

## A585 Windy Harbour to Skippool Improvement Scheme

TR010035

# 7.1 Planning Statement and National Policy Accordance

APFP Regulation 5(2)(q)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

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#### Infrastructure Planning

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

### A585 Windy Harbour to Skippool Improvement Scheme

Development Consent Order 201[]

### 7.1 PLANNING STATEMENT AND NATIONAL POLICY STATEMENT ACCORDANCE

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	Scheme Project Team, Highways England

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#### **EXECUTIVE SUMMARY**

This Planning Statement relates to an application for the A585 Windy Harbour to Skippool Improvement Scheme development consent order ("DCO") which would grant development consent, authorising the construction, operation and maintenance of the A585 Windy Harbour to Skippool Improvement Scheme (the "Scheme"), along with the compulsory acquisition or temporary possession of all land and interests in land necessary to enable this. The Planning Inspectorate will consider the application for development consent and will make a recommendation to the Secretary of State for Transport ("SoS"), who will decide whether development consent for the Scheme should be granted.

The Scheme seeks to provide an improvement, through de-trunking, to approximately 4.85 kilometres of the existing A585 Trunk Road single carriageway that extends in a generally north west direction for approximately 19 kilometres between M55 Junction 3 and the Port of Fleetwood at the northern end of the Fylde Peninsula. The Scheme is located within the administrative boundaries of Fylde Borough Council, Wyre Council and Lancashire County Council. However, only a small proportion scheme (some 2.7ha) falls within Wyre Council's administrative area, relating to the proposed route section between Skippool Junction and Skippool Bridge Junction.

The purpose of the Planning Statement is to set out the relevant planning policy context and the overall case for the Scheme and making of the DCO. The Statement draws upon the conclusions of the supporting application documents and interprets these against planning policy considerations which have been identified as having relevance to the Scheme.

The review of planning policy carried out as part of this Planning Statement shows that environmental issues are important and relevant considerations for the decision-maker (mainly in relation to Green Belt, landscape, air quality, noise, nature conservation and heritage). This Planning Statement provides a comprehensive overview that confirms the ability of the Scheme to satisfactorily address the matters identified. That the Scheme is in accordance with the National Networks National Policy Statement (NN NPS) in all material respects indicates that a presumption in favour of it exists under the Planning Act 2008.

Where there is potential for the Scheme to have an adverse impact in the Environmental Statement (ES), these impacts must be considered and weighed in the context of:

- The avoidance of the route within any statutorily designated sites or areas
- For identified heritage and landscape assets (including visual impacts), the mitigation proposed would assist in reducing the level of impact
- Environmental enhancements provided in relation to biodiversity including habitat connectivity
- Environmental benefits, in relation to the de-trunked section of the Scheme in particular
- The social and economic benefits of the Scheme include those associated with the introduction of the Scheme itself, through tackling current and forecast levels of traffic congestion, reducing conflicts between users and improving connectivity and community cohesion
- The NN NPS presumption in favour of the Scheme



 The significant role the Scheme would play in underpinning the Government's social, economic and environmental policy aspirations, and the substantially improved conditions in which people travel that the Scheme would provide

On the basis of the need case for the Scheme, it is clear that there is a compelling case in the public interest for the Scheme. Against a background of compliance in terms of national and local planning policy, any adverse effects of the Scheme are not considered to outweigh its benefits. Accordingly, the policy presumption in favour of the Scheme and the overall planning balance lies strongly in favour of the grant of development consent.



#### **ABBREVIATIONS**

Abbreviation	In Full
ALC	Agricultural Land Classification
APFP	Applications: Prescribed Forms and Procedure
AQMA	Air Quality Management Area
AQS	Air Quality Strategy
ARN	Affected Road Network
BCR	Benefit Cost Ratio
BHS	Biological Heritage Site
CEMP	Construction Environmental Management Plan
CIfA	Chartered Institute for Archaeologists
CO <sub>2</sub>	Carbon Dioxide
CO <sub>2e</sub>	Carbon Dioxide equivalent
DCO	Development Consent Order
Defra	Department for the Environment, Food and Rural Affairs
DfT	Department for Transport
DMRB	Design Manual for Roads and Bridges
EAR	Environmental Assessment Reports
ES	Environmental Statement
FRA	Flood Risk Assessment
HRA	Habitats Regulations Assessment
IAN	Interim Advice Note
LB	Listed Building
LCA	Landscape Character Area
LCC	Lancashire County Council
LCT	Landscape Character Type
LIR	Local Impact Reports
LPA(s)	Local Planning Authority(ies)
MMP	Materials Management Plan
NCA	National Character Area
NIA	Noise Important Area
NMU	Non-Motorised User



Abbreviation	In Full
NN NPS	National Networks National Policy Statement
NO <sub>2</sub>	Nitrogen Dioxide
NPPF	National Planning Policy Framework
NPPG	National Planning Practice Guidance
NPS	National Policy Statement
NSIP	Nationally Significant Infrastructure Project
NTEM	National Trip End Model
NTM	National Transport Model
PM <sub>10</sub>	Particulate Matter (less than 10 microns in diameter)
PRoW	Public Right of Way
REAC	Register of Environmental Actions and Commitments
RIS	Road Investment Strategy
rMCZ	Recommended Marine Conservation Zone
SMP	Soil Management Plan
SOAEL	Significant Observed Adverse Effect Level
SoS	Secretary of State
SPA	Special Protection Area
SPRS	South Pennines Route Strategy
SRN	Strategic Road Network
SSSI	Site of Special Scientific Interest
TAG	Transport Analysis Guidance
TCA	Townscape Character Assessment
TPO(s)	Tree Preservation Order(s)
ZTV	Zone of Theoretical Visibility
ZVI	Zone of Visual Influence



#### **GLOSSARY**

GLOSSARY	
Term	Meaning
Adverse	A negative/harmful effect
Ambient Noise	Ambient noise is the total sound in a given situation at a given time usually composed of sound from many sources, near and far.
Air Quality Management Area	A Local Authority must designate an Air Quality Management Area (AQMA) if any of the Air Quality Objectives set out in the regulations are not likely to be met over a relevant time period
Air Quality Strategy	The Air Quality Strategy for England, Scotland, Wales and Northern Ireland describes the plans drawn up by the Government and the Developed Administrations to improve and protect ambient air quality in the UK in the medium-term. The Strategy sets objectives for the main air pollutants to protect health. Performance against these objectives is monitored where people regularly spend time and might be exposed to air pollution.
Affected Road Network	Roads which experience changes based on the criteria outlined in Volume 11, Section 3, Part 1 of the DMRB HA207/07 between the without scheme scenario to the with scheme scenario
Baseline	The conditions against which potential effects arising from the Scheme are identified and evaluated.
Biodiversity	The variety of life. The term embraces the full range of habitats, species, and the variation found within species (including genetic variation).
Bund	A barrier, dam or mound used to contain or exclude water (or other liquids). Can either refer to a bund made from earthworks material, sand etc. or a metal/concrete structure surrounding, for example, a fuel tank.
Carbon Dioxide	A greenhouse gas
Construction Environmental Management Plan	A Construction Environmental Management Plan sets out the intended methods of the effective management of potential environmental impacts arising during the construction of a project.
Cumulative Impact	The combined residual impact of a proposed scheme over the entirety of the scheme, as opposed to residual impact for individual sections of the scheme; also the combined impact with other schemes.
Department for the Environment, Food and Rural Affairs	The UK government department responsible for safeguarding the natural environment, supporting the food and farming industry, and sustaining a thriving rural economy.
Design Manual for Roads and Bridges	The Design Manual for Roads and Bridges is a series of 15 volumes that provide standards, advice notes and other documents relating to the design, assessment and operation of trunk roads, including motorways in the UK. This includes



Term	Mooning
remi	Meaning Volume 11 - Environmental Assessment.
	Volume 11 - Environmental Assessment.
Designated	A heritage receptor which is protected under legislation such
heritage	as the Planning Act 1990. These are nationally important
receptor	receptor which are protected under law.
Destructive	A destructive search is the final means of ensuring any given
search	site is free from protected species. Destructive searching can
	involve a number of different services, depending on the
	species that have been cleared from the sites and depending on the habitat and terrain.
Development	A Development Consent Order is the means of obtaining
Consent Order	permission for developments categorised as Nationally
Consent Order	Significant Infrastructure Projects.
Draft DCO	Defines the constraints, in which the construction works for the
Limits	Scheme will stay within, during development.
Driver Stress	Driver stress is defined for the purposes of environmental
	assessment as the adverse mental and physiological effects
	experience by a driver traversing a road network.
Ecology	The study of interactions between organisms and their
	environment.
Environmental	Environmental Impact Assessment is a key aspect of many
Impact	large-scale planning applications which identifies the potential
Assessment	environmental effects of a development project.
Environmental	An Environmental Statement is the written material submitted
Statement	to the local planning authority in fulfilment of the EIA regulations
Interim Advice	Interim Advice Notes are issued by Highways England from
Note	time to time. They contain specific guidance which shall only
11010	be used in connection with works on motorways and trunk
	roads in England.
Landscape	An area, as perceived by people, the character of which is the
•	result of the action and interaction of natural and/or human
	factors.
Landscape	Are the unique individual geographical areas in which
Character	landscape types occur; they share generic characteristics with
Areas	other areas of the same type but have their own particular
1	identity.
Landscape	Distinctive types of landscape that are relatively homogenous
Character	in character. They may occur in different areas in different parts of the country and will share broadly similar combinations
Туре	of geology, topography, drainage patterns, vegetation, historic
	land use and settlement pattern.
Landscape	Defined aspects of the landscape resource that have the
receptors	potential to be affected by a proposal.
Limits of	The tolerances, both laterally and vertically, that any parts of
Deviation	the works can be constructed from the lines and situations
	shown on the works plans and the levels shown on the
	engineering drawings and sections.



<b>T</b>	
Term	Meaning
Mitigation	Measures including any process, activity, or design to avoid, reduce, remedy or compensate for negative environmental impact or effects of a Scheme.
National	This is a natural subdivision of England based on a
Character	combination of landscape, biodiversity, geodiversity and
Area	economic activity. They are defined by Natural England.
Noise	Defined by Defra as where the top 1% of the population that
Important Area	are affected by the highest noise levels from major roads are
Important / troa	located according to the results of the Environmental Noise
	Directive noise mapping.
National	Sets out the need and government policies for nationally
Networks	significant infrastructure rail and road projects for England.
National Policy	
Statement	
National	The NPPF sets out the Government's core policies and
Planning	principles with respect to land use planning.
Policy	
Framework	
Non-Motorised	Considered to be pedestrians, cyclists and equestrians.
Users	Particular consideration is to be given to the needs of disabled
	people, who may use any of these modes or other equipment
	such as wheelchairs. Users of electrically assisted pedal cycles
	or powered wheelchairs that conform with current Department
	for Transport regulations and may legally be used on
	pedestrian or cycle facilities, are also considered to be NMUs.
Nitrogen	Combustion processes emit a mixture of nitrogen oxides (NO <sub>x</sub> )
Dioxide	and primarily nitric oxide (NO) which is quickly oxidised in the
	atmosphere to nitrogen dioxide (NO <sub>2</sub> ). Nitrogen dioxide has a
	variety of environmental and health impacts. It is a respiratory
	irritant which may exacerbate asthma and possible increase
Nuicence	susceptibility to infections.
Nuisance	In this document nuisance is intended to generally refer to
	'bother' or 'annoyance' and is not necessarily the same as that used in some statutory documents.
Opening Year	In the case of this Scheme, assumed to be 2022.
	· ·
Public Right of	This is a path that anyone has the legal right to use on foot,
Way	and sometimes using other modes of transport. Legally, a
	Public Right of Way is part of the Queen's highway and subject
	to the same protection in law as all other highways, including
	trunk roads.
Residual	Effects on the environment that occur after mitigation of
Impact	potential impacts have been implemented.
Setting	The surroundings in which a heritage receptor is experienced.
	Its extent is not fixed and may change as the asset and its
	surroundings evolve. Elements of a setting may make a
	positive or negative contribution to the significance of an asset,
	may affect the ability to appreciate that significance or may be
	neutral.



-	
Term	Meaning
Study Area	The spatial area within which environmental effects are assessed i.e. extending a distance from the scheme footprint in which environmental effects could occur (this may vary between topics).
Townscape Character Area	Unique areas which are the discrete geographical areas of a particular townscape type. Townscape character is a distinct, recognisable and consistent pattern of elements in the built environment that makes one landscape different from another, rather than better or worse.
Transport Analysis Guidance	TAG provides information on the role of transport modelling and appraisal. The guidance provides advice on how to: set objectives and identify problems, develop potential solutions, create a transport model for the appraisal of the alternative solutions and how to conduct an appraisal which meets the department's requirements. Projects or studies that require government approval are expected to make use of this guidance.
Tree Preservation Order	An order made under the Town and Country Planning Act 1990 to protect trees.
Visual Amenity	The overall pleasantness of the views people enjoy of their surroundings, which provides an attractive visual setting or backdrop for the enjoyment of activities of the people living, working, recreating, visiting or travelling through an area.
Visual Receptors	People with views of the development or associated activities. These are located within the zone of theoretical visibility and are typically residents, motorists, pedestrians, recreational users in residential areas on publicly accessible roads, footpaths and open spaces.
Zone of Visual Influence	This is the area within which activities of the Scheme, whether temporary or permanent are likely to be visible.



#### 1 INTRODUCTION

#### 1.1 Scheme Overview

- 1.1.1 This Planning Statement (the "Statement") relates to an application made by Highways England to the Secretary of State for Transport ("SoS") pursuant to the Planning Act 2008 (the "Application"). The Application is for the A585 Windy Harbour to Skippool development consent order ("DCO") which would grant development consent, authorising the construction, operation and maintenance of the A585 Windy Harbour to Skippool Improvement Scheme (the "Scheme"), along with the compulsory acquisition or temporary possession of all land and interests in land necessary to enable this.
- 1.1.2 The Scheme seeks to provide an improvement, through de-trunking, to approximately 4.85 kilometres of the existing A585 Trunk Road single carriageway that extends in a generally north west direction for approximately 19 kilometres between M55 Junction 3 and the Port of Fleetwood at the northern end of the Fylde Peninsula. A detailed description of the Scheme can be found in ES Chapter 2 (Description of the Scheme) (document reference TR010035/APP/6.2).
- 1.1.3 The Planning Inspectorate ("the Inspectorate") will consider the application for development consent and will make a recommendation to the SoS, who will decide whether development consent for the Scheme should be granted.

#### 1.2 Highways England

- 1.2.1 The Applicant, Highways England Company Limited, is appointed and licensed by the SoS as the strategic highways company for England. Highways England is responsible for operating, maintaining and improving the strategic road network in England on behalf of the SoS, made up of motorways and all-purpose trunk roads (the major "A" roads). The existing A585 Windy Harbour to Skippool route forms part of the trunk road network for which Highways England is responsible.
- 1.2.2 Following construction of the Scheme, Highways England would be responsible for operating, maintaining and improving (under its general statutory powers in respect of the latter) the new route of the A585 between Windy Harbour and Skippool. It is proposed that Lancashire County Council, as Highways Authority, will adopt the detrunked section of the existing A585, to be retained between Skippool Bridge and Windy Harbour. It is proposed that an agreement would be reached to this effect.

#### 1.3 Qualification as a Nationally Significant Infrastructure Project

- 1.3.1 The Scheme is a nationally significant infrastructure project ("NSIP") within Sections 14(1)(h) of the Planning Act 2008.
- 1.3.2 Under Section 22 an NSIP must fall within one of the three categories specified, which are expressly stated to be alternatives. This Scheme is construction of a highway in a case within the meaning of Section 22(1)(a). Whilst the Scheme includes some alteration and improvement of the existing A585, the new carriageway will follow a different alignment requiring construction of sections of new highway with a speed limit in excess of 50 miles per hour on an area in excess of 12.5 hectares. The Scheme is wholly located in England and Highways England Company Ltd, being a strategic highways authority, will be the highway authority for the highway to be constructed as part of the Scheme. The Scheme therefore complies with the requirements of Section 22(2) and 22(4) of the 2008 Act.



- 1.3.3 As the proposed authorised development is an NSIP, consent under the Act is required (section 31 of the 2008 Act). Under section 37 of the 2008 Act, an order granting development consent may only be made if application for it is made (through the Planning Inspectorate) to the Secretary of State.
- 1.3.4 This application is accompanied by an Environmental Statement (ES) prepared in accordance with the Infrastructure Planning (Environmental Impact Assessment (EIA)) Regulations 2017 (SI No. 572) (hereafter referred to as the 'EIA Regulations').

#### 1.4 Purpose and Structure of the Planning Statement

- 1.4.1 The Planning Statement provides an accessible guide to the Scheme, Applicant and application, and it assists those in reviewing the application documentation. Whilst its submission is not a mandatory requirement under the Planning Act 2008, this Statement has been prepared to accompany the Application in order to summarise how the Scheme complies with the relevant planning policy context.
- 1.4.2 Thus, the purpose of the Statement is to set out the relevant planning policy context and the overall case for the Scheme and making of the DCO. The Statement draws upon the conclusions of the supporting application documents and interprets these against planning policy considerations which have been identified as having relevance to the Scheme.
- 1.4.3 This Statement has been prepared in accordance with Regulation 5(2) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 ("APFP 2009").
- 1.4.4 The Statement draws upon other the following Application documents:
  - ES (document reference TR010035/APP/6.1 6.20)
  - Flood Risk Assessment (FRA) (document reference TR010035/APP/5.2)
  - Habitats Regulations Assessment (HRA) (document reference TR010035/APP/5.4)
  - Consents and Agreements Position Statement (document reference TR010035/APP/5.5)
  - Water Framework Directive Assessment (document reference TR010035/APP/5.6)
  - Consultation Report (document reference TR010035/APP/5.1)
  - Outline Construction Environmental Management Plan (CEMP) (document reference TR010035/APP/7.2)
  - Record of Environmental Actions and Commitments (REAC) (document reference TR010035/APP/7.3)
  - Transport Assessment (document reference TR010035/APP/7.4)
  - Ground Investigation Report (document reference TR010035/APP/7.6)
  - Drainage Strategy (appended to the FRA document reference TR010035/APP/5.2)
  - Funding Statement (document reference TR010035/APP/4.2)
  - Book of Reference (document reference TR010035/APP/4.3)



- Statement of Reasons (document reference TR010035/APP/4.1)
- Explanatory Memorandum to Draft DCO (document reference TR010035/APP/3.2)
- 1.4.5 The categories of Application documents included within the Scheme submission include those in Appendix 1 to the Inspectorate Advice Note 6: 'Preparation and submission of application documents' (February 2016), reflecting those in APFP 2009 Regulation 5(2). Under the list of such 'other documents' listed in Advice Note 6, reference is made to 'any other document not listed above which the applicant chooses to support the application.' A Planning Statement is provided as an example of such a document.
- 1.4.6 The Application will be determined in accordance with the Planning Act 2008. Section 104 of the Act provides for the decision in cases where a national policy statement (NPS) has effect. Section 104(2) (a) states that in deciding the Application, the SoS must have regard to...'a relevant national policy statement'. Section 104(3) states that the SoS must decide an application in accordance with any relevant NPS. As the NPS is (subject to section 104(4) and (8)) the primary policy reference for the SoS, it setsout the scope of matters for this Statement to consider. For the Scheme the relevant NPS is the National Networks National Policy Statement (NN NPS) (2014).
- 1.4.7 This Statement sets out other 'important and relevant' considerations to be weighed by the Inspectorate and the SoS including national and local planning and transport policy of relevance to the Scheme. The Statement assesses the Scheme against policy and important and relevant considerations, drawing on the environmental information presented in the ES (document reference TR010035/APP/6.1 6.20), submitted with the Application.
- 1.4.8 This Statement has also been prepared to take account of Section 60 of the Planning Act 2008 concerning the preparation of Local Impact Reports (LIRs) by relevant authorities who are invited to submit a LIR, to provide 'details of the likely impact of the proposed development on the authority's area'. The Inspectorate Advice Note 1: Local Impact Reports suggests a list of topics which may be of assistance to a local authority in writing a LIR. This includes the following topic areas:
  - a) 'Relevant development plan policies, supplementary planning guidance or documents, development briefs or approved masterplans and an appraisal of their relationship and relevance to the proposals
  - b) Relevant development proposals under consideration or granted permission but not commenced or completed.'
- 1.4.9 As the above information is not addressed in other documents submitted with the Application, this Statement is also intended to assist local authorities in compiling their LIRs by providing relevant information.
- 1.4.10 The remainder of this Statement is structured as follows:
  - Chapter 2 provides a high-level description of the need for and main elements of the Scheme
  - Chapter 3 introduces Highways England (The Applicant)
  - Chapter 4 considers the extent to which the Scheme complies with national planning policy and relevant local level development plan policies



- Chapter 5 considers other important and relevant planning considerations
- Chapter 6 reaches conclusions on the overall compliance of the Scheme with planning policy; principally that contained within NN NPS, along with other important and relevant considerations, providing a justification on the proposed weighting to be applied to each to assist the SoS in reaching a decision on the Application



#### 2 THE SCHEME

#### 2.1 Need for the Scheme

- 2.1.1 The Department for Transport (DfT) identified the Scheme in the 2014 Road Investment Strategy (RIS) as one of the routes in greatest need of improvement. The Scheme was included as a priority in the RIS for delivery in Road Period 1 to commence construction by March 2020. This was supported by policy in the RIS which stated its intention for the Scheme to improve all road journeys, enhance connectivity across the region, help deliver environmental goals and boost local economic activity.
- 2.1.2 In April 2014, the then Highways Agency produced the South Pennines Route Strategy (SPRS) document with supporting evidence and a Technical Annex. The Strategy identified that the 4.5 kilometres section of the A585 between Windy Harbour Junction and Skippool Junction is a severe bottle-neck, affecting people's journeys between the M55 and the northern part of the Fylde peninsula. Journey times and safety are identified as in need of improvement since it is among the worst 10% of routes in the north west (South Pennines Route Strategy Evidence Report).
- 2.1.3 The South Pennines Route includes the whole of the A585 from the M55 through to Fleetwood. The SPRS reports on the planned growth for the area and the possible new uses for the Port of Fleetwood, implying a significant increase in demand for the A585 route. There is a need therefore to improve capacity on the route to support employment, economic development and growth opportunities, ensuring that the route can accommodate any future growth is recognised as a key priority.

#### 2.2 Scheme Objectives

2.2.1 Table 2-1 below sets-out the Scheme objectives, with a brief commentary provided on the extent to which these are met by the Scheme proposals.

Table 2-1: Compliance with Scheme Objectives

Scheme Objectives	Scheme Compliance and how meets need
Reduce congestion on the existing A585 through Little Singleton Junction, Shard Junction and Skippool Junction	Travel time savings of between 2 and 4.5 minutes per journey are forecast to be saved by road users due to the Scheme.
Reduce severance and improve access across the A585 between Little Singleton and Skippool Junctions	The Scheme would improve connectivity and minimise potential conflicts for non-motorised users (NMUs) by improving the safety of pedestrians, equestrians and cyclists around the existing A585. This includes controlled crossing facilities for pedestrians and cyclists at Skippool junction, Shard Road Junction and Little Singleton Junction, with pedestrian and cycle access provided at the Skippool Bridge and Poulton junctions. A new footbridge (Grange Footbridge) would include the creation of a new, accessible footpath with links across Garstang New Road and to the wider Public Rights of Way (PRoW) network.



Scheme Objectives	Scheme Compliance and how meets need
Improve connectivity and community cohesion	The introduction of new and improved crossing facilities would improve connectivity, enhancing the permeability of the area, thus having a beneficial impact on community severance.
Making the A585 route safer by reducing conflicts between users	The accident and casualty savings show that the Scheme design provides improved accident and casualty reduction measures and is forecast to save around 30 accidents and 120 casualties over the 60-year appraisal period.
Improve journey time reliability by reducing congestion	An appraisal of improved journey time reliability derived from improved user confidence in the reliability of journey times due to the Scheme has been undertaken. The benefit value on the reduction in the variability of journey times due to the Scheme showed the scheme provides a journey time reliability benefit of £22.3 million.
Deliver capacity enhancements to the Strategic Road Network (SRN) whilst supporting the use of sustainable modes	The Scheme has a mainline capacity of up to 41,000 vehicles per day in each direction. The provision of mainline capacity is therefore more than the forecast traffic flow. The reduced traffic flow on the de-trunked section due to the Scheme has the potential to improve the local environment along the de-trunked section and should encourage walking and cycling.
Support employment and residential/commercial development and growth opportunities	The Scheme would support employment and residential/commercial development and growth opportunities in both Wyre Council and Fylde Borough Council areas.  The draft Wyre Local Plan contains proposals for 4,500 homes in the Borough but, due to the need for linkages to the regional economic hub of Preston and beyond (via the M55/M6), these are dependent upon sufficient transport links, which the A585 cannot currently deliver. Wyre Council has stated its support for the bypass, as it would increase the capacity of the network and therefore better support the level of planned residential development. Fylde Borough Council has also stated its support for the Scheme (see Consultation Report (document reference TR010035/APP/5.1)).
Support the removal of obstacles to economic growth potential in both Wyre and Fylde Reduce / minimise the impact on the wider environment particularly	The Scheme would benefit the long-distance traffic that uses the strategic roads of the A585 and M55 to travel between the local authorities of Wyre, Fylde and Blackpool and the rest of the UK.  The Scheme is not predicted to result in significant air quality effects, with noise impacts localised to the immediate vicinity of the Scheme. The Scheme would



Scheme Objectives	Scheme Compliance and how meets need
for air quality and noise	lead to improvement in the local environment along the de-trunked section through a reduction in traffic.
Complement and realise the full benefits of other Operations Directorate schemes in the region	The proposed bypass alignment ties into the existing A585 Garstang New Road west of Windy Harbour junction, which aligns with, and helps to achieve, the objectives of the upgraded junction. As at Windy Harbour junction, all the junctions along the Scheme are proposed to be at-grade and signalised, providing consistency along the route.

#### 2.3 Scheme Description

- 2.3.1 The Scheme comprises the following components, (as shown in Figure 2-1):
  - 4.85 kilometres (3 miles) of new 2-lane, all-purpose, dual-carriageway bypass connecting Windy Harbour Junction and Skippool Junction
  - Four new junctions including:
    - Conversion of Skippool Junction to a traffic signal-controlled crossroads with A588 Breck Road and B5412 Skippool Road
    - Skippool Bridge Junction in the form of a 3-arm traffic signal- controlled junction with the existing Mains Lane
    - Poulton Junction in the form of a signal-controlled crossroads connecting the new bypass to A586 Garstang Road East
    - Modification to Little Singleton Junction (also known as Five Lane Ends) to accommodate U-turning traffic including buses
  - Three new major structures including:
    - Replacement of Skippool Bridge
    - Lodge Lane Bridge
    - Grange Footbridge
  - Alterations to the existing road network on completion of the bypass include:
    - De-trunking the A585 between Skippool Bridge Junction and the end of Garstang New Road east of Little Singleton
    - Applying a reduction in speed limit to 30mph and providing a combined footway/cycleway along Mains Lane between Shard Road Junction and Little Singleton
    - Altering Garstang New Road east of Little Singleton to allow restricted farmers' fields and provide a shared footway/cycleway route between Windy Harbour Junction and Little Singleton
    - Applying a reduced speed limit of 30mph along Garstang Road East between the proposed Poulton Junction and Little Singleton and upgrading the lighting along Mains Lane and Garstang Road East



- 2.3.2 The Scheme also includes the following works during the construction period:
  - Four construction compounds
  - Demolition of two residential properties
  - Construction of borrow pits
  - Development of Habitats Regulations Assessment (HRA) bird mitigation area
  - Flood compensation areas
  - Modification of Skippool Petrol Station Forecourt, with alternative access and egress arrangements
  - Associated works for temporary access, temporary lay-down and work areas and ancillary works
- 2.3.3 A full description of the Scheme works is provided in Schedule 1 of the Draft DCO (document reference TR010035/APP/3.1).

#### 2.4 The Rochdale Envelope

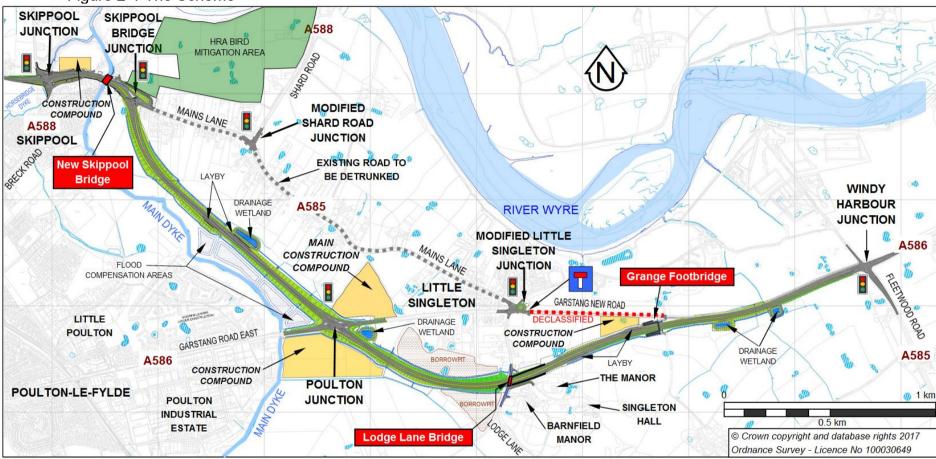
- 2.4.1 The Inspectorate's Advice Note 9: 'Using the 'Rochdale Envelope' provides guidance regarding the degree of flexibility that may be considered appropriate within an application for development consent under the Planning Act 2008. The Advice Note acknowledges that there may be parameters of a scheme's design that are not yet fixed and, therefore, it may be necessary for the ES to assess likely worst-case variations to ensure that the likely significant environmental effects of the scheme have been assessed. For the Scheme, this has been applied in relation to the following proposals:
  - Grange Footbridge and alternatives for crossing points and / or bus-only junction
    - o There remains a number of options and alternatives for the pedestrian crossing point at Grange Junction, pending agreement with stakeholders, to 1) Provide a foot bridge 2) Provide an at grade crossing. The ES (document reference TR010035/APP/6.1 − 6.20) assesses the provision of a footbridge at Grange Junction.
  - Skippool Clough Culvert
    - There remains a number of options regarding the replacement of Skippool Clough culvert, in terms of whether it is delivered as part of advance works or the main package due to traffic management complexities: 1) To replace the culvert as part of the DCO application; 2) To replace the culvert prior to the DCO works commencing under a separate consent. The ES assesses the replacement of Skippool Clough culvert as part of the DCO application.
  - Source of imported material and use of borrow pits
    - There are 2 options for addressing the Schemes material deficit, in order to provide flexibility for the contractor to deliver the scheme: 1)
       Importing all required deficit material; 2) A combination of using the borrow pits and importing the remaining deficit material to site (as only



a certain amount of material could be sourced from the borrow pits). The ES assesses both importing all required material to site along with using the borrow pits.









#### 2.5 Draft DCO Limits

2.5.1 The Scheme is shown on the Works Plans (document reference TR010035/APP/2.3) and the Land Plans (document reference TR010035/APP/2.2). The land required for the Scheme subject to compulsory acquisition and temporary possession powers is shown on the Land Plans. Brief geographical descriptions of each plot of land required for the Scheme is provided in the Book of Reference (document reference TR010035/APP/4.3).

#### 2.6 Existing Character

- 2.6.1 The Scheme is located along the A585 between the Windy Harbour Junction and the Skippool Junction near Poulton-le-Fylde, Lancashire. The River Wyre is located approximately 10 metres to the north of the Scheme at the closest point. A number of watercourses lie within the Draft DCO Limits, the largest being Main Dyke which runs beneath the existing A585 Mains Lane at Skippool Bridge along with Horsebridge Dyke that runs beneath the existing A585 at Skippool Junction.
- 2.6.2 The landscape surrounding the Scheme is low lying and coastal, characterised by arable fields, pasture, drainage ditches and small to medium sized blocks of mixed woodland. There is a greater density of residential properties surrounding the western half of the Scheme with farmland becoming more prevalent to the east. A number of accesses and tracks lie within the Draft DCO Limits, predominantly of an agricultural nature. A number of PRoWs cross the Draft DCO Limits.
- 2.6.3 The Scheme lies entirely within landscape National Character Area: NCA32: Lancashire and Amounderness Plain. The land to be acquired or subject to temporary possession does not include any areas of Common Land or public open space.
- 2.6.4 Areas of land surrounding the settlements of Carleton and Thornton form part of the Blackpool Green Belt. Singleton Conservation Area is located 775 metres south of the Scheme and Poulton-Le-Fylde Conservation Area is located 720 metres west of the Scheme. There are no Grade I or II\* Listed Buildings within the study area, although there is one Grade II Listed Building within the study area, the Ice House at Singleton Hall.
- 2.6.5 There are no World Heritage Sites, Scheduled Monuments, Registered Parks and Gardens or Registered Battlefields within the study area or immediately adjacent to it. The Wyre Estuary Country Park is located approximately 2 kilometres north of the existing A585 roundabout at Skippool Bridge. The Wyre Way regional trail runs east of the Wyre Estuary Country Park along the southern bank of the Wyre Estuary as far as Little Singleton.
- 2.6.6 To the south of Little Singleton and east of the B5260 there is an area of non-designated parkland (Singleton Park). There are eight Noise Important Areas (NIAs) along Breck Road, Mains Lane and Fleetwood Road within the vicinity of the Scheme. NIAs are defined by Defra as where the top 1% of the population that are affected by the highest noise levels from major roads are located according to the results of the Environmental Noise Directive (END) noise mapping. The Important Areas identified and considered within the calculation area are shown on Figure 11.2 of the ES (document reference TR010035/APP/6.11).
- 2.6.7 There are no statutory designated sites for nature conservation within the Draft DCO



Limits, with the Skippool Marsh and Thornton Bank Biological Heritage Site (BHS) (a non-statutory designation) located to the west of the Scheme.

2.6.8 Environmental constraints within the locality of the Scheme include the Morecambe Bay and Duddon Estuary Special Protection Area (SPA); Morecambe Bay Ramsar site; Morecambe Bay Site of Special Scientific Interest (SSSI); and the Wyre and Lune recommended Marine Conservation Zone (rMCZ). There are also 2 additional BHS designations associated with the Wyre Estuary (important at a local level) within proximity to the Scheme. The Main Dyke watercourse lies to the west of the Scheme and there are areas of low-lying floodplain and areas of flood zone 3 associated with Main Dyke and the Wyre Estuary coinciding with the Scheme footprint.

#### 2.7 Local Authority Areas

2.7.1 The Scheme is located within the administrative boundaries of Fylde Borough Council, Wyre Council and Lancashire County Council. However, as shown in Drawing HE548643-ARC-EGN-SZ\_ZZ\_000-DR-LE-3001 in Appendix 3, only a small proportion of the Scheme falls within Wyre Council's administrative area, relating to the proposed route section between Skippool Junction and Skippool Bridge Junction.

