided by the Delivery Partner as is applicable to the environmental aspect.</li> <li>A high level of stakeholder engagement is anticipated for particularly sensitive environmental aspects, such as works affecting the Cuckmere River or the wider SSSI.</li> <li>A normal level of stakeholder engagement would reflect the general communications that the Delivery Partner would propose to undertake to the wider community on matters to deal with the environmental aspect.</li> <li>Reference can be made to <b>Chapter 11</b> to avoid this section becoming repetitious.</li> <li>The Delivery Partner owner of stakeholder engagement is to be recorded.</li> </ul>
Environmental Monitoring and Inspections	<ul style="list-style-type: none"> <li>The environmental monitoring and inspection requirements that accompany each environmental clause are to be presented by the Delivery Partner as taken from the REAC and the list of clauses presented in <b>Annex A6 to Annex A14</b>.</li> <li>The Delivery Partner owner of monitoring and inspections is to be recorded.</li> </ul>
Achievement Criteria	<ul style="list-style-type: none"> <li>The achievement criteria represent the outcomes specified in the REAC and presented in detail in <b>Annex A6 to Annex A14</b>.</li> <li>The Delivery Partner is to provide an estimated date when the achievement criteria would be met to permit close-out of each applicable environmental clause.</li> </ul>
Client Reporting	<ul style="list-style-type: none"> <li>This section provides for a list of the reporting outputs that may be provided to the client on request.</li> <li>The Delivery Partner shall provide the anticipated close-out date for the entirety of the environmental clauses associated with the environmental aspect recorded within the Control Plan.</li> <li>The Delivery Partner shall update the close-out dates during regular updates to the CEMP.</li> </ul>
Documentation and Drawings	<ul style="list-style-type: none"> <li>Should the Delivery Partner consider it helpful in communicating the Control Plan requirements to the supply chain and workforce, then this section can provide for references to drawings and supporting documentation.</li> </ul>

- 5.2.10 The reasoning for provision of the various environmental clauses is provided within the ES Addendum. It is recommended that the clause ID be used to search the ES Addendum to understand the rationale behind the clause. It should be noted, however, that not every environmental clause presented in this CEMP may be referenced in the ES Addendum, since many may be supporting clauses to other clauses that are identified. Alternatively, they may relate to various good practice measures that are regularly undertaken by Delivery Partners.
- 5.2.11 References to guidance documents within the REAC are not intended to be exhaustive. In preparing the CEMP and related topic-specific plans the Delivery Partner shall to make reference to all relevant technical guidance in individual subject areas as appropriate.
- 5.2.12 A review of the REAC presented in **Annex A1** would be undertaken by the Delivery Partner to determine whether amendments to the REAC are required. The Delivery Partner would record any proposed amendments in **Table 5-4** and then seek Client approval and approval from SDNPA where the matter related to a Planning Condition before adoption of the change.

**Table 5-4: Proposed Amendments to the REAC**

Clause Id	Scope	Proposed Change	Justification
	<If none, state 'None'>		

## 5.3 Environmental Clauses

- 5.3.1 The environmental clauses provide for a risk-based and proportionate means of demonstrating compliance and close out to the East Sussex Highway Authority's PM. For each clause, an implementation outcome is presented along with the action the Delivery Partner is to undertake to enable close-out of the environmental clause.
- 5.3.2 The Delivery Partner shall advise all personnel responsible for preparing Method Statements (Principal Contractor and sub-contractors) of the environmental management requirements so that specific measures can be captured within the Risk Assessment & Method Statements.

## 5.4 Risks and Uncertainties

- 5.4.1 The ES Addendum was based upon a series of assumptions and limitations and hence these uncertainties are reflected in the REAC. As the Delivery Partner progresses the design and consideration of construction practices, so the ES Addendum assumptions and limitations may be subject to change.
- 5.4.2 The following key assumptions underpin the design and delivery of the Project and the manner that the REAC shall be delivered through the CEMP by the Delivery Partner:
- That further geotechnical investigations do not give rise to change in the environmental management needs of the scheme.
  - That detailed design measures such as those associated with drainage of the construction works do not damage the SSSI.
  - The Rights of Way network is not affected beyond that assessed in the ES Addendum.
  - Soil management practices are undertaken in accordance with an approved Soil Management Plan.
  - Pollution incidents do not occur contaminating the SSSI or groundwater.
- 5.4.3 A schedule of the assumptions identified in the REAC using specific assumption IDs is presented in Annex A5.
- 5.4.4 The environmental risks associated with the Works are set out below:
- Failure to comply with scheme consents and applicable legislation.
  - Failure to secure or adhere to the requirements of consents or licences.
  - Harm to the environment caused by incidents or accidents.

- Nuisance issues and complaints from the public associated with access constraints, lighting, noise and vibration.
- Reputational damage to the client due to deficiencies in the delivery of the environmental clauses during construction.
- Direct or indirect damage to the SSSI.
- Adverse effects upon protected species.
- Delays to the Project result in the schedule of works conflicting with the anticipated schedule devised to minimise adverse effects.
- Inappropriate removal of vegetation altering the character of the causeway and towards Seaford detracting from the natural landscape in the National Park.

- 5.4.5 The identified risks shall be managed on site via this CEMP by the Delivery Partner's Project Manager on advice from the Environmental Manager.
- 5.4.6 Significant environmental risks would be assessed by the Delivery Partner and focused Method Statements prepared to demonstrate how the risks are to be avoided to enable delivery of the Project to be compliant with its consent.
- 5.4.7 Delivery of the Works will adopt a risk-based approach in which the Delivery Partner recognises that the reporting requirements reflect the anticipated level of environmental risk. Consequently, the Delivery Partner will put in place an appropriate inspection regime and ensure that reports are issued to the East Sussex Highways Authority PM along with a record of all closed-out actions.

## 6. ENVIRONMENTAL MANAGEMENT FRAMEWORK

### 6.1 Introduction

6.1.1 This chapter provides a high-level appreciation of the environmental management framework for the Project structured on appreciation of:

- Environmental management framework.
- Corporate management plans.
- REAC Control Plans/Method Statements.
- Risk Assessment and Management Statement.
- Implementation.
- Leadership.
- Evaluation of Change Register.
- Training and awareness.
- Emergency preparedness and response.
- Evaluation of compliance.
- Non-conformance and corrective actions
- Continual improvement.
- Document control.
- Handover Environmental Management Plan.

### 6.2 Environmental Management Framework

6.2.1 This Environmental Management Plan should be used in conjunction with the Delivery Partner's Information Management System and the Project Management Plan (PMP). The Delivery Partner shall list the relevant procedures of which in Table 6-1**Error! Reference source not found.** below. Relevant Corporate Management Plans prepared under ISO 140001 are to be identified in Table 6-2.

**Table 6-1: Relevant ISO 14001 Procedures**

Document Reference	Title

6.2.2 Where corporate processes have been modified to suit the specific requirements of this scheme, these are documented within this CEMP.

6.2.3 This CEMP is to be implemented for the project and will be reviewed at least every six months. Evidence of the review shall be recorded in the CEMP. The CEMP is to remain a live document throughout construction however the Delivery Partner shall commit to no works commencing without East Sussex Highway Authority's PM's approval of the CEMP. An audit trail of change to the

previous EMP shall be provided in Annex M – Inventory of CEMP Review and Revision. Such revisions shall include:

- Response to design changes.
- Progress on achievement of actions.
- Response to assessment assumptions.
- Any changes to the Environmental Masterplan, Vegetation Clearance Plans and Landscape Planting Plans which shall be provided in PDF and GIS formats.

## 6.3 Corporate Management Plans

6.3.1 The Corporate Environmental Management Plans that are relevant to the Project are to be presented by the Delivery Partner in Error! Reference source not found. below. Such Management Plans are often generic across the Delivery Partner activities or may be applicable to specific sectors such as highways. They are not focused upon this Project unless they are specifically required such as an Asbestos Management Plan specified under legislation.

## 6.4 REAC Control Plans/Method Statements

6.4.1 REAC Control Plans or Method Statements are prepared by the Delivery Partner to define how the environmental control measures are to be implemented to meet the requirements of this CEMP and how Delivery Partner intends to deliver the following REAC themes applicable to the Scheme:

- Delivery of Objectives.
- General Environmental Management.
- Ecological Management.
- Landscape and Visual Amenity.
- Invasive Species.
- Noise and Vibration.
- Water Management.
- Heritage Assets.
- Materials and Waste.
- Air Quality.

## 6.5 Risk Assessment and Management Statement (RAMS)

- 6.5.1 The Delivery Partner shall implement the procedures set out in this CEMP with technical advice from competent environmental specialists. Control Plans and Risk Assessments & Method Statement (RAMS) will be used to ensure all environmental commitments are delivered.
- 6.5.2 Each RAMS shall be reviewed by the Delivery Partner Environmental Manager to ensure that environmental protection has been considered and to ensure conformity that required to deliver the REAC. All operatives on site shall be required to have a RAMS briefing prior to starting work, which includes confirmation of having read and understood the requirements. A schedule of RAMS to be deployed for the Project shall be prepared by the Delivery Partner in the format presented in **Table 6-3**.

**Table 6-2: Corporate Environmental Management Plans**

Management Theme	Corporate Environmental Management Plans	Corporate Reference	Date Produced	Within Annex C
Air Quality & Dust Control				
Asbestos Management				
Communications management				
Construction Compound Management				
Construction and traffic management				
COSHH, Storage & refueling management				
Cultural heritage				
Drainage				
Earthworks and Contamination				
Ecological protection and management				
Energy & carbon reduction				
Environmental asset data				
Environmental incident response				
Invasive species and biosecurity management				
Landscape management				
Noise & vibration management				

Management Theme	Corporate Environmental Management Plans	Corporate Reference	Date Produced	Within Annex C
Resource efficiency management				
Site waste management				
Vegetation clearance management plan				
Water management and pollution control				

**Table 6-3: Risk Assessment & Management Statements<sup>68</sup>**

RAMS ID	Expected Risk Assessment Method Statements (Control Plans) Topics	Scheme Document Title	Reference	Section	Issue Date	Available for Review
<b>Vegetation Clearance</b>						
RAMS01	Vegetation clearance within or next to ancient woodland	Not applicable.				
RAMS02	Vegetation clearance within 30m of badger sett(s)					
RAMS03	Vegetation clearance under dormouse license	Not applicable				
RAMS04	Vegetation clearance under dormouse precautionary measures	Not applicable				
RAMS05	Vegetation clearance under GCN license	Not applicable				
RAMS06	Vegetation clearance under GCN precautionary measures					
RAMS07	Vegetation clearance under Bat license	Not applicable				
RAMS08	Vegetation clearance under Bat precautionary measures					
RAMS09	Vegetation clearance affecting potential reptile habitat					
RAMS10	Vegetation clearance affecting priority habitat					
RAMS11	Vegetation clearance affecting invasive species					
RAMS12	Vegetation clearance on third party land					
<b>Noise and Dust Disturbance</b>						
RAMS13	Noise barrier removal, selection, and installation	Not applicable				
RAMS14	Diversion of traffic					
RAMS15	Selection of construction methodology and plant					

<sup>68</sup> Delivery Partner may add to sequence of RAMS.

RAMS ID	Expected Risk Assessment Method Statements (Control Plans) Topics	Scheme Document Title	Reference	Section	Issue Date	Available for Review
RAMS16	Management of noise and vibration disturbance					
RAMS17	Avoidance of dust nuisance					
<b>Visual Amenity</b>						
RAMS18	Design of retaining works and environmental impact					
RAMS19	Management of low nutrient soils for wildflower grassed areas					
<b>Cultural Heritage</b>						
RAMS20	Works and historic assets					
<b>Aquatic Environment</b>						
RAMS21	Protection of groundwater assets					
RAMS22	Management of dewatering activities					
RAMS23	Measures to reduce impact of flooding					
RAMS24	Jetting operations	Not applicable				
RAMS25	Works adjacent to watercourses					
RAMS26	Water quality monitoring strategy					
<b>Biodiversity</b>						
RAMS27	Works adjacent to European Designated sites	Not applicable				
RAMS28	Works adjacent to SSSI					
RAMS29	Works adjacent to ancient woodland	Not applicable				
RAMS30	Biosecurity measures					
RAMS31	Works near invasive species					
RAMS32	Works affecting contaminated land					
<b>Materials and Waste Management</b>						
RAMS33	Selection of materials to avoid/reduce carbon and water use					
RAMS34	Measures taken to maximise use of recycled/secondary materials					

RAMS ID	Expected Risk Assessment Method Statements (Control Plans) Topics	Scheme Document Title	Reference	Section	Issue Date	Available for Review
RAMS35	Soil management practices					
RAMS36	Works affecting contaminated land					
RAMS37	Mechanisms to maximise recovery of waste					
<b>Sustainability</b>						
RAMS38	Measures to improve health, safety, and wellbeing of affected communities					
RAMS39	Measures to improve land, water, and air quality					
RAMS40	Measures taken to support local economy					
RAMS41	Addressing 'Whole Life Value'					
RAMS42	Measures delivering innovation					
RAMS43	Measures to reduce inequalities					
RAMS44	Measures to ensure responsible sourcing of materials					
RAMS45	Measures to be resource efficient and aid a circular economy					
RAMS46	Working methods to avoid/reduce /remediate carbon emissions					
RAMS47	Measures to deliver resilience to climate change					
RAMS48	Measures to enhance surrounding environment					
RAMS49	Measures taken to involve communities and road users in delivery decisions					
RAMS50	Working methods to reduce water use					

6.5.3 Any improvements or deviations relating to environmental matters shall be approved by the Environmental Manager and shall be subject to East Sussex Highway Authority's Project Manager prior approval. The Delivery Partner shall undertake to provide monthly feedback and information to the East Sussex Highway Authority Project Manager on the progress and success in delivering all mitigation and commitments.

## 6.6 Implementation

- 6.6.1 The provisions of the CEMP will be implemented by East Sussex Highway Authority on the Delivery Partner by means of the works contracts. The contracts will incorporate both:
- General requirements; and
  - Site specific requirements.
- 6.6.2 The Delivery Partner shall ensure that themselves and any sub-contractors, will comply with the terms of the CEMP and appropriate action will be taken by East Sussex Highway Authority with the aim of ensuring compliance.

## 6.7 Leadership

- 6.7.1 The Delivery Partner will implement management processes and briefings to ensure that the works are carried out in accordance with current legislation and guidance.
- 6.7.2 The Delivery Partner shall have an Environmental Policy that meets the requirements of ISO 14001 (see **Annex N – Certificates and Awards**). The policy statement will be displayed on the site notice boards, publicised to all site staff and operatives, and made available to interested parties upon request. It is assumed that the minimum target for the Project would be an "Excellent" score (8/10 in each category).

## 6.8 Evaluation of Change Register

- 6.8.1 Changes to the Project post its consent shall be assessed to determine whether adverse environmental implications arise. Such changes are to be captured in an Evaluation of Change Register (EoCR) and subject to review by the East Sussex Highway Authority' PM prior to adoption of the change.
- 6.8.2 To minimise the need for an EoCR to be prepared, the Delivery Partner shall ensure that such changes to the scheme do not give rise to increased risk of environmental impact.
- 6.8.3 If changes are made to the design or nature of the works that might have a significant effect on the mitigation and environmental protection measures upon which the CEMP is based, then the Delivery Partner may seek via a Request for Information (RFI) or similar, an instruction from the East Sussex Highways Authority PM as to how they would wish the project to proceed.
- 6.8.4 Where a proposed change to the location or nature of the works, would result in an adverse effect, then additional management measures (mitigation and

monitoring) will be considered in an Evaluation of Change Register and captured in a revised CEMP.

- 6.8.5 The amended CEMP would be issued to the East Sussex Highways Authority PM and the Delivery Partner's staff and sub-contractors as a revision to the integrated project Health Safety and Environmental Management Plan (HASEMP). A record of the instruction, or approved change, will be entered into **Annex M - Inventory of CEMP Reviews & Changes** of this CEMP along with details of the changes made or a link / cross reference to updated text elsewhere in the EMP.
- 6.8.6 The EoCR may be being prepared by different organisations such that it can be difficult to follow the changes being proposed, hence Delivery Partner shall provide the East Sussex Highways Authority PM with a list of EoCR that are to be prepared when this is known.
- 6.8.7 The CEMP is to contain a copy of the consolidated EoCR within **Annex M** along with a record of the client's views on each change.

## 6.9 Training and Awareness

- 6.9.1 The training, awareness and competency levels that are required for all staff whose work may affect the achievement of environmental objectives, targets and/or actions are to be assessed and addressed by the Environmental Manager
- 6.9.2 All staff, sub-contractors and operatives will receive a Site Induction that will, provide an overview of the significant environmental aspects of the project and their controls, and will highlight relevant environmental policies.
- 6.9.3 At project level, competency requirements for specific activities will be described in relevant Method Statements and Procedures. Task briefings will be delivered prior to works taking place covering the key environmental issues on the site. Toolbox talks will be undertaken as required.
- 6.9.4 Further details on training are provided in Chapter 10.

## 6.10 Emergency Preparedness and Response

- 6.10.1 Details of the project emergency preparedness and response plan and incident reporting can be found in **Section 9.5** and **Annex C1** within the Corporate Management Plans.
- 6.10.2 All staff will be briefed and trained on the requirements of the Project Emergency Response Plan. This will include practice drills on site to ensure that staff know how respond correctly and effectively.

## 6.11 Evaluation of Compliance

- 6.11.1 The Delivery Partner shall establish a programme of environmental monitoring and regular site surveillance to include evaluate performance against the Project specific objectives, legal requirements, environmental commitments and the requirements of the CEMP through:

- Monitoring compliance with working hours as specified or agreed by the local authority or by contract.
  - Monitoring of discharges against consent criteria.
  - Monitoring of compliance with requirements of waste duty of care.
  - Regular site inspections.
  - Review at project meetings.
  - Review of objectives & targets.
  - Internal and external ISO 14001 Environmental System Audits
- 6.11.2 The Delivery Partner would complete **Table 6-4** to provide an audit, inspections, and reporting schedule.
- 6.11.3 Immediately prior to construction, East Sussex Highway Authority's Employer's Agent (or equivalent) and the Delivery Partner's nominated person shall undertake a site condition survey. This survey shall usually include a photographic record of locations for temporary works where land will be returned to the owner. This shall be used to ensure effective reinstatement and provide a 'baseline' to assess any compensation claims with landowners.
- 6.11.4 The results of compliance checks shall be regularly reviewed and communicated in Scheme meetings with East Sussex Highway Authority Project Manager. Any incidents or non-compliance with commitments shall be recorded and communicated to the site management and the workforce. The CEMP shall be updated following any audits or inspections to reflect any identified improvements or amendments.
- 6.11.5 The Delivery Partner shall:
- Have sole responsibility for pollution prevention measures being successfully implemented although subcontractors are bound to the requirements set out within this CEMP.
  - Take all reasonable precautions and undertake all reasonable measures within their control to ensure that all legal requirements are complied with and that no unnecessary damage, disturbance or pollution results from undertaking the works.
  - Be available for environmental audits on request by the East Sussex Highways Authority PM.
- 6.11.6 All site personnel shall be encouraged to draw attention to any environmental risk or potential environmental risk arising on site (for example, refuelling being carried out too close to a watercourse or working outside the agreed limits of deviation for any aspect of the works). This approach will be promoted in all site inductions and training.
- 6.11.7 The Delivery Partner shall conduct risk-based monthly reviews of the environmental performance as per their internal management systems. The attendees are to include as a minimum:
- Project Manager.
  - Environmental Manager.
  - Stakeholder Liaison Officer.

**Table 6-4: Audit, Inspections and Reporting Schedule**

Type	Key Performance Indicator	Measurement Unit	Frequency	Reporting	Responsible Person
Compound inspections					
Site inspections (High Risk)					
Site inspections (Medium Risk)					
Site inspections (Low Risk)					
EMS Audit					
Environmental Incidents					
Close out of environmental clauses					
East Sussex Highway Authority inspections					
Statutory authorities					
Subcontractor monitoring					
Site Waste Management Plan					
Waste volume by destinations					
Recycling rates					
Sustainable timber					
Carbon reduction					
Fuel use					
Stakeholder engagement					
Diversion routes disturbance to neighbours					

- 6.11.8 An environmental site folder is be kept on site to store relevant environmental documents such as completed site inspections and audits, incident/ near miss reporting and other site records; including permits to pump and water quality and noise monitoring records as appropriate.
- 6.11.9 Specific monitoring requirements for each specific clause are contained within the REAC and are to be presented by the Delivery Partner in the relevant Method Statement.

## 6.12 Non-conformance and Corrective Action

- 6.12.1 The implementation of the CEMP shall be audited at least 6 monthly intervals during the construction period by the Environment or Quality Manager.
- 6.12.2 A Non-Conformance Report (NCR) will be raised to record environmental incidents and work that has not been carried out in accordance with the CEMP or Environmental Design.
- 6.12.3 A Corrective Action Report (CAR) will be raised where a system deficiency has been identified during inspections, internal audits, third party audits or customer complaints, environmental Incidents, near misses & observations will be dealt with.

## 6.13 Continual Improvement

- 6.13.1 A process to ensure continual improvement includes shall be set out by the Delivery Partner that may comprise the following:
  - Generating and building on best practice, lessons learnt and innovations.
  - Using Lean Techniques to improve productivity in methods and processes.
  - Six monthly review of the CEMP and its controls to ensure these are current and effective.
  - Review of customer feedback reports and development of any specific action plans.
  - Reviews with the supply chain and their workforce to identify either process or product improvement measures.
  - Review of audit/ inspection/ site visit feedback recommendations and findings.
  - Review of internal reports/meetings e.g. monthly project reviews, lessons learnt reviews, close calls, and incidents.
- 6.13.2 A schedule of audit, inspections and reporting would be prepared by the Delivery Partner before construction commences and submitted to the East Sussex Highway Authority PM.

## 6.14 Document Control

- 6.14.1 Documents will be controlled using East Sussex Highway Authority Business Collaborator document control system. The CEMP and associated documentation will be maintained in accordance with the project document control procedure.

## Control of Records

- 6.14.2 All key records required by this plan are listed below and in relevant procedures and method statements. For records that are required to be kept for legal reasons, the time for which they should be retained is also noted – although in practice, all records will be maintained within the Common Data Environment. The following records will be retained on site and form part of the handover documents / Health and safety file and where necessary included in the Handover Environmental Management Plan (HEMP):
- Waste Transfer Notes - 2 years from when the notes are first produced.
  - Hazardous Waste Consignment Notes - 3 years from when the notes are first produced.
  - Waste carrier registration certificates of waste disposal contractors.
  - Waste Management Licences or Environmental Permits of waste disposal sites (e.g. waste transfer stations, materials recycling facilities, landfill sites).
  - Flood Risk Activity Permits.
  - Protected Species Licences.
  - Site Inspection forms.
  - Senior Management Audits.
  - Correspondence with environmental enforcement agencies and consultees.
  - Records of internal and external audits.
  - Minutes of project or other meetings including environmental management performance.
  - Environmental Consents Register.
  - Evaluation of Change Register.
  - Environmental Risk Assessments.
  - Incidents and Complaint records.
  - Non-Conformance and Corrective Action records.
  - Environmental training records.

## 6.15 Handover Environmental Management Plan

- 6.15.1 At least six months prior to completion of the commission, a draft Handover Environmental Management Plan (HEMP) shall be provided to the East Sussex Highway Authority PM for review.
- 6.15.2 The HEMP shall, at a minimum, provide the following:
- Details of special maintenance regimes and the areas to which they apply.
  - Location of protected species.
- 6.15.3 To aid efficient handover of the management of the soft estate the Delivery Partner shall below set out in those actions that would be handed over to client to manage following termination of the commission.

**Table 6-5: Actions to be Handed Over to Operations Directorate**

Aspect	Location(s)	Activity	Commentary

## 7. ENVIRONMENTAL MANAGEMENT ACTIONS

### 7.1 Introduction

- 7.1.1 This chapter presents details of the approach being taken by to the delivery of the environmental management clauses within the CEMP. It also provides a template for the Control Plans in which the Delivery Partner shall demonstrate the manner that the overarching environmental objectives and scheme specific environmental clauses will be delivered.

### 7.2 Delivery of Corporate Environmental Policies/ Objectives

- 7.2.1 Where sustainable development goals are part of the Delivery Partner's corporate environmental policies or objectives then they are to be presented by the Delivery Partner in **Table 7-1** as appropriate.

### 7.3 Over-Arching (General) Environmental Clauses

- 7.3.1 While most environmental clauses identify specific locations where management measures are required, overarching or 'General' environmental clauses are applicable to the entire Project.
- 7.3.2 **Table 7-2** presents those clauses applicable to the Project. The REAC Risk Rating reflects the rating prior to mitigation. The clauses are arranged according to the level of reporting to the client as described in **Table 5-3**.
- 7.3.3 The Control Plans are to be prepared by the Delivery Partner and those for 'General' environment are to be presented in **Annex D2**.
- 7.3.4 A list of the general environmental clauses is presented in **Annex A6** – General environmental management clauses with their underpinning assumptions presented in

7.3.5 **Annex A5.1: General Environment.**

**Table 7-1: Corporate Environmental Objectives**

Objective	Target	Action	Responsible Person	Delivery Date	Status
<ul style="list-style-type: none"> <li><b>Community Investment –</b> Adopt the Considerate Constructor Scheme.</li> </ul>	<ul style="list-style-type: none"> <li>Achieve a Considerate Constructor Scheme (CCS) score of &lt;X&gt;.</li> <li>Engage with communities in promotion of engineering skills.</li> <li>Achieve fewer than &lt;insert number&gt; complaints from local residents.</li> </ul>	<ul style="list-style-type: none"> <li>Record community stakeholder interactions and time donated to community activities.</li> </ul>	Stakeholder Manager	<insert>	<Not started/ Ongoing/ Closed>
<ul style="list-style-type: none"> <li><b>Materials –</b> Reduce the amount of virgin materials imported to site.</li> </ul>	<ul style="list-style-type: none"> <li>Re-use &lt;X%&gt; of material by weight generated on site.</li> <li>Use &lt;X%&gt; of secondary or recycled material as substitute for virgin materials.</li> </ul>	<ul style="list-style-type: none"> <li>&lt;insert&gt;</li> </ul>	Procurement	<insert>	<Not started/ Ongoing/ Closed>
<ul style="list-style-type: none"> <li><b>Procurement –</b> Ethical and sustainable sourcing of materials.</li> </ul>	<ul style="list-style-type: none"> <li>&lt;X%&gt; of materials (based upon materials value) are certified with BES6001, or equivalent.</li> <li>100% timber to be FSC or PEFC certified.</li> </ul>	<ul style="list-style-type: none"> <li>Influence supply chain to adopt ethical and sustainable sourcing.</li> <li>Aggregates and concrete sourced from suppliers with BES6001 certification for required products.</li> </ul>	Procurement	<insert>	<Not started/ Ongoing/ Closed>
<ul style="list-style-type: none"> <li><b>Waste –</b> Identify opportunities to reduce, reuse and recycle on site</li> </ul>	<ul style="list-style-type: none"> <li>Target of &gt;=99% waste diverted from landfill excluding hazardous waste.</li> <li>Actual waste arisings to be lower than pre-construction estimates.</li> <li>&lt;X%&gt; of waste wood to be re-used or recycled.</li> <li>&lt;X%&gt; of excavation waste to be re-used on site.</li> <li>Ensure timely submission to waste tracking performance system.</li> </ul>	<ul style="list-style-type: none"> <li>Identify assets for re-use and provide safe storage.</li> <li>Soils testing as part of GI to help inform materials use.</li> <li>Request suppliers take-back of extraneous materials/packaging</li> <li>Register site on the CL: AIRE Materials Register (donor and/or receiver site)</li> <li>Waste wood sent to National Community Wood Recycling Project (01273 203040).</li> <li>Use waste/excess timber for temporary construction e.g. works signage, benches, first aid stands, bird boxes etc.</li> <li>Re-usable shuttering to minimise timber waste.</li> </ul>	Works Manager	Pre-construction	<Not started/ Ongoing/ Closed>

Objective	Target	Action	Responsible Person	Delivery Date	Status
• <b>Water – Improve resource efficiency</b>	• <X>% reduction in potable water consumed per £100,000 of revenue from <XX> benchmark.	• Adopt grey water system. • Minimise use of potable water. • Report potable water use.	Site Engineer, QS, Env Manager	<insert>	
• <b>Carbon – Reduce carbon impact of project.</b>	• Target reduction of <50t> CO <sub>2</sub> per £1m scheme turnover. • Generate <kwh> of renewable energy. • Deploy <X> items of mobile electrical plant. • Ensure timely completion & submission HE Carbon Tool to track scheme emissions.	• Optimise generator size by calculating load requirements. • Use of green energy tariff. • Deployment of LED lighting and renewable energy generation • Record fuel use. • Record electricity use.	Site Engineer, QS, Env Manager	<insert>	<Not started/ Ongoing/ Closed>
• <b>Biodiversity – Creation of net biodiversity gain.</b>	• Enhancement of biodiversity through onsite and measures. • Timely securing of Protected Species Disturbance Licences with no re-course to amendment.	• <insert>	<insert>	<insert>	<Not started/ Ongoing/ Closed>
• <b>Sense of Place – Creation of local landmarks and features of interest.</b>	• Delivery of features of landmark interest. • Achieving 100% retention of the retained screening vegetation	• Create new shared use area in front of the Cuckmere Inn with the use of local materials, provide wide walkways on either side of the bridge making the crossing off the Cuckmere River and event for non-motorised users, provide viewpoints with seating and interpretation giving people a chance to stop and admire the surrounding landscape of the national park. • Retain vegetation by protecting it during the construction works in accordance with BS 5837 : 2012	<insert>	<insert>	<Not started/ Ongoing/ Closed>

Objective	Target	Action	Responsible Person	Delivery Date	Status
<ul style="list-style-type: none"> <li>• <b>Environmental Incidents –</b> Zero tolerance of environment incidents.</li> </ul>	<ul style="list-style-type: none"> <li>• An Environmental Incident Frequency Rate of &lt;__&gt;.</li> <li>• Positive environmental intervention reporting rate of &lt;__&gt;.</li> <li>• Environmental awards scheme for site staff avoiding environmental incidents.</li> <li>• Environmental compliance score of &lt;__ %&gt; from the EMS audit.</li> </ul>	<ul style="list-style-type: none"> <li>• Incidents by incident type; major, minor, near miss. To be uploaded to &lt;insert&gt;</li> </ul>	<insert>	<insert>	<Not started/Ongoing/Closed>

**Table 7-2: Applicable General Clauses**

Environmental Topic	Description of Aspect	REAC Risk Rating	Red Reporting Level	Amber Reporting Level	Green Reporting Level	Control Plan
Consents	Licences and Consents	A	Gen002 Gen003			<a href="#">Table D2.1: General Environmental Management - Licences and Consents</a>
Sustainability	Carbon emissions	G	Gen001 Gen031 Gen032 Gen040	Gen033 Gen041	Gen034 Gen035 Gen036 Gen037 Gen038 Gen039	<a href="#">Table D2.3: General Environmental Management - Carbon emissions</a>
Environmental Management	CEMP	G	Gen009 Gen010 Gen011 Gen012 Gen013 Gen014 Gen027 Gen030			<a href="#">Table D2.4: General Environmental Management - CEMP</a>
Environmental Management	Inspections	G	Gen026	Gen005		<a href="#">Table D2.5: General Environmental Management - Inspections</a>
Environmental Management	Registration to CCS	G	Gen004			<a href="#">Table D2.6: General Environmental Management - Registration to CCS</a>
Environmental Management	Staffing	G	Gen008 Gen018 Gen019 Gen029	Gen017		<a href="#">Table D2.7: General Environmental Management - Staffing</a>
Environmental Management	Working Hours	A	Gen020 Gen022 Gen024			<a href="#">Table D2.8: General Environmental Management - Working Hours</a>
Environmental Management	Start of Works	A	Gen021	Gen023		<a href="#">Table D2.9: Scheduling of Works</a>
Environmental Management	Scheduling of Works	A	Gen042			
Environmental Management	Detailed design	G	Gen006 Gen007 Gen028			<a href="#">Table D2.10: General Environmental Management - Detailed design</a>
Environmental Management	Traffic management	R	Gen043	Gen044 Gen045 Gen046 Gen047		<a href="#">Table D2.11 - Traffic Management</a>
Environmental Management	HEMP	G	Gen015			<a href="#">Table D2.12 - Handover EMP</a>

## Licences and Consents

- 7.3.6 The licences and consents required for construction of the scheme are presented in **Table 3-5**, while **Table D2.1** of **Annex D2** details in the Control Plan for the works for which a licence or consent is required.
- 7.3.7 The clauses relating to licences and consents are:
- The Delivery Partner shall replicate licences, consents and permits within the CEMP with a copy provided to the client within one month of a licence being granted<sup>69</sup>.
  - Where an application for a licence, consent or permit could establish a precedence, requires land agreement, financial or maintenance obligations for the client then the draft application shall be provided to the client recording such implications at least one month prior to the application for the licence being made<sup>70</sup>.

<sup>69</sup> See CEMP clause Gen002

<sup>70</sup> See CEMP clause Gen003

## Easements

- 7.3.8 Temporary access is required to the construction compound. These arrangements would be between the Delivery Partner and the East Sussex Highway Authority. Annex D2 would record any specific management measures to be taken such as reinstatement.

## Carbon Emissions

- 7.3.9 As the Project has an overarching objective to reduce carbon emissions (see **Table 1-1: The Project Environmental Objectives**) and the Delivery Partner may have corporate objectives as set out in Table 7-1: Corporate Environmental Objectives, this section presents the general clauses that direct the Delivery Partner to reduce carbon emissions.
- 7.3.10 As clauses focused upon carbon emissions are also found under the materials and water environmental aspects, so Section 7.12 provides a consolidated view of all the actions to be taken. The 'General' environmental clauses related to carbon require the Delivery Partner to:
- Acknowledge the objective of reducing both carbon emissions from its construction activities and undertake to report sources of greenhouse gases on a quarterly basis in accordance with the National Highways Carbon Tool Guidance<sup>71,72</sup>.
  - Prepare a Carbon Reduction Plan placing obligations upon their supply chain to also reduce carbon emissions<sup>73</sup>.
  - Document its carbon objective, baseline and target values as well as the actions and the target savings anticipated<sup>74</sup>.
  - Identify, assess and deliver measures to reduce carbon through onsite measures, offsetting or carbon sequestration<sup>75</sup>.
  - Alternatives to the use of diesel would be sought<sup>76</sup>.
  - Where possible, provide site and task lighting by non-diesel sources<sup>77</sup>.
  - Provide at least one electric vehicle charging station<sup>78</sup>.
  - Adopt a preference for electric plant and equipment<sup>79</sup>.
  - Use low emission (hybrid) vehicles where commercially available<sup>80</sup>.
  - Encourage the supply chain to maximise the use of blended diesel for all construction plant and equipment where there is no commercially available low carbon alternative<sup>81</sup>.

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<sup>71</sup> See CEMP clause Gen001, Gen031

<sup>72</sup> Monthly reporting may also be undertaken.

<sup>73</sup> See CEMP clause Gen040

<sup>74</sup> See CEMP clause Gen041

<sup>75</sup> See CEMP clause Gen032

<sup>76</sup> See CEMP clause Gen033, Gen034

<sup>77</sup> See CEMP clause Gen035

<sup>78</sup> See CEMP clause Gen036

<sup>79</sup> See CEMP clause Gen037

<sup>80</sup> See CEMP clause Gen038

<sup>81</sup> See CEMP clause Gen039

## Construction Environmental Management Plan

7.3.11 Clauses setting out the approach to be taken to the CEMP are as follows:

- The CEMP shall demonstrate how each environmental clause shall be managed for approval by East Sussex Highways Authority in compliance with a certified ISO 14001 management system for the entire works or work packages as appropriate<sup>82</sup>.
- The CEMP shall contain information related to:
  - Requirements attached to the consents for the Project.
  - Further mitigation measures, as agreed post consent, with the consultees and landowners etc.
  - Mitigation measures developed following the completion of ecological surveys prior to the works commencing.
  - Measures associated with the Evaluation of Change post consent<sup>83</sup>.
- A programme of actions to achieve and monitor scheme specific environmental objectives and targets, such as for material resource efficiency and reducing export of materials, shall be specified and implementation reported by on a monthly basis to East Sussex Highways Authority PM<sup>84</sup>.
- The CEMP shall document measures to deliver environmental actions and commitments associated with delivery of the Project via Control Plans/Method Statements<sup>85</sup>.
- An organisational chart setting out the respective roles and responsibilities of all staff responsible for environmental work shall be included within the CEMP along with contact details<sup>86</sup>.
- The Delivery Partner shall document an Incident Response Plan which outlines classification and response procedures for environmental incidents. The Incident Response Plan shall be provided to the East Sussex Highways Authority PM prior to the start of any works<sup>87</sup>.
- The CEMP shall provide evidence of a risk-based approach to the environmental management of construction activities for the client and provide evidence that activity/location specific method statements have addressed those activities in a proportionate manner. The CEMP shall be updated and re-issued following each approved EoCR or environmental incident and no less frequently than once every six months<sup>88</sup>.

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<sup>82</sup> See CEMP clause Gen009

<sup>83</sup> See CEMP clause Gen010

<sup>84</sup> See CEMP clause Gen011

<sup>85</sup> See CEMP clause Gen012

<sup>86</sup> See CEMP clause Gen013

<sup>87</sup> See CEMP clause Gen014

<sup>88</sup> See CEMP clause Gen027

- Method statements shall define environmental control measures to be implemented to meet the requirements of the CEMP and the Delivery Partner shall submit the Method Statements and risk assessments to the Local Authority or other regulatory body for review in advance of works commencing<sup>89</sup>.

7.3.12 A Control Plan shall be set out in **Annex D2** by the Delivery Partner and shall specify the actions to be taken in the preparation and updating of this Environmental Management.

## Detailed Design

7.3.13 The Delivery Partner shall submit for approval Evaluation of Change Registers for East Sussex Highway Authority where a proposed change to either the Project design or construction method has a plausible impact pathway or involves a change to the environmental management measures.

7.3.14 The clauses related to detailed design are as follows:

- A schedule of the Delivery Partner's decisions with an environmental dimension documenting those making the decision and supported by the Evaluation of Change Register shall be maintained and reported to the East Sussex Highways Authority PM prior to adoption of the changes<sup>90</sup>.
- The Delivery Partner shall use the Evaluation of Change Register for any changes to the scheme with potential environmental implications drawing the East Sussex Highways Authority PM's attention to proposed changes that would increase the risk of a significant impact or reduced effectiveness of a rectification, mitigation or enhancement measure<sup>91</sup>.
- Design solutions shall take all reasonable steps to maximise contribution towards all goals of sustainable development with the CEMP clearly demonstrating how applicable sustainable development goals are to be delivered<sup>92</sup>.

## Inspections

7.3.15 With regard to inspections to ensure compliance with the environmental management requirements for works within this sensitive setting, the following clauses shall be addressed by the Delivery Partner:

- All construction work shall be carried out in accordance with the approved CEMP unless otherwise approved by the East Sussex Highways Authority PM, following consultation with relevant authorities where necessary with records of inspections confirming implementation<sup>93</sup>.

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<sup>89</sup> See CEMP clause Gen030

<sup>90</sup> See CEMP clause Gen006

<sup>91</sup> See CEMP clause Gen007

<sup>92</sup> See CEMP clause Gen028

<sup>93</sup> See CEMP clause Gen005

- The frequency of regular onsite observation monitoring and checks/audits shall be recorded in the CEMP to ensure that Best Practical Means are being employed at all times. The site reviews shall be logged, and any remedial actions recorded. Such check could include:
  - Hours of working.
  - Presence of mitigation measures, equipment (i.e. engines doors closed, airlines not leaking, etc.) and screening (i.e. location and condition of local screening, etc.).
  - Number and type of plant.
  - Construction method.
  - Where applicable, any specific section 61 consent conditions<sup>94</sup>.

## Considerate Contractor Scheme

- 7.3.16 The Project shall be registered with the Considerate Constructors Scheme (“CCS”) within six months of mobilisation with a copy provided in the CEMP<sup>95</sup>.

## Scheduling of Works

- 7.3.17 Reflecting upon ecological constraints and the effects of traffic diversion upon residents, businesses and tourists, the Delivery Partner shall provide a schedule for the works that minimises the amount of disruption and environmental risks that would be caused by the works. Where it is necessary to deviate from the indicative programme presented in environmental assessment, then a revised programme supported by an Evaluation of Change Register is to be provided to the East Sussex Highways Authority prior to the revised programme being adopted<sup>96</sup>.

## Staffing

- 7.3.18 A well informed and motivated workforce is critical to the successful implementation of the CEMP. To this end the Delivery Partner shall address the following:
- Where an environmental risk has been identified, the Delivery Partner shall put in place a system(s) to communicate preventative/control measures to site workers<sup>97</sup>.
  - The CVs and competency certificates for the Environmental Management Team and any environmental specialists employed directly or indirectly by the Delivery Partner shall be recorded in the CEMP<sup>98</sup>.
  - Contacts details of the environmental management team shall be provided to East Sussex Highways Authority PM and updated within one week of

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<sup>94</sup> See CEMP clause Gen026

<sup>95</sup> See CEMP clause Gen004

<sup>96</sup> See CEMP clause Gen042

<sup>97</sup> See CEMP clause Gen008

<sup>98</sup> See CEMP clause Gen017

- any changes to show that appropriate resourcing to effectively achieve environmental outcomes in line with the consent<sup>99</sup>.
- The Delivery Partner shall put in place a training plan detailing the Project specific environmental commitments and requirements applicable to each member of the workforce<sup>100</sup>.
- Regulatory bodies shall be advised on the single point of contact with responsibility for the environmental management of the works prior to the commencement of construction and notified at least one week in advance of any change. Evidence of notification shall be recorded in the CEMP<sup>101</sup>.

## Start of Works

- 7.3.19 The Delivery Partner shall acknowledge that enabling or main construction works shall not commence until the CEMP has been approved by East Sussex Highway Authority following consultation with other statutory bodies<sup>102</sup>.
- 7.3.20 It is noted that maintenance and reversible works such as vegetation clearance may be undertaken in advance with the approval East Sussex Highway Authority<sup>103</sup>.

## Working Hours

- 7.3.21 Core working hours will be from 07:30 to 16:30 on weekdays (excluding bank holidays) and these will be adhered to for each site as far as is reasonably practicable<sup>104</sup>.
- 7.3.22 Guidance on the specific variations to core hours and/ or additional hours likely to be required will be summarised within this CEMP and included within the noise management measures, following consultation with the relevant local authorities.
- 7.3.23 Where works are required outside of normal working hours then they would be agreed with the local Environmental Health Department with at least three days advance notice being given to affected residents prior to the works commencing<sup>105</sup>.
- 7.3.24 Where specific works are identified as locally giving rise to notable noise and/or vibration impact then those works shall be subject to restricted working hours that are agreed with Local Authority. Such restrictions shall be documented in the CEMP<sup>106</sup>.

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<sup>99</sup> See CEMP clause Gen018

<sup>100</sup> See CEMP clause Gen019

<sup>101</sup> See CEMP clause Gen029

<sup>102</sup> See CEMP clause Gen021

<sup>103</sup> See CEMP clause Gen023

<sup>104</sup> See CEMP Clause Gen022

<sup>105</sup> See CEMP clause Gen020

<sup>106</sup> See CEMP clause Gen024

## Traffic Management

- 7.3.25 The following clauses are applicable to the disruption to road users that the Project would generate:
- A Construction Traffic Management Plan shall be prepared for approval by East Sussex Highways Authority PM. The Plan shall address:
    - The safety of cyclists, walkers and horse-riders.
    - Parking of construction and workforce vehicles outside the construction compound.
    - The movement of staff and materials between the compound and works site.
    - Controls on HGV movements to and from the site.
    - Minimisation of congestion in Seaford.
    - Access of residents and business.
    - Minimisation of disruption to public transport and visitors<sup>107</sup>
  - The Delivery Partner would require that its supply chain provides notification of deliveries to be 24 hours in advance of delivery to avoid the holding of vehicles on local roads<sup>108</sup>.
  - The Delivery Partner would require that its supply chain provides notification of deliveries to be 24 hours in advance of delivery to avoid the holding of vehicles on local roads<sup>109</sup>.
  - All supply chain or merchant deliveries would be required to avoid deliveries before 09:30 or after 15:30.
  - The Delivery Partner would be required to use designated routes as agreed with the local highway authority<sup>110</sup>.
  - The Delivery Partner would confirm the diversion route for regular traffic with the local highway authority<sup>111</sup>.

## Handover Environmental Management Plan

- 7.3.26 The need to provide continuity in the environmental management of the Project is to be acknowledged by the Delivery Partner. The objective is to secure sound environmental and sustainability performance following construction of the Project particularly in relation to any licence or other legal commitments.
- 7.3.27 Towards the end of the works period the CEMP shall be refined into a Handover Environmental Management Plan (HEMP) to comprise EPS licences, commitments, environmental data, GIS mapping and management measures

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<sup>107</sup> See CEMP clause Gen043

<sup>108</sup> See CEMP clause Gen044

<sup>109</sup> See CEMP clause Gen045

<sup>110</sup> See CEMP clause Gen046

<sup>111</sup> See CEMP clause Gen047

as appropriate<sup>112</sup>. The HEMP also shall set out the proposed strategy for the future maintenance and management of relevant environmental aspects.

## 7.4 Ecological Management Clauses

7.4.1 The ecological management requirements for the Project are focused upon meeting the need to avoid doing direct or indirect harm to the SSSI, while also avoiding any additional net loss to biodiversity. The relevant ecological management clauses are shown in **Error! Reference source not found.**. This section details management requirements for the following:

- Ecological factors affecting works schedule.
- European designated sites.
- National and local designated sites.
- Priority habitat.
- Vegetation clearance.
- Ecological surveys.
- European Protected Species.
- Dormouse.
- Great crested newt.
- Bats.
- Badgers.
- Reptiles.
- Riparian species.
- Fish.
- Breeding birds.
- Invertebrates.
- Site practice.
- Habitat creation.

### Ecological Factors Affecting Works Schedule

7.4.2 The timing of the Works (both seasonal and diurnally) can have a critical bearing upon the delivery of the environmental actions and commitments. To this end, critical activities include:

- Soil stripping, storage and replacement from within the SSSI.
- Undertaking bridge construction works in a manner to avoid disturbance of migratory sea trout and European eel.
- Ensuring that river impoundment works do not extend beyond 12 months in duration.

7.4.3 Details of the management measures needed to be adopted for the stripping of soils from the SSSI, their storage and replacement are addressed within Section 7.9 – Materials.

7.4.4 The risk of disturbance to sea trout and European eel is associated with vibration caused by piling being transmitted through the river resulting in the disorientation of fish. A secondary risk also arises from the illumination of the river. In addition to clauses presented in this section, the management of piling vibration is also addressed in Section 7.7 while the management of construction lighting is provided for in Section 7.5.

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<sup>112</sup> See CEMP clause Gen015

**Table 7-3: Applicable Ecological Clauses**

Main Works						
Environmental Topic	Description of Aspect	REAC Risk Rating	Red Reporting Level	Amber Reporting Level	Green Reporting Level	Control Plan
Designated sites	Works affecting SSSIs		Nat011 Nat012			<a href="#">Table D2-1: Designated Sites</a>
Designated sites	Site compounds		Nat014			
Designated sites	Works affecting designated habitat			Nat013		
Habitat	Works affecting priority habitat			Nat173		<a href="#">Table D2.2: Habitat Protection</a>
Habitat	Trees and hedgerows				Nat178	
Habitat	Biodiversity Net Gain		Nat180 Nat181			
Habitat	Vegetation clearance				Nat174 Nat175 Nat176 Nat182	
Habitat	Drainage ditches				Nat183	
Protected Species	Licences and consents		Nat031 Nat033 Nat045 Nat048	Nat038 Nat044	Nat042	<a href="#">Table D2.3: Protected Species</a>
Protected Species	Pre-construction surveys		Nat039	Nat043		
Protected Species	Vegetation clearance			Nat032 Nat037 Nat040		
Protected Species	Exclusion zones			Nat046		
Protected Species	Tool Box Talks			Nat041	Nat049	
Protected Species	Maintenance and Monitoring		Nat047	Nat034		
Protected Species	Handover Environmental Management Plan			Nat036		
Great Crested Newts	Vegetation clearance			Nat074 Nat075 Nat078 Nat079 Nat084	Nat082	<a href="#">Table D2.4: Great Crested Newts</a>
Great Crested Newts	Material storage			Nat077		
Bats	Works to structures				Nat095	<a href="#">Table D2.5: Bats</a>
Bats	Pre-construction surveys				Nat094	
Bats	Bat foraging areas				Nat097	
Badgers	Pre-construction surveys				Nat131	<a href="#">Table D2.6: Badgers</a>
Reptiles	Suitable reptile habitat		Nat141 Nat142	Nat144 Nat146	Nat143 Nat143	<a href="#">Table D2.7: Reptiles and Common Toad</a>
Reptiles	Common Toad				Nat148	
Reptiles	Toolbox Talks				Nat145	

Main Works						
Environmental Topic	Description of Aspect	REAC Risk Rating	Red Reporting Level	Amber Reporting Level	Green Reporting Level	Control Plan
Riparian species	Pre-construction surveys				Nat111	<a href="#">Table D2.8: Riparian Species</a>
Riparian species	Disturbance		Nat118			
Riparian species	Toolbox Talks				Nat114	
Fish	Disturbance			Nat122 Nat123 Nat124 Nat125		
Breeding birds	Vegetation clearance				Nat161 Nat162 Nat164	<a href="#">Table D2.10: Breeding Birds</a>
Breeding birds	Disturbance			Nat165	Nat163	
Breeding birds	Toolbox Talks				Nat166	
Site practice	Works <8m of a watercourse		Nat192			
Site practice	Ecological specialist				Nat199	<a href="#">Table D2.11: Site Practice</a>
Site practice	All works				Nat191 Nat198	
Site practice	Night working				Nat195 Nat203	
Site practice	Site compounds				Nat193	
Site practice	Excavations				Nat196	
Site practice	Rabbit warrens				Nat200	
Site practice	Soil management			Nat201 Nat202	Nat191	
Habitat creation	Protected Species				Nat214	<a href="#">Table D2.12: Habitat Creation</a>
Habitat creation	Great crested newts				Nat216	
Habitat creation	Bats				Nat217 Nat218	
Habitat creation	Reptiles					
Habitat creation	Common Toad				Nat225	
Habitat creation	Invertebrates				Nat220	
Habitat creation	Drainage ditches				Nat226	
Habitat creation	Birds				Nat221	
Habitat creation	Floral Species		Nat224			
Invasive species	Pre-construction surveys		Nat231			<a href="#">Table D2.13: Invasive Species</a>
Invasive species	Toolbox Talks				Nat234	
Invasive species	Vegetation clearance				Nat232	
Invasive species	Works <7m of invasive plant			Nat233		
Invasive species	Disposal of invasive species		Nat235			
Invasive species	Treatment of invasive species				Nat236	

## European Designated Sites

### 7.4.5 There are no European Sites affected by the Project.

## National and Local Designated Sites

- 7.4.6 The construction works site is entirely located within the Seaford to Beachy Head SSSI details of the SSSI can be found in **ES Addendum Table 9.4**. The works require the loss of the following habitats:
- Coastal and Floodplain Grazing Marsh Priority Habitat (neutral grassland and ditch habitat).
  - Coastal Saltmarsh Priority Habitat.
  - River habitat
  - Other neutral grassland
  - Scrub.
- 7.4.7 The REAC provides environmental clauses related to works within the SSSI. Such clauses address the following management measures:
- Receipt of the SSSI Assent from Natural England may impose requirements that are additional to this CEMP. Such requirements would be implemented by the Delivery Partner. Advice would be sought from Natural England to minimise direct or indirect effects upon the SSSI, and a method statement prepared to demonstrate how the works are to be delivered<sup>113</sup>.
  - Where it is intended to adopt a construction or recovery compound that is not a candidate construction compound and not subject to a planning application, then such sites shall be screened for direct and/or indirect effects and submitted for approval by East Sussex Highways Authority before a decision is taken to proceed with the site<sup>114</sup>.
  - Habitats in areas of high ecological sensitivity to be retained shall be appropriately fenced off from construction activities under the supervision of an Ecological Clerk of Works or the Environmental Manager<sup>115</sup>.
- 7.4.8 An Assent for works within the SSSI would be required from Natural England, a copy of which shall be retained on site at all times and included within the CEMP<sup>116</sup>.
- 7.4.9 Further environmental clauses associated with the management of soils are provided in Section 7.9 and Annex A12.
- 7.4.10 A Control Plan shall be prepared based upon the template provided in Annex D3 to aid communication to the staff and the supply chain.

## Priority Habitat

- 7.4.11 Priority habitats to be impacted is discussed in paragraph 7.4.6.

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<sup>113</sup> See CEMP clause Nat011, Nat012

<sup>114</sup> See CEMP clause Nat014

<sup>115</sup> See CEMP clause Nat013

<sup>116</sup> See CEMP clause Nat038

## Vegetation Clearance

- 7.4.12 It is acknowledged that the Government priority is to halt the decline in biodiversity while also it is the case that vegetation clearance is required to construct the Project. Consequently, the Delivery Partner will deploy working practices that minimise the loss of habitat within the works site.
- 7.4.13 Clauses relevant to vegetation clearance as they apply to protected species in the sections below. This section provides details of the overarching clauses:
- Where Section 41 priority habitat is located adjacent to working zones, temporary exclusion fencing (Heras or similar) shall be installed prior to construction and maintained throughout to prevent encroachment of machinery or personnel. Materials and spoil shall be stored away from priority habitat areas. Photographic evidence of protected areas shall be provided to the East Sussex Highways Authority PM on request<sup>117</sup>.
  - A pre-construction survey of notable plant species shall be carried out by the EcCoW prior to vegetation clearance to confirm their presence/absence in the works site. Should notable species be encountered, if suitable for that species the EcCoW, will supervise their translocation to an appropriate site that is not to be<sup>118</sup>.
  - A Vegetation Clearance Management Plan shall be prepared for the soft estate to minimise for the loss of habitat caused. This Plan shall detail the sequence of habitat removal and reinstatement demonstrating that the level of ecological service has been maintained or the reduction in the level of service has been minimised. The CEMP shall identify the soft estate where habitat loss has been minimised and measures are to be taken to deliver ecological enhancement<sup>119</sup>.
  - Construction works and vegetation clearance shall be confined to the minimum areas required as defined on the schedule of work areas during detailed design. Those areas to be worked under the Ecological Clerk of Works (EcCoW) or Environmental Manager's supervision, shall be clearly defined and fenced off prior to works starting nearby. Photographic evidence of exclusion zones being demarcated shall be collated and details provided to the East Sussex Highways Authority PM on request<sup>120</sup>.
  - No vegetation clearance lower than 150mm shall take place without prior advice and sign-off from the EcCoW or Environmental Manager. A copy of clearance approval for vegetation clearance lower than 150mm shall be provided to the East Sussex Highways Authority PM on request<sup>121</sup>.

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<sup>117</sup> See CEMP clause Nat173

<sup>118</sup> See CEMP clause Nat182

<sup>119</sup> See CEMP clause Nat174

<sup>120</sup> See CEMP clause Nat175

<sup>121</sup> See CEMP clause Nat176

## Habitat – Trees and Hedgerows

- 7.4.14 Root protection measures shall be deployed (where appropriate) in accordance with British Standard BS5837:2012 - Trees in relation to design, demolition and construction. To be in place prior to construction & maintained throughout. Photographic evidence of Root Protection measures shall be provided to the East Sussex Highways Authority PM on request<sup>122</sup>.
- 7.4.15 Where drainage ditches are identified to be of ecological value by the EcCoW, then localised silt and vegetation translocation to a replacement ditch shall be undertaken<sup>123</sup>. This clause is applicable to an unnamed drainage ditch no.1, which is located to the north-east of Exceat Bridge National Grid Reference<sup>124</sup>.

## Habitat – Biodiversity Net Gain

- 7.4.16 Prior to the removal of vegetation from the soft estate, the ecological baseline and Biodiversity Condition Score shall be established and reported for those areas to be disturbed due to the Works. The Delivery Partner shall report the Biodiversity Units and calculations in tabular format mapped in GIS shape file to the East Sussex Highways Authority PM<sup>125</sup>.

## Ecological Surveys

- 7.4.17 The ES Addendum provides the following ecological survey reports that inform the approach to managing both habitat and protected species:
- **Appendix 9.1** – Preliminary Ecological Appraisal.
  - **Appendix 9.2** – Botanical Report.
  - **Appendix 9.3** – Reptile Survey.
  - **Appendix 9.4** – Bird Survey.
  - **Appendix 9.5** – Bat Survey Report.
  - **Appendix 9.6** – Great Crested Newt Survey Report.
  - **Appendix 9.7** – Water Vole Survey.
  - **Appendix 9.10** – Aquatic Ecology Survey Report
  - **Appendix 9.11** – Repeat preliminary bat survey
  - **Appendix 9.12** – Bat hibernation survey of bridge
- 7.4.18 A summary of the ecological survey findings is presented in Table 7-4 below:

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<sup>122</sup> See CEMP clause Nat178

<sup>123</sup> See CEMP clause Nat183

<sup>124</sup> NGR TV51449937

<sup>125</sup> See CEMP clause Nat180

**Table 7-4: Ecological Survey Findings**

Survey Type	Survey Findings
<b>Habitat</b>	<ul style="list-style-type: none"> <li>Works are within the Seaford to Beachy Head SSSI comprising neutral grassland and open water habitat, associated with coastal floodplain grazing marsh (CFGM) and coastal saltmarsh</li> <li>Potential presence of notable plant species including sea-heath <i>Frankenia laevis</i>, sea wormwood <i>Seriphidium maritimum</i> and perennial glasswort <i>Salicornia perennans</i>. Could occur in ditches or grazing marsh.</li> </ul>
<b>Invasive species</b>	<ul style="list-style-type: none"> <li>Firethorn <i>Pyracantha coccinea</i> has been identified within scrub along the boundary of The Boathouse.</li> <li>A pre-construction survey is to be undertaken to identify presence of invasive species.</li> </ul>
<b>Great Crested newt</b>	<ul style="list-style-type: none"> <li>GCN <i>Triturus cristatus</i> were recorded in 2016 approximately 300m to the south-west of the study area.</li> <li>The ditches to the north of Exceat Bridge may provide potentially suitable habitat for GCN.</li> </ul>
<b>Badger</b>	<ul style="list-style-type: none"> <li>No evidence of badgers has been recorded in the study area, but suitable foraging habitat does exist.</li> </ul>
<b>Bats</b>	<ul style="list-style-type: none"> <li>Common pipistrelle <i>Pipistrellus pipistrellus</i>, soprano pipistrelle <i>Pygmeaus pipistrellus</i>, Natterer's bat <i>Myotis nattereri</i> and <i>Myotis</i> species were recorded foraging/ commuting along the river.</li> <li>Suitable habitat (river, linear lengths of scrub) for commuting and foraging bats.</li> <li>Exceat Bridge itself has low suitability to support roosting bats.</li> </ul>
<b>Nesting birds</b>	<ul style="list-style-type: none"> <li>Numerous species present on the Red and Amber list of Birds of Conservation Concern.</li> <li>Wintering and breeding bird populations using the survey site is of value up to the National level of importance.</li> </ul>
<b>Hazel dormouse</b>	<ul style="list-style-type: none"> <li>Not present.</li> </ul>
<b>Otter</b>	<ul style="list-style-type: none"> <li>No obvious signs of otter <i>Lutra lutra</i>.</li> <li>The stretch of the Cuckmere Estuary within the proposed Project boundary is channelised and linear with little in the way of suitable habitat for otters.</li> </ul>
<b>Water vole</b>	<ul style="list-style-type: none"> <li>No desk study records of water vole <i>Arvicola amphibius</i> within 2km of the survey area.</li> <li>Drainage channels are heavily trampled by cattle and, in places, suffer from poor water quality making the habitat less suited to water vole.</li> </ul>
<b>White Clawed crayfish</b>	<ul style="list-style-type: none"> <li>Not present.</li> </ul>
<b>Reptiles</b>	<ul style="list-style-type: none"> <li>Slow worm <i>Anguis fragilis</i>, grass snake <i>Natrix helvetica</i> and adder <i>Vipera berus</i> within the survey area.</li> <li>Suitable habitat for these species is present.</li> </ul>
<b>Common toad</b>	<ul style="list-style-type: none"> <li>Common toad <i>Bufo bufo</i> recorded during a 2019 reptile survey within the proposed construction footprint.</li> <li>A low population is likely to be present.</li> </ul>
<b>Fish</b>	<ul style="list-style-type: none"> <li>European eel <i>Anguilla anguilla</i> and sea trout <i>Salmo trutta</i> are known to be present in the upper catchment of the Cuckmere River.</li> </ul>
<b>Macro-invertebrates</b>	<ul style="list-style-type: none"> <li>Notable aquatic macro-invertebrate species are present in the aquatic environment.</li> </ul>

- 7.4.19 To manage the risk of protected species being encountered despite the above findings, the following pre-construction surveys shall be undertaken by the Delivery Partner:
- Breeding birds – include Cetti's warbler.
  - Bats.
  - Badgers.
  - Otter & water vole: Little suitable habitat but need to confirm absence.
  - Invasive species.
- 7.4.20 The following environmental management clauses apply to the pre-construction surveys:
- The Delivery Partner shall undertake pre-construction surveys to determine the current status/ distribution of protected and notable species along the Scheme. Copies of all pre-construction survey reports shall be retained on site at all times and the Ecological Survey Report and GIS files issued to East Sussex Highways Authority PM within one month of surveys being complete<sup>126</sup>.
  - The CEMP shall be updated as necessary following pre-construction surveys to reflect any additional mitigation measures and/or licences required for the works. The Delivery Partner shall ensure that exclusion zones are in place to reflect the works to be undertaken. The revised CEMP shall be issued to East Sussex Highways Authority within one month of completion of the surveys as necessary<sup>127</sup>.
  - Where a bat survey has not been undertaken within one year of start of works, a pre-construction survey shall be undertaken to record potential roost features where it has not been possible to exclude the existence of a roost. Results of the survey shall be provided to the East Sussex Highways Authority on request<sup>128</sup>.
  - A pre-construction survey shall be undertaken along watercourses considered to be suitable for otters or water vole where works are to be within 30m of suitable habitat. Should evidence of otter be identified then the EcCoW shall be consulted to determine the need for further mitigation and/or the need for consultation with Natural England. Documented inspection by a suitably qualified ecologist shall be made available to East Sussex Highways Authority PM on request<sup>129</sup>.
  - A pre-construction badger survey shall be undertaken within 30m of the works area six months prior to the start of works to confirm their distribution with a re-survey undertaken within one week following vegetation clearance to confirm the presence of any setts affected by the works. Documented inspection records signed by a suitably qualified

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<sup>126</sup> See CEMP clause Nat039

<sup>127</sup> See CEMP clause Nat043

<sup>128</sup> See CEMP clause Nat094

<sup>129</sup> See CEMP clause Nat111

- ecologist shall be retained and provided to the East Sussex Highways Authority PM on request<sup>130</sup>.
- A pre-construction survey of invasive species extending 8m beyond the works area shall be undertaken no more than two months (within the April to October period) prior to the commencement of construction works in any area to confirm and map the locations of all invasive species. The pre-construction survey results shall be incorporated, along with species-specific control measures, into the final CEMP. Evidence shall be provided on request to the East Sussex Highways Authority PM<sup>131</sup>.

7.4.21 A species survey calendar is provided below.

**Table 7-5: Species Survey Calendar**

Species	Survey timing											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Great crested newt				e-DNA survey period								
GCN			Pond surveys									
Bats			Activity surveys									
	Tree roost potential survey											
			Tree emergence/re-entry surveys									
Badgers												
Reptiles												
Otter												
Water vole												
Invasive plant species – terrestrial												
Optimal survey period												
Sub-optimal survey period												
Surveys not possible												

## Protected Species – Licences and Consents

- 7.4.22 There is an obligation upon the Delivery Partner to undertake the works in accordance with the applicable licences, consents and precautionary method statements. This will be achieved by the appointment of ecologists with specialism in the individual protected species. The ecologists will have authority to require works to cease.
- 7.4.23 Species specific method statements prepared by the Delivery Partner and will be available for consideration by East Sussex Highway Authority on request. The ecologist will be involved in those decisions that have potential ecological implications.
- 7.4.24 There are no areas in which the protecting the habitat of different protected species are in conflict.

<sup>130</sup> See CEMP clause Nat131

<sup>131</sup> See CEMP clause Nat231

7.4.25 As recorded in **Table 3-5 – Schedule for Licences, Consents and Permissions**, there is no current requirement for protected species licensing. Should licences be required then the following clauses shall apply:

- Licences must be sought except where Natural England and the EcCoW is satisfied that a licence is not required. Elsewhere a precautionary approach (under non-licensed method statement) shall be applicable to other situations with evidence that it has been written by a suitably qualified ecologist with details provided to the East Sussex Highways Authority PM on request<sup>132</sup>.
- The Delivery Partner shall consult with the relevant ecological specialist bodies during definition of licences and habitat/species compensation/ enhancement measures, without making commitments until agreed by East Sussex Highways Authority. Minutes of meetings with stakeholders shall be provided to East Sussex Highways Authority upon request. Management and cost commitments of draft licences to be submitted to East Sussex Highways Authority PM for prior approval<sup>133</sup>.
- The relevant part of the Project shall be carried out in accordance with the approved mitigation strategy, or with any amended strategy that may be subsequently approved by East Sussex Highways Authority, following consultation with Natural England, and under any necessary protected species licence. Documentary evidence that the mitigation measures have been undertaken in accordance with the approved measures shall be prepared and provided to the East Sussex Highways Authority PM within five working days of the measures being applied to each location<sup>134</sup>.
- Copies of all protected species licences, the Assent and associated documentation, obtained for the works shall be retained on site at all times and included within the CEMP<sup>135</sup>.
- Whilst performing a task as an Agent/Assistant to the licence, the Signatory/Assistant shall carry a signed letter appointing them as a signatory to the applicable licence. The letter shall highlight the tasks which the Signatory/Assistant is competent to perform and will be issued by the East Sussex Highways Authority PM and reviewed by the named ecologist on the protected species licence<sup>136</sup>.
- The East Sussex Highways Authority PM shall notify the Delivery Partner of the individual who shall adopt responsibility for protected species licence requirements prior to completion of the works. These details are to be recorded in the CEMP or HEMP as appropriate<sup>137</sup>.
- Monthly ecological Audit Reports on the status of licences and consents prepared by the EcCoW shall be submitted to the Environmental Manager

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<sup>132</sup> See CEMP clause Nat044

<sup>133</sup> See CEMP clause Nat031

<sup>134</sup> See CEMP clause Nat033

<sup>135</sup> See CEMP clause Nat038

<sup>136</sup> See CEMP clause Nat042

<sup>137</sup> See CEMP clause Nat045

and East Sussex Highways Authority PM. Progress Reports shall be made available to Natural England on request<sup>138</sup>.

## Protected Species – Toolbox Talks

- 7.4.26 The workforce shall be briefed on the identification of protected species that may be encountered, the actions that they must take and the legal implications. Records of such training shall be retained for Client inspection should that be required<sup>139</sup>.
- 7.4.27 Toolbox talks shall be conducted by the EcCoW, and a record of attendance shall be taken and recorded in the CEMP. Site staff who have not attended the last toolbox talk shall not be allowed to work onsite where protected species or priority habitat is present<sup>140</sup>.

## Protected Species – Vegetation Clearance

- 7.4.28 The following clauses are to be implemented by the Delivery Partner in relation to vegetation clearance:
- No works in the soft estate shall commence until a pre-construction survey work by a suitably qualified ecologist has been undertaken to establish whether European or nationally protected species are present on any land or trees affected, or likely to be affected, by that those works. Survey details shall be provided to the East Sussex Highways Authority PM on request<sup>141</sup>.
  - Should any protected species be found at any time when carrying out the scheme which were not previously identified: (a) A suitably qualified ecologist shall be contacted for advice before the works affecting that so occupied area proceed; (b) The finding shall be reported to Natural England on the advice of the EcCoW; and (c) No activities requiring a protected species licence shall continue until a scheme of protection and mitigation measures for the protected species has been submitted to, and approved by, Natural England and East Sussex Highways Authority<sup>142</sup>.
  - Vegetation clearance in habitat with a protected species interest shall be undertaken by hand tools or flail mounted attachments or low-pressure vehicles avoiding heavy machinery to be tracked over vegetation, as advised by the named ecologist designated under the protected species licence and the EcCoW<sup>143</sup>.

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<sup>138</sup> See CEMP clause Nat048

<sup>139</sup> See CEMP clause Nat041

<sup>140</sup> See CEMP clause Nat049

<sup>141</sup> See CEMP clause Nat032

<sup>142</sup> See CEMP clause Nat037

<sup>143</sup> See CEMP clause Nat040

## Protected Species – Exclusion Zone

- 7.4.29 Zones from which plant and staff are to be excluded shall be established, monitored and maintained to prevent disturbance to protected species and priority habitats as directed by the EcCoW<sup>144</sup>.

## Protected Species – Maintenance and Monitoring

- 7.4.30 Monitoring of impacts on protected species and habitats prior to, during and up to the end of the aftercare period, to include monitoring and management of mitigation measures, shall be carried out by a suitably qualified ecologist to meet the protected species licence requirements. Details are to be provided to East Sussex Highways Authority on request<sup>145</sup>.
- 7.4.31 A schedule for the maintenance and monitoring of protected species licence sites and enhancement works shall be prepared and shall accompany the draft protected species licence application so discussions can be held with the East Sussex Highways Authority PM over the deliverability of these activities<sup>146</sup>.

## Protected Species – HEMP

- 7.4.32 The CEMP and HEMP prepared by the Delivery Partner shall set out on-going monitoring and management requirements as required in accordance with the protected species licence and shall be approved by the East Sussex Highways Authority PM<sup>147</sup>.

### Dormouse

- 7.4.33 No dormouse records exist in the locality.

### Great Crested Newt

- 7.4.34 A medium sized population of GCN was identified in a pond approximately 300m to the south-west of the site. GCN were not present in other ponds and ditches within 500m of the Project. The EcCoW shall prepare a Method Statement for those areas identified as being suitable for GCN<sup>148</sup>. The following clauses managing vegetation clearance shall apply:
- Staged vegetation clearance shall be carried out, with habitat clearance undertaken using hand tools between November and February to just above ground level, followed by full vegetation clearance undertaken in the active GCN period (March to October inclusive) following a fingertip search by an EcCoW.<sup>149</sup>

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<sup>144</sup> See CEMP clause Nat046

<sup>145</sup> See CEMP clause Nat036

<sup>146</sup> See CEMP clause Nat047

<sup>147</sup> See CEMP clause Nat036

<sup>148</sup> See CEMP clause Nat084

<sup>149</sup> See CEMP clause Nat074

- The EcCoW shall confirm the absence of GCN prior to the commencement of clearance<sup>150</sup>.
- Features which may be used as refuges shall be removed by hand by a qualified ecologist and searched for the presence of GCN. A destructive search, of any larger features suitable for use by newts, shall be undertaken by hand or using a small excavator, under ecological supervision<sup>151</sup>.
- Measures to retain refugia materials for habitat creation are to be undertaken as instructed by EcCoW<sup>152</sup>.
- An EcCoW shall be present during vegetation clearance to instruct that works should cease and the advice of the ECoW sought should the presence of GCN be discovered<sup>153</sup>.
- Any stored materials (that might act as temporary GCN resting places) are to be raised off the ground, e.g. on pallets<sup>154</sup>.
- If a great crested newt is found (or suspected), all work in the soft estate for 250m from that location shall stop<sup>155</sup>.

## Bats

- 7.4.35 Where a bat survey has not been undertaken within one year of start of works, a pre-construction survey shall be undertaken to record potential roost features where it has not been possible to exclude the existence of a roost. Inspection records licenced ecologist shall be provided to the East Sussex Highways Authority on request<sup>156</sup>.
- 7.4.36 Where potential or confirmed roosts have been identified within structures, but where no disturbance is likely, a pre-construction check shall be conducted to ensure there are no significant changes to the roost<sup>157</sup>.
- 7.4.37 Where vegetation is expected to be used by bats, vegetation removal should preferably be scheduled to occur between September to October (inclusive) or mid-March to mid-May to minimise the risk of disturbance to foraging bats<sup>158</sup>.

## Badgers

- 7.4.38 A pre-construction badger survey shall be undertaken within 30m of the works area six months prior to the start of works to confirm their distribution with a re-survey undertaken within one week following vegetation clearance to confirm the absence of badger. Documented inspection records signed by a suitably

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<sup>150</sup> See CEMP clause Nat083

<sup>151</sup> See CEMP clause Nat075

<sup>152</sup> See CEMP clause Nat079

<sup>153</sup> See CEMP clause Nat082

<sup>154</sup> See CEMP clause Nat077

<sup>155</sup> See CEMP clause Nat078

<sup>156</sup> See CEMP clause Nat094

<sup>157</sup> See CEMP clause Nat095

<sup>158</sup> See CEMP clause Nat097

qualified ecologist shall be retained and provided to the East Sussex Highways Authority PM on request<sup>159</sup>.

## Reptiles & Common Amphibians

- 7.4.39 No surveys are required to confirm the presence of common reptiles, as they are presumed to be present where suitable habitat within the soft estate has been identified.
- 7.4.40 All vegetation clearance in areas of suspected reptiles shall be undertaken during March to October while reptiles are active under the supervision of an ecological clerk of works (EcCoW) in accordance with a Reptile Mitigation Strategy that has been included in the CEMP. The strategy shall set out the search requirements, vegetation clearance and reptile relocation measures. The Method Statement for vegetation clearance in potential reptile habitat shall be included in the CEMP and submitted to the East Sussex Highways Authority PM<sup>160</sup>.
- 7.4.41 Clearance of vegetation in areas of potential reptile habitat shall be undertaken using a strimmer or brush cutter in two cuts with all cuttings raked and removed the same day. Vegetation shall be first cut to a height of no less than 150mm with the arisings then removed while for the second cut, where vegetation remains dense, vegetation shall be cleared to ground level (maximum height 20mm) and the arisings removed. The cleared area will then be left undisturbed for a minimum of 24 hours to allow reptiles to disperse. Evidence that a two-phase vegetation cut has been implemented shall be collated and provided on request to the East Sussex Highways Authority PM<sup>161</sup>.
- 7.4.42 Natural or artificial reptile or amphibian refugia including log piles, rubble piles and boulders shall be dismantled by hand, and removed to an area within the East Sussex Highways Authority soft estate but outside that directly affected by the works. These works shall be overseen by the EcCoW. Potential hibernacula shall be avoided during the hibernation period [November to February inclusive]. Methods for the removal of potential reptile refugia shall be included in the CEMP submitted to the East Sussex Highways Authority PM. Should other amphibian species (common and palmate newt, frogs and toads) be found, then these shall be moved to a pre-determined 'safe' hibernacula/refugia or water body<sup>162</sup>
- 7.4.43 A Precautionary Method of Working shall be applied to all areas suspected of being suitable for reptiles. This shall include a hand-search prior to vegetation clearance; a phased strimming and an ecological watching brief for areas identified and mapped by Project Ecologist. Evidence that a precautionary method has been implemented shall be collated and provided on request to the East Sussex Highways Authority PM<sup>163</sup>.

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<sup>159</sup> See CEMP clause Nat131

<sup>160</sup> See CEMP clause Nat041

<sup>161</sup> See CEMP clause Nat146

<sup>162</sup> See CEMP clause Nat142

<sup>163</sup> See CEMP clause Nat144

- 7.4.44 Any trenches left overnight within reptile and amphibian habitat (rank grassland and scrub mosaic) shall be covered or provided with ramps to prevent individuals from becoming trapped. Photographic evidence of measures to prevent reptiles and amphibian from being trapped within a trench shall be provided to the East Sussex Highways Authority PM on request<sup>164</sup>.
- 7.4.45 A toolbox talk on identification of reptiles and amphibians, and procedures to be followed shall be held for all on-site staff working within areas of potential r habitat and the requirement not to interfere with protective fencing. Evidence that a toolbox talk on reptiles and amphibians has been delivered and prevents individuals from being killed shall be provided to the East Sussex Highways Authority PM on request<sup>165</sup>.
- 7.4.46 Should any reptiles or amphibians be encountered outside of the active season, works should immediately stop at the location the individual was found. The EcCoW shall be consulted to determine the action required, which could be that works are postponed until the active season (typically February to October when temperatures are above 5°C<sup>166</sup>.
- 7.4.47 The EcCoW must undertake a visual inspection of ditches and suitable hibernacula prior to the commencement of works to confirm the absence of toad or other priority species. If species are found to be at risk, the EcCoW shall supervise the removal/rescue of the species to an agreed location away from the works<sup>167</sup>.

## Riparian Species

- 7.4.48 Although the presence of riparian species (otter and water vole) was not confirmed during previous surveys, the following clauses apply:
- A pre-construction survey shall be undertaken along watercourses considered to be suitable for otters or water vole where works are to be within 30m of suitable habitat. Should evidence of otter be identified then the EcCoW shall be consulted to determine the need for further mitigation and/or the need for consultation with Natural England. Documented inspection by a suitably qualified ecologist shall be made available to East Sussex Highways Authority PM on request<sup>168</sup>.
  - Construction staff working within 30m of suitable habitat shall be briefed on how to identify water vole/otter field signs. Should a water vole burrow be found (or suspected) work shall cease and advice sought from an experienced Ecologist or the Environmental Manager. Evidence that a toolbox talk has been delivered to construction staff working within 30m of a watercourse with suitable water vole/otter habitat shall be provided to the East Sussex Highways Authority PM on request<sup>169</sup>.

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<sup>164</sup> See CEMP clause Nat143

<sup>165</sup> See CEMP clause Nat145

<sup>166</sup> See CEMP clause Nat147

<sup>167</sup> See CEMP clause Nat148

<sup>168</sup> See CEMP clause Nat111

<sup>169</sup> See CEMP clause Nat114

- Should a holt be identified then an exclusion zone of up to 150m (CIEEM, 2011) shall be established until its use has been determined. If confirmed to be a maternal holt, it would either be temporarily closed or removed under licence as required once the mother and cubs are confirmed as having left the holt. Further detailed surveys would likely to be required. A replacement artificial holt may be required as advised by Natural England<sup>170</sup>.

## Fish

- 7.4.49 The Cuckmere River is important for the migration of sea trout and European eel and an aspect recognised by the EA as needing effective management. To this end the following clauses shall apply:
- Piling operations adjacent to migratory European eel or sea trout shall be scheduled so that disturbance during the migration period (March to November) is minimised to the satisfaction of the EA<sup>171</sup>.
  - Where mobile water retention techniques or cofferdams are to be deployed, then the measures shall be sequenced so that a minimum of 50% of the river channel would be available to migratory fish<sup>172</sup>.
  - The assumption that a mobile water retention technique can be deployed and removed in a main river out of the sea trout peak migration period (May - August) would be validated with the EA and incorporated into the River Impoundment Method Statement<sup>173</sup>.
  - The removal/rescue of fish from the mobile water retention technique shall take place prior to dewatering under the supervision of the EcCoW. Fish captured shall be returned to the same river they are rescued from<sup>174</sup>.

## Breeding Birds

- 7.4.50 The grazing marsh is used by numerous nationally important bird species and hence the following clauses apply:
- A risk assessment shall be carried out prior to the commencement of works to inform the likelihood of protected bird species being disturbed by noise or human presence during the breeding season<sup>175</sup>.
  - Site hoardings would be installed along the north and eastern site boundary to minimise disturbance to breeding birds such as Cetti's warbler<sup>176</sup>.
  - A nesting bird check shall be undertaken no longer than 2 days before vegetation removal during the bird breeding season (March to August

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<sup>170</sup> See CEMP clause Nat118

<sup>171</sup> See CEMP clause Nat122

<sup>172</sup> See CEMP clause Nat123

<sup>173</sup> See CEMP clause Nat124

<sup>174</sup> See CEMP clause Nat125

<sup>175</sup> See CEMP clause Nat165

<sup>176</sup> See CEMP clause Nat163

- inclusive) by a competent ecologist in accordance with a Method Statement to ensure the absence of any breeding birds. Any active nests shall have an appropriate exclusion zone be determined by the EcCoW. Work within this zone is to be avoided until an EcCoW or Environmental Manager has confirmed that the chicks have fledged. Evidence demonstrating that nesting birds have been protected during the bird breeding season shall be recorded and provided to the East Sussex Highways Authority PM on request<sup>177</sup>.
- All vegetation suitable for breeding birds shall be removed as part of vegetation clearance outside the breeding season (March - August). Where this is not achievable, clearance would only be undertaken following the prior checking for breeding birds and/or nests by the EcCoW<sup>178</sup>.
  - Should works have the potential to disturb Wildlife & Countryside Act 1981 Schedule 1 breeding birds, suitable mitigation measures shall be agreed with the relevant statutory consultee and only commence within such areas once suitable mitigation is in place<sup>179</sup>.
  - Site staff shall be required to gain an appreciation of the importance of the site for birds along with restrictions against access to the grazing marsh habitat<sup>180</sup>.

## Invertebrates

- 7.4.51 There are no clauses directed towards invertebrates for the proposed Project.

## Site Practice – All Works

- 7.4.52 No construction access, storage of vehicles or materials etc shall take place outside clearly defined works areas to minimise impacts to species and habitats. The site inspection records shall be provided to the East Sussex Highways Authority PM on request<sup>181</sup>.
- 7.4.53 The Delivery Partner shall put in place a series of inspections to ensure that all environmental measures are being properly implemented and maintained. Records of inspections are to be collated, logged and details made available on request to the East Sussex Highways Authority PM<sup>182</sup>.
- 7.4.54 Best practice techniques shall be used for works close to ditches, watercourses and culverts to avoid / minimise risk of contamination or damage to sensitive ecological receptors (habitats and species). The CEMP shall document those watercourses and specify the applicable Method Statements<sup>183</sup>.

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<sup>177</sup> See CEMP clause Nat161

<sup>178</sup> See CEMP clause Nat164

<sup>179</sup> See CEMP clause Nat162

<sup>180</sup> See CEMP clause Nat166

<sup>181</sup> See CEMP clause Nat191

<sup>182</sup> See CEMP clause Nat198

<sup>183</sup> See CEMP clause Nat192

- 7.4.55 Where it is not possible to cover excavations overnight, appropriate escape ramps for mammals shall be provided and visual checks shall be carried out of uncovered excavations each morning before works commence to reduce the risk to trapped animals. The Delivery Partner shall obtain advice from the ecologist if a protected species is found or suspected. Photographic evidence of covered trenches or escape routes shall be provided to the East Sussex Highways Authority PM on request<sup>184</sup>.
- 7.4.56 Suitably qualified ecologists shall oversee the implementation of the ecological mitigation and enhancement measures. Documented inspections are to be made available to the East Sussex Highways Authority PM on request<sup>185</sup>.
- 7.4.57 Where rabbit warrens or fox dens are to be damaged or destroyed then the work will be in accordance with the Wild Mammals (Protection) Act 1996. In case of rabbits, work will also be in accordance with the Animal Welfare Act 2006 by a registered pest control company. Inspections for rabbit warrens will be undertaken prior to earthworks to direct need for use of a registered pest control company the use of which shall be recorded in the CEMP<sup>186</sup>.

## Site Practice – Site Compound

- 7.4.58 Compounds, vehicles, storage of materials and haul routes (where on unpaved surfaces) shall be located to avoid an adverse impact upon sensitive habitats and species. Risk assessment produced for storage areas shall be undertaken and details made available on request to the East Sussex Highways Authority PM<sup>187</sup>.

## Site Practice – Night Working

- 7.4.59 Should night working be required then the advice of the EcCoW should be sought to ensure appropriate mitigation measures are in place<sup>188</sup>.
- 7.4.60 Where lighting, generators (and other noisy equipment) are required these shall be located to avoid impacts to protected species. Lighting shall be directional and shielded to illuminate the works area only. Evidence shall be provided to the East Sussex Highways Authority PM that planned night-time working that could adversely impact protected species has been undertaken in accordance with an appropriate Method Statement<sup>189</sup>.

## Site Practice – Soil Management

- 7.4.61 Soil stripping from within a designated site shall be undertaken with light vehicles when they are within a specified moisture range as specified in a Method Statement to minimise compaction and damage under the supervision

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<sup>184</sup> See CEMP clause Nat196

<sup>185</sup> See CEMP clause Nat199

<sup>186</sup> See CEMP clause Nat200

<sup>187</sup> See CEMP clause Nat193

<sup>188</sup> See CEMP clause Nat203

<sup>189</sup> See CEMP clause Nat195

of an EcCoW. Photographic evidence of compliance with the Method Statement shall be provided to the East Sussex Highways Authority PM<sup>190</sup>.

- 7.4.62 Soils taken from within a designated site shall be transported and stored separately from other soils to avoid mixing in accordance with the advice of the EcCoW<sup>191</sup>.
- 7.4.63 Soil storage areas shall be managed to maximise their value for landscape planting and to minimise opportunities for colonisation by burrowing animals, such as badger. Photographic record of stockpiles shall be provided to the East Sussex Highways Authority PM on request<sup>192</sup>.

## Habitat Creation

- 7.4.64 Ecological mitigation/ enhancement measures set out in the environmental masterplan and the CEMP shall be in accordance with guidance from the Institute of Ecology and Environmental Management, published ecological literature and consultations with statutory and non-statutory nature conservation bodies, except where any departures from that guidance are agreed by East Sussex Highways Authority, and the EcCoW following consultation with relevant stakeholders<sup>193</sup>.
- 7.4.65 There would be a 0.04ha permanent loss of *Lolium-Cynosurus* neutral grassland (associated with Coastal and Floodplain Grazing Marsh priority habitat) and coastal saltmarsh priority habitat to the north of the A259. This loss would be compensated by 0.1ha of the habitat creation at the offsite compensatory area.
- 7.4.66 Ditches shall be replaced to ensure no loss of habitat for notable species including for toad and other amphibian species<sup>194</sup>. New drainage ditches shall include sections with low gradient, localised shallow margins, deeper mid-sections, silt dominated substrate taken from ditches removed by the scheme, low shading and open banks<sup>195</sup>.
- 7.4.67 Photographic evidence with GPS locations that hibernacula have been put in place as specified by the EcCoW in advance of the main works as a refuge for displaced reptiles and amphibians is to be provided to the East Sussex Highways Authority PM on request<sup>196</sup>.
- 7.4.68 Bat bricks/boxes shall be deployed as set out in the Series 3000 Specification and as specified within the non-licensed or licence Method Statement. Bat bricks would be included in the construction of the bridge; and/or bat boxes for *Pipistrellus* and *Myotis* bat species, for example the Schwegler 2FTH, to be erected on trees or other structures, before the end of the Project. When determining the location of bat boxes consideration shall be given to selecting

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<sup>190</sup> See CEMP clause Nat202

<sup>191</sup> See CEMP clause Nat201

<sup>192</sup> See CEMP clause Nat197

<sup>193</sup> See CEMP clause Nat214

<sup>194</sup> See CEMP clause Nat225

<sup>195</sup> See CEMP clause Nat226

<sup>196</sup> See CEMP clause Nat216

locations with good habitat connectivity but poor potential roost features rather than place several boxes in locations of known roosts or viable roost features<sup>197</sup>.

- 7.4.69 Photographic evidence of habitat creation for bats, which shall include the planting of scrub and grass habitats for foraging and commuting, as well as installation of 3-5 bat boxes/bricks to increase roosting opportunities, shall be provided to East Sussex Highways Authority PM on request<sup>198</sup>.
- 7.4.70 Bird boxes shall be deployed for every hectare of habitat loss as appropriate as stated within the Series 3000 Specification. Photographic evidence and GPS location of installation and a copy of the bird box purchase order shall be retained and provided to the East Sussex Highways Authority PM on request<sup>199</sup>.
- 7.4.71 Artificial nest box designs should be targeted for specific species: lesser whitethroat, Cetti's warbler, dunnock and house sparrow.
- 7.4.72 Areas of deadwood shall be carefully moved to locations identified by the EcCoW. Photographic evidence and GPS location of established log piles are to be made available upon request of the East Sussex Highways Authority PM<sup>200</sup>.
- 7.4.73 The Client shall ensure that an experienced ecologist monitors post-construction habitats for three years within and immediately adjacent to the works site to detect colonisation by invasive non-native plant species triggering eradication measures where necessary<sup>201</sup>.

## Invasive Species

- 7.4.74 Firethorn *Pyracantha coccinea* has been identified within scrub along the boundary of the Boathouse. Although not listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) it is considered invasive as it has the potential to become invasive posing a threat to existing native plants.
- 7.4.75 A pre-construction survey of invasive species extending 8m beyond the works area shall be undertaken no more than two months (within the April to October period) prior to the commencement of construction works in any area to confirm and map the locations of all invasive species. The pre-construction survey results shall be incorporated, along with species-specific control measures, into the final CEMP. Evidence shall be provided on request to the East Sussex Highways Authority PM<sup>202</sup>.
- 7.4.76 The Delivery Partner shall not to trample or cut vegetation or undertake excavations unless the absence of invasive species has been confirmed. If invasive species are identified or suspected in any construction works area, works shall cease to await advice of the EcCoW or the Environmental Manager.

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<sup>197</sup> See CEMP clause Nat217

<sup>198</sup> See CEMP clause Nat218

<sup>199</sup> See CEMP clause Nat221

<sup>200</sup> See CEMP clause Nat220

<sup>201</sup> See CEMP clause Nat224

<sup>202</sup> See CEMP clause Nat231

A Method Statement with controls for invasive species shall be presented within the CEMP submitted to East Sussex Highways Authority PM<sup>203</sup>.

- 7.4.77 Areas of plant invasive species shall be marked out with an exclusion zone (7m radius) using barrier tape and / or spray paint to prevent cross contamination. Works within exclusion zone to be carried out in accordance with a Method Statement following best practice and in accordance with the Invasives Species Management Plan which advises that:
- Any arisings from the top 3m should be left in situ, if permitted, as the soil could contain invasive plant species.
  - Where arisings from the top 3m cannot be left in situ, Delivery Partner to remove all soil and cuttings and dispose of via a licensed carrier to a licensed disposal site.
  - Photographic evidence of exclusion zones being implemented shall be undertaken and details provided on request to the East Sussex Highways Authority PM<sup>204</sup>.
  - Invasive species stands that do not have to be removed to facilitate the works shall be temporarily protected and their location recorded in the Handover Environmental Management Plan<sup>205</sup>.
- 7.4.78 A plan shall be prepared as to how each invasive species stand shall be removed and disposed of. To bury invasive non-native plant waste without a permit, the conditions in 'Treatment and Disposal of Invasive Non-Native Plants: RPS 178' must be met with the Management Plan being part of the CEMP. Management by spraying with approved herbicides shall be subject to COSHH assessment and EA agreement and NE if in an SSSI. Off-site disposal of invasive plant waste shall only be via a registered waste carrier the waste being sent to an authorised landfill site or suitable disposal site following all appropriate procedures. The HEMP shall record the location of on-site or licenced disposal facilities and document procedures to prevent the spread of invasive species<sup>206</sup>.
- 7.4.79 The Delivery Partner shall put in place a series of briefing/training sessions that detail the identification characteristics, mitigation and control measures and legal implications of the invasive species which may be present. Evidence that such toolbox talks have been delivered shall be recorded and details made available on request to the East Sussex Highways Authority PM<sup>207</sup>.

## 7.5 Landscape

- 7.5.1 In addition to the ecological management aspects identified above, measures associated with vegetation clearance, biosecurity, visual amenity, and enhancement opportunities apply (see Table 7-6 below).

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<sup>203</sup> See CEMP clause Nat232

<sup>204</sup> See CEMP clause Nat233

<sup>205</sup> See CEMP clause Nat236

<sup>206</sup> See CEMP clause Nat235

<sup>207</sup> See CEMP clause Nat234

7.5.2 This section addresses the environmental clauses for the following aspects:

- Ancient woodland.
- Retained vegetation.
- Visual amenity.
- Materials.
- Soil management and biosecurity.
- Construction lighting.
- Reinstatement planting.
- Enhancement opportunities.

**Table 7-6: Applicable Landscape Clauses**

Main Works						
Environmental Topic	Description of Aspect	REAC Risk Rating	Red Reporting Level	Amber Reporting Level	Green Reporting Level	Control Plan
Retained vegetation	Pre-construction surveys	G		Land015		<a href="#">Table D3.1 - Retained Vegetation</a>
Retained vegetation	Tree survey	G		Land032		
Retained vegetation	Toolbox talks	G		Land016		
Retained vegetation	Tree Protection	A			Land054	
Retained vegetation	Tree surgery	G	Land034		Land055	
Retained vegetation	Vegetation clearance					
Visual amenity	Construction compounds	A		Land022	Land025	<a href="#">Table D3.2 - Visual Amenity</a>
Visual amenity	Gantries					
Visual amenity	Soil storage	A		Land067		
Visual amenity	Removal of noise barriers					
Visual amenity	Selection of noise barriers					
Visual amenity	Installation of noise barriers					
Visual amenity	Disturbance	A		Land040 Land061		
Visual amenity	Litter	G			Land060	

Main Works						
Environmental Topic	Description of Aspect	REAC Risk Rating	Red Reporting Level	Amber Reporting Level	Green Reporting Level	Control Plan
Materials	Timber fencing	A			Land056	<a href="#">Table D3.3: Materials</a>
Materials	Retaining works	A		Land057		
Materials	Cycle stands	G			Land062	
Materials	Seating	G			Land063	
Materials	Timber	G			Land064	
Materials	Walls	A			Land065 Land066	
Soil management	Soil handling	G			Land013	<a href="#">Table D3.4: Soil Management and Biosecurity</a>
Biosecurity	Vegetation clearance			Land033		
Construction lighting	Inspection of lighting	R		Land051		<a href="#">Table D3.5 - Construction Lighting</a>
Construction lighting	Lighting period	G			Land052	
Construction lighting	Lighting Strategy	G			Land053	
Reinstatement planting	Tree Preservation Orders					<a href="#">Table D3.6 - Reinstatement Planting</a>
Reinstatement planting	Replacement trees	G		Land012		
Reinstatement planting	Mitigation planting	A	Land008			
Reinstatement planting	Seeding			Land059		
Reinstatement planting	Monitoring and maintenance			Land007		

## Ancient Woodland

7.5.3 Not applicable.

## Retained Vegetation

7.5.4 The following clauses apply to the vegetation clearance and the importance of not clearing more vegetation than is specified:

- Prior to any vegetation clearance commencing, all areas of existing vegetation shall be assessed by a qualified landscape architect and the Ecological Clerk of Works (EcCoW) or Environmental Manager to confirm vegetation to be protected or reinstated following the construction works. Documented inspections shall be provided to the East Sussex Highways Authority PM on request<sup>208</sup>.
- Those responsible for undertaking vegetation clearance shall be notified by the Environmental Manager of those areas where vegetation clearance is not permitted prior to works commencing, this information shall be updated and re-issued as appropriate. Evidence that a toolbox talk/briefing for vegetation retention/ reinstatement has been undertaken

<sup>208</sup> See CEMP clause Land015

- shall be recorded and details provided to the East Sussex Highways Authority PM on request<sup>209</sup>.
- A tree survey meeting the requirements of BS 5837, or as otherwise agreed with the East Sussex Highways Authority PM, shall be undertaken by a suitably qualified Arboriculturist to include recognition of tree pests and tree diseases as notified by DEFRA and be reported in an Arboricultural Report. As the health and condition of trees can change rapidly, so the status of the surveyed trees shall be checked on a basis commensurate with the level of risk and preferably on an annual basis. As necessary an updated Arboricultural Report shall be provided to the East Sussex Highways Authority PM. Evidence of how biosecurity considerations have influenced construction methods shall be provided to the East Sussex Highways Authority PM on request<sup>210</sup>.
- Only trees identified in the Arboricultural Assessment Report, Tree Constraints Plan and the Tree Removal and Retention Plan shall have any works undertaken to them. Where trees on neighbouring land require removal or other works, evidence shall be provided to the East Sussex Highways Authority PM of agreement with neighbours and justification as to why a working method is not available to preclude the need for such works. An Evaluation of Change Register shall be signed off by the client prior to the tree surgery being undertaken<sup>211</sup>.
- Only trees identified in the Arboricultural Assessment Report, Tree Removal and Retention Plan shall have any works undertaken to them as specified. Should tree surgery be required on trees not identified in the Report or Plan then an Evaluation of Change Register shall be submitted to the East Sussex Highways Authority PM for approval before tree surgery or additional scrub clearance works commence<sup>212</sup>.
- All trees and scrub that are to be retained shall be protected in accordance with BS 5839 2012, the Arboricultural Assessment and Tree Removal and Retention Plan<sup>213,214</sup>.

## Visual Amenity

- 7.5.5 The objective is to deliver a scheme that enhances the existing landscape character, promotes a sense of place while also minimising adverse effects on the visual amenity of neighbouring land uses.
- 7.5.6 It is recognised that vegetation clearance may give rise to increased views of the road and can also give rise to an increased perception of traffic noise. As

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<sup>209</sup> See CEMP clause Land016

<sup>210</sup> See CEMP clause Land032

<sup>211</sup> See CEMP clause Land034

<sup>212</sup> See CEMP clause Land055

<sup>213</sup> See CEMP clause Land054

<sup>214</sup> See the Arboricultural Assessment Report 3520000-ESH-ELS-SY2-0129-D0-LV-0001, Tree Constraints Plan 3520000-CH2-ELS-SY2-0129-DR-LX-0006 and Tree Removal and Retention Plan 3520000-CH2-ELS-SY2-0129-DR-LX-0007.

fast-growing screening plants would not fit with the character of the National Park, so only native species shall be used and thus a visual screen fence would be used to reduce such intrusion at The Boathouse for the benefit of the residents of that property.

7.5.7 The environmental clauses to be implemented by the Delivery Partner to minimise visual intrusion within the National Park comprise:

- In developing the layout for and operating site compounds, the Delivery Partner shall take into account sensitive receptors, existing screening vegetation and arrange the height of the offices, workshops, plant and storage elements so not to cause visual intrusion. Written records of consideration being given to the environmental impact of construction compounds upon neighbouring interests shall be provided to the East Sussex Highways Authority PM on request<sup>215</sup>.
- The Delivery Partner shall install and maintain temporary suitable boundary fence that screens and secures a site as appropriate, the appearance of which shall be dependent on Local Authority requirements. Photographic evidence of the hoarding shall be made available upon request to the East Sussex Highways Authority PM<sup>216</sup>.
- The Delivery Partner shall install a visual screen fence of a sufficient height to screen non-HGV traffic until mitigation planting becomes sufficiently established to deliver effective screening where disturbance to residents of The Boathouse. Photographic evidence of the fencing shall be made available upon request to the East Sussex Highways Authority PM<sup>217</sup>.
- Litter shall be removed from all areas within the works site prior to the removal of any soils or vegetation particularly from any drainage ditches<sup>218</sup>.
- The Delivery Partner shall engage with landowners to advise them of if and when vegetation clearance would affect their land. Such discussions would consider options for replanting species or use of fences as applicable<sup>219</sup>.

## Materials

7.5.8 To respect the local character of the National Park, the Park Authority has stipulated in the selection of materials and treatment of the Project. To this end, it has been stipulated that locally sourced timber from within the National Park is to be used for the fencing, cycle stands and seating areas. Walls are to be clad with flint.

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<sup>215</sup> See CEMP clause Land022

<sup>216</sup> See CEMP clause Land025

<sup>217</sup> See CEMP clause Land040

<sup>218</sup> See CEMP clause Land060

<sup>219</sup> See CEMP clause Land061

- 7.5.9 The clauses affecting the selection of materials are:
- Timber fencing as shown on the Landscape General Arrangement Plan shall be made from locally sourced material<sup>220</sup>.
  - Retaining solutions and/or materials shall be selected to reduce visual and landscape impacts in areas of high landscape sensitivity or where visual receptors with high sensitivity are present. The retaining solutions and/or materials shall be constructed in accordance with the specification and clad with flint<sup>221</sup>.
  - Flint and brick walls shall be constructed in the same style as walls in the local area<sup>222</sup>.
  - Gaps and open joints would be left in the flint and brick wall to provide for natural colonisation by plants<sup>223</sup>.
  - Cycle stands shall be made of locally sourced timber<sup>224</sup>.
  - Seating shall be made of locally sourced timber<sup>225</sup>.
  - All timber used on the Scheme, including fencing, temporary hoardings and formwork shall be sourced in accordance with current Government procurement rules<sup>226</sup>.

## Soil Management and Biosecurity

- 7.5.10 Clauses dealing with soil management are presented in Section 7.9.
- 7.5.11 Biosecurity issues are not only related to invasive species but to other plant pests. The arboricultural survey recognises that some tree pests and diseases are notifiable and must be reported to the Forestry Commission or the Animal and Plant Health Agency (APHA). All plants are to be UK sourced accompanied by proof of provenance certificates.
- 7.5.12 Given the above, the Delivery Partner shall take measures to meet the biosecurity requirements advised by DEFRA/Forestry Commission insofar as works in the soft estate are concerned with identified tree pests/diseases being notified to the Forestry Commission (via the Tree Alert website). Method statements and evidence of implementation shall be provided to the East Sussex Highways Authority PM on request<sup>227</sup>.
- 7.5.13 The sourcing, testing, stripping, handling, storage and spreading of site-won and imported topsoil shall comply with current guidance such as BS 6031: 2009 Code of practice for earthworks (BSI, 2009); DEFRA 'Construction Code of Practice for the Sustainable Use of Soils on Construction Sites'. Further, imported topsoil shall comply with the BS 3882: 2007 Specification for topsoil and requirements for use (BSI, 2007). Evidence of compliance with relevant

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<sup>220</sup> See CEMP Clause Land056

<sup>221</sup> See CEMP Clause Land057

<sup>222</sup> See CEMP Clause Land066

<sup>223</sup> See CEMP Clause Land065

<sup>224</sup> See CEMP Clause Land062

<sup>225</sup> See CEMP Clause Land063

<sup>226</sup> See CEMP Clause Land064

<sup>227</sup> See CEMP clause Land033

best practice shall be provided upon request to the East Sussex Highways Authority PM<sup>228</sup>.

## Construction Lighting

- 7.5.14 Site lighting and signage shall be provided to enable the safety and security of the construction sites. Lighting shall be designed, positioned and directed so as not to intrude unnecessarily on adjacent buildings, ecological receptors and other land uses to prevent unnecessary disturbance.
- 7.5.15 A Construction Lighting Strategy shall be prepared by the Delivery Partner to demonstrate that the potential for adverse effects upon dwellings or protected species has been minimised through correct location and orientation of the lighting equipment. The Strategy shall be included in the CEMP and submitted to the local planning authority for approval prior to the commencement of works<sup>229</sup>.
- 7.5.16 Where new or relocated lighting is introduced within 100m of residential dwellings or protected species, then an assessment shall be undertaken to confirm the absence of an adverse effect upon such dwellings or protected species within one week and corrective measures taken where adverse effects arise shall be reporting in the CEMP along with remedial actions. Site inspection records confirming correct orientation of construction lighting units shall be provided to the East Sussex Highways Authority PM on request<sup>230</sup>.
- 7.5.17 Due to the Dark Skies policy applicable to the area, all site works lighting (excluding construction compound) shall be extinguished in the period 17:00 to 07:00 unless extensions are agreed with the local planning authority in advance<sup>231</sup>.

## Reinstatement Planting

- 7.5.18 All planting should be in accordance with the planting plan and schedule 3520000-CH2-ELS-SY2-0129-DR-LX-0005. Also:
  - Trees and shrubs to be from local area (within the SDNP if possible) or at least within provenance zone 405.
  - Details of cultivation shall be in the specification.
  - A programme for the implementation of all the landscaping scheme.
- 7.5.19 Achievement of a reinstated site to the satisfaction of Natural England, landowner, local planning authority and the client is a critical aspect for the successful delivery of this Project given its SSSI status. Further clauses, dealing with the management of soils are presented in Section 7.9, while ecological aspects are addressed in Section 7.4.
- 7.5.20 Appropriate inspection, monitoring and maintenance of landscaping and planting shall be provided as part of the Project to facilitate the effective

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<sup>228</sup> See CEMP clause Land013

<sup>229</sup> See CEMP clause Land053

<sup>230</sup> See CEMP clause Land051

<sup>231</sup> See CEMP clause Land052

establishment of vegetation and the effectiveness of the landscaping proposals. The Delivery Partner shall maintain this planting and rectify all planting defects for a two-year period from the date of completion of the works.

- 7.5.21 Evidence of inspection, maintenance and rectifying planting defects shall be recorded, and details provided to the East Sussex Highways Authority PM on request<sup>232</sup>. The planting shall be inspected at the end of a two-year aftercare period at which all planting should be in a good healthy condition as assessed by a qualified landscape architect or ECoW.
- 7.5.22 All landscaping works shall be carried out in accordance with the approved planting strategy and in line with appropriate British Standards or other recognised codes of good practice unless otherwise amended following approval of an Evaluation of Change Register<sup>233</sup>.
- 7.5.23 Any trees intended to be retained which are felled or die as a consequence of works shall be replaced by the Delivery Partner. Where reasonably practicable, the size and species of replacement trees shall be selected to achieve to the greatest extent possible, a close resemblance of the original trees most effectively using locally occurring native species of local provenance and taking cognisance of any management plans for areas of woodland immediately adjacent. A record of inspections and any tree death/ damage/ replacements shall be maintained, and details provided upon request to the East Sussex Highways Authority PM<sup>234</sup>.
- 7.5.24 As the tall hedge adjacent to The Boathouse would be removed, options comprising fencing and species that accord with the character of the area would be discussed with the property owner.
- 7.5.25 The following two separate approaches to the re-seeding of vegetation are to be adopted. The first is along the roadside verge, while the second is within the SSSI:
- Roadside grassland shall be established by the use of a green hay collected from the roadside verge along the A259 on the northern side of the Causeway between the road and scrub<sup>235,236</sup>.
  - Grassland within the SSSI to be established by the replacement of topsoil removed from the designated site with allowance for natural regeneration from the seedbank within the soils. Seeding may be reinforced by use of green hay taken from the landward side of the river embankments immediately to the north and spread over the receptor areas. Should remedial supplementation be required if the natural regeneration and green hay is not successful, consideration should be given to selecting

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<sup>232</sup> See CEMP clause Land007

<sup>233</sup> See CEMP clause Land008

<sup>234</sup> See CEMP clause Land012

<sup>235</sup> See CEMP clause Land058

<sup>236</sup> Contact Ian Stanley (Business Manager Transport Winter and Compliance), Tel: 07342 998544, Email: ian.stanley2@eastsussexhighways.com

more salt tolerant species within the seed mix, in line with the increasingly saline conditions of the floodplain grazing marsh within the SSSI<sup>237,238</sup>.

