East Sussex County Council
County Hall
St Anne's Crescent
Lewes
East Sussex

Bexhill to Hastings Link Road

Project Sustainability Appraisal

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Mott MacDonald
St Anne House
20-26 Wellesley Road
Croydon
Surrey
CR9 2UL
UK
Tel : 44 (0)20 8774 2000
Fax : 44 (0)20 8681 5706

Bexhill to Hastings Link Road

Project Sustainability Appraisal

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Chapters and Appendices

Glossary of Terms

A glossary of terms used in this report are listed below:

Baseline: A description of the present and future state of an area, in the absence of any plan, taking into account changes resulting from natural events and from other human activities.

Indicator: A measure of variables over time, often used to measure achievement of objectives.

Mitigation Measure: Refer to measures to avoid, reduce or offset significant adverse effects.

Objective: A statement of what is intended, specifying the desired direction of change in trends.

Significant effect: Effects which are significant in the context of the plan (Annex II of the SEA Directive gives criteria for determining the likely environmental significance of effects).

Sustainability Appraisal: Generic term used in this report to describe the form of assessment that considers social, environmental and economic effects, which fully incorporates the requirements of the Strategic Environmental Assessment (SEA) Directive. However, for this report, SA is not the formal process associated with the Planning and Compulsory Purchase Act 2004.

Sustainability Appraisal Report: Term used in this report to describe a document required to be produced as part of the SA process to describe and appraise the likely significant effects on sustainability of implementing a plan, which also meets the requirement for the Environmental Report under the SEA Directive.

Sustainability Objectives: These are the specific objectives that have been developed for this project and agreed with ESCC. They are also referred to as the SA framework, against which the scheme objectives and route options have been tested for the purposes of this SA.

List of Abbreviations

Acronyms and other abbreviations used in this report are listed below:

AONB Area of Outstanding Natural Beauty

AQAP Air Quality Action Plan

AQMA Air Quality Management Area

BAP Biodiversity Action Plan

BCL Bullen Consultants Ltd

BGS British Geological Survey

BHLR Bexhill to Hastings Link Road

BOAT Byways Open to All Traffic

CCTV Close Circuit Television

CEMP Construction Environmental Management Plan

EA Environment Agency

EIA Environmental Impact Assessment

EMS Environmental Management System

ESCC East Sussex County Council

FPP Five Point Plan

HBC Hastings Borough Council

HGV Heavy Good Vehicles

HMWB Heavily Modified Water Bodies

HSDP Hastings Strategy Development Plan

IMD Index of Multiple Deprivation

LDF Local Development Framework

LNR Local Nature Reserve

LTP Local Transport Plan

ODPM Office of the Deputy Prime Minister

PM_{10}	Very Fine Particulate Matter with a diameter of less than 10 microns
PPS	Planning Policy Statement
PPG	Planning Policy Guidance
RDA	Riding for the Disabled Association
RPG	Regional Planning Guidance
RSS	Regional Spatial Strategy
SA	Sustainability Appraisal
SEA	Strategic Environmental Assessment
SEEDA	South East England Development Agency
SEP	South East Plan
SME	Small to Medium-sized Enterprise
SNCI	Site of Nature Conservation Importance
SoCoMMS	South Coast Corridor Multi-Modal Study
SSSI	Site of Special Scientific Interest
SWS	Southern Water Services
SUDS	Sustainable Urban Drainage System
UK	United Kingdom

Executive Summary

Introduction

Mott MacDonald was commissioned by East Sussex County Council (ESCC) in May 2006 to undertake a Sustainability Appraisal (SA) of the proposed Bexhill to Hastings Link Road (BHLR), in support of the planning application for the scheme. As completion of a SA is not mandatory at project level, this represents the commitment of ESCC to meeting not only national, regional and local sustainability criteria, but also the SA objectives that have been specifically developed for the BHLR scheme by Mott MacDonald and ESCC, as outlined in this report.

Background

The justification for the BHLR scheme is driven by the existing socio-economic, transportation and environmental problems in the area. The Bexhill and Hastings area has high levels of deprivation and unemployment, lower than national average earnings, and a poor educational achievement record. The A259 corridor in particular suffers from severe traffic congestion, poor bus reliability, high accident levels, community severance and poor pedestrian and cyclist provision. The A259 corridor has been assessed as having a poor air quality and has been designated as an Air Quality Management Area (AQMA).

The objective of the BHLR is to address the above socio-economic and environmental issues by providing an alternative route to reduce current congestion levels and improve access to Bexhill and Hastings. In addition, the scheme will release nearby land for development by providing the necessary access, thereby helping to facilitate regeneration of the area. The proposal is fully in accordance with transport planning policy at national, regional and local levels. This report provides a review of the various route options proposed for the Bexhill to Hastings Link Road to establish the sustainability benefits and disbenefits of each option to determine which design has the greater potential to deliver a more sustainable outcome. The report also presents recommended mitigation measures to improve the sustainability performance of the project.

The planning process is already underway for the proposed BHLR road scheme. As such, an Environmental Scoping Report has already been completed and was submitted for consultation in March 2006. An Environmental Impact Assessment (EIA) is currently being undertaken, and is anticipated to be completed by January 2007. The SA report does not form part of the EIA, but will be submitted as a supporting document with the planning application.

Scheme Description

A number of alternative schemes were considered for the BHLR by ESCC, including a non-road based scheme. Following extensive assessment, potential route alignments were narrowed down to a total of six alternative route options (Figure 3.1) for the Link Road. These options included three northern alignments (Red, Blue, and Brown), two central alignments (Orange and Purple), and one southern option (Pink) for crossing the Combe Haven Valley. The options were taken through public consultation and through

consultation with statutory bodies, following which a further southern alignment was added (Green). All options shared the 1.5km Bexhill Connection section of the route to access the A259 through the built up area of Bexhill, following the route of a disused railway. A slightly modified version of the Blue route is currently the preferred option due to its lesser impact on the local environment and relatively low cost, and is the route that is being assessed in detail through the EIA.

Methodology

The SA methodology is based on the ODPM guidance 'Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents' (November 2005). However, because the SA process has been applied to a project and not a plan or programme, aspects of the guidance have been drawn upon where we consider them to be relevant. The main tasks comprised the following:

- review of relevant policies, plans and programmes;
- review of baseline conditions and identification of sustainability issues;
- development of a Sustainability Framework and Objectives during a workshop with ESCC;
- testing of the development options against the Sustainability Framework during consultation with ESCC;
- consideration of mitigation measures and monitoring requirements; and
- consultation with stakeholders and statutory consultees (Natural England (formerly English Nature and the Countryside Agency), the Environment Agency and English Heritage, plus ESCC). Whilst this is not formally required as this SA is not a legal requirement, it is considered to be best practice to follow the consultation process in order to take into account the views of consultees.

Results and Conclusions of SA

The results of the sustainability options appraisal show that the 'Blue Route' is the preferred option in terms of its more positive contribution to environmental and sustainability issues and objectives. The main positive benefits of the Blue route over the other six options are:

- it has no negative impacts in terms of contributing to the SA objectives agreed with ESCC. The main reason for this is that the route doesn't pass through a Site of Special Scientific Interest (SSSI);
- it scored better than the other options for biodiversity. This is likely to be because it doesn't pass through a SSSI, and will provide benefits through creation of habitats;
- it performs well in terms of contribution towards the SA objectives for water quality, protection of the landscape, and resource and waste use; and

- as with the other options, the Blue route performs very well in terms of its contribution to the socio-economic SA objectives. It has significant positive impacts for objectives such as access to community services, opportunities for housing, social inclusion and economic development. The route also had positive impacts on reducing congestion, increasing travel choice and improving the bus service.

It should be noted that this SA report is part of an iterative design process and will be updated where necessary as the scheme is amended on the basis of ongoing surveys during the detailed design phase. The updated versions of the report will be identified by the record of issue sheet at the front of this document.

Recommendations

The sustainability performance of the BHLR can be improved through implementation of mitigation and enhancement measures. A design and construction sustainability register has also been prepared in order to identify actions that can be completed in order to deliver the sustainability objectives (Appendix C). This register should be used by the design team to provide a record or audit trail as the design progresses and also incorporated into the preparation of a Construction Environmental Management Plan (CEMP) for use during the design and construction process.

Mitigation and enhancement measures which could be usefully implemented into both the design and construction phases include the following activities which will be incorporated into the blue route:

Environmental mitigation

- production of a Construction Environmental Management Plan (CEMP). The CEMP will be prepared by the selected Design and Build (D&B) contractor. It will outline methodologies to avoid impacts on the environment during construction and increase the sustainability of the project at both design and construction phases;
- tree planting should be implemented to offset carbon dioxide emissions generated by the road with a view to mitigating the implications of climate change resulting from a road development;
- the reduction in congestion may mean that bus priority lanes can be implemented, possibly resulting in a modal shift from car to bus;
- reedbeds at the side of the road to help filter out pollutants from contaminated run-off;
- water quality monitoring where the road crosses the rivers;
- incorporation of measures into the design that will reduce flood risk to the residential areas of Crowhurst at the top of the Powdermill Stream, and Bulverhythe at the foot of the Combe Haven, including the development of areas of flood storage substitutions and on-line flood storage, either within the stream cannel itself or within voids beneath the road;
- implementation of washlands, reedbeds and lakes for compensatory flood storage, the use of SUDS for treatment and control of road surface run-off, in additional to pollution interceptors;

- clear span bridges so that water levels and flood flows are not affected;
- use of the new drainage system to make nature conservation sites wetter, for the benefit of the ecological interest contained within them;
- the creation of new habitats such as reedbed and wetland areas, and the enhancement of existing habitats to compensate for the loss of habitats from the construction;
- the installation of structures such as badger fencing, and badger and amphibian tunnels to reduce the risk of disturbance to animals during both the construction and operational phases;
- where necessary translocation of species will be implemented;
- training site staff and monitoring qualified ecologists where construction activities are close to sites of significant interest such as SSSIs;
- the monitoring of effect during and after construction and adjusting procedures as necessary to minimise harm to habitats and species and optimise beneficial effects;
- the site clearance would be carried out in accordance with a site clearance plan produced by an Ecologist and subject to their certification prior to carrying out the works and on satisfactory completion prior to earthmoving;
- mature trees noted for retention within the Scheme would be physically protected by rigid fencing to avoid damage during the currency of the works;
- minimise lorry movements in and out of the site by using cut and fill to recycle all excavated material on site;
- wherever possible the sustainability processes in the Government's Waste and Resources Action Programme will be followed;
- the contractor will use directional lighting to minimise light pollution from the site;
- haul roads will be from either end of the scheme and accessed from existing main roads to minimise impacts on minor roads and residential properties;
- the site will be kept tidy and adequate wheel wash facilities will be provided;
- existing trees and hedges will be protected in accordance with BS 5837:2005 'Trees in Relation to Construction';
- temporary stockpiling of materials will be avoided where possible, where these are necessary piles will not exceed 4m and will be kept within the site boundaries;
- the structures strategy will aim to minimise impacts on local roads and residents;
- site compounds will be located in visually discreet locations and away for residential properties;

- health and safety and environmental protection procedures will be followed at all times;
- sensitive road routing using the natural topography of the landscape;
- using cuttings and embankments to reduce visual impacts;
- new hedges, trees and scrub planting will act as a screen between the road and the countryside, and provide wildlife links;
- the removal of derelict buildings and reuse of demolition materials where possible;
- sensitive lighting to enhance the area and historic buildings;
- sensitive design of remaining urban open spaces;
- in-situ and ex-situ remedial technologies for contaminated soils as an alternative to landfill disposal;
- re-use and recycling of materials used in the construction of the road;
- use of local resources, products and suppliers;
- ensure an energy efficient plant during construction;
- development of contaminated land mitigation strategy in line with current best practise as detailed in CLR 11-Model Procedures for the Management of Contaminated Land;
- cuttings, embankments, side slopes and drainage measures would be designed into the Scheme to avoid risk of instability to adjacent land outside the construction site;
- development of an earthworks strategy detailing the removal, handling, storage and placement of soils. The earthworks strategy will form part of the Construction Environmental Management Plan (CEMP);
- all suitable material excavated would be re-used in the construction of the Scheme, further reducing the requirement to import materials for construction and eliminating the need to remove surplus material from site; and
- materials arising from the site clearance would be disposed of in line with sustainability best practices and in agreement with the local authorities. This would include the use of an on-site crushing facility, which would recycle inert material from the demolition works for use as granular fill within the works.

Socio-Economic mitigation

- traffic restriction measures on relieved roads;
- minimised clutter of signage, lighting and other urban features along the route;
- implementation of pedestrian crossings at appropriate points;
- planting in the urban area to reduce the impact of noise fencing and retaining walls;

- creation of a green corridor effect through the urban area using mounding, verges and planting where appropriate;
- use of earthworks as noise attenuation, as extensively as possible in the rural area to minimise the need for noise fencing and to achieve a better integration of the Scheme with the local landscape;
- planting to integrate noise fencing and earthworks in the rural area;
- some open views retained to the countryside from the scheme;
- increasing the number of regular bus services;
- provision of cycle lanes linking local roads to the Greenway;
- appropriate lighting of public areas e.g. bus stops;
- CCTV in vulnerable areas;
- security measures on-site during construction e.g. Secure fencing and locked gates around the site, security man on patrol after hours, warning signs around the site perimeter;
- targeted bus routes to enable access to key services;
- areas to increase employment and the potential for youth training schemes;
- the provision of facilities such as nature interest trails and cycling tours;
- encouraging local walking and cycling groups to use the Greenway regularly;
- a major mitigation will be the Greenway providing a linking recreational route roughly along the line at the scheme but sufficiently separate from it to provide quiet linking access to the proposed Pebsham Countryside Park;
- preservation by record of any archaeological remains found;
- if required following the EIA, provide a watching brief during excavation of certain areas or operations to enable preservation by record of any archaeological remains found;
- ensure careful siting of road near listed buildings e.g. use of screening and complementary planting schemes, cutting and embankments;
- the protection of listed buildings whilst works are undertaken in the vicinity and optimising location and design of the scheme; and
- programme of recording historic structures for removal and consulting with the Conservation Officer of Rother District Council (the Local Planning Authority). Recording but would probably take the form of photographic recording to RCHME Level 1 or 2 record (RCHME 1996).

It is also envisaged that the scheme will encourage property developers to provide a range of housing types in the proposed development areas. Similarly, Small to Medium-sized Enterprises (SMEs) may also seek to locate within the area as a result of the increased access afforded by the scheme.

It is recommended that any responses from consultation with statutory bodies, performed as part of the EIA planning process, should be obtained from ESCC and reviewed and monitored in the context of the findings of this SA report.

Monitoring and Management

Sustainability indicators have been identified within this report to enable monitoring the performance of the project and its ability to deliver the sustainability objectives. In the future, it will become important that such monitoring is undertaken as part of any reporting completed for the implementation of the forthcoming Local Development Frameworks (LDF) for the area. ESCC is committed to undertaking an ongoing appraisal of the project throughout both the detailed design and construction phases of the Scheme to ensure that the project fully meets the sustainability objectives set out in this report.

A CEMP should also be prepared for the project which will be based on the Sustainability Register presented in Appendix C. The CEMP will be updated as more information becomes available during the detailed design phase to ensure that it is fully comprehensive throughout the project lifespan. The CEMP will cover all aspects of both the design and construction phase.

1 Introduction

1.1 Terms of Reference

1.1.1 Mott MacDonald was commissioned by East Sussex County Council (ESCC) in May 2006 to undertake an Environmental Impact Assessment (EIA) of the proposed Bexhill to Hastings Link Road (BHLR) in compliance with the requirements of the Town & Country Planning (Environmental Impact Assessment) (England & Wales) Regulations 1999.

1.1.2 Under these regulations there is no legal requirement in the context of EIA to provide a Project Sustainability Statement as part of the EIA documentation. However, it is a requirement that in determining planning applications for individual projects, consideration should be given to whether a proposed development conforms with stated policy objectives, including those concerning sustainable development. In order to achieve this, Mott MacDonald was commissioned by ESCC in May 2006 to undertake a stand-alone Sustainability Statement in support of the planning application.

1.1.3 This SA report has been produced through the use of guidance provided by the Office of the Deputy Prime Minister (ODPM) for production of Sustainability Appraisals (SA) ('Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents' (November 2005)). However, as the ODPM guidance is for SAs of plans, policies and programmes, it has had to be modified to enable application to project level. This report provides a review of the various route options proposed for the Bexhill to Hastings Link Road to establish the sustainability benefits and disbenefits of each option to determine which design has the greater potential to deliver a more sustainable outcome.

1.2 Background to the BHLR

Need for the Scheme

1.2.1 Bexhill and Hastings are located on the South East coast of England in the county of East Sussex. The justification for the Bexhill to Hastings Link Road (BHLR) scheme is driven by the existing socio-economic, transportation and environmental problems in the area. The Bexhill and Hastings area has high levels of deprivation and unemployment, lower than national average earnings, and a poor educational achievement. The A259 corridor in particular suffers from severe traffic congestion, poor bus reliability, high accident levels, community severance and poor pedestrian and cyclist provision. The A259 corridor has been assessed as having a poor air quality and has been designated as an Air Quality Management Area (AQMA).

1.2.2 The decline of economic confidence in the Hastings and Bexhill area has been reinforced by poor accessibility. It has been recognised since the 1980s that that significant improvements to strategic and local transport infrastructure are vital to the regeneration of Bexhill and Hastings. Proposals for improving accessibility have formed a key policy for this area, central to which has been the need to deal with the growing congestion on the A259 coastal route through the towns and the overall capacity of the corridor. The A259 forms a strategic link for the southern coastal towns from Folkestone to Southampton as well as the main link between Hastings and Bexhill.

1.2.3 The Secretary of State for Transport rejected proposals for a Hastings and Bexhill bypass in 2001, as the argument presented did not satisfactorily demonstrate that options contributed sufficiently to the regeneration of the towns and also that the options impacted adversely on the sensitive environment to the north of the towns. However, the Secretary of State did note that there was the need for a substantial transport investment programme as an essential part of a wider investment programme for the area. Following this decision, a Task Force was established under the direction of the South East England Development Agency (SEEDA) to bring together a regeneration strategy for the Bexhill and Hastings area.

1.2.4 Since the Secretary of State's decision, a number of studies and strategies have been completed, including The Access to Hastings Multi-Modal Study, the East Sussex Local Transport Plan (LTP2) (including bus strategy), Hastings and Bexhill Five Point Plan (by the Task Force), the South Coast Corridor Multi-Modal Study (SoCoMMS), and the Hastings Strategy Development Plan (HSDP).

1.2.5 East Sussex County Council (ESCC), with the Task Force, considers that, in addition to the public transport improvements for the area, it is essential that a new link road be built to relieve the capacity and congestion problems on the A259 arising from both development pressures and increased car use. The problem of congestion has been hindered further by low levels of investment in local infrastructure during the recent past.

1.2.6 Plans for a new Bexhill to Hastings Link Road were drawn up in 2003, which would improve access to and within Hastings and Bexhill and open up the north Bexhill and Hastings area for development, boosting the local economy and promoting regeneration. However, the nature of development in the two towns following completion of the link road would differ. Whilst development in Bexhill would have a large Greenfield component, it is proposed that Hastings would need to rely far more on the redevelopment and regeneration of brownfield land.

1.2.7 A key finding of SoCoMMS was that a high proportion of trips in the East Sussex coastal towns are short distance and mostly between adjacent towns. The implication of this finding is that local transport measures such as the Link Road will have a key role to play in

solving local transport problems and improving accessibility and road safety.

1.2.8 The Task Force's Five Point Plan (FPP), launched in March 2002, provides a comprehensive regeneration strategy for the towns. The Plan targets the most deprived communities in the towns, and is intended to increase Gross Domestic Product (GDP) by 3.2% by year 10 of the Plan. An extensive ten year £340m investment programme to implement the FPP is now underway, directed by the Task Force and implemented by Sea Space, a company set up to deliver the projects identified in the programme.

1.2.9 The Task Force considers that the Bexhill to Hastings Link Road is a vital component of its vision to regenerate Hastings and Bexhill. The Link Road is one of the key transport infrastructure projects which forms a core element of the Five Point Plan. It will be vital to releasing new employment and housing land in Bexhill as well as allowing other projects, currently constrained by congestion and capacity on the A259 corridor, to be realised.

Scheme Objectives

1.2.10 The Link Road is fully in accordance with transport planning policy at national, regional and local levels. At a national level it accords with the requirement of Planning Policy Guidance (PPG) note 13 (Transport), March 2001, that development plan allocations and local transport investment and priorities should be closely linked. At a regional level, the construction of the Link Road was recommended in SoCoMMS, a recommendation which was subsequently reinforced by the findings of the HSDP. At a local level, the Link Road accords with Local Transport Objectives and the Rother District Local Plan.

1.2.11 The following table summarises the overall local objectives of the proposed scheme and their relation to regional and national objectives.

Table 1-1: Local Objectives of the BHLR scheme

Government Objectives	Local Objectives
Environment	To reduce emissions of particulates (PM10) along the A259 Bexhill Road, with the aim of reducing concentrations to within the UK air quality objectives for PM10 and removing the need for the currently designated Air Quality Management Area (AQMA).
	To minimise the impact of the Link Road on the environmentally sensitive areas in the Combe Haven valley and to ensure that the number of persons adversely impacted by the scheme is kept as low as possible.
	To ensure the scheme is complementary to the future implementation of the proposed Pebsham Country Park.
Safety	To reduce the number of accidents on the local road network in general and on the A259 in particular.
Economy	To reduce journey times for all road users and improve reliability of bus services on the local road network.
	To maximise and preserve the benefit from reductions in traffic volumes and congestion on the A259 corridor between Bexhill and Hastings for buses by introducing bus priority measures.
	To contribute towards the Five Point Plan for the regeneration of Hastings and Bexhill by improving overall accessibility to employment, education, health, and other opportunities within the local area and thereby contributing to improvement in social inclusion.
	To enable the housing and commercial developments proposed in north Bexhill, which are dependent on construction of the Link Road for planning approval, to be realised.
Accessibility	To reduce community severance in the A259 corridor and in local villages used as rat runs to avoid the A259.
	To improve conditions for pedestrians, cyclists and equestrians on the local road network in general and to facilitate creation of dedicated cycle ways between the two towns.
Integration	To ensure that the Link Road is complementary to future transportation developments in the area.

1.3 Purpose and Content of the SA Report

1.3.1 The objective of this Sustainability Appraisal (SA) is to summarise the review process which was undertaken of the various proposed route options for the BHLR project to establish the sustainability benefits and disbenefits of each option to determine which route has the greatest potential to deliver a more sustainable outcome. This report can also enable increased awareness of sustainability issues during the design and construction processes.

1.3.2 As part of this process, a scoping exercise has been undertaken which has identified and reviewed the range of relevant plans, programmes and sustainability objectives relevant to the BHLR project (Section 2). Section 3 describes the different route options and Section 4 outlines the design evolution of the preferred route. The next stage of the process included the identification of the

prevailing baseline social, economic and environmental conditions for East Sussex (Section 5). Section 6 and 7 of the SA describes in greater detail the methodology used during the study, including the development of objectives and targets and appraises the seven route options for the BHLR scheme, in the form of a sustainability matrix and associated commentary text. Section 8 of the report identifies a number of mitigation measures to potentially assist in improving the sustainability aspects of the preferred option and identifies the need for any additional technical studies. Finally, Section 9 of the report examines the need for sustainability design aims and targets, as well as future consultation and monitoring arrangements for the project.

1.3.3 Following the completion of the EIA and the environmental design freeze in November 2006, the SA has been reappraised on the basis of the new information and updated accordingly.

1.4 Limitations of the SA

1.4.1 The compiled environmental, social and economic baseline data has been effective in providing a "snapshot" of current critical issues associated with the proposed construction of the BHLR. Nevertheless, a number of issues and potential gaps have been encountered during the preparation of this SA report and the associated appraisal of the various route options for the BHLR.

1.4.2 Although no formal consultation has been undertaken at this stage, the statutory consultees (Natural England (formerly English Nature and the Countryside Agency), the Environment Agency and English Heritage, along with ESCC) were contacted and the scope of this SA discussed. This document will be issued for consultation prior to submission with the planning application and subsequently updated with any comments from the consultees.

1.4.3 This SA has been applied to the design process and therefore does not constitute a SA in compliance with the Planning and Compulsory Purchase Act 2004.

1.5 Client Aspirations for Sustainable Development

1.5.1 There are great benefits that sustainable approaches to development can bring. These benefits will touch many aspects of people's everyday lives in the Bexhill and Hastings area and the proposed road scheme provides a great opportunity for ESCC to show its commitment to sustainability issues. This SA Report will enable ESCC and the project team to ensure that sustainability policies are considered and implemented in practice during the design and, assuming consent is granted, during construction and operation of the road.

1.5.2 The East Sussex Community Strategy 'Pride of Place' (2003) sets out the council's vision for Sustainable Development in East Sussex '–

Our vision for East Sussex is of a sustainable county with an improving quality of life, where everyone can prosper, where individuals can participate fully in the lives of their communities, where those in need are supported and where individuals and organisations play their part in protecting our distinct environment for the benefit of present and future generations'.

1.5.3 The SA Report will help to enable the project team to achieve a project which delivers high levels of sustainability performance. It will also help achievement of the wider benefits of attaining a high quality of living environment, encouraging patterns of development and incorporating high levels of accessibility to jobs, education, health facilities, shopping, leisure and local services.

2 Sustainability Appraisal Policy Context

2.1.1 The key national, regional and local policy documents relating to the BHLR have been reviewed and detailed in a Sustainability Register in Appendix A. These documents included:

National

- Securing the Future – delivering UK sustainable development strategy, the UK Government Sustainable Development Strategy (March 2005);
- Sustainable Communities (February 2003);
- Planning Policy Statement 1 (PPS1) – Delivering Sustainable Development (2005);
- Planning Policy Guidance 2 (PPG2) - Green Belts (March 2001);
- Planning Policy Statement 7 (PPS7) - Sustainable Development in Rural Areas (August 2004);
- Planning Policy Statement 9 (PPS9) - Biodiversity and Geological Conservation (August 2005);
- Planning Policy Statement 10 (PPS10) - Planning for Sustainable Waste Management (July 2005);
- Planning Policy Guidance 13 (PPG13) - Transport (March 2001);
- Planning Policy Guidance 15 (PPG15) - Planning and the Historic Environment (September 1994);
- Planning Policy Guidance 16 (PPG16) - Archaeology and Planning (November 1990);
- Planning Policy Statement 23 (PPS23) - Planning and Pollution Control (November 2004); and
- Planning Policy Guidance 24 (PPG24) – Planning and Noise (September 1994).

Regional

- Regional Planning Guidance (RPG) 9: South East (2001) (including alterations 2004 and 2006);
- Draft Regional Spatial Strategy - Draft South East Plan (March 2006);
- Draft South East Plan Sub-Regional Chapters – Sussex Coast (March 2006);
- Draft South East Plan Sustainability Appraisal (March 2006);
- Integrated Regional Framework 2004: A Better Quality of Life in the South East (June 2004);
- Regional Economic Strategy: Building a World Class Region (2000);

- The Draft Regional Economic Strategy – The RES for South East England 2006-2016 (2005);
- East Sussex and Brighton and Hove Structure Plan 1991-2011 (Adopted December 1999);
- East Sussex and Brighton and Hove Minerals Local Plan (Adopted November 1999);
- East Sussex and Brighton and Hove Waste Local Plan (February 2006);
- East Sussex and Brighton and Hove Construction and Demolition Waste Supplementary Planning Document (2005);
- SEEDA (South East England Development Agency) – Regional Sustainability Checklist for Developments;
- Pride of Place – A Community Strategy for East Sussex (2003);
- East Sussex Environmental Action Plan 2002/2003 – 2004/2005;
- A Biodiversity Action Plan for Sussex (July 1998);
- Second East Sussex Local Transport Plan 2006-2011 (2006); and
- Second East Sussex Local Transport Plan Sustainability Appraisal (2006).

Local

- Hastings Local Plan (Adopted April 2004);
- Rother Local Plan (July 2006);
- Cuckmere and Sussex Haven Catchment Flood Management Plan (March 2005);
- Hastings and St Leonards Community Strategy 2003-2013; and
- Rother Community Plan 2004-2009.

2.2 National Context

2.2.1 The national strategy for delivery of Sustainable Development was published by the UK Government in March, 2005, “Securing the Future, Delivering the UK Sustainable Development Strategy”. The strategy provides a set of shared UK guiding principles that the Government will use to achieve our sustainable development purpose. The guiding principles bring together and build on the various previously existing UK sustainability principles to set out an overarching approach which will focus the basis for policy in the UK. These are identified below:

- Living within environmental limits;
- Ensuring a strong, healthy and just society;
- Achieving a sustainable economy;
- Promoting good governance; and

- Using sound science responsibly.

2.2.2 The strategy also provides a set of "shared priorities for UK action" which will also help to shape the way the UK works internationally in ensuring that the UK's objectives and activities are aligned with international goals. The shared priorities are set out below:

- Sustainable consumption and production;
- Climate change and energy;
- Natural resource protection and environmental enhancement; and
- Sustainable communities.

2.2.3 PPS1 'Delivering Sustainable Development' (2005) outlines the general principles under which the planning system operates following the introduction of the Planning and Compulsory Purchase Act 2004, and sets out an overview and general statement on the objectives of the planning system. PPS1 follows the Government's sustainable development themes of:

- Social cohesion and inclusion;
- Prudent use of natural resources;
- Sustainable economic development; and
- Integrating sustainable development plans.

2.3 Regional Context

2.3.1 The regional planning framework is provided by Regional Planning Guidance for the South East (RPG) (the current Regional Spatial Strategy for the South East). A full revision of RPG9 has taken place and the draft South East Plan has been produced. The South East Plan is currently only draft status, but once approved by the government the South East Plan will replace RPG9 forming the statutory document with which local authority development plans will need to conform. Regeneration of the Bexhill and Hastings areas is an important issue for the South East Plan, and the Bexhill to Hastings Link Road is specifically mentioned in the South East Plan Implementation Plan Sub-Regional Investment Framework.

2.3.2 Until the South East Plan is approved and officially adopted RPG9 sets out the regional planning framework. RPG9 focuses on enabling urban renaissance, promoting regeneration and renewal, concentrating development in urban areas, promoting a prosperous and multi-purpose countryside and promoting wider choice in travel options.