#### 2.8 Scheme Development and Alternatives Considered

- 2.8.1 Three route corridors were considered during Highways England's options stage (Project Control Framework (PCF) Stages 1 and 2) which were an online, southern and northern corridor route option. A further 5 options were identified for the southern corridor (S1-S5), with 2 options for both the northern (N1 and N2) and online corridors (O1 and O2). The options were differentiated in terms of their junction arrangements, number of lanes as well as their use. A total of 9 options were considered at the options stage.
- 2.8.2 As part of this exercise, 2 Environmental Assessment Reports (EARs) were prepared (1 at PCF Stage 1 and 1 at PCF Stage 2) which assessed the route options in accordance with Highways England's Design Manual for Roads and Bridges Volume 11 (DMRB¹). The EARs provided an assessment of the Scheme options in relation to air quality, cultural heritage, landscape effects, noise, biodiversity, geology and soils, road drainage and the water environment, people and communities and materials. The conclusions of the assessments undertaken were used to inform the selection of the preferred option.
- 2.8.3 The preferred option (1), the southern bypass, was announced by Highways England on the 24 October 2017<sup>2</sup>. Details of the rejected route options are provided in ES Chapter 3 (Alternatives) (document reference TR010035/APP/6.3). The ES chapter states that although it is the most expensive option, the southern bypass does more to reduce congestion, reduce journey time and improve safety overall. It would better support proposed developments further north on the Fylde peninsula, by increasing the overall capacity of the road and also provide the greatest improvements for pedestrians and cyclists.

<sup>&</sup>lt;sup>1</sup> The DMRB Volume 11, published by Highways England and partners is the key guidance used for undertaking FIAs for highways schemes

<sup>&</sup>lt;sup>2</sup> Highways England, A585 Windy Harbour to Skippool Improvement Scheme, *Preferred route announcement*, October 2017, available: <a href="https://highwaysengland.citizenspace.com/he/a585-windy-harbour-to-skippool-improvements/results/a585-windy-harbour-to-skippool\_pra.pdf">https://highwaysengland.citizenspace.com/he/a585-windy-harbour-to-skippool\_pra.pdf</a> [accessed 31/07/2018]



- 2.8.4 As a result of the consultation undertaken, changes to the Scheme design have been incorporated, as set out in Table 6-1 of the Consultation Report (document reference TR010035/APP/5.1). In summary, these have included the following changes to:
  - The arrangement of Breck Service Road south-east of Skippool Junction
  - The design of Poulton Junction
  - The design of Singleton Junction
  - The design of Shard Road Junction
  - Enhancement of environmental mitigation measures
- 2.8.5 The Environmental Masterplan details the Scheme mitigation plans and contain modifications made following comments made during consultation (document reference TR010035/APP/6.19).
- 2.8.6 Figure 2-2 sets out the timeline for the Scheme's development, from the initial options phase, through to the current submission stage of the draft DCO (at the end of Stage 3). This will be followed by the consideration of the application for development consent by the SoS and subsequent construction phase, depending on the Scheme's approval as submitted.



Figure 2-2: Scheme Development



#### 2.9 Economic Case

- 2.9.1 A business case for the Scheme has been produced by the Applicant in accordance with The Department for Transport (DfT) Transport Analysis Guidance (TAG) which recommends that options should be appraised using cost-benefit analysis in accordance with the Green Book (HMT, 2003). This is achieved through, wherever feasible, attributing monetary values to the impacts of the proposal. Cost-benefit analysis quantifies in monetary terms as many of the costs and benefits of a proposal as feasible, including items for which the market does not provide a satisfactory measure of economic value.
- 2.9.2 The impacts of the Scheme are recorded in the Appraisal Summary Table (AST) contained within the Stage 3 Economic Appraisal, which Highways England has prepared. The AST provides a summary of the economic, environmental, social and public accounts costs and benefits. Estimates of costs and benefits to transport users and providers from the Analysis of Monetised Costs and Benefits Table have been included in the AST which therefore includes costs and benefits for which the evidence on monetary values is considered most robust.
- 2.9.3 The Economic Appraisal was undertaken to facilitate the quantification and monetisation of the Scheme costs and benefits in accordance with DfT TAG Units A1, A2, A3 and A4. The assessment encompasses the economic impact on transport users over a 60-year period.
- 2.9.4 The preparation of Scheme costs has been carried out in accordance with the principles set out in TAG Unit A1.2 entitled 'Scheme Costs' under two broad headings investment costs and maintenance costs. Investment costs are those that will be incurred in the preparation and construction of the scheme, including land acquisition



costs. Maintenance costs are those that are required for the maintenance of the scheme.

- 2.9.5 The Scheme benefits broadly comprise the following:
  - Road user benefits savings in travel time and vehicle operating costs as a result of the Scheme
  - Safety benefits due to changes in the number and/or severity of accidents as a result of the Scheme
  - Construction and maintenance (dis)benefits due to changes in travel time and vehicle operating costs during the Scheme construction and maintenance
  - Environmental impacts due to changes in greenhouse gas emissions, air quality and noise levels as a result of the Scheme
  - Indirect tax revenue due to changes in the amount of fuel purchased and the associated impact to revenue from fuel duty as a result of the Scheme
  - Journey time reliability impacts due to changes in the journey time variability in the network as a result of the Scheme
  - Distributional impacts as a result of the Scheme
  - Social impacts as a result of the Scheme
  - Wider Impacts as a result of the Scheme
- 2.9.6 The Scheme costs are expressed as market prices, inflated to outturn costs using construction related inflation and rebased to 2010 calendar year profiles for economic calculations. An assessment of the maintenance costs of the Scheme has been prepared, applying TAG guidance. The change in indirect taxation revenues is related to changes in traffic levels and have been assessed as part of the process
- 2.9.7 The appraisal of transport user benefits and costs was conducted using the DfT's Transport User Benefit Appraisal (TUBA) software. TUBA was used to estimate the user and provider benefits in terms of travel time savings and vehicle operating cost savings using traffic forecasts output from the Scheme's transport model. TUBA works based on five standard definition time periods including weekday morning, inter-peak, evening and off-peak periods and the weekend period.
- 2.9.8 An Analysis of Monetised Costs and Benefits (AMCB) for the Scheme was undertaken to summarise the monetised impacts of the Scheme. The AMCB brings the user benefits and scheme costs together with the accident and greenhouse gas impacts, where they can be quantified to generate the measures of economic worth, including the scheme's Initial Benefit-Cost Ratio (BCR). The BCR indicates how much benefit is obtained for each unit of cost, with a BCR greater than 1 indicating that the benefits outweigh the costs.
- 2.9.9 As outlined in TAG Unit Section 3.4 the AMCB table includes costs and benefits for which the evidence on monetisation is considered most robust. There are other significant Scheme benefits, including Wider Impacts, Reliability and Weekend User Benefits where the evidence on monetisation is less well developed and therefore the analysis presented in the AMCB table does not provide a full measure of value for money and should not be used as the sole basis for decisions. Further analysis of



- monetised estimates of Reliability, Wider Impacts and weekend user benefits were appraised to allow the calculation of the Adjusted BCR to contribute to the Scheme evidence base.
- 2.9.10 From the Stage 3 Economic Appraisal, the initial BCR of the Scheme is 1.26. Adding in weekend benefits, journey time reliability and wider impacts to provide an adjusted BCR increases the BCR to 2.02.
- 2.9.11 The accident cost savings show that the Scheme provides better accident measures and is forecast to save around 30 accidents and 120 casualties over the 60-year appraisal period
- 2.9.12 The scheme reduces severance for non-motorised users including walkers, cyclists and horse riders and improves access across the existing A585.
- 2.9.13 An appraisal of the economic impacts due to the Scheme that are additional to transport user benefits was undertaken which showed that the scheme supports economic growth in the area. Wider Impacts of the Scheme include Agglomeration Impacts, Output change in imperfectly competitive markets and Labour market impacts. In addition, the A585 mainline traffic flows is not forecast to reach capacity by the design year 2037 showing that the Scheme mainline has reserve capacity to support future development in the area. The Scheme therefore supports economic growth in the area.
- 2.9.14 The Scheme improves journey time and reliability.
- 2.9.15 For the reasons above, the results of the A585 Windy Harbour to Skippool Improvement Scheme Economic Appraisal have shown that the overall objectives of the Scheme to improve safety along the route, reduce severance for non-motorised users, support economic growth and improve journey time reliability have been met and it is therefore worthwhile in economic terms to proceed with the Scheme.



#### 3 PLANNING POLICY CONSIDERATIONS

#### 3.1 Introduction

- 3.1.1 This Chapter sets out the national and local planning policy context for the Scheme.
- 3.1.2 Section 104(2) of the Planning Act 2008 provides the basis for determining an application for development consent where an NPS is in force. It requires that in deciding an application for development consent the SoS must have regard to:
  - Any relevant NPS
  - Any LIR
  - Any matters prescribed in relation to development of the description to which the application relates
  - Any other matter that the decision maker thinks is both important and relevant to its decision
- 3.1.3 Under Section 104(3), the SoS is required to decide the application in accordance with any relevant NPS, except in certain circumstances specified in subsections (4) to (8). These include circumstances where the adverse effects of a scheme outweigh the benefits.
- 3.1.4 The NN NPS (2014) is the relevant NPS for the Scheme and triggers the provisions of Section 104 of the Planning Act 2008.
- 3.2 NN NPS, Department for Transport, December 2014
- 3.2.1 Paragraph 1.1 of NN NPS states that the purpose of the NPS is to establish:
  - 'The need for, and Government's policies to deliver, development of nationally significant infrastructure projects (NSIPs) on the national road and rail networks in England. It provides planning guidance for promoters of nationally significant infrastructure projects on the road and rail networks, and the basis for the examination by the Examining Authority and decisions by the Secretary of State.'
- 3.2.2 NN NPS paragraph 2.2 recognises that there is a critical need to improve the national networks to address road congestion in order '...to provide safe, expeditious and resilient networks that better suppose social and economic activity; and to provide a transport network that is capable of stimulating and supporting economic growth.'
- 3.2.3 The need for the A585 Windy Harbour to Skippool Improvement Scheme has been set-out within the DfT 2014 RIS as a route in need of improvement.
- 3.2.4 This Planning Statement provides a broad overview confirming the Scheme's compliance with the NN NPS and a commentary on how each of the relevant provisions of the NN NPS Chapters 3, 4 and 5 are met. A more detailed assessment of how the Scheme complies with the NN NPS is provided in Appendix 1.

#### **Environmental and Social Impacts**

3.2.5 In relation to NN NPS paragraph 3.3, which expects applicants to avoid and mitigate environmental and social impacts, the Statement of Reasons (document reference TR010035/APP/4.1) states that the 'permanent land required for the Scheme has been minimised as far as possible balancing the need for flexibility within the limits of deviation together with the need to include appropriate mitigation particularly with regards to water attenuation, flood mitigation measures, landscaping and



environmental bunds. Temporary land required for the Scheme has been minimised as far as possible.' The limits of deviation are set out in the Draft DCO (document reference TR010035/APP/3.1).

- 3.2.6 As part of the Scheme proposals, a number of mitigation measures are proposed in ES Chapter 8 Biodiversity (document reference TR010035/APP/6.8), including:
  - New woodland planting
  - Reinstatement and new planting of hedgerows
  - Reinstatement/replacement of ponds and new ditches
  - Minimisation of disturbance including the sensitive timing of works
  - Bat boxes to replace removed potential roost features
  - Culverts for use by otters
  - Pre-construction badger surveys
  - The design of lighting to avoid light-spill
  - Destructive searches<sup>3</sup> and safe working practices to prevent injury or disturbance to animals during construction
  - Installation of structures underneath the carriageway to maintain habitat connectivity
  - Woodland and linear planting to offset habitat loss
- 3.2.7 Opportunities for environmental enhancement have also been taken where possible, including the creation of reptile hibernacula; installation of bird boxes; bee posts; and wildflower meadows to be created around pond and wetland areas along the route corridor (document reference TR010035/APP/6.8).
- 3.2.8 Compensation measures as part of the Scheme proposals would comprise the establishment of aquatic habitats for great crested newts and, during construction, the provision of refuge habitats for pink-footed geese (document reference TR010035/APP/6.8).
- 3.2.9 In terms of how the Scheme might affect overall amenity in the area, the ES identifies that there are no significant operational air quality, visual amenity, or noise and vibration effects (document references TR010035/APP/6.6; TR010035/APP/6.9; and TR010035/APP/6.11).
- 3.2.10 The social benefits of the Scheme include those associated with the introduction of the Scheme itself, through tackling current and forecast levels of traffic congestion, reducing conflicts between users and improving connectivity and community cohesion (document reference TR010035/APP/6.10).
- 3.2.11 The Scheme, once constructed, would facilitate the operation of a new two-lane dual carriageway bypass for use by vehicular traffic. At the same time, the Scheme would bring about reductions in congestion throughout the area. The Scheme would minimise potential conflicts for non-motorised users (NMUs) by improving the safety

<sup>&</sup>lt;sup>3</sup> A destructive search is the final means of ensuring any given site is free from protected species. Destructive searching can involve a number of different services, depending on the species that have been cleared from the sites and depending on the habitat and terrain.



- of pedestrians, equestrian and cyclists around the existing A585, which would be detrunked. At both the Skippool Bridge and Poulton Junctions, pedestrian and cycle access is to be provided. A new footbridge (Grange Footbridge) would include the creation of a new, accessible footpath with links across Garstang New Road and to the wider PRoW network (document reference TR010035/APP/6.10).
- 3.2.12 Traffic calming and other improvement measures would be provided on the section of the existing road to be bypassed and de-trunked. Garstang New Road east of Little Singleton would be decommissioned over a length of about 1.1 kilometres as it would not be connected to the bypass but would be retained for field access and use by pedestrians and cyclists (document reference TR010035/APP/6.10).
- 3.2.13 Whilst PRoW 5-11-FP 2 would be severed as a result of the Scheme, reconnection of the footpath between Little Singleton and Windy Harbour Junction, replacing an existing uncontrolled road crossing, would be made with the new Grange footbridge. This would be constructed off-site (document reference TR010035/APP/6.10).
- 3.2.14 Elsewhere, the existing provision for cyclists, equestrians and pedestrians in the vicinity of the Scheme would not be detrimentally affected and the Scheme proposals would improve access for pedestrians and cyclists at Five Lane Ends Junction (document reference TR010035/APP/6.10).
- 3.2.15 ES Chapter 10 (People and Communities) (document reference TR010035/APP/6.10) concludes that the Scheme would have an overall significant positive effect on NMUs, in compliance with the NN NPS.
- 3.2.16 The impact on the likelihood of accidents as a result of the Scheme has been assessed using the DfT's Cost and Benefits to Accidents – Light Touch (COBALT) program. The outcome of the analysis as presented in the Transport Assessment (document reference TR010035/APP/7.4), shows an overall objective of the Scheme, to improve safety along the route, will be achieved, as the Scheme if implemented is shown to reduce the number of accidents and casualties and therefore no mitigation measures were deemed necessary nor subsequently assessed. Travel time savings of between 2 and 4.5 minutes per journey are forecast to be saved by road users due to the Scheme, which is also expected to result in a decrease of 30 accidents and 120 casualties 60-year appraisal period (document TR010035/APP/7.4). Therefore, it is considered that the Scheme would improve road safety and is compliant with the NN NPS in this regard.
- 3.2.17 For the reasons above, it can be concluded that the Scheme complies with the key principles of the NN NPS in relation to environmental and social benefits.

#### **General Principles of Assessment**

- 3.2.18 Chapter 4 of the NN NPS sets out the assessment principles and general policies against which applications relating to national networks infrastructure are to be determined. Detail of the relevant NN NPS policy requirements is presented in Table 2 in Appendix 1.
- 3.2.19 The approach taken by the Applicant has followed the DfT's TAG guidance, which recommends that options should be appraised using cost-benefit analysis in accordance with the Green Book (HMT, 2003). This is achieved through, wherever feasible, attributing monetary values to the impacts of the proposal. The full business case for the Scheme is included in the Stage 3 Economic Appraisal by Highways England, the results of which are summarised in Section 2.9 of this Statement.



- 3.2.20 A Transport Assessment (document reference TR010035/APP/7.4) has been produced, which provides details of the traffic forecasts prepared for the preferred route of the Scheme based on the DfT's standard assumptions about growth in travel demand and incorporates proposed local housing and employment development and network assumptions. This has informed the Economic Appraisal.
- 3.2.21 For these reasons, the Scheme can be said to have met the guidance requirements provided for in the NN NPS.

#### **Alternatives**

- 3.2.22 In relation to the NN NPS requirements for undertaking options appraisal, the Applicant investigated highway options to alleviate major congestion along the A585 between Windy Harbour Junction and Skippool Junction near Poulton-le-Fylde (ES Chapter 1 (Introduction) (document reference TR010035/APP/6.1)). As a result of the options appraisal, the Applicant announced on 24 October 2017 that an offline 'southern' bypass between the 2 Junctions was the preferred route option.
- 3.2.23 A total of 9 options were considered at the options stage. The Scheme has been subject to a *'full options appraisal'* undertaken as part of the investment decision making process in line with the requirements of the NN NPS.

#### Design

- 3.2.24 NN NPS paragraph 4.29 states that:
  - 'Visual appearance should be a key factor in considering the design of new infrastructure, as well as functionality, fitness for purpose, sustainability and cost.'
- 3.2.25 However, NN NPS paragraph 4.30 acknowledges that:
  - 'Given the nature of much national network infrastructure development...there may be a limit on the extent to which it can contribute to the enhancement of the quality of the area.'
- 3.2.26 The development and design of major highway projects is governed by the guidance and standards set out in the DMRB. The DMRB is supplemented by a number of Interim Advice Notes ("IANs") that provide up-to-date guidance on a range of highway issues, published by DfT and Highways England.
- 3.2.27 Whilst these guidelines have provided the basis for the Scheme design, account has also been taken of the physical constraints and social and environmental considerations in achieving a layout that maximises the benefits to road users and the community.
- 3.2.28 The vertical alignment of the bypass has been developed to minimise visual impacts on surrounding residential areas and individual properties, as well as the rural landscape by keeping the height of embankments to a minimum and placing the bypass in a cutting where it passes immediately south of Little Singleton.
- 3.2.29 In meeting the standards set out in DMRB and the IANs, and in responding to its local context, the Scheme has demonstrated that it complies with the guidance set out in the NN NPS.
- 3.2.30 In terms of how the design process has evolved, the statutory consultation period (21 March to 8 May 2018) provided an opportunity for the Scheme to be understood by the public and stakeholders and to make comments on the proposals. This included aspects of the Scheme design, such as:



- The proposed designs for the junctions at Skippool, Skippool Bridge, Poulton and Little Singleton;
- The options for the bridge to carry the existing B5260 Lodge Lane over the new bypass;
- The Grange Footbridge; and
- Improvements to the existing section of Mains Lane and Garstang New Road.
- 3.2.31 As a result of the consultation undertaken, changes to the Scheme design have been made, as set out in Table 6-1 the Consultation Report (document reference TR010035/APP/5.1). The Environmental Masterplan details the Scheme mitigation plans and contains modifications made following comments made during consultation (document reference TR010035/APP/6.19).

#### **Climate Change Adaptation**

3.2.32 Paragraph 4.40 NN NPS states:

'New national networks infrastructure will be typically long-term investments which will need to remain operational over many decades, in the face of a changing climate.' Accordingly, it advises, 'that applicants must consider the impacts of climate change when planning location, design, build and operation.'

3.2.33 In compliance with the NN NPS, a 30% allowance for climate change has been adopted as part of the Scheme's design, in line with the UKCP09 high emissions scenario 2080 projections, and in place of the more widely used 20% allowance for climate change set-out in the former Highways Agency's guidance HD33/06 (document reference TR010035/APP/6.15).

#### Flood Risk

- 3.2.34 A Flood Risk Assessment (FRA) (document reference TR010035/APP/5.2) has been undertaken for the Scheme. The FRA identifies residual risks and provides the evidence for a sequential test and exceptions test. The development of the FRA has involved consultation with the EA and Lancashire County Council, in their role as Lead Local Flood Authority (LLFA).
- 3.2.35 The FRA includes an assessment to ensure that the Scheme is not at increased risk of flooding over its lifetime due to climate change for the three climate change scenarios for the 1% Annual Exceedance Probability (AEP) event: +35% and +70% fluvial inflows. The Scheme has identified an area of land on the right bank of the Main Dyke immediately downstream of the A585 which would be used to provide additional floodplain storage to offset that removed by the road embankment during construction.
- 3.2.36 The FRA shows that the Scheme is proposed in an area currently predicted to be at risk of flooding. However, by increasing the capacity of the existing A585 crossing as part of the Scheme proposals, upstream flood extents are reduced and, therefore, the Scheme is not at risk of flooding for any of the design events assessed
- 3.2.37 As set out in the FRA (document reference TR010035/APP/5.2), the site is mostly at very low risk of surface water flooding and, with the implementation of a suitable surface water drainage strategy, the risk from surface water flooding would not increase across the Scheme. A suitable surface water drainage strategy would be implemented to ensure that there would be no increase in surface water run-off from the Scheme to the local land drainage system and that there would be no increase in



third party flood risk from this source. In accordance with HA 119/06 and the NN NPS, the Drainage Strategy would incorporate appropriate forms of SuDS within the drainage design.

3.2.38 In accordance with the NN NPS, it can be seen that all reasonable steps are being taken to avoid, limit and reduce the flood risk to the Scheme through the assessment work undertaken.

#### Waste Management

- 3.2.39 ES Chapter 14 (Materials) (document reference TR010035/APP/6.14) provides details of the arisings and management of waste as part of the Scheme. There would be an estimated surplus of 194,500m³ of excavated material deemed suitable for reuse onsite for general or granular fill. Any inert waste from the pavement excavation and demolition from the West Wynds main house, extension and garage, the derelict barn south of Mains Lane, the Beeches main house, outbuildings and extension and Skippool Bridge would also be reused on-site in the landscaping for the Scheme, when suitable. In addition, approximately 3,772m³ of non-hazardous waste would arise from existing highways infrastructure and approximately 516m³ from the demolition described.
- 3.2.40 An Outline CEMP (document reference TR010035/APP/7.2) has been submitted with the DCO application requiring contractors to promote opportunities for the potential reusing and recycling of all material resources and waste.
- 3.2.41 The Outline CEMP (document reference TR010035/APP/7.2) mandates several subsidiary management plans, including a draft Site Waste Management Plan (SWMP) and draft Materials Management Plan (MMP). The draft MMP has been produced to identify ways to reuse site-won or excavated materials within the construction of the Scheme, whilst the draft SWMP is intended to measure and monitor the types and quantities of waste sent off-site, to ensure that the waste hierarchy is being implemented wherever possible. The Draft DCO (document reference TR010035/APP/3.1) requires that a CEMP is produced and approved by the relevant authorities, before development may commence.
- 3.2.42 The waste management measures outlined above demonstrate the intention to minimise the volume of waste produced and that sent for disposal in the line with the NN NPS.

#### Safety

3.2.43 The NN NPS (3.10) states that 'scheme promotors are expected to take opportunities to improve road safety...' The impact on the likelihood of accidents has been assessed using the DfT COBALT program. This shows that the Scheme design would provide improved accident and casualty reduction measures and is forecast to save 30 accidents and 120 casualties over the 60-year appraisal period. The outcome of the analysis is such that no mitigation measures have been deemed necessary nor subsequently assessed, as the Scheme is seen as improving road safety in compliance with the NN NPS.

#### Health

3.2.44 NN NPS paragraph 4.79 notes that:

'National road networks have the potential to affect the health, well-being and quality of life of the population and can have direct impacts on health because of traffic, noise,



- vibration, air quality and emissions, light pollution, community severance, dust, odour, polluting water, hazardous waste and pests.'
- 3.2.45 Paragraph 4.82 of the NN NPS therefore requires that:

  'The applicant should identify measures to avoid, reduce or compensate for adverse health impacts as appropriate.'
- 3.2.46 With regards to air quality, ES Chapter 6 (Air Quality) (document reference TR010035/APP/6.6) states that both nitrogen dioxide (NO<sub>2</sub>) and particulate matter (PM<sub>10</sub>) are predicted to be below the respective Air Quality Strategy Objectives for both the Base Year and Opening Year of the Scheme and no significant effects on human health are predicted as a result of the Scheme.
- 3.2.47 ES Chapter 11 (Noise and Vibration) (document reference TR010035/APP/6.11) states that the construction noise levels, would have no significant adverse impacts on health and quality of life as a result of the Scheme. In terms of operational road traffic noise impacts, it is predicted that beneficial impacts would occur at five Noise Impact Areas (NIAs) in the short-term and three NIAs in the long-term and therefore a significant beneficial effect is expected to occur at these NIAs.
- 3.2.48 ES Chapter 10 (People and Communities) (document reference TR010035/APP/6.10) considers that the improved connectivity as a result of the Scheme has the potential to improve human health through increasing opportunities for walking and cycling. This is particularly important as physical activity levels in both Fylde and Wyre Council areas are below the national average.
- 3.2.49 It is also maintained that the design of the new road to a higher highway standard would help reduce uncertainty, fear and driver stress. The Scheme is therefore predicted to have a beneficial effect on human health through reduced stress levels typical of delayed or congested road use.
- 3.2.50 ES Chapter 12 (Road Drainage and the Water Environment) (document reference TR010035/APP/6.12) states that the Scheme would result in a reduction in flood risk of the proposed crossing of the Main Dyke and in areas of the Scheme alignment and surrounding areas that are at risk of flooding from the tidal Wyre Estuary.
- 3.2.51 In addition, the ES (document reference TR010035/APP/6.12) notes that, 'properties that reside to the south of the Scheme on Kevin Avenue and Royston Road will benefit most from this reduction in tidal flood risk.' Any potential risk for pollutants to enter watercourses would be mitigated and therefore no significant adverse effects on human health are predicted.
- 3.2.52 With respect to hazardous waste, as set out in the ES Chapter 14 (Materials) (document reference TR010035/APP/6.14), there does not appear to be a high probability of significant sources of contaminated land being present within the application site. The baseline has identified that the landfill sites have sufficient capacity to accommodate waste from the Scheme without compromising the integrity of the receiving infrastructure within Lancashire and Greater Manchester, if disposal to landfill is required. As such, hazardous waste effects are assessed as slight and not significant and thus not anticipated to impact on human health.
- 3.2.53 For the reasons above, it can be stated that the Scheme is in compliance with the NN NPS in relation to health.



## Air Quality

3.2.54 NN NPS paragraph 5.10 states:

'The Secretary of State should consider air quality impacts over the wider area likely to be affected, as well as in the near vicinity of the scheme...'

- 3.2.55 ES Chapter 6 (Air Quality) (document reference TR010035/APP/6.6) assesses the potential air quality impacts of the Scheme during the construction and operational phases, within the study area. The traffic change criteria as a result of the Scheme is set out in the DMRB and has been used to define the Affected Road Network (ARN) for the local air quality assessment.
- 3.2.56 NN NPS paragraph 5.11 advises that:

'Air quality considerations are likely to be particularly relevant where schemes are proposed:

- Within or adjacent to Air Quality Management Areas (AQMA); roads identified as being above Limit Values or nature conservation sites (including Natura 2000 sites and SSSIs, including those outside England)...'
- 3.2.57 The ES notes that that no AQMAs have been designated within Fylde Borough Council, although there is one in Wyre Council (Chapel Street AQMA in Poulton-le-Fylde), approximately 1.2 kilometres south west of Skippool Junction.
- 3.2.58 Overall, the ES concludes:
  - Base year (2015) monitored and modelled concentrations indicate that air quality concentrations do not exceed Air Quality Strategy (AQS) Objectives.
  - The evaluation of the operational significance of effects for air quality is that the Scheme does not have a significant impact on local air quality.
  - The assessment demonstrates that in terms of impact on compliance with the EU Directive on ambient air quality (2008/60/EC), the Scheme is Low Risk in relation to affecting the UKs reported ability to comply with the EU Directive in the shortest timescales possible, as exceedances of the EU limit values are unlikely to be exceeded.
  - Construction phase impacts from dust and emissions would be negligible with the implementation of mitigation measures included in the Outline CEMP (document reference TR010035/APP/7.2).
- 3.2.59 As a result of the above air quality assessment, it has been demonstrated that the Scheme is in compliance with the requirements of the NN NPS.

#### **Carbon Emissions**

3.2.60 Paragraph 5.17 NN NPS comments:

'It is very unlikely that the impact of a road project will, in isolation, affect the ability of Government to meet its carbon reduction plan targets. However, for road projects applicants should provide evidence of the carbon impact of the project and an assessment against the Government's carbon budgets.'

3.2.61 As set out in ES Chapter 15 (Climate) (document reference TR010035/APP/6.15), the Scheme seeks to reduce greenhouse gas emissions as far as practicable to contribute to the UK's net reduction in carbon emissions. The Scheme design (ES Chapter 2



Description of the Scheme (document reference TR010035/APP/6.2)) aims to reduce the overall carbon footprint of the Scheme by reusing excavated materials where practicable. The footprint of structures and junctions have been made as compact as practicable, ensuring minimal land use change and materials use. Throughout the Scheme's design, material resources have been evaluated and their carbon emissions calculated, ensuring that material resources with lower carbon emissions have been fully considered.

3.2.62 The predicted increase of carbon dioxide equivalent (CO<sub>2e</sub>) in emissions over 60 years of the Scheme's operation would be caused primarily by an increase in traffic volume and flow along the route of the Scheme. This increase, however, is deemed to be negligible when compared against the Government's carbon budgets.

**Biodiversity and Ecological Conservation** 

3.2.63 NN NPS paragraph 5.22 states that:

'Where the project is subject to EIA the applicant should ensure that the environmental statement clearly sets out any likely significant effects on internationally, nationally and locally designated sites of ecological or geological conservation importance (including those outside England) on protected species and on habitats and other species identified as being of principal importance for the conservation of biodiversity and that the statement considers the full range of potential impacts on ecosystems.'

- 3.2.64 The assessment undertaken within the ES has considered the likely impacts of the Scheme on designated sites of international, national and local importance, protected species, habitats and other species of principal importance for nature conservation.
- 3.2.65 There are no statutory or non-statutory designated sites of nature conservation importance with the Draft DCO Limits. The Morecambe Bay and Duddon Estuary SPA and SSSI and Morecambe Bay Ramsar site boundary lies immediately to the north of the Scheme.
- 3.2.66 The Scheme crosses Main Dyke, a tributary of the River Wyre which flows directly into the Morecambe Bay and Duddon Estuary SPA and Morecambe Bay Ramsar site at two locations. A Habitats Regulations Assessment (HRA) Report (document reference TR010035/APP/5.4), including HRA Screening and Appropriate Assessment, has been undertaken for the Scheme. Positive engagement with Natural England has been ongoing throughout the HRA process. In agreement with Natural England, the HRA has concluded that installation of a new bridge crossing over Main Dyke has the potential to lead to changes in water quality downstream and potentially within the SPA itself which could affect habitats utilised by the water bird assemblage. However, with mitigation, it is considered that, during construction, there would be no adverse effect on the integrity of Morecambe Bay and Duddon Estuary SPA or Morecambe Bay Ramsar site or on the ability of the site to achieve the aims of the Conservation Objectives.
- 3.2.67 An HRA Bird Mitigation Area (refer to Appendix 1 of the HRA, Figure 1 (document reference TR010035/APP/5.4) would be included in the Scheme design (and included in the Draft DCO Limits). The Bird Mitigation Area would be secured by the Applicant as essential mitigation and would provide alternative foraging habitat for the duration of the construction period. It is intended that the mitigation would be in place for the birds to use from October 2019. Further details are included in the Bird Mitigation Strategy (appended to the Outline CEMP document reference TR010035/APP/7.2).



Natural England has agreed the size and location of the mitigation area. The Draft DCO (Schedule 2 Part 1 (4))(document reference TR010035/APP/3.1) requires that a CEMP is produced and approved by the relevant authorities, before development may commence.

- 3.2.68 During operation, the HRA has concluded that, 'given the measures in place to reduce noise and visual disturbance/displacement and the results of the traffic forecasting and noise assessments (which shows a decrease in noise levels where the majority of SPA/Ramsar site bird species have been recorded); there would be no long-term effects from disturbance/displacement of the completed Scheme...The Scheme could potentially have some net beneficial effects through the decrease in noise levels adjacent to the SPA/Ramsar site.'
- 3.2.69 In relation to protected species, the surveys undertaken as part of the Environmental Impact Assessment, confirmed the presence of great crested newts 110m north of the Scheme and the presence of barn owl within 300m of the Scheme, as well as bats and badgers along the Scheme corridor.
- 3.2.70 In accordance with NN NPS paragraph 5.36, ES Chapter 8 (Biodiversity) (document reference TR010035/APP/6.8) sets out the approach the Scheme has taken to avoid and mitigate the effects on ecology and nature conservation. In terms of mitigation, a number of measures are proposed, as follows, in accordance with policy guidance.
- 3.2.71 New woodland planting is proposed along both sides of the new carriageway to mitigate for the permanent loss deciduous woodland. Hedgerows scheduled for temporary loss during construction are to be reinstated and where appropriate, enhanced (document reference TR010035/APP/6.8).
- 3.2.72 The planting works aim to improve the ecological value of land within the vicinity of the Scheme, comprising of native species of local provenance. Where possible, this includes reinstating and re-linking severed linear wildlife corridors (document reference TR010035/APP/6.8).
- 3.2.73 A total area of 6,287m² of deciduous woodland would be lost as a result of the Scheme, along with the permanent (4,221m²) and temporary (2,091m²) loss of hedgerows. Six ponds would be lost during construction of the Scheme, although three of these would be temporary and would be reinstated in their original location returned to a condition of ecological value equal to or above that identified during the baseline surveys, once works had been completed. The planting of deciduous woodland totalling 47,287m² and hedgerows totalling 9,437m² would result in a net increase in these habitats as mitigation for the Scheme (document reference TR010035/APP/6.8).
- 3.2.74 Mitigation measures within the Scheme design would ensure the protection of water quality during both the construction and operational phases of the Scheme. Particular attention is to be paid to ensuring the protection of water quality during construction at the location of the new bridge crossing of the Main Dyke. New ditches totalling a length of 6,742 metres are to be installed along the length of the Scheme, representing substantial enhancement of this habitat type (document reference TR010035/APP/6.8).
- 3.2.75 In summary, the mitigation measures, including other measures to those outlined above, include:
  - New woodland planting



- Reinstatement and new planting of hedgerows
- Reinstatement/replacement of ponds and new ditches
- Minimisation of disturbance including the sensitive timing of works
- Bat boxes to replace removed potential roost features
- Culverts for use by otters
- Pre-construction badger surveys
- The design of lighting to avoid light-spill
- Destructive searches and safe working practices to prevent injury or disturbance to animals during construction
- Installation of structures underneath the carriageway to maintain habitat connectivity
- Woodland and linear planting to offset habitat loss
- 3.2.76 Compensation measures as part of the Scheme proposals would comprise the establishment of aquatic habitats for great crested newts and during construction, the provision of refuge habitats for pink-footed geese (document reference TR010035/APP/6.8).
- 3.2.77 NN NPS paragraph 5.33 states that: 'development proposals potentially provide many opportunities for building in beneficial biodiversity or geological features as part of good design. When considering proposals, the Secretary of State should consider whether the applicant has maximised such opportunities in and around developments.'
- 3.2.78 Opportunities for environmental enhancement as part of the Scheme design have been taken where possible. This includes the creation of reptile hibernacula; installation of bird boxes; bee posts and wildflower meadows, to be created around pond and wetland areas along the route corridor. Biodiversity benefits form an integral part of the proposed landscaping, including the use of wildflowers and native and fruit-bearing species, providing benefits to wildlife in general. ES Chapter 8 (Biodiversity) reinforces the point, stating that: 'the extensive landscape planting would increase connectivity of hedgerow and woodland habitats on either side of the carriageway and is considered to represent an overall enhancement of hedgerow connectivity above baseline levels during the operational phase.'
- 3.2.79 It is noted in ES Chapter 8 Biodiversity (document reference TR010035/APP/6.8) that 'as part of the landscape design and mitigation packages to be implemented for other species such as the creation of ponds and woodland planting mixes which are to also incorporate rides comprising semi-natural grassland, positive benefits and suitable habitats local enhancements would be provided for barn owls. Therefore, these measures would lead to a long-term beneficial slight positive impact at the local level during the operational phase.'
- 3.2.80 It is therefore considered that where biodiversity benefits can be achieved, these have been incorporated as part of enhancement measures, to be delivered in accordance with the policy requirements.