## Enhancement Opportunities

7.5.26 No enhancement opportunities have been identified for the Project.

## 7.6 Archaeology and Cultural Heritage

- 7.6.1 There are few archaeological and cultural heritage aspects that require action from the Delivery Partner. The main area of risk relates to the construction compound site that is eventually selected. The applicable clauses are presented in Table 7-7.
- 7.6.2 The candidate compound site identified in the 2021 ES Addendum located close to Seaford is not expected to provide any archaeological resource given the agricultural use of the land.
- 7.6.3 An alternative site adjacent to The Boathouse (the 2022 candidate compound site) has the potential to encounter trench remains from the World War I. Consequently, a geophysical survey needs to be undertaken on behalf of the Delivery Partner with sufficient time to accommodate any investigations that may be required in advance of establishing the compound site.

**Table 7-7: Applicable Heritage Clauses**

Main Works						
Environmental Topic	Description of Aspect	REAC Risk Rating	Red Reporting Level	Amber Reporting Level	Green Reporting Level	Control Plan
Archaeological Finds	Works near heritage sites	A	Her003	Her002		<a href="#">Table D5.1: Archaeological finds - Works near heritage sites and Keeping of records</a>
Archaeological Finds	Keeping of records	A			Her001	
Watching Brief	Works near heritage sites	G		Her005		<a href="#">Table D5.2: Heritage - Watching Brief</a>
Works Scheme Instruction	Works near heritage sites		Her015			<a href="#">Table D5.3: Heritage - Works near heritage</a>

7.6.4 The following measures would be required for the 2022 candidate site:

- **Construction Plant:** Use of low compaction plant over areas of wet ground.
- **Fencing:** Areas outside the footprint of the works would be temporarily fenced to demarcate the works boundary.
- **Geophysical Survey:** A geophysical survey of the temporary construction compound would be undertaken in advance of soil stripping. The geophysical survey and reporting would be undertaken sufficiently in

<sup>237</sup> See CEMP clause Land059

<sup>238</sup> Contact Laura Clapham, Seven Sisters Park Ranger, South Downs National Park Authority, Tel: 07950 285830 email: [Laura.Clapham@southdowns.gov.uk](mailto:Laura.Clapham@southdowns.gov.uk)

advance to allow for subsequent trial trenching and, if required, mitigation to be completed in advance of construction commencing.

- **Written Scheme of Investigation:** A Written Scheme of Investigation (WSI) would be submitted to the East Sussex County Archaeologist for approval in advance of all archaeological works. The WSI would be prepared by the appointed archaeological contractor<sup>239</sup>.

7.6.5 The following clauses would become applicable should archaeological remains be found:

- Records of all archaeological remains found and copies of any mitigation measures determined in consultation with the local authority archaeologists and/or Historic England throughout the works must be kept on site for the duration of the works. Records of finds shall be made available to the East Sussex Highways Authority PM on request<sup>240</sup>.
- No construction operations shall take place within 10m of discovered archaeological remains for a period of 14 days from the date of such notification unless otherwise agreed by East Sussex Highways Authority following consultation with Historic England and the relevant county archaeologist. Photographic evidence shall be provided of protection of archaeological remains before works recommence to East Sussex Highways Authority PM on request<sup>241</sup>.
- If East Sussex Highways Authority is of the view that the archaeological remains require further investigation, no construction operations shall take place within 10m of the remains until provision has been made for further investigation and recording of the remains. This shall be delivered in accordance with details first submitted to and approved by East Sussex Highways Authority following consultation with Historic England and the relevant county archaeologist as appropriate<sup>242</sup>.
- Where works are likely to disturb previously un-excavated ground, archaeological watching briefs shall be undertaken during topsoil stripping and excavations. The archaeological watching briefs shall be followed by an appropriate programme of assessment, analysis and reporting. Documented archaeological brief by a qualified archaeologist shall be made available to the East Sussex Highways Authority PM on request<sup>243</sup>.

## 7.7 Construction Noise and Vibration

7.7.1 The environmental clauses to manage noise and vibration during construction are set out in **Acoustic Barriers**

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<sup>239</sup> See CEMP clause Her015

<sup>240</sup> See CEMP clause Her001

<sup>241</sup> See CEMP clause Her002

<sup>242</sup> See CEMP clause Her003

<sup>243</sup> See CEMP clause Her005

7.7.2 No acoustic barriers are required for the mitigation of operational noise. However, construction noise is likely to be particularly disturbing to local residents and visitors to the area. Insofar as piling and other noisy plants, the Delivery Partner would select and operate such plants in a manner that minimises disturbance to the residents.

7.7.3 Table 7-8 and address the following environmental aspects:

- Acoustic barriers.
- Compound and traffic disturbance.
- Works affecting receptors.
- Piling noise and vibration.

## Acoustic Barriers

7.7.4 No acoustic barriers are required for the mitigation of operational noise. However, construction noise is likely to be particularly disturbing to local residents and visitors to the area. Insofar as piling and other noisy plants, the Delivery Partner would select and operate such plants in a manner that minimises disturbance to the residents.

**Table 7-8: Applicable Construction Noise and Vibration Clauses**

Main Works						
Environmental Topic	Description of Aspect	REAC Risk Rating	Red Reporting Level	Amber Reporting Level	Green Reporting Level	Control Plan
Construction disturbance	Piling operations	A	NV045 NV051	NV054		<a href="#">Table D5.2: Acoustics Vibration</a>
Construction disturbance	Vibration	A	NV012 NV033 NV034 NV036	NV013	NV032	
Construction disturbance	Construction compound	A	NV017	NV018		<a href="#">Table D5.3: Acoustics Traffic Management</a>
Construction disturbance	Works <100m of dwellings	R	NV006 NV036 NV043		NV003 NV004 NV005 NV008 NV009 NV014	<a href="#">Table D5.4: Acoustics Disturbance to Dwellings</a>
Construction disturbance	Works duration	R	NV019			
Noise mitigation	Method statements	R	NV022			<a href="#">Table D5.5: Noise Mitigation</a>
Noise mitigation	Section 61	R			NV029	
Noise mitigation	Health protection	A			NV046	
Noise mitigation	Compressors	A		NV047		
Noise mitigation	Tool box talks	G			NV048	
Noise mitigation	Site hoarding	G			NV049	
Noise mitigation	Site cabins	A			NV050	
Noise mitigation	Tourists	A			NV052	
Noise monitoring	Reporting	G	NV027			<a href="#">Table D5.6: Noise Monitoring</a>

## Compound and Traffic Disturbance

- 7.7.5 The following clauses provide for the management of noise associated with the construction compound:
- A solid fence/hoarding would be provided along the boundary of the construction compound and the works site to minimise the impact of site noise on neighbouring dwellings<sup>244</sup>.
  - Noise generating equipment such as a site generator would be located as far from the dwellings as possible using other buildings (site cabin and welfare facilities to offer screening<sup>245</sup>.
  - All compressors would be 'sound reduced' models fitted with properly lined and sealed acoustic covers to be kept closed while in use. All ancillary pneumatic percussive tools would be fitted with mufflers or silences of the type recommended by the manufacturer<sup>246</sup>.
  - Method statements, monitoring and reporting protocols shall demonstrate that no construction vehicles shall wait or queue on public highways (excluding the Project) or in the vicinity of site compounds with engines running for periods in excess of 10 minutes except in the case of emergencies or breakdowns. Details of the management of construction traffic on the public highway shall be included within the Traffic Management Plan submitted to the East Sussex Highways Authority PM prior to the start of works<sup>247</sup>.
  - Where practicable, works with the potential to cause disturbance (including deliveries to site) shall be programmed such that the requirement for working outside of normal working hours is minimised. Evidence of agreed core working hours shall be presented in the CEMP with a process for agreeing any extensions with the local authority<sup>248</sup>.

## Works Affecting Receptors

- 7.7.6 A key measure is advanced notification of local stakeholders and residents of noise generating works, especially those undertaken. These clauses are presented in Section 7.10.
- 7.7.7 The following clauses seek to minimise acoustic disturbance to nearby residents:
- A Noise and Vibration Management Plan (NVMP) and Method Statements which apply the principles of S72 of Control of Pollution Act (CoPA) 1974, and good practice under BS 5228-1: Noise (BSI, 2014a) and BS 5228-2 Vibration (BSI, 2014b) Monitoring and reporting protocols shall demonstrate to East Sussex Highways Authority that no significant impact

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<sup>244</sup> See CEMP clause NV049

<sup>245</sup> See CEMP clause NV009, NV050

<sup>246</sup> See CEMP clause NV047

<sup>247</sup> See CEMP clause NV017

<sup>248</sup> See CEMP clause NV018

shall result from noise and vibration both within the scheme and along diversion routes<sup>249</sup>.

- If required following consultation with the local authority, an application under Section 61 of The Control of Pollution Act 1974 shall be made to the relevant Local Authority Environmental Health Department. Evidence of measures taken to comply with an applicable S61 consent shall be provided to the East Sussex Highways Authority PM on request<sup>250</sup>.
- Where the local authority requires noise monitoring, the Delivery Partner shall undertake and report noise and vibration monitoring as agreed with the local authority. Monitoring sites shall be established at a range of receptors to establish that the average noise levels do not exceed pre-existing ambient noise levels. The results shall be provided to the East Sussex Highways Authority PM within one month of the survey in an Excel spreadsheet format<sup>251</sup>.
- The layout of the individual works in noise sensitive locations shall be such that any noise impact at nearby sensitive properties is minimised, hence static plant shall be located to optimise screening and/or distance attenuation to occupied residential properties. Evidence demonstrating how nearby residential properties were considered in the location of static plant shall be provided to the East Sussex Highways Authority PM on request<sup>252</sup>.
- Where practicable, works with the potential to cause disturbance shall be sequenced to occur outside of the peak tourist season or are of a duration or timing that is acceptable to the Local Environmental Health Department<sup>253</sup>.
- The scheduled works shall be undertaken in accordance with the approved noise management scheme for the task. Records of inspections shall be provided to the East Sussex Highways Authority PM on request<sup>254</sup>.
- Noise generating equipment shall be sound reduced models fitted with acoustic enclosures, silencers or mufflers or screened maintained in good working order wherever practicable to comply with permissible noise levels set out in the relevant regulations. The specifications of plant used on site when within 100m of dwellings shall be provided to the East Sussex Highways Authority PM on request<sup>255</sup>.
- Method statements, monitoring and reporting protocols shall demonstrate that all plant and equipment is properly maintained and operated in accordance with manufacturers' recommendations. Plant shall be

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<sup>249</sup> See CEMP clause NV022

<sup>250</sup> See CEMP clause NV029

<sup>251</sup> See CEMP clause NV027

<sup>252</sup> See CEMP clause NV009

<sup>253</sup> See CEMP clause NV052

<sup>254</sup> See CEMP clause NV007

<sup>255</sup> See CEMP clause NV003

- inspected on arrival to site. Details shall be provided to the East Sussex Highways Authority PM on request<sup>256</sup>.
- Method statements, monitoring and reporting protocols shall demonstrate that machines in intermittent use shall be shut down in intervening periods of non-use or, where this is impracticable, they shall be throttled down to a minimum. There shall be no idling for a period more than 10 minutes. Details shall be provided to the East Sussex Highways Authority PM on request<sup>257</sup>.
  - Where static items of plant are likely to generate high noise levels, portable noise screens shall be deployed to provide additional noise attenuation when working close to residential properties such that the SOAEL values reported in the environmental assessment are not exceeded. Photographic evidence of portable noise screens being used shall be recorded and details provided to East Sussex Highways Authority within three days of plant being deployed<sup>258</sup>.
  - The Method Statement shall detail the forecast construction noise levels based upon the sound power level of the proposed plant to achieve a noise level at the facades of key receptors no greater than that forecast within the environmental assessment. It shall document the maximum noise levels and duration that key receptors would experience during the construction works<sup>259</sup>.
  - Hoardings, portable barriers and acoustic sheds shall be erected so that the SOAEL values reported in the environmental assessment are not exceeded by noisy construction activities unless safety or acoustic reasons preclude their use. Photographic evidence of measures to meet SOAEL values shall be provided to the East Sussex Highways Authority PM on request<sup>260</sup>.
  - Works with a risk of causing disturbance under BS 5228 shall be limited to no more than 10 working days in any 15 consecutive days and shall not exceed 40 days in any six consecutive months unless appropriate mitigation measures have been specified. The CEMP shall document those works at specific locations where there is a risk of BS 5228 not being met and propose mitigation measures for approval<sup>261</sup>.
  - Where high levels of noise are likely to be a hazard to site staff, prominent warning notices shall be displayed with ear protectors being available for the workforce and site visitors<sup>262</sup>.

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<sup>256</sup> See CEMP clause NV004

<sup>257</sup> See CEMP clause NV005

<sup>258</sup> See CEMP clause NV006

<sup>259</sup> See CEMP clause NV036

<sup>260</sup> See CEMP clause NV014

<sup>261</sup> See CEMP clause NV019

<sup>262</sup> See CEMP clause NV046

- All site staff and operatives would be briefed during toolbox talks on the requirements to minimise nuisance to both human and ecological receptors from site activities<sup>263</sup>.

## Piling Noise and Vibration

- 7.7.8 The Project requires piling activities close to the Cuckmere River and close to sensitive human and ecological receptors. Consequently, the following clauses apply:
- Methods of construction and plant shall be selected to minimise noise and vibration, and reduce the use of percussive and vibratory equipment, particularly for night-time working. The CEMP shall document the measures to be taken to minimise disturbance caused by use of piling activities<sup>264</sup>.
  - Where piling activities have the potential to result in noise levels that would be above or equal to SOAEL and below SOAEL +5dB, then a method of working to avoid the chance of piling for 10 days in 15 at the same place would be followed to avoid a significant impact. The Delivery Partner shall document and provide evidence to the East Sussex Highways Authority PM of those locations where a specific working method would be required to prevent the occurrence of a significant effect<sup>265</sup>.
  - The Delivery Partner shall establish criteria, controls and working methods, taking account of guidance in BS 5228 – 1 and BS 5228 – 2, ISO 4866: Mechanical vibration and shock, vibration of fixed structures. Guidelines for the measurement of vibrations and evaluation of their effects on structures and BS 7385- 2 Evaluation and measurement for vibration in buildings – Part 2: Guide to damage levels from ground borne vibration 1993. Best practical means shall be used to control vibration levels so that the Peak Particle Velocity (PPV) thresholds at sensitive receptors are not exceeded as a result of the works. The CEMP shall establish the locations and means by which construction vibration is to be managed<sup>266</sup>.
  - The Delivery Partner shall avoid percussive piling or where this is not possible, the Delivery Partner shall monitor noise and vibration levels where properties are located less than 20m from the piling works. The results of vibration monitoring shall be provided to the East Sussex Highways Authority PM on request<sup>267</sup>.
  - Should predicted vibration levels exceed 1mm/s component PPV at occupied residential buildings, or 3mm/s PPV at occupied commercial buildings, a detailed appraisal shall be carried out in accordance with the

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<sup>263</sup> See CEMP clause NV048

<sup>264</sup> See CEMP clause NV012

<sup>265</sup> See CEMP clause NV043

<sup>266</sup> See CEMP clause NV032

<sup>267</sup> See CEMP clause NV013

methods in BS 5228 – 2. If this identifies that people occupying buildings may experience levels in excess of the threshold values, those potentially affected shall be notified as soon as practicably possible in advance of the works. The notification shall describe the nature and duration of the works and any associated proposals for vibration monitoring. Details of those properties which potentially would experience elevated levels of vibration shall be notified to the East Sussex Highways Authority PM before contact is made with the occupiers<sup>268</sup>.

- Where works are predicted to generate a PPV above 10mm/s then the local authority shall be consulted and when there is no reasonable or practicable means to reduce predicted or measured vibration then the Delivery Partner shall: a) agree monitoring for vibration; b) consult occupiers of properties about condition surveys and any consequent actions; as well as reasonable and practicable mitigation for the occupants. Details of those properties which potentially would experience elevated levels of vibration shall be notified to the East Sussex Highways Authority PM before contact is made with the occupiers<sup>269</sup>.
- Percussive piling shall not be undertaken 1 hour prior to dusk or 16:30 whichever is the earliest to reduce disturbance to residents and to migratory sea trout and European eel<sup>270</sup>.
- Piling operations shall be constrained to periods agreed with the Local Environmental Health Department as advised by the EA should migratory fish be at risk. The agreed periods shall be recorded in the Piling Method Statement which shall be included in the CEMP<sup>271</sup>.
- Continuous flight auger (CFA) piling would be used rather than hammered or vibratory piling unless agreed with the local authority<sup>272</sup>.
- Soil compaction plant shall be set to a low amplitude setting or small plant shall be used when operating within 30m of sensitive receptors<sup>273</sup>.

7.7.9 Those residents likely to be affected by the removal of vegetation or other noisy operations shall be notified of the activity prior to the works being undertaken.

## 7.8 Road Drainage and Water Environment

7.8.1 As the Project is located across a river and in a groundwater dependent terrestrial ecosystem, this section sets out the environmental clauses in **Table 7-9** that address the following aspects:

- |                     |                     |
|---------------------|---------------------|
| • Consent           | • Groundwater       |
| • Water Consumption | • Hydrology         |
| • Flood risk        | • Pollution Control |

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<sup>268</sup> See CEMP clause NV033

<sup>269</sup> See CEMP clause NV034

<sup>270</sup> See CEMP clause NV045

<sup>271</sup> See CEMP clause NV054

<sup>272</sup> See CEMP clause NV051

<sup>273</sup> See CEMP clause NV053

- Consents.
- Water consumption.
- Flood risk.
- Source protection zone
- Groundwater monitoring
- Hydrology.
- Control of sediment and runoff.

**Table 7-9: Applicable Aquatic Environment Clauses**

Main Works						
Environmental Topic	Description of Aspect	REAC Risk Rating	Red Reporting Level	Amber Reporting Level	Green Reporting Level	Monitoring & Inspections
Consents	Consultations	A		Wat057		<a href="#">Table 6-1: Consents</a>
Consents	Dewatering / Excavations	A	Wat003			
Consents	Ground investigation	A		Wat055		
Consents	Water abstraction	A			Wat004	
Consents	Works <8m of a watercourse	A	Wat005			
Consents	Works in a main river	A	Wat082	Wat081		
Consumption	Water consumption	G		Wat051 Wat063		<a href="#">Table 6-2: Water Consumption</a>
Flood Risk	Works within Flood Zone 3	R		Wat015		<a href="#">Table 6-3: Flood Risk</a>
Flood Risk	Works in the flood plain	R		Wat008	Wat007 Wat009	
Flood Risk	Works <8m of a watercourse	R		Wat011		
Flood Risk	Works <16m of a designated tidal river	R		Wat010		
Flood Risk	Construction compounds	G		Wat013		
Hydrology	Control Measures	A	Wat088			<a href="#">Table 6-4: Hydrology</a>
Groundwater	Dewatering / Excavations	A	Wat047			<a href="#">Table 6-5: Groundwater</a>
Groundwater	Piling operations	R	Wat070 Wat071			
Pollution Control	Contaminated land	A	Wat064			<a href="#">Table D6-6: Sensitive Environmental Conditions</a>
Pollution Control	Piling operations	A	Wat083 Wat084 Wat090			<a href="#">Table D6-7: Piling Operations</a>
Pollution Control	Bridge works	A		Wat085 Wat087		<a href="#">Table D6-8: Bridge Works</a>
Pollution Control	Runoff control	A			Wat022 Wat023 Wat038 Wat044 Wat060	<a href="#">Table D6-9: Control Measures</a>
Pollution Control	Control measures	A		Wat058 Wat059		
Pollution control	Toolbox talk	A		Wat086	Wat052	
Pollution Control	Monitoring	G	Wat040 Wat042		Wat039 Wat043	<a href="#">Table 6-10: Monitoring</a>

Main Works						
Environmental Topic	Description of Aspect	REAC Risk Rating	Red Reporting Level	Amber Reporting Level	Green Reporting Level	Monitoring & Inspections
Pollution Control	Construction compounds	G			Wat006 Wat045	Table 6-11: Site Controls and Reporting
Pollution Control	Site management	G			Wat089	
Pollution Control	Site security	A			Wat027	
Pollution Control	Site documentation	G			Wat028 Wat029	
Pollution Control	Reporting	A	Wat020 Wat056			
Pollution Control	Hydrocarbon spillages	A			Wat021 Wat054	
Pollution Control	Road sweepings	A			Wat026	
Pollution Control	Vehicle cleaning	G			Wat061	
Pollution Control	Concrete washings	A		Wat062		

## Consents

7.8.2 The Project requires activities close to the Cuckmere River which could cause detrimental impact to the watercourse. Certain activities would therefore require consents from regulatory authorities, where the following clauses are applicable:

- Where de-watering activities are required, early engagement with the regulatory authorities shall be undertaken to agree proposed solutions and to ensure solutions and controls are compliant with the current Regulatory Position Statement for temporary dewatering. Applications for appropriate licences shall be prepared and lodged with the regulatory authority, with licence secured prior to discharging any water generated via dewatering activities<sup>274</sup>.
- Any proposed abstractions (e.g. for batching plants, wheel washing etc.) whether surface water or groundwater if in excess of 20m<sup>3</sup>/day must be supported by an abstraction licence<sup>275</sup>.
- Flood risk activity permits may be required for works near Main Rivers, e.g. construction of outfalls and must be kept on site at all times. Consents under the Water Resources Act 1991 and Land Drainage Act 1991 (incorporated into Environmental Permits under Environmental Permitting regulations for Main Rivers) for works on, over or within a main river or ordinary watercourse respectively, including temporary works shall be in place<sup>276</sup>.
- Where it is not possible to comply with the EA Regulatory Position Statement then site investigation boreholes and temporary trial pits within a main river floodplain must be reviewed in accordance with SR2015 No 36. This requires that they shall not be on or within 5m of the bank of a

<sup>274</sup> See CEMP Clause Wat003

<sup>275</sup> See CEMP Clause Wat004

<sup>276</sup> See CEMP Clause Wat005

- main river, culvert or remote defence, or within 8m of a flood defence or river control work<sup>277</sup>.
- Where any works are to be undertaken within a Main River then the relevant consents shall be sought from the EA or Marine Management Organisation as appropriate prior to installation<sup>278</sup>.

- 7.8.3 Where appropriate, consultations would be held with the EA and/or Local Flood Authority to determine where environmental permits would be required. Outcomes of these meetings shall be recorded in the Water Management Plan<sup>279</sup>.
- 7.8.4 A Method Statement for works within a Main River shall be agreed with the appropriate regulatory body prior to the commencement of works and shall be placed in the CEMP<sup>280</sup>.

## Water Consumption

- 7.8.5 Minimising water consumption makes a helpful contribution towards carbon reduction as well as managing resources. To this end, the Delivery Partner shall specify how it intends to maximise the use of grey water and water harvesting techniques<sup>281</sup>.

## Flood Risk

- 7.8.6 The Delivery Partner shall undertake to minimise the potential damage from flooding events by committing not to store materials within Flood Zone 3 (high probability area) or within the functional floodplain as defined by the EA on its Flood Map for Planning<sup>282</sup>.
- 7.8.7 The Delivery Partner shall avoid any increase in flood risk by taking appropriate measures, such as keeping watercourses clear of obstructions and debris to reduce blockage risk. Suitable access and safe refuges shall be identified for use in the event of a flood, and these will be communicated to all site personnel as part of the Contractor's site induction. Appropriate maintenance access will be made available to watercourses and associated flood risk structures, if required. A record of site inspections of watercourses shall be collated, and details shall be made available to the East Sussex Highways Authority PM upon request<sup>283</sup>.
- 7.8.8 All activities in Flood Zones 2 and 3 shall be considered in terms of safe access and egress for the workforce. An Emergency Flood Response Plan and procedures shall be provided to include measures to protect the works, plant and workforce<sup>284</sup>

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<sup>277</sup> See CEMP Clause Wat055

<sup>278</sup> See CEMP Clause Wat081

<sup>279</sup> See CEMP Clause Wat057

<sup>280</sup> See CEMP Clause Wat082

<sup>281</sup> See CEMP Clause Wat051, Wat063

<sup>282</sup> Environment Agency Flood Plan for Planning (<https://flood-map-for-planning.service.gov.uk/>)

<sup>283</sup> See CEMP Clause Wat007

<sup>284</sup> See CEMP Clause Wat009

- 7.8.9 No scheduled works within Flood Zone 3 shall commence until details of the works, including any flood storage compensation works have been agreed with the relevant authorities<sup>285</sup>.
- 7.8.10 The Delivery Partner shall consider potential flooding effects when planning sites and storing materials consulting with relevant regulatory bodies in flood plains and make appropriate use of the EA's Floodline flood warning service. Contact details shall be provided to all site personnel as part of their site induction<sup>286</sup>.
- 7.8.11 Where feasible, compounds and storage areas shall be located outside of Flood Zones 2 and 3. Justification for the location of site compounds and storage areas shall be provided to the East Sussex Highways Authority PM on request<sup>287</sup>.
- 7.8.12 Consultation with the EA must be undertaken where any of the Project lies within 16m of a designated tidal river. Minutes of Meetings with the EA shall be provided to the East Sussex Highways Authority PM on request<sup>288</sup>.
- 7.8.13 Consultation with the EA and/or Lead Local Flood Authorities/Internal Drainage Board will be undertaken where any of the Proposed Scheme lies within 8m of a designated main river or ordinary watercourse. Minutes of Meetings with the EA shall be provided to the East Sussex Highways Authority PM on request<sup>289</sup>.

## Source Protection Zone

- 7.8.14 The Project is not located within a Source Protection Zone (SPZ).

## Groundwater Monitoring

- 7.8.15 Due to the potential impact on soils and groundwater due to the Project, the following measures shall be undertaken:
- The design of key below ground structures, including retaining walls, piles, cable ducts, and also the excavation and widening of embankments and cuttings shall minimise alteration of the hydraulic properties of the surrounding ground (including the creation of flow pathways), intersection of groundwater flow or the creation of groundwater dams<sup>290</sup>.
  - Contaminated groundwater intercepted during construction would be tankered and disposed off-site at an appropriate licensed location unless it can be demonstrated that the resultant groundwater quality would not result in harm to the receiving environment<sup>291</sup>.

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<sup>285</sup> See CEMP Clause Wat015

<sup>286</sup> See CEMP Clause Wat008

<sup>287</sup> See CEMP Clause Wat013

<sup>288</sup> See CEMP Clause Wat010

<sup>289</sup> See CEMP Clause Wat011

<sup>290</sup> See CEMP Clause Wat047

<sup>291</sup> See CEMP Clause Wat067

7.8.16 Once the earthworks design and specification for sheet piling have been completed, then the Groundwater Risk Assessment would be updated and issued to the EA<sup>292</sup>.

## Hydrology

7.8.17 The Delivery Partner shall engage with the Internal Drainage Board to ensure that measures are in place to secure water levels and water quality during the works to the satisfaction of the Board<sup>293</sup>.

## Pollution Control

7.8.18 Pollution measures shall be implemented pre-construction to minimise the risk of contaminated materials entering the Cuckmere River or any other bodies of water<sup>294</sup>.

7.8.19 The working methods would be such to ensure no contamination of the ground or controlled waters from contaminated run-off or accidental spillages during construction<sup>295</sup>. For example:

- No construction materials shall be stored within the SSSI where feasible.
- Method Statements shall identify those areas where concrete mixing and wash areas are to be provided with a wash water collection system and demonstrate that they would not be within 10m of a watercourse. The location of concrete mixing and wash areas shall be recorded in the CEMP<sup>296</sup>.
- A Pollution Control Plan and Emergency Control Plan taking into account standard best practices shall be put in place for works for works that could affect aquifers or watercourses<sup>297</sup>.
- A road sweeping disposal method shall be established prior to works commencement and any dewatering of the arisings discussed with the regulator<sup>298</sup>.
- Mobile plant shall only be refuelled in designated areas where the risk of contamination to watercourses (including mains and foul sewers) can be minimised<sup>299</sup>.
- The passage of plant and works shall remain at least 10m from both Main Rivers and Ordinary Watercourses unless previously agreed with the regulatory body via a Method Statement<sup>300</sup>.
- No washing of vehicles shall take place within 10m of a watercourse<sup>301</sup>.

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<sup>292</sup> See CEMP Clause Wat070

<sup>293</sup> See CEMP Clause Wat088

<sup>294</sup> See CEMP Clause Wat038

<sup>295</sup> See CEMP clause Wat022, Wat023

<sup>296</sup> See CEMP Clause Wat062

<sup>297</sup> See CEMP Clause Wat020

<sup>298</sup> See CEMP Clause Wat026

<sup>299</sup> See CEMP Clause Wat054

<sup>300</sup> See CEMP Clause Wat060

<sup>301</sup> See CEMP Clause Wat061

- Method Statements shall specify that potentially contaminated materials would be segregation and stored in an impervious bunded area. Known or suspected contaminated stockpiles would be tested to ensure that no cross-contamination results<sup>302</sup>.

- 7.8.20 The Delivery Partner will take note of advice and recommendations within the CIRIA document C741 (2015, 4th Edition) Environmental Good Practice on Site guide, and C532 (2001) Control of water pollution from construction sites – Guidance for consultants and Delivery Partners. Spill Kits should be provided, and training given in their use within toolbox talks<sup>303</sup>.
- 7.8.21 The Water Management Plan shall document the measures to be taken to minimise the creation and release of contaminated silts and sediment into the surrounding watercourses and ponds. The Water Management Plan shall record those measures to be taken to address periods of intense rainfall<sup>304</sup>.
- 7.8.22 Method Statements shall include [but not be limited to] pollution control measures, systems and details of the isolation of existing surface water drainage systems from risks of pollution. Photographic evidence of pollution control measures in operation shall be provided to the East Sussex Highways Authority PM on request<sup>305</sup>.
- 7.8.23 Visual assessments for oil and silt shall be undertaken at watercourses at risk of pollution with evidence of inspections being available to East Sussex Highways Authority<sup>306</sup>.
- 7.8.24 Water quality monitoring, using portable field indicator equipment where necessary, shall be undertaken at high sensitivity watercourses at risk of pollution during scheme construction with evidence being available to East Sussex Highway Authority<sup>307</sup>.
- 7.8.25 A proposed suite of determinants to be monitored and the monitoring locations are to be agreed with East Sussex Highway Authority and the regulatory authorities. Details shall be documented in the CEMP<sup>308</sup>.
- 7.8.26 The Water Management Plan shall include measures to ensure that no pollution pathways are created between the construction sites and watercourses via overland flow during high intensity rainfall events. Measures may include minimising the period that subsoil is exposed, use of cut-off trenches and sediment ponds as well as retention of vegetation along watercourses to aid attenuation including adoption of relevant sections of BS 6031:2009 Code of Practice for Earthworks<sup>309</sup>.

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<sup>302</sup> See CEMP Clause Wat064

<sup>303</sup> See CEMP Clause Wat052, Wat089

<sup>304</sup> See CEMP Clause Wat038

<sup>305</sup> See CEMP Clause Wat058

<sup>306</sup> See CEMP Clause Wat039

<sup>307</sup> See CEMP Clause Wat040

<sup>308</sup> See CEMP Clause Wat042, Wat043

<sup>309</sup> See CEMP Clause Wat044

- 7.8.27 Construction compounds shall incorporate a closed drainage system with pollution control measures<sup>310</sup>. Where appropriate, liaison with the EA and/or Local Water Authority shall be undertaken to determine whether discharges from construction compounds require consents<sup>311</sup>.
- 7.8.28 Characterisation of the groundwater level would be undertaken for those sections of sheet pile that exceed 25m lengths or a distance exceeding 150m containing multiple sheet pile sections. Evidence would be provided within the CEMP recording the groundwater level for the applicable sections of sheet piling<sup>312</sup>.
- 7.8.29 A Piling Risk Assessment shall be undertaken prior to the commencement of works and used to inform a Piling Methods Statement. Daily visual checks of surface waters would be required during piling to check for losses of drilling fluid, and any other impacts<sup>313</sup>.
- 7.8.30 Guidance, including EA National Groundwater & Contaminated Land Centre Report NC/99/73 and its 2002 Piling into Contaminated Sites would be followed in those areas where contamination or risks to a source protection zone is anticipated. The CEMP would evidence the application of the EA's guidance on risk assessment and mitigation measures prior to works commencing<sup>314</sup>.
- 7.8.31 The Delivery Partner shall ensure that the site(s) has effective protection against vandalism/ theft to prevent damage which may lead to a release of materials/chemicals, which could cause pollution to ground/watercourse and/or drains<sup>315</sup>.
- 7.8.32 The Delivery Partner shall prepare a Bridge Demolition Method Statement that addresses not only the anticipated contaminants within the structure, but also defines how works are to be undertaken to prevent any bridge material or detritus from entering the river<sup>316</sup>. Furthermore:
- All personal involved in the bridge demolition works shall receive a toolbox talk before works commence on the bridge<sup>317</sup>
  - Inclusion of a 'crash deck' of sufficient width to capture any materials that could fall from a bridge vertically or at an angle shall be required<sup>318</sup>
- 7.8.33 A Control of Substances Hazardous to health (COSHH) register must be maintained by the Contractor for each site compound and updated through the works as required<sup>319</sup>. This shall be maintained within the Site Compound Plan and updated at a minimum frequency of every six months<sup>320</sup>.

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<sup>310</sup> See CEMP Clause Wat045

<sup>311</sup> See CEMP Clause Wat006

<sup>312</sup> See CEMP Clause Wat071

<sup>313</sup> See CEMP Clause Wat083, Wat084

<sup>314</sup> See CEMP Clause Wat065, Wat090

<sup>315</sup> See CEMP Clause Wat027

<sup>316</sup> See CEMP Clause Wat085

<sup>317</sup> See CEMP Clause Wat086

<sup>318</sup> See CEMP Clause Wat087

<sup>319</sup> See CEMP Clause Wat028

<sup>320</sup> See CEMP Clause Wat029.

7.8.34 Water pollution incidents with an impact beyond the site boundary are to be reported to the EA Pollution Incident Hotline within four hours where there is a major risk to the environment or people over an extended duration or frequency. All water pollution incidents with an impact beyond the site boundary shall be recorded in the CEMP along with a record of notification to the East Sussex Highways Authority or other applicable organisations<sup>321</sup>.

## 7.9 Materials and Waste

- 7.9.1 The Materials and Waste management requirements for the Project focus upon increasing efficiency of material use; reducing volume of waste arisings requiring disposal to landfill; and avoiding any deleterious impact to the Cuckmere River and the surrounding SSSI areas. The relevant materials and waste clauses are shown in Table 7-10.
- 7.9.2 The environmental management clauses described in this section address the following aspects:
- Resource efficiency.
  - Materials Management Plan.
  - Carbon emissions.
  - Contamination.
  - Excavated materials.
  - Contamination.
  - Unexploded ordnance.
  - Site Waste Management Plan.
  - Site management.
  - Soil survey.
  - Soil Management Plan.
  - Soil handing.
  - Soil storage.
  - Soils from the SSSI.
  - Soil reinstatement.

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<sup>321</sup> See CEMP Clause Wat056

**Table 7-10: Applicable Materials and Waste Clauses**

Main Works						
Environmental Topic	Description of Aspect	REAC Risk Rating	Red Reporting Level	Amber Reporting Level	Green Reporting Level	Control Plan
Sustainable resource use	Recycled aggregate	A			Mat014 Mat071	
Sustainable resource use	Materials Plan	A	Mat001 Mat070	Mat002 Mat005		<a href="#">See Table D7.1 - Materials Plan, CL:aire and Recycled Aggregate</a>
Sustainable resource use	CL:aire	G		Mat013		
Sustainable resource use	Carbon	A	Mat015 Mat017 Mat018	Mat067	Mat069	<a href="#">See Table D7.2: Carbon Emissions</a>
Sustainable resource use	Excavated materials	A	Mat020	Mat019	Mat006	<a href="#">See Table D7.3: Excavated Materials</a>
Contaminated land	Unexploded Ordnance	A			Mat061	
Contaminated land	Contamination	A		Mat063	Mat062	<a href="#">See Table D7.4: UXO and Contamination</a>
Waste management	Site Waste Management Plan	G	Mat008			
Waste management	Waste disposal	A	Mat003 Mat009	Mat012	Mat011	<a href="#">See Table D7.5: Waste Management</a>
Waste management	Control of litter	A			Mat068 Mat072	
Soil management	Soil survey	A	Mat021 Mat022 Mat023			
Soil management	Soil Management Plan	R	Mat024			<a href="#">See Table D7.6: Soil Survey and Management Plan</a>
Soil management	Soil handling	R	Mat034 Mat036	Mat025 Mat026 Mat027 Mat028 Mat029 Mat030 Mat031 Mat032 Mat033 Mat035	Mat037	<a href="#">See Table D7.7: Soil Handling and Toolbox Talk</a>
Soil management	Tool box talk	A		Mat038		
Soil management	Soil stockpiling	R	Mat048	Mat039 Mat040 Mat041 Mat042 Mat043 Mat044 Mat045 Mat046 Mat047	Mat049	<a href="#">See Table 7.8: Soil Stockpiling</a>
Soil management	Soil reinstatement	R		Mat050 Mat051 Mat052 Mat055 Mat065	Mat053 Mat054 Mat054	<a href="#">See Table 7.9: Soil Re-instatement</a>
Soil management	Aftercare	A	Mat057		Mat058	
Soil management	Records management	A	Mat059			<a href="#">See Table 7.10: Aftercare, Records Management and Biosecurity</a>
Soil management	Biosecurity	G	Mat060			
Soil management	Material storage	A			Mat066	<a href="#">See Table 7.11: Material Storage</a>

## Resource Efficiency

- 7.9.3      Approximately 70% of the carbon used during construction is associated with construction materials. Hence improving material resource efficiency not only reduces waste and cost, but also contributes to carbon savings. In addition to material resource efficiency, fuel and energy savings also reduce carbon emissions.
- 7.9.4      Resource efficiency would not only reduce costs, but also reduce carbon emissions, and such efficiencies can be achieved by correctly specifying both

the type and quantities of materials required. Reducing over-ordering also reduces the quantity of waste to be generated.

- 7.9.5 By purchasing re-used or recycled aggregate in preference to primary materials, lower carbon emissions may be achieved. The current target for regional recycled aggregates for the region is 26% for the South-East region<sup>322</sup>. The use of recycled aggregate shall furthermore meet the WRAP quality Protocol<sup>323</sup>.
- 7.9.6 The Delivery Partner acknowledges the opportunities set out in DMRB Standard CD 374<sup>324</sup> to use recycled aggregates in structural concrete to aid the prudent use of natural resources and maximise use of recycled construction waste. It is noted that the use of recycled aggregate is currently restricted to structural elements with less onerous exposure classes and with inherent robustness.
- 7.9.7 The Delivery Partner shall ensure that all reasonable steps to maximise the contribution towards all goals of sustainable development and, in particular, resource efficiency and the minimisation of the whole life carbon emissions have been undertaken<sup>325</sup>. Furthermore, the Delivery Partner shall adhere to the waste hierarchy and maximise the potential for asset re-use<sup>326</sup>.
- 7.9.8 The Delivery Partner would propose measures to address the following objectives:
- Use responsibly sourced materials.
  - Be resource efficient and adopt a circular economy approach.
  - Use surplus materials for community projects and off-site environmental enhancement.
  - Achieve over 70% material recovery/recycling of non-hazardous CDW materials.
  - Imported aggregate to comprise re-used/recycled aggregate in line with the regional target.
  - Adopt designs that do not restrict use of materials with sustainability credentials.
  - Minimise materials and waste transport.

## Material Management Plan

- 7.9.9 The estimated quantities of construction materials are to be recorded in the Material Management Plan (MMP) by the Delivery Partner. While the selection of materials can often be constrained, the Delivery Partner would identify opportunities to use recycled materials and record this in the MMP<sup>327</sup>.

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<sup>322</sup> See CEMP clause Mat071

<sup>323</sup> See CEMP clause Mat014

<sup>324</sup> DMRB Update CD 374 0 The Use of Recycled Aggregates in Structural Concrete - CD 374 specifies that the percentage of recycled aggregates to the total aggregates by mass in the concrete mix shall not exceed: 60% for non-prestressed concrete structures; 30% for buried structures and structures with no access for inspection; 20% for prestressed concrete structures.

<sup>325</sup> See CEMP clause Mat015

<sup>326</sup> See CEMP clause Mat001

<sup>327</sup> See CEMP clause Mat001

- 7.9.10 A record of the origins and quantities of primary, site recovered, re-used and secondary materials used is to be maintained under a WRAP quality protocol and recorded in the MMP with suitable audits undertaken<sup>328</sup>
- 7.9.11 Aggregate to be used within sensitive sites shall be of a pH that would not diverge from that of the soil to prevent alteration of the preferred pH range of salt marsh and grazing marsh species<sup>329</sup>.
- 7.9.12 Any material to be taken off site shall be characterised in accordance with the appropriate guidance. Furthermore, the use of the CL: AIRE definition of Waste shall be included and recorded in the MMP<sup>330</sup>.

## Carbon Emissions

- 7.9.13 The Delivery Partner would, where feasible, undertake actions that shall seek to minimise the carbon emissions associated with the Project. This shall include the sourcing of materials locally where possible and the use of prefabricated components<sup>331</sup>.
- 7.9.14 As reducing material demand and waste disposal contribute towards reducing greenhouse gas emissions, the transport of material and waste to and from the Project also contribute. To this end, the Delivery Partner would seek to reduce the average tonne/km that materials and waste would be moved recognising that multiple sources and disposal sites are expected to be used. The carbon footprint associated with the sourcing of materials<sup>332</sup> would be an explicit consideration of the Delivery Partner's purchasing strategy.
- 7.9.15 The Delivery Partner shall identify how phasing of the construction sequence could minimise non-construction carbon emissions associated with the diversion of traffic<sup>333</sup>.

## Excavated Materials

- 7.9.16 The Delivery Partner would establish and manage dedicated areas for handling and storing excavated materials to prevent harm to human health or the natural environment. Evidence of site inspections of materials handling, and storage shall be made available to the client<sup>334</sup>.
- 7.9.17 The physical and chemical properties of soils to be excavated shall be determined such that soil handling measures are in place to prevent the release of sediment or other contaminants into the aquatic or terrestrial ecosystem<sup>335</sup>.
- 7.9.18 Where excavations and earthworks are to take place within or adjacent to a coastal, wetland or riverine designated site, a Method Statement shall be

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<sup>328</sup> See CEMP clause Mat005

<sup>329</sup> See CEMP clause Mat002

<sup>330</sup> See CEMP clause Mat013

<sup>331</sup> See CEMP clause Mat015, Mat017, Mat067, Mat069

<sup>332</sup> See CEMP clause Mat067

<sup>333</sup> See CEMP clause Mat018

<sup>334</sup> See CEMP clause Mat006

<sup>335</sup> See CEMP clause Mat019

agreed with Natural England to avoid deleterious ecological effects with a copy being provided to the client<sup>336</sup>.

## Contamination

7.9.19 The Delivery Partner would act to minimise deleterious impacts on the SSSI area through contamination:

- An **Unexpected Contamination Plan** would be produced by the Delivery Partner in advance of any earthworks or construction activities involving ground disturbance. This would include processes and procedures to deal with unforeseen contamination and manage immediate risks to human health and the environment to prevent the further spread of contamination. Specific protocols would be developed for dealing with potential asbestos-containing materials<sup>337</sup>.
- Where possible, contaminated ground would be retained on site and placed beneath clean cover material. Otherwise it would be transported to a suitably licensed waste facility at such as the Woodside depot located in Wealden for bituminous materials containing coal tar, or Allied Waste Management Ltd in Wealden for construction materials containing asbestos<sup>338</sup>.

## Unexploded Ordnance

7.9.20 The construction area is at very-high risk from buried Unexploded Ordnance (UXO). This level of risk is likely to apply also to the temporary construction compound. It is the responsibility of the Delivery Partner to commission a further detailed UXO Threat and Risk Assessment for the temporary construction compound area and provide the report to the client in advance of the site preparation phase<sup>339</sup>.

## Site Waste Management Plan

7.9.21 The efficient use of material resources, reduction of waste at source and reduction of the quantity of waste arisings requiring disposal to landfill is a regular element of current day construction practice. As a result, the Delivery Partner would prepare an MMP and a Site Waste Management Plan (SWMP)<sup>340</sup>. These Plans would be provided for approval by appropriate regulatory organisations.

7.9.22 A SWMP shall be prepared prior to construction activities and shall include procedures for compliance with the requirements for waste transfer notes, in accordance with the appropriate legislation. It shall include a register of all waste loads leaving the site and shall be held on-site and recorded in to provide

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<sup>336</sup> See CEMP clause Mat020

<sup>337</sup> See CEMP clause Mat062

<sup>338</sup> See CEMP clause Mat063

<sup>339</sup> See CEMP clause Mat061

<sup>340</sup> See CEMP clause Mat008

an audit train<sup>341</sup> and be regularly updated by the appointed Environmental Manager<sup>342</sup>.

- 7.9.23 The SWMP would set the framework for the management of wastes generated during construction. The Plan would document the decisions taken to minimise waste and set objectives and targets for the main waste types. The principles of the waste hierarchy would be applied to minimise waste generation and maximise re-use of materials on-site, wherever possible.
- 7.9.24 In meeting the requirement of DMRB LA 110 – Materials and Waste paragraph 4.1, the Delivery Partner shall complete Table 7-11 by providing the assumptions in place prior to the works commencing. Table 7-12 shall document the Delivery Partner's intended waste statistics to be recorded.

**Table 7-11: Assumptions Underpinning Waste Forecasts**

Aspect	Assumptions
<complete table>	

**Table 7-12: Monitoring of Waste Statistics**

Aspect	Statistics to be Recorded
<complete table>	

- 7.9.25 For all potential waste arisings, the Delivery Partner would comply with The Environmental Permitting (England and Wales) Regulations 2015. If wastes cannot be legitimately re-used on site, they would be removed using a licenced carrier to a licensed recycling or disposal facility in line with regulatory requirements. All necessary waste management permits and planning permissions shall be obtained and managed by the Delivery Partner<sup>343</sup>.
- 7.9.26 A register of all waste loads leaving the site, including volumes, recycling rate, carrier details and disposal sites details shall be held on site and be maintained to provide an audit trail for the reporting of waste types, quantities and management methods and shall be available to the client on request<sup>344</sup>.
- 7.9.27 Offsite recovery and/or disposal facilities shall be within 20 miles of the Project to minimise carbon emissions unless demonstrable efficiencies result due to enhanced material recovery or cost saving. The location of offsite recovery and/or disposal facilities shall be provided to the client on request supported by evidence of efficiencies<sup>345</sup>.
- 7.9.28 The quantity of waste arisings to be moved to landfill sites from the Project would be minimised where reasonably practicable based upon measures such

<sup>341</sup> See CEMP clause Mat009

<sup>342</sup> See CEMP clause Mat011

<sup>343</sup> See CEMP clause Mat009

<sup>344</sup> See CEMP clause Mat010

<sup>345</sup> See CEMP clause Mat012

as storage of materials to prevent cross contamination and waste through 'spoilage and 'just in time' deliveries<sup>346</sup>.

- 7.9.29 The Delivery Partner shall implement the management requirements of the waste hierarchy<sup>347</sup>. All waste would be managed by the contractor in accordance with the waste hierarchy (in order of preference) to comply with SDNPA Sustainable Construction Technical Advice Note (SDNPA, November 2019):
- Prevention.
  - Preparing for re-use.
  - Recycling.
  - Other recovery.
  - Disposal.
- 7.9.30 An indicative list of the major types of waste materials that are anticipated to arise from the Project and the potential for recycling of waste arising from the Project shall be provided in Table 7-14 by the Delivery Partner.
- 7.9.31 Where re-use of material generated on-site is not possible, alternative options would be sought off-site such as reprocessing or the use of inert materials on local farms. In addition to the beneficial use of surplus materials, opportunities exist for surplus materials to be put to a beneficial community use. The Delivery Partner would report intended community use of surplus materials in Table 7-13.

**Table 7-13: Intended Community Use of Surplus Materials**

Surplus Material	Possible Users	Potential Uptake	Locations/ Contact Points
Tree mulch	Local community projects		
Concrete pipes	Schools, Fire service		

## Site Management

- 7.9.32 The Delivery Partner shall manage all construction sites to avoid deleterious impacts on the surrounding sensitive areas. Reflecting upon the sensitivity of the Cuckmere River, and construction works would be taking place above and alongside the river, it is important that materials do not enter the river or are not discarded by the workforce. To this end, fine netting would be put in place alongside work zones to prevent items entering the river<sup>348</sup>. There would also be weekly inspections of the riverbanks to ensure that it was free from construction debris and litter<sup>349</sup>.

<sup>346</sup> See CEMP clause Mat003

<sup>347</sup> See CEMP clause Mat001

<sup>348</sup> See CEMP clause Mat072

<sup>349</sup> See CEMP clause Mat068

**Table 7-14: Estimated Quantities of Construction and Demolition Waste Arising**

## Soil Survey

7.9.33 As noted in Section 3.2 a pre-construction soil resource survey is to be undertaken to establish the nature of the soils within any areas of that shall be disturbed during the site preparation and construction phases<sup>350</sup>.

## Soil Management Plan

7.9.34 The Delivery Partner is required to produce a Soil Management Plan (SMP) and approved by SDNPA prior to the start of the site preparation phase. The soil survey and previous ground investigation findings shall be used to inform the plan preparation<sup>351</sup>. This Plan shall include measures to:

- Mitigate the potential for damage to the soil structure through compaction, the main cause of which is the traversing of earth moving machinery<sup>352</sup>.
- Manage the handling of soils and excavated materials particularly after rainfall<sup>353</sup>.
- Organise stockpiling of soils on and off the site to reflect their importance to restoration of the SSSI<sup>354</sup>.
- Achieve successful reinstatement of soils within the work site<sup>355</sup>.

7.9.35 Alongside the soil survey, rainfall criteria shall be established in the SMP. It is anticipated that these criteria shall comprise:

- In light drizzle, soil handling may continue for up to four hours unless the soils are already at/ near to their moisture limit.
- In light rain, soil handling must cease after 15 minutes.
- In heavy rain and intense showers, handling shall cease immediately

7.9.36 The SMP shall also detail the approach to aftercare of the site of between one and five years to be agreed with the landowner and the client.<sup>356</sup>

## Soil Handling

7.9.37 The handling of soils is subject to the following requirements:

- **Soils not from the SSSI:** Methods of topsoil stripping, handling and storage particularly when dealing with wet soils within the working areas, combined with a ground reinstatement programme, to retain its condition for plant growth and agricultural use would be specified by the Delivery Partner to the satisfaction of the SDNPA<sup>357</sup>.

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<sup>350</sup> See CEMP clauses Mat021, Mat022, Mat023

<sup>351</sup> See CEMP clause Mat024

<sup>352</sup> See CEMP clause Mat026

<sup>353</sup> See CEMP clauses Mat025 to Mat037

<sup>354</sup> See CEMP clauses Mat039 to Mat049

<sup>355</sup> See CEMP clauses Mat050 to Mat056

<sup>356</sup> See CEMP clauses Mat057, Mat058.

<sup>357</sup> See CEMP clause Mat025 to Mat060.

- **Hazards:** Ground surveys would be undertaken prior to the commencement of soil stripping to address any residual risks from unexploded ordinance or other hazards that may be encountered<sup>358</sup>.
  - **Biohazards:** All vehicles involved in the movement of soils represent a means for the transfer of disease, pathogens and weeds including invasive non-native species (INNS) hence an INNS Method Statement shall be implemented<sup>359</sup>.
- 7.9.38 All soil handling works are to be undertaken in accordance with the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites<sup>360</sup> and the Good Practice Guide for Handling Soils in Mineral Workings<sup>361,362</sup>.
- 7.9.39 In all cases, after rain has ceased, soil tests would be applied to determine whether handling may re-start, provided that the ground is free from ponding and ground conditions are safe to do so<sup>363</sup>.
- 7.9.40 If sustained heavy rainfall (e.g. >10mm in 24 hours) occurs during soil stripping operations, work must be suspended and not restarted until the ground has had at least a full dry day or agreed moisture criteria (such as a specified soil moisture content as defined in the CEMP) can be met<sup>364</sup>.
- 7.9.41 Where soils are wet or moist, they should be handled using excavators rather than dozers to minimise compaction<sup>365</sup>. All plant and machinery must always be maintained in a good working condition to ensure that soils are stripped correctly to ensure the correct depth of strip and to minimise the risk of contamination<sup>366</sup>.
- 7.9.42 The Environmental Clerk of Works (ECoW) would provide supervision of soil management in accordance with the principles set out within the CEMP and the Soil Management Plan<sup>367</sup>.
- 7.9.43 Daily records of operations undertaken together with site and soil conditions shall be maintained during soil handling activities<sup>368</sup>.
- 7.9.44 The soil handling environmental management clauses shall be communicated to all personnel involved in ground works through appropriate toolbox talks setting out the principles of good practice in soil management, the site constraints and objectives, as well as the contents of the Soil Management Plan<sup>369</sup>.

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<sup>358</sup> See CEMP clause Mat061

<sup>359</sup> See CEMP clause Mat060

<sup>360</sup> Department for Food and Rural Affairs (Defra) 2009, available at <https://www.gov.uk/government/publications/code-of-practice-for-the-sustainable-use-of-soils-on-construction-sites>.

<sup>361</sup> Institute of Quarrying 2021, available at <https://www.quarrying.org/soils-guidance>.

<sup>362</sup> See CEMP clause Mat027

<sup>363</sup> See CEMP clause Mat033

<sup>364</sup> See CEMP Clause Mat032

<sup>365</sup> See CEMP clause Mat028

<sup>366</sup> See CEMP clause Mat029

<sup>367</sup> See CEMP clause Mat031

<sup>368</sup> See CEMP clause Mat059

<sup>369</sup> See CEMP clause Mat038

- 7.9.45 The main cause of soil compaction is the traversing of soils with earth-moving machinery and the inherent increased likelihood of adverse soil compaction is the weight (i.e. the contact pressure) of the machinery. To reduce the potential for soil compaction, it is anticipated that the Delivery Partner would utilise the lightest machines as is practicable to undertake all soil stripping and soil handling activity<sup>370</sup>.
- 7.9.46 Topsoil would be stripped across the working areas to the full depth (not expected to be greater than 30mm), while sub-soil would be stripped to a depth of 150mm prior to laying down a geotextile material and a working surface of crushed stone (except where not specified for ecological reasons)<sup>371</sup>.

## Soil Storage

- 7.9.47 Soil would be transported directly to its stockpile location after stripping, and once the stockpile has been formed, the soil would remain in the stockpile until it is re-used at its destination<sup>372</sup>. Interim stockpiles would not be used, unless unavoidable, to minimise the double handling of soils<sup>373</sup>.
- 7.9.48 Given that the works are to occur within a floodplain, it is not expected that materials and soils would be able to be stored at the works site. Topsoil and subsoil would be stockpiled at the construction compound and not within the floodplain<sup>374</sup>. Instead, materials would need to be transported to and from the construction compound.
- 7.9.49 Soils would be loose tipped into heaps in the stockpile locations with the stockpiles being formed and shaped to create shallow gradients to facilitate the shedding of rainwater and prevent ponding and infiltration. They would have slopes of 1 in 2 (approximately 25°) or less<sup>375</sup>.
- 7.9.50 Maximum permissible stockpile heights would be specified within the Soil Management Plan but would not exceed 2m for all soils obtained from the SSSI and 3m for all other topsoil. The height of subsoil stockpiles would be kept as low as practicable<sup>376</sup>.
- 7.9.51 The locations, volumes and contents of all stockpiles would be clearly recorded along with marker posts placed adjacent to the stockpiles to indicate all stockpile contents especially those taken from specific plots within the SSSI<sup>377</sup>.
- 7.9.52 Once the stockpile has been formed the area would be cordoned off with secure fencing to prevent any disturbance by other activities. No wheeled vehicles would run on stockpiles of soil that is to be re-used<sup>378</sup>.

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<sup>370</sup> See CEMP clause Mat026

<sup>371</sup> See CEMP clause Mat034

<sup>372</sup> See CEMP clause Mat039

<sup>373</sup> See CEMP clause Mat035

<sup>374</sup> See CEMP clause Mat040

<sup>375</sup> See CEMP clause Mat042

<sup>376</sup> See CEMP clause Mat042

<sup>377</sup> See CEMP clause Mat044

<sup>378</sup> See CEMP clause Mat045

- 7.9.53 The stockpiles would be monitored for signs of ponding, as indicated by standing water, and erosion. Where this occurs, temporary drainage measures, regrading and/or silt fencing would be put into effect<sup>379</sup>.
- 7.9.54 To reduce the likelihood of anaerobic conditions developing in the topsoil stockpiles, the surface shall be either bare or only have short surface vegetation present prior to stripping. Cuttings must not be added to or mixed with the stripped soil<sup>380</sup>.

## Soils from the SSSI

- 7.9.55 A SMP with the following objectives would be agreed with Natural England<sup>381</sup>:

### Soil stripping

- Soils to be moved from within the SSSI are to be defined by the ecologist according to the plant assemblages such that individual plots are not mixed with other soils to retain the mix of seeds associated with each individual plot<sup>382</sup>.
- Individual topsoil units identified by the ecologist are to be separately lifted, transported and stored<sup>383</sup>.
- Where soils and vegetation are to be removed from a drainage ditch, litter shall be removed before the soils are placed into realigned ditches<sup>384</sup>.
- Remove soils only with a soil moisture content such that the process of soil handling does not give rise to smearing or other damage to the soils<sup>385</sup>.

### Soil moving plant

- Agree with Natural England the use of light weight equipment to remove soils to reduce the risk of compaction<sup>386</sup>.
- Provide suitable vehicles to transport soils with a high moisture content that prevent leakage on to the highway and subsequent runoff of sediment into the river<sup>387</sup>.
- As the passage of vehicles across soils risks causing soil compaction, site restoration would include restoring compacted soils to their former condition. Also, wooden bearers should be used to spread the weight of heavy construction equipment and components such as the bridge girders<sup>388</sup>.

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<sup>379</sup> See CEMP clause Mat047

<sup>380</sup> See CEMP clause Mat037

<sup>381</sup> See CEMP clause Mat024

<sup>382</sup> See CEMP clause Mat025

<sup>383</sup> See CEMP clause Mat041

<sup>384</sup> See CEMP clause Mat065

<sup>385</sup> See CEMP clause Mat030

<sup>386</sup> See CEMP clause Mat026

<sup>387</sup> See CEMP clause Mat036

<sup>388</sup> See CEMP clause Mat066

## **Soil storage**

- Separate storage of each topsoil unit from subsoils<sup>389</sup>.
- The storage of soils within the compound site must clearly record the identity of the SSSI soils and ensure that there is no mixing between soil storage areas<sup>390</sup>.
- While there would be no seeding of SSSI stockpiles, other stockpiles should be seeded where the stockpile is anticipated to remain for more than 60 days<sup>391</sup>.
- Minimum of three times a week checking of the soils stored at the compound site to ensure absence of contamination with other soils<sup>392</sup>.
- Minimum of three times a week checking of the soils stored at the compound site to maintain soil moisture levels as agreed with Natural England with weekly reporting to East Sussex Highways Authority<sup>393</sup>.
- Adherence to the DEFRA Code of Practice for the Sustainable Use of Soils Code of Practice on construction sites<sup>394</sup>.

- 7.9.56 In the case of soils taken from the SSSI drainage ditch, the substrate and vegetation removed from the ditch would be separated from other material for their return into the new ditch on completion<sup>395</sup>.
- 7.9.57 Substrate and vegetation removed from saltmarsh would be separated from other material for their returned to the new banks.

## **Soil Reinstatement**

- 7.9.58 Where land is to be reinstated to its former use, soils would be reinstated to their pre-disturbance depths and quality as far as practicable, with reference to pre-construction soil resource survey results as applicable<sup>396</sup>.
- 7.9.59 All surfaces to receive topsoil or subsoil would be inspected and all obstacles, such as wire, rope, wood, metal, plastic and concrete debris, and any temporary roads, surfacing or building materials, would be removed from site before the soils are reinstated<sup>397</sup>.
- 7.9.60 Agreement would be reached with Natural England on the method of soil placement for each soil unit such that the ecological outcomes are achieved<sup>398</sup>.
- 7.9.61 No soil originating from outside the SSSI would be used within the designated area<sup>399</sup>.

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<sup>389</sup> See CEMP clause Mat041

<sup>390</sup> See CEMP clause Mat044

<sup>391</sup> See CEMP clause Mat043

<sup>392</sup> See CEMP clause Mat047

<sup>393</sup> See CEMP clause Mat048

<sup>394</sup> <https://www.gov.uk/government/publications/code-of-practice-for-the-sustainable-use-of-soils-on-construction-sites>

<sup>395</sup> See CEMP clause Mat065

<sup>396</sup> See CEMP clause Mat052

<sup>397</sup> See CEMP clause Mat053

<sup>398</sup> See CEMP clause Mat055

<sup>399</sup> See CEMP clause Mat051

- 7.9.62 The reinstatement of soils would take place during late spring to early autumn to reduce the potential need to work around adverse (i.e. wet/freezing conditions)<sup>400</sup>.
- 7.9.63 Soils would be reinstated by loose-tipping, with a tracked excavator if no transportation is required, or otherwise with dump trucks. Either way, an excavator would spread the soil to its specified thickness.
- 7.9.64 Appropriate decompaction measures would be undertaken during reinstatement for topsoil, subsoils and their receiving substrates, including loosening with low weightbearing ripping equipment<sup>401</sup>.

## 7.10 Population and Human Health

- 7.10.1 As noted in the Chapter 13 of the ES Addendum, a risk-based approach is to be taken towards community engagement reflecting those work activities likely to give rise to disturbance and complaint. This section identifies measures relevant to the works as set out in Table 7-15.

**Table 7-15: Applicable Community Engagement Clauses**

Main Works						
Environmental Topic	Description of Aspect	REAC Risk Rating	Red Reporting Level	Amber Reporting Level	Green Reporting Level	Control Plan
Stakeholder communications	Construction disturbance	R	Com002 Com008	Com001 Com007	Com023 Com024	<a href="#">Table D9.1 Stakeholder Communications</a>
Stakeholder communications	Formal notifications	A	Com004			
Stakeholder communications	Records management	A	Com003			
Vehicular access restrictions	Construction disturbance	R	Com012			<a href="#">Table D9.2: Vehicular Access Restrictions</a>
Diversion routes	Construction Traffic	A	Com013			
Diversion routes	Construction disturbance		Com025			
Public Rights of Way	Construction disturbance	A		Com017 Com018 Com019	Com020 Com021	<a href="#">Table D9.3 Public Rights of Way</a>

### Stakeholder Communications

- 7.10.2 A mechanism by which potentially significant effects can be avoided is by effective and timely stakeholder engagement. Based upon an appreciation of how the Proposed Scheme would be constructed as described in ES Addendum Chapter 4, the following environmental management clauses shall be implemented by the Delivery Partner to minimise disturbance to local residents and businesses:

<sup>400</sup> See CEMP clause Mat054

<sup>401</sup> See CEMP clause Mat056

- A **Stakeholder Communications and Engagement Plan** shall be prepared to detail how the local community (including users of the A259) are to be informed of the works activities likely to cause disturbance to their day-to-day activities. The Plan shall provide details of the notice periods to be given to the local community<sup>402</sup>.
- **Enhanced Stakeholder Engagement:** Where the CEMP identifies specific receptors that are to be provided with an elevated level of stakeholder engagement then the Stakeholder and Communications Engagement Plan shall set out the manner and scheduling that such enhanced engagement is to involve reflecting upon the equality characteristics of the receptors<sup>403</sup>.
- **Record of Stakeholder Feedback:** A monthly record of feedback from residents adversely affected by the works shall be maintained along with any resultant changes in construction practice and provided to the Highway Authority<sup>404</sup>.
- **Start of Works Notification** to be given to the local planning authority, businesses and households at least 14 days before commencement of the works providing details of following agreement with the Highway Authority:
  - A general description of the Project.
  - Contact details for the site representative.
  - Traffic management arrangements<sup>405</sup>.
- **Construction Disturbance:** The Delivery Partner shall engage with the local environmental health officer, affected residents and businesses to ensure that disturbance is effectively managed, and they are informed of works progress through appropriate means. Copies of communications and minutes of public meetings shall be provided to the client on request<sup>406</sup>.

## Vehicular Access Restrictions

- 7.10.3 As detailed in Table 4.11 of the ES Addendum, it has been assumed that approximately 88 days of disruption to the normal flow of traffic would occur for 24-hour periods. It is recognised, however, that the Delivery Partner in working through the scheduling of the works would seek to minimise disruption to existing road users in general and to the residents of Blackberry Cottage and The Boathouse as well as Cuckmere Inn.
- 7.10.4 The following environmental management clauses apply to these implications from the Project:
- **Reduce disruption:** The Delivery Partner shall advise the client of measures proposed to reduce disruption<sup>407</sup>.

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<sup>402</sup> See CEMP clause Com001

<sup>403</sup> See CEMP clause Com002

<sup>404</sup> See CEMP clause Com003

<sup>405</sup> See CEMP clause Com004

<sup>406</sup> See CEMP clause Com007

<sup>407</sup> See CEMP clause Com012

- **Construction Traffic Management Plan:** The Delivery Partner shall prepare a Plan to manage construction traffic and the potential impacts on the local road network affecting all road users including the frequency and timing of closures as well as diversion routes to comply with BS 5228. The Plan shall be developed in consultation with the local authority and submitted to the client for approval before the commencement of works<sup>408</sup>.

## Public Rights of Way

- 7.10.5 As set out in section 13.4 of the ES Addendum, the works would affect the Vanguard Way, The Coastal Path, National Cycle Route 2 and two local PRoW (CMV/24/1 and CMV/14/7). The following environmental management clauses are to be delivered:
- **Vanguard Way and the Coastal Path Users:** A month's advance notice shall be provided to users regarding the re-routing of the path using various communication channels such as the dedicated websites for these routes<sup>409</sup>.
  - **Vanguard Way and the Coastal Path Users:** As users of these paths would be required to pass through the Cuckmere Inn car park adjacent to part of the works site, the Delivery Partner shall ensure that they are provided with safe passage through this area<sup>410</sup>.
  - **Closure of Eastbourne Road:** Where works require the closure of Eastbourne Road from Seaford, then the Delivery Partner shall sign the alternative route north of Chyngton Farm for users of the National Cycle Route 2<sup>411</sup>.
  - **PRoW CMV/24/1:** The Delivery Partner shall seek to sequence the closures of this PRoW in a manner that maximises safety while minimising disruption to users<sup>412</sup>.
  - **PRoW CMV/14/7:** The Delivery Partner shall provide signage to alternative routes for this PRoW for the duration of its closure<sup>413</sup>.

## 7.11 Air Quality

- 7.11.1 While the Proposed Project does not give rise to any significant environmental effects upon air quality (see Chapter 7 of the 2021 ES), there is a high probability of moist soils from the soil stripping being deposited on the road during transportation to the compound site. Unless rapidly cleaned, as such deposits dry so fugitive dust risks being generated.

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<sup>408</sup> See CEMP clause Gen043

<sup>409</sup> See CEMP clause Com017

<sup>410</sup> See CEMP clause Com018

<sup>411</sup> See CEMP clause Com019

<sup>412</sup> See CEMP clause Com020

<sup>413</sup> See CEMP clause Com021

7.11.2 The clauses applicable to air quality are presented in Table 7-16 and in Annex A14 – Air quality clauses with the assumptions provided in Annex A5 – REAC – Assumptions.

**Table 7-16: Applicable Air Quality Clauses**

Main Works						
Environmental Topic	Description of Aspect	REAC Risk Rating	Red Reporting Level	Amber Reporting Level	Green Reporting Level	Control Plan
Construction works	Dust emissions	A	Air001	Air004		Table D10.1: Dust Suppression and Air Pollution Control
Construction works	Vehicle & plant emissions			Air002		

## Fugitive Dust

7.11.3 The following environmental management clauses shall be implemented by the Delivery Partner:

- Appropriate risk-based mitigation measures, including those described in IAQM Guidance on the Assessment of Dust from Demolition and Construction shall be detailed in working Method Statements or Control Plans to demonstrate how impacts upon receptors shall be avoided. The Method Statement or Control Plan is to be submitted to the client's PM before the start of works<sup>414</sup>.
- Use of a fine dust suppressive spray rather than a high-pressure spray shall be deployed to suppress dust emissions in the vicinity of the Cuckmere River<sup>415</sup>

## Air Pollution

7.11.4 The Delivery Partner shall manage dust, air pollution and exhaust emissions in accordance with Best Practicable Means (BPM). Specific measures shall be based upon industry best practice, including the measures listed in IAQM Guidance on the Assessment of Dust from Demolition and Construction<sup>416</sup>.

## 7.12 Carbon Emissions

7.12.1 While environmental clauses associated with general site management, materials and water detailed above also address carbon emissions, this section draws them together to provide an overview of the requirements.

7.12.2 The Delivery Partner is expected to acknowledge the objective of reducing both carbon emissions from its construction activities and undertake to report sources of greenhouse gases on a quarterly basis in accordance with the National Highways Carbon Tool Guidance<sup>417,418</sup>.

<sup>414</sup> See CEMP clause Air001

<sup>415</sup> See CEMP clause Air004

<sup>416</sup> See CEMP clause Air002

<sup>417</sup> See CEMP clause Gen031

<sup>418</sup> Monthly reporting may also be undertaken.

- 7.12.3 As approximately 70% of the carbon used during construction is associated with construction materials, material resource efficiency not only reduces waste and cost, but also contributes to carbon savings. In addition to material resource efficiency, fuel and energy savings also reduce carbon emissions. Consequently, the Delivery Partner shall prepare a Carbon Reduction Plan placing obligations upon their supply chain to also reduce carbon emissions<sup>419</sup>. To this end, the Delivery Partner shall document its carbon objective, baseline and target values as well as the actions and the target savings anticipated<sup>420</sup>.
- 7.12.4 The Delivery Partner shall deliver the following clauses:
- Identify, assess and deliver measures to reduce carbon through onsite measures, offsetting or carbon sequestration<sup>421</sup>.
  - Alternatives to the use of diesel would be sought<sup>422</sup>.
  - Where possible, site and task lighting would be provided by non-diesel sources<sup>423</sup>.
  - At least one electric vehicle charging station shall be provided<sup>424</sup>.
  - Electric plant and equipment should be preferred<sup>425</sup>.
  - Low emission (hybrid) vehicles shall be used where commercially available<sup>426</sup>.
  - Encourage the supply chain to maximise the use of blended diesel for all construction plant and equipment where there is no commercially available low carbon alternative<sup>427</sup>.
- 7.12.5 Focusing upon the selection and transportation of materials, the following clauses shall be implemented:
- Prepare a Resource Efficiency Management Plan to demonstrate the role of local sourcing, carbon emissions, recycled/secondary content reflecting a Circular approach to the use of materials<sup>428</sup>.
  - The Delivery Partner shall seek to maximise the use of prefabricated components where feasible<sup>429</sup>.
  - The selection of construction materials shall identify, assess and incorporate measures to reduce embodied water consumption where alternatives exist<sup>430</sup>.

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<sup>419</sup> See CEMP clause Gen040

<sup>420</sup> See CEMP clause Gen041

<sup>421</sup> See CEMP clause Gen032

<sup>422</sup> See CEMP clause Gen033, Gen034

<sup>423</sup> See CEMP clause Gen035

<sup>424</sup> See CEMP clause Gen036

<sup>425</sup> See CEMP clause Gen037

<sup>426</sup> See CEMP clause Gen038

<sup>427</sup> See CEMP clause Gen039

<sup>428</sup> See CEMP clause Mat001

<sup>429</sup> See CEMP clause Mat069

<sup>430</sup> See CEMP clause Wat051

- Offsite recovery and/or disposal facilities shall be within 35km of the Project to minimise carbon emissions unless demonstratable efficiencies result due to enhanced materials recovery or cost savings<sup>431</sup>.
- Measures shall be adopted to minimise the use of mains water such as through grey water harvesting<sup>432</sup>.

## 7.13 Progress on Delivery of Actions and Commitments

- 7.13.1 During updates to this CEMP the Delivery Partner shall have completed or progressed several Actions and Commitments from REAC. Progress is to be recorded in Table 7-17.

**Table 7-17: Progress on Delivery of Actions and Commitments**

Environmental Aspect	Description of Aspect	Env Clauses	Commentary

<sup>431</sup> See CEMP clause Mat012

<sup>432</sup> See CEMP clause Wat063

## 8. ENVIRONMENTAL ASSET DATA AND MAPPING

### 8.1 Handover Mapping

8.1.1 There is no requirement for the provision of handover environmental mapping on completion of the Project.

### 8.2 Digital Environmental Management

8.2.1 There is no requirement for the provision of digital environmental management although there are efficiencies to be gained in the delivery and close-out of the REAC.

### 8.3 EnvIS

8.3.1 EnvIS is a National Highways GIS system and hence does not apply to this Project.

### 8.4 GIS – BIM

8.4.1 There is no requirement for the scheme to implement a GIS system or a Better Information Management.

### 8.5 Environmental Mapping

8.5.1 The EMP Report is to be accompanied by the following mapping:

- Diversion routes and areas of constraint agreed with the Local Highway Authority.
- Noise Important Areas and works to acoustic barriers – not applicable.
- Areas of protected vegetation.
- Areas for elevated stakeholder engagement.
- Protected species survey results and outstanding survey areas.

### 8.6 Transferring Asset Data

8.6.1 As set out in DMRB GG 182<sup>433</sup>, programme for transferring asset data shall be agreed prior to the commencement of construction with a programme for data handover taking account of the resource requirements for delivery, review, approval and acceptance of all data. Records required for handover shall be

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<sup>433</sup> DMRB Update GG 182 Major schemes: Enabling Handover into Operation and Maintenance [http://www.standardsforhighways.co.uk/ha/standards/dmrb/vol0/section2/GG%20182%20Major%20schemes\\_%20Enabling%20handover%20into%20operation%20and%20maintenance-web.pdf](http://www.standardsforhighways.co.uk/ha/standards/dmrb/vol0/section2/GG%20182%20Major%20schemes_%20Enabling%20handover%20into%20operation%20and%20maintenance-web.pdf)

created, updated and maintained as the scheme progresses in accordance with the agreed programme.

## **9. ENVIRONMENTAL MONITORING, INCIDENTS & RESPONSE**

### **9.1 Introduction**

9.1.1 This Chapter details the statutory monitoring commitments; evaluation of monitoring, audits and remedial actions that the Delivery Partner shall undertake alongside the success criteria and progress reporting.

### **9.2 Inspections, Monitoring and Audits**

9.2.1 Copies of all environmental documentation relevant to the works shall be filed on site, and made available for internal inspection, including:

- Written communication with the Environmental Regulator/competent body/consultee.
- Waste transfer notes.
- Hazardous waste consignment notes.
- Monitoring/performance data (including audits).
- Consents and licences required and obtained.
- Survey records/reports.
- Environmental risk assessments/impact assessments.
- Incident and complaint records.
- Environmental training records (inductions etc.).

### **9.3 Environmental Monitoring**

9.3.1 Table 6-4 details the environmental monitoring and inspections that are a core part of the scheme. Specific details of the monitoring and inspection protocols are detailed in Annex D for each environmental topic.

9.3.2 The Handover Environmental Management Plan shall include the specific management and or monitoring requirements over defined time periods for matters such as ecological monitoring and compliance with licence provisions.

### **9.4 Investigating and Reporting Environmental Incidents**

9.4.1 An Environmental Incident is defined as an unplanned, undesired event that results in harm or damage to the environment or the potential for enforcement action relating to environmental legislation, consents and consent conditions.

9.4.2 Harm or damage to the environment includes (but is not limited to): pollution of, or damage to, surface water, groundwater, or land; spills or leaks of oil and chemicals; damage to archaeology or heritage (listed and non-listed); damage to wildlife; including protected species and habitats; excessive noise, dust and/or other air pollutants, vibration or light pollution; or failure to control waste or excavated material in accordance with the regulations. Incidents are classified as Level 1, 2, 3, 4 or 5 (1 = close call – 5 = major incident):

- **Level 1** – An incident resulting in Minimal environmental impact e.g. minor oil drips.
- **Level 2** – An incident resulting in Local impact requiring management response, but from which there is natural recovery e.g. recovery of fly tip waste, low levels of silt into spawning river.
- **Level 3** – An incident resulting in moderate environmental impact requiring management response to aid recovery Reportable to authorities e.g. fuel tank spillage.
- **Level 4** – Major environmental incident resulting in significant impact requiring management by external authorities and/or high level of resources for response and remedy Environmental incident managed by external authorities e.g. contamination of potable water.
- **Level 5** - Extreme environmental incident resulting in irreversible, long term or widespread harm.

- 9.4.3 An Environmental Incidents Register of all Environmental incidents and Close Calls, including close out actions shall also be kept on site and provided to East Sussex Highway Authority within monthly reports.
- 9.4.4 In the case of a Level 4 or 5 environmental incident a written Root Cause Analysis investigation report shall be produced and reported on an incident report form. An interim report shall be produced within 7 days of the event occurring and a full investigation completed within 14 days and issued within 21 days. The investigation team shall be appointed by the project director for a level 4 incident or the Managing director for level 5 incidents. Any incident of level 3 or greater shall be notified to East Sussex Highway Authority as soon as practicable and within 24 hours.
- 9.4.5 The Environmental Manager shall be the main point of contact with East Sussex Highway Authority and regulatory authorities and shall maintain records of telephone conversations and all written communication relating to environmental issues.

## 9.5 Environmental Incidents & Response

- 9.5.1 The Delivery Partner shall implement and communicate the site environmental emergency response procedures to detailed in Annex C1. Site specific emergency response plans shall be produced that detail and implement appropriate measures to control the risk of pollution due to construction works, materials and extreme weather events.
- 9.5.2 In particular, the following measures shall be adopted to manage the risk of pollution incidents:
- Provision of maps showing the locations, together with address and contact details, of local emergency services facilities such as police stations, fire authorities, medical facilities and other relevant authorities.
  - Ensure that site drainage plans and flood risk management plans are available on site and are kept up to date.

- Statement of appropriate information which shall be held on site and to be provided immediately in the event of any incident such as a spillage or release of a potentially hazardous material.
- Ensure staff competence and awareness in implementing plans and using pollution response kit through toolbox talks, site training and induction.
- Provision of contact details for the relevant authorities, such as the EA, and the persons responsible on the construction site and within the Contractor organisation for pollution incident response.
- Provision of contacts with a competent spill response company which can be contacted at short notice for an immediate response.
- Notification of relevant statutory bodies, environmental regulatory bodies, local authorities and local water and sewer providers of pollution incidents, where required.
- Notification of appropriate emergency services, authorities and personnel on the construction site.

- 9.5.3 The Delivery Partner shall prepare an Environmental Incident Response Plan that provides the procedure for a rapid response to any environmental incident arising from the Works, including appropriate measures for pollution control and prevention of spillages.
- 9.5.4 All environmental incidents shall be initially reported to the Site Manager who shall ensure escalation happens in line with an Escalation Chart to be provided by the Delivery Partner (in accordance with the internal management systems. (see Figure 9-1). East Sussex Highway Authority and the enforcement authorities shall be included.

**Figure 9-1: Incident Escalation Chart**

<To be provided by Delivery Partner>

- 9.5.5 A Non-Conformance & Corrective Action Register (which forms part of the Contractor's Quality Procedures and is not exclusively for environmental issues) and an Environmental Incidents Register shall be set up as part of the CEMP by the Delivery Partner.
- 9.5.6 The Non-Conformance & Corrective Action Register shall detail:
- The date the non-conformance was identified.
  - A description of the non-conformance.
  - The implications of the non-conformance in terms of environmental impacts.
  - A description of the elements of the environment affected by the impact (receptors).
  - Corrective actions aimed at addressing the non-conformance.
  - Persons responsible for implementing corrective actions.
  - Timeframe for implementation of corrective actions.
- 9.5.7 The Environmental Incidents Register shall detail:
- The date that the environmental incident occurred.
  - The environmental incident situation.

- The impact of the environmental incidents.
- The environmental aspects which have been affected by environmental incidents (receptors).
- the actions to be implemented in response to the environmental incident.
- the person responsible for undertaking actions.
- the timeframe for implementing actions.

## 9.6 Unexploded Ordnance

- 9.6.1 As it is likely that unexploded ordnance (UXO) could be encountered during the works an emergency response procedure shall be prepared in accordance with Unexploded ordnance, A guide for the construction industry CIRIA C681 (CIRIA, 2009) and implemented. This emergency response procedure shall include notifications to the relevant local authorities and emergency services. The Delivery Partner shall raise awareness of hazards from UXO through the site induction process and toolbox talks.

## 9.7 Emergency Procedures

- 9.7.1 A summary of control measures for potential environmental emergency situations that may occur during the Works is to be provided in **Annex C1** by the Delivery Partner. All employees, contractors and operatives are responsible for ensuring that environmental incidents are reported within the required timescales and in accordance with the Delivery Partner's internal management systems.
- 9.7.2 All environmental incident investigation shall be allocated to the site Environmental Manager with full participation and co-operation from site management, workforce and any other sub-contractors involved.
- 9.7.3 With regards to major environmental incidents, a full report shall be compiled, and conclusions and recommendations shall be shared with the client and statutory bodies.

## 9.8 Review and Close Out Reporting

- 9.8.1 The approach to review and close out reporting of environmental incidents and responses is to be provided by the Delivery Partner.

# 10. TRAINING & AWARENESS

## 10.1 Introduction

- 10.1.1 This section of the CEMP details how the Delivery Partner shall communicate the requirements of the REAC to those assisting in the delivery of the scheme. It addresses the following:
- Scheme awareness.
  - Site induction.
  - Toolbox talks.
  - Site instruction.
  - Competencies

## 10.2 Scheme Awareness

- 10.2.1 The Delivery Partner is responsible for delivering the project environmental training programme, including toolbox talks, throughout the construction works, ensuring all staff are trained adequately and to the agreed level prior to starting work on site.
- 10.2.2 The Delivery Partner shall comply with the procedures set out within their corporate management system as detailed in the following documents:
- <Delivery Partner to list relevant corporate documents>.
- 10.2.3 Regular communication must be maintained between representatives at all levels of the contract between East Sussex Highway Authority and the Delivery Partner (including sub-contractors) to ensure that everyone is fully aware of the environmental aspects. Communication methods must include inductions, toolbox talks, briefings, letters/memos/emails, etc. and review meetings.
- 10.2.4 It shall be the responsibility of the Delivery Partner to ensure that the environmental aspects and method statements related to the works are communicated to all staff, and that the staff on site adhere to the contents of the CEMP.
- 10.2.5 It shall be the responsibility of the Delivery Partner to ensure that an appropriate communication matrix is implemented throughout the works for the Project. Prior to, and during, the works the Delivery Partner shall communicate to all personnel on site:
- Site specific environmental information which all personnel should be aware of.
  - Details of the CEMP and associated emergency response procedures.
  - Details of any pending/actual enforcement action.
  - Any other specific environmental requirements relating to the site.
- 10.2.6 As the construction progresses, should updates be required to the CEMP or any of its associated appendices, it shall be the responsibility of the Delivery Partner to provide East Sussex Highway Authority's PM with any proposed amendments. In addition, the Delivery Partner shall communicate any environmental incidents or issues associated with the environmental monitoring throughout the works.

- 10.2.7 The environmental aspects of the works shall be inspected on a regular basis as per the Delivery Partner corporate processes outlined in the following documents:
  - <Delivery Partner to list relevant corporate documents>.
- 10.2.8 Monthly review meetings shall be undertaken, at which the following shall be reviewed:
  - Environmental requirements, objectives and targets for the works (including Environmental) to ensure that targets are being met.
  - A review of all environmental incidents and any non-compliances, to ensure that appropriate rectifying actions have been undertaken.

## 10.3 Site Inductions

- 10.3.1 Prior to commencing work on site, all personnel shall undergo a site induction, where the Delivery Partner shall communicate the environmental objectives, requirements and responsibilities to the workforce relevant to the tasks that individuals are responsible for. Environmental Site Rules shall detail site personnel's obligations while on site. This shall introduce accountability for personnel working on the Scheme including the Leadership Team.
- 10.3.2 All personnel on site shall be made aware of the company Environmental Policy, the Register of Environmental Legislation, the REAC and the relevant Environment Control Plans included in the CEMP.
- 10.3.3 The Induction briefing shall include the following environmental topics as a minimum:
  - Environmental aspects.
  - Environmental site rules.
  - Spill kit use and locations.
  - Emergency spill procedures.
  - Energy management.
  - Biodiversity protection.
- 10.3.4 In addition, managerial and supervisory staff shall attend an induction which shall address how the environmental aspects of the works shall be delivered, mitigated, monitored and reported.
- 10.3.5 All induction shall communicate the sensitivities of the local environment and the importance of remaining within the Permitted Development Consent envelop which requires the avoidance of significant environmental effects.

## 10.4 Environmental Training

- 10.4.1 Delivery Partner shall adopt the following means to ensure all personnel are made aware of the Environmental Policy and are briefed on relevant parts of the CEMP:
  - <Delivery Partner to insert measures>
- 10.4.2 Specific training needs shall be identified and provided for all personnel involved in work activities that could result in an adverse impact on the environment. The training shall include reference to the importance of adhering

to the contents of the CEMP and the potential consequences of departure from specified Method Statements.

## 10.5 Toolbox Talks

- 10.5.1 The Delivery Partner and each of its sub-contractors shall establish a regime of toolbox talks such that every employee receives a health, safety & environmental briefing as appropriate, with a target of a minimum of one toolbox talk on an environmental topic per month. This shall be in addition to task/operation location specific briefings as required for site works. For sub-contractors, their supervisors are responsible for conducting these briefings and their implementation shall be monitored by the Delivery Partner.
- 10.5.2 Records shall be kept of toolbox talks carried out and who attended and made available to the client PM on request.
- 10.5.3 A preliminary list of toolbox talks appropriate to the Project is provided below. More may be added to this list as the project progresses and as issues arise.
- Working in a SSSI.
  - Working in a floodplain.
  - Sediment control.
  - Dust and air quality.
  - Soil management.
  - Waste management.
  - Spill control.
  - Cement and concrete.
  - Washing down plant and machinery.
  - Silt management.
  - River impoundment.
  - Protected Species.
  - Nesting Birds.

## 10.6 Site Briefings

- 10.6.1 A regime of Toolbox Talks shall be established such that all site personnel receive a Health, Safety & Environmental briefing as appropriate to the Works. Responsibility for training and supervision rests with the Delivery Partner.
- 10.6.2 Records of Toolbox Talks carried out and who attended them shall be kept and maintained on record as part of the management system.
- 10.6.3 Key to the successful delivery of the REAC is the timely and effective communication of requirements to staff. Also acknowledge that the REAC provides for geospatial communication that is specific to the works taking place at specific locations. To this end, the Delivery Partner shall adopt the following means to aid the electronic communication of requirements to staff in a timely and spatially focused manner:
- Use of QR-codes to identify management measures at specific locations.
  - Use of electronic markers with links to plant and staff via mobile phone or other wearable technology.
  - Communication packages such as Hello lamp post.  
[\(http://www.hellolamppost.co.uk/\).](http://www.hellolamppost.co.uk/)

# 11. STAKEHOLDER COMMUNICATIONS

## 11.1 Introduction

- 11.1.1 A Stakeholder Engagement and Communications Plan shall be prepared, which meets the communications needs of all stakeholders, and detail procedures to ensure feedback is considered throughout the lifecycle of the project. The stakeholder and communication aspects of this CEMP form part of the Stakeholder Engagement and Communications Plan.
- 11.1.2 The Delivery Partner shall prepare a summary table based upon that below to highlight the key processes being put in place to deliver effective stakeholder communications.

**Table 11-1: Summary of Communication Processes**

Stakeholder	Outline Communication Processes
East Sussex Highway Authority	<ul style="list-style-type: none"><li>Delivery Partner shall be responsible for involving East Sussex Highway Authority in any safety and / or environmental meetings (as required).</li><li>The minutes of the meetings shall be issued to East Sussex Highway Authority and a copy shall be retained on site.</li></ul>
Statutory and Non-Statutory Bodies	<ul style="list-style-type: none"><li>There shall be at least bi-monthly consultation with the statutory and non-statutory bodies (where necessary) to provide an opportunity to input to the operation of the site and minimise adverse environmental impacts.</li><li>Where method statements shall be submitted to the relevant statutory / non-statutory bodies for comment to ensure that no pertinent environmental issues are overlooked where permitting is required.</li></ul>
The Public	<ul style="list-style-type: none"><li>The public shall be notified in advance of potentially disturbing operations, such as temporary loss of amenities, changes to pedestrian or vehicle access routes or vegetation clearance.</li><li>Any such notification shall set out the nature of the operations and the times at which they are to be carried out.</li><li>Social media and local residents shall be informed of progress on construction and any new operations that are to be carried out</li><li>The information provided shall also include details of contacts within the project team (should any issues arise).</li></ul>
Construction Staff	<ul style="list-style-type: none"><li>Construction staff shall be kept up to date on all operational matters that may have an impact on the safety and environmental factors on site.</li><li>The site induction shall form the basis for all relevant information provided to construction staff and shall be supported at regular intervals by toolbox talks, especially where new or particularly sensitive operations are about to commence.</li><li>At least bi-weekly staff briefings shall provide an opportunity to advise of changes in working methods and procedure.</li><li>Audits and reviews of the effectiveness of the method statements shall highlight any corrective measures and subsequent feedback to construction staff shall serve as a means of regulating and ensuring best working practice.</li></ul>

## 11.2 Internal Communications

- 11.2.1 Regular internal communication shall be maintained to ensure that everyone, including sub-contractors are fully aware of the environmental issues and that the staff on Site adhere to the contents of the CEMP. Communication methods shall include inductions, toolbox talks, briefings, letters, visual displays etc. and at review meetings.
- 11.2.2 Key Project environmental information shall be displayed on site, including a copy of the Environmental Policy.
- 11.2.3 The Delivery Partner shall establish and maintain procedures for internal communications between the various levels and functions of the team during construction.
- 11.2.4 Throughout the construction works, the Delivery Partner shall communicate any proposed amendments of the CEMP along with any environmental incidents to the East Sussex Highway Authority PM. The Project's environmental requirements, objectives and targets, environmental incidents and any non-compliances shall be reviewed at the monthly contract review meetings.

## 11.3 External Communication

- 11.3.1 The Delivery Partner shall communicate with statutory bodies, local residents/businesses and other members of the public that may be affected by construction activities. Communication with these stakeholders shall be monitored through the Stakeholder Engagement and Communications Plan and Communications log.
- 11.3.2 The Delivery Partner shall appoint a Stakeholder Manager who in collaboration with the client shall consult and inform the affected individuals and communities, using a full range of communication methods which shall include face to face meetings, phone calls, letters, newsletters, website updates and, where permissible, social media.
- 11.3.3 The Project's Stakeholder and Public Liaison Officer<sup>434</sup>, in collaboration with East Sussex Highway Authority, shall consult and inform the affected individuals and communities, through meetings, phone calls, letters, newsletters, website updates and where permissible social media.
- 11.3.4 The Delivery Partner shall set out the means for communication with statutory bodies, local residents/businesses and other members of the public that may be affected by construction activities. Communication with these stakeholders shall be monitored through a Stakeholder Action Tracker.
- 11.3.5 The Environmental Manager shall be the single point of contact for the environmental regulatory authorities. Responsibilities for interface with all stakeholders is defined in the Stakeholder Engagement and Communications Plan. The Delivery Partner shall provide the regulatory authorities with relevant contact details prior to the commencement of construction.

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<sup>434</sup> See CEMP clause Com008

## Liaison with Statutory Bodies and Environmental Organisations

- 11.3.6 In collaboration with East Sussex Highway Authority, the Delivery Partner shall set up procedures to liaise with the local planning authorities and regulatory authorities during the pre-mobilisation and construction phase. A list of these stakeholders, their areas of influence and preliminary project contact shall be detailed in the Stakeholder Engagement and Communications Plan. Traffic management clinics shall also be held with local authorities and relevant developers to minimise conflict with adjacent schemes.
- 11.3.7 The contact points for the Proposed Scheme within the Statutory Environmental Bodies are set out in Table 11-2 below.
- 11.3.8 Proactive communication with regulatory environmental bodies shall be established to facilitate the efficient progression of the works. The Environmental Manager shall liaise regularly with local authorities and their Environmental Health Departments.
- 11.3.9 The Delivery Partner shall set up procedures to liaise with the local planning authorities and regulatory authorities during the pre-mobilisation and construction phase. East Sussex Highway Authority and their Delivery Partner shall liaise with the relevant local planning authorities and relevant statutory bodies to ensure that the Project and the environmental management measures are acceptable<sup>435</sup>.
- 11.3.10 A Traffic Management Working Group (“TMWG”) shall be formed for the Project. The TMWG shall have representation from the Emergency Services, Local Network managers, local authorities, relevant statutory undertakers, other developers and the Delivery Partner’s specialist traffic management contractors. Traffic management clinics shall also be held with local authorities and relevant developers to minimise conflict with adjacent schemes as appropriate<sup>436</sup>.

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<sup>435</sup> See CEMP clause Com025

<sup>436</sup> See CEMP clause Com025

**Table 11-2: Environmental Organisations - contact points**

Organisation	Representative	Tel. No.	Email Address
<b>Environment Agency</b>			
Oving Road, Chichester, West Sussex PO20 2AG	<b>Anna Rabone</b> Sustainable Places Advisor	0370- 8506-506	Not available
<b>Natural England</b>			
Hornbeam House, Crewe Business Park, Electra Way, Crewe, Cheshire CW1 6GJ	<b>Luke Hasler</b> Sussex & Kent Area Team	0300- 060-3900	<a href="mailto:Luke.hasler@naturalengland.org.uk">Luke.hasler@naturalengland.org.uk</a>
<b>Historic England</b>			
4 <sup>th</sup> Floor, Cannon Bridge House, 25 Dowgate Hill, London	<b>Maria Buczak</b> Assistant Inspector of Ancient Monuments	020- 7973- 3700	<a href="mailto:Maria.Buczak@HistoricEngland.org.uk">Maria.Buczak@HistoricEngland.org.uk</a>
<b>Local Authority Archaeologist</b>			
East Sussex County Council, County Hall, St Anne's Crescent, Lewes East Sussex BN7 1UE	<b>Neil Griffin</b> County Archaeologist	0345- 6080-190	county.archaeology@eastsussex.gov.uk
<b>South Downs National Park Authority</b>			
South Downs Centre, North Street, Midhurst, West Sussex, GU29 9DH	<b>Mark Waller- Gutierrez</b> SDNP Design Officer	01730- 819-328	
	<b>Ruth Childs</b> SDNP Landscape Officer	Not available	<a href="mailto:Ruth.Childs@southdowns.gov.uk">Ruth.Childs@southdowns.gov.uk</a>
	Vicky Colwell Principal Planning Officer	01740- 819-280	<a href="mailto:Vicki.Colwell@southdowns.gov.uk">Vicki.Colwell@southdowns.gov.uk</a>
<b>Southern Water</b>			
Southern House, Yeoman Road, Worthing, West Sussex, BN13 3NX	Not available	0330- 303-0119	Not available
<b>Pevensey and Cuckmere Water Level Management Board</b>			
East Sussex County Council, County Hall, St Anne's Crescent, Lewes East Sussex BN7 1UE	<b>Nick Claxton</b> Team Manager – Flood Risk Management	Not available	Not available
East Sussex County Council, County Hall, St Anne's Crescent, Lewes East Sussex BN7 1UE	<b>Revai Kinsella</b> Area Manager	01273 335-534	<a href="mailto:revai.kinsella@wlma.org.uk">revai.kinsella@wlma.org.uk</a>

Organisation	Representative	Tel. No.	Email Address
<b>Environmental Organisations</b>			
Sussex Wildlife Trust, Woods Mill, Henfield, West Sussex BN4 9SD	<b>Jess Price</b> Conservation Officer	01273-492-630	
Sustrans, 2 Cathedral Square, College Green., Bristol BS1 5DD	<b>Roddy Crockett</b> Partnerships Manager	07827-927-541	
National Trust London and South East, Scotney Castle hub, Lamberhurst, Tunbridge Wells, Kent TN3 8JN	<b>Andrew Shaw</b> Regional Planning Adviser	07825-844-315	

## Engaging with Local Communities

- 11.3.11 The Delivery Partner shall use the Stakeholder Communication and Engagement Plan to maintain effective community engagement. Ongoing and continuing community engagement shall be undertaken through structured stakeholder engagement boards and community focus groups for the Scheme.
- 11.3.12 The Stakeholder Communication and Engagement Plan<sup>437</sup> shall include the following:
- Details of regular meetings and public consultation events.
  - Regular forums with the local authorities and local communities.
  - Written records of all meetings/discussions held as well as the identification of how actions have been addressed.
  - Identification of how any issues identified have been incorporated into the evolution of the CEMP.
- 11.3.13 The strategy shall also include procedures to:
- Maintain effective community engagement throughout the construction period.
  - Inform affected communities in advance of the relevant construction works.
  - Inform affected communities in advance about the programme of the construction works.
  - Provide information on the enquiry and complaints procedures and how this is operated.
- 11.3.14 During construction, a programme of high quality, effective and sustained communications shall include:
- **Online** –East Sussex Highway Authority's website and other digital media including relevant links to its partners' and stakeholders' websites shall be provided with at least monthly updates on the progress of construction

<sup>437</sup> See CEMP clause Com001

- works, areas affected by construction, any mitigation measures and any road closures or works recently completed<sup>438</sup>.
- **Newsletter** – a Scheme newsletter may be issued on a regular basis and shall provide information regarding construction progress and planned works<sup>439</sup>.
  - **Provision of information on construction works progress** – the relevant local authority, district councils, parish councils, councillors, constituency members of Parliament and other relevant persons shall be kept informed of the progress and effects of construction works<sup>440</sup>.
  - **Notification to local residents and key stakeholders** – The Delivery Partner shall notify occupiers of nearby properties and businesses in line with the requirements set out in the CEMP but at a minimum of two weeks in advance of planned construction works that may affect them<sup>441</sup>. The notification shall provide details of the enquiries and complaints procedure developed in accordance with the requirements set out below (see **Section 0**). Information included in the notifications shall include, as appropriate:
    - the location of the planned works.
    - the activities to be carried out.
    - the duration of the planned works and the periods within which works shall be undertaken (i.e. whether during normal working hours, during the evening or overnight).
    - the anticipated effects of the planned works.
    - the measures to be implemented in line with the CEMP to mitigate the impact of the planned works.
    - enquiries and complaints procedure.

## Aviation Safeguarding

11.3.15 Not required.

## Canals and Rivers Trust

11.3.16 Not required.

## Internal Drainage Boards

11.3.17 The Delivery Partner shall engage with the Pevensey and Cuckmere Water Level Management Board to ensure that water levels and quality are maintained during the works to the satisfaction of the Board<sup>442</sup>.

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<sup>438</sup> See CEMP clause Com024

<sup>439</sup> See CEMP clause Com007

<sup>440</sup> See CEMP clause Com007

<sup>441</sup> See CEMP clause Com004

<sup>442</sup> See CEMP clause Wat088

## Enquiries and Complaints Procedure

- 11.3.18 An information line shall be used to deal with enquiries and complaints from the public. This consists of a phone line, email and website contact facility and is to be available 24 hours a day, 7 days a week. The contact number, email and website addresses for the information line shall be displayed on signs around the construction site<sup>443</sup>.
- 11.3.19 The complaints system shall:
- Log enquiries and complaints in a register.
  - Deal with enquiries and complaints appropriately, recognising that they may be due to the effect of construction works on the interests of, and impacts on persons and their properties.
  - Pass on the enquiry or complaint to the correct person for review and appropriate action if the person recording it cannot do so.
  - Take appropriate action and respond to enquiries or complaints.
  - Outline the process for the employer's representative to review enquiries and complaints regularly to assess the adequacy, efficiency and effectiveness of the enquiries and complaints system and procedure and the measures being taken to respond to any enquiries or complaints.
- 11.3.20 The extent of the action taken shall depend on the nature of the complaint. All complaints shall be investigated to establish the cause of the complaint and whether the works comply with the Scheme's environmental requirements and other relevant requirements such as legislation, standards and codes of practice.

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<sup>443</sup> See CEMP clause Com023

## REFERENCES

British Standards Institution (1996, as amended), BS EN ISO 14001, Environmental Management Systems – specification with guidance for use.

Institute of Environmental Management and Assessment (IEMA) (2008), Environmental Management Plans, Practitioner Best Practice Series, Volume 12.

## ABBREVIATIONS

BIM	Better Information Management
BSI	British Standards Institution
CCTV	Closed Circuit Television
CEMP	Construction Environmental Management Plan
DMRB	Design Manual for Road and Bridges
EAR	Environmental Assessment Report
EMP	Environmental Management Plan
EnvIS	Environmental Information System
ESR:	Environmental Scoping Report
GIS	Geographical Information System
HEMP	Handover Environmental Management Plan
IEMA	Institute of Environmental Management and Assessment
ISO	International Organisation for Standardisation
OEMP	Outline Environmental Management Plan
RAG	Red, Amber, Green
REAC	Register of Environmental Actions and Commitments
SAC	Special Area of Conservation
SGAR	Stage Gate Assessment Review
SHE	Safety, Health & Environment
SPA	Special Protection Area

# ANNEXURES

## **Annex A – Register of Environmental Actions and Commitments**

- A1 - REAC – Planning application
- A2 - REAC - Enabling Works – not applicable
- A3 - REAC – Main Works
- A4 - REAC – Handover
- A5 – REAC – Assumptions
- A6 – General environmental management clauses.
- A7 – Ecological management clauses.
- A8 – Landscape management clauses.
- A9 – Heritage management clauses.
- A10 – Acoustics management clauses.
- A11 – Water management clauses.
- A12 – Materials and waste management clauses.
- A13 – Population, health and local economy clauses.
- A14 – Air quality clauses.