2.3.3 Integrated Regional Framework 2004: A Better Quality of Life in the South East '*aims to clarify what sustainable development means for the South East of England and how the Region can contribute to sustainable development of the County as a whole'*. Identifying objectives to work towards provides a common reference point for

sustainable development which will help guide the work of organisations, particularly those operating at regional level, and ensure that sustainable development is at the heart of regional policy. The framework objectives and indicators are separated into four themes aligned to the Government's sustainable development strategy from 1999:

- Social progress which meets the needs of everyone;
- Effective protection of the environment;
- Prudent use of natural resources; and
- Maintenance of high and stable levels of economic growth and employment.

2.4 Local Context

2.4.1 There are a number of Local Plans and Strategies that may have implications for the BHLR. These are examined in detail in the Sustainability Register in Appendix A. Below is a brief outline of some of the key plans.

2.4.2 The adopted development plan for the area comprises the East Sussex and Brighton & Hove Structure Plan (1999), Minerals Local Plan (1999) Waste Local Plan (2006), and the local plans of both Rother District and Hastings. Regard will need to be paid to the policies of the "development plan" when determining planning applications. These documents establish the way in which development and change will be managed in East Sussex, and set out detailed policies on waste and minerals planning, up to 2011.

2.4.3 Under the Planning and Compulsory Purchase Act 2004 local authorities are required to develop Local Development Frameworks (LDF) which will gradually replace Local Plans. Hastings District Council has started to develop its LDF and has produced 'Shaping Hastings – Core Strategy Issues and Options'. Rother District Council is also at a similar stage in the LDF process and has produced a Core Strategy Issues and Options document. These documents are still at the draft stage, because of this it is too early to place any weight on them and the adopted Local Plans and Community Strategy's will be given greater weighting.

2.4.4 The East Sussex and Brighton and Hove Structure Plan will be superseded by the South East Plan once this has been approved by Government. The Structure Plan's overall objective is "*To seek a more environmentally sustainable future for the county and to meet the needs for development and change in a manner that is more sustainable in the longer term*". It allocates a new community at Bexhill contingent upon the appropriate transport improvements, to meet regional housing targets in the most sustainable manner for Rother District.

2.4.5 The Hastings Local Plan sets out a framework of policies to *'guide and encourage development in the Borough up to the year 2011'.* Similarly, the Rother Local Plan *'sets out the vision and strategy for land use and development in Rother District'*, including specific planning policies and proposals to manage development and change up to 2011. Local needs in terms of economic prosperity, social cohesion and environmental protection have been the core considerations in shaping the Plan.

2.4.6 Community strategies are prepared by a local authority to improve local quality of life and aspirations under the Local Government Act 2000. The Rother Community Plan 2004-2009 'Making things better by working together' has been developed through consultation with residents. It sets out nine priority action areas including community safety, education, waste, culture, employment, health, and transport. The Hastings and St Leonards Community Strategy 2003-2013 'Putting your ideas and our ideas together' was also developed through widespread consultation with residents. It identifies a ten year vision and 21 key targets for improving quality of life and community cohesion.

2.5 Implications for the BHLR

2.5.1 The BHLR scheme will need to take account of national, regional and local planning policies. Of particular note is the local policy context with policies on biodiversity, noise and visual intrusion, air and water pollution, traffic congestion and economic regeneration. The Hastings Local Plan contains policies to safeguard and protect designated SSSIs. The BHLR will run very close to two SSSI, the Combe Haven Valley and Marline Woods. This means careful consideration and mitigation measures will be needed during construction and operation of the scheme to avoid any damage to the SSSIs. The Hastings Local Plan also states that development proposals within a SNCI will not be permitted unless there is a local need which outweighs any harm to nature conservation interest. The Rother Local Plan states that existing natural resources of species, habitats and geological features including SNCI will be protected from damage.

2.5.2 The BHLR will run through the Disused Railway SNCI causing land-take and loss of habitat. It would need to be clearly shown that the need for the BHLR scheme in terms of relieving traffic congestion, improving air quality and opening up links to deprived communities outweighs any adverse impacts on nature conservation in order to accord with the Hastings Local Plan and Rother Local Plan. The Rother District Local Plan contains policies to improve the basic transport infrastructure and encourage cycling and walking. The Greenway to be developed as part of the scheme will contribute positively to Rother's policies on cycling and walking by providing a new, safe footpath and cycle route through the countryside. The development strategy of the Rother District Local Plan also depends on the release of development land facilitated by the link road. This

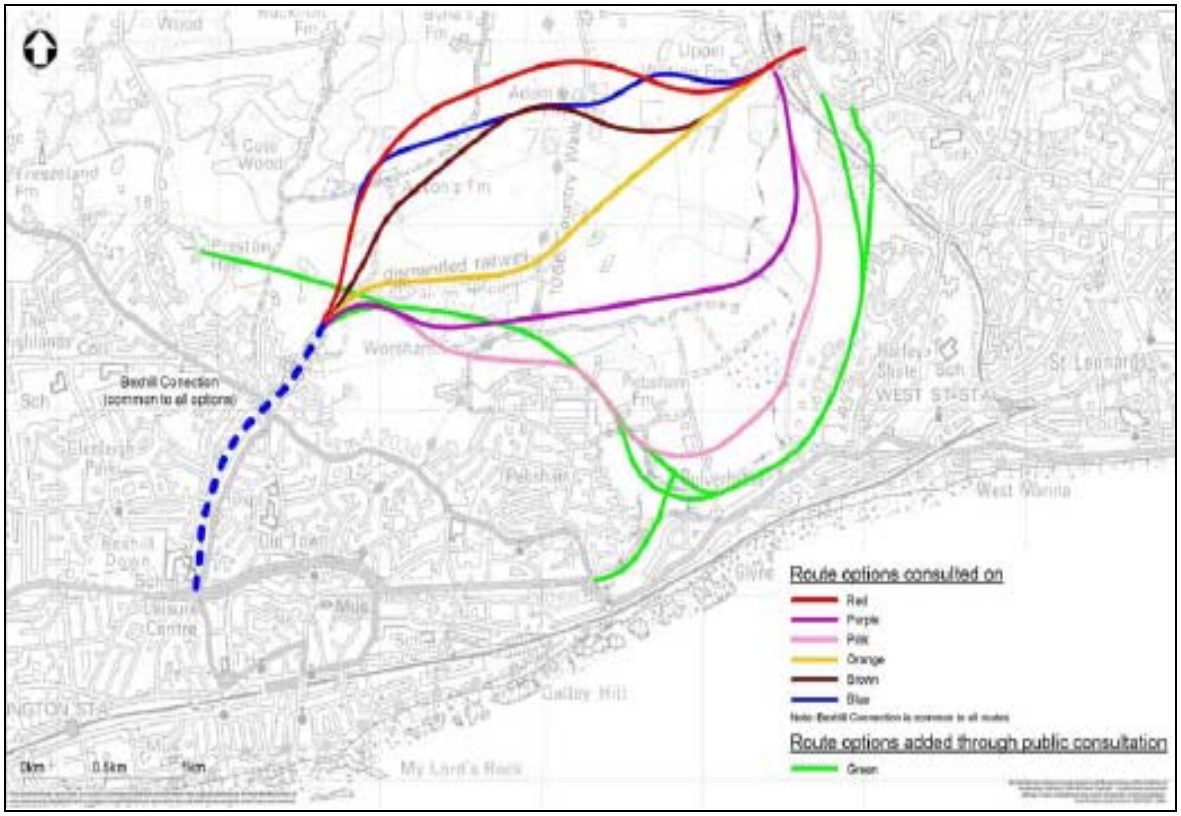
has inevitable social and economic implications if the link road is not constructed.

Description of the BHLR Route Options

2.5.3 The need for a direct Link road between Bexhill and Hastings was identified in the SoCoMMS and Local Transport Plan Annex E Report submitted in July 2004. The Annex E Report outlined a number of alternative schemes considered for the BHLR by ESCC. A non-road based solution to the existing problems was considered but rejected at an early stage in option development as it could not unlock the development potential of the area to enable regeneration nor deliver significant congestion and environmental relief. Public transport improvements were also considered but found unsuitable because the development potential in north Bexhill is dependant on construction of the Link Road, improvements to rail services would be at significant costs and scope for modal shift is small, and there would be little scope for improvements along currently congested roads to improve reliability of bus services. It was therefore concluded that a road based solution would not only enable delivery of regeneration benefits to the area but would also facilitate an increase in accessibility by public transport through a reduction in traffic along the A259.

2.5.4 Following extensive assessment, potential route alignments were narrowed down to a total of six alternative route options (Figure 0-1) for the Link Road.

Figure 0-1: Map of BHLR Route Options



2.5.5 These options included three northern alignments (Red, Blue, and Brown), two central alignments (Orange and Purple), and one southern option (Pink) for crossing the Combe Haven Valley. The options were taken through public consultation and through consultation with statutory bodies, following which a further southern alignment was added (Green).

2.5.6 All options shared the 1.5km Bexhill Connection section of the route to access the A259 through the built up area of Bexhill. This area is currently a disused railway.

2.6 The Northern Routes (Red, Blue and Brown)

2.6.1 The Northern route corridor approximately follows the edge of the Combe Haven Valley on its north side and consists of the Red, Blue and Brown routes. At the western end, the road will connect to the Bexhill Connection (formally known as the Bexhill Northern Approach Road) at traffic lights, enabling the future Sidley and Worsham Farm link roads. At the eastern end, the road will cross the existing Hastings to London Railway Line on a bridge and will connect to Crowhurst Road with a signalized junction. Bridges will be constructed over Watermill Stream and Powdermill Stream floodplains.

2.6.2 The Northern route corridor was found to have the least impact on the SSSI and alleviated noise and air pollution at Bulverhythe. It also provides the best opportunities for landscape mitigation and provides a logical boundary to the proposed Pebsham Countryside Park. The negative aspects of the northern corridor are that major structures may be required in some cases such as tunnels, it is also the nearest to Crowhurst.

2.6.3 The majority of the Red route will be in a tunnel, making this a heavily engineered route. The brown route infringes on the edge of the Combe Haven Valley SSSI. The Blue route doesn't run through a SSSI, and will be built into ridges in the landscape topography to reduce visual impacts. All the northern routes pass close to Adam's Farm and Upper Wilting Farm listed buildings, and skirt the southernmost tip of Marline Woods SSSI.

2.7 The Central Routes (Orange and Purple)

2.7.1 The western end of the Central corridor closely follows the alignment of the dismantled railway. At the west end the road will connect to the Bexhill Connection at traffic lights, enabling the future Sidley and Worsham Farm link roads. At the east end the road will cross the existing Hastings to London Railway Line on a bridge and will connect to Crowhurst Road with a signalized junction.

2.7.2 The Central corridor provides the shortest route and will alleviate noise and air pollution at Bulverhythe. The negative aspects of the central corridor are that it bisects the Combe Haven Valley SSSI and future Pebsham Countryside Park. It will also require a major viaduct to cross the flood plains within the SSSI.

2.7.3 The Central corridor consists of the Orange and Purple routes. Both route options run straight through the Combe Haven Valley SSSI, which is also an area of high archaeological potential, and the proposed Pebsham Countryside Park. The Orange route will be on a 12m high viaduct. Some of the purple route will also be located on a viaduct but it will be lower in height than the Orange route.

2.8 The Southern Routes (Pink and Green)

2.8.1 The corridor alignment is located to the south of the dismantled railway. At the west end the road will connect to the Bexhill Connection at traffic lights, enabling the future Sidley and Worsham Farm link roads At the east end the road will cross the existing Hastings to London Railway Line on a bridge and will connect to Crowhurst Road with a signalized junction.

2.8.2 The southern route corridor will provide an access road to Worsham Farm Development and provides the future possibility for a link road at Glyne Gap. It also minimizes impact on the quiet countryside. The negative aspects of the southern corridor are that it is the longest

route. It crosses the Combe Haven Valley SSSI, Filsham Reedbed Local Nature Reserve, semi-natural ancient woodlands and the future Pebsham Countryside Park. It would also provide the least improvement to air quality at Bulverhythe.

2.8.3 The Southern corridor consists of the Pink and Green routes. Both routes skirt the urban edge of Bexhill and Hastings, and because of this some houses may need to be demolished. The routes also infringe on the Combe Haven Valley SSSI, Filsham Reedbed Local Nature Reserve and the proposed Pebsham Countryside Park. Both routes infringe on Pebsham Farm which is a listed building and contains a Riding for the Disabled Association centre. The Green Route infringes on areas of semi natural ancient woodlands (Combe Wood, Pebsham Wood) and runs through the Combe Haven Holiday Park caravan site, which is very important for local tourism.

2.9 Estimated Costs

2.9.1 Cost estimates were calculated for the six main route options during the original route appraisal undertaken in 2004, the results of which are presented in Annex E of the Local Transport Plan (July 2004). No cost assessment was completed for the green route, which was included towards the end of the process following public consultation.

2.9.2 The Red route was the most expensive route option at a cost of £145m due to the large amount of engineering works required for construction of the tunnel. The Brown and Orange routes were the cheapest options at an estimated cost of £50m each. The Purple route was estimated to cost £55m, and the Pink route £85m. The preferred Blue route was estimated at £60m.

2.9.3 Although the Blue route is not the cheapest option it has the least environmental impacts and is relatively low cost compared to the red and pink options.

2.10 Route Options Consultation

2.10.1 The six proposed Route Options for the BHLR were taken through public consultation and through consultation with statutory bodies in February 2004, following which a further southern alignment was added (Green). Public awareness and reaction was promoted by the circulation of a four page newsletter (with a questionnaire) circulated to some 65,000 households in Bexhill, Hastings, and Crowhurst, which detailed the Options, sought views via the questionnaire, and invited the public to attend a mobile exhibition.

2.10.2 From comments received from the questionnaires, 84% of respondents supported the principle of developing a link road. The Orange and Blue Routes were the most favoured options, with 37% of first choice votes received for the Orange Route and 24% for the Blue Route. Out of these two routes, people considered the Blue

Route would have the least impact on the environment. The remaining 39% of support for a link road was divided between the Red, Brown, Purple and Pink Routes in descending order of support. The Pink Route received the least support as people considered that it would not resolve the congestion problem on the A259 and also that the Route ran in close proximity to residential areas. The Red Route, at a proposed cost of £140million, was considered by a number to be too costly a scheme.

2.10.3 A smaller-scale local consultation was carried out independently by an action group in Crowhurst. These responses did not affect the overall ranking of the individual routes. About 10% of these responses indicated opposition to the principle of a link road, however a number expressed a concern about the potential increase in 'rat running' traffic with the scheme, the impact of the road on flooding issues, and increasing noise and pollution locally within the village.

2.10.4 The BHLR EIA Report contains a section on consultation detailing all public consultation and stakeholder input in the decision-making process.

2.11 Preferred Route

2.11.1 The Preferred Route Option for the Link Road which has been selected to take forward to planning application is essentially the Blue route described above, with some minor modifications made as the design has evolved since the consultation period on the different options. The finalised engineering design, completed on 15th November 2006, is presented in Appendix D (Preliminary Scheme Layout Sheets and 2, produced by Owen Williams Consultants).

2.11.2 The route will be 5.58km long from its junction with the A259 in Bexhill to its junction with the B2092 Queensway in Hastings. The first 1.5km section of the road (Bexhill Connection) will be located along the bed of an abandoned railway line cutting to pass through the built up area of Bexhill and constructed to a standard single two lane carriageway standard. The remainder of the road will be constructed to wide two lane single carriageway standard. The Link Road requires some property take at the western tie-in to the A259 in Bexhill, and the majority of this land and property has been acquired. Signalised junctions, including bus priority, will connect the western end of the Link Road with the A259 Belle Hill and A269 London Road in Bexhill, and the eastern end with the B2092 Queensway in Hastings.

2.11.3 The preferred alignment was selected to minimise adverse impacts on the broad Combe Haven valley that separates the towns. The Link Road skirts the northern side of the Combe Haven Site of Special Scientific Interest (SSSI) and runs just to the south of the Marline Valley Woods SSSI, as well as avoiding areas of semi natural ancient woodland to the north. The alignment was also designed to reduce the impact on Actons Farm, Adam's Farm, and Upper Wilting Farm, the latter two properties being Grade 2 listed buildings. The Blue

route has been modified to take this latter issue into account and now passes to the north of Upper Wilting Farm, rather than to the south as shown in the plan above.

2.11.4 The Link Road is seen as part of a “green” access corridor between Bexhill and Hastings and will be accompanied by a greenway to accommodate activities such as cycling, walking and horse riding. This has been designed so that over much of the length of the greenway the equestrian provision and the pedestrian and cycle route would be separate. Over these lengths the equestrian route would be a 3m wide track with 1m verges. The pedestrian and cycle route would be a 3m wide surface with 1m wide verges. Where it is not possible to separate equestrians from other users, the greenway would be increased in width and a 3.5m dressed bituminous surface provided. Grass verges would be either 2.5m on each side or 4m on one side and 1m on the other.

3 Design Evolution and Appraisal of Scheme

3.1 Introduction

3.1.1 The Preliminary Design for the BHLR scheme has evolved over a period of time. This sustainability appraisal has been undertaken based on the most recent version of the design (engineering design freeze November 2006); however, the sustainability appraisal process must be iterative to ensure that all aspects of the final proposal are taken into consideration.

3.2 Benefits of the SA

3.2.1 Although there is no statutory requirement to carry out a Sustainability Appraisal on the proposed BHLR scheme, SA can have many benefits and can support sustainable development in planning. Benefits of the BHLR SA include:

- providing a means to prevent, reduce and, as fully as possible, offset any potentially adverse environmental, social or economic effects resulting from the development of the BHLR;
- facilitating transparency by including consultee comments and making the results publicly available;
- facilitating an improved consultation process, including the rigorous assessment of reasonable route alternatives;
- providing a rigorous system for including environmental, social and economic factors in decision-making, thus supporting a sustainable approach; and
- providing clear information on the possible environmental, social and economic impacts of the proposed BHLR scheme, while building in better sustainability protection and outcomes.

3.3 Evolution of the Design

3.3.1 The six route options for the BHLR were taken to public consultation in 2004, where the community were involved in the selection of the preferred route (the Blue route). The design of Blue route preferred option is similar to the original put forward at the public consultation but with some minor modifications made as the design has evolved since the consultation period.

3.3.2 An Environmental Impact Assessment (EIA) Scoping Report for the BHLR has been completed by Mott MacDonald and was submitted for consultation in March 2006. The full EIA is ongoing and is anticipated to be completed by January 2007. On 15th November 2006, there was an engineering design freeze by Owen Williams Consultants Ltd so that the EIA and SA could assess the latest engineering designs.

Shortly afterwards there was an environmental design freeze once the results of the EIA had been determined.

3.3.3 The SA of the proposed BHLR scheme helped to inform both the design process and EIA in an iterative manner. The SA was updated by Mott MacDonald following completion of the EIA and will be further updated during the detailed design phase if considered necessary.

3.4 Sustainability Appraisal Consultation

3.4.1 As part of the planning process, the planning application is likely to be subject to statutory consultation with bodies such as the Environment Agency (EA), English Heritage (EH) and Natural England (formerly the Countryside Agency (CA) and English Nature (EN)). It is recommended that any preliminary responses from the statutory consultees should be obtained from East Sussex County Council and reviewed and monitored in the context of the findings of this SA report.

3.4.2 Although no formal consultation has been undertaken at this stage, all of the statutory consultees outlined above, in addition to ESCC, were contacted by Mott MacDonald by telephone and the scope of this SA discussed to ensure that the consultees were involved at an early stage. This SA report will also be issued for formal consultation to the statutory consultees prior to submission with the planning application, and will be subsequently updated with any comments from the consultees.

4 Baseline Conditions

4.1.1 In order to assess how the project accords with the principles of sustainability it is essential to understand the prevailing local economic, social and environmental conditions in East Sussex. The following section sets out a baseline profile for the locality of the proposed road from which it is possible to identify the key sustainability issues for the project.

4.1.2 More detailed baseline information for each topic area is presented within the Environmental Statement for the scheme (currently in preparation by Mott MacDonald, aiming for completion in January 2007).

4.2 Socio-Economic

Population

4.2.1 The socio-economic conditions in Hastings are particularly acute and the Government's Indices of Multiple Deprivation (IMD 2004) recognise Hastings as one of the most deprived areas in the South East. Hastings is the most deprived community in the South East and the 37th most deprived local authority in England, with SOAs in six of its 16 wards in the 10% most deprived nationally, and a further five wards with SOAs in the 20% most deprived nationally. Sidley in Bexhill is also disadvantaged containing SOAs in the worst 20% nationally.

4.2.2 With a population in Hastings of some 85,000 and in Bexhill of nearly 42,000, there are nearly 130,000 residents in the Regeneration Area defined as Hastings and Bexhill. However, only 50% of people living in Bexhill are of working age (16-64). The proportion of residents in Bexhill who are elderly is higher than the national average. Bexhill has nearly three times the national average of people over 75, with about 21% of the population in that category. The average age in Bexhill is 49, compared to a national average of 38. Rother as a whole has the second highest proportion of its population over 65 in the country and the largest proportion of its population over 85 of any local authority in the UK (Rother DC Economic Development Strategy 2004-2009).

Employment

4.2.3 There are some 30,000 jobs based in Hastings and 25,000 in Rother (NOMIS 2005).The Census 2001 data showed that at the time, out of some 35,000 employed residents in Hastings some 30,000 were employed within Hastings and Rother districts. Some 25,000 people worked in Hastings and approximately 5,000 worked in Rother District. Of the 33,000 plus employed residents in Rother District,

approximately 20,000 worked within Rother, and 5,000 in Hastings. A majority of residents therefore work locally. However, unemployment in Hastings stands at 3.9% and in Bexhill at 2.8% (NOMIS/ONS December 2006), which is significantly higher that the rest of East Sussex which stand at 2.1%, the South East at 1.6% and for UK at 2.5%.

4.2.4 Within Hastings, there is a heavy reliance on service sector jobs which accounts for over 60% of all jobs. Within this, public sector (public administration, education and health) accounts for two thirds of all service sector jobs and one third is accounted for by the distribution, hotels and restaurants sector (NOMIS 2005). Some 13% of jobs are in manufacturing and construction. Tourism accounts for 7% of jobs. Only 11% of jobs are in financial services which is considerably lower than the regional average of 23%. Within Bexhill, service sector jobs account for 56% of employment. Some 10% of jobs are in manufacturing and construction, 15% in financial services and 11% in tourism.

Economy

4.2.5 Average earnings for local residents are considerably lower than the South East and UK average by some 25-30%. Residents of the two towns have a higher proportion of unskilled workers than the rest of East Sussex and the South East. Skills are recognised as an issue for local residents of the Regeneration Area and could adversely affect the local population's ability to compete for jobs. The need for skills development in Hastings has been recognised within sub-regional and local policies and a number of initiatives and regeneration programmes are underway with objectives to contribute to an increase in a more highly qualified workforce. Key programmes including the Objective 2 Projects in Hastings, the Rother and Hastings Area Investment Framework, the Hastings Local Enterprise Growth Initiative (LEGI), the Greater Hollington Partnership Pathfinder Project, the Neighbourhood Renewal Fund and the projects being carried out by Sea Space for the Task Force's Five Point Plan (FPP) and Business Plan are identified in Chapter 2 of the Regeneration Statement. These projects are generally targeted on the most deprived wards, and accessibility to employment areas is implicit in the regeneration programmes.

4.2.6 The FPP has been translated into a Business Plan that was approved by the DTI in November 2003. It provides for a £341million public/private package of projects over 10 years to deliver 5,700 jobs and 100,000sqm of new business and education space in Hastings and Bexhill. Early progress on the ground is starting to have an impact:

- Hastings town centre has its new University Centre, the two Creative Media Centre buildings and a new £9 million railway station. Construction of the Lacuna Place office development is underway and work on the new main FE college will start this summer;

- Elsewhere, the Innovation Centre opened in 2006 and the Marina Pavillion revamp and conversion is underway. Restoration of the De La Warr Pavilion in Bexhill was completed in 2006 and land in the Ore Valley has been remediated and prepared for the Millennium Community development.

4.2.7 Rother District's Economic Regeneration Strategy 2004-2009 states that poor infrastructure contributes to its economic problems. Hastings' Regeneration Strategy (Making Waves) identifies that local transport improvements are required to provide improved access to jobs and training. The Hastings Local Plan for Employment Land states that there is a significant greater demand for smaller business units in the area than supply. With existing employment land in Hastings Borough nearly all taken up, the most important new land release in the future within the local area would be at the North East Bexhill Development. With future employment land allocations in the local area largely focused in North East Bexhill, the Scheme would provide improved access to these jobs from Hastings.

4.2.8 Consultation with businesses carried out for the Regeneration Statement (see Chapter 6 of the Regeneration Statement) has identified a view that congestion between Bexhill and Hastings is considered to have an impact on catchment areas for employees. There was a consensus that the current road infrastructure did not meet peak commuter requirements and that journey times during the peak periods were considerably greater than off-peak times. This was viewed to have an impact on employees, in higher fuel costs and frustration experienced with arguably impacts on productivity, and on employers in Hastings, by reducing the catchment area for employees to largely east of Bexhill. Some employees were viewed to have relocated from Bexhill to Hastings to overcome this problem. Some firms provided estimates of the impact on employment arising from improved road infrastructure with the North East Bexhill Development versus the status quo. This ranged from a productivity increase of around 1-2% to an increase in net employment of up to 20%. The downside included an estimate in excess of a 10% decline in employment if the Scheme did not happen.

Housing

4.2.9 The Draft South East Plan has identified that between 2006 and 2026 Hastings should provide 4,200 more new dwellings and the Rother part of the Sussex Coast sub-region should provide 4,000 new homes. Part of the 4,000 homes includes the 1,100 to be provided at north-east Bexhill. The expected growth in the number of households in Hastings and Rother would increase the supply of the workforce, the number of potential new business start ups and transport usage. Although car ownership in Hastings is currently low in comparison with the South East (Census 2001), this is expected to increase with the planned economic regeneration for the area.

Traffic Conditions

4.2.10 Acute congestion, particularly on the only link road between Bexhill and Hastings, A259 Bexhill Road, is a major constraint on economic activity in the area. This section of the A259 carries significant levels of traffic throughout the working day. Bus operations between Bexhill and Hastings are affected by the congestion and variable travel conditions, which in turn makes efficiency of operation difficult and costly. In addition, the A259 Bexhill Road has a very poor accident record, at some three times greater than the national average for this type of road.

4.2.11 Traffic through Bexhill and Hastings passes through a number of local communities and sensitive land uses. In Hastings, the main route takes traffic through a number of the most deprived wards. These areas suffer from high accident rates and a poor street crossing environment. In Bexhill, high traffic levels on Wrestwood Road impact on the local community and schools. Congestion on the A259 is also leading to 'rat running' of traffic along local roads between Bexhill and Hastings, impacting particularly on the communities of Henley's Downs and Crowhurst.

4.2.12 The interdependency and close proximity of Bexhill and Hastings, together with low car ownership levels (nearly a quarter of households in East Sussex do not have access to a car, which is higher than the regional average of 20% (LTP2 SEA Report, 2005)), means that it is important to foster opportunities to increase levels of cycling and walking. The distances are suitable for utility cycling, however, there are only limited cycle routes in the area. Part of the National Cycle Network Route 2 promoted by Sustrans runs along the A259 Bexhill Road, but it is not possible to provide a cycle way due to the severe congestion. However, it must also be taken into account that regeneration of the area is likely to result in increased car ownership levels. This reflects the regional priority of breaking the link between increased prosperity and the growth in the use of the private car, and therefore the importance of fostering opportunities for cycling and walking.

4.2.13 Data collected as part of the traffic model development process has been used to assess the baseline traffic conditions in this section. Journey times were recorded during the weekdays of 20-26 April 2004 and during 12-15 December 2005 by driving specific routes a number of times during different time periods. The results show that journey times are up to five times longer in the peak periods compared to the off-peak periods. Whilst the average journey times are given, there is also great variation in journey times between individual runs. This is indicative of the variability in journey times resulting from traffic congestion.

4.2.14 The journey time delays through Glyne Gap have been extracted and the results show that delays are considerably higher during the AM and PM peaks, and can be as long as 18 minutes, although there is great variability in the delays measured during the different journey

time runs within the same time period. Average delay through Glyne Gap can be up to two-thirds of the total average delay experienced in the journey from Glyne Gap to Harley Shute Road junction and indicates that Glyne Gap is a bottleneck on the A259 between the two towns.

4.2.15 An unclassified road runs from Catsfield eastwards through the Parish, and through Crowhurst to join the B2092, Crowhurst Road at Upper Wilting. This is a well known rat-run used by people driving between areas to the west and the northern parts of Hastings and St Leonards. The rat-run traffic is particularly bad during the peak periods and discussions with the local Parish Councils have raised safety concerns from road traffic collisions along this stretch of rural road. From interrogation of the road side interview survey data collected in 2004, there is an evidence base that almost 50% of the traffic over the day is travelling between Bexhill and Hastings or to and from destinations beyond.

Public Transport

4.2.16 Bexhill Railway Station provides the main transport node in Bexhill with buses stopping nearby. Similarly St Leonards Warrior Square Railway Station provides an interchange between train and a number of bus services.

4.2.17 Hollington Tesco Superstore provides a focus and turning point for a number of bus routes. These bus routes do not serve the nearby Churchfields and Castleham Industrial Estates which are a 15 minute walk away. Conquest Hospital on The Ridge provides another focus for bus routes and there is a bus shelter and turning facility within the Hospital Grounds.

4.2.18 The Conquest Hospital serves Hastings and Bexhill, and outlying areas including Battle and Rye. It is located on the northern edge of Hastings approximately 4km north of the centre of Hastings, 8.5km from the centre of Bexhill and 6.5km from Battle.

4.2.19 Currently the Conquest Hospital is served by seven bus services, most of which run by various routes from the centre of Hastings. Whilst there is a regular bus service to and from Hastings, buses serving the surrounding area are few. People in Bexhill have to change buses in Hastings town centre to and from the Conquest Hospital. There is only one service each weekday in each direction which can take passengers directly between Bexhill and the Conquest Hospital. Some of the bus services serve areas beyond Hastings and St Leonards-on-Sea such as Rye, Guestling, Bexhill, Westfield, and Northiam.

