1 Introduction

1.1 Objective of the Environmental Report

1.1.1 This Environmental Report is part of the Strategic Environmental Assessment (SEA) of the Isle of Wight Highways Private Finance Initiative (PFI). It has been produced on behalf of Isle of Wight Council in compliance with the Environmental Assessment of Plans and Programmes Regulations 2004 SI No. 1633 and as required by the SEA Directive 2001/42/EC.

1.2 The Isle of Wight Highways PFI

- 1.2.1 The Isle of Wight Highways PFI is a 25 year programme of highways maintenance and operation. It is designed to reverse historic underinvestment in the Isle of Wight's highways network and to revitalise the Island's road infrastructure. Under the Highways PFI, which covers the period from 2013 to 2038, the Island's public road network (including pavements and cycleways) will be upgraded and improved. Street lights will also be replaced on a one-for-one basis with newer, more energy efficient stock. In addition to major improvements to the highways network, the scope of the Highways PFI includes routine maintenance elements such as street cleansing, roadside verge maintenance and gully cleansing.
- 1.2.2 The Highways PFI itself is a large, complex procurement initiative, many parts of which have little or no bearing on the built form of the highways network. For example, there are extensive sections on Legal and Financial requirements for the successful Service Provider. The Technical requirements of the Highways PFI oblige the Service Provider to return the extent and condition of the highways network to agreed standards, within its current footprint, and maintain these standards for the lifetime of the project.
- 1.2.3 The first seven years of the project, known as the Core Investment Period (CIP), will focus on upgrading and improving highways, including some capital schemes to bring the entire highway network up to the required standard. From year eight to 25, known as the Lifecycle Period, the focus of the Highways PFI switches to maintaining the network following upgrades in the CIP. This may include some additional upgrading works as assets deteriorate. Over the course of the 25 years, routine and cyclic maintenance will be in place to ensure the highways network runs effectively and safely. The majority of the Council's existing statutory duties in relation to the highway will be transferred to the Highways PFI Service Provider throughout the 25 year period. To summarise, the Highways PFI programme encompasses the following main aspects over the 25 years:
 - Refurbishment of the highways network (over the first seven years);
 - Life cycle maintenance (over years eight to 25);
 - Routine maintenance (over 25 years); and
 - Operation of the highways network (over 25 years).



1.2.4 The full range of services to be transferred included within the Highways PFI programme is presented within **Table 1.1**.

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Core Services		
Structural Maintenance	Carriageways, footways, urban footpaths, kerbs, channels, road signs and highway drainage	
Routine Maintenance	Reactive repairs to carriageways, footways, urban footpaths, kerbs, channels, road signs, road markings, highway drainage, street furniture, barriers and tree replacements	
Cyclical Maintenance	Amenity and highway verge cutting on and off highway, weed control, street cleansing, ditching, quartering and gully cleansing	
Emergencies	Winter maintenance, emergency call outs to fallen trees, highway flooding etc	
Enforcement	Overhanging vegetation, obstructions, illegal footway crossings, safety camera operations, Transport Management Act 2004 (TMA) and New Roads and Street Works Act 1991 (NRASWA) obligations, and abandoned vehicles (excluding legal action through the Courts)	
Miscellaneous	Dealing with customer reports and complaints, third party insurance claims, maintenance of Local Street Gazetteer, and safety camera infrastructure maintenance	
Street Lighting	Capital renewals of street lights and illuminated signs/bollards, and reactive maintenance	
Structures	Bridge and retaining wall capital works (including bridge parapet strengthening), undertaking of structural inspections and assessments and reactive repairs	
Cycleways	Capital and reactive repairs to cycleways, including trimming back of overhanging vegetation	
Development Control	Advice and comments on highway planning elements, adoptions and street naming and numbering	
ССТV	Capital and reactive maintenance to CCTV infrastructure, and operation of control room.	
Car Parking	Capital and reactive maintenance to parking meters on street	
Non Core Services		
Car Parking	Capital and reactive maintenance to off street car park infrastructure	
Design	Local Transport Plan Integrated Transport schemes	
Land Drainage	Provision of advice, and enforcement role	
Miscellaneous	Assistance with civil emergencies, Street Gazetteer maintenance	
Capital Schemes		

Table 1.1:	Services to be transferred to the Highways PFI operator
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To rectify 18 locations on the Island's highway network that are at risk of catastrophic failure within the 25 year programme period (known as 'red risk site'). Technical drawings of the engineering solutions are presented in **Appendix X**.