## **Annex B - Environmental Mapping**

- B1 - Environmental Constraints
- B2 - Environmental Clauses – not applicable
- B3 - Limits of Deviation – not applicable
- B4 - Environmental Masterplans
- B5 - Baseline Biodiversity Condition
- B6 - Vegetation Clearance Enabling Works – Not applicable
- B7 - Vegetation Clearance Main Works
- B8 – Diversion Routes

## **Annex D - Scheme Specific Control Plans/Method Statements**

- D0 -Delivery of Environmental Objectives
- D1 -General Environmental Management
- D2 - Ecological Management
- D3 - Landscape and Visual Amenity
- D4 - Heritage Assets
- D5 - Water Management
- D6 - Noise and Vibration
- D7 - Community Engagement
- D8 - Materials and Waste

D9 - Air Quality

**Annex E - Risk Assessment & Management Statements**

**Annex F – Change Management**

F1 – EoCR dated <Delivery Partner to insert date>

F2 - EoCR dated <Delivery Partner to insert date>

F3 – Inventory of CEMP review and revision

**Annex G - Monitoring Reports**

G1 – Soil survey monitoring report

G2 – Groundwater monitoring report

G3 – Pre-construction ecological survey reports

G4 – Unexploded ordnance survey report

G5 – Invasive species monitoring report

**Annex H - Applicable Environmental Legislation**

**Annex I - Register of Consent Requirements**

**Annex J - Licences, Consents & Permissions**

J1 - Natural England EPS Disturbance Licences

J2 – SSSI Assent

J3 - EA Permits

J4 - Construction Compound Environmental Management Plan

**Annex K - Competencies**

**Annex L - Ecological Clerk of Works Specification**

**Annex M - Inventory of CEMP Review & Changes**

**Annex N - Certificates and Awards**

N1 – CCS certificate

N2 – ISO 14001 certificate

# **ANNEX A – REGISTER OF ENVIRONMENTAL ACTIONS AND COMMITMENTS**

Annex A1 - REAC - Planning Application

Annex A2 - REAC – Enabling Works – Not applicable

Annex A3 - REAC – Main Works – To be provided by Delivery Partner

Annex A4 - REAC – Handover – To be provided by Delivery Partner

Annex A5 – REAC – Assumptions

# ANNEX A1 - REAC - PLANNING APPLICATION

Environmental Risk Assessment & Management Measures Register			Pre-mitigation Risk/RAG						Clauses				Post- Mitigation RAG					Owner	Phase			
Activity/Action Category	Aspect/ Control Plan Link	Location	Schedule Risk	Commercial Risk	Reputational Risk	Legislative Risk	Severity	Likelihood	RAG Status	Environmental Management Clause ID(s)	Objective	Headline Summary of Activity/Action			Severity	Likelihood	RAG Status	Monitoring & Inspections		Corporate Responsibility	Delivery Phase	Assumptions Id.
<u>General Environmental Management</u>																						
Consents	Licences and Consents	Scheme wide	Y	Y	Y	Y	2	5	A	Gen002 Gen003	Record of licences/ permits and consents available for future users. Confirmation that no unacceptable liabilities pass on to East Sussex Highways Authority	Submission of draft licence applications to East Sussex Highways Authority. Licences and consents are to be included in the CEMP.			2	2	G	Check consents/permits are in the EMP and issued to the East Sussex Highways Authority PM. Check draft licence and statement are issued to the East Sussex Highways Authority PM.		Design Team	Pre-Construction	GenAss001
Sustainability	Carbon emissions	Scheme wide	N	N	N	N	2	2	G	Gen001 Gen031 Gen032 Gen033 Gen034 Gen035 Gen036 Gen037 Gen038 Gen039 Gen040 Gen041	Evidenced reduction in carbon emissions.	Mandates use of National Highways Carbon reporting tool.			2	2	G	Check carbon returns are made at least every quarter.		DP - Principal Contractor	During Construction	GenAss003
Environmental Management	CEMP	Scheme wide	Y	Y	Y	Y	2	2	G	Gen009 Gen010 Gen011 Gen012 Gen013 Gen014 Gen027 Gen030	Provision of a clear audit trail of the implementation of environmental clauses in conformity with ISO 14001.	CEMP to demonstrate how applicable OEMP clauses are addressed in a risk based manner with the CEMP being ISO14001 compliant.			2	2	G	The EMP shall be agreed with the East Sussex Highways Authority Environmental Advisor. Check that management measures established post SGAR3 are implemented. Check that monitoring actions are delivered. Check that the commitments and actions have been addressed. Check the Organisational chart is up to date. Check that the Incident Response Plan is updated.		DP - Principal Contractor	Pre-Construction	GenAss004
Environmental Management	Inspections	Scheme wide	Y	N	N	Y	2	2	G	Gen005 Gen026	Delivery of the scheme in accordance with a CEMP approved by East Sussex Highways Authority.	Logging of regular onsite inspections/audits and remedial actions to deliver CEMP and Best Practical Means.			2	2	G	Corrective measures shall be implemented and recorded in the EMP. Check that observation monitoring takes place at the frequency directed in the CEMP.		DP - Principal Contractor	Pre-Construction	GenAss005

Environmental Risk Assessment & Management Measures Register				Pre-mitigation Risk/RAG						Clauses				Post- Mitigation RAG					Owner	Phase	
Activity/Action Category	Aspect/ Control Plan Link	Location	Schedule Risk	Commercial Risk	Reputational Risk	Legislative Risk	Severity	Likelihood	RAG Status	Environmental Management Clause ID(s)	Objective	Headline Summary of Activity/Action			Severity	Likelihood	RAG Status	Monitoring & Inspections	Corporate Responsibility	Delivery Phase	Assumptions Id.
<b>General Environmental Management</b>																					
Environmental Management	Registration to CCS	Scheme wide	N	Y	Y	N	2	2	G	Gen004	Check CCS certificate is added to EMP.	Requires joining the CCS scheme		2	2	G	Check CCS certificate is added to EMP.		DP - Principal Contractor	Pre-Construction	GenAss006
Environmental Management	Staffing	Scheme wide	Y	Y	Y	Y	2	2	G	Gen008 Gen017 Gen018 Gen019 Gen029	Deliver environmental outcomes in line with the consent for the Scheme.	Site workers to be advised of measures to avoid/minimise environmental impacts with appropriate experience, training requirements and maintenance of register of environmental staff.		2	2	G	Check that a register of CVs remains up to date. Check that the contact details for Env. Management Team remains up to date. Monitor the appropriateness of training and amend as needed. Monitor construction noise levels where a risk of exceedence of SOAEL noise levels.		DP - Principal Contractor	Pre-Construction	GenAss007
Environmental Management	Working Hours	Scheme wide	Y	Y	Y	Y	3	3	A	Gen020 Gen022 Gen024	Working hours agreed with Local Authority to minimise adverse outcomes.	Sets process for defining working hours in areas of environmental risk.		2	2	G	Check compliance with the working hours agreed with the LA. Monitor construction noise levels where a risk of exceedence of SOAEL noise levels.		DP - Principal Contractor	Pre-Construction	GenAss008
Environmental Management	Start of Works	Scheme wide	Y	Y	Y	Y	3	3	A	Gen021 Gen023	Enabling and/or Main works not to be undertaken without an approved EMP being in place.	Agreed alignment of CEMP with OEMP required before start of works.		2	1	G	Confirm the EMP has been agreed with the East Sussex Highways Authority Environmental Advisor. Monitor the programme to ensure that a signed off CEMP is in place.		DP - Principal Contractor	Pre-Construction	GenAss009
Environmental Management	Scheduling of Works	Scheme wide	Y	N	Y	N	3	4	A	Gen042	Works scheduled to minimise adverse environmental outcomes.	The Delivery Partner shall provide a schedule for the works that minimises the amount of disruption and environmental risks that would be caused by the works. Where it is necessary to deviate from the indicative programme presented in environmental assessment, then a revised programme supported by an Evaluation of Change Register is to be provided to the East Sussex Highways Authority prior to the revised programme being adopted.		3	2	A	Monthly review of optimisation of works schedule to minimise environmental impact.		DP - Principal Contractor	Pre-Construction	GenAss010
Environmental Management	Detailed design	Scheme wide	Y	Y	Y	Y	2	2	G	Gen006 Gen007 Gen028	Continued alignment of the CEMP to changes in the Scheme design. Achievement of sustainable development goals.	Designs shall maximise contribution towards sustainable development goals while any change likely to increase environmental impact to be approved in advance and monthly register provided.		2	2	G	Ensure approval of the EoCR is received prior to adoption of a change to the design or construction methodology. Check that contributions are being made towards the sustainable development goals.		DP - Principal Contractor	Pre-Construction	GenAss011

Environmental Risk Assessment & Management Measures Register				Pre-mitigation Risk/RAG						Clauses				Post- Mitigation RAG					Owner	Phase		
Activity/Action Category	Aspect/ Control Plan Link	Location	Schedule Risk	Commercial Risk	Reputational Risk	Legislative Risk	Severity	Likelihood	RAG Status	Environmental Management Clause ID(s)	Objective	Headline Summary of Activity/Action			Severity	Likelihood	RAG Status	Monitoring & Inspections	Corporate Responsibility	Delivery Phase	Assumptions Id.	
<u>General Environmental Management</u>																						
Environmental Management	Traffic management	Scheme wide	Y	N	Y	N	4	4	R	Gen043 Gen044 Gen045 Gen046 Gen047	Reduced disruption to local residents, businesses and other road users.	A Construction Traffic Management shall be prepared with the Delivery Partner agreeing the diversion route, delivery routes and controls on HGV deliveries.			3	3	A	Check that the Construction Traffic Management Plan addresses all requirements prior to issue.		DP - Principal Contractor	Pre-Construction	GenAss01 2
Environmental Management	HEMP	Scheme wide	N	N	Y	Y	1	3	G	Gen015	Successful, efficient handover of environmental management responsibilities.	Successful, efficient handover of environmental management responsibilities.			1	1	G	Check that appropriate consideration is given to ongoing environmental management responsibilities required of the client.		DP - Principal Contractor	Post-Construction	GenAss01 3

Environmental Risk Assessment & Management Measures Register				Pre-mitigation Risk/RAG						Clauses				Post- Mitigation RAG					Owner	Phase		
Activity/Action Category	Aspect/ Control Plan Link	Location		Schedule Risk	Commercial Risk	Reputational Risk	Legislative Risk	Severity	Likelihood	RAG Status	Environmental Management Clause ID(s)	Objective	Headline Summary of Activity/Action			Severity	Likelihood	RAG Status	Monitoring & Inspections	Corporate Responsibility	Delivery Phase	Assumptions Id.
<b>Biodiversity Clauses</b>																						
Designated sites	Works affecting SSSIs	Scheme-wide		Y	Y	Y	Y	4	4	R	Nat011 Nat012	SSSI Assent has been approved by Natural England. Avoidance of adverse effects upon a SSSI that have not been subject to an assent. Assented impacts to be the minimum achievable impact upon a SSSI.	Where works are likely to damage the condition or special features of a SSSI, then advice shall be sought from Natural England and evidence of an assent shall be provided. A method statement demonstrating how the works shall be delivered in compliance with the assent conditions shall be reviewed by the EcCoW and provided to East Sussex Highways Authority PM prior to the commencement of works. Works in or adjacent to a SSSI shall be demonstrated to the East Sussex Highways Authority Environmental Advisor as being designed so as to minimise direct or indirect habitat loss supported by measures being to offset such losses.	3	2	A	Check that East Sussex Highways Authority PM views and those of the EcCoW are received prior to commencement of works potentially affecting a SSSI. Check measures to protect SSSI's are delivering protection.	DP - Principal Contractor	During Construction	DS001		
Designated sites	Works affecting designated habitat	Scheme-wide		N	N	Y	N	4	4	R	Nat013	Avoidance of encroachment into and impacts upon designated sites.	Habitats and vegetation in areas of high ecological sensitivity to be protected under supervision.	3	2	A	Check vegetation to be retained has been protected.	DP - Principal Contractor	Vegetation Clearance	DS003		
Designated sites	Site compounds	Scheme-wide		Y	Y	Y	Y	3	2	A	Nat014	Avoidance of direct or indirect effects upon SSSI from the location of candidate construction compounds.	Where it is intended to adopt a construction or recovery compound that is not a candidate construction compound and not subject to a planning application, then such sites shall be screened for direct and/or indirect effects and submitted for approval by East Sussex Highways Authority before a decision is taken to proceed with the site.	2	1	G	Check environmental screening is in place for construction compounds not subject to a planning application or assessed as a candidate construction compound.	DP - Principal Contractor	Pre-Construction	DS002		
Protected Species	Pre-construction surveys	Scheme-wide		Y	Y	Y	Y	3	2	A	Nat039 Nat043	Informed decisions to reduce risk of infringement of protected species licensing.	Survey to be undertaken, updates to the CEMP with EPS report and GIS data submitted within one month of survey completion. Provision of a clear audit trail.	2	1	G	Check protected species survey report is included in CEMP and provided to East Sussex Highways Authority PM. Monthly checks that the CEMP has been updated to reflect additional mitigation measures and/or licences.	Design Team	SGAR3 - SGARS	EPS002		
Protected Species	Licences and consents	Scheme-wide		Y	Y	Y	Y	3	2	A	Nat031 Nat033 Nat038 Nat042 Nat044 Nat045 Nat048	Avoidance of inappropriate costs and ongoing liabilities associated with the licencing of works. Compliance with approved mitigation scheme. Provision of a clear audit trail. Appropriately qualified EcCoW to supervise works. Method Statements prepared by appropriately qualified ecologist. Compliance with protected species licence and method statements.	Draft EPS licences to be reviewed by National Highways. EPS licence to be within CEMP with specialists carrying letter of authority. HEMP to record ongoing EPS management or monitoring needs.	2	1	G	Check that East Sussex Highways Authority PM views are received prior to submission of the licence application. Confirm that works are delivered in accordance with licenced measures. Monthly audits of protected species licences should be undertaken and included in the CEMP. Check signatory/assistant carries a signed letter when performing licenced tasks and record the letter within the CEMP. Check that works follow either licence requirements or a non-licenced method statement and that decisions are agreed with Natural England and documented in the CEMP. Check individual	Design Team	Pre-construction	EPS001		

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<b>Biodiversity Clauses</b>																						
Protected Species	Tool Box Talks	Scheme-wide	Y	Y	Y	Y	3	2	A	Nat041 Nat049	Compliance with protected species licencing and method statements.	Workforce briefings shall be provided to site staff to provide a timely understanding of the designated habitats, species, the law, licensed works, the importance of the enhancement and mitigation measures. They must also be able to identify and understand the actions to be taken in the event of a protected species being encountered anywhere along the scheme. Evidence shall be collated and details provided to the East Sussex Highways Authority PM on request demonstrating that all operatives working in areas of potential protected species have received a Toolbox talk relevant to the ecological measures and protected species requirements. Any changes to ecological mitigation following the monthly Audit Report shall be communicated to site staff via toolbox talks.			2	2	G	Check that a record of attendance at tool box talk on works where protected species or priority habitat is present is on file.		DP - Principal Contractor	Pre-construction	EPS005
Protected Species	Exclusion Zones	Grazing Marsh	N	N	Y	Y	3	3	A	Nat046	Avoidance of unnecessary disturbance to protected species.	Works exclusion zones shall be established, monitored and maintained where works are to be undertaken within a distance that could give rise to disturbance to protected species as directed by the EcCoW.			2	2	G	Inspections or digital monitoring to be established to demonstrate compliance with exclusion zones.		DP - Principal Contractor	During Construction	EPS003
Protected Species	Vegetation clearance	Scheme-wide	Y	Y	Y	Y	3	3	A	Nat032 Nat037 Nat040	Avoidance of impacts upon protected species.	A pre-construction survey is to confirm absence of EPS with vegetation clearance in habitat with an EPS interest in accordance with Method Statement. Works shall cease when EPS are encountered.			3	1	G	Check a documented inspection of protected species has been carried out. Check that reporting requirements are implemented . Check vegetation clearance methods detailed in the protected species licence are followed and supervised by an EcCoW when not applicable to protected species.		DP - Principal Contractor	Vegetation Clearance	EPS004
Protected Species	Maintenance and Monitoring	Grazing Marsh	N	Y	Y	Y	4	4	R	Nat034 Nat047	Compliance with protected species licences and achievement of enhancement objectives. Protected species licence commitments can be delivered following handover to the maintenance contractor.	A schedule for the maintenance and monitoring of protected species licence sites shall accompany the draft licence application with monitoring and management of mitigation measures carried out.			2	4	A	Check that inspections confirm delivery of protection to dormouse. Check that a schedule for the maintenance and monitoring of protected species licence sites and designated funded works has been prepared.		DP - Principal Contractor	During Construction	EPS006
Protected Species	Handover Environmental Management Plan	Scheme-wide	Y	Y	Y	Y	2	2	G	Nat036	Protected species licencing commitments can be delivered following handover.	The CEMP and HEMP prepared by the Delivery Partner shall set out on-going monitoring and management requirements as required in accordance with the protected species licence and shall be approved by the East Sussex Highways Authority PM.			2	2	G	Check agreed measures for handover of licence requirements to Operations Directorate are documented.		Delivery Partner - Env Manager	Post-Construction	EPS008
Great Crested Newts	Vegetation clearance	Scheme-wide	Y	Y	Y	Y	3	3	A	Nat074 Nat075 Nat078 Nat079 Nat082 Nat084	Compliance with GCN licence or method statement requirements.	Staged vegetation clearance under licence or precautionary method statement. Exclusion fence to remain in situ until local works are complete and removed during the active period.			2	2	G	Check that destruction of suitable habitat is supervised by an EcCoW.		DP - Principal Contractor	Vegetation Clearance	GCN003

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<b>Biodiversity Clauses</b>																									
Great Crested Newts	Material storage	Scheme-wide	N	N	N	Y	2	1	G	Nat077	Compliance with GCN licence or method statement requirements.	Any stored materials (that might act as temporary GCN resting places) are to be raised off the ground, e.g. on pallets.			1	1	G	Check that excavations are backfilled or provided with a ramp at night.			DP - Principal Contractor	During Construction	GCN004		
Bats	Pre-construction surveys	Scheme-wide					2	2	G	Nat094	Compliance with wildlife legislation.	Where a bat survey has not been undertaken within 1 year of start of works, a pre-construction survey shall be undertaken to record potential roost features where it has not been possible to exclude the existence of a roost. Inspection records licenced ecologist shall be provided to the East Sussex Highways Authority on request.			2	2	G	Confirmation that precautionary measures were used.			DP - Principal Contractor	Pre-Construction	Bat002		
Bats	Works to structures	Bridge	Y	Y	Y	Y	2	2	G	Nat095	Compliance with wildlife legislation.	A pre-construction check of roosts in structures not to be disturbed along with structures of 'moderate' or 'high' bat potential shall be undertaken. All invasive works to bridges, underpasses and culverts shall follow best practice guidelines. If bats/signs of bats are identified, then works should cease and advice sought. The hibernation or maternity periods shall be avoided, with works taking place during nights between mid-March to mid-May or September to October.			1	1	G	Check that records of pre-construction surveys of structures have been filed.			DP - Principal Contractor	During Construction	Bat001		
Bats	Bat foraging areas	Scheme-wide	N	N	Y	Y	3	2	A	Nat097	Minimise impact on bat foraging habitat.	Where vegetation is expected to be used by bats, vegetation removal should preferably be scheduled to occur between September to October (inclusive) or mid-March to mid-May to minimise the risk of disturbance to foraging bats.			2	2	G	Document vegetation clearance measures taken to protect impact on foraging bats.			DP - Principal Contractor	Vegetation Clearance	Bat003		
Riparian species	Pre-construction surveys	Scheme-wide	N	N	N	Y	2	2	G	Nat111	Clarity as to whether otter or water vole could be affected by works.	A pre-construction survey shall be undertaken along watercourses considered to be suitable for otters or water vole where works are to be within 30m of suitable habitat. Should evidence of otter be identified then the EcCoW shall be consulted to determine the need for further mitigation and/or the need for consultation with Natural England. Documented inspection by a suitably qualified ecologist shall be made available to East Sussex Highways Authority PM on request.			1	2	G	Check that pre-construction surveys of watercourses adjacent to works are undertaken where risk to habitat exists.			DP - Principal Contractor	During Construction	Rip001		
Riparian species	Disturbance	Scheme-wide					2	2	G	Nat118	Deter otters from investigating construction works.	Should a maternal Holt be identified then an exclusion zone of up to 150m (CIEEM, 2011) shall be established. Once the mother and cubs are confirmed as having ceased using the Holt, then it would be either temporarily closed or removed under licence as required. A replacement artificial Holt may be required if an otter Holt is found to be present as advised by Natural England.			2	1	G	Check that pre-construction surveys of watercourses adjacent to works are undertaken where risk to habitat exists.			DP - Principal Contractor	During Construction	Rip003		

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<b>Biodiversity Clauses</b>																						
Riparian species	Tool Box Talks	Scheme-wide					2	2	G	Nat114	Disturbance to otter or water vole avoided.	Construction staff working within 30m of suitable habitat shall be briefed on how to identify Water Vole/Otter field signs. Should a Water Vole burrow be found (or suspected) work shall cease and advice sought from an experienced Ecologist or the Environmental Manager. Evidence that a toolbox talk has been delivered to construction staff working within 30m of a watercourse with suitable Water Vole/Otter habitat shall be provided to the East Sussex Highways Authority PM on request.			1	1	G	Confirm that tool box talks on works within 30m of a watercourse are effective.		DP - Principal Contractor	During Construction	Rip004
Fish	Disturbance	Watercourse	Y	Y	Y	Y	4	3	A	Nat122 Nat123 Nat124 Nat125	Avoidance of disturbance to key fish species.	Piling operations adjacent to migratory European eel or sea trout shall be scheduled so that disturbance during the migration period (March to November) is minimised to the satisfaction of the Environment Agency.			3	3	A	Check to ensure piling operations comply with Environmental Agency requirements.		DP - Principal Contractor	During Construction	Fis002
Badgers	Pre-construction surveys	Scheme-wide	Y	N	N	Y	2	2	G	Nat131	Works are undertaken with full awareness of the location of badger setts.	Badger survey to be undertaken one week before works within 30m of soft estate works.			1	1	G	Check that a signed record of survey prior to works in the soft estate is on file.		DP - Principal Contractor	During Construction	Bad001
Reptiles	Suitable reptile habitat	Scheme wide	Y	N	Y	Y	3	2	A	Nat141 Nat142 Nat143 Nat144 Nat146 Nat147	Avoidance of harm to reptiles.	Areas of suspected reptiles shall be cleared with a hand search before vegetation removal during March to October in accordance with a Reptile Mitigation Strategy setting out the search strategy, vegetation clearance and reptile relocation measures. Hand dismantling of refugia is required.			2	1	G	Check that measures protect reptiles have been supervised. Check that artificial refugia have been dismantled by hand and relocated. Check that measures prevent reptiles from being trapped. Check that measures to protect reptiles during vegetation clearance deliver protection. Confirm effectiveness of measures to protect reptiles during vegetation clearance.		DP - Principal Contractor	Vegetation Clearance	Rep001
Reptiles	Common Toad	Scheme wide	N	N	Y	Y	4	2	A	Nat148	Avoidance of harm to priority species.	The EcCoW must undertake a visual inspection of ditches and suitable hibernacula prior to the commencement of works to confirm the absence of toad or other priority species. If species are found to be at risk, the EcCoW shall supervise the removal/rescue of the species to a location away from the works.			2	1	G	Confirm that a record of EcCoW inspections in advance of works to the ditches is in place.		DP - Principal Contractor	Vegetation Clearance	Rep002

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<b>Biodiversity Clauses</b>																						
Reptiles	Toolbox Talks	Scheme-wide	N	N	Y	N	4	2	A	Nat145	Avoidance of harm to reptiles.	Staff with potential to encounter reptiles are to receive training and to be demonstrated to on request.			2	1	G	Check that a record of attendance at tool box talk on invasive reptiles is on file.		DP - Principal Contractor	Pre-construction	Rep003
Breeding birds	Vegetation clearance	Scheme-wide	Y	Y	N	Y	2	2	G	Nat161 Nat162 Nat164	Protection of nesting birds.	A nesting bird check should be undertaken no longer than 24 hours before vegetation removal during the bird breeding season			1	1	G	Check that measures to protect nesting birds deliver protection.		DP - Principal Contractor	Vegetation Clearance	Bir001
Breeding birds	Disturbance	Scheme-wide	N	N	Y	Y	4	2	A	Nat163 Nat165	Avoid disturbance to breeding birds.	Site hoardings would be installed along the north and eastern site boundary to minimise disturbance to breeding birds. A risk assessment shall be carried out prior to the commencement of works to inform the likelihood of protected bird species being disturbed by noise or human presence during the breeding season.			4	1	G	Confirm installation of hoardings. Confirm that a risk assessment was undertaken and the results reported in the CEMP.		DP - Principal Contractor	During Construction	Bir002
Breeding birds	Toolbox Talks	Scheme-wide	N	N	Y	Y	4	2	A	Nat166	Avoid disturbance to breeding birds.	Site staff will be required to gain an appreciation of the importance of the site for birds along with restrictions against access to the grazing marsh habitat.			4	1	G	Check that a record of attendance at tool box talk on importance of site for birds is on file.		DP - Principal Contractor	During Construction	Bir003
Habitat	Vegetation clearance	Scheme-wide	N	N	N	N	3	3	A	Nat174 Nat175 Nat176 Nat182 Nat182	Minimal loss of habitat.	No vegetation clearance lower than 150mm shall take place without prior advice and sign-off from the Ecological Clerk of Works (EcCoW) or Environmental Manager.			2	1	G	Check that the Vegetation Clearance Plan minimises loss of priority habitat. Check that working areas are under EcCoW supervision are clearly defined and fenced off prior to works starting nearby. Check no vegetation clearance lower than 150mm has taken place.		DP - Principal Contractor	Vegetation Clearance	Hab005
Habitat	Works affecting priority habitat	Scheme-wide	N	N	Y	N	3	3	A	Nat173	Protection of priority habitat.	Protection of priority habitat during construction works.			3	2	A	Check temporary exclusion fencing is remains effective.		DP - Principal Contractor	Vegetation Clearance	Hab001
Habitat	Trees and hedgerows	Scheme-wide	N	Y	Y	N	2	1	G	Nat178	Protection of trees and hedgerows.	Root protection measures to be deployed.			1	1	G	Check that root protection measures are followed and that the measures are audited on a monthly basis.		DP - Principal Contractor	Vegetation Clearance	Hab003
Habitat	Biodiversity Net Gain	Scheme-wide	Y	Y	N	N	3	2	A	Nat180 Nat181	Auditible record of the Biodiversity Units.	Habitat loss will be reinstated in a manner that maximises the biodiversity score while achieving visual amenity and landscape objectives based upon the Environmental Masterplan using native species of local provenance as well as a grass seed rich in wildflower species to supporting pollinating insects.			3	1	G	Check that the quarterly reporting of the biodiversity metric is being delivered.		Design Team	During Construction	Enh010

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Biodiversity Clauses																								
Site practice	Works <8m of a watercourse	Scheme-wide	N	N	N	Y	3	3	A	Nat192	Avoidance of damage to aquatic habitats.	Best practice techniques shall be used for works close to ditches, watercourses and culverts to avoid / minimise risk of contamination or damage to sensitive ecological receptors (habitats and species).	3	2	A	Confirm that method statements for works within 8m of watercourses are in the CEMP.		DP - Principal Contractor	During Construction	Site001				
Site practice	All works	Scheme-wide	N	N	Y	Y	4	3	A	Nat191 Nat198	Avoidance of incidental damage to species and habitat. Compliance with the EMP.	No construction access, storage of vehicles or materials etc shall cause impacts to species and habitats with inspections occurring to ensure that all mitigation and protection is maintained.	2	2	G	Check that site inspection records confirm absence of activities beyond the defined works area. Check that records of inspections of management measures are on file.		DP - Principal Contractor	During Construction	Site003				
Site practice	Night working	Scheme-wide	Y	Y	N	Y	3	3	A	Nat195 Nat203	Protection of priority habitat and protected species.	Working during dark/night time conditions where a potential impact upon sensitive habitats and species exists will be avoided with lighting, generators (and other noisy equipment) located to avoid impacts.	2	2	G	Check that lighting and noisy equipment is located to avoid impact on protected species.		DP - Principal Contractor	During Construction	Site004				
Site practice	Site compounds	Scheme-wide	N	N	Y	Y	2	1	G	Nat193	Avoidance of incidental damage to species and habitat.	Compounds, vehicles, storage of materials and haul routes (where on unpaved surfaces) are to be located to avoid an adverse impact upon sensitive habitats and species.	1	1	G	Check that site compound activities have been located to avoid impact on priority habitats and species.		DP - Principal Contractor	Pre-Construction	Site005				
Site practice	Excavations	Scheme-wide	N	N	N	Y	2	2	G	Nat196	Compliance with wildlife legislation.	Provision of escape ramps for mammals from excavations will be provided and visual checks will be undertaken.	2	1	G	Check covered trenches or escape route are in place.		DP - Principal Contractor	During Construction	Site006				
Site practice	Soil management	Scheme-wide	N	N	N	N	2	2	G	Nat197 Nat201 Nat202	Avoidance of harm to burrowing animals.	Soil storage areas shall be managed to maximise their value for landscape planting and to minimise opportunities for colonisation by burrowing animals.	2	1	G	Check soil storage areas are correctly managed.		DP - Principal Contractor	During Construction	Site008				
Site Practice	Rabbit Warrens	Scheme-wide	Y	N	N	Y	1	2	G	Nat200	Avoidance of unnecessary suffering to mammals.	Where rabbit warrens are to be damaged or destroyed then the work will be in accordance with the Wild Mammals (Protection) Act 1996 and Animal Welfare Act 2006 by a registered pest control company. Inspections for rabbit warrens to prior to earthworks to direct need for use of a registered pest control company the use of which shall be recorded in the CEMP.	1	1	G	Check for the presence of rabbit and the need for pest control measures.		DP - Principal Contractor	During Construction	Site007				

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<b>Biodiversity Clauses</b>																						
Site practice	Ecological specialist	Scheme-wide	Y	Y	Y	Y	4	3	A	Nat199	Compliance with Method Statements and the EMP.	Documented inspections by a suitably qualified ecologist are to be made available to the East Sussex Highways Authority PM on request.			2	2	G	Check that the ecologist is suitably qualified for the habitats and species to be protected.		Delivery Partner - Env Manager	During Construction	Site002
Habitat creation	Protected species	Scheme-wide	N	N	N	N	2	2	G	Nat214	Creation of new habitat suitable for protected species. Adoption of best practice habitat creation measures.	Ecological mitigation/ enhancement measures set out in the environmental masterplan and the CEMP shall be in accordance with guidance from the Institute of Ecology and Environmental Management, published ecological literature and consultations with statutory and non-statutory nature conservation bodies, except where any departures from that guidance are agreed by East Sussex Highways Authority, and the ECoW following consultation with relevant stakeholders.			1	1	G	Check design of ecological mitigation and enhancement is in line with recognised guidance.		DP - Principal Contractor	Post-Construction	Enh004
Habitat creation	Great crested newts	Scheme-wide	N	N	Y	Y	1	1	G	Nat216	Enhancement of GCN and reptile habitat.	GCN hibernacula shall be created.			1	1	G	Check hibernacula are created in locations specified in method statement.		DP - Principal Contractor	Post-Construction	Enh006
Habitat creation	Bats	Scheme-wide	N	N	N	Y	1	1	G	Nat217 Nat218	Provision of enhanced habitat suitable for the bats species found in the vicinity of the scheme.	Locate bat boxes in areas with good habitat connectivity but poor potential roost features with a Management Plan compensating for habitat loss.			1	1	G	Check that photographic evidence of enhancement measures for bats is on file. Check bat boxes offer good habitat connectivity.		DP - Principal Contractor	During Construction	Enh008
Habitat creation	Common Toad	Scheme-wide	N	N	Y	Y	1	1		Nat225	To minimise loss of habitat.	Ditches shall be replaced to ensure no loss of habitat for notable species including for toad and other amphibian species.			1	1		Check that replacement ditches are provided.		DP - Principal Contractor	During Construction	Enh009
Habitat creation	Invertebrates	Scheme-wide	N	N	Y	Y	1	1	G	Nat220	Protection and enhancement of terrestrial invertebrate habitat.	Areas of deadwood shall be carefully moved to locations identified by the ECoW. Log piles shall be created to enhance habitats for terrestrial invertebrates.			1	1	G	Check areas of dead wood have been appropriately moved and measures are in place to enhance terrestrial invertebrates habitats.		DP - Principal Contractor	During Construction	Enh010
Habitat creation	Drainage ditches	Grazing Marsh	N	N	Y	N	1	1		Nat226	To minimise loss of habitat.	New drainage ditches shall include sections with low gradient, localised shallow margins, deeper mid-sections, silt dominated substrate taken from ditches removed by the scheme, low shading and open banks.			1	1		Check that replacement ditches have a suitable profile.		DP - Principal Contractor	During Construction	Enh011

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Habitat creation	Birds	Grazing Marsh	N	N	N	N	1	1	G	Nat221	Provision of nest boxes for birds.	Bird boxes will be deployed for every hectare of habitat loss.			1	1	G	Check that measures to replace habitat loss with bird boxes are in place.		DP - Principal Contractor	Post-Construction	Enh013
Habitat creation	Floral species	Grazing Marsh	N	N	N	N	1	1	G	Nat224	Reinstatement of habitat and creation of wildlife corridors.	The Client shall ensure that an experienced ecologist monitors post-construction habitats for three years within and immediately adjacent to the works site to detect colonisation by invasive non-native plant species triggering eradication measures where necessary.			1	1	G	An annual inspection shall be commissioned		Design Team	SGAR3 - SGARS	Enh007
Invasive species	Pre-construction surveys	Scheme-wide	N	N	N	Y	3	2	A	Nat231	Avoidance of spread of invasive plant or animal species.	Survey to be undertaken within April-October not more than 2 months before start of works.			2	1	G	Check that a pre-construction invasive species survey results and species-specific control measures are in the CEMP.		Design Team	Pre-construction	ISp001
Invasive species	Toolbox Talks	Scheme-wide	N	Y	N	Y	3	2	A	Nat234	Avoidance of spread of invasive plant or animal species.	Staff with potential to encounter invasive species are to receive training and to be demonstrated to East Sussex Highways Authority PM on request.			2	1	G	Check that a record of attendance at tool box talk on works where invasive species are present is on file.		DP - Principal Contractor	Pre-construction	ISp002
Invasive species	Works <7m of invasive plant species	Scheme-wide	Y	Y	N	Y	3	2	A	Nat233	Avoidance of spread of invasive plant species.	A biosecurity protocol or method statement to prevent the introduction and spread of invasive non-native species and pathogens between sites must be adopted.			2	1	G	Check that exclusion zones have been marked out 7m from plant invasive species.		DP - Principal Contractor	Vegetation Clearance	ISp004
Invasive species	Vegetation clearance	Scheme-wide	N	Y	N	Y	2	2	G	Nat232	Avoidance of spread of invasive plant or animal species.	A Method Statement with controls for invasive species is to be outlined within CEMP.			2	1	G	Check that measures to avoid the spread of invasive species are functioning.		DP - Principal Contractor	Vegetation Clearance	ISp003
Invasive species	Disposal of invasive species	Scheme-wide	Y	Y	Y	Y	2	2	G	Nat235	Avoidance of spread of invasive plant species.	A plan shall be prepared as to how each invasive species stand shall be removed and disposed of. To bury invasive non-native plant waste without a permit, the conditions in 'Treatment and Disposal of Invasive Non-Native Plants: RPS 178' must be met with the Management Plan being part of the CEMP. The Environment Agency shall be informed a week before Japanese knotweed is buried. Management by spraying with approved herbicides shall be subject to COSHH assessment and EA agreement and NE if in an SSSI. Off-site disposal of invasive plant waste shall only be via a registered waste carrier the waste being sent to an authorised landfill site or suitable disposal site following all appropriate procedures. The HEMP shall record the location of on-site or licenced disposal facilities and document procedures to prevent the spread of invasive species.			2	1	G	Check that a Management Plan for invasive species has been prepared and that the location of on-site or offsite disposal is recorded in the HEMP along with a record of the EA being notified and Waste Management licences.		DP - Principal Contractor	Pre-Construction	ISp005

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Activity/Action Category	Aspect/ Control Plan Link	Location	Schedule Risk	Commercial Risk	Reputational Risk	Legislative Risk	Severity	Likelihood	RAG Status	Environmental Management Clause ID(s)	Objective	Headline Summary of Activity/Action			Severity	Likelihood	RAG Status	Monitoring & Inspections	Corporate Responsibility	Delivery Phase	Assumptions Id.	
Invasive species	Treatment of invasive species	Scheme-wide	Y	Y	Y	Y	2	2	G	Nat236	Avoidance of spread of invasive plant species. Compliance with wildlife legislation.	Location of stands not needing removal shall be recorded in the Handover Environmental Management Plan.			2	1	G	Check measures to avoid encroachment on invasive species stands are effective.		DP - Principal Contractor	Post-Construction	ISp 006

Environmental Risk Assessment & Management Measures Register				Pre-mitigation Risk/RAG						Clauses				Post- Mitigation RAG					Owner	Phase		
Activity/Action Category	Aspect/ Control Plan Link	Location	Schedule Risk	Commercial Risk	Reputational Risk	Legislative Risk	Severity	Likelihood	RAG Status	Environmental Management Clause ID(s)	Objective	Headline Summary of Activity/Action			Severity	Likelihood	RAG Status	Monitoring & Inspections		Corporate Responsibility	Delivery Phase	Assumptions Id.
<b>Water Clauses</b>																						
Consents	Water abstraction	Scheme-wide	Y	Y	Y	Y	3	2	A	Wat004	Ensure that abstractions are subject to appropriate controls.	Any proposed abstractions (e.g. for batching plants, wheel washing etc.) whether surface water or groundwater if in excess of 20m³/day must be supported by an abstraction licence. The CEMP shall record where abstractions for dewatering may need an abstraction licence. A copy of an abstraction licence shall be provided in the CEMP, while a copy of the abstraction monitoring log shall be provided to the East Sussex Highways Authority PM on request.			2	2	G	Confirm abstraction licence is copied to CEMP before dewatering commences.		DP - Principal Contractor	Pre-Construction	WatAss004
Consents	Works <8m of a watercourse	Scheme-wide	N	Y	N	Y	3	4	A	Wat005	Ensure that appropriate controls are in place to protect rivers and floodplains.	Flood risk activity permits may be required for works near Main Rivers, e.g. construction of outfalls and must be kept on site at all times. Consents under the Water Resources Act 1991 and Land Drainage Act 1991 (incorporated into Environmental Permits under Environmental Permitting regulations for Main Rivers) for works on, over or within a main river or ordinary watercourse respectively, including temporary works shall be in place. Consultation with the EA and/or Lead Local Flood Authorities/Internal Drainage Board shall be undertaken. Appropriate consents for works within 8m of watercourses shall be included in the CEMP and available for onsite inspection.			3	2	A	Check need for FRAPs has been addressed and consents copied to EMP before works at watercourses commence. Monitor to ensure works close to watercourses are compliant with permit conditions.		DP - Principal Contractor	Pre-Construction	WatAss005
Consents	Dewatering / Excavations	Scheme-wide	N	Y	Y	Y	2	3	A	Wat003	Protection of groundwater from the spread of contaminants.	Where dewatering activities are required, early engagement with the regulatory authorities shall be undertaken to agree proposed solutions and to ensure solutions and controls are compliant with the current Regulatory Position Statement (RPS) for temporary dewatering. Applications for appropriate licences will be prepared and lodged with the regulatory authority, with licence secured prior to discharging any water generated via dewatering activities. Minutes of meeting with Environment Agency regarding water activities with clearly identified decisions/ agreements between the parties shall be provided to the East Sussex Highways Authority PM.			2	2	G	Check meeting notes with Environment Agency are provided to East Sussex Highways Authority PM. Check for compliance with abstraction licence restrictions.		DP - Principal Contractor	During Construction	WatAss002

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#### Water Clauses

Consents	Consultations	Scheme-wide	Y	N	Y	Y	4	3	A	Wat057	Avoidance of adverse effects on local hydrological conditions.	Consultation would be held with the Environment Agency and/or Local Flood Authority to determine where environmental permits would be required. The Water Management Plan shall record the outcome of consultations with the Environment Agency/Local Flood Authority detailing the circumstances where permits would be required.	3	2	A	Check that the Water Management Plan details permitting requirements.	DP - Principal Contractor	Pre-Construction	WatAss001
Consents	Ground investigation	Scheme-wide	Y	Y	Y	Y	3	2	A	Wat055	Absence of pollution incidents.	Location of boreholes and trial pits within 5 m of main river flood plain or 8m of flood defence works and need for Bespoke Permits.	2	2	G	Check that EA Standard Rule SR2015 No 36 or subsequent revision is complied with.	Delivery Partner - Construction Manager	Pre-Construction	WatAss003
Consents	Works in a main river	Scheme-wide	Y	Y	Y	Y	4	3	A	Wat081 Wat082	Avoidance of pollution to a Main River and/or adverse effects upon riverine hydrology.	Where any works are to be undertaken within a Main River then the relevant consents shall be sought from the Environment Agency or Marine Management Organisation as appropriate prior to installation. A copy of the consent shall be placed in the CEMP. A Method Statement for works within a Main River shall be agreed with the appropriate regulatory body prior to the commencement of works and shall be placed in the CEMP.	2	2	G	Check that consent is in place prior to the commencement of works within a Main River. Check that the Method Statement is being complied with.	DP - Principal Contractor	Pre-Construction	WatAss006
Consumption	Water consumption	Scheme-wide	N	N	Y	N	2	2	G	Wat051 Wat063	Reduce embodied water consumption and indirect carbon emissions.	Consideration of embedded water in construction materials and that used during construction to be reported in the CEMP.	1	2	G	Check that material selection practice considers reduced water consumption and is documented.	DP - Principal Contractor	Pre-Construction	WatAss007
Flood Risk	Works within Flood Zone 3	Scheme-wide	Y	Y	Y	Y	3	5	R	Wat015	Absence of flood plain incidents.	No scheduled works within Flood Zone, 3 as shown in the flood risk assessment are to commence until any required flood storage compensation works have been agreed with the relevant statutory authorities.	2	5	A	Check meeting notes with Environment Agency on flood compensation are provided to the East Sussex Highways Authority PM on request.	DP - Principal Contractor	Pre-Construction	WatAss008
Flood Risk	Works in the flood plain	Scheme-wide	Y	Y	Y	Y	3	5	R	Wat007 Wat008 Wat009	Avoid increase in flood risk. Provide for health and safety of workforce in the event of a flood.	Avoid any increase in flood risk and consider potential flooding effects with Emergency Flood Response Plan and Procedures shall be provided in the CEMP.	2	3	A	Inspections to be undertaken to ensure absence of obstructions and debris giving rise to increased flood risk. Confirm whether materials are to be stored within a floodplain. Inspect work plans to confirm outwith the flood zone. Confirm presence of an Emergency Flood Response Plan is within the CEMP.	DP - Principal Contractor	Pre-Construction	WatAss009
Flood Risk	Works <8m of a watercourse	Scheme-wide	N	Y	Y	Y	3	5	R	Wat011	Avoidance of risks to a watercourse.	Consultation with the EA and/or Lead Local Flood Authorities/Internal Drainage Board if the Proposed Scheme lies within 8m of a designated main river or ordinary watercourse.	2	3	A	Check meeting notes with are provided to the PM on request.	Design Team	Pre-Construction	WatAss011

Environmental Risk Assessment & Management Measures Register				Pre-mitigation Risk/RAG						Clauses				Post- Mitigation RAG					Owner	Phase		
Activity/Action Category	Aspect/ Control Plan Link	Location	Schedule Risk	Commercial Risk	Reputational Risk	Legislative Risk	Severity	Likelihood	RAG Status	Environmental Management Clause ID(s)	Objective	Headline Summary of Activity/Action			Severity	Likelihood	RAG Status	Monitoring & Inspections		Corporate Responsibility	Delivery Phase	Assumptions Id.

#### Water Clauses

Flood Risk	Works<16m of a designated tidal river	Scheme-wide	Y	Y	Y	Y	3	5	R	Wat010	Avoidance of risks to a Main River.	Consultation with the Environment Agency where the Proposed Scheme lies within 16m of a designated tidal river.	2	3	A	Check meeting notes with are provided to the East Sussex Highways Authority PM on request.	DP - Principal Contractor	Pre-Construction	WatAss01 2
Flood Risk	Construction compounds	Scheme-wide	N	Y	Y	Y	2	2	G	Wat013	Avoidance of pollution should flooding occur.	Where feasible, compounds and storage areas should be located outside of Flood Zones 2 and 3.	2	1	G	Check justification for compound and storage areas being within Flood Zones 2 and 3 is on file.	DP - Principal Contractor	Pre-Construction	WatAss01 3
Hydrology	Control Measures	Scheme-wide	N	Y	Y	Y	3	3	A	Wat088	Maintenance of water levels for neighbouring agricultural interests.	The Delivery Partner shall engage with the Internal Drainage Board to ensure that measures are in place to secure water levels and water quality during the works to the satisfaction of the Board. Details of the measures shall be reported in the CEMP before works commence.	2	2	G	Check that a revised Groundwater Risk Assessment is issued to the Environment Agency. Check that the CEMP provides details of the groundwater level at relevant sections of sheet piling.	DP - Principal Contractor	Pre-Construction	WatAss01 5
Groundwater	Dewatering / Excavations	Scheme-wide	N	Y	Y	Y	4	2	A	Wat047	Disruption of groundwater flow avoided.	The design of key below ground structures, including retaining walls, piles, cable ducts, and also the excavation and widening of embankments and cuttings shall minimise alteration of the hydraulic properties of the surrounding ground (including the creation of flow pathways), intersection of groundwater flow or the creation of groundwater dams. Evidence shall be provided of the manner in which hydrological risks have been minimised during the design of below ground structures to the East Sussex Highways Authority PM.	4	1	G	Check that evidence of minimising hydrological risks are provided to the East Sussex Highways Authority PM.	DP - Principal Contractor	During Construction	WatAss01 6
Groundwater	Piling operations	Scheme-wide	Y	Y	Y	Y	4	4	R	Wat070 Wat071	Disruption of groundwater flow avoided.	Once the earthworks design and specification for sheet piling have been completed, then the Groundwater Risk Assessment would be updated and issued to the Environment Agency. Evidence would be provided within the CEMP recording that a revised Groundwater Risk Assessment had been issued to the Environment Agency. Characterisation of the groundwater level would be undertaken for those sections of sheet pile that exceed 25m lengths or a distance exceeding 150m containing multiple sheet pile sections. Evidence would be provided within the CEMP recording the groundwater level for the applicable sections of sheet piling.	3	2	A	Check that a revised Groundwater Risk Assessment is issued to the Environment Agency. Check that the CEMP provides details of the groundwater level at relevant sections of sheet piling.	DP - Principal Contractor	During Construction	WatAss01 9

Environmental Risk Assessment & Management Measures Register				Pre-mitigation Risk/RAG						Clauses				Post- Mitigation RAG					Owner	Phase	
Activity/Action Category	Aspect/ Control Plan Link	Location	Schedule Risk	Commercial Risk	Reputational Risk	Legislative Risk	Severity	Likelihood	RAG Status	Environmental Management Clause ID(s)	Objective	Headline Summary of Activity/Action			Severity	Likelihood	RAG Status	Monitoring & Inspections	Corporate Responsibility	Delivery Phase	Assumptions Id.

#### Water Clauses

Pollution Control	Contaminated land	Scheme-wide	Y	Y	N	Y	3	2	A	Wat064	Absence of pollution incidents.	Should unexpected contaminated land, including groundwater, be encountered, works that risk causing pollution shall cease with remediation carried out in accordance with the scheme approved by the East Sussex Highways Authority PM.	2	1	G	Check that the Materials Management Plan and Water Management Plans present an integrated approach. Check whether the CEMP records where the seepage of contaminated water is likely and the actions to be taken. Check that the CEMP provides evidence of consideration of rising groundwater and piling strategy.	DP - Principal Contractor	During Construction	WatAss02 1
Pollution Control	Piling operations	Scheme-wide	N	Y	Y	Y	3	3	A	Wat083 Wat084 Wat090	Protection of groundwater from the spread of contaminants.	Management of risk of causing pollution impact pathways from historical landfill sites.	2	2	G	Check that a Method Statement agreed with the EA is within the CEMP. Inspections to identify release of pollutants during piling.	DP - Principal Contractor	Pre-Construction	WatAss02 2
Pollution Control	Bridge works	Bridge site	Y	Y	Y	Y	4	3	A	Wat085 Wat087	Avoidance of pollution to a main river.	The Delivery Partner shall prepare a Bridge Demolition Method Statement that addresses not only the anticipated contaminants within the structure, but also defines how works are to be undertaken to prevent any bridge material or detritus from entering the river. A 'crash deck' of sufficient width to capture any materials that could fall from a bridge vertically or at an angle. Materials falling onto the deck shall be separated into large units to be lifted by a crane and smaller materials to be manually removed. None of the materials being manually removed shall be swept into the river. The ECoW shall be present to supervise the works to ensure compliance with the Method Statement.	2	2	G	Onsite supervision of works to ensure no detritus enters the river.	DP - Principal Contractor	During Construction	WatAss02 3
Pollution Control	Runoff control	Scheme-wide	N	Y	Y	Y	3	3	A	Wat022 Wat023 Wat038 Wat044 Wat060	Absence of pollution incidents.	The Delivery Partner shall provide a construction site drainage system to prevent pollution of surface or groundwaters and describe the approach within the Water Management Plan which shall be included in the CEMP.	2	2	G	Check that the Water Management Plan details pollution control measures and is included in the CEMP. Check meeting notes with Environment Agency are on file.	DP - Principal Contractor	Pre-Construction	WatAss02 4

Environmental Risk Assessment & Management Measures Register				Pre-mitigation Risk/RAG						Clauses				Post- Mitigation RAG					Owner	Phase		
Activity/Action Category	Aspect/ Control Plan Link	Location	Schedule Risk	Commercial Risk	Reputational Risk	Legislative Risk	Severity	Likelihood	RAG Status	Environmental Management Clause ID(s)	Objective	Headline Summary of Activity/Action			Severity	Likelihood	RAG Status	Monitoring & Inspections	Corporate Responsibility	Delivery Phase	Assumptions Id.	
<b>Water Clauses</b>																						
Pollution Control	Control measures	Scheme-wide	N	Y	Y	Y	3	3	A	Wat058 Wat059	Absence of pollution incidents.	Method Statements shall include [but not be limited to] pollution control measures, systems and details of the isolation of existing surface water drainage systems from risks of pollution. Photographic evidence of pollution control measures in operation shall be provided to the East Sussex Highways Authority PM on request. Appropriately sized settlement / attenuation ponds shall be provided to accommodate surface water runoff from the construction site, compounds and storage areas in the context of high intensity rainfall events. The Water Management Plan shall record the location of the settlement / attenuation ponds along with justification for their size.			2	2	G	Check for inclusion of photographic evidence in CEMP. Check that the Water Management Plan details the provision of settlement / attenuation ponds.		DP - Principal Contractor	During Construction	WatAss025
Pollution control	Toolbox talk	Scheme wide	N	Y	Y	Y	3	3	A	Wat052 Wat086	Avoidance of pollution to a main river.	The Delivery Partner shall take note of advice and recommendations within the CIRIA document C741 (2015, 4th Edition) Environmental Good Practice on Site guide, and C532 (2001) Control of water pollution from construction sites – Guidance for consultants and Delivery Partners. Spill Kits should be provided, and training given in their use within toolbox talks. All personal involved in the bridge demolition works shall receive a toolbox talk before works commence on the bridge. The toolbox talk shall detail the environmental status of the river and the risks associated with bridge demolition. Records of attendance shall be captured within the CEMP.			2	2	G	Check that evidence of training on CIRIA C741 and C532 is on file.		DP - Principal Contractor	During Construction	WatAss026
Pollution Control	Monitoring	Scheme-wide	N	Y	Y	Y	2	2	G	Wat039 Wat040 Wat042 Wat043	Absence of pollution incidents.	A proposed suite of determinants to be monitored and the monitoring locations are to be agreed with East Sussex Highways Authority and the regulatory authorities. Details shall be documented in the CEMP. Visual assessments for oil and silt shall be undertaken at watercourses at risk of pollution during scheme construction. Evidence that inspections of watercourses at risk is being undertaken shall be provided to the East Sussex Highways Authority PM on request.			2	2	G	Check that evidence of monitoring of at risk watercourse. Maintain and retain on-site records. Check meeting notes with regulatory authority are on file.		DP - Principal Contractor	During Construction	WatAss027

Environmental Risk Assessment & Management Measures Register				Pre-mitigation Risk/RAG						Clauses				Post- Mitigation RAG					Owner	Phase	
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#### Water Clauses

Pollution Control	Construction compounds	Scheme-wide	N	Y	Y	Y	2	2	G	Wat006 Wat045	Absence of pollution incidents.	Liaison with the Environment Agency and/or Local Water Authority shall be undertaken to determine whether discharges from construction compound areas require discharge consent. Consents are to be included in the CEMP with minutes of meeting with Environment Agency shall be provided to the East Sussex Highways Authority PM on request. Construction compounds shall incorporate a closed drainage system with pollution control measures. The Water Management Plan shall detail the pollution control measures within the CEMP.	1	2	G	Check need for discharge consents from construction compounds and record in CEMP before discharges commence. Monitor to demonstrate compliance with discharge consent.	DP - Principal Contractor	Pre-Construction	WatAss029
Pollution Control	Site management	Scheme-wide	N	N	Y	Y	2	2	G	Wat089	Avoid harm to human health and the natural environment.	The storage and handling of oils, fuels, hazardous materials and waste shall follow the Environment Agency's good practice guidance, including PPG1 (General Guide to the Prevention of Pollution), and PPG5 (Works and Maintenance near water) and CIRIA C532 documentation on The Control of Pollution from Construction Sites and Control of Pollution Regulations.	2	1	G	Check that inspections of areas for handling and storing of materials are held on file.	DP - Principal Contractor	During Construction	WatAss030
Pollution Control	Site security	Scheme-wide	N	Y	Y	Y	3	2	A	Wat027	Absence of pollution incidents.	Protection against vandalism/theft to prevent pollution to ground/watercourse and/or drains.	2	1	G	Check photographic evidence of security measures to protect against vandals with pollution risk is on file.	DP - Principal Contractor	During Construction	WatAss031
Pollution Control	Site documentation	Scheme-wide	N	Y	N	Y	2	2	G	Wat028 Wat029	Absence of pollution incidents.	A Control of Substances Hazardous to Health ("COSHH") Register must be maintained by the Contractor for each site compound and updated throughout the works as required. The COSHH register shall be provided to the East Sussex Highways Authority PM on request. Copies of the Site Compound Plan (reviewed at a minimum 6 month frequency) shall be kept on site and the plan is to clearly indicate where potentially polluting substances and COSHH stores are to be located. Evidence review of the Site Compound Plan and updates shall be provided to the East Sussex Highways Authority PM on request.	2	1	G	Check that COSHH is regularly reviewed. Check that Site Compound Plan is periodically reviewed.	DP - Principal Contractor	During Construction	WatAss032

Environmental Risk Assessment & Management Measures Register			Pre-mitigation Risk/RAG							Clauses					Post- Mitigation RAG					Owner	Phase	
Activity/Action Category	Aspect/ Control Plan Link	Location	Schedule Risk	Commercial Risk	Reputational Risk	Legislative Risk	Severity	Likelihood	RAG Status	Environmental Management Clause ID(s)	Objective	Headline Summary of Activity/Action			Severity	Likelihood	RAG Status	Monitoring & Inspections		Corporate Responsibility	Delivery Phase	Assumptions Id.
<u>Water Clauses</u>																						
Pollution Control	Reporting	Scheme-wide	N	Y	Y	Y	3	3	A	Wat020 Wat056	Absence of pollution incidents. Rapid reporting of pollution incidents.	A surface water and/or groundwater Pollution Control Plan and Emergency Response Plan taking into account standard best practices shall be put in place for works that could affect aquifers or watercourses. The Plans shall be included in the CEMP. Water pollution incidents with an impact beyond the site boundary are to be reported to the Environment Agency Pollution Incident Hotline within 4 hours where there is a major risk to the environment or people over an extended duration or frequency. All water pollution incidents with an impact beyond the site boundary shall be recorded in the CEMP along with a record of notification to the East Sussex Highways Authority or other applicable organisations.			2	2	G	Confirm that a Water Management Plan is presented within the CEMP and its requirements observed. Check that the CEMP retains a record of pollution incidents.		DP - Principal Contractor	Pre-Construction	WatAss03 3
Pollution Control	Hydrocarbon spillages	Scheme-wide	N	Y	Y	Y	4	3	A	Wat021 Wat054	Absence of pollution incidents.	Mobile plant shall only be refuelled in designated areas where the risk of contamination to watercourses (including mains and foul sewers) can be minimised. Evidence of inspections to confirm refuelling takes place only in designated areas shall be provided to the East Sussex Highways Authority PM on request.			4	2	A	Confirm Water Management Plan addresses hydrocarbon pollution risk. Inspections to ensure compliance with the Water Management Plan.		DP - Principal Contractor	During Construction	WatAss03 4
Pollution Control	Road sweepings	Scheme-wide	N	Y	N	Y	2	3	A	Wat026	Absence of pollution incidents.	A roadsweeper arisings disposal method shall be established before construction starts and any dewatering of the arisings shall be discussed with the regulator. Minutes of meetings with the Environment Agency shall be provided to the East Sussex Highways Authority PM on request.			2	2	G	Check meeting notes with Environment Agency are on file.		DP - Principal Contractor	Pre-Construction	WatAss03 5
Pollution control	Vehicle cleaning	Scheme-wide	N	N	N	Y	2	2	G	Wat061	Avoid contamination watercourses by washwaters.	Vehicle washing not to occur within 10m of watercourse.			2	1	G	Inspections to ensure compliance with the Water Management Plan.		DP - Principal Contractor	During Construction	WatAss03 7
Pollution control	Concrete washings	Scheme-wide	N	Y	Y	N	3	3	A	Wat062	Avoid contamination watercourses by washwaters.	Concrete wash areas not to be within 10m of a watercourse.			3	1	G	Inspections to ensure compliance with the Water Management Plan.		DP - Principal Contractor	During Construction	WatAss03 8

Environmental Risk Assessment & Management Measures Register				Pre-mitigation Risk/RAG						Clauses				Post- Mitigation RAG					Owner	Phase		
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<u>Landscape and Visual</u>																						
Retained vegetation	Pre-construction surveys	Scheme-wide	N	N	Y	N	2	2	G	Land015	Avoidance of impact upon birds and protected species.	Prior to any vegetation clearance commencing, all areas of existing vegetation shall be assessed by a qualified landscape architect and the Ecological Clerk of Works (EcCoW) or Environmental Manager to confirm vegetation to be protected or reinstated following the construction works. Documented inspections shall be provided to the East Sussex Highways Authority PM on request.			1	1	G	Check inspections of protective measures prior to vegetation clearance are documented.		DP - Principal Contractor	Pre-Construction	LandAss007
Retained vegetation	Tree survey	Scheme-wide	N	N	Y	N	2	2	G	Land032	Maintenance of biosecurity.	A tree survey meeting the requirements of BS 5837, or as otherwise agreed with the East Sussex Highways Authority PM, shall be undertaken by a suitably qualified Arboriculturalist to include recognition of tree pests and tree diseases as notified by DEFRA and be reported in a Arboricultural Report. As the health and condition of trees can change rapidly, so the status of the surveyed trees shall be checked on a basis commensurate with the level of risk and preferably on an annual basis. As necessary an updated Arboricultural Report shall be provided to the East Sussex Highways Authority PM. Evidence of how biosecurity considerations have influenced construction methods shall be provided to the East Sussex Highways Authority PM on request.			1	1	G	Check that the tree survey and tree constraints plan influence the construction methods and vegetation to be protected.		DP - Principal Contractor	Pre-Construction	LandAss008
Retained vegetation	Toolbox talks	Scheme-wide	N	N	Y	N	2	2	G	Land016	Retention of vegetation not identified for clearance.	Those responsible for undertaking vegetation clearance shall be notified by the Environmental Manager of those areas where vegetation clearance is not permitted prior to works commencing, this information shall be updated and re-issued as appropriate. Evidence that a tool box talk/briefing for vegetation retention/reinstatement has been undertaken shall be recorded and details provided to the East Sussex Highways Authority PM on request.			1	1	G	Check that evidence of briefings of site crew of the areas of retained vegetation is on file.		DP - Principal Contractor	Vegetation Clearance	LandAss009

Environmental Risk Assessment & Management Measures Register				Pre-mitigation Risk/RAG						Clauses				Post- Mitigation RAG					Owner	Phase		
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<b>Landscape and Visual</b>																						
Retained vegetation	Tree Protection	Scheme-wide	N	N	Y	N	3	2	A	Land054	Minimisation of landscape impact.	All trees and scrub that are to be retained shall be protected in accordance with BS 5837 2012, the Arboricultural Assessment and Tree Removal and Retention Plan. Only trees identified in the Arboricultural Assessment Report, Tree Constraints Plan and the Tree Removal and Retention Plan shall have any works undertaken to them. Where trees on neighbouring land require removal or other works, evidence shall be provided to the East Sussex Highways Authority PM of agreement with neighbours and justification as to why a working method is not available to preclude the need for such works. An Evaluation of Change Register shall be signed off by the client prior to the tree surgery being undertaken.			2	1	G	Check that liaison occurs with the local planning authority over damage to any trees and scrub.		DP - Principal Contractor	Vegetation Clearance	LandAss010
Retained vegetation	Tree surgery	Scheme wide	N	N	Y	N	2	2	G	Land034 Land055	Minimisation of landscape impact.	Only trees identified in the Arboricultural Assessment Report, Tree Constraints Plan and the Tree Removal and Retention Plan shall have any works undertaken to them. Where trees on neighbouring land require removal or other works, evidence shall be provided to the East Sussex Highways Authority PM of agreement with neighbours and justification as to why a working method is not available to preclude the need for such works. An Evaluation of Change Register shall be signed off by the client prior to the tree surgery being undertaken.			2	2	G	Check evidence of agreement with landowners has been issued to the East Sussex Highways Authority PM before site works commence. Check that a client approved EoCR is within the CEMP.		DP - Principal Contractor	Vegetation Clearance	LandAss011
Visual amenity	Construction compounds	Scheme-wide	N	Y	Y	N	3	2	A	Land022 Land025	The layout of the construction compound(s) seek to minimise impact upon neighbouring interests.	In developing the layout for and operating site compounds, the Delivery Partner shall take into account sensitive receptors, existing screening vegetation and arrange the height of the offices, workshops, plant and storage elements so not to cause visual intrusion. Written records of consideration being given to the environmental impact of construction compounds upon neighbouring interests shall be provided to the East Sussex Highways Authority PM on request. The Delivery Partner shall install and maintain temporary suitable boundary fence that screens and secures a site as appropriate, the appearance of which shall be dependent on Local Authority requirements. Photographic evidence of the hoarding shall be made available upon request to the East Sussex Highways Authority PM.			2	2	G	Check that visual intrusion has been minimised through the proposed site compound. Inspections to confirm boundary fencing is secure and meets local authority requirements.		DP - Principal Contractor	Pre-Construction	LandAss013

Environmental Risk Assessment & Management Measures Register				Pre-mitigation Risk/RAG						Clauses				Post- Mitigation RAG					Owner	Phase	
Activity/Action Category	Aspect/ Control Plan Link	Location	Schedule Risk	Commercial Risk	Reputational Risk	Legislative Risk	Severity	Likelihood	RAG Status	Environmental Management Clause ID(s)	Objective	Headline Summary of Activity/Action			Severity	Likelihood	RAG Status	Monitoring & Inspections	Corporate Responsibility	Delivery Phase	Assumptions Id.

#### Landscape and Visual

Visual amenity	Soil storage	Scheme-wide	Y	Y	Y	N	3	4	A	Land067	Seek to minimise impact of soil storage areas upon neighbouring interests. Avoid contamination of seedbank with undesirable species.	Soil storage areas may be located and planted to provide a buffer to adjacent properties provided no adverse effects are caused to adjacent retained vegetation. Written records of discussions with landowners and occupiers/ owners of adjacent properties over soil storage areas are to be prepared and details shall be provided on request to the East Sussex Highways Authority PM. No planting shall take place on SSSI soil stockpiles since this would contaminate the seedbank with undesirable species required for reinstatement.	3	2	A	Check that local stakeholders are involved in discussions over soil storage areas. Check that no plant species become established in the stockpiles.	DP - Principal Contractor	During Construction	LandAss015
Visual amenity	Disturbance	Scheme-wide	N	N	N	N	3	2	A	Land040 Land061	Provision of temporary screening to the satisfaction of affected neighbours. Minimise deleterious impacts.	The Delivery Partner shall install a visual screen fence of a sufficient height to screen non-HGV traffic until mitigation planting becomes sufficiently established to deliver effective screening where disturbance to neighbours is likely. Photographic evidence of the fencing shall be made available upon request to the East Sussex Highways Authority PM. The Delivery Partner shall engage with landowners to advise them of if and when vegetation clearance would affect their land. Such discussions would consider options for replanting species or use of fences as applicable.	2	2	G	Check that all visual screen fences are effective. Check the CEMP contains a record of discussions and the agreement with landowners	DP - Principal Contractor	Vegetation Clearance	LandAss019
Visual amenity	Litter	Scheme-wide	N	N	N	N	2	2	G	Land060	Prevent contamination of areas to be reinstated.	Litter shall be removed from all areas within the works site prior to the removal of any soils or vegetation particularly from any drainage ditches.	1	1	G	Check that all litter has been removed.	DP - Principal Contractor	During Construction	LandAss020
Materials	Timber fencing	Scheme-wide	N	Y	Y	N	3	2	A	Land056	Assist in fitting the scheme into the local landscape. Promotion of traditional techniques and crafts.	Timber fencing as shown on the landscape general arrangement plan shall be made from locally sourced material.	2	2	G	Check source of timber used.	DP - Principal Contractor	During Construction	LandAss021
Materials	Retaining works	Western embankment	Y	N	Y	N	3	3	A	Land057	Design of retaining structures to be sympathetic to landscape sensitivities.	Retaining solutions shall be designed to reduce visual and landscape impact.	2	2	G	Confirm that retaining measures provided reduce visual impact in areas of high landscape sensitivity or high sensitivity receptors.	DP - Principal Contractor	During Construction	LandAss022
Materials	Cycle stands	Scheme-wide	N	Y	Y	N	2	2	G	Land062	Assist in fitting the scheme into the local landscape. Promotion of traditional techniques and crafts.	Cycle stands shall be made of locally sourced timber.	2	2	G	Check source of timber used.	DP - Principal Contractor	During Construction	LandAss023

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#### Landscape and Visual

Materials	Seating	Scheme-wide	N	N	Y	N	2	2	G	Land063	Assist in fitting the scheme into the local landscape. Promotion of traditional techniques and crafts.	Seating shall be made of locally sourced timber.	2	2	G	Check source of timber used.	DP - Principal Contractor	During Construction	LandAss024
Materials	Timber	Scheme-wide	N	N	Y	N	2	2	G	Land064	Timber sourced from sustainable woodland.	All timber used on the Scheme, including fencing, temporary hoardings and formwork shall be sourced in accordance with current Government procurement rules.	2	2	G	Check source of timber used.	DP - Principal Contractor	During Construction	LandAss025
Materials	Walls	Scheme-wide	N	N	Y	N	3	2	A	Land065 Land066	Reduce visual impact of walls and reflect the character of walls in the locality. Provision of habitat for macro-invertebrates, plants and bats.	Gaps and open joints would be left in the flint and brick wall to provide for natural colonisation by invertebrates, plants, and potential roosting habitats for bats. The Delivery Partner shall engage with landowners to advise them of if and when vegetation clearance would affect their land. Such discussions would consider options for replanting species or use of fences as applicable.	2	1	G	Check for gaps and open joints during construction.	DP - Principal Contractor	During Construction	LandAss026
Soil management	Soil handling	Scheme-wide	N	N	Y	N	3	2	A	Land013	Successful soil handling practices such that ecological and landscape objectives are achieved.	The sourcing, testing, stripping, handling, storage and spreading of site-won and imported topsoil shall comply with current guidance such as BS 6031: 2009 Code of practice for earthworks (BSI, 2009); DEFRA 'Construction Code of Practice for the Sustainable Use of Soils on Construction Sites'. Further, imported topsoil shall comply with the BS 3882: 2007 Specification for topsoil and requirements for use (BSI, 2007). Evidence of compliance with relevant best practice shall be provided upon request to the East Sussex Highways Authority PM.	2	2	G	Check that soil suitability is part of the input for the landscape specification.	DP - Principal Contractor	During Construction	LandAss027
Biosecurity	Vegetation clearance	Scheme-wide	N	N	Y	Y	2	2	G	Land033	Maintenance of biosecurity.	Measures shall be taken to meet the biosecurity requirements advised by DEFRA/Forestry Commission insofar as works in the soft estate are concerned with identified tree pests/diseases being notified to the Forestry Commission (via the Tree Alert website). Method statements and evidence of implementation shall be provided to the East Sussex Highways Authority PM on request.	2	1	G	Check that biosecurity measures are being successfully implemented.	DP - Principal Contractor	During Construction	LandAss029

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<u>Landscape and Visual</u>																						
Construction lighting	Inspection of lighting	Scheme-wide	N	N	N	Y	4	4	R	Land051	Avoidance of impact on dwellings and protected species from construction lighting.	Where new or relocated lighting is introduced within 100m of residential dwellings or protected species, then an assessment shall be undertaken to confirm the absence of an adverse effect upon such dwellings or protected species within one week and corrective measures taken where adverse effects arise shall be reporting in the CEMP along with remedial actions. Site inspection records confirming correct orientation of construction lighting units shall be provided to the East Sussex Highways Authority PM on request.			3	3	A	Confirm the EMP contains a record of the impact and resolution where residential dwellings or protected species are affected.		DP - Principal Contractor	During Construction	LandAss030
Construction lighting	Lighting period	Scheme-wide	N	N	Y	Y	1	2	G	Land052	Reduce impact on dark skies and disturbance to local residents and wildlife.	All site works lighting (excluding construction compound) shall be extinguished in the period 17:00 to 07:00 unless extensions are agreed with the local planning authority in advance.			1	2	G	Check that use of construction lighting conforms to agreement with local planning authority.		DP - Principal Contractor	During Construction	LandAss031
Construction lighting	Lighting Strategy	Scheme-wide	N	N	Y	N	3	1	G	Land053	Avoidance of impact on dwellings and protected species from construction lighting.	A Construction Lighting Strategy shall be prepared by the Delivery Partner to demonstrate that the potential for adverse effects upon dwellings or protected species has been minimised through correct location and orientation of the lighting equipment. The Strategy shall be included in the CEMP and submitted to the local planning authority for approval prior to the commencement of works.			2	1	G	Confirm that the CEMP contains the Lighting Strategy and is being complied with.		DP - Principal Contractor	During Construction	LandAss032
Reinstatement planting	Replacement trees	Scheme wide	N	N	Y	N	2	2	G	Land012	Provision of replacement trees for those felled or that die due to the works.	Any trees intended to be retained which are felled or die as a consequence of works shall be replaced by the Delivery Partner. Where reasonably practicable, the size and species of replacement trees shall be selected to achieve to the greatest extent possible, a close resemblance of the original trees most effectively using locally occurring native species of local provenance and taking cognisance of any management plans for areas of woodland immediately adjacent. A record of inspections and any tree death/ damage/ replacements shall be maintained and details provided upon request to the East Sussex Highways Authority PM.			1	1	G	Check that inspections and death/damage/replacement of trees are recorded.		DP - Principal Contractor	During Construction	LandAss034

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<u>Landscape and Visual</u>																						
Reinstatement planting	Mitigation planting	Scheme-wide	N	N	Y	N	3	2	A	Land008	Successful implementation of the landscaping scheme.	All landscaping work shall be carried out in accordance with the approved planting strategy and in line with appropriate British Standards or other recognised codes of good practice unless otherwise amended following approval of an Evaluation of Change Register.			2	2	G	Confirm compliance with Landscape Strategy and that any variation is recorded in the EoCR. Check inspections of protective measures prior to vegetation clearance are documented.		DP - Principal Contractor	Post-Construction	LandAss037
Reinstatement planting	Seeding	Scheme-wide	N	N	Y	N	3	3	A	Land059	Recreate grassland within designated site.	Grassland within the SSSI to be established by the replacement of topsoils removed from the designated site with allowance for natural regeneration from the seedbank within the soils. Seeding may be reinforced by use of green hay taken from other parts of the designated site.			2	2	G	Check establishment of seed.		DP - Principal Contractor	Post-Construction	LandAss038
Reinstatement planting	Monitoring and maintenance	Scheme-wide	N	Y	N	N	2	2	G	Land007	Successful implementation of the landscaping scheme.	Appropriate inspection, monitoring and maintenance of landscaping and planting shall be provided as part of the Scheme to facilitate the effective establishment of vegetation and the effectiveness of the landscaping proposals. The Delivery Partner shall maintain this planting and rectify all planting defects for a two year period from the date of completion of the works. Evidence of inspection, maintenance and rectifying planting defects shall be recorded and details provided to the East Sussex Highways Authority PM on request.			2	1	G	Deliver inspections, maintenance and rectification of defects and record management requirements.		DP - Principal Contractor	Post-Construction	LandAss041

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<b>Cultural Heritage</b>																						
Archaeological Finds	Works near heritage sites	Scheme wide	N	N	N	N	3	2	A	Her002 Her003	Preservation of the archaeological record.	Protection of archaeological finds and engagement with Historic England and the relevant planning authority.			2	2	G	Confirm that protective measures are photographed and are on file.		DP - Principal Contractor	During Construction	HerAss002
Watching Brief	Works near heritage sites	Scheme wide	N	N	N	N	2	2	G	Her005	Preservation of the archaeological record.	Archaeological watching briefs to be undertaken at sites of previously un-excavated ground.			1	1	G	Check that an archaeological brief is on file.		DP - Principal Contractor	During Construction	HerAss003
Works Scheme Instruction	Works near heritage sites	Scheme wide	N	N	N	N	2	2	G	Her015	Protection of individual sites and areas by ensuring that appropriate mitigation measures are identified and implemented.	Written Scheme of Investigations are to be developed with contributions from the local authority and Historic England for works near heritage sites.			1	1	G	Check that the CEMP records evidence that the Written Scheme of Investigation has the approval of the Local Authority.		DP - Principal Contractor	During Construction	HerAss004
Archaeological Finds	Keeping of records		N	N	Y	Y	3	2	A	Her001	Preservation of the archaeological record.	All archaeological finds are to be recorded and appropriate measures taken following consultation with the local authority and Historic England.			2	1	G	Check that records of finds and mitigation measures are on file.		DP - Principal Contractor	During Construction	HerAss002

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<b>Noise &amp; Vibration Controls</b>																						
Construction disturbance	Works <100m of dwellings	Scheme wide	N	N	Y	N	5	4	R	NV003 NV004 NV005 NV006 NV008 NV009 NV014 NV036 NV043	Minimise acoustic disturbance to residents.	Method statements shall demonstrate low noise generating plant has been selected for works within 100m of dwellings supported by acoustic screens etc with forecast noise levels being provided for key receptors.			4	3	A	Confirm the acoustic performance of plant is aligned with its specification and is correctly operated. Provide a photographic record of how the effectiveness of temporary noise screens is maintained. Check that a record of maximum noise levels is maintained for most sensitive property.		DP - Principal Contractor	Pre-Construction	AcoAss013
Construction disturbance	Construction compound	Scheme wide	N	N	Y	N	3	2	A	NV017 NV018	Minimise acoustic disturbance to residents.	Traffic using construction compound sites is to be managed to minimise disturbance to nearby residents.			2	2	G	Confirm that construction traffic is managed to avoid queues on public highways. Check that the EMP documents working hours agreed with local authorities.		DP - Principal Contractor	During Construction	AcoAss09
Construction disturbance	Piling operations	Scheme wide	Y	N	Y	N	4	3	A	NV045 NV051 NV054	Minimise impact of vibration upon all receptors identified in the environmental assessment.	Percussive piling shall not be undertaken 1 hour prior to dusk or 16:30 whichever is the earliest to reduce disturbance to residents and to migratory sea trout and European eel. Continuous flight auger (CFA) piling would be used rather than hammered or vibratory piling unless agreed with the local authority.			2	2	G	Record timings of percussive activities for client inspection. Record all communications over piling strategy with the local authority and record in the CEMP.		DP - Principal Contractor	During Construction	AcoAss07
Construction disturbance	Vibration	Scheme wide	Y	Y	Y	N	4	3	A	NV012 NV013 NV032 NV033 NV034 NV053	Minimise disturbance caused by use of piling activities.	Plant and working methods shall be selected to minimise noise and vibration particularly at night, with monitoring at properties less than 20m from the works and liaise with residents.			3	3	A	Check that a Method Statement is followed for vibration sensitive locations. Check that the client is notified of properties expected to experience levels of vibration likely to cause disturbance. Ensure that the working method minimises disturbance. Check that noise and vibration results are held.		DP - Principal Contractor	Pre-Construction	AcoAss08
Construction disturbance	Works duration	Western embankment	Y	Y	Y	Y	5	4	R	NV019	Minimise acoustic disturbance to residents.	Works with a risk of causing disturbance under BS 5228 shall be limited to no more than 10 working days in any 15 consecutive days and shall not exceed 40 days in any 6 consecutive months unless appropriate mitigation measures have been specified. The CEMP shall document those works at specific locations where there is a risk of BS 5228 not being met and propose mitigation measures for approval.			4	3	A	Confirm requirements under BS 5228 are not breached to East Sussex Highways Authority PM.		DP - Principal Contractor	During Construction	AcoAss014

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<b>Noise &amp; Vibration Controls</b>																						
Noise mitigation	Method statements	Scheme wide	N	N	Y	N	5	4	R	NV022	Minimise acoustic disturbance to residents.	A Noise and Vibration Management Plan (NVMP) and Method Statements which apply the principles of S72 of Control of Pollution Act (CoPA) 1974, and good practice under BS 5228-1: Noise (BSI, 2014a) and BS 5228-2 Vibration (BSI, 2014b),, monitoring and reporting protocols shall demonstrate to East Sussex Highways Authority that no significant impact shall result from noise and vibration both within the scheme and along diversion routes.			4	3	A	Check a noise and vibration Method Statement of how BPM is applied is within the EMP.		Design Team	SGAR3 - SGARS	AcoAss016
Noise mitigation	Section 61	Scheme wide	Y	Y	Y	Y	5	4	R	NV029	Minimise acoustic disturbance to residents.	If required following consultation with the local authority, an application under Section 61 of The Control of Pollution Act 1974 shall be made to the relevant Local Authority Environmental Health Department. Evidence of measures taken to comply with an applicable S61 consent shall be provided to the East Sussex Highways Authority PM on request.			4	3	A	Confirm evidence of measures taken under applicable S61 are on file.		DP - Principal Contractor	During Construction	AcoAss018
Noise mitigation	Health protection	Scheme wide	N	N	N	Y	3	2	A	NV046	Avoid deleterious impacts on site staff and visitors due to noisy works.	Where high levels of noise are likely to be a hazard to site staff, prominent warning notices shall be displayed with ear protectors being available for the workforce and site visitors.			2	2	G	Record of photographs of signs displayed at work site and construction compound.		DP - Principal Contractor	During Construction	AcoAss019
Noise mitigation	Compressors	Scheme wide	N	N	Y	N	3	4	A	NV047	Minimise acoustic disturbance to residents.	All compressors would be 'sound reduced' models fitted with properly lined and sealed acoustic covers to be kept closed while in use. All ancillary pneumatic percussive tools would be fitted with mufflers or silences of the type recommended by the manufacturer.			2	3	A	Confirm that compressors are 'sound reduced' models and record model in CEMP.		DP - Principal Contractor	During Construction	AcoAss020
Noise mitigation	Tool box talks	Scheme wide	N	N	Y	Y	4	1	G	NV048	Minimise deleterious impacts to wildlife and humans.	All site staff and operatives would be briefed during tool box talks on the requirements to minimise nuisance to both human and ecological receptors from site activities.			2	1	G	Record attendance and agenda of tool box talks within the CEMP.		DP - Principal Contractor	During Construction	AcoAss021
Noise mitigation	Site hoarding	Scheme wide	N	N	Y	Y	4	1	G	NV049	Minimise acoustic disturbance to residents.	A solid fence/hoarding would be provided along the boundary of the construction compound and the works site to minimise the impact of site noise on neighbouring dwellings.			2	1	G	Record provision of solid fence/hoarding around compound and works site.		DP - Principal Contractor	During Construction	AcoAss022

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<b>Noise &amp; Vibration Controls</b>																						
Noise mitigation	Site cabins	Construction compound	N	N	Y	N	2	3	A	NV050	Minimise acoustic disturbance to residents.	Position site cabins to minimise the impact of noise generating activities on neighbouring dwellings.			2	2	G	Confirm proposed layout of the construction compound locates cabins so as to attenuate site noise.		DP - Principal Contractor	Pre-Construction	AcoAss02 3
Noise mitigation	Tourists	Scheme wide	N	N	Y	N	4	3	A	NV052	Minimise acoustic disturbance to tourists and visitors.	Where practicable, works with the potential to cause disturbance shall be sequenced to occur outwith the peak tourist season or are of a duration or timing that is acceptable to the Local Environmental Health Department.			3	3	A	Record details of the agreement with the Local Environmental Health Department within the CEMP.		DP - Principal Contractor	During Construction	AcoAss02 4
Noise monitoring	Reporting	Scheme wide	N	N	Y	N	2	2	G	NV027	No increase in baseline ambient noise levels at noise Important Areas.	FALSE Where the local authority requires noise monitoring, the Delivery Partner shall undertake and report noise and vibration monitoring as agreed with the local authority. Monitoring sites shall be established at a range of receptors to establish that the average noise levels do not exceed pre-existing ambient noise levels. The results shall be provided to the East Sussex Highways Authority PM within one month of the survey in an Excel spreadsheet format.			2	2	G	Check monitoring to confirm compliance with applicable S61 is provided to East Sussex Highways Authority PM.		DP - Principal Contractor	During Construction	AcoAss02 5

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Community Clauses																						
Stakeholder communications	Construction disturbance	Scheme wide	Y	N	Y	N	5	4	R	Com001 Com002 Com007 Com008 Com023 Com024	Reduce disturbance to local community. Provision of evidence of effective community engagement.	Effective engagement with local residents, local Environmental Health Officers and commercial operations shall advise on progress of the works and notice of impending works likely to cause disturbance.			3	4	A	Check Stakeholder Communications and Engagement Plan addresses engagement with the local communities reflecting local diversities. Confirm that elevated engagement at specific communities is delivered according to the Outline EMP. Check that file records of communications with Local Environmental Health, affected residents and commercial operators is maintained. Check that the East Sussex Highways Authority PM is advised of the nominated person for public liaison.		DP - Principal Contractor	During Construction	ComAss001
Stakeholder communications	Records management	Scheme wide	N	N	Y	N	2	5	A	Com003	Provision of evidence of effective community engagement.	Evidence of the effectiveness of stakeholder engagement shall be provided to the National Highways PM.			2	3	A	Check that Monthly Stakeholder Feedback Report documenting effectiveness of elevated engagement is provided to East Sussex Highways Authority PM.		DP - Principal Contractor	During Construction	ComAss003
Diversion routes	Construction Traffic Management Plan	Scheme wide	Y	Y	Y	N	3	2	A	Com013	Reduce disturbance to traffic and those along diversion routes.	The Construction Traffic Management Plan shall include the frequency and timing that diversion routes are to be used and agreed with the local highway authority.			3	2	A	Confirm that the Construction Traffic Management Plan sets out measures to reduce impacts.		Design Team	SGAR3 - SGAR5	ComAss008
Stakeholder communications	Formal notifications	Scheme wide	Y	Y	Y	Y	4	3	A	Com004	Reduce disturbance to local community.	At least fourteen days notice is to be given to local authorities, businesses and households within 300m of a works area with a draft provided to the Highways England PM in advance of distribution.			3	3	A	Confirm that formal notifications of the start of works are provided at least 14 days before works commence.		DP - Principal Contractor	Pre-Construction	ComAss002

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<b>Community Clauses</b>																						
Vehicular access restrictions	Construction disturbance	Scheme wide					5	4	R	Com012 Com022 Com025	Reduce disturbance to local community.	The Delivery Partner shall document measures to reduce the extent of disruption caused to local residents and businesses caused by the temporary traffic management measures and advise the East Sussex Highways Authority PM of the proposed measures.			4	3	A	Check that the East Sussex Highways Authority PM is advised of the proposed traffic management measures.		DP - Principal Contractor	Pre-Construction	ComAss007
Public Rights of Way	Construction disturbance	Scheme wide					4	3	A	Com017 Com018 Com019 Com020 Com021	Reduce disturbance to users of PRoW.	A months advance notice shall be provided by the Delivery Partner to users of the Vanguard Way and Coastal Path regarding their re-routing using various communication channels. Safe passage through Cuckmere Inn car park during construction shall also be provided. Secure rights to temporarily close use of Eastbourne Road from the compound site to Exceat Bridge for cyclists and to sign the use of the alternative route. Organise the sequence of closures of PRoW CMV/24/1 in such a manner that maximises safety while minimising disruption to users. Provide signage to alternative routes to that of CMV/14/7 for the duration of its closure.			3	3	A	Check that adequate advance notice is provided to PRoW users. Daily check to confirm safe passage is achievable by users of the PRoW.		DP - Principal Contractor	Pre-Construction	ComAss0010

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#### Materials Clauses

Sustainable resource use	Materials Plan	Scheme wide	N	Y	N	N	3	2	A	Mat001 Mat002 Mat005 Mat070	Deliver a circular approach to materials resource efficiency.	Resource Efficiency Management Plan shall demonstrate security of supply, carbon emissions, local sourcing, use of site won, recycled or secondary materials and also minimise use of materials with the potential to harm human health or the environment.	2	2	G	Confirm that the CEMP demonstrates how sustainable resource use decisions maximise contribution to sustainable development goals.	DP - Principal Contractor	Pre-Construction	MatAss002
Sustainable resource use	CL:aire	Scheme wide	N	N	Y	N	2	2	G	Mat013	Evidence of consideration of CL:aire.	Use of the CL:aire Definition of waste protocol and materials register to be reviewed for its suitability with the rationale for the outcome to be provided in the CEMP.	2	2	G	Confirm the CEMP contains consideration of CL:aire.	DP - Principal Contractor	Pre-Construction	MatAss003
Sustainable resource use	Carbon	Scheme wide	N	N	Y	N	3	3	A	Mat015 Mat017 Mat018 Mat067 Mat069	Demonstrate sustainable resource use. Reduce carbon emissions.	Demonstrate that all reasonable steps to maximise contribution towards all goals of sustainable development and in particular resource efficiency and the minimisation of the whole life carbon emissions has been taken.	3	2	A	Confirm that the CEMP demonstrates how sustainable resource use decisions maximise contribution to sustainable development goals. Check that procurement practices consider carbon as part of purchasing strategy.	DP - Principal Contractor	Pre-Construction	MatAss004
Sustainable resource use	Excavated materials	Scheme wide	N	Y	Y	Y	3	3	A	Mat006 Mat019 Mat020	Avoid harm to human health and the natural environment. Avoidance of deleterious effects upon sensitive receptors.	Materials shall be managed to prevent harm to human health, amenity and the environment with evidence of consideration of CL:aire and WRAP Quality Protocols being within the CEMP.	2	2	G	Check that inspections of areas for handling and storing excavated materials are held on file.	DP - Principal Contractor	Pre-Construction	MatAss005
Sustainable resource use	Recycled aggregate	Scheme wide	N	Y	N	N	2	3	A	Mat014 Mat071	Compliance with WRAP quality protocol and other standards.	Where recycled aggregate is to be used then it shall meet a WRAP quality protocol and be subject to the Specification of Highway Works requirements and evidence of testing retained on site.	2	2	G	Check that a file record of compliance with relevant WRAP protocols is on file.	DP - Principal Contractor	During Construction	MatAss001
Contaminated land	Unexploded ordnance	Scheme wide	Y	Y	Y	N	3	4	A	Mat061	Safety of workforce.	A detailed UXO Threat and Risk Assessment survey shall be undertaken prior to the commence of works to identify unexploded ordnance that are anticipated to be present in the area.	3	3	A	Ensure correct management actions are taken in the event of UXO being encountered.	DP - Principal Contractor	Pre-Construction	MatAss006

Environmental Risk Assessment & Management Measures Register				Pre-mitigation Risk/RAG						Clauses				Post- Mitigation RAG					Owner	Phase		
Activity/Action Category	Aspect/ Control Plan Link	Location	Schedule Risk	Commercial Risk	Reputational Risk	Legislative Risk	Severity	Likelihood	RAG Status	Environmental Management Clause ID(s)	Objective	Headline Summary of Activity/Action			Severity	Likelihood	RAG Status	Monitoring & Inspections	Corporate Responsibility	Delivery Phase	Assumptions Id.	
<b>Materials Clauses</b>																						
Contaminated land	Contamination	Scheme wide	N	N	N	Y	3	2	A	Mat062 Mat063	Deomonstrate compliance with current waste regulations.	An unexpected Contamination Plan would be prepared by the Delivery Partner in advance of earthworks to include processes and procedures to deal with unforeseen contamination and provide for the management of risks to human health and the environment to prevent further spread of contamination. Specific protocols would be developed for dealing with potential asbestos containing materials.			2	2	G	Check to ensure that contamination risks to human health and the environment are correctly managed.		DP - Principal Contractor	Pre-Construction	MatAss007
Waste management	Site Waste Management Plan	Scheme wide	N	N	N	Y	2	2	G	Mat008	Deomonstrate compliance with current waste regulations.	The SWMP will include procedures for compliance with waste management regulations and arrangements for auditing the actions of other parties in the waste handling chain.			2	2	G	Confirm the CEMP contains the SWMP and that the SWMP is updated.		DP - Principal Contractor	Pre-Construction	MatAss008
Waste management	Waste disposal	Scheme wide	N	Y	N	Y	3	3	A	Mat003 Mat009 Mat011 Mat012	Deomonstrate compliance with current waste regulations.	A register of waste disposal records is to be provided.			2	2	G	Check that a file record of waste disposal records exists.		DP - Principal Contractor	During Construction	MatAss009
Waste management	Control of litter	Scheme wide	N	N	Y	N	3	4	A	Mat068 Mat072	Avoidance of adverse effects upon wildlife and local visual amenity.	Weekly inspections of the riverbanks would be undertake to ensure that it was free from construction debris and litter. Netting shall be deployed to prevent materials and litter from entering sensitive watercourses.			2	2	G	Check that litter and debris is removed from the riverbanks.		DP - Principal Contractor	During Construction	MatAss010
Soil management	Soil survey	Scheme wide	Y	N	Y	Y	3	3	A	Mat021 Mat022 Mat023	Soil property records on which to design a soil management strategy to achieve ecological and water quality objectives. Pre-construction survey to establish baseline condition against which to judge effective reinstatement.	To aid the reinstatement of soils, pre-condition surveys will be discussed with landowners and where agreed, carried out on land within the works site. The pre-condition survey shall include a photographic record, written description and topographical survey to be used to ensure appropriate reinstatement of the site. The number of field samples to be tested by area would be agreed with the East Sussex Highways AuthorityPM. Each sample should be a composite of at least five sub-samples around each sample point. Separate samples for topsoil and sub-soil shall be taken.			2	2	G	Check that an adequate baseline condition is recorded.		DP - Principal Contractor	Pre-Construction	MatAss011
Soil management	Soil Management Plan	Scheme wide	Y	Y	Y	N	4	4	R	Mat024	Minimise damage to soils within sensitive areas.	The Delivery Partner shall produce a Soil Management Plan based upon the soil survey and ground investigations. The Plan will be produced in accordance with the requirements for Good Practice Guide for Handling Soils in Mineral Workings and agreed with Natural England.			3	3	A	Check that a Soil Management Plan has been submitted as part of the CEMP and is implemented.		DP - Principal Contractor	Pre-Construction	MatAss012

Environmental Risk Assessment & Management Measures Register				Pre-mitigation Risk/RAG						Clauses				Post- Mitigation RAG					Owner	Phase		
Activity/Action Category	Aspect/ Control Plan Link	Location	Schedule Risk	Commercial Risk	Reputational Risk	Legislative Risk	Severity	Likelihood	RAG Status	Environmental Management Clause ID(s)	Objective	Headline Summary of Activity/Action			Severity	Likelihood	RAG Status	Monitoring & Inspections		Corporate Responsibility	Delivery Phase	Assumptions Id.
<u>Materials Clauses</u>																						
Soil management	Soil handling	Scheme wide	Y	Y	Y	N	4	4	R	Mat025 Mat026 Mat027 Mat028 Mat029 Mat030 Mat031 Mat032 Mat033 Mat034 Mat035 Mat036 Mat037	Minimise damage to soils within sensitive areas.	Soils to be moved from sensitive areas are to be defined by the ecologist according to the plant assemblages such that individual vegetative plots are not mixed with other soils to retain the mix of seeds associated with each individual plot. The EcoW shall supervise soil management and shall halt works when antecedent/ prevailing weather conditions are unsuitable and/or the soil moisture limits detailed in the Soil Management Plan are exceeded.			4	3	A	Check that soil handling is in accordance with Soil Management Plan.		DP - Principal Contractor	During Construction	MatAss01 3
Soil management	Tool box talk	Scheme wide	Y	Y	Y	N	3	3	A	Mat038	Minimise damage to soils within sensitive areas.	The soil handling environmental management clauses shall be communicated to all personnel involved in ground works through appropriate tool box talks setting out the principles of good practice in soil management, the site constraints and objectives, and the contents of the Soil Management Plan.			2	2	G	Check that all groundworks personnel receive an appropriate tool box talk.		DP - Principal Contractor	During Construction	MatAss01 4
Soil management	Soil stockpiling	Scheme wide	Y	Y	Y	N	4	4	R	Mat039 Mat040 Mat041 Mat042 Mat043 Mat044 Mat045 Mat046 Mat047 Mat048 Mat049	Minimise damage to soils within sensitive areas. Minimise contamination of the seeds and biota with species alien to the designated site. Avoid deleterious effects upon soil character and fertility.	Avoid mixing of separately stripped soils, avoid anaerobic conditions, maintain moisture conditions.			3	3	A	Monitoring of stockpiles at least three times a week by ECoW.		DP - Principal Contractor	During Construction	MatAss01 5
Soil management	Soil reinstatement	Scheme wide	Y	Y	Y	N	4	4	R	Mat050 Mat051 Mat052 Mat053 Mat054 Mat055 Mat056 Mat065	Avoid deleterious effects upon soil character and fertility. Achieve pre-defined site restoration objectives.	Reinstatement shall include making good any damage or disturbance to any soil structure, native or other planting, grass, fencing, hard landscaping or structures, where agreed with the landowner and Natural England where reinstatement of soils in a SSSI are involved.			2	2	G	Check that pre-defined restoration objectives are achieved.		DP - Principal Contractor	During Construction	MatAss01 6
Soil management	Aftercare	Scheme wide	Y	Y	N	N	3	3	A	Mat057 Mat058	Achieve pre-defined site restoration objectives.	An aftercare programme shall be agreed between the landowner, Delivery Partner and East Sussex Highways Authority and recorded within the CEMP. A flexible period of aftercare of between one and five years is to be agreed with the landowner with the aftercare deemed to be complete when the reinstatement standard has been met.			2	2	G	Check that all aftercare programmes are successfully delivered.		DP - Principal Contractor	Post-Construction	MatAss01 7

Environmental Risk Assessment & Management Measures Register			Pre-mitigation Risk/RAG						Clauses			Post- Mitigation RAG					Owner	Phase			
Activity/Action Category	Aspect/ Control Plan Link	Location	Schedule Risk	Commercial Risk	Reputational Risk	Legislative Risk	Severity	Likelihood	RAG Status	Environmental Management Clause ID(s)	Objective	Headline Summary of Activity/Action			Severity	Likelihood	RAG Status	Monitoring & Inspections	Corporate Responsibility	Delivery Phase	Assumptions Id.

#### Materials Clauses

Soil management	Records management	Scheme wide	N	Y	Y	N	2	3	A	Mat059	Compliance with the Soil Management Plan	Daily records of operations undertaken alongside site and soil conditions shall be maintained during soil handling activities.	1	2	G	Check for conformity with Soil Management Plan	DP - Principal Contractor	During Construction	MatAss01 8
Soil management	Biosecurity	Scheme wide	N	N	N	Y	2	2	G	Mat060	Avoidance of deleterious effects upon sensitive receptors.	The movement of soils is a key means for the transfer of disease, pathogens and weeds. To avoid the spread of invasive non-native species (INNS), pests and pathogens during construction and ensure legal compliance, an INNS Method Statement shall be produced providing specific control procedures.	1	2	G	Check that the INNS Method Statement is correctly followed.	DP - Principal Contractor	During Construction	MatAss01 9
Soil management	Material storage	Scheme wide	N	Y	N	N	3	4	A	Mat066	Avoidance of adverse effects upon site restoration.	Where heavy construction equipment and materials would risk compaction of the soils then wooden bearers should be used to spread the weight of bridge girders for example.	2	2	G	Check for conformity with Soil Management Plan	DP - Principal Contractor	During Construction	MatAss02 0

Environmental Risk Assessment & Management Measures Register			Pre-mitigation Risk/RAG						Clauses			Post- Mitigation RAG					Owner	Phase				
Activity/Action Category	Aspect/ Control Plan Link	Location	Schedule Risk	Commercial Risk	Reputational Risk	Legislative Risk	Severity	Likelihood	RAG Status	Environmental Management Clause ID(s)	Objective	Headline Summary of Activity/Action			Severity	Likelihood	RAG Status	Monitoring & Inspections	Corporate Responsibility	Delivery Phase	Assumptions Id.	
<b>Air Quality</b>																						
Construction works	Dust emissions	Scheme wide	N	N	N	Y	3	4	A	Air001 Air004	Avoidance of complaint due to dust deposition. Prevention of dust and sediment being washed into the waterbody.	Control of dust from demolition and construction works near sensitive receptors.			2	3	A	Check that a risk based approach to dust mitigation is reported in the CEMP.		DP - Principal Contractor	Pre-Construction	AirAss001
Construction works	Vehicle & plant emissions	Scheme wide	N	N	Y	N	2	3	A	Air002	Air quality is managed appropriately across the Scheme works.	The Delivery Partner shall manage dust, air pollution and exhaust emissions during the works in accordance with Best Practicable Means (BPM). Specific measures shall be based upon industry best practice, including the measures listed in the Institute of Air Quality Management's (IAQM) Guidance on the Assessment of Dust from Demolition and Construction.			2	2	G	Weekly checks to confirm application of BPM techniques.		DP - Principal Contractor	During Construction	AirAss002

## **ANNEX A5 – REAC – ASSUMPTIONS**

## ANNEX A5.1: GENERAL ENVIRONMENT – ASSUMPTIONS

General Clause Assumptions				
Environmental Topic	Activity / Aspect of work	Applicable Clauses	Assumption Id	Assumptions
Consents	Licences and Consents	Gen002 Gen003	GenAss001	<ul style="list-style-type: none"> <li>• All applicable licences, permits and consents would be granted.</li> </ul>
Consents	Easements		GenAss002	
Sustainability	Carbon emissions	Gen001 Gen031 Gen032 Gen040 Gen033 Gen041 Gen034 Gen035 Gen036 Gen037 Gen038 Gen039	GenAss003	<ul style="list-style-type: none"> <li>• Carbon reporting tool is periodically updated to reflect changing carbon emissions data.</li> </ul>
Environmental Management	CEMP	Gen009 Gen010 Gen011 Gen012 Gen013 Gen014 Gen027 Gen030	GenAss004	<ul style="list-style-type: none"> <li>• The CEMP including all appendices shall be available to the public via the scheme website and shall be updated on a quarterly basis.</li> <li>• A risk based approach would be taken to environmental management with the outcome of red-rated clauses being reported to the client, while Amber and Green clauses may be requested by the client on the basis of perceived environmental risks.</li> </ul>
Environmental Management	Inspections	Gen026 Gen005	GenAss005	<ul style="list-style-type: none"> <li>• Inspections of implementation of the CEMP would be undertaken by personal with appropriate qualifications and experience.</li> </ul>
Environmental Management	Registration to CCS	Gen004	GenAss006	<ul style="list-style-type: none"> <li>• Assume that Delivery Partner currently holds CCS registration.</li> </ul>
Environmental Management	Staffing	Gen008 Gen018 Gen019 Gen029 Gen017	GenAss007	<ul style="list-style-type: none"> <li>• An effective system for communication of environmental management objectives would operate during construction in which key personal and their responsibilities were documented.</li> </ul>
Environmental Management	Working Hours	Gen020 Gen022 Gen024	GenAss008	<ul style="list-style-type: none"> <li>• Working hours would be agreed with the local authority.</li> </ul>
Environmental Management	Start of Works	Gen021 Gen023	GenAss009	<ul style="list-style-type: none"> <li>• Where construction of the scheme involves enabling works or discrete construction phases, then a CEMP focussed upon each phase can be prepared.</li> </ul>

General Clause Assumptions				
Environmental Topic	Activity / Aspect of work	Applicable Clauses	Assumption Id	Assumptions
Environmental Management	Scheduling of Works	Gen042	GenAss010	<ul style="list-style-type: none"> <li>None.</li> </ul>
Environmental Management	Detailed design	Gen006 Gen007 Gen028	GenAss011	<ul style="list-style-type: none"> <li>Design decisions which either support or detract from sustainable development goals would be documented.</li> </ul>
Environmental Management	Traffic management	Gen043 Gen044 Gen045 Gen046 Gen047	GenAss012	<ul style="list-style-type: none"> <li>None.</li> </ul>
Environmental Management	HEMP	Gen015	GenAss013	<ul style="list-style-type: none"> <li>Agreement would be reached with the organisation responsible for maintenance on the content of the HEMP and the format of digital information to be provided.</li> </ul>

## ANNEX A5.2: BIODIVERSITY – ASSUMPTIONS

Environmental Topic	Activity / Aspect of work	Applicable Clauses	Assumption Id	Assumptions
Designated sites	Works affecting SSSIs	Nat011 Nat012	DS001	<ul style="list-style-type: none"> <li>SSSI Assent conditions would be addressed in the method statement for the specific works to be undertaken affecting the SSSI and demonstrate minimal net loss of habitat condition.</li> </ul>
Designated sites	Site compounds	Nat014	DS002	<ul style="list-style-type: none"> <li>The establishment of a construction compound(s) or other works incidental to the exercise of functions of the Secretary of State under SI 1995-596) Part 9 shall be assessed under the Habitat Regulations prior to its adoption.</li> </ul>
Designated sites	Works affecting designated habitat	Nat013	DS003	<ul style="list-style-type: none"> <li>Protective exclusion measures would be effective and inspected prior to works taking place.</li> </ul>
Habitat	Works affecting priority habitat	Nat173	Hab001	<ul style="list-style-type: none"> <li>Protective exclusion measures would be effective and inspected prior to works taking place.</li> </ul>
Habitat	Trees and hedgerows	Nat178	Hab003	<ul style="list-style-type: none"> <li>Earthworks would be undertaken in a manner so as to minimise the damage to tree roots where so advised by an arboriculturist.</li> </ul>
Habitat	Biodiversity Net Gain	Nat180 Nat181	Hab004	<ul style="list-style-type: none"> <li>None.</li> </ul>
Habitat	Vegetation clearance	Nat174 Nat175 Nat176 Nat182	Hab005	<ul style="list-style-type: none"> <li>Vegetation clearance works would respect the ecological considerations applicable to individual areas.</li> </ul>
Habitat	Drainage ditches	Nat183	Hab006	<ul style="list-style-type: none"> <li>That the drainage ditches are of sufficient ecological value to merit translocation.</li> </ul>
Protected Species	Licences and consents	Nat031 Nat033 Nat045 Nat048 Nat038 Nat044 Nat042	EPS001	<ul style="list-style-type: none"> <li>EPS licences are required.</li> </ul>
Protected Species	Pre-construction surveys	Nat039 Nat043	EPS002	<ul style="list-style-type: none"> <li>Pre-construction surveys required for EPS would be undertaken at 2 months, and then no more than 7 days from the commencement of works at locations identified as potentially having EPS presence otherwise works would be delayed or undertaken under the supervision of an Ecological Specialist with the authority to terminate works.</li> </ul>
Protected Species	Exclusion zones	Nat046	EPS003	<ul style="list-style-type: none"> <li>That exclusion zones would be established, maintained and successfully implemented.</li> </ul>

Environmental Topic	Activity / Aspect of work	Applicable Clauses	Assumption Id	Assumptions
Protected Species	Vegetation clearance	Nat032 Nat037 Nat040	EPS004	<ul style="list-style-type: none"> <li>Protective exclusion measures would be effective and inspected prior to and for the duration that works take place.</li> </ul>
Protected Species	Toolbox Talks	Nat041 Nat049	EPS005	<ul style="list-style-type: none"> <li>All staff responsible for the design, management and construction of works within/adjacent to sensitive areas identified in the CEMP mapping would receive toolbox talks relevant to their activities.</li> </ul>
Protected Species	Maintenance and Monitoring	Nat047 Nat034	EPS006	<ul style="list-style-type: none"> <li>Monitoring and reporting requirements under EPS licences would be complied with.</li> </ul>
Protected Species	Handover Environmental Management Plan	Nat036	EPS008	<ul style="list-style-type: none"> <li>All environmental measures that have an ongoing implication for the maintenance of the highway and soft estate will be documented along with licences and consents in the HEMP as agreed with the East Sussex Highways Authority PM.</li> </ul>
Great Crested Newts	Vegetation clearance	Nat074 Nat075 Nat078 Nat079 Nat084 Nat082	GCN003	<ul style="list-style-type: none"> <li>Protective exclusion measures would be effective and inspected prior to and for the duration that works take place.</li> </ul>
Great Crested Newts	Excavations		GCN004	<ul style="list-style-type: none"> <li>Evacuations would be covered or provided with exit routes usable by GCN.</li> </ul>
Great Crested Newts	Material storage	Nat077	GCN005	<ul style="list-style-type: none"> <li>Pallets provide adequate deterrence to GCN.</li> </ul>
Bats	Works to structures	Nat095	Bat001	<ul style="list-style-type: none"> <li>Pre-construction checks would be undertaken by an Ecological Specialist of all structures identified as having the potential to offer potential bat roosts (including drainage culverts) within 7 days of the commencement of works at each structure.</li> </ul>
Bats	Pre-construction surveys	Nat094	Bat002	<ul style="list-style-type: none"> <li>The presence of bats that are at risk of disturbance is to be anticipated.</li> </ul>
Bats	Bat foraging areas	Nat097	Bat003	<ul style="list-style-type: none"> <li>Vegetation clearance to be optimised across the needs of protected species.</li> </ul>
Bats	Works within 30m of bat roost		Bat004	<ul style="list-style-type: none"> <li>Works would be scheduled to minimise the impact upon bats.</li> </ul>

Environmental Topic	Activity / Aspect of work	Applicable Clauses	Assumption Id	Assumptions
Badgers	Pre-construction surveys	Nat131	Bad001	<ul style="list-style-type: none"> <li>Pre-construction surveys required for badgers would be undertaken no more than 7 days from the commencement of works at locations identified as potentially having EPS presence otherwise works would be delayed or undertaken under the supervision of an Ecological Specialist with the authority to terminate works.</li> </ul>
Reptiles	Suitable reptile habitat	Nat141 Nat142 Nat144 Nat146 Nat143	Rep001	<ul style="list-style-type: none"> <li>Appropriate methods of working to protect reptiles and habitat creation measures would be implemented</li> </ul>
Reptiles	Common Toad	Nat148	Rep002	<ul style="list-style-type: none"> <li>None.</li> </ul>
Reptiles	Toolbox Talks	Nat145	Rep003	<ul style="list-style-type: none"> <li>Toolbox talks would address all ecological requirements set out under Licences or client objectives as detailed in the EMP.</li> </ul>
Riparian species	Pre-construction surveys	Nat111	Rip001	<ul style="list-style-type: none"> <li>Pre-construction surveys would be undertaken during April - June or September - October.</li> </ul>
Riparian species	Night working		Rip002	<ul style="list-style-type: none"> <li>Disturbance of otter particularly at night would be avoided.</li> </ul>
Riparian species	Disturbance	Nat118	Rip003	<ul style="list-style-type: none"> <li>Works would be scheduled to minimise the impact upon otter.</li> </ul>
Riparian species	Toolbox Talks	Nat114	Rip004	<ul style="list-style-type: none"> <li>Site staff would be able to identify otter and be able to stop work until advised by the EcCoW or Environmental Manager.</li> </ul>
Riparian species	Vegetation clearance		Rip005	<ul style="list-style-type: none"> <li>Vegetation clearance within 8m of a watercourse with potential otter/water vole interest would take place between mid-February - Mid-April.</li> </ul>
Fish	Pollution		Fis001	<ul style="list-style-type: none"> <li>Assume that measures to control pollution are effective.</li> </ul>
Fish	Disturbance	Nat122 Nat123 Nat124 Nat125	Fis002	<ul style="list-style-type: none"> <li>That piling work and installation and removal of the water retention technique can be scheduled to minimise disturbance to migratory Sea trout and European eel.</li> <li>The transfer of fish from the water impoundment to the watercourse can be achieved without fish mortality.</li> </ul>
Breeding birds	Vegetation clearance	Nat161 Nat162 Nat164	Bir001	<ul style="list-style-type: none"> <li>Timely inspection for nesting fledglings would occur prior to vegetation clearance taking place during the breeding season.</li> </ul>
Breeding birds	Disturbance	Nat165 Nat163	Bir002	<ul style="list-style-type: none"> <li>That the risk assessment shall demonstrate that no additional environmental clauses are required.</li> </ul>

Environmental Topic	Activity / Aspect of work	Applicable Clauses	Assumption Id	Assumptions
Breeding birds	Toolbox Talks	Nat166	Bir003	<ul style="list-style-type: none"> <li>That site staff will observe the need to avoid causing disturbance to birds on the coastal marsh.</li> </ul>
Invertebrates	Works <8m of watercourses		Inv001	<ul style="list-style-type: none"> <li>Toolbox talks would summarise the importance of invertebrates in the vicinity of watercourses.</li> </ul>
Invertebrates	Works affecting priority habitat		Inv002	<ul style="list-style-type: none"> <li>Toolbox talks would highlight the habitats of protected invertebrates in the vicinity of works.</li> </ul>
Site practice	Works <8m of a watercourse	Nat192	Site001	<ul style="list-style-type: none"> <li>Contamination of sensitive watercourses would be avoided.</li> </ul>
Site practice	Ecological specialist	Nat199	Site002	<ul style="list-style-type: none"> <li>An ecologist experienced in the habitats and species to be encountered on site would be present during ecologically sensitive works.</li> </ul>
Site practice	All works	Nat191 Nat198	Site003	<ul style="list-style-type: none"> <li>Site inspections would take place to confirm the effectiveness of the environmental management measures.</li> </ul>
Site practice	Night working	Nat195 Nat203	Site004	<ul style="list-style-type: none"> <li>Inspections would be undertaken to confirm the effectiveness of measures to limit the impact of lighting on habitats and species.</li> </ul>
Site practice	Site compounds	Nat193	Site005	<ul style="list-style-type: none"> <li>Sources of fugitive dust are located such that deposition upon sensitive receptors is avoided.</li> </ul>
Site practice	Excavations	Nat196	Site006	<ul style="list-style-type: none"> <li>Measures to prevent mammals from being trapped in excavations would be successful.</li> </ul>
Site practice	Rabbit warrens	Nat200	Site007	<ul style="list-style-type: none"> <li>Measures to prevent animal cruelty would be successful.</li> </ul>
Site practice	Soil management	Nat201 Nat202 Nat191	Site008	<ul style="list-style-type: none"> <li>Soils shall be appropriately stored.</li> </ul>
Habitat creation	Off-site enhancement		Enh001	<ul style="list-style-type: none"> <li>Enhancement opportunities on third party land would be identified for additional funding approvals.</li> </ul>
Habitat creation	Protected Species	Nat214	Enh003	<ul style="list-style-type: none"> <li>None</li> </ul>
Habitat creation	Bats	Nat217 Nat218	Enh007	<ul style="list-style-type: none"> <li>Landscape planting strategy would define ecological and landscape objectives for specific plots to maximise habitat value subject to other environmental and engineering constraints.</li> </ul>
Habitat creation	Common Toad	Nat225	Enh009	<ul style="list-style-type: none"> <li>That the drainage ditches are of sufficient ecological value to merit translocation.</li> </ul>
Habitat creation	Invertebrates	Nat220	Enh010	<ul style="list-style-type: none"> <li>Habitat condition surveys, where necessary, would be undertaken at an appropriate time of the year prior to vegetation clearance.</li> </ul>