Community Transport Services

4.2.20 For those who qualify there are voluntary car services available to take them to and from The Conquest Hospital as follows:

- The Conquest Hospital Car Service is available for two visits per week by family members to in-patients at the Hospital. Arrangements for this have to be made through the relevant ward staff;
- The designated timetabled service provided by Battle Area Community Transport can divert to pick up passengers with mobility difficulties who live up to half a mile off -route; and,
- Dial-a-Ride and Voluntary Car Services are available in Bexhill, Hastings and Rye.

4.2.21 Bexhill Caring Community (BCC) offers a range of services including: home visits; shopping and collecting pensions; organising outings; library; Dial-a-Ride; and a voluntary car service. Dial-a-Ride is also a door to door transport service and is available to anyone over 18 living in the Bexhill area and unable to use conventional public transport. Journeys can be made for shopping, visiting friends, hospital visits, hairdressers, etc, within the local area. Dial-a-Ride Hastings provides a door-to-door wheelchair accessible transport service for people of all ages who find it difficult or impossible to use public transport. The service operates Monday to Friday within the Borough of Hastings and St Leonards. Dial-a-Ride Hastings carries out 16,000 client movements a year.

4.2.22 Battle Area Community Transport runs three round trips to the Conquest Hospital each weekday except Monday with an accessible 16-seater bus. The bus can divert to pick up passengers with mobility difficulties who live up to half a mile off the route. The service has carried up to 200 people a month to Conquest Hospital. This minibus also serves the villages around Battle and funding is provided by ESCC, the Rural Development Commission and Battle Town Council, with financial assistance from a number of smaller donors. There is no restriction on who can use this service.

Bexhill and Conquest Hospitals

4.2.23 The area around the Scheme now comes under one Primary Care Trust (PCT) - the Hastings and Rother PCT - which was established on 1st October 2006 by the amalgamation of Bexhill and Rother PCT and Hastings and St Leonards PCT. The main hospitals in the Hastings and Rother PCT area are the Conquest Hospital on The Ridge in St Leonards and Bexhill Hospital on Holliers Hill in Bexhill. Both these hospitals are run by the East Sussex Hospitals NHS Trust together with the Eastbourne District General Hospital and a number of smaller specialised units.

4.2.24 The Hospital Trust is a major employer for the area, employing 5,180 staff across the Trust, with 2,300 based at the Conquest site. Consultants, nursing staff and managers travel largely by car to the

Conquest and between the Conquest, Bexhill and Eastbourne hospital sites. In consultation with the hospital's Travel Plan Co-ordinator, their key transport issues included the current road traffic congestion and journey time reliability between their sites and the time spent in traffic congestion by their staff represents an appreciable loss of manpower. The hospital is keen to minimise staff travel by car both on inter-site journeys and journeys to work

4.2.25 The hospital has 1,040 car parking spaces, of which 270 (26%) are for visitors, 743 (71%) are for staff, and a further 27 are for disabled people. These parking spaces are generally fully occupied. The Hospital viewed that the majority of visitors come by car. The visitors' car park is generally full and congested with cars queuing for spaces. A survey carried out by the NHS Trust in October 2004 showed that 89% of staff cars parking at the hospital only contained one person, whilst only 56% of visitors' cars had a single occupant. Peak flows were between 0730 and 0830 where some 600 cars entered the hospital car parks.

4.2.26 Bexhill Hospital is run by Bexhill and Rother Primary Care Trust. It mainly operates an outpatient's service, although it does also have a Day Surgery unit. The hospital has a health centre onsite and a rehabilitation unit for elderly people. There is limited car parking on site which is not charged and people tend to park on local streets around the hospital.

4.2.27 The Strategic Health Authority Area has been recently expanded to include Kent and Medway counties (as well as Surrey and Sussex). As part of these changes, there is a move to rationalise NHS services. The East Sussex NHS Trust is in the process of preparing options for consultation for service rationalisation. From discussion with the Trust, plans have not yet reached a formal consultation stage. Formal public consultation is due to take place in February 2007 and is expected to take three months.

Emergency Services

4.2.28 Since 1st July 2006 ambulances in East Sussex have been operated by the South East Coast Ambulance Service NHS Trust. This includes the operation of emergency ambulances with paramedics, rapid response vehicles and motor bikes, urgent GP referral service and the Patient Transport Service. The Ambulance Service currently operates from Ambulance Stations where the vehicles are stored in garages and there are facilities for the crews. Here the crews clean, prepare and restock their vehicles and stand-by for calls. However, in the future, the Ambulance Service will change from the present Ambulance Stations to Make-Ready Centres with Standby Centres. An ambulance will return after each shift to its Make Ready Centre where it will be cleaned, deep cleaned, maintained and restocked, as necessary, by dedicated staff, instead of the Ambulance crews who are currently doing this work. At the beginning of a shift a crew would then take a clean, restocked ambulance from a Make-Ready Centre

to a strategically located Standby Centre which will have the basic rest facilities.

4.2.29 The target emergency response time for an ambulance is 8 minutes - 6 minutes following 2 minutes for receiving instructions. Standby points will be established in areas which are further than 8 minutes from an Ambulance Station, where ambulances can be posted in readiness

4.2.30 The East Sussex Fire and Rescue Service have four stations in the Bexhill/Hastings area: at Bohemia Road and The Ridge in Hastings; at Beeching Road in Bexhill and at London Road in Battle. Target response times for the Fire and Rescue Service are 9 minutes and 13 minutes: 50% of emergencies should be reached by the first appliance within 8 minutes and 90% within 13 minutes. The selection of fire stations to mobilise appliances to an emergency is based on predetermined response times to the location. Predetermined response times are computed using OS TNL layers and legal speed limits. Modelled travel times are compared with observed emergency travel times and the response times corrected manually.

Educational Facilities

4.2.31 There are currently some 9,500 children of primary school age (July 2006) attending schools in Bexhill, Hastings & St Leonards, Ninfield, Catsfield and Crowhurst. These schools have a capacity of 9,845 places (leaving a spare capacity of 345 spaces). Trends show that the numbers of children in the study area of primary school age will begin to fall significantly in the near future, leaving more spare capacity in the primary schools. From the autumn term of 2006, ESCC will conduct a review of primary school places, starting with those within Hastings and St Leonards, and focusing upon managing the decline in primary school numbers.

4.2.32 There are currently some 7,380 11-16 year old students in the Hastings and St Leonards and Bexhill areas (July 2006), and schools' capacity is placed at 7,616 places. There are 462 students within the Hastings and St Leonards and Bexhill areas attending 6th form college in one of the 5 colleges that offer this. ESCC has been invited to take part in the Building Schools for the Future (BSF) One School Pathfinder programme. This programme offers to fund the complete or partial rebuild of one secondary school in the county by September 2009. Schools are judged against a set of criteria. Amongst others in the County, Bexhill High School will be one of those put forward, therefore long term future plans for this school are not certain until the results of the programme are known.

4.2.33 In Hastings and Rother, the Sixth forms at Filsham Valley School, The Grove School, and Hillcrest School as well as Thomas Peacocke Community College in Rye, will close after the September 2007 intake and post-16 provision will be delivered in future by Hastings

College of Art and Technology (HCAT), Hastings New College (HNC), William Parker School and Helenswood School.

4.2.34 The North East Bexhill Development Masterplan proposes a potential future primary school to serve the population of the new housing development. However this is not a certainty and the need for a school at this location will be studied as part of the overall primary school review to be conducted by ESCC.

4.2.35 A number of Independent Schools are located in the Study Area: Battle Abbey Nursery and Preparatory School (17), Claremont Preparatory School (56), Bexhill College (57), and St Mary's Special School & College (16), which are located between Pebsham and Sidley; and Battle Abbey Secondary School (5) in Battle.

Local Shops and Community Facilities

4.2.36 The Hastings Local Plan sets out the Shopping Centre hierarchy for the town and its shopping strategy. A list of local shopping areas was obtained from Rother District Council. The role of centres in Hastings and Bexhill are listed in Table 5.1. Of particular relevance to this Scheme are West St Leonards, Bexhill Road, Sidley High Street, and Ravenside Retail and Leisure Park at Glyne Gap.

Table 5.1: Shopping Centres in the Study Area

Location	**Role**
Hastings	
Hastings Town Centre	Sub-regional Centre
St Leonards (including Marine Court)	District/ Speciality Centre
Old Town	Speciality/ Local Centre
Silverhill	District Centre
Ore	District Centre
Bohemia	Local/ Speciality Centre
West St Leonards (Bexhill Road)	Local Centre
Battle Road	Local Centre
Mount Pleasant	Local Centre
Mount Road	Local Centre

Location	Role
Bexhill	
Bexhill Town Centre	Town Centre
Ravenside Retail and Leisure Park	Out of Centre Retail Park
Sidley	District Centre
Little Common	District Centre
London Road	Local/Speciality Centre
Battle and Rural Areas	
Battle	Town Centre

4.2.37 Sidley Community Centre, the Parish Church, Sidley surgery (which caters for over 15,000 patients), All Saints C of E primary school and Sidley Community primary school are located close to the A269 Ninfield Road. The Sidley Community Centre is very active with a Family Service Department, a Young People's Centre, the Rainbow Childcare Centre, a UK Online Centre, a Learning Link and the Sidley Friendship Group offering services to the upper age group. The Family Service Department and The Rainbow Childcare Centre are funded by Sure Start Bexhill and Sidley and the County Council and by fees paid by parents. The Family Service Department offers a range of support and activities for families with children up to 11 years of age. The Childcare Centre provides for up to 30 children aged 0-5 years.

4.2.38 The Ravenside Retail and Leisure Park is located at Glyne Gap to the east of Bexhill Town Centre and has a floor area of some 23,000m2 over 16 units with 880 car parking spaces. It has a food superstore, fast food restaurant, ten-pin bowling alley, and a Leisure Pool. The main tenants are Homebase, Currys, PC World, Tesco, Boots, Iceland and Comet.

4.3 Environmental

Geology and Soils

4.3.1 According to the British Geological Survey (BGS) 1:50000 Sheet 320/321 the entire route is underlain by the Cretaceous Hastings Beds which themselves can be sub-divided into Ashdown Beds and Wadhurst Clay. Superficial alluvial deposits of Quaternary age are present in the central section of the proposed route.

4.3.2 The Ashdown Beds comprise sandstones, siltstones and mudstones with some subordinate beds of lignite. The total thickness of this formation is likely to be between 180m and 215m. The Wadhurst Clay underlies the superficial deposits along certain sections of the route. The Wadhurst Clay comprises mainly grey mudstone which weathers to mottled greenish grey and khaki coloured clays and is between 35m and 60m in thickness.

4.3.3 The alluvial deposits consist of mottled greyish brown silts and clays with some small developments of peat. The alluvial deposits are associated with the streams and tributaries which cross the proposed route alignment including Watermill Stream, Powdermill Stream and Combe Haven.

4.3.4 The 1:50000 BGS Sheet 320/321 indicates that the site is situated on the southern limb of the Wealden Anticlinorium, a roughly WNW-ESE trending domed structure incorporating the rocks of Cretaceous age beneath the site. Faulting is associated with the folding, and the major faults in the region including the Old Town, Sidley and Wilting Faults. The majority of the proposed route is within a block roughly made by these faults.

4.3.5 There are no recorded coal mining hazards within 250m of the study area. Several low risk shallow mining hazards are identified within the Envirocheck report, located within 30m of the proposed route. These hazards relate to possible historical chalk mining in the area and so the presence and exact location of these features is often unknown and undocumented.

4.3.6 Although it is not considered likely that the site will contain significant contamination resulting from its agricultural usage, the presence of contaminated materials at the site cannot be precluded and both geotechnical and contaminant site investigations will be undertaken post-planning application.

4.3.7 The Combe Haven and Marline Valley Woods SSSIs are designated for their ecological interest, although the local geology does contribute to their designation. There are no Regionally Important Geological and Geomorphological Sites (RIGS) present along the scheme, the nearest being Galley Hill and Little Galley Hill approximately 2km southeast of the proposed route. This would not be affected by the scheme.

Landscape and Visual

4.3.8 The study area comprises the Combe Haven Valley, surrounding landscape and townscape, and the High Weald AONB.

4.3.9 The landscape to the north of Bexhill is dominated by the Combe Haven Valley and surrounding ridges. This broad, flat-floored main valley curves north then west, with its ecologically important and

visually distinctive wetlands, notably the Filsham reed beds, and particularly its broad, open floor, is the focus of the study area. The tributary valleys running in to the Combe Haven Valley create a ridge and valley system, particularly on the north side of the Combe Haven.

4.3.10 Settlements within the study area include the urban area of north Bexhill, the western edges of Hastings and the village of Crowhurst to the north. Other wise there are scattered farms, usually on the surrounding ridges. Some of these are small settlements with several residential buildings associated with the farms for example Hillcroft., High House Actons and Worsham Farms.

4.3.11 The area has local value as accessible, attractive countryside, with public and permissive footpaths.

4.3.12 The Combe Haven valley floor and main tributary valleys are floodplain grassland. There are fields within the floodplain where scrub is encroaching and changing the open nature of the valley. The historic pattern of drainage channels support reeds and other wetland habitat species, the Filsham and Glyne Gap reed beds are significant landscape and habitat features. Above the floodplain on the valley slopes there is a mix of arable, rye grass ley and pasture.

4.3.13 The surrounding ridges support significant areas of woodland, much of which is semi-natural ancient deciduous woodland. The largest area of woodland is in the west of the study area between Combe Haven Valley and Watermill stream, notably Cole Wood, Park Wood and Hanging Wood.

4.3.14 The agricultural fields on the slopes surrounding the main Combe Haven valley are generally enclosed by mature hedges with scattered mature trees. There is a strong hedge structure on the north slopes of the Combe Haven Valley between Adams Farm and Upper Wilting Farm. The hedges, tree belts and woodland on these slopes give this area a heavily wooded appearance.

4.3.15 Most of the Combe Haven Valley is in mixed agricultural landuse. The open levels which are subject to seasonal flooding and are under pasture. There are areas of arable farming on the slopes rising out of the valley. The urban areas through which the scheme passes are mainly residential with some commercial centres. There is a large caravan holiday park on the eastern slopes of the Combe Haven Valley and a reservoir used for fishing adjacent to Queensway. Queensway is also the focus of urban edge industrial estate developments.

4.3.16 East Sussex contains a large proportion of the High Weald Area of Outstanding Natural Beauty (AONB). The area is characterised by rolling hills, small, irregular fields, abundant woods and hedges, scattered farmsteads and sunken lanes. The total area of the High Weald AONB is 145,707 hectares, making it the largest AONB in South East England and the fourth largest in England and Wales. The

southern boundary of the AONB lies a short distance to the north of the proposed BHLR route.

4.3.17 Hastings has over 13km of beach and coastline, and approximately 300 hectares of open/recreational space and is considered to have a quality local environment (Hastings Borough Council LDF SA Report, 2005).

Cultural Heritage and Archaeology

4.3.18 The area surrounding the scheme contains a rich and diverse series of cultural heritage features. Key amongst these are:

- The Combe Haven Valley alluvial deposits with their deep stratified palaeo-environmental and archaeological deposits;
- The scheduled remains of the later medieval chapel of St Mary's, one element of Bulverhythe medieval village;
- The archaeological remains of early occupation and early iron industry;
- The surviving historic rural landscapes along the northern half of the Study Area;
- Surviving Post Medieval decoy ponds;
- The concentrations of small-scale dispersed historic settlement; and,
- The historic cores of Bexhill and Hastings.

4.3.19 Hastings itself has an attractive and diverse environment including historic buildings, good quality parks and open spaces, sea views and a hilly landscape of valleys and ridges. There are 17 conservation areas and 890 listed buildings. The town has a rich heritage of historic buildings including the medieval Old Town, the Victorian town centre and the regency splendour of parts of St Leonards. (Hastings Borough Council LDF SA Report, 2005)

4.3.20 There are no Scheduled Monuments, Registered Parks and Gardens or Historic Battlefields within the study area for the cultural heritage chapter of the Environmental Statement. However, there are nine Listed Buildings within the study area, all of which are Listed at Grade II. These comprise:

- OA 407 Bynes Farm;
- OA 408 Royal Oak Cottage;
- OA 409 Adam's Farmhouse;
- OA 410 Upper Wilting Farmhouse;
- OA 411 Mayfield Farmhouse;
- OA 415 The New Inn;
- OA 419 50, 52 and 54 Belle Hill;

- OA 420 60 Belle Hill; and
- OA 421 74 Belle Hill.

4.3.21 There are also two Archaeologically Sensitive Areas within study area, designated by ESCC. These comprise:

- OA 124 Archaeologically Sensitive Area, around the location of a Roman bloomery site (OA 109); and
- OA 125 Archaeologically Sensitive Area, around the historic core of old Bexhill and the site of the Napoleonic barracks, the majority of which lies outside of the Study Area.

4.3.22 There no other Cultural Heritage Designated Sites within, adjacent, or extending into the Study Area.

4.3.23 There are a large number of extant hedgerows within the study area, each of are individual features of the Historic Landscape. A high proportion of the hedgerows meet the historical value criteria to be designated as 'Important' under Schedule 1 to the *Hedgerow Regulations 1997*.

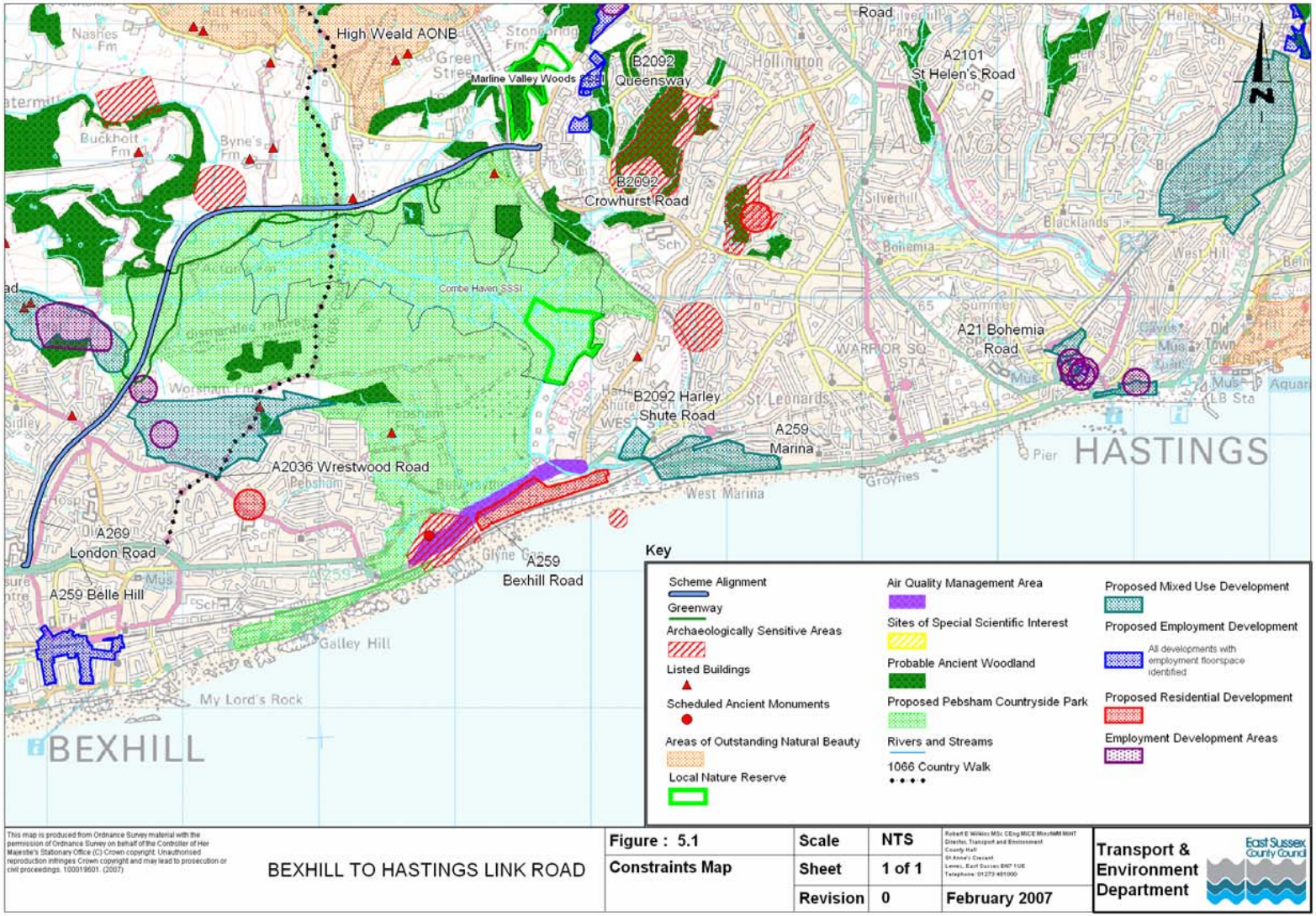
Ecology

4.3.24 There are no Ramsar Sites, Special Areas of Conservations, Special Protections Areas or National Nature Reserves within two kilometres of the Scheme. However, two Sites of Special Scientific Interest (SSSIs) eight Sites of Nature Conservation Importance (SNCIs) and three Local Nature Reserves (LNRs) (Table 5-2 and Figure 5-1) are within this distance and all of these except two SNCIs are within 500m.

Table 4-2: Designated sites within 2km of the proposed route

Site Name	Area (ha)	Grid Reference	Minimum distance from centre-line of scheme (km)	Description
Combe Haven SSSI	156	TQ 770 102	0	Wet alluvial meadows, reedbeds, one of the largest t in East Sussex.
Marline Valley Woods SSSI and LNR	55	TQ 780 122	0.05	Important area of ancient woodland and neutral grassland. Rich stream flora, Pedunculate Oak-Hornbeam woodland and species-rich unimproved grassland.
Filsham Reedbed LNR (within SSSI) Coombe Haven	18	TQ 778 097	1.2	
Church Wood and Robsack Wood LNR and SNCI	29.5	TQ 785 113	0.5	Ancient natural woodland, gill woodland, freshwater streams and semi-improved meadow.
Woodland Complex at Buckholt Farm SNCI	53	TQ 74 10	0.125	Five ancient woodlands, predominantly abandoned hornbeam coppice with oak standards. Derelict ponds and streams.
Disused railway, Bexhill SNCI	19	TQ 746 092–TQ 761 101	0	Track bed and cuttings, which support a variety of habitats including secondary woodland, scrub, and tall herbaceous plants linking areas of adjacent woodland and scrub.
Disused railway, Crowhurst SNCI	12.2	TQ 763 116	0	Track bed, embankments and sides of cuttings with woodland, species-rich grassland, open area and disused pits.
Old Filsham Golf Course SNCI	9.98	TQ 783 100	1	Part of a network of sites linking the Wishing Tree SNCI, Filsham Reed Beds LNR and Combe Haven SSSI. Developing scrub and open meadow habitats, which graduate from the wetland fen to surrounding mature semi-natural woodland.
Churchwood Complex and Meadows SNCI (Ha9)	27.6	TQ 785 113	0.5	Remnant ancient woodland with mainly sweet chestnut coppice and a hornbeam dominated ghyll stream. Meadow is semi-improved grassland.
Ponds Wood SNCI	21.8	TQ 792 105	1.6	Two transitional meadow habitats and woodland habitats with running and standing water.
Wainwright Close SNCI	0.5	TQ 778 114	0.4	Mixed habitat of species rich grassland, scrub and pond.
Wishing Tree SNCI	20.9	TQ 780 105	0.2	Matrix of substantial habitats with semi-improved meadow, open water and woodland.

Figure 4-1: Map of Environmental Constraints



4.3.25 There are several priority habitats identified in the Sussex Biodiversity Action Plan (BAP), including ancient and species-rich hedgerows, alluvial grassland and arable margins, broadleaved semi-natural woodlands of Decoy pond Wood, Chapel Wood and Hanging Wood. These habitats contain several BAP and protected species including Badgers, Dormouse, several species of bat, Skylark, Song Thrush, Reed Bunting and Great Crested Newt.

4.3.26 It is apparent from previous surveys that the study area has a large badger population. This work showed particularly dense concentrations of active setts round the edges of the Combe Haven Valley from which the badgers feed on the grassland below.

4.3.27 Bat surveys completed in 2004 confirmed that species present in the study area included: Common Pipistrelle; Brown Long-Eared; Myotis sp, Noctule and Serotine. They indicate that the study area supports a good, but not exceptional range of bats. The main centres for activity were Adam's Farm where a Brown Long-Eared maternity roost and a hibernating roost may be present but due to access problems this could not be confirmed and Upper Wilting Farm where a Brown Long-Eared roost of unknown status was located. Foraging was recorded throughout the area, but Adam's Farm, Acton's Farm (notably north of the farm around hedges OA504/3) and the disused railway line were the areas with greatest activity. The mature trees of the latter provide good foraging habitat and a number of roosting opportunities in the trees and bridges

4.3.28 Dormice were known to be present in Marline Valley Woods in considerable numbers and in the woods and scrub south from Marline Woods SSSI to Upper Wilting Farm. It was confirmed by the recent survey that Dormice are present over a wide area and a number of the hedgerows that support them would be crossed by the BHLR scheme.

4.3.29 Sussex is one of the few counties where otter recovery is still tenuous (Species Action Plan for Sussex, Otter, 2002). The Sussex Otters and Rivers Partnership have four records for the area, three from Filsham Reedbed and Combe Haven Valley SSSI in 2001 and one near Galley Hill, Bexhill Seafront from 2002. It is quite possible that the 2001 records were of the same individual.

4.3.30 Although water voles were common in Combe Haven until recently, only one water vole was found in the whole of the area of search. This was near the Southern Water Sewage Works. Evidence of Mink (*Mustela vison*) was extensive and it is quite likely that they have removed the water voles.

4.3.31 Water shrews were found to be present at three out of 16 survey sites, two of which are on the line of the route. However, it is quite possible that the species occurs in other areas of wet grassland and fen. Terrestrial shrews were present at seven of the 16 sites.

4.3.32 The Combe Haven valley as whole is important for spring and autumn passage. Survey for the BHWB noted 83 species in late summer/early autumn, principally on passage. Breeding bird surveys were undertaken in 2005-6 and a wintering bird survey in 2006. The following Red List species were recorded: Turtle Dove, Skylark, Song Thrush, Starling, House Sparrow, Linnet (Acanthus cannabina), Bullfinch, Yellowhammer and Reed Bunting. The following Amber List Species were recorded:- Mute Swan, Kestrel, Black-headed Gull (Larus ridibundus), Herring Gull (Larus argentatus), Stock Dove, Cuckoo, Barn Owl, Green Woodpecker (Picus viridis), Sand Martin (Riparia riparia), Swallow, House Martin, Meadow Pipit, Yellow Wagtail, Dunnock (Prunella modularis), Stonechat, Mistle Thrush and Hawfinch.

4.3.33 Barn Owls breed at Byne's Farm and Acton's Farm; the species is listed under Schedule 1 of the Wildlife & Countryside Act 1981 (as amended) and under this act is afforded additional protection against disturbance at the nest.

4.3.34 Great Crested Newts were not found in any of the ditches in the floodplain even though these are slow flowing and provide suitable potential habitat. However, they were noted in a number of ponds within the study area.

Noise and Vibration

4.3.35 Traffic noise is the main feature of the local noise climate for many locations in the area. There are no significant industrial noise sources in the area. Many locations are remote and do not have traffic noise. Ambient noise in the area is therefore likely to be dominated by traffic from the surrounding roads, particularly during the summer holiday season.

4.3.36 The topography in the area is complex and this significantly affects noise propagation. Buildings and other structures can effectively screen some locations. Thus, a house affected by noise on one side may provide effective screening to windows or other buildings on the side away from the road. Local structures may cause levels to be lower than indicated from noise modelling results.

Water Resources

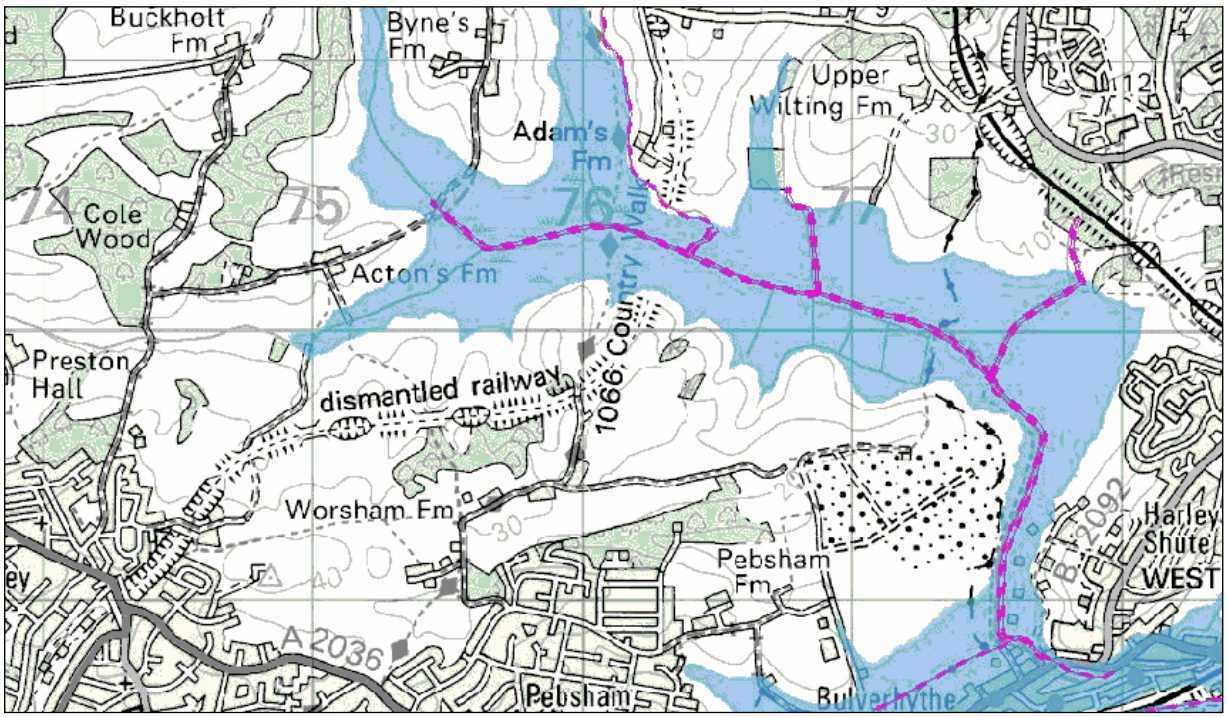
4.3.37 There are ten streams present within the study area. The principal river is the Combe Haven. The Combe Haven lies to the north-east of Bexhill and to the west of Hastings. Most of the valley floor is below high tide level and a tide flap at Bulverhythe prevents tidal flooding. The valley is therefore partially tide-locked and the Combe Haven only discharges to the sea during part of the tidal cycle. Part of the Combe Haven Valley lies within a flood risk area designated by the Environment Agency, the geographical extent of which is presented in Figure 4-2.