1.2.5 The Highways PFI programme sets the framework for a series of highways maintenance projects, some of which are likely to have significant effects on the environment, the capital schemes in particular. To address this, although the Highways PFI is not a statutory programme, the Council is applying a twin assessment process of Strategic Environmental Assessment (SEA) and Habitats Regulations Assessment (HRA), to ensure that any significant effects can be adequately mitigated, and beneficial environmental outcomes maximised. The other services which are part of the Highways PFI programme constitute a transfer of responsibility from the Council to the Service Provider. In other words they are services that the Council, as a local transport authority, provides on a day-to-day basis as a standard part of its operations, normally without requiring it to gain permissions from other consenting authorities.

1.2.6 **Box 4** sets out the key facts relating to the Highways PFI.

Box 4: Key facts about the Isle of Wight Highways PFI				
Name of Responsible Authority:	Isle of Wight Council			
Title of programme:	Highways Private Finance Initiative			
What prompted the programme (e.g. legislative, regulatory or administrative provision):	Administrative programme			
Subject (e.g. transport):	Highways maintenance and operation			
Period covered:	2013 – 2038			
Frequency of updates:	Never (one-off)			
Area covered:	Island wide (highways network only)			
Purpose and scope of the plan:	The Isle of Wight Highways PFI Project will encompass all aspects of the highway that occurs between the fences – this includes the structures, geotechnical assets, road surface, drainage, street lighting, kerbs, footways, grass verges, signs, bus shelters, etc. It will include the entire Island's adopted road network, encompassing the management and maintenance of 803kms of highways, 12,068 street lighting columns and a further 2,438 illuminated street furniture items.			
Contact point:	114 Pyle Street Newport Isle of Wight PO30 1XA Tel: 01983 823520 (ext 6600) <u>http://www.iwight.com/highways-pfi/</u>			

1.3 The Isle of Wight in Context

1.3.1 The Isle of Wight lies off the south coast of England and is separated from Hampshire by the Solent. The largest Island in England, the Isle of Wight is diamond-shaped, covers an area of approximately 382 km² and extends 37 km from west to east and 21 km from north to south.

- 1.3.2 The two largest settlements on the Island are Newport, which is the Island's principal administrative and retail centre, and home to approximately 24,100 people, and Ryde, a seaside town with a population of 23,900 people³. The other main settlements on the Island include Cowes, East Cowes, Sandown, Shanklin, Ventnor and Freshwater. Overall, the population of the Island is concentrated in the centre, north and east of the Island. In November 2009, the population of the Isle of Wight was approximately 142,5004. This is projected to increase to 172,500 by 20305.
- 1.3.3 The Isle of Wight is characterised by a high quality natural and historic environment. The high quality landscape of the Island is reflected by the designation of half the Island as the Isle of Wight Area of Outstanding Natural Beauty (AONB) and the designation of 55km of the Island's 96km coastline as Heritage Coast. The Isle of Wight's biodiversity resource is reflected by the significant number of international and national nature conservation designations on and around the Island. Many of these designations are centred on the Isle of Wight's maritime cliffs and slopes, its estuaries and intertidal areas, and its chalk grasslands. The Island also has a rich historic environment which includes well known and important features such as Carisbrooke Castle, Osborne House, Yarmouth Castle and Appuldurcombe House, as well as a wide range of other designated and non-designated features and areas.
- 1.3.4 Whilst for most of the 20th century the Isle of Wight's economy was based on seaside tourism, manufacturing and farming, financial and business services have been of growing importance, and the public sector is now the largest employer on Island. The Island's rich natural and historic environment attracts large numbers of tourists, and the Island's population more than doubles during the summer holiday season. The high quality environment and lifestyle have also drawn many retirees and second home owners⁶.
- 1.3.5 The Highways PFI addresses the entirety of the Island's highways network, 'from fence-tofence'. This includes all roads and their associated footways, as well as cycle routes for which the Council is responsible. The 18 red risk sites, which characterised by severe geotechnical or geological defects, are clustered around eight different locations as illustrated in Figure 1.1.