Environmental Topic	Activity / Aspect of work	Applicable Clauses	Assumption Id	Assumptions
Habitat creation	Drainage ditches	Nat226	Enh011	<ul style="list-style-type: none"> <li>That the drainage ditches are of sufficient ecological value to merit translocation.</li> </ul>
Habitat creation	Birds	Nat221	Enh012	<ul style="list-style-type: none"> <li>Habitat enhancement measures would be delivered in areas of poor condition, but good connectivity as advised by the Ecological Specialist.</li> </ul>
Habitat creation	Floral Species	Nat224	Enh013	<ul style="list-style-type: none"> <li>Appropriately sized bird boxes would be deployed for species with declining populations as advised by the RSPB.</li> </ul>
Invasive species	Pre-construction surveys	Nat231	ISp001	<ul style="list-style-type: none"> <li>A survey for invasive plant and animal species would be undertaken within the works area ideally between April and September.</li> </ul>
Invasive species	Toolbox Talks	Nat234	ISp002	<ul style="list-style-type: none"> <li>Toolbox talks would address the identification, handling and disposal of invasive species as well as health effects as appropriate.</li> </ul>
Invasive species	Vegetation clearance	Nat232	ISp003	<ul style="list-style-type: none"> <li>Effective identification, management and disposal of invasive species would be implemented.</li> </ul>
Invasive species	Works <7m of invasive plant species	Nat233	ISp004	<ul style="list-style-type: none"> <li>Effective identification, management and disposal of invasive species would be implemented.</li> </ul>
Invasive species	Disposal of invasive species	Nat235	ISp005	<ul style="list-style-type: none"> <li>Effective identification, management and disposal of invasive species would be implemented.</li> </ul>
Invasive species	Treatment of invasive species	Nat236	ISp006	<ul style="list-style-type: none"> <li>Effective identification, management and disposal of invasive species would be implemented.</li> </ul>
Invasive species	Works <8m of a watercourse		ISp007	<ul style="list-style-type: none"> <li>Toolbox talks would address the issue of signal crayfish (and spores from crayfish plague) spread through water or mud on vehicles, equipment and clothing.</li> </ul>

## ANNEX A5.3: LANDSCAPE – ASSUMPTIONS

Landscape Clause Assumptions				
Environmental Topic	Activity / Aspect of work	Applicable Clauses	Assumption Id	Assumptions
Ancient Woodland	Root Protection Area		LandAss001	
Ancient Woodland	Adjacent works		LandAss002	
Ancient Woodland	Tree surgery		LandAss003	
Ancient Woodland	Soil handling		LandAss004	
Ancient Woodland	HEMP		LandAss005	
Ancient Woodland	Reporting		LandAss006	
Retained vegetation	Pre-construction surveys	Land015	LandAss007	<ul style="list-style-type: none"> <li>That surveys are undertaken at an appropriate time of year.</li> </ul>
Retained vegetation	Tree survey	Land032	LandAss008	<ul style="list-style-type: none"> <li>The existing Aboriginal Survey Report is checked to see whether an update to reflect possible changes in biosecurity is required.</li> </ul>
Retained vegetation	Tool Box talks	Land016	LandAss009	<ul style="list-style-type: none"> <li>Toolbox talks will stress the importance of not encroaching into designated sites or areas outwith the works site.</li> </ul>
Retained vegetation	Tree Protection	Land054	LandAss010	<ul style="list-style-type: none"> <li>No vegetation is cleared beyond that identified in the Tree Removal and Retention Plan.</li> </ul>
Retained vegetation	Tree surgery	Land034 Land055	LandAss011	<ul style="list-style-type: none"> <li>Effective application of the EoCR process would be deployed to prevent vegetation clearance taking place outwith the Tree Removal and Retention plan.</li> </ul>

Landscape Clause Assumptions				
Environmental Topic	Activity / Aspect of work	Applicable Clauses	Assumption Id	Assumptions
Retained vegetation	Vegetation clearance		LandAss012	
Visual amenity	Construction compounds	Land022 Land025	LandAss013	<ul style="list-style-type: none"> <li>Site hoardings and internal layout of site elements would be so organised to minimise adverse effects on visual amenity.</li> </ul>
Visual amenity	Gantries		LandAss014	
Visual amenity	Soil storage	Land067	LandAss015	<ul style="list-style-type: none"> <li>Given the need to protect and segregate the stockpiled soils taken from the designated site, the ability for stockpiles to aid visual screening is not considered to be great.</li> </ul>
Visual amenity	Removal of noise barriers		LandAss016	
Visual amenity	Selection of noise barriers		LandAss017	
Visual amenity	Installation of noise barriers		LandAss018	
Visual amenity	Disturbance	Land040 Land061	LandAss019	<ul style="list-style-type: none"> <li>The Delivery Partner will keep local residents informed of the works activities to minimise risk of disturbance.</li> <li>The Delivery Partner shall take best practice efforts to minimise disturbance to residents.</li> </ul>
Visual amenity	Litter	Land060	LandAss020	<ul style="list-style-type: none"> <li>The Delivery Partner will be diligent in protecting local visual amenity associated with exposed areas and through litter removal.</li> </ul>
Materials	Timber fencing	Land056	LandAss021	<ul style="list-style-type: none"> <li>Stocks of local timber matching the specification are available in adequate quantities and that local skills can be brought on board.</li> </ul>
Materials	Retaining works	Land057	LandAss022	<ul style="list-style-type: none"> <li>Matters of biosecurity are given the attention they deserve.</li> </ul>
Materials	Cycle stands	Land062	LandAss023	<ul style="list-style-type: none"> <li>Stocks of local timber matching the specification are available in adequate quantities and that local skills can be brought on board.</li> </ul>
Materials	Seating	Land063	LandAss024	<ul style="list-style-type: none"> <li>Stocks of local timber matching the specification are available in adequate quantities and that local skills can be brought on board.</li> </ul>
Materials	Timber	Land064	LandAss025	<ul style="list-style-type: none"> <li>The Delivery Partner is able to demonstrate the sustainability of the timber used onsite.</li> </ul>
Materials	Walls	Land065 Land066	LandAss026	<ul style="list-style-type: none"> <li>That a trial panel can demonstrate delivery of walls to the required specification.</li> </ul>
Soil management	Soil handling	Land013	LandAss027	<ul style="list-style-type: none"> <li>The Delivery Partner is able to deliver the careful management of soils needed for this sensitive site.</li> </ul>

Landscape Clause Assumptions				
Environmental Topic	Activity / Aspect of work	Applicable Clauses	Assumption Id	Assumptions
Soil management	Low nutrient soils		LandAss028	
Biosecurity	Vegetation clearance	Land033	LandAss029	<ul style="list-style-type: none"> <li>Matters of biosecurity are given the attention they deserve.</li> </ul>
Construction lighting	Inspection of lighting	Land051	LandAss030	<ul style="list-style-type: none"> <li>Lighting is capable of being orientated so as to avoid adverse effects on human and ecological receptors.</li> </ul>
Construction lighting	Lighting period	Land052	LandAss031	<ul style="list-style-type: none"> <li>Compliance with the lights-out period will be achieved.</li> </ul>
Construction lighting	Lighting Strategy	Land053	LandAss032	<ul style="list-style-type: none"> <li>The Strategy is capable of organising the lighting to avoid adverse effects on human and ecological receptors.</li> </ul>
Reinstatement planting	Tree Preservation Orders		LandAss033	<ul style="list-style-type: none"> <li>None.</li> </ul>
Reinstatement planting	Replacement trees	Land012	LandAss034	<ul style="list-style-type: none"> <li>Trees found to be damaged or dying as a result of error are replaced with suitable replacements.</li> </ul>
Reinstatement planting	Stakeholder engagement		LandAss035	
Reinstatement planting	Fencing		LandAss036	
Reinstatement planting	Mitigation planting	Land008	LandAss037	<ul style="list-style-type: none"> <li>None.</li> </ul>
Reinstatement planting	Seeding	Land059	LandAss038	<ul style="list-style-type: none"> <li>Early attention would be given to securing sufficient local green hay seed to meet the landscape and ecological objectives.</li> <li>Should remedial measures be required if the regeneration and green hay is not successful, consideration would be given to selecting more salt tolerant species within a seed mix, in line with the increasingly saline conditions of the floodplain grazing marsh within the SSSI.</li> <li>Should failure of the regeneration or green hay only become evident towards the end of the aftercare period then responsibility would return to East Sussex Highways Authority.</li> </ul>
Reinstatement planting	Monitoring and maintenance	Land007	LandAss039	<ul style="list-style-type: none"> <li>Inspections and monitoring of the landscape planting result in adaptive approaches to landscape management to meet the landscape and ecological objectives.</li> </ul>
National Park	Landscape policy		LandAss040	

## ANNEX A5.4: HERITAGE – ASSUMPTIONS

Heritage Clause Assumptions				
Environmental Topic	Activity / Aspect of work	Applicable Clauses	Assumption Id	Assumptions
Archaeological Investigations	Works near heritage sites		HerAss001	
Archaeological Finds	Works near heritage sites	Her001 Her002 Her003	HerAss002	<ul style="list-style-type: none"> <li>Archaeological finds would be correctly recorded and stored as directed by the local authority archaeologist.</li> </ul>
Watching Brief	Works near heritage sites	Her005	HerAss003	<ul style="list-style-type: none"> <li>An appropriately qualified archaeologist would be present at the commencement of works within areas of archaeological interest.</li> </ul>
Works Scheme Instruction	Works near heritage sites	Her015	HerAss004	<ul style="list-style-type: none"> <li>The Delivery Partner and its supply chain and associated utilities would respect the requirements to manage the effects of the Scheme upon heritage assets.</li> </ul>

## ANNEX A5.5: ACOUSTICS – ASSUMPTIONS

Acoustics Clause Assumptions				
Environmental Topic	Activity / Aspect of work	Applicable Clauses	Assumption Id	Assumptions
Acoustic barriers	Design of acoustic barriers		AcoAss001	
Acoustic barriers	Unfit existing noise barriers		AcoAss002	
Acoustic barriers	Works to existing noise barriers		AcoAss03	
Acoustic barriers	Noise barrier replacement		AcoAss004	
Acoustic barriers	Assumptions affecting noise		AcoAss005	
Acoustic barriers	Protection of noise barrier sites		AcoAss006	
Construction disturbance	Piling operations	NV045 NV051 NV054	AcoAss007	• A Piling Risk Assessment would be undertaken to assess the level of vibration at sensitive receptors.
Construction disturbance	Vibration	NV012 NV033 NV034 NV036 NV013 NV032	AcoAss008	• Plant selected and deployed with objective of reducing vibration. • Delivery Partner is employs staff competent in noise and vibration monitoring and assessment.
Construction disturbance	Construction compound	NV017 NV018	AcoAss009	• That the delivery route to the compound site would consist of sensitive receptors within 50m of the road.
Construction disturbance	Traffic management		AcoAss010	
Construction disturbance	Traffic management		AcoAss011	

Environmental Topic	Activity / Aspect of work	Applicable Clauses	Assumption Id	Assumptions
Construction disturbance	Recovery compounds		AcoAss012	
Construction disturbance	Works <100m of dwellings	NV006 NV036 NV043 NV003 NV004 NV005 NV008 NV009 NV014	AcoAss013	<ul style="list-style-type: none"> <li>• Plant and equipment shall be correctly maintained and operated in accordance with manufacturers instructions.</li> <li>• That acoustic screens shall be properly deployed such that there are no visible gaps between the receptor and noise source.</li> </ul>
Construction disturbance	Works duration	NV019	AcoAss014	<ul style="list-style-type: none"> <li>• The Delivery Partner would maintain a daily record of noise and vibration disturbance being caused excess of the requirements of BS5228.</li> </ul>
Construction disturbance	Historic buildings		AcoAss015	
Noise mitigation	Method statements	NV022	AcoAss016	<ul style="list-style-type: none"> <li>• None.</li> </ul>
Noise mitigation	Carriageway surfacing		AcoAss017	
Noise mitigation	Section 61	NV029	AcoAss018	<ul style="list-style-type: none"> <li>• None.</li> </ul>
Noise mitigation	Health protection	NV046	AcoAss019	<ul style="list-style-type: none"> <li>• None.</li> </ul>
Noise mitigation	Compressors	NV047	AcoAss020	<ul style="list-style-type: none"> <li>• Compressors would be properly maintained and operated with appropriate acoustic screening.</li> </ul>
Noise mitigation	Tool box talks	NV048	AcoAss021	<ul style="list-style-type: none"> <li>• All site staff working with noisy plant and equipment would receive toolbox talks in advance of commencement of noise or vibration generating equipment.</li> </ul>
Noise mitigation	Site hoarding	NV049	AcoAss022	<ul style="list-style-type: none"> <li>• None.</li> </ul>
Noise mitigation	Site cabins	NV050	AcoAss023	<ul style="list-style-type: none"> <li>• None.</li> </ul>
Noise mitigation	Tourists	NV052	AcoAss024	<ul style="list-style-type: none"> <li>• The number of tourists may be reduced due to existence of the works.</li> </ul>
Noise monitoring	Reporting	NV027	AcoAss025	<ul style="list-style-type: none"> <li>• None.</li> </ul>

## ANNEX A5.6: ROAD DRAINAGE & AQUATIC ENVIRONMENT – ASSUMPTIONS

Water Clause Assumptions				
Environmental Topic	Activity / Aspect of work	Applicable Clauses	Assumption Id	Assumptions
Consents	Consultations	Wat057	WatAss001	<ul style="list-style-type: none"> <li>None.</li> </ul>
Consents	Dewatering / Excavations	Wat003	WatAss002	<ul style="list-style-type: none"> <li>Dewatering licence would be forthcoming.</li> </ul>
Consents	Ground investigation	Wat055	WatAss003	<ul style="list-style-type: none"> <li>That the investigations would be undertaken between 5-8m to fulfil the criteria outlined in the clause.</li> </ul>
Consents	Water abstraction	Wat004	WatAss004	<ul style="list-style-type: none"> <li>Abstraction licence would be secured if required.</li> </ul>
Consents	Works <8m of a watercourse	Wat005	WatAss005	<ul style="list-style-type: none"> <li>Flood risk activity permit would be secured.</li> </ul>
Consents	Works in a main river	Wat082 Wat081	WatAss006	<ul style="list-style-type: none"> <li>Consent for works in a main river would be secured.</li> </ul>
Consumption	Water consumption	Wat051 Wat063	WatAss007	<ul style="list-style-type: none"> <li>Efforts would be taken to reduce water consumption.</li> </ul>
Flood Risk	Works within Flood Zone 3	Wat015	WatAss008	<ul style="list-style-type: none"> <li>No activities would take place that would increase flood risk within the flood plain.</li> </ul>
Flood Risk	Works in the flood plain	Wat008 Wat007 Wat009	WatAss009	<ul style="list-style-type: none"> <li>No activities would take place that would increase flood risk within the flood plain.</li> <li>Measures would be put in place to protect the workforce should there be a flood event.</li> </ul>
Flood Risk	Compensatory areas		WatAss010	
Flood Risk	Works <8m of a watercourse	Wat011	WatAss011	<ul style="list-style-type: none"> <li>Consultations would be undertaken in a timely manner.</li> </ul>
Flood Risk	Works <16m of a designated tidal river	Wat010	WatAss012	<ul style="list-style-type: none"> <li>Consultations would be undertaken in a timely manner.</li> </ul>
Flood Risk	Construction compounds	Wat013	WatAss013	<ul style="list-style-type: none"> <li>Assume compounds would be located towards Seaford on Eastbourne Road.</li> </ul>
Hydrology	Baseline survey		WatAss014	

Environmental Topic	Activity / Aspect of work	Applicable Clauses	Assumption Id	Assumptions
Hydrology	Control Measures	Wat088	WatAss015	
Groundwater	Dewatering / Excavations	Wat047	WatAss016	<ul style="list-style-type: none"> <li>Design solutions are available to avoid adverse changes in groundwater movement.</li> </ul>
Groundwater	Modelling		WatAss017	
Groundwater	Control Measures		WatAss018	
Groundwater	Piling operations	Wat070 Wat071	WatAss019	
Pollution Control	Works in a SPZ		WatAss020	
Pollution Control	Contaminated land	Wat064	WatAss021	
Pollution Control	Piling operations	Wat083 Wat084 Wat090	WatAss022	<ul style="list-style-type: none"> <li>The Piling Risk Assessment would identify a piling methodology that is acceptable to the Environment Agency.</li> </ul>
Pollution Control	Bridge works	Wat085 Wat087	WatAss023	<ul style="list-style-type: none"> <li>That site workers would respect the need to prevent bridge debris entering the river following a Toolbox talk on the rationale for the measures.</li> </ul>
Pollution Control	Runoff control	Wat022 Wat023 Wat038 Wat044 Wat060	WatAss024	<ul style="list-style-type: none"> <li>Consultations with the Environment Agency would lead to an appropriate means of controlling runoff.</li> </ul>
Pollution Control	Control measures	Wat058 Wat059	WatAss025	<ul style="list-style-type: none"> <li>Effective best practice pollution control measures would be deployed.</li> </ul>
Pollution control	Toolbox talk	Wat086 Wat052	WatAss026	<ul style="list-style-type: none"> <li>That site workers would respect the need to follow the various method statements.</li> </ul>
Pollution Control	Monitoring	Wat040 Wat042 Wat039 Wat043	WatAss027	<ul style="list-style-type: none"> <li>An water monitoring programme is delivered to prevent adverse changes to water quality.</li> </ul>
Pollution control	Priority outfalls		WatAss028	

Water Clause Assumptions				
Environmental Topic	Activity / Aspect of work	Applicable Clauses	Assumption Id	Assumptions
Pollution Control	Construction compounds	Wat006 Wat045	WatAss029	<ul style="list-style-type: none"> <li>Soil stockpiles do not become a source of sediment runoff into the river.</li> </ul>
Pollution Control	Site management	Wat089	WatAss030	<ul style="list-style-type: none"> <li>Best practice is achieved in the management of oils, fuels, hazardous materials and waste etc.</li> </ul>
Pollution Control	Site security	Wat027	WatAss031	<ul style="list-style-type: none"> <li>Effective site security removes the risk of pollution as a result of vandalism.</li> </ul>
Pollution Control	Site documentation	Wat028 Wat029	WatAss032	<ul style="list-style-type: none"> <li>Best practice is achieved in the management of COSHH substances.</li> </ul>
Pollution Control	Reporting	Wat020 Wat056	WatAss033	<ul style="list-style-type: none"> <li>Best practice is achieved to prevent water pollution.</li> </ul>
Pollution Control	Hydrocarbon spillages	Wat021 Wat054	WatAss034	<ul style="list-style-type: none"> <li>Best practice is achieved to prevent hydrocarbon spillages.</li> </ul>
Pollution Control	Road sweepings	Wat026	WatAss035	<ul style="list-style-type: none"> <li>The effective road sweeping takes place to prevent the build up of sediment on the road to then be washed into the river.</li> </ul>
Pollution control	Jetting Operations		WatAss036	<ul style="list-style-type: none"> <li>None</li> </ul>
Pollution Control	Vehicle cleaning	Wat061	WatAss037	<ul style="list-style-type: none"> <li>None</li> </ul>
Pollution Control	Concrete washings	Wat062	WatAss038	<ul style="list-style-type: none"> <li>Best practice is achieved to prevent water pollution.</li> </ul>

## ANNEX A5.7: MATERIALS – ASSUMPTIONS

Materials Clause Assumptions				
Environmental Topic	Activity / Aspect of work	Applicable Clauses	Assumption Id	Assumptions
Sustainable resource use	Recycled aggregate	Mat014 Mat071	MatAss001	<ul style="list-style-type: none"> <li>• Recycled aggregate meeting specifications is locally available.</li> </ul>
Sustainable resource use	Materials Plan	Mat001 Mat070 Mat002 Mat005	MatAss002	<ul style="list-style-type: none"> <li>• None.</li> </ul>
Sustainable resource use	CL:aire	Mat013	MatAss003	<ul style="list-style-type: none"> <li>• None.</li> </ul>
Sustainable resource use	Carbon	Mat015 Mat017 Mat018 Mat067 Mat069	MatAss004	<ul style="list-style-type: none"> <li>• The Delivery Partner has expertise to assess carbon emissions.</li> </ul>
Sustainable resource use	Excavated materials	Mat020 Mat019 Mat006	MatAss005	<ul style="list-style-type: none"> <li>• Supply chain staff would follow the Soil Management Plan and Toolbox talks.</li> </ul>
Contaminated land	Unexploded Ordnance	Mat061	MatAss006	<ul style="list-style-type: none"> <li>• Competent expertise would be used for the threat assessment.</li> </ul>
Contaminated land	Contamination	Mat063 Mat062	MatAss007	<ul style="list-style-type: none"> <li>• No contamination is anticipated.</li> </ul>
Waste management	Site Waste Management Plan	Mat008	MatAss008	<ul style="list-style-type: none"> <li>• Competent expertise would be used to prepare the Site Waste Management Plan.</li> </ul>
Waste management	Waste disposal	Mat003 Mat009 Mat012 Mat011	MatAss009	<ul style="list-style-type: none"> <li>• That waste disposal/recycling facilities are located within 20 mile radius.</li> </ul>
Waste management	Control of litter	Mat068 Mat072	MatAss010	<ul style="list-style-type: none"> <li>• None.</li> </ul>
Soil management	Soil survey	Mat021 Mat022 Mat023	MatAss011	<ul style="list-style-type: none"> <li>• A robust soil survey would be undertaken on which to base soil handling and site restoration standards.</li> </ul>
Soil management	Soil Management Plan	Mat024	MatAss012	<ul style="list-style-type: none"> <li>• Appropriate expertise in dealing with soils from ecologically sensitive sites would be employed by the Delivery Partner.</li> </ul>

Materials Clause Assumptions				
Environmental Topic	Activity / Aspect of work	Applicable Clauses	Assumption Id	Assumptions
Soil management	Soil handling	Mat034 Mat036 Mat025 Mat026 Mat027 Mat028 Mat029 Mat030 Mat031 Mat032 Mat033 Mat035 Mat037	MatAss013	<ul style="list-style-type: none"> <li>Reasonable due care and attention would be taken in the handling of soils in accordance with the Soil Management Plan.</li> </ul>
Soil management	Tool box talk	Mat038	MatAss014	<ul style="list-style-type: none"> <li>All site staff handling soils would receive the toolbox talk in advance of commencing soil handling activities.</li> </ul>
Soil management	Soil stockpiling	Mat048 Mat039 Mat040 Mat041 Mat042 Mat043 Mat044 Mat045 Mat046 Mat047 Mat049	MatAss015	<ul style="list-style-type: none"> <li>The management of stockpiled soils from sensitive sites would not be contaminated or be allowed to deteriorate while held within their individual stockpiles.</li> </ul>
Soil management	Soil reinstatement	Mat050 Mat051 Mat052 Mat055 Mat065 Mat053 Mat054 Mat054	MatAss016	<ul style="list-style-type: none"> <li>Effective site preparation works would be undertaken prior to the replacement of soils.</li> </ul>
Soil management	Aftercare	Mat057 Mat058	MatAss017	<ul style="list-style-type: none"> <li>The Delivery Partner, client and landowner can agree an adequate aftercare period.</li> <li>The aftercare delivers the site to the required standard.</li> </ul>
Soil management	Records management	Mat059	MatAss018	<ul style="list-style-type: none"> <li>None.</li> </ul>
Soil management	Biosecurity	Mat060	MatAss019	<ul style="list-style-type: none"> <li>All site staff handling soils would receive the toolbox talk in advance of commencing soil handling activities and recognition of the need to avoid the spread of plant species alien to the sensitive site.</li> </ul>
Soil management	Material storage	Mat066	MatAss020	<ul style="list-style-type: none"> <li>That measures can be taken to avoid soil compaction caused by the storage of major construction components.</li> </ul>

## ANNEX A5.8: POPULATION AND HEALTH - ASSUMPTIONS

Community Clause Assumptions				
Environmental Topic	Activity / Aspect of work	Applicable Clauses	Assumption Id	Assumptions
Stakeholder communications	Construction disturbance	Com002 Com008 Com001 Com007 Com023 Com024	ComAss001	<ul style="list-style-type: none"> <li>None.</li> </ul>
Stakeholder communications	Formal notifications	Com004	ComAss002	<ul style="list-style-type: none"> <li>Assume that East Sussex Highways Authority PM approves notifications within without delay.</li> </ul>
Stakeholder communications	Records management	Com003	ComAss003	<ul style="list-style-type: none"> <li>None.</li> </ul>
Stakeholder communications	Construction noise leaflet		ComAss004	
Stakeholder communications	Vegetation management leaflet		ComAss005	
Stakeholder communications	Environmental enhancement leaflet		ComAss006	
Vehicular access restrictions	Construction disturbance	Com012	ComAss007	<ul style="list-style-type: none"> <li>None.</li> </ul>
Diversion routes	Construction Traffic Management Plan	Com013	ComAss008	<ul style="list-style-type: none"> <li>Assume that East Sussex Highways Authority PM and the Local Authority approves the Plan within without delay.</li> </ul>
Diversion routes	Construction disturbance		ComAss009	<ul style="list-style-type: none"> <li>None.</li> </ul>
Public Rights of Way	Construction disturbance	Com017 Com018 Com019 Com020 Com021	ComAss0010	<ul style="list-style-type: none"> <li>None.</li> </ul>

## ANNEX A5.9: AIR QUALITY - ASSUMPTIONS

Air Quality Clause Assumptions				
Environmental Topic	Activity / Aspect of work	Applicable Clauses	Assumption Id	Assumptions
Construction works	Dust emissions	Air001 Air004	AirAss001	<ul style="list-style-type: none"><li>None.</li></ul>
Construction works	Vehicle & plant emissions	Air002	AirAss002	<ul style="list-style-type: none"><li>Assume that East Sussex Highways Authority PM approves notifications within without delay.</li></ul>
Air quality monitoring	NO2 emissions within AQMA			

# ANNEX A6 – GENERAL ENVIRONMENTAL MANAGEMENT CLAUSES

Topic	Subtopic	Reporting Level	Clause ID	Activity / Aspect of work	Commitment		Implementation Outcomes	Monitoring and Inspections	Responsibility / Owner	Phase
					Required Action / Commitment					
General	Sustainability	Red	Gen001	Carbon emissions	The National Highways carbon reporting tool to be completed in accordance with current advice. Evidence of reducing carbon emissions during construction shall be submitted to East Sussex Highways Authority to enable reporting to DfT.		Evidenced reduction in carbon emissions.	Check carbon returns are made at least every quarter.	Delivery Partner QS Team	During Construction
General	Consents	Red	Gen002	Licences and Consents	Consent/Permit conditions shall be replicated within the EMP or added within 1 month of a licence being granted and provided to the East Sussex Highways Authority PM.		Record of licences/permits and consents available for future users.	Check consents/permits are in the EMP and issued to the East Sussex Highways Authority PM.	Delivery Partner - Env Manager	Pre-Construction
General	Consents	Red	Gen003	Licences and Consents	Where environmental applications and consents/authorisations could establish precedence, require land agreement, financial or maintenance for East Sussex Highways Authority then the proposed applications shall be provided along with a statement as recording such implications one month prior to the application to the regulatory body.		Confirmation that no unacceptable liabilities pass on to East Sussex Highways Authority	Check draft licence and statement are issued to the East Sussex Highways Authority PM.	Design Team	Pre-Construction
General	Environmental Management	Red	Gen004	Registration to CCS	The Scheme shall be registered with the Considerate Constructors Scheme ("CCS") within six months of mobilisation with a copy provided in the CEMP.		Reinforce good Delivery Partner site practice.	Check CCS certificate is added to CEMP.	Delivery Partner Project Manager	Pre-Construction
General	Environmental Management	Amber	Gen005	Inspections	All construction work shall be carried out in accordance with the approved CEMP unless otherwise approved by the East Sussex Highways Authority PM, following consultation with relevant authorities where necessary with records of inspections confirming implementation.		Delivery of the scheme in accordance with a CEMP approved by East Sussex Highways Authority.	Corrective measures shall be implemented and recorded in the CEMP.	Delivery Partner Project Manager	During Construction
General	Environmental Management	Red	Gen006	Detailed design	A schedule of Delivery Partner decisions with an environmental dimension documenting those making the decision and supported by the Evaluation of Change Register shall be maintained and reported to the East Sussex Highways Authority PM prior to adoption of the changes.		Continued alignment of the CEMP to changes in the Scheme design.	Ensure approval of the EoCR is received prior to adoption of a change to the design or construction methodology.	Delivery Partner Project Manager	Pre-Construction
General	Environmental Management	Red	Gen007	Detailed design	The Delivery Partner shall use the Evaluation of Change Register for any changes to the scheme with potential environmental implications drawing the East Sussex Highways Authority PM's attention to proposed changes that would increase the risk of a significant impact or reduced effectiveness of a		Continued alignment of the CEMP to changes in the Scheme design.	Ensure approval of the EoCR is received prior to adoption of a change to the design or	Delivery Partner Project Manager	Pre- construction
General	Environmental Management	Red	Gen008	Staffing	Where an environmental risk has been identified, the Delivery Partner shall put in place a system(s) to communicate preventative/control measures to site workers.		Deliver environmental outcomes in line with the consent for the Scheme.	The effectiveness of site controls and corrective measures shall be documented in a revised CEMP.	Delivery Partner - Construction Manager	Pre- Construction

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring and Inspections	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
General	Environmental Management	Red	Gen009	CEMP	The CEMP shall demonstrate how each environmental clause shall be managed for approval by East Sussex Highways Authority in compliance with a certified ISO 14001 management system for the entire works or work packages as appropriate.	Provision of a clear audit trail of the implementation of environmental clauses in conformity with ISO 14001.	The EMP shall be agreed with the East Sussex Highways Authority Environmental Advisor.	Delivery Partner - Env Manager	Pre-Construction
General	Environmental Management	Red	Gen010	CEMP	The CEMP shall contain information related to: a) Requirements attached to the DCO for the Scheme (where applicable); b) Further mitigation measures, as agreed post SGAR3, with the consultees and landowners etc; c) Mitigation measures developed following the completion of ecological surveys prior to the works commencing; and d) Measures associated with the Evaluation of Change post consent.	Provision of a clear audit trail of the implementation of environmental clauses in conformity with ISO 14001.	Check that management measures established post SGAR3 are implemented.	Delivery Partner - Env Manager	Pre-Construction
General	Environmental Management	Red	Gen011	CEMP	A programme of actions to achieve and monitor scheme specific environmental objectives and targets, such as for material resource efficiency and reducing export of materials, shall be specified and implementation reported by on a monthly basis to East Sussex Highways Authority PM.	Clearly documented actions to achieve and monitor scheme specific environmental objectives.	Check that monitoring actions are delivered.	Delivery Partner - Env Manager	Pre-Construction
General	Environmental Management	Red	Gen012	CEMP	The CEMP shall document measures to deliver environmental actions and commitments associated with delivery of the Scheme via Control Plans/Method Statements.	Evidence that the required actions either have been addressed or remain to be addressed.	Check that the commitments and actions have been addressed.	Delivery Partner - Env Manager	Pre-Construction
General	Environmental Management	Red	Gen013	CEMP	An organisational chart setting out the respective roles and responsibilities of all staff responsible for environmental work shall be included within the CEMP along with contact details.	Evidence of a clear line of responsibilities to deliver environmental clauses.	Check the Organisational chart is up to date.	Delivery Partner - Env Manager	Pre-Construction
General	Environmental Management	Red	Gen014	CEMP	The Delivery Partner shall document an Incident Response Plan which outlines classification and response procedures for environmental incidents. The Incident Response Plan shall be provided to the East Sussex Highways Authority PM prior to the start of any works.	Evidence of an Incident Response Plan that would prevent incidents becoming significant impacts.	Check that the Incident Response Plan is updated.	Delivery Partner - Env Manager	Pre-Construction
General	Environmental Management	Red	Gen015	HEMP	Towards the end of the works period the CEMP shall be refined into a Handover Environmental Management Plan (HEMP) to comprise EPS licences, commitments, environmental data, GIS mapping and management measures as appropriate. The HEMP also shall set out the proposed strategy for the future maintenance and management of relevant environmental aspects.	Successful, efficient handover of environmental management responsibilities.	Check that appropriate consideration is given to ongoing environmental management responsibilities required of the client.	Delivery Partner - Env Manager	Post-Construction
General	Environmental Management	Amber	Gen017	Staffing	The CVs and competency certificates for the Environmental Management Team and any environmental specialists employed directly or indirectly by the Delivery Partner shall be recorded in the CEMP.	Deliver environmental outcomes in line with the consent for the Scheme.	Check that a register of CVs remains up to date.	Delivery Partner Project Manager	Pre-Construction

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring and Inspections	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
General	Environmental Management	Red	Gen018	Staffing	Contacts details of the environmental management team shall be provided to East Sussex Highways Authority PM and updated within one week of any changes to show that appropriate resourcing to effectively achieve environmental outcomes in line with the consent.	Deliver environmental outcomes in line with the consent for the Scheme.	Check that the contact details for Env. Management Team remains up to date.	Delivery Partner Project Manager	During Construction
General	Environmental Management	Red	Gen019	Staffing	The Delivery Partner shall put in place a training plan detailing the scheme specific environmental commitments and requirements applicable to each member of the workforce.	Deliver environmental outcomes in line with the consent for the Scheme.	Monitor the appropriateness of training and amend as needed.	Delivery Partner Project Manager	SGAR3 - SGAR5
General	Environmental Management	Red	Gen020	Working Hours	Where works are required outside of normal working hours then they would be agreed with the local Environmental Health Department with at least 3 days advance notice being given to affected residents prior to the works commencing.	Working hours agreed with Local Authority to minimise adverse outcomes.	Monitor construction noise levels where a risk of exceedence of SOAEL noise levels.	Delivery Partner Project Manager	During Construction
General	Environmental Management	Red	Gen021	Start of Works	No part of the scheme shall commence until the enabling works or main works CEMP that is substantially in accordance with the Outline EMP has been submitted to and approved by East Sussex Highways Authority following consultation with the relevant planning authority and the Environment Agency.	Enabling and/or Main works not to be undertaken without an approved EMP being in place.	Confirm the EMP has been agreed with the East Sussex Highways Authority Environmental Advisor.	Delivery Partner - Env Manager	Pre-Construction
General	Environmental Management	Red	Gen022	Working Hours	Core working hours shall be defined through consultation with the Local Authority and recorded in the CEMP. The Delivery Partner shall adhere to the core working hours for each site as far as is reasonably practicable subject to local planning constraints and specific exemptions agreed with East Sussex Highways Authority in advance.	Working hours agreed with Local Authority to minimise adverse outcomes.	Check compliance with the working hours agreed with the LA.	Delivery Partner Project Manager	Pre-Construction
General	Environmental Management	Amber	Gen023	Start of Works	Where it is necessary for Works such as vegetation clearance to take place before start of works and submission of the CEMP, an Enabling Works CEMP shall be submitted to the East Sussex Highways Authority at least two weeks in advance of those works.	Enabling and/or Main works not to be undertaken without an approved EMP being in place.	Monitor the programme to ensure that a signed off CEMP is in place.	Delivery Partner - Env Manager	Pre-Construction
General	Environmental Management	Red	Gen024	Working Hours	Where specific works are identified as locally giving rise to notable noise and/or vibration impact then those works shall be subject to restricted working hours that are agreed with Local Authority. Such restrictions shall be documented in the CEMP.	Working hours agreed with Local Authority to minimise adverse outcomes.	Monitor construction noise levels where a risk of exceedence of SOAEL noise levels.	Delivery Partner Project Manager	SGAR3 - SGAR5
General	Environmental Management	Red	Gen026	Inspections	The frequency of regular onsite observation monitoring and checks/audits shall be recorded in the CEMP to ensure that Best Practical Means are being employed at all times. The site reviews shall be logged and any remedial actions recorded. Such check could include: a) hours of working; b) presence of mitigation measures, equipment (i.e. engines doors closed, airlines not leaking, etc.) and screening (i.e location and condition of local screening, etc.); c) number and type of plant; d) construction method; and e) where applicable, any specific s61 consent conditions.	Delivery of the scheme in accordance with a CEMP approved by East Sussex Highways Authority.	Check that observation monitoring takes place at the frequency directed in the CEMP.	Delivery Partner - Env Manager	During Construction
General	Environmental Management	Red	Gen027	CEMP	The CEMP shall provide evidence of a risk-based approach to the environmental management of construction activities for East Sussex Highways Authority and provide evidence that activity/location specific method statements have addressed those activities in a proportionate manner. The CEMP shall be updated and re-issued following each approved EoCR or environmental incident and no less frequently than once every 6 months.	Targetted and proportionate approach to implementation of the CEMP.	Check that an appropriate risk based approach is taking place.	Design Team	Pre-Construction

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring and Inspections	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
General	Environmental Management	Red	Gen028	Detailed design	Design solutions shall take all reasonable steps to maximise contribution towards all goals of sustainable development with the CEMP clearly demonstrating how applicable sustainable development goals are to be delivered.	Achievement of sustainable development goals.	Check that contributions are being made towards the sustainable development goals.	Design Team	Pre-Construction
General	Environmental Management	Red	Gen029	Staffing	Regulatory bodies shall be advised on the single point of contact with responsibility for the environmental management of the works prior to the commencement of construction and notified at least one week in advance of any change. Evidence of notification shall be recorded in the CEMP.	Deliver environmental outcomes in line with the consent for the Scheme.	Check that Regulatory bodies are informed of any changes to the point of contact.	Delivery Partner - Env Manager	During Construction
General	Environmental Management	Red	Gen030	CEMP	Method statements shall define environmental control measures to be implemented to meet the requirements of the CEMP and the Delivery Partner shall submit the Method Statements and risk assessments to the Local Authority or other regulatory body for review in advance of works commencing.	Working methods take into account health and wellbeing, safety, site security and environmental issues and are of an appropriate standard.	Check that the CEMP comprises evidence of acceptance of the Method Statements by the appropriate regulatory body.	Delivery Partner - Env Manager	Pre-Construction
General	Sustainability	Red	Gen031	Carbon emissions	Evidence of reducing carbon emissions during construction shall be submitted to East Sussex Highways Authority PM to enable reporting to DfT.	Reduce carbon emissions.	Record in the CEMP key carbon savings.	Delivery Partner Project Manager	During Construction
General	Sustainability	Red	Gen032	Carbon emissions	Identify, assess and deliver measures to reduce carbon through onsite or offsite offsetting or carbon sequestration.	Reduce carbon emissions.	Record in the CEMP key carbon savings.	Delivery Partner - Env Manager	During Construction
General	Sustainability	Amber	Gen033	Carbon emissions	Alternatives to the use of diesel would be sought by the Delivery Partner	Reduce carbon emissions.	Record in the CEMP key carbon savings.	Delivery Partner - Construction Manager	During Construction
General	Sustainability	Green	Gen034	Carbon emissions	Low carbon alternatives to diesel generator powered welfare facilities would be determined by site constraints with a preference to use alternatives over diesel.	Reduce carbon emissions.	Record in the CEMP key carbon savings.	Delivery Partner - Construction Manager	During Construction
General	Sustainability	Green	Gen035	Carbon emissions	Where possible, site and task lighting would be provided by non-diesel sources with solar tower lighting being a preferred solution.	Reduce carbon emissions.	Record in the CEMP key carbon savings.	Delivery Partner - Construction Manager	During Construction
General	Sustainability	Green	Gen036	Carbon emissions	At least one electric vehicle charging station shall be provided in accordance with applicable local authority regulations.	Reduce carbon emissions.	Record in the CEMP key carbon savings.	Delivery Partner - Construction Manager	During Construction
General	Sustainability	Green	Gen037	Carbon emissions	Where feasible and allowable within the constraints, electric plant and equipment would be selected.	Reduce carbon emissions.	Record in the CEMP key carbon savings.	Delivery Partner - Construction Manager	During Construction

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring and Inspections	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
General	Sustainability	Green	Gen038	Carbon emissions	Zero or low emission (hybrid) vehicles shall be used where commercially available.	Reduce carbon emissions.	Record in the CEMP key carbon savings.	Delivery Partner - Construction Manager	During Construction
General	Sustainability	Green	Gen039	Carbon emissions	The Delivery Partner would encourage the supply chain to maximise the use of blended diesel with the highest possible content of biodiesel for all construction plant & equipment where there is not a commercially available low carbon alternative.	Reduce carbon emissions.	Record in the CEMP key carbon savings.	Delivery Partner - Construction Manager	During Construction
General	Sustainability	Red	Gen040	Carbon emissions	A Carbon Reduction Plan shall be prepared with the Delivery Partner requiring their supply chain to: a) reduce energy use and associated greenhouse gas emissions; b) Selection of low carbon materials; c) Reduce the amount of virgin materials used; d) Reduce waste arisings including the amount sent to landfill; e) Monitor fuel use on site; f) Train plant operatives in efficient plant operating techniques.	Reduce carbon emissions.	Record in the CEMP key carbon savings.	Delivery Partner - Construction Manager	During Construction
General	Sustainability	Amber	Gen041	Carbon emissions	The Delivery Partner shall provide a table documenting its carbon objective, baseline and target values as well as the actions and target savings anticipated.	Reduce carbon emissions.	Record in the CEMP key carbon savings.	Delivery Partner - Env Manager	During Construction
General	Environmental Management	Red	Gen042	Scheduling of Works	The Delivery Partner shall provide a schedule for the works that minimises the amount of disruption and environmental risks that would be caused by the works. Where it is necessary to deviate from the indicative programme presented in environmental assessment, then a revised programme supported by an Evaluation of Change Register is to be provided to the East Sussex Highways Authority prior to the revised programme being adopted.	Works scheduled to minimise adverse environmental outcomes.	Monthly review of optimisation of works schedule to minimise environmental impact.	Delivery Partner - Construction Manager	During Construction
General	Environmental Management	Red	Gen043	Traffic management	A Construction Traffic Management Plan shall be prepared for approval by East Sussex Highways Authority PM. The Plan shall address: a) The safety of cyclists, walkers and horse-riders. b) Parking of construction and workforce vehicles outwith the construction compound. c) The movement of staff and materials between the compound and works site. d) Controls on HGV movements to and from the site. e) Minimisation of congestion in Seaford. f) Access of residents and business. g) Minimisation of disruption to public transport and visitors.	Reduced disruption to local residents, businesses and other road users.	Check that the Construction Traffic Management Plan addresses all requirements prior to issue.	Delivery Partner - Construction Manager	Pre-Construction
General	Environmental Management	Amber	Gen044	Traffic management	The Delivery Partner would require that its supply chain provides notification of deliveries to be 24 hours in advance of delivery to avoid the holding of vehicles on local roads.	Reduced disruption to local residents, businesses and other road users.	Inspections to ensure absence of delivery vehicles being held on local roads.	Delivery Partner - Construction Manager	During Construction

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring and Inspections	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
General	Environmental Management	Amber	Gen045	Traffic management	All supply chain or merchant deliveries would be required to avoid deliveries before 09:30 or after 15:30.	Reduced disruption to local residents, businesses and other road users.	Random checks to ensure compliance.	Delivery Partner - Construction Manager	During Construction
General	Environmental Management	Amber	Gen046	Traffic management	The Delivery Partner would be required to use designated routes as agreed with the local highway authority.	Reduced disruption to local residents, businesses and other road users.	Random checks to ensure compliance.	Delivery Partner - Env Manager	During Construction
General	Environmental Management	Amber	Gen047	Traffic management	The Delivery Partner would confirm the diversion route for regular traffic with the local highway authority.	Reduced disruption to local residents, businesses and other road users.	None	Delivery Partner - Construction Manager	Pre-Construction

## ANNEX A7 – ECOLOGICAL MANAGEMENT CLAUSES

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring and Inspections	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
Nature Conservation	Designated sites	Red	Nat011	Works affecting SSSIs	Where works are likely to damage the condition or special features of a SSSI, then advice shall be sought from Natural England and evidence of an assent shall be provided. A method statement demonstrating how the works shall be delivered in compliance with the assent conditions shall be reviewed by the EcCoW and provided to East Sussex Highways Authority PM prior to the commencement of works.	SSSI Assent has been approved by Natural England. Avoidance of adverse effects upon a SSSI that have not been subject to an assent.	Check that East Sussex Highways Authority PM views and those of the EcCoW are received prior to commencement of works potentially affecting a SSSI.	Delivery Partner - Env Manager	Pre-construction
Nature Conservation	Designated Sites	Red	Nat012	Works affecting SSSIs	Works in or adjacent to a SSSI shall be demonstrated to the East Sussex Highways Authority Environmental Advisor as being designed so as to minimise direct or indirect habitat loss supported by measures being to offset such losses.	Assented impacts to be the minimum achievable impact upon a SSSI.	Check measures to protect SSSI's are delivering protection.	Delivery Partner - Env Manager	Pre-Construction
Nature Conservation	Designated sites	Amber	Nat013	Works affecting designated habitat	Habitats and vegetation in areas of high ecological sensitivity to be retained shall be appropriately fenced off from construction activities under Ecological Clerk of Works (EcCoW) or Environmental Manager's supervision. Barriers will also provide some isolation of construction activities from nearby habitats to prevent release of pollutants as per current industry practice.	Avoidance of encroachment and impacts into designated sites.	Check vegetation to be retained has been protected.	Delivery Partner - Construction Manager	Vegetation Clearance
Nature Conservation	Designated sites	Red	Nat014	Site compounds	Where it is intended to adopt a construction or recovery compound that is not a candidate construction compound and not subject to a planning application, then such sites shall be screened for direct and/or indirect effects and submitted for approval by East Sussex Highways Authority before a decision is taken to proceed with the site.	Avoidance of direct or indirect effects upon SSSI from the location of candidate construction compounds.	Check environmental screening is in place for construction compounds not subject to a planning application or assessed as a candidate construction compound.	Delivery Partner Project Manager	Pre-Construction
Nature Conservation	Protected Species and Habitats	Red	Nat031	Licences and consents	The Delivery Partner shall consult with the relevant ecological specialist bodies during definition of licences and habitat/species compensation/enhancement measures, without making commitments until agreed by East Sussex Highways Authority. Minutes of meetings with stakeholders shall be provided to East Sussex Highways Authority upon request. Management and cost commitments of draft licences to be submitted to East Sussex Highways Authority PM for prior approval.	Avoidance of inappropriate costs and ongoing liabilities associated with the licencing of works.	Check that East Sussex Highways Authority PM views are received prior to submission of the licence application.	Design Team	Pre-construction
Nature Conservation	Protected Species and Habitats	Amber	Nat032	Vegetation clearance	No works in the soft estate shall commence until a pre-construction survey work by a suitably qualified ecologist has been undertaken to establish whether European or nationally protected species are present on any land or trees affected, or likely to be affected, by those works. Survey details shall be provided to the East Sussex Highways Authority PM on request.	Avoidance of impacts upon protected species.	Check a documented inspection of protected species has been carried out.	Delivery Partner - Planner	Pre-construction

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring and Inspections	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
Nature Conservation	Protected Species and Habitats	Red	Nat033	Licences and consents	The relevant part of the scheme shall be carried out in accordance with the approved mitigation scheme, or with any amended mitigation scheme that may be subsequently approved by East Sussex Highways Authority, following consultation with Natural England, and under any necessary protected species licence. Documentary evidence that the mitigation measures have been undertaken in accordance with the approved measures shall be prepared and provided to the East Sussex Highways Authority PM within 5 working days of the measures being applied to each location.	Compliance with approved mitigation scheme.	Confirm that works are delivered in accordance with licenced measures.	Delivery Partner - Env Manager	During Construction
Nature Conservation	Protected Species	Amber	Nat034	Maintenance and Monitoring	Monitoring of impacts on protected species and habitats prior to, during and up to the end of the aftercare period, to include monitoring and management of mitigation measures shall be carried out by a suitably qualified ecologist to meet the protected species licence requirements. Details are to be provided to East Sussex Highways Authority on request.	Compliance with protected species licences and achievement of enhancement objectives.	Check protected species licence and designated funding requirements have been met.	Delivery Partner - Env Manager	During Construction
Nature Conservation	Protected Species	Amber	Nat036	Handover Environmental Management Plan	The CEMP and HEMP prepared by the Delivery Partner shall set out on-going monitoring and management requirements as required in accordance with the protected species licence and shall be approved by the East Sussex Highways Authority PM.	Protected species licensing commitments can be delivered following handover.	Check agreed measures for handover of licence requirements to Operations Directorate are documented.	Delivery Partner - Env Manager	Post-Construction
Nature Conservation	Protected Species	Amber	Nat037	Vegetation clearance	Should any protected species be found at any time when carrying out the scheme which were not previously identified:(a) A suitably qualified ecologist shall be contacted for advice before the works affecting that so occupied area proceed;(b) The finding shall be reported to Natural England on the advice of the EcCoW; and(c) No activities requiring a protected species licence shall continue until a scheme of protection and mitigation measures for the protected species has been submitted to, and approved by, Natural England and East Sussex Highways Authority.	Avoidance of impacts upon protected species.	Check that reporting requirements are implemented.	Delivery Partner - Env Manager	During Construction
Nature Conservation	Protected Species	Amber	Nat038	Licences and consents	Copies of all protected species licences, the Assent and associated documentation, obtained for the works shall be retained on site at all times and included within the CEMP.	Provision of a clear audit trail.	Monthly audits of protected species licences should be undertaken and included in the CEMP.	Delivery Partner - Env Manager	During Construction
Nature Conservation	Protected Species	Red	Nat039	Pre-construction surveys	The Delivery Partner shall undertake pre-construction surveys to determine the current status/distribution of protected and notable species along the Scheme. Copies of all pre-construction survey reports shall be retained on site at all times and the Ecological Survey Report and GIS files issued to East Sussex Highways Authority PM within one month of surveys being complete.	Informed decisions to reduce risk of infringement of protected species licensing.	Check protected species survey report is included in CEMP and provided to East Sussex Highways Authority PM.	Delivery Partner - Env Manager	Pre-Construction
Nature Conservation	Protected Species	Amber	Nat040	Vegetation clearance	Vegetation clearance in habitat with a protected species interest shall be undertaken by hand tools or flail mounted attachments or low-pressure vehicles avoiding heavy machinery to be tracked over vegetation, as advised by the named ecologist designated under the protected species licence and the EcCoW.	Avoidance of impacts on protected species.	Check vegetation clearance methods detailed in the protected species licence are followed and supervised by an EcCoW when not applicable to protected species.	Delivery Partner - Construction Manager	Vegetation Clearance

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring and Inspections	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
Nature Conservation	Protected Species	Amber	Nat041	Toolbox Talks	Workforce briefings shall be provided to site staff to provide a timely understanding of the designated habitats, species, the law, licensed works, the importance of the enhancement and mitigation measures. They must also be able to identify and understand the actions to be taken in the event of a protected species being encountered anywhere along the scheme. Evidence shall be collated and details provided to the East Sussex Highways Authority PM on request demonstrating that all operatives working in areas of potential EPS have received a Toolbox Talk relevant to the ecological measures and protected species requirements. Any changes to ecological mitigation following the monthly Audit Report shall be communicated to site staff via toolbox talks.	Compliance with protected species licensing and method statements.	Check that a record of attendance at toolbox talk on works where protected species or priority habitat is present is on file.	Delivery Partner - Env Manager	Vegetation Clearance
Nature Conservation	Protected Species	Green	Nat042	Licences and consents	Whilst performing a task as an Agent/Assistant to the licence, the Signatory/Assistant shall carry a signed letter appointing them as a signatory to the applicable licence. The letter shall highlight the tasks which the Signatory/Assistant is competent to perform and will be issued by the East Sussex Highways Authority PM and reviewed by the named ecologist on the protected species licence.	Appropriately qualified EcCoW to supervise works.	Check signatory/assistant carries a signed letter when performing licenced tasks and record the letter within the CEMP.	Delivery Partner - Env Manager	During Construction
Nature Conservation	Protected Species	Amber	Nat043	Pre-construction surveys	The CEMP shall be updated as necessary following pre-construction surveys to reflect any additional mitigation measures and/or licences required for the works. The Delivery Partner shall ensure that exclusion zones are in place to reflect the works to be undertaken. The revised CEMP shall be issued to East Sussex Highways Authority within one month of completion of the surveys as necessary.	Provision of a clear audit trail.	Monthly checks that the CEMP has been updated to reflect additional mitigation measures and/or licences.	Delivery Partner - Env Manager	Pre-Construction
Nature Conservation	Protected Species	Amber	Nat044	Licences and consents	Licences must be sought except where Natural England and the EcCoW is satisfied that a licence is not required. Elsewhere a precautionary approach (under non-licensed method statement) shall be applicable to other situations with evidence that it has been written by a suitably qualified ecologist with details provided to the East Sussex Highways Authority PM on request.	Method Statements prepared by appropriately qualified ecologist.	Check that works follow either licence requirements or a non-licensed method statement and that decisions are agreed with Natural England and documented in the CEMP.	Delivery Partner - Env Manager	Pre-Construction
Nature Conservation	Protected Species	Red	Nat045	Licences and consents	The East Sussex Highways Authority PM shall notify the Delivery Partner of the individual in who shall adopt responsibility for protected species licence requirements prior to the start of works. Details are to be provided in the CEMP or HEMP as appropriate.	Compliance with protected species licence and method statements.	Check individual responsible for protected species licence has been recorded in the EMP.	National Highways	Post-Construction
Nature Conservation	Protected Species	Amber	Nat046	Exclusion zones	Works exclusion zones shall be established, monitored and maintained where works are to be undertaken within a distance that could give rise to disturbance to protected species and priority habitats, as directed by the EcCoW.	Avoidance of unnecessary disturbance to protected species.	Inspections or digital monitoring to be established to demonstrate compliance with exclusion zones.	Delivery Partner - Env Manager	During Construction
Nature Conservation	Protected Species	Red	Nat047	Maintenance and Monitoring	A schedule for the maintenance and monitoring of protected species licence sites and enhancement works shall be prepared and shall accompany the draft protected species licence application so discussions can be held with the East Sussex Highways Authority PM over the deliverability of these activities.	Protected species licence commitments can be delivered following handover to the maintenance contractor.	Check that a schedule for the maintenance and monitoring of protected species licence sites and designated funded works has been prepared.	Design Team	Pre-Construction

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring and Inspections	Responsibility / Owner	Phase
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Nature Conservation	Protected Species	Red	Nat048	Licences and consents	Monthly ecological Audit Reports on the status of ecological works on site including ensuring the adherence to licences, consents and methods statements of protected species and habitats, shall be submitted to the Environmental Manager and East Sussex Highways Authority PM. Progress Reports shall be made available to Natural England on request.	Compliance with the approved mitigation scheme.	Confirm that the Audit Reports are placed in the CEMP.	Delivery Partner - Env Manager	During Construction
Nature Conservation	Protected Species	Green	Nat049	Toolbox Talks	Toolbox talks shall be conducted by the EcCoW and a record of attendance shall be taken and recorded in the CEMP. Site staff who have not attended the last toolbox talk shall not be allowed to work onsite where protected species or priority habitat is present.	Compliance with the approved mitigation scheme.	Check that a record of attendance at the last toolbox talk is on file and those onsite have attended.	Delivery Partner - Env Manager	During Construction
Nature Conservation	Great Crested Newts	Amber	Nat074	Vegetation clearance	Staged vegetation clearance shall be carried out, with habitat clearance undertaken using hand tools between November and February to just above ground level, followed by full vegetation clearance undertaken in the active GCN period (March to September inclusive) following a fingertip search by an EcCoW.	Compliance with GCN licence or method statement requirements.	Check that two stage vegetation clearance takes place in specified areas.	Delivery Partner - Planner	Vegetation Clearance
Nature Conservation	Great Crested Newts	Amber	Nat075	Vegetation clearance	Features which may be used as refuges shall be removed by hand by a qualified ecologist in active season only (March to October) and searched for the presence of great crested newts. A destructive search, of any larger features suitable for use by newts, shall be undertaken by hand or using a small excavator, under ecological supervision.	Compliance with GCN licence or method statement requirements.	Check that destruction of suitable habitat is supervised by an EcCoW.	Delivery Partner - Construction Manager	Vegetation Clearance
Nature Conservation	Great Crested Newts	Amber	Nat077	Material storage	Any stored materials (that might act as temporary GCN resting places) are to be raised off the ground, e.g. on pallets.	Compliance with GCN licence or method statement requirements.	Inspect storage of materials in suitable areas are not used by GCN.	Delivery Partner - Construction Manager	During Construction
Nature Conservation	Great Crested Newts	Amber	Nat078	Vegetation clearance	If a great crested newt is found (or suspected), all work in the soft estate for 250m from that location shall stop.	Compliance with GCN licence or method statement requirements.	Check that commitment is implemented.	Delivery Partner - Construction Manager	During Construction
Nature Conservation	Great Crested Newts	Amber	Nat079	Vegetation clearance	Measures to retain refugia materials for habitat creation are to be undertaken as instructed by EcCoW.	Compliance with GCN licence or method statement requirements.	Check that EcCoW instructions are implemented.	Delivery Partner - Construction Manager	Vegetation Clearance
Nature Conservation	Great Crested Newts	Green	Nat082	Vegetation clearance	An EcCoW shall be present during vegetation clearance to instruct that works should cease and the advice of the EcCoW sought should the presence of GCN be discovered.	Avoid disturbance to protected species.	EcCoW to conduct daily visual inspections to confirm absence of GCN.	Delivery Partner - Env Manager	Vegetation Clearance
Nature Conservation	Great Crested Newts	Amber	Nat084	Vegetation clearance	The EcCoW shall prepare a Method Statement for those areas identified as being suitable for GCN.	Avoid disturbance to protected species.	Confirm that the Method Statement is recorded in the CEMP.	Delivery Partner - Env Manager	Vegetation Clearance
Nature Conservation	Bats	Green	Nat094	Pre-construction surveys	Where a bat survey has not been undertaken within 1 year of start of works, a pre-construction survey shall be undertaken to record potential roost features where it has not been possible to exclude the existence of a roost. Inspection records shall be produced by a licenced ecologist and shall be provided to the East Sussex Highways Authority on request.	Compliance with wildlife legislation.	Check that pre-commencement survey records are on file.	Delivery Partner - Env Manager	Pre-construction
Nature Conservation	Bats	Green	Nat095	Works to structures	Where potential or confirmed roosts have been identified within structures and trees, but where no disturbance is likely, a pre-construction check shall be conducted to ensure there are no significant changes to the roost.	Compliance with wildlife legislation.	Check that records of pre-construction surveys of structures have been filed.	Delivery Partner - Env Manager	Pre-construction

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring and Inspections	Responsibility / Owner	Phase
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Nature Conservation	Bats	Green	Nat097	Bat foraging areas	Where vegetation is expected to be used by bats, vegetation removal should preferably be scheduled to occur between September to October (inclusive) or mid-March to mid-May to minimise the risk of disturbance to foraging bats.	Minimise impact on bat foraging habitat.	Document vegetation clearance measures taken to protect impact on foraging bats.	Delivery Partner - Planner	Pre-construction
Nature Conservation	Riparian species	Green	Nat111	Pre-construction surveys	A pre-construction survey shall be undertaken along watercourses considered to be suitable for otters or water vole where works are to be within 30m of suitable habitat. Should evidence of otter be identified then the EcCoW shall be consulted to determine the need for further mitigation and/or the need for consultation with Natural England. Documented inspection by a suitably qualified ecologist shall be made available to East Sussex Highways Authority PM on request.	Clarity as to whether otter or water vole could be affected by works.	Check that pre-construction surveys of watercourses adjacent to works are undertaken where risk to habitat exists.	Delivery Partner - Env Manager	Pre-Construction
Nature Conservation	Riparian species	Green	Nat114	Toolbox Talks	Construction staff working within 30m of suitable habitat shall be briefed on how to identify water vole/otter field signs. Should a water vole burrow be found (or suspected) work shall cease and advice sought from an experienced Ecologist or the Environmental Manager. Evidence that a toolbox talk has been delivered to construction staff working within 30m of a watercourse with suitable water vole/Otter habitat shall be provided to the East Sussex Highways Authority PM on request.	Disturbance to otter or water vole avoided.	Confirm that toolbox talks on works within 30m of a watercourse are effective.	Delivery Partner - Env Manager	During Construction
Nature Conservation	Riparian species	Red	Nat118	Disturbance	Should a holt be identified then an exclusion zone of up to 150m (CIEEM, 2011) shall be established until its use has been determined. If confirmed to be a maternal holt, it would either be temporarily closed or removed under licence as required once the mother and cubs are confirmed as having left the holt. Further detailed surveys would likely be required. A replacement artificial holt may be required as advised by Natural England.	Disturbance to otter or water vole avoided.	Check that pre-construction surveys of watercourses adjacent to works are undertaken where risk to habitat exists.	Delivery Partner - Env Manager	Pre-Construction
Nature Conservation	Fish	Amber	Nat122	Disturbance	Piling operations adjacent to migratory European eel or Sea Trout shall be scheduled so that disturbance during the migration period (March to November) is minimised to the satisfaction of the EA.	Avoidance of disturbance to key fish species.	Check to ensure piling operations comply with Environmental Agency requirements.	Delivery Partner - Env Manager	During Construction
Nature Conservation	Fish	Amber	Nat123	Disturbance	Where mobile water retention techniques or cofferdams are to be deployed, then the measures shall be sequenced so that a minimum of 50% of the river channel would be available to migratory fish.	Avoidance of disturbance to key fish species.	Check that the sequencing of work maintains availability of at least 50% of the river channel for migratory fish.	Delivery Partner - Env Manager	During Construction
Nature Conservation	Fish	Amber	Nat124	Disturbance	The assumption that a mobile water retention technique can be deployed and removed in a main river out of the sea trout peak migration period (May - August) would be validated with the EA and incorporated into the River Impoundment Method Statement.	Avoidance of disturbance to key fish species.	Check that the river impoundment activities are undertaken in line with the Method Statement.	Delivery Partner - Env Manager	Pre-Construction
Nature Conservation	Fish	Amber	Nat125	Disturbance	The removal/rescue of fish from the mobile water retention technique shall take place prior to dewatering under the supervision of the EcCoW. Fish captured will be returned to the same river they are rescued from.	Avoidance of disturbance to key fish species.	EcCoW to be present to inspect for trapped fish and supervise their return to the river.	Delivery Partner - Env Manager	During Construction
Nature Conservation	Badgers	Green	Nat131	Pre-construction surveys	A pre-construction badger survey shall be undertaken within 30m of the works area six months prior to the start of works to confirm their distribution with a re-survey undertaken within one week following vegetation clearance to confirm the total number of setts affected by the works. Documented inspection records signed by a	Works are undertaken with full awareness of the location of badger setts.	Check that a signed record of survey prior to works in the soft estate is on file.	Delivery Partner - Env Manager	Pre-construction

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring and Inspections	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
					suitably qualified ecologist shall be retained and provided to the East Sussex Highways Authority PM on request.				
Nature Conservation	Reptiles	Red	Nat141	Suitable reptile habitat	All vegetation clearance in areas of suspected reptiles shall be undertaken during March to October while reptiles are active under the supervision of an ecological clerk of works (EcCoW) in accordance with a Reptile Mitigation Strategy that has been included in the EMP. The strategy shall set out the search strategy, vegetation clearance and reptile relocation measures. The Method Statement for vegetation clearance in potential reptile habitat shall be included in the CEMP and submitted to the East Sussex Highways Authority PM.	Avoidance of harm to reptiles.	Check that measures protect reptiles have been supervised.	Delivery Partner - Env Manager	Pre-Construction
Nature Conservation	Reptiles	Red	Nat142	Suitable reptile habitat	Natural or artificial reptile refugia including log piles, rubble piles and boulders shall be dismantled by hand, and removed to an area within the East Sussex Highways Authority soft estate but outside that directly affected by the works. These works shall be overseen by the EcCoW. Potential hibernacula shall be avoided during the hibernation period [November to February inclusive]. Methods for the removal of potential reptile refugia shall be included in the CEMP submitted to the East Sussex Highways Authority PM. Should other amphibian species (common and palmate newt, frogs and toads) be found, then these shall be moved to a pre-determined 'safe' hibernacula/refugia or water body.	Avoidance of harm to reptiles.	Check that artificial refugia have been dismantled by hand and relocated.	Delivery Partner - Env Manager	Pre-Construction
Nature Conservation	Reptiles	Green	Nat143	Suitable reptile habitat	Any trenches left overnight within reptile and amphibian habitat (rank grassland and scrub mosaic) shall be covered or provided with ramps to prevent reptiles from becoming trapped. Photographic evidence of measures to prevent reptiles from being trapped within a trench shall be provided to the East Sussex Highways Authority PM on request.	Avoidance of harm to reptiles.	Check that measures prevent reptiles from being trapped.	Delivery Partner - Construction Manager	During Construction
Nature Conservation	Reptiles	Amber	Nat144	Suitable reptile habitat	A Precautionary Method of Working shall be applied to all areas suspected of being suitable for reptiles. This shall include a hand-search prior to vegetation clearance; a phased strimming and an ecological watching brief for areas identified and mapped by Project Ecologist. Evidence that a precautionary method has been implemented shall be collated and provided on request to the East Sussex Highways Authority PM.	Avoidance of harm to reptiles.	Check that measures to protect reptiles during vegetation clearance deliver protection.	Delivery Partner - Env Manager	During Construction
Nature Conservation	Reptiles	Green	Nat145	Toolbox Talks	A toolbox talk on identification of reptiles and procedures to be followed shall be held for all on-site staff working within areas of potential reptiles' habitat and the requirement not to interfere with protective fencing. Evidence that a toolbox talk on reptiles has been delivered and prevents reptiles from being killed shall be provided to the East Sussex Highways Authority PM on request.	Avoidance of harm to reptiles.	Check that a record of attendance at toolbox talk on invasive reptiles is on file.	Delivery Partner - Env Manager	During Construction
Nature Conservation	Reptiles	Amber	Nat146	Suitable reptile habitat	Clearance of vegetation in areas of only potential reptile habitat shall be undertaken using a strimmer or brush cutter in two cuts with all cuttings raked and removed the same day. Vegetation shall be first cut to a height of no less than 150mm with the arisings then removed while for the second cut, where vegetation remains dense, vegetation shall be cleared to ground level (maximum height 20mm) and the arisings removed. The cleared area will then be left undisturbed for a minimum of 24 hours to allow reptiles to	Avoidance of harm to reptiles.	Confirm effectiveness of measures to protect reptiles during vegetation clearance.	Delivery Partner - Env Manager	Vegetation Clearance

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring and Inspections	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
		Orange			disperse. Evidence that a two-phase vegetation cut has been implemented shall be collated and provided on request to the East Sussex Highways Authority PM.				
Nature Conservation	Reptiles	Green	Nat147	Suitable reptile habitat	Should any reptiles or amphibians be encountered outside of the active season, works should immediately stop at the location the individual was found. The EcCoW shall be consulted to determine the action required, which could be that works are postponed until the active season (typically February to October when temperatures are above 5°C).	Avoidance of harm to reptiles.	Confirm effectiveness of measures to protect reptiles during vegetation clearance.	Delivery Partner - Env Manager	During Construction
Nature Conservation	Reptiles	Green	Nat148	Common Toad	The EcCoW must undertake a visual inspection of ditches and suitable hibernacula prior to the commencement of works to confirm the absence of toad or other priority species. If species are found to be at risk, the EcCoW shall supervise the removal/rescue of the species to a location away from the works.	Avoidance of harm to priority species.	Confirm that a record of EcCoW inspections in advance of works to the ditches is in place.	Delivery Partner - Env Manager	Vegetation Clearance
Nature Conservation	Breeding birds	Green	Nat161	Vegetation clearance	A nesting bird check shall be undertaken no longer than 24 hours before vegetation removal during the bird breeding season (March to August inclusive) by a competent ecologist in accordance with a Method Statement to ensure the absence of active birds' nests. Any active nests shall have an appropriate exclusion zone be determined by the EcCoW. Work within this zone is to be avoided until an EcCoW or Environmental Manager has confirmed that the nestlings have fledged. Evidence demonstrating that nesting birds have been protected during the bird breeding season shall be recorded and provided to the East Sussex Highways Authority PM on request.	Protection of nesting birds.	Check that measures to protect nesting birds deliver protection.	Delivery Partner - Env Manager	During Construction
Nature Conservation	Breeding birds	Green	Nat162	Vegetation clearance	Should works have the potential to disturb Wildlife & Countryside Act 1981 Schedule 1 breeding birds, suitable mitigation measures shall be agreed with the relevant statutory consultee and only commence within such areas once suitable mitigation is in place.	Protection of nesting birds.	Inspections, monitoring and reporting would be undertaken in accordance with Natural England/local authority requirements.	Delivery Partner - Env Manager	Pre-construction
Nature Conservation	Breeding birds	Green	Nat163	Disturbance	Site hoardings would be installed along the north and eastern site boundary to minimise disturbance to breeding birds.	Avoid disturbance to breeding birds.	Confirm installation of hoardings.	Delivery Partner - Construction Manager	Pre-Construction
Nature Conservation	Breeding birds	Green	Nat164	Vegetation clearance	All vegetation suitable for breeding birds shall be removed as part of vegetation clearance outside the breeding season (March - August). Where this is not achievable, clearance would only be undertaken following the prior checking for nests by the EcCoW.	Protection of nesting birds.	Confirm vegetation clearance is outside the breeding season, otherwise records of EcCoW inspections in advance of clearance shall be recorded in the CEMP.	Delivery Partner - Env Manager	Pre-construction
Nature Conservation	Breeding birds	Amber	Nat165	Disturbance	A risk assessment shall be carried out prior to the commencement of works to inform the likelihood of protected bird species being disturbed by noise or human presence during the breeding season.	Avoid disturbance to breeding birds.	Confirm that a risk assessment was undertaken, and the results reported in the CEMP.	Delivery Partner - Env Manager	Pre-construction
Nature Conservation	Breeding birds	Green	Nat166	Toolbox Talks	Site staff will be required to gain an appreciation of the importance of the site for birds along with restrictions against access to the grazing marsh habitat.	Avoid disturbance to breeding birds.	Check that a record of attendance at toolbox talk on importance of site for birds is on file.	Delivery Partner - Env Manager	During Construction
Nature Conservation	Habitat	Amber	Nat173	Works affecting suitable habitat	Where Section 41 priority habitat are located adjacent to working zones, temporary exclusion fencing (Heras or similar) shall be installed prior to construction and maintained throughout to	Protection of priority habitat.	Check temporary exclusion fencing is remains effective.	Delivery Partner - Env Manager	Pre-Construction

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				Activity / Aspect of work	Required Action / Commitment				
					prevent encroachment of machinery or personnel. Materials and spoil shall be stored away from priority habitat areas. Photographic evidence of protected areas shall be provided to the East Sussex Highways Authority PM on request.				
Nature Conservation	Habitat	Green	Nat174	Vegetation clearance	A Vegetation Clearance Management Plan shall be prepared for the soft estate to minimise for the loss of habitat caused. This Plan shall detail the sequence of habitat removal and reinstatement demonstrating that the level of ecological service has been maintained or the reduction in the level of service has been minimised. The CEMP shall identify the soft estate where habitat loss has been minimised and measures are to be taken to deliver ecological enhancement.	Minimal loss of habitat.	Check that the Vegetation Clearance Plan minimises loss of priority habitat.	Design Team	Pre-Construction
Nature Conservation	Habitat	Green	Nat175	Vegetation clearance	Construction works and vegetation clearance shall be confined to the minimum areas required as defined on the schedule of work areas during detailed design. Those areas to be worked under the Ecological Clerk of Works (EcCoW) or Environmental Manager's supervision, shall be clearly defined and fenced off prior to works starting nearby. Photographic evidence of exclusion zones being demarcated shall be collated and details provided to the East Sussex Highways Authority PM on request.	Minimal loss of habitat.	Check that working areas are under EcCoW supervision are clearly defined and fenced off prior to works starting nearby.	Delivery Partner - Construction Manager	Vegetation Clearance
Nature Conservation	Habitat	Green	Nat176	Vegetation clearance	No vegetation clearance lower than 150mm shall take place without prior advice and sign-off from the Ecological Clerk of Works (EcCoW) or Environmental Manager. A copy of clearance approval for vegetation clearance lower than 150mm shall be provided to the East Sussex Highways Authority PM on request.	Minimal loss of habitat.	Check no vegetation clearance lower than 150mm has taken place.	Delivery Partner - Construction Manager	Vegetation Clearance
Nature Conservation	Habitat	Green	Nat178	Trees	Root protection measures shall be deployed (where appropriate) in accordance with British Standard BS5837:2012 - Trees in relation to design, demolition and construction. To be in place prior to construction & maintained throughout. Photographic evidence of Root Protection measures shall be provided to the East Sussex Highways Authority PM on request.	Protection of trees.	Check that root protection measures are followed and that the measures are audited on a monthly basis.	Delivery Partner - Env Manager	Pre-Construction
Nature Conservation	Habitat	Red	Nat180	Biodiversity Net Gain	Prior to the removal of vegetation from the soft estate, the ecological baseline and Biodiversity Condition Score shall be established and reported for those areas to be disturbed due to the Works. The Principal Contractor shall report the Biodiversity Units and calculations in tabular format mapped in GIS shape file to the East Sussex Highways Authority PM.	Auditable record of the Biodiversity Units.	Check that the quarterly reporting of the biodiversity metric is being delivered.	Delivery Partner - Env Manager	Pre-construction
Nature Conservation	Habitat	Red	Nat181	Biodiversity Net Gain	Should the temporary water retention technique be in place for longer than 12 months then the Delivery Partner shall re-determine the Biodiversity Net Gain calculations in accordance with the current Defra methodology and secure additional habitat to offset the losses to maintain the net gain required for the Scheme.	Achievement of Biodiversity Net Gain requirement.	Check whether the duration of the water impoundment technique extend beyond 12 months and secure additional habitat to achieve the required BNG.	Delivery Partner - Env Manager	Pre-Construction
Nature Conservation	Habitat	Green	Nat182	Vegetation clearance	Notable plants will either be protected from disturbance or at an appropriate time of year carefully dug up and either translocated or stored during works, then translocated to an appropriate habitat.	Avoidance of loss of notable plant species.	Check that a record of pre-construction surveys for notable plant species has been undertaken in advance of vegetation clearance and that it is within the CEMP.	Delivery Partner - Env Manager	Pre-Construction

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				Activity / Aspect of work	Required Action / Commitment				
Nature Conservation	Habitat	Green	Nat183	Drainage ditches	Where drainage ditches are identified to be of ecological value by the EcCoW, then localised silt and vegetation translocation to a replacement ditch shall be undertaken.	Minimal loss of habitat.	Check that the replacement drainage ditch is available to accommodate translocated silt and vegetation.	Delivery Partner - Env Manager	During Construction
Nature Conservation	Site practice	Green	Nat191	All works	No construction access, storage of vehicles or materials etc shall take place outside clearly defined works areas to minimise impacts to species and habitats. The site inspection records shall be provided to the East Sussex Highways Authority PM on request.	Avoidance of incidental damage to species and habitat.	Check that site inspection records confirm absence of activities beyond the defined works area.	Delivery Partner - Construction Manager	During Construction
Nature Conservation	Site practice	Red	Nat192	Works <8m of a watercourse	Best practice techniques shall be used for works close to ditches, watercourses and culverts to avoid / minimise risk of contamination or damage to sensitive ecological receptors (habitats and species). The CEMP shall document those watercourses and specify the applicable Method Statements.	Avoidance of damage to aquatic habitats.	Confirm that method statements for works within 8m of watercourses are in the CEMP.	Delivery Partner - Env Manager	Pre-Construction
Nature Conservation	Site practice	Green	Nat193	Site compounds	Compounds, vehicles, storage of materials and haul routes (where on unpaved surfaces) shall be located to avoid an adverse impact upon sensitive habitats and species. Risk assessment produced for storage areas shall be undertaken and details made available on request to the East Sussex Highways Authority PM.	Avoidance of incidental damage to species and habitat.	Check that site compound activities have been located to avoid impact on priority habitats and species.	Delivery Partner - Construction Manager	Pre-Construction
Nature Conservation	Site practice	Green	Nat195	Night working	Where lighting, generators (and other noisy equipment) are required these shall be located to avoid impacts to protected species. Lighting shall be directional and shielded to illuminate the works area only. Evidence shall be provided to the East Sussex Highways Authority PM that planned night-time working that could adversely impact protected species has been undertaken in accordance with an appropriate Method Statement.	Protection of priority habitat and protected species.	Check that lighting and noisy equipment is located to avoid impact on protected species.	Delivery Partner - Construction Manager	During Construction
Nature Conservation	Site practice	Green	Nat196	Excavations	Where it is not possible to cover excavations overnight, appropriate escape ramps for mammals shall be provided and visual checks shall be carried out of uncovered excavations each morning before works commence to reduce the risk to trapped animals. The Delivery Partner shall obtain advice from the ecologist if a protected species is found or suspected. Photographic evidence of covered trenches or escape routes shall be provided to the East Sussex Highways Authority PM on request.	Compliance with wildlife legislation.	Check covered trenches or escape route are in place.	Delivery Partner - Construction Manager	During Construction
Nature Conservation	Site practice	Green	Nat197	Soil management	Soil storage areas shall be managed to maximise their value for landscape planting and to minimise opportunities for colonisation by burrowing animals, such as badger. Photographic record of stockpiles shall be provided to the East Sussex Highways Authority PM on request.	Avoidance of harm to burrowing animals.	Check soil storage areas are correctly managed.	Delivery Partner - Construction Manager	During Construction
Nature Conservation	Site Practice	Green	Nat198	All works	The Delivery Partner shall put in place a series of inspections to ensure that all environmental measures are being properly implemented and maintained. Records of inspections are to be collated, logged and details made available on request to the East Sussex Highways Authority PM.	Compliance with the EMP.	Check that records of inspections of management measures are on file.	Delivery Partner - Env Manager	During Construction
Nature Conservation	Site practice	Green	Nat199	Ecological specialist	Suitably qualified ecologists shall oversee the implementation of the ecological mitigation and enhancement measures. Documented inspections are to be made available to the East Sussex Highways Authority PM on request.	Compliance with Method Statements and the EMP.	Check that the ecologist is suitably qualified for the habitats and species to be protected.	Delivery Partner - Env Manager	During Construction

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring and Inspections	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
Nature Conservation	Site practice	Green	Nat200	Rabbit warrens	Where rabbit warrens or fox dens are to be damaged or destroyed then the work will be in accordance with the Wild Mammals (Protection) Act 1996. In the case of rabbits, work will also be in accordance with the Animal Welfare Act 2006 by a registered pest control company. Inspections for rabbit warrens will be undertaken prior to earthworks to direct need for use of a registered pest control company the use of which shall be recorded in the CEMP.	Avoidance of unnecessary suffering to mammals.	Check for the presence of rabbit and the need for pest control measures.	Delivery Partner - Env Manager	Vegetation Clearance
Nature Conservation	Site Practice	Amber	Nat201	Soil management	Soils taken from within a designated site shall be transported and stored separately from other soils to avoid mixing in accordance with the advice of the EcCoW.	Protection of biota and seeds from designated sites.	Inspections to confirm adequate storage space to prevent mixing of soils.	Delivery Partner - Planner	Pre-Construction
Nature Conservation	Site Practice	Amber	Nat202	Soil management	Soil stripping from within a designated site shall be undertaken with light vehicles when they are within a specified moisture range as specified in a Method Statement to minimise compaction and damage under the supervision of an EcCoW. Photographic evidence of compliance with the Method Statement shall be provided to the East Sussex Highways Authority PM.	Protection of biota and seeds from designated sites.	Inspections to ensure avoidance of damage to soils.	Delivery Partner - Construction Manager	During Construction
Nature Conservation	Site Practice	Green	Nat203	Night working	Working during dark/night time conditions where a potential impact upon priority habitat and protected species exists shall be avoided (except in emergency situations). Should night working be required then the advice of the EcCoW should be sought to ensure appropriate mitigation measures are in place.	Prevent detrimental impacts to protected species and sensitive habitat.	Check that an approved EoCR is located in CEMP.	Delivery Partner - Env Manager	During Construction
Nature Conservation	Habitat creation	Green	Nat214	Protected species	Ecological mitigation/ enhancement measures set out in the environmental masterplan and the CEMP shall be in accordance with guidance from the Institute of Ecology and Environmental Management, published ecological literature and consultations with statutory and non-statutory nature conservation bodies, except where any departures from that guidance are agreed by East Sussex Highways Authority, and the EcCoW following consultation with relevant stakeholders.	Adoption of best practice habitat creation measures.	Check design of ecological mitigation and enhancement is in line with recognised guidance.	Delivery Partner - Env Manager	Pre-Construction
Nature Conservation	Habitat creation	Green	Nat216	Great crested newts	Photographic evidence with GPS locations that hibernacula have been put in place as specified by the EcCoW in advance of the main works as a refuge for displaced species is to be provided to the East Sussex Highways Authority PM on request.	Enhancement of GCN and reptile habitat.	Check hibernacula are created in locations specified in method statement.	Delivery Partner - Env Manager	During Construction
Nature Conservation	Habitat creation	Green	Nat217	Bats	Bat boxes shall be deployed as set out in the Series 3000 Specification and as specified within the non-licensed or licence Method Statement. When determining the location of bat boxes consideration shall be given to selecting locations with good habitat connectivity but poor potential roost features rather than place several boxes in locations of known roosts or viable roost features.	Provision of enhanced habitat suitable for the bats species found in the vicinity of the scheme.	Check bat boxes offer good habitat connectivity.	Delivery Partner - Env Manager	Pre-construction
Nature Conservation	Habitat creation	Green	Nat218	Bats	Photographic evidence of habitat creation for bats, which shall include the planting of scrub and grass habitats for foraging and commuting, as well as installation of 3-5 bat boxes/bricks to increase roosting opportunities, shall be provided to East Sussex Highways Authority PM on request.	Provision of enhanced habitat suitable for the bats species found in the vicinity of the scheme.	Check that photographic evidence of enhancement measures for bats is on file.	Delivery Partner - Env Manager	During Construction
Nature Conservation	Habitat creation	Green	Nat220	Invertebrates	Areas of deadwood shall be carefully moved to locations identified by the EcCoW. Photographic evidence and GPS location of	Protection and enhancement of terrestrial	Check areas of dead wood have been appropriately moved and measures are in	Delivery Partner - Env Manager	During Construction

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring and Inspections	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
					established log piles are to be made available upon request of the East Sussex Highways Authority PM.	invertebrate habitat.	place to enhance terrestrial invertebrates habitats.		
Nature Conservation	Habitat creation	Green	Nat221	Birds	Bird boxes shall be deployed for every hectare of habitat loss as appropriate as stated within the Series 3000 Specification. Photographic evidence and GPS location of installation and a copy of the bird box purchase order shall be retained and provided to the East Sussex Highways Authority PM on request.	Provision of nest boxes for birds.	Check that measures to replace habitat loss with bird boxes are in place.	Delivery Partner - Env Manager	During Construction
Nature Conservation	Habitat creation	Red	Nat224	Floral species	The Client shall ensure that an experienced ecologist monitors post-construction habitats for three years within and immediately adjacent to the works site to detect colonisation by invasive non-native plant species triggering eradication measures where necessary.	To ensure minimal colonisation by invasive species following completion of the works.	An annual inspection shall be commissioned	East Sussex Highways Authority	Operation
Nature Conservation	Habitat creation	Green	Nat225	Common Toad	Ditches shall be replaced to ensure no loss of habitat for notable species including for toad and other amphibian species.	To minimise loss of habitat.	Check that replacement ditches are provided.	Delivery Partner - Env Manager	During Construction
Nature Conservation	Habitat creation	Green	Nat226	Drainage ditches	New drainage ditches shall include sections with low gradient, localised shallow margins, deeper mid-sections, silt dominated substrate taken from ditches removed by the scheme, low shading and open banks.	To minimise loss of habitat.	Check that replacement ditches have a suitable profile.	Delivery Partner - Env Manager	During Construction
Nature Conservation	Invasive species	Red	Nat231	Pre-construction surveys	A pre-construction survey of invasive species extending 8m beyond the works area shall be undertaken no more than two months (within the April to October period) prior to the commencement of construction works in any area to confirm and map the locations of all invasive species. The pre-construction survey results shall be incorporated, along with species-specific control measures, into the final CEMP. Evidence shall be provided on request to the East Sussex Highways Authority PM.	Avoidance of spread of invasive plant or animal species.	Check that a pre-construction invasive species survey results and species-specific control measures are in the CEMP.	Delivery Partner - Planner	Pre-Construction
Nature Conservation	Invasive species	Green	Nat232	Vegetation clearance	The Delivery Partner shall not to trample or cut vegetation or undertake excavations unless the absence of invasive species has been confirmed. If invasive species are identified or suspected in any construction works area, works shall cease to await advice of the EcCoW or the Environmental Manager. A Method Statement with controls for invasive species shall be presented within the CEMP submitted to East Sussex Highways Authority PM.	Avoidance of spread of invasive plant or animal species.	Check that measures to avoid the spread of invasive species are functioning.	Delivery Partner - Env Manager	Vegetation Clearance
Nature Conservation	Invasive species	Amber	Nat233	Works <7m of invasive plant species	Areas of plant invasive species shall be marked out with an exclusion zone (7m radius) using barrier tape and / or spray paint to prevent cross contamination. Works within exclusion zone to be carried out in accordance with a Method Statement following best practice and in accordance with the Invasives Species Management Plan which advises that: - Any arisings from the top 3m should be left in situ, if permitted, as the soil could contain invasive plant species. - Where arisings from the top 3m cannot be left in situ, Delivery Partner to remove all soil and cuttings and dispose of via a licensed carrier to a licensed disposal site. Photographic evidence of exclusion zones being implemented shall be undertaken and details provided on request to the East Sussex Highways Authority PM.	Avoidance of spread of invasive plant species.	Check that exclusion zones have been marked out 7m from plant invasive species.	Delivery Partner - Construction Manager	Pre-Construction

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring and Inspections	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
Nature Conservation	Invasive species	Green	Nat234	Toolbox Talks	The Delivery Partner shall put in place a series of briefing/training sessions that detail the identification characteristics, mitigation and control measures and legal implications of the invasive species which are/may be present on site. Evidence that such toolbox talks have been delivered shall be recorded and details made available on request to the East Sussex Highways Authority PM.	Avoidance of spread of invasive plant or animal species.	Check that a record of attendance at toolbox talk on works where invasive species are present is on file.	Delivery Partner - Env Manager	During Construction
Nature Conservation	Invasive species	Red	Nat235	Disposal of invasive species	A plan shall be prepared as to how each invasive species stand shall be removed and disposed of. To bury invasive non-native plant waste without a permit, the conditions in ' <i>Treatment and Disposal of Invasive Non-Native Plants: RPS 178</i> ' must be met with the Management Plan being part of the CEMP. The EA shall be informed a week before Japanese knotweed is buried. Management by spraying with approved herbicides shall be subject to COSHH assessment and EA agreement and NE if in an SSSI. Off-site disposal of invasive plant waste shall only be via a registered waste carrier the waste being sent to an authorised landfill site or suitable disposal site following all appropriate procedures. The HEMP shall record the location of on-site or licenced disposal facilities and document procedures to prevent the spread of invasive species.	Avoidance of spread of invasive plant species.	Check that a Management Plan for invasive species has been prepared and that the location of on-site or offsite disposal is recorded in the HEMP along with a record of the EA being notified and Waste Management licences.	Delivery Partner - Env Manager	During Construction
Nature Conservation	Invasive species	Green	Nat236	Treatment of invasive species	Invasive species stands that do not have to be removed to facilitate the works shall be temporarily protected and their location recorded in the Handover Environmental Management Plan.	Avoidance of spread of invasive plant species.	Check measures to avoid encroachment on invasive species stands are effective.	Delivery Partner - Env Manager	During Construction

## ANNEX A8 – LANDSCAPE MANAGEMENT CLAUSES

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring and Inspections	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
Landscape	Reinstatement planting	Amber	Land007	Monitoring and maintenance	Appropriate inspection, monitoring and maintenance of landscaping and planting shall be provided as part of the Scheme to facilitate the effective establishment of vegetation and the effectiveness of the landscaping proposals. The Delivery Partner shall maintain this planting and rectify all planting defects for a two-year period from the date of completion of the works. Evidence of inspection, maintenance and rectifying planting defects shall be recorded, and details provided to the East Sussex Highways Authority PM on request.	Successful implementation of the landscaping scheme.	Deliver inspections, maintenance and rectification of defects and record management requirements.	Delivery Partner - Env Manager	Post-Construction
Landscape	Reinstatement planting	Red	Land008	Mitigation planting	All landscaping works shall be carried out in accordance with the approved planting strategy and in line with appropriate British Standards or other recognised codes of good practice unless otherwise amended following approval of an Evaluation of Change Register.	Successful implementation of the landscaping scheme.	Confirm compliance with Landscape Strategy and that any variation is recorded in the EoCR.	Delivery Partner - Construction Manager	During Construction
Landscape	Reinstatement planting	Amber	Land012	Replacement trees	Any trees intended to be retained which are felled or die as a consequence of works shall be replaced by the Delivery Partner. Where reasonably practicable, the size and species of replacement trees shall be selected to achieve to the greatest extent possible, a close resemblance of the original trees most effectively using locally occurring native species of local provenance and taking cognisance of any management plans for areas of woodland immediately adjacent. A record of inspections and any tree death/ damage/ replacements shall be maintained, and details provided upon request to the East Sussex Highways Authority PM.	Provision of replacement trees for those felled or that die due to the works.	Check that inspections and death/damage/replacement of trees are recorded.	Delivery Partner - Env Manager	During Construction
Landscape	Soil management	Green	Land013	Soil handling	The sourcing, testing, stripping, handling, storage and spreading of site-won and imported topsoil shall comply with current guidance such as BS 6031: 2009 Code of practice for earthworks (BSI, 2009); DEFRA 'Construction Code of Practice for the Sustainable Use of Soils on Construction Sites'. Further, imported topsoil shall comply with the BS 3882: 2007 Specification for topsoil and requirements for use (BSI, 2007). Evidence of compliance with relevant best practice shall be provided upon request to the East Sussex Highways Authority PM.	Successful soil handling practices such that ecological and landscape objectives are achieved.	Check that soil suitability is part of the input for the landscape specification.	Delivery Partner - Construction Manager	During Construction
Landscape	Retained vegetation	Amber	Land015	Pre-construction surveys	Prior to any vegetation clearance commencing, all areas of existing vegetation shall be assessed by a qualified landscape architect and the Ecological Clerk of Works (EcCoW) or Environmental Manager to confirm vegetation to be protected or reinstated following the construction works. Documented inspections shall be provided to the East Sussex Highways Authority PM on request.	Avoidance of impact upon birds and protected species.	Check inspections of protective measures prior to vegetation clearance are documented.	Delivery Partner - Planner	Vegetation Clearance
Landscape	Retained vegetation	Amber	Land016	Toolbox talks	Those responsible for undertaking vegetation clearance shall be notified by the Environmental Manager of those areas where vegetation clearance is not permitted prior to works commencing, this information shall be updated and re-issued as appropriate. The Delivery Partner shall, where practicable, exploit the use of GPS, wearable technology etc to enforce the requirements to protect key	Retention of vegetation not identified for clearance.	Check that evidence of briefings of site crew of the areas of retained vegetation is on file.	Delivery Partner - Env Manager	Vegetation Clearance

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring and Inspections	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
					vegetation and to log instances of infringement. Evidence that a toolbox talk/briefing for vegetation retention/reinstatement has been undertaken shall be recorded and details provided to the East Sussex Highways Authority PM on request.				
Landscape	Visual amenity	Amber	Land022	Construction compounds	In developing the layout for and operating site compounds, the Delivery Partner shall take into account sensitive receptors, screening vegetation and arrange the height of the offices, workshops, plant and storage elements so not to cause visual intrusion. Written records of consideration being given to the environmental impact of construction compounds upon neighbouring interests shall be provided to the East Sussex Highways Authority PM on request.	The layout of the construction compound(s) seeks to minimise impact upon neighbouring interests.	Check that visual intrusion has been minimised through the proposed site compound.	Delivery Partner - Construction Manager	Pre-Construction
Landscape	Visual amenity	Amber	Land023	Soil storage	Soil storage areas may be located and planted to provide a buffer to adjacent properties provided no adverse effects are caused to adjacent retained vegetation. Written records of discussions with landowners and occupiers/ owners of adjacent properties over soil storage areas are to be prepared and details shall be provided on request to the East Sussex Highways Authority PM.	The layout of the construction compound(s) seek to minimise impact upon neighbouring interests.	Check that local stakeholders are involved in discussions over soil storage areas.	Delivery Partner - Construction Manager	During Construction
Landscape	Visual amenity	Green	Land025	Construction compounds	The Delivery Partner shall install and maintain temporary suitable boundary fence that screens and secures a site as appropriate, the appearance of which shall be dependent on Local Authority requirements. Photographic evidence of the hoarding shall be made available upon request to the East Sussex Highways Authority PM.	The layout of the construction compound(s) seek to minimise impact upon neighbouring interests.	Inspections to confirm boundary fencing is secure and meets local authority requirements.	Delivery Partner - Construction Manager	Pre-Construction
Landscape	Retained vegetation	Amber	Land032	Tree survey	A tree survey meeting the requirements of BS 5837, or as otherwise agreed with the East Sussex Highways Authority PM, shall be undertaken by a suitably qualified Arboriculturalist to include recognition of tree pests and tree diseases as notified by DEFRA and be reported in an Arboricultural Report. As the health and condition of trees can change rapidly, so the status of the surveyed trees shall be checked on a basis commensurate with the level of risk and preferably on an annual basis. As necessary an updated Arboricultural Report shall be provided to the East Sussex Highways Authority PM. Evidence of how biosecurity considerations have influenced construction methods shall be provided to the East Sussex Highways Authority PM on request.	Maintenance of biosecurity.	Check that the tree survey and tree constraints plan influence the construction methods and vegetation to be protected.	Design Team	Pre-Construction
Landscape	Biosecurity	Amber	Land033	Vegetation clearance	Measures shall be taken to meet the biosecurity requirements advised by DEFRA/Forestry Commission insofar as works in the soft estate are concerned with identified tree pests/diseases being notified to the Forestry Commission (via the Tree Alert website). Method statements and evidence of implementation shall be provided to the East Sussex Highways Authority PM on request.	Maintenance of biosecurity.	Check that biosecurity measures are being successfully implemented.	Delivery Partner - Env Manager	Vegetation Clearance

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring and Inspections	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
Landscape	Retained vegetation	Red	Land034	Tree surgery	Only trees identified in the Arboricultural Assessment Report, Tree Constraints Plan and the Tree Removal and Retention Plan shall have any works undertaken to them. Where trees on neighbouring land require removal or other works, evidence shall be provided to the East Sussex Highways Authority PM of agreement with neighbours and justification as to why a working method is not available to preclude the need for such works. An Evaluation of Change Register shall be signed off by the client prior to the tree surgery being undertaken.	Minimisation of landscape impact.	Check evidence of agreement with landowners has been issued to the East Sussex Highways Authority PM before site works commence.	Delivery Partner - Env Manager	Vegetation Clearance
Landscape	Visual amenity	Amber	Land040	Vegetation clearance	The Delivery Partner shall install a visual screen fence of a sufficient height to screen non-HGV traffic until mitigation planting becomes sufficiently established to deliver effective screening where disturbance to neighbours is likely. Photographic evidence of the fencing shall be made available upon request to the East Sussex Highways Authority PM.	Provision of temporary screening to the satisfaction of affected neighbours.	Check that all visual screen fences are effective.	Delivery Partner - Env Manager	During Construction
Landscape	Construction lighting	Amber	Land051	Inspection of lighting	Where new or relocated lighting is introduced within 100m of residential dwellings or protected species, then an assessment shall be undertaken to confirm the absence of an adverse effect upon such dwellings or protected species within one week and corrective measures taken where adverse effects arise shall be reporting in the CEMP along with remedial actions. Site inspection records confirming correct orientation of construction lighting units shall be provided to the East Sussex Highways Authority PM on request.	Avoidance of impact on dwellings and protected species from construction lighting.	Confirm the CEMP contains a record of the impact and resolution where residential dwellings or protected species are affected.	Delivery Partner - Env Manager	During Construction
Landscape	Construction lighting	Green	Land052	Lighting period	All site works lighting (excluding construction compound) shall be extinguished in the period 17:00 to 07:00 unless extensions are agreed with the local planning authority in advance.	Reduce impact on dark skies and disturbance to local residents and wildlife.	Check that use of construction lighting conforms to agreement with local planning authority.	Delivery Partner - Env Manager	During Construction
Landscape	Construction lighting	Green	Land053	Lighting Strategy	A Construction Lighting Strategy shall be prepared by the Delivery Partner to demonstrate that the potential for adverse effects upon dwellings or protected species has been minimised through correct location and orientation of the lighting equipment. The Strategy shall be included in the CEMP and submitted to the local planning authority for approval prior to the commencement of works.	Avoidance of impact on dwellings and protected species from construction lighting.	Confirm that the CEMP contains the Lighting Strategy and is being complied with.	Delivery Partner - Env Manager	Pre-Construction
Landscape	Retained vegetation	Green	Land054	Tree Protection	All trees and scrub that are to be retained shall be protected in accordance with BS 5837 2012, the Arboricultural Assessment and Tree Removal and Retention Plan.	Minimisation of landscape impact.	Check that liaison occurs with the local planning authority over damage to any trees and scrub.	Delivery Partner - Env Manager	During Construction
Landscape	Retained vegetation	Green	Land055	Tree surgery	Only trees identified in the Arboricultural Assessment Report, Tree Removal and Retention Plan shall have any works undertaken to them as specified. Should tree surgery be required on trees not identified in the Report or Plan then an Evaluation of Change Register shall be submitted to the East Sussex Highways Authority PM for approval before tree surgery or additional scrub clearance works commence.	Minimisation of landscape impact.	Check that a client approved EoCR is within the CEMP.	Delivery Partner - Env Manager	During Construction
Landscape	Materials	Green	Land056	Timber fencing	Timber fencing as shown on the landscape general arrangement plan shall be made from locally sourced material.	Assist in fitting the scheme into the local landscape. Promotion of	Check source of timber used.	Delivery Partner - Env Manager	During Construction

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring and Inspections	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
						traditional techniques and crafts.			
Landscape	Materials	Amber	Land057	Retaining works	Retaining solutions and/or materials shall be selected to reduce visual and landscape impacts in areas of high landscape sensitivity or where visual receptors with high sensitivity are present. The retaining solutions and/or materials shall be constructed in accordance with the specification and clad with flint.	Design of retaining structures to be sympathetic to landscape sensitivities.	Confirm that retaining measures provided reduce visual impact in areas of high landscape sensitivity or high sensitivity receptors.	Delivery Partner - Construction Manager	During Construction
Landscape	Reinstatement planting	Amber	Land058	Seeding	Roadside grassland shall be established by the use of a green hay collected from the roadside verge in mid-July-August.	Recreate new verge grassland to fit with surrounding landscape.	Check establishment of seed.	Delivery Partner - Env Manager	Post-Construction
Landscape	Reinstatement planting	Amber	Land059	Seeding	Grassland within the SSSI to be established by the replacement of topsoils removed from the designated site with allowance for natural regeneration from the seedbank within the soils. Seeding may be reinforced by use of green hay taken from other parts of the designated site.	Recreate grassland within designated site.	Check establishment of seed.	Delivery Partner - Env Manager	Post-Construction
Landscape	Visual amenity	Green	Land060	Vegetation clearance	Litter shall be removed from all areas within the works site prior to the removal of any soils or vegetation particularly from any drainage ditches.	To prevent pollution or contamination of areas to be reinstated.	Check that all litter has been removed.	Delivery Partner - Env Manager	During Construction
Landscape	Visual amenity	Amber	Land061	Vegetation clearance	The Delivery Partner shall engage with landowners to advise them of if and when vegetation clearance would affect their land. Such discussions would consider options for replanting species or use of fences as applicable.	Engage with landowners to minimise deleterious impacts.	Check the CEMP contains a record of discussions and the agreement with landowners	Delivery Partner - Construction Manager	Pre-Construction
Landscape	Materials	Green	Land062	Cycle stands	Cycle stands shall be made of locally sourced timber.	Assist in fitting the scheme into the local landscape. Promotion of traditional techniques and crafts.	Check source of timber used.	Delivery Partner - Env Manager	During Construction
Landscape	Materials	Green	Land063	Seating	Seating shall be made of locally sourced timber.	Assist in fitting the scheme into the local landscape. Promotion of traditional techniques and crafts.	Check source of timber used.	Delivery Partner - Env Manager	During Construction
Landscape	Materials	Green	Land064	Timber	All timber used on the Scheme, including fencing, temporary hoardings and formwork shall be sourced in accordance with current Government procurement rules.	Timber sourced from sustainable woodland.	Check timber certification is in accordance with Government timber procurement rules.	Delivery Partner - Env Manager	During Construction

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring and Inspections	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
Landscape	Materials	Green	Land065	Walls	Gaps and open joints would be left in the flint and brick wall to provide for natural colonisation by invertebrates, plants, and potential roosting habitats for bats.	Reduce visual impact of walls and reflect the character or walls in the locality. Provision of habitat for macro-invertebrates, plants and bats.	Check for gaps and open joints during construction.	Delivery Partner - Env Manager	During Construction
Landscape	Materials	Green	Land066	Walls	Flint and brick walls shall be constructed in the same style as walls in the local area.	Reduce visual impact of walls and reflect the character or walls in the locality.	Provide trial panel to check correct appearance. Check completed walls achieve the required standard.	Delivery Partner - Construction Manager	During Construction
Landscape	Visual amenity	Amber	Land067	Soil storage	No planting shall take place on soil stockpiles since this would contaminate the seedbank with undesirable species required for reinstatement.	Avoid contamination of seedbank with undesirable species.	Check that no plant species become established in the stockpiles.	Delivery Partner - Env Manager	During Construction

# ANNEX A9 – HERITAGE MANAGEMENT CLAUSES

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring and Inspections	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
Cultural Heritage	Archaeological Finds	Green	Her001	Keeping of records	Records of all archaeological remains found and copies of any mitigation measures determined in consultation with the local authority archaeologists and/or Historic England throughout the works must be kept on site for the duration of the works. Records of finds shall be made available to the East Sussex Highways Authority PM on request.	Preservation of the archaeological record.	Check that records of finds and mitigation measures are on file.	Delivery Partner - Env Manager	During Construction
Cultural Heritage	Archaeological Finds	Amber	Her002	Works near heritage sites	No construction operations shall take place within 10m of discovered archaeological remains for a period of 14 days from the date of such notification unless otherwise agreed by East Sussex Highways Authority following consultation with Historic England and the relevant county archaeologist. Photographic evidence shall be provided of protection of archaeological remains before works recommence to East Sussex Highways Authority PM on request.	Preservation of the archaeological record.	Confirm that protective measures are photographed and are on file.	Delivery Partner - Construction Manager	During Construction
Cultural Heritage	Archaeological Finds	Red	Her003	Works near heritage sites	If East Sussex Highways Authority is of the view that the archaeological remains require further investigation, no construction operations shall take place within 10m of the remains until provision has been made for the further investigation and recording of the remains in accordance with details first submitted to, and approved by East Sussex Highways Authority following consultation with Historic England and the relevant county archaeologist as appropriate.	Preservation of the archaeological record.	Confirm archaeological investigations are approved by the county archaeologist and the East Sussex Highways Authority PM.	Delivery Partner - Construction Manager	During Construction
Cultural Heritage	Watching Brief	Amber	Her005	Works near heritage sites	Where works are likely to disturb previously un-excavated ground, archaeological watching briefs shall be undertaken during topsoil stripping and excavations. The archaeological watching briefs shall be followed by an appropriate programme of assessment, analysis and reporting. Documented archaeological brief by a qualified archaeologist shall be made available to the East Sussex Highways Authority PM on request.	Preservation of the archaeological record.	Check that an archaeological brief is on file.	Delivery Partner - Env Manager	During Construction
Cultural Heritage	Works Scheme Instruction	Red	Her015	Works near heritage sites	The specialist archaeological contractor shall prepare a Written Scheme of Investigation to outline the known and potential archaeological features and deposits supported with an exploration methodology that uses the latest, most appropriate and cost-effective archaeological techniques that meets the requirements of the County Archaeologist.	Protection of individual sites and areas by ensuring that appropriate mitigation measures are identified and implemented.	Check that the CEMP records evidence that the Written Scheme of Investigation has the approval of the Local Authority.	Delivery Partner - Env Manager	During Construction