4.3.38 The Combe Haven catchment is predominantly rural in nature and covers an area of 51.5km^2. The catchment comprises 10 sub-catchments including its tributaries; the Watermill Stream, Powdermill Stream, Decoy Stream, Spring Ditch, Pebsham Stream and Hollington Stream. The two largest catchments, the Watermill and the Powdermill represent about 61% of the total catchment area. The Powdermill drains the area to the north of the catchment and is the only major tributary with any significant urban settlement; the village of Crowhurst.

4.3.39 The Egerton Stream catchment is 4.2km^2 and is predominantly urban in nature lying almost entirely within the Bexhill development area. Egerton Stream rises to the north-west of Bexhill in the Sidley area of the town and flows south-east through the gardens of residential properties until it joins the route of the disused and abandoned railway via a culvert.

4.3.40 The Combe Haven Valley contains a number of sites designated for their conservation value. This includes Combe Haven SSSI, and Filsham Reed Bed LNR. The SSSI contains a large expanse of alluvial meadows and the LNR is the largest reed bed in East Sussex. Both of these habitats are strongly influenced by the current hydrological conditions within the catchment.

Figure 4-2: Environment Agency Flood Map



4.3.41 Under the WFD Combe Haven, Watermill Stream and Powdermill Stream are all provisionally identified as “at risk” and classified as heavily modified water bodies (HMWB). The main rivers feeding the

upstream reaches of the Combe Haven are of 'good' quality, Watermill Stream has an RE Target of RE2 (meaning water of good quality and suitable for all fish species) which it is compliant with. Powdermill Stream has an RE Target of RE 3 (meaning water of fairly good quality suitable for high class coarse fish populations) which it is also compliant with. Combe Haven has a RE Target of RE 4 (meaning water of fairly good quality suitable for class coarse fish populations) which it is marginally compliant due to saturation levels of dissolved oxygen. Watermill and Powdermill Streams have chemical and biological GQA grades Grade A/B (very good to good). Downstream of Decoy Pond Stream the chemical water quality in Combe Haven appears to deteriorate (possibly as a result of ditches draining the south-east of the catchment and from the Gorringe Stream System) with a chemical GQA grade of E (poor). Biological GQA for this reach of Combe Haven is Grade B (good).

4.3.42 Water consumption has dramatically risen over the last 25 years such that we consume 50% more water than we did 25 years ago. The South East is one of the driest regions in the country; It is also a region with high forecast population growth. Water supply and treatment is supplied by Southern Water Services (SWS) (Hastings Borough Council LDF SA Report, 2005).

4.3.43 Over 70% of SWS water is from underground sources known as aquifers, the remainder is from rivers (25%) and groundwater's (5%). This makes the area vulnerable in times of drought and if climate change alters the rainfall pattern. To help safeguard water supplies in Hastings a 29km pipeline has been installed between Bewl Water Reservoir and the water supply works at Ninfield. This will enable water from the Medway area to be used in the Hastings (and Bexhill) areas. Average water consumption per person in Hastings is 160 litres per day, which is equal to the average consumption in the southeast (150-165 litres per day). (Hastings Borough Council LDF SA Report, 2005).

4.3.44 The EA Groundwater Vulnerability map Sheet 46 shows that the scheme is underlain by a Minor aquifer along its entire route. Minor Aquifers have sufficient groundwater resource to supply local abstractions and support base flow to rivers, but are not usually capable of supporting large abstractions such as public potable water supplies. The Minor Aquifer in the vicinity of the scheme comprises the sandstone bands within the Wadhurst Clay and Ashdown Beds.

4.3.45 Clay bands within the Wadhurst Clay and Ashdown Beds are classified as Non-Aquifers, and the borehole logs produced along the scheme route indicate that the majority of the scheme is predominantly underlain by such clay bands. Therefore, it is considered that the classification of the area as a Minor Aquifer is conservative.

4.3.46 Groundwater elevations along the scheme route have been measured by Owen Williams between March and June 2006. The depth to groundwater is predominantly at or very close to the ground

surface, especially in low lying ground adjacent to surface watercourses. It is thought that groundwater provides a source of baseflow to the streams and to the man-made drainage channels in low lying areas.

Air Quality and Climate

4.3.47 Air quality in the Bexhill Hastings area is generally good (i.e. within relevant air quality criteria) particularly in the more rural parts of the scheme area. However, air pollutant concentrations are elevated near to busy roads. Hastings Borough Council's (HBC) 'Review and Assessment of Air Quality' report confirmed that the 24-hour mean Air Quality Objective for particulate matter (PM10) as prescribed in the Air Quality (England) Regulations 2002 and 2003, is likely to be breached in the A259 Bexhill area.

4.3.48 In accordance with Part IV of the Environment Act 1995, HBC has designated an Air Quality Management Area (AQMA) along the Bexhill Road on the basis of PM10. This has placed a responsibility upon HBC to prepare and implement an Air Quality Action Plan (AQAP) to tackle the pollution problem, which was adopted by HBC in October 2005. The key actions of the AQAP are outlined in annex 6 of the Local Transport Plan 2 (LTP2), one of which is the implementation of the link road scheme.

4.4 Implications for the Project

4.4.1 The Hastings and Bexhill areas suffer from social deprivation, higher than average unemployment rates, poor education standards and limited access to employment opportunities for residents. The BHLR should help to improve conditions by opening up transport links and accessibility to employment areas and community services. It is identified in the emerging South East Plan (SEP) (Implementation Plan) as an essential piece of infrastructure, and SCT9 of the SEP notes that without all the improvements listed in the Implementation Plan the development strategy will not succeed.

4.4.2 The BHLR forms an important part of improving mobility along regional spokes, and assists with improving intra regional connections, whilst also releasing land for housing development and employment land. It is the first stage in realising the longer term development strategy for the area; without it and the Baldslow link, a western "country avenue" needed to release more housing land to the west of Bexhill will be unlikely.

4.4.3 Congestion on the A259 is a major constraint on economic activity in the area. Bus operations are also affected by the congestion, making efficiency of operation difficult and costly. The high levels of congestion mean that the A259 has a poor accident record and poor air quality, with an AQMA designated for the area. The BHLR is will help to reduce congestion on the A259 by providing an alternative link

between Hastings and Bexhill. This should help to improve road safety, bus efficiency and local air quality.

4.4.4 Hastings has low car ownership, which means it is important to provide opportunities for cycling and walking. The Greenway, proposed as part of the scheme will provide a footpath and cycle route through the countryside. However, without careful management, car ownership and use will rise as prosperity increases. In terms of mass transit, priority should therefore be placed on improving and expanding bus services.

4.4.5 A recent Housing Needs Survey indicated that there is a current shortage of affordable housing. The construction of the BHLR will enable the development of the Sidley and Pebsham commercial and housing areas in north Bexhill which are dependent on completion of the Link Road for planning permission. The BHLR therefore plays a major role in the development strategy for the area in both the short and long term.

4.4.6 The area contains the High Weald AONB, Combe Haven Valley SSSI, Marline Woods SSSI, and the Disused Railway SNCI. The BHLR will have to take careful consideration of these areas and propose appropriate mitigation measures to deal with noise intrusion and loss of habitats.

5 Approach to Sustainability Appraisal

5.1 SA Methodology

5.1.1 The SA methodology is based on the ODPM guidance 'Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents' (November 2005). However, because the SA process has been applied to a project and not a plan or programme, aspects of the guidance have been drawn upon where we consider them to be relevant.

5.1.2 The SA involved the following tasks:

Stage 1 – Review of relevant policies, plans and programmes

5.1.3 This stage involved a thorough examination of relevant planning policy guidance and best practice relating to sustainable development and project sustainability.

5.1.4 Deliverable - A register of policies was prepared and implications for the development assessed (see Appendix A).

Stage 2 – Review of baseline conditions and identification of sustainability issues

5.1.5 A review of socio-economic and environmental baseline conditions at the project site was undertaken to identify the key sustainability issues associated with the proposed project. This information was obtained from previous studies undertaken by the BHLR project team.

5.1.6 Deliverable - A baseline review of key issues as part of Project Sustainability Statement (see Section 5).

Stage 3 – Development of a Sustainability Framework

5.1.7 A Sustainability Framework was developed in the form of a series of objectives, targets and indicators with which to measure the performance of the project and any options or alternatives. The sustainability objectives have been aligned to the SEA Directive, relevant polices, plans and programmes and the overall development framework objectives, and were agreed during a workshop with ESCC in June 2006.

5.1.8 Deliverable – Alignment matrix and Criteria or objectives to review the performance of the scenarios (see Table 6-1 and Appendix B).

Stage 4 – Testing the BHLR project objectives and the development options against the Sustainability Framework

5.1.9 The BHLR project objectives and the proposed BHLR development, including any options or alternatives, have been appraised by determining the level of sustainability performance against each of the Sustainability Framework Objectives. This has been undertaken at a workshop with ESCC members.

5.1.10 Deliverable - Summary table and comparison of options (see Section 6.2 and Table 6-2).

Stage 5 – Consideration of mitigation measures and monitoring requirements

5.1.11 Mitigation measures and monitoring requirements have been developed and will cover design, construction and operational phases of the project and will assist in the delivery of sustainability for the project.

5.1.12 Deliverable – Section 8 in this report

Consultation

5.1.13 Consultation with stakeholders and statutory consultees is considered to be of great importance as part of the above process. Whilst a formal Scoping Report has not been prepared for this project in line with the ODPM guidance, initial contact was made with Natural England (formerly English Nature and the Countryside Agency), the Environment Agency and English Heritage, as well as with ESCC, regarding the scope of work for this SA Report. Feedback from this preliminary consultation process has been incorporated into this document.

5.2 The Sustainability Appraisal Framework

Sustainability Objectives and Indicators

5.2.1 A range of objectives were developed against which the seven route options for the BHLR could be checked to decide whether their contribution towards sustainability can be improved.

5.2.2 A total of 15 objectives have been developed for this SA, with the aim of keeping the number of objectives to a manageable level. The objectives were produced following the outcome of a workshop (15th

June 2006) between consultants from Mott MacDonald, and officers from ESCC. The objectives have been selected based upon a review of the requirements of the SEA Directive, the UK Government's Sustainable Development Strategy (March 2005) and also Regional and Local level information contained within the Integrated Regional Framework, East Sussex Community Strategy, Rother District Council Local Action 21, the Sustainable Development Strategy for Hastings and St. Leonard's 2001, and Community Strategies for the areas. An alignment matrix showing how the SA objectives relate to these document and the policies contained within them can be found in Appendix B.

5.2.3 A set of indicators have also been developed for each of the SA objectives. The aim of the indicators is to monitor and measure the contribution of the BHLR towards the SA objectives. Table 5-1 shows the SA objectives and indicators.

Table 5-1: SA Objectives and Indicators

Ref.	Issue	Objective	Indicator
1.	Local air quality and climate change	Improve the air quality in Hastings and Bexhill and help towards reducing climate change by aiming to reduce concentrations of PM_{10} and greenhouse gas emissions such as CO_2 along the A259	• Background levels of main air quality pollutants including PM_{10} • Number of moderate/poor air quality days • Remove the need for the Air Quality Management Area (AQMA) designation along the A259 • Tonnes of CO_2 emitted along route per year • % of CO_2 offset by planting
2.	Water quality (ground & surface),	Protection of the existing quality of the groundwater and surface water in the Combe Haven Valley catchment area	• River quality (chemical and biological) up and downstream of scheme within the Coombe Haven catchment area • Groundwater quality, measured from samples collected from boreholes where possible
3.	Flood Risk	Maintain existing flood risk through appropriate mitigation	• % development on floodplain • Number of flood events along route corridor • Area of development where Sustainable Urban Drainage Systems (SUDS) are implemented
4.	Biodiversity (wildlife)	Minimise impacts of the scheme through maintenance and enhancement of the quality and diversity of the County's natural environment and resources, including designated areas	• Condition and area of Combe Haven Valley and Marline Woods SSSIs • Presence/extent and condition of East Sussex Local Biodiversity Action Plan (LBAP) species and habitats • Change in area of wooded cover / number of hectares planted • Loss of ancient woodland • Net gain : loss of habitat resulting from the development
5.	Landscape, countryside	Protect and enhance the local landscape character of the Combe Haven Valley and complement the future implementation of the proposed Pebsham Countryside Park	• Number of hectares planted for landscape enhancement/screening • The change in landscape character resulting from mitigation visible from selected viewpoints • Implementation of the Pebsham Countryside Park
6.	Townscape	Protect and enhance the townscape of Hastings and Bexhill	• Change in area of derelict land and buildings along the proposed route corridor • The change in townscape character resulting from mitigation visible from selected viewpoints

Ref.	Issue	Objective	Indicator
7.	Energy, resource use and waste	Promote the effective and sustainable management of renewable and non-renewable resources such as the use of energy from renewable sources, use of brownfield land, minimisation of waste and maximisation of the re-use and recycling of materials	• % of brownfield land used for development • % of reused or recycled material used for construction • % of renewable energy used during construction and operation • Number of solar traffic lights/signals • % construction waste diverted from landfill disposal for re-use/recycling
8.	Health and safety	Reduce road congestion and associated road traffic accidents in Bexhill and Hastings, and minimise nuisances such as noise pollution	• Number of road casualties in Hastings and Bexhill (fatal, serious, slight) • Traffic flows along the A259 and local roads • Noise monitoring at key receptors
9.	Transport choice, public transport	Increase travel choice and reduce the need to travel by car by improving bus services and opportunities for cycling and walking	• Number of people using public transport • Frequency of public transport services between Hastings and Bexhill • Number and length of cycle routes • Journey times • Modal shift from car to public transport (bus)
10.	Crime	Reduce crime and the fear of crime in Bexhill and Hastings and the rural areas through which the proposed road passes	• Recorded offences (domestic burglaries, violent offences and vehicle crime) per 100 population in Bexhill and Hastings • Number of public areas without lighting
11.	Access to community facilities	Improve the community's of Hastings and Bexhill's access to key services/facilities, e.g. hospitals, doctors, educational facilities etc	• % of rural households at set distance from key services (dentists, GP surgeries, hospitals, schools, ATMs) • Accessibility to recreational facilities (leisure centres, proposed Pebsham countryside park facilities etc)
12.	Housing	Increase opportunity for provision of affordable, decent housing and enable development of proposed housing schemes in Hastings and Bexhill	• % new dwelling stock by council tax band • Number of new houses constructed and % affordable • % tenure type within new properties (rented : bought)
13.	Economy, employment & education, social inclusion and deprivation	Increase social inclusion and reduce deprivation through supporting the local economy, opportunities for investment, education and employment	• Deprivation indices (as defined in the ESCC In-figures database) • Average household income • Economic activity • % unemployed • % with no qualifications

Ref.	Issue	Objective	Indicator
14.	Leisure, recreation and culture	Promote health and well being through improvement of opportunities for cultural and recreational pursuits, including for disabled users	• Number of people using the Greenway split into mode e.g. cyclists, walkers, runners, horse-riders • Heart and respiratory disease • Number of people using Riding for the Disabled Association (RDA) facilities
15.	Cultural heritage and archaeological heritage	Protect the cultural and archaeological heritage and diversity along the route corridor	• Number of archaeological sites adversely impacted by the road • Change in setting of listed buildings along the route corridor

Testing the BHLR Objectives against the SA Objectives

5.2.4 It is important that the objectives of the BHLR scheme are set in accordance with the UK Governments sustainability principles, so they can be tested for compatibility with the sustainability appraisals objectives. The BHLR objectives should also be consistent with each other and the associated sustainability appraisal objectives will be one way of checking for this. Where there is conflict between objectives, ESCC will need to reach a decision on priorities.

5.2.5 Table 5-2 tests the objectives of the BHLR scheme against the SA objectives which have been developed by the SA Consultancy Team in conjunction with ESCC. Compatibility between BHLR objectives and SA objectives is in the main good with direct links between objectives for air quality, the natural environment, reducing road congestion, increasing accessibility to services, public transport and cycling. There are no objectives which directly or indirectly contradict each other.

5.2.6 There is uncertainty over whether the BHLR objective for regenerating Hastings and Bexhill will promote the SA objective for reducing road congestion and noise pollution. This will depend on implementation of the BHLR objective. Regeneration of the area may lead to an increased number of visitors to the area which may increase road traffic and associated traffic noise, however regeneration will also improve access to services and employment which will mean residents have less distance to travel.

Table 5-2: Testing the BHLR Project Objectives against the SA Objectives

BHLR Project Objectives / SA Objectives	To reduce emissions of particulates along the A259 Bexhill Road, with the aim of reducing concentrations to within UK air quality objectives for PM10 and removing the need for the currently designated AQMA	To minimise the impact of the link road on the environmentally sensitive areas in the Combe Haven Valley and to ensure that the number of persons adversely impacted by the scheme is kept as low as possible	To ensure that the scheme is complementary to the future implementation of the proposed Pebsham Country Park	To reduce the number of accidents on the local road network in general and on the A259 in particular	To reduce journey times for all road users and improve reliability of bus services on the local road network	To maximise and preserve the benefit from reductions in traffic volumes and congestion on the A259 corridor between Bexhill and Hastings for buses by introducing bus priority measures	To contribute towards the Five Point Plan for the regeneration of Hastings and Bexhill by improving overall accessibility to employment, education, health, and other opportunities within the local area and thereby contributing to improvement in social inclusion	To enable the housing and commercial developments proposed in north Bexhill, which are dependent on construction of the link road for planning approval, to be realised	To reduce community severance in the A259 corridor and in local villages used as rat runs to avoid the A259	To improve conditions for pedestrians, cyclists and equestrians on the local road network in general and to facilitate creation of dedicated cycle ways between the two towns	To ensure that the link road is complementary to future transportation developments in the area
1. Improve the air quality in Hastings and Bexhill and help towards reducing climate change by aiming to reduce concentrations of PM10 and greenhouse gas emissions such as CO2 along the A259	++	+			++	+				+	
2. Protection of the existing water quality of the ground and surface water in the Combe Haven Valley catchment area	+	++									
3. Maintain existing flood regime/risk through appropriate mitigation	+	++		+							
4. Minimise impacts of the scheme through maintenance and enhancement of the County's biodiversity and natural resources, including designated areas	+	++	+								
5. Protect the landscape character of the Combe Haven Valley and complement the future implementation of the proposed Pebsham Countryside Park	+	++	++								
6. Protect and enhance the townscape of Hastings and Bexhill	+	+			+	+	+	+			
7. Promote the effective and sustainable management of renewable and non-renewable resources such as the use of energy from renewable sources, use of brownfield land, minimisation of waste and maximisation of the re-use and recycling of materials		+					+	+			
8. Reduce local road congestion and associated road traffic accidents, and minimise nuisances such as noise pollution	++	++		+	++	++	+ ?			+	+
9. Increase travel choice and reduce the need to travel by car by improving bus services and opportunities for cycling and walking	++	+		+	++	++	+		++	++	++
10. Reduce crime and the fear of crime in Bexhill and Hastings and the rural areas through which the proposed road passes		+			+	+	++		++	+	
11. Improve the community's of Hastings and Bexhill's access to key services/ facilities, e.g. hospitals, doctors, educational facilities			+		+	+	++	+	++	++	+
12. Increase opportunity to provide affordable, decent housing and enable development of proposed housing schemes in Hastings and Bexhill							+	++			
13. Increase social inclusion and reduce deprivation through supporting the local economy, opportunities for investment, education and employment			+		+	+	++	+	++	+	+
14. Promote health and well being through improvement of opportunities for cultural and recreational pursuits, including for disabled users			+				+		+	++	
15. Protect the cultural and archaeological heritage and diversity along the route corridor	+	++	+				+				

Key

++	BHLR objective directly promotes SA objective
+	BHLR objective indirectly promotes SA objective
	BHLR objective has no link to the SA objective
-	BHLR objective indirectly contradicts SA objectives
--	BHLR objective directly contradicts SA objectives
?	Link depends on implementation of BHLR objective

6 Sustainability Appraisal Findings

6.1 Summary of Findings

6.1.1 The options appraisal table (Table 7.1) and commentary (Table 7.2) were produced in conjunction with officers from ESCC. The seven route options were assessed according to whether they would have a positive, negative or neutral contribution to the SA objectives. The results showed that Option 2 'The Blue Route' came out as the preferred option due to its more positive contribution to environmental and sustainability objectives. The Blue route had significant positive impacts for many of the socio-economic objectives such as access to community services, opportunities for housing, social inclusion and economic development. The route also had positive impacts on reducing congestion, increasing travel choice and improving the bus service. The Blue route was the only option to have least impact on the environment and it scored better than the other options for water quality and biodiversity. The main reason for this is that the blue route doesn't pass through any SSSIs.

6.2 Cost implications

6.2.1 Cost estimates were calculated for the six main route options during the original route appraisal undertaken in 2004, the results of which are presented in Annex E of the Local Transport Plan July 2004. No cost assessment was completed for the green route, which was included towards the end of the process following public consultation. Of the main 6 options, the red route was by far the most expensive at £145 million due to construction of the tunnel, whilst the cheapest were the brown and orange routes at and estimated cost of £50 million each. The preferred blue route was estimated at £60 million.

6.2.2 Achieving the SA objectives and design aims outlined in this report will have cost implications for the development of the BHLR which may not have been included in the original estimates. These costs may be in terms of initial capital costs, maintenance costs or long term cost savings from measures such as energy efficient traffic lights etc. It is difficult to put specific costs against each design aim, but this issue can be further investigated during the more detailed design phase.

6.3 Appraisal of the BHLR Route Options

6.3.1 This section provides a summary of the appraisal of the seven route options for the BHLR against the SA Framework objectives. The full appraisal is contained within the matrix Table 7.1. Under the options matrix there is also a commentary section (Table 7.2). This commentary provides the opportunity to record those factors taken into account in the decision making process during the appraisal, as

well as any key assumptions made. Both Tables 7.1 and 7.2 were completed by the Mott MacDonald project team during a workshop discussion, and were subsequently reviewed by ESCC.

Table 7.1: Appraisal of BHLR Route Options

SA Topics	Environmental							Socio-Economic								
	Air Quality	*Water Quality*	*Flood Risk*	*Biodiversity*	*Landscape*	*Townscape*	*Energy, resources use, waste*	*Health and Safety*	*Transport choice, public transport*	*Crime*	*Access to community facilities*	*Housing*	*Economy, employment, education, social inclusion, deprivation*	*Leisure, recreation, culture*	*Archaeological and cultural heritage*	
BHLR Route Options	1. Improve the air quality in Hastings and Bexhill by aiming to reduce concentrations of PM_{10} and greenhouse gas emissions such as CO_2 along the A259	2. Protection of the existing water quality of the ground and surface water in the Combe Haven Valley catchment area	3. Maintain existing flood regime/risk through appropriate mitigation	4. Minimise impacts of the scheme through maintenance and enhancement of the County's biodiversity and natural resources, including designated areas	5. Protect the local landscape character of the Combe Haven Valley and complement the future implementation of the proposed Pebsham Countryside Park	6. Protect and enhance the townscape of Hastings and Bexhill	7. Promote the effective and sustainable management of renewable and non-renewable resources such as the use of brownfield land, minimisation of waste and maximisation of the re-use and recycling of materials	8. Reduce local road congestion and associated road traffic accidents, and minimise nuisances such as noise pollution	9. Increase travel choice and reduce the need to travel by car by improving bus services and opportunities for cycling and walking	10. Reduce crime and the fear of crime in Bexhill and Hastings and the rural areas through which the proposed road passes	11. Improve the communities of Hastings and Bexhill's access to key services/ facilities	12. Increase opportunity to provide affordable, decent housing and enable development of proposed housing schemes in Hastings and Bexhill	13. Increase social inclusion and reduce deprivation through supporting the local economy, opportunities for investment, education and employment	14. Promote well being through improvement of opportunities for cultural and recreational pursuits, including for disabled users	15. Protect the cultural and archaeological heritage and diversity along the route corridor	
Option1 – Red route		- -	-		-	+	-	+	++	+	++	++	++	++	-	D
Option 2 – Blue route					-	+		+	++	+	++	++	++	++	-	D
Option 3 – Brown route		-		-	-	+		+	++	+	++	++	++	++	-	D
Option 4 – Orange route		- -		-	- -	+	-	+	+	+	++	++	++	+	-	D
Option5 – Purple route		- -		-	- -	+	-	+	+	+	++	++	++	+	-	D
Option 6 – Pink route		- -		- -	- -	+		+	+	+	++	++	+	+	-	D
Option 7 – Green route		-		-	-	+		+	+	?	+	++	+		+	-	D
Option 8 – Do Nothing	-							-	-	-	-	-	-	-	+	

Key

++	Significant beneficial effect
+	Marginal beneficial effect
	An empty cell indicates a neutral or no effect
-	Marginal negative effect
- -	Significant negative effect
?	Uncertainty over effect
D	Depends on implementation

Table 6.2: Appraisal Commentary

SA Objectives	BHLR Route Options							
	Option 1 (Red)	**Option 2 (Blue)**	**Option 3 (Brown)**	**Option 4 (Orange)**	**Option 5 (Purple)**	**Option 6 (Pink)**	**Option 7 (Green)**	**Option 8 (Do Nothing)**
1. Improve local air quality of Hastings and Bexhill by aiming to reduce PM_{10} and greenhouse gas emissions such as CO_2	These routes have been assessed as having a neutral impact. Although these routes would reduce congestion along the A259 east by providing an alternative route which should improve the flow of traffic along the A259, thereby reducing levels of PM_{10} produced by stop/start traffic, it is unlikely that local air quality will improve because numbers of cars on the roads will be similar to the current situation and may even increase.						The route has been assessed as having a neutral impact. Although it would reduce congestion along the A259, thereby improving the flow of traffic and reducing PM_{10} from stop/start traffic, the proposed route is very close to the existing A259 which would concentrate vehicle pollution in one area.	This option has been assessed as having a negative impact because there would be no reduction in traffic congestion and associated air quality impacts along the A259
2. Protection of the existing water quality of the ground and surface water in the Combe Haven Valley catchment area	The route has been assessed as having a significant negative effect because of the large section of tunnelling to be used. Excavation of the tunnel could impact on the quality of groundwater and may also affect the local groundwater flow regime.	This route has been assessed as having a neutral impact. Although the construction of a road would slightly alter local patterns of run-off and groundwater flow, measures such as reedbeds and wetland habitat creation will be implemented to mitigate these impacts. (The route does not pass through any SSSIs.)	These routes have been assessed as having a negative impact as they cross through a section of the Combe Haven Valley SSSI and works may have a detrimental impact on the quality and quantity of groundwater and surface water supplied to the wetland areas.			This route has been assessed as having a significant negative impact because it would cross through the Filsham Reedbed LNR, and may also have a detrimental effect on the groundwater which supplies the wetland.	This route has been assessed as having a negative impact as it would cross through the Filsham Reedbed Local Nature Reserve, and may also have a detrimental effect on the groundwater which supplies the wetland.	This option has been assessed as having a neutral effect because there would be no change to the current conditions
3. Maintain existing flood regime/risk through appropriate mitigation	This route has been assessed as having a negative impact because the tunnel would disturb local groundwater flows. This may cause local raising of the watertable which could lead to an increased risk of flooding in this area.	These routes have been assessed as having a neutral impact. This is because although the routes would cross a flood risk area, mitigation measures such as a minimum road level across the flood plain area, reedbeds and flood storage would be implemented to reduce the effects.		These routes have been assessed as having a neutral impact because they would cross the flood plain area of the Combe Haven SSSI by viaduct, thereby mitigating the risk of flooding.		These routes have been assessed as having a neutral impact as only a short section would cross the flood plain, and mitigation measures such as reeedbeds and flood storage would be implemented		This option has been assessed as having a neutral effect because there wouldl be no change to the current conditions
4. Minimise impacts of the scheme through maintenance and enhancement of the County's biodiversity and natural resources, including designated areas	This route has been assessed as having a neutral impact because although it would pass through an area of sensitive habitat, this section of the route would be in a tunnel to ensure minimal disruption. It would be further from the SSSI than other routes and impacts can be mitigated.	This route has been assessed as having a marginal negative impact. Although there would be some land-take, it does not include any part of a SSSI. Mitigation measures would also be put in place to enhance the existing SSSI through habitat creation and enhancement and embankment planting, and would help integration of the SSSI with the proposed Pebsham Countryside Park.	This route has been assessed as having a negative impact. Although some enhancements would be made through habitat creation, part of the SSSI would be lost which would have a detrimental effect upon species and habitats.	These routes have been assessed as having a negative impact because they would run directly through the Combe Haven SSSI. This would have a negative impact on local species and habitat and result in habitat severance.		This route has been assessed as having a significant negative impact. This is because the route would run through the Combe Haven Valley SSSI causing land-take, species and habitat severance and noise disruption. Some enhancements to the SSSIs would be implemented.	This route has been assessed as having a negative impact because it would run through the Combe Haven SSSI causing some land-take and disruption to species and habitats. Some enhancements to the SSSIs would be implemented.	This option has been assessed as having a neutral effect because there would be no change to the current conditions. Although the do-nothing option would prevent land-take and habitat severance, there would be no enhancement of the existing SSSIs or integration with the proposed Pebsham Countryside Park.
5. Protect the local landscape character of the Combe Haven Valley and complement the future implementation of the proposed Pebsham	This route has been assessed as having a marginal negative impact because part of the route would be in a tunnel underground, thereby reducing visibility. The route also compliments the future implementation of the Pebsham Countryside Park	This route has been assessed as having a marginal negative impact because it would use the natural topography of the area such as ridges to help to hide the road. There would be some visibility of the road but this would be kept to a minimum through	This route has been assessed as having a marginal negative impact because it will use in part the natural topography of the area such as ridges to help hide the road. There would be some visibility of the road which would affect the main view of the valley.	This route has been assessed as having a significant negative impact because of the high viaduct the route runs along. The viaduct would be 12m high, severing the character area and would be visible from a wide area including the High Weald AONB. The	This route has been assessed as having a significant negative impact because of the viaduct the route runs along. The viaduct would sever the character area and be visible from a wide area which could include the High Weald AONB. The	This route has been assessed as having a significant negative impact because it would cross through the Combe Haven SSSI and the Filsham Reedbeds reserve, therefore being visible throughout these sensitive landscapes. The route	This route has been assessed as having a marginal negative effect because although it would skirt the urban edge, it would be a major intrusion into the main view of the Combe Haven Valley. It would sever the Park area from the adjacent urban	This option has been assessed as having a neutral impact because there would be no change to current landscape conditions.