Strategic Environmental Assessment and the Highways PFI 1.4

- Strategic Environmental Assessment (SEA) is a systematic process for evaluating the 1.4.1 environmental consequences of proposed plans or programmes to ensure environmental issues are fully integrated and addressed at the earliest appropriate stage of decision making. SEA was introduced to the UK through EU Directive 2001/42/EC. In England this Directive has been transposed via the Environmental Assessment of Plans and Programmes Regulations 2004.
- 1.4.2 A Habitats Regulation Assessment is also being carried out for the Highways PFI. Whilst the HRA will support the findings of the SEA, the Habitats Regulations Assessment is being carried out independently of the SEA process and is reported on separately.



³ ONS 2007 Mid Year Estimates as quoted in IOWC (2009) Isle of Wight Town Centre Health Check Study ⁴ IOWC (November 2009) Equality and Diversity document:

http://www.iwight.com/equality_and_diversity/documents/Diversity_on_the_lsle_of_Wight_Nov09.pdf

⁵ Source: ONS 2006-based sub-national population projections, published June 2008, <u>www.statistics.gov.uk</u> Isle of Wight Strategic Partnership (2008): Ecoisland: The Isle of Wight's Sustainable Community Strategy 2008-2020

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GX

S

Isle of Wight Highways

Cosham

Horse Sand Fort

" No Man's Land Fort

Portchester

Network, Capital Hill Top Stubbington Calsho Scheme Clusters and Holbury Furzey Lodge Castle Palace B House Beaulieu Hardway Blackfield **European Sites** ot Spit Hill Head Langley GOSPORT East Exbury Calshot 7 1 Boldre Lee-on-the-Solent Bucklers Heath IWC PFI Red Site Hard Battramsley Pilley Point Cycleway Norle Lepe Boldre Needs Ore Southsea East End Cycleway Verge Gilkicker Point COW Spitsand Fort Point Adopted Highway INGTON Highway SAC Penning SPA Puckpool Point Lymore Nettlestone Point Ramsar Keyhaven **Capital Scheme Clusters** 3 1 St Helens Hurst Castle 2 Adgestone 3 Norton Tot 4 Ventnor 5 Undercliff Drive 6 Military Road Blackgang 7 8 Yarmouth Source: includes data from Natural England SHANKLIN N 0 1.25 2.5 5 7.5 Kil Glometers This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office @ Crown TNOR copyright. Unauthorised reproduction infringes Crown 14 copyright and may lead to prosecution or civil proceedings. IOWC 100019229 (2011) Lawrence Date Scale 1:175,000 May2012 Reviewed by Created by ENVIRONMENT SS NP CONSULTING

Beaulieu Heath

Warsash

Fawley

Titchfield

Figure 1.1: Geographic scope of the Highways PFI

UE

Tower Point

North Road

Brighton BN1 1YR

Drawing number

UE-0100_IoW_PFIscope_ 250512SS

- 1.4.3 The approach for carrying out the SEA of the Highways PFI is based on current best practice. Primarily the approach applied to this SEA draws on guidance from:
 - Office of the Deputy Prime Minister (September 2005): A Practical Guide to the SEA Directive;
 - Department for Transport (April 2009): TAG Unit 2.11, Strategic Environmental Assessment for Transport Plans and Programmes.
- 1.4.4 TAG Unit 2.11 presents a methodology for carrying out SEA of transport plans and programmes. While it sets out a broadly similar approach as the ODPM, it takes more of a transport focus, and also suggests how SEA can complement and take further many of the aspects promoted through the New Approach to Appraisal (NATA).⁷

Stages in the SEA Process

1.4.5 TAG Unit 2.11, in common with other SEA and Sustainability Appraisal guidance documents, sets out a five stage process for carrying out SEA, summarised in **Table 1.2**. Those shaded in green indicate the stages covered in this Environmental Report. The first column indicates where information about each respective stage can be found in this document.