## ANNEX A10 – ACOUSTICS MANAGEMENT CLAUSES

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring/Corrective Actions	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
Acoustics	Construction disturbance	Amber	NV003	Works <100m of dwellings	Noise generating equipment shall be sound reduced models fitted with acoustic enclosures, silencers or mufflers or screened maintained in good working order wherever practicable to comply with permissible noise levels set out in the relevant regulations. The specifications of plant used on site when within 100m of dwellings shall be provided to the East Sussex Highways Authority PM on request.	Minimise acoustic disturbance to residents.	Confirm evidence that the acoustic performance of plant in sensitive area complies with regulations is on file.	Delivery Partner - Construction Manager	Pre-construction
Acoustics	Construction disturbance	Amber	NV004	Works <100m of dwellings	Method statements, monitoring and reporting protocols shall demonstrate that all plant and equipment is properly maintained and operated in accordance with manufacturers' recommendations. Plant will be inspected on arrival to site. Details shall be provided to the East Sussex Highways Authority PM on request.	Minimise acoustic disturbance to residents.	Confirm evidence is on file that plant is properly maintained and inspected.	Delivery Partner - Env Manager	During Construction
Acoustics	Construction disturbance	Amber	NV005	Works <100m of dwellings	Method statements, monitoring and reporting protocols shall demonstrate that machines in intermittent use will be shut down in intervening periods of non-use or, where this is impracticable, they will be throttled down to a minimum. There shall be no idling for a period more than 10 minutes. Details shall be provided to the East Sussex Highways Authority PM on request.	Minimise acoustic disturbance to residents.	Confirm that records of inspections of noise generating plant in sensitive areas use are on file.	Delivery Partner - Env Manager	Pre-construction
Acoustics	Construction disturbance	Red	NV006	Works <100m of dwellings	Where static items of plant are likely to generate high noise levels, portable noise screens shall be deployed to provide additional noise attenuation when working close to residential properties such that the SOAEL values reported in the environmental assessment are not exceeded. Photographic evidence of portable noise screens being used shall be recorded and details provided to East Sussex Highways Authority within three days of plant being deployed.	Minimise acoustic disturbance to residents.	Check that photographs of correctly deployed temporary noise screens are provided to East Sussex Highways Authority PM.	Delivery Partner - Construction Manager	During Construction
Acoustics	Construction disturbance	Amber	NV008	Works <100m of dwellings	The scheduled works shall be undertaken in accordance with the approved noise management scheme for the task. Records of inspections shall be provided to the East Sussex Highways Authority PM on request.	Minimise acoustic disturbance to residents.	Confirm that a record of inspections are on file.	Delivery Partner - Env Manager	During Construction
Acoustics	Construction disturbance	Amber	NV009	Works <100m of dwellings	The layout of the individual works in noise sensitive locations shall be such that any noise impact at nearby sensitive properties is minimised, hence static plant shall be located so as to optimise screening and/or distance attenuation to occupied residential properties. Evidence demonstrating how nearby residential properties were considered in the location of static plant shall be provided to the East Sussex Highways Authority PM on request.	Minimise acoustic disturbance to residents.	Confirm that a record of inspections are on file.	Delivery Partner - Construction Manager	During Construction
Acoustics	Construction disturbance	Red	NV012	Vibration	Methods of construction and plant shall be selected so as to minimise noise and vibration and reduce the use of percussive and vibratory equipment, particularly for night-time working. The CEMP shall document the measures to be taken to minimise disturbance caused by use of piling activities.	Minimise disturbance caused by use of piling activities.	Check that working method and plant selected minimises vibration caused by piling.	Delivery Partner - Construction Manager	Pre-construction
Acoustics	Construction disturbance	Amber	NV013	Vibration	The Delivery Partner shall avoid percussive piling, or where this is not possible the Delivery Partner shall monitor noise and vibration levels where properties are located less than 20m from the piling works. The results of vibration monitoring shall be provided to the East Sussex Highways Authority PM on request.	Minimise disturbance caused by use of piling activities.	Check results of noise and vibration monitoring are on file for most sensitive locations.	Delivery Partner - Construction Manager	During Construction

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring/Corrective Actions	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
Acoustics	Construction disturbance	Amber	NV014	Works <100m of dwellings	Hoardings, portable barriers and acoustic sheds shall be erected so that the SOAEL values reported in the environmental assessment are not exceeded by noisy construction activities unless safety or acoustic reasons preclude their use. Photographic evidence of measures to meet SOAEL values shall be provided to the East Sussex Highways Authority PM on request.	Minimise acoustic disturbance to residents.	Confirm that a photographic record of inspections are on file.	Delivery Partner - Env Manager	During Construction
Acoustics	Construction disturbance	Red	NV017	Construction compound	Method statements, monitoring and reporting protocols shall demonstrate that no construction vehicles will wait or queue on public highways (excluding the scheme) or in the vicinity of site compounds with engines running for periods in excess of 10 minutes except in the case of emergencies or breakdowns. Details of the management of construction traffic on the public highway shall be included within the Traffic Management Plan submitted to the East Sussex Highways Authority PM prior to the start of works.	Minimise acoustic disturbance to residents.	Confirm that construction traffic is managed to avoid queues on public highways.	Delivery Partner - Env Manager	During Construction
Acoustics	Construction disturbance	Amber	NV018	Construction compound	Where practicable, works with the potential to cause disturbance (including deliveries to site) shall be programmed such that the requirement for working outside of normal working hours is minimised. Evidence of agreed core working hours shall be presented in the CEMP with a process for agreeing any extensions with the local authority.	Minimise acoustic disturbance to residents.	Check that the EMP documents working hours agreed with local authorities.	Delivery Partner - Construction Manager	During Construction
Acoustics	Construction disturbance	Red	NV019	Works duration	Works with a risk of causing disturbance under BS 5228 shall be limited to no more than 10 working days in any 15 consecutive days and shall not exceed 40 days in any 6 consecutive months unless appropriate mitigation measures have been specified. The CEMP shall document those works at specific locations where there is a risk of BS 5228 not being met and propose mitigation measures for approval.	Minimise acoustic disturbance to residents.	Confirm requirements under BS 5228 are not breached to East Sussex Highways Authority PM.	Delivery Partner - Planner	During Construction
Acoustics	Noise mitigation	Red	NV022	Method statements	A Noise and Vibration Management Plan (NVMP) and Method Statements which apply the principles of S72 of Control of Pollution Act (CoPA) 1974, and good practice under BS 5228-1: Noise (BSI, 2014a) and BS 5228-2:Vibration (BSI, 2014b)., monitoring and reporting protocols shall demonstrate to East Sussex Highways Authority that no significant impact shall result from noise and vibration both within the scheme and along diversion routes.	Minimise acoustic disturbance to residents.	Check a noise and vibration Method Statement of how BPM is applied is wthin the EMP.	Delivery Partner - Env Manager	During Construction
Acoustics	Noise monitoring	Red	NV027	Reporting	Where the local authority requires noise monitoring, the Delivery Partner shall undertake and report noise and vibration monitoring as agreed with the local authority. Monitoring sites shall be established at a range of receptors to establish that the average noise levels do not exceed pre-existing ambient noise levels. The results shall be provided to the East Sussex Highways Authority PM within one month of the survey in an Excel spreadsheet format.	Compliance with local authority noise monitoring requirements.	Check monitoring to confirm compliance with applicable S61 is provided to East Sussex Highways Authority PM.	Delivery Partner - Env Manager	During Construction
Acoustics	Noise mitigation	Green	NV029	Section 61	If required following consultation with the local authority, an application under Section 61 of The Control of Pollution Act 1974 shall be made to the relevant Local Authority Environmental Health Department. Evidence of measures taken to comply with an applicable S61 consent shall be provided to the East Sussex Highways Authority PM on request.	Minimise acoustic disturbance to residents.	Confirm evidence of measures taken under applicable S61 are on file.	Delivery Partner - Env Manager	Pre- construction

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring/Corrective Actions	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
Acoustics	Construction disturbance	Green	NV032	Vibration	The Delivery Partner shall establish criteria, controls and working methods, taking account of guidance in BS 5228-1 and BS 5228-2, ISO 4866: Mechanical vibration and shock, vibration of fixed structures. Guidelines for the measurement of vibrations and evaluation of their effects on structures and BS 7385- 2 Evaluation and measurement for vibration in buildings – Part 2: Guide to damage levels from groundborne vibration 1993. Best practical means shall be used to control vibration levels so that the PPV thresholds at sensitive receptors are not exceeded as a result of the works. The CEMP shall establish the locations and means by which construction vibration is to be managed.	Minimise impact of vibration upon all receptors identified in the environmental assessment.	Check that vibration sensitive locations are identified and how they are to be managed are within the EMP.	Delivery Partner - Env Manager	Pre-construction
Acoustics	Construction disturbance	Red	NV033	Vibration	Should predicted vibration levels exceed 1mm/s component PPV at occupied residential buildings, or 3mm/s PPV at occupied commercial buildings, a detailed appraisal shall be carried out in accordance with the methods in BS 5228-2. If this identifies that people occupying buildings may experience levels in excess of the threshold values, those potentially affected shall be notified as soon as practicable in advance of the works. The notification shall describe the nature and duration of the works and any associated proposals for vibration monitoring. Details of those properties which potentially would experience elevated levels of vibration shall be notified to the East Sussex Highways Authority PM before contact is made with the occupiers.	Minimise impact of vibration upon all receptors identified in the environmental assessment.	Confirm that East Sussex Highways Authority PM is notified of properties subject to elevated vibration levels before contact made with occupiers.	Delivery Partner - Env Manager	During Construction
Acoustics	Construction disturbance	Red	NV034	Vibration	Where works are predicted to generate a PPV above 10mm/s then the local authority shall be consulted and when there is no reasonable or practicable means to reduce predicted or measured vibration then the Delivery Partner shall: a) agree monitoring for vibration; b) consult occupiers of properties about condition surveys and any consequent actions; as well as reasonable and practicable mitigation for the occupants. Details of those properties which potentially would experience elevated levels of vibration shall be notified to the East Sussex Highways Authority PM before contact is made with the occupiers.	Minimise impact of vibration upon all receptors identified in the environmental assessment.	Confirm that PM is notified of properties subject to elevated vibration levels before contact made with occupiers.	Delivery Partner - Env Manager	During Construction
Acoustics	Construction disturbance	Red	NV036	Works <100m of dwellings	The Method Statement in the CEMP shall detail the forecast construction noise levels based upon the sound power level of the proposed plant to achieve a noise level at the facades of key receptors no greater than that forecast within the environmental assessment. The Method Statement shall document the maximum noise levels and duration that key receptors would experience during the construction works.	Minimise impact of vibration upon all receptors identified in the environmental assessment.	Check that the maximum noise levels are documented for most sensitive receptors.	Delivery Partner - Construction Manager	Pre-construction
Acoustics	Construction disturbance	Red	NV043	Works <100m of dwellings	Where piling activities have the potential to result in noise levels that would be above or equal to SOAEL and below SOAEL +5dB, then a method of working to avoid the chance of piling for 10 days in 15 at the same place would be followed to avoid a significant impact. The Delivery Partner shall document and provide evidence to the East Sussex Highways Authority PM of those locations where a specific working method would be required to prevent the occurrence of a significant effect.	Minimise impact of vibration upon all receptors identified in the environmental assessment.	Inspections to confirm adherence to working method.	Delivery Partner - Construction Manager	Pre-construction
Acoustics	Construction disturbance	Amber	NV045	Piling operations	Percussive piling shall not be undertaken 1 hour prior to dusk or 16:30 whichever is the earliest to reduce disturbance to residents and to migratory sea trout and European eel.	Minimise impact of vibration upon all receptors identified in the environmental assessment.	Record timings of percussive activities for client inspection.	Delivery Partner - Planner	During Construction
Acoustics	Noise mitigation	Green	NV046	Health protection	Where high levels of noise are likely to be a hazard to site staff, prominent warning notices shall be displayed with ear protectors being available for the workforce and site visitors.	Avoid deleterious impacts on site staff and visitors due to noisy works.	Record of photographs of signs displayed at work site and construction compound.	Delivery Partner - Env Manager	During Construction

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring/Corrective Actions	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
Acoustics	Noise mitigation	Amber	NV047	Compressors	All compressors would be 'sound reduced' models fitted with properly lined and sealed acoustic covers to be kept closed while in use. All ancillary pneumatic percussive tools would be fitted with mufflers or silences of the type recommended by the manufacturer.	Minimise acoustic disturbance to residents.	Confirm that copressors are 'sound reduced' models and record model in CEMP.	Delivery Partner - Construction Manager	During Construction
Acoustics	Noise mitigation	Green	NV048	Tool box talks	All site staff and operatives would be briefed during tool box talks on the requirements to minimise nuisance to both human and ecological receptors from site activities.	Minimise deleterious impacts to wildlife and humans.	Record attendance and agenda of tool box talks within the CEMP.	Delivery Partner - Env Manager	During Construction
Acoustics	Noise mitigation	Green	NV049	Site hoarding	A solid fence/hoarding would be provided along the boundary of the construction compound and the works site to minimise the impact of site noise on neighbouring dwellings.	Minimise acoustic disturbance to residents.	Record provision of solid fence/hoarding around compound and works site.	Delivery Partner - Env Manager	Pre- construction
Acoustics	Noise mitigation	Green	NV050	Site cabins	Position site cabins to minimise the impact of noise generating activities on neighbouring dwellings.	Minimise acoustic disturbance to residents.	Confirm proposed layout of the construction compound locates cabins so as to attenuate site noise.	Delivery Partner - Env Manager	Pre- construction
Acoustics	Construction disturbance	Amber	NV051	Piling operations	Continuous flight auger (CFA) piling would be used rather than hammered or vibratory piling unless agreed with the local authority.	Minimise acoustic disturbance to residents.	Record all communications over piling strategy with the local authority and record in the CEMP.	Delivery Partner - Construction Manager	Pre- construction
Acoustics	Noise mitigation	Green	NV052	Tourists	Where practicable, works with the potential to cause disturbance shall be sequenced to occur outwith the peak tourist season or are of a duration or timing that is acceptable to the Local Environmental Health Department.	Minimise acoustic disturbance to tourists and visitors.	Record details of the agreement with the Local Environmental Health Department within the CEMP.	Delivery Partner - Env Manager	Pre- construction
Acoustics	Construction disturbance	Green	NV053	Vibration	Soil compaction plant shall be set to a low amplitude setting or small plant shall be used when operating within 30m of sensitive receptors.	Minimise acoustic disturbance to residents.	Check that equipment is set to the correct setting when within 30m of sensitive receptors.	Delivery Partner - Env Manager	During Construction
Acoustics	Construction disturbance	Amber	NV054	Piling operations	Piling operations shall be constrained to periods agreed with the Local Environmental Health Department as advised by the Environment Agency should migratory fish be at risk. The agreed periods shall be recorded in the Piling Method Statement which shall be included in the CEMP.	Minimise impact of vibration upon all receptors identified in the environmental assessment.	Check that the Piling Method Statement is complied with.	Delivery Partner - Env Manager	During Construction

## ANNEX A11 – WATER MANAGEMENT CLAUSES

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring and Inspections	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
Water	Consents	Red	Wat003	Dewatering / Excavations	Where dewatering activities are required, early engagement with the regulatory authorities shall be undertaken to agree proposed solutions and to ensure solutions and controls are compliant with the current Regulatory Position Statement (RPS) for temporary dewatering. Applications for appropriate licences will be prepared and lodged with the regulatory authority, with licence secured prior to discharging any water generated via dewatering activities. Minutes of meeting with Environment Agency regarding water activities with clearly identified decisions/ agreements between the parties shall be provided to the East Sussex Highways Authority PM.	Protection of groundwater from the spread of contaminants.	Check meeting notes with Environment Agency are provided to East Sussex Highways Authority PM. Check for compliance with abstraction licence restrictions.	Delivery Partner - Env Manager	Pre-Construction
Water	Consents	Green	Wat004	Water abstraction	Any proposed abstractions (e.g. for batching plants, wheel washing etc.) whether surface water or groundwater if in excess of 20m3/day must be supported by an abstraction licence. The CEMP shall record where abstractions for dewatering may need an abstraction licence. A copy of an abstraction licence shall be provided in the CEMP, while a copy of the abstraction monitoring log shall be provided to the East Sussex Highways Authority PM on request.	Ensure that abstractions are subject to appropriate controls.	Confirm abstraction licence is copied to CEMP before dewatering commences.	Delivery Partner - Env Manager	Pre-Construction
Water	Consents	Red	Wat005	Works <8m of a watercourse	Flood risk activity permits may be required for works near Main Rivers, e.g. construction of outfalls and must be kept on site at all times. Consents under the Water Resources Act 1991 and Land Drainage Act 1991 (incorporated into Environmental Permits under Environmental Permitting regulations for Main Rivers) for works on, over or within a main river or ordinary watercourse respectively, including temporary works shall be in place. Consultation with the EA and/or Lead Local Flood Authorities/Internal Drainage Board shall be undertaken. Appropriate consents for works within 8m of watercourses shall be included in the CEMP and available for onsite inspection.	Ensure that appropriate controls are in place to protect rivers and floodplains.	Check need for FRAPs has been addressed and consents copied to CEMP before works at watercourses commence. Monitor to ensure works close to watercourses are compliant with permit conditions.	Delivery Partner - Env Manager	Pre-Construction
Water	Pollution Control	Green	Wat006	Construction compounds	Liaison with the Environment Agency and/or Local Water Authority shall be undertaken to determine whether discharges from construction compound areas require discharge consent. Consents are to be included in the CEMP with minutes of meeting with Environment Agency shall be provided to the East Sussex Highways Authority PM on request.	Absence of pollution incidents.	Check need for discharge consents from construction compounds and record in CEMP before discharges commence. Monitor to demonstrate compliance with discharge consent.	Delivery Partner - Env Manager	Pre-Construction
Water	Flood Risk	Green	Wat007	Works in the flood plain	The Delivery Partner shall avoid any increase in flood risk by taking appropriate measures, such as keeping watercourses clear of obstructions and debris to reduce blockage risk. Suitable access and safe refuges shall be identified for use in the event of a flood and these will be communicated to all site personnel as part of the Contractor's site induction. Appropriate maintenance access will be made available to watercourses and associated flood risk structures, if required. A record of site inspections of watercourses shall be collated and details shall be made available to the East Sussex Highways Authority PM upon request.	Avoid increase in flood risk.	Inspections to be undertaken to ensure absence of obstructions and debris giving rise to increased flood risk.	Delivery Partner - Env Manager	During Construction
Water	Flood Risk	Amber	Wat008	Works in the flood plain	The Delivery Partner shall consider potential flooding effects when planning sites and storing materials consulting with relevant regulatory bodies in flood plains and make appropriate use of the EA's Floodline flood warning service. Contact details shall be provided to all site personnel as part of their site induction.	Avoid increase in flood risk.	Confirm whether materials are to be stored within a floodplain.	Delivery Partner - Env Manager	Pre-Construction

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring and Inspections	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
Water	Flood Risk	Green	Wat009	Works in the flood plain	An Emergency Flood Response Plan and Procedures shall be provided in the CEMP to include measures to protect the works, plant and workforce within the compound, rescue and recovery areas in the event of a flood.	Provide for health and safety of workforce in the event of a flood.	Inspect work plans to confirm outwith the flood zone. Confirm presence of an Emergency Flood Response Plan is within the CEMP.	Delivery Partner - Env Manager	Pre-Construction
Water	Flood Risk	Amber	Wat010	Works <16m of a designated tidal river	Consultation with the Environment Agency must be undertaken where any of the Scheme lies within 16m of a designated tidal river. Minutes of Meetings with the Environment Agency shall be provided to the East Sussex Highways Authority PM on request.	Avoidance of risks to a Main River.	Check meeting notes with are provided to the East Sussex Highways Authority PM on request.	Delivery Partner - Env Manager	Pre- construction
Water	Flood Risk	Amber	Wat011	Works <8m of a watercourse	Consultation with the Environment Agency and/or Lead Local Flood Authorities/Internal Drainage Board will be undertaken where any of the Scheme lies within 8m of a designated main river or ordinary watercourse. Minutes of Meetings with the Environment Agency shall be provided to the East Sussex Highways Authority PM on request.	Avoidance of risks to a watercourse.	Check meeting notes with are provided to the PM on request.	Delivery Partner - Env Manager	Pre- Construction
Water	Flood Risk	Amber	Wat013	Construction compounds	Where feasible, compounds and storage areas shall be located outside of Flood Zones 2 and 3. Justification for the location of site compounds and storage areas within Flood Zones 2 and 3 shall be provided to the East Sussex Highways Authority PM on request.	Avoidance of pollution should flooding occur.	Check justification for compound and storage areas being within Flood Zones 2 and 3 is on file.	Delivery Partner Project Manager	Pre- Construction
Water	Flood Risk	Amber	Wat015	Works within Flood Zone 3	No scheduled works within Flood Zone 3 shall commence until details of the works including any flood storage compensation works, have been agreed with the relevant statutory authorities. Minutes of Meetings with the Environment Agency shall be taken and details provided to the East Sussex Highways Authority PM on request.	Absence of flood plain incidents.	Check meeting notes with Environment Agency on flood compensation are provided to the East Sussex Highways Authority PM on request.	Delivery Partner - Construction Manager	Pre- Construction
Water	Pollution Control	Red	Wat020	Reporting	A surface water and/or groundwater Pollution Control Plan and Emergency Response Plan taking into account standard best practices shall be put in place for works that could affect aquifers or watercourses. The Plans shall be included in the CEMP.	Absence of pollution incidents.	Confirm that a Water Management Plan is presented within the CEMP and its requirements observed.	Delivery Partner - Env Manager	Pre- Construction
Water	Pollution Control	Green	Wat021	Hydrocarbon spillages	Pollution control measures that apply in relation to storage of any oil based materials (eg fuel storage) shall be defined in the CEMP. Stationary plant used by the Delivery Partner shall be fitted with measures to retain any leakage of oil or fuel. Mobile plant shall be refuelled in designated areas with a sealed drainage system.	Absence of pollution incidents.	Confirm Water Management Plan addresses hydrocarbon pollution risk.	Delivery Partner - Env Manager	Pre- Construction
Water	Pollution Control	Green	Wat022	Runoff control	The Delivery Partner shall provide a construction site drainage system to prevent pollution of surface or groundwaters and describe the approach within the Water Management Plan which shall be included in the CEMP.	Absence of pollution incidents.	Check that the Water Management Plan details pollution control measures and is included in the CEMP.	Delivery Partner - Construction Manager	Pre- Construction
Water	Pollution Control	Green	Wat023	Runoff control	The Delivery Partner shall consult with the statutory authorities regarding the measures to be implemented to contain and manage surface water runoff from the scheme construction and requirements for water quality monitoring of watercourses or groundwater potentially affected by construction works or discharge of surface water run-off. Minutes of Meetings with the Environment Agency shall be provided to the East Sussex Highways Authority PM on request.	Absence of pollution incidents.	Check meeting notes with Environment Agency are on file.	Delivery Partner - Env Manager	Pre- Construction
Water	Pollution Control	Green	Wat026	Road sweepings	A roadsweeper arisings disposal method shall be established before construction starts and any dewatering of the arisings shall be discussed with the regulator. Minutes of meetings with the Environment Agency shall be provided to the East Sussex Highways Authority PM on request.	Absence of pollution incidents.	Check meeting notes with Environment Agency are on file.	Delivery Partner - Env Manager	Pre- Construction

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring and Inspections	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
Water	Pollution Control	Green	Wat027	Site security	The Delivery Partner shall ensure that the site(s) has effective protection against vandalism/ theft to prevent damage which may lead to a release of materials/chemicals which could cause pollution to ground/watercourse and/or drains. Photographic evidence of security provision shall be provided to the East Sussex Highways Authority PM on request.	Absence of pollution incidents.	Check photographic evidence of security measures to protect against vandalism with pollution risk is on file.	Delivery Partner Works Manager	During Construction
Water	Pollution Control	Green	Wat028	Site documentation	A Control of Substances Hazardous to Health ("COSHH") Register must be maintained by the Contractor for each site compound and updated throughout the works as required. The COSHH register shall be provided to the East Sussex Highways Authority PM on request.	Absence of pollution incidents.	Check that COSHH is regularly reviewed.	Delivery Partner - Env Manager	During Construction
Water	Pollution Control	Green	Wat029	Site documentation	Copies of the Site Compound Plan (reviewed at a minimum 6 month frequency) shall be kept on site and the plan is to clearly indicate where potentially polluting substances and COSHH stores are to be located. Evidence reviews of the Site Compound Plan and updates shall be provided to the East Sussex Highways Authority PM on request.	Absence of pollution incidents.	Check that Site Compound Plan is periodically reviewed.	Delivery Partner - Env Manager	During Construction
Water	Pollution Control	Green	Wat038	Runoff control	The Water Management Plan shall document the measures to be taken to minimise the creation and release of contaminated silts and sediment into the surrounding watercourses and surface water ponds. The Water Management Plan shall record those measures to be taken to address periods of intense rainfall which shall be described in the CEMP.	Absence of pollution incidents.	Confirm that a Water Management Plan is presented within the CEMP.	Delivery Partner - Env Manager	Pre-Construction
Water	Pollution Control	Green	Wat039	Monitoring	Visual assessments for oil and silt shall be undertaken at watercourses at risk of pollution during scheme construction. Evidence that inspections of watercourses at risk is being undertaken shall be provided to the East Sussex Highways Authority PM on request.	Absence of pollution incidents.	Check that evidence of monitoring of at risk watercourse. Maintain and retain on-site records.	Delivery Partner - Env Manager	During Construction
Water	Pollution Control	Red	Wat040	Monitoring	Water quality monitoring, using portable field indicator equipment where necessary, shall be undertaken at high sensitivity watercourses at risk of pollution during scheme construction. Evidence of monitoring shall be provided to the East Sussex Highways Authority PM on a weekly basis.	Absence of pollution incidents.	Check that evidence of surface water monitoring is being maintained on site and reported to the East Sussex Highways Authority PM on a weekly basis.	Delivery Partner - Env Manager	During Construction
Water	Pollution Control	Red	Wat042	Monitoring	A proposed suite of determinants to be monitored and the monitoring locations are to be agreed with East Sussex Highways Authority and the regulatory authorities. Details shall be documented in the CEMP.	Absence of pollution incidents.	Check that the monitoring strategy for groundwater is within the CEMP.	Delivery Partner - Env Manager	Pre-Construction
Water	Pollution Control	Green	Wat043	Monitoring	The regulatory authorities shall be consulted with respect to the water monitoring plans. Minutes of meetings with the regulatory authority shall be provided to the East Sussex Highways Authority PM on request.	Absence of pollution incidents.	Check meeting notes with regulatory authority are on file.	Delivery Partner - Env Manager	Pre-Construction
Water	Pollution Control	Green	Wat044	Runoff control	The Water Management Plan shall include measures to ensure that no pollution pathways are created between the construction sites and watercourses via overland flow during high intensity rainfall events. Measures may include minimising the period that subsoil is exposed, use of cut-off trenches and sediment ponds as well as retention of vegetation along watercourses to aid attenuation including adoption of relevant sections of BS 6031:2009 Code of Practice for Earthworks.	Absence of pollution incidents.	Check that the Water Management Plan details pollution control measures.	Delivery Partner - Env Manager	Pre-Construction

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring and Inspections	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
Water	Pollution Control	Green	Wat045	Construction compounds	Construction compounds shall incorporate a closed drainage system with pollution control measures. The Water Management Plan shall detail the pollution control measures within the CEMP.	Absence of pollution incidents.	Check that the Water Management Plan details pollution control measures.	Delivery Partner - Env Manager	Pre-Construction
Water	Groundwater	Red	Wat047	Dewatering / Excavations	The design of key below ground structures, including retaining walls, piles, cable ducts, and also the excavation and widening of embankments and cuttings shall minimise alteration of the hydraulic properties of the surrounding ground (including the creation of flow pathways), intersection of groundwater flow or the creation of groundwater dams. Evidence shall be provided of the manner in which hydrological risks have been minimised during the design of below ground structures to the East Sussex Highways Authority PM.	Disruption of groundwater flow avoided.	Check that evidence of minimising hydrological risks are provided to the East Sussex Highways Authority PM.	Design Team	Pre-Construction
Water	Consumption	Amber	Wat051	Water consumption	The selection of construction materials shall identify, assess and incorporate measures to reduce embodied water consumption where commercially viable alternatives exist. The CEMP shall record opportunities and demonstrate the steps taken to reduce embodied water consumption as well as that used during construction.	Reduce embodied water consumption and indirect carbon emissions.	Check that material selection practice considers reduced water consumption and is documented.	Delivery Partner - Construction Manager	Pre-Construction
Water	Pollution Control	Green	Wat052	Toolbox talk	The Delivery Partner shall take note of advice and recommendations within the CIRIA document C741 (2015, 4th Edition) Environmental Good Practice on Site guide, and C532 (2001) Control of water pollution from construction sites – Guidance for consultants and Delivery Partners. Spill Kits should be provided, and training given in their use within toolbox talks.	Avoidance of pollution to a main river.	Check that evidence of training on CIRIA C741 and C532 is on file.	Delivery Partner - Construction Manager	During Construction
Water	Pollution Control	Green	Wat054	Hydrocarbon spillages	Mobile plant shall only be refuelled in designated areas where the risk of contamination to watercourses (including mains and foul sewers) can be minimised. Evidence of inspections to confirm refuelling takes place only in designated areas shall be provided to the East Sussex Highways Authority PM on request.	Absence of pollution incidents.	Inspections to ensure compliance with the Water Management Plan.	Delivery Partner - Construction Manager	Pre-Construction
Water	Consents	Amber	Wat055	Ground investigation	Where it is not possible to comply with the Environment Agency Regulatory Position Statement then site investigation boreholes and temporary trial pits within a main river floodplain must be reviewed in accordance with SR2015 No 36. This requires that boreholes shall not be on or within 5m of the bank of a main river, culvert or remote defence, or within 8m of a flood defence or river control work. Where these requirements are not met then a Bespoke Permit shall be sought.	Absence of pollution incidents.	Check that EA Standard Rule SR2015 No 36 or subsequent revision is complied with.	Delivery Partner - Construction Manager	Pre-Construction
Water	Pollution Control	Red	Wat056	Reporting	Water pollution incidents with an impact beyond the site boundary are to be reported to the Environment Agency Pollution Incident Hotline within 4 hours where there is a major risk to the environment or people over an extended duration or frequency. All water pollution incidents with an impact beyond the site boundary shall be recorded in the CEMP along with a record of notification to the East Sussex Highways Authority or other applicable organisations.	Rapid reporting of pollution incidents.	Check that the CEMP retains a record of pollution incidents.	Delivery Partner - Env Manager	During Construction
Water	Consents	Amber	Wat057	Consultations	Consultation would be held with the Environment Agency and/or Local Flood Authority to determine where environmental permits would be required. The Water Management Plan shall record the outcome of consultations with the Environment Agency/Local Flood Authority detailing the circumstances where permits would be required.	Avoidance of adverse effects on local hydrological conditions.	Check that the Water Management Plan details permitting requirements.	Delivery Partner - Construction Manager	Pre-Construction

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring and Inspections	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
Water	Pollution Control	Amber	Wat058	Control measures	Method Statements shall include [but not be limited to] pollution control measures, systems and details of the isolation of existing surface water drainage systems from risks of pollution. Photographic evidence of pollution control measures in operation shall be provided to the East Sussex Highways Authority PM on request.	Absence of pollution incidents.	Check for inclusion of photographic evidence in CEMP.	Delivery Partner - Env Manager	During Construction
Water	Pollution Control	Amber	Wat059	Control measures	Appropriately sized settlement / attenuation ponds shall be provided to accommodate surface water runoff from the construction site, compounds and storage areas in the context of high intensity rainfall events. The Water Management Plan shall record the location of the settlement / attenuation ponds along with justification for their size.	Absence of pollution incidents.	Check that the Water Management Plan details the provision of settlement / attenuation ponds.	Delivery Partner - Construction Manager	Pre-Construction
Water	Pollution Control	Green	Wat060	Runoff control	The passage of plant and works shall remain at least 10m from both Main Rivers and Ordinary Watercourses unless previously agreed with the regulatory body via a Method Statement. Where this cannot be achieved then specific measures should be defined that are proportionate to the risk and sensitivity of the waterbody. The Water Management Plan shall record the measures to be taken to avoid sediment release for each waterbody where plant and works would be within 10m.	Absence of pollution incidents.	Check that the Water Management Plan details protective measures for those waterbodies within 10m of the works.	Delivery Partner - Env Manager	Pre-Construction
Water	Pollution Control	Green	Wat061	Vehicle cleaning	Method Statements shall state that there is to be no washing of vehicles shall take place within 10m of a watercourse.	Avoid contamination watercourses by washwaters.	Inspections to ensure compliance with the Water Management Plan.	Delivery Partner - Env Manager	During Construction
Water	Pollution Control	Amber	Wat062	Concrete washings	Method Statements shall identify those areas where concrete mixing and wash areas are to be provided with a wash water collection system and demonstrate that they would not be within 10m of a watercourse. The location of concrete mixing and wash areas shall be recorded in the CEMP.	Avoid contamination watercourses by washwaters.	Inspections to ensure compliance with the Water Management Plan.	Delivery Partner - Env Manager	Pre-Construction
Water	Consumption	Amber	Wat063	Water consumption	Measures shall be adopted to minimise use of mains water such as through grey water harvesting and settlement systems to re-use of water within construction compounds. The Water Management Plan shall record the measures to be reduce the use of mains water during construction.	Minimise water use and indirectly reduce carbon emissions.	Check that the Water Management Plan details measures to minimise use of mains water.	Delivery Partner - Env Manager	Pre-Construction
Water	Pollution Control	Red	Wat064	Contaminated land	Method Statements shall specify that potentially contaminated materials would be segregated and stored in an impervious bunded area to prevent contamination of groundwater or land. Known or suspected contaminated stockpiles would be tested to ensure that no cross-contamination results. The Materials Management Plan and Water Management Plans shall evidence an integrated approach to the avoidance of contamination.	Absence of pollution incidents.	Check that the Materials Management Plan and Water Management Plans present an integrated approach.	Delivery Partner - Env Manager	Pre-Construction
Water	Groundwater	Red	Wat070	Piling operations	Once the earthworks design and specification for sheet piling have been completed, then the Groundwater Risk Assessment would be updated and issued to the Environment Agency. Evidence would be provided within the CEMP recording that a revised Groundwater Risk Assessment had been issued to the Environment Agency.	Disruption of groundwater flow avoided.	Check that a revised Groundwater Risk Assessment is issued to the Environment Agency.	Delivery Partner - Env Manager	Pre-Construction
Water	Groundwater	Red	Wat071	Piling operations	Characterisation of the groundwater level would be undertaken for those sections of sheet pile that exceed 25m lengths or a distance exceeding 150m containing multiple sheet pile sections. Evidence would be provided within the CEMP recording the groundwater level for the applicable sections of sheet piling.	Disruption of groundwater flow avoided.	Check that the CEMP provides details of the groundwater level at relevant sections of sheet piling.	Delivery Partner - Construction Manager	Pre-Construction
Water	Consents	Amber	Wat081	Works in a main river	Where any works are to be undertaken within a Main River then the relevant consents shall be sought from the Environment Agency or Marine Management Organisation as appropriate prior to installation. A copy of the consent shall be placed in the CEMP.	Avoidance of pollution to a Main River and/or adverse effects upon riverine hydrology.	Check that consent is in place prior to the commencement of works within a Main River.	Delivery Partner - Env Manager	Pre-Construction

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring and Inspections	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
Water	Consents	Red	Wat082	Works in a main river	A Method Statement for works within a Main River shall be agreed with the appropriate regulatory body prior to the commencement of works and shall be placed in the CEMP.	Avoidance of pollution to a Main River and/or adverse effects upon riverine hydrology.	Check that the Method Statement is being complied with.	Delivery Partner - Env Manager	During Construction
Water	Pollution Control	Red	Wat083	Piling operations	A Piling Risk Assessment shall be undertaken prior to the commencement of works and used to inform a Piling Method Statement that addresses the risks to both groundwater, disturbance to migratory fish and to the nearby residents shall be submitted to the Environment Agency for their approval before being incorporated into the CEMP.	Protection of groundwater from the spread of contaminants.	Check that a Method Statement agreed with the EA is within the CEMP.	Delivery Partner - Env Manager	Pre-Construction
Water	Pollution Control	Red	Wat084	Piling operations	Daily visual checks of surface waters would be required during piling to check for losses of drilling fluid and any other impacts.	Protection of groundwater from the spread of contaminants.	Inspections to identify release of pollutants during piling.	Delivery Partner - Env Manager	During Construction
Water	Pollution Control	Amber	Wat085	Bridge works	The Delivery Partner shall prepare a Bridge Demolition Method Statement that addresses not only the anticipated contaminants within the structure, but also defines how works are to be undertaken to prevent any bridge material or detritus from entering the river.	Avoidance of pollution to a main river.	Onsite supervision of works to ensure no detritus enters the river.	Delivery Partner - Env Manager	During Construction
Water	Pollution Control	Amber	Wat086	Toolbox talk	All personal involved in the bridge demolition works shall receive a toolox talk before works commence on the bridge. The toolbox talk shall detail the environmental status of the river and the risks associated with bridge demolition. Records of attendance shall be captured within the CEMP.	Avoidance of pollution to a main river.	Check that a record of attendees to the tool box talk is within the CEMP.	Delivery Partner - Env Manager	During Construction
Water	Pollution Control	Amber	Wat087	Bridge works	A 'crash deck' of sufficient width to capture any materials that could fall from a bridge vertically or at an angle. Materials falling onto the deck shall be separated into large units to be lifted by a crane and smaller materials to be manually removed. None of the materials being manually removed shall be swept into the river. The ECoW shall be present to supervise the works to ensure compliance with the Method Statement.	Avoidance of pollution to a main river.	Onsite supervision of works to ensure no detritus enters the river.	Delivery Partner - Env Manager	During Construction
Water	Hydrology	Red	Wat088	Control Measures	The Delivery Partner shall engage with the Internal Drainage Board to ensure that measures are in place to secure water levels and water quality during the works to the satisfaction of the Board. Details of the measures shall be reported in the CEMP before works commence.	Maintenance of water levels for neighbouring agricultural interests.	Check the CEMP and Control Plans/RAMS document the measures agreed with the Board.	Delivery Partner - Env Manager	Pre-Construction
Water	Pollution Control	Green	Wat089	Site management	The storage and handling of oils, fuels, hazardous materials and waste shall follow the Environment Agency's good practice guidance, including PPG1 (General Guide to the Prevention of Pollution), and PPG5 (Works and Maintenance near water) and CIRIA C532 documentation on The Control of Pollution from Construction Sites and Control of Pollution Regulations.	Avoid harm to human health and the natural environment.	Check that inspections of areas for handling and storing of materials are held on file.	Delivery Partner - Env Manager	During Construction
Water	Pollution Control	Red	Wat090	Piling operations	In those areas where there is a risk of contamination the following guidance Environmental Agency National Groundwater & Contaminated Land Centre Report NC/99/73 and its 2002 Piling into Contaminated Sites shall be followed. The CEMP shall evidence the application of this guidance in the risk assessment and mitigation measures prior to works commencing.	Protection of groundwater from the spread of contaminants.	Inspections to verify the application of mitigation measures would be recorded in the CEMP.	Delivery Partner - Env Manager	During Construction

# ANNEX A12 – MATERIALS AND WASTE MANAGEMENT CLAUSES

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring/Corrective Actions	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
Materials	Sustainable resource use	Red	Mat001	Materials Plan	A Resource Efficiency Management Plan shall be included in the CEMP addressing the selection and procurement of materials prior to and during construction, demonstrating security of supply, carbon emissions (transportation), local sourcing, use of site won, recycled or secondary materials and also minimise the use of materials with the potential to harm human health or the environment. Apart from being resource efficient, the Plan shall implement the waste hierarchy and reflect a circular approach to the use of materials.	Deliver a circular approach to materials resource efficiency.	Confirm that resource efficiency is addressed during the procurement of materials.	Delivery Partner Project Manager	Pre-construction
Materials	Sustainable resource use	Amber	Mat002	Materials Plan	Aggregate to be used within sensitive sites shall be of a pH that would not diverge from that of the soil to prevent alteration of the preferred pH range of salt marsh and grazing marsh species.	Avoid harm to the natural environment.	Confirm that the aggregate to be deployed is appropriate to the sensitivity of the site.	Delivery Partner - Planner	Pre-construction
Materials	Waste management	Red	Mat003	Waste disposal	The quantity of waste arisings to be moved to landfill sites from the Scheme shall be minimised where reasonably practicable based upon measures such as storage of materials to prevent cross-contamination and waste through 'spoilage' and 'just in time' deliveries.	Minimise waste being sent to landfill.	Monitor quantities of materials sent to landfill.	Delivery Partner - Env Manager	Pre-construction
Materials	Sustainable resource use	Amber	Mat005	Materials Plan	A record of the origins and quantities of primary, site recovered, re-used and secondary materials used in the scheme is to be maintained under a WRAP quality protocol or Materials Management Plan with suitable audits undertaken.	Demonstrate management of material resource efficiency.	Check that the origin and quantities of materials used are recorded.	Delivery Partner QS Team	During Construction
Materials	Sustainable resource use	Green	Mat006	Excavated materials	Dedicated areas for handling and storing excavated material shall be managed so as to prevent harm to human health or the natural environment. Evidence of site inspections of materials handling and storage shall be provided to the East Sussex Highways Authority PM on request.	Avoid harm to human health and the natural environment.	Check that inspections of areas for handling and storing excavated materials are held on file.	Delivery Partner - Construction Manager	During Construction
Materials	Waste management	Red	Mat008	Site Waste Management Plan	The Delivery Partner shall prepare a SWMP that includes procedures for compliance with the requirements for waste transfer notes, in accordance with the Waste (England and Wales) Regulations 2011 (or as subsequently revised), and arrangements for auditing the actions of other parties in the waste handling chain.	Deomonstrate compliance with current waste regulations.	Confirm the CEMP contains the SWMP and that the SWMP is updated.	Delivery Partner - Env Manager	Pre-construction
Materials	Waste management	Red	Mat009	Waste disposal	Necessary waste management permits and planning permissions shall be obtained, or applications to the Environment Agency will be made by the Delivery Partner for registration of any relevant exemption from permitting waste that is necessary during construction works.	Copies of permits shall be included within the CEMP.	Check that the EMP contains copies of all permits, consents etc.	Delivery Partner - Env Manager	During Construction
Materials	Waste management	Green	Mat011	Waste disposal	A register of all waste loads leaving the site, including volumes, recycling rate, carrier details and disposal sites detail shall be held on site and be maintained to provide an audit trail for the reporting of waste types, quantities and management methods and shall be available to the East Sussex Highways Authority PM on request.	Deomonstrate compliance with current waste regulations.	Check that a file record of waste disposal records exists.	Delivery Partner - Env Manager	During Construction
Materials	Waste management	Amber	Mat012	Waste disposal	Off-site recovery and/or disposal facilities should be shall within 20 miles of the Scheme to minimise carbon emissions unless demonstrable efficiencies result due to enhanced materials recovery or cost saving. The location of off-site recovery and/or disposal facilities shall be provided to the East Sussex Highways Authority PM on request supported by evidence of efficiencies.	Demonstrate achievement of resource efficiency.	Check that the location of recovery/disposal sites used are available to East Sussex Highways Authority PM.	Delivery Partner - Construction Manager	During Construction

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring/Corrective Actions	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
Materials	Sustainable resource use	Amber	Mat013	CL:aire	Use of the CL:aire Definition of waste protocol and materials register to be reviewed for its suitability with the rationale for the outcome to be provided in the CEMP.	Evidence of consideration of CL:aire.	Confirm the CEMP contains consideration of CL:aire.	Delivery Partner - Env Manager	Pre-construction
Materials	Sustainable resource use	Green	Mat014	Recycled aggregate	Where recycled aggregate is to be used then it shall meet a WRAP quality protocol and be subject to the Specification of Highway Works requirements and evidence of testing retained on site.	Compliance with WRAP quality protocol and other standards.	Check that a file record of compliance with relevant WRAP protocols is on file.	Delivery Partner - Construction Manager	Pre-construction
Materials	Sustainable resource use	Red	Mat015	Carbon	The CEMP shall demonstrate that all reasonable steps to maximise contribution towards all goals of sustainable development and in particular resource efficiency and the minimisation of the whole life carbon emissions has been taken.	Demonstrate sustainable resource use.	Confirm that the CEMP demonstrates how sustainable resource use decisions maximise contribution to sustainable development goals.	Design Team	Pre-construction
Materials	Sustainable resource use	Red	Mat017	Carbon	Maximise the potential for re-using and/or refurbishing of existing assets to reduce the extent of new construction and/or explore alternative lower carbon options to deliver the project objectives. The CEMP shall demonstrate the decision making undertaken in achieving sustainable resource use.	Demonstrate sustainable resource use.	Monitor the carbon savings associated with the re-use/refurbishment of assets and materials.	Delivery Partner QS Team	Pre-construction
Materials	Sustainable resource use	Red	Mat018	Carbon	Identify how phasing of the construction sequence could minimise non-construction GHG emissions associated with the diversion of traffic.	Reduce carbon emissions.	Check that consideration of highway user carbon emissions has occurred during design of the Traffic Management Plan.	Delivery Partner - Planner	Pre-construction
Materials	Sustainable resource use	Amber	Mat019	Excavated materials	The physical and chemical properties of soils to be excavated shall be determined such that soil handling measures are in place to prevent the release of sediment or other contaminants into the aquatic or terrestrial environment.	Avoidance of deleterious effects upon sensitive receptors.	The CEMP shall contain evidence that the physical and chemical properties of the materials to be excavated have informed the Method Statement on how they would be handled.	Delivery Partner - Construction Manager	Pre-construction
Materials	Sustainable resource use	Red	Mat020	Excavated materials	Where excavations and earthworks are to take place within or adjacent to a coastal, wetland or riverine designated site, a Method Statement shall be agreed with Natural England to avoid deleterious ecological effects. A copy of the Method Statement shall be provided to the East Sussex Highways Authority PM.	Avoidance of deleterious effects upon sensitive receptors.	The CEMP shall contain evidence that the Method Statement for materials handling within or adjacent to a sensitive area.	Delivery Partner - Construction Manager	Pre-construction
Materials	Soil management	Red	Mat021	Soil survey	The Delivery Partner shall undertake a pre-construction soil resource survey to establish the soil properties within those areas to be disturbed during site preparation and construction phases. The results shall be provided to East Sussex Highways Authority PM within one month of the survey being completed and be recorded in the CEMP.	Soil property records on which to design a soil management strategy to achieve ecological and water quality objectives.	Check that the soil survey protocol is correctly performed and captures all necessary soil properties.	Delivery Partner - Construction Manager	Pre-construction
Materials	Soil management	Red	Mat022	Soil survey	To aid the reinstatement of soils, pre-condition surveys will be discussed with landowners and where agreed, carried out on land within the works site. The pre-condition survey shall include a photographic record, written description and topographical survey to be used to ensure appropriate reinstatement of the site.	Pre-construction survey to establish baseline condition against which to judge effective reinstatement.	Check that an adequate baseline condition is recorded.	Delivery Partner - Env Manager	Pre-construction

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring/Corrective Actions	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
Materials	Soil management	Red	Mat023	Soil survey	The number of field samples to be tested by area would be agreed with the East Sussex Highways AuthorityPM. Each sample should be a composite of at least five sub-samples around each sample point. Separate samples for topsoil and sub-soil shall be taken.	Pre-construction survey to establish baseline condition against which to judge effective reinstatement.	Check that an adequate baseline condition is recorded.	Delivery Partner - Env Manager	Pre-construction
Materials	Soil management	Red	Mat024	Soil Management Plan	The Delivery Partner shall produce a Soil Management Plan based upon the soil survey and ground investigations. The Plan will be produced in accordance with the requirements for Good Practice Guide for Handling Soils in Mineral Workings and agreed with Natural England.	Minimise damage to soils within sensitive areas.	Check that a Soil Management Plan has been submitted as part of the CEMP and is implemented.	Delivery Partner - Env Manager	Pre-construction
Materials	Soil management	Amber	Mat025	Soil handling	Soils to be moved from sensitive areas are to be defined by the ecologist according to the plant assemblages such that individual vegetative plots are not mixed with other soils to retain the mix of seeds associated with each individual plot.	Aid the process of ecological restoration within sensitive sites.	Check that the Soil Management Plan defines the individual soil stripping plots as defined by the EcCoW.	Delivery Partner - Env Manager	Pre-construction
Materials	Soil management	Amber	Mat026	Soil handling	The Delivery Partner shall minimise the potential for damage to soil structure caused by compaction by restricting and minimising the use of vehicles to those areas subject to soil removal. Low ground pressure vehicles shall be used to undertake all soil stripping and handling activities.	Minimise damage to soils within sensitive areas.	Check that soil handling is in accordance with Soil Management Plan.	Delivery Partner - Construction Manager	During Construction
Materials	Soil management	Amber	Mat027	Soil handling	The Delivery Partner shall undertake all soil handling works in compliance with the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites; the Good Practice Guide for Handling Soils in Mineral Workings; and BS 3882:2015 - BSI Specification of Topsoils.	Minimise damage to soils within sensitive areas.	Check that the Soil Management Plan is in compliance with current guidance.	Delivery Partner - Env Manager	Pre-construction
Materials	Soil management	Amber	Mat028	Soil handling	Where soils are wet or moist they should be handled using excavators rather than dozers to minimise compaction.	Minimise damage to soils within sensitive areas.	Check that the requirements of the Soil Management Plan are being met.	Delivery Partner - Construction Manager	During Construction
Materials	Soil management	Amber	Mat029	Soil handling	All plant and machinery must always be maintained in a good working condition to ensure that soils are stripped correctly. For example, to ensure that the depth of the strip can be accurately controlled and to minimise the risk of contamination as a result of spillages.	Minimise damage to soils within sensitive areas.	Check maintenance log of equipment to be used in soil handling operations.	Delivery Partner - Construction Manager	During Construction
Materials	Soil management	Amber	Mat030	Soil handling	Rainfall criteria for the management of soils shall be established within the Soil Management Plan. The following criteria may be applied: a) In light drizzle soil handling may continue for up to four hours unless the soils are already at or near to their moisture limit. b) In light rain handling must cease after 15 minutes. c) In heavy rain and intense showers, handling shall immediately cease.	Minimise damage to soils within sensitive areas.	Check that the requirements of the Soil Management Plan are being met.	Delivery Partner - Env Manager	During Construction
Materials	Soil management	Amber	Mat031	Soil handling	The EcoW shall supervise soil management and shall halt works when antecedent/ prevailing weather conditions are unsuitable and/or the soil moisture limits detailed in the Soil Management Plan are exceeded.	Minimise damage to soils within sensitive areas.	Check that the requirements of the Soil Management Plan are being met.	Delivery Partner - Env Manager	During Construction
Materials	Soil management	Amber	Mat032	Soil handling	If sustained heavy rainfall (e.g. >10mm in 24 hours) occurs during soil stripping operations then work must be suspended and not re-started until the ground has had at least a full dry day or the specified soil moisture criteria has been met.	Minimise damage to soils within sensitive areas.	Check that the requirements of the Soil Management Plan are being met.	Delivery Partner - Env Manager	During Construction
Materials	Soil management	Amber	Mat033	Soil handling	After a rainfall event has ceased, soil tests would be applied to determine whether soil handling may re-start, provided that the ground is free from ponding and ground conditions are safe to do so.	Minimise damage to soils within sensitive areas.	Check that the requirements of the Soil Management Plan are being met.	Delivery Partner - Env Manager	During Construction

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring/Corrective Actions	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
Materials	Soil management	Red	Mat034	Soil handling	Topsoil shall be stripped to the full depth, while sub-soil would be stripped to a depth of 150mm prior to laying down a geotextile material and a working surface of crushed stone except where disallowed for ecological reasons. The depths of soil stripping shall be specified in the CEMP.	Avoid deleterious effects upon soil character and fertility.	Supervision of soil stripping shall be undertaken by the ECoW.	Delivery Partner - Env Manager	During Construction
Materials	Soil management	Amber	Mat035	Soil handling	There shall be no triple handling of soils and/or <i>ad hoc</i> storage of soils from defined sensitive areas.	Minimise damage to soils within sensitive areas.	Supervision of soil stripping shall be undertaken by the ECoW.	Delivery Partner - Construction Manager	During Construction
Materials	Soil management	Red	Mat036	Soil handling	The Delivery Partner shall deploy vehicles to transport soils with a high moisture content so as to prevent leakages onto the highway and subsequent runoff of sediment into watercourses. The Soil Management Plan shall define the plant to be used.	Minimise the risk of water pollution.	Supervision of soil stripping shall be undertaken by the ECoW.	Delivery Partner - Construction Manager	Pre-construction
Materials	Soil management	Green	Mat037	Soil handling	To reduce the likelihood of anaerobic conditions developing in the topsoil stockpile, the topsoil surface shall be either bare or only have short surface vegetation present. Cuttings must not be added to or mixed with the stripped soil.	Avoid deleterious effects upon soil character and fertility.	Supervision of soil stripping shall be undertaken by the ECoW.	Delivery Partner - Env Manager	During Construction
Materials	Soil management	Amber	Mat038	Tool box talk	The soil handling environmental management clauses shall be communicated to all personnel involved in ground works through appropriate tool box talks setting out the principles of good practice in soil management, the site constraints and objectives, and the contents of the Soil Management Plan.	Minimise damage to soils within sensitive areas.	Check that all groundworks personnel receive an appropriate tool box talk.	Delivery Partner - Construction Manager	During Construction
Materials	Soil management	Amber	Mat039	Soil stockpiling	Soils are to be transported directly to its assigned stockpile location after stripping. Once the stockpile has been formed, soil would remain in the stockpile until it is to be re-instated in its final destination. Interim stockpiles would not be used unless unavoidable, to minimise double handling of the soils.	Minimise damage to soils within sensitive areas.	Supervision of soil stockpiling shall be undertaken by the ECoW.	Delivery Partner - Env Manager	During Construction
Materials	Soil management	Amber	Mat040	Soil stockpiling	Topsoils and subsoils will be stockpiled as close to where they were stripped as practicable, outwith root protection areas, at least 10m from watercourses and outwith a floodplain.	Minimise damage to soils within sensitive areas.	Supervision of soil stockpiling shall be undertaken by the ECoW.	Delivery Partner - Env Manager	During Construction
Materials	Soil management	Amber	Mat041	Soil stockpiling	Topsoil and subsoils from a designated site shall be separately stored at locations agreed with the EcCoW and marked as such.	Minimise damage to soils within sensitive areas.	Supervision of soil stockpiling shall be undertaken by the ECoW.	Delivery Partner - Env Manager	During Construction
Materials	Soil management	Amber	Mat042	Soil stockpiling	Soils shall be loose-tipped into heaps at the agreed stockpile locations by excavators or dump trucks. The stockpiles shall be formed and shaped to create shallow gradients to facilitate the shedding of rain water and to prevent ponding and excessive infiltration. The stockpiles would have slopes of 1 in 2 or less. The maximum permissible stockpile height would be specified in the Soils Management Plan but would not exceed 2m for topsoil and 3m for subsoil.	Minimise damage to soils within sensitive areas.	Supervision of soil stockpiling shall be undertaken by the ECoW.	Delivery Partner - Env Manager	During Construction
Materials	Soil management	Amber	Mat043	Soil stockpiling	Where soils require storage for longer than sixty days, would be seeded with an appropriate low-maintenance seed mix and measures taken to control weeds. There would be no seeding of soils taken from sensitive sites unless instructed by the EcCoW.	Minimise contamination of the seeds and biota with species alien to the designated site.	Supervision of the stockpiles for the management of weeds shall be undertaken by the EcCoW.	Delivery Partner - Env Manager	During Construction
Materials	Soil management	Amber	Mat044	Soil stockpiling	The locations, volumes and contents of all soil stockpiles shall be electronically recorded and physically recorded with marker posts at each stockpile.	Avoid deleterious effects upon soil character and fertility.	Supervision of soil stockpiling shall be undertaken by the ECoW.	Delivery Partner - Env Manager	During Construction
Materials	Soil management	Amber	Mat045	Soil stockpiling	Once the stockpile had been formed, the area would be cordoned off with secure fencing to prevent any disturbance by other activities. No wheeled vehicles would run over the soil stockpiles.	Avoid deleterious effects upon soil character and fertility.	Supervision of soil stockpiling shall be undertaken by the ECoW.	Delivery Partner - Env Manager	During Construction

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring/Corrective Actions	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
Materials	Soil management	Amber	Mat046	Soil stockpiling	Soil stockpiles taken from sensitive sites would be covered with a semi-permeable membrane to retain elevated moisture levels.	Avoid deleterious effects upon soil character and fertility.	Supervision of soil stockpiling shall be undertaken by the ECoW.	Delivery Partner - Env Manager	During Construction
Materials	Soil management	Amber	Mat047	Soil stockpiling	The stockpiles would be monitored a minimum of three times a week for signs of contamination with other soils or ponding, as indicated by standing water and erosion. Where ponding occurs, temporary drainage measures, regrading and/or silt fencing would be deployed.	Avoid cross contamination of soils and minimise runoff from stockpiles.	Supervision of soil stockpiling shall be undertaken by the ECoW.	Delivery Partner - Env Manager	During Construction
Materials	Soil management	Red	Mat048	Soil stockpiling	Each soil stockpile from a sensitive site would be monitored a minimum of three times a week to confirm that they maintained soil moisture levels as agreed with Natural England. Compliance with the moisture levels are to be confirmed with the East Sussex Highways Authority PM on a weekly basis.	Avoid deleterious effects upon soil character and fertility.	Supervision of soil stockpiling shall be undertaken by the ECoW.	Delivery Partner - Env Manager	During Construction
Materials	Soil management	Green	Mat049	Soil stockpiling	Stockpile vegetation shall be managed to prevent the spread of seeds from the stockpile onto adjacent land as advised by the ECoW.	Avoid spread of weeds into neighbouring soils.	Supervision of soil stockpiling shall be undertaken by the ECoW.	Delivery Partner - Env Manager	During Construction
Materials	Soil management	Amber	Mat050	Soil reinstatement	Where a geotextile material and/or crushed stone has been used, these shall be removed prior to reinstatement of the soils.	Avoid deleterious effects upon soil character and fertility.	Supervision of soil reinstatement shall be undertaken by the ECoW.	Delivery Partner - Env Manager	During Construction
Materials	Soil management	Amber	Mat051	Soil reinstatement	No soils originating from outside the sensitive areas would be used within those areas without the approval of the ECoW.	Avoid deleterious effects upon soil character and fertility.	Supervision of soil reinstatement shall be undertaken by the ECoW.	Delivery Partner - Env Manager	During Construction
Materials	Soil management	Amber	Mat052	Soil reinstatement	Where land is to be restored to its former use, such as agricultural land or natural grassland, soils would be reinstated to the pre-disturbance depths and quality as far as practicable, with reference to the Soil Management Plan.	Achieve pre-defined site restoration objectives.	Check that pre-defined restoration objectives are achieved.	Delivery Partner - Env Manager	Post-Construction
Materials	Soil management	Green	Mat053	Soil reinstatement	All surfaces to receive topsoil or subsoil would be inspected and all obstacles, such as wire, rope, metal, plastic and concrete debris would be removed along with any temporary roads, surfacing or building materials before the soils are reinstated.	Achieve pre-defined site restoration objectives.	Check that pre-defined restoration objectives are achieved.	Delivery Partner - Env Manager	Post-Construction
Materials	Soil management	Green	Mat054	Soil reinstatement	The reinstatement of soils would take place during late-spring to early autumn to reduce the potential to work around adverse weather conditions.	Achieve pre-defined site restoration objectives.	Check that works programme conforms to soil reinstatement schedule.	Delivery Partner - Planner	Pre-construction
Materials	Soil management	Amber	Mat055	Soil reinstatement	Reinstatement shall include making good any damage or disturbance to any soil structure, native or other planting, grass, fencing, hard landscaping or structures, where agreed with the landowner and Natural England where reinstatement of soils in a SSSI are involved.	Achieve pre-defined site restoration objectives.	Check that pre-defined restoration objectives are achieved.	Delivery Partner - Env Manager	Post-Construction
Materials	Soil management	Green	Mat056	Soil reinstatement	Decompaction techniques appropriate to the sensitivity of the area in which the soils are reinstated shall be deployed for topsoils, subsoils and their receiving substrates.	Avoid deleterious effects upon soil character and fertility.	Supervision of soil reinstatement shall be undertaken by the ECoW.	Delivery Partner - Env Manager	Post-Construction
Materials	Soil management	Red	Mat057	Aftercare	An aftercare programme shall be agreed between the landowner, Delivery Partner and East Sussex Highways Authority and recorded within the CEMP.	Achieve pre-defined site restoration objectives.	Check that all aftercare programmes are in place.	Delivery Partner - Env Manager	Pre-construction
Materials	Soil management	Green	Mat058	Aftercare	A flexible period of aftercare of between one and five years is to be agreed with the landowner with the aftercare deemed to be complete when the reinstatement standard has been met.	Achieve pre-defined site restoration objectives.	Check that all aftercare programmes are successfully delivered.	Delivery Partner - Env Manager	Post-Construction
Materials	Soil management	Red	Mat059	Records management	Daily records of operations undertaken alongside site and soil conditions shall be maintained during soil handling activities.	Compliance with the Soil Management Plan	Check for conformity with Soil Management Plan	Delivery Partner - Env Manager	During Construction
Materials	Soil management	Red	Mat060	Biosecurity	The movement of soils is a key means for the transfer of disease, pathogens and weeds. To avoid the spread of invasive non-native species (INNS), pests and pathogens during construction and ensure legal compliance, an INNS Method Statement shall be produced providing specific control procedures.	Avoidance of deleterious effects upon sensitive receptors.	Check that the INNS Method Statement is correctly followed.	Delivery Partner - Env Manager	During Construction
Materials	Contaminated land	Green	Mat061	Unexploded Ordnance	A detailed UXO Threat and Risk Assessment survey shall be undertaken prior to the commence of works to identify unexploded ordnance that are anticipated to be present in the area.	Safety of workforce.	Ensure correct management actions are taken in the event of UXO being encountered.	Delivery Partner Project Manager	Pre-construction
Materials	Contaminated land	Green	Mat062	Contamination	An unexpected Contamination Plan would be prepared by the Delivery Partner in advance of earthworks to include processes and procedures to deal with unforeseen contamination and provide for the management of risks to human health and the environment to prevent further spread of contamination. Specific protocols would be developed for dealing with potential asbestos containing materials.	Avoidance of deleterious effects upon sensitive receptors.	Check to ensure that contamination risks to human health and the environment are correctly managed.	Delivery Partner - Env Manager	During Construction

Topic	Subtopic	Reporting Level	Clause ID	Activity / Aspect of work	Commitment	Implementation Outcomes	Monitoring/Corrective Actions	Responsibility / Owner	Phase
					Required Action / Commitment				
Materials	Soil management	Amber	Mat065	Soil reinstatement	Where soil and vegetation are to be removed from a drainage ditch then litter shall be removed before the soils and vegetation are placed into the realigned ditch.	Avoidance of adverse effects upon site restoration.	Check that litter and debris is removed before soils are placed into the realigned ditch.	Delivery Partner - Env Manager	During Construction
Materials	Soil management	Green	Mat066	Material storage	Where heavy construction equipment and materials would risk compaction of the soils then wooden bearers should be used to spread the weight of bridge girders for example.	Compliance with the Soil Management Plan	Check for conformity with Soil Management Plan	Delivery Partner - Env Manager	During Construction
Materials	Sustainable resource use	Amber	Mat067	Carbon	The carbon footprint associated with the sourcing of materials would be an explicit consideration in the Delivery Partner's purchasing strategy with local sourcing being selected where commercially acceptable.	Reduce carbon emissions.	Check that procurement practices consider carbon as part of purchasing strategy.	Delivery Partner Project Manager	During Construction
Materials	Waste management	Green	Mat068	Control of litter	Weekly inspections of the riverbanks would be undertake to ensure that it was free from construction debris and litter.	Avoidance of adverse effects upon wildlife and local visual amenity.	Check that litter and debris is removed from the riverbanks.	Delivery Partner - Env Manager	During Construction
Materials	Sustainable resource use	Green	Mat069	Carbon	To minimise the amount of carbon associated with the import of materials as well as to reduce the risk of pollution and waste, the Delivery Partner would use prefabricated components to the extent that is feasible.	Reduce carbon emissions.	Check that the design has optimised the use of prefabricated components.	Delivery Partner - Construction Manager	Pre- construction
Materials	Sustainable resource use	Red	Mat070	Materials Plan	Where the Delivery Partner intends to deviate from an environmentally critical design solution, then an environmental assessment is required to the depth commensurate with the sensitivity of the environmental asset that would be affected. The Evaluation of Change Register shall demonstrate that the alternative solution is not environmentally worse than the design solution. The Delivery Partner shall not adopt the alternative solution until approval is received from the East Sussex Highways Authority PM.	Avoid deviation from environmental assessment.	Check that a robust EoCR has been approved prior to the change being implemented.	Delivery Partner Project Manager	Pre- construction
Materials	Sustainable resource use	Green	Mat071	Recycled aggregate	The Delivery Partner shall meet the relevant regional recycled aggregates target unless there is a sound engineering or carbon reduction reason why not.	Demonstrate sustainable resource use.	Check that the CEMP records the relevant regional recycled aggregates target and the percentage achieved.	Delivery Partner Project Manager	Pre- construction
Materials	Waste management	Green	Mat072	Control of litter	Netting shall be deployed to prevent materials and litter from entering sensitive watercourses.	Avoidance of adverse effects upon wildlife and local visual amenity.	Check that litter and debris is removed from the riverbanks.	Delivery Partner - Env Manager	During Construction

# ANNEX A13 – POPULATION, HEALTH AND LOCAL ECONOMY CLAUSES

Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring/Corrective Actions	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
People and Communities	Stakeholder communications	Amber	Com001	Construction disturbance	The Stakeholder Communication and Engagement Plan shall detail how the local community (reflecting its diversity) shall be informed of the works to include details on the notice periods to be given to the local community, including but not limited to noisy works, overnight works, as well as removal of visual screens and noise barriers.	Reduce disturbance to local community.	Check Stakeholder Communications and Engagement Plan addresses engagement with the local communities reflecting local diversities.	Delivery Partner Project Manager	Pre-Construction
People and Communities	Stakeholder communications	Red	Com002	Construction disturbance	Where the CEMP has identified that specific receptors are to be provided with an elevated level of stakeholder engagement, then the Stakeholder Communications and Engagement Communications Plan shall set out the manner and scheduling that engagement with those residents is to be undertaken reflecting their equalities characteristics.	Reduce disturbance to those members of the community particularly affected.	Confirm that elevated engagement at specific communities is delivered according to the Outline EMP.	Delivery Partner Project Manager	Pre-Construction
People and Communities	Stakeholder communications	Amber	Com007	Construction disturbance	Engagement with local Environmental Health Officers, affected residents and commercial operations shall be undertaken to ensure that disturbance is effectively managed and they are informed of the progress of the works including the timing of potentially disruptive activities via newsletters and public meetings etc. Copies of all communications and minutes of public meetings shall be provided to the East Sussex Highways Authority PM on request.	Provision of evidence of effective community engagement.	Check that file records of communications with Local Environmental Health, affected residents and commercial operators is maintained.	Delivery Partner - Env Manager	During Construction
People and Communities	Stakeholder communications	Red	Com008	Construction disturbance	A responsible person to liaise with the public shall be appointed and notified to East Sussex Highways Authority PM with a representative being available on site during daytime working hours to answer queries/concerns which shall be dealt with fairly and expeditiously.	Reduce disturbance to local community.	Check that the East Sussex Highways Authority PM is advised of the nominated person for public liaison.	Delivery Partner - Env Manager	During Construction
People and Communities	Vehicular access restrictions	Red	Com012	Construction disturbance	The Delivery Partner shall document measures to reduce the extent of disruption caused to local residents and businesses caused by the temporary traffic management measures and advise the East Sussex Highways Authority PM of the proposed measures.	Reduce disturbance to local community.	Check that the East Sussex Highways Authority PM is advised of the proposed traffic management measures.	Delivery Partner Project Manager	Pre-Construction
People and Communities	Public Rights of Way	Amber	Com017	Construction disturbance	A months advance notice shall be provided by the Delivery Partner to users of the Vanguard Way and Coastal Path regarding their re-routing using various communication channels.	Reduce disturbance to users of PRoW.	Check that adequate advance notice is provided to PRoW users.	Delivery Partner - Env Manager	During Construction
People and Communities	Public Rights of Way	Amber	Com018	Construction disturbance	The users of the Vanguard Way and Coastal Path would be provided with safe passage through the Cuckmere Inn car park during the construction works.	Reduce disturbance to users of PRoW.	Daily check to confirm safe passage is achievable by users of the PRoW.	Delivery Partner - Env Manager	During Construction

Topic	Subtopic	Reporting Level	Clause ID	Activity / Aspect of work	Commitment		Implementation Outcomes	Monitoring/Corrective Actions	Responsibility / Owner	Phase
					Required Action / Commitment					
People and Communities	Public Rights of Way	Amber	Com019	Construction disturbance	While the use of Eastbourne Road from the compound site to Exeat Bridge is to be closed to traffic the Delivery Partner shall sign the alternative route to the north of Chynton Farm for users of the National Cycle Route 2.		Reduce disturbance to users of PRoW.	Inspection of alternative route to confirm suitability for use by cyclists.	Delivery Partner Project Manager	Pre-Construction
People and Communities	Public Rights of Way	Green	Com020	Construction disturbance	The Delivery Partner to organise the sequence of closures of PRoW CMV/24/1 in such as manner that maximises safety while minimising disruption to users.		Reduce disturbance to users of PRoW.	Check whether correct balance of closures and user safety is in place.	Delivery Partner Project Manager	Pre-Construction
People and Communities	Public Rights of Way	Green	Com021	Construction disturbance	The Delivery Partner shall provide signage to alternative routes to that of CMV/14/7 for the duration of its closure.		Reduce disturbance to users of PRoW.	Weekly inspections to confirm that the signage remains in place.	Delivery Partner - Env Manager	During Construction
People and Communities	Vehicular access restrictions	Green	Com022	Construction disturbance	The Delivery Partner shall restrict HGV movements to between 09:30 and 15:30 to avoid peak traffic in neighbouring settlements unless otherwise agreed with the local highway authority.		Reduce disturbance to local community.	Check that agreement with local highway authority is recorded in the CEMP and is complied with.	Delivery Partner Project Manager	Pre-Construction
People and Communities	Stakeholder communications	Green	Com023	Construction disturbance	A 24 hour 7 days a week information line will be established to deal with enquiries and complaints from the public the details of which shall be displayed on signs at the construction site.		Receive alerts over construction working methods.	Check that complaints are logged and addressed.	Delivery Partner Project Manager	During Construction
People and Communities	Stakeholder communications	Green	Com024	Construction disturbance	The Delivery Partner shall provide at least monthly updates to the client's website and to other relevant websites on the progress of construction works recording mitigation measures, road closures and works recently completed.		Reduce disturbance to local community.	Check that monthly updates are issued to relevant websites.	Delivery Partner Project Manager	During Construction
People and Communities	Vehicular access restrictions	Red	Com025	Construction disturbance	The Delivery Partner shall establish a Traffic Management Working Group comprising the Emergency Services, local network managers, local highway authorities, relevant statutory undertakers as well as other developers and National Highways Traffic Officers as appropriate.		Minimise disruption to other road users, highway authorities or developers.	Check that the Traffic Management Working Group accepts the proposed highway restrictions.	Delivery Partner Project Manager	During Construction

## ANNEX A14 – AIR QUALITY CLAUSES

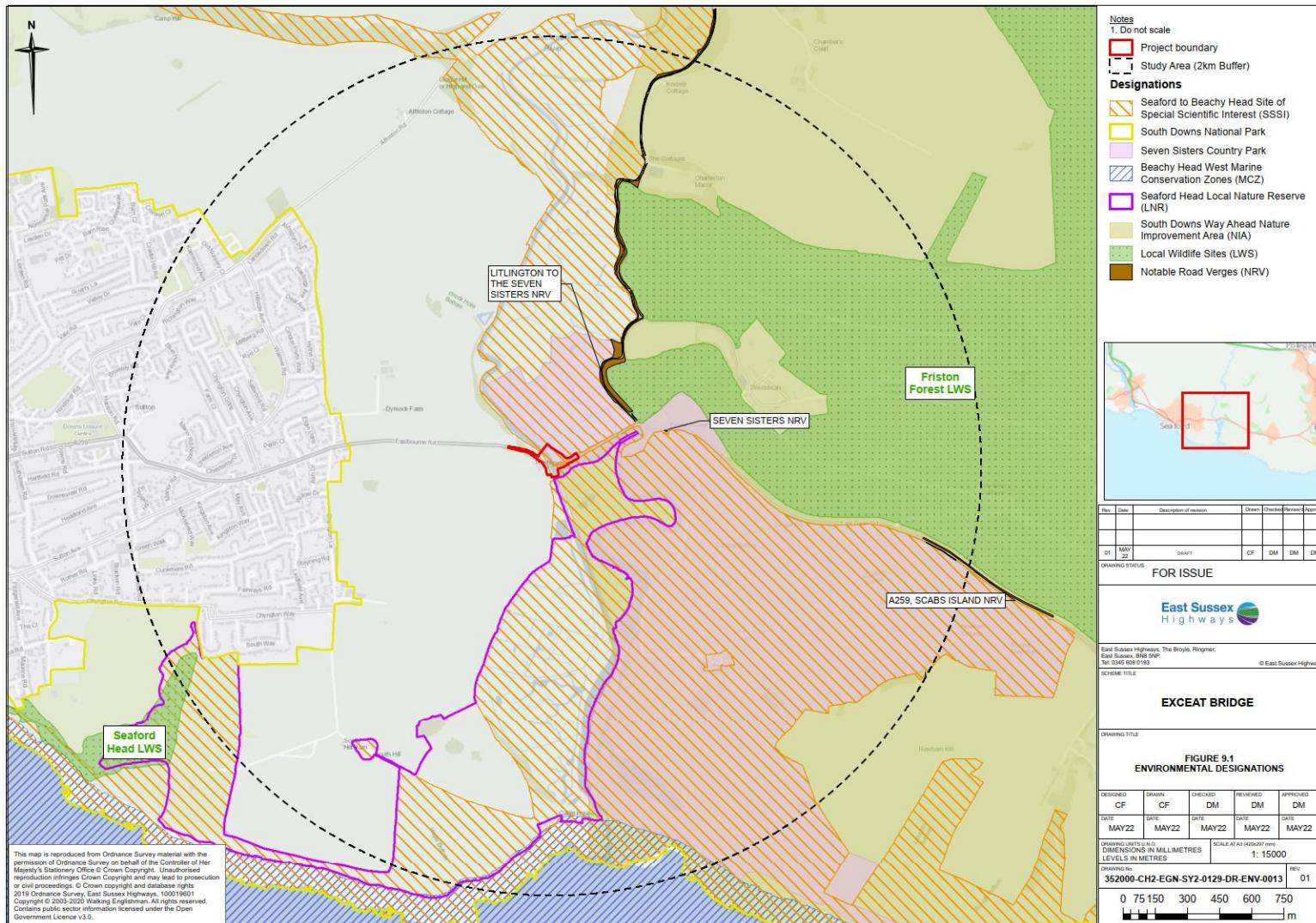
Topic	Subtopic	Reporting Level	Clause ID	Commitment		Implementation Outcomes	Monitoring/Corrective Actions	Responsibility / Owner	Phase
				Activity / Aspect of work	Required Action / Commitment				
Air Quality	Construction works	Red	Air001	Dust emissions	Appropriate risk based mitigation measures - including those described in IAQM Guidance on the Assessment of Dust from Demolition and Construction, shall be detailed in working Method Statements or Control Plans demonstrating how impacts on receptors will be avoided and submitted to the East Sussex Highways Authority PM before the start of works.	Avoidance of complaint due to dust deposition.	Check that a risk based approach to dust mitigation is reported in the CEMP.	Delivery Partner - Env Manager	SGAR3 - SGAR5
Air Quality	Construction works	Amber	Air002	Vehicle & plant emissions	The Delivery Partner shall manage dust, air pollution and exhaust emissions during the works in accordance with Best Practicable Means (BPM). Specific measures shall be based upon industry best practice, including the measures listed in the Institute of Air Quality Management's (IAQM) Guidance on the Assessment of Dust from Demolition and Construction.	Air quality is managed appropriately across the Scheme works.	Weekly checks to confirm application of BPM techniques.	Delivery Partner - Env Manager	During Construction
Air Quality	Construction works	Amber	Air004	Dust emissions	Dust suppression techniques near waterbodies shall use a fine suppressive spray to avoid washing sediment into the waterbody.	Prevention of dust and sediment being washed into the waterbody.	Weekly checks that spray measures do not wash sediment into the waterbody.	Delivery Partner - Env Manager	During Construction

## **ANNEX B – ENVIRONMENTAL MAPPING**

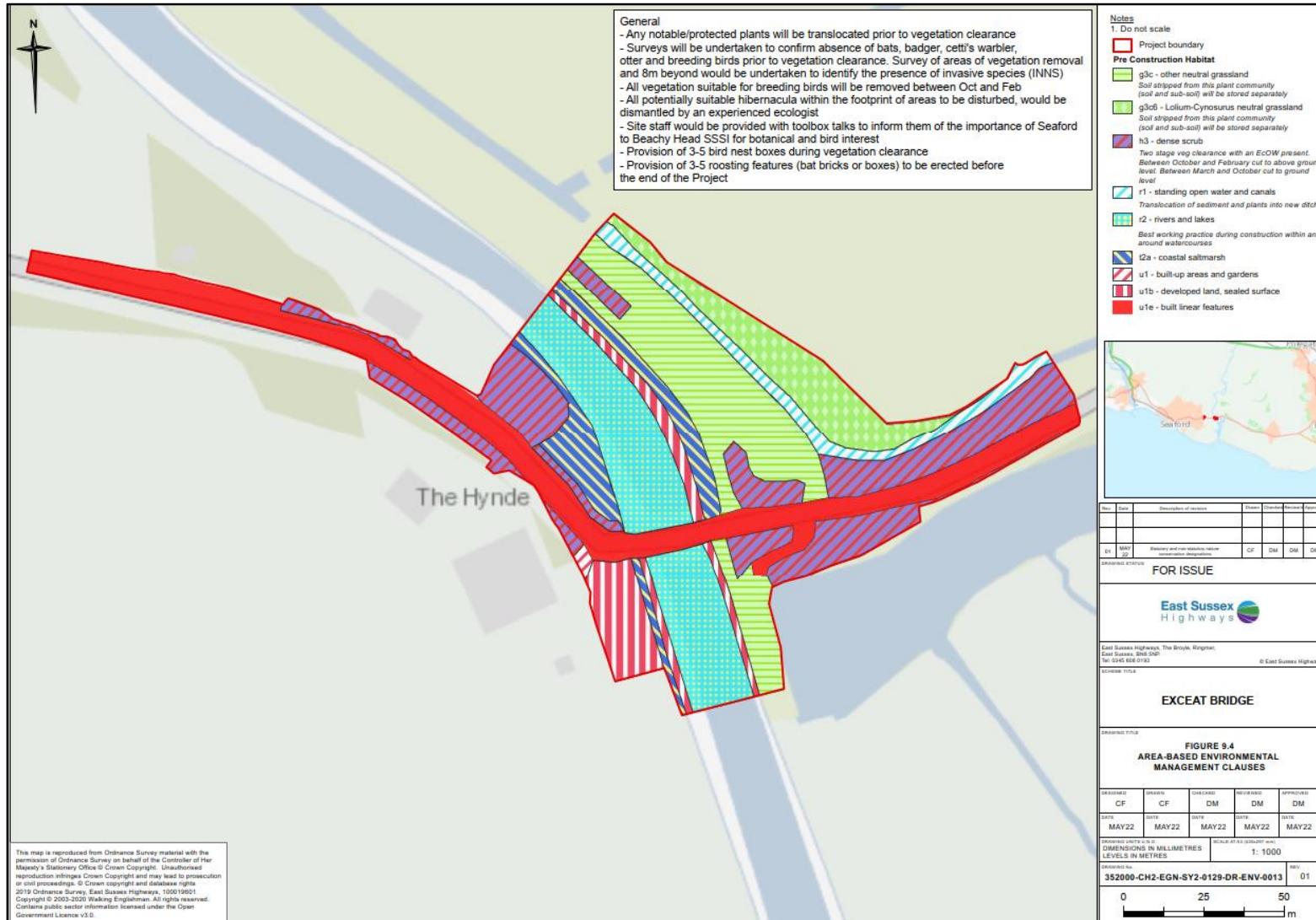
- B1 - Environmental Constraints
- B2 - Environmental Clauses
- B3 - Limits of Deviation – not applicable
- B4 - Environmental Masterplans
- B5 - Baseline Biodiversity Condition
- B6 - Vegetation Clearance – Not applicable
- B7 - Vegetation Clearance – Main Works
- B8 - Diversion Routes – Not applicable
- B9 - Construction Compound Layout Plan – To be provided by Delivery Partner

## ANNEX B1 – ENVIRONMENTAL CONSTRAINTS



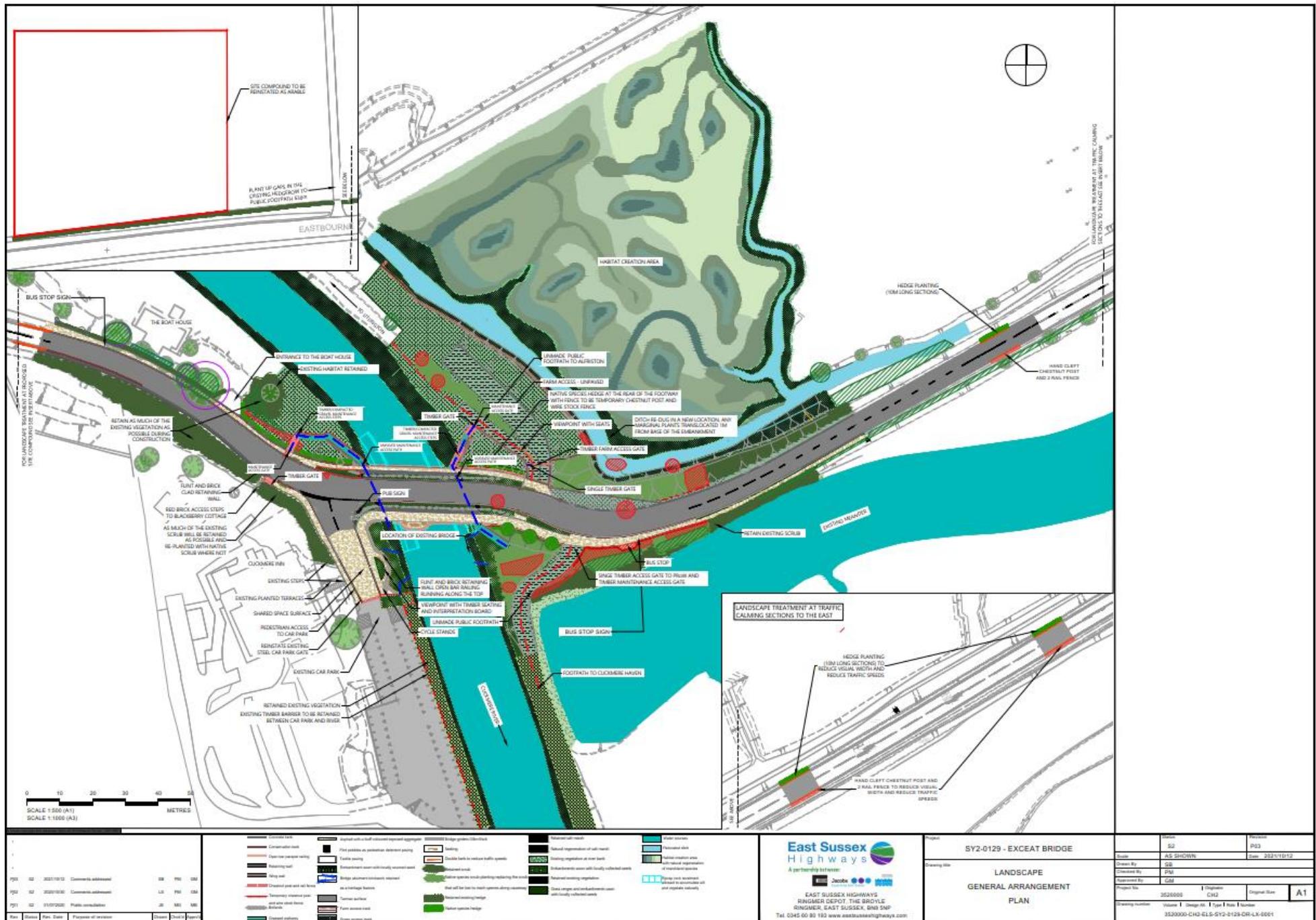


## ANNEX B2 – ENVIRONMENTAL CLAUSES



## ANNEX B4 – ENVIRONMENTAL MASTERPLAN

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## ANNEX B5 – BASELINE BIODIVERSITY CONDITION





## ANNEX C – CORPORATE MANAGEMENT PLANS

C1 – Incident Response Plan

C2 - <Delivery Partner to insert title>

C3 - <Delivery Partner to insert title>

## **ANNEX D – SCHEME SPECIFIC CONTROL PLANS/ METHOD STATEMENTS**

D0 - Delivery of Environmental Objectives

D1 - General Environmental Management

D2 - Ecological Management

D3 - Landscape and Visual Amenity

D4 - Heritage Assets

D5 - Water Management

D6 - Noise and Vibration

D7 - Community Engagement

D8 - Materials and Waste

D9 - Air Quality

## **ANNEX E – RISK ASSESSMENT AND MANAGEMENT STATEMENTS (RAMS)**

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## ANNEX F - EVALUATION OF CHANGE REGISTER

F1 – EoCR dated <Delivery Partner to insert date>

F2 - EoCR dated <Delivery Partner to insert date>

## **ANNEX G - MONITORING REPORTS**

- G1 – Soil survey monitoring report
- G2 – Groundwater monitoring report
- G3 – Pre-construction ecological survey reports
- G4 – Unexploded ordinance survey report
- G5 – Invasive species monitoring report

## ANNEX H - APPLICABLE ENVIRONMENTAL LEGISLATION

Record of Applicable Environmental Legislation			
General			
Legislation	Scope / Purpose	Compliance Requirements	Comment(s)
Planning Act 2008	Sets out the planning regime in relation to applications for orders granting development consent for Nationally Significant Infrastructure Projects (NSIPs). NSIPs are large scale developments which require a type of consent known as 'development consent' under procedures governed by the Planning Act 2008 (and amended by the Localism Act 2011).	The Project has the potential to be considered a NSIP, depending upon the option chosen, and therefore may require a Development Consent Order (DCO). In order to obtain a DCO, an application must be drafted by the applicant seeking development consent and submitted to the planning inspectorate, together with other prescribed documents such as an environmental statement. If required, the planning inspectorate will consider the application and make a recommendation to the Secretary of State (SoS), who will decide whether a development consent should be granted for the Project.	<insert as necessary>
Countrywide Rights of Way Act 2000.	Relates to public access and the adoption of core paths.	<insert requirements if any>	<insert as necessary>

Record of Applicable Environmental Legislation			
Environmental Impact Assessment (EIA)	<p>Required for certain categories of projects and is the process of gathering information, undertaking consultation and performing an impact assessment which will ultimately conclude with preparation of an environmental statement. The purpose of the assessment is to identify and mitigate likely environmental effects and to provide decision-makers and statutory consultees with the environmental information they require to determine an application for consent.</p>	<p>Due to the early stage of options development and assessment, it is not yet known whether the Project will require an EIA in accordance with UK EIA Regulations 2017 which transpose European Union Directive 2011/92/EU 'on the assessment of the effects of certain public and private projects on the environment' into UK law. Standards for environmental assessment on highway schemes are set out in the Design Manual for Roads and Bridges (DMRB): sustainability and environment, together with specific guidance on individual environmental factors.</p>	
National Policy Statement for National Networks (NPSNN) (DfT, 2014)	<p>Sets out the need for and the government's policies to deliver the development of NSIPs on the national road and rail networks in England. It provides planning guidance for promoters of NSIPs on the road and rail networks and the basis for the examination by the examining authority and decisions by the SoS. The thresholds for nationally significant road, rail and strategic rail freight infrastructure projects are defined in the Planning Act 2008 as amended (for highway and railway projects) by The Highway and Railway (nationally significant infrastructure project) Order 2013 ("the Threshold Order").</p>	<p>For the purposes of this NPSNN, these developments are referred to as national road, rail and strategic rail freight interchange developments. Although the consenting route is not yet clear for the Project, the assessment has been undertaken against NPSNN as the most stringent likely requirement.</p> <p>The SoS uses this NPSNN as the primary basis for making decisions on development consent applications for national networks NSIPs in England.</p>	

Record of Applicable Environmental Legislation			
National Planning Policy Framework (NPPF)	<p>Statement of central government guidance on planning policy, which, when introduced in 2012, replaced the previous system of topic-specific Planning Practice Guidance (PPG) and Planning Policy Statements (PPS). The NPPF was revised in July 2018 and updated in July 2021 (Ministry of Housing Communities and Local Government, 2021a).</p> <p>The NPPF states that the purpose of the planning system is to contribute to the achievement of sustainable development. Achieving sustainable development means that the planning system has three interdependent overarching objectives: an economic, a social and an environmental objective. All three need to be explored in mutually supportive ways.</p>	<p>The overall strategic aims of the NPPF and the NPSNN are consistent, however the NPPF does not contain specific policies for NSIPs and will only be considered to the extent relevant to the Project.</p>	

Ecology & Nature Conservation			
Legislation	Scope / Purpose	Compliance Requirements	Comment(s)
Wildlife & Countryside Act 1981 (as amended).	Provides legal protection for species of flora and fauna and designated sites and allows for a three-stage approach to managing invasive non-native species.	<insert requirements if any>	<insert as necessary>

Record of Applicable Environmental Legislation			
Wildlife and Countryside Act 1981 as amended by Countryside and Rights of Way Act 2000.	<p>The Assent of Natural England is required only for works that have been determined as being likely to damage an SSSI. A fine of £20,000 in a magistrate's court or a limited fine in the Crown Court could be imposed where:</p> <p>Natural England is not given notice of an intention to carry out or approve an activity likely to damage an SSSI.</p> <p>Works occur before Natural England's response is received.</p>	<insert requirements if any>	<insert as necessary>
Natural Environment & Rural Communities Act 2006	<p>Summary of the Requirements (Within England)</p> <p>Part III makes provision for protection of birds and spread of invasive species.</p> <p>Part IV addresses gaps in Sites of Special Scientific Interest (SSSI's)</p>	<insert requirements if any>	<insert as necessary>
Conservation of Habitats & Species Regulations 2010 as amended.	Designation of SACs, and SPAs and protection of certain species. All protected species listed on the schedules of the <i>Regulations</i> are also listed within the <i>Wildlife &amp; Countryside Act 1981 (as amended)</i> .	<insert requirements if any>	<insert as necessary>

Record of Applicable Environmental Legislation			
The Construction (Design & Management) Regulations 2015.	Places legal duties on virtually everyone involved in construction work. These are known as 'duty holders' and include clients, principal designer, designers, principal contractors, contractors and workers.	<insert requirements if any>	<insert as necessary>
The Protection of Badgers Act 1992	Protection of badgers subject to a licence.	<insert requirements if any>	<insert as necessary>
The Salmon and Freshwater Fisheries Act 1975	Makes it an offence to cause or knowingly permits to flow, or pollution poisonous or injurious to fish or spawning grounds or spawn or food of fish.	<insert requirements if any>	<insert as necessary>
The Plant Health (Amendment)(England) Order 2019	Controls over Oak Processionary Moth by importation of certain Quercus L. plants, other pests and soils.	<insert requirements if any>	<insert as necessary>
Invasive Alien Species (Enforcement and Permitting) Order 2019	Sets offences and defences for release of invasive alien species.	<insert requirements if any>	<insert as necessary>

Road Drainage & the Water Environment			
Legislation	Scope / Purpose	Compliance Requirements	Comment(s)
Environmental Protection Act 1990.	Aims to prevent pollution from emissions to air, land or water.	<insert requirements if any>	<insert as necessary>
The Water Act 2003.  Pollution Prevention and Control Act 1999.	These aim to prevent the pollution of waters (groundwater, rivers, streams, inland waters, territorial waters and some coastal waters) by making it an offence to cause or knowingly permit any poisonous, noxious, or polluting material, or any solid waste to enter them.	<insert requirements if any>	<insert as necessary>
Water Industry Act 1991	Consolidates enactments on the supply of water and the provision of sewerage services.	<insert requirements if any>	<insert as necessary>
Water Resources Act 1991	To prevent pollution of controlled waters, i.e. virtually all natural waters including inland rivers, streams and groundwater.	<insert requirements if any> <insert requirements if any>	<insert as necessary> <insert as necessary>
Land Drainage Act 1991	To mitigate flood risk from development		
The Water Resources (Abstraction and Impounding) Regulations 2006	These Regulations implement the provisions of the Water Act 2003, for abstraction and impounding licensing.	<insert requirements if any>	<insert as necessary>
Control of Pesticides Regulations 1986	To control the use of pesticides to prevent harm to the environment.	<insert requirements if any>	<insert as necessary>

Waste			
Legislation	Scope / Purpose	Compliance Requirements	Comment(s)
Waste (England and Wales) Regulations 2011	Requires the application of the waste management hierarchy when transferring waste & includes a declaration on waste transfer notes or consignment notes, introduces a two-tier system for waste carrier and broker registration, and excludes some categories of waste from waste controls.	<insert requirements if any>	<insert as necessary>

Heritage			
Legislation	Scope / Purpose	Compliance Requirements	Comment(s)
Ancient Monuments and Archaeological Areas Act 1979	Provides for nationally important archaeological sites to be statutorily protected as Scheduled Ancient Monuments.	<insert requirements if any>	<insert as necessary>
Planning (Listed Buildings and Conservation Area) Act 1990	Part I requires authorisation for any works to a listed building.  Part II requires authorisation for any works to buildings in a conservation area.	<insert requirements if any>	<insert as necessary>

Nuisance			
Legislation	Scope / Purpose	Compliance Requirements	Comment(s)
Environmental Protection Act 1990.	<i>Part III</i> of the Act sets out statutory nuisance provisions that local authorities have in relation to any smoke, dust, gas, fumes, steam, smell, accumulation, deposit, noise or vibration that is prejudicial to health or a nuisance.	<insert requirements if any>	<insert as necessary>
Control of Pollution Act 1974	To control transient noise and vibration nuisance from construction sites.	<insert requirements if any>	<insert as necessary>
The Clean Neighbourhoods and Environment Act 2005	Deals with the transport, deposit and disposal of waste	<insert requirements if any>	<insert as necessary>

Public Rights of Way			
Legislation	Scope / Purpose	Compliance Requirements	Comment(s)
Highway Act 1980	To ensure that new developments are appropriately planned for and include an objective to minimise impact on the environment.	<insert requirements if any>	<insert as necessary>
Town & Country Planning Act 1990		<insert requirements if any>	<insert as necessary>

Other			
Legislation	Scope / Purpose	Compliance Requirements	Comment(s)
Environmental Protection Act 1990, Part II.	These acts / regulations serve to regulate and license the disposal of controlled waste. All parties must ensure safe storage of waste. A legal duty of care is placed upon waste producers, carriers and disposers to ensure that waste is not illegally disposed, dealt with without a licence or in a way that causes pollution or harm. Waste must be prevented from escape, transferred only to authorised people, and accompanied by written descriptions.	<insert requirements if any>	<insert as necessary>
Environmental Protection (Duty of Care) Regulations 1991.			
The Special Waste Regulations 1996.			
The Waste (England and Wales) (Amendment) Regulations 2012.			
The Control of Pollution (Oil Storage) Regulations 2001	Sets our requirements for storage including mobile bowsers.	<insert requirements if any>	<insert as necessary>
The Control of Substances Hazardous to Health Regulations 2002 as amended	Places duties relating to the assessment and use of hazardous substances.	<insert requirements if any>	<insert as necessary>
The Hazardous Waste Regulations 2005 as amended	Control of hazardous wastes including electronic equipment.	<insert requirements if any>	<insert as necessary>
The Control of Asbestos Regulations 2012	Deals with identification and licensing of work with asbestos.	<insert requirements if any>	<insert as necessary>

Other			
Legislation	Scope / Purpose	Compliance Requirements	Comment(s)
The Environmental Permitting (England and Wales) Regulations 2007	(Consolidation regulations) – Introduced new permitting and implements the Landfill Directive 1999/31 and Decision on acceptance of waste at landfill 2003/31. It also revises the requirements for waste management exemptions addressing	<insert requirements if any>	<insert as necessary>
The Environmental Permitting (England and Wales) (Amendment) (No.2) Regulations 2010	<ul style="list-style-type: none"> <li>• All those arranging the disposal or recovery of controlled waste on behalf of another to be registered as a broker.</li> </ul>		
The Environmental Permitting (England and Wales) (Amendment) Regulations 2011	<ul style="list-style-type: none"> <li>• Any regulated facility disposing of or treating waste must hold an Environmental Permit, unless it is an Excluded or Exempt waste operation. (Exempt waste operation is as listed in Schedule 3 -still needs to be registers with the appropriate registration authority and must be renewed every 12 months)</li> </ul>		
The Environmental Permitting (England and Wales) (Amendment) (Regulations 2013	Environmental Permitting Regulation 2016 revised and replaced all amendments of these regulations and brought water discharge/flood defence consent works under the permitting regime replacing land drainage and water pollution regs.		
The Environmental Permitting (England and Wales) (Amendment) (No.2) Regulations 2013			
The Environmental Permitting (England and Wales) (Amendment) Regulations 2014			
Environmental Permitting Regulations (2016)			

Other			
Legislation	Scope / Purpose	Compliance Requirements	Comment(s)
Regulatory Position statement 178	To bring some control of invasive species within the RPS system when dealing with volumes below specified criteria as outlined with the RPS.	<insert requirements if any>	<insert as necessary>

## **ANNEX I - REGISTER OF CONSENT REQUIREMENTS**

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## ANNEX J - LICENCES, CONSENTS & PERMISSIONS

I1 - Natural England EPS Disturbance Licences

I2 - EA Permits

I3 - Construction Compound Environmental Management Plan

## ANNEX K – COMPETENCIES

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## **ANNEX L – ECOLOGICAL CLERK OF WORKS SPECIFICATION**

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## ANNEX M - INVENTORY OF CEMP REVIEWS & CHANGES

Version	Date of Revision	Reason for Change	Date of Client Acceptance

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## ANNEX N – CERTIFICATES AND AWARDS

N1 – CCS Certificate

N2 – ISO14001 Compliance Certificate

## Application Summary

**Address:** Exceat Bridge Eastbourne Road Exceat East Sussex  
Realignment and replacement of an existing single lane bridge at the A259 over the river Cuckmere, with a new two way, two lane bridge with a footpath, including re-profiling of the river and road embankments. Proposed provision of traffic calming measures between the Seven Sisters Country Park and Seaford. Alterations to access and provision of shared surface to east of Cuckmere Inn. Provision of a habitat creation area to restore agricultural land back into wetland on the east bank of Cuckmere Valley. The application is supported by an Environmental Statement.|cr|

**Proposal:** **Case Officer:** Vicki Colwell

## Customer Details

**Name:** Sustrans  
**Email:** [roddy.crockett@sustrans.org.uk](mailto:roddy.crockett@sustrans.org.uk)  
**Address:** Sustrans, 2 Cathedral Square,, College Green., Bristol BS1 5DD

## Comments Details

**Commenter Type:** Other SUSTRANS?  
**Stance:** Customer SUSTRANS? objects to the Planning Application

### Reasons for comment:

**Comments:**

1. We are concerned that the proposals will lead to an increase in vehicular traffic along the A259 and along National Cycle Network Route 2 that runs from Dover to Plymouth. The route also comprises part of the Avenue Verte Route from London to Paris and there is an expectation by users that the route has minimal dangers. We believe that this proposal will increase dangers to cyclists along the route.
2. We are not convinced that spending this money on improving road infrastructure will positively benefit people cycling due to increased volume of traffic and speed. Cycling and walking infrastructure should take precedence over proposals that will lead to higher car usage and ownership.
3. Sections of the National Cycle Network Route 2 already have to detour away from the A259 due to the speed, width and frequency of vehicles and this will compound the problem.
4. Many local and national policies require authorities to take steps to reduce road traffic to meet environmental and climate targets. Much of this environmental damage has been caused by vehicles increasing in number and size. This proposal appears to be counter-intuitive and illogical as it will lead to both an increase in number and

size.

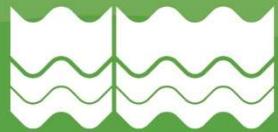
5. By increasing traffic and pollution along the A259 it will increase danger to people using other modes of travel.
6. With the advent of ebikes we believe that not only greater numbers but also a more diverse population of people will want to use the National Cycling Network to explore this area.
7. We are also concerned about the impact on cyclists and walkers in the surrounding areas when the traffic flow increases as feeder routes and villages will have increased volumes of vehicular traffic.

**Roddy Crockett**

Partnerships Manager | England South - Sussex | **Sustrans**  
07827 927 541 | *I work a half day on Fridays*)

## Exeat Bridge Replacement site plan for visit





# ‘Let’s get cycling and walking’

**East Sussex’s Local Cycling & Walking  
Infrastructure Plan 2020 – 2030**

**October 2020**



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## Appendices

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- Appendix B - LCWIP Part 2 Infrastructure Plan
- Appendix 1 - ESCC LCWIP Policies
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## Equality Impact Assessment



Having due regard to the Equality Act 2010 has been essential in the development of the LCWIP, and will be during the delivery of both identified cycling and walking infrastructure and initiatives.

An Equality Impact Assessment (EQiA) has been undertaken to ensure that the LCWIP does not discriminate, but advances equality for people who are defined as having a protected characteristic.

In order to support the Department for Transport's 'Inclusive Transport Strategy' 2019, the principle of inclusiveness, i.e. to support people with both physical and hidden disabilities, alongside other groups where cycling is often underrepresented, including people of an older age, women, and Black, Asian and minority ethnic (BAME) groups, is a critical element of the plan.

*The outcome of the EQiA is outlined in Appendix 3.*

## 1. Foreword

East Sussex's **first** Local Cycling and Walking Infrastructure Plan (LCWIP) sets out a proposed network of cycling and walking routes and measures in specific areas of the County. Importantly this will sit alongside our wider plans to improve transport and travel over the next ten years.

The opportunity to enable more people to walk and cycle has never been so important. The COVID-19 pandemic has had huge an impact on the way people work, socialise and, ultimately, travel. For some this has meant that they have been able to re-think about how they travel - cycling and walking has become more of an option. We want to maintain this momentum by improving and adding to our existing network, and this LCWIP is a significant step to achieving this.

The benefits associated with more people walking and cycling are evident. We know that it can improve our physical and mental health and wellbeing, and that it can help to reduce the number of people using vehicles thereby reducing emissions from exhaust fumes and benefiting the environment.

We must also not underestimate the importance that active travel will have in supporting the recovery of the economy. It will achieve this by improving connections for people to access education, training and employment opportunities, alongside creating a healthy more reliable workforce, individuals benefiting from financial savings arising from not having a need for vehicular travel, and supporting future clean growth in housing and employment. **Despite all of these benefits we do understand that for most people, choosing to cycle or walk is only going to be a realistic option if it is convenient and fits easily into their lives**

**So, PEOPLE** are at the centre of this plan. We will focus as much on understanding people's needs and the **PLACES** that they want to get to, as this will influence how we can encourage more to cycling and walking. This will also help inform us about the types of measures we need to deliver to help make this happen.

This plan is a live document. It will continue to evolve, and new schemes and different areas of the county will be considered and included where possible. We **cannot deliver this plan alone, so we will be working in partnership with** district and borough councils and the business sector alongside our local communities, to help us plan, secure future funding and deliver the measures that people need to enable them to walk and cycle more.



**Councillor  
Keith Glazier  
Leader of  
East Sussex  
County Council**



**Councillor Claire  
Dowling  
Lead Member for  
Transport and  
Environment**

## 2. What is an LCWIP and how has it been developed?

- The LCWIP indicates the proposed cycling and walking networks within specific areas of the County.
- The LCWIP will help ESCC and their partners to secure funding to deliver cycling and walking infrastructure improvements.
- The LCWIP will be a 'live document' and updated regularly as opportunities to enhance the networks evolve.

2.1 The Department for Transport (DfT) identified LCWIP's in their Cycling & Walking Investment Plan, which was published in 2017. Whilst local authorities are not required to develop LCWIPs, these plans are helpful in making it clear where we can develop and deliver improvements to our cycling and walking networks and the funding, we require to deliver these. This will place us and our partners in a much stronger position to secure future funding.

2.2 In the current climate where a resulting impact of COVID – 19 pandemic has seen people wanting to walk and cycle more, the government is placing a greater emphasis on active travel for all or part of people's daily journeys wherever possible. This plan will help us to respond to available funding and react quickly to sustain and build on this momentum.

2.3 East Sussex's first LCWIP sets out an ambitious network of additional cycling and walking routes and measures integrated with existing cycling and walking infrastructure. This is set alongside the wider transport network, with the aim to maximise the potential to support new housing and employment space coming forward.

2.4 This first version of the LCWIP will be focussed on those areas where there are the greatest opportunities to increase levels of cycling and walking. There is an emphasis on delivering infrastructure improvements which will support those people who currently do not cycle or walk. At a national level, cycling is underrepresented in people of an older age, women, and Black, Asian and minority ethnic (BAME) and often the barriers which prohibit them from cycling, including concerns around safety and risk, are interrelated.

2.5 Whilst the LCWIP is focussed on delivering cycling and walking routes and measures, we recognise that people will often only change how they travel if it is convenient and easy. By providing training, information and initiatives can help people make this change. Working with our key partners this plan will also develop programmes of cycling and walking training, information and initiatives that link with the infrastructure measures coming forward.

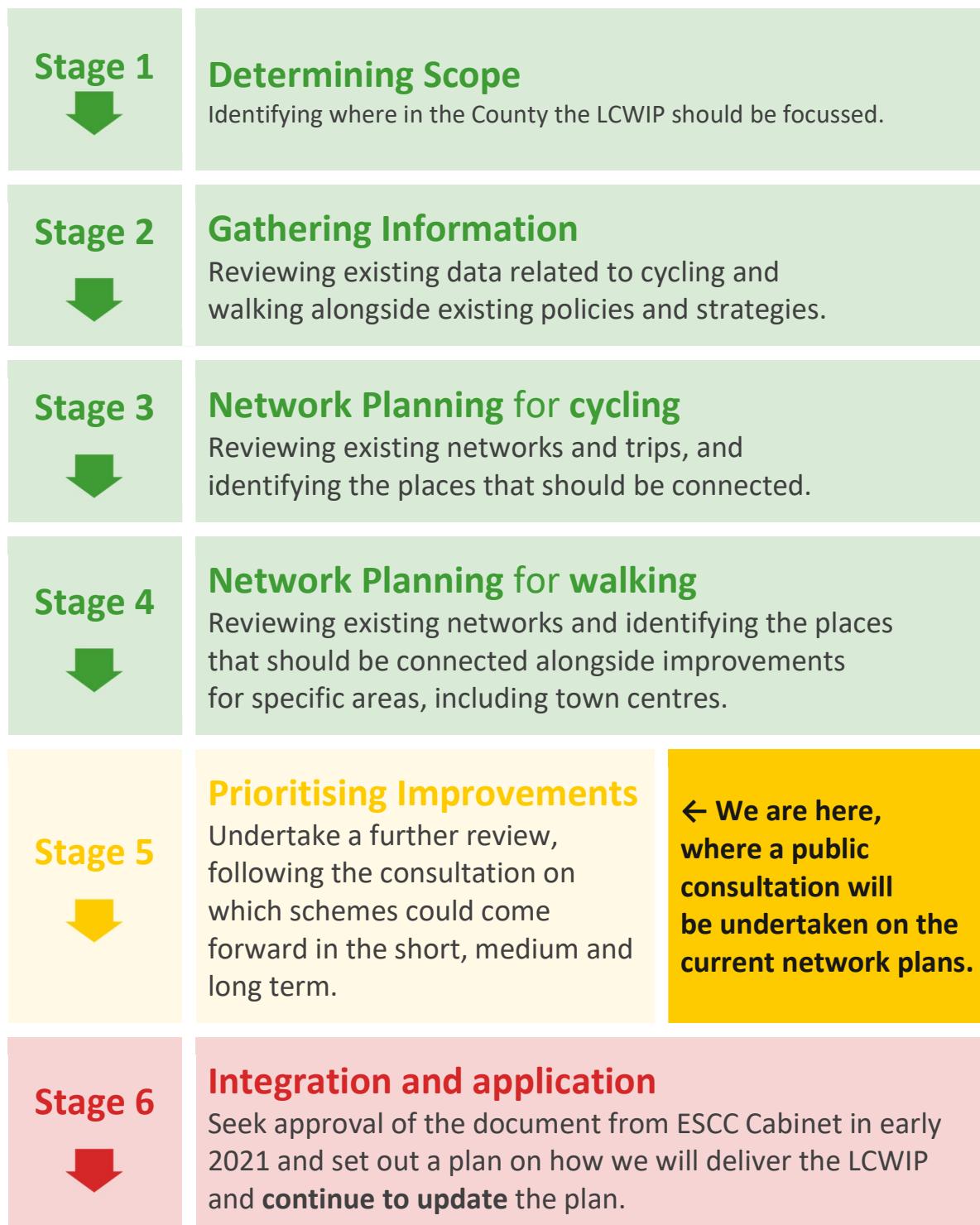
2.6 The LCWIP will be a **ten-year document**, covering the period from **2020 to 2030**, and will identify a prioritised programme of work over the following timeframes:

- **short - 0 to 3 years,**
- **medium – 3 to 5 years and**
- **long term - 5 to 10 years.**

**2.7 It is important to note that our LCWIP document will be treated as a 'live document' and updated regularly as opportunities to enhance the cycling and networks evolve. The document we are currently consulting on is the first version.**

2.8 DfT provided guidance on how local authorities should develop an LCWIP and recommended that several different stages of work should be undertaken. ESCC has followed these stages to develop the LCWIP. Figure 1 indicates the work that has been undertaken by ESCC at each stage and the current stage of the plan.