SA Objectives	BHLR Route Options							
	Option 1 (Red)	**Option 2 (Blue)**	**Option 3 (Brown)**	**Option 4 (Orange)**	**Option 5 (Purple)**	**Option 6 (Pink)**	**Option 7 (Green)**	**Option 8 (Do Nothing)**
Countryside Park	because it defines the northern boundary of the Park.	use of cuttings, embankments and planting. The route also compliments the future implementation of the Pebsham Countryside Park because it defines the northern boundary of the Park.	The route also compliments the future implementation of the Pebsham Countryside Park but intrudes slightly into it.	route would also run through the proposed Pebsham Countryside Park which may conflict with its implementation.	route would also run through the proposed Pebsham Countryside Park which may conflict with its implementation.	would also run through the proposed Pebsham Countryside Park which may conflict with its implementation.	area.	
6. Protect and enhance the townscape of Hastings and Bexhill	These routes have been assessed as having a positive impact. This is because they would help in the regeneration of the derelict land around the disused railway in North Bexhill. The routes would also reduce congestion along the A259 east, improving the townscape.					This route has been assessed as having a positive impact. This is because the route would help in the regeneration the derelict land around the disused railway. The route would also reduce congestion along the A259 east, improving the townscape.	This route has been assessed as having a positive impact. This is because the route would regenerate the derelict land around the disused railway. The route would also reduce congestion along the A259 east, improving the townscape. However, the route would require the demolition of parts of the holiday park and possibly some housing.	This option has been assessed as having a neutral impact because there would be no change to the townscape of the area
7. Promote the effective and sustainable management of renewable and non-renewable resources such as brownfield land, minimisation of waste and maximisation of the re-use and recycling of materials	This route has been assessed as having a negative impact because of the use of a tunnel. The tunnel would require the excavation of large amounts of material which would have to be disposed of, and the use of energy from tunnel excavation and construction machinery. Measures such as re-using and recycling materials and using renewable energy sources would be implemented. The route uses brownfield land at the disused railway site in North Bexhill.	These routes have been assessed as having a neutral impact. This is because although energy and materials would be needed for construction of the road measures such as re-using and recycling materials and using renewable energy sources would be implemented. The routes also use brownfield land at the disused railway site in North Bexhill.		These routes have been assessed as having a negative impact because of the large amount of engineering works needed to construct the viaduct. This would require imported material for construction of the viaduct and energy to power the machinery to build the viaduct. Measures such as re-using and recycling materials and using renewable energy sources would be implemented. The routes use brownfield land at the disused railway site in North Bexhill.		These routes have been assessed as having a negative impact because they would involve viaduct construction and are longer and so would require more material and energy use for construction. Measures such as re-using and recycling materials and using renewable energy sources would be implemented. The routes use brownfield land at the disused railway site in North Bexhill.		This option has been assessed as having a neutral impact because there would be no change to the current conditions
8. Reduce local road congestion and associated road traffic accidents, and minimise nuisances such as noise pollution	These routes have been assessed as having a positive impact. This is because they would all reduce congestion along the A259 east by providing traffic with an alternative route. They would also reduce traffic in rural roads and settlements to the north. This reduction in traffic should help to reduce driver frustration associated with congestion. However, this reduction in traffic will not necessarily mean that road traffic accidents are reduced because the flow of traffic will be moving faster, creating potential for higher speed collisions. There would be some noise impacts associated with the new route but it is felt the benefits in terms of congestion reduction outweigh these impacts.							This option has been assessed as having a negative impact because congestion and road accidents won't be reduced and the problem increase in future as more people buy cars.
9. Increase travel choice and reduce the need to travel by car by improving bus services and opportunities for cycling and walking	These routes have been assessed as having a significant positive impact. This is because the efficiency of bus services between Hastings and Bexhill will improve due to less congestion, and the Greenway alongside the new route will provide opportunities for cycling, walking and horse-riding. This would make alternative modes of the transport more appealing and reduce the need for car travel.			These routes have been assessed as having marginal benefits because the efficiency of bus services between Hastings and Bexhill would improve due to less congestion but the Greenway would be difficult to achieve and except for the orange route not as serviceable for utility purposes.			This route has been assessed as having a marginal benefit. This is because the Greenway would have marginal benefits for utility travellers between the towns and so it is likely that the \greenway would not be provided as part of this route option	This option has been assessed as having a negative impact because there would be no improvements to bus services and no opportunities to increase cycling and walking

SA Objectives	BHLR Route Options							
	Option 1 (Red)	Option 2 (Blue)	Option 3 (Brown)	Option 4 (Orange)	Option 5 (Purple)	Option 6 (Pink)	Option 7 (Green)	Option 8 (Do Nothing)
10. Reduce crime and the fear of crime in Bexhill and Hastings and rural areas through which the proposed route passes	These routes have been assessed as having a positive impact as the derelict area around the disused railway in North Bexhill will be regenerated. There may be a slight increase in crime in rural areas through which the route passes due to increased accessibility but this is anticipated to be of low incidence. The route would also increase accessibility to employment and education which will help reduce social problems and related crime.							This option has been assessed as having a negative impact because it would not reduce crime levels
11. Improve the community's of Hastings and Bexhill's access to key services/facilities	These routes have been assessed as having a significant positive impact because they would increase people's access and reduce journey times to services and facilities such as hospitals, libraries, GP surgeries, schools, shops. The Greenway would increase access and opportunity for leisure and recreational activities such as cycling, walking, running and horse-riding.						This route has been assessed as having a significant positive impact because it would increase people's access and reduce journey times to services and facilities such as hospitals, libraries, GP surgeries, schools, shops. If the Greenway is provided with this route option it would increase access and opportunity for leisure and recreational activities such as cycling, running and horse-riding	This option has been assessed as having a negative impact because it does not increase accessibility to key services
12. Increase opportunities to provide affordable, decent housing and enable development of proposed housing schemes in Hastings and Bexhill	These routes have been assessed as having a significant positive impact because they would enable the housing and commercial developments proposed in North Bexhill, which are dependent on construction of the Link Road for planning approval, to be realised. They would also open up access to other development areas.					These routes have been assessed as having a positive impact because they would enable the housing and commercial developments proposed in North Bexhill, which are dependent on construction of the Link Road for planning approval, to be realised. They would also open up access to other development areas, but would infringe on land allocated for housing development.		This option has been assessed as having a negative impact because it would not enable the housing development in the north of Bexhill to go ahead
13. Increase social inclusion and reduce deprivation through supporting the local economy, opportunities for investment, education and employment	These routes have been assessed as having a significant positive impact because they would open up access between communities, reducing severance and encouraging social inclusion. They would also give deprived areas access to employment and education, and promote regeneration and economic development.					This route has been assessed as having a positive impact because it would open up access between communities, reducing severance and encouraging social inclusion. It would also give deprived areas access to employment and education, and promote regeneration and economic development. However the route would also infringe on land allocated for development, reducing the number of services and facilities that can be built.	This route has been assessed as having a neutral impact because it would open up access between communities, reducing severance and encouraging social inclusion. It would also give deprived areas access to employment and education, and promote regeneration and economic development. However the route would also infringe on land allocated for development, reducing the number of services and facilities that can be built. The route also runs straight through a caravan site, which is a major tourism centre and source of income for the area.	This option has been assessed as having a negative impact because it won't reduce deprivation of areas or increase social inclusion
14. Improve access including disabled access, to increase	These routes have been assessed as having a significant positive impact because the Greenway would provide recreational activities such as cycling, running and horse-riding, and will link up with other cycle and footpaths in the area. Options 1 and 2 are particularly	These routes have been assessed as having a positive impact because if the Greenway is achievable, it would provide recreational activities such as cycling, running and				These routes have been assessed as having a positive impact because if the Greenway is achievable it would provide recreational activities such as cycling, running,		This option has been assessed as having a negative impact because no

SA Objectives	BHLR Route Options							
	Option 1 (Red)	Option 2 (Blue)	Option 3 (Brown)	Option 4 (Orange)	Option 5 (Purple)	Option 6 (Pink)	Option 7 (Green)	Option 8 (Do Nothing)
opportunities for culture, leisure and recreation such as dedicated cycle-ways, to promote well-being	compatible with the proposed Pebsham Countryside Park which would provide access to leisure and recreational facilities.			horse-riding, and would link up with other cycle and footpaths in the area. However the routes run through the land allocated for the Pebsham Countryside Park and may affect the recreational facilities that can be offered.		walking and horse-riding, and would link up with other cycle and footpaths in the area. However the routes would run through the current Riding for the Disabled Association (RDA) centre at Pebsham Farm and would therefore affect the facilities. This would sever land allocated for the Park and may detract from the facilities which the Park could provide.		new recreation or leisure facilities will be provided
15. Protect the cultural and archaeological heritage and diversity along the route corridor	This route has been assessed as having a possible negative impact, but it would largely depend on implementation of the scheme. The route would run quite close to Adams Farm and Upper Wilting Farm which are listed buildings. This may affect the setting of the buildings through visual intrusion and noise, although appropriate mitigation measures such as tree planting could reduce the severity of this impact.	These routes have been assessed as having a possible negative impact, but it would largely depend on implementation of the scheme. The routes would run very close to Adams Farm and Upper Wilting Farm, which are listed buildings. This may affect the setting of the buildings through visual intrusion and noise. However, the routes would be designed so that the road would be in a cutting as it passes the farms which will minimise the effects.		These routes have been assessed as having a possible negative impact, but it would largely depend on implementation of the scheme. This is because the route would run through an area of high archaeological potential. Whilst this could have a damaging impact through disruption to the setting and possible damage to archaeological remains, it could also be viewed as having a positive outcome as without the road excavation, archaeological remains might never be found and recorded. There is also likely to be some adverse impact upon the setting of the listed building at Upper Wilting Farm.		These routes have been assessed as having a possible negative impact, but it would largely depend on implementation of the scheme. This is because the routes run past listed buildings and the setting of the buildings could be affected through visual intrusion and noise. However, careful construction and mitigation measures such as tree planting to provide a screen could reduce impacts. Option 6 is also likely to have an impact upon the valley floor area of high archaeological potential.		This option has been assessed as having a positive impact because listed buildings and archaeological area will remain unaffected

7 Conclusions and Design Implications

7.1 General Benefits of the BHLR scheme

7.1.1 On the basis of this limited SA appraisal, it is considered that the construction of the proposed BHLR will have a number of benefits on the residents of the surrounding area, including the following:

- availability of land parcels for development due to improved road access, enabling regeneration of the area and enhancing employment opportunities;
- regeneration of disused railway area, leading to a reduction in local residents' fear of crime in that area;
- potential diversion of traffic away from local roads, creating a perception of increased safety for local residents and possibly increasing physical health by encouraging more people to cycle or walk on local roads;
- less congestion due to improved access should reduce stress caused to drivers by traffic jams and prolonged journey times;
- improved access would open up links to neighbouring communities, thereby reducing community severance and feelings of isolation;
- improved access to the countryside and to associated recreational facilities, such as the proposed Pebsham Country Park; and
- increased access to safe paths and cycleways on the Greenway which may enhance people's health and well-being.

7.1.2 Additional information regarding the potential impacts of the scheme on the environment is documented in the Environmental Statement (ES) prepared for the scheme.

7.2 Results of the Options Appraisal

7.2.1 The results of the options appraisal show that Option 2 'Blue Route' is the preferred option in terms the sustainability appraisal because of its more positive contribution to environmental and sustainability objectives. The main positive benefits of the Blue route over the other six options are:

- it performs well in terms of contribution towards the objectives for water quality, protection of the landscape, and resource and waste use;
- it was found to have a neutral score in terms of biodiversity. This result was the same for the red route whilst all other routes were determined to have a negative effect on biodiversity. The reason for this is likely to be because the blue route doesn't pass through a SSSI, and will provide benefits to help balance the negative effects through creation of habitats; and

- as with the other options, the Blue route performs very well in terms of its contribution to the socio-economic objectives. It has significant positive impacts for objectives such as access to community services, opportunities for housing, social inclusion and economic development. The route also had positive impacts on reducing congestion, increasing travel choice and improving the bus service.

7.3 Construction Environmental Management Plan

7.3.1 It is understood that the scheme is likely to be procured through the Design and Build method whereby the Contractor appoints a Lead Designer. The Lead Designer will be responsible for the preparation of a Construction Environmental Management Plan (CEMP) for the project, which should be based on the Sustainability Register presented in Appendix C and aligned with the Environmental Management System (EMS) certification scheme, ISO 14001. The Sustainability Register provides a list of actions which should be incorporated into the CEMP and monitored during the detailed design and construction phases to ensure that the project delivers the sustainability objectives outlined in this report. The register will therefore provide a record or audit trail as the scheme progresses.

7.3.2 The CEMP will build on the contents of the register as more information becomes available during the detailed design phase, and the CEMP will be subsequently updated regularly where necessary to ensure that it is fully comprehensive throughout the project lifespan. The CEMP will cover all elements of both the design and construction phases. The Lead Designer should appoint an environmental design manager who is responsible for the production and implementation of the CEMP. It is recommended that regular internal audits are undertaken by the Contractor to ensure that the contents of the CEMP are fully understood and strictly adhered to by the whole project team.

7.4 Mitigation and Enhancement Measures

7.4.1 The key areas where the sustainability performance of the BHLR can be improved through the implementation of mitigation and enhancement measures are described in the following section, separated into the SA objective topics. Mitigation measures have been compiled using information from the completed EIA and from consultation responses.

Air Quality and Climate

7.4.2 Mitigation measures to reduce impacts on air quality and climate change could include:

- tree planting should be implemented to offset carbon dioxide emissions generated by the road with a view to mitigating the implications of climate change resulting from a road development; and
- the reduction in congestion may mean that bus priority lanes can be implemented, possibly resulting in a modal shift from car to bus.

Water Quality and Flood Risk

7.4.3 Measures to mitigate against the potential impacts on water quality and flood risk could include:

- reedbeds at the side of the road would help to filter out pollutants from contaminated run-off;
- water quality monitoring where the road crosses the rivers;
- incorporating measures into the design that will reduce flood risk to the residential areas of Crowhurst at the top of the Powdermill Stream, and Bulverhythe at the foot of the Combe Haven, including the development of areas of flood storage substitutions and on-line flood storage, either within the stream cannel itself or within voids beneath the road;
- implementation of washlands, reedbeds and lakes for compensatory flood storage, the use of SUDS for treatment and control of road surface run-off, in additional to pollution interceptors; and
- clear span bridges so that water levels and flood flows are not affected.

Biodiversity

7.4.4 Measures to mitigate against the impacts on biodiversity could include:

- use of the new drainage system to make nature conservation sites wetter, for the benefit of the ecological interest contained within them;
- the creation of new habitats such as reedbed and wetland areas, and the enhancement of existing habitats to compensate for the loss of habitats from the construction;
- the installation of structures such as badger fencing, and badger and amphibian tunnels to reduce the risk of disturbance to animals during both the construction and operational phases;
- where necessary translocation of species will be implemented;
- training site staff and monitoring qualified ecologists where construction activities are close to sites of significant interest such as SSSIs;
- the monitoring of effect during and after construction and adjusting procedures as necessary to minimise harm to habitats and species and optimise beneficial effects;

- the site clearance would be carried out in accordance with a site clearance plan produced by an Ecologist and subject to their certification prior to carrying out the works and on satisfactory completion prior to earthmoving; and
- mature trees noted for retention within the Scheme would be physically protected by rigid fencing to avoid damage during the currency of the works.

Landscape

7.4.5 Measures to mitigate against the impacts on landscape could include:

- minimise lorry movements in and out of the site by using cut and fill to recycle all excavated material on site;
- wherever possible the sustainability processes in the Government's Waste and Resources Action Programme will be followed;
- the contractor will use directional lighting to minimise light pollution from the site;
- haul roads will be from either end of the scheme and accessed from existing main roads to minimise impacts on minor roads and residential properties;
- the site will be kept tidy and adequate wheel wash facilities will be provided;
- existing trees and hedges will be protected in accordance with BS 5837:2005 'Trees in Relation to Construction';
- temporary stockpiling of materials will be avoided where possible, where these are necessary piles will not exceed 4m and will be kept within the site boundaries;
- the structures strategy will aim to minimise impacts on local roads and residents;
- site compounds will be located in visually disctreet locations and away for residential properties;
- health and safety and environmental protection procedures will be followed at all times;
- sensitive road routing using the natural topography of the landscape;
- using cuttings and embankments to reduce visual impacts; and
- new hedges, trees and scrub planting will act as a screen between the road and the countryside, and provide wildlife links.

Townscape

Measures to mitigate against the impacts on townscape could include:

- the removal of derelict buildings and reuse of demolition materials where possible;
- sensitive lighting to enhance the area and historic buildings; and

- sensitive design of remaining urban open spaces.

Energy, Resource Use and Waste

7.4.6 Measures to mitigate against the impacts on resources could include:

- in-situ and ex-situ remedial technologies for contaminated soils as an alternative to landfill disposal;
- re-use and recycling of materials used in the construction of the road;
- use of local resources, products and suppliers; and
- ensure an energy efficient plant during construction.

Soils and Geology

7.4.7 Mitigation measures could include:

- development of contaminated land mitigation strategy in line with current best practise as detailed in CLR 11-Model Procedures for the Management of Contaminated Land;
- cuttings, embankments, side slopes and drainage measures would be designed into the Scheme to avoid risk of instability to adjacent land outside the construction site;
- development of an earthworks strategy detailing the removal, handling, storage and placement of soils. The earthworks strategy will form part of the Construction Environmental Management Plan (CEMP);
- all suitable material excavated would be re-used in the construction of the Scheme, further reducing the requirement to import materials for construction and eliminating the need to remove surplus material from site; and
- materials arising from the site clearance would be disposed of in line with sustainability best practices and in agreement with the local authorities. This would include the use of an on-site crushing facility, which would recycle inert material from the demolition works for use as granular fill within the works.

Traffic Congestion, Road Accidents

7.4.8 Mitigation measures could include:

- traffic restriction measures on relieved roads;
- minimised clutter of signage, lighting and other urban features along the route; and
- implementation of pedestrian crossings at appropriate points.

Noise Pollution

7.4.9 Mitigation measures could include:

- planting in the urban area to reduce the impact of noise fencing and retaining walls;
- the creation of a green corridor effect through the urban area using mounding, verges and planting where appropriate;
- use of earthworks as noise attenuation, as extensively as possible in the rural area to minimise the need for noise fencing and to achieve a better integration of the Scheme with the local landscape;
- planting to integrate noise fencing and earthworks in the rural area; and
- some open views retained to the countryside from the Scheme.

Travel Choice, Bus Services, Cycling

7.4.10 Measures to enhance travel choice, bus services and cycling opportunities could include:

- increasing the number of regular bus services;
- provision of cycle lanes linking local roads to the Greenway.

Crime

7.4.11 Mitigation measures to help reduce crime could include:

- appropriate lighting of public areas e.g. bus stops;
- CCTV in vulnerable areas; and
- security measures on-site during construction e.g. Secure fencing and locked gates around the site, security man on patrol after hours, warning signs around the site perimeter.

Access to Key Services

7.4.12 Measures to enhance the community's access to key services such as shopping centres, hospitals and school could include:

- targeted bus routes to enable access to key services.

Housing

7.4.13 Measures to enhance the housing development opportunities could include:

- encouraging property developers to provide a range of housing types in proposed development areas.

Economy, Education, Employment

7.4.14 Measures to enhance opportunities for education, employment and the local economy could include:

- encouraging SMEs to locate in proposed development areas to increase employment and the potential for youth training schemes.

Leisure, Recreational, Health and Well-being

7.4.15 Measures to enhance recreational opportunities and well-being of the community could include:

- the provision of facilities such as nature interest trails and cycling tours;
- encouraging local walking and cycling groups to use the Greenway regularly;
- a major mitigation will be the Greenway providing a linking recreational route roughly along the line at the scheme but sufficiently separate from it to provide quietl linking access to the proposed Pebsham Countryside Park.

Cultural Heritage and Archaeological Heritage

7.4.16 Measures to mitigate against the impacts on the cultural and archaeological heritage of the area could include:

- preservation by record of any archaeological remains found;
- if required following the EIA, provide a watching brief during excavation of certain areas or operations to enable preservation by record of any archaeological remains found;
- ensure careful siting of road near listed buildings e.g. use of screening and complementary planting schemes, cutting and embankments;
- the protection of listed buildings whilst works are undertaken in the vicinity and optimising location and design of the scheme; and
- programme of recording historic structures for removal and consulting with the Conservation Officer of Rother District Council (the Local Planning Authority). Recording but would probably take the form of photographic recording to RCHME Level 1 or 2 record (RCHME 1996).

8 Future Monitoring

8.1.1 Indicators have been identified within this report to enable monitoring the performance of the project and its ability to meet the sustainability objectives. In the future, it will become important that such monitoring is undertaken as part of any reporting completed for the implementation of the forthcoming Local Development Framework (LDF).

8.1.2 ESCC is committed to undertaking an ongoing appraisal of the project throughout both the detailed design and construction phases of the scheme to ensure that the project fully meets the sustainability objectives set out in this report.

8.2 Design Monitoring

8.2.1 Monitoring during the design development is recommended to include the following:

- Design for energy efficiency;
- Design for on-site renewable energy;
- Water efficiency during construction;
- Sustainable drainage systems;
- Provision of public transport services; and
- Low environmental impact materials.

8.2.2 The above measures would support SA policy and sustainability in general. Further information is presented in the Design and Construction Sustainability Register presented in Appendix C. This tool will be used by the design team to monitor the progress towards achieving the project sustainability objectives. It will also form the basis for both construction and operational monitoring, and should be used by the selected Contractor as the foundations for the project Construction Environmental Management Plan (CEMP), as described in section 8.6.

8.3 Construction Monitoring

8.3.1 The following monitoring of construction activities should be considered by ESCC:

- the selection of the Construction Contractor should be based on criteria which should include a review of its environmental and sustainability credentials;

- the Construction Contractor should develop a site Construction Environmental Management Plan (CEMP), for the construction phase of the project, as identified in section 8.5. By incorporating the information within the sustainability construction register, the CEMP should aim to minimise and manage potential environmental and sustainability effects of the proposed development. Another approach could include the adoption by the Contractor of the Considerate Constructors Scheme;
- a waste management strategy should be developed for the site, to ensure that waste generated during demolition and construction is minimised and disposed of in an environmentally sound manner and that where possible waste is reused or recycled; and
- the Construction Contractor's activities on-site should be monitored by an independent environmental auditor to ensure the environmental requirements of the EMP are delivered appropriately on-site.

8.3.2 the above measures would support SA policy and sustainability in general. Further information is presented in the Design and Construction Sustainability Register presented in Appendix C.

8.4 Operational Monitoring

8.4.1 The following monitoring of the operation of the road should be considered by ESCC:

- air quality monitoring at targeted points on the A259 and along the new road route to assess change in quality following opening of the new route;
- water quality monitoring at available points on local watercourses;
- monitoring of peak time traffic flows on the A259 and the new road to identify any areas of congestion; and
- monitor biodiversity of the adjacent areas by coordination and liaison with the team responsible for the BAP.

8.4.2 The above monitoring would support SA policy and sustainability in general.

9 References

9.1 Reports

East Sussex County Council (July 2004) Local Transport Plan Annual Progress Report: Bexhill to Hastings Link Road Annex E Report

East Sussex County Council (April 2001) Local Agenda 21 Strategy for a Sustainable East Sussex

East Sussex County Council (2004) Pride of Place: A Community Strategy for East Sussex

Hastings Borough Council (September 2005) Hastings Local Development Framework SA/SEA Draft Scoping Report for Consultation

Hastings Borough Council (April 2004) Hastings Local Plan

Hastings Borough Council (2001) Sustainable Development Strategy for Hastings and St. Leonards

Hastings Borough Council (2003) Hasting and St Leonards Community Strategy 2003-2013

Land Use Consultants (July 2005) East Sussex Local Transport Plan 2 SA/SEA Final Report for Submission to DFT

Mott MacDonald (January 2006) Bexhill to Hastings Link Road Draft EIA Scoping Report

ODPM (November 2005) Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents

Owen Williams Consultants (January 2004) Bexhill to Hastings Link Road: Route Selection Rother District Council (November 2003) Rother Local Plan

Rother District Council (September 2000) Rother District Council's Local Action 21 Strategy

Rother District Council (2004) Rother Community Plan 2004-2009: Making things better by working together

SEEDA, SEERA, GO-SE *et al*. (2004) Integrated Regional Framework 2004: A Better Quality of Life in the South East

9.2 Websites

East Sussex County Council In Figures Database - http://www.eastsussexinfigures.org.uk/webview/

Environment Agency Website - Flood Maps - http://www.environment-agency.gov.uk

Appendix A Sustainability Policy Register – Review of Relevant Plans and Programmes

Plan or Programme	Policy No.	Guiding Principles and Themes	Objectives or Requirements of the Plans or Programmes	Implications for the BHLR Project
International Documents				
The Convention on Wetlands of International Importance 1971 (amended 1982)			Requires signatory states to designate important wetlands for conversation in particular waterfowl habitats. Designation of Ramsar Sites to be protected from development.	The project should encourage the sustainable use of resources and protect and enhance biodiversity
The Convention on Biological Diversity, Rio de Janeiro, 1992			The main driver of the SEA Directive. Article 6A of the Convention requires each Contracting Party to develop national strategies, plans and programmes for the conservation and sustainable use of biological diversity.	The project should consider biodiversity in terms of whole ecosystems rather than 'islands' of protected sites
Convention of Biodiversity (1992)			Implementation of national strategies, plans and programmes for the conversation and sustainable use of biological diversity.	The project should encourage the sustainable use of resources and protect and enhance biodiversity
Johannesburg Summit on Sustainable Development (2002)			Furthering of Parties commitment to sustainable development including sustainable consumption and production. Implementation of strategies to support ecosystems and increase use of renewable energy sources. No precise targets or indicators established.	The project should encourage the sustainable use of resources, energy efficiency and protect and enhance biodiversity
United Nations Framework Convention on Climate Change (1994)			Framework convention of which the UK is a signatory. Let to the adoption of the Kyoto Protocol in 1997.	Transport is a significant contributor to climate change. The project should aim to improve air quality and help reduce climate change
Kyoto Protocol (1997)			Implemented measures to limit and / or reduce emissions of greenhouse gases. The protocol was ratified in 2004.	Transport is a significant contributor to climate change. The project should aim to help reduce climate change
European Documents				
European Climate Change Programme			To combat climate change by means of various cross-cutting measure in the fields of energy, industry and transport	Transport is a significant contributor to climate change. The project should aim to help reduce climate change
Air Quality Framework Directive 1996/62/EC - on ambient air quality and management			Revision of previously existing legislation, setting of long term air quality objectives and introduction of new air quality standards. Establishes mandatory standards for air quality and sets limits and guides values for sulphur and nitrogen dioxide, suspended particulates and lead in air.	Transport is a significant contributor to air quality. The project should include objectives for air quality
Council Directive 1999/30/EC on Ambient Air Quality Limits			Establishment of limit values for concentrations of sulphur dioxide, nitrogen dioxide, particulate matter and lead in the ambient air.	Transport is a significant contributor to air quality. The project should include objectives for air quality
Council Directive 2002/49/EC on the Assessment and Management of Environmental Noise			To define a common approach intended to avoid, prevent or reduce noise on a prioritised basis including the harmful effects of exposure to environmental noise in built-up-areas, public parks or other quiet areas.	Noise barriers between the link road and countryside should be incorporated into the design, such as embankments, vegetation and trees
The EC Directive on			Imposes duty on Member States to sustain populations of naturally	The project should

Plan or Programme	Policy No.	Guiding Principles and Themes	Objectives or Requirements of the Plans or Programmes	Implications for the BHLR Project
the Conservation of Wild Birds 79/409/EEC 1979			occurring wild birds by sustaining areas of habitats in order to maintain populations at ecologically and scientifically sound levels. Applies to birds, their eggs, nests and habitats. Designation of SACs and use of Appropriate Assessment.	consider the effects of transport on European protected bird species
EC Directive on the Conservation of Natural Habitats of Wild Fauna and Flora 92/43/EEC 1992			Requires Member States to take legislative and administrative measures to maintain and restore natural habitats and wild species at a favourable conservation status in the Community.	The biodiversity and habitat impacts of the project should be considered along with possible mitigation measures
Directive 2000/60/EC establishing a framework for the Community action in the field of water policy ('The Water Framework Directive')			A non-prescriptive framework Directive requiring all Member States to achieve 'good ecological statuses of inland water bodies by 2015. Environment Agency to hold some planning powers as River Basin Authority.	Surface water run-off from roads and hard surfaced areas can cumulatively pollute watercourses. The project should consider the effects on groundwater, surface water and river water quality
National Documents				
The National Sustainable Development Strategy – Securing the Future (March 2005)	i) Guiding Principles	Living Within Environmental Limits	Respecting the limits of the planet's environment, resources and biodiversity – to improve our environment and ensure that the natural resources needed for life are unimpaired and remain so for future generations.	Establishes the UK Government sustainable development objectives which should be incorporated into the project where possible
		Ensuring a Strong, Healthy and Just Society	Meeting the diverse needs of all people in existing and future communities, promoting personal wellbeing, social cohesion and inclusion, and creating equal opportunity for all.	
		Achieving a Sustainable Economy	Building a strong, stable and sustainable economy which provides prosperity and opportunities for all, and in which environmental and social costs fall on those who impose them (polluter pays), and efficient resource use is incentivised.	
		Promoting Good Governance	Actively promoting effective, participative systems of governance in all levels of society – engaging people's creativity, energy, and diversity.	
		Using Sound Science Responsibly	Ensuring policy is developed and implemented on the basis of strong scientific evidence, whilst taking into account scientific uncertainty (through the precautionary principle) as well as public attitudes and values.	
	ii) Priorities for Action	Sustainable Consumption and Production	Sustainable consumption and production is about achieving more with less. This means not only looking at how goods and services are produced, but also the impacts of products and materials across their whole lifecycle and building on people's awareness of social and environmental concerns. This includes reducing the inefficient use of resources which are a drag on the economy, so helping boost business competitiveness and to break the link between economic growth and environmental degradation.	The project should consider the impacts of the materials used in the road construction
		Climate Change and Energy	The effects of a changing climate can already be seen. Temperatures and sea levels are rising, ice and snow cover are declining, and the consequences could be catastrophic for the natural world and society. Scientific evidence points to the release of greenhouse gases, such as carbon dioxide and methane, into the atmosphere by human activity as the primary cause of climatic change. We will seek to secure a profound change in the way we generate and use energy, and in other activities that release these gases. At the same time we must prepare for the climate change that cannot now be avoided. We must set a good example and will encourage others to follow it.	The project should aim to help improve air quality and use energy efficient construction materials