## Dust, Odour, Artificial Light, Smoke, and Steam

- 3.2.81 In accordance with NN NPS paragraph 5.87, ES Chapter 6 (Air Quality) (document reference TR010035/APP/6.6) recognises that construction activities have the potential to give rise to adverse impacts from fugitive emissions of dust due to the construction of the Scheme. However, mitigation measures are recorded in the Register of Environmental Actions and Commitments (REAC) (document reference TR010035/APP/7.3) to ensure avoidance of any significant impacts. Standard dust mitigation measures are summarised in Table 6-6 of ES Chapter 6.
- 3.2.82 With the exception of dust from construction activities, impacts on amenity from emissions of odour, steam, or smoke are not considered relevant to the Scheme and thus no assessment has been undertaken in relation to them.
- 3.2.83 The Scheme's lighting proposals have been designed to minimise light spill and trespass beyond the Scheme alignment, to reduce potential landscape and amenity impacts as well as impact on adjacent habitats. During construction, lighting would be directional and kept to a minimum. For the operational phase, lighting of the Scheme has been designed to minimise light spill and trespass beyond the Scheme alignment and would be restricted to junction areas where the carriageway needs to be lit for health and safety reasons, with baffles fitted to ensure lighting remains directional and the surrounding landscape remains unlit. In accordance with policy guidance therefore, the Scheme's lighting design has sought to minimise any detrimental impacts on the landscape and amenity of the immediate area, particularly in relation to adjoining habitats (document reference TR010035/APP/6.9).

## Land Instability

- 3.2.84 ES Chapter 13 (Geology and Contaminated Land) (document reference TR010035/APP/6.13) presents an assessment of geology and contaminated land impacts associated with the Scheme, both during the construction and operational phases. The Scheme design has considered land instability and ground conditions in determining the appropriate design parameters / techniques.
- 3.2.85 The conclusions reached within the ES are that any ground stability issues are considered to be short term and limited to when significant earthwork movements are taking place during construction and are therefore non-significant and in compliance with NN NPS paragraph 5.188.

#### The Historic Environment

- 3.2.86 In line with the requirements of the NN NPS, ES Chapter 7 (Cultural Heritage) (document reference TR010035/APP/6.7) considers the potential effects of the Scheme on archaeology and cultural heritage during both the construction and operational phases. The assessment has been undertaken in accordance with DMRB, Volume 11 Section 3 Part 2 (Highways Agency, 2007), the Chartered Institute for Archaeologists (ClfA) 'Code of Conduct' (ClfA 2014a) and 'Standards and Guidance for Historic Environment Desk Based Assessments' (ClfA 2014b).
- 3.2.87 There are no designated heritage assets located within the Draft DCO Limits of the Scheme. However, a Grade II listed Ice House at Singleton Hall (60 metres to the south of the Draft DCO Limits) and Singleton Conservation Area (775 metres to the south of the Draft DCO Limits) are located in proximity to the Scheme.
- 3.2.88 There is the potential for the Scheme to affect the setting of Singleton Conservation Area in terms of noise levels resulting from the Scheme. However, with mitigation in



- place in the form of acoustic fencing, and routing construction traffic away from the Conservation Area, would result in a neutral/slight significance of effect, which is not considered to be significant.
- 3.2.89 As stated in ES Chapter 7 (Cultural Heritage) (document reference TR010035/APP/6.7), work within the Draft DCO Limits to the north of Garstang Road would result in the direct loss of potential archaeological remains related to the known Romano-British settlements to the west of the Main Dyke at Moorfield Park. This effect has been assessed within the ES as negative and significant. An archaeological watching brief, trial trenching and boreholes would therefore be undertaken. The Draft DCO (Schedule 2 Part 1 (9)) (document reference TR010035/APP/3.1) requires that a written scheme for the investigation of areas of archaeological interest is produced and approved by the relevant authorities, before development may commence.
- 3.2.90 With regards to the Grade II listed Ice House (LB8), paragraph 5.131 NN NPS states: 
  'When considering the impact of a proposed development on the significance of a designated heritage asset, the Secretary of State should give great weight to the asset's conservation. The more important the asset, the greater the weight should be...Substantial harm to or loss of a grade II Listed Building or a grade II Registered Park or Garden should be exceptional...'
- 3.2.91 Mitigation would comprise an area of new woodland planting around the existing planting within Singleton Park together with acoustic fencing. Planting would result in an additional area of separation between the Ice House and the Scheme, consequently helping to maintain the green rural setting of the receptor.' (ES Chapter 7 Cultural Heritage, document reference TR010035/APP/6.7)
- 3.2.92 The conclusions of the ES are that the significance of the Grade II listed Ice House would be negatively impacted during both construction and operation. The rural setting of the Ice House is a contributor to the receptor's significance. Impacts are predicted to be a moderate significance of effect, which is considered to be significant. The public benefits of the Scheme are demonstrated throughout this Planning Statement, including the significant role the Scheme would play in underpinning the Government's social, economic and environmental policy aspirations, and the substantially improved conditions in which people travel that the Scheme would provide. The predicted damage of the setting to the Grade II listed Ice House should be weighed against these predicted benefits, leading to its exception in this case.

#### Landscape and Visual Impact

3.2.93 Paragraph 5.149 NN NPS states that:

'Landscape effects depend on the nature of the existing landscape likely to be affected and nature of the effect likely to occur. Both of these factors need to be considered in judging the impact of a project on landscape. Projects need to be designed carefully, taking account of the potential impact on the landscape. Having regard to siting, operational and other relevant constraints, the aim should be to avoid or minimise harm to the landscape, providing reasonable mitigation where possible and appropriate.'

- 3.2.94 The assessment undertaken within ES Chapter 9: Landscape (document reference TR010035/APP/6.9), notes that the Scheme lies outside of any statutory or non-statutory designated landscapes.
- 3.2.95 The site does, however, lie within landscape National Character Area 32: Lancashire



- and Amounderness Plain and within the county-level Landscape Character Area (LCA) 15d: The Fylde, within Landscape Character Type (LCT) 15: Coastal Plain. The wider study area also includes LCA 18c Wyre Marshes, and Urban Landscape Type Suburban.
- 3.2.96 The national and county-level LCTs and LCAs cover relatively large areas and consequently a Scheme-specific character study has been undertaken as part of the assessment in order to add local detail to the character descriptions. This study has identified 6 local LCAs and 9 local Townscape Character Areas (TCAs). Of these 3 LCAs and 3 TCAs are considered to be potentially affected by the Scheme. Of these receptors and taking account of the nature of the Scheme, 2 TCAs are considered to have a low value and low sensitivity, 1 TCA and 2 LCAs a moderate value and moderate sensitivity, and 1 LCA a high value and high sensitivity.
- 3.2.97 The Scheme includes a range of measures designed to mitigate for potential effects on landscape character and visual amenity. This includes the retention of existing vegetation and features within the Draft DCO Limits, along with the following mitigation measures identified on the Environmental Masterplan both during the construction and operational phases (document reference TR010035/APP/6.19):
  - A combination of amenity grass, grassland with bulbs and species rich grassland for integrating the Scheme, providing visual amenity and enhancing nature conservation and biodiversity
  - Soft landscape measures including woodland planting, linear belts of trees, shrub and scrub planting, with intermittent tree planting to aid the landscape integration of the Scheme within its context, provide visual screening and amenity and to promote nature conservation and enhance biodiversity
  - Individual tree planting as features to enhance the built environment, providing a positive contribution to the character areas, aiding visual amenity and providing visual screening
  - Earthwork cuttings (typically 2m higher than the highway carriageway) to provide visual screening and integrate the Scheme within the surrounding landscape
- 3.2.98 The Draft DCO (Schedule 2 Part 1 (5))(document reference TR010035/APP/3.1) requires that a landscaping scheme is produced and approved by the relevant authorities, before development may commence.
- 3.2.99 The residual effects assessment undertaken within ES Chapter 9 (Landscape) (document reference TR010035/APP/6.9) assesses the construction phase effects of the Scheme on landscape and townscape character (and features) as being slight for the majority of character areas, with two improving to become beneficial effects. A large adverse effect was predicted for LCAs 4, 5 and 6 (Main Dyke Farmland, Singleton Enclosed Farmland and Singleton Hall and Parkland), during the construction phase of the Scheme. A moderate adverse, reducing to neutral effect on TCA3 (Skippool Bridge) was predicted, with a moderate adverse, reducing to a minor beneficial effect on TCA5 (A585 Mains Lane).
- 3.2.100 The worst-case operational phase effects of the Scheme on landscape and townscape character (and features) have been assessed within the ES as slight adverse or neutral for NCA32 (Lancashire and Amounderness Plain) and LCA 15d (The Fylde), with no discernible effect on LCA 18c (Wyre Marshes) and TCA3



- (Skippool Bridge). A slight beneficial effect on TCA5 and TCA 7 (A585 Mains Lane and Little Singleton) has been predicted. A large adverse significant effect on LCAs 4, 5 and 6 (Main Dyke Farmland, Singleton Enclosed Farmland, and Singleton Hall and Parkland) is also predicted (document reference TR010035/APP/6.9).
- 3.2.101 Over time, and by year 15, the proposed mitigation planting would become established and start to mature, and the overall planting scheme itself would form a notable integrating landscape feature within LCAs 4, 5 and 6. The planting would also further reduce the visibility of traffic travelling along the Scheme. By year 15 the overall magnitude of impact on LCAs 4, 5 and 6 would reduce to moderate adverse. With moderate sensitivity, this would result in a moderate adverse and significant effect (document reference TR010035/APP/6.9).
- 3.2.102 Paragraph 5.158 of the NN NPS states:
  - 'The Secretary of State will have to judge whether the visual effects on sensitive receptors, such as local residents, and other receptors, such as visitors to the local area, outweigh the benefits of the development.'
- 3.2.103 The assessment undertaken within ES Chapter 9 (Landscape) (document reference TR010035/APP/6.9), identifies that a Zone of Theoretical Visibility (ZTV) has been generated for an area extending to 5 kilometres, representing the theoretical area from which any part of the Scheme may be seen. This identifies theoretical visibility up to these distances; however, it is considered that beyond the 2 kilometres study area, the Scheme would not be readily perceptible within the wider landscape, which has formed the basis for the assessment of effects on visual amenity.
- 3.2.104 The Zone of Visual Influence (ZVI) demonstrates that visibility extends in all directions from the Scheme, with the potential for extensive views within a 1 kilometre extent. Beyond these distances visibility reduces to the south and west as a result of filtering by intervening vegetation and built form. To the north and east the ZTV at 2 kilometres is clearer, primarily as a result of the flat natured topography and more open character of the Wyre Estuary. Beyond these distances the ZTV identifies that the visibility becomes more broken and scattered.
- 3.2.105 Twenty-one representative viewpoints have been assessed in detail for effects on visual amenity, and a further desk-based assessment has been undertaken for a wide range of other potential visual receptors present within the ZVI of the Scheme.
- 3.2.106 During the construction phase significant adverse effects on local visual amenity would be experienced at 13 of the 21 representative viewpoints. Of these, 2 representative viewpoints would experience very large adverse effects, with 10 viewpoints experiencing a large adverse effect and 1 experiencing moderate adverse effects. 28 individual or groups of visual receptors, all within 300m of the Draft DCO Limits, would experience significant adverse effects during the construction phase (document reference TR010035/APP/6.9).
- 3.2.107 At year 1 of the Scheme's operation, 9 of the 21 representative viewpoints would continue to experience significant adverse effects. Of these at worst, 4 viewpoints would experience a large adverse effect and 5 would experience an adverse moderate effect (document reference TR010035/APP/6.9).
- 3.2.108 In addition, 17 of the individual or groups of visual receptors assessed as experiencing significant adverse construction phase effects would continue to experience significant effects at year 1 of operation (document reference TR010035/APP/6.9).



- 3.2.109 By year 15 of the Scheme's operation, 9 of the 21 representative viewpoints would continue to experience significant adverse effects. Of these, 1 would experience a large adverse effect and 6 would experience a moderate adverse effect (document reference TR010035/APP/6.9).
- 3.2.110 By year 15, 7 individual or groups of visual receptors reported to experience significant adverse effects at opening year would continue to experience significant effects (document reference TR010035/APP/6.9).
- 3.2.111 Approximately 104 residential properties located along the existing A585 Mains Lane which currently experience views of the existing highway and its associated traffic flow may experience views with reduced flows as a result of the Scheme. This would result in improvements to the view and a slight beneficial effect. However, in most cases views from properties are filtered as a result of in curtilage vegetation and the nature of the properties being set back from the highway. Furthermore, a number of these may also, as a result of the Scheme, experience filtered visibility of the operational Scheme and its traffic flows to the rear of their gardens. At worst, by year 15, these receptors would experience a slight adverse effect, which is not considered significant (document reference TR010035/APP/6.9).
- 3.2.112 The public benefits of the Scheme are demonstrated throughout this Planning Statement, including the significant role the Scheme would play in underpinning the Government's social, economic and environmental policy aspirations, and the substantially improved conditions in which people travel that the Scheme would provide. The predicted landscape and visual effects should be weighed against these predicted benefits, alongside the benefits to be achieved in landscape terms in the de-trunked section of the Scheme.

## Land Use Including Open Space, Green Infrastructure and Green Belt

- 3.2.113 Chapter 2 of this Planning Statement sets out the need case for the Scheme, as a form of linear infrastructure. A small section of the Scheme (some 2.7ha) (namely the Skippool Junction) within Wyre Council lies within the Green Belt.
- 3.2.114 Paragraph 5.178 NN NPS states:
  - 'When located in the Green Belt national networks infrastructure projects may comprise inappropriate development. Inappropriate development is by definition harmful to the Green Belt and there is a presumption against it except in very special circumstances. The Secretary of State will need to assess whether there are very special circumstances to justify inappropriate development. Very special circumstances will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations...'
- 3.2.115 It is acknowledged that the Scheme represents 'inappropriate development' within the Green Belt. However, as demonstrated below, any actual or perceived harm to the openness of the Green Belt is outweighed by other material considerations, which justify the application of 'very special circumstances' in support of the Scheme. In this regard, the relevant policy restrictions on development in the Green Belt are to be weighed against the other policy considerations, which inform the planning balance put forward in this Planning Statement.
- 3.2.116 The need for the Scheme is an important and relevant consideration which should be attributed significant weight. The rationale behind the Scheme has been set out in



Chapter 2 of this Statement with reference made to the Government's support in improving journey times and safety and the need to improve capacity on the proposed route to support employment, economic development and growth opportunities within the region.

- 3.2.117 The Scheme is the product of a rigorous assessment process and has been included in the DfT 2014 RIS, as one of the routes in greatest need of improvement.
- 3.2.118 In determining the extent to which harm may be caused to the Green Belt as a result of the Scheme, reference is made to the five purposes of the Green Belt, set out in paragraph 134 of the National Planning Policy Framework (NPPF), as follows:
  - To check the unrestricted sprawl of large built-up areas
  - To prevent neighbouring towns merging into one another
  - To assist in safeguarding the countryside from encroachment
  - To preserve the setting and special character of historic towns
  - To assist in urban regeneration, by encouraging the recycling of derelict and other urban land
- 3.2.119 Taking each in-turn, the purposes of including land within the Green Belt and the associated responses are set out below:

## To check the unrestricted sprawl of large built-up areas

3.2.120 The section of Scheme lying within Green Belt land is limited to improvement works to Skippool Junction and Amounderness Way, extending a short distance (401 metres) to the west of the existing Skippool roundabout. The Scheme involves alteration of the Junction from a priority roundabout to a 4-way traffic signal-controlled crossroads junction with designated turning lanes. The section of Amounderness Way proposes widening within the existing highway boundary to accommodate predicted increases in traffic flows. In view of the nature of the Scheme proposals and their containment within the existing highway boundary, it is considered that this would not lead to an extension of the urban area, nor further incursion into the Green Belt.

## To prevent neighbouring towns from merging into one another

3.2.121 The Scheme involves remodelling of the existing Skippool Junction, as well as the necessary widening of part of Amounderness Way, within the highway boundary. The Scheme would not involve the development of land outside of the highway boundary within the Green Belt and would not therefore facilitate the merger of neighbouring towns. It would also not impact on or reduce the ability of the Green Belt to prevent neighbouring towns from merging.

## To assist in safeguarding the countryside from encroachment

3.2.122 The highway improvement works to the west of the Skippool Junction define the extent of the Scheme proposals within the Green Belt. The Scheme would not involve the development of land outside of the highway boundary within the Green Belt. Based on the purpose and extent of the proposals and their relationship to the existing highway infrastructure, this does not, in itself, represent encroachment into the countryside.



## To preserve the setting and special character of historic towns

3.2.123 There are no historic towns within the area of Green Belt affected by the Scheme, thus there is no change to the setting and character of historic towns within the Green Belt.

To assist in urban regeneration by encouraging the recycling of derelict and other urban land

- 3.2.124 The Scheme aims to improve journey times on the A585 between Windy Harbour and Skippool Junctions in delivering capacity enhancements to support employment and residential/commercial development and growth opportunities. This is seen as having a positive effect on bringing forward development land in the area.
- 3.2.125 The Scheme proposals within the Green Belt would be restricted within the highway boundary therefore avoiding the need for developing greenfield land beyond.
- 3.2.126 Based on the above assessment, potential harm to the Green Belt is minimal and is clearly outweighed by the other important and relevant considerations in relation to the need for the Scheme. That there is no harm identified to the Green Belt is a significant factor in demonstrating the Scheme's compliance with relevant guidance for development within Green Belt land.

#### 3.3 Minerals

- 3.3.1 Within the boundary of the Scheme, two Mineral Safeguarding Areas (MSAs) have been identified. The importance attached to safeguarding designated Mineral Safeguarding Areas (MSAs) is set-out in Paragraph 5.182, which states that, 'where a proposed development has an impact on a Mineral Safeguarding Area (MSA), the Secretary of State should ensure that the applicant has put forward appropriate mitigation measures to safeguard mineral resources.'
- 3.3.2 A Mineral Assessment Report, included as Appendix 4, identifies areas of land within the order limits that are located within the mineral safeguarding area. The first MSA (MSA1) is near the proposed Poulton Junction and the second (MSA2) is immediately east of Lodge Lane. Both apply to sand and gravel reserves.
- 3.3.3 The report concludes that given the small areas / volume of both MSAs (MSA1 76,000m³ and MSA2 39,000m³) within the Draft DCO Limits, it is considered commercial unviable and environmentally unacceptable to extract the minerals from the area. The report states that 'Overall... it is not considered feasible to undertake prior extraction in advance of the proposed development, and that there is an overarching need for the development that outweighs the need to avoid the part sterilisation of the relatively small mineral resource.'
- 3.3.4 Paragraph 5.183 [NN NPS] goes on to say that, 'where a project has a sterilising effect on land use there may be scope for this to be mitigated through, for example, using the land for nature conservation or wildlife corridors or for parking and storage in employment areas'. It should be noted that the borrow pits (if used) are not in an MSA, but they will be returned to agricultural use after materials have been extracted. A draft Borrow Pit Restoration and Aftercare Plan is included as Appendix N of the Outline CEMP.

#### 3.4 Noise and Vibration

3.4.1 NN NPS paragraphs 5.189-5.191 set out guidance for undertaking the assessment of noise impacts. An assessment of both construction and operational road traffic noise



has been undertaken within ES Chapter 11 (Noise and Vibration) (document reference TR010035/APP/6.11) in accordance with DMRB, which has considered road traffic noise impacts in both the short-term (year of opening) and long-term (15 years after opening).

- 3.4.2 ES Chapter 11 (Noise and Vibration) (document reference TR010035/APP/6.11) concludes that road traffic noise nuisance associated with the Scheme would result in both increases and decreases in road traffic noise nuisance compared to the existing situation. This is regarded as being typical for a bypass scheme where traffic noise contribution to an area is transferred from the existing road network to a new scheme located in areas of previously low-level road traffic noise.
- 3.4.3 The findings of the noise assessment indicate that, in the short and long-term, adverse changes in road traffic noise level above a Significant Observed Adverse Effect Level (SOAEL), where significant adverse impacts on health and quality of life from operational road traffic noise would occur, would not be of a sufficient magnitude to be considered significant. This has been achieved through the implementation of mitigation into the Scheme design, including the use of a low noise/thin surfacing system surface to be laid on new or altered roads and 2m and 3m high acoustic/landscape bunds. The locations of these measures are presented in Figure 11.4 of the ES (document reference TR010035/APP/6.11).
- 3.4.4 Short-term operational beneficial impacts are predicted to occur at receptors located along Garstang New Road, Garstang Road west of Little Singleton and at receptors located on the north of Mains Lane, with 82 dwellings predicted to experience a moderate or greater beneficial change above a SOAEL. Changes of this magnitude would represent a significant beneficial impact on health and quality of life. Short term adverse effects were assessed as not having a significant adverse impact on health and quality of life, as no adverse changes greater than minor adverse above a SOAEL were predicted (document reference TR010035/APP/6.11).
- 3.4.5 Long-term operational beneficial impacts are predicted to occur at receptors located along Garstang New Road, Garstang Road west of Little Singleton and at receptors located on the north of Mains Lane, with 55 dwellings predicted to experience a moderate or greater beneficial change above a SOAEL. Changes of this magnitude would represent a significant beneficial impact on health and quality of life. Long term adverse effects were assessed as not having a significant adverse impact on health and quality of life, as no adverse changes greater than negligible above a SOAEL were predicted (document reference TR010035/APP/6.11).
- 3.4.6 As all predicted daytime construction noise levels remain below the relevant BS522814 significance threshold category and a SOAEL throughout the construction period, daytime construction noise levels are therefore not considered to have a significant effect during daytime construction activities. Only limited construction activities would occur during the night time period for road crossings and final surfacing tie ins and are not considered to be significant (document reference TR010035/APP/6.11).
- 3.4.7 A CEMP and Noise and Vibration Management Plan would be prepared and agreed with the SoS, in consultation with Fylde Borough Council and Wyre Council, prior to commencing construction. An Outline CEMP (document reference TR010035/APP/7.2) has been prepared together with a Register of Environmental

<sup>&</sup>lt;sup>4</sup> British Standard 5228: 2009+A1: 2014 'Code of Practice for Noise and Vibration Control on Construction and Open Sites' Part 1



Actions and Commitments (REAC) (document reference TR010035/APP/7.3). This includes a set of best practice working methods for the control of construction noise and vibration. Noise monitoring during construction would be undertaken at key sensitive receptors to ensure that mitigation is working effectively. The Draft DCO (Schedule 2 Part 1 (4))(document reference TR010035/APP/3.1) requires that a CEMP is produced and approved by the relevant authorities, before development may commence.

3.4.8 With regard to operational airborne vibration nuisance associated with the Scheme the assessment has shown that there would be fewer dwellings experiencing an increase in airborne vibration nuisance and more dwellings experiencing a decrease in airborne vibration nuisance compared to the existing situation. Results of this nature are considered typical for a bypass scheme, where traffic noise contribution to an area is transferred from the existing road network to a new scheme located in areas of previously low-level traffic noise (document reference TR010035/APP/6.11).

#### 3.5 Conclusion on the NN NPS

- 3.5.1 The NN NPS references the compelling need for the development of the national road network, of which the A585 forms part. The NN NPS acknowledges that all major infrastructure projects may have an adverse impact on the environment but states that these impacts must be weighed against the need for such development.
- 3.5.2 The policy presumption in support of the Scheme recognises the proposed highway improvements to the A585 as a positive measure to reduce traffic congestion, improve road safety and support economic growth within the region. The Scheme is also predicted to have a beneficial effect on human health by reducing stress levels (document reference TR010035/APP/6.10). Through the assessments undertaken, beneficial effects in relation to operational road traffic noise impacts are predicted (document reference TR010035/APP/6.11) and flood risk reduced, with the Scheme not at risk of flooding (document reference TR010035/APP/5.2). Opportunities for environmental enhancement as part of the Scheme design have been taken wherever possible. attendant biodiversity benefits (document TR010035/APP/6.8). At the same time, mitigation measures have been introduced to off-set the impacts of the Scheme on the majority of heritage features (document reference TR010035/APP/6.7), landscape and sensitive receptors (document reference TR010035/APP/6.9), along with the construction effects on air quality ((document reference TR010035/APP/6.10). These considerations in favour of the Scheme must attract significant weight.
- 3.5.3 The NN NPS confirms the test set out in the National Planning Policy Framework (NPPF) in respect of development within the Green Belt, demonstrating the very special circumstances required and in not detracting from the five purposes of the Green Belt.
- 3.5.4 The public benefits of the Scheme are demonstrated throughout this Planning Statement, including the significant role the Scheme would play in underpinning the Government's social, economic and environmental policy aspirations, and the substantially improved conditions in which people travel that the Scheme would provide. The predicted damage of the setting to the Grade II listed Ice House, potential archaeological remains associated to the Romano-British settlement at Moorfield Park predicted negative landscape effects in some areas, should be weighed against these predicted benefits, leading to its exception in this case.



3.5.5 The approach taken to the design and mitigation proposed for the Scheme, has therefore adequately addressed any potential impacts, in accordance with the policy criteria set out within the NN NPS.

# 3.6 National Planning Policy Framework

- 3.6.1 The NPPF, published by the Ministry of Housing, Communities and Local Government in July 2018, sets out the Government's economic, environmental and social planning policies for England. These policies promote a national strategy for sustainable development. This vision should seek to meet local aspirations and needs.
- 3.6.2 In the determination of applications, NPPF paragraph 2 notes that:
  - 'Planning law requires that applications for planning permission must be determined in accordance with the development plan, unless material considerations indicate otherwise. This Framework is a material consideration in planning decisions. Planning policies and decisions must also reflect relevant international obligations and statutory requirements.'
- 3.6.3 Paragraph 1.17 of the NN NPS states that the NPS and NPPF are consistent, with paragraph 1.18 going on to say that the NPPF would be an important and relevant consideration 'but only to the extent relevant to [the] scheme'. Therefore, it is necessary to consider the extent of any such relevance and compliance with the policies that it contains.
- 3.6.4 The NPPF promotes a 'presumption in favour of sustainable development'. This presumption requires that economic, social and environmental considerations should be assessed in the determination of development proposals. The document is clear that development proposals that accord with the development plan and are considered sustainable, should be approved without delay.
- 3.6.5 The NPPF confirms that the NPS is the primary decision-making document for NSIPs under the Planning Act 2008. Paragraph 3 notes that:
  - 'The Framework does not contain specific policies for nationally significant infrastructure projects. These are determined in accordance with the decision-making framework in the Planning Act 2008 (as amended) and relevant national policy statements for major infrastructure, as well as any other matters that are considered both important and relevant (which may include the National Planning Policy Framework). National policy statements form part of the overall framework of national planning policy and may be a material consideration in preparing plans and making decision on planning applications.'
- 3.6.6 The NPPF outlines the Government's core planning principles which seek to ensure that development plan making, and decisions made on planning applications contribute to the delivery of sustainable development. The following key principle supports this:
  - 'proactively drive and support sustainable economic development to deliver the homes, business and industrial units, infrastructure and thriving local places that the country needs...'
- 3.6.7 The significance of planning in developing the need for economic growth is stated in the overarching objectives, included in paragraph 8 of the NPPF:
  - 'an economic objective to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at



- the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure.'
- 3.6.8 NPPF paragraphs 133-147 address planning policy in relation to the Green Belt, a matter that is addressed fully in the consideration of the NN NPS policy framework above.
- 3.6.9 Paragraph 170 states that:
  - 'planning policies and decision should contribute to and enhance the natural and local environment by:
    - a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan):
    - b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland; ...
    - d) ...minimizing impacts on and providing net gains for biodiversity, including establishing coherent ecological networks that are more resilient to current and future pressures;
    - e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality... and
    - f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.'
- 3.6.10 NPPF paragraph 174 requires that in determining planning applications, local planning authorities should aim to:
  - 'promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.'
- 3.6.11 The Scheme lies within landscape National Character Area 32: Lancashire and Amounderness Plain and within the county-level LCA 15d: The Fylde, within LCT 15: Coastal Plain. The wider study area also includes LCA 18c Wyre Marshes, and Urban Landscape Type Suburban.
- 3.6.12 The assessment undertaken within ES Chapter 9 (Landscape) (document reference TR010035/APP/6.9) assesses the construction phase effects of the Scheme on landscape and townscape character (and features) as being slight adverse for the majority of character areas, with two improving to become beneficial effects. A large adverse effect was predicted for LCAs 4, 5 and 6 (Main Dyke Farmland, Singleton Enclosed Farmland and Singleton Hall and Parkland), during the construction phase of the Scheme.
- 3.6.13 The worst-case operation phase effects of the Scheme on landscape and townscape character (and features) have been assessed as slight adverse or neutral for NCA32: Lancashire and Amounderness Plain; LCA 15d: The Fylde and no discernible effect on LCA 18c: Wyre Marshes; and TCA3 (Skippool Bridge). A slight beneficial effect on TCA5 and TCA 7 (A585 Mains Lane and Little Singleton), has been predicted, as a



result of the de-trunking of the existing A585 Mains Lane. A large adverse effect on LCAs 4, 5 and 6 (Main Dyke Farmland, Singleton Enclosed Farmland, and Singleton Hall and Parkland) has been assessed at Year 1. However, with mitigation, this would reduce to moderate adverse over time and by Year 15 as the mitigation's soft landscape measures develop.

- 3.6.14 The public benefits of the Scheme are demonstrated throughout this Planning Statement, including the significant role the Scheme would play in underpinning the Government's social, economic and environmental policy aspirations, and the substantially improved conditions in which people travel that the Scheme would provide. The predicted negative landscape effects in some areas, should be weighed against these predicted benefits, leading to its exception in this case.
- 3.6.15 As set out in ES Chapter 8 (Biodiversity) (document reference TR010035/APP/6.8), as part of the Scheme proposals, a number of mitigation measures are proposed, including:
  - New woodland planting
  - Reinstatement and new planting of hedgerows
  - Reinstatement/replacement of ponds and new ditches
  - Minimisation of disturbance including the sensitive timing of works
  - Bat boxes to replace removed potential roost features
  - Culverts for use by otters
  - Pre-construction badger surveys
  - The design of lighting to avoid light-spill
  - Destructive searches and safe working practices to prevent injury or disturbance to animals during construction
  - Installation of structures underneath the carriageway to maintain habitat connectivity
  - Woodland and linear planting to offset habitat loss
- 3.6.16 Compensation measures as part of the Scheme proposals would comprise the establishment of aquatic habitats for great crested newts and, during construction, the provision of refuge habitats for pink-footed geese (document reference TR010035/APP/6.8).
- 3.6.17 In addition, bat boxes to be installed throughout the Scheme would compensate for the loss of potential roosting sites and provide further enhancements, whilst the reinstatement and provision of new ditches would provide substantial enhancement of this habitat type. Landscape design for the Scheme would result in a net increase in foraging habitat available. Chapter 8 (Biodiversity) (document reference TR010035/APP/6.8) states that 'although some flight-lines (hedgerows) would be permanently severed in order to accommodate the scheme, the provision of oversized culverts/safe crossing points would still ensure commuting routes are available. The use of these would be encouraged through the implementation of the landscape design and strategic planting to guide bats to the safe crossing points... Noise, lighting and pollution from the Scheme has potential to displace bats from the area although mitigation and a sensitive lighting strategy would ensure any adverse effects from



lighting would be avoided / kept to a minimum around junction areas.'