1.5 Presenting the SEA Information

- 1.5.1 The Environmental Report presents the SEA information through a series of environmental information themes. The selected environmental information themes incorporate the SEA 'topics' derived from Annex I(f) of the SEA Directive (see **Appendix I**): biodiversity, flora and fauna, population, human health, soil, water, air, climatic factors, material assets, cultural heritage (including architectural and archaeological heritage), landscape and the interrelationship between these factors. These have been updated and expanded for clarity, and to mirror the purpose and likely outcomes of the SEA process. See **Table 1.3**.
- 1.5.2 It is anticipated that using this approach to present environmental information will enable the reader to easily locate the SEA information representing their specific areas of interest.
- 1.5.3 The following chapters present an overview of the stages of the SEA carried out to date, the appraisal findings, and the next steps for the development of the Highways PFI and accompanying SEA process.

⁷ NATA is an approach for improving the consistency and transparency with which transport decisions are made. It seeks to presents the key economic, environmental and social impacts of decisions in a clear, consistent and balanced way using an Appraisal Summary Table and associated worksheets. NATA is the basis for appraising multi-modal studies, Highways Agency road schemes, Local Transport Plans major road and public transport schemes, Strategic Rail Authority schemes, seaports, and the Government's airports strategy.



Location	Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope	
Chapter 2 (& Scoping Report)	A1: Identify other relevant plans, programmes and environmental protection objectives	
Chapter 2 (& Scoping Report)	A2: Collecting baseline information	
Chapter 2 (& Scoping Report)	A3: Identifying environmental problems	
Chapter 2 (& Scoping Report)	A4: Developing the SEA framework	
Chapter 2 (& Scoping Report)	A5: Consulting on the scope of the SEA	
Location	Stage B: Developing and refining alternatives and assessing effects	
Chapter 4	B1: Testing the plan objectives against the SEA objectives	
Chapter 5	B2: Developing strategic alternatives	
Chapter 5 and 6	B3: Predicting the effects the draft plan, including alternatives	
Chapter 5 and 6	B4: Evaluating the effects of the draft plan, including alternatives	
Chapter 6 and 7	B5: Considering ways of mitigating adverse effects	
Chapter 6	B6: Proposing measures to monitor the environmental effects of plan implementation	
Location	Stage C: Preparing the Environmental Report	
All Chapters	C1: Preparing an Environmental Report	
Location	Stage D: Consulting on the draft plan and Environmental Report	
N/A	D1: Consultation on the draft plan and Environmental Report	
N/A	D2: Assessing significant changes	
N/A	D3: Decision making and providing information	
Location	Stage E: Consulting on the draft plan and Environmental Report	
N/A	E1: Developing aims and methods for monitoring	
N/A	E2: Responding to adverse effects	



Theme	Topic from SEA Directive	Theme includes:
Accessibility and Transport	Population	Transportation infrastructure Traffic flows and congestion Travel to work Accessibility
Air Quality	Air	Air quality management Air pollution sources Air quality hotspots
Biodiversity and Geodiversity	Biodiversity, flora and fauna	Habitats Species Nature conservation designations Nature reserves Biodiversity opportunity areas Geological features
Climate Change	Climatic factors	Greenhouse gas emissions by source Greenhouse gas emission trends Climate change adaptation
Health	Human health	Health indicators Health inequalities Road safety
Historic Environment	Cultural heritage, including architectural and archaeological heritage	Historic development of the area Designated and non-designated sites and areas Archaeological assets
Landscape	Landscape	Landscape character Townscape character Noise and light pollution Tranquillity
Material Assets	Material assets	Minerals production Waste and recycling Energy production
Population	Population	Population size and migration Population density Age structure Ethnicity Deprivation Unemployment Crime
Soil	Soil	Soil type and quality Agricultural land quality
Water	Water	Water resources and availability Water quality Flooding

Table 1.3: Environmental information themes