Plan or Programme	Policy No.	Guiding Principles and Themes	Objectives or Requirements of the Plans or Programmes	Implications for the BHLR Project
		Natural Resource Protection and Environmental Enhancement	Natural resources are vital to our existence and that of communities throughout the world. We need a better understanding of environmental limits, environmental enhancement and recovery where the environment is most degraded to ensure a decent environment for everyone, and a more integrated policy framework.	Aim to protect the natural environment and use resources efficiently
		Sustainable Communities	Our aim is to create sustainable communities that embody the principles of sustainable development at the local level. This will involve working to give communities more power and say in the decisions that affect them; and working in partnership at the right level to get things done. The UK uses the same principles of engagement, partnership, and programmes of aid in order to tackle poverty and environmental degradation and to ensure good governance in overseas communities.	The project should help to improve social inclusion and accessibility between communities
Planning Policy Statement 1 (PPS1) Delivering Sustainable Development (2005)		Sustainable and inclusive patterns of urban and rural development	Making suitable land available for development in line with economic, social and environmental objectives to improve people's quality of life	The project should seek to achieve economic, social and environmental sustainability, as well as inclusive access for all and high quality design
			Contributing to sustainable economic development	
			Protecting and enhancing the natural and historic environment, the quality and character of the countryside, and existing communities	
			Ensuring high quality development through good and inclusive design, and the efficient use of resources	
			Ensuring that development supports existing communities and contributes to the creation of safe, sustainable, liveable and mixed communities with good access to jobs and key services for all members of the community	
Planning Policy Guidance 2 (PPG2) Green Belts (march 2001)			When any large-scale development or redevelopment of land occurs in the Green Belt, including road and other infrastructure developments or improvements such as the Scheme, it should, so far as possible, contribute to the achievement of the objectives for the use of land in Green Belts identified below: • To provide opportunities for access to the open countryside for the urban population; • To provide opportunities for outdoor sport and outdoor recreation near urban areas; • To retain attractive landscapes, and enhance landscapes, near to where people live; • To improve damaged and derelict land around towns; • To secure nature conservation interest; and • To retain land in agricultural, forestry and related uses	The proposed scheme will impact on Greenbelt, and where possible will contribute to the achievement of objectives for use of land in Greenbelts. The proposed Greenway will encourage outdoor sport and recreation, creation of new habitats will enhance biodiversity and the landscape
Planning Policy Statement 7 (PPS7) Sustainable Development in Rural Areas			To raise the quality of life and the environment in rural areas through the promotion of: • Thriving, inclusive and sustainable rural communities, ensuring people have decent places to live by improving the quality and sustainability of local environments and neighbourhoods; • Sustainable economic growth and diversification; Good quality, sustainable development that respects and, where possible, enhances local distinctiveness and the intrinsic qualities of the countryside; and • Continued protection of the open countryside for the benefit of all, with the highest level of protection for our most valued landscapes and environmental resources.	Protect the rural countryside and provide access to amenities and other towns for rural villages
			To promote more sustainable patterns of development: • Focusing most development in, or next to, existing towns and villages;	

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			• Preventing urban sprawl; Discouraging the development of 'greenfield' land, and, where such land must be used, ensuring it is not used wastefully; • Promoting a range of uses to maximise the potential benefits of the countryside fringing urban areas; and Providing appropriate leisure opportunities to enable urban and rural dwellers to enjoy the wider countryside.	
			Promoting the development of the English regions by improving their economic performance so that all are able to reach their full potential – by developing competitive, diverse and thriving rural enterprise that provides a range of jobs and underpins strong economies.	
Planning Policy Statement 9 (PPS9) Biodiversity and Geological Conservation (August 2005)			PPS 9 recognises that there is a need to balance economic growth with the effective conservation of wildlife and natural features. With careful planning and control, conservation can be compatible and proximity to designated sites does not mean that certain development proposals would be inappropriate if careful design considerations and mitigation measures are included. Therefore the main purpose of the PPS is not to prevent development including transport infrastructure projects, but to minimise and mitigate damaging impacts	Mitigation measures will be incorporated into the design to minimise impact on the environment (especially SSSI's). Measures may include creation of new habitats and wetland areas
			To promote sustainable development by ensuring that biological and geological diversity are conserved and enhanced as an integral part of social, environmental and economic development, so that policies and decisions about the development and use of land integrate biodiversity and geological diversity with other considerations	
			To conserve, enhance and restore the diversity of England's wildlife and geology by sustaining, and where possible improving, the quality and extent of natural habitat and geological and geomorphological sites; the natural physical processes on which they depend; and the populations of naturally occurring species which they support	
			To contribute to rural renewal and urban renaissance by: enhancing biodiversity in green spaces and among developments so that they are used by wildlife and valued by people, recognising that healthy functional ecosystems can contribute to a better quality of life and to people's sense of well-being; and ensuring that developments take account of the role and value of biodiversity in supporting economic diversification and contributing to a high quality environment	
Planning Policy Statement 10 (PPS10) Planning for Sustainable Waste Management (July 2005)			Help deliver sustainable development through driving waste management up the waste hierarchy, addressing waste as a resource and looking to disposal as the last option, but one which must be adequately catered for	Aim to dispose of construction waste and excavated materials according to the waste hierarchy, favouring re-use and recycling
			Help secure the recovery or disposal of waste without endangering human health and without harming the environment, and enable waste to be disposed of in one of the nearest appropriate installations	
			Ensure the design and layout of new development supports sustainable waste management	
Planning Policy Guidance 13 (PPG13) Transport (March 2001)			PPG 13 seeks to integrate planning and transport from the national, regional, county and local level. The key objectives of the PPG are to: • 'Promote more sustainable transport choices for both	Measures will implemented to mitigate the impacts of proposed road on the environment. The BHLR will contribute to the objectives of

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			people and for moving freight; • Promote accessibility to jobs, shopping, leisure facilities and services by public transport, walking and cycling; and • Reduce the need to travel, especially by car.'	PPG13 by relieving congestion to make bus transport more efficient, provide a Greenway for cycling and open up links to jobs, shopping and leisure facilitates.
			'Care must be taken to avoid or minimise the environmental impact of any new transport infrastructure projects or improvements to existing infrastructure; this includes the impacts which may be caused during construction (including the need to transport materials to and from the site and dispose of spoil). Wherever possible, appropriate measures should be implemented to mitigate the impacts of transport infrastructure'	
Planning Policy Guidance 15 (PPG15) Planning and the Historic Environment (September 1994)			Major new transport infrastructure developments can have an especially wide-ranging impact on the historic environment, not just visually and physically, but indirectly, for example, by altering patterns of movement or commerce and generating new development pressures or opportunities in historic areas. Local highway and planning authorities should therefore integrate their activities and should take great care to avoid or minimise impacts on the various elements of the historic environment and their settings	The route should avoid damage to cultural and historic sites
			If a new route is unavoidable, authorities should initially identify any features of the historic environment – including parks, gardens, battlefields and archaeological sites as well as buildings and areas – and evaluate their importance. Wherever possible, new roads … should be kept away from listed buildings, conservation areas and other historic sites. However, in each case a suitable balance has to be struck between conservation, other environmental concerns, economics, safety and engineering feasibility	
Planning Policy Guidance 16 (PPG16) Archaeology and Planning (November 1990)			Archaeological remains should be seen as a finite and non-renewable resource, in many cases highly fragile and vulnerable to damage and destruction. Appropriate management is therefore essential to ensure that they survive in good condition. In particular, care must be taken to ensure that archaeological remains are not needlessly or thoughtlessly destroyed	Archaeological remains should be preserved and recorded
			Where nationally important archaeological remains, whether scheduled or not, and their settings, are affected by proposed development there should be a presumption in favour of their physical preservation	
Planning Policy Statement 23 (PPS23) Planning and Pollution Control (November 2004)			The planning system should focus on whether the development itself is an acceptable use of the land, and the impacts of those uses, rather than the control of processes or emissions themselves. Planning authorities should work on the assumption that the relevant pollution control regime will be properly applied and enforced. They should act to complement but not seek to duplicate it.	Noise impacts will be reduced through appropriate mitigation measures such as restricting construction working hours, provision of quiet road surfaces, appropriate noise attenuating barriers and provision of noise insulation
Planning Policy Guidance 24 (PPG24) Planning and Noise (September 1994)			Much of the development which is necessary for the creation of jobs and the construction and improvement of essential infrastructure will generate noise. The planning system should not place unjustifiable obstacles in the way of such development. Nevertheless, local planning authorities must ensure that development does not cause an unacceptable degree of disturbance	
			Special consideration is required where noisy development is proposed in or near Sites of Special Scientific Interest (SSSIs) … The effect of noise on the enjoyment of other areas of landscape,	

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			wildlife and historic value should also be taken into account	
Sustainable Communities (ODPM, February 2003)			The Communities Plan outlines the Government's commitment to provide decent quality homes and a good quality local environment in all regions. The plan is also part of the Government's wider drive to raise the quality of life in our communities through increasing prosperity, reducing inequalities, more employment, better public services, better health and education and tackling crime and anti social behaviour. The document also outlines the key requirements of sustainable communities which are as follows: • A flourishing local economy to provide jobs and wealth; • Strong leadership to respond positively to change; • Effective engagement and participation by local people, groups and businesses, especially in the planning, design and long-term stewardship of their community, and an active voluntary and community sector; • A safe and healthy local environment with well-designed public and green space; • Sufficient size, scale and density, and the right layout to support basic amenities in the neighbourhood and minimise use of resources (including land); • Good public transport and other transport infrastructure both within the community and linking it to urban, rural and regional centres; • Buildings - both individually and collectively - that can meet different needs over time, and that minimise the use of resources; • A well-integrated mix of decent homes of different types and tenures to support a range of household sizes, ages and incomes; • Good quality local public services, including education and training opportunities, health care and community facilities, especially for leisure; • A diverse, vibrant and creative local culture, encouraging pride in the community and cohesion within it; • A "sense of place;" and The right links with the wider regional, national and international community.	Project to acknowledge local action to meet local needs
Regional Documents				
Draft Regional Spatial Strategy: Draft South East Plan (March 2006)	NRM1	Sustainable water resources, groundwater and river water quality management	Water supply, ground water and river water quality will be maintained and enhanced through avoiding adverse effects of development on the water environment.	Aim to protect the environment and local water quality. Incorporate measures to reduce noise into the design. The BHLR will help to decrease disparities between towns by opening links between areas and providing easier access to jobs, retail and leisure facilities. The scheme will also help to relieve congestion, making the local bus
	NRM7	Air Quality	Local authorities and other relevant bodies should seek an improvement in air quality in their areas so that there is a significant reduction in the number of days of medium and high air pollution by 2026.	
	NRM8	Noise	Measures to address and reduce noise pollution will be developed at regional and local level	
	C3	Landscape and countryside management	Outside nationally designated landscapes, positive and high quality management of the region's open countryside should be encouraged and supported by local authorities and other organisations, agencies, land managers, the private sector and	

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			local communities, through a combination of planning policies, grant aid and other measures,	service more efficient.
	CC1	Sustainable Development	The principal objective of the Plan shall be to achieve and to maintain sustainable development in the region. The strategy and policies of the Plan promote measures that contribute to: • Achieving a sustainable economy • Promoting good governance • Using sound science responsibly • Living within environmental limits • Ensuring a strong, healthy and just society.	
	Policy CC8a	Urban Focus and Urban Renaissance	The prime focus for development in the South East should be urban areas, in order to foster accessibility to employment, housing, retail and other services, and avoid unnecessary travel. Local planning authorities should formulate policies to: • Concentrate development within the region's urban areas • Seek to achieve at least 60% of all new development in the South East on previously developed land and through conversions of existing buildings • Ensure that developments in and around urban areas, including urban infill/intensification and new urban extensions are well designed and consistent with the principles of urban renaissance and sustainable development • Use urban potential studies to identify the scope for redevelopment and intensification of urban areas, seeking opportunities for intensification around transport hubs and interchanges.	
	Policy CC8b	Regional Hubs	Relevant regional strategies, local development documents and Local Transport Plans will include policies and proposals that support and develop the role of regional hubs by: • Giving priority to measures that increase the level of accessibility by public transport, walking and cycling • Encouraging higher density land uses and/or mixed land uses that require a high level of accessibility so as to create 'living centres' • Giving priority to the development of high quality interchange facilities between all modes of transport.	
	Policy CC9	Addressing intra-regional disparities	Local authorities and other national, regional and local partners in the public, private and voluntary sector should align policies and programmes to reduce the overall extent of, and as a result the significant spatial disparities in, socioeconomic deprivation across the region. Specifically they should focus funding and initiatives to: • Address the extensive regeneration needs of the following sub-regions – East Kent and Ashford; Kent Thames Gateway; South Hampshire; Sussex Coast; and the Isle of Wight Special Policy Area • Implement appropriate actions to address the pockets of deprivation and broader exclusion issues facing other parts of the region both inside and outside sub-regional strategy areas.	
	Policy RE5		Through joint working, national, regional and local partners will actively seek to maintain and enhance the competitiveness of the most economically successful parts of the region and also address	

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			structural economic weakness to release the economic potential of those areas which are underperforming. i) In those parts of the region where the economy is strongest, within a regional and national context, defined as the sub-regions of Milton Keynes and Aylesbury Vale, the Western Corridor and Blackwater Valley, Central Oxfordshire, the London Fringe and Gatwick Area: • SEEDA, together with local economic partners, will encourage smart growth which involves maximising the productive value of the sub-regions' resources including human capital, land and natural resources • Local partners will promote the economic potential of the international transport hubs at Heathrow and Gatwick (within currently agreed levels of airport growth as set out in transport policy T9), and address transport, skills and environmental constraints to maximise business development opportunities in the surrounding areas • SEEDA and local partners will promote the take up of ICT to develop remote working practices which will enhance competitiveness and the development of a dynamic knowledge-based economy. ii) In the coastal belt, defined as the sub regions of Kent Thames Gateway, East Kent and Ashford, Sussex Coast, South Hampshire and the Isle of Wight Special Policy Area • Local Development Documents should: a) Give priority to delivering economic development in allocating land b) Protect sites for industrial and commercial use where there is a good prospect of employment use c) Consider whether any upgrading or improvement of existing sites is required • Local authorities should work with other agencies to develop delivery mechanisms to unlock and bring into use sites with economic development potential • Guided by sustainable development principles, local partners will promote the economic potential of the international gateways of the Ports of Southampton, Portsmouth and Dover, the Medway Ports, the Channel Tunnel and Southampton Airport to maximise business opportunities in the surrounding areas • SEEDA, together with local economic partners and private interests should comprehensively market and target inward investment to employment sites in the sub-region • The Learning and Skills Council, Local Skills for Productivity Alliance and other key partners will work together to develop training strategies for the local workforce to ensure they benefit from and contribute to structural changes in the area • Local partners will enable and promote the take up of ICT to stimulate increased enterprise and innovation and to transform learning opportunities • Local and regional partners will address the transport constraints which are an impediment to increased economic performance.	
Draft South East Plan Sustainability	SA objectives	Objective 1	To ensure that everyone has the opportunity to live in a decent, sustainably constructed and affordable home	Road to open up links between communities to

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Appraisal (March 2006)		Objective 2	To reduce the risk of flooding and the resulting detriment to public wellbeing, the economy and the environment	promote economic regeneration and accessibility to key services and facilities.
		Objective 3	To improve the health and well-being of the population and reduce inequalities in health	
		Objective 4	To reduce poverty and social exclusion and close the gap between the most deprived areas in the South East and the rest of the region	
		Objective 5	To raise educational achievement levels across the region and develop the opportunities for everyone to acquire the skills needed to find and remain in work	
		Objective 6	To reduce crime and the fear of crime	
		Objective 7	To create and sustain vibrant communities	
		Objective 8	To improve accessibility to all services and facilities	
		Objective 9	To encourage increased engagement in cultural activity across all sections of the community in the South East	
		Objective 10	To improve efficiency in land use through the re-use of previously developed land and existing buildings, including re-use of materials from buildings, and encourage urban renaissance	
		Objective 11	Top reduce air pollution and ensure air quality continues to improve	
		Objective 12	To address the causes of climate change through reducing emissions of greenhouse gases and ensure that the South East in prepared for its impacts	
		Objective 13	To conserve and enhance the region's biodiversity	
		Objective 14	To protect, enhance and make accessible for enjoyment, the region's countryside and historic environment	
		Objective 15	To reduce road congestion and pollution levels by improving travel choice, and reducing the need for travel by car/lorry	
		Objective 16	To reduce the global social and environmental impact of consumption of resources by using sustainable produced and local products	
		Objective 17	To reduce waste generation and disposal, and achieve the sustainable management of waste	
		Objective 18	To maintain and improve the water quality of the region's rivers and coasts, and to achieve sustainable water resources management	
		Objective 19	To increase energy efficiency, and the proportion of energy generated from renewable sources in the region	
		Objective 20	To ensure high and stable levels of employment so everyone can benefit from the economic growth of the region	
		Objective 21	To sustain economic growth and competitiveness across the region	
		Objective 22	To stimulate economic revival in priority regeneration areas	
		Objective 23	To develop a dynamic, diverse and knowledge-based economy that excels in innovation with higher value, lower impact activities	
		Objective 24	To encourage the development of a buoyant, sustainable tourism sector	
		Objective 25	To develop and maintain a skilled workforce to support long-term competitiveness of the region	
Draft South East Plan Sub-Regional Chapter – Sussex Coast (March 2006)	Policy SCT1	Core Sub-Regional Strategy	Local Authorities and other agencies should, as a priority, pro-actively pursue and promote the sustainable economic growth and regeneration of the Sussex Coast	Road to open up links between communities to promote economic growth and regeneration
	Policy SCT2	Enabling Economic Regeneration	To help realise a step change in the sub-region's economic performance, national, regional and other relevant agencies and authorities should give increased priority to investment decisions and other direct support for the sub-region	

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	Policy SCT3	Management of existing employment sites and premises	To deliver sufficient appropriate sites and premises for business and other uses that will help to facilitate the regeneration of the local economy	
	Policy SCT9	Infrastructure	In preparing their Local Development Documents local authorities should work jointly with other relevant agencies and infrastructure providers to ensure that all of the necessary local and strategic, social and physical infrastructure can be provided in time to serve the developments proposed in this strategy	
Regional Planning Guidance 9 (RPG9) - South East (2001) (including alternations 2004 and 2006)		The main principles that should govern the continuing development of the Region	1 - Urban areas should become the main focus for development through making them more attractive, accessible and better able to attract investment; 2 - Greenfield development (namely, on previously undeveloped land) should normally take place only after other alternatives have been considered, and should have regard to the full social, environmental and transport costs of location; 3 - The pattern of development should be less dispersed with more sustainable patterns of activity, allowing home, work, leisure, green spaces, cultural facilities and community services to be in closer proximity; 4 - London's World City role and the South East's international connections should be developed as a basis for the enhancement of the Region's attractiveness in Europe and the world; 5 - Economic opportunities should be increased by raising skills levels and reducing the disparities between different parts of the Region. In particular, by positive investment strategies for the Thames Gateway and Priority Areas for Economic Regeneration to improve the performance of poorer parts of the Region and by managing the localised impacts of development in economically buoyant areas; 8 - Development should be located and designed to enable more sustainable use of the Region's natural resources, in the supply of food, water, energy, minerals and timber, in the effective management of waste, the promotion of renewable energy sources and to assist in reducing pollution of air, land and water; 9 - There should be continued protection and enhancement of the Region's biodiversity, internationally and nationally important nature conservation areas, and enhancement of its landscape and built and historic heritage; 10 - The life of the countryside and rural communities should be sustained through economic diversification which respects the character of different parts of the Region and enables sustainable agriculture and forestry; 11 - Access to jobs, services, leisure and cultural facilities should be less dependent on longer distance movement and there should be increased ability to meet normal travel needs through safe walking, cycling and public transport with reduced reliance on the car; and 12 - Transport investment should support the spatial strategy, maintaining the existing network, enhancing access as part of more concentrated forms of development, overcoming bottlenecks and supporting higher capacity and less polluting modes of transport.	Transport investment should, enhancing access, overcoming bottlenecks and supporting higher capacity and less polluting modes of transport
The Draft Regional Economic Strategy – The RES for South	Objective 1	Global Competitiveness	Maintain the South East's share of global trade and investment: • Global businesses – Increase the percentage of businesses located in the South east operating	The BHLR will contribute to the RES objectives through opening up links

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East England 2006-2016 (2005)			internationally from an estimated 10% in 2003 to 15% by 2016 • Foreign direct investment – Maintain the South East's share of global foreign direct investment to 2016 • Business expenditure on research and development – Increase business expenditure on research and development in the South east from 3.1% of Gross Value Added in 2002 to 4% by 2016 • Knowledge transfer – Increase the proportion of businesses in the South East reporting R&D links with universities from 11% in 2005 to 15% by 2016 • Infrastructure – Secure infrastructure investment to maintain international economic competitiveness	between towns and increasing access to jobs and services. Opening up land for development.
	Objective 2	Smart Growth	Increase productivity per worker by 30% from £39,000 in 2004 to at least £50,000 by 2016: • Enterprise – Increase the business stock by 35% from 35 businesses per 1,000 inhabitants in 2003 to 44 per 1,000 inhabitants by 2016, including 10,000 new businesses run by women by 2010 • Innovation – Increase the percentage of total South East business turnover attributable to new and improved products and services from 12% during 1998-2000 to 20% by 2016 • Skills – Increase the percentage of the working age population with qualifications at NVQ Level 2 or higher from 66% in 2003 to at least 80% by 2016, and increase the percentage of the working age population with qualifications at NVQ Level 4 of higher from 28% in 2003 to at least 40% by 2016 • Competition – Increase the level of participation of South East businesses in tendering for public sector contracts • Infrastructure – Reduce road congestion and pollution levels by improving travel choice, managing demand and facilitating modal shift • Employment – Improve the productivity if the workforce and increase economic activity from 82% to 85% by bringing 110,000 net additional South East residents of working age into the labour market by 2016	
	Objective 3	Sustainable Prosperity	Reduce the rate of increase in the region's ecological footprint, stabilise it and seek to reduce it by 2016: • Environmental pollution and climate change – Reduce CO2 emissions attributed to the South East by 20% from 2003 baseline by 2016 • Renewable energy – Increase the contribution of renewable energy to overall energy supply in the South east to 8% of generation capacity (895MW) by 2016 • Water consumption – Reduce per capita water consumption in the South East by 20% from 169 litres per day in 2003-2004 to 135 litres per day by 2016 • Resource efficiency – Achieve a 30% increase over the 2003 baseline in GVA generated per tonne of materials entering the waste stream by 2016 • Sustainable construction – Ensure all building development in the South East achieves the Ecohomes / BREEAM 'excellent' standard by 2016	
Regional Economic		Employment	By 2016, 85% of residents in the South east will be economically	The road development

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Strategy for the South East : Building a World Class Region (2005)			active. • Lift barriers and increase incentives to work • Identify and promote the benefits of a diverse workforce • Invest in appropriate childcare and family care provision • Promote flexible job design and work organisation • Put high value jobs for local people at the heart of regenerating communities Reduce polarisation and economic inactivity by raising the skills, quality and status of lower paid jobs	will provide employment opportunities during the construction phase and for maintenance during operation
		Enterprise	By 2016 the South East will become one of the world's 15 most entrepreneurial regions. • Invest to ensure higher business start-up and survival rates • Invest in integrated, 'no wrong door' business support, including addressing access to finance. • Provide support for Small and Medium Enterprises to compete globally • Invest in an entrepreneurial culture, with particular emphasis on the next generation	
		Innovation and Creativity	By 2016 the South East will be recognised as one of the world's 15 most innovative regions • Catalyse collaboration to bring more innovation to market • Invest in market gaps to stimulate knowledge transfer between businesses and the region's knowledge base, including leading edge high technology developments with commercial potential. • Continue to attract and retain high value added inward investors • Promote innovation and creativity across all sectors, including public services and provide a demand-led Innovation Advisory Service for businesses • Ensure the region's workforce has the vision, courage and confidence to innovate and be creative • Stimulate international relationships strategic to the region for innovation and knowledge transfer, including through the development of the Greater South East as an International Science City-Region	
		Skills	By 2016 the workforce in the South East will have the skills and flexibility to sustain a world class economy • Ensure business can access the skills they need to raise productivity • Ensure entrepreneurs can access the management and leadership skills they need to start and grow successful businesses • Ensure individuals can access the skills they need to enter and progress in the labour market	
		Competition and Business Regulation	By 2016 the South East will be recognised as an excellent region in which to start, build or invest in business. • Influence European and UK regulations to be fit for purpose and to be enforced fairly • Remove the barriers faced by South east businesses in accessing public procurement markets	

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			• Identify and promote the business benefits of environmental and social response	
		Investment in infrastructure	By 2016 the infrastructure necessary to support sustainable prosperity in the South East will be substantially in place, and programmed. • Secure investment in a sustainable transport network in order to improve connectivity, reflecting regional economic priorities • Ensure sufficient, and affordable, housing to meet the needs of the Region's labour force • Secure an Urban Renaissance • Prioritise sustainable management of energy and water resources • Develop and use new mechanisms for infrastructure investment	
Integrated Regional Framework 2004: A Better Quality of Life in the South East	Theme 1	Social progress which recognises the needs of everyone	• To ensure that everyone has the opportunity of a decent and affordable home. • To improve the health and well-being of the population and reduce inequalities in health. • To reduce poverty and social exclusion and close the gap between the most disadvantaged communities and the rest. • To stimulate economic revival in priority regeneration areas. • To raise educational and achievement levels across the Region and develop opportunities for everyone to acquire the skills needed to find and remain in work. • To reduce crime and the fear of crime. • To create and sustain vibrant communities. • To encourage the development of, and participation in, cultural, creative and sporting activity, and a buoyant sustainable tourism sector.	Encourage regeneration, well-being and social inclusion
	Theme 2	Effective protection of the environment	• To improve efficiency in land use through the re-use of previously developed land and existing buildings, and encourage urban renaissance. • To reduce air pollution and ensure air quality continues to improve. • To maintain and improve the water quality of the Region's rivers and coast • To address the causes of climate change through reducing emissions of greenhouse gases. • To conserve and enhance the Region's biodiversity. • To protect, enhance and encourage enjoyment of the countryside. • To reduce road traffic and congestion through reducing the need to travel by car and improving travel choice. • To maintain, enhance and make accessible the historic environment and assets of the Region.	Aim to protect the natural environment
	Theme 3	Prudent use of natural resources	• To achieve sustainable water resources management. • To reduce the risk of flooding that would be detrimental to public well-being, the economy and the environment. • To reduce waste generation and disposal, and achieve	Construction materials will be recycled where possible

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			sustainable management of waste. • To increase energy efficiency. • To increase the proportion of energy generated and • consumed in the Region from renewable sources.	
	Theme 4	Maintenance of high and stable levels of economic growth and employment	• To ensure high and stable levels of employment so everyone can benefit from the economic growth of the Region. • To sustain economic growth and competitiveness, and ensure a better distribution of economic activity across the Region • To invest to secure our future prosperity and quality of life. • To develop the knowledge economy by focusing on higher value, lower impact activities.	Encourage economic growth and employment opportunities
SEEDA – Sustainability Checklist			This Checklist is designed to be used by those involved in planning or building sizeable developments from estates to urban villages and regeneration projects. It helps both at the strategic level and at the more detailed estate/site level, focusing on the sustainability aspects relating to buildings and infrastructure. Using it will: • Increase the awareness amongst planners, developers and estate managers of the practical measures that can be taken to plan 'sustainability' into a development • Provide a framework for assessing the sustainability issues relating to buildings and infrastructure • Give guidance on standards and indicators • Provide developers with a method of demonstrating to planning authorities that sustainability has been systematically addressed in their proposals • Help planners to specify 'sustainability' in supplementary planning guidance/development codes • Provide planners with a method of assessing the sustainability aspects of development proposals consistent with DCLG requirements. The checklist includes topics on: • Climate Change • Place Making • Transport and Movement • Ecology • Resources • Business • Buildings	Where possible the BHLR will be reviewed against the sustainability checklist
Pride of Place – A Community Strategy for East Sussex (2003)			Building a prosperous local economy Regenerating rural communities Tackling the problems of the most deprived communities Raising educational aspirations and achievement Modernising communications (transport infrastructure and broadband) Improving support for older people Creating faster and easier joint access to services for all citizens Improving community safety Protecting and promoting the environment	Open up transport links and accessibility to deprived areas