- 3.6.18 In relation to otters, the (ES Chapter 8 Biodiversity document reference TR010035/APP/6.8) sets out that 'habitat fragmentation would be limited to a reduction in terrestrial habitat of low suitability lost beneath the footprint of the Scheme. Aquatic terrestrial connectivity would be mitigated in the long-term through the maintenance of existing culverts and watercourses wherever possible; additionally, purpose-designed culverts suitable for use by otters would be installed where the Scheme creates new watercourse crossing points.'
- 3.6.19 In relation to badgers, 'given the locations of the 2 setts, the Scheme is likely to result in habitat fragmentation. As mitigation, mammal tunnels would be installed along the Scheme corridor.'
- 3.6.20 As stated in the ES (Chapter 8 Biodiversity document reference TR010035/APP/6.8), the opportunities to provide biodiversity enhancements are extensive. Opportunities for environmental enhancement have also been taken where possible, including the creation of reptile hibernacula; installation of bird boxes; bee posts; and wildflower meadows to be created around pond and wetland areas along the Scheme corridor. Extensive landscape planting is also included, through increasing the connectivity of hedgerow and woodland habitats on either side of the carriageway. The 3 ponds to be created to mitigate for those lost would, through the creation of larger ponds result in an overall improvement in the condition of waterbodies created compared to those lost.
- 3.6.21 The agricultural assessment undertaken as part of ES (Chapter 10 People and Communities document reference TR010035/APP/6.10) concludes that the principal land use within the footprint of the Scheme is agricultural. Provisional Agricultural Land Classification (ALC) mapping shows land within the Draft DCO Limits to be predominantly Grade 2, with Grade 3 land at the western and eastern ends. Land immediately to the south of Main Dyke, as far as Garstang Road is predominantly Grade 3b with a small area of Grade 3a land.
- 3.6.22 There is no direct mitigation for the loss of agricultural land. However, the Scheme design (ES Chapter 2 (Description of the Scheme) (document reference TR010035/APP/6.2)) aims to reduce the overall footprint of the Scheme, the junctions and structures, which have been made as compact as practicable, ensuring minimal land use change and materials use.
- 3.6.23 In terms of mitigation, the implementation of best practice in relation to soil handling, restoration and re-use (in accordance with the Defra Construction Code (2008)) would be implemented. This would include the development of a Soil Management Plan (SMP) for the Scheme in the Outline CEMP (document reference TR010035/APP/7.2). The Draft DCO (Schedule 2 Part 1 (4))(document reference TR010035/APP/3.1) requires that a CEMP is produced and approved by the relevant authorities, before development may commence.
- 3.6.24 Two areas of contaminated land are the historic landfill sites adjacent to the Scheme. These are at Skippool Marsh and Skippool Creek and are located approximately 500 metres north of the western end of the Scheme. ES (Chapter 13: Geology and Contaminated Land (document reference TR010035/APP/6.13)) has identified that sources of potentially contaminating materials include the storage and use of fuels, oils and chemicals and the use of cement-based products would be controlled by the application of pollution prevention measures. These measures would aim to prevent



- the deterioration of the underlying soils through spillages/leakages. Mitigation measures have been proposed for the Scheme during the construction phase only. Potential residual effects are assessed as not significant. During the operational phase of the Scheme, no significant effects have been identified.
- 3.6.25 With regards to air quality, ES Chapter 6 (Air Quality) (document reference TR010035/APP/6.6) states that both NO<sub>2</sub> and PM<sub>10</sub> are predicted to be below the respective Air Quality Strategy Objectives for both the Base Year and Opening Year of the Scheme. Any potential risk for pollutants to enter watercourses would be mitigated.
- 3.6.26 NPPF paragraph 180 states:
  - 'Planning policies and decisions should ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or wider area to impacts that could arise from the development.'
- 3.6.27 Paragraph 180(a) of the NPPF states that planning policies and decisions should, amongst other matters, aim to 'mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development- and avoid noise giving rise to significant adverse impacts on health and quality of life.'
- 3.6.28 With regards to air quality, ES Chapter 6 (Air Quality) (document reference TR010035/APP/6.6) states that both NO<sub>2</sub> and PM<sub>10</sub> are predicted to be below the respective Air Quality Strategy Objectives for both the Base Year and Opening Year of the Scheme and no significant effects on human health are predicted as a result of the Scheme.
- 3.6.29 ES Chapter 10 (People and Communities) (document reference TR010035/APP/6.10) considers that the improved connectivity as a result of the Scheme has the potential to improve human health through increasing opportunities for walking and cycling. This is particularly important as physical activity levels in both Fylde and Wyre Council areas are below the national average.
- 3.6.30 It is also maintained that the design of the new road to a higher highway standard would help reduce uncertainty, fear and driver stress, The Scheme is therefore predicted to have a beneficial effect on human health through reduced stress levels typical of delayed or congested road use.
- 3.6.31 ES Chapter 12 (Road Drainage and the Water Environment) (document reference TR010035/APP/6.12) states that the Scheme would result in a reduction in flood risk of the proposed crossing of the Main Dyke and in areas of the Scheme alignment and surrounding areas that are at risk of flooding from the tidal Wyre Estuary. In addition, 'properties that reside to the south of the Scheme on Kevin Avenue and Royston Road will benefit most from this reduction in tidal flood risk.' Any potential risk of pollutants entering the watercourse would be mitigated and therefore no significant adverse effects on human health are predicted.
- 3.6.32 Paragraph 180 states that developments should, *inter alia*:
  - 'b) identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason; and
  - c) limit the impact of light pollution from artificial light on local amenity, intrinsically



## dark landscapes and nature conservation.'

- 3.6.33 ES Chapter 9 (Landscape) (document reference TR010035/APP/6.9) identifies that the study area comprises a mix of areas of dark landscape and areas of low ambient night-time brightness, with areas of medium or high ambient brightness within the settlements of Poulton-le-Fylde and Thornton. The existing A585 is identified as a road with notable lighting and high levels of illumination from traffic
- 3.6.34 As assessed ES Chapter 9: Landscape (document reference TR010035/APP/6.9), the Scheme includes the provision of lighting at junctions only, with no lighting provided along the route of the bypass.
- 3.6.35 In addition, the lighting design would minimise light pollution which can cause sky glow, glare and light trespass and has sought to minimise any detrimental impacts on the amenity of the immediate area, particularly in relation to adjoining habitats.
- 3.6.36 ES Chapter 11 (Noise and Vibration) (document reference TR010035/APP/6.11) concludes that road traffic noise nuisance associated with the Scheme would result in both increases and decreases in road traffic noise nuisance compared to the existing situation. This is typical for a bypass scheme where traffic noise contribution to an area is transferred from the existing road network to a new scheme located in areas of previously low-level road traffic noise.
- 3.6.37 The findings of the noise assessment indicate that in the short and long-term adverse changes in road traffic noise level above a SOAEL where significant adverse impacts on health and quality of life from operational road traffic noise would occur, would not be of a sufficient magnitude to be considered significant. This has been achieved through the implementation of mitigation into the Scheme design. This includes the use of a low noise/thin surfacing system surface to be laid on new or altered roads and 2m and 3m high acoustic/landscape bunds (document reference TR010035/APP/6.11).
- 3.6.38 As all predicted daytime construction noise levels would not exceed the relevant BS5228-1<sup>5</sup> significance threshold category and a SOAEL throughout the construction period, daytime construction noise levels are therefore not considered to have a significant effect during daytime construction activities. Only limited construction activities would occur during the night time period for road crossings and final surfacing tie ins and are not considered to be significant (document reference TR010035/APP/6.11).
- 3.6.39 A CEMP and Noise and Vibration Management Plan would be prepared and agreed with Fylde Borough Council and Wyre Council prior to commencing construction. An Outline CEMP (document reference TR010035/APP/7.2) and REAC (document reference TR010035/APP/7.3) have been prepared to support the Application. This includes a set of best practice working methods for the control of construction noise and vibration. The Draft DCO (Schedule 2 Part 1 (4))(document reference TR010035/APP/3.1) requires that a CEMP is produced and approved by the relevant authorities, before development may commence. Noise monitoring during construction would be undertaken at key sensitive receptors to ensure that mitigation is working effectively.
- 3.6.40 NPPF paragraph 181 contains a requirement that:

<sup>&</sup>lt;sup>5</sup> British Standard 5228: 2009+A1: 2014 'Code of Practice for Noise and Vibration Control on Construction and Open Sites' Part 1



'Planning policies and decisions should sustain and contribute towards compliance with and contribute towards EU limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones, and the cumulative impacts from individual sites in local areas. Opportunities to improve air quality or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement...Planning decisions should ensure that any new development in Air Quality Management Areas and Clean Air Zones is consistent with the local air quality action plan.'

- 3.6.41 ES Chapter 6: Air Quality (document reference TR010035/APP/6.6) assesses whether the Scheme would have a significant impact on air quality. The ES notes that that no AQMAs have been designated within Fylde Borough Council, although there is one in Wyre Council (Chapel Street AQMA), approximately 1.2 kilometres south west of Skippool Junction.
- 3.6.42 Overall, the ES (document reference TR010035/APP/6.6) concludes:
  - Base year (2015) monitored and modelled concentrations indicate that air quality concentrations do not exceed Air Quality Strategy (AQS) Objectives.
  - The evaluation of the operational significance of effects for air quality is that the Scheme does not have a significant impact on local air quality.
  - The assessment demonstrates that in terms of impact on compliance with the EU Directive on ambient air quality (2008/60/EC), the Scheme is Low Risk in relation to affecting the UKs reported ability to comply with the EU Directive in the shortest timescales possible, as exceedances of the EU limit values are unlikely to be exceeded.
  - Construction phase impacts from dust and emissions would be negligible with the implementation of mitigation measures included in the Outline CEMP (document reference TR010035/APP/7.2).
- 3.6.43 Paragraph 189 of the NPPF states that local planning authorities should require applicants:

'to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which development is proposed includes, or has the potential to include, heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.'

3.6.44 Paragraphs 193-196 go on to state that:

'When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance. Any harm to, or loss of, the significance of a designated heritage asset (from its alteration or destruction, or from development within its setting), should require clear and convincing justification. Substantial harm



- to or loss of: a) grade II listed buildings... should be exceptional...Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal including, where appropriate, securing its optimum viable use.'
- 3.6.45 There are no designated heritage assets located within the Draft DCO Limits of the Scheme. However, a Grade II listed Ice House at Singleton Hall (60 metres to the south of the Draft DCO Limits) and Singleton Conservation Area (775 metres to the south of the Draft DCO Limits are located in proximity to the Scheme (document reference TR010035/APP/6.7).
- 3.6.46 The conclusions of the ES (document reference TR010035/APP/6.7) are that the setting of the Grade II listed Ice House would be impacted during both construction and operation. The rural setting of the Ice House is a contributor to the receptor's significance. With mitigation, which would comprise screening, impacts are predicted to be a moderate significance of effect, which is considered to be significant. The public benefits of the Scheme are demonstrated throughout this Planning Statement, including the significant role the Scheme would play in underpinning the Government's social, economic and environmental policy aspirations, and the substantially improved conditions in which people travel that the Scheme would provide. The predicted damage of the setting to the Grade II listed Ice House should be weighed against these predicted benefits.
- 3.6.47 There is the potential for the Scheme to affect the setting of Singleton Conservation Area as a result of noise levels. However, with mitigation in place in the form of acoustic fencing, this would result in a neutral/slight adverse significance of effect, which is not considered to be significant.
- 3.6.48 As stated in ES Chapter 7 (Cultural Heritage) (document reference TR010035/APP/6.7), work within the Draft DCO Limits to the north of Garstang Road would result in the direct loss of potential archaeological remains related to the known Romano-British settlements to the west of the Main Dyke at Moorfield Park. This effect has been assessed within the ES as negative and significant. An archaeological watching brief, trial trenching and boreholes would therefore be undertaken. The proposed mitigation measures, as set out above, would assist in reducing the level of impact of the Scheme, however this may still be significant. The Draft DCO (Schedule 2 Part 1 (9)) (document reference TR010035/APP/3.1) requires that a written scheme for the investigation of areas of archaeological interest is produced and approved by the relevant authorities, before development may commence.

#### 3.7 Conclusions in Relation to NPPF

- 3.7.1 The Scheme supports the delivery of the NPPF's core land-use planning principles, by providing improved infrastructure to support economic growth within the wider region through delivering capacity enhancements to the strategic road network.
- 3.7.2 In terms of specific policies of relevance to the Scheme, development within the Green Belt is an issue of importance within the NPPF. The response to the policy guidance has already been addressed within the commentary on the NN NPS, in which the same considerations apply. Acknowledging that the Scheme represents inappropriate development in the Green Belt, the special circumstances of the Scheme's development within Green Belt land and its compliance with the relevant tests have been fully demonstrated.



- 3.7.3 The ES demonstrates that across the range of environmental topics addressed within the NPPF, the Scheme has taken account of and accords with the relevant policy guidance of the NPPF.
- 3.7.4 The conclusions reached in the ES are that the Scheme would not result in any direct significant impacts on designated or non-designated sites of nature conservation interest (document reference TR010035/APP/6.8). In addition, once the proposed landscape planting is in place, the operation of the Scheme is seen as enhancing the current ecological value of the area and that the overall effects on nature conservation are assessed as beneficial (document reference TR010035/APP/6.11).
- 3.7.5 In relation to cultural heritage, the ES (document reference TR010035/APP/6.7) confirms that the setting of the Grade II listed Ice House would be negatively affected, along with the loss of potential archaeological remains. However, the proposed mitigation measures would assist in reducing the level of impact as a result of the Scheme.
- 3.7.6 In relation to the effects on landscape, the Scheme lies outside any statutory or non-statutory designated landscapes and has included a range of measures designed to mitigate for the majority of potential effects on landscape character and visual amenity
- 3.7.7 The public benefits of the Scheme are demonstrated throughout this Planning Statement, including the significant role the Scheme would play in underpinning the Government's social, economic and environmental policy aspirations, and the substantially improved conditions in which people travel that the Scheme would provide. The predicted damage of the setting to the Grade II listed Ice House, potential archaeological remains associated to the Romano-British settlement at Moorfield Park predicted negative landscape effects in some areas, should be weighed against these predicted benefits, leading to its exception in this case.
- 3.7.8 Regarding other environmental matters, both noise and air quality feature prominently within the NPPF. In relation to the former, road traffic noise nuisance is assessed as resulting in both increases and decreases compared to the existing situation. The findings of the noise assessment indicate that in the short and long-term adverse changes in road traffic noise level above a SOAEL where significant adverse impacts on health and quality of life from operational road traffic noise would occur, would not be of a sufficient magnitude to be considered significant. This has been achieved through the implementation of the mitigation measures into the Scheme design (document reference TR010035/APP/6.11).
- 3.7.9 In relation to air quality, the ES concludes that the Scheme does not have a significant impact on local air quality once operational (document reference TR010035/APP/6.6). Construction phase impacts from dust and emissions would be negligible with the implementation of mitigation measures included in the Register of Environmental Actions and Commitments (REAC) (document reference TR010035/APP/7.3). Therefore, it is considered that the Scheme aligns with the requirements of the NPPF.
- 3.8 Local Planning, Minerals and Transport Policy
- 3.8.1 Although the National Policy Statements are the primary planning policy documents for decision making on NSIPs, local planning policy is still relevant as it addresses local conformity of the Scheme to the Local Development Plans. LPAs have a statutory duty to prepare a development plan for their area.
- 3.8.2 This section provides a summary of the assessment of the Scheme against relevant



local planning, minerals and transport policies for each of the relevant local planning authorities, namely, Fylde Borough Council, Wyre Council and Lancashire County Council. It considers whether the Scheme is in accordance with the policy framework at this level, as compliance with local policy is an important and relevant consideration and is material in assessing the planning balance. Appendix 2 provides a full assessment of the Scheme against individual planning policies.

Lancashire County Council: Local Transport Plan 2011-2021: A Strategy for Lancashire, May 2011

- 3.8.3 Whilst the Lancashire County Council Local Transport Plan (2011-2021) has no policy framework against which to assess compliance of the Scheme, it does provide a strategic framework in which it supports a number of improvements to tackle congestion and bring forward new development, as highlighted below.
- 3.8.4 The Local Transport Plan's 'Priorities and Activities' promote improved access into areas of economic growth and regeneration:
  - 'Reduce congestion and delay and increase road capacity on our most congested transport corridors, improve highway links and junctions to support the growth of our key economic centres of Preston and Lancaster, the development of strategic employment sites, regeneration of town centres and other places which will be key drivers of economic growth (e.g. our universities and Blackpool Airport).'
- 3.8.5 Areas identified as a focus for the Council's economic aspirations of relevance to the Scheme include Warton and the M55 Junction 4 area (Fylde), as well as Lancashire's urban, rural, coastal and heritage visitor economy.
- 3.8.6 The Fylde Coast Highways and Transport Masterplan forms an appendix to the Local Transport Plan. The document seeks to ensure that the A585(T) operates as effectively as possible, by carrying forward a programme of viable improvements. It states that the Council proposes to build on the work of the Applicant in taking forward the Scheme. The Masterplan recognises that the Scheme 'would remove the current bottleneck at Five Lane Ends and give the opportunity to improve the A585(T) Mains Lane / A588 Shard Road junction. It could also remove rat-running from Singleton.'
- 3.8.7 Tables 4 to 7 in Appendix 2 to this Statement identify the relevant planning and mineral policies and provide a detailed assessment of the compliance of the Scheme with the relevant policy framework for each of the relevant local planning authorities. A summary of the relevant policy position is provided below:
  - Fylde Borough Council, The Fylde Borough Local Plan (as altered), Adopted October 2005
- 3.8.8 The majority of the Scheme falls within Fylde Borough Council. The Adopted Local Plan seeks to reduce traffic congestion on the existing A585(T) trunk road. Policy T1 Strategic Highway Improvements identifies the A585 Windy Harbour to Skippool Improvement Scheme as a road scheme being promoted by the Applicant and supported by the Council. It is noted that the Council's website confirms that the inspector's report on the emerging plan has been received and it will be presented to full Council on 22 October 2018. It could be adopted shortly thereafter.
- 3.8.9 There are no statutory designated sites for nature conservation within the Draft DCO Limits, with the Skippool Marsh and Thornton Bank BHS (a non-statutory designation) located to the west of the Scheme. The Wyre Estuary SSSI and Morecambe Bay and Duddon Estuary SPA/Morecambe Bay Ramsar site are located to the north of the



- Scheme. There are also two additional BHS designations associated with the Wyre Estuary (important at a local level) within proximity to the Scheme (document reference TR010035/APP/6.8).
- 3.8.10 In relation to the BHSs, direct physical loss, damage and pollution is considered unlikely to occur. Mitigation measures are therefore considered appropriate to adequately reduce the risk of adverse effects to the BHSs. Therefore, the sites were scoped out of the assessment in the ES (document reference TR010035/APP/6.8).
- 3.8.11 The Scheme has the potential to impact on a number of designations within the Borough, notably a Countryside Area; Singleton Conservation Area; Grade II listed Ice House at Singleton Hall; Grade 3 agricultural land; the Wyre Estuary SSSI and Morecambe Bay and Duddon Estuary SPA/Morecambe Bay Ramsar Site, along with PRoWs.
- 3.8.12 The Scheme falls entirely within a 'Countryside Area'. The designation of these areas is designed to control development in the open countryside. Policy SP2 defines the categories of development which are acceptable in the open countryside in appropriate circumstances. Whilst the development of a highway scheme is not listed as an exception to permitted development within countryside, it is accepted that the improvements to the A585 can only take place within the area identified for the Scheme.
- 3.8.13 There are a number of are a number of trees and lengths of hedgerow within the Draft DCO Limits, including some trees which are under Tree Preservation Orders (TPOs). ES Chapter 9: Landscape (document reference TR010035/APP/6.9) states that: 'For Singleton Hall and Parkland (LCA 6), the construction phase of the Scheme would again introduce a substantial uncharacteristic feature into a locally valued designed (but not designated) landscape. This would result in the permanent loss of parts of the valued woodland copses, which are in protected under Fylde Singleton TPO1 1974. These include features G1, A1, G2, and G4. G1 and A1 would have their southern edges removed, G4 would have the northern edge removed, and G2 would have all be its northern edge removed. These are notable landscape features which together with the loss of hedgerows and changes in the local topography and bulk earthwork activities, (as a result of the Scheme being in cutting), would result in substantial damage to the landscape character.'
- 3.8.14 Landscape and visual mitigation measures form an integral part of the Scheme, including the planting of native woodland, shrub planting, and linear planting, roadside specimen trees, wildflower meadows and amenity grassland and verges. The Scheme also includes some use of cuttings, false cuttings and embankments. However, the loss of trees protected by TPOs cannot be avoided, due to their location within the footprint of the Scheme. Section 37 of the Draft DCO (document reference TR010035/APP/3.1) sets out the provisions relating to TPOs.
- 3.8.15 Over time, and by year 15, the proposed mitigation planting would become established and start to mature, and the overall planting scheme itself would form a notable integrating landscape feature within LCA 6. The planting would also further reduce the visibility of traffic travelling along the Scheme. The Draft DCO (Schedule 2 Part 1 (5))(document reference TR010035/APP/3.1) requires that a landscaping scheme is produced and approved by the relevant authorities, before development may commence.



- 3.8.16 For the woodland planting within Singleton Park this would also assist in maintaining the wider setting of Singleton Conservation Area by shielding any visual intrusion from the Scheme. Effects on the setting of Singleton Conservation Area are assessed as negligible.
- 3.8.17 The agricultural assessment undertaken as part of ES Chapter 10 (People and Communities) (document reference TR010035/APP/6.10) concludes that the principal land use within the footprint of the Scheme is agricultural. Provisional ALC mapping shows land within the Draft DCO Limits to be predominantly Grade 2, with Grade 3 land at the western and eastern ends. Land immediately to the south of Main Dyke, as far as Garstang Road is predominantly Grade 3b with a small area of Grade 3a land.
- 3.8.18 There is no direct mitigation for the loss of agricultural land. However, the Scheme design (ES Chapter 2 (Description of the Scheme) (document reference TR010035/APP/6.2)) aims to reduce the overall footprint of the Scheme, the junctions and structures, which have been made as compact as practicable, ensuring minimal land use change and materials use. In terms of mitigation, the implementation of best practice in relation to soil handling, restoration and re-use (in accordance with the Defra Construction Code (2008)) would be implemented. This would include the development of a Soil Management Plan (SMP) for the Scheme and is included in the Outline CEMP (document reference TR010035/APP/7.2). The Draft DCO (Schedule 2 Part 1 (4))(document reference TR010035/APP/3.1) requires that a CEMP is produced and approved by the relevant authorities, before development may commence.
- 3.8.19 The Scheme crosses Main Dyke within the Borough, a tributary of the River Wyre which flows directly into the Morecambe Bay and Duddon Estuary SPA and Morecambe Bay Ramsar site at 2 locations. A HRA Report (document reference TR010035/APP/5.4), including HRA Screening and Appropriate Assessment, has been undertaken, which has concluded that installation of a new bridge crossing over Main Dyke has the potential to lead to changes in water quality downstream and potentially within the SPA itself which could affect habitats utilised by the water bird assemblage. However, with mitigation, it is considered that during construction there would be no adverse effect on the integrity of Morecambe Bay and Duddon Estuary SPA or Morecambe Bay Ramsar site or on the ability of the site to achieve the aims of the Conservation Objectives.
- 3.8.20 Positive engagement with Natural England has been ongoing throughout the HRA process. A Bird Mitigation Area (refer to Appendix 1 of the HRA, Figure 1 (document reference TR010035/APP/5.4) would be included in the Scheme design (and included in the Draft DCO Limits). The Bird Mitigation Area, comprising fields, covering 16.4ha, would be secured by the Applicant as essential mitigation and would provide alternative foraging habitat for the duration of the construction period. The mitigation would be in place for the birds to use from October 2019. Further details are included in the Bird Mitigation Strategy (appended to the Outline CEMP document reference TR010035/APP/7.2). Natural England has agreed the size and location of the mitigation area.
- 3.8.21 An Outline CEMP (document reference TR010035/APP/7.2) would include best practices and seek to mitigate or minimise many of the potential environmental impacts from construction of the Scheme. The Draft DCO (Schedule 2 Part 1 (4))(document reference TR010035/APP/3.1) requires that a CEMP is produced and



approved by the relevant authorities, before development may commence.

3.8.22 Whilst PRoW 5-11-FP 2 would be severed as a result of the Scheme, reconnection of the footpath between Little Singleton and Windy Harbour Junction, replacing an existing uncontrolled road crossing, would be made with the new Grange footbridge. This would be constructed off-site. The route would be increased in length by approximately 10 – 15 metres and would replace an existing uncontrolled road crossing.

Fylde Borough Council, Fylde Local Plan to 2032 Submission (2016)

3.8.23 The Submission Local Plan provides a similar policy framework to the Adopted Local Plan, though reflects more recent planning issues, notably in relation to climate change and for development proposals to mitigate against the likely effects of climate change. ES Chapter 15 (Climate) (document reference TR010035/APP/6.15) sets out how the Scheme takes account of the projected impacts of climate change and assesses the impacts on greenhouse gas emissions and vulnerability of the Scheme to climate change. The FRA (document reference TR010035/APP/5.5) includes an assessment to ensure that the Scheme is not at increased risk of flooding over its lifetime due to climate change.

Wyre Council, Wyre Resaved Policies of the Wyre Adopted Local Plan 1999

- 3.8.24 A small section of the Scheme lies within Wyre Council and is located within Green Belt. It has been acknowledged earlier in Section 3.2 that the Scheme is an 'inappropriate use' within the Green Belt and an assessment of the Scheme against the purposes of the Green Belt has been demonstrated in line with the NN NPS and NPPF.
- 3.8.25 There are no statutorily designated sites or areas within Wyre Council that are affected by the Scheme.

Lancashire County Council, Joint Lancashire Minerals and Waste Development Framework Core Strategy DPD: Managing our Waste and Natural Resources: February 2009; and Site Allocation and Development Management Policies - Part One, September 2013

- 3.8.26 Within the boundary of the Scheme, two Mineral Safeguarding Areas (MSAs) have been identified. A Mineral Assessment Report, included as Appendix 4, identifies areas of land within the order limits that are located within the mineral safeguarding area. The first MSA (MSA1) is near the proposed Poulton Junction and the second (MSA2) is immediately east of Lodge Lane. Both apply to sand and gravel reserves. Table 5.1 of the Mineral Assessment Report provides a detailed assessment of compliance with policy M2.
- 3.8.27 The report concludes that given the small areas / volume of both MSAs (MSA1 76,000m³ and MSA2 39,000m³) within the Draft DCO Limits, it is considered commercial unviable and environmentally unacceptable to extract the minerals from the area. 'Overall... it is not considered feasible to undertake prior extraction in advance of the proposed development, and that there is an overarching need for the development that outweighs the need to avoid the part sterilisation of the relatively small mineral resource.'



# 3.9 Conclusions on Local Planning, Minerals and Transport Policies

- 3.9.1 The main planning policy issues raised by the Scheme across each of the local authorities relate to traffic and environmental impacts. Local transport policy recognises the role the Scheme can play in alleviating existing congestion along and surrounding the route.
- 3.9.2 Environmental considerations such as biodiversity, drainage, cultural heritage, landscape, air and noise impacts, along with development in the Green Belt have all been recognised and the design of the Scheme has ensured that it is environmentally sensitive in relation to the surrounding countryside and natural habitats, with associated mitigation measures ensuring that the proposals are acceptable in local policy terms.



## 4 OTHER IMPORTANT AND RELEVANT CONSIDERATIONS

#### 4.1 Introduction

4.1.1 This Chapter identifies other important and relevant considerations in support of the Scheme to be considered alongside the national and local planning policy referred to in Chapter 3.

# 4.2 Government Policy

National Infrastructure Delivery Plan 2016-2021, Infrastructure and Projects Authority reporting to HM Treasury and Cabinet Office, March 2016

- 4.2.1 The National Infrastructure Delivery Plan updates and replaces the previous National Infrastructure Plan. Chapter 3 states that 'roads are fundamental to modern society. They keep people connected, making it possible to travel for work and leisure. The road network brings communities closer together, providing users with freedom and flexibility that is unrivalled by any other mode of transport.'
  - Northern Transport Strategy: 'The Northern Powerhouse: One Agenda, One Economy, One North.', HM Government, March 2015
- 4.2.2 The Northern Transport Strategy seeks to transform Northern growth, rebalance the UK economy and establish the North as a global powerhouse. This Strategy sets out how transport is a fundamental part of achieving these goals and how to develop long-term investment in the region.
- 4.2.3 Lancashire is identified as a city region in the Strategy. The Highways Plan within the Strategy aims to address areas of very high congestion on the road network, with high demand for freight from the Northern ports.

# 4.3 Local Strategy

- 4.3.1 The Lancashire Enterprise Partnership has produced 'The Lancashire Strategic Transport Prospectus' (January 2016). The introduction provides a case for improvements to the strategic road network from an economic perspective, stating that:
  - 'As elsewhere within the Northern Powerhouse, connectivity is fundamental to maximising growth potential. Those transformational and supporting transport interventions that underpin strategic economic growth in Lancashire and the wider North need to be prioritised and delivered as part of an integrated approach.'
- 4.3.2 The Prospectus highlights that the A585... 'remains a key route within the Fylde Coast highway network and is vital to the regeneration of Fleetwood and the success of the recently announced Enterprise Zone at the Hillhouse International Business Park at Thornton.'

#### 4.4 Conclusions on Other Important and Relevant Considerations

- 4.4.1 It is evident from relevant national and local strategies that traffic congestion is regarded as a major constraint to economic development and that relieving it is key to both the Government's and the local Partnership's aspirations for sustainable economic growth.
- 4.4.2 Reducing congestion on the existing A585 accords with the national policy position. The strong support given to improving the Strategic Road Network by the Government lends further weight to the Scheme.



4.4.3 The recognition, at a local level on the need for the Scheme to deliver future economic growth and planned development within the region underlines the need case for the Scheme and must be seen as a strongly important and relevant consideration in support of the Application.



## 5 OVERALL CONCLUSIONS AND THE PLANNING BALANCE

# 5.1 The Application

- 5.1.1 This Planning Statement relates to the Application made by Highways England to the SoS pursuant to the Planning Act 2008.
- 5.1.2 The Application is for the A585 Windy Harbour to Skippool Improvement Scheme DCO, which would grant development consent authorising the construction, operation and maintenance of the Scheme, along with the compulsory acquisition or temporary possession of all land necessary to enable this.

#### 5.2 The Scheme

- 5.2.1 The Scheme lies wholly within England and includes the improvement of a highway, where the speed is greater than 50mph, for which the SoS is the highway authority. The area of development is greater than 12.5ha. As such, the Scheme is classified as a NSIP. The Scheme's key objectives are to:
  - Reduce congestion on the existing A585 through Little Singleton Junction, Shard Junction and Skippool Junction;
  - Reduce severance and improve access across the A585 between Little Singleton and Skippool Junctions;
  - Improve connectivity and community cohesion;
  - Making the A585 route safer by reducing conflicts between users;
  - Improve journey time reliability by reducing congestion;
  - Deliver capacity enhancements to the SRN whilst supporting the use of sustainable modes;
  - Support employment and residential/commercial development and growth opportunities;
  - Support the removal of obstacles to economic growth potential in both Wyre and Fylde;
  - Reduce/minimise the impact on the wider environment particularly for air quality and noise; and
  - Complement and realise the full benefits of other Operations Directorate schemes in the region.

## 5.3 Determination and Important and Relevant Considerations

5.3.1 The Examining Authority would consider the Application for development consent and would make a recommendation to the SoS, who would decide whether development consent for the Scheme should be granted. In so doing, the SoS must decide the Application in accordance with any relevant national policy statement, but other important and relevant considerations are the NPPF and development plan policies of the LPAs, together with any other important and relevant considerations.

#### 5.4 National Networks National Policy Statement

5.4.1 The Scheme has been appraised against the various polices contained in the NN NPS, particularly having regard to the assessment matters identified in that document in relation to environmental effects.



- 5.4.2 The Scheme has been shown to accord with the NN NPS in all material respects and on that basis a presumption in its favour exists under the terms of Section 104 of the Planning Act 2008.
- 5.4.3 The public benefits of the Scheme are demonstrated throughout this Planning Statement, including the significant role the Scheme would play in underpinning the Government's social, economic and environmental policy aspirations, and the substantially improved conditions in which people travel that the Scheme would provide. The predicted damage of the setting to the Grade II listed Ice House, potential archaeological remains associated to the Romano-British settlement at Moorfield Park predicted negative landscape effects in some areas, should be weighed against these predicted benefits, leading to its exception in this case.

## 5.5 National Planning Policy Framework

- 5.5.1 The Scheme strongly accords with the key aims of the NPPF, notably by improving the conditions in which people travel. This is a key objective of the Scheme.
- 5.5.2 The Scheme supports the delivery of the NPPF's core land-use planning principles, by providing improved infrastructure to support economic growth within the region through improving journey time reliability by reducing congestion on the A585.
- 5.5.3 Development within the Green Belt is a key issue within the NPPF. It is acknowledged that a short section of the route that lies within the Green Belt represents inappropriate development and, for that reason, a full assessment of the Scheme against the requirements of the NN NPS and NPPF has been carried out. The assessment has demonstrated that 'very special circumstances' exist for development within Green Belt land and the Scheme's compliance with both the tests of openness, and the five purposes of the Green Belt.
- 5.5.4 The assessment undertaken within the ES addresses a range of environmental issues, particularly landscape and heritage, along with biodiversity, air quality and noise. In each case, it is concluded that following mitigation and enhancement, the Scheme satisfies relevant policy guidance and that overall, the Scheme is consistent with the provisions and requirements of the NPPF
- 5.5.5 The public benefits of the Scheme are demonstrated throughout this Planning Statement, including the significant role the Scheme would play in underpinning the Government's social, economic and environmental policy aspirations, and the substantially improved conditions in which people travel that the Scheme would provide. The predicted damage of the setting to the Grade II listed Ice House, potential archaeological remains associated to the Romano-British settlement at Moorfield Park predicted negative landscape effects in some areas, should be weighed against these predicted benefits, leading to its exception in this case.

## 5.6 Local Planning Policy

- 5.6.1 The Scheme is considered to be in compliance with the local planning policies of relevance. The Scheme is explicitly supported within local planning policies and strategies to enable an improvement to congestion, expanding road capacity, to support economic aspirations. Local level issues have been considered within the Scheme design, including an improvement to local community connectivity as well as biodiversity enhancements.
- 5.6.2 Although the Scheme lies in Green Belt within Wyre Council, an assessment of the Scheme against the policy tests within the NN NPS and the NPPF has been carried



- out and has concluded that 'very special circumstances' exist for the highway improvement within Green Belt land and the Scheme's compliance with both the tests of openness and the five purposes of the Green Belt.
- 5.6.3 Mitigation measures would ensure that any potential environmental effects and subsequent community effects would be minimised to within acceptable levels, consistent with planning policy.
- 5.6.4 Although there are 2 MSAs within the Draft DCO Limits, 'overall... it is not considered feasible to undertake prior extraction in advance of the proposed development, and that there is an overarching need for the development that outweighs the need to avoid the part sterilisation of the relatively small mineral resource' (see Appendix 4 of this Statement).

## 5.7 Other Important and Relevant Considerations

- 5.7.1 It is evident from the policy documents reviewed that traffic congestion is regarded as a major constraint to economic development and that relieving it is key to national and local aspirations for sustainable economic growth within the region.
- 5.7.2 Addressing the current congestion along the A585 accords with the national policy position. The strong support given to improving the strategic road network by the Government lends further weight to the Scheme.

# 5.8 The Planning Balance

- 5.8.1 The review of planning policy carried out as part of this Planning Statement shows that environmental issues are important and relevant considerations for the decision-maker (mainly in relation to Green Belt, landscape, air quality, noise, nature conservation and heritage). This Planning Statement provides a comprehensive overview that confirms the ability of the Scheme to satisfactorily address the matters identified.
- 5.8.2 That the Scheme is in accordance with the NN NPS in all material respects indicates that a presumption in favour of it exists under the Planning Act 2008.
- 5.8.3 Where there is potential for the Scheme to have an adverse impact in the ES, these impacts must be considered and weighed in the context of:
  - The avoidance of the route within any statutorily designated sites or areas
  - For identified heritage and landscape assets (including visual impacts), the mitigation proposed would assist in reducing the level of impact
  - Environmental enhancements provided in relation to biodiversity including habitat connectivity
  - Environmental benefits in relation to the de-trunked section of the Scheme in particular
  - The social and economic benefits of the Scheme include those associated with the introduction of the Scheme itself, through tackling current and forecast levels of traffic congestion, improving safety, reducing conflicts between users and improving connectivity and community cohesion
  - The NN NPS presumption in favour of the Scheme
  - The significant role the Scheme would play in underpinning the Government's social, economic and environmental policy aspirations, and the substantially



improved conditions in which people travel that the Scheme would provide

5.8.4 On the basis of the need case for the Scheme, it is clear that there is a compelling case in the public interest for the Scheme. Against a background of compliance in terms of national and local planning policy, any adverse effects of the Scheme are not considered to outweigh its benefits. Accordingly, the policy presumption in favour of the Scheme and the overall planning balance lies strongly in favour of the grant of development consent.