**Figure 1 - LCWIP Development Stages**



### 3. Why are we developing an LCWIP?

3.1 East Sussex LCWIP will be at the forefront of taking positive action to support several key challenges and opportunities which are facing us both nationally and locally.

Figure 2 – Key Challenges & Opportunities



## National Evidence

3.2 As outlined in Figure 2 the LCWIP supports several key challenges and opportunities that we are facing at an international, national and local level. This section provides an overview of what these are, but more information can be found in Appendix 2.

### COVID-19 Pandemic

3.3 The current COVID-19 pandemic is altering the way people work, socialise and organise their daily lives. Its presence has had a severe impact on the physical and mental health and wellbeing of people, as well as a serious impact on the economy. However, this situation has also raised awareness of the importance of improving physical health and wellbeing, as well as the benefits of cleaner air and quieter streets through less people travelling for work or leisure purposes. The positive feeling people get from exercising should not be underestimated, and this is especially important at a time when people are being limited on who they can see, and what they can do.

3.4 Active travel can help us to be more resilient to illness, and we have an opportunity to develop this plan to get more people fit and healthy by improving our walking and cycling networks, as well as improve confidence and perceptions of safety, to support those that wish to make positive changes to their travel habits.

### Tackling Climate Change

3.5 The impacts of Climate Change are evident and in June 2019, the UK Government committed to a target to bring all greenhouse gas emissions to net zero by 2050, compared with the previous target of at least 80% reduction from 1990 levels. With transport accounting for over a third of all carbon dioxide emissions nationally<sup>1</sup> we have an important role to play in helping to reduce these emissions.

3.6 We need to act now, which is why it is important to integrate deliverable measures which align local environmental policy with wider policy agendas. This LCWIP, along with other localised walking and cycling improvement plans across the country, will be instrumental in reducing carbon emissions.

### Improving Air Quality

3.7 Exposure to poor air quality is not a lifestyle choice, and often affects the health of people who are more vulnerable, including children and people with pre-existing health conditions, as well as those people that live or work nearer to congested roads. Initiatives to encourage more people to walk and cycle, particularly on the commute to work or to access education, is therefore important. Not only will this reduce congestion from vehicles on the road, thereby lowering toxic emission levels locally, but it will improve the physical health and wellbeing of people locally. This is especially important in our air quality management areas (AQMAs) within Newhaven and Lewes (both of which are managed by Lewes - Eastbourne – Council).

### Improving physical and mental health

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<sup>1</sup> Cycling UK's Cycling Statistics - 2017-201?

3.8 Leading an active lifestyle is proven to support both physical and mental health. East Sussex's LCWIP will align with existing Public Health programmes to improve the cycling and walking environment, and initiatives to help people use active travel for everyday journeys and to access green space. The Plan will embrace Public Health England's approach of 'proactive, predictive, and personalised prevention' to reduce long term health conditions and reduce the burden on our economy. With physical inactivity costing the NHS up to £1bn per annum enabling more people to be physically active will benefit not only the individual but relieve the growing pressures on our healthcare system and the economy.

### **Supporting economic recovery and growth in a sustainable way**

3.9 Most local journeys to work in East Sussex are at or below 5km. This enables cycling and walking for journeys of up to 2km to be an achievable option for all or part of journeys to and from work. The East Sussex LCWIP will be an integral element of economic strategic plans which support access to new and existing employment, boosting productivity through a healthier and more active workforce, and broadening people's horizons with access to education and training.

3.10 The provision of improved cycling and walking infrastructure will be a fundamental element of 'place making,' within our high streets, town centres, existing residential areas and as part of new developments. The plan will also look to integrate sustainable transport within regional economic planning focussed on 'promoting greater inclusion and change by harnessing economic opportunities in coastal communities'<sup>2</sup> and will focus on areas where there are the greatest opportunities to get more people cycling and walking.

### **Better safety for people cycling and walking**

3.11 It is often the case that people will choose to not cycle (or walk) because they are concerned about safety. Therefore, better safety for people cycling and walking through the provision of well-developed infrastructure combined with training and initiative programmes is an integral element of the East Sussex LCWIP. Utilising existing multi-agency partnerships across the county will help us to support and enable more people to walk and cycle with confidence.

### **Integration with place making**

3.12 There is increased pressure to deliver more housing and employment opportunities in the county. Currently in East Sussex over 2,000 additional homes are proposed to be built per year alongside additional employment workspace. Revisions to Local Plans will be considering even higher housing targets to meet local needs, and this must be considered in the LCWIP and for future revisions.

3.13 Walking and cycling must be integral to the development and planning of forthcoming proposals for housing and employment space. We need to ensure that cycling and walking are an achievable way to travel for all or part of journeys from people's homes to their places of work, and to other key trip attractors such as educational and leisure facilities.

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<sup>2</sup> Draft SE LEP Local Industrial Strategy 2020

## Local Evidence

3.14 The way that people travel is largely determined by whether it convenient and easy and can fit into a person's daily life. As part of the assessment stage of the LCWIP we reviewed the issues and opportunities related to some of the barriers to cycling and walking in the County alongside data related to people's health, the economy, and the environment.

Table 1 outlines a summary of this review. This information has been used to help inform the development of the cycling and walking networks. (For further information on the evidence review for each settlement included in the LCWIP, please refer to Appendix B - East Sussex LCWIP – Infrastructure Plan section 2.7 Key Issues & Opportunities – Specific Geographic Areas.)

**Table 1 – County wide issues and opportunities**

Issues
<b>Limited cycling and walking network</b> on key corridors of movement, within key growth areas.
<b>Limited and inconsistent provision for cycling and walking</b> connecting residential areas and key local trip attractors.
<b>Inconsistent provision</b> for cycling and walking to support <b>inclusive access</b> .
<b>A lack of high-quality segregated routes</b> and suitable (width of) highway space to be able to introduce such routes
<b>Safety issues</b> – volume and speed of traffic
Inconsistent provision <b>connecting new development</b> and the existing cycling and walking network.
<b>Town centres dominated by traffic movements</b> , impacting on ambience, safety and air quality.
<b>Poor legibility</b> in key centres.
<b>Limited cycle parking</b> provision at key destinations.
Higher than average levels of <b>obesity</b> at reception and Year 6 children in certain district and boroughs.
<b>Prevalence of mental health issues</b> in certain district and boroughs.
<b>Reluctance to cycle on the road</b> due to fear of conflict with vehicular traffic and <b>lack of education and awareness</b> to help combat this perception, especially in vulnerable groups.

## Opportunities

**Maintain the momentum of increased active travel since the COVID-19 pandemic** through improved infrastructure and training and initiatives.

**Distances between residential areas - key centres / business areas - localised trip attractors between 3 - 5km or less**, making cycling and walking feasible.

**Declaration of a climate emergency** – Lewes – Eastbourne, Rother & Hastings 2030, the rest of the County 2050.

**Increased growth in housing and employment** connected to the existing sustainable transport network.

**Focus on town centre and high street regeneration** – prioritise cycling, walking, public transport integrated with inclusive access.

Integrate active travel alongside **smart mobility measures**.

**Appetite for active travel** from local populations.

**Untapped opportunities to promote accessible cycling and walking** alongside cultural and tourist offer.

Continued **integration of travel behaviour change programmes** and training with the delivery of **transport infrastructure projects**.

**Reduce health issues and related financial impact on the NHS** through a more active population.

**Cleaner streets and reduction in carbon emissions and congestion** through a reduction in car dependency.

## 4. Where is the LCWIP focussed?

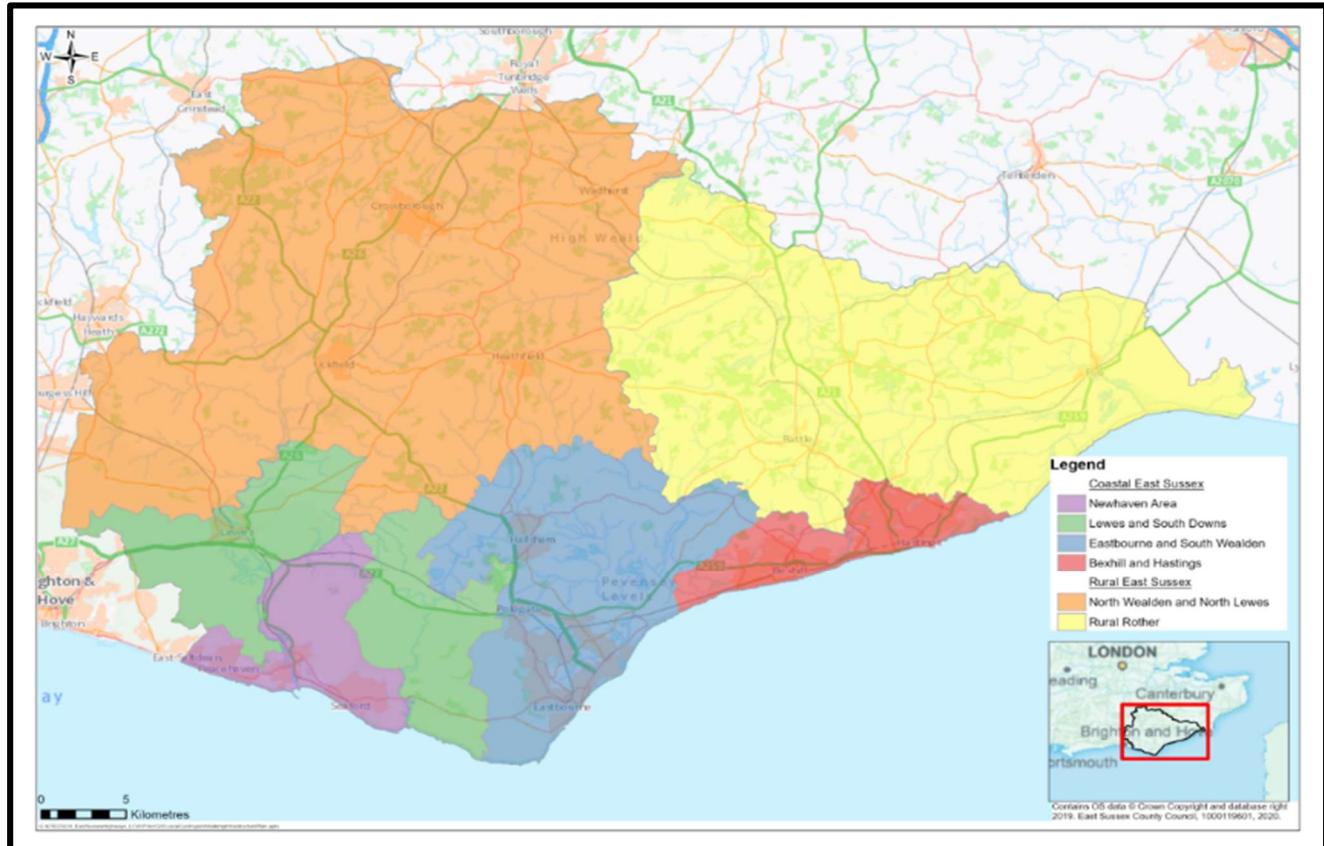
**4.1** The government has asked local authorities to focus their LCWIP's on areas where there are the greatest opportunities to get as many people as possible cycling and walking. This means developing a network that enables people to cycle and walk for everyday short local journeys or as part of longer journeys, whether this be for getting to school, work, shopping trips or for leisure. With the need for housing and employment in the county, networks will also need to support the plans for these.

**4.2** Our first version of the LCWIP prioritises areas largely located on the coastal strip and the larger market towns in the County. We anticipate that focussing on these areas will provide us with the greatest opportunities to secure larger scale external funding for cycling and walking infrastructure programmes, especially from central government.

**4.3** Focussing on the coastal strip and larger market towns in the first version of the LCWIP does not mean that we do not recognise that there are opportunities for cycling and walking trips within rural areas. We are committed to working with our key local partners, to seek and secure funding from a variety of sources to deliver the infrastructure and measures identified in the LCWIP. Aside from Government funding, potential sources include our Local Transport Plan, District and Borough Councils Local Plans, and Neighbourhoods Plans

**4.4** The County has been subdivided into the following 'areas', and these are represented in Figure 3 below.

**Figure 3 – LCWIP Areas**



The towns where we have undertaken network development for cycling and walking are listed below in Figure 4.

4.6 Further priority has been assigned to the coastal areas within the County, as they offer the greatest opportunities to increase levels of cycling and walking.

Figure 4- LCWIP Geographic Areas

### Coastal East Sussex – Priority LCWIP AREAS

- Newhaven Area
  - *Newhaven, Peacehaven & Seaford*
- Lewes & South Downs National Park
  - *Lewes*
- Eastbourne & South Wealden
  - *Eastbourne*
  - *Hailsham & Polegate*
- Bexhill & Hastings
  - *Bexhill*
  - *Hastings*

### Rural East Sussex

- North Wealden & North Lewes area
  - *Uckfield*
  - *Heathfield*
  - *Crowborough*
- Rural Rother
  - *Battle & Rye*

## 5. What is the LCWIP proposing?

This stage of the LCWIP has required:

- The development of proposed cycle network maps for each of the areas,
- The development of proposed walking network maps for Newhaven, Lewes, Eastbourne, Hailsham, Bexhill and Hastings, and
- A programme of cycling and walking infrastructure improvements.

5.2 The networks were developed using several transport assessment tools, as recommended by the DfT. (For further information on how the networks were developed and the tools which were used, please refer to Appendix B -ESCC LCWIP Infrastructure Plan – stages 3 & 4 network planning.)

### Stakeholder engagement

5.3 To ensure that the initial interests of local stakeholders were considered in the preparation of the first version of the LCWIP, the district and borough councils, alongside local cycling, walking and access groups were engaged with the development of the proposed networks.

**It is important to understand that the proposed cycling and walking networks in the LCWIP indicate the potential alignment of a route or measure, with an emphasis on demonstrating how they can connect people with the places they may travel for everyday journeys. They do not contain detailed proposals.**

### Proposed Cycle Network Maps

5.4 A proposed cycle network map of preferred routes for each priority area has been developed. These maps outline the proposed cycle networks for each settlement, alongside a table with the name of each route that is referred to on the map.

5.5 Whilst network planning for walking has been undertaken for some of the specific geographic areas, as outlined in Appendix B, the cycling network development work also

identified improvements on these routes for pedestrians. For example, where a shared cycling and pedestrian route may be the most appropriate option, or where there is an opportunity to either improve or install new dropped kerbs, or where a toucan crossing is proposed

## Coastal East Sussex – Priority LCWIP Areas

### Newhaven Area - *Newhaven, Peacehaven & Seaford*

5.6 In the Newhaven area the preferred network is focussed on having several key routes connecting the three towns, to support the strategic connections on the A259 corridor in the longer term. This is alongside having more localised networks in each town to support with access to schools, shops and local facilities.

Figure 5 - Newhaven area proposed cycle network



Table 2 – Proposed infrastructure

Table 2 Scheme Number	Scheme Names - Newhaven, Peacehaven & Seaford
N1	Telscombe Link
N2	South Coast Road (A259) Peacehaven
N3	Coastal Path
N4	Arundel Road NCN2
N5	Firle Road
N6	Saltdean – Peacehaven - Southease
N7	Peacehaven – Newhaven via The Highway

N8	Newhaven East/West Corridor
N9	Gibbon Road – Court Farm Road to the Newhaven Swing bridge
N10	Seaford East/West Corridor
N11	Seaford Northern Loop
N12	Alfriston Road – Southdowns
N13	The Station – A259 via Sutton Avenue
N14	Marine – Exceat Bridge via Seaford Seafront
N15	Peacehaven Loop
N16	Piddington Avenue
N17	Egrets Way
N18	A259 to Denton
N19	Railway Road
N20	Seaford Northern Loop
N21	Town Centre – Belgrave Road via Avondale Road and Blatchington Hill
N22	A259 – Alfriston Road via Walmer Road
N23	Town Centre – Seafront via Dane Road and The Causeway
N24	Southdown Road
N25	Arundel Road

**(Further information on the development of this network is in Appendix 5A.)**

## Lewes & South Downs National Park

### Lewes

5.7 It is important that the preferred routes within this area are sympathetic to the historic nature of Lewes and take into consideration the impact of infrastructure within a national park setting. With the highest levels of cycling for work and leisure within this area of the County, the routes are focussed on supporting more strategic links to the existing National Cycle Network, together with links to nearby settlements and supporting access to local facilities.

Figure 6 - Lewes proposed cycle network



Table 3 – Proposed infrastructure

Table 3 Scheme Number	Scheme Names Lewes
L1	A27 and Lewes Town Centre
L2	Ringmer – Southease
L3	South Downs Way – Lewes
L4	Montacute Road - Town Centre
L5	South Downs - Spital Road
L6	South Downs – Station
L7	Ditchling – Cooksbridge
L8	A27 – Swanbourne
L9	Lewes – Southease
L10	Nevill - Southover Cooksbridge - Lewes Riverside

L11	Offham - Town Centre
L12	Cooksbridge - Lewes Riverside
L13	Malling - Southover

(Further information on the development of this network is in Appendix 5B.)

## Eastbourne & South Wealden

### Eastbourne, Hailsham & Polegate

5.8 In Eastbourne, by taking advantage of an essentially flat topography, routes will support access for localised journeys as well as to support the visitor economy. There is also an emphasis on supporting improved access to the town centre and seafront area.

5.9 With South Wealden being the only area of the county where significant growth in housing can come forward, the preferred routes will support existing local journeys to local services as well as connecting to future development.

5.10 There is also an opportunity to create a high-quality corridor linking each of these areas by utilising the Cuckoo Trail which is an existing and popular walking and cycling path.

Figure 7 - Eastbourne proposed cycle network



Table 4 - Proposed infrastructure

Table 4 Scheme Number	Scheme Names Eastbourne
E1	South Downs Way – Sovereign Harbour via Seafront
E2	University – Pevensey Bay
E3	Hospital – Westham

E4	Polegate High Street - NCN21 and A22
E5	Polegate-Seafront
E6	Willingdon Road - Seafront
E7	Hampden Park – Sovereign Centre
E8	A22 / Dittons Road - NCN21 – Willingdon Drove
E9	Stone Cross – Royal Parade via Langney
E10	Seaside Road – Sovereign Harbour – Eastbourne Road
E11	Town Hall – Langley Roundabout
E12	Ramsay Way – Route 200 – Pacific Drive
E13	Station – Upper Avenue
E14	Horsey Way – Seaside
E15	Upperton – Eastbourne Park – Sevenoaks Road
E16	Victoria Drive – Hospital
E17	Willingdon Roundabout – South Shinewater Park
E18	Willingdon – The North Shinewater Park – Friday Street
E19	Lower Willingdon - Willingdon Upper
E20	Eastbourne Road - Polegate Recreation Ground - Cuckoo Trail
E21	Dittons Road - Cuckoo Trail – A22
E22	Borough Lane - King Edward's Parade
E23	Old Town-Library and Council Offices - Terminus Road - Seafront
E24	Rodmill - Eastbourne Rail Station
E25	Coopers Hill – Wish Hill
E26	Hazelwood Avenue and Hampden Park – Eastbourne Station link
E27	Polegate – New North Railway Path – Hampden Park – Ringwood Road - Seafront
E28	Stone Cross – Larkspur Drive – Sevenoaks Road, Friday Street – Pennine Way – Seafront
E29	Friday Street – Pennine Way – Seafront
E30	Netherfield Avenue – Sovereign Harbour - Seafront
E31	Pevensey – Pevensey Bay

**(Further information on the development of this network is in Appendices 5C & 5D)**

Figure 8 - Hailsham proposed cycle network

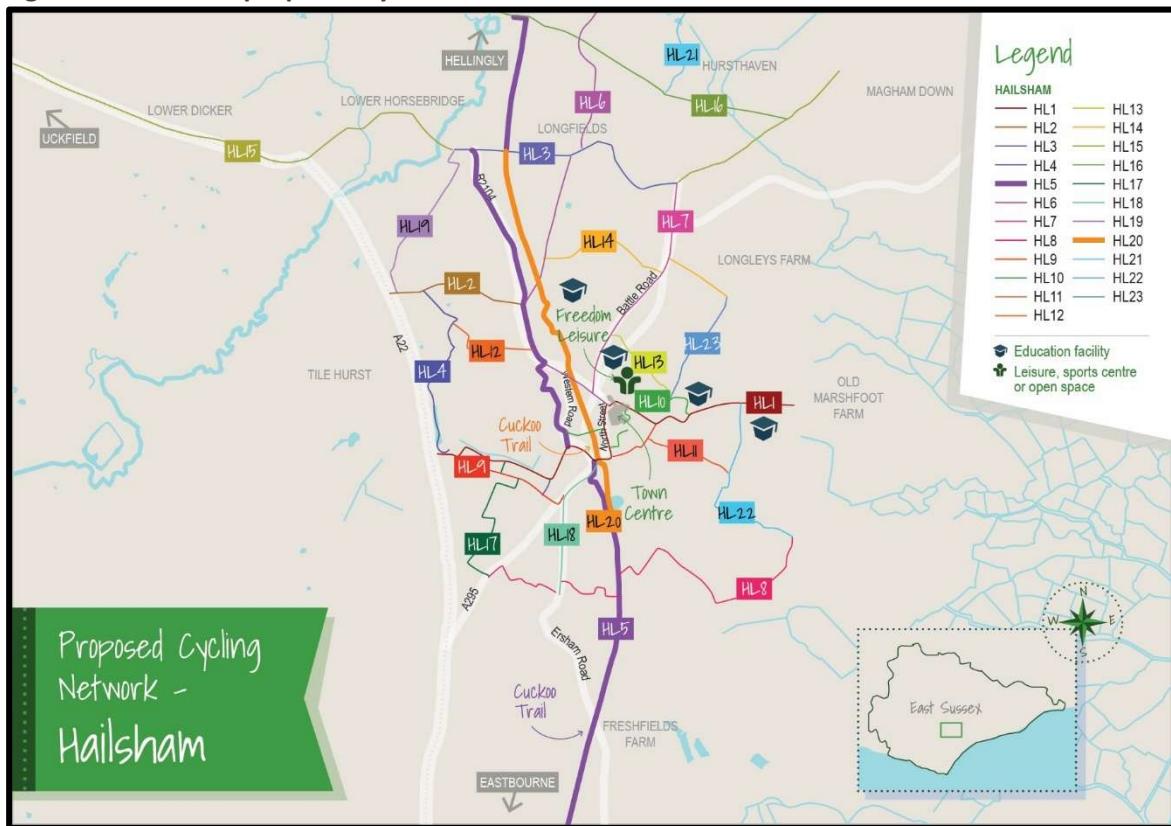


Table 5 - Proposed infrastructure

Table 5 Scheme Number	Scheme Names Hailsham
H1	Diplocks Way (A22) — Phoenix Academy
H2	Hempstead Lane
H3	Cuckmere Close — Battle Road
H4	Diplocks Way / A22 — Hempstead Lane
H5	Polegate — Hellingly
H6	High Street — Hellingly
H7	London Road — Battle Road — Hawkswood Road
H8	South Road — Mill Road
H9	A22 — Vicarage Lane
H10	Summerheath Road — High Street
H11	Vicarage Road — Hamlins Park Close
H12	Gleneagles Drive — London Road
H13	Battle Road — White House School
H14	Hawks Road — Harebeating Lane
H15	Lower Dicker — Park Gate Road
H16	Hellingly — Park Gate
H17	Arlington Road East — Upper Horsebridge Road

H18	Ersham Road — South Road
H19	Hempstead Lane - Upper Horsebridge Road
H20	South Road Car Park — Upper Horsebridge Road
H21	New Road - The Drive
H22	Mill Lane - Marshfoot Lane
H23	White House School - Harebeating Lane

**(Further information on the development of this network is in Appendices 5E & 5F)**

## Bexhill & Hastings

### Bexhill & Hastings

5.11 With existing links in place connecting Bexhill & Hastings to the north and south, the focus of the preferred routes will be on supporting access to local services. Whilst the topography is challenging, especially in some areas of Hastings, there will be an emphasis on supporting wider projects that aid regeneration, including growth in housing and employment and support the visitor economy.

Figure 9 - Bexhill proposed cycle network



**Table 6 - Proposed infrastructure**

<b>Table 6 Scheme Number</b>	<b>Scheme Names Bexhill</b>
B1	NCN2
B2	Cooden Beach, Collington, Cranstoun Avenue, Windsor Road
B3	Withyham Road, Little Common, Recreation Ground
B4	Cooden Sea Road, Broadoak Lane, Woodsgate Park
B5	NCN2/West Parade, King Offa Primary, NBDA West
B6	Collington Rail Station – Hastings Direct
B7	Bancroft, Hillside, Bankside
B8	Bexhill Railway Station to Little Common Road
B9	Bexhill Hospital, Gunters Lane
B10	Gunters Lane, Highlands
B11	Norfolk Close, NBDA
B12	Gunters Lane - Sidley
B13	Buckholt Lane - NBDA
B14	NCN2/De La Warr Parade, King Offa Way & NBDA Central
B15	NCN2/De La Warr Parade & NBDA Central
B16	NCN2/De La Warr Parade NBDA East & Central
B17	Retail Park, Pebsham Lane, NBDA East & Central
B18	NCN2/De La Warr Parade, King Offa Way & NBDA Central
B19	NCN2/De La Warr Parade NBDA East & Central
B20	NCN2/De La Warr Parade NBDA East & Central
B21	Retail Park, Pebsham Lane, NBDA East & Central
B22	NCN2/De La Warr Parade, King Offa Way & NBDA Central
B23	Bexhill – Hastings Greenway (Coombe Valley Way)

**(Further information on the development of this network is in Appendix 5G.)**

**Figure 10 - Hastings proposed cycle network**



**Table 7 - Proposed infrastructure**

<b>Table 7 Scheme Number</b>	<b>Scheme Names Hastings</b>
HS1	NCN2 Bulverhythe – Old Town
HS2	NCN2 Bulverhythe - Fairlight
HS3	Robertson Street – Wellington Place
HS4	West Hill
HS5	Hastings Station – St Helens Road
HS6	St Helens Road – Ore Road
HS7	Ore Station – The Ridge
HS8	Ore Station – The Ridge (Alternative)
HS9	Robsack Wood - Hastings
HS10	Silverhill – Alexandra Park
HS11	The Ridge
HS12	Wishing Tree Road – NCN2
HS13	Battle Road - Silverhill
HS14	Silverhill – St Leonards – NCN2
HS15	A21 – The Ridgeway - Silverhill
HS16	A21 – Silverhill – Hastings Station
HS17	Conquest Hospital – Alexandra Park – Bethune Way
HS18	West St Leonards – A21

HS19	Hughenden Road – Queens Road
HS20	West St Leonards – London Road
HS21	St Leonards Warrior Square – Hastings Centre
HS22	Ashford Road
HS23	St Helens Park Road
HS24	St Helens Park Road
HS25	Tilekin – Conquest Hospital
HS26	Tile Barn Road Spur
HS27	Wishing Tree Road Sur
HS28	Briscoes Walk Friday Street – Pennine Way – Seafront
BHG	Bexhill – Hastings Greenway (Combe Valley Way) Friday Street – Pennine Way – Seafront

**(Further information on the development of this network is in Appendix 5H.)**

## Rural East Sussex

### North Wealden & North Lewes area

#### Uckfield, Heathfield, Crowborough

5.12 With further housing growth likely to be a considerable focus for these areas, the emphasis of the preferred routes is on supporting access to existing localised services. The preferred routes will also form the basis for further work to be undertaken by ESCC, Wealden District Council and developers in the near future, to develop a more comprehensive network which supports future growth in housing and employment.

Figure 11 - Uckfield proposed cycle network

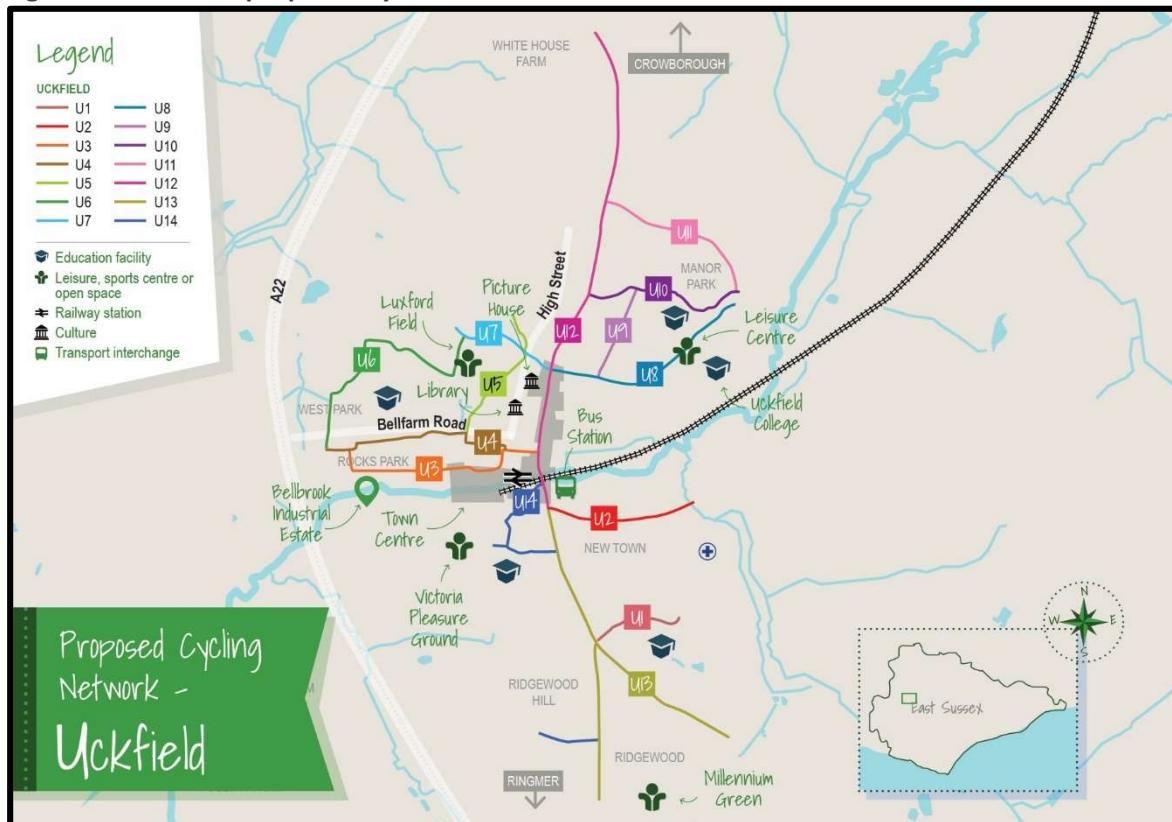


Table 8 - Proposed infrastructure

Table 8 Scheme Number	Scheme Names Uckfield
U1	Mallard Drive
U2	Framfield Road
U3	Belfarm Road to Bell Lane
U4	Belfarm Road Greenway
U5	Belmont Road - Manor Way
U6	Batchelor Way - Rocks Park
U7	Church Street
U8	Hempstead Lane
U9	Lime Tree Avenue

U10	Southview Drive/ Downsview Crescent
U11	Browns Lane
U12	B2102 Ringles Cross – Framfield Road
U13	New Town - Ridgewood
U14	New Town to Railway Station (via Victoria Pleasure Ground)

(Further information on the development of this network is in Appendix 5I)

Figure 12 - Heathfield proposed cycle network

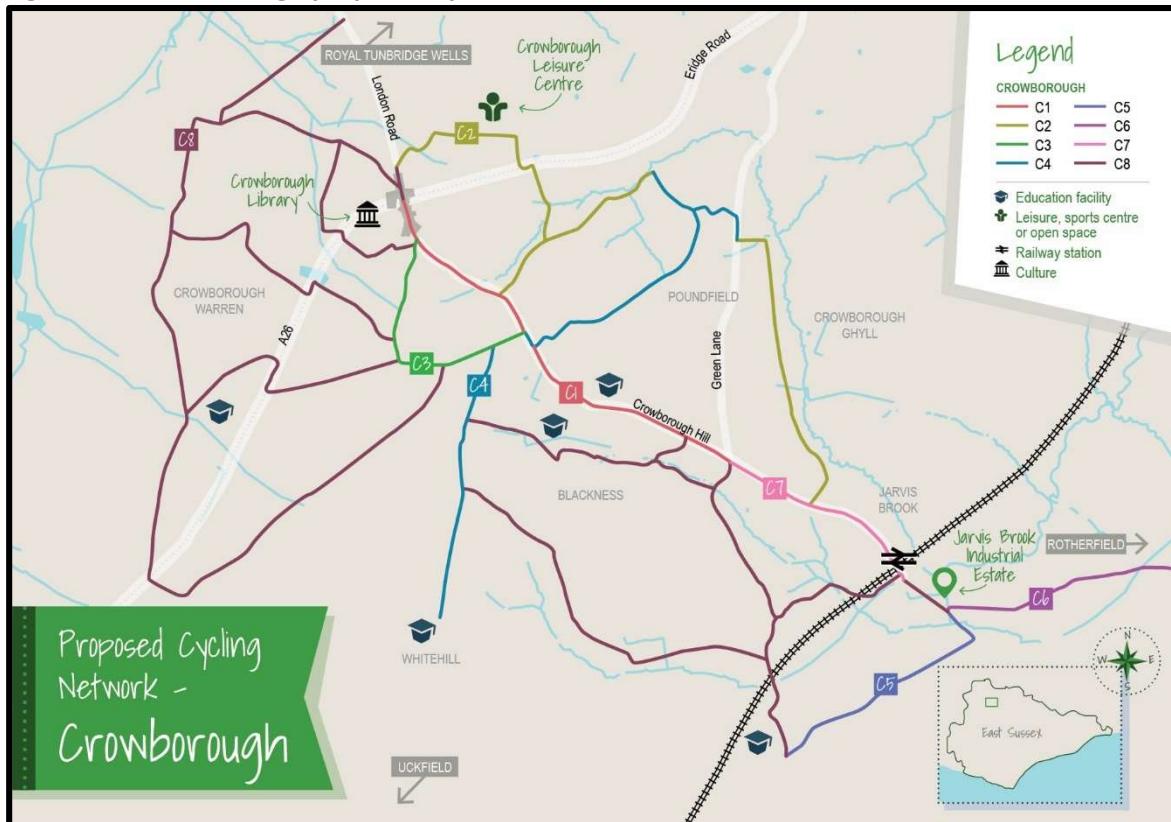


Table 9 - Proposed infrastructure

Table 9 Scheme Number	Scheme Names Heathfield
HE1	NCN Route 21
HE2	Cuckoo Trail Extension
HE3	A265 Snatchells Farm – Broad Oak
HE4	Battle Road West
HE5	Battle Road East
HE6	Halley Road
HE7	A256 – Sandy Cross Lane
HE8	Leeves Common
HE9	Sheepsetting Lane – Sandy Cross Lane
HE10	Cuckoo Drive – Green Lane
HE11	Thorny Close Link

(Further information on the development of this network is in Appendix 5J.)

**Figure 13 - Crowborough proposed cycle network**



**Table 10 - Proposed infrastructure**

Table 10 Scheme Number	Scheme Names Crowborough
C1/C3/C7	B21 from the A27 - junction Green Lane and the Croft Road/Church Road Triangle
C2	Jarvis Brook – St Johns via Medway and Millbrook Road
C4	North/South link via Queens Road and Poundfield
C5	Jarvis Brook – Mount Pleasant – via Tubwell Lane
C6	Jarvis Brook - Rotherfield
C8	Area based improvements – residential areas

(Further information on the development of this network is in Appendix 5K.)

## *Rural Rother*

## *Battle & Rye*

5.13 These historic smaller settlements are set within a more rural environment which is surrounded by Areas of Outstanding Natural Beauty. Alongside the large numbers of tourists which these towns attract they also provide a role as a service centre for nearby rural villages. Therefore, the routes are focussed on supporting local access both within and to the settlements.

Figure 14 - Battle proposed cycle network

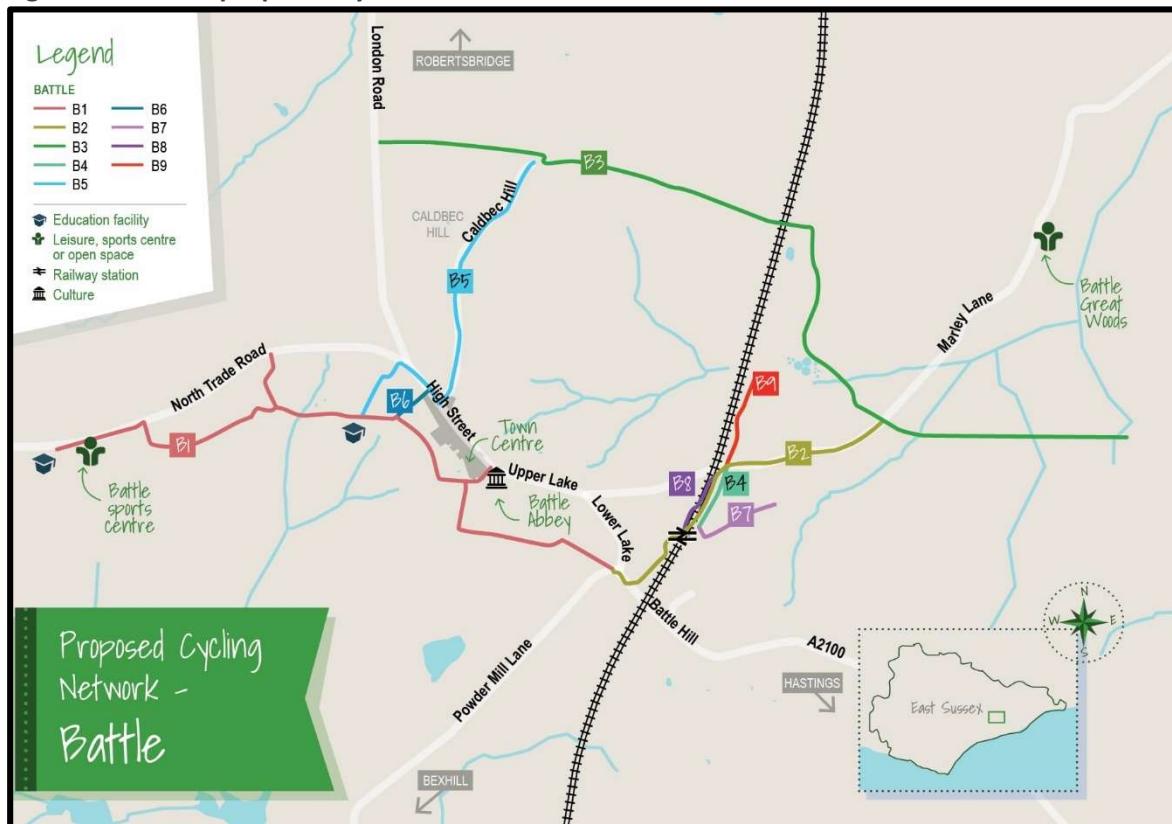


Table 11 - Proposed infrastructure

Table 11 Scheme Number	Scheme Names Battle
B1/B2	Battle Schools Greenway
B3	Uckham Lane, Marley Lane, Great Wood
B4/B7/B8/B9	Links to Blackfriars Re-development
B5	Battle North
B6	Link Automotive Estates

(Further information on the development of this network is in Appendix 5L.)

Figure 15 - Rye proposed cycle network

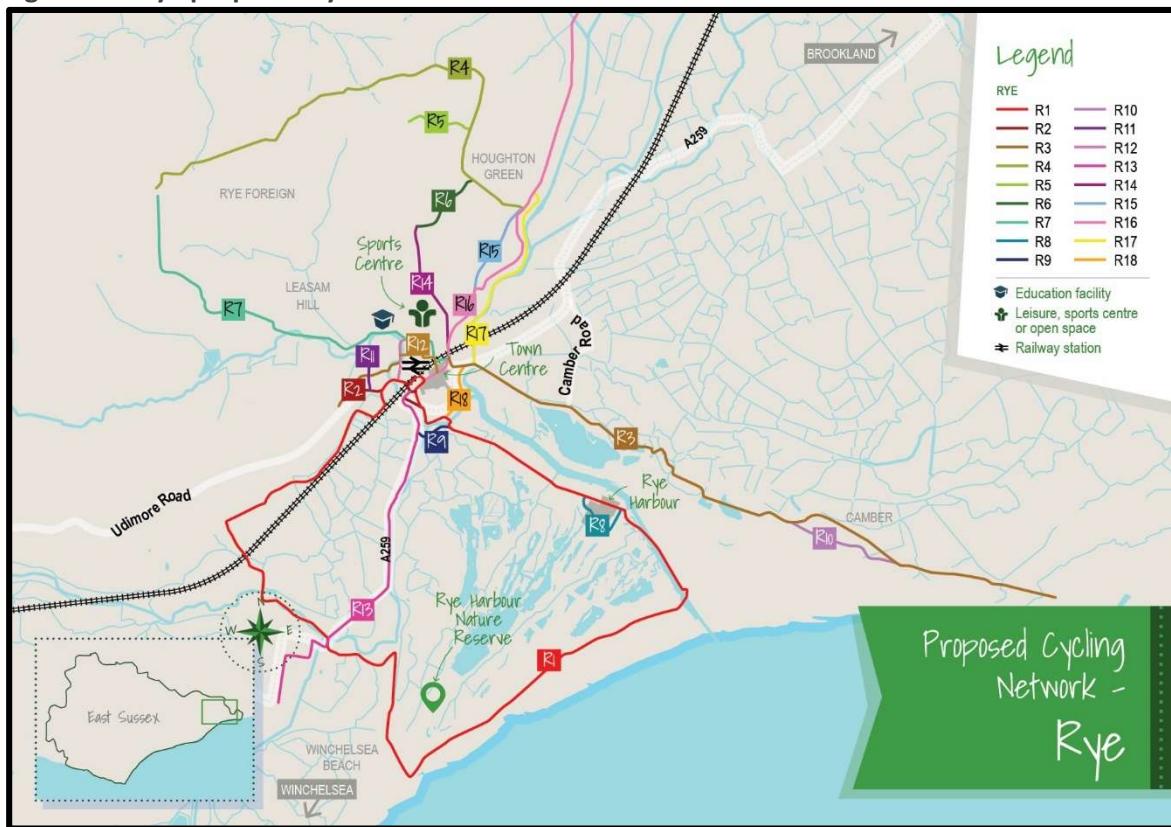


Table 12 - Proposed infrastructure

Table 12 Scheme Number	Scheme Names Rye
R1	Rye - Rye Harbour - Winchelsea Loop
R2	Valley Park - Rock Channel
R3	Valley Park - Camber - Jury's Gap
R4	Peasmash - Military Road
R5	Playden Lane
R6	School Lane
R7	Peasmash - Landgate
R8	Rye Harbour Alternative
R9	Winchelsea Road - Harbour Road
R10	Camber Alternative
R11	Mason Road
R12	Ferry Road - Love Lane
R13	Cinque Ports Street - Winchelsea
R14	Rye - Playden
R15	Military Road

R16	Rye - Iden Lock
R17	New Road - Scots Float Sluice
R18	Rock Channel

(Further information on the development of this network is in Appendix 5M.)

## Proposed Walking Network Maps

5.14 A proposed walking network map of preferred routes for each priority area has been developed. Please see below a map outlining the proposed walking networks for each settlement, alongside a table with the name of each route.

5.15 The aim is to improve the existing walking network and core walking zones (such as town centres) or, where feasible, to extend the walking network. These maps will be adopted as strategic planning documents.

### Coastal East Sussex

#### Newhaven Area - Newhaven

5.16 Whilst the quality of the existing infrastructure for pedestrians is generally good in some locations, there are some specific issues related to accessibility. This includes the height of kerbing, severance issues caused by limited step free access on the most direct routes, lack of pedestrian crossings, and poor quality of footway surfacing.

Figure 16 - Newhaven proposed walking network

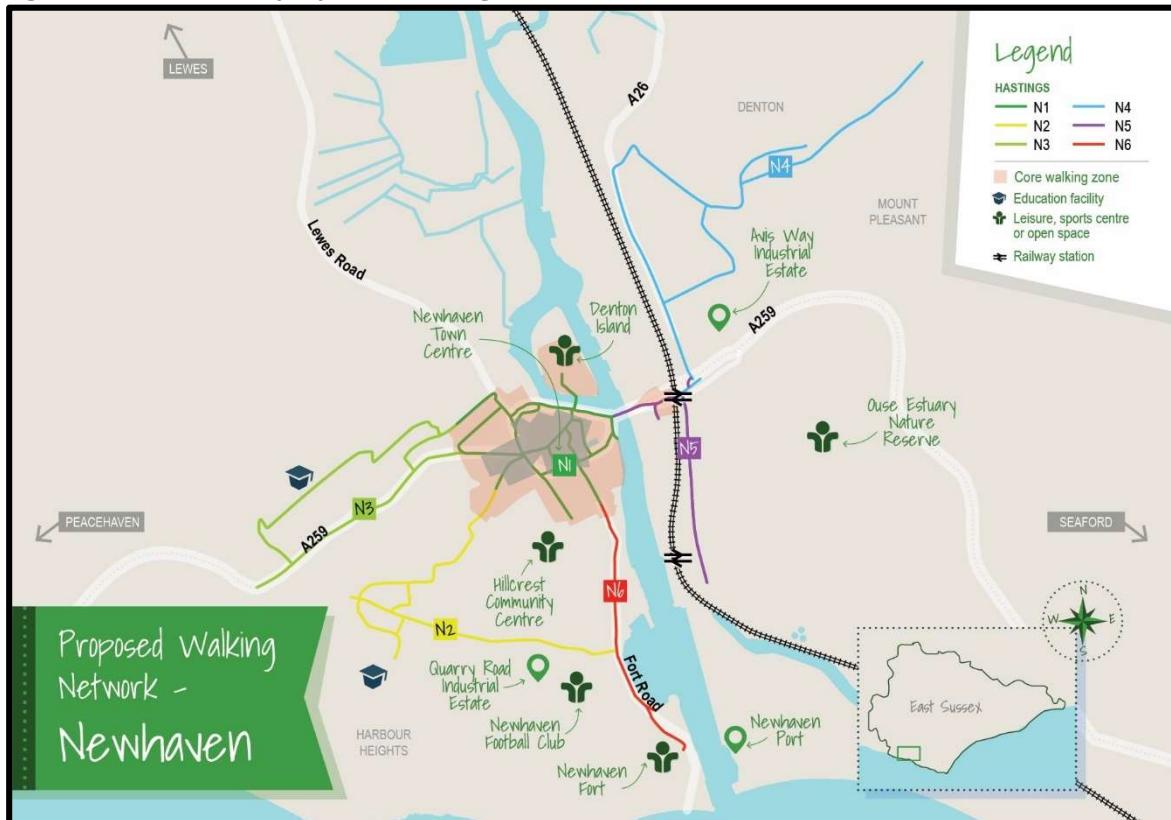


Table 13 - Proposed infrastructure

Table 13 Scheme Number	Scheme Name
N1	Core Walking Zone
N2	Church Hill to Southdown Rd
N3	Eveyln Ave to Brighton Rd
N4	Drove Rd to Denton Rd
N5	North Way to Beach Rd
N6	South Rd to Fort Rise

(Further information on the development of this network is in Appendix 50.)

#### Lewes & South Downs National Park - Lewes

5.17 Lewes is a historic town and therefore the current pedestrian environment is reflective of this. Key issues include narrow footway widths, quality of footway surfacing, and the need for increased footway provision.

Figure 17 - Lewes proposed walking network

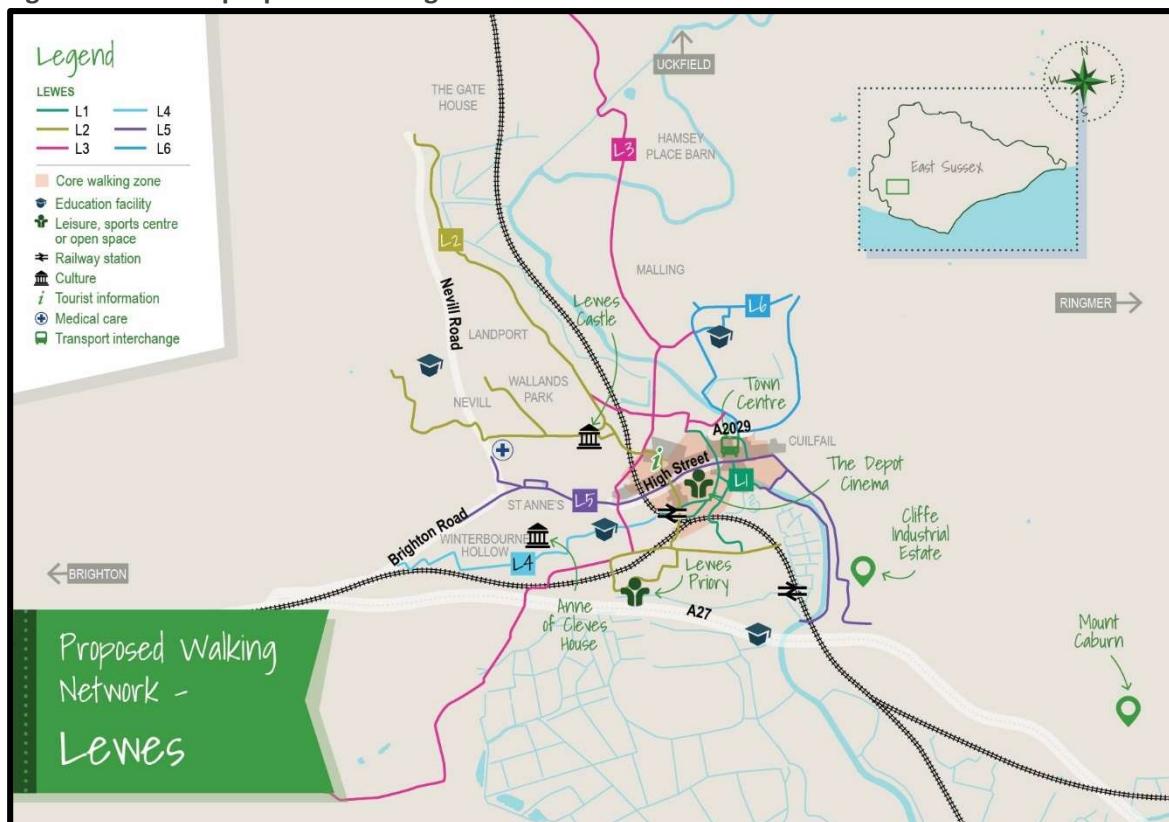


Table 14 - Proposed infrastructure

Table 14 Scheme Number	Scheme Name
L1	Core Walking Zone
L2	Cockshut Road to The Drove
L3	Wellgreen Lane to Whitfield Lane
L4	Elm Grove to Brighton Rd
L5	Brighton Road to Southerham Lane
L6	Phoenix Causeway to Mill Road

(Further information on the development of this network is in Appendix 50.)

#### *Eastbourne & South Wealden – Eastbourne*

5.18 ESCC and LDC-EBC are currently undertaking work to prioritise people accessing the town centre using more active travel. Specific issues identified include the need for more pedestrian crossing points between destinations to improve the directness of routes, reduction of traffic speeds, footway resurfacing, and provision of footways where there are gaps.

Figure 18 - Eastbourne proposed walking network



Table 15 - Proposed infrastructure

Table 15 Scheme Number	Scheme Name
E1	Core Walking Zone
E2	Devonshire Place to Wellcombe Crescent
E3	Terminus Road to Park Avenue
E4	Ashford Road to Lottbridge Drive
E5	Cavendish Place to King's Drive
E6	Marine Parade Rd to Birch Roundabout

(Further information on the development of this network is in Appendix 50.)

5.19 With the ambition to be a '10-minute town' where people can access the local services they need using active travel, pedestrian accessibility in Hailsham is crucial. Key improvements identified for this town include the need to provide greater access to the Cuckoo Trail, increased dropped kerb provision, improved footway widths at certain locations, and the provision of crossing facilities on busier roads.

Figure 19 - Hailsham proposed walking network

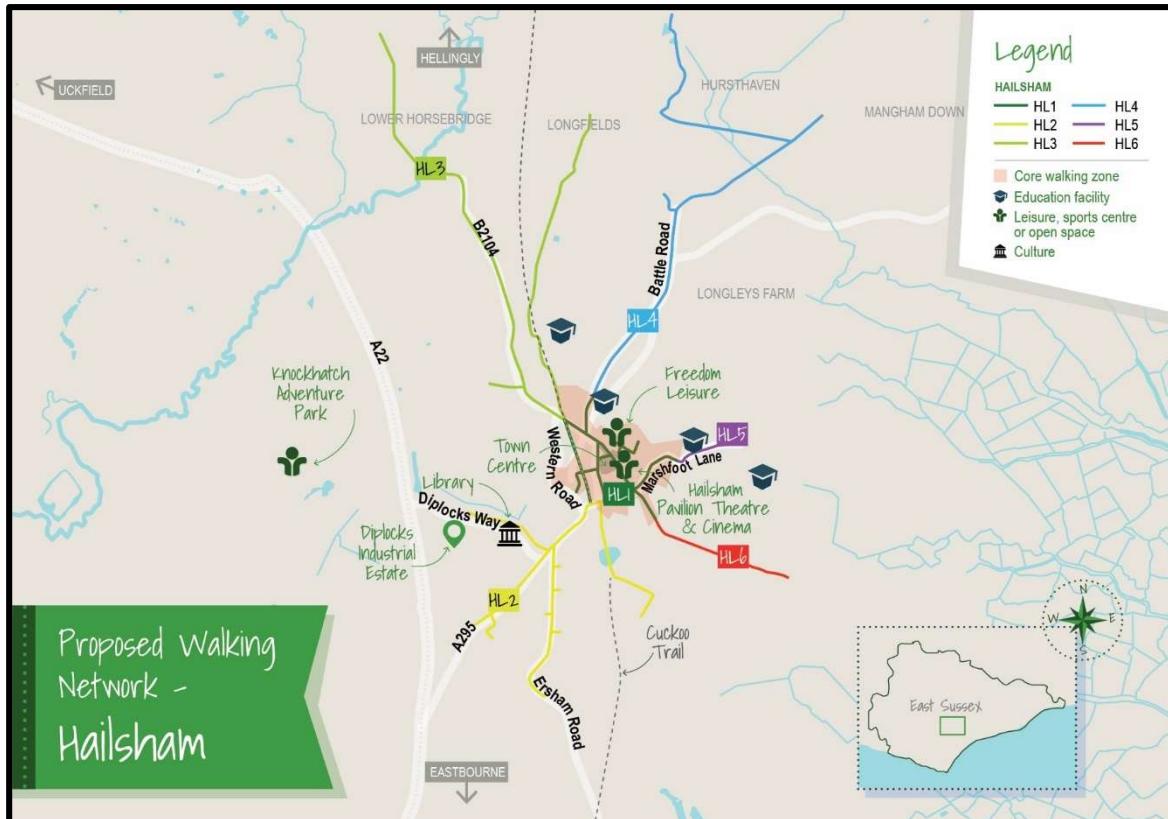


Table 16 - Proposed infrastructure

Table 16 Scheme Number	Scheme Name
H1	Core Walking Zone
H2	South Rd to Arlington Road East
H3	London Road to Church Road

H4	Battle Road New Road
H5	Marshfoot Lane
H6	Mill Road

**(Further information on the development of this network is in Appendix 50.)**

### **Bexhill & Hastings – Bexhill**

5.20 With generally an older population living in Bexhill compared to other areas of the county, accessibility is essential. A key issue identified is the need for enforcement to limit parking on existing footways. In both Hastings and Bexhill, it was identified that there was a need for the resurfacing of footways, increased footway widths, increasing pedestrian crossing points and expansion of dropped kerb provision. This would help both Rother District Council and Hastings Borough Council in the regeneration of their town centre areas, and the enhancement of the public realm.

**Figure 20 - Bexhill proposed walking network**



**Table 17 - Proposed infrastructure**

Table 17 Scheme Number	Scheme Name
B1	Core Walking Zone
B2	Cooden Sea Road to Freshfields
B3	Station Road to Barnhorn Road
B4	Buckhurst Place to Turkey Road
B5	Sea Road to Watermill Lane

**(Further information on the development of this network is in Appendix 50.)**

**Bexhill & Hastings – *Hastings***

**Figure 21 - Hastings proposed walking network**



**Table 18 - Proposed infrastructure**

Table 18 Scheme Number	Scheme Name
H1	Core Walking Zone
H2	White Rock to Harley Shute Road
H3	Cornwallis Gardens to Hollington Old Lane
H4	Queens Rd to The Ridge
H5	Milward Road to Ivyhouse Lane
H6	The Bourne to Rye Road
H7	Pelham Place to Barley Lane
BHS:	Bexhill-Hastings Seafront

**(Further information on the development of this network is in Appendix 50.)**

### **Future Walking Network Development Work – Other Areas**

5.21 As outlined above the LCWIP network development for cycling also identified improvements for pedestrians where possible, but the walking network development work has been more focussed on urban centres. ESCC and their partners will review the opportunities to undertake more detailed walking network development assessments in Peacehaven, Seaford, Uckfield, Heathfield, Crowborough, Battle and Rye in the future.

### **Cycling & Walking Training, Information & Initiatives**

5.22 To maximise the use of the potential infrastructure projects listed above, ESCC and their partners will look to continue delivering a programme of cycling and walking training, information and initiatives. This will be subject to funding being secured. This is currently delivered through ESCC 'Active Access for Growth Programme. (Further details on this programme and others is in Appendix 2 East Sussex LCWIP Part 2 Infrastructure Plan Stage 6.)

## 6. How will the LCWIP be delivered?

6.1 As we have previously stated the LCWIP is dependent on the ability of ESCC and their partners to secure funding. To place us in a stronger position to secure the funding necessary to deliver the LCWIP we have identified **four** key factors which we will need to undertake. These are as follows:

### 1. Embed within strategy and policy documents

6.2 To help ESCC and their partners deliver the LCWIP the first step will be to ensure that it is referenced in other County wide strategy and policy documents. When making the case for funding there is a requirement to demonstrate the wider impacts that cycling and walking can support, especially in relation to the environment, health and wellbeing, the economy and planning. So, it is important that it is referenced in documents that cover these key policy areas. For example, we will work with district and borough councils to ensure that the cycle and walking network maps are adopted as part of their Local Plans. (For further information about the specific documents that the LCWIP links to, are included in Appendix 2.)

### 2. High Quality Infrastructure Design & Engagement

6.3 Ensuring that we deliver schemes that are inclusive for all users alongside being safe, attractive and convenient is essential, so that people regardless of their ability or age feel comfortable in using it.

6.4 The government has recently published new design guidance for cycling infrastructure referred to as LTN 1/20. This has a greater emphasis on providing routes that are of a higher quality and are physically separated (e.g. by a kerb or barrier) from the highway or footway. On all new schemes ESCC will look to follow this guidance where it is feasible or where there are opportunities to adapt the approaches.

6.5 Early engagement with key stakeholders and the general public, especially those people that will be the key beneficiaries of a scheme, will remain as a high priority. We will also seek to look at more innovative ways of engaging with people to obtain their views, to ensure acceptability and most importantly to ensure the future use of schemes.

### 3. Targeted cycling and walking Initiatives

6.6 Installing new infrastructure, particularly cycling and walking infrastructure, is not always enough to help encourage more people to cycle or walk. How someone chooses to travel is determined by a person's personal circumstances (i.e. this could be their type of employment, how far they need to travel, the cost of a journey) and importantly how convenient it is in enabling them to make those every day journeys.

6.7 So we are committed to provide people with walking and cycling initiatives, information and skills to give people the right opportunities to give cycling and walking a try and to move people to changing their travel behaviour towards more active travel for short local journeys or as part of longer journeys. This will build upon existing work, which has been undertaken through previous programmes outlined in section 5 above.

#### 4. Partnership working will ensure the delivery of East Sussex's LCWIP

6.8 Partnership working is fundamental in determining the success of ESCC and their partners in securing funding from a range of sources, to enable the delivery of the LCWIP. ESCC is leading on the LCWIP to support an increase in cycling and walking, but significant change will only occur by collaborative working with our key internal and external partners, including the public, commercial and voluntary sector along with embracing any new future partnerships.

#### Prioritising Schemes

6.9 To help us meet DfT guidance the plan will need to include an indication of those schemes which are of a higher priority over others. This will largely be to support ESCC and their partners in applications for larger scale funding from the government or other larger funding organisations. (An initial prioritisation of schemes has been undertaken and is indicated in Appendix 2 - Stage 5. This will be reviewed following the public consultation, and all schemes assessed as part of this process.) However, whilst this prioritisation process is important, it is also recognised that the schemes may not always come forward according to this prioritisation. It is essential that there is a degree of flexibility in the delivery of the plan. This because the plan is dependent on:

- **the types of funding which come forward in the future** (capital/revenue),
- **the purpose and criteria of these funds** (i.e. aligned to policies, themes etc.), and
- **the process associated with accessing the funding and who can access these** (ESCC, District & Boroughs, SDNPA, voluntary sector)

#### Types of funding

6.10 ESCC and their partners working collaboratively will enable a greater range of funding sources to be secured for cycling and walking infrastructure and initiatives.

6.11 This will include direct applications for funding from the government and larger or smaller scale national or local funding organisations. Examples of potential funding sources include the DfT's Active Travel Fund; the Ministry of Housing, Communities & Local Government - High Streets Fund; Highways England's Designated Funds; the Energy Savings Trust, and British Cycling.

6.12 Funding will also be sought through the planning process for new development by securing development contributions. To enable this to happen, the networks will need to be included as part of the district and borough Local Plans and potential schemes included in the accompanying Infrastructure Development Plans, which list the infrastructure required to support future development. This will enable ESCC to specifically request potential schemes included in the LCWIP, as appropriate, when providing responses to planning applications from the district and boroughs. This will be alongside any potential opportunities for communities to allocate Community Infrastructure Levy (CIL) funding they receive, to support the delivery of cycling and walking infrastructure, identified within their Neighbourhood Plans.

6.13 To support the collaborative nature of the plan ESCC and their partners will be supportive of local organisations in securing and delivering more localised measures and initiatives to support more cycling and walking in the county.

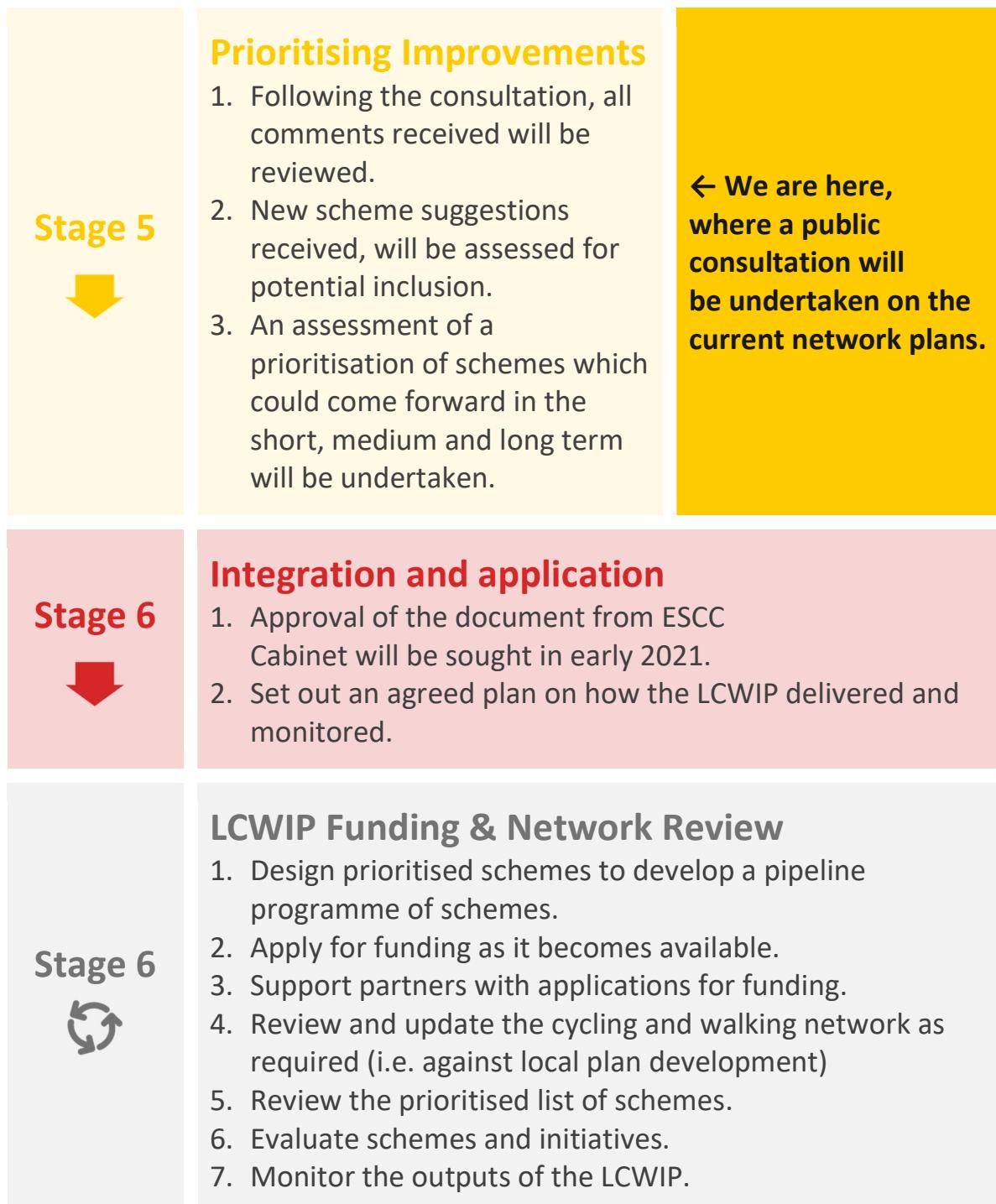
### **Governance**

6.14 It will be monitored on an annual basis through the governance arrangements as outlined in Appendix 4; progress and future projects will be reported through ESCC's Capital Programme of Local Transport Improvements.

## 7. What next?

7.1 In section 2 the stages that had been undertaken to help develop the plan were explained, so that the plan is in accordance with the DfT guidance. Figure 19 indicates the next stages which will be undertaken by ESCC and their partners.

**Figure 22 - Next Steps**



## New DfT strategy – ‘Gear Change’ – A new vision for cycling and walking 2020

7.2 In July 2020 the DfT published a new cycling and walking strategy, referred to as ‘Gear Change’. **The strategy is focussed on providing more space for people cycling and walking by reallocating more road space for either fully segregated cycle routes or closing roads to traffic to create low traffic neighbourhoods.** To help support this the DfT is establishing a national funding body and inspectorate referred to as ‘Active Travel England’.

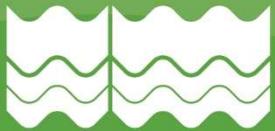
7.3 The role of this will be to:

- provide expert advice regarding scheme design and stakeholder consultation,
- administer funding & review funding applications,
- enforce scheme design standards and time limits on scheme delivery, and
- publish annual reports on highway authority’s performance in relation to cycling and walking infrastructure.

7.4 **To respond to this ESCC will be commissioning a study to review the opportunities for delivering these types of schemes in the County. This will be undertaken during November 2020 – February 2021.**

## East Sussex Local Transport Plan 2020 Review

7.5 ESCC will commence a review of their Local Transport Plan 2011 – 2026 which will be updated in the next year, to reflect the changes in policy and the likely impacts of the Covid – 19 Pandemic, which will change future travel patterns in the short and longer term. The LCWIP will be updated, to reflect this document.



# **‘Let’s get cycling and walking’**

**East Sussex’s Local Cycling & Walking  
Infrastructure Plan 2020 – 2030**

**October 2020**



# Contents - Part 1

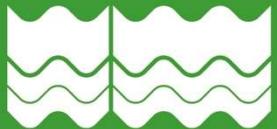
## East Sussex County Council (ESCC) Local Cycling & Walking Strategy

### How will we get more people cycling and walking in East Sussex?

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*Appendix 1 - ESCC Policies*

*Appendix 2 - National/Regional/Local Strategy/Policy*



# 1

## How will we get more people cycling & walking in East Sussex?

Background Information &  
East Sussex's Strategy



## 1. Purpose

East Sussex's **first** Local Cycling and Walking Infrastructure Plan (LCWIP) sets out a proposed network of cycling and walking routes and measures in specific areas of the County. Importantly this will sit alongside our wider plans to improve transport and travel over the next ten years.

The opportunity to enable more people to walk and cycle has never been so important. The COVID-19 pandemic has had huge an impact on the way people work, socialise and, ultimately, travel. For some this has meant that they have been able to re-think about how they travel - cycling and walking has become more of an option. We want to maintain and this momentum by improving and adding to our existing network, and this LCWIP is a significant step to achieving this.

The benefits associated with more people walking and cycling are evident. We know that it can improve our physical and mental health and wellbeing, and that it can help to reduce the number of people using vehicles thereby reducing emissions from exhaust fumes and benefiting the environment.

We must also not underestimate the importance that active travel will have in supporting the recovery of the economy. It will achieve this by improving connections for people to access education, training and employment opportunities, alongside creating a healthy more reliable workforce, individuals benefiting from financial savings arising from not having a need for vehicular travel, and supporting future clean growth in housing and employment. **Despite all of these benefits we do understand that for most people, choosing to cycle or walk is only going to be a realistic option if it is convenient and fits easily into their lives**

**So, PEOPLE** are at the centre of this plan. We will focus as much on understanding people's needs and the **PLACES** that they want to get to, as this will influence how we can encourage more to cycling and walking. This will also help inform us about the types of measures we need to deliver to help make this happen.

This plan is a live document. It will continue to evolve, and new schemes and different areas of the county will be considered and included where possible. We **cannot deliver this plan alone, so we will be working in partnership with** district and borough councils and the business sector alongside our local communities, to help us plan, secure future funding and deliver the measures that people need to enable them to walk and cycle more.



**Councillor  
Keith Glazier**  
Leader of  
East Sussex  
County Council



**Councillor Claire  
Dowling**  
Lead Member for  
Transport and  
Environment

## 2. Executive Summary

### 2.1 What is the East Sussex LCWIP?

East Sussex's first LCWIP sets out an ambitious network of cycling and walking routes and measures integrated with existing cycling and walking infrastructure, which we have recently invested in. This is alongside the wider transport network and maximising the potential in development areas.

**This plan is focussed on areas where there are the greatest opportunities to increase levels of cycling and walking**, with an emphasis on delivering infrastructure improvements which will support those people who currently do not cycle or walk. We know at national level, that cycling is underrepresented in people of an older age, women, and Black, Asian and minority ethnic (BAME) groups <sup>1</sup>.

By assessing the identified measures against the key factors of policy, deliverability and value for money a programme of measures has been developed for short, medium and longer term delivery. **It's important to note that the delivery of this plan is dependent on the availability and securing funding**. However, having a plan in place will put us and our partners in a stronger position to secure future investment from a range of funding sources.

We also know that many people face a number of barriers in trying to cycle or walk for everyday journeys, which often have a greater impact for underrepresented groups. So, this plan also outlines what type of initiatives we can deliver to help support changes in travel behaviour. These initiatives will look to tackle some of the common and often interrelated barriers which people face, including concerns around safety and their perception of risk, the constraint of an existing busy life or not seeing walking and cycling as the norm.

LCWIP's were identified within the Department for Transport Cycling & Walking Investment Plan (CWIP), which was published in 2017. **Whilst these are not mandatory documents for local authorities to develop, ESCC and their partners were eager to adopt this approach to maximise the opportunities to enable more people to cycle and walk.**

*ESCC also acknowledges the changes in travel patterns which are resulting from the impacts of Covid-19, in the use cycling and walking for both commuting and for leisure purposes. ESCC and their partners will continue to monitor this data during the current circumstances, together with identifying the future opportunities to enable us to support people in the recovery to integrate cycling and walking as part of their longer term travel choices. This will be reflected in a future update to the plan.*

### 2.2 Why are we developing an LCWIP?

See the diagram on page 6.

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1. <sup>1</sup> Cycling UK's Cycling Statistics - 2017-201?

**Figure 1: Why we are developing an LCWIP**

East Sussex's LCWIP will be at the forefront of taking positive action to support a number of key challenges and opportunities which we are facing both nationally and locally.

### Tackling Climate Change



Integration with Place Making



Improving Air Quality



Better safety for people cycling and walking



Improving physical and mental health



Supporting economic recovery and growth in a sustainable way

## Tackling Climate Change

With the impacts of Climate Change being made more evident, this will increase unless we take action according to leading professionals; as such the integration of deliverable environmental policy with wider policy agendas is vital. With transport accounting for over a third of all carbon dioxide emissions nationally <sup>2</sup>, East Sussex's LCWIP will be part of the delivery mechanism that will counteract this through the delivery of greater infrastructure that gives a high priority to people wanting to cycle and walk locally and within key destinations, such as town centre areas.

## Improving Air Quality

The exposure to poor air quality is not a lifestyle choice and often people who are more vulnerable, including children and people with pre-existing health conditions or those people that live or work nearer to congested roads suffer the most consequences. Air quality is also usually a lot worse inside vehicles than outside; so initiatives to encourage people to walk and cycle, particular on the commute to work or to access education will be important. East Sussex's LCWIP will focus on air quality management areas, within Newhaven and Lewes, (which are managed by Eastbourne – Lewes Council), alongside contributing to reducing particulate matter within our towns and key settlements.

## Improving physical and mental health

Leading a physically active lifestyle is proven to support both physical and mental health, increasing the amount of walking and cycling supports the need to reduce preventable death, disease and disability, East Sussex's LCWIP will align with existing Public Health programmes. These will be focussed on considering how local systems are operating and where there are the greatest opportunities for change. Actions to improve the physical environment and initiatives to support travel behaviour change towards more active travel and access to green space will support this. This will embrace Public Health England's approach of 'proactive, predictive, and personalised prevention' to reduce long term health conditions.

## Supporting economic recovery and growth in a sustainable way

Most local journeys to work in East Sussex are at or below 5km. This enables cycling and walking for journeys of up to 2km to be an achievable option for all or part of journeys to and from work. The East Sussex LCWIP will be an integral element of economic strategic plans which support access to new and existing employment, boosting productivity through a healthier and more active workforce and broadening people's horizons with access to education and training.

The provision of improved cycling and walking infrastructure will be a fundamental element of 'place making,' within our high streets, town centres, existing residential areas and as part of new developments.

The plan will also look to integrate sustainable transport within regional economic planning focussed on 'promoting greater inclusion and change by harnessing economic opportunities in coastal communities'<sup>3</sup>, and focussing the LCWIP within these areas where there are the greatest opportunities to get more people cycling and walking.

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<sup>2</sup> National Statistics March 2019

<sup>3</sup> Draft SE LEP Local Industrial Strategy 2020

## Better safety for people cycling and walking

Better safety for people cycling and walking through the provision of infrastructure, training and behaviour change programmes is an integral element of the East Sussex LCWIP. This will utilise existing multi-agency partnership approaches the county. To ensure that when people are using streets to cycle or walk, they feel that they belong and that there are appropriate speed measures are in place. This needs to be combined with information and training, particularly for cycling, to support people to use the roads and dedicated cycling infrastructure with confidence.

## Integration with place making

There is increased pressure to deliver more housing and work opportunities in the county. Currently in East Sussex over 2,000 additional homes are proposed to be built per year alongside additional employment workspace.

Revisions to Local Plans will be considering even higher housing targets to meet local needs. Increasing and improving better planning for the **provision** of walking and cycling will be important, ensuring that this is an achievable way to travel for all or part of journeys from people's homes to their places of work.

## 2.3 How have we set our Vision, Principles and objectives?

East Sussex's LCWIP will actively contribute to addressing the key national and local issues and opportunities we have referred to in section 3.2. These have helped define the vision for the plan, which is focussed on supporting people to be able to choose cycling and walking for everyday journeys. The vision is supported by four overarching principles under the headings:

- **Consistent Policy Approach**
- **High Quality Infrastructure Design & Engagement**
- **Targeted Initiatives**
- **Partnership Working**

These principles are supported by detailed objectives which will underpin the delivery and prioritisation of projects.

To support our vision, principles and objectives and the future delivery programmes, ESCC has also published a series of robust cycling and walking policies, grouped under the key principles headings, these provide detailed guidance, scope and actions on how the vision and objectives can be achieved. These are provided in appendix 1.

## 2.4 What is the geographic extent of the LCWIP?

East Sussex encompasses an area of 692 square miles, with a distinct urban/rural split. The more urban environment is located to the south of the County, along the coastal strip. The more rural environment is to the north with much of it being covered by landscape and environmental designations, of both national and international significance.

The current population stands at 552,259 people, with over 60% of the population concentrated on the coastal fringe in the three main urban areas of Eastbourne/South Wealden, Bexhill and Hastings, alongside Newhaven, Seaford and Peacehaven.

In accordance with DfT LCWIP guidance, **an LCWIP should focus on areas where there is the greatest propensity to increase levels of cycling and walking**. Alongside this we have considered the key trip attractors in the County, the travel to work areas and future growth in relation to housing, employment and the visitor economy. **Therefore this has led us to prioritise our first LCWIP on areas largely located on the coastal strip and the larger market towns in the County, which will also provide the greatest opportunities to secure larger scale external funding for cycling and walking infrastructure programmes.**

**This does not mean that we do not recognise that there are opportunities for cycling and walking trips within rural areas**, but that our approach for these areas will be largely focussed on what can be achieved through our Local Transport Plan, Local Plans and Neighbourhoods Plans and other partners and funding associated with these. We are committed to working with key local partners in the future to identify opportunities and funding in relation to active travel for leisure, culture and tourism.

## **2.5 How has ESCC LCWIP been developed?**

A series of recommended network improvements for cycling and walking infrastructure improvements has been developed. This has been undertaken by identifying the preferred routes and core zones for improvement, linking closely with the key places that people need or want to access for every day journeys or leisure purposes, alongside considering future planned growth for both housing and employment.

The two key outputs of this assessment work are the development of cycle and walking network maps, and an initial programme of infrastructure improvements, which will be subject to further development work. These will be adopted as strategic planning documents in the future.

This has been achieved by working in partnership with key local stakeholders in relation to cycling, walking, access groups, district and borough councils and liaison through our travel behaviour change programme, 'Active Access for Growth' with schools and businesses involved too. Therefore, East Sussex's LCWIP is underpinned by local people's needs and the needs of future users.

## **2.6 What will ESCC LCWIP deliver?**

Essentially our LCWIP outlines a programme of infrastructure improvements, which ESCC and other key local partners will look to use to seek future investment. An initial prioritisation has been undertaken to provide an early indication of which schemes could come forward imminently, should funding be secured. However, it is essential that there is a degree of flexibility with this approach, as ESCC will be working with partners to seek various types of funding in the short, medium and long term to deliver improvements across the County.

As outlined in section 1, this will be treated as a 'live document' and progress on the delivery of cycling and walking infrastructure measures will be monitored through ESCC's Capital Programme of Local Transport Improvements, as a mechanism to demonstrate the investment in future cycling and walking infrastructure.

The LCWIP will also be used by ESCC, key partners and the voluntary sector to help secure future investment in initiatives to deliver comprehensive travel behaviour change programmes, to support the investment in existing and new cycling and walking infrastructure projects.

The LCWIP will also be used to influence and respond to the development of other plans and strategies to ensure schemes are coordinated and linked to other proposals and developments.



## 3. Policy Context

### 3.1 LCWIP - Making the policy links

The purpose of ESCC's LCWIP, as outlined in section 1, highlights how this document will be part of the wider action being taken across all tiers of government and multiple policy departments.

This will be in order to help tackle some of the key challenges and opportunities which are affecting people now:

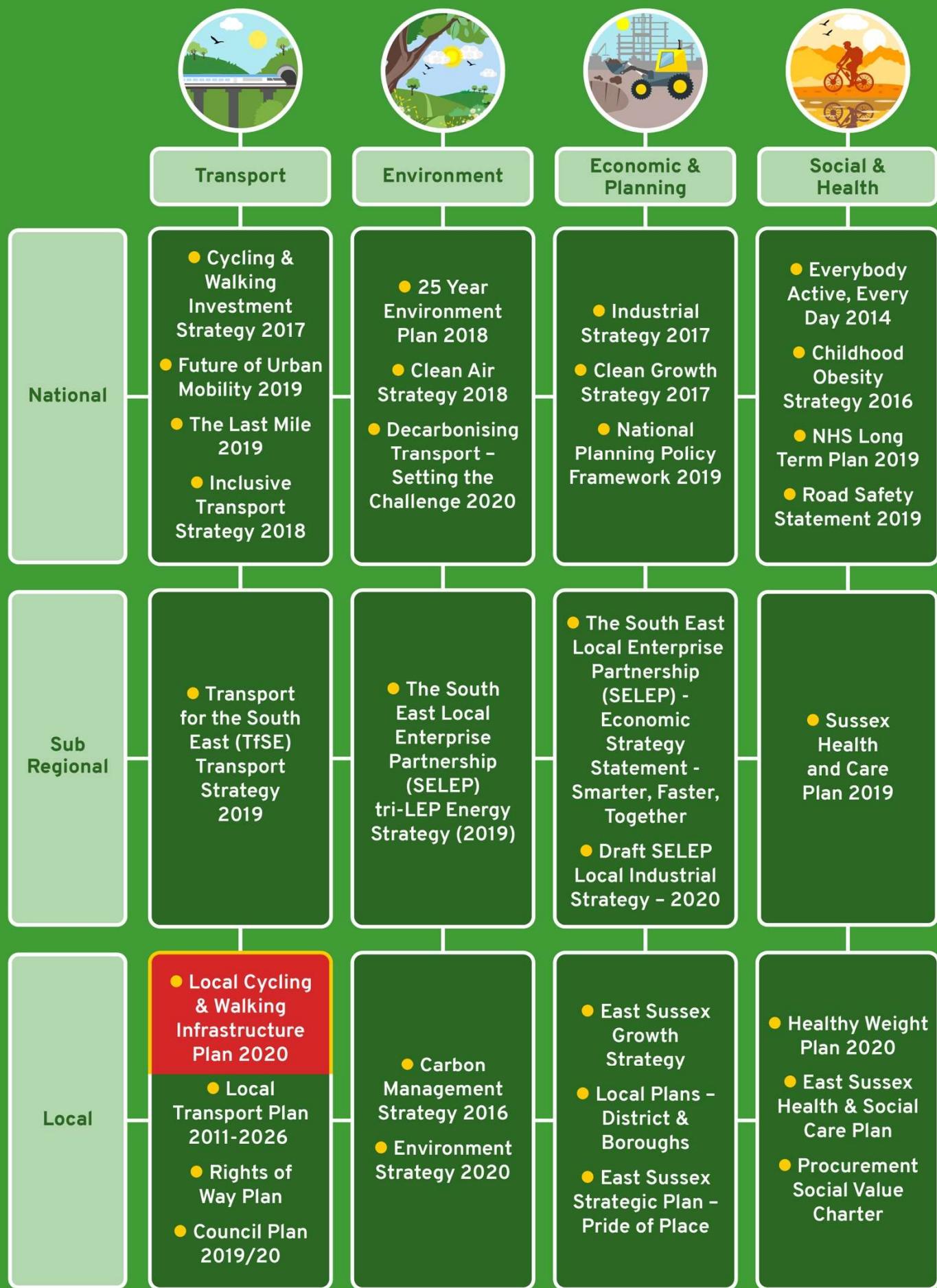
- **transport,**
- **environment,**
- **economy & planning, and**
- **social & health.**

What will be crucial is the action that is taken by ESCC and their partners to ensure that the LCWIP is embed within the relevant documents. (This is as outlined in section 2 – Stage 6.)

Appendix 2 highlights the key national, regional and local policies and plans which East Sussex's LCWIP's are aligned to, with a brief summary as outlined on the next page.



**Figure 2: Policy Linkage**



## 3.2 Transport

The national '**Cycling & Walking Investment Strategy**' (CWIS) was published in 2017 by the Department for Transport (DfT). This is the first statutory plan to support longer term investment in cycling and walking. The overall ambition is to make cycling and walking the natural choices for shorter journeys, or as part of a longer journey. Crucially the CWIS encourages local authorities to develop LCWIP's, to enable a strategic approach to be taken in the identification of cycling and walking infrastructure projects.

How people travel, is set to change considerably in the near future and the '**Future of Urban Mobility**' (March 2019) sets out the benefits of innovation in mobility and the principles required to deliver this, with the need for walking, cycling and active travel being required to remain as the best option for short urban journeys alongside more innovative approaches to travel. This is supported by '**The Last Mile**' – Delivering goods more sustainably (March 2019), which demonstrates how the 'last mile' in distribution and deliveries could be transformed into an integrated, clean and sustainable delivery system, using zero-emission e-cargo bikes and ultra-low-emission electric vehicles.

Inclusive access is an important element of an LCWIP; the DfT's '**Inclusive Transport Strategy**' (**August 2018**) is focussed on achieving equal access for disabled people and sets out the Government's plans to make the transport system more inclusive, and to make travel easier for disabled people.

The **Transport for the South East (TfSE)**, which brings together representatives of 16 transport authorities and five local enterprise partnerships, enables dialogue with government with 'one voice' on the geography's transport priorities. The overarching ambition of their strategy is not just to improve but also transform the quality of transport for the South East's residents, businesses and visitors, by delivering 'a quality, integrated transport system that makes us more productive and competitive, and improves the quality of life for all whilst protecting the environment'.

The **County Council's Local Transport Plan (LTP) 2011 to 2026**, sets out the overarching transport strategy, alongside the specific needs for defined geographic areas. It is underpinned by a number of key objectives, as outlined below, with economic competitiveness and growth and improving safety, health and security identified as the key priorities.

- **Improve economic competitiveness and growth**
- **Improve safety, health and security**
- **Tackle climate change**
- **Improve accessibility and enhance social inclusion**
- **Improve quality of life**

The strategy is supported by a series of five year Local Transport Implementation Plans, which outline the identified measures required for delivery to support the transport needs of the specific geographic areas, with programmes to deliver cycling and walking measures being a key element of these. *ESCC's LTP will be reviewed during 2020 – 21.*

There is an existing **Cycling Strategy for Eastbourne and a Cycling & Walking Strategy for Hastings**. The proposed networks included in these documents have been taken into

consideration in the development of the LCWIP for these areas. These documents will be superseded by the East Sussex LCWIP document 2020-2030.

As well as developing new infrastructure, the maintenance of our existing asset is important. **ESCC's Highway Asset Management Strategy 2018 – 2024** outlines that there are 2,481km of footways and cycle ways in the County, maintained by the ESCC Highway Service. The maintenance of these supports the key factors of safety, social inclusion and accessibility, especially for more vulnerable people.

**ESCC Rights of Way Improvement Plan 2007-2017** sets out plans to improve the public rights of way network and access to the countryside. It includes measures to ensure safe and easy access for all. *This plan is currently under review, and a revised version is due to be published in 2020.*

### 3.3 Environment

The '**Clean Growth Strategy**' focuses on the need to grow the economy, whilst reducing greenhouse gas emissions. One of the key aims is to 'Accelerate the shift to low carbon transport', including making cycling and walking the natural choice.

With air quality and the climate change emergency being critical issues that we need to tackle now, the UK Government's '**25 Year Environment Plan**' includes targets to reduce emissions of the five key damaging air pollutants, halve the effects of air pollution on health by 2043, and reduce total greenhouse gas emissions by at least 80% by 2043. This was followed by the **Clean Air Strategy** in 2018, which includes a target to reduce particulate matter emissions by 46% by 2050.

More recently the **DfT 'Decarbonising Transport' Setting the Challenge 2020** is underpinned by the law passed in 2019 for the UK to achieve a 'net zero' greenhouse gas emission by 2050. This document will be used to set the plan to support this target, with active travel being a key element of this.

The East Sussex **Environment Strategy** 2020, includes an overarching vision is to 'Protect and enhance our natural and built environment for current and future generations and tackle and adapt to climate change.' The need to tackle air quality within local Air Quality Management Areas (AQMA's) and tackling climate change by becoming carbon neutral are key elements of this, along with developing an LCWIP.

### 3.4 Economy & Planning

**ESCC Council Plan** sets out ambitions for the County for the period up to 2022. This includes four overarching priority outcomes:

- driving sustainable economic growth;
- keeping vulnerable people safe;
- helping people help themselves; and
- making best use of resources.

The LCWIP will be an integral element of supporting sustainable economic growth by delivering new and improved transport infrastructure alongside helping people help themselves, through travel behaviour change projects.

The government's '**Industrial Strategy**' is a long term policy document focused on increasing the productivity of the economy and living standards and driving growth across the whole country. The strategy includes five foundations to enable the delivery of the overall vision of a 'transformed economy, with people, place and business an integral element of this.

**Economic Strategic Statement: Smarter, Faster and Together: towards a local industrial strategy** (2018) sets out the ambitions for the South East Local Enterprise Partnership (SELEP) area to support the delivery of the Government's National Industrial Strategy. In linking this to the LCWIP the statement reinforces the need for transport infrastructure that ensures existing and new settlements are successful and sustainable, particularly the availability of high quality (public and) sustainable transport. *The LEP is currently developing a Local Industry Strategy for its geography which will supersede the Economic Strategic Statement.*

**East Sussex's Growth Strategy** (2014) sets out a vision for a more 'innovative, productive and faster growing East Sussex economy'. It is built around three key pillars related to **Business**, by enabling business growth, with an emphasis on 'high value' businesses; **Place**: by providing a significantly valued asset to the East Sussex economy and **People**: by ensuring the skills needs of business are met and support is provided to residents to reach their full potential. *This document will be reviewed during 2020-21.*

**Local Plans** produced by **district and borough councils and the South Downs National Park Authority** set out the level and distribution of future growth across the County and the policy framework for delivering that growth. Currently in East Sussex over 2,000 additional homes are proposed to be built per year alongside additional employment workspace. Revisions to Local Plans will be considering even higher housing targets to meet assessed levels of needs.

Local Plans contain policies on sustainable travel which encourage and support travel and development of walking and cycling networks. Opportunities to link planned and future growth to the LCWIP is fundamental to maximising walking and cycling potential.

ESCC LCWIP therefore has been developed to take consideration of both current committed and future allocated sites for housing and employment particularly in key growth, regeneration areas, and town centres. This has involved identifying the opportunities to link to existing transport infrastructure and identifying improvements or new projects. ESCC LCWIP will be used to strengthen Local Plan policies and to influence and fully integrate walking and cycling into development allocations in the next round of Local Plans.

### 3.5 Social & Health

With physical inactivity being the fourth leading risk factor for global mortality, and accounting for one in six deaths in the UK, it is cited as being as dangerous as smoking. Inactivity and associated costs are estimated to cost the UK £7.4 billion a year. Cycling and walking for every day journeys play a critical element in reducing physical inactivity.

**'Everybody Active, Every Day'** (2014), published by Public Health England, is focussed on tackling physical inactivity to reduce preventable death, disease and disability, and support people and their communities to achieve their potential. This is alongside the active environment section, which emphasises the importance of planning and the integration of cycling and walking infrastructure.

The more recent '**NHS Long Term Plan**' (2019) includes seven key areas to improve services, with greater support for people to have control over their own health, by providing personal health budgets and reducing obesity being a key element. This links to a more recent trend towards the 'quantified self', as many people now measure their daily steps, miles cycled and calories consumed as part of an interest in maintaining a healthier lifestyle.

ESCC Healthy Weight Plan is the County's plan for tackling obesity. It recognises that achieving a healthy weight is much more complex than maintaining it through a balance between energy intake and energy expenditure. The plan embraces the need to take a whole-system approach in order to address all the factors which can affect weight including knowledge, the social and physical environment we live in, economic and cultural background, and our self-confidence. It uses an integrated partnership approach drawing in a range of sectors to work collaboratively to reduce the burden of excess weight in the County, with active travel being a key element of this.

**Further information which informs the evidence base for the plan is outlined in stage 2 of ESCC LCWIP.**



## 4. East Sussex's Cycling & Walking Vision

The DfT's Cycling & Walking Investment Plan ambition is for 'cycling and walking to be the natural choice for short journeys, or as part of longer journeys'.

This ambition is reinforced by three key elements:

- the need for **better safety**, which is about providing cycle training and better connected communities;
- the need for **better mobility**, which means better quality cycling and walking facilities, integration between public transport and
- **better streets**, which is about better planning for cycling and walking and places designed for people of all ages and abilities.

By reflecting the national ambition and the key elements which reinforce this, for East Sussex this means:

### 4.1 Vision - Cycling & Walking for everyday journeys

Figure 3: Vision

***People will be able to choose to walk or cycle for all or part of their everyday journeys, enabling them to get to the places they need or want to go to. It will be an easy, enjoyable, inclusive and a safe option, centred on supporting healthy and sustainable communities.***



## 5. East Sussex's Cycling & Walking Principles & Objectives

### 5.1 Our Approach

To reinforce the delivery of our vision we have identified four key principles, which will strengthen the delivery of both cycling and walking infrastructure and initiatives. This will include the following:

#### **Consistent Policy Approach**

##### **1. Promotion and delivery of cycling and walking will be an integral element of regional and local strategy documents.**

This means that we will ensure that cycling and walking for every day journeys are reflected at all policy levels through integration from the outset into the development of future regional and local strategy documents, policies and commissions within our influence and that of our partners.

This will be in relation to documents concerning the economy, housing, transport, culture & leisure, health, social care and the environment. Critically this includes East Sussex Environment Strategy, which outlines our approach in managing the impacts of climate change, East Sussex Growth Strategy, ESCC Healthy Weight Plan and Local Planning Authorities Local Plans.

A consistent message will support us in increasing cycling and walking activity across the County for all journey purposes, and most importantly ensure that cycling and walking is both prioritised and integrated alongside emerging changes in travel.

#### **High Quality Infrastructure Design & Engagement**

##### **2. The use of current and future guidance and best practice examples will be embraced in the design and delivery of safer and inclusive cycling and walking infrastructure, which will be supported through engagement with users.**

This will mean that we can deliver safer, convenient, efficient, inclusive and attractive cycling and walking infrastructure measures, which will make cycling and walking easier for people and improve access for people regardless of their ability or ages.

Early engagement with key stakeholders and the general public, especially those people that will be the key beneficiaries of a scheme, will remain as a high priority. We will also seek to

look at more innovative ways of engaging with people to obtain their views, to ensure acceptability and most importantly to ensure the future use of schemes.

### **Targeted Initiatives**

#### **3. Cycling and walking initiatives, including information and skills, alongside cycling and walking infrastructure schemes.**

As with our ability to deliver infrastructure, the delivery of initiatives will be dependent on ours and our partner's ability to secure funding. It is widely recognised that often installing new infrastructure, particularly cycling and walking infrastructure, is not enough to change people's travel behaviour, unless combined with initiatives, information or skills training to overcome any identified barriers.

So we are committed to provide people, particularly with underrepresented groups, with walking and cycling initiatives, information and skills to give people the right opportunities to give cycling and walking a try and to move people to changing their travel behaviour towards more active travel for short local journeys or as part of longer journeys.

### **Partnership working**

#### **4. Partnership working will ensure the delivery of East Sussex's LCWIP.**

ESCC can provide the strategic basis to support an increase in cycling and walking but significant change will only occur by collaborative working with our key internal and external partners, including the public, commercial and voluntary sector along with embracing any new future partnerships. We have shared responsibility to work collaboratively across all areas which can influence cycling and walking activity, including strategy and policy development, applications for funding and infrastructure and intervention design and delivery, which ESCC and our partners are committed to do.

### **5.2 Objectives**

The above principles are supported by a series of detailed objectives. These reflect the specific policy areas which the LCWIP can influence and specifically those which are based on the needs of the people of the County. These will influence the prioritisation and delivery of cycling and walking infrastructure and initiatives in our LCWIP, as outlined in section 11, which will support social inclusion of access to jobs, services, leisure, education and training.

**Figure 4: Objectives**

**To support:**

**ECONOMIC**

- 1. access to employment, education, training, public transport hubs and other everyday journeys and key destinations**
- 2. local economic regeneration within our town centres and key settlements and place shaping.**
- 3. sustainable planned growth, both housing and employment**
- 4. opportunities to provide innovation and integrate with emerging smarter travel options**

**SOCIAL & HEALTH**

- 5. opportunities for integration with other modes of travel**
- 6. opportunities to improve health and wellbeing**
- 7. improvements to safety**
- 8. access to leisure and cultural activities for both local people and visitors**

**ENVIRONMENTAL**

- 9. improve air quality within the air quality management areas**
- 10. contribute to meeting the World Health Organisation's recommended air quality standards**
- 11. contribute to East Sussex becoming carbon neutral**
- 12. contribute to protecting and enhancing the natural environment.**

### 5.3 ESCC Policies

To support our ambition, principles and objectives, ESCC has also published a series of robust cycling and walking policies grouped under the four key principles, which will be adopted as part of the LCWIP. These provide detailed guidance, scope and actions on how the vision and objectives can be achieved and will be helpful in informing internal and external documents and guide future infrastructure and initiative programmes. These can be referred to in Appendix 1.



## 6. Monitoring

### 6.1 National Targets

The DfT's Cycling & Walking Investment Plan (CWIS) 2017, includes the following targets up to 2025:

Figure 5: National Targets

- Aim to double cycling levels
- Aim to increase walking activity
- Aim to increase the proportion of children aged 5 to 10 that usually walk to school

More information in relation to these can be found at:

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/603527/cycling-walking-investment-strategy.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/603527/cycling-walking-investment-strategy.pdf)

### 6.2 Local Monitoring

The delivery of ESCC LCWIP is subject to the ability to secure external funding. Therefore a set of local indicators, as outlined below, will be utilised to monitor the plan.

Figure 6: Local Monitoring

#### Infrastructure Maintenance

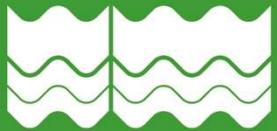
- Km's cycling and walking network maintained
- Number of defects on the cycling and walking network repaired
- Numbers of maintenance schemes including improvements to cycling and walking improvements

#### New Infrastructure

- Km's cycling/walking network installed (Include figure for 2019/20 as baseline)
- Number of dropped kerbs installed
- Amount of investment – cycling
- Amount of investment – walking

#### Initiatives

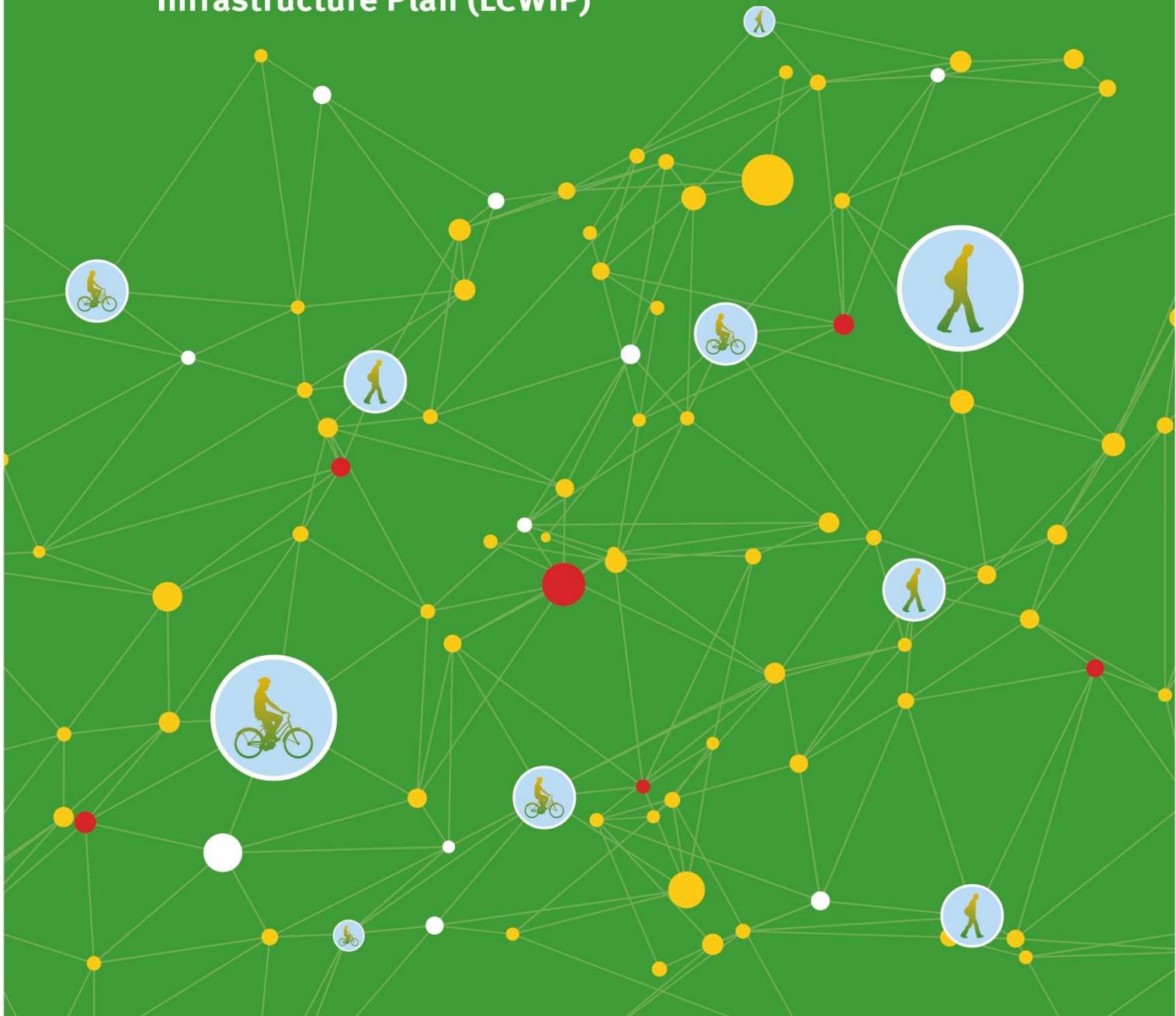
- Proportion of children aged 5 to 10 that usually walk to school - ESCC School census data, collected annually.
- Travel change behaviour programme output data – ESCC Access Fund Programme i.e. level of engagement, participant numbers, number of activities.
- Travel change behaviour programme outcome data – ESCC Access Fund Programme i.e. walking/cycling trip/CO2 savings/access employment/training/health improvement.



2

## How will we deliver more cycling & walking infrastructure and initiatives?

The East Sussex Local Cycling & Walking Infrastructure Plan (LCWIP)



# CONTENTS - Part 2

## The East Sussex Local Cycling & Walking Infrastructure Plan (LCWIP)

### How will we deliver more cycling and walking infrastructure and initiatives?

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## Equality Impact Assessment



Having due regard to the Equality Act 2010 has been essential in the development of the LCWIP, and will be during the delivery of both identified cycling and walking infrastructure and initiatives.

An Equality Impact Assessment (EQiA) has been undertaken to ensure that the LCWIP does not discriminate, but advances equality for people who are defined as having a protected characteristic.

In order to support the Department for Transport's 'Inclusive Transport Strategy' 2019, the principle of inclusiveness, i.e. to support people with both physical and hidden disabilities, alongside other groups where cycling is often underrepresented, including people of an older age, women, and Black, Asian and minority ethnic (BAME) groups, is a critical element of the plan.

*The outcome of the EQiA is outlined in appendix 3.*

## What is a Local Cycling & Walking Infrastructure Plan?

Following the publication of the Cycling and Walking Investment Strategy (CWIS) by the Department for Transport (DfT) in 2017, local authorities were encouraged to develop Local Cycling and Walking Infrastructure Plans (LCWIP). An LCWIP provides a strategic approach to identifying improvements required at a local level. The strategy states that whilst “the preparation of LCWIP’s is non-mandatory, local authorities who have developed such plans will be well placed to make the case for future investment”.

The national strategy includes guidance on how LCWIP’s should be developed to ensure plans are evidence based and achieve support from local communities and key stakeholders. As such, LCWIP’s aim to create a long-term approach to increasing the number of cycling and walking trips across local authorities.

LCWIP’S must be focussed where there are the greatest opportunities to increase levels of cycling and walking, through the identification of preferred routes and the subsequent creation of a prioritised programme of infrastructure improvements for future investment. Therefore the development of LCWIP’s assists central Government in implementing the national CWIS at a local level.

It is important to note that LCWIP’s are dependent on a local authorities and their partner’s ability to secure funding to deliver the prioritised programme of infrastructure improvements and other measures identified through the LCWIP process.

Following the COVID - 19 Pandemic the government has placed a greater emphasis on active travel, through the promotion of this and also by the publication of a new strategy ‘Gear Change – A new vision for cycling and walking’ (July 2020) alongside design guidance for cycle infrastructure. With this plan being a live document, ESCC will be undertaking a further review of the LCWIP, to establish how it can align with this new strategy and guidance. However, in the meantime a public consultation on this first version of the plan is being undertaken to ensure that we have a plane in place to enable us to respond quickly to any imminent calls for funding applications.

## Introduction – The East Sussex LCWIP

Figure 1 – LCWIP Infrastructure

### East Sussex's LCWIP

#### Infrastructure

**To get more people cycling and walking for all or part of their everyday journeys ESCC and our partners will need to deliver an initial tranche of 132km of cycling and walking routes alongside a number of complementary measures, to expand our existing network, improve the places where people live, work and play and support development.**

Figure 2 – LCWIP Initiatives

#### Initiatives

ESCC understands that to help people 'break' travel habits and to give people the confidence to choose cycling or walking by making it achievable for all or part of their everyday journeys, travel information, training and behaviour change programmes are critical. ESCC and their partners are committed to delivering a programme of cycling and walking initiatives to ensure that it is an easy and enjoyable option for both every day travel and for leisure purposes, alongside the opportunity to maximise capital infrastructure investment.