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East Sussex and Brighton and Hove Structure Plan 1991-2011 (Adopted December 1999)	Policy TR8		Better integration between bus and rail services, and between public passenger transport and all other forms of transport will be sought'	The BHLR will aid the efficiency of the public transport service by increasing efficiency of the bus service. The BHLR will take congestion away from the A259 and local towns
	Policy TR9		Improved access onto public passenger transport for people with disabilities and those with young children or shopping will be sought through encouraging better vehicle, station and street infrastructure design, and through the provision of County Rider bus services using vehicles specially adapted for use by people with disabilities	
	Policy TR20		The Government will be urged to give priority to the early improvement of the trunk roads within the plan area (A27/A259, A26 (south of the A27), A21) and links to the coastal towns. Longer distance traffic will be encouraged to use the trunk roads	
	Policy EN15		Development proposals and transport schemes will be required, where applicable, to include measures to minimise noise	
East Sussex and Brighton and Hove Minerals Local Plan (Adopted November 1999)			The key issue in the Local Plan is to balance, through its proposals, the essential need for minerals against the protection of the environment and local amenity. The most significant issue dealt with in the plan concerns construction aggregates. The plan seeks to supplement greater use of secondary aggregates and recycled material	
East Sussex and Brighton and Hove Waste Local Plan (February 2006)			To progressively reduce the amount of waste disposed of to land;	
			To provide an integrated waste management strategy;	
			To increase recycling and recovery and achieve targets set by Government and this Plan;	
			To treat and dispose of the Plan area's waste arisings	
			To minimise road traffic associated with the transportation of waste and encourage other modes of transport; and	
			To protect the environment and avoid harm to communities and environmentally important and sensitive land uses	
East Sussex and Brighton and Hove Construction and Demolition Waste Supplementary Planning Document			To reduce the quantities of construction and demolition waste being sent to landfill by encouraging recycling and waste minimisation	
			To influence design to achieve waste minimisation in the construction industry;	
			To enhance the use of construction and demolition waste as a resource for construction and engineering	
			To improve awareness of sustainable construction techniques;	
			To provide guidance in construction and demolition waste management which helps improve economic efficiency in the relevant business sectors, encourages innovative new business development and enhances workforce training and skills	
Second East Sussex Local Transport Plan 2006-2011 (2006)	Objective 1	Transport	Improve access to services by providing greater travel choices and influencing land use decisions	Encourage public transport use, cycling and walking. Incorporate traffic safety measures into the road design. The LTP identifies the Bexhill to Hastings Link Road as
	Objective 2		Manage demand and reduce the need to travel by private car	
	Objective 3		Improve road safety and reduce fear of crime in communities	

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	Objective 4		Reduce congestion and improve the efficiency of the transport network	a Major Scheme (Section 8)
	Objective 5		Protect, promote and enhance the environment	
	Objective 6		Improve maintenance and management of the transport network	
Second East Sussex Local Transport Plan Sustainability Appraisal (2006)	SA/SEA Headline Objective 1	Health	To improve the health and well-being of the East Sussex population	Open up transport links and accessibility to deprived areas, increasing accessibility to local amenities and facilities
	SA/SEA Headline Objective 2	Crime	To reduce anti-social activity	
	SA/SEA Headline Objective 3	Key services	To improve accessibility to services and facilities for residents, businesses and visitors to East Sussex	
	SA/SEA Headline Objective 4	Community	To encourage a sense of community identity in East Sussex	
	SA/SEA Headline Objective 5	Air quality	To address the causes of climate change, reduce air pollution and ensure air quality continues to improve	
	SA/SEA Headline Objective 6	Cultural heritage	To protect, enhance and make accessible for enjoyment East Sussex's natural and cultural heritage	
	SA/SEA Headline Objective 7	Biodiversity	To conserve and restore East Sussex's biodiversity	
	SA/SEA Headline Objective 8	Water quality	To maintain and improve the quality of East Sussex's groundwater, rivers and coasts	
	SA/SEA Headline Objective 9	Flooding	To reduce the risk of flooding	
	SA/SEA Headline Objective 10	Transport	To reduce the effect of travel on the environment	
	SA/SEA Headline Objective 11	Land use	To improve efficiency in land use and conserve soil resources	
	SA/SEA Headline Objective 12	Economy	To promote sustainable local economic development	
A Biodiversity Action Plan for Sussex (July 1998)	Objective 1	Biodiversity	To maintain, and where practicable enhance, the wildlife and habitats that give Sussex its character and natural diversity.	Aim to protect the natural environment and include habitat creation of the road design
	Objective 2		To identify priority habitats and species which are important to us in Sussex and/or where we have a special responsibility to care for something which is important on a national or international scale.	
	Objective 3		To set realistic, but ambitious, targets and timescales for priority habitats and species and to monitor progress of action plans against those targets.	
	Objective 4		To ensure that biodiversity action continues as a joint initiative, evolving a dynamic framework for nature conservation.	
	Objective 5		To raise public awareness and encourage involvement in biodiversity action.	
East Sussex Environmental Action Plan 2002/2003 – 2004/2005	Objective 1	Natural Environment	Maintain in good condition the environmental assets for which we are responsible	Aim to protect the environment
	Objective 2		Ensure that the County Council follows good environmental practice	

Plan or Programme	Policy No.	Guiding Principles and Themes	Objectives or Requirements of the Plans or Programmes	Implications for the BHLR Project
	Objective 3		Lead environmental work that directly supports the local economy	
	Objective 4		Implement, in partnership with others, programmes of environmental enhancement work on the ground;	
Local Documents				
Hastings Local Plan (Adopted April 2004)	Policy DG33		Planning permission will not be granted for development which would be likely to cause unacceptable pollution of air, water or land. The Council may require that applicants carry out air quality monitoring and assessment into the likely effect of significant new developments alongside existing main roads which could lead to a substantial increase in traffic levels and consequent deterioration in air quality in the area	Construction methods to ensure minimal water pollution. Possibility of installing air monitoring station by road
	Policy NC2		Designated Sites of Special Scientific Interest (SSSIs) will be safeguarded and protected	Protect areas of nature conservation and biodiversity value
	Policy NC3		Areas designated or proposed as Local Nature Reserves (LNRs) will be safeguarded and protected	
	Policy NC6		Development proposals within or adjacent to Sites of Nature Conservation Importance will not be permitted unless there is a local need which outweighs any harm to the nature conservation interest	
	Policy NC8		Development proposals will be required to minimise damage to wildlife and habitats.	
Rother Local Plan (July 2006)	Policy TR1		The area of search for the proposed Bexhill - Hastings link road, as shown on the Proposals Map, will be safeguarded from prejudicial development. The area protected will be reviewed as a scheme progresses.	
	Policy TR2		All development shall, wherever reasonably practicable, be carried out in a location and manner which will promote more sustainable travel choice. Applications for planning permission may be required to demonstrate how the proposed development will promote sustainable travel choice. Improvements in the availability, quality and efficiency of sustainable transport opportunities including quality bus routes, cycle networks, priority for pedestrians and related facilities will be sought, including through supplementary guidance and in the determination of planning applications. In particular, development proposals will only be permitted where they provide, or contribute to, the new or improved transport facilities and services (including improved links to bus, cycle and footpath networks that connect to local services such as shopping centres and schools) that are necessary to make the development acceptable in sustainable transport terms, and do not result in the loss of sustainable transport facilities.	
The Sustainable Development Strategy for Hastings and St Leonards 2001 – Hastings Borough Council		Community Involvement and Participation	Actively support widespread community participation in decision-making	Actively involve the local community in the decision making process
			Increase the capacity of local residents to use and access the information they need to be involved in decision-making	
			Work towards equity for all members of our local community	
			Ensure that training, community development and staffing resources are available to maintain existing services and develop new services to maximise the success of these strategic	

Plan or Programme	Policy No.	Guiding Principles and Themes	Objectives or Requirements of the Plans or Programmes	Implications for the BHLR Project
			objectives	
		Crime and Community Safety	Establish a safe and secure environment for local people and visitors by reducing levels of crime and disorder throughout the Borough	Traffic safety measures and education to protect human health
			Develop an education programme about prevention and reduction of substance misuse	
			Secure investment to provide facilities for young people, and offer support and guidance for parents and carers where appropriate	
		Education and Life Long Learning	Raise awareness and understanding in all sectors about sustainable development through training and education	Raise awareness of sustainable transport modes road safety issues
			Encourage, promote and facilitate the provision of opportunities for lifelong learning and training - which are affordable and accessible to all	
		Energy, Pollution, Waste and Water	Actively minimise the use of energy, water and natural resources to ensure they are used efficiently	Promote the re-use and recycling of road construction materials
			Reduce the amount of waste produced in all sectors of our community	
			Actively promote the re-use and recycling of products and materials	
			Actively promote the use of clean and efficient forms of energy supply	
			Promote action towards providing clean air, clean land and clean water and an environment free from pollution	
		Healthy Living	Try to improve the health of local people and, wherever possible, decrease health inequality	Improve public transport services and encourage walking and cycling
			Promote the availability of affordable healthy food and the benefits of allotment gardening	
			Promote the benefits of adopting a healthy lifestyle to local residents	
			Encourage employers to promote the adoption of healthy lifestyles for all employees	
			Increase the coordination of services for older people across Hastings and St Leonards	
			Reduce stresses affecting local families	
		Leisure, Arts and Culture	Provide a range of quality sports, play, arts and cultural opportunities that are physically, emotionally and socially rewarding and accessible to all	Accessibility between towns to provide access to leisure, sporting and cultural facilities
			Encourage local residents to take up leisure, art and cultural activities to improve their social and emotional wellbeing	
			Develop communications networks within the towns existing groups, organisations, facilities and locations connected to sports, arts and culture	

Plan or Programme	Policy No.	Guiding Principles and Themes	Objectives or Requirements of the Plans or Programmes	Implications for the BHLR Project
			Utilise local talent	
			Protect and actively promote the towns unique cultural heritage	
			Recognise and embrace the different cultures of residents and visitors to the town	
		Local Economy and Training for Work	Develop and grow a diverse, sustainable local economy	Enhance the local economy through investment, job creation and tourism
			Promote equal access to satisfying and rewarding work, and work towards a high wage, high-skill economy	
			Recognise the value of unpaid and voluntary work	
			Improve everyone's access to skills and knowledge and promote local jobs for local people	
			Promote the benefits of sustainable business practices	
			Encourage local firms to access local, regional and international markets	
			Support mutual trading between Hastings and Rother	
		The Built Environment	Ensure that housing targets reflect both the amount of available space for development in the town and local needs	Enhance the setting of the area
			Support local residents access to decent housing at an affordable cost	
			Encourage and support the use of brownfield sites, derelict land and buildings for developments and housing	
			Ensure all new developments are accessible and well located to encourage use of public transport , walking and cycling	
			Seek to ensure that any Greenfield development provides 'environmental repayment'	
			Ensure that housing provision is linked to employment, encouraging a close physical relationship between homes and work, including mixed use developments	
			Encourage the provision of a safe, secure and well designed Environment within existing and proposed developments, recognising the historic character of the town	
			Support opportunities for economic development and diversification	
		The Natural Environment	Ensure that the conservation and enhancement of wildlife and habitats are considered within all planning, landscaping, redevelopment and regeneration proposals	Protect the natural environment, biodiversity and open green spaces
			Ensure that the biodiversity of open green spaces within the Borough is, wherever possible, maintained at current levels	

Plan or Programme	Policy No.	Guiding Principles and Themes	Objectives or Requirements of the Plans or Programmes	Implications for the BHLR Project
			Ensure that all residents and visitors have safe access to a variety of areas of quality local green space and that the management of green space enhances both the wildlife value and enjoyment for local residents	
			Encourage the local community to value the Borough's natural environment and facilitate opportunities to play a role in its protection and conservation	
		Transport	Develop an integrated transport plan which aims to manage the need to travel, overall traffic levels and reliance on the car, and to increase cycling, walking and use of public transport	Seek to improve the basic transport infrastructure, promote sustainable modes of transport and increase accessibility
			Continue to seek improvements to the basic transport infrastructure	
			Develop a transport hierarchy in Hastings and St Leonards which gives more priority to pedestrians in the town centre and commercial areas	
			Develop, in partnership, public transport systems which are accessible, affordable and responsive to local need.	
			To support the education of local people about sustainable transport issues and to promote the health benefits of cycling and walking	
Rother District Council Local Action 21 (formerly Local Agenda 21) – Rother District Council		To Lead and Engage the Community	To consult with the community and our partners and enable and encourage participation in the work of the Council and ensure accountability through the democratic process	Involve local people throughout the design process
		To Protect and Enhance the Built and Natural Environment	To protect and enhance the character of the wider environment including air and water quality and the reduction of pollution.	Protect areas of countryside value
			To protect the countryside and enhance particularly sensitive areas of high landscape, wildlife and agricultural value	
		To Provide a safe and Healthy District	To participate in reducing crime and disorder	Traffic safety and calming measures to promote public road safety
			To help maintain and enhance standards of public health and safety	
			To seek improvements in the personal health of the local community	
		To Provide for Economic Growth and Employment	To seek significant improvements to the road, rail and public transport infrastructure in partnership with other relevant agencies and organisations	Seek to improve the road infrastructure
			To promote the development of employment sites, with special emphasis on brownfield sites, throughout the District and especially in Bexhill, whilst being mindful of the impact upon the environment	
		To Provide Opportunities to Meet the Social, Leisure and Cultural Needs of the Community	To maintain and improve our parks, open spaces, woodland and beaches.	Seek to improve access to leisure and cultural facilities
			To maintain and improve amenity areas and leisure facilities	
			To provide access to a wide range of cultural, sporting and leisure activities by working in partnership with others	
			To identify the District's housing needs and seek to meet them in partnership with others	
			To reduce social exclusion in the community by providing, enabling and supporting, in partnership with others, services which pro-actively address the issues involved	

Plan or Programme	Policy No.	Guiding Principles and Themes	Objectives or Requirements of the Plans or Programmes	Implications for the BHLR Project
Cuckmere and Sussex Haven Catchment Flood Management Plan (March 2005)	Draft objective 1	Flood risk and management	Reduce flood risk to towns, villages and isolated properties throughout the upper CFMP catchments through reduction in run-off rates from the High Weald.	Build flood mitigation measures into the road design
	Draft objective 2		Reduce flood risk to low lying parts of towns, villages and properties within the lower coastal parts of the CFMP area	
	Draft objective 3		Reduce flood risk to infrastructure, including road and rail links and water treatment works, both foul and potable.	
	Draft objective 4		Protect and enhance the natural environment by providing additional wetland habitats, improve the quality of existing natural habitats and increase biodiversity	
	Draft objective 5		Manage the impact of future urban and economic growth without increasing flood risk within the areas of potential growth	
	Draft objective 6		Improve sustainability of flood risk and water level management within low-lying Levels area and river estuaries	
	Draft objective 7		Manage flood risk under future climate change and sea level rise to an acceptable level within the catchments	
Hastings and St Leonards Community Strategy 2003-2013		Narrowing the Gap	Take our five most deprived wards out of the worst 10% nationally by 2013	Seek to open up transport links to deprived areas and provide access to services and facilities
		Resident satisfaction with the local neighbourhood	Increase the percentage of local people satisfied with their neighbourhood as a place to live to 85% by 2013	
		Child Poverty	Halve the gap between child poverty rates for Hastings and for East Sussex as a whole	
		Young People	Increase the proportion of young people who think the town is a good place for them to live in	
		Community Safety	Halve the gap between overall crime rates per 1000 for Hastings and St Leonards and the average for England and Wales	
		Unemployment	Reduce average unemployment in the town to the East Sussex level by 2013	
		Average earnings	Increase average weekly earnings to national levels by 201	
		Education	Increase the percentage of 15 year olds achieving 5 or more GCSEs at grade A*-C or equivalent from 40% in 2001 to 55% in 2013	
		Community cohesion	Increase the number of residents who feel people from different backgrounds live harmoniously in the town	
		Access to a community facility	Ensure that residents of each ward have ready access to a community facility throughout the year	
		Neighbourhood forums	Ensure that 80% of residents have a neighbourhood forum or similar body so they can influence services and take decisions affecting their local areas by 2013	
		Living longer, healthier lives	Reduce death rates from circulatory disease and cancer in people under 75, by at least 40% and 20% respectively by 2013	
		Substance Misuse	Reduce drug related deaths by 10% by 2005 and 20% by 2013	
		Housing – new homes	Build 3300 new homes by 2013, 60% on previously developed land and 25% affordable homes for young people and others in housing need	

Plan or Programme	Policy No.	Guiding Principles and Themes	Objectives or Requirements of the Plans or Programmes	Implications for the BHLR Project
		Housing – Improving Conditions	Remove the gap between our town and the national average for unfit homes	
		Transport – bus travel	Increase the total number of bus passenger journeys by 20% compared with 2001 levels	
		Access to open space	Give 90% of households access to open space such as parks, Local Nature Reserves, public gardens and play areas or the beach, within 300m of their homes by 2013	
		Waste recycling	Increase the amount of household waste recycled and composted to 30% by 2013	
Rother Community Plan 2004-2009		Community Safety	Actively support the Crime and Disorder Reduction Partnership's efforts to reduce crime, disorderly behaviour and the fear of crime	Seek to improve the local transport network and provide opportunities for walking and cycling
		Children and young people	To consult and engage with children, young people and their families in the development of facilities and services which meet their needs and enables all to participate in the wider community and realise their potential. In particular we will seek to reduce disaffection and tackle the underlying social causes of crime and anti-social behaviour	
		Education and Skills	Make life long learning a reality for everyone in the Rother area. In particular to develop a culture for learning that enables all to participate in the Rother community, to be economically and communally active and to participate in society generally	
		Culture and leisure	Provide year round opportunities for both local people and visitors to access and participate in a wide range of culture, sport and leisure activity.	
		Waste and recycling	Ensure residents and businesses in Rother understand that we must drastically reduce the amount of waste going to landfill within the next 2 years	
		Health	To co-ordinate the action of local organisations to improve health and reduce health inequalities within the population of Rother	
		Housing	To seek to meet the housing and support needs of our residents by increasing the provision of affordable accommodation in the Rother District	
		Jobs	To create an economic climate with fairly paid jobs for all which will help to improve the quality of people's lives	
		Transport	To secure improvements to the strategic rail and road networks and to improve access to better public transport. To improve co-ordination between bus, rail and community transport services. To improve safe and convenient places for walking and cycling	

Appendix B Sustainability Appraisal Framework Development – Alignment Matrix

Mott MacDonald SA Objectives	SEA Directive 2001/42/EC (Annex 1f)	UK Government National Sustainable Development Strategy	Integrated Regional Framework 2004: A Better Quality of life in the South East	Local Agenda 21 (LA 21) Strategy for a Sustainable East Sussex / Pride of Place – A Community Strategy for East Sussex	Rother District Council Local Action 21 (LA 21) / Rother Community Plan 2004-2009	Sustainable Development (SD) Strategy for Hastings and St. Leonard's / Hastings and St Leonards Community Strategy 2003-2013
1. Improve the air quality in Hastings and Bexhill by aiming to reduce concentrations of PM_{10} and greenhouse gas emissions such as CO_2 along the A259	Air	Climate Change and Energy -The effects of a changing climate can already be seen. Temperatures and sea levels are rising, ice and snow cover are declining, and the consequences could be catastrophic for the natural world and society. Scientific evidence points to the release of greenhouse gases, such as carbon dioxide and methane, into the atmosphere by human activity as the primary cause of climatic change. We will seek to secure a profound change in the way we generate and use energy, and in other activities that release these gases. At the same time we must prepare for the climate change that cannot now be avoided. We must set a good example and will encourage others to follow it	To reduce air pollution and ensure air quality continues to improve (Objective 11) To address the causes of climate change through reducing emissions of greenhouse gases and ensure that the South East is prepared for its impacts (Objective 12)	Minimise the environmental impact of all our activities and reduce pollution (LA 21 clause B6) Reduce emissions of 'greenhouse gases' and ensure that forward planning decisions take proper account of the likely impacts of future climate change (LA 21 clause B8)	To protect and enhance the character of the wider environment including air and water quality and the reduction of pollution (LA 21)	Promote action towards providing clean air, clean land and clean water and an environment free from pollution (SD Strategy page 25)
2. Protection of the existing water quality of the ground and surface water in the Combe Haven Valley catchment area	Water	Living within Environmental Limits - Respecting the limits of the planet's environment, resources and biodiversity – to improve our environment and ensure that the natural resources needed for life are unimpaired and remain so for future generations	To maintain and improve the water quality of the region's rivers and coasts, and to achieve sustainable water resources management (Objective 18)	Improve the quality of the water environment (LA 21 clause B7)	To protect and enhance the character of the wider environment including air and water quality and the reduction of pollution (LA 21)	Promote action towards providing clean air, clean land and clean water and an environment free from pollution (SD Strategy page 25)
3. Maintain existing flood regime/risk through appropriate mitigation	Water, Climatic Factors	Climate Change and Energy -The effects of a changing climate can already be seen. Temperatures and sea levels are rising, ice and snow cover are declining, and the consequences could be catastrophic for the natural world and society. Scientific evidence points to the release of greenhouse gases, such as carbon dioxide and methane, into the atmosphere by human activity as the primary cause of climatic change. We will seek to secure a profound change in the way we generate and use energy, and in other activities that release these gases. At the same time we must prepare for the climate change that cannot now be avoided. We must set a good example and will encourage others to follow it	To reduce the risk of flooding and the resulting detriment to public well-being, the economy and the environment (Objective 2)	There are no direct objectives on flood risk	There are no direct objectives on flood risk	There are no direct objectives on flood risk
4. Minimise impacts of the scheme through maintenance and enhancement of	Biodiversity, flora, fauna	Living within Environmental Limits - Respecting the limits of the planet's environment, resources and biodiversity – to improve our environment and ensure that the natural resources needed for life are unimpaired and remain so for future	To conserve and enhance the region's biodiversity (Objective 13)	Maintain and enhance the quality and diversity of the county's natural environment and resources (LA 21 clause B1) Protecting and promoting the	To protect the countryside and enhance particularly sensitive areas of high landscape, wildlife and agricultural value (LA 21)	Ensure that the conservation and enhancement of wildlife and habitats are considered within all planning, landscaping, redevelopment and regeneration proposals (SD Strategy

Mott MacDonald SA Objectives	SEA Directive 2001/42/EC (Annex 1f)	UK Government National Sustainable Development Strategy	Integrated Regional Framework 2004: A Better Quality of life in the South East	Local Agenda 21 (LA 21) Strategy for a Sustainable East Sussex / Pride of Place – A Community Strategy for East Sussex	Rother District Council Local Action 21 (LA 21) / Rother Community Plan 2004-2009	Sustainable Development (SD) Strategy for Hastings and St. Leonard's / Hastings and St Leonards Community Strategy 2003-2013
the County's biodiversity and natural resources, including designated areas		generations		environment (Community Strategy page 16)		page 48) Ensure that the biodiversity of open green spaces within the Borough is, wherever possible, maintained at current levels (SD Strategy page 48) Ensure that all residents and visitors have safe access to a variety of areas of quality local green space and that the management of green space enhances both the wildlife value and enjoyment for local residents (SD Strategy page 49) Encourage the local community to value the Borough's natural environment and facilitate opportunities to play a role in its protection and conservation (SD Strategy page 49)
5. Protect the local landscape character of the Combe Haven Valley and complement the future implementation of the proposed Pebsham Countryside Park	Landscape	Natural Resource Protection and Environmental Enhancement - Natural resources are vital to our existence and that of communities throughout the world. We need a better understanding of environmental limits, environmental enhancement and recovery where the environment is most degraded to ensure a decent environment for everyone, and a more integrated policy framework	To protect, enhance and make accessible for enjoyment, the region's countryside and historic environment (Objective 14)	Minimise the need for development on greenfield sites (LA 21 clause B4) Enable easy access to, and enjoyment of, the countryside for all (LA 21 clause B5)	To protect the countryside and enhance particularly sensitive areas of high landscape, wildlife and agricultural value (LA 21) To maintain and improve our parks, open spaces, woodland and beaches (LA 21)	Seek to ensure that any Greenfield development provides 'environmental repayment' (SD Strategy page 45) Give 90% of households access to open space such as parks, Local Nature Reserves, public gardens and play areas or the beach, within 300m of their homes by 2013 (Community Strategy, Key Target 20)
6. Protect and enhance the townscape of Hastings and Bexhill	Landscape, Population, Cultural Heritage	Natural Resource Protection and Environmental Enhancement - Natural resources are vital to our existence and that of communities throughout the world. We need a better understanding of environmental limits, environmental enhancement and recovery where the environment is most degraded to ensure a decent environment for everyone, and a more integrated policy framework	To improve the efficiency in land use through the re-use of previously developed land and existing buildings, including re-use of materials from buildings, and encourage urban renaissance (Objective 10)	Maintain and enhance the quality of the county's built environment and historic heritage (LA 21 clause B2)	There are no direct objectives on townscape	Encourage and support the use of brownfield sites, derelict land and buildings for developments and housing (SD Strategy page 45)
7. Promote the effective and sustainable management of renewable and non-renewable resources such	Soil, Air, Climatic Factors	Natural Resource Protection and Environmental Enhancement - Natural resources are vital to our existence and that of communities throughout the world. We need a better understanding of environmental limits, environmental enhancement and recovery where the	To improve the efficiency in land use through the re-use of previously developed land and existing buildings, including re-use of materials from buildings, and encourage urban	Use all resources as efficiently as possible, minimising the generation of waste (LA 21 clause A1) Maximise the re-use and recycling of materials and seek the Best Practicable Environmental Option for	To promote the development of employment sites, with special emphasis on brownfield sites, throughout the District and especially in Bexhill, whilst being mindful of the impact upon the environment (LA 21)	Actively promote the re-use and recycling of products and materials (SD Strategy page 24) Encourage and support the use of brownfield sites, derelict land and buildings for developments and

Mott MacDonald SA Objectives	SEA Directive 2001/42/EC (Annex 1f)	UK Government National Sustainable Development Strategy	Integrated Regional Framework 2004: A Better Quality of life in the South East	Local Agenda 21 (LA 21) Strategy for a Sustainable East Sussex / Pride of Place – A Community Strategy for East Sussex	Rother District Council Local Action 21 (LA 21) / Rother Community Plan 2004-2009	Sustainable Development (SD) Strategy for Hastings and St. Leonard's / Hastings and St Leonards Community Strategy 2003-2013
as the use of brownfield land, minimisation of waste and maximisation of the re-use and recycling of materials		environment is most degraded to ensure a decent environment for everyone, and a more integrated policy framework	renaissance (Objective 10) To reduce the global, social and environmental impacts of consumption of resources by using sustainable produced and local products (Objective 16) To reduce waste generation and disposal, and achieve the sustainable management of waste (Objective 17) To increase energy efficiency, and the proportion of energy generated from renewable sources in the region (Objective 19)	dealing with residual waste (LA 21 clause A4) Promote the sustainable management of land (LA 21 clause A5) Promote the effective and sustainable management of the county's renewable and non-renewable resources (LA 21 clause A2) Encourage the appropriate development of renewable energy resources (LA 21 clause A3)	To ensure residents and businesses in Rother understand that we must drastically reduce the amount of waste going to landfill within the next 2 years (Community Plan page 8)	housing (SD Strategy page 45) Actively minimise the use of energy, water and natural resources to ensure they are used efficiently (SD Strategy page 23) Reduce the amount of waste produced in all sectors of our community (SD Strategy page 23) Increase the amount of household waste recycled and composted to 30% by 2013 (Community Strategy, Key Target 21) Actively promote the use of clean and efficient forms of energy supply (SD Strategy page 24)
8. Reduce local road congestion and associated road traffic accidents, and minimise nuisances such as noise pollution	Human Health	Ensuring a Strong, Healthy and Just Society - Meeting the diverse needs of all people in existing and future communities, promoting personal wellbeing, social cohesion and inclusion, and creating equal opportunity for all	To reduce road congestion and pollution levels by improving travel choice, and by reducing the need for travel by car/lorry (Objective 15)	Promote healthier lifestyles and provide access to high quality medical services for all (LA 21 clause F1)	To help maintain and enhance standards of public health and safety (LA 21) To seek improvements in the personal health of the local community (LA 21) To co-ordinate the action of local organisations to improve health and reduce health inequalities within the population of Rother (Community Plan page 8)	Try to improve the health of local people and, wherever possible, decrease health inequality (SD Strategy page 27) Reduce stresses affecting local families (SD Strategy page 30)
9. Increase travel choice and reduce the need to travel by car by improving bus services and opportunities for cycling and walking	Air, Climatic Factors, Human Health	Living within Environmental Limits - Respecting the limits of the planet's environment, resources and biodiversity – to improve our environment and ensure that the natural resources needed for life are unimpaired and remain so for future generations	To reduce road congestion and pollution levels by improving travel choice, and by reducing the need for travel by car/lorry (Objective 15	Increase transport choice and reduce the volume of road traffic, congestion and reliance on the car (LA 21 clause C1) Improve the county's strategic transport network (LA 21 clause C2) Improve sustainable transport opportunities for rural communities (LA 21 clause C3) Ensure travel intensive development is located in places that are readily accessible by public transport (LA 21 Clause C4)	To seek significant improvements to the road, rail and public transport infrastructure in partnership with other relevant agencies and organisations (LA 21) To secure improvements to the strategic rail and road networks and to improve access to better public transport (Community Plan page 10) To improve co-ordination between public bus, rail and community transport services (Community Plan page 10)	Ensure all new developments are accessible and well located to encourage use of public transport , walking and cycling (SD Strategy page 45) Develop an integrated transport plan which aims to manage the need to travel, overall traffic levels and reliance on the car, and to increase cycling, walking and use of public transport (SD Strategy page 52) To support the education of local people about sustainable transport issues and to promote the health benefits of cycling and walking (SD

Mott MacDonald SA Objectives	SEA Directive 2001/42/EC (Annex 1f)	UK Government National Sustainable Development Strategy	Integrated Regional Framework 2004: A Better Quality of life in the South East	Local Agenda 21 (LA 21) Strategy for a Sustainable East Sussex / Pride of Place – A Community Strategy for East Sussex	Rother District Council Local Action 21 (LA 21) / Rother Community Plan 2004-2009	Sustainable Development (SD) Strategy for Hastings and St. Leonard's / Hastings and St Leonards Community Strategy 2003-2013
				Improving communications by extending the availability of broadband, and providing a high quality accessible, affordable, sustainable and integrated transport network (Community Strategy page 12)		Strategy page 54) Develop, in partnership, public transport systems which are accessible, affordable and responsive to local need (SD Strategy page 53) Continue to seek improvements to the basic transport infrastructure (SD Strategy page 52) Develop a transport hierarchy in Hastings and St Leonards which gives more priority to pedestrians in the town centre and commercial areas (SD Strategy page 53) Increase the total number of passenger journeys by 20% compared with 2001 levels (Community Strategy, Key Target 19)
10. Reduce crime and the fear of crime in Bexhill and Hastings and the rural areas through which the proposed road passes	Population, Human Health	Sustainable Communities - Our aim is to create sustainable communities that embody the principles of sustainable development at the local level. This will involve working to give communities more power and say in the decisions that affect them; and working in partnership at the right level to get things done. The UK uses the same principles of engagement, partnership, and programmes of aid in order to tackle poverty and environmental degradation and to ensure good governance in overseas communities	To reduce crime and the fear of crime (Objective 6)	Reduce crime and the fear of crime (LA 21 clause F3) Improve personal and community safety (LA 21 clause F4) Improving community safety (Community Strategy page 15)	To participate in reducing crime and disorder (LA 21) To secure safe and convenient places for walking and cycling (Community Plan page 10) Actively support the Crime and Disorder Reduction Partnership's efforts to reduce crime, disorderly behaviour and the fear of crime (Community Plan page 5) Consult and engage with children, young people and their families in he development of facilities and services which meet their needs and enables all to participate in the wider community and realise their potential. In particular we will seek to reduce disaffection and tackle the underlying social causes of crime and anti social behaviour (Community Plan page 5)	Encourage the provision of a safe, secure and well designed Environment within existing and proposed developments, recognising the historic character of the town (SD Strategy page 46) Establish a safe and secure environment for local people and visitors by reducing levels of crime and disorder throughout the Borough (SD Strategy page 15) Halve the gap between overall crime rates per 1000 for Hastings and St Leonards and the average for England and Wales (Community Strategy, Key Target 5) Increase the percentage of residents who feel safe walking alone in their local neighbourhoods at night (Community Strategy, Key Target 6)
11. Improve the community's of Hastings and	Population	Sustainable Communities - Our aim is to create sustainable communities that embody the principles of sustainable	To improve accessibility to all services and facilities (Objective 8)	Promote more self-contained communities, with services, jobs and facilities available locally (LA 21	To maintain and improve amenity areas and leisure facilities (LA 21)	Ensure that residents of each ward have ready access to a community facility throughout the year