# **Appendix 1 – National Policy Statement for National Networks Accordance Table**



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Table 4 National Naturally National Policy Statement Chanter 2

	Networks National Policy Statement Chapter	
NN NPS Paragraph Number	Requirement of the National Policy Statement on National Networks (NN NPS)	Compliance with the NN NPS
3		
3.2 (Environment and social impacts)	The Government recognises that for development of the national road and rail networks to be sustainable these should be designed to minimise social and environmental impacts and improve quality of life.	The Scheme objectives aim to improve journey times on the A585 between Windy Harbour and Skippool Junctions; improve safety for all road users; improve access for local users, pedestrians and cyclists; and deliver capacity enhancements to support employment and residential/commercial development and growth opportunities, safety for all road users as well as access for local users, pedestrians and cyclists.  A comprehensive Environmental Impact Assessment (EIA) has been carried out at Project Control Framework (PCF) Stage 3 to accompany the Development Consent Order (DCO) and the proposals for mitigation of likely significant effects arising from the Scheme are reported within the Environmental Statement (ES) (document reference TR010035/APP/6.1 – 6.20). The ES incorporates environmental benefits during the Scheme design process.
3.3	In delivering new schemes, the Government expects applicants to avoid and mitigate environmental and social impacts in line with the principles set out in the NPPF and the Government's planning guidance. Applicants should also provide evidence that they have considered reasonable opportunities to deliver environmental and social benefits as part of schemes.	Each chapter of the ES (document reference TR010035/APP/6.1 – 6.20) sets out how the predicted environmental impacts of the Scheme would be mitigated, in line with current relevant guidance and accepted principles for design and mitigation. Opportunities for environmental and social benefits have been considered as part of the EIA process, and will also be an ongoing aim of the detailed design process.
3.10	Scheme promoters are expected to take	Impact on the likelihood of accidents as a result of the Scheme



NN NPS Paragraph Number 3	Requirement of the National Policy Statement on National Networks (NN NPS)	Compliance with the NN NPS
(Road Safety)	opportunities to improve road safety, including introducing the most modern and effective safety measures where proportionate.	have been assessed using the DfT's COBALT program. The outcome of the analysis, as presented in the Transport Assessment (document reference TR010035/APP/7.4), shows an overall objective of the Scheme, to improve safety along the route, will be achieved, as the Scheme if implemented is shown to reduce the number of accidents and casualties and therefore no mitigation measures were deemed necessary nor subsequently assessed.
3.17 (Sustainable transport)	There is a direct role for the national road network to play in helping pedestrians and cyclists. The Government expects applicants to use reasonable endeavours to address the needs of cyclists and pedestrians in the design of new schemes. The Government also expects applicants to identify opportunities to invest in infrastructure in locations where the national road network severs communities and acts as a barrier to cycling and walking, by correcting historic problems, retrofitting the latest solutions and ensuring that it is easy and safe for cyclists to use junctions.	One of the Road Investment Strategy's Key Performance Indicators is helping cyclists, walkers and other vulnerable users of the Network.  The Scheme would improve connectivity and minimise potential conflicts for non-motorised users (NMUs) by improving the safety of pedestrians, equestrians and cyclists around the existing A585. This includes controlled crossing facilities for pedestrians and cyclists at Skippool Junction, with pedestrian and cycle access provided at the Skippool Bridge and Poulton Junctions. A new footbridge (Grange Footbridge) would include the creation of a new, accessible footpath with links across Garstang New Road and to the wider Public Rights of Way (PRoW) network.
3.21 (Accessibility)	Applicants are reminded of their duty to promote equality and to consider the needs of disabled people as part of their normal practice. Applicants are expected to comply with any obligations under the	The Scheme would minimise potential conflicts for NMUs by improving the safety of pedestrians, equestrian and cyclists around the existing A585, which would be de-trunked. This, in turn, should lead to improved accessibility for all user groups. At both the Skippool Bridge and Poulton Junctions, pedestrian



NN NPS Paragraph Number 3	Requirement of the National Policy Statement on National Networks (NN NPS)	Compliance with the NN NPS
	Equalities Act 2010.	and cycle access is to be provided. A new footbridge (Grange Footbridge) will include the creation of a new, accessible footpath with links across Garstang New Road and to the wider
		PRoW network. This will be accessible to the needs of all users, including people with disabilities.
		ES Chapter 10: People and Communities (document reference TR010035/APP/6.10) concludes that, during operation, 'the Scheme would improve connectivity and minimise potential conflicts for NMUs by improving the safety of pedestrians, equestrians and cyclists around the existing A585; the impact of the Scheme in terms of journey length, travel patterns and amenity is therefore considered to be beneficial.'
3.22	Severance can be a problem in some locations. Where appropriate applicants should seek to deliver improvements that reduce community severance and improve accessibility.	ES Chapter 10 People and Communities (document reference TR010035/APP/6.3) identifies that during operation, new and improved crossing facilities would improve connectivity, enhancing the permeability of the area. Footpath 5-11-FP 2 would be severed as a result of the Scheme, requiring diversion from its existing route. The route would be increased in length by approximately 10-15m and would replace an existing uncontrolled crossing with a new footbridge (Grange Footbridge) over Garstang New Road. These improvements would greatly improve connectivity of the footpath with other routes; and would improve the standard of the path. Overall, the effect is deemed to be beneficial.

Table 2 National Networks National Policy Statement Chapter 4



NN NPS Paragraph Number 4	Requirement of the National Networks National Policy Statement (NN NPS)	Compliance with the NN NPS
4.5 (General principles of assessment – Business Case)	Applications for road and rail projects (with the exception of those for SRFIs, for which the position is covered in paragraph 4.8 below) will normally be supported by a business case prepared in accordance with Treasury Green Book principles. This business case provides the basis for investment decisions on road and rail projects. The business case will normally be developed based on the Department's Transport Business Case guidance and WebTAG guidance. The economic case prepared for a transport business case will assess the economic, environmental and social impacts of a development. The information provided will be proportionate to the development. This information will be important for the Examining Authority and the Secretary of State's consideration of the adverse impacts and benefits of a proposed development. It is expected that NSIP schemes brought forward through the development consent order process by virtue of Section 35 of the Planning Act 2008 should also meet this requirement.	A Business Case for the Scheme has been produced by Highways England in accordance with DfT Transport Analysis Guidance (TAG) guidance which recommends that options should be appraised using cost-benefit analysis in accordance with the Green Book (HMT, 2003).  The Economic Appraisal has been undertaken to facilitate the quantification and monetisation of the Scheme costs and benefits in accordance with DfT TAG Units A1, A2, A3 and A4. The assessment encompasses the economic impact on transport users over a 60-year period.  The preparation of Scheme cost has been carried out following principles set out in TAG Unit A1.2 'Scheme Costs'. The costs have been estimated under two broad headings – investment costs and maintenance costs.  The Scheme Costs are expressed as market prices, inflated to outturn costs using construction related inflation and rebased to 2010 calendar year profiles for economic calculations. An assessment of the maintenance cost of the Scheme has been prepared, applying TAG guidance.  An Analysis of Monetised Costs and Benefits (AMCB) for the Scheme was undertaken to summarise the monetised impacts of the Scheme. The results of the AMCB are presented in the appropriate cost-benefit analysis metric as a Benefit-Cost Ratio (BCR). The BCR indicates how much benefit is obtained for



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4		each unit of cost, with a BCR greater than 1 indicating that the benefits outweigh the costs.
		From the economic appraisal, the initial Benefit Cost Ratio (BCR) of the Scheme is 1.26.
		Adding in Weekend benefits, Journey Time Reliability and Wider impacts to provide an adjusted BCR increases the BCR to 2.02.
		The accident cost savings shows that the Scheme provides better accident measures and reduces accidents.
		The scheme reduces severance for non-motorised users.
		An appraisal of the economic impacts due to the Scheme that are additional to transport user benefits was undertaken which showed that the scheme supports economic growth in the area. Wider Impacts of the Scheme include Agglomeration Impacts, Output change in imperfectly competitive markets and Labour market impacts. In addition, the A585 mainline traffic flows is not forecast to reach capacity by the design year 2037 showing that the Scheme mainline has reserve capacity to support future development in the area. The Scheme therefore supports economic growth in the area.
		The Scheme improves journey time and reliability.
		For the reasons above, the A585 Windy Harbour to Skippool



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4.6	Applications for road and rail projects	Improvement Scheme Economic Appraisal Package has shown that the overall objectives of the Scheme to improve safety along the route, reduce severance for non-motorised users, support economic growth and improve journey time reliability have been met and it is therefore worthwhile in economic terms to proceed with the Scheme.  A Transport Assessment (document reference
(local transport model)	should usually be supported by a local transport model to provide sufficiently accurate detail of the impacts of a project. The modelling will usually include national level factors around the key drivers of transport demand such as economic growth, demographic change, travel costs and labour market participation, as well as local factors. The Examining Authority and the Secretary of State do not need to be concerned with the national methodology and national assumptions around the key drivers of transport demand. We do encourage an assessment of the benefits and costs of schemes under high and low growth scenarios, in addition to the core case. The modelling should be proportionate to the scale of the scheme and include appropriate sensitivity analysis to consider the impact of uncertainty on	TR010035/APP/7.4) has been produced which provides details of the traffic forecasts prepared for the preferred route of the Scheme based on the DfT's standard assumptions about growth in travel demand and incorporates proposed local housing and employment development and network assumptions.  The Scheme base year transport model was developed and validated using the guidance and acceptability criteria recommended in DfT TAG Unit M3.1. The model uses processes that have ensured that the matrix has retained its integrity with observed data and matrix estimation applied in a controlled and limited way.  Transport model forecast assignments were undertaken for core growth, low growth and optimistic growth scenarios required for economic assessment. The principal aim of these forecasts was to determine the impact of the proposed A585 Windy Harbour to Skippool Improvement Scheme and provide traffic data outputs from the forecast year transport models for the economic, environmental and operational assessment of the Scheme.



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4.15 (Environmental Impact Assessment)	All proposals for projects that are subject to the European Union's Environmental Impact Assessment Directive and are likely to have significant effects on the environment, must be accompanied by an environmental statement (ES), describing the aspects of the environment likely to be significantly affected by the project. The Directive specifically requires an environmental impact assessment to identify, describe and assess effects on human beings, fauna and flora, soil, water, air, climate, the landscape, material assets and cultural heritage, and the interaction between them. Schedule 4 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 sets out the information that should be included in the environmental statement including a description of the likely significant effects of the proposed project on the environment, covering the direct effects and any indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects of the project, and	A comprehensive EIA has been carried out at PCF Stage 3 to accompany a DCO application and addresses the requirements of the Infrastructure Planning (Environmental Impact Assessment (EIA)) Regulations 2017 (SI No. 572) (hereafter referred to as the 'EIA Regulations'). A statutory Environmental Statement (ES) has prepared in compliance with the EIA Regulations, which state that '(4) In order to ensure the completeness and quality of the environmental statement— (a) the applicant must ensure that the environmental statement is prepared by competent experts; and (b) the environmental statement must be accompanied by a statement from the applicant outlining the relevant expertise or qualifications of such experts'.  Evidence of competency is provided in Appendix 1.1: Competent Expert Evidence (document reference TR010035/APP/6.1.1) of the ES.



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	also the measures envisaged for avoiding or mitigating significant adverse effects. In this NPS, the terms 'effects', 'impacts' or 'benefits' should accordingly be understood to mean likely significant effects, impacts or benefits.	
4.16	When considering significant cumulative effects, any environmental statement should provide information on how the effects of the applicant's proposal would combine and interact with the effects of other development (including projects for which consent has been granted, as well as those already in existence).	Cumulative effects resulting in combination with those from other developments, 16 in total, currently in development or proposed within the surrounding area have been considered within the ES (document reference TR010035/APP/6.16) to provide an assessment of the likely significant effects of the Scheme in combination with relevant development proposals identified and their impact interactions.
4.18-4.19	In some instances, it may not be possible at the time of the application for development consent for all aspects of the proposal to have been settled in precise detail. Where this is the case, the applicant should explain in its application which elements of the proposal have yet to be finalised, and the reasons why this is the case.  Where some details are still to be finalised, applicants are advised to set	The Scheme design is set out in the DCO application and described within the ES (document reference TR010035/APP/6.1 – 6.20). ES Chapter 2: Description of the Scheme (document reference TR010035/APP/6.2) sets out that certain elements of the design are not yet fixed and the ES assesses likely worst-case variations to ensure that the likely significant environmental effects of the Scheme have been assessed. This includes the following Scheme elements: <ul> <li>Grange Footbridge and alternatives for crossing points and / or bus-only junction</li> </ul>
	out in the environmental statement, to the best of their knowledge, what the maximum extent of the proposed	There remain a number of options and alternatives for the pedestrian crossing point at Grange Junction to 1) provide a foot bridge and 2) provide an at grade crossing.



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4	development may be (for example in terms of site area) and assess the potential adverse effects which the project could have to ensure that the impacts of the project as it may be constructed have been properly assessed.	The ES (document reference TR010035/APP/6.1 – 6.20) assesses the provision of a footbridge at Grange Junction.  Skippool Clough Culvert  There remain a number of options regarding the replacement of Skippool Clough Culvert: 1) To replace it as part of the DCO application; 2) To replace the culvert prior to the DCO works commencing under a separate consent. The ES (document reference TR010035/APP/6.12 and TR010035/APP/5.2) assesses the replacement of Skippool Clough culvert as part of the DCO application.  Source of imported material and use of borrow pits  There are 2 options for addressing the Scheme's material deficit: 1) Importing all required deficit material; 2) A combination of using the borrow pits and importing the remaining deficit material to site (as only a certain amount of material could be sourced from the borrow pits). The ES assesses both importing all required material to site along with using the borrow pits.
4.21	In cases where the EIA Directive does not apply to a project, and an environmental statement is not therefore	In this case a comprehensive EIA is required, and the resultant ES (document reference TR010035/APP/6.1 – 6.20) is submitted as part of the DCO application.



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4 22	required, the applicant should instead provide information proportionate to the project on the likely environmental, social and economic effects.	
4.22 (Habitats Regulations Assessment)	The applicant should seek the advice of Natural England and, where appropriate, for cross-boundary impacts, Natural Resources Wales and Scottish Natural Heritage to ensure that impacts on European sites in Wales and Scotland are adequately considered.	A Habitats Regulations Assessment (HRA) (document reference TR010035/APP/5.4) including HRA Screening and Appropriate Assessment, has been undertaken for the Scheme. The HRA has assessed the implications for the Morecambe Bay and Duddon Estuary SPA and the Morecambe Bay Ramsar site, situated within 2km of the Scheme. Consultation has been carried out with Natural England in order to comply with HRA requirements. There would be no cross-boundary impacts.
4.23	Applicants are required to provide sufficient information with their applications for development consent to enable the Secretary of State to carry out an Appropriate Assessment if required. This information should include details of any measures that are proposed to minimise or avoid any likely significant effects on a European site. The information provided may also assist the Secretary of State in concluding that an appropriate assessment is not required because significant effects on European sites are sufficiently unlikely that they can be excluded.	As above, an Appropriate Assessment in the HRA (document reference TR010035/APP/5.4) has been undertaken of the options and the Scheme and is submitted as part of the DCO application. Natural England has been engaged throughout the process and are in agreement with the findings (Consultation Report (document reference TR010035/APP/5.1).



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4.26 (Alternatives)	Applicants should comply with all legal requirements and any policy requirements set out in this NPS on the assessment of alternatives. In particular:  The EIA Directive requires projects with significant environmental effects to include an outline of the main alternatives studied by the applicant and an indication of the main reasons for the applicant's choice, taking into account the environmental effects.  There may also be other specific legal requirements for the consideration of alternatives, for example, under the Habitats and Water Framework Directives.  There may also be policy requirements in this NPS, for example the flood risk sequential test and the assessment of alternatives for developments in National Parks, the Broads and Areas of Outstanding Natural Beauty (AONB).	The consideration of Alternatives is set out in the ES in Chapter 4: Alternatives (document reference TR010035/APP/6.4). This outlines the main alternatives studied and how the environmental effects of options have been taken into account.  The specific legal requirements have been addressed through the Habitats Regulations Assessment (document reference TR010035/APP/5.4) and the Water Framework Directive Assessment (document reference TR010035/APP/5.6) contained in the application documents.  The sequential test for flood risk is included in the Flood Risk Assessment (FRA) (document reference TR010035/APP/5.2).  The Scheme is not located within a National Park or AONB and no indirect effects would occur as a result.
4.27	All projects should be subject to an options appraisal. The appraisal should consider viable modal alternatives and may also consider other options (in light of the paragraphs 3.23 to 3.27 of this	As the Scheme is included in the Government's Road Investment Strategy, it is noted that a viable modal alternatives assessment will have been undertaken.  ES Chapter 4: Alternatives (document reference
	NPS). Where projects have been subject	TR010035/APP/6.4) sets out the process for assessing options



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	to full options appraisal in achieving their status within Road or Rail Investment Strategies or other appropriate policies or investment plans, option testing need not be considered by the examining authority or the decision maker. For national road and rail schemes, proportionate option consideration of alternatives will have been undertaken as part of the investment decision making process. It is not necessary for the Examining Authority and the decision maker to reconsider this process, but they should be satisfied that this assessment has been undertaken.	and arriving at the Preferred Scheme. Three corridors were considered during Highways England's options stages (PCF Stages 1 and 2), online, southern and northern corridors. Five options were identified for the southern corridor (options S1 - S5), while two options were identified for both the northern (Options N1 and N2) and online corridors (Options O1 and O2). The options were different in terms of the junction strategy, the number of lanes as well as lane utilisation. A total of nine options were therefore, considered during the options stage.  A number of alternative arrangements were suggested by members of public as part of the non-statutory public consultation in 2016 (refer to ES Chapter 3: Consultation (document reference TR010035/APP/6.3). The main suggestion was for an alternative southern bypass much further south between Poulton Junction and Windy Harbour Junction than the proposed Scheme alignment.  Highways England's Preferred Route Announcement document (2017) stated that Scheme was the most expensive option, however, it reduced congestion, journey times and improved overall safety. It was also found to better support proposed developments further north on the Fylde Peninsula, by increasing the overall capacity of the road. The Scheme also provides greater improvements for pedestrians and cyclists in taking traffic away from the existing A585.
4.28 - 4.29	Applicants should include design as an	The design of the Scheme has taken into account the physical



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(Criteria for "good design" for national network Infrastructure)	integral consideration from the outset of a proposal. Visual appearance should be a key factor in considering the design of new infrastructure, as well as functionality, fitness for purpose, sustainability and cost. Applying "good design" to national network projects should therefore produce sustainable infrastructure sensitive to place, efficient in the use of natural resources and energy used in their construction, matched by an appearance that good aesthetics as far as possible.	constraints and social and environmental considerations to achieve a layout that would maximise the benefits to road users and the community. The Scheme would remove traffic from the semi-urban existing route to a new rural bypass, the alignment of which has achieved a balance between minimising impacts on residents and the environment – particularly as it passes through an area of historic flooding. That has been achieved by removing a downstream constraint to the floodplain, which has been tested by the production of a detailed FRA (document reference TR010035/APP/5.2). The layout of new junctions has taken into account future traffic demands and the need for pedestrians and cyclists to use the junctions.  The vertical alignment of the bypass has been developed to minimise the visual impact on the surrounding residential areas and individual properties as well as the rural landscape by keeping the height of embankments to a minimum but siting the bypass in cutting where it passes immediately south of Little Singleton. This screens the bypass from close properties and helps to reduce severance of communities. The cutting also provides a balance of material used for the construction of the embankments and mounding required to help to screen the bypass from properties.  There is the potential for borrow pits to be used for local materials and for lime stabilisation techniques to enable use of the site materials for embankments.



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4.33	The applicant should therefore take into account, as far as possible, both functionality (including fitness for purpose and sustainability) and aesthetics (including the scheme's contribution to the quality of the area in which it would be located). Applicants will want to consider the role of technology in delivering new national networks projects. The use of professional, independent advice on the design	ES Chapter 13: Materials (document reference TR010035/APP/6.13) identifies that the following targets relevant to material resources and waste would be considered for the Scheme:  Where specification allows, a portion of construction materials to include a reused and recycled content, Waste and Resources Action Programme (WRAP)'s case studies illustrate that by adopting the available opportunities to increase recycled content through the use of cost competitive and readily available products levels exceeding 15-20% are common;  Use of primary aggregates would be minimised by the selection of secondary materials, where possible;  Materials specified would have low embodied carbon;  Optimise the recovery of construction, demolition and excavation waste; and  Minimise waste to landfill (excluding hazardous waste).  The Scheme has been designed to meet the Scheme's objectives which include both functionality (improving journey times, access and delivering capacity enhancements) and aesthetic requirements (assessed as part of the ES (document reference TR010035/APP/6.9)). Good design principles have been integrated into the Scheme's evolving design and additionally, consultation has been undertaken with key stakeholders including Lancashire County Council, Fylde Borough Council and Wyre Council (document reference TR010035/APP/5.1).



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4.34	aspects of a proposal should be considered, to ensure good design principles are embedded into infrastructure proposals.  Whilst the applicant may only have	The environmental assessment and design processes have
	limited choice in the physical appearance of some national networks infrastructure, there may be opportunities for the applicant to demonstrate good design in terms of siting and design measures relative to existing landscape and historical character and function, landscape permeability, landform and vegetation.	operated iteratively, and as likely environmental effects have been recognised during the Scheme design, the proposed design has been adjusted, as appropriate to reduce the effects.  The Statement of Reasons (document reference TR010035/APP/4.1) states that the 'permanent land required for the Scheme has been minimised as far as possible balancing the need for flexibility within the limits of deviation together with the need to include appropriate mitigation particularly with regards to water attenuation, flood mitigation measures, landscaping and environmental bunds. Temporary land required for the Scheme has been minimised as far as possible.'  As part of the Scheme proposals, a number of mitigation measures are proposed, including:  New woodland planting;  Reinstatement and new planting of hedgerows;  Reinstatement/replacement of ponds and new ditches;  Minimisation of disturbance including the sensitive timing of works;  Bat boxes to replace removed potential roost features;  Culverts for use by otters;  Pre-construction badger surveys;



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4		<ul> <li>The design of lighting to avoid light-spill;</li> <li>Destructive searches and safe working practices to prevent injury or disturbance to animals during construction;</li> <li>Installation of structures underneath the carriageway to maintain habitat connectivity and;</li> <li>Woodland and linear planting to offset habitat loss.</li> <li>Opportunities for environmental enhancement as part of the Scheme design have been taken where possible. This includes the creation of reptile hibernacula; installation of bird boxes; bee posts and wildflower meadows, to be created around pond and wetland areas along the Scheme corridor. Biodiversity benefits form an integral part of the proposed landscaping, including the use of wildflowers and native and fruit-bearing species, providing benefits to wildlife in general. ES Chapter 8 Biodiversity (document reference TR010035/APP/6.8) reinforces the point, stating that: 'the extensive landscape planting would increase connectivity of hedgerow and woodland habitats on either side of the carriageway and is considered to represent an overall enhancement of hedgerow connectivity above baseline levels during the operational phase.'</li> <li>Compensation measures as part of the Scheme proposals would comprise the establishment of aquatic habitats for great crested newts and, during construction, the provision of refuge habitats for pink-footed geese.</li> </ul>



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		ES Chapter 9: Landscape (document reference TR010035/APP/6.9) identifies that landscape and visual mitigation measures form an integral part of the Scheme, including native woodland, shrub planting, and linear planting, roadside specimen trees, wildflower meadows and amenity grassland and verges. The Scheme also includes some use of cuttings, false cuttings and embankments.
4.35	Applicants should be able to demonstrate in their application how the design process was conducted and how the proposed design evolved. Where a number of different designs were considered, applicants should set out the reasons why the favoured choice has been selected	Three route corridors were considered during Highways England's options stage (Project Control Framework (PCF) Stages 1 and 2) which were an online, southern and northern corridor route option. A further five options were identified for the southern corridor (S1-S5), with two options for both the northern (N1 and N2) and online corridors (O1 and O2). The options were differentiated in terms of their junction arrangements, number of lanes as well as their use. A total of nine options were considered at the options stage.
		As part of this exercise, two Environmental Assessment Reports (EARs) were prepared (1 at PCF Stage 1 and 1 at PCF Stage 2), which assessed the route options in accordance with Highways England's Design Manual for Roads and Bridges Volume 11 (DMRB). The EARs provided an assessment of the Scheme options in relation to air quality, cultural heritage, landscape effects, noise, biodiversity, geology and soils, road drainage and the water environment, people and communities and materials. The conclusions of the assessments undertaken were used to inform the selection of the preferred Scheme



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-		option.
		The preferred option (1), the southern bypass, was announced by Highways England on the 24 October 2017. Details of the rejected route options is provided in ES Chapter 4 (Alternatives) (document reference TR010035/APP/6.4).
		A statutory consultation period ran for seven weeks from 21 March to 8 May 2018, providing an opportunity for the Scheme to be understood by the public and stakeholders and to make comments on the proposals.
		<ul> <li>The statutory consultation was an opportunity to seek views on a number of aspects of the Scheme including:</li> <li>The proposed designs for the junctions at Skippool, Skippool Bridge, Poulton and Little Singleton;</li> <li>The options for the Lodge Lane Land Bridge which would be provided to carry the existing B5260 Lodge Lane over the new bypass;</li> <li>The Grange Footbridge; and</li> <li>Improvements to the existing section of Mains Lane and Garstang New Road.</li> </ul>
		Opinions on how well the southern bypass option would achieve the Scheme's objectives and how a number of features would improve safety were also sought. As a result of the consultation, changes to the Scheme design have been implemented as set out in Section 7 of Document 5.1: Consultation Report



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		(document reference TR010035/APP/5.1 Further to the statutory consultation period, an information sharing exercise was undertaken advising people in the vicinity of the Poulton Junction of the changes in the design of the Poulton Junction.  In relation to the Lodge Lane Land bridge, a Value Management Workshop was held on 12/09/2018 to determine whether the scheme should proceed with a land bridge or conventional structure, based on a series of criterion. The session was attended by Highways England and Arcadis. The outcome was a conventional bridge should be provided, with enhanced mitigation for the properties adjacent to the scheme, including the planting of semi-mature trees and the placement of a hedgerow.



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4.40-4.41 (Climate change adaptation)	New national networks infrastructure will be typically long-term investments which will need to remain operational over many decades, in the face of a changing climate. Consequently, applicants must consider the impacts of climate change when planning location, design, build and operation. Any accompanying environment statement should set out how the proposal will take account of the projected impacts of climate change.  Where transport infrastructure has safety-critical elements and the design life of the asset is 60 years or greater, the applicant should apply the UK Climate Projections 2009 (UKCP09) high emissions scenario (high impact, low likelihood) against the 2080 projections at the 50% probability level.	ES Chapter 15: Climate (document reference TR010035/APP/6.15) sets out how the proposal takes account of the projected impacts of climate change. The assessment includes an assessment of the impacts on greenhouse gas emissions and vulnerability of the Scheme to climate change.  A detailed FRA (document reference TR010035/APP/5.2) has been undertaken for the Scheme. The latest Environment Agency (EA) climate change guidance has been used in the FRA and this has been agreed with the EA. Engagement has continued during the refinement of the FRA during PCF Stage 3. The FRA includes an assessment to ensure that the proposed development is not at increased risk of flooding over its lifetime due to climate change and this has been used for the three climate change scenarios for the 1% Annual Exceedance Probability (AEP) event: +35% and +70% fluvial inflows.  ES Chapter 12 Road Drainage and the Water Environment (document reference TR010035/APP/6.12) allows for increased rainfall intensities due to climate change (+30%) thus the storage to attenuate runoff rates to greenfield, incorporating an allowance for climate change. The Scheme has identified an area of land on the right bank of the Main Dyke immediately downstream of the A585 which would be used to provide additional floodplain storage to offset that removed by the road embankment during construction.
4.42	The applicant should take into account the potential impacts of climate change	Climate change allowances applicable to the design life of the Scheme has been represented in the quantitative modelling



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4	using the latest UK Climate Projections available at the time and ensure any environment statement that is prepared identifies appropriate mitigation or adaptation measures. This should cover the estimated lifetime of the new infrastructure	assessments undertaken to inform the Scheme drainage design and FRA (document reference TR00035/APP/5.2). A drainage design has been developed for the operational Scheme that rapidly removes water and prevents flooding of the carriageway. The Scheme would discharge to the receiving water environment via existing and new outfalls. Attenuation would be provided to achieve agreed discharge rates, inclusive of an allowance for climate change resilience. The drainage design also includes appropriate measures to manage the quality of highway runoff.
4.43	The applicant should demonstrate that there are no critical features of the design of new national networks infrastructure which may be seriously affected by more radical changes to the climate beyond that projected in the latest set of UK climate projections. Any potential critical features should be assessed taking account of the latest credible scientific evidence on, for example, sea level rise (e.g. by referring to additional maximum credible scenarios such as from the Intergovernmental Panel on Climate Change or Environment Agency) and on the basis that necessary action can be taken to ensure the operation of the infrastructure over its estimated lifetime through potential further mitigation or	Chapter 15: Climate (document reference TR010035/APP/6.15) of the ES sets out how the Scheme takes account of the projected impacts of climate change. This assesses the impacts on greenhouse gas emissions and vulnerability of the Scheme to climate change. The FRA includes an assessment to ensure that the Scheme is not at increased risk of flooding over its lifetime due to climate change.  ES Chapter 12: Road Drainage and the Water Environment (document reference TR010035/APP/6.12) states that attenuation would be provided to achieve agreed discharge rates, inclusive of an allowance for climate change resilience.



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4	adaptation	
4.44	adaptation.  Any adaptation measures should be based on the latest set of UK Climate Projections, the Government's national Climate Change Risk Assessment and consultation with statutory consultation bodies. Any adaptation measures must themselves also be assessed as part of any environmental impact assessment and included in the environment statement, which should set out how and where such measures are proposed to be secured.	Adaptation measures for climate change and how these have been secured have been considered during PCF Stage 3 and are set out in the ES (document reference TR010035/APP/6.15). A 30% allowance for climate change has been adopted as part of the Scheme's design, in line with the UKCP09 high emissions scenario 2080 projections, and in place of the more widely used 20% allowance for climate change set-out in the former Highways Agency's guidance HD33/06. Extensive consultation was undertaken with the statutory consultation bodies. Further details of this can be found in the Consultation Report (document reference TR010035/APP/5.1).
4.52 (Pollution control and other environmental protection Regimes)	There is a statutory duty on applicants to consult the Marine Management Organisation (MMO) on nationally significant projects which would affect, or would be likely to affect, any relevant marine areas as defined in the Planning Act (as amended by section 23 of the Marine and Coastal Access Act 2009)	One area of the Scheme lies between the mean high and mean low water springs. This falls within the Marine Management Organisation (MMO) jurisdiction. Engagement has continued with relevant organisations, including the MMO, throughout the consultation process. Further details of this can be found in the Consultation Report (document reference TR010035/APP/5.1).
4.53	When an applicant applies for an Environmental Permit, the relevant regulator (the Environment Agency) requires that the application demonstrates that processes are in place to meet all relevant Environmental Permit requirements	The Consents and Agreements Position Statement (document reference R010035/APP/5.5) identifies that all statutory consents, permits or licenses required for the construction (relevant to those that do not form part of the DCO) would be obtained. Any conditions included in consents/licenses/permits would be documented in an updated CEMP and considered as part of the planning, design and construction process.



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4.54	Applicants are encouraged to begin preapplication discussions with the Environment Agency as early as possible. It is however expected that an applicant will have first thought through the requirements as a starting point for discussion. Some consents require a significant amount of preparation; as an example, the Environment Agency suggests that applicants should start work towards submitting the permit application at least 6 months prior to the submission of an application for a Development Consent Order, where they wish to parallel track the applications. This will help ensure that applications take account of all relevant environmental considerations and that the relevant regulators are able to provide timely advice and assurance to the Examining Authority.	The Consents and Agreements Position Statement (document reference R010035/APP/5.5) identifies that all statutory consents, permits or licenses required for the construction (relevant to those that do not form part of the DCO) would be obtained.  The Consents and Agreements Position Statement states that 'at this point (i.e. the submission of the DCO application) the majority of consents and all of the powers, required have been included, or addressed, within the DCO as permitted by various provisions of the Planning Act 2008. These fall into the following categories:  • Authorisation of all permanent and temporary works (equivalent of planning permission). Note: none of the following consents are needed for the Scheme: scheduled monument consent, listed building consent, conservation area consent, common land consent, Site of Special Scientific Interest assent.  • Compulsory acquisition of land and of rights over land such as easements, restrictive covenants and the temporary possession of land.  • Consent to carry out street works and to stop up highways permanently or temporarily.  • Highway matters (such as designating highway as trunk road).  • Traffic regulation matters (such as speed limits, clearways and restrictions on use).  • Consent to stop up and divert public and private rights of



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4		<ul> <li>way.</li> <li>Consent to carry out tree works (including works to trees subject to a Tree Preservation Order).</li> <li>Consent to remove hedgerows.</li> <li>Powers / consent to carry out utility diversions (subject to protection provisions).</li> <li>Deemed Marine Licence.</li> </ul> The Consents and Agreements Position Statement identifies other consents, agreements, licences and permits likely required for specific locations and requirements that are outside those included in the DCO. It also provides a commentary on the status of these as at the date of the DCO Submission. In terms
		of requirements under the EA's authorisation, these include the following:  • Flood Risk Activity Permit (FRAP);  • Water Abstraction Licence; and  • Permit for temporary dewatering and discharge from excavations.
		Dialogue with the EA has continued including Environmental Permits and potential information requirements. Further details of this can be found in the Consultation Report (document reference TR010035/APP/5.1).
4.61 (Safety)	The applicant should undertake an objective assessment of the impact of the proposed development on safety including the impact of any mitigation	Impact on the likelihood of accidents as a result of the Scheme have been assessed using the DfT's COBALT program.  COBALT is a computer program developed by the DfT to undertake the analysis of the impact on accidents as part of



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4	measures. This should use the methodology outlined in the guidance from DfT (WebTAG) and from the Highways Agency.	economic appraisal of a road scheme as is set out in unit A4.1 of DfT's TAG. The appraisal period used for the assessment has been the standard of 60 years in line with TAG Unit A1.1 Section 2.3, Appraisal periods. The outcome of the analysis with the Scheme in place is that the Scheme provides better accident measures in reducing accidents, and therefore no mitigation measures were deemed necessary nor subsequently assessed.
4.62	They should also put in place arrangements for undertaking the road safety audit process. Road safety audits are a mandatory requirement for all trunk road highway improvement schemes in the UK (including motorways).	Impact on the likelihood of accidents as a result of the Scheme have been assessed using the DfT's COBALT program. The outcome of the analysis as presented in the Transport Assessment (document reference TR010035/APP/7.4), shows an overall objective of the Scheme, to improve safety along the route, will be achieved, as the Scheme if implemented is shown to reduce the number of accidents and casualties and therefore no mitigation measures were deemed necessary nor subsequently assessed.
4.64	The applicant should be able to demonstrate that their scheme is consistent with the Highways Agency's Safety Framework for the Strategic Road Network and with the national Strategic Framework for Road Safety. Applicants will wish to show that they have taken all steps that are reasonably required to:    minimise the risk of death and injury arising from their development;   contribute to an overall reduction in	A Stage 3 Safety Plan has been prepared, describing the safety activities that would be undertaken as part of the safety management system for the Scheme and how these activities would lead to the project safety objectives being met. The Scheme's transport objectives address safety by seeking to reduce accidents along the Scheme routes specifically through reducing the number of people killed or seriously injured on the network as presented in the Transport Assessment (document reference TR010035/APP/7.4).
	road casualties;	have been assessed using the DfT's COBALT program. The



NN NPS Paragraph Number 4	Requirement of the National Networks National Policy Statement (NN NPS)	Compliance with the NN NPS
4	□ contribute to an overall reduction in the number of unplanned incidents; and □ contribute to improvements in road safety for walkers and cyclists.	outcome of the analysis with the Scheme in place is that the Scheme provides better accident measures in reducing accidents, and therefore no mitigation measures were deemed necessary nor subsequently assessed. Therefore, it is considered that the Scheme would improve road safety and is compliant with the NN NPS in this regard.  The Scheme safety objectives are cognisant of the requirements of Highways England's Health and Safety 5 Year Plan targets for accident frequency rates. The Scheme satisfies the road user safety objective as it can be demonstrated over a period of three years after becoming fully operational that:  The average number of Fatal and Weighted Injury (FWI) casualties per year is no more than the safety baseline The rate of FWIs per billion vehicle miles per annum is no more than the safety baseline For each link, no population (e.g. car drivers, pedestrians, HGV drivers and motorcyclists) is disproportionately adversely affected in terms of safety and risk to each population remains tolerable.  The Safety Plan has been updated at PCF Stage 3 with detailed information including the validated STATS 19 accident data and the results from COBALT modelling. It would be reviewed at Stage 5 (Construction Preparation / Mobilisation) Construction (PCF Stage 6) and Handover and Closeout (PCF Stage 7). The Safety Plan operates as a 'live' document and it is intended that any significant changes to the Scheme design or operating



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		procedures would require consideration of a revised version.
		Risk assessment activities would be undertaken including hazard analysis, risk assessment, hazard mitigation and designing for maintenance. This would include identifying potential hazards so that they can be mitigated and enabling early identification of hazards so that the design of the Scheme can be modified to either remove hazards completely or reduce the risk from hazards as soon as they are identified.
4.65	They will also wish to demonstrate that:  ☐ they have considered the safety implications of their project from the outset; and ☐ they are putting in place rigorous	In addition to what has been outlined in response to 4.64, the project Safety Plan identifies that any residual risks would be recorded and clear guidance on how they would be managed/monitored would be required.
	processes for monitoring and evaluating safety.	There will be a need to verify that the project has implemented any identified safety requirements and that all planned safety activities have been adequately undertaken in accordance with the DMRB general direction (GD) 04/12 Standard for safety risk assessment on the strategic road network. Assumptions would also need to be validated and safety objectives met, and this would be tracked through post operational monitoring.
		Once operation commences, the performance of the Scheme would be monitored to ensure that it is operating as expected and to ensure that any necessary corrective action is undertaken. A procedure describing the monitoring and control actions would be developed.
4.76 - 4.77	Where national security implications have	The Scheme is not considered to be "critical infrastructure" for



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(Security considerations)	been identified, the applicant should consult with relevant security experts from CPNI [Centre for the Protection of National Infrastructure] and the Department for Transport, to ensure that physical, procedural and personnel security measures have been adequately considered in the design process and that adequate consideration has been given to the management of security risks. If CPNI and the Department for Transport (as appropriate) are satisfied that security issues have been adequately addressed in the project when the application is submitted, they will provide confirmation of this to the Secretary of State, and the Examining Authority should not need to give any further consideration to the details of the security measures during the examination.  The applicant should only include such information in the application as is necessary to enable the Examining Authority to examine the development consent issues and make a properly informed recommendation on the application.	the purposes of national security.