## Stage 1 - Determining Scope

### 1.1 East Sussex – Geographic Context

East Sussex is largely a rural County covering an area of 692 square miles (1,792 sq. km), and includes the administrative boroughs and districts of Lewes – Eastbourne, Wealden, Hastings and Rother.

The current population stands at 552,259 people, with over 60% of the population concentrated on the coastal fringe in the three main urban areas of Eastbourne/South Wealden, Bexhill and Hastings, alongside Newhaven, Seaford and Peacehaven.

The main coastal urban areas are linked east-west by parallel roads of the A27 and A259, with the National Cycle Network running along sections of these routes including NCN2, NCN21 and Regional Route 90.

By rail, the East Coastway provides the major link along the coast. There are two strategic corridors from the county north towards London from Brighton via the A23/M23 and the Brighton Mainline and from Hastings via the A21 and the Hastings to Tonbridge rail line. The Uckfield rail line provides a link to London from the centre of the county. (See Figure 3.)

Nearly 80% of the county is covered by environmental designations of local, national and ecologically international significance. Whilst this provides both a distinctive and high quality landscape to both live and work and a valuable asset attracting high levels of tourism, the delivery of sustainable economic growth is essential.

**Figure 3: County Transport Map**



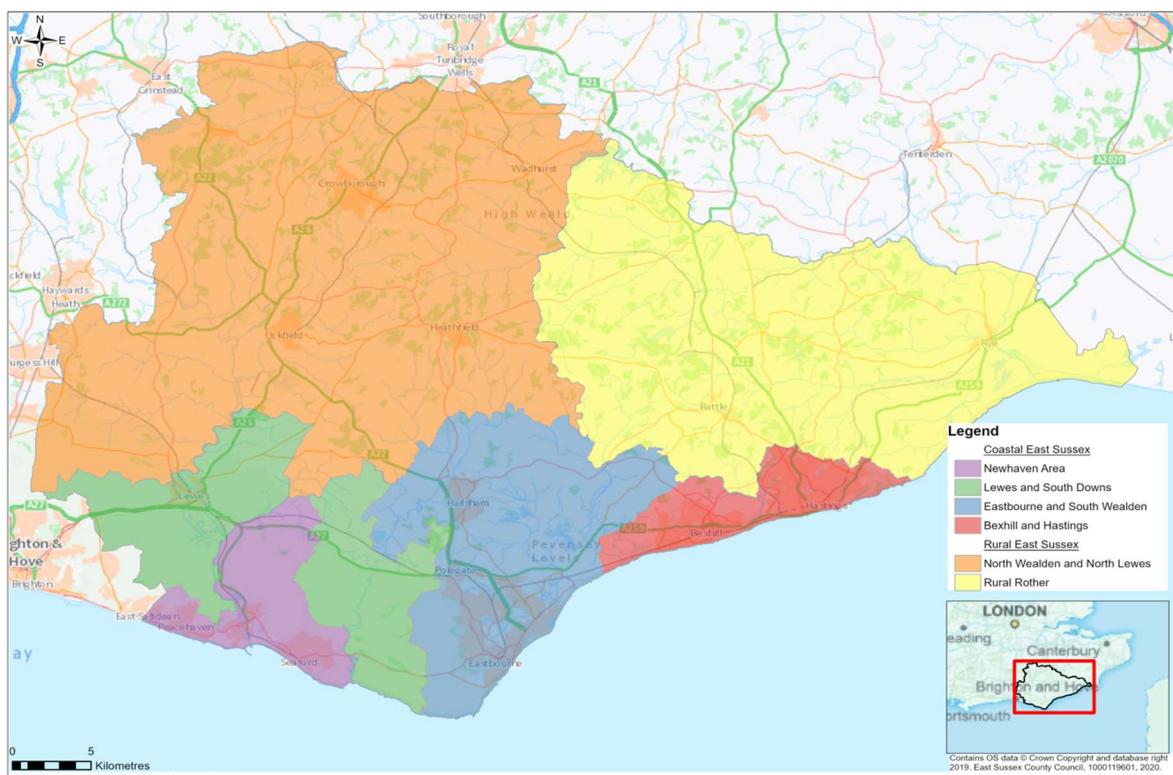
## 1.2 Geographic Extent

The geographic extent of the East Sussex LCWIP is driven by a number of key factors, with the emphasis being on the geographic nature of the County, as explained above, and how this influences the propensity to enable more people to cycle or walk for everyday journeys.

In defining the geographic extent of East Sussex's **first LCWIP** we have considered the following factors:

- **Population Density** – Opportunity to impact on greater numbers of the population - 60% of the population is located in the main coastal urban areas.
  - **Local Transport Plan geographic extent** - Aligning the LCWIP with ESCC Local Transport Plan geographic extent to provide consistency between the documents. (See figure 4)
  - **Future growth** – Areas where there are likely to be greater opportunities to support a growth in housing, employment and the visitor economy.
  - **Partnerships & Funding** – Aligning the plan to areas where there are strong strategic and local partnerships with associated funding, and opportunities to provide greater value for money through investment.
  - **Accessibility** – Opportunities where cycling and walking is an achievable option in accessing key trip attractors relating to employment, education, health, shopping and leisure.
  - **Travel to Work Areas** and the opportunities for cross boundary travel.

## Figure 4 - Local Transport Plan Geographic Areas



In respect of the factors above, the assessment of networks and measures for cycling and walking has resulted in the County being subdivided into the following geographic areas. Specific assessments have been developed for **key settlements** highlighted in green text below. (See figure 5)

The coastal areas within the County are the key growth areas and have been prioritised within the LCWIP, as they offer the greatest opportunities to increase levels of cycling and walking. *These areas were assessed using the DfT LCWIP Technical Guidance and other complementary tools.*

Figure 5 – LCWIP Geographic Areas

### Coastal East Sussex – Priority LCWIP AREAS

- Newhaven Area
  - *Newhaven, Peacehaven & Seaford*
- Lewes & South Downs National Park
  - *Lewes*
- Eastbourne & South Wealden
  - *Eastbourne*
  - *Hailsham & Polegate*
- Bexhill & Hastings
  - *Bexhill*
  - *Hastings*

### Rural East Sussex

- North Wealden & North Lewes area
  - *Uckfield*
  - *Heathfield*
  - *Crowborough*
- Rural Rother
  - *Battle & Rye*

## 1.3 Governance & Delivery of LCWIP

The governance and delivery of ESCC LCWIP is based on the 'single local authority' model.

### Project Board

In order to utilise robust governance an existing board of senior managers, officers, key partners and stakeholders will be utilised as the basis for the delivery of the LCWIP, who currently drive forward ESCC Department for Transport Access Fund Programme.

The project board will include a Senior Responsible Owner, who will have overall accountability for the delivery of the plan. This will be the **ESCC Head of Service for Economic Development, Skills, Culture, and Infrastructure**. The group will also include senior officers in the Council responsible for the delivery of transport infrastructure to ensure appropriate challenge is given where necessary and to provide overarching guidance on scheme development and delivery. This group will be responsible for monitoring progress of scheme identification, design and delivery and the funding associated with this.

This board will be supported by the Strategic Economic Infrastructure Governance Oversight Board, whose role will be to provide strategic direction and oversight.

### ESCC Officer Liaison Group

To support the ethos of shared responsibility for the delivery of the LCWIP across Partners. The project board will be supported by an ESCC Officer Liaison Group which will consist of internal ESCC officers, who will actively engage in supporting the identification, design, delivery and funding of future cycling and walking infrastructure projects and initiatives. There are a number of trips which do cross ESCC boundaries, therefore liaison with these local authorities will continue as part of the governance arrangements, and as LCWIP's in these adjoining areas are developed.

### Stakeholder Liaison Group

Through ESCC Access Fund Programme a core group of local stakeholders has been developed who support the delivery of the programme. The project boards will look to work in partnership with this group in relation to scheme/initiative design, consultation and future funding opportunities.

### East Sussex Cycling & Walking Forum

ESCC initially established a Cycling Forum in 2014, with the purpose to engage with local cycling groups across the County to help inform policy and scheme delivery. This forum was extended to include walking and access groups in 2017, and this group has been vital in supporting ESCC in the development of the LCWIP. This forum will continue, but the function of this group will be reviewed as part of the delivery of LCWIP.

This governance model is as outlined in Appendix 4.

## 1.4 Engagement

As we strongly emphasised in section 1, the LCWIP Purpose, this plan is people-led. Therefore engagement with a range of people has been essential in the development phase of the plan, and ongoing engagement will be required through the delivery phase.

### Stage 1 – LCWIP Development – Network Planning & Identification of Measures

#### **Partnership working with key local cycling, walking and access groups**

Sustrans were commissioned to help ESCC develop a network for future cycling and walking infrastructure. This stage involved working closely with local cycling, walking and access groups in a review of existing cycling and walking infrastructure and identifying where improvements or new infrastructure schemes will be considered across the key settlements identified for assessment.

#### **Integrating with Local Plans**

The integration of cycling and walking and the shaping of places is a critical element of this plan. Therefore this stage was supported through liaison with the local district and borough councils, to ensure the identification of key trip attractors within their areas and how these could be linked to existing or new cycling and walking infrastructure and importantly how allocated sites for both housing and employment growth could support future connectivity in network development.

#### **Integrating with key local transport infrastructure programmes and initiative programmes**

Alongside this we have also sought additional insight through work on existing investment programmes, including ESCC Access Fund Programme and ESCC Local Growth Programme, particularly projects on the regeneration of town centres.

As part of the ESCC Access Fund Programme 'Active Access for Growth' we were able to obtain information from schools, colleges and businesses on some of the localised barriers to cycling and walking.

ESCC has been successful in securing up to £23m of Local Growth Funding (LGF) from the South East Local Enterprise Partnership to enable the delivery of a range of sustainable transport projects across the coastal towns of Eastbourne, Bexhill and Hastings.

This includes:

**Figure 6 – ESCC LGF**

Project	LGF Secured	BCR's
<b>Eastbourne &amp; South Wealden Cycling &amp; Walking Package</b>	<b>£6.2m</b>	<b>2.41 (High)</b>
<b>Eastbourne Town Centre</b>	<b>£8m</b>	<b>2.41 (High)</b>
<b>Bexhill &amp; Hastings Movement &amp; Access Programme</b>	<b>£9m</b>	<b>3.55 (High)</b>
<b>Hailsham/Polegate/Eastbourne Movement &amp; Access Corridor</b>	<b>£2.1m</b>	<b>2.19 (High)</b>

These programmes of work achieved high benefit cost ratios, as outlined above and are supporting wider local benefits in relation to improving access to jobs, education and training, supporting town centre regeneration projects, providing greater priority to more vulnerable road users and integrating cycling and walking as part of multi modal schemes.

Considerable stakeholder engagement work has also been undertaken as part of these programmes, to identify a number of schemes, some of which will be prioritised for delivery according to the LGF available by 2020/21. Any outstanding schemes from this process have been considered for inclusion in the LCWIP. This will be referred to in the network planning - stages 3 & 4.

#### **Stage 2 – LCWIP Development – Document Development**

As part of the development of the LCWIP document, considerable engagement was undertaken with local stakeholders. This has included the East Sussex Cycling & Walking Forum, district and borough councils and other key stakeholders across various policy areas. This has ensured that the LCWIP reflects current and future local programmes of work.

#### **Stage 3 – LCWIP Development – Public Consultation**

A consultation with key stakeholders will commence in April 2020, for a six week consultation period. This will be available via ESCC Consultation Hub on the ESCC website.

ESCC realise that this will not be a priority for some stakeholders due to the requirements to prioritise their resources to support the circumstances in relation to Covid -19. Therefore a

further consultation with key stakeholders who have not been able to participate previously, alongside a wider public consultation will be undertaken in autumn 2020. The date of this may be subject to change.

Following the public consultation, the results will be analysed and the document updated as appropriate, prior to seeking sign off from ESCC's Cabinet. The cabinet date is yet to be confirmed.

#### **Stage 4 – LCWIP Application**

As outlined in Part 1, 'The Purpose', this will be treated as a live document. Therefore engagement will continue with both internal and external organisations and communities to enable the delivery through various actions identified in an 'Application Action Plan'. See Stage 6 – Integration and Application.

### **1.5 Timescales for LCWIP delivery**

ESCC recognises the benefits of taking a longer term approach in planning and prioritising of cycling and walking infrastructure and initiatives to enable a pipeline of projects to be developed to assist with the securing of funding, and aligning this to wider strategic transport projects.

ESCC LCWIP will be a **ten year document**, covering the period from **2020 to 2030**, and will identify a prioritised programme of work over the following timeframes:

- **short <3 years,**
- **medium <5 years and**
- **long term >5 years.**

It will be monitored on an annual basis through the governance arrangements as outlined in Appendix 4, and progress and future projects will be reported through ESCC Capital Programme of Local Transport Improvements.

## Stage 2 – Information & Data Sources

### 2.1 Data Sources

The East Sussex LCWIP is underpinned by evidence focussed on our 'people and place' approach, which has been utilised to inform the planning and prioritisation of schemes. This includes:

**Figure 7 – Data Sources**

- **National Data and sub regional data** – to identify key trends in relation to cycling and walking
- **Policy Review** – insight ESCC and local partners Strategy documents
- **National departmental data sets and statistics** – available at a local level, for example Department for Transport – transport data, Census 2011
- **Local Data** – for example Joint Strategic Needs & Assets Assessment
- **Local Programmes of work** – for example, ESCC Local Growth Fund, ESCC Access Fund Programme
- **Cycling & Walking Assessments** - undertaken by both Sustrans and Jacobs, as commissioned by ESCC. These used the DfT LCWIP Technical Guidance and other key tools, in cycling and walking network development.

### 2.2 Key National & Sub Regional Data

There are a number of national and sub regional data trends which the East Sussex LCWIP can actively contribute to. These are summarised on the next page.

## Figure 8: National Data Trends

Average temperature in the most recent decade (2009-18) is:

**↑0.3°**

warmer than previous decades.

Source: Office for National Statistics 2017

Poor Air Quality is the largest environmental risk to public health in the UK.



Road transport is the biggest source of Nox being the main source of exposure at roadside.

Source: PHE 2018/Clean Air Strategy 2018

Greenhouse Gas Emissions (GHG) from road transport made up around a fifth of the UK's total GHG emissions.

### Physical Health

**39%**

of adults are not meeting government's physical activity guidelines, which is costing the UK Healthcare £1.2 billion.

Source: British Heart Foundation 2017



### Planning

**300,000**

new homes needed a year to manage the shortfall in recent housebuilding across the UK.

Source: Homes England 2018/CIHT Better Planning, Better Transport, Better Places



### Travel & Transport

Most trips are relatively short. In England in 2018:



Source: TfSE Transport Strategy

Between 2002 & 2018



the average number of trips made per person per year, plus average miles travelled decreased, predominantly for commuting and shopping.

Source: TfSE Transport Strategy



People are walking more often and over further distances.

For cycling the number of cycling miles has increased but the number of trips has remained static.

Source: Active Lives Travel Survey 2018



Nationally more women make more trips over slightly shorter distances (shopping, escort to education), compared to...



...men who make less trips over longer distances (commuting).

Source: TfSE Transport Strategy

## 2.3 Policy Review

A review of national, sub – regional and local strategies and policies has already been undertaken in **Part 1: Background Information & East Sussex's Strategy – section 3. Policy review.**

This clearly outlines the opportunities which the East Sussex LCWIP will have in supporting the delivery of cross departmental policy areas of transport, environment, economy, planning and health.

More detailed information on the relevant documents can be referred to in Appendix 2 – Policy Review. Stage 6 also explains the actions which will be undertaken to embed the LCWIP in the relevant strategy documents.

## 2.4 Review of Local Data

A number of national departmental data sets and statistics, which are available at local level alongside more locally developed data sets were assessed. A summary of this data is outlined in Figure 9.

## Figure 9: Local Data Trends

### Productivity



Source: ONS GVA & Sub regional Productivity Tables

### Qualifications



Highest rates of working age adults with no or low qualifications.

Source: Census 2011

### Claiming Benefits



Highest proportions of people claiming Disability Living Allowance and PIP residing in Eastbourne & South Wealden and Bexhill & Hastings.

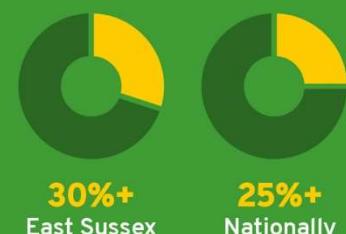


Highest proportions of people claiming Universal Credit residing in Bexhill & Hastings and Eastbourne & South Wealden.

Source: DWP Stat-Xplore

### Employment Type

Highest proportions of employment East Sussex within **Public sector, education and health**:



Source: Business Register & Employment Survey

### Deprivation



30%+

of Lower Layer Super Output Areas (LSOAs)\* in Hastings are among the most deprived 10% of domains nationally, with **income, employment and health** deprivation being the highest.

\* A statistical unit used in England and Wales to facilitate the reporting of small area statistics, Office for National Statistics (ONS).

Source: IMD 2019

### Planned Growth



In East Sussex over

**2,000**

additional homes are proposed to be built per year.

Source: East Sussex District & Boroughs Local Plans

## Figure 9: Walking & Cycling

### Current Regional Trends



Adults aged 16+ walking or cycling at least **once a week**

Lewes  
**75%**

Eastbourne  
**75%**

### Cycling for travel (commuting)



### Cycling for leisure



### Walking for travel (commuting)



### Walking for leisure

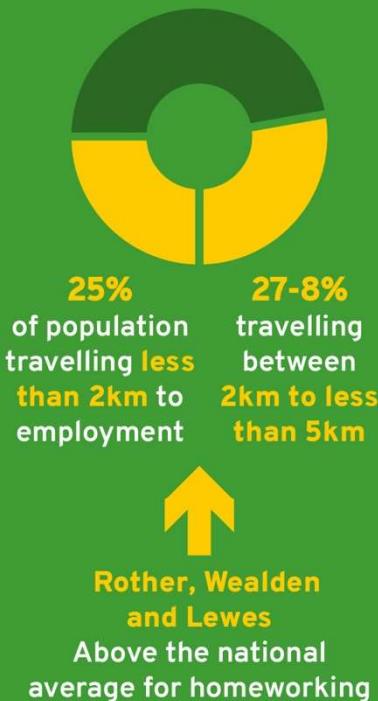


**Figure 9: Travel to work**

## Distance and mode (2011)

Source: Census 2011

### Eastbourne and Hastings



### Train:

Lewes & South Downs & North Lewes & North Wealden: **higher proportion using train** – out commuting, between 5-7%, above national average 3.3%



### Bus:

Highest proportion using the bus:  
**Newhaven, Peacehaven & Seaford 6.8%**



### Car:

Driving to work most popular mode of travel in the county – over **40%** North Lewes & North Wealden, and **37%** Bexhill & Hastings

## Car Ownership



**Hastings** has the lowest proportion.

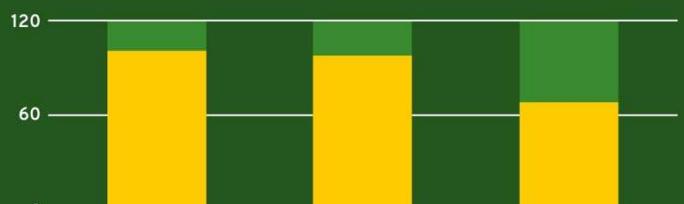


**Wealden** has the highest, and also the highest proportion of licensed Ultra Low Emission Vehicles (ULEVs).



## Killed or Seriously Injured

KSI per 100k population



Source: Sussex Road Safety Partnership & DFT

## Figure 9: Population



### Trends by District & Borough

- **Population density** highest in **Bexhill & Hastings**, followed by **The Havens**.
- **0-15 year olds** are **17% of the population** in all areas of East Sussex, except **Rother**.
- **65 years and over**: largest population are in **Rother**, second highest population of all districts in England.
- **Bexhill**: highest percentage of people living in care homes.

### Trends across the county

- **Higher proportion** of pensioners who live alone than nationally.
- **Higher percentage** of the population who provide 50 or more hours per week unpaid care than nationally.
- Percentage of **households with children** set to decrease up to 2032.
- **Single person households** set to increase, particularly amongst those aged over 65 years old.

### Physical activity

Percentage of adults aged 19+ who were physically active in 2016/17



Eastbourne Borough: lowest percentage of adults achieving 150+ minutes of physical activity per week.

### Excess weight

#### Obesity levels



Reception year children have the highest level in **Hastings & St Leonards**.



Year 6 children have the highest level in the **Havens and Eastbourne**.

## Figure 9: Health

The highest proportions in East Sussex include:



Premature mortality from circulatory diseases  
Hastings & St Leonards, Bexhill and Havens



People reporting long term ill health or disability  
Bexhill



Incidence of depression  
Hailsham & Polegate, Eastbourne



Premature mortality from cancer  
Hastings & St Leonards, Bexhill and Havens



Prevalence of severe mental illness  
Bexhill and Hastings, and St Leonards



Prevalence of dementia  
Bexhill & Seaford



Emergency admissions rate for asthma; mortality rate for chronic obstructive pulmonary disease (COPD) & respiratory disease  
Hastings & St Leonards, Bexhill and Havens



Rates of emergency admissions for stroke  
Havens, Seaford & Hailsham & Polegate



Mortality from stroke  
Hailsham & Polegate and Uckfield



Fraction of all-cause mortality attributable to man made particulate air pollution (PM2.5)  
Hastings Borough



Self-reported ill-health  
Bexhill



Rates of all East Sussex localities of unpaid carers providing 20+ hours care per week  
Hastings & St Leonards, Bexhill and Havens

## 2.5 Assessment of Cycling & Walking

Cycling & walking assessments were undertaken by both Sustrans and Jacobs, as commissioned by ESCC. The DfT LCWIP Technical Guidance and other key tools, including the design guidance published as part of Active Travel (Wales) Act 2013, the London Cycling Design Standards Guidance on developing a coherent cycle network and Highways England (Interim Advice Note 195/16) has been utilised.

The Propensity to Cycle Tool (PCT) is an open source tool for cycling transport planning using origin/destination data on travel to work from the 2011 Census. The data analyses the number of people travelling by different modes from MSOA by trip lengths and hilliness helping identify those trips that could be undertaken by cycle. Different scenarios are possible using the tool aiming to identify at both the strategic and local level where to prioritise high quality cycling infrastructure for a planned growth in cycling.

The PCT is useful for understanding future potential growth in cycling on certain corridors however caution should be used when interpreting this information as the tool does not account for other every day or leisure cycling trips which form an important element of cycling or for specific land use types, demographics or behavioural responses. For these reasons, analysis of PCT outputs should be conducted alongside other key sources of information including development plans, origin / destination mapping and local knowledge.

The DfT's 'Walking Route Audit Tool' has been used to assess current walking routes using key criteria such as attractiveness, comfort, directness, safety and coherence. Audits were carried out through site visits and included specific input from staff with detailed knowledge of planning transport improvements for people with disabilities.

## 2.6 Key Issues & Opportunities – LCWIP Extent

The review of evidence and the network development work has resulted in the identification of a number of key issues and opportunities, which are prevalent across the extent of the LCWIP area. These are summarised in figure 10, below.

Figure 10 - Issues & Opportunities – People and Place

Issues
<b>Limited cycling and walking network</b> on key corridors of movement, within key growth areas.
<b>Limited and inconsistent provision for cycling and walking</b> connecting residential areas and key local trip attractors.
<b>Inconsistent provision</b> for cycling and walking to support <b>inclusive access</b> .
<b>A lack of high quality segregated routes.</b>
<b>Safety issues</b> – volume and speed of traffic.
Inconsistent provision <b>connecting new development</b> and the existing cycling and walking network.
<b>Town centres dominated by traffic movements</b> , impacting on ambience, safety and air quality.
<b>Poor legibility</b> in key centres.
<b>Limited cycle parking</b> provision key destinations.
Higher than average levels of <b>obesity</b> at reception and Year 6 children in certain district and boroughs.
<b>Prevalence of mental health issues</b> in certain district and boroughs.
Opportunities
<b>Distances</b> between residential areas - key centres / business areas - localised trip attractors <b>between 3 - 5km or less</b> , making cycling and walking feasible.
<b>Declaration of a climate emergency</b> – Lewes – Eastbourne, Rother & Hastings 2030, the rest of the County 2050.
<b>Increased growth in housing and employment</b> connected to the existing sustainable transport network.

**Focus on town centre and high street regeneration** – prioritise cycling, walking, public transport integrated with inclusive access.

Integrate cycling and walking alongside **smart mobility measures**.

**Appetite for active travel** from local populations.

**Untapped opportunities to promote accessible cycling and walking** alongside cultural and tourist offer.

Continued **integration** of Bikeability training, travel information and cycling and walking initiatives (including e-bikes, e-cargo bikes, active steps etc.), with the delivery of **transport infrastructure projects**.

Identify **support for people in the recovery from post Covid -19** to integrate cycling and walking as part of their longer term travel choices.

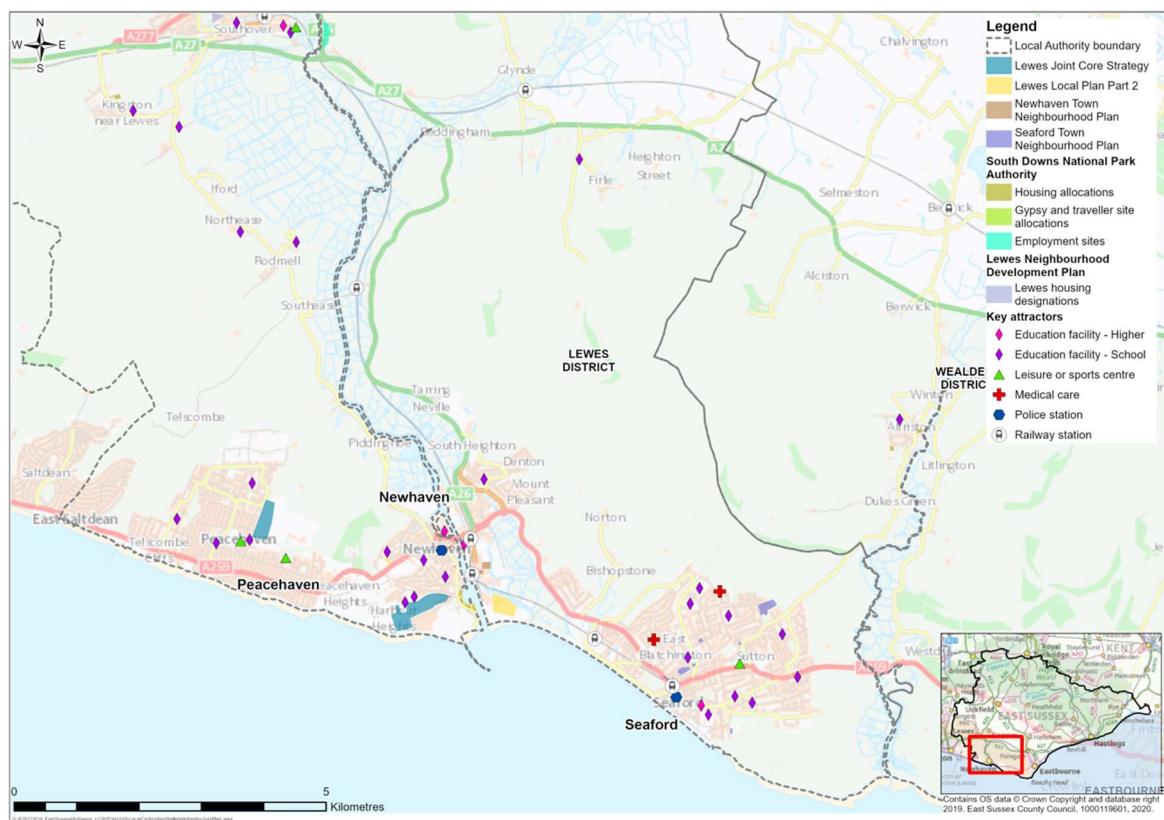
## 2.7 Key Issues & Opportunities – Specific Geographic Areas

The key issues and opportunities specific to each of the geographic areas have been developed which emphasise details on the existing transport network, existing and proposed trip attractors, the outputs from the cycle propensity tools, alongside data which relates to the local populations. This has directly informed the focus of the cycling and walking network development referred to in stages 3 & 4 and provides the wider **strategic case**.

## Coastal East Sussex

## 2.7.1 Newhaven Area

**Figure 11 - Newhaven, Peacehaven & Seaford – Key Trip Attractors**



## PLACE

## **Geographic Context**

Newhaven area includes the key coastal settlements of Newhaven alongside Peacehaven and Seaford. This is a key growth area in the County with connectivity between Brighton in the west and Eastbourne in the east.

Newhaven is divided by the river Ouse and dominated by the centrally located port which is surrounded by an industrial area and retail services. This area was designated as an 'Enterprise Zone' in 2017 to support local economic regeneration. The residential areas in Newhaven are located to the north east and south west of the port area. Peacehaven is

largely a residential settlement with some localised amenities and with access to the South Downs National Park (SDNP). Seaford is the largest settlement, based on residential population, and has a busy high street and some local employment.

### **Transport Network**

This area is connected to the strategic road network by the A26 between Newhaven and Lewes; the A259, which forms part of the Major Road Network, runs east to Eastbourne and west to Brighton. The Newhaven town road network operates using a gyratory system, with a swing bridge opening at regular intervals to provide port access. Traffic congestion is a key issue with daily traffic volumes in this area exceeding 20,000+ vehicles. As a result of this the town centre is designated as an Air Quality Management Area (AQMA). The high traffic flows on the gyratory system also creates severance for pedestrians and cyclists accessing the town centre (particularly in the area of Lewes Road) and the port, UTC and rail station as noted in the WRAT.

The national cycle network (NCN2) is the existing key cycle route which runs along the coastal area and into the town centre area of Newhaven. A number of improvements to the cycling, walking and bus network connecting Peacehaven and Newhaven were undertaken as part of ESCC Local Sustainable Transport Fund Programme up to 2016. This included a shared cycling and walking route, dropped kerb provision and improvements to bus stop infrastructure enhanced by Real Time Passenger Information display boards. Further sections of the scheme have been developed and are construction ready, subject to funding.

Significant work has also been undertaken by Sustrans, the SDNPA and local stakeholders to deliver a cycling and walking path alongside the river Ouse, connecting Newhaven and Lewes, known as the Egrets Way. Further phases are required to provide a complete connection between the two settlements.

Rail stations are located in both Newhaven and Seaford, with connections to Brighton and London. Recent investment secured by working in partnership with Southern Rail, has seen improvements to cycle parking at these stations. Brighton & Hove Buses run a number of high frequency services along the A259 serving these settlements including the 12 between Brighton and Eastbourne, and with the 12x providing a fast commuter service at peak times, alongside the 14 providing connectivity between Brighton and Peacehaven. This is supported by segregated bus lanes on sections of the A259 in Peacehaven.

With this being a key growth area within the County, this area has benefitted from recent investment in infrastructure from Local Growth Funding, which ESCC has successfully secured. The Newhaven Port Access Road will open in autumn 2020 and will have pedestrian and cycle facilities.

Following the publication of its Transport Strategy in 2019, Transport for the South East will be undertaking an Outer Orbital corridor study, which will include the A259 corridor, to identify the strategic interventions required to delivery their strategy and inform the development of their Strategic Investment Plan.

To complement this, ESCC and neighbouring authorities, will be undertaking a study on the A259 Corridor between Eastbourne and Brighton, therefore encompassing the Newhaven Area. This study will be used to identify localised measures to reduce congestion with a focus on sustainable transport measures. The LCWIP network for this area will be utilised to identify further integrated improvements on this key corridor of movement.

### **Future Housing & Employment Growth**

The focus of development in Lewes District is on the coastal towns and particularly in Newhaven. There are strategic site allocations at Harbour Heights in Newhaven and at Lower Hodder Farm in Peacehaven. Lower levels of development are proposed in Seaford as opportunities for expansion is limited due to it being tightly constrained by the South Downs National Park, growth is therefore focussed on redevelopment of sites within the town boundary.

Regeneration of the district coastal towns is a key Local Plan objective. Newhaven has significant opportunities for regeneration through the development of derelict and under-utilities sites including within the town centre. The port provides further opportunities for expansion and modernisation which will lead to further employment growth within the area. The operations and maintenance base for the Rampion Offshore Wind Farm at the port is acting as a catalyst for the regeneration of the town and helping to stimulate the local economy. The overall approach to economic development and regeneration of the coastal towns has also been supported by the designation of the Newhaven Enterprise Zone which covers 79 ha of land across eight sites.

The significant growth and change particularly in Newhaven provide key opportunities for the LCWIP to improve accessibility through and between the coastal towns.

### **Key Trip Generators**

In Peacehaven trip generation is focussed on access to the adjacent settlements with a large proportion of travel into neighbouring Brighton for access to employment. There is also significant travel to local amenities including the Meridian Shopping Centre, Peacehaven Big Park, the coastal path and local schools.

In Newhaven localised trips are generated by the need to access the town centre services and the retail sector to the east of the town. Significant external traffic is generated by the port and industrial estates, which travel through the town utilising the gyratory system.

In Seaford localised trips are generated by the need to access the town centre 'High Street area', where the rail station is located, alongside the seafront promenade, which has shared cycle and pedestrian use, together with the local primary and secondary school sites located on Sutton Avenue.

### **Cycle Propensity Tool**

The PCT 'Go Dutch Fast Routes' scenario has been used to analyse future opportunities for increasing cycling in the Newhaven area. Appendix 5P shows sections of the A295 in Newhaven as having higher potential cycling flows of between 250 – 499 and flows of between 100 – 249 along other sections of the A259, and within Peacehaven and Seaford in

the commuting scenario. Under the schools scenario, flows of between 250 – 499 are projected in eastern Peacehaven and southern Seaford.

## PEOPLE

### Population

The population of this area, particularly Newhaven, has a higher proportion of younger aged children 0-4 years (8.2% Denton & Meeching LSOA), which corresponds with a larger proportion of people aged 30-44 years old (23% Denton & Meeching LSOA). This is similar in Peacehaven, but in Seaford there is a larger proportion of older aged people 65-74 years (23.4% Seaford East) and 75-84 years (12.9% Seaford West).

### Employment

Employment is concentrated on finance, real estate, professional and admin followed by the public sector. There is also a large industrial and retail sector. The proportion of people with no qualifications is also higher than average.

### Travel Patterns

The most popular mode of travel for commuting is car or van followed by walking, but it does have the highest proportion of bus use in the County.

### Health

Obesity levels for year 6 children are one of the highest in the County. There is also a higher prevalence of dementia and high rates of emergency admissions for strokes, together with higher levels of unpaid carers providing 20+ hours care per week.

The Active Access for Growth Programme, is operating in this area by supporting cycling and walking initiatives with schools, employers and the local community. A key success is the development of the cycle hub at Peacehaven.

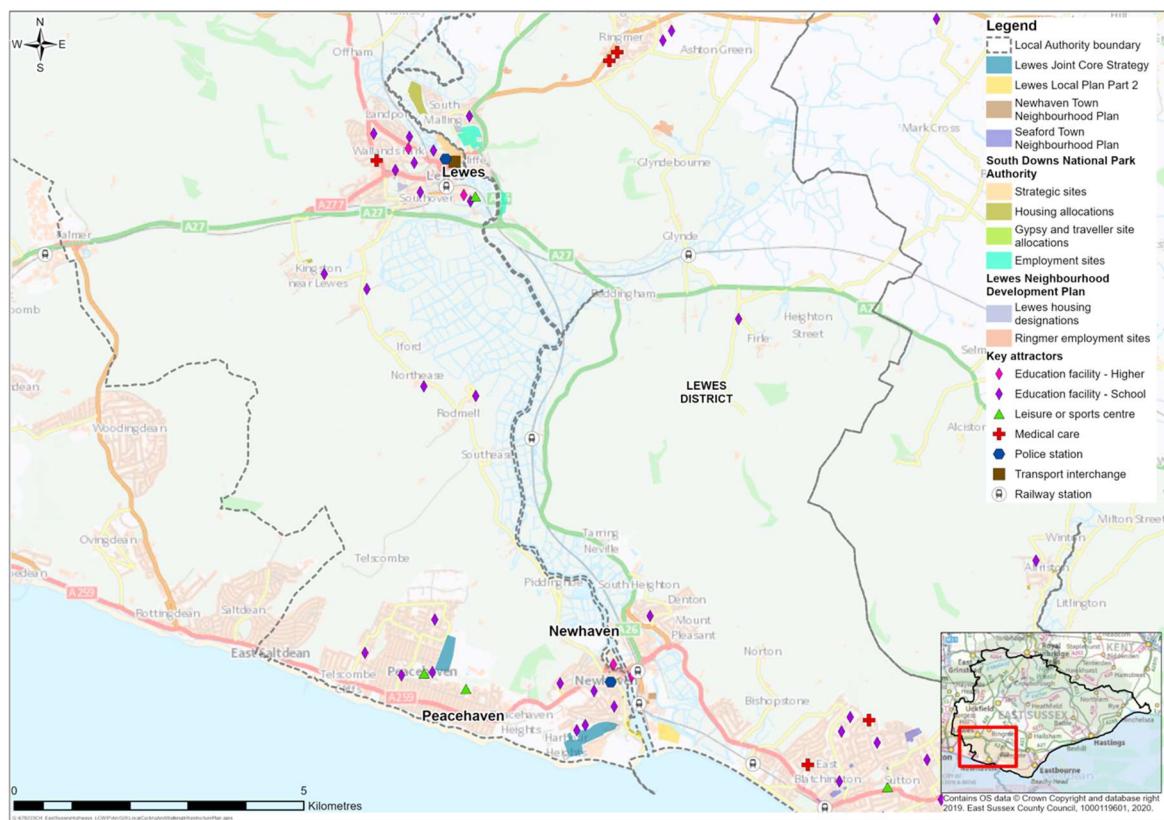
**Table 1 - Newhaven Area - Cycling & Walking Issues and Opportunities**

Issues and Opportunities	Cycling	Walking	Cycling & Walking
<b>Issues</b>			
A lack of continuous segregated routes on the main corridors of movement, A259, which link to the existing network.	✓		
Severance and safety issues with high volumes of traffic especially within the town centres of Newhaven and Seaford and key routes including the A259			✓

Traffic travelling at 30mph within residential areas, particularly Seaford and Peacehaven			<input checked="" type="checkbox"/>
Limited secure cycle parking in town centres and at key destinations.	<input checked="" type="checkbox"/>		
Poorly maintained footways.		<input checked="" type="checkbox"/>	
Air quality issue within Newhaven town centre.			<input checked="" type="checkbox"/>
<b>Opportunities</b>			
Distances between the key centres and residential areas, less than 2.5km, especially in Peacehaven and Seaford.			<input checked="" type="checkbox"/>
Significant investment would provide high quality integrated cycling, walking and public transport infrastructure along the A259 (main corridor of movement within this growth area) and linking with Brighton & Hove.			<input checked="" type="checkbox"/>
Enable links to cycling and walking from residential areas into the South Downs National Park i.e. Peacehaven			<input checked="" type="checkbox"/>
Promote cycle tourism from Newhaven port and links into the South Downs National Park.	<input checked="" type="checkbox"/>		
Utilise Peacehaven Cycle Hub to promote cycling and walking activity within this area, to support health improvement.			<input checked="" type="checkbox"/>
Promote continued travel behaviour change programmes, but targeted at families for travel to work and education and for older people and wider community to support healthy active lifestyles and to improve air quality.			<input checked="" type="checkbox"/>

## 2.7.2 Lewes & SDNPA

Figure 12 – Lewes Key Trip Attractors



## PLACE

### Geographic Context

Lewes is the historic County town of East Sussex and is located within the protected area of the South Downs National Park alongside the river Ouse, which naturally constrains its growth. To the south of Lewes towards Newhaven, is the Ouse Valley which hosts a number of villages located adjacent to the river. To the north of Lewes the rural hinterland supports numerous smaller village communities, with Lewes being their main service centre.

### Transport Network

The A27 strategic road network is the main east-west route, which bypasses the town to the south. Proposals for a new offline dual carriageway between Lewes and Polegate to reduce congestion, stop route diversions and improve safety, has been included in the Government's Roads Investment Strategy 2 (2015 – 2020). This is as a pipeline scheme for development over the next five years for potential construction in RIS 3 (2025 – 2030), subject to funding.

There are also links to the A26, which is part of the Major Road Network, which connect Lewes with Tunbridge Wells, Uckfield and Newhaven. There are also key A Roads, including A277 Brighton Road from the west and the A275 from the north, known as the Offham Road and Nevill Road respectively.

Regional Route 90 is the key cycle route connecting Brighton to Lewes and beyond to Firle, although the section within the town centre is to be completed. Significant work has also been undertaken by local stakeholders to deliver a cycling and walking path alongside the river Ouse, connecting Newhaven and Lewes, known as the Egrets Way. Further phases are required to provide a complete connection between the two settlements. The majority of the town centre and some residential area are covered by 20mph zones.

There is a rail station and bus station within the town centre. The rail connections support regular services to London via Haywards Heath, together with Brighton, Eastbourne and Seaford. By working in partnership with Southern Rail investment was secured to develop a secure cycle parking hub at the rail station. The town is served by regular bus services connecting Brighton to Lewes and Lewes to Uckfield and Tunbridge Wells. This is supported by Real Time Passenger Information at key bus stops, which was installed as part of ESCC Local Sustainable Transport Fund Programme between 2013 and 2016.

As noted in the Lewes WRAT (Appendix 6) the town has predominantly narrow streets and footways with a lack of dropped kerbs which results in accessibility issues. Within the centre of the town streets are bounded by high sided buildings and high emissions from vehicles are present. Further information on the action being taken to manage this is as outlined in the below link.

<https://www.leweseastbourne.gov.uk/resources/assets/inline/full/0/261611.pdf>

ESCC is working in partnership with Highways England (HE) to secure improvements to the A27 pedestrian crossing facilities within this area, and has recently been successful in securing funding from the HE Designated Fund – Crossings - to support feasibility work.

### **Future Housing & Employment Growth**

Lewes has significant development needs. The town has the highest requirement for affordable housing in the district. There are two strategic site allocations at North Street Quarter and Old Malling Farm. Further outward expansion of the town beyond these allocations is extremely limited due to the high-quality National Park landscape and the extensive floodplain of the River Ouse. The majority of other development opportunities are therefore small scale and within the existing town particularly through the redevelopment of sites.

Growth in the town is further limited by its unique geographical, historic and cultural heritage. It is essential that development and schemes which do take place in the town including within the LCWIP is sympathetic to this.

There is also a need within the town for additional office and light industrial floorspace. Some of the need will be met at the mixed-use development site at North Street Quarter and the employment allocated site at Malling Brooks.

## Key Trip Generators

Lewes town centre is the major destination for shopping for both local people and for the nearby rural communities. It also has considerable local employment including East Sussex County Council, Sussex Police, Lewes Prison and the Law Courts, alongside a thriving number of independent contemporary businesses. The historic and cultural assets also generate year round tourists.

There are also a large number of primary schools, within an educational quarter located close to the rail station, which includes Priory School and East Sussex College, Lewes campus. Outside of Lewes notable trip attractors include Charleston and Glyndebourne.

## Cycle Propensity Tool

Lewes has a higher proportion of people cycling than across wider East Sussex and the PCT 'Go Dutch Fast Routes' scenario has been used to analyse future opportunities for increasing this further. Appendix 5P shows various links within Lewes town centre and the north east of Ringer having higher potential cycling flows of between 100 – 249 in the commuting scenario. Under the schools scenario flows of between 250 – 499 are projected in southern Lewes.

# PEOPLE

## Population

In Lewes town the population has a larger proportion of working age people 25- 64 years old (Lewes Bridge 30-44 years 20.5%, 45-64 years 34%, LSOA). In the more rural areas adjacent to Lewes this is also apparent, but with pockets of young people concentrated in certain settlements including Plumpton (Age 18-24 14.5%) and Chailey and Wivelsfield (9.7% 11-15 years).

## Employment

Within Lewes being the County town, employment is focussed on the public sector (36.1%). It also has the highest proportion of people employed in agriculture in the County (2.2%).

## Travel Patterns

Lewes district has the highest level of cycling for any journey purpose, and is highest in the county for commuting. Levels of walking are also higher for all journey purposes in comparison to other areas of the county.

## Health

As outlined in the figure 9 above Lewes has the highest percentage of adults aged 16+ walking or cycling at least once a week for any trips. There are also the highest levels of commuting using the train and bus.

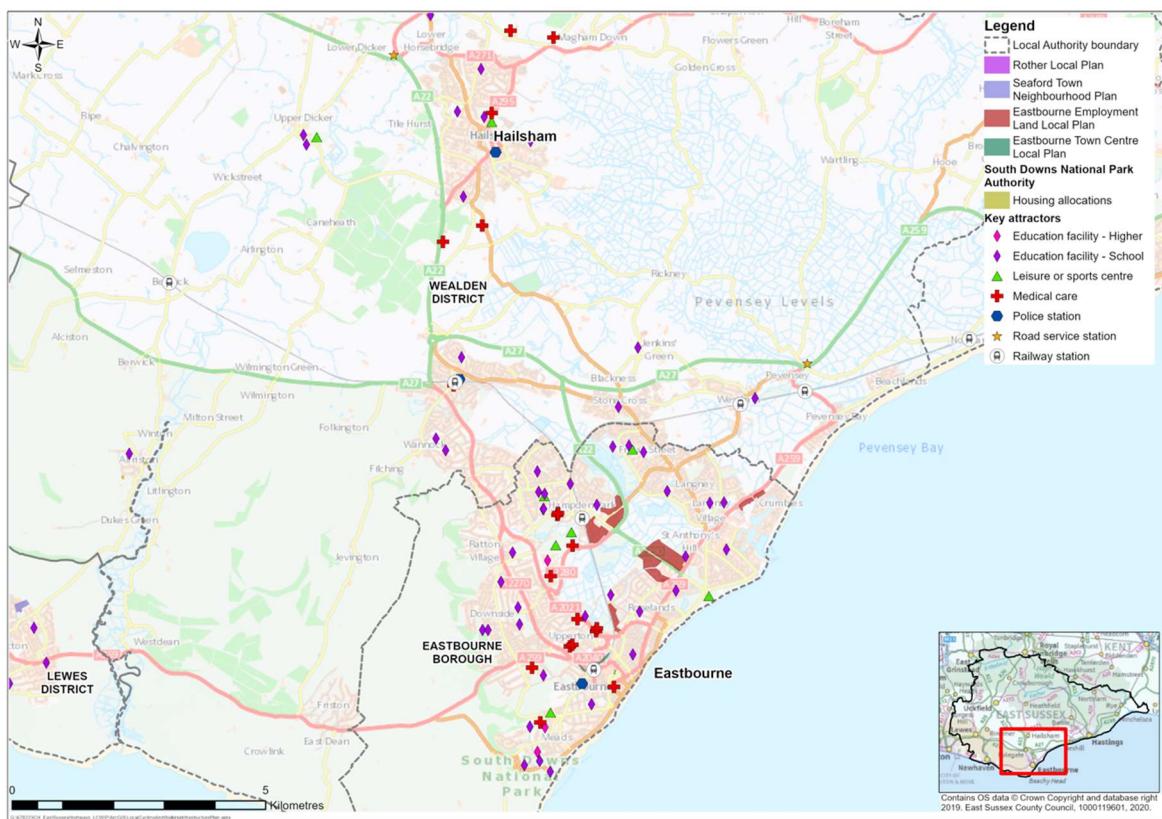
In regards to health there are significantly lower levels of overweight or obese children at year 6, and significantly lower levels of depression, yet significantly higher rate of admissions for circulatory heart disease and a higher prevalence for people having asthma.

Table 2 - Lewes & SDNPA Cycling & Walking Issues and Opportunities

Issues and Opportunities	Cycling	Walking	Cycling & Walking
<b>Issues</b>			
Incomplete routes or poor quality routes on key corridors of movement.			✓
Poor legibility, especially from Lewes rail station to key trip attractors.			✓
Congestion within town centre causing air quality issues.			✓
Limited routes to outlying villages.			✓
Narrow footways and minimal dropped kerb provision.		✓	
<b>Opportunities</b>			
Existing population higher than average levels of active travel for all journey types.			✓
Partnership working crucial - local and national stakeholders to secure investment for both infrastructure and initiatives. (SDNPA, Highways England)			✓
Promote active travel as part of SDNPA tourist offer and access to cultural heritage.			✓
Promote travel behaviour change programmes, for commuter travel and access to education and for the wider community to support healthy active lifestyles and to improve air quality.			✓

## 2.7.3 Eastbourne & South Wealden

Figure 13 - Eastbourne, Hailsham & Polegate Key Trip Attractors



### PLACE

#### Geographic Context

The topography of Eastbourne and Hailsham naturally lend themselves to enable greater levels of cycling and walking, especially Eastbourne, with key trip attractors located on the immediate level coastline, alongside the residential areas which are more undulating, but not excessively steep. Eastbourne also benefits from having access to the South Downs Way, starting from the western edge of the town and stretching across to Hampshire.

Hailsham, the key settlement within South Wealden is compact, and one of the key aspirations of the Neighbourhood Plan is for this area is to have a '10 Minute Town', where people can access the local services they need, i.e. schools, healthcare, shops leisure by walking or cycling or using public transport.

Eastbourne and South Wealden area also shares a functional geography, with the links in provision for people to access employment, education, retail and leisure facilities.

#### Transport Network

Eastbourne, Hailsham and Polegate have very 'walkable' town centres with many destinations located closely to each other, and all areas have received investment to improve the public realm and accessibility on various scales. There is however more to do and there is conflict between traffic, pedestrians and cyclists within the town centres,

particularly Eastbourne and Hailsham as noted is the WRAT and the Sustrans network improvement plans.

The A27 strategic road network is the main east-west single carriageway route connecting Lewes and Polegate within this area. This existing route has a shared cycling and walking route running adjacent to the carriageway, but the quality is inconsistent and provision for pedestrian access is limited. As outlined in section 2.7.2 Lewes area, proposals for a new offline dual carriageway between Lewes and Polegate to reduce congestion, stop route diversions and improve safety, has been included in the Government's Roads Investment Strategy 2 (2015 – 2020). This is as a pipeline scheme for development over the next five years for potential construction in RIS 3 (2025 – 2030), subject to funding.

The A22 forms part of the major road network (MRN) north – south, providing a connection between Polegate/Hailsham to London. Funding is being sought as part of an Major Route Network bid to government for a series of junction improvements on the A22, which will integrate improvements to access for pedestrians and cyclists.

A key aim of highway improvements within this area is to encourage traffic, when accessing Eastbourne, to use the A22/B2247 corridor to reduce the impact on the A2270 corridor between Polegate and Eastbourne. This will then enable improvements for sustainable transport on A22/A2270 corridor between Hailsham and Eastbourne. The A22/A2270 is a key corridor of movement between Eastbourne and Hailsham supporting access to key services to enable people to live, work and play.

To support the functional geography as outlined above the Hailsham – Polegate – Eastbourne Movement & Access Corridor scheme will support greater levels of cycling and walking, integrated with public transport. Phase 1 is expected to be delivered during 2021-2022 as a result of ESCC securing £2.1m of LGF from the South East Local Enterprise Partnership (SE LEP), but further funding is required for the other four phases. A substantial part of the route is in place through the use of the Cuckoo Trail, although improvements are required. Therefore there is an opportunity to fill in the missing links to create a high quality link connecting the urban centres.

A further £14.6m of Local Growth Funding has been secured for the Eastbourne and South Wealden area from the SE LEP. Integrated with the newly extended shopping centre 'The Beacon' greater priority is being given in Eastbourne town centre for people walking, cycling and using public transport by reducing access to traffic. Incremental improvements are being undertaken to improve the public realm, bus stop infrastructure and wayfinding, alongside access for cycling. This is being supported with improvements for cycling on key corridors which access to the town centre.

The England Coastal Trail is also commencing implementation within this area of the County, as part of the Shoreham to Eastbourne stretch. This is likely to be completed during 2020. Consultation regarding a proposed route from Eastbourne to Camber is also currently taking place.

**The Marshlink line and Coastway Line East**, operated by Southern Railway from Ashford International to Eastbourne/Brighton via Hastings, with stations at Norman's Bay, Pevensey Bay, Pevensey and Westham, Polegate and Berwick. This line provides connections from these stations to Gatwick via Lewes and to the Channel Tunnel Rail Link – High Speed 1, at Ashford International.

In terms of bus service provision, the key providers include Stagecoach, Brighton & Hove Bus Company and Metrobus. They provide the majority of the key inter-urban links on a commercial basis.

### **Key Trip Generators**

The majority of trips undertaken within this geography are within 5km. As outlined above these are for functional purposes, with localised trips to support access to education and employment, alongside retail, leisure and cultural experiences. The area also draws in 5 million visitors a year, with the Devonshire Park complex, Towner Art Gallery, Winter Gardens, Beacon centre, Sovereign harbour and Pevensey bay being key attractors.

### **Future Housing & Employment Growth**

Eastbourne Borough Council (EBC) is currently reviewing its Local Plan documents and preparing a new Local Plan which will provide the framework for growth up to 2038. The borough is highly constrained with large areas at high risk of flooding and being surrounded by the South Downs National Park. Development sites are likely to be predominately small and spread across the borough though currently all proposed development options have a focus on the Town Centre to differing extents. There is a need for new office space, and it is anticipated that this can be accommodated in the borough at locations within the Town Centre and at Sovereign Harbour.

With EBC declaring a climate emergency for Eastbourne, the focus of the emerging Local Plan will be to support growth that integrates greater investment in sustainable transport. The LCWIP will therefore provide a key role in achieving this and will be further developed alongside the preparation of the Local Plan to ensure all opportunities are explored to increase accessibility and to enable a more comprehensive network across the area.

The adopted Wealden Core Strategy and the recently withdrawn Wealden Local Plan focused growth within the South Wealden area, specifically within Hailsham and Polegate. This is evident by the substantial amount of developments currently being implemented and planning applications being processed in the area. Particularly in Hailsham large sites are being implemented in the north, east and south of the town, alongside Polegate and Stone Cross and the Parish of Westham. Recent transport studies to support proposed development for Wealden District Council have identified the need for a significant change in the use of sustainable transport to support future growth.

The preparation of a new Local Plan which is expected to be over a longer plan period provides the opportunity for the LCWIP to form an important basis for the Plan as development options are considered and to achieve the necessary change in the use of sustainable transport. This will enable a more comprehensive network to be developed that supports both current and future development needs. Also, with Eastbourne and Wealden

both currently developing new Local Plans there is a real opportunity for improvements to network links across the wider area including improved connectivity between the various settlements.

### **Cycle Propensity Tool**

The PCT 'Go Dutch Fast Routes' scenario has been used to analyse future opportunities for increasing cycling in the Eastbourne, Polegate and Hailsham area. Appendix 5P shows particularly high projected flows of above 1000 on key links towards Eastbourne town centre including the A2290 and A259 in the commuting scenario. The corridor between Eastbourne, Polegate and Hailsham is also prominent with flows of between 100 – 249. Under the schools scenario higher flows are evident in western and eastern Eastbourne of above 500.

## **PEOPLE**

### **Population**

This area of the county is the most densely populated compared to other areas in East Sussex. There has been a 5% population increase in the last ten years in Eastbourne mostly driven by migration into the area. There is a growing trend of people moving from Brighton to Eastbourne, mainly aged 30 – 45 years old, and also people moving out of Eastbourne to Wealden particularly families with children 0-15 years old.

The predominant age groups in this area are focussed on 30-44 years (15.6%) and 45-64 years old (28%) in Eastbourne and South Wealden, but with differentiations across wards (Meads 25.5% aged - 75-84 years old) and (Hampden Park 11.4% aged 0-5 years old).

### **Employment**

Employment is concentrated in three main sectors including, the public sector (37.4%) distribution, hotels and restaurants (24.2%) and finance and administration (16.5%). The percentage of people with no qualifications in this area of the county (13.6%) is higher than the average percentage for the South East (11.7%), but lower when compared with the national percentage (14.8%).

### **Travel Patterns**

The most popular mode of travel for commuting is car or van followed by walking.

### **Health**

Obesity levels for year 6 children are one of the highest in the County. There is also a higher prevalence of dementia and high rates of emergency admissions for strokes, together with higher levels of unpaid carers providing 20+ hours care per week.

The Active Access for Growth Programme, is operating in this area by supporting cycling and walking initiatives with schools, employers and the local community. A key success is the development of the cycle hub at Peacehaven.

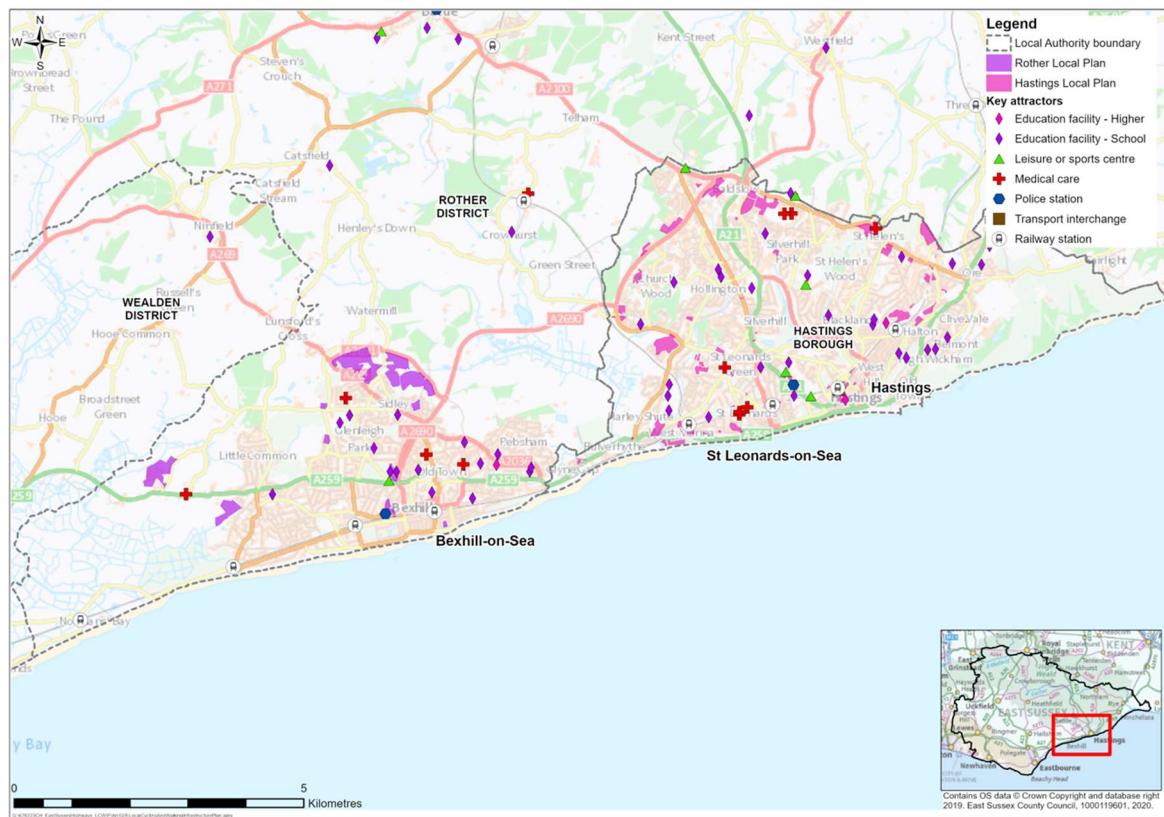
**Table 3 - Eastbourne & South Wealden Cycling & Walking Issues and Opportunities**

Issues and Opportunities	Cycling	Walking	Cycling & Walking
<b>Issues</b>			
Severance caused by railway lines and strategic road network in Eastbourne.			✓
Conflict between traffic, pedestrians and cyclists within Eastbourne and Hailsham town centre.			✓
Poor connectivity for all modes of travel between south Wealden and Eastbourne – on key corridors of movement.			✓
Limited provision for cycling – Eastbourne Seafront	✓		
Inconsistent footway/dropped kerb provision Eastbourne town centre.		✓	
Limited and inconsistent wayfinding.			✓
Limited access points from residential development on Cuckoo Trail – between Hailsham and Polegate.			✓
<b>Opportunities</b>			
Designated cycling routes of high quality connecting residential areas to key trip attractors and town centre.	✓		
Review opportunities for a continuous cycle route along Eastbourne seafront, to link with the existing sections.			✓
Prioritise access within Eastbourne town centre for people cycling and walking to support local plan ambitions.			✓
Improve accessibility within the town centre areas, through the provision of dropped kerbs.		✓	

Greater links from existing residential areas and from new development to the Cuckoo Trail within Hailsham.			
Deliver a consistent wayfinding strategy for Eastbourne.			
Promote cycle tourism linking Eastbourne – Bexhill - Hastings			
Promote continued travel behaviour change programmes, but targeted at families for travel to work and education and for older people and wider community to support healthy active lifestyles.			

## 2.7.4 Bexhill & Hastings

Figure 14 - Bexhill & Hastings Key Trip Attractors



## PLACE

### Geographic Context

Whilst Bexhill & Hastings are two separate towns they form an almost continuous urban area, tightly constrained by an 180° rural hinterland. Hastings has significant gradients on connections from the town centre to the north, east and west of the town, but both settlements benefit from 14km of unspoilt coastline. The settlements are both bounded by high quality rural landscapes with environmental designations of local and national importance.

### Transport Network

Hastings and Bexhill are connected to the strategic road network by the A259; with Hastings also connected to the A21 and Bexhill to the A269. The WRAT identified particular severance on the coastal route through Hastings on the A259, due to this being the main east-west coastal traffic corridor, with limited crossing points and high traffic flows.

The NCN within Bexhill & Hastings is referred to as the Bulverhythe route, and links Bexhill and Hastings, providing a popular route for both leisure and utility journeys. Other notable cycle routes include the Coombe Valley Way, which follows the alignment of the link road, connecting Bexhill to the north of Hastings.

Hastings has four rail stations and Bexhill three rail stations, with regular services to London, Brighton and Ashford International. ESCC and other key local partners are lobbying for High Speed Rail between London, Rye, Bexhill & Hastings, which would provide significant journey times savings between London and Ashford.

ESCC has recently secured £9m of LGF from the SE LEP, to enable the delivery of the Bexhill Hastings Movement & Access Programme. This is focussed on delivering new cycling routes, public realm improvements, pedestrian crossing facilities, wayfinding and enhancements to bus stop accessibility and real time passenger information.

Hastings Borough Council has also secured European funding to develop a business case for a continuous public transport solution to connect the seafront area, integrated with improvements to the cycling and walking environment.

The WRATs for both Hastings and Bexhill identified a series of routes for improvement which are currently dominated by traffic. Key improvements include improvements crossing points, providing routes better aligned to desire lines, traffic calming and reshaping the forecourt of Bexhill station to be more welcoming for pedestrians and cyclists.

### **Key Trip Generators**

In Hastings the key trip generators are focussed on the town centre which provides access to commercial, tourism and employment services. This is alongside Hastings Old Town, where there is a prominent arts scene and West St Leonards. To the north of Hastings town centre, along the The Ridge and the A21, industrial estates, public services (including the Conquest Hospital) are located.

In Bexhill the town centre, includes thriving independent retailers, with the train station, schools and colleges nearby. Other key attractors include the Ravenside Retail Park and leisure centre and the north Bexhill development Area.

### **Future Housing & Employment Growth**

Adopted Local Plan documents have identified Bexhill as the focus for development within Rother District. This is due to its range of services and location outside any national landscape or nature conservation designations. A large part of the development in Bexhill over the next few years will take place through a major urban extension to the town in North East Bexhill, which involves housing and business areas, either site of Combe Valley Way. Allocations both within and on the edges of the town are also identified to ensure that housing levels as set out in the adopted Plan can be built, most notable are linked allocated sites to the north of the town.

There has been significant progress in bringing employment land forward since the construction of Combe Valley Way with completions and planning permissions in the area. A further large allocation of a business area off the new north Bexhill Access Road has recently been granted planning permission.

Development choices within Hastings and outward expansion are very limited. The town has various environmental assets of national and international importance including the High

Weald Area of Outstanding Natural Beauty to the north and east, and sites of Special Scientific Interest and Conservation which act as restraints to major outward growth.

Opportunities for future development are therefore small scale and spread across the existing urban area. The majority of new homes in Hastings in recent years have been delivered through the redevelopment of sites though the combined delivery arising from new build and change of use.

Hastings has and is undergoing significant change with several regeneration initiatives planned and undertaken. Local Plan documents provide a long-term plan to deliver regeneration and sustainable growth in the Borough with objectives to also achieve and sustain a thriving economy.

A key challenge in the town is to balance future development requirements with the protection and enhancement of the area's unique built and natural environment. Particularly in the Town Centre and Bohemia Area some parts need revitalisation and offer significant opportunities for high quality new development, but the area also contains buildings and spaces of heritage importance which have significant cultural and environmental value which need to be protected and enhanced.

Both Hastings Borough Council and Rother District Council are in the process of preparing new Local Plans which will have longer timeframes than existing adopted plans. The LCWIP will provide an important basis for these new Local Plans and an opportunity to reconsider improvements to existing networks including links between the two towns as potential development sites are considered.

### **West Marina**

Tourism is a key driver of economic growth and jobs in Hastings, with the latest Tourism South East Research Unit study indicating that the local visitor economy is worth over £250m a year to the borough and supporting approximately 6,600 jobs, 21% of the workforce, both directly and indirectly<sup>1</sup>. In addition, it supports an estimated 400 enterprises in the hospitality and leisure sectors, and visitors are a key element for the continued health of the town's retail sector<sup>2</sup>.

### **Cycle Propensity Tool**

The PCT 'Go Dutch Fast Routes' scenario has been used to analyse future opportunities for increasing cycling in the Hastings and Bexhill areas. Appendix 5P shows high flows of potential cyclists in the commuting scenario on key routes in Hastings and Bexhill of between 250 – 499 with a particularly high section of above 500 in Silverhill north of Hastings. There are also higher flows predicted between the two towns on coastal routes. Under the schools scenario higher flows are projected on the outskirts of Hastings and to the east and north of Bexhill.

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<sup>1</sup> The Economic Impact of Tourism on Hastings Borough 2017, Tourism South East Research Unit

<sup>2</sup> Hastings Seafront Strategy, Hastings Borough Council, 2015

## PEOPLE

### Population

Hastings & Bexhill is one of the most densely populated areas of the county. Hastings tends to have a younger population, with the highest proportion of people aged 18-24 years in the county (7.8%), in comparison to Rother where Bexhill is located which has the highest proportion of people aged 85+ (4.8%) and some of the oldest people in England.

### Employment

The predominant employment sectors are focussed on the public sector (34.8%) and distribution, hotels and tourism (30.4%).

### Travel Patterns

Car ownership is the lowest in this part of the county, which corresponds with high levels of walking for any purpose (69.4%), which matches the national average. Levels of cycling are low for any journey purpose.

### Health

There are high levels of unemployment and high levels of deprivation compared to other areas of the county, especially within Hastings. This results in poorer health outcomes in relation to the higher proportions of premature mortality from cancers and circulatory disease, alongside poorer mental health, and high levels of dementia in Bexhill.

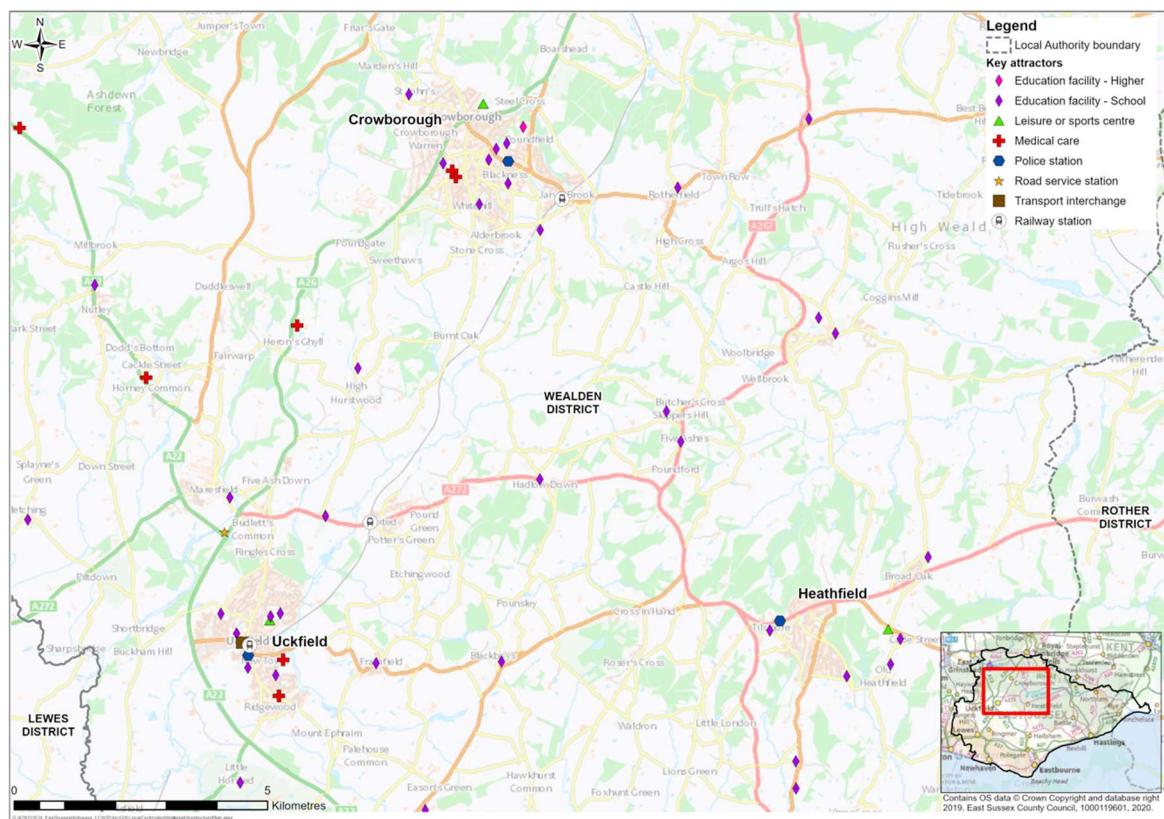
**Table 4 - Bexhill & Hastings Cycling & Walking Issues and Opportunities**

Issues and Opportunities	Cycling	Walking	Cycling & Walking
Limited dedicated cycling and walking routes to local amenities, schools, employment, shopping			✓
High levels of traffic within residential areas travelling at 30mph.			✓
Severance by major road network in the town – A259.			✓
Significant gradients from the town centre to the north, east and west of the town within Hastings, and the perception of this issue with people choosing to cycle or walk.	✓		
Inconsistent legibility across both towns.			✓

Opportunities			
Speed reduction measures in residential areas.			✓
More designated cycling routes of high quality connecting residential areas to key trip attractors.	✓		
Wayfinding Strategy for both Hastings & Bexhill.	✓		✓
Improvements to the public realm – Hastings and Bexhill town centre, as part of wider regeneration plans.			✓
Maintenance of existing assets – footways, provision for dropped kerbs.			✓
Electric cycle provision to manage gradients in Hastings.	✓		
Promote cycle tourism linking Eastbourne – Bexhill - Hastings	✓		
Promote continued travel behaviour change programmes, but targeted at families for travel to work, training and education and the wider community to support healthy active lifestyles.			✓

## 2.7.5 Rural East Sussex - North Wealden & North Lewes area

Figure 15 - North Wealden & North Lewes area Key Trip Attractors



### PLACE

#### 2.7.5.1 Uckfield

##### *Geographic Context*

Uckfield is a small market town located alongside the River Uck and in close proximity to the Ashdown Forest and the High Weald Area of Outstanding Natural Beauty.

##### **Transport network**

Connected to the strategic road network through the A2/A26 corridor to Lewes and London. The Uckfield Rail Line provides hourly services to London Bridge.

With a length of less than 3km there are considerable opportunities to enable short local journeys to key destinations by cycling and walking within Uckfield. There is an existing network of traffic free walking routes links through residential areas and green space.

With increasing pressure from development recent investment has been targeted towards improving access within the town centre with an upgrade to the High Street public realm. The delivery of a further phase will enhance access to public transport, with improvements to the bus station.

### **Future housing and employment growth**

Development in Uckfield is currently focused on the large strategic site being implemented on land west of Uckfield. Significant development above this was until recently constrained due to the potential air quality impact on the Ashdown Forest. Now with the withdrawal of the Wealden Local Plan and a reduction of the Ashdown Forest as a constraint to development there is potential for further development to be considered within Uckfield. Both through the processing of planning applications being submitted ahead of a new Plan being adopted and as part of the production of a new Local Plan which will cover a longer timeframe than previous adopted and draft Local Plans.

The potential for further development to come forward within Uckfield provides key opportunities for the LCWIP to improve accessibility within the town. More emphasis will be required to mitigate the impact of potential growth by enabling more active travel for both shorter and longer journeys, through connections to bus and rail. The LCWIP, alongside previous work looking at movement and access along the five key transport corridors into Uckfield town centre, will form a basis to work with both WDC and developers to review the proposed network by taking into consideration proposed sites for development. This will enable a more comprehensive network to be developed that supports both current and future needs.

### **Key trip attractors**

The key trip attractors within Uckfield include the town centre, the rail station, the local schools, Victoria Park, retail areas adjacent to the town centre and industrial estates, including Bell Lane.

## ***PEOPLE***

### **Population**

Uckfield currently has a younger age profile, with a higher proportion of people aged 30-44 years (20.6% Uckfield Town LSOA) and 45-64 years (30.7% Uckfield Ridgewood LSOA) alongside younger aged children 0-4 years (5.7% Uckfield Town LSOA) and 5-10 years (8.7% Uckfield Ridgewood LSOA).

### **Travel Patterns**

Over 70% of the population are walking or cycling at least once a week within the Wealden area. The proportion for cycling (3.2%) and walking (30.3%) for work in the Wealden area is the lowest in the County, compared to the other district and boroughs.

## Employment

Whilst the public sector and distribution are the dominant employment sectors, there are higher proportions of people employed in manufacturing and transport & communications, compared to elsewhere in the county.

## Health

With data available at a district level the high weald area has a lower level of COPD and diabetes prevalence but higher levels of stroke and depression compared to England.

### **2.7.5.2 Heathfield**

## **PLACE**

### **Geographic context**

Heathfield is located on southern ridge of the High Weald Area of Outstanding Natural Beauty (AONB). The geography of the town is undulating with the majority of key trip attractors located on the main ridge in the High Street area, with the residential areas located in the more undulating areas, although the gradients are not excessively steep.

### **Transport network**

The A265 is the key road through the town centre, with links to the A267 to Tunbridge Wells and Hailsham, and the B2096 provides links to Battle and Hastings. The disused railway line between Heathfield and Polegate has been developed into a traffic free cycling and walking path, referred to as the Cuckoo Trail. The nearest rail stations are Buxted, which provides access to London, Stonegate which provides access to Tunbridge Wells and London to the north and Hastings to the south, and Polegate for access along the coast between Brighton and Ashford.

### **Future housing and employment growth**

Heathfield is located within the centre of Wealden district providing an essential service centre for its residents and surrounding population. It is a sustainable settlement however it is highly constrained to deliver vast amounts of growth through urban extensions due to its location in the High Weald Area of Outstanding Natural Beauty. Over the last few years there has been limited planned development taking place in Heathfield due to either no or only limited allocations in Local Plan.

However modest levels of development are being delivered within the town to meet its housing and economic needs and to ensure that its role and function continues through a maintained and vibrant town centre. The challenge is to manage and deliver housing and employment growth in the town whilst safeguarding its more open and sensitive edge where development is likely to adversely impact the valued High Weald landscape.

Though the withdrawal of the Wealden Local Plan does provide an opportunity for further sites to come forward, through either planning applications ahead of a new adopted Plan or more long-term through the new Local Plan, large amounts of growth through urban extensions are restricted by national policy requirements to protect valued landscapes such as AONBs.

## Key trip attractors

Heathfield does provide a number of key services therefore a number of localised trips are generated, including the High Street and Station Road in the northern part of the town which as a number of shops, the Cuckoo Trail, the Ghyll Road Industrial Estate, Heathfield Community College and two primary schools, which are located at opposite ends of the town.

## **PEOPLE**

### Population

Heathfield tends to have a greater number of people of middle age years and older, including 45-66 years (34.7% Heathfield East LSOA) and 65 – 74 years (17.1% Heathfield East LSOA).

### Travel Patterns

See Uckfield travel patterns, there is no disaggregated data for Heathfield but only Wealden. The majority of trips within the town are within 3km, therefore making it feasible to increase active travel.

### Employment

See Uckfield employment.

### Health

See Uckfield health.

## **2.7.5.3 Crowborough**

### Geographic context

Crowborough was previously a series of separate villages and hamlets that merged to become one compact settlement, with the most localised journeys within 3km. It sits on the eastern edge of the Ashdown Forest and the High Weald Area of Outstanding Natural Beauty (AONB).

### Transport network

The A26 is the main link road, which runs along the west side of the town providing a connection to Tunbridge Wells in the north and Newhaven, via Uckfield and Lewes to the south.

Crowborough station is located to the east side of the town and runs two peak hour services to London Bridge and Uckfield. There is also a frequent bus services operated by Brighton & Hove Buses, which runs through the town linking Brighton and Tunbridge Wells.

### Future housing and employment growth

The High Weald Area of Outstanding Natural Beauty (AONB) encircles Crowborough and the Ashdown Forest is located to the west both have an impact and restrict development in the town. Small scale development has been previously allocated in Crowborough and there are some small commitments within town and in the south on the edge of the urban area.

Development within Wealden District has been until recently constrained due to the potential air quality impacts on the Ashdown Forest. Now with the withdrawal of the emerging Wealden Local Plan and a reduction of the Ashdown Forest as a constraint to development there is potential for further development to be considered within Crowborough. However large-scale growth particularly as major urban extensions will remain restricted due to the potential impact on the surrounding AONB and Ashdown Forest.

The potential for further development to come forward and the production of a new Local Plan provides key opportunities for the LCWIP to improve accessibility with the town. The LCWIP will form a basis to work with both WDC and developers to review the network by taking into consideration proposed sites for development. This will enable a more comprehensive network to be developed that supports both current and future needs.

### **Key trip attractors**

There is considerable external commuting from Crowborough as a result of the frequent rail and bus services that serve the town. This is focussed on London, Tunbridge Wells and East Grinstead.

More localised trip attractors are Jarvis Brook, where the station and retail/industrial estates are located; the high street where a number of supermarkets are situated, alongside education facilities located either side of the B2100 and the leisure centre.

## **PEOPLE**

### **Population**

Similar to Heathfield, Crowborough tends to have a greater number of people of middle age years and older, including 45-66 years (30.8% Crowborough St Johns LSOA) and 65 – 74 years (20.7% Crowborough St Johns LSOA).

### **Travel Patterns**

See Uckfield travel patterns, there is no disaggregated data for Heathfield but only Wealden. The majority of trips within the town are within 3km, therefore making it feasible to increase active travel.

### **Employment**

See Uckfield employment.

### **Health**

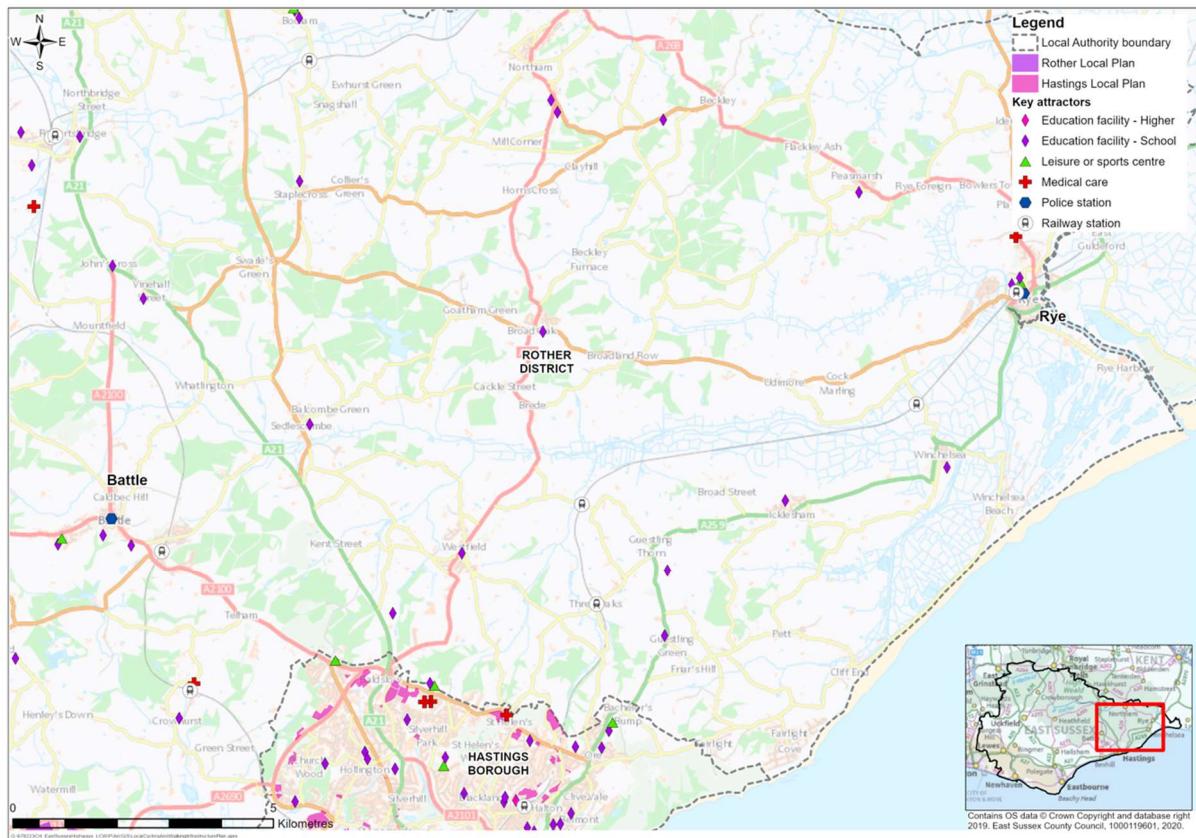
See Uckfield health.

Table 5 - North Wealden & North Lewes area - Cycling & Walking Issues and Opportunities

Issues and Opportunities	Cycling	Walking	Cycling & Walking
<b>Issues</b>			
Severance major roads, with inadequate pedestrian crossing facilities – Uckfield		✓	
Lack of dedicated cycling and walking infrastructure serving key trip attractors and new development - Uckfield			✓
Poor quality footway and surfacing to traffic free paths – Uckfield/Crowborough		✓	
Constrained road space on major town roads – all settlements.		✓	
Limited wayfinding - all settlements.			✓
Localised town centre congestion at peak periods – all settlements.			✓
<b>Opportunities</b>			
Focus will be on implementing cycling and walking infrastructure routes to link with existing residential areas and new development sites to key local trip attractors.			✓
Implement a wayfinding strategy – Uckfield and Crowborough through new development.			✓
Work with developers as sites identified to enhance the LCWIP network.			✓
Work with WDC and developers to fund travel behaviour change programmes at the onset of occupation of new development.			✓

## 2.7.6 Rural East Sussex

**Figure 16 Rural Rother**



## PLACE

### 2.7.6.1 Battle

#### Geographic context

Battle is a small historic market town within Rother, with the town centre designated as a conservation area, and the surrounding countryside within the High Weald Area of Outstanding Natural Beauty (AONB).

#### Transport network

It is connected to the A21, which forms part of the strategic road network, via the A2100, which also provides a link to Hastings, as well as the A269 and A271. Battle is located on the Hastings line providing frequent rail services to Charing Cross, via Tunbridge Wells and south to Hastings. By working in partnership with South Eastern Rail, investment has been secured to improve cycle parking at the station.

#### Future housing and employment growth

Modest levels of development are planned for at Battle. It is constrained by the surrounding High Weald Area of Outstanding Natural Beauty countryside but has a key service role for the area and also significant local housing need. Development will generally be delivered through the redevelopment potential in the town with a focus at the allocated site with

planning permission at Blackfriars. Further smaller sites will be allocated through the emerging Battle Neighbourhood Plan.

Rother District Council is currently reviewing their Local Plan documents and is preparing a new Plan which will have a longer timeframe than adopted Plan documents. Further opportunities for development in Battle will be considered through this process. The LCWIP will be used as an important basis for the new Local Plan and the review process will provide an opportunity to improve accessibility within the town as potential development sites are considered.

### **Key trip attractors**

The key trip attractors include the historic town centre, Battle Abbey, the High Street area (which is a narrow footway) alongside the rail station and the four schools including Claverham Community College.

## **PEOPLE**

### **Population**

Battle tends to have a greater number of people of middle age years and older, including 30-44 years (up to 17% Battle Town LSOA) and 45- 64 years (up to 30.4% Battle Town LSOA), alongside children aged 5- 10 years (7.7% Battle Town LSOA) and 11-15 year olds (7.1% Battle Town LSOA).

### **Travel Patterns**

There is no disaggregated data for Battle but for Rother as a whole. Approximately 71% of the population are walking or cycling at least once a week within Rother area. The proportion for cycling is (5%) and walking (34%) for work in the Rother area, the proportion for cycling is comparable to Eastbourne.

### **Employment**

Whilst the public sector and distribution are the dominant employment sectors, there are higher proportions of people employed in construction and transport & communications, compared to other areas in the county.

### **Health**

Rother CCG has a significantly higher prevalence of asthma, COPD, diabetes and depression compared to other areas of the county and England.

## **2.7.6.2 Rye**

### **Geographic context**

Rye is a historic medieval town with a number of smaller adjacent settlements including, Playden, Iden, Peasmarsh, Camber, Winchelsea and Winchelsea Beach. Rye lies at the head of a bay overlooking the English Channel. The geography specifically in Rye, Playden and Winchelsea has significant height differences, with stepped footways and cobbled streets.

## **Transport network**

The A259 runs through Rye linking with Hastings and Folkestone, with links also to Ashford via the A259/A2070. The A268 and B2089 provide the main links into the town. Rye and Winchelsea both have rail station providing access along the East Coastway to Brighton and Ashford. The NCN2 runs through this area which is both used for commuting and leisure.

A consultation of the England Coastal Trail regarding a proposed route from Eastbourne to Camber is also currently taking place within this area.

## **Future housing and employment growth**

Rye is the main service and employment centre in eastern Rother District. The area surrounding Rye is heavily constrained by landscape and biodiversity designations and land prone to flooding but Rye has in recent years seen growth to the west of the town. The Local Plan existing strategy for the town is to retain and strengthen the role of Rye as a service centre and provide modest and balanced housing and employment growth to create jobs and opportunities to meet the needs of the town.

Due to its topographical and landscape context and statutory designations further opportunity for development on the periphery of Rye is confined. Potential development levels are therefore modest and focused on sites and infill within the built-up urban area. Small sites are allocated in the Rye Neighbourhood Plan all predominantly on brownfield sites. Developments within the built-up areas will however need to be sympathetic to the historic core and character of the town.

Development plan documents also promote the town's role as a wider visitor centre. The high-quality landscape setting that surrounds Rye contributes to the distinctive character of the town. A key objective is to maintain the landscape surrounding Rye whilst investigating additional opportunities to carefully develop leisure and tourism attractions. Support is given to additional sustainable tourist facilities and leisure development which extends the season by providing diverse year-round activities.

Rother District Council is currently reviewing their Local Plan documents and is preparing a new Plan which will have a longer timeframe than adopted development plans. Further opportunities for development in Rye will be considered through this process. The LCWIP will be used as an important basis for the new Local Plan and the review process will provide an opportunity, as potential development sites are considered, to improve accessibility within the town including better support for leisure and tourism.

## **Key trip attractors**

Rye provides key services to local rural settlements alongside its role as a key historic tourist destination within the county. Key trip attractors include the historic town centre and shopping parades, the castle, museums, harbour and industrial estates.

## **PEOPLE**

### **Population**

Battle tends to have a greater number of people of middle age years and older, including people aged 45- 64 years (up to 30.7% Rye LSOA) and 64- 75 years (16.2% Rye LSOA).

### **Travel Patterns**

There is no disaggregated data for Rye, see Battle travel patterns.

### **Employment**

See Battle employment.

### **Health**

See Battle health.

Table 6 - Rural Rother Cycling & Walking Issues and Opportunities

Issues and Opportunities	Cycling	Walking	Cycling & Walking
<b>Issues</b>			
Delivering improvements within a constrained historic environments.			✓
High volumes of traffic on main routes through the towns.			✓
Limited provision for cycling and walking.			✓
Steep gradients – Rye town centre.	✓		
Traffic congestion – peak periods and tourist seasons.			✓
Location of schools – Battle – exacerbates congestion.			✓
NCN2 substandard sections and access limited – Rye.	✓		
Poor legibility within towns.			✓
<b>Opportunities</b>			
Focus on improving walking/cycling access to schools - Battle			✓
More segregated/shared paths compared to on road carriageway routes – Rye.	✓		
Review legibility to support local access and tourism for both towns.			✓
Improve access to the NCN2	✓		
Improve accessibility Battle footpath network.		✓	

Improve pedestrian provision – Rye town centre.			
Improve cycle – rail access to the town centres.			

## Stage 3 - Network Planning for Cycling

### 3.1 Introduction

The two key outputs of this section are:

- **the development of a cycle network map, and a**
- **a programme of infrastructure improvements.**

These will be adopted as strategic planning documents.

The networks will highlight the preferred routes, **but it is important to note that these will be subject to further development work.**

In order to develop the networks, Sustrans were commissioned by ESCC to undertake the assessment work, using a range of key national guidance supporting cycle route identification, network development and design. To ensure that the interests of local stakeholders were collected, local cycling, walking and access groups were actively engaged with the network assessment alongside the district and borough councils and other key ESCC stakeholders.

In some of the areas of the county some previous network planning had been undertaken. Therefore this process has enabled a validation of this and importantly an enhancement to these networks.

### 3.2 How have the cycling networks been developed?

The networks were developed using the DfT LCWIP Technical Guidance for Local Authorities as a guide, alongside the design guidance published as part of Active Travel (Wales) Act 2013, the London Cycling Design Standards Guidance on developing a coherent cycle network and Highways England (Interim Advice Note 195/16).

The geography of East Sussex LCWIP varies between densely populated coastal settlements compared to more dispersed rural market towns and historic centres. Therefore it is important to note that whilst a similar approach was utilised to develop the networks across East Sussex, within some of the more urban areas it was possible to undertake more detailed network development.

Whilst network planning for walking has been undertaken for some of the specific geographic areas, as outlined in stage 4, the cycling network development work also identified improvements on these routes for pedestrians. For example where a shared cycling and pedestrian route may be the most appropriate option, or where there is an opportunity to either improve or install new dropped kerbs, or where a toucan crossing is proposed.

### 3.2.1 Identifying Demand

Using a GIS platform the trip origins and the significant existing and proposed key trip generators within the specified geographic areas were identified, i.e. **origins** - residential areas, **existing & proposed trip generators** – another settlement, employment, education sites, healthcare, retail, community facilities (leisure centres), transport interchanges and allocated sites for housing and employment identified in district and borough local plans. Analysis was also conducted using the Propensity to Cycle Tool as noted in the preceding chapter.

### 3.2.2 Identifying Desire Lines

The plotting of the origins and destinations naturally formed an indicative network of desire lines. As part of the review of the desire lines Sustrans also considered the existing transport network, in relation to major roads and railways, a review of traffic flow data, review of existing cycle routes and cycle flow data associated with these, alongside using the Propensity to Cycle Tool to forecast future cycle flows on the primary network.

### 3.2.3 Classification of Desire Lines

The above assessments enabled the desire lines to be classified into the following categories. Taking into consideration the assessment and stakeholder engagement the East Sussex LCWIP assumes the following:

- **Primary** – the most popular and strategic routes linking residential areas with key trip generators, and likely to have higher flows of cyclists.
- **Secondary** – locally important and less strategic, they fill the gaps in the primary network and are likely to have lower flows of cyclists.

### 3.2.4 Network Density

The assessment associated with the density of a cycle network was undertaken for certain settlements in the East Sussex LCWIP, i.e. Eastbourne. This is because a large majority of the settlements which have been included are more rural in nature and have more limited and dispersed trip attractors. The assessment of density of the proposed networks integrated a review of the existing cycle network and committed cycle schemes.

### 3.2.5 Core Design Outcomes for Cycle Routes

As Sustrans utilised the design guidance published as part of Active Travel (Wales) Act 2013, the London Cycling Design Standards Guidance in developing the network, the identified cycle networks are underpinned by the core design outcomes of being coherent, direct, safe, comfortable and attractive, using key guidance such as the forthcoming update to Local Transport Note 02/08 by the DfT.

Proposed route improvements were also costed using benchmark costs from similar schemes already delivered in East Sussex and elsewhere, with 44% optimism bias applied given the early stage of the scheme development process.

In addition to this the Sustrans assessment reports (in appendix 5) outline some recommendations for the design of the East Sussex cycle networks and the types of recommended measures which are applicable to the settlements. The **quality of future**

**cycle network design** was cited as a key issue identified through stakeholder engagement. These will be a key action for the East Sussex LCWIP to embrace and for ESCC and other partners delivering infrastructure to act upon.

### 3.3 Cycle Network Maps

The key output from the assessment undertaken of each settlement, as outlined above, is a **proposed cycle network map of preferred routes**.

## Coastal East Sussex

### 3.3.1 Newhaven Area

#### Newhaven, Peacehaven & Seaford

Based on the evidence outlined in stage 2 the preferred routes for this area, particularly in Newhaven, are focussed on providing more segregated routes for cycling, to manage the key existing issues of severance and speeding. This is alongside the need to support greater levels of cycling, to reduce air quality issues and to improve the strategic connections on the A259 corridor in the longer term. For Peacehaven and Seaford, the network will support more localised journeys with access to schools, shops and local facilities a key priority.

Figure 17 - Existing network and committed schemes

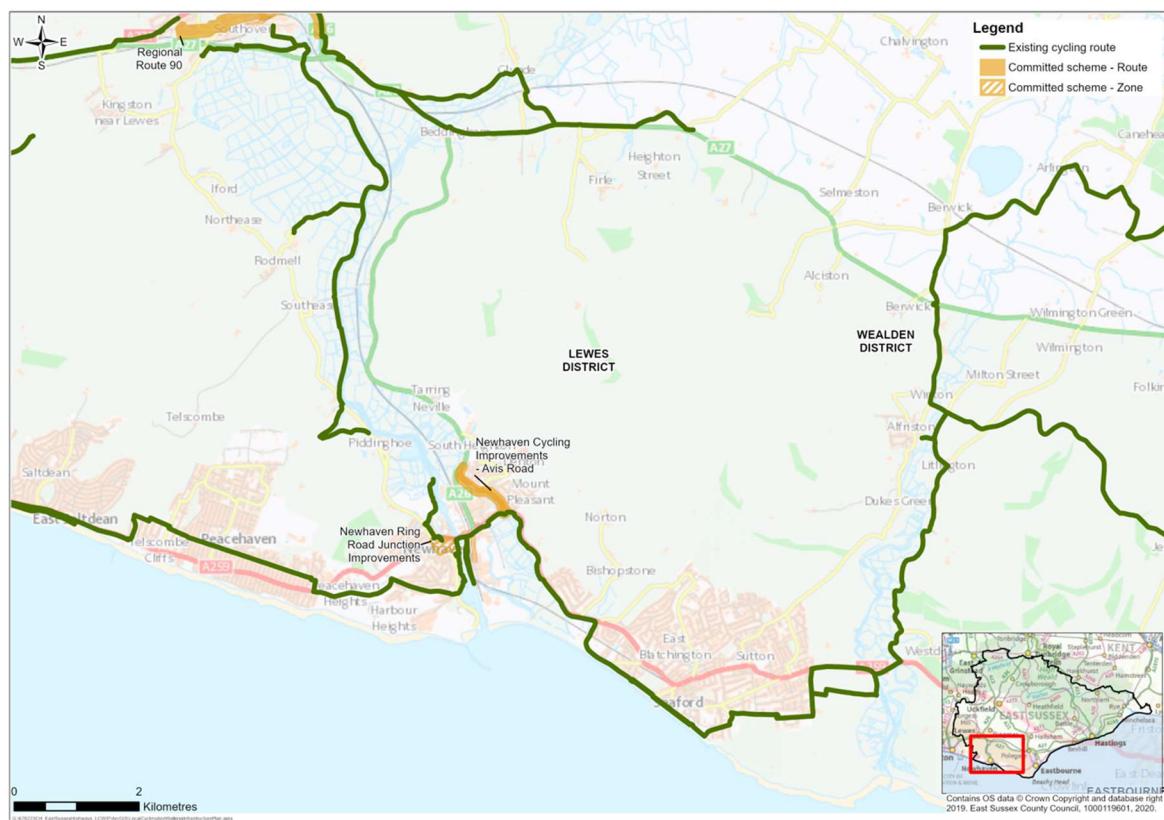


Figure 18 - Proposed network

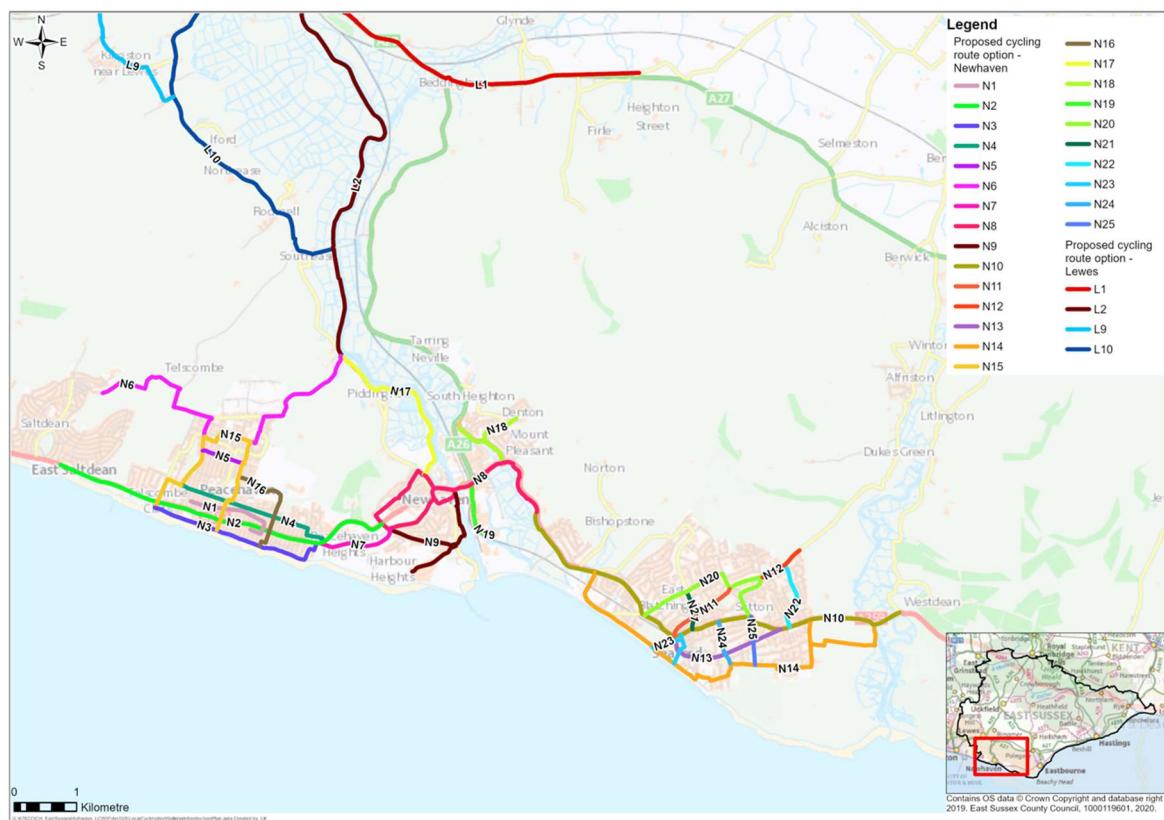


Table 7 Scheme Number	Scheme Names - Newhaven, Peacehaven & Seaford
N1	Telscombe Link
N2	South Coast Road (A259) Peacehaven
N3	Coastal Path
N4	Arundel Road NCN2
N5	Firle Road
N6	Saltdean – Peacehaven - Southease
N7	Peacehaven – Newhaven via The Highway
N8	Newhaven East/West Corridor
N9	Gibbon Road – Court Farm Road to the Newhaven Swingbridge
N10	Seaford East/West Corridor
N11	Seaford Northern Loop
N12	Alfriston Road – Southdowns
N13	The Station – A259 via Sutton Avenue
N14	Marine – Exceat Bridge via Seaford Seafront
N15	Peacehaven Loop
N16	Piddingshoe Avenue

N17	Egrets Way
N18	A259 to Denton
N19	Railway Road
N20	Seaford Northern Loop
N21	Town Centre – Belgrave Road via Avondale Road and Blatchington Hill
N22	A259 – Alfriston Road via Walmer Road
N23	Town Centre – Seafront via Dane Road and The Causeway
N24	Southdown Road
N25	Arundel Road

*Appendix 5A outlines the network development work for the Newhaven Area.*

### 3.3.2 Lewes & South Downs National Park

#### Lewes

Stage 2 highlighted the need for any preferred routes within this area to be sympathetic to the historic nature of Lewes and to consider the needs of developing infrastructure within a national park. With the highest levels of cycling for work and leisure within this area of the County, the routes are focussed on supporting more strategic links to the existing National Cycle Network, together with links to nearby settlements and localised improvements which support air quality.

**Figure 19 - Proposed network**

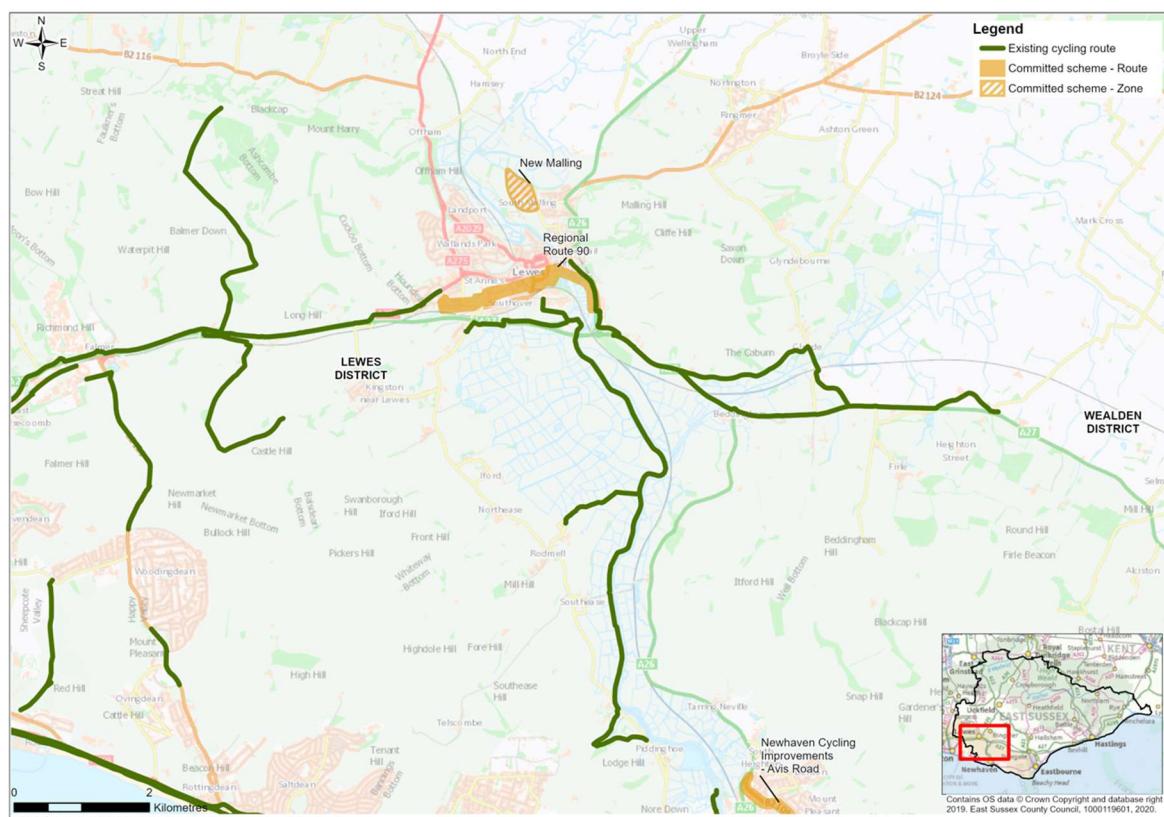


Figure 20 - Existing network and committed schemes

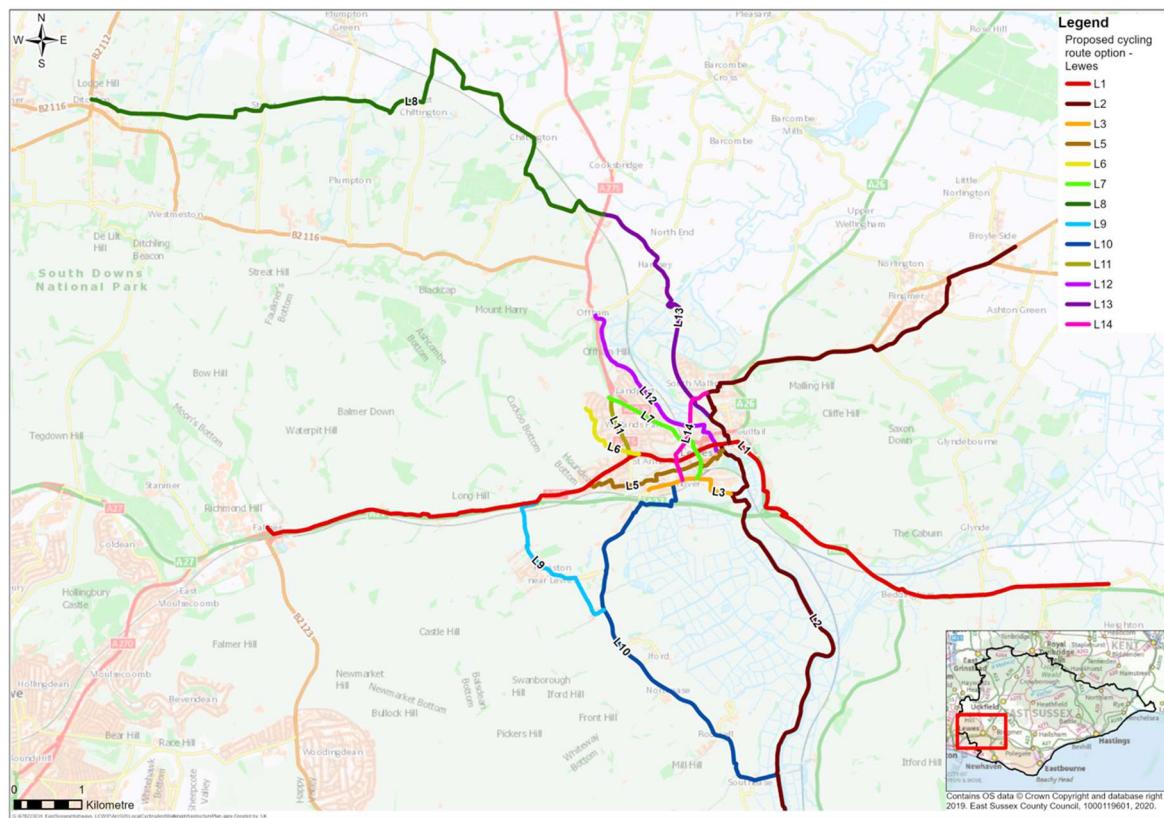


Table 8 Scheme Number	Scheme Names Lewes
L1	A27 and Lewes Town Centre
L2	Ringmer – Southease
L3	South Downs Way – Lewes
L4	Montacute Road - Town Centre
L5	South Downs - Spital Road
L6	South Downs – Station
L7	Ditchling – Cooksbridge
L8	A27 – Swanbourne
L9	Lewes – Southease
L10	Nevill - Southover Cooksbridge - Lewes Riverside
L11	Offham - Town Centre
L12	Cooksbridge - Lewes Riverside
L13	Malling - Southover

Appendix 5B outlines the network development work for Lewes.