Mott MacDonald SA Objectives	SEA Directive 2001/42/EC (Annex 1f)	UK Government National Sustainable Development Strategy	Integrated Regional Framework 2004: A Better Quality of life in the South East	Local Agenda 21 (LA 21) Strategy for a Sustainable East Sussex / Pride of Place – A Community Strategy for East Sussex	Rother District Council Local Action 21 (LA 21) / Rother Community Plan 2004-2009	Sustainable Development (SD) Strategy for Hastings and St. Leonard's / Hastings and St Leonards Community Strategy 2003-2013
Bexhill's access to key services/ facilities		development at the local level. This will involve working to give communities more power and say in the decisions that affect them; and working in partnership at the right level to get things done. The UK uses the same principles of engagement, partnership, and programmes of aid in order to tackle poverty and environmental degradation and to ensure good governance in overseas communities		clause E7) Regenerating rural communities (Community Strategy page 9) Create joint, faster and easier access to services for all citizens (Community Strategy page 14)		(Community Strategy, Key target 11) Increase the number of residents who feel people from different backgrounds live harmoniously in the town (Community Strategy, Key Target 10) Increase the percentage of local people satisfied with their neighbourhood as a place to live to 85% by 2013 (Community Strategy, Key Target 2) Increase the proportion of young people who think the town is a good place for them to live in (Community Strategy, Key Target 4)
12. Increase opportunity to provide affordable, decent housing and enable development of proposed housing schemes in Hastings and Bexhill	Material assets	Sustainable Communities - Our aim is to create sustainable communities that embody the principles of sustainable development at the local level. This will involve working to give communities more power and say in the decisions that affect them; and working in partnership at the right level to get things done. The UK uses the same principles of engagement, partnership, and programmes of aid in order to tackle poverty and environmental degradation and to ensure good governance in overseas communities	To ensure that everyone has the opportunity to live in a decent, sustainable constructed and affordable home (Objective 1)	Enable people to live in decent, warm and affordable homes, suited to their needs (LA 21 clause G1)	To identify the District's housing needs and seek to meet them in partnership with others (LA 21) To seek to meet the housing and support needs of our residents by increasing the provision of affordable accommodation in the Rother District (Community Plan page 9)	Support local residents access to decent housing at an affordable cost (SD Strategy page 44) Ensure that housing provision is linked to employment, encouraging a close physical relationship between homes and work, including mixed use developments (SD Strategy page 45) Build 3,300 new homes by 2013, 60% on previously developed land and 25% affordable homes for young people and others in housing need (Community Strategy, Key Target 16) Remove the gap between our towns and the national average for unfit homes (Community Strategy, Key Target 17)
13. Increase social inclusion and reduce deprivation through supporting the local economy, opportunities for investment, education and employment	Population	Achieving a Sustainable Economy - Building a strong, stable and sustainable economy which provides prosperity and opportunities for all, and in which environmental and social costs fall on those who impose them (polluter pays), and efficient resource use is incentivised	To sustain economic growth and competitiveness across the region (Objective 21) To stimulate economic revival in priority regeneration areas (Objective 22) To develop a dynamic, diverse and knowledge-based economy that excels	Help East Sussex businesses to thrive and attract appropriate new businesses to the county (LA 21 clause D1) Support community-based economic development initiatives (LA 21 clause D7) Reduce equalities, poverty and social exclusion (LA 21 clause F2) Build a prosperous local economy	To reduce social exclusion in the community by providing, enabling and supporting, in partnership with others, services which pro-actively address the issues involved (LA 21)	Develop and grow a diverse, sustainable local economy (SD Strategy page 37) Support opportunities for economic development and diversification (SD Strategy page 46) Support mutual trading between Hastings and Rother (SD Strategy page 42) Take our five most deprived wards

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			in innovation with higher value, lower impact activities (Objective 23) To encourage the development of a buoyant, sustainable tourism sector (Objective 24) To reduce poverty and social exclusion and close the gap between the most deprived areas in the South East and the rest of the region (Objective 4) To create and sustain vibrant communities (Objective 7)	(Community Strategy page 8) Tackling the problems of the most deprived communities (Community Strategy page 10)		out of the worst 10% nationally by 2013 (Community Strategy) Halve the gap between child poverty rates for Hastings and for East Sussex as a whole (Community Strategy, Key Target 3) Increase the average weekly earnings to national levels by 2013 (Community Strategy, Key Target 8)
	Population		To raise educational achievement levels across the region and develop the opportunities for everyone to acquire the skills needed to find and remain in work (Objective 5)	Provide everyone with access to lifelong learning - the education and skills training we need throughout our lives to fulfil our potential (LA 21 clause G2) Promote wider understanding and appreciation of sustainability issues (LA 21 clause B3) Raising educational aspiration and achievement (Community Strategy page 11)	To make life long learning a reality for everyone in the Rother area. In particular to develop an culture for learning that enables all to participate in the Rother community, to be economically and communally active and to participate in society generally (Community Plan page 6)	Raise awareness and understanding in all sectors about sustainable development through training and education (SD Strategy page 20) Encourage, promote and facilitate the provision of opportunities for lifelong learning and training – which are affordable and accessible to all (SD Strategy page 20) Increase the percentage of 15 year-olds achieving 5 or more GCSEs at grades A* - C or equivalent from 40% in 2001 to 55% in 2013 (Community Strategy, Key Target 9)
	Population		To develop and maintain a skilled workforce to support long-term competitiveness of the region (Objective 25) To ensure high and stable levels of employment so everyone can benefit from the economic growth of the region (Objective 20)	Create more opportunities for residents to work locally in long-term, satisfying employment (LA 21 clause D2)	To create an economic climate with fairly paid jobs for all which will help to improve the quality of people's lives (Community Plan page 10)	Encourage employers to promote the adoption of healthy lifestyles for all employees (SD Strategy page 29) Improve everyone's access to skills and knowledge and promote local jobs for local people (SD Strategy page 40)
14. Promote well being through improvement of opportunities for cultural and	Cultural Heritage, Architectural and Archaeological	Ensuring a Strong, Healthy and Just Society - Meeting the diverse needs of all people in existing and future communities, promoting personal wellbeing, social cohesion and inclusion, and creating equal	To encourage increased engagement in cultural activity across all sectors of the community on the South East (Objective 9)	Maintain and enhance the quality of the county's built environment and historic heritage (LA 21 clause B2) Ensure that a wide range of cultural	To maintain and improve amenity areas and leisure facilities (LA 21) To provide access to a wide range of cultural, sporting and leisure activities	Promote the benefits of adopting a healthy lifestyle to local residents (SD Strategy page 29) Protect and actively promote the

Mott MacDonald SA Objectives	SEA Directive 2001/42/EC (Annex 1f)	UK Government National Sustainable Development Strategy	Integrated Regional Framework 2004: A Better Quality of life in the South East	Local Agenda 21 (LA 21) Strategy for a Sustainable East Sussex / Pride of Place – A Community Strategy for East Sussex	Rother District Council Local Action 21 (LA 21) / Rother Community Plan 2004-2009	Sustainable Development (SD) Strategy for Hastings and St. Leonard's / Hastings and St Leonards Community Strategy 2003-2013
recreational pursuits, including for disabled users 15. Protect the cultural and archaeological heritage and diversity along the route corridor	Heritage, Human Health	opportunity for all	To protect, enhance and make accessible for enjoyment, the region's countryside and historic environment (Objective 14) To improve health and well-being of the population and reduce inequalities in health (Objective 3)	and recreational opportunities is available and easily accessible to everyone (LA 21 clause G4) Ensure that all buildings and places open to the public are accessible to all (LA 21 clause G3) Support the distinctive character of local communities and encourage residents to take pride in them (LA 21 clause E3)	by working in partnership with others (LA 21) To provide year round opportunities for both local people and visitors to access and participate in a wide range of culture, sporty and leisure activity (Community Plan page 7) To build a strong multi agency partnership to guide Rother's cultural development and advocate the role of culture and leisure in social, environmental and economic well being (Community Plan page 7)	towns unique cultural heritage (SD Strategy page 34) Recognise and embrace the different cultures of residents and visitors to the town (SD Strategy page 35) Provide a range of quality sports, play, arts and cultural opportunities that are physically, emotionally and socially rewarding and accessible to all (SD Strategy page 32) Encourage local residents to take up leisure, art and cultural activities to improve their social and emotional wellbeing (SD Strategy page 33) Develop communications networks within the towns existing groups, organisations, facilities and locations connected to sports, arts and culture (SD Strategy page 34) Reduce death rates from circulatory disease and cancer in people under 75, by at least 40% and 20% respectively by 2013 (Community Strategy, Key Target 13)

Appendix C Design and Construction Sustainability Register

Bexhill to Hastings Link Road - Design and Construction Sustainability Register. June 2006

Version 1.0

D	Design Phase
C	Construction Phase

	Completed/Adopted in design
	Ongoing
	To be progressed
	Discounted

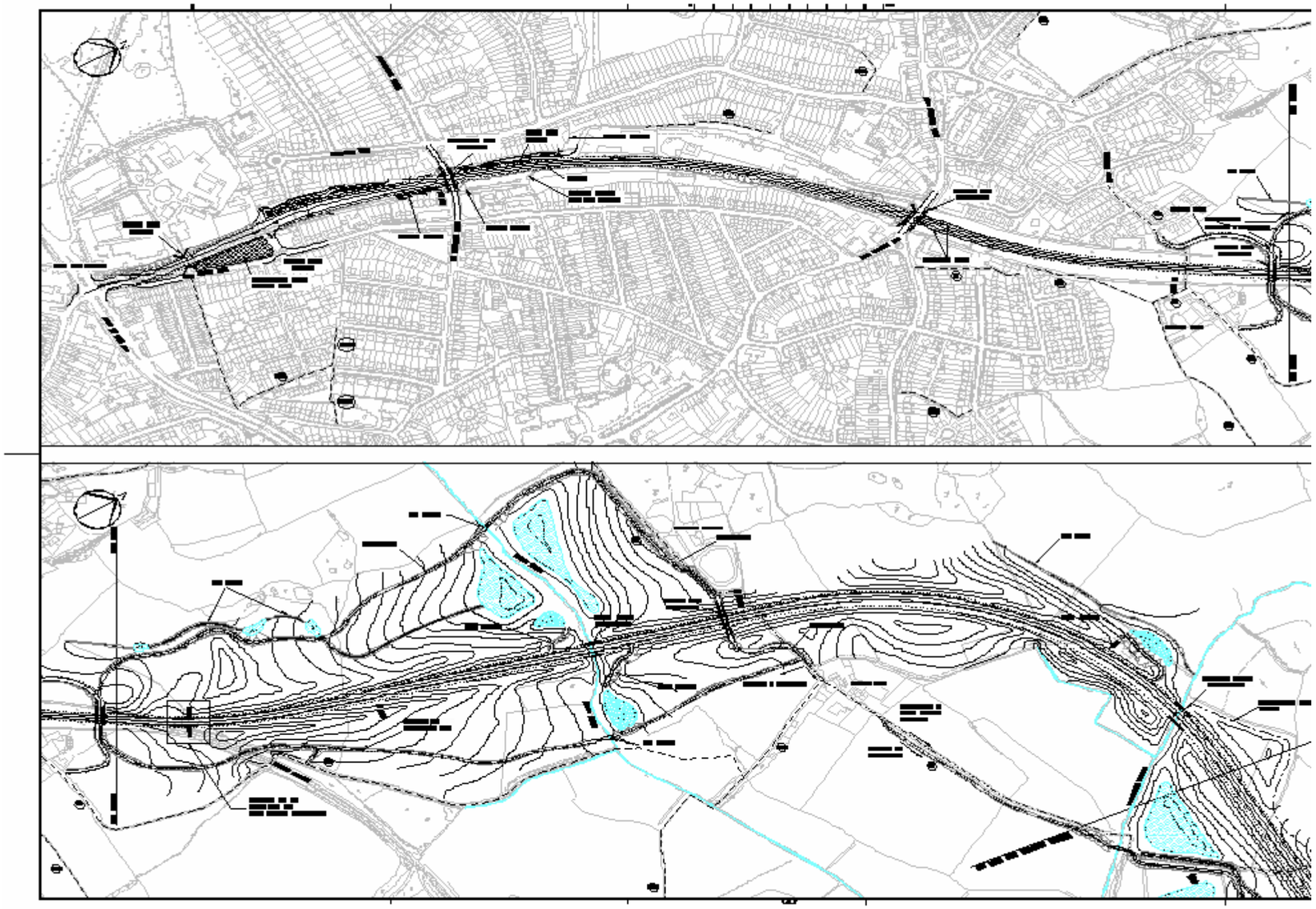
No.	Theme	Sustainability Objective	D/C	Proposals	Project Implementation	Status	Action/Comment	Ownership
1.1	Local air quality and greenhouse gases	Improve the air quality in Hastings and Bexhill by aiming to reduce concentrations of PM10 and greenhouse gas emissions such as CO2 along the A259	D	Minimise effect of traffic and plant emissions.	Modelling studies to be undertaken as part of the air quality assessment.		Air quality assessment underway as part of EIA	MM (Matt Ireland)
1.2			C		Use modern well maintained plant.			Site Team
1.3			D&C		Minimise vehicle journeys			ALL
1.4			C		Turn off plant when not in use.			Site Team
1.5			C	Reduce air emissions by technology	Eliminate the use of a diesel generator on-site.			Site Team
1.6			C	Minimise particulates	Implement dust control measures		Include in CMP	Site Team
1.7			D&C	Reduce greenhouse gas emissions	Use of renewable technology and energy where possible			OW
1.8			D	Create carbon sinks	Planting of trees as part of landscaping and also in local area to create carbon sinks			ESCC landscape team & OW
2.1	Water quality (ground and surface)	Protection of the existing quality of the groundwater and surface water in the Combe Haven Valley catchment area	D	Protect and enhance water quality by incorporating surface water drainage methods that take account of the quantity and quality of the drainage outflow.	Drainage design includes for oil/water interceptors and natural attenuation ponds using reed and filter beds.			OW
2.2			D		Drainage design includes for measures to prevent lime/cement derived leachate from entering the local environment.		To be included in specifications	OW
2.3			D		Specifying the use of low alkali additives for sprayed concrete.		To be included in slope shotcrete specs	OW
2.4			C		Use modern well maintained plant to prevent fuel leaks.			Site Team
2.5			C		Use defined areas for refuelling equipped for pollution prevention		Include in CMP	Site Team
2.6			D	Prevent undesirable construction techniques and materials in proximity to the water table.	Road structure is generally located above the water table.		n/a	n/a
2.7			D		Road lining to be watertight to prevent escape of water/cleansing effluent/accidental hazardous spillage from the road into the aquifer.			OW
2.8			D		Soakaway design based on significant attenuation between the ground surface and the groundwater table.			OW/FM
2.9			D		Specifying the use of low alkali additives for sprayed concrete.		To be included in shotcrete specs	OW
2.10			D		Ground investigations undertaken during Phase 1 to model the groundwater table level and flow.			MM/FM
2.11			D&C		Removal from site of Class U2 material.			Site Team
3.1	Flood Risk	Maintain existing flood regime/risk through appropriate mitigation	D	Reduce risk of flooding	Use of reedbeds to store increased run-off			OW/ESCC
3.2			D		Incorporate flood storage into the design			OW/ESCC
4.1	Biodiversity (wildlife)	Minimise impacts of the scheme through maintenance and enhancement of the quality and diversity of the County's natural environment and resources, including designated areas	D	Include proposals for protecting the local habitat, flora and fauna.	Ecological surveys to be undertaken as part of ecology assessment to identify local species and their sensitivity to the scheme.			ACTA
4.2			D		Soil survey to be undertaken			MM (Fran Storey)
4.3			D		The design includes drainage, landscaping & planting proposals to limit the impact on the ecology and produce a finish that is in harmony with the natural habitat.			ACTA/OW
4.4			D		Inclusion of badger routes and mammal fencing to prevent fauna becoming road kill victims.		Mitigation measures to be outlined in EIA	ACTA/OW
4.5			C		Undertake animal relocation prior to site clearance.			ACTA/Site Team
4.6			C		Ensure access is restricted to within the site boundary to prevent damage to the adjacent environment.			Site Team
4.7			C		Engage environmental site manager to coordinate policy			OW/ESCC
4.8			C		Provide staff awareness briefings			Site Team
4.9			D&C		Maintain a risk register			Site Team
4.10			D&C	Prevent spread of invasive species	Identify areas of Japanese Knotweed and requirements for disposal.		Disposal requirements to be specified if identified during surveys	ACTA/OW
5.1	Landscape, countryside	Protect and enhance the local landscape character of the Combe Haven Valley and complement the future implementation of the proposed Pebsham Countryside Park	D	Optimise "green" and natural finishes that minimise the visual impact on the environment.	Planting of trees as part of landscaping to provide screening			OW/ESCC
5.2			D		Use of natural ridges, cuttings and embankments to inetragte the road into the landscape and limit its visual impacts			OW/ESCC
5.3			D		Cuttings and embankments to be vegetated to maintain a green appearance where possible.			OW/ESCC
6.1	Townscape	Protect and enhance the townscape of Hastings and Bexhill	C	Minimise the impact on views of the townscape	Minimise use of tall cranes			Site Team
6.2			C		Minimise use of roadworks in the town centre			Site Team
6.3			D&C	Minimise effect on the historic built environment	Avoid or fence off listed buildings			OW/CBA
7.1	Travel choice, public transport efficiency and sustainable transport	Increase travel choice and reduce the need to travel by car by improving bus services and opportunities for cycling and walking	D	Include proposals for maintaining and improving public access to the area.	Maintain footpath coverage.			MM/OW
7.2			D		Provision of Greenway to provide opportunities for walking and cycling		Already confirmed - specifics in design stage	ESCC/OW
7.3			D		Increase ease of public access to the local SSSIs		Provide public transport to SSSI region	ESCC/OW/MM
7.4			C	Minimise number and distance of vehicle journeys.	Provide minibus services for collection of workforce to reduce number of vehicle journeys.			Site Team
7.5			D&C		Encourage the use of cycles by providing secure storage facilities.		Cycle use to be encouraged for both site team and future greenway users	ESCC/OW/Site Team
7.6			C		Coordinate supply deliveries to minimise number of vehicle journeys.			Site Team
7.70			D&C		Use local suppliers where possible to reduce journey distances.		Ensure aggregate is from local quarries etc.	Site Team
7.8			C		Plan earthwork cut, fill & stockpiling operations to minimise haul distances.			Site Team
7.9			C		Minimise movements of materials			Site Team
7.10			D&C	Planning to reduce number and length of road journeys.	Encourage greater use of public transport, cycling & walking by design provision.			ESCC/OW
8.1	Health and safety	Reduce road congestion and associated road traffic accidents in Bexhill and Hastings, and minimise nuisances such as noise pollution	D	Minimise or reduce noise impact of road scheme, during and after construction.	Noise and environmental barriers are included within the scheme design			OW/SEC
8.2			D		Use of noise attenuating road surface			OW/SEC
8.3			D		Design to include road cuttings where appropriate.			OW
8.4			D					
8.5			C		Use modern well maintained plant.			Site Team
8.6			C		Restriction of site working hours e.g. 8am-6pm Monday-Friday and 9am-1pm Saturday			Site Team
8.7			C		Turn off plant when not in use.			Site Team
8.8			D&C		Reduce number of journeys to site			Site Team
8.9			D	Minimise road traffic accidents	Pedestrian crossings incorporated into the design at appropriate points			ESCC
8.10			D		Traffic calming measures such as speed cameras, warning signs and traffic lights			ESCC

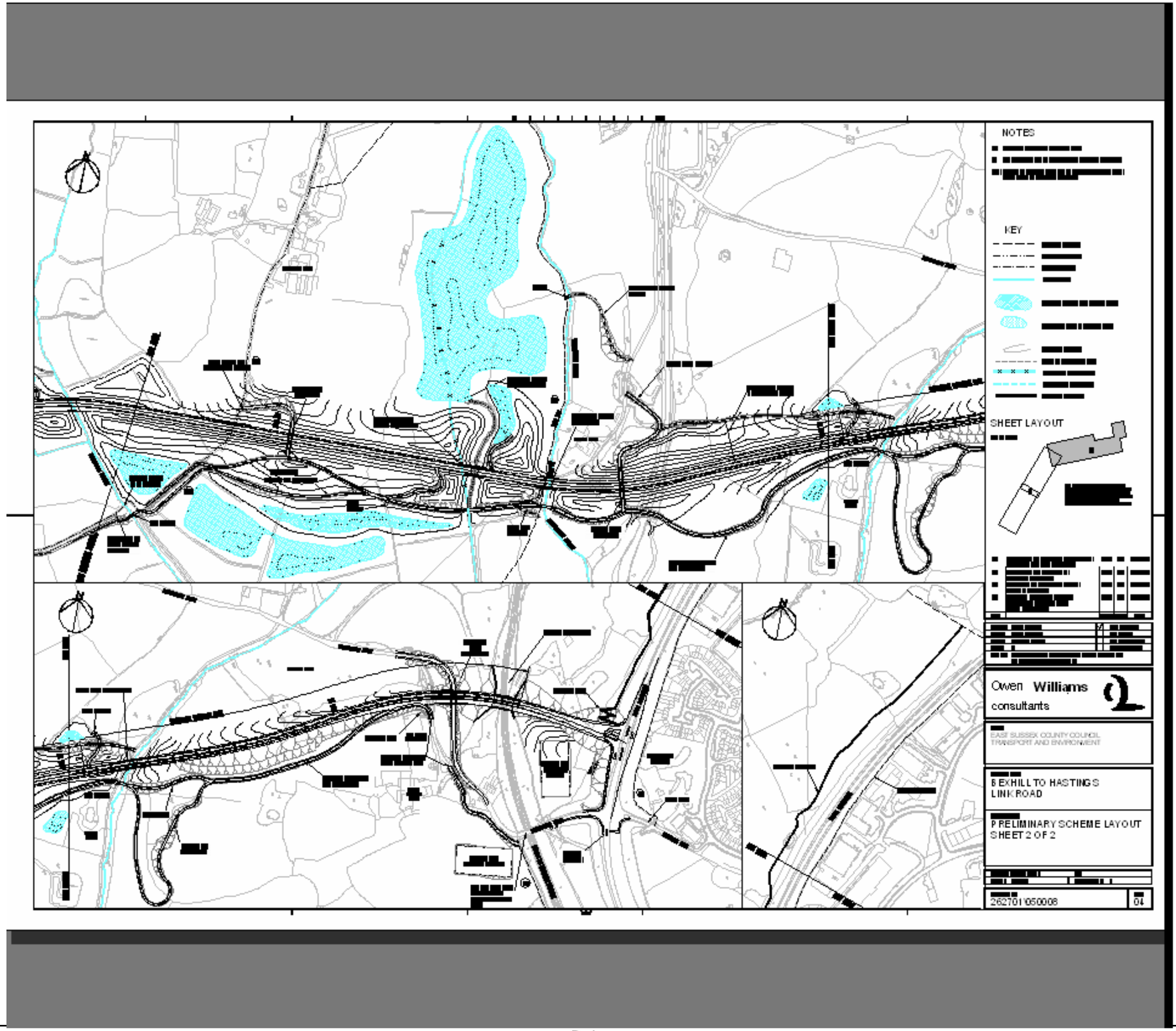
9.1	Energy, resource use, and waste	Promote the effective and sustainable management of renewable and non-renewable resources such as the use of brownfield land, minimisation of waste and maximisation of the re-use and recycling of materials	D	Earthworks	The design has been produced with balanced earthwork quantities.			OW
9.2			C		Where possible adopt natural moisture content reduction measures to minimise use of lime.			Site Team
9.3			D		Ground improvement techniques (lime/cement treatment) have been included to maximise reuse of materials for both general fill and road pavement construction.			OW
9.4			D		Contamination survey and analyses undertaken during Phase 1 to identify potential risks.		Results to feed into re-use of on-site materials	MM (Fran Storey)
9.5			D		Specification for fill material to exclude contaminated materials.			Site Team
9.6			D&C		Implement effective waste management proposals			Site Team
9.7			C		Limit stockpiling where possible to prevent cross contamination.			Site Team
9.8			D	Drainage	Minimisation of material has been undertaken by use of the SUDS approach. This includes for the use of filter drains, swales and permeable surfaces in preference to pipes for surface water collection, conveyance and storage.			FB/OW
9.9			D	Pavements	The pavement has been designed using lime/cement stabilised materials to maximise the use of on site materials and prevent the need for importation of materials.			OW
9.10			D	Timber	Design to consider concrete construction and finishes that limit the use of formwork.		General item applicable to all concrete surfaces	OW
9.11			D		Design to exclude the need for tropical hardwoods unless demonstrable maintenance free service life factors are favourable.			OW
9.12			C		Wood to be obtained from managed and sustainable forests			OW/Site Team
9.13			D	Concrete	Designs undertaken to minimise concrete requirements for structures and foundations.		General items applicable to all structural design	OW/Site Team
9.14			D		Concrete specification to allow use of recycled aggregates and additives (eg pfa).			OW/Site Team
9.15			C		Planning of deliveries to prevent unnecessary loads.			Site Team
9.16			C	Water	Use of non potable water for toilets and construction activities.			Site Team
9.17			C		Recycling of water in batching plant			Site Team
9.18			D	General Waste Issues	Specify the use of recycled materials where possible.		General items relating to all design issues	ALL
9.19			D		Consider material longevity as part of life time structure assessment			OW/Site Team
9.20			D		Design for whole life costs.			OW
9.21			C		On site collection and separate storage of recyclable materials.			Site Team
9.22			C		Return packaging to suppliers			Site Team
9.23			C		Waste minimisation to be included as part of tool box talks			Site Team
9.24			D	Inclusion of energy efficient electrical equipment including use of renewable energy	Power factor correction will be installed on all motor circuits (pumps and jet fans) to reduce the energy			OW
9.25			D					
9.26			D		Consideration of whole life design costs.			OW
9.27			C		Use of insulated and temperature regulated site office buildings.			Site Team
9.28			C		Use of energy efficient electrical equipment including photovoltaics to power road signs.			Site Team
10.1	Crime	Reduce crime and the fear of crime in Bexhill and Hastings and the rural areas through which the proposed road passes	C	Reduce crime and vandalism on site	Implementation of site security measures such as fencing, locked gates, CCTV, warning signs, security guard after hours			Site Team
10.2			D	Reduce crime and fear of crime along the Greenway	Appropriate lighting, signs and emergency call boxes incorporated into the Greenway design			OW
11.1	Access to community facilities	Improve the community's of Hastings and Bexhill's access to key services/facilities	C	Minimise disruption to local roads	Limit road closures during construction			Site Team
12.1	Housing	Increase opportunity for provision of affordable, decent housing and enable development of proposed housing schemes in Hastings and Bexhill	D	Increase opportunity for housing development	Provision for additional link roads to key development sites			ESCC
13.1	Economy, employment & education, social inclusion and deprivation	Increase social inclusion and reduce deprivation through supporting the local economy, opportunities for investment, education and employment.	C	Encourage use of local companies	Use local workforce where possible.			Site Team
13.2			D &C		Use local suppliers, goods and services where possible			Site Team
			D&C	Encourage public participation in design process through consultation and education	Present project information at any public consultation meetings and consider presentation of project information at the proposed Pebsham Countryside Park visitor centre			ESCC
14.1	Leisure, recreation and culture	Promote well being through improvement of opportunities for cultural and recreational pursuits, including for disabled users	D	Reduce traffic impacts in urban areas	Undertake future traffic modelling to demonstrate longer term benefits.			OW
14.2			D	Increase opportunities for recreational pursuits	Provide Greenway for cycling, walking and horse-riding		Agreed and incorporated into design	OW
14.3			D	Improve access to open countryside	Provision for new and upgraded paths			MM/OW
15.1	Cultural heritage and archaeological heritage	Protect the cultural and archaeological heritage and diversity along the route corridor	D	Limit impact on sites of archaeological interest and permit access for inspections.	Archaeological studies and inspections have been undertaken as part of Phase 1.		Results to be reported in the EIA	CBA
15.2			C		Engage archaeologists with a watching brief and call off capacity to identify potential finds.			Site Team/CBA
15.3			D	Limit impacts on listed buildings	Careful siting of road near listed buildings			CBA/OW
15.4			C		Protection of listed buildings while works undertaken			Site Team/CBA

Key:

ESCC	East Sussex County Council
MM	Mott MacDonald
OW	Owen Williams
CBA	Chris Blandford Associates
FB	Faber Maunsell
SEC	Southdown Environmental Consultants

Appendix D Preliminary Scheme Layout (Engineering Design)




NOTES
KEY
SHEET LAYOUT
Owen Williams
consultants
EAST SUSSEX COUNTY COUNCIL
TRANSPORT AND ENVIRONMENT
BEXHILL TO HASTINGS
LINK ROAD
PRELIMINARY SCHEME LAYOUT
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