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4.79, 4.81 - 4.82 (Health)	National road networks have the potential to affect the health, well-being and quality of life of the population and can have direct impacts on health because of traffic, noise, vibration, air quality and emissions, light pollution, community severance, dust, odour, polluting water, hazardous waste and pests.  As described in the relevant sections of this NPS, where the proposed project has likely significant environmental impacts that would have an effect on human beings, any environmental statement should identify and set out the assessment of any likely significant adverse health impacts.  The applicant should identify measures to avoid, reduce or compensate for adverse health impacts as appropriate. These impacts may affect people simultaneously, so the applicant, and the Secretary of State (in determining an application for development consent) should consider the cumulative impact on health.	The ES Chapters present the different environmental effects of the project that could affect human health, notably Chapter 6: Air Quality (document reference TR010035/APP/6.6), Chapter 10: People and Communities (document reference TR010035/APP/6.10), Chapter 11: Noise and Vibration (document reference TR010035/APP/6.11), Chapter 13 Geology and Contamination (document reference TR010035/APP/6.13) and Chapter 14 Materials (document reference TR010035/APP/6.13) and Chapter 14 Materials (document reference TR010035/APP/6.14). The ES includes consideration of cumulative effects and identifies appropriate mitigation measures.  With regards to air quality, ES Chapter 6 (Air Quality) (document reference TR010035/APP/6.6) states that both nitrogen dioxide (NO2) and particulate matter (PM10) are predicted to be below the respective Air Quality Strategy Objectives for both the Base Year and Opening Year of the Scheme and no significant effects on human health are predicted as a result of the Scheme.  ES Chapter 11 Noise and Vibration (document reference TR010035/APP/6.11) states that the construction noise levels, would have no significant adverse impacts on health and quality of life as a result of the Scheme. In terms of operational road traffic noise impacts, it is predicted that beneficial impacts would occur at five Noise Impact Areas (NIAs) in the short-term and three NIAs in the long-term and therefore a significant beneficial effect is expected to occur at these NIAs.



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-		ES Chapter 10 People and Communities (document reference TR010035/APP/6.10) considers that the improved connectivity as a result of the Scheme has the potential to improve human health through increasing opportunities for walking and cycling. This is particularly important as physical activity levels in both Fylde Borough Council and Wyre Council areas are below the national average.
		It is also maintained that the design of the new road to a higher highway standard would help reduce uncertainty, fear and driver stress. The Scheme is therefore predicted to have a beneficial effect on human health through reduced stress levels typical of delayed or congested road use.
		ES Chapter 12 Road Drainage and the Water Environment (document reference TR010035/APP/6.12) states that the Scheme would result in a reduction in flood risk of the proposed crossing of the Main Dyke and in areas of the Scheme alignment and surrounding areas that are at risk of flooding from the tidal Wyre Estuary.
		In addition, the ES notes that, 'properties that reside to the south of the Scheme on Kevin Avenue and Royston Road will benefit most from this reduction in tidal flood risk.' Any potential risk for pollutants to enter watercourses would be mitigated and therefore no significant adverse effects on human health are predicted.



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4		With respect to hazardous waste, as set out in the ES Chapter 14 (Materials) (document reference TR010035/APP/6.14), there does not appear to be a high probability of significant sources of contaminated land being present within the application site. The baseline has identified that the landfill sites have sufficient capacity to accommodate waste from the Scheme without compromising the integrity of the receiving infrastructure within Lancashire and Greater Manchester, if disposal to landfill is required. As such, hazardous waste effects are assessed as slight and not significant and thus not anticipated to impact on human health.  On this basis, it can be stated that the Scheme complies with the NN NPS in relation to health.



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5 5.6 - 5.11 (Air quality)	Where the impacts of the project (both on and off-scheme) are likely to have significant air quality effects in relation to meeting EIA requirements and / or affect the UKs ability to comply with the Air Quality Directive, the applicant should undertake an assessment of the impacts of the proposed project as part of the environmental statement.  The environmental statement should describe:    existing air quality levels;   forecasts of air quality at the time of opening, assuming that the scheme is not built (the future baseline) and taking account of the impact of the scheme; and   any significant air quality effects, their mitigation and any residual effects, distinguishing between the construction and operation stages and taking account of the impact of road traffic generated by the project.  Defra publishes future national projections of air quality based on evidence of future emissions, traffic and vehicle fleet.  Projections are updated as the evidence base changes. Applicant's assessment should be consistent with this but may	ES Chapter 6 Air Quality (document reference TR010035/APP/6.6) describes existing air quality, forecasts air quality at the time of opening and assesses the significance of environmental effects in line with the NN NPS requirements, as to whether the effects of the Scheme are significant and whether it would affect the UK's ability to comply with the Air Quality Directive.



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3	include more detailed modelling to demonstrate local impacts. In addition to information on the likely significant effects of a project in relation to EIA, the Secretary of State must be provided with a judgement on the risk as to whether the project would affect the UK's ability to comply with the Air Quality Directive.	
	The Secretary of State should consider air quality impacts over the wider area likely to be affected, as well as in the near vicinity of the scheme. In all cases the Secretary of State must take account of relevant statutory air quality thresholds set out in domestic and European legislation. Where a project is likely to lead to a breach of the air quality thresholds, the applicant should work with the relevant authorities to secure appropriate mitigation measures with a view to ensuring so far as possible that those thresholds are not breached.	
	Air quality considerations are likely to be particularly relevant where schemes are proposed: within or adjacent to Air Quality	



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5	Management Areas (AQMA); roads identified as being above Limit Values or nature conservation sites (including Natura 2000 sites and SSSIs, including those outside England)	
5.13	The Secretary of State should refuse consent where, after taking into account mitigation, the air quality impacts of the scheme will:  result in a zone/agglomeration which is currently reported as being compliant with the Air Quality Directive becoming noncompliant; or  affect the ability of a non-compliant area to achieve compliance within the most recent timescales reported to the European Commission at the time of the decision.	<ul> <li>Overall, the ES document reference (TR010035/APP/6.6) concludes:</li> <li>Base year (2015) monitored and modelled concentrations indicate that air quality concentrations do not exceed Air Quality Strategy (AQS) Objectives.</li> <li>The evaluation of the operational significance of effects for air quality is that the Scheme does not have a significant impact on local air quality.</li> <li>The assessment demonstrates that in terms of impact on compliance with the EU Directive on ambient air quality (2008/60/EC), the Scheme is Low Risk in relation to affecting the UKs reported ability to comply with the EU Directive in the shortest timescales possible, as exceedances of the EU limit values are not predicted.</li> <li>Construction phase impacts from dust and emissions would be negligible with the implementation of mitigation measures included in the Outline CEMP (document reference TR010035/APP/7.2).</li> </ul>
5.14 - 5.15	The Secretary of State should consider whether mitigation measures put forward	During construction, industry best practice mitigation measures would be implemented to ensure that no significant impacts occur



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	by the applicant are acceptable. A management plan may help codify mitigation at this stage. The proposed mitigation measures should ensure that the net impact of a project does not delay the point at which a zone will meet compliance timescales.  Mitigation measures may affect the project design, layout, construction, operation and/or may comprise measures to improve air quality in pollution hotspots beyond the immediate locality of the scheme. Measures could include, but are not limited to, changes to the route of the new scheme, changes to the proximity of vehicles to local receptors in the existing route, physical means including barriers to trap or better disperse emissions and speed control. The implementation of mitigation measures may require working	during construction from dust. These measures are set out in the Outline CEMP (document reference TR010035/APP/7.2).  No mitigation measures are required during the operation of the Scheme as it does not result in a significant impact on air quality.
- 1-	with partners to support their delivery.	
5.17 (Carbon emissions)	Carbon impacts will be considered as part of the appraisal of scheme options (in the business case), prior to the submission of an application for DCO. Where the development is subject to EIA, any Environmental Statement will need to describe an assessment of any likely	As set out in ES Chapter 15 Climate (document reference TR010035/APP/6.15), the Scheme seeks to reduce greenhouse gas emissions as far as practicable to contribute to the UK's net reduction in carbon emissions. The Scheme design (ES Chapter 2 Description of the Scheme (document reference TR010035/APP/6.2)) aims to reduce the overall carbon footprint of the Scheme by reusing excavated materials where



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5	significant climate factors in accordance with the requirements in the EIA Directive. It is very unlikely that the impact of a road project will, in isolation, affect the ability of Government to meet its carbon reduction plan targets. However, for road projects applicants should provide evidence of the carbon impact of the project and an assessment against the Government's carbon budgets.	practicable. The footprint of structures and junctions have been made as compact as practicable, ensuring minimal land use change and materials use. Throughout the Scheme's design, material resources have been evaluated and their carbon emissions calculated, ensuring that material resources with lower carbon emissions have been fully considered.  The predicted increase of carbon dioxide equivalent (CO <sub>2e</sub> ) in emissions over 60 years of the Scheme's operation would be caused primarily by an increase in traffic volume and flow along the route of the Scheme. This increase, however, is deemed to be negligible when compared against the Government's carbon budgets.
5.19	Evidence of appropriate mitigation measures (incorporating engineering plans on configuration and layout, and use of materials) in both design and construction should be presented. The Secretary of State will consider the effectiveness of such mitigation measures in order to ensure that, in relation to design and construction, the carbon footprint is not unnecessarily high. The Secretary of State's view of the adequacy of the mitigation measures relating to design and construction will be a material factor in the decision-making process.	The opportunities for mitigation in relation to potential carbon impacts associated with materials and climate (as described above) are presented within the ES Chapter 14 Materials (document reference TR010035/APP/6.14) and Chapter 15 Climate (document reference TR010035/APP/6.15).



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5.22 - 5.23 (Biodiversity and ecological conservation)	Where the project is subject to EIA the applicant should ensure that the environmental statement clearly sets out any likely significant effects on internationally, nationally and locally designated sites of ecological or geological conservation importance (including those outside England) on protected species and on habitats and other species identified as being of principal importance for the conservation of biodiversity and that the statement considers the full range of potential impacts on ecosystems.  The applicant should show how the project has taken advantage of opportunities to conserve and enhance biodiversity and geological conservation interests.	ES Chapter 13: Geology and Contaminated Land (document reference TR010035/APP/6.13) identifies that as there are no sensitive geological features across the Scheme. Geology was scoped out during the Scoping stage of the EIA.  ES Chapter 8 Biodiversity (document reference TR010035/APP/6.8) sets out that there are no statutory or non-statutory designated sites of nature conservation importance with the Draft Order Limits. The Morecambe Bay and Duddon Estuary SPA and Morecambe Bay Ramsar site boundary lies immediately to the north of the Scheme.  A HRA Report (document reference TR010035/APP/5.4), including HRA Screening and Appropriate Assessment, has been undertaken for the Scheme. This has concluded that installation of a new bridge crossing over Main Dyke has the potential to lead to changes in water quality downstream and potentially within the SPA itself which could affect habitats utilised by the water bird assemblage. However, with mitigation, it is considered that, during construction, there would be no adverse effect on the integrity of Morecambe Bay and Duddon Estuary SPA or Morecambe Bay Ramsar site or on the ability of the site to achieve the aims of the Conservation Objectives. Positive engagement with Natural England has been ongoing throughout the HRA process. A Bird Mitigation Area (refer to the HRA document reference TR010035/APP/5.4) would be included in the Scheme design (and included in the Draft DCO Limits). The Bird Mitigation Area would be secured by the



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	Applicant as essential mitigation and would provide alternative foraging habitat for the duration of the construction period. It is intended the mitigation would be in place for the birds to use from October 2019. Further details are included in the Bird Mitigation Strategy (appended to the Outline CEMP - document reference TR010035/APP/7.2). Natural England has agreed the size and location of the mitigation area.  In line with NN NPS, the assessment demonstrates the approach the Scheme has taken to avoid and mitigate its effects on ecology and nature conservation.  During operation, the HRA has concluded that, 'given the measures in place to reduce noise and visual disturbance/displacement and the results of the traffic forecasting and noise assessments (which shows a decrease in noise levels where the majority of SPA/Ramsar site bird species have been recorded); there would be no long-term effects from disturbance/displacement of the completed Scheme. The Scheme could potentially have some net beneficial effects through the decrease in noise levels adjacent to the SPA/Ramsar site.'  In addition, a total area of 6,287m² of deciduous woodland would be lost as a result of the Scheme, along with the permanent (4,221m²) and temporary (2,091m²) loss of hedgerows. Six ponds would be lost during construction of the Scheme,
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5		reinstated in their original location once works had been completed. The planting of deciduous woodland totalling 47,287m² and hedgerows totalling 9,437m² would result in a net increase in these habitats as mitigation for the Scheme.  Opportunities for environmental enhancement as part of the Scheme design have been taken where possible. This includes the creation of reptile hibernacula; installation of bird boxes; bee posts and wildflower meadows, to be created around pond and wetland areas along the Scheme corridor. Biodiversity benefits form an integral part of the proposed landscaping, including the use of wildflowers and native and fruit-bearing species, providing benefits to wildlife in general. ES Chapter 8 (Biodiversity) (document reference TR010035/APP/6.8) reinforces the point, stating that: 'extensive landscape planting has been incorporated into the Scheme design. This would increase connectivity of hedgerow and woodland habitats on either side of the carriageway and is considered to represent an overall enhancement of hedgerow connectivity above baseline levels during the operational phase.'
5.25	As a general principle, and subject to the specific policies below, development should avoid significant harm to biodiversity and geological conservation interests, including through mitigation and consideration of reasonable alternatives. The applicant may also wish to make use	The Statement of Reasons (document reference TR010035/APP/4.1) states that the 'permanent land required for the Scheme has been minimised as far as possible balancing the need for flexibility within the limits of deviation together with the need to include appropriate mitigation particularly with regards to water attenuation, flood mitigation measures, landscaping and environmental bunds. Temporary land required



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5	of biodiversity offsetting in devising compensation proposals to counteract any impacts on biodiversity which cannot be avoided or mitigated. Where significant harm cannot be avoided or mitigated, as a last resort, appropriate compensation measures should be sought.	for the Scheme has been minimised as far as possible.'  Opportunities for environmental enhancement as part of the Scheme design have been taken where possible. This includes the creation of reptile hibernacula; installation of bird boxes; bee posts and wildflower meadows, to be created around pond and wetland areas along the Scheme corridor. Biodiversity benefits form an integral part of the proposed landscaping, including the use of wildflowers and native and fruit-bearing species, providing benefits to wildlife in general. ES Chapter 8 (Biodiversity) (document reference TR010035/APP/6.8) reinforces the point, stating that: 'extensive landscape planting has been incorporated into the Scheme design. This would increase connectivity of hedgerow and woodland habitats on either side of the carriageway and is considered to represent an overall enhancement of hedgerow connectivity above baseline levels during the operational phase.'  Compensation measures as part of the Scheme proposals would comprise the establishment of aquatic habitats for great crested newts and, during construction, the provision of refuge habitats for pink-footed geese.
5.26	In taking decisions, the Secretary of State should ensure that appropriate weight is attached to designated sites of international, national and local importance, protected species, habitats	A HRA Report (document reference TR010035/APP/5.4), including HRA Screening and Appropriate Assessment, has been undertaken, which has concluded that installation of a new bridge crossing over Main Dyke has the potential to lead to changes in water quality downstream and potentially within the



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5	and other species of principal importance for the conservation of biodiversity, and to biodiversity and geological interests within the wider environment.	SPA itself which could affect habitats utilised by the water bird assemblage. However, as agreed with the EA, with mitigation, it is considered that during construction there would be no adverse effect on the integrity of Morecambe Bay and Duddon Estuary SPA or Morecambe Bay Ramsar site or on the ability of the site to achieve the aims of the Conservation Objectives.  Positive engagement with Natural England has been ongoing throughout the HRA process. A Bird Mitigation Area (refer to the HRA document reference TR010035/APP/5.4) would be included in the Scheme design (and included in the Draft DCO Limits). The Bird Mitigation Area would be secured by the Applicant as essential mitigation and would provide alternative foraging habitat for the duration of the construction period. It is intended the mitigation would be in place for the birds to use from October 2019. Further details are included in the Bird Mitigation Strategy (appended to the Outline CEMP - document reference TR010035/APP/7.2). Natural England has agreed the size and location of the mitigation area.  ES Chapter 8 Biodiversity (document reference TR010035/APP/6.8) identifies that mitigation of effects has been fully considered as is an integral part of the design process. Mitigation measures outlined within Chapter 8 address the
		effects of the Scheme during construction and operation. The Statement of Reasons (document reference TR010035/APP/4.1) states that the 'permanent land required for the Scheme has been minimised as far as possible balancing the need for



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5		flexibility within the limits of deviation together with the need to include appropriate mitigation particularly with regards to water attenuation, flood mitigation measures, landscaping and environmental bunds. Temporary land required for the Scheme has been minimised as far as possible.'
5.29 (Biodiversity- SSSIs)	Where a proposed development on land within or outside a SSSI is likely to have an adverse effect on an SSSI (either individually or in combination with other developments), development consent should not normally be granted. Where an adverse effect on the site's notified special interest features is likely, an exception should be made only where the benefits of the development at this site clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest, and any broader impacts on the national network of SSSIs. The Secretary of State should ensure that the applicant's proposals to mitigate the harmful aspects of the development and, where possible, to ensure the conservation and enhancement of the site's biodiversity or geological interest, are acceptable. Where necessary, requirements and/or planning	The bird species for which the Wyre Estuary SSSI is designated also form part of the Morecambe Bay and Duddon Estuary SPA. The HRA (document reference TR010035/APP/5.4) concludes that there would be no adverse effect on integrity of Morecambe Bay and Duddon Estuary SPA, or on the ability of the site to achieve the aims of the Conservation Objectives (with mitigation in place for the construction phase).  Positive engagement with Natural England has been ongoing throughout the HRA process. A Bird Mitigation Area (refer to the HRA document reference TR010035/APP/5.4) would be included in the Scheme design (and included in the Draft DCO Limits). The Bird Mitigation Area would be secured by the Applicant as essential mitigation and would provide alternative foraging habitat for the duration of the construction period. It is intended the mitigation would be in place for the birds to use from October 2019. Further details are included in the Bird Mitigation Strategy (appended to the Outline CEMP - document reference TR010035/APP/7.2). Natural England has agreed the size and location of the mitigation area.



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5.32 (Biodiversity - Irreplaceable habitats including ancient woodland and veteran trees)	obligations should be used to ensure these proposals are delivered.  Ancient woodland is a valuable biodiversity resource both for its diversity of species and for its longevity as woodland. Once lost it cannot be recreated. The Secretary of State should not grant development consent for any development that would result in the loss or deterioration of irreplaceable habitats including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the national need for and benefits of the development, in that location, clearly outweigh the loss. Aged or veteran trees found outside ancient woodland are also particularly valuable for biodiversity and their loss should be avoided. Where such trees would be affected by development proposals, the applicant should set out proposals for their conservation or, where their loss is unavoidable, the reasons for this.	The Scheme would not affect any Ancient Woodland or veteran trees.
5.33 (Biodiversity within and around developments)	Development proposals potentially provide many opportunities for building in beneficial biodiversity or geological features as part of good design. When	Opportunities for environmental enhancement as part of the Scheme design have been taken where possible. This includes the creation of reptile hibernacula; installation of bird boxes; bee posts and wildflower meadows, to be created



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	considering proposals, the Secretary of State should consider whether the applicant has maximised such opportunities in and around developments.	around pond and wetland areas along the Scheme corridor. Biodiversity benefits form an integral part of the proposed landscaping, including the use of wildflowers and native and fruit-bearing species, providing benefits to wildlife in general. ES Chapter 8 Biodiversity (document reference TR010035/APP/6.8) reinforces the point, stating that 'the extensive landscape planting would increase connectivity of hedgerow and woodland habitats on either side of the carriageway and is considered to represent an overall enhancement of hedgerow connectivity above baseline levels during the operational phase.'
5.35 (Biodiversity - Protection of other habitats and species)	Other species and habitats have been identified as being of principal importance for the conservation of biodiversity in England and Wales and therefore requiring conservation action. The Secretary of State should ensure that	ES Chapter 8 Biodiversity (document reference TR010035/APP/6.8) sets out the anticipated effects on other habitats and species of local and county importance.  The Scheme design seeks to mitigate any impacts and maximise biodiversity benefits potentially achieved. Overall the
	applicants have taken measures to ensure these species and habitats are protected from the adverse effects of development. Where appropriate, requirements or	Scheme's residual effects in relation to ecology and nature conservation have been assessed to be slightly adverse, neutral or slightly beneficial.
	planning obligations may be used in order to deliver this protection. The Secretary of State should refuse consent where harm to the habitats or species and their habitats would result, unless the benefits of the development (including need) clearly outweigh that harm.	The ES Chapter also considers the inclusion of the Biodiversity Metric. The results of the calculations determined that there would be a net gain of 17 biodiversity units for non-linear habitats and 72,062.18 biodiversity units for linear habitats. 'The net increase in biodiversity is as a result of increasing the quality of the habitats postconstruction (for example, defunct or species-poor hedgerows would be replanted so as to achieve species-rich and continuous hedgerows, once re-established),



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5.36 (Biodiversity – Mitigation)	Applicants should include appropriate mitigation measures as an integral part of their proposed development, including identifying where and how these will be secured. In particular, the applicant should demonstrate that:  • during construction, they will seek to ensure that activities will be confined to the minimum areas required for the works;  • during construction and operation, best practice will be followed to ensure that risk of disturbance or damage to species or habitats is minimised (including as a consequence of transport access arrangements);  • habitats will, where practicable, be restored after construction works have finished;	and increasing the quantity of the habitats (for example, less than 1ha of broadleaved woodland would be lost, but this would be replaced with more than 5ha of new woodland planting). By improving the quality of the habitats this would increase the distinctiveness score after construction and increasing the quantity of the habitat would increase the area score after construction. Thereby resulting in a net increase in the number of biodiversity units post construction.'  Mitigation measures outlined within Chapter 8 Biodiversity (document reference TR010035/APP/6.8) mitigate the effects of the Scheme during construction and operation. The extent of the Draft DCO Limits has been minimised wherever possible, and best practice measures are proposed to address the potential adverse effects of pollution, vegetation/ habitat removal, disturbance and road mortality, as required by the provisions of the NN NPS.  As part of the Scheme proposals, a number of mitigation measures are proposed. These would be delivered through the including:  New woodland planting;  Reinstatement and new planting of hedgerows;  Reinstatement/replacement of ponds and new ditches;  Minimisation of disturbance including the sensitive timing of works;  Bat boxes to replace removed potential roost features;  Culverts for use by otters;



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5	<ul> <li>developments will be designed and landscaped to provide green corridors and minimise habitat fragmentation where reasonable;</li> <li>opportunities will be taken to enhance existing habitats and, where practicable, to create new habitats of value within the site landscaping proposals, for example through techniques such as the 'greening' of existing network crossing points, the use of green bridges and the habitat improvement of the network verge.</li> </ul>	<ul> <li>Pre-construction badger surveys;</li> <li>The design of lighting to avoid light-spill;</li> <li>Destructive searches and safe working practices to prevent injury or disturbance to animals during construction;</li> <li>Installation of structures underneath the carriageway to maintain habitat connectivity and;</li> <li>Woodland and linear planting to offset habitat loss.</li> <li>All mitigation and enhancement measures are presented in the Outline Construction Environmental Management Plan (CEMP) (document reference TR010035/APP/7.2), Register of Environmental Actions and Commitments (REAC) (document reference TR010035/APP/7.3), Environmental Enhancement Strategy appended to the Outline CEMP (document reference TR010035/APP/7.2) and Environmental Masterplan (document reference TR010035/APP/6.19). These documents would be updated throughout the Scheme construction.</li> </ul>
5.42 (Waste management)	The applicant should set out the arrangements that are proposed for managing any waste produced. The arrangements described should include information on the proposed waste recovery and disposal system for all waste generated by the development. The applicant should seek to minimise the volume of waste produced and the volume of waste sent for disposal unless it can be	ES Chapter 14 Materials (document reference TR010035/APP/6.14) provides details of the arisings and management of waste as part of the Scheme. There would be an estimated surplus of 194,500 m³ of excavated material deemed suitable for reuse onsite for general or granular fill. Any inert waste from the pavement excavation and demolition from the West Wynds main house, extension and garage, the derelict barn south of Mains Lane, the Beeches main house, outbuildings and extension and Skippool Bridge would also be reused on-site in the landscaping for the Scheme, when



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	demonstrated that the alternative is the best overall environmental outcome.	suitable. In addition, approximately 3,772 m³ of non-hazardous waste would arise from existing highways infrastructure and approximately 516 m³ from the demolition described.  An Outline CEMP (document reference TR010035/APP/7.2) has been submitted with the DCO application requiring contractors to promote opportunities for the potential reusing and recycling of all material resources and waste.  The Outline CEMP (document reference TR010035/APP/7.2) mandates several subsidiary management plans, including a draft Site Waste Management Plan (SWMP) and draft Materials Management Plan (MMP)). The draft MMP has been produced to identify ways to reuse site-won or excavated materials within the construction of the Scheme, whilst the draft SWMP is intended to measure and monitor the types and quantities of waste sent off-site, to ensure that the waste hierarchy is being implemented wherever possible.
5.55 - 5.58 (Civil and military aviation and defence interests)	Where the proposed development may have an effect on civil or military aviation and/or other defence assets, an assessment of potential effects should be carried out.  The applicant should consult the MoD, CAA, National Air Traffic Services (NATS) and any aerodrome – licensed or otherwise – likely to be affected by the	The Scheme is not considered to have an effect on civil or military aviation and/or other defence assets.



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	proposed development in preparing an assessment of the proposal on aviation or other defence interests.  Any assessment on aviation or other defence interests should include potential impacts during construction and operation of the project upon the operation of CNS infrastructure, flight patterns (both civil and military), other defence assets and aerodrome operational procedures. If any relevant changes are made to proposals for an NSIP during the preapplication period or before the end of the examination of an application, it is the responsibility of the applicant to ensure that the relevant aviation and defence consultees are informed as soon as reasonably possible.	
5.71- 5.74 (Coastal change)	Applications for development in a Coastal Change Management Area (CCMA) should make it clear why there is a need for it to be located in a CCMA. For developments in a CCMA, applicants should undertake an assessment of the vulnerability of the proposed development to coastal change, taking account of climate change, during the project's	The Scheme is not located within a CCMA. One area of the Scheme lies between the mean high and mean low water springs, within the MMO jurisdiction.



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5	operational life. For any projects involving dredging or disposal into the sea, the applicant should consult the Marine Management Organisation (MMO), and where appropriate, for cross-boundary impacts, Natural Resource Wales and Scottish Natural Heritage, at an early stage. The applicant should also consult the MMO on projects which could impact on coastal change, since the MMO may also be involved in considering other projects which may have related coastal impacts. The applicant should examine the broader context of coastal protection around the proposed project, and the influence in both directions, i.e. coast on project, and project on coast. The applicant should be particularly careful to identify any effects of physical changes on the integrity and special features of Marine Conservation Zones, candidate marine Special Areas of Conservation (SACs), coastal SACs and candidate coastal SACs, coastal Special Protection Areas (SPAs) and potential coastal SPAs, Ramsar sites, Sites of Community Importance (SCIs) and	



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5.79	potential SCIs and sites of Special Scientific Interest. For any projects affecting the above marine protected areas, the applicant should consult Natural England and where appropriate, for cross-boundary impacts, Natural Resource Wales and Scottish Natural Heritage, at an early stage.  Applicants should propose appropriate mitigation measures to address adverse physical changes to the coast in consultation with the MMO, the Environment Agency, Natural England, Natural Resource Wales, Scottish Natural Heritage, Local Planning Authorities, other statutory consultees, Coastal Partnerships and other coastal groups, as it considers appropriate. The Secretary of State should consider whether the mitigation requirements put forward by an applicant are acceptable and will be delivered and whether requirements should be attached to any grant of development consent in order to secure their delivery.	Engagement has continued with the relevant organisations through the consultation process. One area of the Scheme lies between the mean high and mean low water springs, within the MMO jurisdiction.
5.84 - 5.86 (Dust, odour, artificial light, smoke, steam)	Where the development is subject to an Environmental Impact Assessment, the applicant should assess any likely significant effects on amenity from	ES Chapter 6 Air Quality (document reference TR010035/APP/6.6) recognises that construction activities have the potential to give rise to adverse impacts from fugitive emissions of dust due to the construction of the Scheme. However, mitigation measures are



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5	aminging of adoug dust stoom amaka	recorded in the Degister of Environmental Actions and
	emissions of odour, dust, steam, smoke and artificial light and describe these in the Environmental Statement.  In particular, the assessment provided by the applicant should describe:  • the type and quantity of emissions;  • aspects of the development which may give rise to emissions during	recorded in the Register of Environmental Actions and Commitments (REAC) (document reference TR010035/APP/7.3) to ensure avoidance of any significant impacts. Standard dust mitigation measures are summarised in Table 6-6 of ES Chapter 6.  With the exception of dust from construction activities, impacts on amenity from emissions of odour, steam, or smoke are not considered relevant to the Scheme and thus no assessment has
	<ul> <li>construction, operation and decommissioning;</li> <li>premises or locations that may be affected by the emissions;</li> <li>effects of the emission on identified premises or locations; and</li> <li>measures to be employed in preventing or mitigating the emissions. The applicant is advised to consult the relevant local planning authority and, where appropriate, the Environment Agency about the scope and methodology of the assessment.</li> </ul>	The Scheme's lighting proposals have been designed to minimise light spill and trespass beyond the Scheme alignment to improve potential landscape and amenity impacts as well as impact on adjacent habitats. During construction, lighting would be directional and kept to a minimum. For the operational phase, lighting of the Scheme has been designed to minimise light spill and trespass and would be restricted to junction areas where the carriageway needs to be lit for health and safety reasons, with baffles fitted to ensure lighting remains directional and the surrounding landscape remains unlit.
5.87	The Secretary of State should be satisfied that all reasonable steps have been taken, and will be taken, to minimise any detrimental impact on amenity from emissions of odour, dust, steam, smoke and artificial light. This includes the impact of light pollution from artificial light on local	



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	amenity, intrinsically dark landscapes and nature conservation.	
5.89	The Secretary of State should ensure the applicant has provided sufficient information to show that any necessary mitigation will be put into place. In particular, the Secretary of State should consider whether to require the applicant to abide by a scheme of management and mitigation concerning emissions of odour, dust, steam, smoke, artificial light from the development to reduce any loss to amenity which might arise during the construction and operation of the development. A construction management plan may help codify mitigation.	
5.91 (Flood risk)	The National Planning Policy Framework (paragraphs 100 to 104) makes clear that inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk. But where development is necessary, it should be made safe without increasing flood risk elsewhere. The guidance supporting the National Planning Policy Framework explains that essential transport infrastructure (including mass evacuation routes), which has to cross the	A detailed FRA (document reference TR010035/APP/5.2) has been undertaken for the Scheme. This includes an assessment to ensure that the Scheme is not at increased risk of flooding over its lifetime due to climate change for the three climate change scenarios for the 1% Annual Exceedance Probability (AEP) event: +35% and +70% fluvial inflows.  The FRA shows that the Scheme is proposed in an area currently predicted to be at risk of flooding. However, by increasing the capacity of the existing A585 crossing as part of the Scheme proposals, upstream flood extents are reduced and therefore the Scheme is not at risk of flooding for any of the design events



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	area at risk, is permissible in areas of high flood risk, subject to the requirements of the Exception Test.	assessed.
5.92 - 5.93 (Flood Risk Assessment)	<ul> <li>Applications for projects in the following locations should be accompanied by a flood risk assessment (FRA):</li> <li>Flood Zones 2 and 3, medium and high probability of river and sea flooding;</li> <li>Flood Zone 1 (low probability of river and sea flooding) for projects of 1 hectare or greater, projects which may be subject to other sources of flooding (local watercourses, surface water, groundwater or reservoirs), or where the Environment Agency has notified the local planning authority that there are critical drainage problems.</li> <li>This should identify and assess the risks of all forms of flooding to and from the project and demonstrate how these flood risks will be managed, taking climate</li> </ul>	A quantitative assessment of the flood impacts of the Southern option on the Main/ Horsebridge Dyke catchments has been undertaken and reported in the FRA (document reference TR010035/APP/5.2).  As set out above, the FRA shows that although the Scheme is proposed in an area currently predicted to be at risk of flooding, by increasing the capacity of the existing A585 crossing as part of the Scheme proposals, upstream flood extents are reduced and therefore the Scheme is not at risk of flooding for any of the design events assessed.
5.94 (Flood	change into account.	A EPA (decument reference TP010035/APP/5.2) has been
Risk `	<ul><li>In preparing an FRA the applicant should:</li><li>consider the risk of all forms of flooding</li></ul>	A FRA (document reference TR010035/APP/5.2) has been prepared, which considers the risk of all forms of flooding arising
Assessment)	arising from the project (including in	from the Scheme and demonstrates how all risks would be
	adjacent parts of the United Kingdom),	managed and mitigated. This includes an assessment to ensure
	in addition to the risk of flooding to the	that the Scheme is not at increased risk of flooding over its



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	project, and demonstrate how these risks will be managed and, where relevant, mitigated, so that the development remains safe throughout its lifetime;  • take the impacts of climate change into account, clearly stating the development lifetime over which the assessment has been made;  • consider the vulnerability of those using the infrastructure including arrangements for safe access and exit;  • include the assessment of the remaining (known as 'residual') risk after risk reduction measures have been taken into account and demonstrate that this is acceptable for the particular project;  • consider if there is a need to remain operational during a worst-case flood event over the development's lifetime;  • provide the evidence for the Secretary of State to apply the Sequential Test	lifetime due to climate change for the three climate change scenarios for the 1% Annual Exceedance Probability (AEP) event: +35% and +70% fluvial inflows. The FRA also identifies the residual risks and provides the evidence for a sequential test and exceptions test.
5.96 (flood risk	and Exception Test, as appropriate.	The EDA (decomposed and see TD040005/ADD/E 0)
consultation)	Applicants for projects which may be affected by, or may add to, flood risk are advised to seek sufficiently early preapplication discussions with the	The FRA (document reference TR010035/APP/5.2) has involved consultation with the EA and Lancashire County Council, in their role as Lead Local Flood Authority (LLFA).