### 3.3.3 Eastbourne & South Wealden

#### Eastbourne, Hailsham & Polegate

The evidence in Stage 2 clearly demonstrated that significant investment has been recently secured to begin to transform cycling and walking infrastructure in one of the key growth areas of the county. With South Wealden being the only area of the county where significant growth in housing can come forward, alongside the need to continue to build upon the existing infrastructure being delivered, the preferred routes are focussed on supporting integrated connections between the key settlements in this geographic area.

By taking advantage of an essentially flat topography, routes will support access for localised journeys as well as supporting the visitor economy. There is also an emphasis on supporting improved access to town centres, especially Eastbourne, by giving people cycling or walking greater priority. There is an opportunity to create a high quality corridor linking through each urban area utilising the Cuckoo Trail as part of this.

*(Previous network development work had been undertaken within Eastbourne, which enabled the development of the Eastbourne Cycle Strategy. This assessment has validated the existing proposed network, alongside providing enhancement to this. The plan for this area will supersede the proposed plan agreed in 2012.)*

**Figure 21 - Existing network and committed schemes**

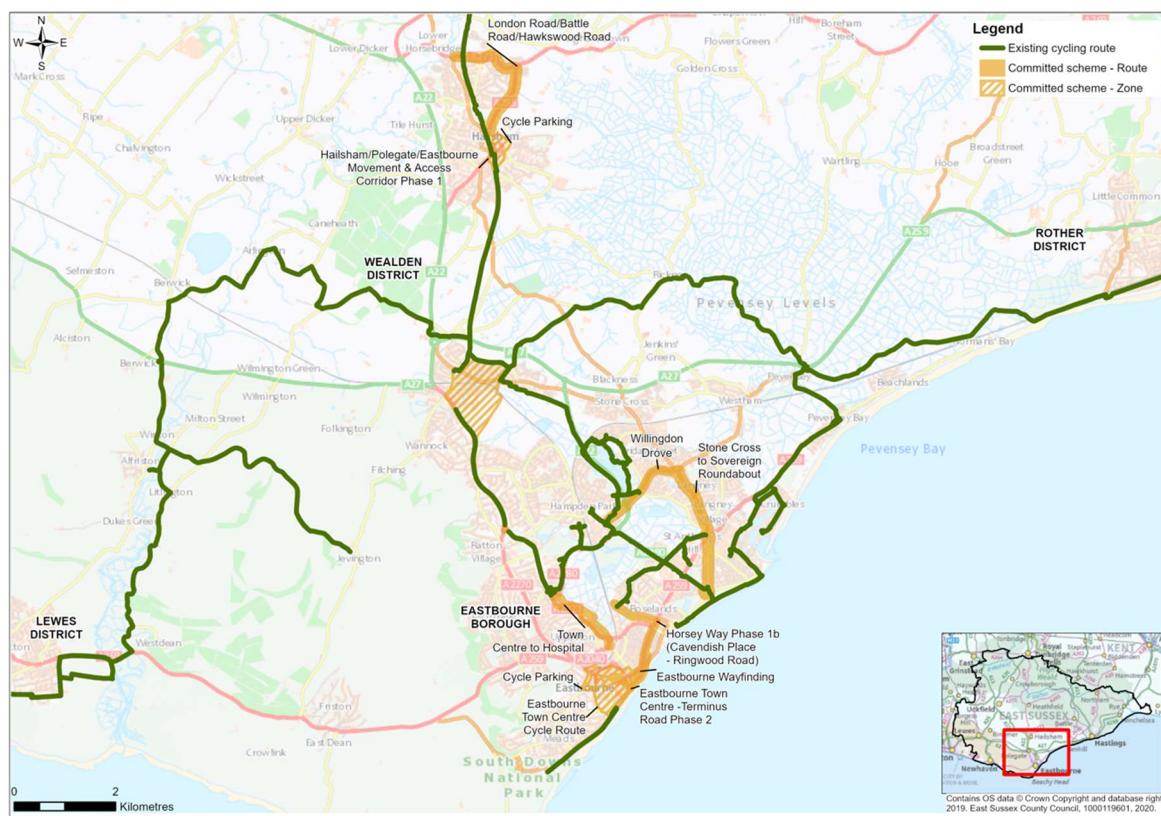


Figure 22 - Proposed network - Eastbourne

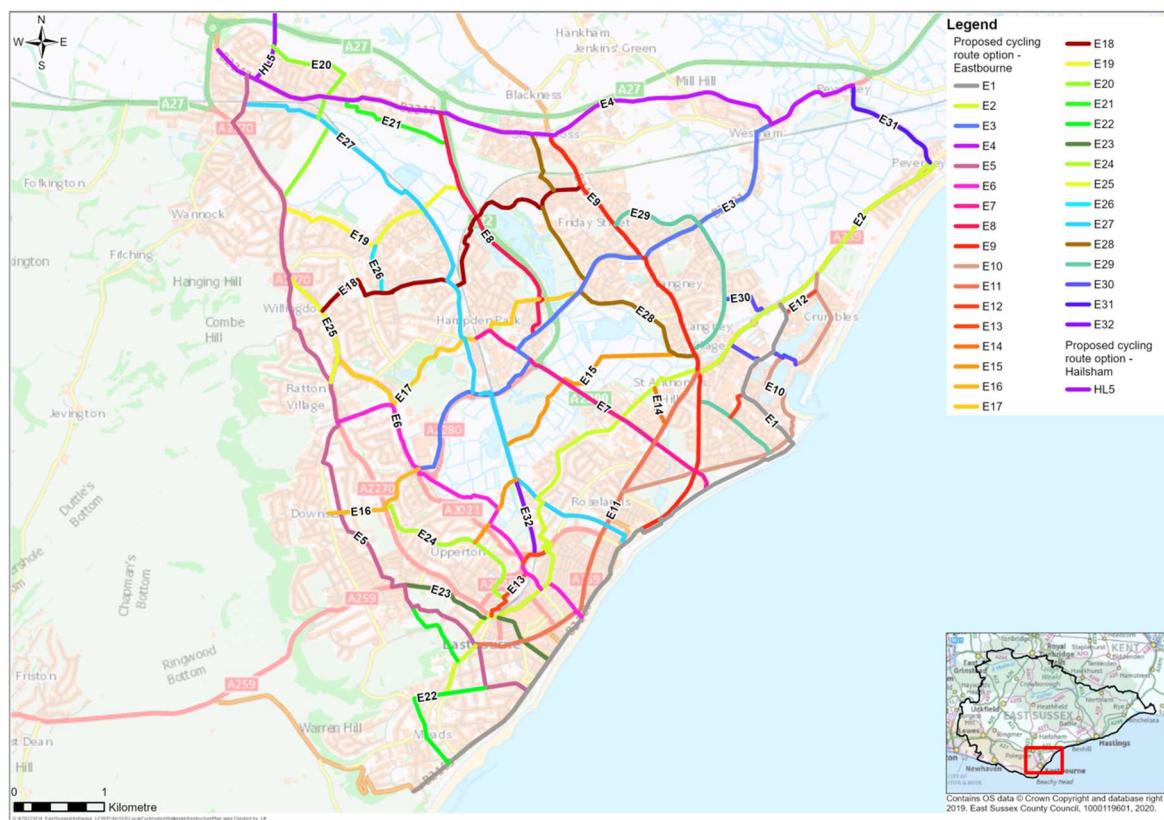
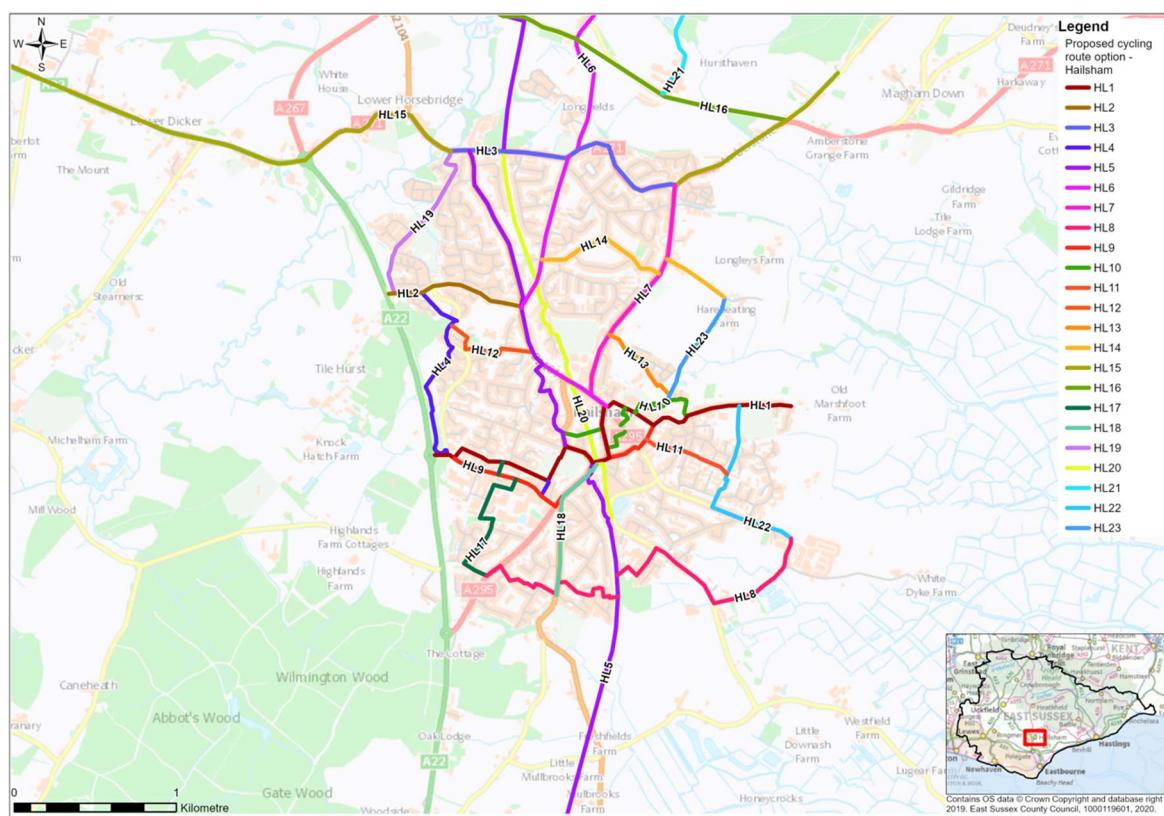


Table 9 Scheme Number	Scheme Names Eastbourne
E1	South Downs Way – Sovereign Harbour via Seafront
E2	University – Pevensey Bay
E3	Hospital – Westham
E4	Polegate High Street - NCN21 and A22
E5	Polegate-Seafront
E6	Willingdon Road - Seafront
E7	Hampden Park – Sovereign Centre
E8	A22 / Dittons Road - NCN21 – Willingdon Drove
E9	Stone Cross – Royal Parade via Langney
E10	Seaside Road – Sovereign Harbour – Eastbourne Road
E11	Town Hall – Langley Roundabout
E12	Ramsay Way – Route 200 – Pacific Drive
E13	Station – Upper Avenue
E14	Horsey Way – Seaside
E15	Upperton – Eastbourne Park – Sevenoaks Road
E16	Victoria Drive – Hospital

E17	Willingdon Roundabout – South Shinewater Park
E18	Willingdon – The North Shinewater Park – Friday Street
E19	Lower Willingdon - Willingdon Upper
E20	Eastbourne Road - Polegate Recreation Ground - Cuckoo Trail
E21	Dittons Road - Cuckoo Trail – A22
E22	Borough Lane - King Edward's Parade
E23	Old Town-Library and Council Offices - Terminus Road - Seafront
E24	Rodmill - Eastbourne Rail Station
E25	Coopers Hill – Wish Hill
E26	Hazelwood Avenue and Hampden Park – Eastbourne Station link
E27	Polegate – New North Railway Path – Hampden Park – Ringwood Road - Seafront
E28	Stone Cross – Larkspur Drive – Sevenoaks Road, Friday Street – Pennine Way – Seafront
E29	Friday Street – Pennine Way – Seafront
E30	Netherfield Avenue – Sovereign Harbour - Seafront
E31	Pevensey – Pevensey Bay

*Appendix 5C & 5D outlines the network development work for Eastbourne*

**Figure 23 - Proposed network - Hailsham**



<b>Table 10 Scheme Number</b>	<b>Scheme Names Hailsham</b>
H1	Diplocks Way (A22) — Phoenix Academy
H2	Hempstead Lane
H3	Cuckmere Close — Battle Road
H4	Diplocks Way / A22 — Hempstead Lane
H5	Polegate — Hellingly
H6	High Street — Hellingly
H7	London Road — Battle Road — Hawkswood Road
H8	South Road — Mill Road
H9	A22 — Vicarage Lane
H10	Summerheath Road — High Street
H11	Vicarage Road — Hamlin's Park Close
H12	Gleneagles Drive — London Road
H13	Battle Road — White House School
H14	Hawks Road — Harebeating Lane
H15	Lower Dicker — Park Gate Road
H16	Hellingly — Park Gate
H17	Arlington Road East — Upper Horsebridge Road
H18	Ersham Road — South Road
H19	Hempstead Lane - Upper Horsebridge Road
H20	South Road Car Park — Upper Horsebridge Road
H21	New Road - The Drive
H22	Mill Lane - Marshfoot Lane
H23	White House School - Harebeating Lane

*Appendix 5E & 5F outlines the network development work for Hailsham*

### 3.3.4 Bexhill & Hastings

#### Bexhill & Hastings

With Bexhill & Hastings being a key growth area in the county initial investment has recently been secured to begin to kick-start the delivery a cycle network. Whilst the topography is challenging, especially in some areas of Hastings the preferred routes are focussed on continuing to expand on the extent of the limited cycle network, with an emphasis on supporting wider projects to support regeneration in supporting access to education, employment and local amenities, supporting the visitor and cultural economy and linking to housing growth.

*(Previous network development work had been undertaken within Hastings, which enabled the development of the Hastings Walking & Cycle Strategy. This assessment has validated the existing proposed network, alongside providing enhancement to this. The plan for this area will supersede the proposed plan agreed in 2014.)*

Figure 24 - Existing network and committed schemes - Bexhill

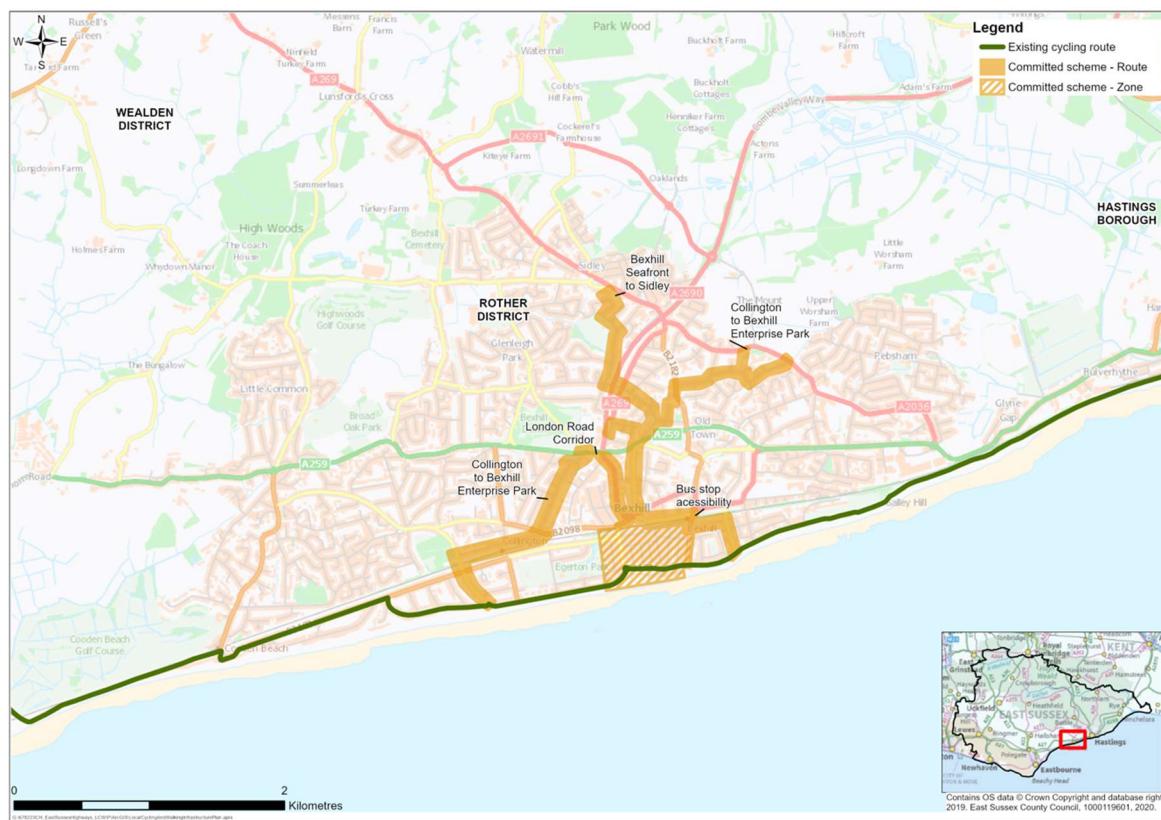


Figure 25 - Proposed network – Bexhill

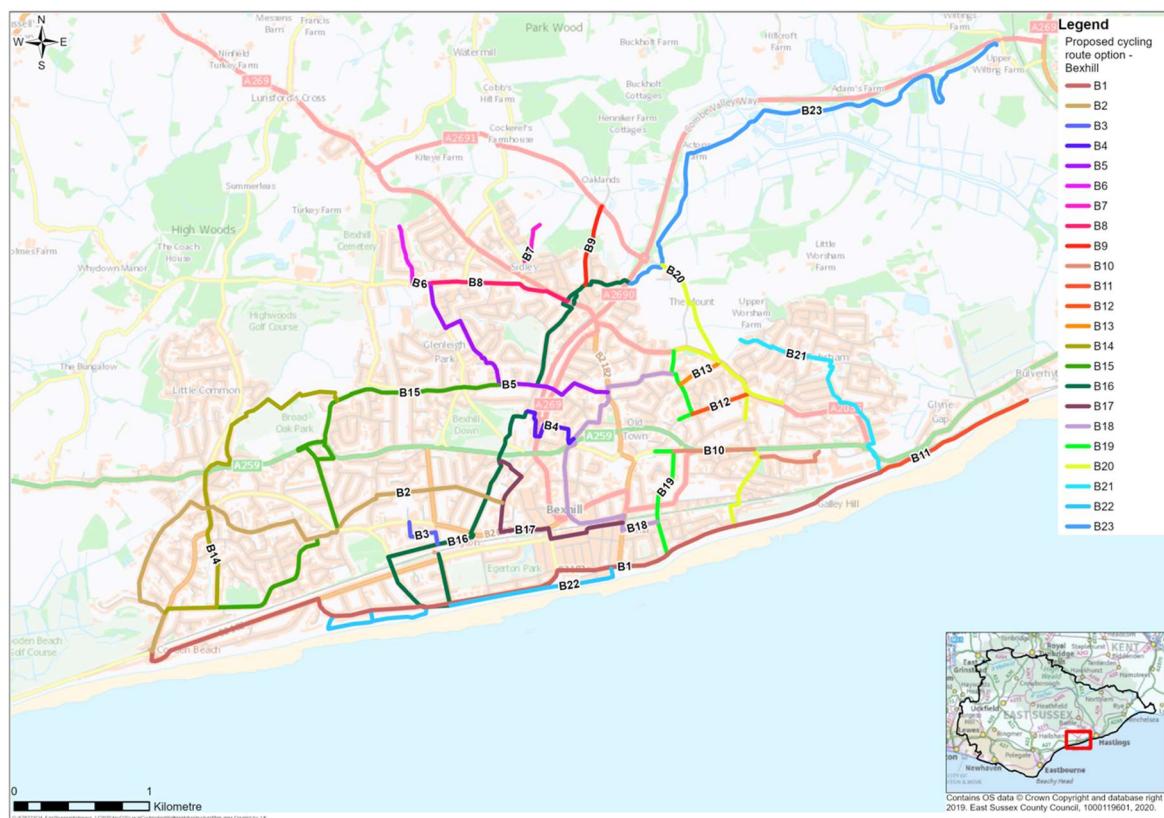


Table 11 Scheme Number	Scheme Names Bexhill
B1	NCN2
B2	Cooden Beach, Collington, Cranstoun Avenue, Windsor Road
B3	Withyham Road, Little Common, Recreation Ground
B4	Cooden Sea Road, Broadoak Lane, Woodsgate Park
B5	NCN2/West Parade, King Offa Primary, NBDA West
B6	Collington Rail Station – Hastings Direct
B7	Bancroft, Hillside, Bankside
B8	Bexhill Railway Station to Little Common Road
B9	Bexhill Hospital, Gunters Lane
B10	Gunters Lane, Highlands
B11	Norfolk Close, NBDA
B12	Gunters Lane - Sidley
B13	Buckholt Lane - NBDA
B14	NCN2/De La Warr Parade, King Offa Way & NBDA Central
B15	NCN2/De La Warr Parade & NBDA Central
B16	NCN2/De La Warr Parade NBDA East & Central

B17	Retail Park, Pebsham Lane, NBDA East & Central
B18	NCN2/De La Warr Parade, King Offa Way & NBDA Central
B19	NCN2/De La Warr Parade NBDA East & Central
B20	NCN2/De La Warr Parade NBDA East & Central
B21	Retail Park, Pebsham Lane, NBDA East & Central
B22	NCN2/De La Warr Parade, King Offa Way & NBDA Central
B23	Bexhill – Hastings Greenway (Coombe Valley Way)

**Appendix 5G outlines the network development work for Bexhill**

**Figure 26 - Existing network and committed schemes – Hastings**

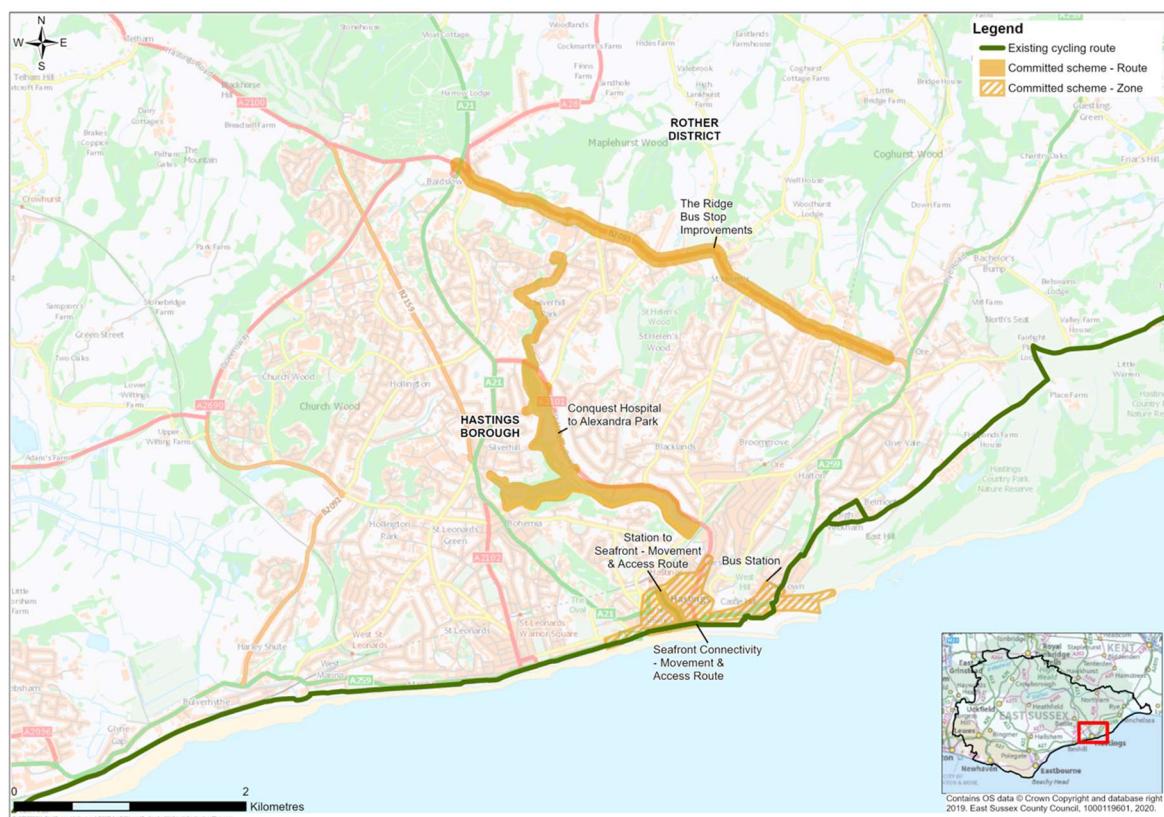


Figure 27 -Proposed network - Hastings

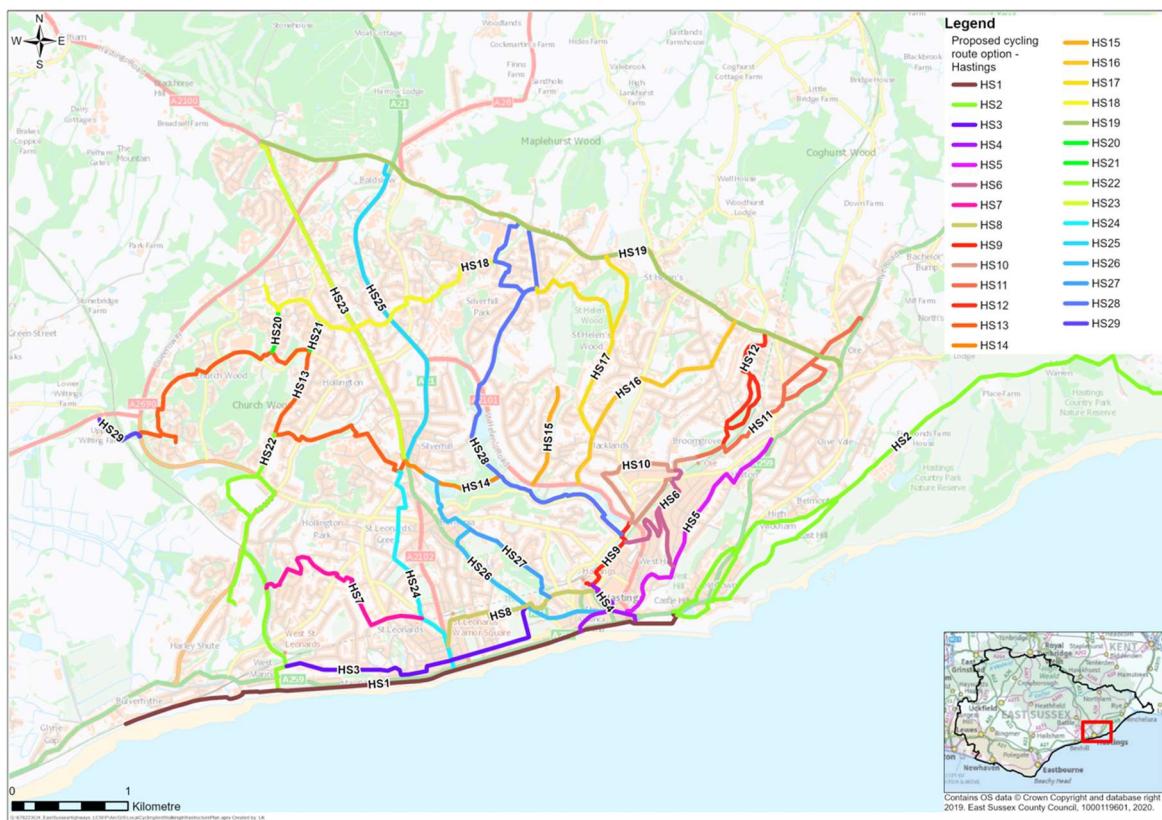


Table 12 Scheme Number	Scheme Names Hastings
HS1	NCN2 Bulverhythe – Old Town
HS2	NCN2 Bulverhythe - Fairlight
HS3	Robertson Street – Wellington Place
HS4	West Hill
HS5	Hastings Station – St Helens Road
HS6	St Helens Road – Ore Road
HS7	Ore Station – The Ridge
HS8	Ore Station – The Ridge (Alternative)
HS9	Robsack Wood - Hastings
HS10	Silverhill – Alexandra Park
HS11	The Ridge
HS12	Wishing Tree Road – NCN2
HS13	Battle Road - Silverhill
HS14	Silverhill – St Leonards – NCN2

HS15	A21 – The Ridgeway - Silverhill
HS16	A21 – Silverhill – Hastings Station
HS17	Conquest Hospital – Alexandra Park – Bethune Way
HS18	West St Leonards – A21
HS19	Hughenden Road – Queens Road
HS20	West St Leonards – London Road
HS21	St Leonards Warrior Square – Hastings Centre
HS22	Ashford Road
HS23	St Helens Park Road
HS24	St Helens Park Road
HS25	Tilekin – Conquest Hospital
HS26	Tile Barn Road Spur
HS27	Wishing Tree Road Sur
HS28	Briscoes Walk Friday Street – Pennine Way – Seafront
BHG	Bexhill – Hastings Greenway (Combe Valley Way) Friday Street – Pennine Way – Seafront

*Appendix 5H outlines the network development work for Hastings*

## Rural East Sussex

### 3.3.5 North Wealden & North Lewes area

#### *Uckfield, Heathfield, Crowborough*

With further housing growth likely to be a considerable focus for these areas the emphasis of the preferred routes is on supporting access to existing localised trip attractors, i.e. employment, educations and local amenities, and particularly access to rail stations. As this area has a high level of out commuting by rail. The preferred routes will also form the basis for further work to be undertaken by ESCC, Wealden District Council and developers in the near future, to develop a more comprehensive network which supports future needs.

**Figure 28 - Existing network and committed schemes - North Wealden & North Lewes area**

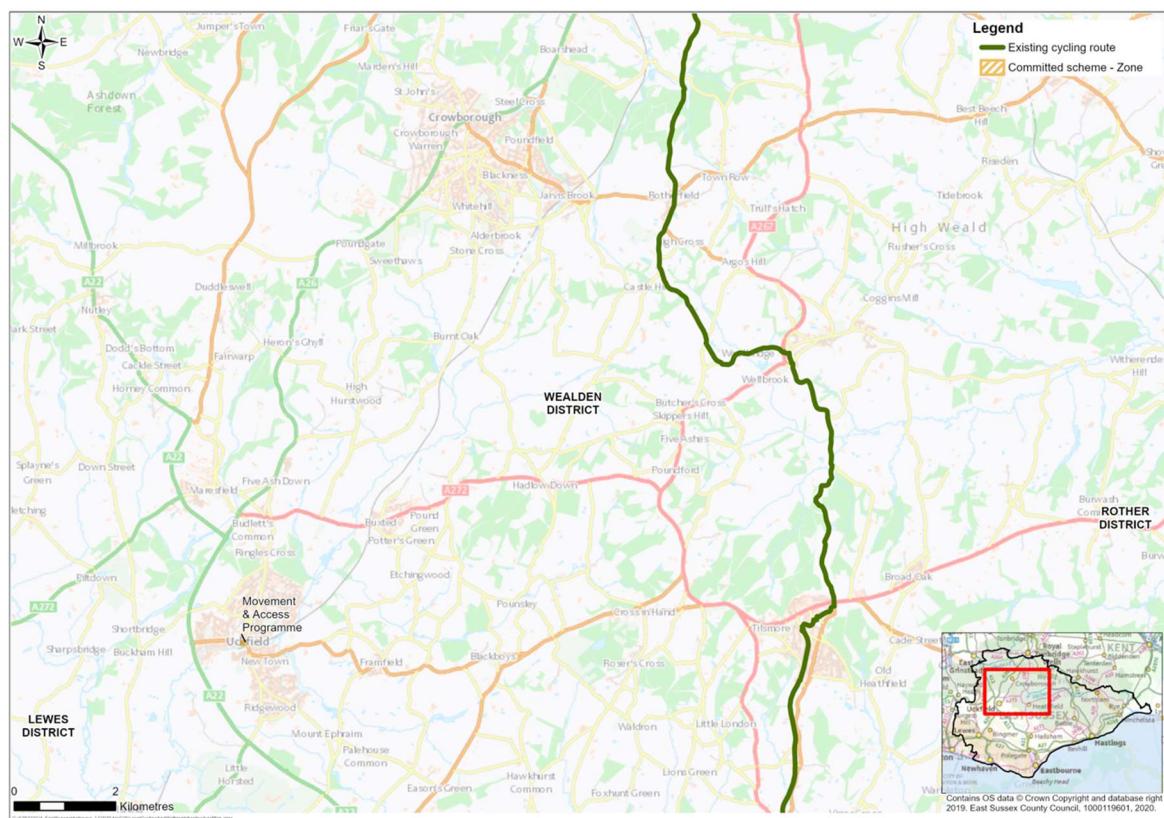


Figure 29 -Proposed network – Uckfield

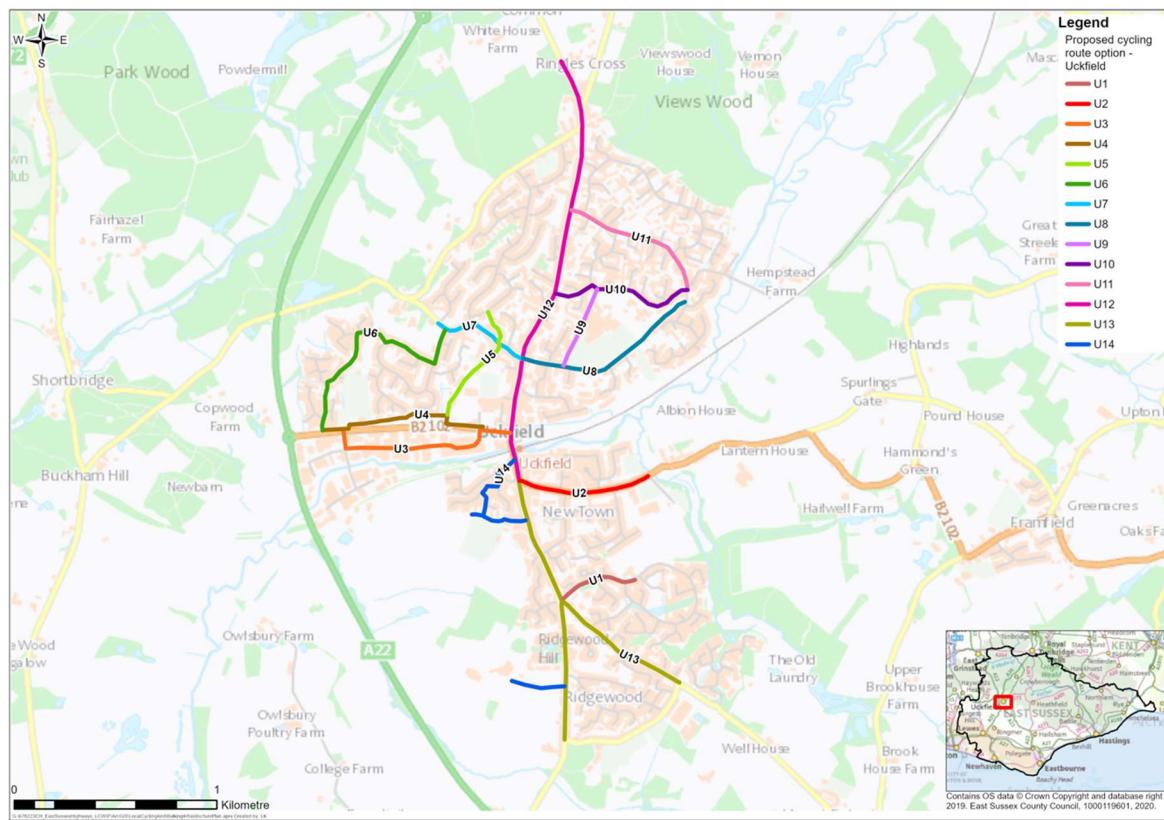


Table 13 Scheme Number	Scheme Names Uckfield
U1	Mallard Drive
U2	Framfield Road
U3	Belfarm Road to Bell Lane
U4	Belfarm Road Greenway
U5	Belmont Road - Manor Way
U6	Batchelor Way - Rocks Park
U7	Church Street
U8	Hempstead Lane
U9	Lime Tree Avenue
U10	Southview Drive/ Downsview Crescent
U11	Browns Lane
U12	B2102 Ringers Cross – Framfield Road
U13	New Town - Ridgewood
U14	New Town to Railway Station (via Victoria Pleasure Ground)

Appendix 5I outlines the network development work for Uckfield

Figure 30 - Proposed network – Heathfield

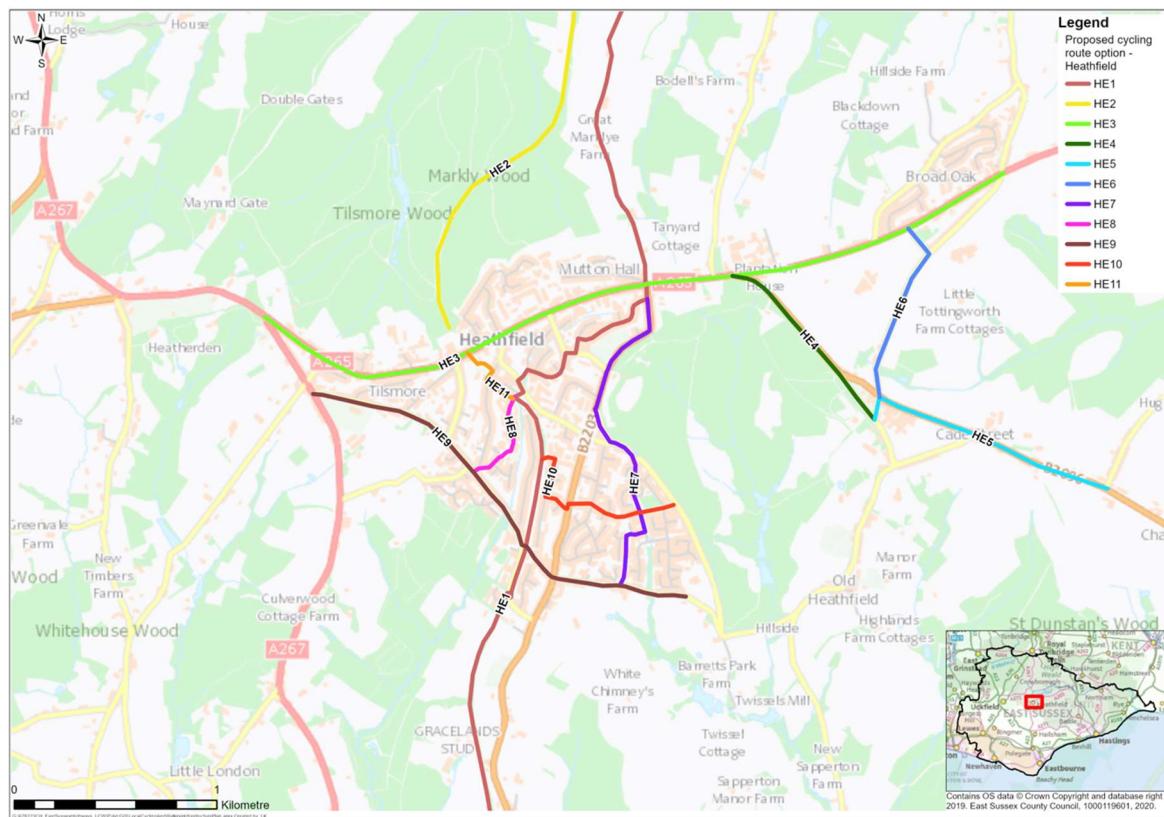


Table 14 Scheme Number	Scheme Names Heathfield
HE1	NCN Route 21
HE2	Cuckoo Trail Extension
HE3	A265 Snatchells Farm – Broad Oak
HE4	Battle Road West
HE5	Battle Road East
HE6	Halley Road
HE7	A256 – Sandy Cross Lane
HE8	Leeves Common
HE9	Sheepsetting Lane – Sandy Cross Lane
HE10	Cuckoo Drive – Green Lane
HE11	Thorny Close Link

Appendix 5J outlines the network development work for Heathfield

**Figure 31 - Proposed network – Crowborough**

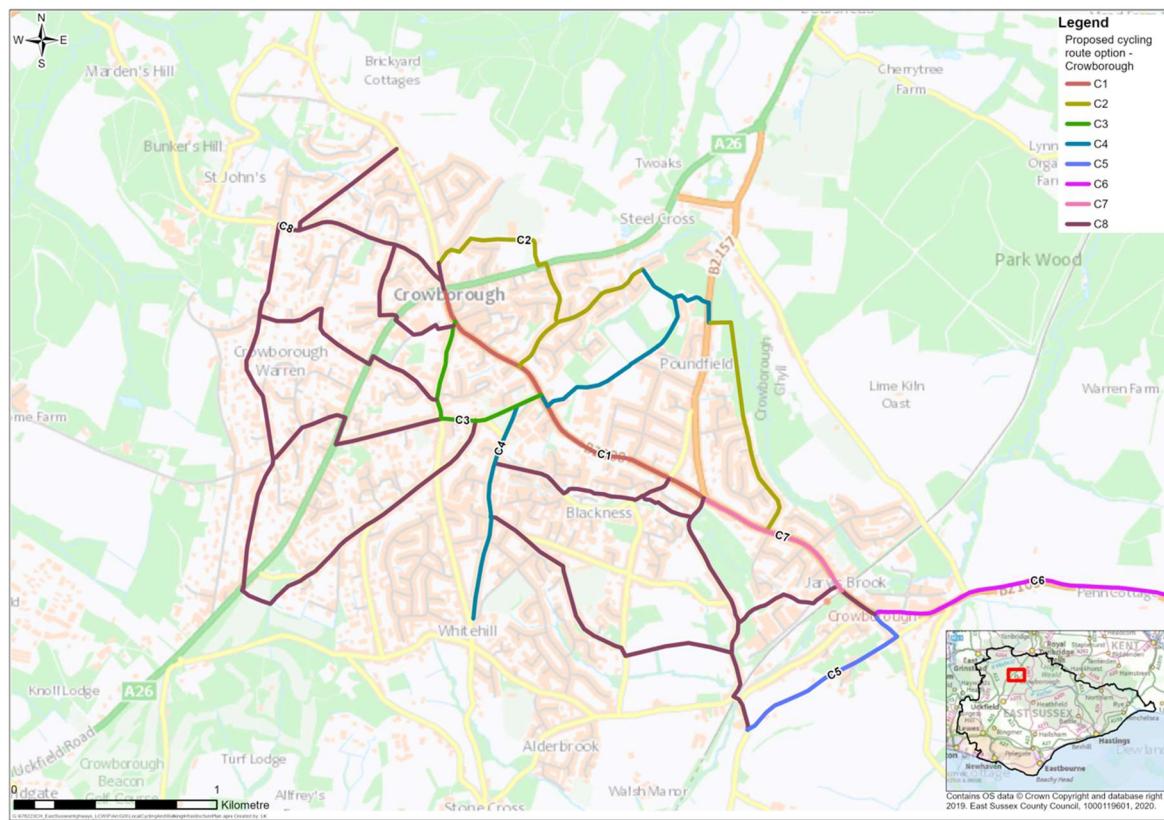


Table 15 Scheme Number	Scheme Names Crowborough
C1/C3/C7	B21 from the A27 - junction Green Lane and the Croft Road/Church Road Triangle
C2	Jarvis Brook – St Johns via Medway and Millbrook Road
C4	North/South link via Queens Road and Poundfield
C5	Jarvis Brook – Mount Pleasant – via Tubwell Lane
C6	Jarvis Brook - Rotherfield
C8	Area based improvements – residential areas

*Appendix 5K outlines the network development work for Crowborough*

### 3.3.6 Rural Rother

#### Battle & Rye

The evidence in stage 2 highlights the historic nature of these smaller settlements, set within a more rural environment which is surrounded by areas of Outstanding Natural Beauty. Alongside the large numbers of tourists which these towns attract they also provide a role as a service centre for nearby rural villages. Therefore the routes are focussed on supporting local access both within and two the settlements.

Figure 32 - Existing network and committed schemes Battle & Rye

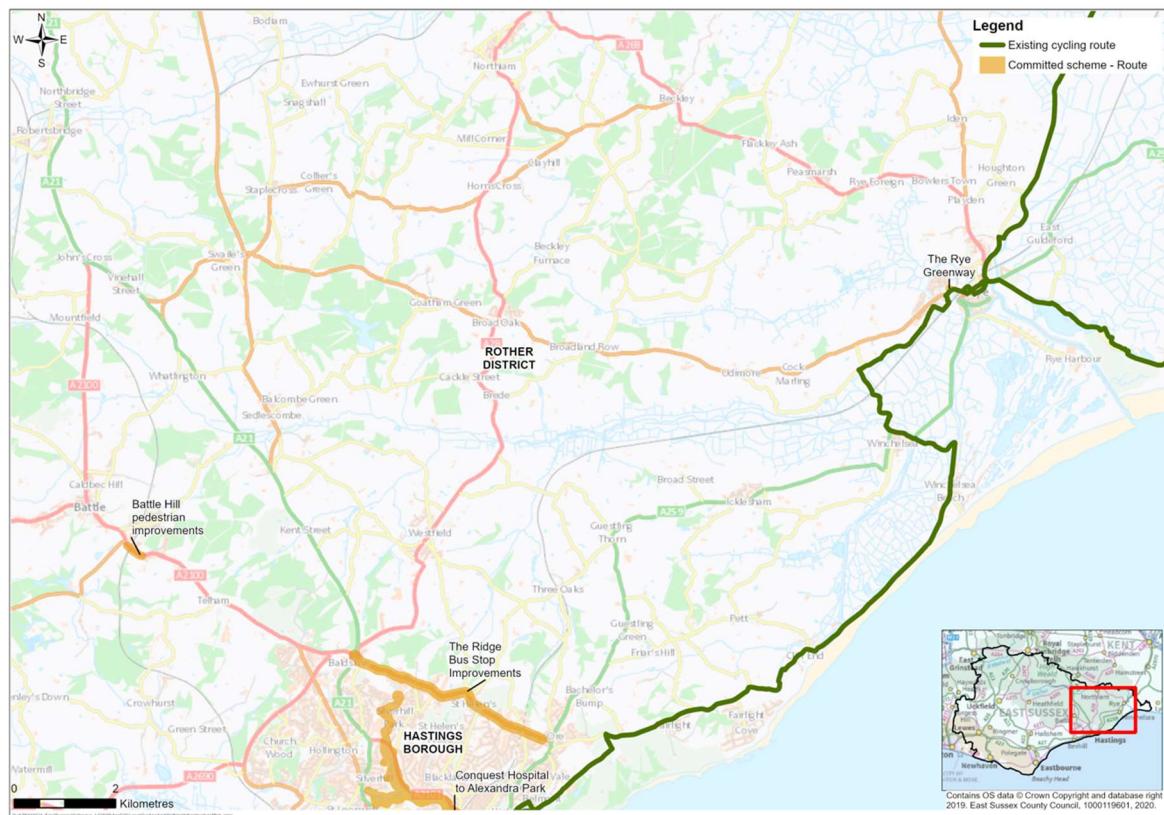


Figure 33 - Proposed network – Battle

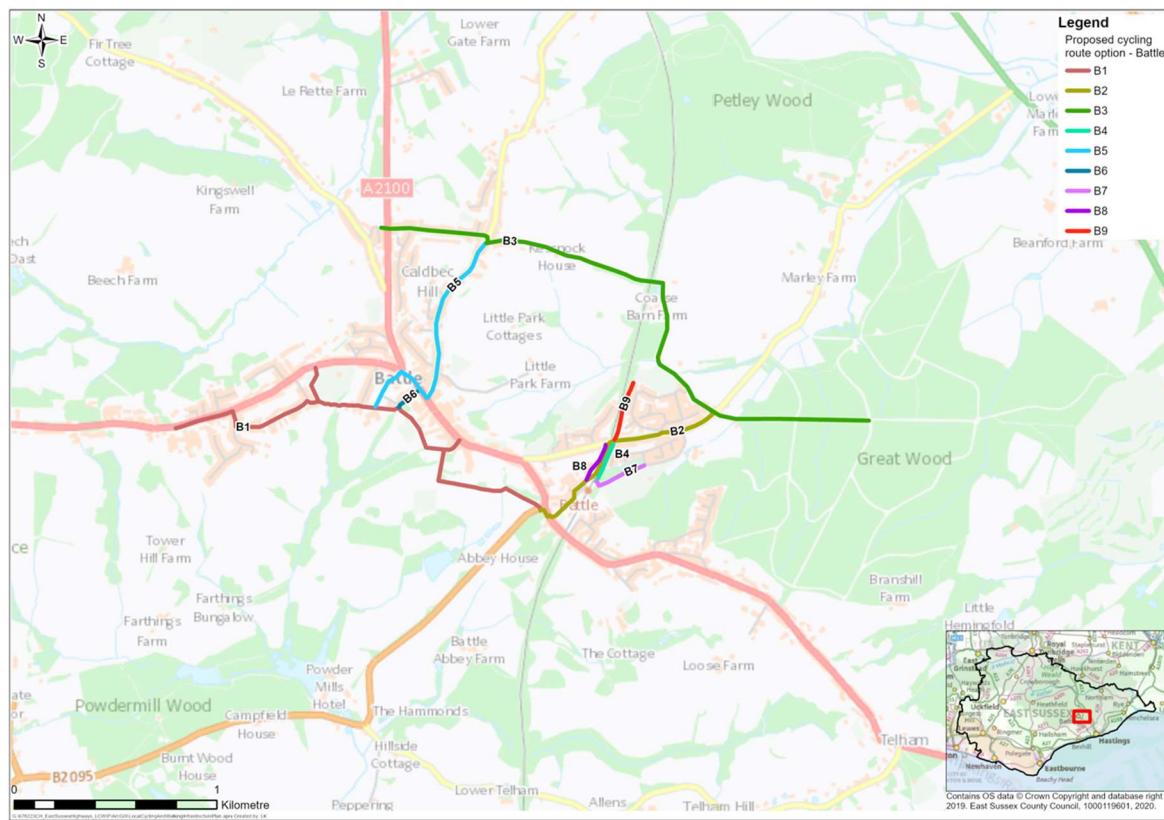
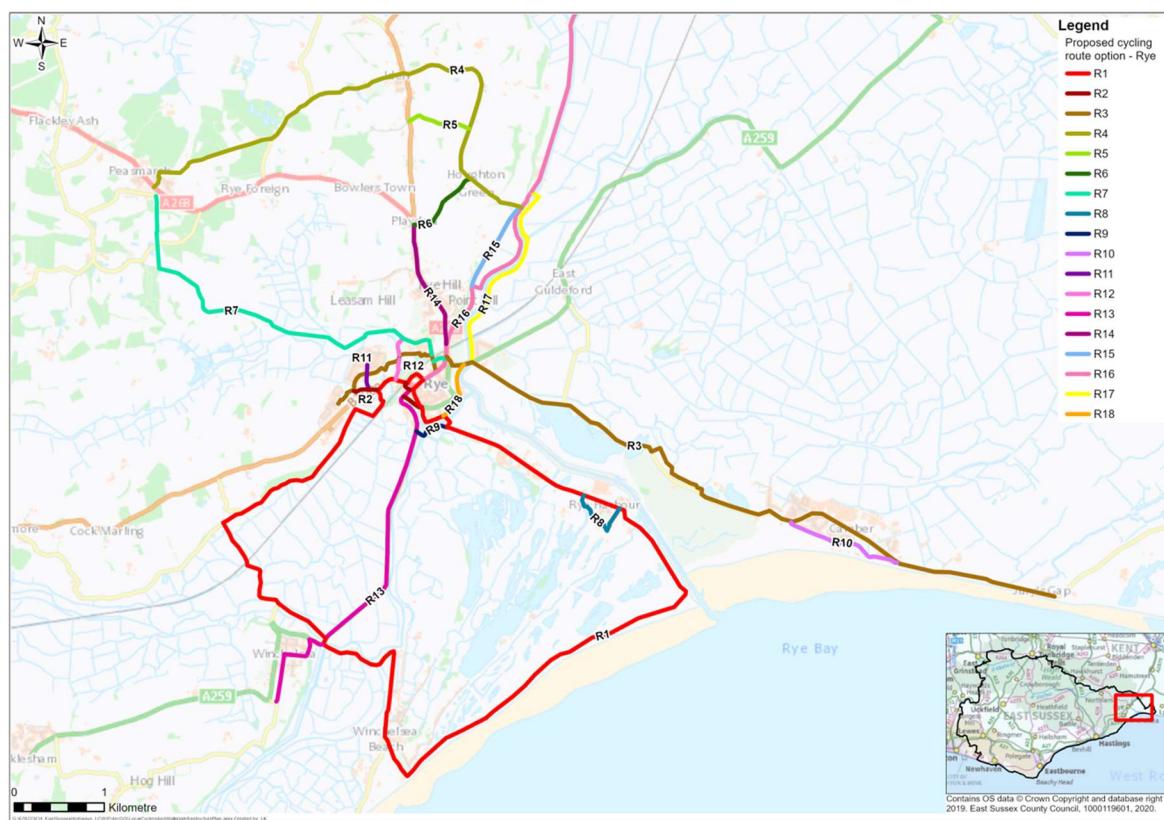


Figure 34 - Proposed network- Rye



<b>Table 16 Scheme Number</b>	<b>Scheme Names Battle</b>
B1/B2	Battle Schools Greenway
B3	Uckham Lane, Marley Lane, Great Wood
B4/B7/B8/B9	Links to Blackfriars Re-development
B5	Battle North
B6	Link Automotive Estates

*Appendix 5L outlines the network development work for Battle*

<b>Table 17 Scheme Number</b>	<b>Scheme Names Rye</b>
R1	Rye - Rye Harbour - Winchelsea Loop
R2	Valley Park - Rock Channel
R3	Valley Park - Camber - Jury's Gap
R4	Peasmash - Military Road
R5	Playden Lane
R6	School Lane
R7	Peasmash - Landgate
R8	Rye Harbour Alternative
R9	Winchelsea Road - Harbour Road
R10	Camber Alternative
R11	Mason Road
R12	Ferry Road - Love Lane
R13	Cinque Ports Street - Winchelsea
R14	Rye - Playden
R15	Military Road
R16	Rye - Iden Lock
R17	New Road - Scots Float Sluice
R18	Rock Channel

*Appendix 5M outlines the network development work for Rye*

### 3.4 Programme of cycle infrastructure improvements

The output from the cycle network is a list of preferred routes which form an initial tranche programme of cycle key infrastructure improvements. These are specifically outlined in Stage 5 – Prioritising Improvements.

## Stage 4 – Network Planning for Walking

### 4.1 Introduction

As outlined in 3.2 the cycle network planning also identified improvements for pedestrians particularly where a shared cycling and pedestrian route may be the most appropriate option, or where there is an opportunity to either improve or install new dropped kerbs, or where a toucan crossing is proposed. To develop this further network planning, specifically for walking has been undertaken.

The two key outputs of this section are:

- **the development of a walking network map, and a**
- **programme of infrastructure improvements.**

The aim is to improve the existing walking network and core walking zones (such as town centres) or where feasible to extend the walking network. The key outputs will be adopted as strategic planning documents.

As outlined in stage 3 – cycle network planning, it **is important to note that the outputs from this stage will be subject to further review and development work.**

The networks outlined below were informed by the assessments undertaken by both Sustrans and Jacobs consulting, whom ESCC commissioned to support with this element of the LCWIP. To ensure a consistent approach, as utilised with the development of the cycle network, views were and are being obtained from local cycling, walking and access groups alongside the district and borough councils and other key ESCC stakeholders.

In some areas of the county, existing plans for infrastructure improvements which provide greater priority for pedestrians, especially within town centres has been integrated as part of the development of the walking network maps.

In undertaking the assessments key factors raised by stakeholders in relation to improving access through the provision of dropped kerbs and reducing conflict between pedestrians and cyclists has been considered.

### 4.2 How have the walking networks been developed?

The walking networks and core zones were developed using the DfT LCWIP Technical Guidance for Local Authorities as a guide, alongside the design guidance published as part of Active Travel (Wales) Act 2013.

The process for assessing walking networks lends itself to larger more urban type geographies; therefore the larger urban settlements have been prioritised. Further assessment work for pedestrian improvements for the smaller settlements will be undertaken in the future.

#### **4.2.1 Mapping Trip Generators**

Using a GIS platform the trip origins and the significant existing and proposed key trip generators within the specified geographic areas were identified and clustered, i.e. **origins** - residential areas, **existing & proposed trip generators** – another settlement, employment, education sites, healthcare, retail, community facilities (leisure centres), transport interchanges and allocated sites for housing and employment identified in district and borough local plans. The plotting of the origins and destinations naturally formed an indicative network of desire lines as shown in Appendix 6.

#### **4.2.2 Identifying Core Walking Zones**

The core walking zones were defined once the existing and proposed trip generators were identified. As previously stated the trip generators tend to be located closer together within the core walking zones, which in East Sussex were in town centres within the more urban centres.

#### **4.2.3 Identifying Key Walking Routes**

A street audit was undertaken using the DfT's Walking Route Audit Tool (as noted in the preceding chapter) within the core walking zones and on the key routes to identify current issues and actions for potential improvements. This integrated consideration to existing programmes of work, particularly within Eastbourne and Hastings, and importantly assessed the needs of more vulnerable pedestrians, including older people, people with physical or hidden disabilities and people using buggies.

#### **4.2.4 Auditing Key Walking Routes & Core Walking Zones**

A street audit was undertaken within the core walking zones and on the key routes to identify potential improvements. This integrated consideration to existing programmes of work, particularly within Eastbourne and Hastings, and importantly assessed the needs of more vulnerable pedestrians, including older people, people with physical or hidden disabilities and people using buggies.

#### **4.2.5 Establishing Walking Infrastructure Improvements**

The audit identified issues and where infrastructure is currently inadequate and has put forward a series of proposed improvements predominantly to the existing network. The outcomes of the audits are outlined in Appendix 5 – 50. Proposed route improvements were also costed using benchmark costs from similar schemes already delivered in East Sussex and elsewhere, with 44% optimism bias applied given the early stage of the scheme development process to inform the BCR score.

## 4.3 Walking Network Maps

The key output from the assessment undertaken of a number of towns as outlined below, is a **proposed walking network map of preferred routes**.

### Coastal East Sussex

#### 4.3.1 Newhaven Area - Newhaven

Whilst the quality of the existing infrastructure for pedestrians was generally good in some locations, the audit identified some specific issues related to accessibility. This was due to the height of kerbing, severance issues caused by limited step free access on the most direct routes or lack of pedestrian crossings and poor quality of footway surfacing.

**Figure 35 – Proposed Walking Network - Newhaven**

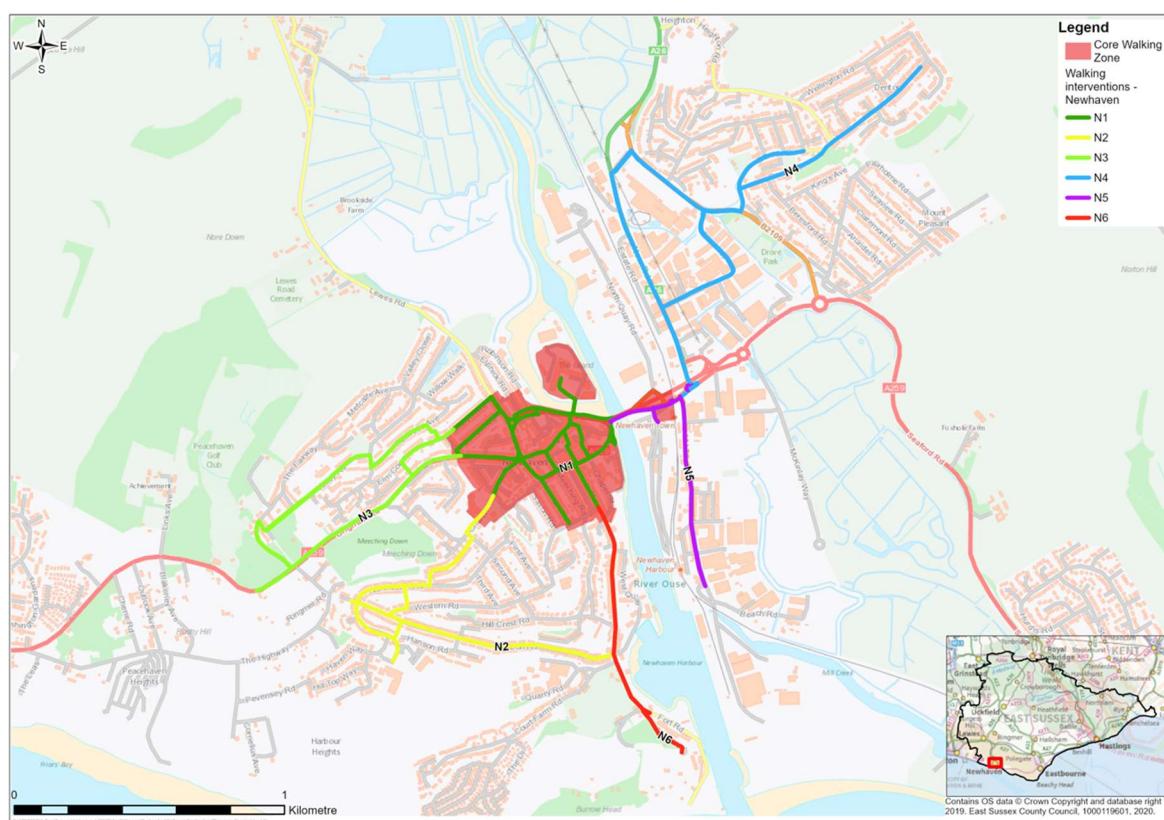


Table 18 Scheme Number	Scheme Name
N1	Core Walking Zone
N2	Church Hill to Southdown Rd
N3	Eveyln Ave to Brighton Rd
N4	Drove Rd to Denton Rd
N5	North Way to Beach Rd
N6	South Rd to Fort Rise

The outputs from the audit and the details related to the identified schemes are outlined in Appendix 5 O.

#### 4.3.2 Lewes & South Downs National Park - Lewes

Lewes is a historic town and therefore the current pedestrian environment is reflective of this. Therefore key issues identified were narrow footway widths, quality of footway surfacing or the need for increased footway provision.

Figure 36 – Proposed Walking Map - Lewes

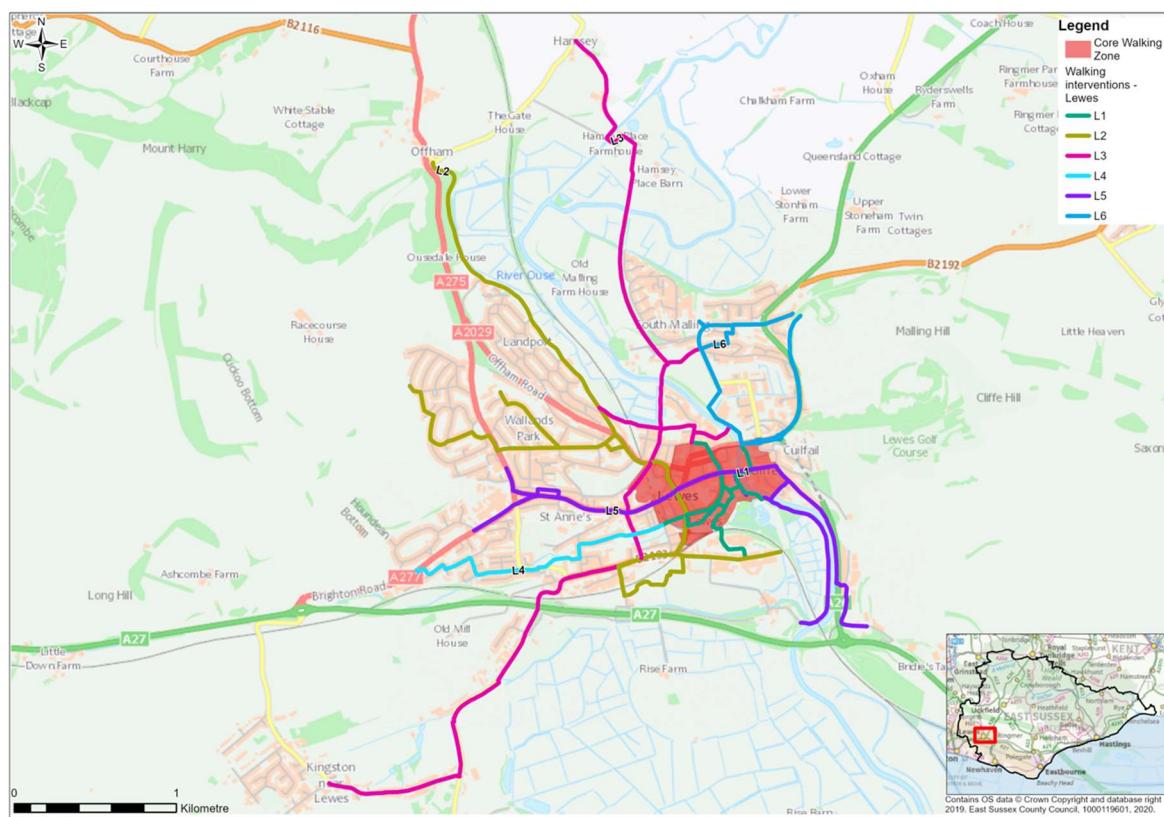


Table 19 Scheme Number	Scheme Name
L1	Core Walking Zone
L2	Cockshut Road to The Drove
L3	Wellgreen Lane to Whitfield Lane
L4	Elm Grove to Brighton Rd
L5	Brighton Road to Southerham Lane
L6	Phoenix Causeway to Mill Road

The outputs from the audit and the details related to the identified schemes are outlined in Appendix 5 O.

#### 4.3.3 Eastbourne & South Wealden - Eastbourne

The audit has enabled further development of work ESCC and LDC-EBC are currently undertaking to transform priority for people accessing the town centre using sustainable transport. Specific issues identified include, the need for more pedestrian crossing points between destinations to improve the directness of routes, reduction of traffic speeds, footway resurfacing and provision of footways where there are gaps in provision.

Figure 37 – Proposed Walking Map - Eastbourne

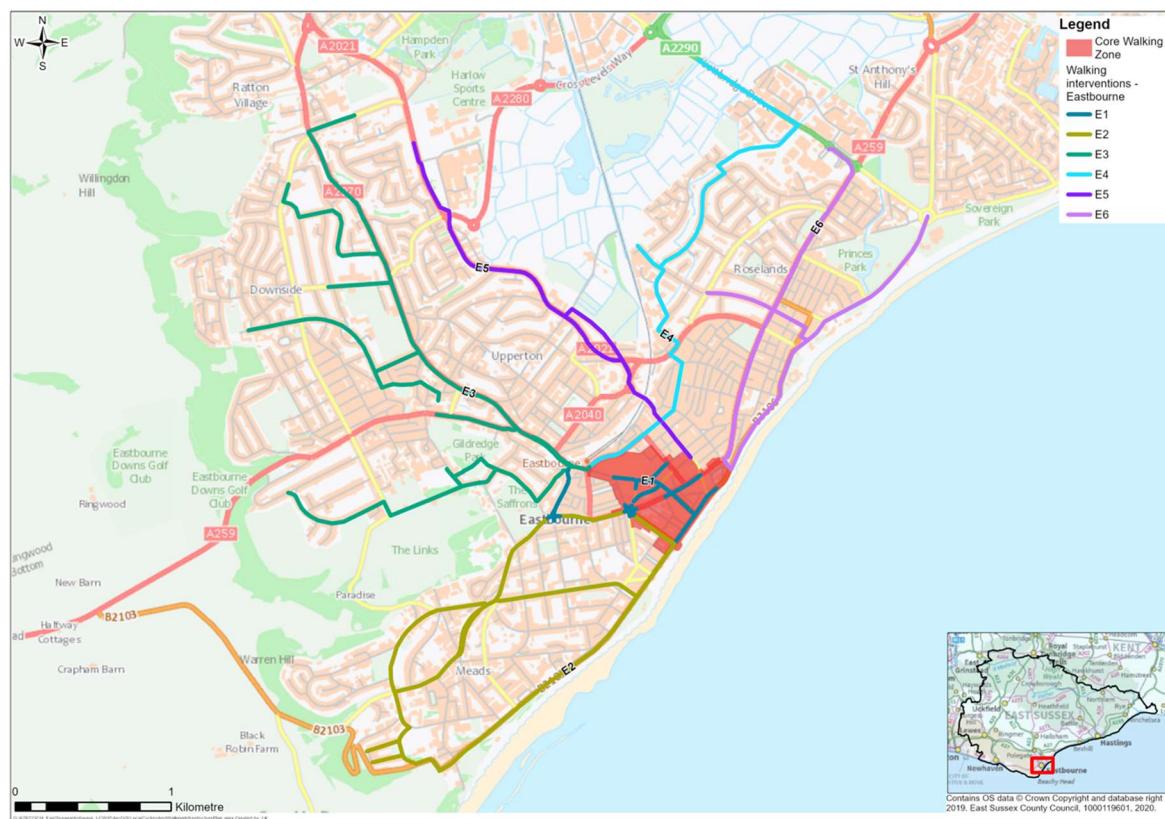


Table 20 Scheme Number	Scheme Name
E1	Core Walking Zone
E2	Devonshire Place to Wellcombe Crescent
E3	Terminus Road to Park Avenue
E4	Ashford Road to Lottbridge Drive
E5	Cavendish Place to King's Drive
E6	Marine Parade Rd to Birch Roundabout

The outputs from the audit and the details related to the identified schemes are outlined in Appendix 5 O.

#### 4.3.4 Eastbourne & South Wealden - Hailsham

With the ambition to be a '10 minute town' where people can access the local services they need using sustainable transport, pedestrian accessibility is crucial. Key improvements identified for this town include the need to provide greater access to the Cuckoo Trail and raise the visibility of this, increased provision of dropped kerb provision, increased footway widths at certain location and the provision of crossing facilities on busier roads. This audit will form the basis for further transport study work as part of Wealden's new Local Plan.

Figure 38 – Proposed Walking Map – Hailsham

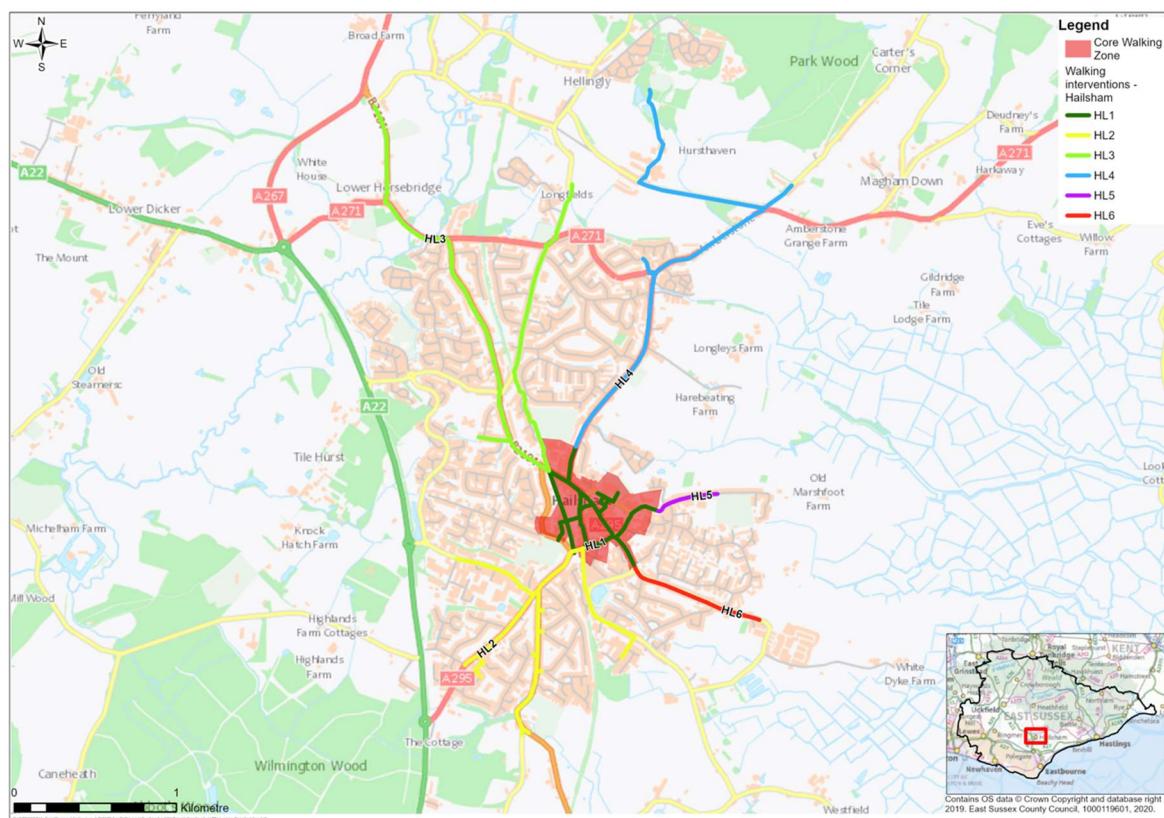


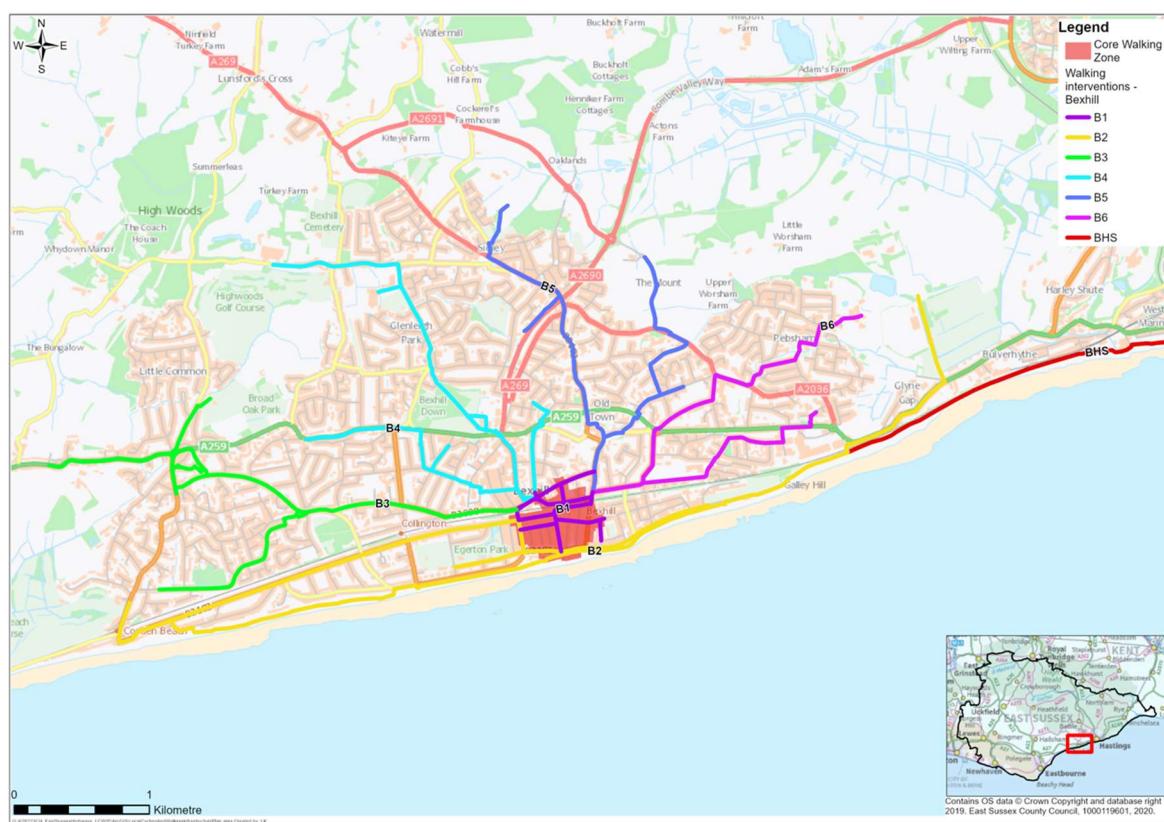
Table 21 Scheme Number	Scheme Name
H1	Core Walking Zone
H2	South Rd to Arlington Road East
H3	London Road to Church Road
H4	Battle Road New Road
H5	Marshfoot Lane
H6	Mill Road

The outputs from the audit and the details related to the identified schemes are outlined in Appendix 5 O.

#### 4.3.5 Bexhill & Hastings – Bexhill

This audit identified further measures to develop a future phase of work to complement the existing Bexhill & Hastings Movement & Access Programme. This also supports Rother District Council's ambitions to transform the public realm in Bexhill town centre in the near future. This work can be considered as part of further assessment work. With generally an older population living in Bexhill compared to other areas of the county, accessibility is essential. The key issues identified include the need for enforcement to limit parking on existing footways, resurfacing of footways, increasing footway widths, increasing pedestrian crossing points and expansion of dropped kerb provision. Any changes to the pedestrian environment would need to have regard to Rother District Council's Public Realm Strategic Framework.

**Figure 39 – Proposed Walking Map – Bexhill**



<b>Table 22</b> <b>Scheme Number</b>	<b>Scheme Name</b>
B1	Core Walking Zone
B2	Cooden Sea Road to Freshfields
B3	Station Road to Barnhorn Road
B4	Buckhurst Place to Turkey Road
B5	Sea Road to Watermill Lane
B6	Upper Sea Road to Pebsham Lane

The outputs from the audit and the details related to the identified schemes are outlined in Appendix 5 O.

#### 4.3.6 Bexhill & Hastings – *Hastings*

This audit identified further measures to develop a future phase of work to complement the existing Bexhill & Hastings Movement & Access Programme, which is delivering improvements to the pedestrian provision in the town centre, improved access by cycling and wayfinding. The key issues identified include the need for refurbishment of tactile paving, increased dropped kerb provision, and greater pedestrian crossing facilities.

**Figure 40 – Proposed Walking Map - Hastings**

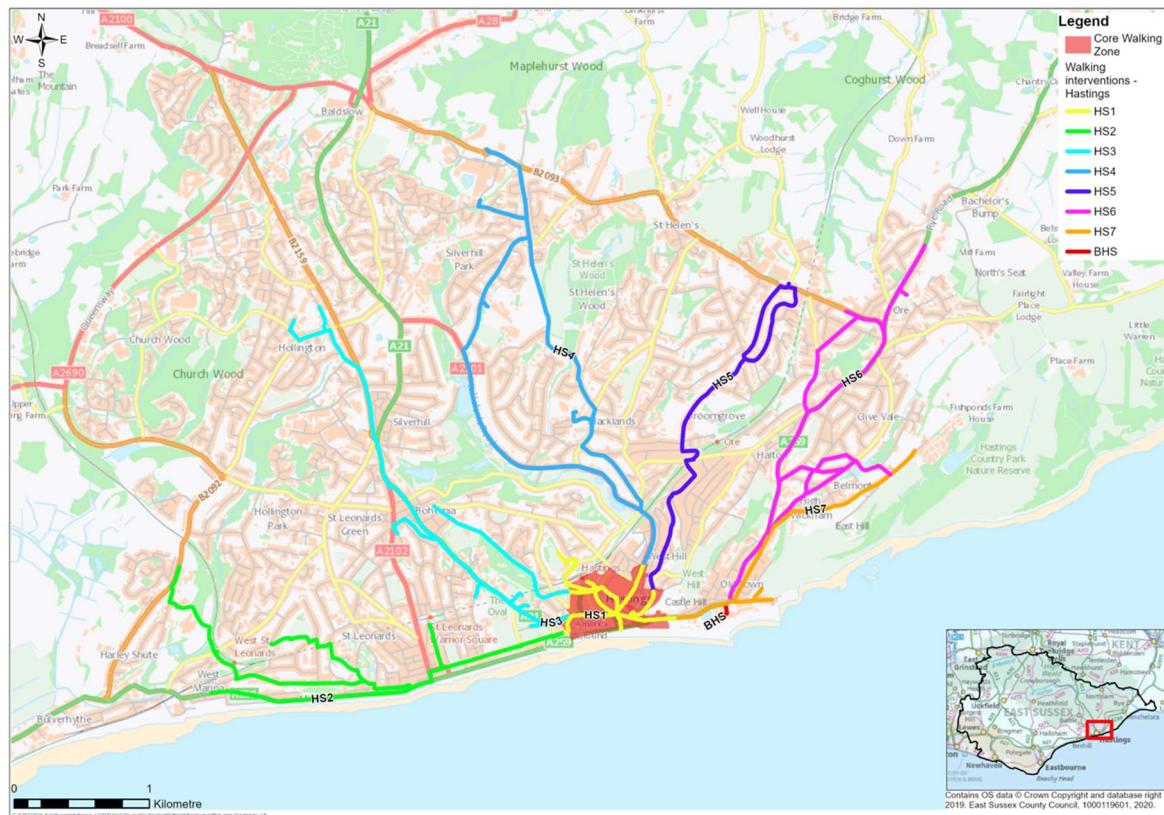


Table 23 Scheme Number	Scheme Name
H1	Core Walking Zone
H2	White Rock to Harley Shute Road
H3	Cornwallis Gardens to Hollington Old Lane
H4	Queens Rd to The Ridge
H5	Milward Road to Ivyhouse Lane
H6	The Bourne to Rye Road
H7	Pelham Place to Barley Lane
BHS:	Bexhill-Hastings Seafront

The outputs from the audit and the details related to the identified schemes are outlined in Appendix 5 O.

#### **4.4 Future Walking Network Development Work – Other Areas**

As outlined above the LCWIP network development for cycling also identified improvements for pedestrians where possible, but walking network development work has been more focussed on the urban centres. ESCC and their partners will review the opportunities to undertake more detailed walking network development assessments in Peacehaven, Seaford, Uckfield, Heathfield, Crowborough, Battle and Rye in the future. A review of whether this could be applied beyond the town centres, will also be explored.

## Stage 5 – Prioritising Improvements

### 5.1 Purpose of the prioritisation

The purpose of this stage is to utilise the evidence collected in stages 3 & 4 and to undertake an initial prioritisation of potential schemes which have been identified and which, importantly, align with the strategic focus of the plan.

This will be during the ten year timescale of the LCWIP and beyond, over the following periods:

- **short (<3 years)**
- **medium ( 3- 5 years) and**
- **longer term (>5 years).**

Within the DfT's LCWIP Technical Guidance there is an emphasis on identifying those schemes which will have the greatest impact on increasing the number of people who choose to cycle and walk, which will in turn provide the best value for money.

As previously outlined, the delivery of the LCWIP and the schemes and initiatives identified are dependent on ESCC and our partners securing funding.

Whilst the prioritisation process is important, the schemes may not always come forward according to the initial prioritised list of schemes. It is essential that there is a degree of flexibility in the delivery of the plan. This because the plan is dependent on:

- **the types of funding which come forward in the future** (capital/revenue),
- **the purpose and criteria of these funds** (i.e. aligned to policies, themes etc.), and
- **the process associated with accessing the funding and who can access these**

Therefore ESCC and our partners will work collaboratively and with innovation to source and secure funding to deliver the plan and the range of schemes identified as outlined in appendix 5.

### 5.2 Prioritisation Framework

In order to assess the schemes identified an assessment framework, based on a multi-criteria approach, has been developed by ESCC, as outlined in appendix 6. This takes into consideration the key factors which influence transport infrastructure scheme development

and delivery, to identify schemes that can be brought forward in a timely way, with key risks and constraints understood prior to bidding for funding.

To provide a consistent approach, the assessment framework is in alignment with the established ESCC framework utilised to prioritise transport schemes for inclusion in ESCC annual Capital Programme for Local Transport Improvements.

The following factors, with an associated scoring mechanism, have been included:

1. **Scheme Details** – assesses the geographic location of the scheme, the scale of impact of the scheme and the effectiveness, in terms of the opportunity to maximise the number of people who choose to cycle and walk.
2. **Policy Fit** – assesses how the scheme meets with policies in relation to the economy, social (i.e. health, safety and access) and the environment.
3. **Financial** – assesses the estimated cost, the value for money, opportunities to secure external funding and consideration of maintenance costs.
4. **Deliverability** – assesses the feasibility of the scheme, the opportunities to link with existing transport infrastructure schemes and the acceptability of the scheme from political members, stakeholders and the general public.

The schemes identified within the geographic areas, outlined in Stage 1, have been assessed and a summary of the **initial tranche of prioritised programme of infrastructure improvements** is as outlined below. (This is a live document; therefore the list of schemes will be subject to review and according to the availability of funding. Therefore this will be updated accordingly.)

## Table 24 - 5.3 Schemes – Short/Medium/Long Term

The table below outlines the schemes which ESCC and key local partners will actively seek initial funding for:

Prioritised Schemes	Short	Medium	Long
<b>Eastbourne &amp; South Wealden</b>			
Hailsham/Polegate/Eastbourne Movement & Access Programme – HPE MAC			
Eastbourne Town Centre Phase 2B			
Eastbourne Seafront Cycle Route/Pedestrian Access			
Eastbourne Rail Station to Seafront - Cycle Route			
Coastal Cultural Trail			
A259 Newhaven – Pevensey Multi Modal Corridor Scheme			
Cuckoo Trail – improve access points			
<b>Hastings &amp; Bexhill</b>			
Coombe Valley Greenway Upgrade			
Alexandra Park - Conquest Hospital Hastings			
Bexhill & Hastings Movement & Access Programme (BHMAP) Phase 2			
Bexhill Town Centre Improvements			
Bexhill Cycle Routes			

Coastal Cultural Trail			
<b>Newhaven Area</b>			
Exceat Bridge - Walking and Cycling Provision			
Avis Road - Newhaven (Multi - Modal) Scheme			
A259 Newhaven – Pevensey Multi Modal Corridor Scheme			
<b>Lewes &amp; SDNPA</b>			
Regional Route 90 - Lewes Town Centre			
A27 - Falmer - Ashcombe Roundabout			
Egrets Way Lewes – Newhaven - Phases <ul style="list-style-type: none"> <li>• 5 - Newhaven to Piddlinghoe</li> <li>• 6 - Lewes to Rodmell</li> <li>• 7 - Piddlinghoe to Deans Farm</li> </ul>			
Lewes Wayfinding			

## 5.4 Scheme Costs & Appraisal

As referred to earlier in the plan, ESCC has recent experience of securing over £25m of funding through the South East Local Growth Fund to deliver sustainable transport infrastructure improvements. This is alongside working with key local partners to support the securing of funding and scheme delivery.

The development of business cases for many of these programmes of work and individual schemes have demonstrated that cycling and walking provide high value for money.

As part of this LCWIP, return on investment has been calculated using the DfT's Active Mode Appraisal Tool (AMAT). This tool estimates economic benefits as a result of investing in walking and cycling schemes in line with DfT WebTAG appraisal guidance compared against high level cost estimates for improvements. The benefits reported within the tool include:

- Health through reduced mortality
- Modal shift through reduced congestion and reduced environmental impacts
- Journey Ambience

The initial phase of prioritised schemes as part of this LCWIP demonstrate a high value for money, as outlined below:

**Table 25 – Benefit Cost Ratio of Prioritised Schemes**

Prioritised Schemes BCR	Lower Cost Higher Demand Uplift	Higher Cost Lower Demand Uplift
<b>Eastbourne &amp; South Wealden</b>		
Hailsham/Polegate/Eastbourne Movement & Access Programme – HPE MAC	<b>10.95</b>	<b>6.01</b>
Eastbourne Town Centre Phase 2B	<b>2.05</b>	<b>1.94</b>
Eastbourne Seafront Cycle Route/Pedestrian Access	<b>3.35</b>	<b>2.13</b>
Eastbourne Rail Station to Seafront - Cycle Route	<b>2.54</b>	<b>1.05</b>
Coastal Cultural Trail	<b>2.50</b>	<b>1.75</b>
<b>Hastings &amp; Bexhill</b>		
Combe Valley Greenway Upgrade	<b>3.55</b>	<b>2.08</b>

Alexandra Park - Conquest Hospital Hastings	<b>2.42</b>	<b>1.44</b>
Bexhill & Hastings Movement & Access Programme (BHMAP) Phase 2	<b>2.83</b>	<b>2.41</b>
Bexhill Town Centre Improvements	<b>2.23</b>	<b>1.78</b>
Bexhill Cycle Routes	<b>TBC</b>	<b>TBC</b>
<b>Newhaven Area</b>		
Avis Road - Newhaven (Multi - Modal) Scheme	<b>3.36</b>	<b>1.50</b>
A259 Newhaven – Pevensey Multi Modal Corridor Scheme (Inc. Exceat Bridge)	<b>2.41</b>	<b>1.49</b>
<b>Lewes &amp; SDNPA</b>		
Regional Route 90 - Lewes Town Centre	<b>2.81</b>	<b>1.90</b>
A27 - Falmer - Ashcombe Roundabout	<b>2.74</b>	<b>1.65</b>
Egrets Way Lewes – Newhaven Phases 5-7	<b>1.57</b>	<b>1.27</b>

More details in relation to the appraisal in relation to the prioritised schemes, is outlined in Appendix 7 – Active Modes Appraisal Toolkit (AMAT) Outputs.

Through the securing of funding and recent scheme evaluation ESCC and our partners are developing a rich source of local cycling and walking data. This will be utilised alongside reviewing the maintenance cost of the cycling and walking asset, in the development of future cases for funding, to provide a more accurate indication of potential scheme usage, which will inform the return on investment.

## Stage 6 – Integration & Application

### 6.1 Embedding the LCWIP

Before you apply the LCWIP, it needs a robust strategic basis by being **embed** within ESCC and our partner's key strategic documents, across a range of policy areas. The relevant local documents are referred to in Part 1. Section 3. Policy Context. The action to embed the East Sussex LCWIP, which has been undertaken to date, is as follows:



**Table 26 – Embedding the LCWIP in Strategic Documents**

<b>Strategic Documents</b>	<b>Action</b>
<b>East Sussex Local Transport Plan 2011-2026 (LTP)</b>	<p>LCWIP will be treated as a supplementary document to ESCC's LTP strategy document and Implementation plans. Will provide greater detail on which schemes can potentially be delivered subject to funding.</p> <p><i>ESCC LTP is being reviewed during 2020 and will reflect the strategy outlined in Part 1, which focusses on 'planning for people and places'.</i></p>
<b>ESCC's Highway Asset Management Strategy 2018 - 2024</b>	<p>The Asset Management Strategy supports the LCWIP by setting out an approach to maintaining the highway network - including footways and cycleways - in the best possible condition for the resources available. It is designed to allow for flexibility in the prioritisation of maintenance work and LCWIP objectives can be taken into consideration.</p> <p><i>The Strategy is currently under review (April 2020)</i></p>
<b>District &amp; Borough Local Plans</b>	<p>East Sussex's LCWIP vision and policies are reflected in local plans policies, and the schemes identified within the LCWIP considered future patterns of growth and are included in Local Plan Infrastructure Development Plans, see below in 6.2.</p>
<b>ESCC Environment Plan 2020</b>	<p>LCWIP is referred to as a key deliverable within this document, to support a reduction in carbon emissions through the opportunities for greater numbers of people to cycle and walk for every day journeys.</p>
<b>ESCC Healthy Weight Plan 2020</b>	<p>LCWIP is referred to as supporting the opportunities to deliver both infrastructure and initiatives to support an increase in physical activity and mental wellbeing, alongside the need to integrate this with 'healthy and sustainable' place making.</p>
<b>ESCC Rights of Way Improvement Plan</b>	<p>LCWIP includes integration with the ROW network within the larger urban areas and key market towns. This plan is currently under review, therefore there is likely to be opportunities to improve the integration between these plans in the future.</p>
<b>ESCC Procurement Social Value Charter</b>	<p>ESCC will explore the opportunities to integrate the LCWIP within the charter as it supports a number of measures in relation to improving the environment, economy and health.</p>

## 6.2 Application of LCWIP

**The application of an LCWIP is one of the most crucial elements, as it will determine the ability of ESCC and their partners to deliver the plan.**

With the East Sussex LCWIP having a robust strategic basis, will strengthen the application of this through its ability to influence a range of policy areas and the potential funding associated with these. Table 10 outlines the actions which ESCC and their partners will take to support the application of the East Sussex LCWIP, according to the four overarching principles.

Whilst all of the below actions are important, there are a number of key actions which have been identified by ESCC and stakeholders as critical to the delivery of the plan. These include ensuring that we **deliver high quality infrastructure**, which reflects current guidance and best practice, continuing to **work in partnership with key local partners to secure funding** and **ensuring the LCWIP is integrated as part of district and borough local plans**.



**Table 27 – LCWIP Application – Action Plan**

Action	Timescale	
<b>1. Consistent Policy Approach</b>		
<b>Work with key partners at a regional and local level to embed LCWIP into key strategy documents</b>	<p>As outlined in 6.1, further work will be undertaken to embed the LCWIP alongside other key partners strategic documents these may include:</p> <ul style="list-style-type: none"> <li>• TfSE Transport Strategy,</li> <li>• SELEP Local Industrial Strategy,</li> <li>• East Sussex's Growth Strategy,</li> <li>• ESCC Local Transport Plan review</li> <li>• ESCC Rights of Way Plan</li> <li>• ESCC Sustainable Modes of Travel Strategy</li> <li>• South Downs National Park LCWIP</li> <li>• South Downs National Park Management Plan</li> <li>• Borough/District/Neighbourhood plans and studies in relation to accessibility, sustainability, economy, leisure and green space</li> </ul>	To be undertaken during the short term timescale of the plan (next 3 years).
<b>Work with local plan authorities</b>	<p>Work with local plan authorities as they review their local plans to integrate LCWIP policies.</p> <p>Work with district and boroughs to ensure LCWIP strategic documents i.e. cycle and walking network maps and the programme of infrastructure improvements are adopted as part of their local plans and included within borough/district IDP's.</p> <p>This information will be used when assessing planning applications, and applied when appropriate to support the securing of development contributions.</p> <p>To support this, workshops will be held with district and borough policy and development control planners to establish the best methods for applying the LCWIP networks and securing development contributions.</p>	2020/21 and ongoing
<b>Work with Neighbourhood Plans</b>	ESCC and District/Boroughs will continue to advise on how the LCWIP can be integrated within Neighbourhood Plans at the preparation stage, alongside using their future allocations of a CIL funding to support the delivery of cycling and walking infrastructure.	2020/21 and ongoing
<b>2. High Quality Infrastructure Design &amp; Engagement</b>		

<b>LCWIP Scheme Development – Priority Schemes</b>	Further scheme development work will be undertaken on schemes identified as priorities within the LCWIP in order to inform future business cases or bids for funding	2020/21 and ongoing
<b>Policies &amp; Procedures</b>	Update ESCC LCWIP policies, procedures and assessment approach as national guidance is published (i.e. infrastructure design –quality (accommodating e-cargo bikes etc.), shared space, pavement parking, e-scooters etc.)	To be updated as appropriate at the annual review of the LCWIP.
<b>Equality Impact Assessments</b>	A review will be undertaken on how EQIA's should be undertaken as part of scheme design, and whether the extent of a scheme should determine the detail which is attributed to this.	Initial action undertaken by ESCC and East Sussex Highways in 2020/21.
<b>Training &amp; Best Practice Guidance</b>	Provide updated training or promote best practice guidance on cycling and walking infrastructure design, with an emphasis on <b>quality</b> and <b>inclusiveness</b> : <ul style="list-style-type: none"> <li>• East Sussex Highways Design &amp; Engineering Team</li> <li>• Developers through CIL/Section 106/278/38 agreements – infrastructure design work</li> </ul>	Initial action undertaken by ESCC in 2020/21, then on-going review through the lifetime of the plan.
<b>Integration with other modes of transport</b>	ESCC and their partners will look to identify and develop the opportunities for greater multi modal programmes of work in the priority LCWIP areas on key corridors of movement with their key partners.	2020/21 and ongoing

### 3. Targeted Initiatives

<b>Travel Behaviour Change Programme</b>	Undertake insight work with identified groups of people within East Sussex to develop a new programme of cycling & walking initiatives, targeted towards people's needs, within specific geographic areas. Explore partnership, monitoring and funding opportunities associated with these.	Led by ESCC and key partners 2020/21
<b>Travel Planning/Transport Assessments</b>	ESCC and district/borough councils to apply LCWIP to travel plans and transport assessments.	2020/21 and ongoing
<b>Active Travel Measures – Development Contributions</b>	ESCC and district/borough councils to explore the option to develop a framework to secure development contributions to support travel behaviour change measures countywide.	2020/21 and ongoing

<b>Integration of Smarter Mobility Schemes</b>	ESCC will work with key local partners to explore options to integrate smarter mobility schemes as part of the LCWIP programme of infrastructure improvements.	2020/21 and ongoing
<b>4. Partnership working will ensure the delivery of East Sussex's LCWIP</b>		
<b>LCWIP submission to DfT</b>	Submission of the East Sussex LCWIP by ESCC and their partners, to the DfT for consideration of future allocations of national cycling and walking funding.	April 2020, and subsequent submissions should amendments be required.
<b>External Funding Applications</b>	ESCC and their partners to explore external funding opportunities to submit bids/business cases for the delivery of identified <b>LCWIP infrastructure and initiatives</b> . This could include in the immediate future: <ul style="list-style-type: none"> <li>• Major Route Network (MRN)</li> <li>• MHCLG - Hastings High Street Fund</li> <li>• MHCLG - Newhaven High Street Fund</li> <li>• British Cycling</li> <li>• Energy Savings Trust – E-Cargo Bikes</li> <li>• Sport England</li> </ul>	2020/21 and ongoing
<b>ESCC Framework to supporting funding applications for both infrastructure &amp; initiatives</b>	ESCC will undertake research to identify the best options to develop a framework to support key partners and the wider community to seek and secure external funding.  The aim of this is to support partners and community groups to take ownership in the delivery of both infrastructure and initiatives identified in the LCWIP and other projects which support the vision, principles and objectives of the East Sussex LCWIP.	2020/21
<b>Review the role and focus of the East Sussex Cycling &amp; Walking Forum</b>	The role of the forum in recent times has focussed on supporting the development of the LCWIP.  In partnership with the forum members, this will be reviewed, to establish how best the forum can collectively support the delivery of the LCWIP. As a key partner.	Review 2020
<b>Work with neighbouring local authorities</b>	Liaise more closely with neighbouring authorities, including Brighton & Hove City Council, West Sussex and Kent County Councils to develop links between LCWIP's in association with future studies, infrastructure projects and lobbying/securing of funding	2020/21 and ongoing

A number of the actions in Table 10 will build upon existing programmes of work and partnerships. These are in relation to travel behaviour change programmes, Bikeability training, partnership working and smart mobility. The LCWIP will provide a framework to align these more closely to the delivery of future of cycling and walking infrastructure. The information below outlines some current good practice from ESCC and their partners.

## 6.3 Travel Behaviour Change Programmes & Training

Travel behaviour change projects and training are an integral element of ESCC wider transport capital investment programmes. Programmes such as this maximise the use of the investment by enabling people and business to use new or improved infrastructure improvements by breaking down some of the common barriers people and businesses often associate with these modes of travel. These tend to focus on:

- **the perception of risk and safety, especially with cycling,**
- **the constraint of an existing busy life or**
- **not seeing it as normal for them.**

Whilst there is no optimum amount of revenue funding required to support capital schemes, they often support key outcomes, which capital funding alone cannot achieve. (Finding the Optimum, Transport for Quality of Life 2014). These types of programmes are fundamental to the East Sussex LCWIP and will remain an important element, as we aim to both extend the cycling and walking network alongside supporting integrated place making by giving people who are walking, cycling and using public transport greater priority. However the delivery of revenue funded schemes will be subject to ESCC and our partner's ability to secure funding.

### 6.3.1 Local Sustainable Transport Fund & Access Fund

ESCC has been successful in securing in the region of £5m of DfT funding alongside local contributions since 2012, to deliver a range of programmes which enable people to cycle or walk more for everyday journeys across ESCC key growth areas of Newhaven, Eastbourne & South Wealden and Bexhill & Hastings.

The funding has been secured through the Department for Transport 'Local Sustainable Transport Fund' and the 'Access Fund', where we have worked with educational establishments, workplaces and local community groups to look to break down the barriers often associated with cycling and walking. Details of these programmes can be found at:

<https://www.eastsussex.gov.uk/roadsandtransport/localtransportplan/funding/>

These programmes provide **high value for money, in the region of >7** and benefits across multiple policy areas, including the economy, health and environment. However, these benefits can sometimes be difficult to sustain without the availability of dedicated funding.

Programmes in East Sussex have included the following initiatives:

- **Cycle/electric cycle hire,**
- **Independent travel training,**
- **Sustrans Bike It & Active Steps Projects,**
- **Living Streets – Walking Projects,**
- **Wheels 2 Work,**
- **Cycle and walk leader training and**
- **Cycle hubs.**

ESCC has recently secured extension funding for their existing Access Fund for 2020/21. Appendix 8 includes the Access Fund Programme Case Study for 2018/2019.

### **6.3.2 Bikeability Training**

ESCC is proud to be at the forefront of providing both children and adults the skills they need for riding their bikes on the road. ESCC provides training in schools, alongside school holiday courses and training for adults at Eastbourne Cycle Hub. This offer will be extended further when a cycle hub is launched in Peacehaven in 2020/21, as part of ESCC Access Fund Programme. For further information see the following link.

<https://www.eastsussex.gov.uk/roadsandtransport/roads/roadsafety/cycle-and-driver-training/cycle-training/bikeability/what-is-bikeability/>

### **6.3.3 Wheels for All**

Alongside this ESCC also offer the 'Wheels for All' initiative. This is a nationally recognised programme, which enables adults and children with disabilities and differing needs to participate in cycling activities, which are supported by trained staff. At the Eastbourne Cycle Centre ESCC offer specially adapted cycles for users and their carers at weekly events. There has been a substantial demand for this service. Therefore ESCC will work with partners to seek funding to enable the expansion of this offer at Eastbourne, alongside launching this offer at the Peacehaven Cycle Hub from 2020/21.



#### **6.3.4 Future Travel Behaviour Change Programmes**

ESCC has committed investment in 2020/21 to work alongside key partners to design a future travel behaviour change programme. This will look to apply the learning secured through both the LSTF and Access fund programmes, together with commissioning insight work with specific groups of people within the County to understand their specific barriers in using sustainable travel. This insight will be utilised in the design of initiatives and the monitoring associated with these to enable the collection of more robust output and outcome data.

ESCC and their partners will also look to see how projects involving the use of e-cargo bikes can be established, alongside extending the opportunities for the use of electric cycles and the charging of these at key destinations. The opportunities to also support social prescribing (potentially through a cycling on prescription project), will also be explored.



#### **6.4 Partnership Working**

Partnership working is a key principle of the East Sussex LCWIP as it will be essential to support the delivery of plan. Some examples of existing good practice are outlined in Appendix 8.

##### **6.4.1 DEFRA Air Quality Management Fund Programmes**

Sussex Air is represented by all the Local Authorities in Sussex who work in partnership to ensure that they meet their statutory obligations to assess and report on local air quality. They also deliver projects to improve local air quality and to reduce people's exposure to poor air quality. Sussex Air has been successful in securing DEFRA funding during 2019/20 and 2020/21 to deliver air quality projects integrated as part of Access Fund Programmes in schools across Sussex.



## 6.5 Integrating with Smart Mobility

ESCC and their partners are keen to embrace the changes that technology is generating for travel and transport and for this to be an integral element of the wider transport strategy for the county. The key relationship with the East Sussex LCWIP is that this must not undermine the opportunities for cycling and walking by reducing the attractiveness of these modes of travel. Cycling and walking must remain the best option for short local journeys or as part of longer journeys.

Therefore ESCC and their partners welcome the publication of the DfT document 'Future of Transport Regulatory Review', March 2020, with the support to make journeys 'easier and greener' and the opportunities to use data and growing digital capabilities to package different services (including measures such as cycle hire) together for travelers when they are planning journeys.

There are key opportunities through the use of micro-mobility (i.e. electric scooters) once the legal frameworks are agreed, to help manage some of the barriers for people who are less active. This is alongside the use of electric bikes and associated charging facilities, especially in some areas of the County where the terrain is more challenging.

Other areas which the LCWIP could look to integrate with smart mobility include:

- how technology could be paired with people with an interest in maintaining a healthier lifestyle. Trends such as 'quantified self' with people measuring their daily steps, miles cycled, and calories consumed via the use of smart applications.
- achieving smartness through collaboration based on broad stakeholder engagement with not just local, but international stakeholders such as institutes of technology and engineering, to support research and development and home-grown capital investment in real-time data analysis of traffic information and air quality monitoring.
- integrating smart technology and sustainable transport measures to create more cohesive urban design and traffic control systems .

## **6.6 Reviewing & Updating**

The East Sussex LCWIP will be monitored on an annual basis through the governance arrangements as outlined in stage 1, paragraph 1.3., and the progress and future projects will be reported through ESCC Integrated Transport Capital Programme.

A set of indicators has been developed and will be utilised to monitor the delivery of the plan. These are as outlined in Part 1 of the LCWIP, section 6.

As stated in the purpose of LCWIP, this is a 'live document', therefore to support this ESCC propose to upload the LCWIP as a web document, which can be updated more easily. This will be undertaken as part of the review of ESCC Local Transport Plan in 2020/21.

## Glossary

<b>AMAT</b>	Active Modes Appraisal Toolkit
<b>AONB</b>	Area of Outstanding Natural Beauty
<b>COPD</b>	Chronic obstructive pulmonary disease
<b>CWIS</b>	Cycling & Walking Investment Plan
<b>DfT</b>	Department for Transport
<b>LCWIP</b>	Local Cycling & Walking Infrastructure Plan
<b>MCAF</b>	Multi Criteria Assessment Framework
<b>PCT</b>	Propensity to Cycle Tool
<b>SE LEP</b>	South East Local Enterprise Partnership
<b>TfSE</b>	Transport for South East