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5	Environment Agency, and, where relevant,	
	other flood risk management bodies such	
	as lead local flood authorities, Internal	
	Drainage Boards, sewerage undertakers,	
	highways authorities and reservoir owners	
	and operators. Such discussions can be	
	used to identify the likelihood and possible extent and nature of the flood risk, to help	
	scope the FRA, and identify the	
	information that will be required by the	
	Secretary of State to reach a decision on	
	the application once it has been submitted	
	and examined. If the Environment Agency	
	has concerns about the proposal on flood risk grounds, the applicant is encouraged	
	to discuss these concerns with the	
	Environment Agency and look to agree	
	ways in which the proposal might be	
	amended, or additional information	
	provided, which would satisfy the	
	Environment Agency's concerns,	
	preferably before the application for development consent is submitted.	
5.97 (local floo		As set out in the FRA (document reference TR010035/APP/5.2),
risk) `	groundwater and ordinary watercourse	the site is mostly at very low risk of surface water flooding and,
	flooding), local flood risk management	with the implementation of a suitable surface water drainage
	strategies and surface water management	strategy, the risk from surface water flooding would not increase
	plans provide useful sources of	across the Scheme. A suitable surface water drainage strategy



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5	information for consideration in Flood Risk Assessments. Surface water flood issues need to be understood and then account of these issues can be taken, for example flow routes should be clearly identified and managed.	would be implemented to ensure that there would be no increase in surface water run-off from the Scheme to the local land drainage system and that there would be no increase in third party flood risk from this source.
5.100 (drainage)	For construction work which has drainage implications, approval for the project's drainage system will form part of any development consent issued by the Secretary of State. The Secretary of State will therefore need to be satisfied that the proposed drainage system complies with any National Standards published by Ministers under Paragraph 5(1) of Schedule 3 to the Flood and Water Management Act 2010. In addition, the development consent order, or any associated planning obligations, will need to make provision for the adoption and maintenance of any Sustainable Drainage Systems (SuDS), including any necessary access rights to property. The Secretary of State, should be satisfied that the most appropriate body is being given the responsibility for maintaining any SuDS, taking into account the nature and security of the infrastructure on the proposed site.	Highways England has a proprietary approach to drainage design as detailed in DMRB Volume 4, Section 2, Part 9 (HA 119/06), which would be used to inform the Drainage Strategy for the Scheme. In accordance with HA 119/06 and the NN NPS, the Drainage Strategy would incorporate appropriate forms of SuDS within the drainage design.



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5.102 (Flood risk)	The responsible body could include, for example, the applicant, the landowner, the relevant local authority, or another body such as the Internal Drainage Board.  The Secretary of State should expect that reasonable steps have been taken to avoid, limit and reduce the risk of flooding to the proposed infrastructure and others.	A FRA (document reference TR010035/APP/5.2) has been prepared, which considers the risk of all forms of flooding arising from the Scheme and demonstrates how all risks would be managed and mitigated. This takes into account the impacts of climate change, identifies the residual risks and provides the
5.112 - 5.115 (Flood risk - mitigation)	Site layout and surface water drainage systems should cope with events that exceed the design capacity of the system, so that excess water can be safely stored on or conveyed from the site without adverse impacts.  The surface water drainage arrangements for any project should be such that the volumes and peak flow rates of surface	evidence for a sequential test and exceptions test.  A drainage design has been developed for the operational Scheme that rapidly removes water and prevents flooding of the carriageway. The Scheme would discharge to the receiving water environment via existing and new outfalls. Attenuation would be provided to achieve agreed discharge rates, inclusive of an allowance for climate change resilience. The drainage design also includes appropriate measures to manage the quality of highway runoff.
	water leaving the site are no greater than the rates prior to the proposed project, unless specific off-site arrangements are made and result in the same net effect. It may be necessary to provide surface water storage and infiltration to limit and	Where an existing watercourse would be severed by the proposed carriageway alignment, a culvert would be installed to maintain the existing land drainage regime. Five new culverts on ordinary watercourses are proposed and two existing culverts, on ordinary watercourses, would be extended to accommodate the Scheme.
	reduce both the peak rate of discharge from the site and the total volume discharged from the site. There may be	The new culverts have been sized, as part of the drainage design, to maintain the current land drainage regime and to convey flood flows without causing any detriment to baseline flood risk.



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5	circumstances where it is appropriate for infiltration attenuation storage to be provided outside the project site, if necessary through the use of a planning obligation.  The sequential approach should be applied to the layout and design of the project. Vulnerable uses should be located on parts of the site at lower probability and residual risk of flooding. Applicants should seek opportunities to use open space for multiple purposes such as amenity, wildlife habitat and flood storage uses. Opportunities can be taken to lower flood risk by improving flow routes, flood storage capacity and using SuDS.	Replacement of the existing Horsebridge Dyke culvert is also proposed. Design of the new structure would ensure that the existing flow conveyance properties of the culvert are maintained or improved.  Where the Scheme interacts with EA Main Rivers (the Main Dyke/Horsebridge Dyke and Wyre Estuary) the vertical alignment prevents flooding of the carriageway (including during tide locked conditions, when high water levels in the estuary prevent free discharge of the rivers). A new clear span crossing of the Main Dyke, replacing the existing twin culvert arrangement, would also mitigate existing flood risk. As detailed in the FRA (document reference TR010035/APP/5.2), this measure causes a reduction in the extent of the Main Dyke floodplain, bringing benefit in terms of a reduction in river flooding risk upstream of the A585 crossing.  The Scheme has identified an area of land on the right bank of the Main Dyke immediately downstream of the A585 which would be used to provide additional floodplain storage to offset that removed by the road embankment during construction.  Effects on groundwater levels and flows would be mitigated by implementing an appropriate drainage solution for the section of the Scheme that would be in cutting.
5.117 - 5.118 (Land instability)	Where necessary, land stability should be considered in respect of new	Ground investigations have been undertaken in 2018 to inform the Scheme design. This ensures that Stage 3 design has taken



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5	development, as set out in the National Planning Policy Framework and supporting planning guidance. Specifically, proposals should be appropriate for the location, including preventing unacceptable risks from land instability. If land stability could be an issue, applicants should seek appropriate technical and environmental expert advice to assess the likely consequences of proposed developments on sites where subsidence, landslides and ground compression is known or suspected. Applicants should liaise with the Coal Authority if necessary.  A preliminary assessment of ground instability should be carried out at the earliest possible stage before a detailed application for development consent is prepared. Applicants should ensure that any necessary investigations are undertaken to ascertain that their sites are and will remain stable or can be made so as part of the development. The site needs to be assessed in context of surrounding areas where subsidence, landslides and land compression could threaten the development during its	into account of land instability and ground conditions in determining the appropriate design parameters/techniques.



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5.126 - 5.129, 5.131-2 (Cultural heritage))		ES Chapter 7: Cultural Heritage (document reference TR010035/APP/6.7) provides an assessment of the potential impacts on archaeology and cultural heritage from the Scheme. This includes a description of the significance of heritage assets affected for designated and non-designated sites.  A Desk-based Assessment (DBA) Appendix 7.1 (document reference TR010035/APP/6.7.1) was undertaken to obtain information relating to heritage receptors.  In addition, a cultural heritage field reconnaissance walkover was undertaken across the Scheme. The results were reported in the DBA Appendix 7.1 (document reference TR010035/APP/6.7.1). Moreover, a programme of archaeological investigations has been undertaken.  This included geophysical survey Appendix 7.2 (document reference TR010035/APP/6.7.2) of the application site along the
	proposed includes or has the potential to include heritage assets with archaeological interest, the applicant should include an appropriate desk-based assessment and, where necessary, a field evaluation.	Draft DCO Limitsand a geoarchaeological assessment and deposit model of the route (Appendix 7.3 (document reference TR010035/APP/6.7.3)). The results of these surveys have enhanced the baseline.



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	In determining applications, the Secretary of State should seek to identify and assess the particular significance of any heritage asset that may be affected by the proposed development (including by development affecting the setting of a heritage asset). In considering the impact of a proposed development on any heritage assets, the Secretary of State should take into account the particular nature of the significance of the heritage asset and the value that they hold for this and future generations.  Substantial harm to or loss of a grade II Listed Building or a grade II Registered Park or Garden should be exceptional. Substantial harm to or loss of designated assets of the highest significance, including World Heritage Sites, Scheduled Monuments, grade I and II* Listed Buildings, Registered Battlefields, and grade I and II* Registered Parks and Gardens should be wholly exceptional.  Any harmful impact on the significance of a designated heritage asset should be weighed against the public benefit of development, recognising that the greater	<ul> <li>The assessment undertaken within the ES provides an opportunity for the SoS to assess the impact on heritage assets, all of which have been given a relative value, which has been based on factors including their heritage significance. Four heritage assets, two railways; the Grade II listed Ice House and Singleton Conservation Area are assigned a medium value, as are the unknown peat deposits. All other assets are considered to be of low value in terms of their historic/archaeological interest.</li> <li>ES Chapter 7 (Cultural Heritage) (document reference TR010035/APP/6.7) considers the potential effects of the Scheme on archaeology and cultural heritage during both the construction and operational phases. The assessment has been undertaken in accordance with DMRB, Volume 11 Section 3 Part 2 (Highways Agency, 2007), the Chartered Institute for Archaeologists (ClfA) 'Code of Conduct' (ClfA 2014a) and 'Standards and Guidance for Historic Environment Desk Based Assessments' (ClfA 2014b).</li> <li>There are no designated heritage assets located within the Draft DCO Limits of the Scheme. However, a Grade II listed Ice House at Singleton Conservation Area (775m to the south of the Draft DCO Limits) and Singleton Conservation Area (775m to the south of the Draft DCO Limits) are located in proximity to the Scheme.</li> <li>The conclusions of the ES are that the significance of the Grade II listed Ice House would be negatively impacted during both construction and operation. The rural setting of the Ice House is a contributor to the receptor's significance. Impacts are</li> </ul>



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	the harm to the significance of the heritage asset, the greater the justification that will be needed for any loss.	predicted to be a moderate significance of effect, which is considered to be significant. The public benefits of the Scheme are demonstrated throughout this Planning Statement, including the significant role the Scheme would play in underpinning the Government's social, economic and environmental policy aspirations, and the substantially improved conditions in which people travel that the Scheme would provide. The predicted damage of the setting to the Grade II listed Ice House should be weighed against these predicted benefits.
		• There is the potential for the Scheme to affect the setting of Singleton Conservation Area in terms of noise levels resulting from the Scheme. However, with mitigation in place in the form of acoustic fencing, and routing construction traffic away from the Conservation Area, would result in a neutral/slight significance of effect, which is not considered to be significant.
		• As stated in ES Chapter 7 (Cultural Heritage) (document reference TR010035/APP/6.7), work within the Draft DCO Limits to the north of Garstang Road would result in the direct loss of potential archaeological remains related to the known Romano-British settlements to the west of the Main Dyke at Moorfield Park. This effect has been assessed within the ES as negative and significant. An archaeological watching brief, trial trenching and boreholes would therefore be undertaken.
5.131 (the historic environment)	When considering the impact of a proposed development on the significance of a designated heritage asset, the Secretary of State should give great	The setting of the Grade II listed Ice House at Singleton Hall would be negatively impacted during both construction and operation. This would be due to construction activity and comprise noise and potentially visual intrusion from within the Draft Order Limits. The



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5	weight to the asset's conservation. The more important the asset, the greater the weight should be. Once lost, heritage assets cannot be replaced and their loss has a cultural, environmental, economic and social impact. Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. Given that heritage assets are irreplaceable, harm or loss affecting any designated heritage asset should require clear and convincing justification. Substantial harm to or loss of a grade II Listed Building or a grade II Registered Park or Garden should be exceptional. Substantial harm to or loss of designated assets of the highest significance, including World Heritage Sites, Scheduled Monuments, grade I and II* Listed Buildings, Registered Battlefields, and grade I and II* Registered Parks and Gardens should be wholly exceptional.	rural setting of the Ice House is a contributor to the receptor's significance. With mitigation, which would comprise screening, impacts are predicted to be a moderate significance of effect which is considered to be significant.  No other significant effects are anticipated to designated heritage assets.
5.133 (the historic environment)	Where the proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, the Secretary of State should refuse consent unless it can be	As set out above, ES Chapter 7 Cultural Heritage (document reference TR010035/APP/6.7) states that the setting of the Grade II listed Ice House at Singleton Hall would be impacted during both construction and operation. The rural setting of the Ice House is a contributor to the receptor's significance. With mitigation, which



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	<ul> <li>demonstrated that the substantial harm or loss of significance is necessary in order to deliver substantial public benefits that outweigh that loss or harm, or alternatively that all of the following apply: <ul> <li>the nature of the heritage asset prevents all reasonable uses of the site; and</li> <li>no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and</li> <li>conservation by grant-funding or some form of charitable or public ownership is demonstrably not possible; and</li> <li>the harm or loss is outweighed by the benefit of bringing the site back into use.</li> </ul> </li></ul>	would comprise screening, impacts are predicted to be a moderate significance of effect which is considered to be significant. The public benefits of the Scheme are demonstrated throughout this Planning Statement, including the significant role the Scheme would play in underpinning the Government's social, economic and environmental policy aspirations, and the substantially improved conditions in which people travel that the Scheme would provide. The predicted damage of the setting to the Grade II listed Ice House should be weighed against these predicted benefits.
5.144 - 5.146 5.149 and 5.158 (Landscape and visual	Where the development is subject to EIA the applicant should undertake an assessment of any likely significant landscape and visual impacts in the environmental impact assessment and	The assessment undertaken within ES Chapter 9: Landscape (document reference TR010035/APP/6.9), notes that the application site lies outside of any statutory or non-statutory designated landscapes.
impacts)	describe these in the environmental assessment. A number of guides have been produced to assist in addressing landscape issues. The landscape and visual assessment should include	The site does however lie within landscape National Character Area 32: Lancashire and Amounderness Plain and within the county-level Landscape Character Area (LCA) 15d: The Fylde, within Landscape Character Type (LCT) 15: Coastal Plain. The wider study area also includes LCA 18c Wyre Marshes, and



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5	reference to any landscape character assessment and associated studies, as a means of assessing landscape impacts relevant to the proposed project. The applicant's assessment should also take account of any relevant policies based on these assessments in local development documents in England.  The applicant's assessment should include any significant effects during construction of the project and/or the significant effects of the completed development and its operation on landscape components and landscape character (including historic landscape characterisation).  The assessment should include the visibility and conspicuousness of the project during construction and of the presence and operation of the project and potential impacts on views and visual amenity. This should include any noise and light pollution effects, including on local amenity, tranquillity and nature conservation.	Urban Landscape Type Suburban.  The national and county-level LCTs and LCAs cover relatively large areas and consequently a Scheme-specific character study has been undertaken as part of the assessment in order to add local detail to the character descriptions. A Scheme-specific character study has identified 6 local LCAs and 9 local Townscape Character Areas (TCAs). Of these 3 LCAs and 3 TCAs are considered to be potentially affected by the Scheme. Of these receptors and taking account of the nature of the Scheme, 2 TCAs are considered to have a low value and low sensitivity, 1 TCA and 2 LCAs a moderate value and moderate sensitivity, and 1 LCA a high value and high sensitivity.  The Scheme includes a range of measures designed to mitigate for potential effects on landscape character and visual amenity. This includes the retention of existing vegetation and features within the Draft Order Limits, along with the following mitigation measures identified on the Environmental Masterplan both during the construction and operational phases (document reference TR010035/APP/6.19):  A combination of amenity grass, grassland with bulbs and species rich grassland for integrating the Scheme, providing visual amenity and enhancing nature conservation and biodiversity.  Soft landscape measures including woodland planting,
	Landscape effects depend on the nature of the existing landscape likely to be	linear belts of trees, shrub and scrub planting, with intermittent tree planting to aid the landscape integration of



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	affected and nature of the effect likely to occur. Both of these factors need to be considered in judging the impact of a project on landscape. Projects need to be designed carefully, taking account of the potential impact on the landscape. Having regard to siting, operational and other relevant constraints, the aim should be to avoid or minimise harm to the landscape, providing reasonable mitigation where possible and appropriate.  The Secretary of State will have to judge whether the visual effects on sensitive receptors, such as local residents, and other receptors, such as visitors to the local area, outweigh the benefits of the development.	the Scheme within its context, provide visual screening and amenity and to promote nature conservation and enhance biodiversity.  • Individual tree planting as features to enhance the built environment, providing a positive contribution to the character areas, aiding visual amenity and providing visual screening.  • Earthwork cuttings (typically 2m higher than the highway carriageway) to provide visual screening and integrate the Scheme within the surrounding landscape.  The residual effects assessment undertaken within ES Chapter 9 (Landscape) (document reference TR010035/APP/6.9) assesses the construction phase effects of the Scheme on landscape and townscape character (and features) as being slight for the majority of character areas, with two improving to become beneficial effects. A large adverse effect was predicted for LCAs 4, 5 and 6 (Main Dyke Farmland, Singleton Enclosed Farmland and Singleton Hall and Parkland), during the construction phase of the Scheme. A moderate adverse, reducing to neutral effect on TCA3 (Skippool Bridge) was predicted, with a moderate adverse, reducing to a minor beneficial effect on TCA5 (A585 Mains Lane).  The worst-case operational phase effects of the Scheme on landscape and townscape character (and features) have been assessed within the ES as slight adverse or neutral for NCA32 (Lancashire and Amounderness Plain) and LCA 15d (The



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5		Fylde), with no discernible effect on LCA 18c (Wyre Marshes) and TCA3 (Skippool Bridge). A slight beneficial effect on TCA5 and TCA 7 (A585 Mains Lane and Little Singleton) has been predicted. A large adverse significant effect on LCAs 4, 5 and 6 (Main Dyke Farmland, Singleton Enclosed Farmland, and Singleton Hall and Parkland).  Over time, and by year 15, the proposed mitigation planting
		would become established and start to mature, and the overall planting scheme itself would form a notable integrating landscape feature within LCAs 4, 5 and 6. The planting would also further reduce the visibility of traffic travelling along the Scheme. By year 15 the overall magnitude of impact on LCAs 4, 5 and 6 would reduce to moderate adverse. With moderate sensitivity, this would result in a moderate adverse and significant effect.
		In terms of visual amenity, the assessment undertaken within ES Chapter 9 (Landscape) (document reference TR010035/APP/6.9), identifies that a Zone of Theoretical Visibility (ZTV) has been generated for an area extending to 5km, representing the theoretical area from which any part of the Scheme may be seen. This identifies theoretical visibility up to these distances; however, it is considered that beyond the 2km Study Area, the Scheme would not be readily perceptible within the wider landscape, which has formed the basis for the assessment of effects on visual amenity.



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5		The Zone of Visual Influence (ZVI) demonstrates that visibility extends in all directions from the Scheme, with the potential for extensive views within a 1km extent. Beyond these distances visibility reduces to the south and west as a result of filtering by intervening vegetation and built form. To the north and east the ZTV at 2km is clearer, primarily as a result of the flat natured topography and more open character of the Wyre Estuary. Beyond these distances the ZTV identifies that the visibility becomes more broken and scattered.  Twenty-one representative viewpoints have been assessed in detail for effects on visual amenity, and a further desk-based assessment has been undertaken for a wide range of other potential visual receptors present within the ZVI of the Scheme.  During the construction phase significant adverse effects on local visual amenity would be experienced at 13 of the 21 representative viewpoints. Of these, 2 representative viewpoints would experience very large adverse effects, with 10 viewpoints experiencing a large effect and 1 experiencing moderate adverse effects. 28 individual or groups of visual receptors, all within 300m of the Draft Order Limits, would experience significant adverse effects during the construction phase.  At year 1 of the Scheme's operation, 9 of the 21 representative viewpoints would continue to undergo significant adverse effects. Of these at worst, 4 viewpoints would undergo a large



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5		In addition, 17 of the individual or groups of visual receptors assessed as experiencing significant adverse construction phase effects would continue to experience significant effects at year 1 of operation.  By year 15 of the Scheme's operation, 9 of the 21 representative viewpoints would continue to undergo significant adverse effects. Of these, 1 would undergo a large adverse effect and 6 would undergo a moderate adverse effect.  By year 15, 7 individual or groups of visual receptors reported to experience significant adverse at opening year would continue to experience significant effects.  Approximately 104 residential properties located along the existing A585 Mains Lane which currently experience views of the existing highway and its associated traffic flow may experience views with reduced flows as a result of the Scheme. This would result in improvements to the view and a slight beneficial effect. However, in most cases views from properties are filtered as a result of in curtilage vegetation and the nature of the properties being set back from the highway. Furthermore, a number of these may also, as a result of the Scheme, experience filtered visibility of the operational Scheme and its traffic flows to the rear of their gardens. At worst, by year 15, these receptors would experience a slight adverse effect, which is not considered significant.



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		The public benefits of the Scheme are demonstrated throughout this Planning Statement, including the significant role the Scheme would play in underpinning the Government's social, economic and environmental policy aspirations, and the substantially improved conditions in which people travel that the Scheme would provide. The predicted landscape and visual impact effects should be weighed against these predicted benefits, alongside the benefits to be achieved in landscape terms in the de-trunked section of the Scheme.
5.147- 5.148 (national parks and AONBs)	Any statutory undertaker commissioning or undertaking works in relation to, or so as to affect land in a National Park or Areas of Outstanding Natural Beauty, would need to comply with the respective duties in section 11A of the National Parks and Access to Countryside Act 1949 and section 85 of the Countryside and Rights of Way Act 2000.  For significant road widening or the building of new roads in National Parks and the Broads applicants also need to fulfil the requirements set out in Defra's English national parks and the broads: UK government vision and circular 2010 or successor documents. These	The Scheme is not located within a National Park or AONB and no indirect effects would occur as a result.



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	requirements should also be complied with for significant road widening or the building of new roads in Areas of Outstanding Natural Beauty.  The applicant should identify existing and proposed land uses near the project, any effects of replacing an existing development or use of the site with the	ES Chapter 10: People and Communities (document reference TR010035/APP/6.10) identifies the existing and proposed land uses. No direct impacts on open space, sports or recreation buildings are identified. However, the Scheme requires permanent land-take, necessitating the demolition of two residential properties – in addition to a derelict agricultural structure. Based upon buildability and construction advice the optimum position would be to demolish these properties and this has been communicated with the affected landowners.  There is likely to be a neutral impact overall on the visitor economy – given that the Scheme relocates the main road further from some receptors, but closer to others, with critical issues likely to revolve around visibility of the Scheme from individual receptors (refer to ES Chapter 9 – Landscape (document reference TR010035/APP/6.9).  There would be no residual effects in relation to agricultural land and farm businesses.
	authority's assessment of need for such types of land and buildings. During any pre-application discussions with the applicant, the local planning	recreational facilities as a result of the Scheme.  The study area extends into the Wyre Council Green Belt. A detailed response on this issue is set out with respect to



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	authority should identify any concerns it has about the impacts of the application on land-use, having regard to the development plan and relevant applications, and including, where relevant, whether it agrees with any independent assessment that the land is surplus to requirements. These are also matters that local authorities may wish to include in their Local Impact Report which can be submitted after an application for development consent has been accepted.	paragraph 5.170 to 5.171 below.
5.168 (agricultural land)	Applicants should take into account the economic and other benefits of the best and most versatile agricultural land (defined as land in grades 1, 2 and 3a of the Agricultural Land Classification). Where significant development of agricultural land is demonstrated to be necessary, applicants should seek to use areas of poorer quality land in preference to that of a higher quality. Applicants should also identify any effects, and seek to minimise impacts, on soil quality, taking into account any mitigation measures proposed. Where possible, developments should be on previously developed (brownfield) sites	The agricultural assessment undertaken as part of ES (Chapter 10: People and Communities (document reference TR010035/APP/6.10)) concludes that the principal land use within the footprint of the Scheme is agricultural. Provisional Agricultural Land Classification (ALC) mapping shows land within the application site to be predominantly Grade 2, with Grade 3 land at the western and eastern ends. Land immediately to the south of Main Dyke, as far as Garstang Road is predominantly Grade 3b with a small area of Grade 3a land.  There is no direct mitigation for the loss of agricultural land. However, the Scheme design (ES Chapter 2 (Description of the Scheme) (document reference TR010035/APP/6.2)) aims to reduce the overall footprint of the Scheme, the junctions and structures, which have been made as compact as practicable, ensuring minimal land use change and materials use.



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	provided that it is not of high environmental value. For developments on previously developed land, applicants should ensure that they have considered the risk posed by land contamination and how it is proposed to address this.	In terms of mitigation, the implementation of best practice in relation to soil handling, restoration and re-use (in accordance with the Defra Construction Code (2008)) would be implemented. This would include the development of a Soil Management Plan (SMP) for the Scheme is included in the Outline CEMP (document reference TR010035/APP/7.2).
5.169 (minerals)	Applicants should safeguard any mineral resources on the proposed site as far as possible.	The Mineral Assessment Report (see Appendix 4) provides an assessment of the extent and quality of any mineral resources, the physical site setting and the proposed development, informing the likelihood of any resources being worked in the future. This will quantify the possible magnitude of mineral sterilisation and consider whether the prior extraction of minerals is feasible (practically and economically) and environmentally acceptable.
		The Mineral Assessment Report concludes that, in line with the requirements of Policy M2 of the Lancashire Minerals and Waste Local Plan, it is not considered feasible to undertake prior extraction in advance of the proposed development, and that there is an overarching need for the development that outweighs the need to avoid the part sterilisation of the relatively small mineral resource.
5.170 - 5.171 and 5.178 (green belts)	The general policies controlling development in the countryside apply with equal force in Green Belts but there is, in addition, a general presumption against inappropriate development within them. Such development should not be	In terms of designations, the planning policy review highlights that there is a designated Green Belt between the settlements of Carleton and Thornton. Policy SP4 of the Wyre Local Plan states that appropriate development in the Green Belt remains in place and provides the relevant policy guidance against which development within the designated Green Belt will be considered.



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5	approved except in very special circumstances. Applicants should therefore determine whether their proposal, or any part of it, is within an established Green Belt and, if so, whether their proposal may be considered inappropriate development within the meaning of Green Belt policy.  Metropolitan Open Land, and land designated as Local Green Space in a local or neighbourhood plan, are subject to the same policies of protection as Green Belt, and inappropriate development should not be approved except in very special circumstances.  Linear infrastructure linking an area near a Green Belt with other locations will often have to pass through Green Belt land. The identification of a policy need for linear infrastructure will take account of the fact that there will be an impact on the Green Belt and as far as possible, of the need to contribute to the achievement of the objectives for the use of land in Green Belts.  When located in the Green Belt national networks infrastructure projects may	The five purposes of Green Belt are set out in paragraph 134 of the NPPF. Each is dealt with below:  To check the unrestricted sprawl of large built-up areas The section of Scheme lying within Green Belt land is limited to improvement works to Skippool Junction and Amounderness Way, extending a short distance (401m) to the west of the existing Skippool roundabout. The Scheme involves alteration of the Junction from a priority roundabout to a 4-way traffic signal-controlled crossroads junction with designated turning lanes. The section of Amounderness Way proposes widening within the existing highway boundary to accommodate predicted increase in traffic flows. In view of the nature of the Scheme proposals and their containment within the existing highway boundary, it is considered that this would not lead to an extension of the urban area, nor further incursion into the Green Belt.  To prevent neighbouring towns from merging into one another. The Scheme involves remodelling of the existing Skippool Junction, as well as the necessary widening of part of Amounderness Way, within the highway boundary. The Scheme would not involve the development of land outside of the highway boundary within the Green Belt and would not therefore facilitate the merger of neighbouring towns. It would also not impact on or reduce the ability of the Green Belt to prevent neighbouring towns from merging.



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	comprise inappropriate development. Inappropriate development is by definition harmful to the Green Belt and there is a presumption against it except in very special circumstances. The Secretary of State will need to assess whether there are very special circumstances to justify inappropriate development. Very special circumstances will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations. In view of the presumption against inappropriate development, the Secretary of State will attach substantial weight to the harm to the Green Belt, when considering any application for such development.	To assist in safeguarding the countryside from encroachment The highway improvement works to the west of the Skippool Junction define the extent of the Scheme proposals within the Green Belt. The Scheme would not involve the development of land outside of the highway boundary within the Green Belt. Based on the purpose and extent of the proposals and their relationship to the existing highway infrastructure, this does not, in itself represent encroachment into the countryside.  To preserve the setting and special character of historic towns There are no historic towns within the area of Green Belt affected by the Scheme, thus there is no change to the setting and character of historic towns within the Green Belt.  To assist in urban regeneration by encouraging the recycling of derelict and other urban land The Scheme aims to improve journey times on the A585 between Windy Harbour and Skippool Junctions in delivering capacity enhancements to support employment and residential/commercial development and growth opportunities. This is seen as having a positive effect on bringing forward development land in the area.  The Scheme proposals within the Green Belt would be restricted within the highway boundary therefore avoiding the need for developing greenfield land beyond.  Based on the above assessment, potential harm to the Green Belt



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		is minimal and is clearly outweighed by the other important and relevant considerations in relation to the need for the Scheme. That there is no harm identified to the Green Belt is a significant factor in demonstrating the Scheme's compliance with relevant guidance for development within Green Belt land.
5.174 (open space, sports and recreational facilities)	The Secretary of State should not grant consent for development on existing open space, sports and recreational buildings and land, including playing fields, unless an assessment has been undertaken either by the local authority or independently, which has shown the open space or the buildings and land to be surplus to requirements, or the Secretary of State determines that the benefits of the project (including need) outweigh the potential loss of such facilities, taking into account any positive proposals made by the applicant to provide new, improved or compensatory land or facilities.	The People and Communities Chapter 10 of the ES (document reference TR010035/APP/6.10) identifies that there would be no loss of existing open space, sport or recreational facilities, as a result of the Scheme.
5.177 (coastal recreation sites)	In considering the impact on maintaining coastal recreation sites and features, the Secretary of State should expect	The Scheme is in proximity to the Wyre Estuary. ES Chapter 10: People and Communities (document reference TR010035/APP/6.10) sets out that the Scheme would improve
	applicants to have taken advantage of opportunities to maintain and enhance access to the coast. In doing so the	connectivity and minimise potential conflicts for NMUs by improving the safety of pedestrians, equestrians and cyclists around the existing A585; bringing benefits. Moreover, new and
	Secretary of State should consider the	improved crossing facilities would improve connectivity,



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5	implications for development of the creation of a continuous signed and managed route around the coast, as proposed in the Marine and Coastal Access Act 2009.	enhancing the permeability of the area, thus having a beneficial impact on community severance.
5.180 (green infrastructure)	Where green infrastructure is affected, applicants should aim to ensure the functionality and connectivity of the green infrastructure network is maintained and any necessary works are undertaken, where possible, to mitigate any adverse impact and, where appropriate, to improve that network and other areas of open space, including appropriate access to new coastal access routes, National Trails and other public rights of way.	ES Chapter 10: People and Communities (document reference TR010035/APP/6.10) sets out that there are slight impacts on PRoW during construction. Footpath 5-11-FP 2 is proposed to be severed but the limited usage of this footpath at present has been noted and would not present a loss of access to community facilities or services. Closure periods and the need for a diversion route are expected to be limited as construction of the Grange Footbridge would be carried out off-line.  During operation, the Scheme would minimise potential conflicts for NMUs by improving the safety of pedestrians, equestrian and cyclists around the existing A585, which would be de-trunked. At both the Skippool Bridge and Poulton Junctions, pedestrian and cycle access is to be provided. A new footbridge (Grange Footbridge) would include the creation of a new, accessible footpath with links across Garstang New Road and to the wider PRoW network. These improvements would greatly improve connectivity of the footpath with other routes; and would improve the standard of the path giving beneficial effects
5.182 (mineral safeguarding areas)	Where a proposed development has an impact on a Mineral Safeguarding Area (MSA), the Secretary of State should	Within the Draft DCO Limits, two Mineral Safeguarding Areas (MSAs) have been identified.
	ensure that the applicant has put forward	A Mineral Assessment Report, included as Appendix 4,



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5	appropriate mitigation measures to safeguard mineral resources.	identifies areas of land within the order limits that are located within the mineral safeguarding area. The first MSA (MSA1) is near the proposed Poulton Junction and the second (MSA2) is immediately east of Lodge Lane. Both apply to sand and gravel reserves.
		The report concludes that given the small areas / volume of both MSAs (MSA1 – 76,000m³ and MSA2 – 39,000m³) within the Draft DCO Limits, it is considered commercial unviable and environmentally unacceptable to extract the minerals from the area.
		'Overall it is not considered feasible to undertake prior extraction in advance of the proposed development, and that there is an overarching need for the development that outweighs the need to avoid the part sterilisation of the relatively small mineral resource.'
5.184 (PRoWs)	Public rights of way, National Trails, and other rights of access to land (e.g. open access land) are important recreational facilities for walkers, cyclists and equestrians. Applicants are expected to take appropriate mitigation measures to address adverse effects on coastal access, National Trails, other public rights of way and open access land and, where	As set out above, ES Chapter: 10 People and Communities (document reference TR010035/APP/6.10) sets out that there are slight impacts on PRoW during construction. Footpath 5-11-FP 2 is proposed to be severed but the limited usage of this footpath at present has been noted and would not present a loss of access to community facilities or services. Closure periods and the need for a diversion route are expected to be limited as construction of the Grange Footbridge would be carried out off-line.
	appropriate, to consider what opportunities there may be to improve	During operation, the Scheme would minimise potential conflicts for NMUs by improving the safety of pedestrians, equestrian



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5	access. In considering revisions to an existing right of way consideration needs to be given to the use, character, attractiveness and convenience of the right of way. The Secretary of State should consider whether the mitigation measures put forward by an applicant are acceptable and whether requirements in respect of these measures might be attached to any grant of development consent.	and cyclists around the existing A585, which would be detrunked. At both the Skippool Bridge and Poulton Junctions, pedestrian and cycle access is to be provided. A new footbridge (Grange Footbridge) would include the creation of a new, accessible footpath with links across Garstang New Road and to the wider PRoW network. These improvements would greatly improve connectivity of the footpath with other routes; and would improve the standard of the path giving beneficial effects.
5.189 -5.190 (Noise and vibration)	Where a development is subject to EIA and significant noise impacts are likely to arise from the proposed development, the applicant should include the following in the noise assessment, which should form part of the environment statement:	ES Chapter 11: Noise and Vibration (document reference TR010035/APP/6.11) provides an assessment of noise and vibration impacts of the Scheme during construction and operation. This identifies receptors, considers daytime and night-time impacts, and sets out mitigation, in accordance with the requirements.
	a description of the noise sources including likely usage in terms of number of movements, fleet mix and diurnal pattern. For any associated fixed structures, such as ventilation fans for tunnels, information about the noise sources including the identification of any distinctive tonal,	The Chapter concludes that road traffic noise nuisance associated with the Scheme would result in both increases and decreases in road traffic noise nuisance compared to the existing situation. This is regarded as being typical for a bypass scheme where traffic noise contribution to an area is transferred from the existing road network to a new scheme located in areas of previously low-level road traffic noise.
	impulsive or low frequency characteristics of the noise.	The findings of the noise assessment indicate that, in the short and long-term, adverse changes in road traffic noise level above



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5	<ul> <li>identification of noise sensitive premises and noise sensitive areas that may be affected.</li> <li>the characteristics of the existing noise environment.</li> <li>a prediction on how the noise environment will change with the proposed development:</li> <li>In the shorter term such as during the construction period;</li> <li>in the longer term during the operating life of the infrastructure;</li> <li>at particular times of the day, evening and night as appropriate.</li> <li>an assessment of the effect of predicted changes in the noise environment on any noise sensitive premises and noise sensitive areas.</li> <li>measures to be employed in mitigating the effects of noise. Applicants should consider using best available techniques to reduce noise impacts.</li> <li>the nature and extent of the noise assessment should be proportionate to the likely noise impact.</li> <li>The potential noise impact elsewhere that is directly associated with the development, such as changes in road</li> </ul>	a Significant Observed Adverse Effect Level (SOAEL), where significant adverse impacts on health and quality of life from operational road traffic noise would occur, would not be of a sufficient magnitude to be considered significant. This has been achieved through the implementation of mitigation into the Scheme design, including the use of a low noise/thin surfacing system surface to be laid on new or altered roads and 2m and 3m high acoustic/landscape bunds. The locations of these measures are presented in Figure 11.4 of the ES (document reference TR010035/APP/6.11).  Short-term operational beneficial impacts are predicted to occur at receptors located along Garstang New Road, Garstang Road west of Little Singleton and at receptors located on the north of Mains Lane, with 82 dwellings predicted to experience a moderate or greater beneficial change above a SOAEL. Changes of this magnitude would represent a significant beneficial impact on health and quality of life. Short term adverse effects were assessed as not having a significant adverse impact on health and quality of life, as no adverse changes greater than minor adverse above a SOAEL were predicted.  Long-term operational beneficial impacts are predicted to occur at receptors located along Garstang New Road, Garstang Road west of Little Singleton and at receptors located on the north of Mains Lane, with 55 dwellings predicted to experience a moderate or greater beneficial change above a SOAEL.



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5	and rail traffic movements elsewhere on the national networks, should be considered as appropriate.	Changes of this magnitude would represent a significant beneficial impact on health and quality of life. Long term adverse effects were assessed as not having a significant adverse impact on health and quality of life, as no adverse changes greater than negligible above a SOAEL were predicted.  As all predicted daytime construction noise levels remain below the relevant BS5228 significance threshold category and a SOAEL throughout the construction period, daytime construction noise levels are therefore not considered to have a significant effect during daytime construction activities. Only limited construction activities would occur during the night time period for road crossings and final surfacing tie ins and are not considered to be significant.  A CEMP and Noise and Vibration Management Plan would be prepared and agreed with Fylde Borough Council and Wyre Council prior to commencing construction. An Outline CEMP (document reference TR010035/APP/7.2) has been prepared together with a Register of Environmental Actions and Commitments (REAC) (document reference TR010035/APP/7.3). This includes a set of best practice working methods for the control of construction noise and vibration. Noise monitoring during construction would be undertaken at key sensitive receptors to ensure that mitigation is working effectively.  With regard to operational airborne vibration nuisance
		With regard to operational airborne vibration nuisance



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5.191 (noise and vibration)	Operational noise, with respect to human receptors, should be assessed using the principles of the relevant British Standards and other guidance. The prediction of road traffic noise should be based on the method described in Calculation of Road Traffic Noise For the prediction, assessment and management of construction noise, reference should be made to any relevant British Standards and other guidance which also give examples of mitigation strategies.	associated with the Scheme the assessment has shown that there would be fewer dwellings experiencing an increase in airborne vibration nuisance and more dwellings experiencing a decrease in airborne vibration nuisance compared to the existing situation. Results of this nature are considered typical for a bypass scheme, where traffic noise contribution to an area is transferred from the existing road network to a new Scheme located in areas of previously low-level traffic noise.  The assessment of operational noise impacts has been undertaken in accordance with the relevant British Standards and other guidance and the prediction is based on the method set out in the Calculation of Road Traffic Noise.
5.192 (noise and vibration)	The applicant should consult Natural England with regard to assessment of noise on designated nature conservation sites, protected landscapes, protected species or other wildlife. The results of any noise surveys and predictions may inform the ecological assessment. The	Consultation has taken place with Natural England. ES Chapter 8: Biodiversity (document reference TR010035/APP/6.8) considers noise impacts on species. Impacts and mitigation have been considered, for example landscape planting and bunding would be installed along the completed road Scheme (as shown on the Environmental Masterplan (document reference TR010035/APP/6.19)) to help minimise potential noise and screen



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	seasonality of potentially affected species in nearby sites may also need to be taken into account.	visual disturbance to birds utilising adjacent habitats.
5.195 (health and quality of life)	The Secretary of State should not grant development consent unless satisfied that the proposals will meet, the following aims, within the context of Government policy on sustainable development:  • avoid significant adverse impacts on health and quality of life from noise as a result of the new development;  • mitigate and minimise other adverse impacts on health and quality of life from noise from the new development; and  • contribute to improvements to health and quality of life through the effective management and control of noise, where possible.	The ES Chapters present the different environmental effects of the project that could affect human health, notably Chapter 6: Air Quality (document reference TR010035/APP/6.6), Chapter 10: People and Communities (document reference TR010035/APP/6.10), Chapter 11: Noise and Vibration (document reference TR010035/APP/6.11) and Chapter 13: Geology and Contaminated Land (document reference TR010035/APP/6.13). The ES includes consideration of cumulative effects and identifies appropriate mitigation measures.  With regards to air quality, ES Chapter 6 Air Quality (document reference TR010035/APP/6.6) states that both NO2 and PM10 are predicted to be below the respective Air Quality Strategy Objectives for both the Base Year and Opening Year of the Scheme and no significant effects on human health are predicted as a result of the Scheme.  ES Chapter 11 Noise and Vibration (document reference TR010035/APP/6.11) states that the construction noise levels, would have no significant adverse impacts on health and quality of life as a result of the Scheme. In terms of operational road traffic noise impacts, it is predicted that beneficial impacts would occur at four Noise Impact Areas (NIAs) in the short-term and two NIAs in the long-term and therefore a significant beneficial



NN NPS Paragraph Number	Requirement of the National Networks National Policy Statement (NN NPS)	Compliance with the NN NPS
5		effect is expected to occur at these NIAs.  ES Chapter 10 People and Communities (document reference TR010035/APP/6.10) considers that the improved connectivity as a result of the Scheme has the potential to improve human health through increasing opportunities for walking and cycling. This is particularly important as physical activity levels in both Fylde and Wyre Council areas are below the national average.  It is also maintained that the design of the new road to a higher highway standard would help reduce uncertainty, fear and driver stress, The Scheme is therefore predicted to have a beneficial effect on human health through reduced stress levels typical of delayed or congested road use. Travel time savings of between
		2 and 4.5 minutes per journey are forecast to be saved by road users due to the scheme, which is also expected to result in a decrease of around 30 accidents and 120 casualties over the 60-year appraisal period.
5.199 and 5.200 (noise mitigation)	For most national network projects, the relevant Noise Insulation Regulations will apply. These place a duty on and provide powers to the relevant authority to offer noise mitigation through improved sound insulation to dwellings, with associated ventilation to deal with both construction and operational noise. An indication of the	An assessment of both construction and operational road traffic noise has been undertaken within ES Chapter 11 Noise and Vibration (document reference TR010035/APP/6.11) in accordance with DMRB, which has considered road traffic noise impacts in both the short-term (year of opening) and long-term (15 years after opening).
	likely eligibility for such compensation should be included in the assessment. In	The findings of the noise assessment indicate that, in the short and long-term, adverse changes in road traffic noise level above a



NN NPS Paragraph Number	Requirement of the National Networks National Policy Statement (NN NPS)	Compliance with the NN NPS
5	extreme cases, the applicant may consider it appropriate to provide noise mitigation through the compulsory acquisition of affected properties in order to gain consent for what might otherwise be unacceptable development. Where mitigation is proposed to be dealt with through compulsory acquisition, such properties would have to be included within the development consent order land in relation to which compulsory acquisition powers are being sought.  Applicants should consider opportunities to address the noise issues associated with the Important Areas as identified through the noise action planning process.	Significant Observed Adverse Effect Level (SOAEL), where significant adverse impacts on health and quality of life from operational road traffic noise would occur, would not be of a sufficient magnitude to be considered significant. This has been achieved through the implementation of mitigation into the Scheme design, including the use of a low noise/thin surfacing system surface to be laid on new or altered roads and 2m and 3m high acoustic/landscape bunds. The locations of these measures are presented in Figure 11.4 of the ES (document reference TR010035/APP/6.11).  Short-term operational beneficial impacts are predicted to occur at receptors located along Garstang New Road, Garstang Road west of Little Singleton and at receptors located on the north of Mains Lane, with 82 dwellings predicted to experience a moderate or greater beneficial change above a SOAEL. Changes of this magnitude would represent a significant beneficial impact on health and quality of life. Short term adverse effects were assessed as not having a significant adverse impact on health and quality of life, as no adverse changes greater than minor adverse above a SOAEL were predicted.  Long-term operational beneficial impacts are predicted to occur at receptors located along Garstang New Road, Garstang Road west of Little Singleton and at receptors located on the north of Mains Lane, with 55 dwellings predicted to experience a moderate or greater beneficial change above a SOAEL. Changes of this magnitude would represent a significant beneficial impact on



NN NPS Paragraph Number	Requirement of the National Networks National Policy Statement (NN NPS)	Compliance with the NN NPS
5		health and quality of life. Long term adverse effects were assessed as not having a significant adverse impact on health and quality of life, as no adverse changes greater than negligible above a SOAEL were predicted.  A CEMP and Noise and Vibration Management Plan would be prepared and agreed with Fylde Borough Council and Wyre Council prior to commencing construction. An Outline CEMP (document reference TR010035/APP/7.2) has been prepared together with a REAC (document reference TR010035/APP/7.3). This includes a set of best practice working methods for the control of construction noise and vibration. Noise monitoring during construction would be undertaken at key sensitive receptors to ensure that mitigation is working effectively.  Outside of the detailed calculation area changes in road traffic noise level on roads within the Affected Road Network (ARN) would be negligible in both the short-term and long-term. This provides a positive indication that noise impacts as a result of the Scheme would be localised to the immediate vicinity of the Scheme.
5.203 - 5.205 (Impacts on transport networks)	Applicants should have regard to the policies set out in local plans, for example policies on demand management being undertaken at the local level.  Applicants should consult the relevant highway authority, and local planning authority, as appropriate, on the	The Planning Statement (document reference



NN NPS Paragraph Number	Requirement of the National Networks National Policy Statement (NN NPS)	Compliance with the NN NPS
5		
	assessment of transport impacts. Applicants should consider reasonable opportunities to support other transport modes in developing infrastructure. As part of this, consistent with paragraph 3.19-3.22 above, the applicant should provide evidence that as part of the project they have used reasonable endeavours to address any existing severance issues that act as a barrier to non-motorised users.	proposed development on the authority's area'.  The Scheme would improve connectivity and minimise potential conflicts for NMUs by improving the safety of pedestrians, equestrians and cyclists around the existing A585. New and improved crossing facilities would improve connectivity, enhancing the permeability of the area, thus having a beneficial impact on community severance.
5.220 (Water quality and resources)	Where applicable, an application for a development consent order has to contain a plan with accompanying information identifying water bodies in a River Basin Management Plan.	ES Chapter 12: Road Drainage and the Water Environment (document reference TR010035/APP/6.12) sets out the relevant baseline conditions of the study area, including surface and groundwater features, as well as groundwater quality and resources.
5.221 and 5.222 (Water quality and resources)	Applicants should make early contact with the relevant regulators, including the Environment Agency, for abstraction licensing and with water supply companies likely to supply the water. Where a development is subject to EIA and the development is likely to have significant adverse effects on the water environment, the applicant should ascertain the existing status of, and carry out an assessment of the impacts of the	ES Chapter 12: Road Drainage the Water Environment (document reference TR010035/APP/6.12) identifies the data and information that has been received from the EA inform the baseline analysis and assessment of impacts of the Scheme.  In consultation with the EA it has been confirmed there is a single abstraction licence located approximately 275m north of the eastern end of the Scheme. The licence permits abstraction of groundwater from the superficial aquifer to serve a supply for domestic, commercial, industrial and public services uses. The operation of this licence has recently been renewed by the EA to



NN NPS Paragraph Number	Requirement of the National Networks National Policy Statement (NN NPS)	Compliance with the NN NPS
5	proposed project on water quality, water resources and physical characteristics as part of the environmental statement.  For those projects that are improvements to the existing infrastructure, such as road widening, opportunities should be taken, where feasible, to improve upon the quality of existing discharges where these are identified and shown to contribute towards Water Framework Directive commitments.	March 2030. Requests for information on unlicensed (private) supplies within a 3km search radius were made to Wyre and Fylde Borough Councils and Lancashire County Council. The Councils each confirmed that they have no records of any private water supplies within the search area.  The EA hold records of 6 consented discharges within the study area, illustrated in Figure 12.1 of the ES. These comprise discharges from the public sewer network, trade effluent and a recreational facility. Discharges are received by the Wyre Estuary, the Skippool Creek, the Main Dyke and a tributary of this watercourse.  During construction the Scheme would implement measures to prevent pollution / water quality degradation and to manage work site drainage and runoff. Baseline information for surface and groundwater quality has been drawn from the WFD 2015 second cycle and watercourses within the study area achieve 'Moderate' or 'Good' overall status. There is limited possibility of sedimentation and pollution during the construction phase, following the application of mitigation measures (see the Outline CEMP (document reference TR010035/APP/7.2) resulting in an overall effect of Neutral.  No significant impacts on the abstraction located in the study area are predicted during construction or operation of the Scheme.
5.223 (Water	Any environmental statement should	The ES includes further information in relation the potential



NN NPS Paragraph Number	Requirement of the National Networks National Policy Statement (NN NPS)	Compliance with the NN NPS
quality and resources)	<ul> <li>the existing quality of waters affected by the proposed project;</li> <li>existing water resources affected by the proposed project and the impacts of the proposed project on water resources;</li> <li>existing physical characteristics of the water environment (including quantity and dynamics of flow) affected by the proposed project, and any impact of physical modifications to these</li> <li>characteristics;</li> <li>any impacts of the proposed project on water bodies or protected areas under the Water Framework Directive and source protection zones (SPZs) around potable groundwater abstractions; and</li> <li>any cumulative effects.</li> </ul>	impact of the proposed project on water quality, resources and physical characteristics.
5.226, 5.227 and 5.228	The Secretary of State should be satisfied that a proposal has had regard to the River	In relation to water quality, ES Chapter 12: Road Drainage and the Water Environment (document reference TR010035/APP/6.12)
(Water quality and resources)	Basin Management Plans and the requirements of the Water Framework Directive (including Article 4.7) and its daughter directives,	identifies that the Scheme is located to the south of the estuary of the River Wyre. Other surface water features in the study area include the Main Dyke and the Horsebridge Dyke. These surface water features are presented in Figure 12.1 of the ES. The River
	including those on priority substances and	Wyre and Main Dyke are both monitored under the WFD, as



NN NPS Paragraph Number	Requirement of the National Networks National Policy Statement (NN NPS)	Compliance with the NN NPS
5	groundwater. The specific objectives for particular river basins are set out in River Basin Management Plans. In terms of Water Framework Directive compliance, the overall aim of projects should be no deterioration of ecological status in watercourses, ensuring that Article 4.7 of the Water Framework Directive Regulations does not need to be applied.  The Examining Authority and the	illustrated in Figure 12.3 at Appendix A of the ES. There is one groundwater body underlying the study area, the West Lancashire Quaternary Sand and Gravel Aquifer.  The Outline CEMP (document reference TR010035/APP/7.2) would ensure the quality of the water environment does not deteriorate during construction of the Scheme. The Outline CEMP would include best practice for the management of environmental impacts during construction. It would be expected to include a Pollution Control Plan to safeguard the quality of surface water and groundwater, drawing on standard best practice and relevant
	Secretary of State should consider proposals put forward by the applicant to mitigate adverse effects on the water environment and whether appropriate requirements should be attached to any development consent and/or planning obligations. If the Environment Agency continues to have concerns and objects to the grant of development consent on the grounds of impacts on water quality/resources, the Secretary of State can grant consent, but will need to be satisfied before deciding whether or not to do so that all reasonable steps have been taken by the applicant and the Environment Agency to try to resolve the concerns, and that the Environment	'To promote the sustainable use of water resources, measures would be implemented during construction to promote general water use efficiency and particularly reduce the use of potable water. Examples that could be adopted include rainwater harvesting, to provide water supply for welfare facilities and for use in dust suppression; the collection of greywater for use in wheel washing facilities; and leakage prevention. These measures would be set out in a Construction Water Management Plan as detailed in the Outline CEMP (document reference TR010035/APP/7.2) and REAC (document reference TR010035/APP/7.3).'  During operation, the pollution potential of the Scheme has been tested, during both routine runoff and accidental spillage scenarios, using HAWRAT. The findings, detailed in the drainage



NN NPS Paragraph Number	Requirement of the National Networks National Policy Statement (NN NPS)	Compliance with the NN NPS
5	Agency is satisfied with the outcome.	strategy, which is appended to the FRA (document reference TR010035/APP/5.2), have informed the drainage design.
	The Secretary of State should consider whether the mitigation measures put forward by the applicant which are needed for operation and construction (and which are over and above any which may form part of the project application) are acceptable. A construction management plan may help codify mitigation.	'A drainage design has been developed for the operational Scheme that rapidly removes water and prevents flooding of the carriageway. The Scheme would discharge to the receiving water environment via existing and new outfalls. Attenuation would be provided to achieve agreed discharge rates, inclusive of an allowance for climate change resilience. The drainage design also includes appropriate measures to manage the quality of highway runoff. Measures include vortex oils and grit separators, vegetation treatment systems (constructed wetlands) and shut off valves to contain pollutants in the event of an accidental spillage. These treatment measures have been tested using the HAWRAT. All outfalls achieve a Pass with the proposed mitigation measures in place.'
		Residual effects are assessed in the ES as being not significant during both the construction and operational phases.



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## **Appendix 2 - Local Planning Policy Accordance Tables**



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Table 4 The Fylde Borough Local Plan (As Altered) (Oct 2005)

	Borough Local Plan (As Altered) (Oct 2005)	
	gh Local Plan (As Altered) (Oct 2005)  Policy Guidance	Sahama Camplianas with local policy
Chapter 2:		Scheme Compliance with local policy  The Scheme falls entirely within a 'Countryside Area' Whilet the
Chapter 2: General Development Policies – Policy SP2 Development in Countryside Areas	In countryside areas, development will not be permitted except where proposals properly fall within one of the following categories:  1. That essentially required for the purposes of agriculture, horticulture of forestry; or other uses appropriate to a rural area, including those provided for in other policies of the plan which would help to diversify the rural economy, and which accord with policy SP9;  2. The rehabilitation and re-use of permanent and substantial buildings which are structurally sound, in line with policies SP5 and SP6;	The Scheme falls entirely within a 'Countryside Area'. Whilst the development of a highway scheme is not listed as an exception to the permitted development within countryside, it is accepted that the improvements to the A585 could only take place within the area identified for the Scheme. Fylde Borough Council has stated its support for the Scheme (see Consultation Report (document reference TR010035/APP/5.1)).
	3. The re-use, refurbishment or redevelopment or large developed sites in line with policy SP7;	
	4. Minor extensions to existing residential and other buildings.	
	5. Development essentially needed for the continuation of an existing enterprise, facility or operation, of a type and scale	



The Fylde Borough Local Plan (As Altered) (Oct 2005)		
Policy	Policy Guidance	Scheme Compliance with local policy
	which would not harm the character of the surrounding countryside.	
Chapter 5: Transportation – Policy TR1	The following measures will be undertaken to improve facilities for pedestrians and to encourage walking as an alternative means of travel:  4. The safeguarding of pedestrian safety and well-being through traffic management measures, including traffic calming schemes and the installation of pedestrian phases to traffic signals where appropriate	The text below demonstrates how the Scheme delivers many of the planning policy considerations required under this policy. These benefits include:  • tackling current and forecast levels of traffic congestion  • reducing conflicts between users  • improving connectivity and community cohesion  Travel time savings of between 2 and 4.5 minutes per journey are forecast to be saved by road users due to the Scheme, which is also expected to result in a decrease of around 30
Chapter 5: Transportation – Policy TR3	The Council, together with the County Council, will increase provision and facilities for cycling within the borough. In particular the Council will: 3. Incorporate facilities for cyclists in highway designs, traffic management and traffic signal phasing where such action is possible	The Scheme would minimise potential conflicts for Non-Motorised Users (NMUs) by improving the safety of pedestrians, equestrian and cyclists around the existing A585, which would be de-trunked. At both the Skippool Bridge and Poulton Junctions, pedestrian and cycle access would be provided. A new footbridge (Grange Footbridge) would include the creation of a new, accessible footpath with links across Garstang New Road and to the wider Public Rights of Way (PRoW) network.
		Environmental Statement (ES) Chapter 10: People and Communities (document reference TR010035/APP/6.10) concludes that, during operation, 'the Scheme would improve connectivity and minimise potential conflicts for NMUs by improving the safety of pedestrians, equestrians and cyclists around the existing A585; the impact of the Scheme in terms of journey length, travel patterns and amenity is therefore



The Fylde Borough Local Plan (As Altered) (Oct 2005)		
Policy	Policy Guidance	Scheme Compliance with local policy
		considered to be beneficial'.
Chapter 7: Environmental Protection and Conservation – Policy EP3 Conservation areas	New development within or affecting the setting of a designated conservation area will only be permitted where the character or appearance of the area, and its setting, are appropriately conserved or enhanced.  Proposed development should be appropriately designed and should respect the quality of the total environment including: the physical setting of the area, settlement form, townscape, the character of buildings and other structures, the character of open spaces, and any views into or out of the area.	As set out in ES Chapter 7: Cultural Heritage (document reference TR010035/APP/6.7) there are no designated receptors located within the Draft DCO Limits of the Scheme. However, the Singleton Conservation Area is located 775m to the south of the Draft Order Limits.  The ES states that: 'Construction activity such as an increase in traffic within the surrounding area and noise and visual intrusion from construction has the potential to affect the setting of Singleton Conservation Area (CA2). With mitigation, which would comprise re-routing construction traffic there would be a negligible magnitude of impact to this medium value receptor which results in a slight significance of effect.'
	The introduction of new uses or buildings will not be permitted where these would be prejudicial to the character or appearance of the area	cause visual and noise intrusion on the setting of Singleton Conservation Area, with mitigation in place in the form of acoustic fencing, this will result in a neutral/slight significance of effect, which is not considered to be significant.
Chapter 7: Environmental Protection and Conservation – Policy EP10	The distinct character and important habitats of Fylde will be protected, both in terms of its coastal and inland elements. In particular, priority will be given to the protection of important landscape and habitat features, including sand dunes, mud flats, marine marshes, beaches, broadleaved woodland, scrub meadows, hedgerows, wetlands, ponds and	The assessment undertaken within ES Chapter 9: Landscape (document reference TR010035/APP/6.9), notes that the application site lies outside any statutory or non-statutory designated landscapes.  However, the site does lie within landscape National Character Area 32: Lancashire and Amounderness Plain and within the county-level Landscape Character Area (LCA) 15d: The Fylde, within Landscape Character Type (LCT) 15: Coastal Plain. The



Policy Watercourses.  Appropriate management of these features will be encouraged generally and particularly by the imposition of planning conditions, by the use of planning agreements and by entering into management agreements with landowners and developers where appropriate.  Chapter 7: Environmental Protection and Conservation – Policy EP11  New development in rural areas should the characteristic landscape features defined in policy EP10. Development must be of a high standard of design. Matters of scale, features and building materials should reflect the local vernacular style.  Scheme Compliance with local policy wider study area also includes LCA 18c Wyre Marshes, and Urban Landscape Type Suburban. A scheme-specific character study has identified 6 local LCAs and 9 local Townscape Character Areas (TCAs).  The Scheme within Fylde falls within 3 LCAs and 3 TCAs, and as a result their character and/or features would be directly impacted upon by the Scheme. The remaining local LCAs and TCAs are visually separated from the Scheme by intervening existing built form or tree cover. These LCAs and TCAs are therefore considered unlikely to undergo even indirect effects.  Landscape and visual mitigation measures form an integral part of the Scheme, including:  • A combination of amenity grass, grassland with bulbs and species rich grassland for integrating the Scheme, providing visual amenity and enhancing nature conservation and biodiversity.  • Soft landscape measures including woodland planting,	The Fylde Boroug	gh Local Plan (As Altered) (Oct 2005)	
Appropriate management of these features will be encouraged generally and particularly by the imposition of planning conditions, by the use of planning agreements and by entering into management agreements with landowners and developers where appropriate.  Chapter 7: Environmental Protection and Conservation – Policy EP11  New development in rural areas should be sited in keeping with the distinct landscape character types identified in the landscape strategy for Lancashire and the characteristic landscape features defined in policy EP10. Development must be of a high standard of design. Matters of scale, features and building materials should reflect the local vernacular style.  Urban Landscape Type Suburban. A scheme-specific character study has identified 6 local LCAs and 9 local Townscape Character Areas (TCAs).  The Scheme within Fylde falls within 3 LCAs and 3 TCAs, and as a result their character and/or features would be directly impacted upon by the Scheme. The remaining local LCAs and TCAs are visually separated from the Scheme by intervening existing built form or tree cover. These LCAs and TCAs are therefore considered unlikely to undergo even indirect effects.  Landscape and visual mitigation measures form an integral part of the Scheme, including:  • A combination of amenity grass, grassland with bulbs and species rich grassland for integrating the Scheme, providing visual amenity and enhancing nature conservation and biodiversity.  • Soft landscape Type Suburban. A scheme-specific character study has identified 6 local LCAs and 9 local LCAs and 3 TCAs, and as a result their character and/or features would be directly impacted upon by the Scheme. The remaining local LCAs and TCAs are visually separated from the Scheme by intervening existing built form or tree cover. These LCAs and TCAs are visually separated from the Scheme by intervening existing built form or tree cover. These LCAs and TCAs are therefore considered unlikely to undergo even indirect effects.  Landscape and visual mitigation measu		Policy Guidance	Scheme Compliance with local policy
intermittent tree planting to aid the landscape integration of the Scheme within its context, provide visual screening and amenity and to promote nature conservation and enhance biodiversity.  Individual tree planting as features to enhance the built environment, providing a positive contribution to the	Chapter 7: Environmental Protection and Conservation –	watercourses.  Appropriate management of these features will be encouraged generally and particularly by the imposition of planning conditions, by the use of planning agreements and by entering into management agreements with landowners and developers where appropriate.  New development in rural areas should be sited in keeping with the distinct landscape character types identified in the landscape strategy for Lancashire and the characteristic landscape features defined in policy EP10. Development must be of a high standard of design.  Matters of scale, features and building materials should reflect the local	wider study area also includes LCA 18c Wyre Marshes, and Urban Landscape Type Suburban. A scheme-specific character study has identified 6 local LCAs and 9 local Townscape Character Areas (TCAs).  The Scheme within Fylde falls within 3 LCAs and 3 TCAs, and as a result their character and/or features would be directly impacted upon by the Scheme. The remaining local LCAs and TCAs are visually separated from the Scheme by intervening existing built form or tree cover. These LCAs and TCAs are therefore considered unlikely to undergo even indirect effects.  Landscape and visual mitigation measures form an integral part of the Scheme, including:  A combination of amenity grass, grassland with bulbs and species rich grassland for integrating the Scheme, providing visual amenity and enhancing nature conservation and biodiversity.  Soft landscape measures including woodland planting, linear belts of trees, shrub and scrub planting, with intermittent tree planting to aid the landscape integration of the Scheme within its context, provide visual screening and amenity and to promote nature conservation and enhance biodiversity.  Individual tree planting as features to enhance the built



The Fylde Boroug	gh Local Plan (As Altered) (Oct 2005)	
Policy	Policy Guidance	Scheme Compliance with local policy
		<ul> <li>Earthwork cuttings (typically 2m higher than the highway carriageway) to provide visual screening and integrate the Scheme within the surrounding landscape.</li> </ul>
Chapter 7:	Trees, woodlands and hedgerows which	Following mitigation, the effects on LCAs 4, 5 and 6 and TCAs 3 and 5 are considered to be significant during construction. Over time, and by year 15, the proposed mitigation planting would become established and start to mature, and the overall planting scheme itself would form a notable integrating landscape feature within LCAs 4, 5 and 6. The planting would also further reduce the visibility of traffic travelling along the Scheme. By year 15 the overall magnitude of impact on LCAs 4, 5 and 6 would reduce to moderate adverse. With moderate sensitivity, this would result in a moderate adverse and significant effect.  ES Chapter 9: Landscape (document reference
Environmental Protection and Conservation – Policy EP12	individually or in groups make a significant contribution to townscape or landscape character, quality and visual amenity, will be protected.	TR010035/APP/6.9) states that there are a number of trees and lengths of hedgerow within the Draft Order Limits, including some trees which are under Tree Preservation Orders (TPOs). These are detailed in the ES and are described, as follows:
	Tree preservation orders will be issued in relation to trees and woodlands of townscape or landscape significance.	Fylde TPO 1974 comprises a collection of grouped TPOs, 6 No. present within the Draft DCO Limits adjacent to Singleton Hall and the B5260 Lodge Lane.
		Group G1 (west of Lodge Lane) is affected by the temporary diversion of Lodge Lane for the bridge construction and has been included as part of the (currently temporary land) for the northern borrow pit. The southern and eastern edge of this



The Fylde Borough Local Plan (As Altered) (Oct 2005)	
Policy Policy Guidance	Scheme Compliance with local policy
	group would be affected. The remainder of the group would be retained.  • Area A1 (east of Lodge Lane) is affected by the construction of the Lodge Lane north retaining wall. It may be possible to retain the trees along the northern edge of the area, but they may be affected long-term by changes in ground water level resulting from the Scheme.  • Group G2 would be almost completely removed as part of the Scheme.  • Group G4 the northern half of this copse would be removed as part of the Scheme.  • Area A2 would not be affected by the Scheme.  ES Chapter 9: Landscape (document reference TR010035/APP/6.9) states that: 'For Singleton Hall and Parkland (LCA6), the construction phase of the Scheme would again introduce a substantial uncharacteristic feature into a locally valued designed (but not designated) landscape. This would result in the permanent loss of parts of the valued woodland copses, which are in protected under Fylde Singleton TPO1 – 1974. These include features G1, A1, G2, and G4. G1 and A1 would have their southern edges removed, G4 would have the northern edge removed, and G2 would have all be its northern edge removed. These are notable landscape features which together with the loss of hedgerows and changes in the local topography and bulk earthwork activities, (as a result of the Scheme being in cutting), would result in substantial damage to the landscape character.'



The Fylde Borough Local Plan (As Altered) (Oct 2005)		
Policy	Policy Guidance	Scheme Compliance with local policy
		Landscape and visual mitigation measures form an integral part of the Scheme, including the planting of native woodland, shrub planting, and linear planting, roadside specimen trees, wildflower meadows and amenity grassland and verges. The Scheme also includes some use of cuttings, false cuttings and embankments. However, the loss of trees protected by TPOs cannot be avoided, due to their location within the footprint of the Scheme.
		Over time, and by year 15, the proposed mitigation planting would become established and start to mature, and the overall planting scheme itself would form a notable integrating landscape feature within LCA 6. The planting would also further reduce the visibility of traffic travelling along the Scheme.
Chapter 7: Environmental Protection and Conservation – Policy EP14	In relation to planning applications for the construction of new housing or other developments, development schemes must make suitable provision for landscape planting. Where appropriate, planning permission will be granted with conditions to ensure the proper implementation and maintenance of such schemes.	<ul> <li>ES Chapter 9: Landscape (document reference TR010035/APP/6.9) provides details relating to landscape and visual mitigation measures, which form an integral part of the Scheme, including:         <ul> <li>A combination of amenity grass, grassland with bulbs and species rich grassland for integrating the Scheme, providing visual amenity and enhancing nature conservation and biodiversity.</li> <li>Soft landscape measures including woodland planting, linear belts of trees, shrub and scrub planting, with intermittent tree planting to aid the landscape integration of the Scheme within its context, provide visual screening and amenity and to promote nature conservation and enhance biodiversity.</li> </ul> </li> </ul>



The Fylde Boroug	gh Local Plan (As Altered) (Oct 2005)	
Policy	Policy Guidance	Scheme Compliance with local policy
		<ul> <li>Individual tree planting as features to enhance the built environment, providing a positive contribution to the character areas, aiding visual amenity and providing visual screening.</li> <li>Earthwork cuttings (typically 2m higher than the highway carriageway) to provide visual screening and integrate the Scheme within the surrounding landscape.</li> </ul>
		In relation to monitoring the landscape works, it is stated that 'The proposed mitigation measures set out in this Chapter should be reviewed at regular intervals during their establishment period (15 years), and especially within the first five years to ensure these are providing for effective mitigation'
Chapter 7: Environmental Protection and Conservation – Policy EP15	Development proposals which may affect a European site, or a proposed European site will be subject to the most vigorous examination.	The Wyre Estuary Site of Special Scientific Interest (SSSI) and Morecambe Bay and Duddon Estuary Special Protection Area (SPA)/Morecambe Bay Ramsar site is located 10m to the north of the Scheme.
	development proposals not directly connected with or necessary to the management of the site and which would affect the integrity of the site as a whole, will not be permitted unless the developer can demonstrate that:	ES Chapter 8 (Biodiversity) states that 'no construction works would take place within the Special Protected Area (SPA)/Ramsar site/SSSI itself, or within the intertidal habitat adjacent to the River Wyre. Therefore, the Scheme would not give rise to any direct impacts upon the key habitats of the species for which the SPA is designated.'
	there is no alternative solution; and     there are imperative reasons of over-	A Habitats Regulations Assessment (HRA) Report (document reference TR010035/APP/5.4), including HRA Screening and Appropriate Assessment, has been undertaken for the Scheme.



The Fylde Boroug	gh Local Plan (As Altered) (Oct 2005)	
Policy	Policy Guidance	Scheme Compliance with local policy
_	riding public interest for the development.  where the site hosts a priority natural habitat type and/or a priority species, development will not be permitted unless the developer can demonstrate that it is necessary for reasons of human health or public safety or benefits of primary importance to the environment would result.	This has concluded that installation of a new bridge crossing over Main Dyke has the potential to lead to changes in water quality downstream and potentially within the SPA itself which could affect habitats utilised by the water bird assemblage.  However, with mitigation it is considered that during construction, there would be no adverse effect on the integrity of Morecambe Bay and Duddon Estuary SPA or Morecambe Bay Ramsar site or on the ability of the site to achieve the aims of the Conservation Objectives.
Chapter 7: Environmental Protection and Conservation – Policy EP16 Nature Conservation	Development proposals within or likely to affect sites of special scientific interest will be subject to special scrutiny.  Development proposal likely to prejudicially affect an SSSI will not be permitted unless the use of conditions or planning obligation would prevent damaging impacts on the nature conservation interest of the site, or the reasons for the development clearly outweigh the nature conservation value of the site itself.	Positive engagement with Natural England has been ongoing throughout the HRA process. A Bird Mitigation Area (refer to the HRA document reference TR010035/APP/5.4) would be included in the Scheme design (and included in the Draft DCO Limits). The Bird Mitigation Area would be secured by the Applicant as essential mitigation and would provide alternative foraging habitat for the duration of the construction period. It is intended the mitigation would be in place for the birds to use from October 2019. Further details are included in the Bird Mitigation Strategy (appended to the Outline CEMP - document reference TR010035/APP/7.2). Natural England has agreed the size and location of the mitigation area.
		There is nonetheless, the potential for indirect effects on the SPA / Ramsar / SSSI site upon the qualifying bird species of the site, which may be utilising habitats outside of the designated site, which could be affected by the Scheme or through reduction in water quality downstream thereby impacting upon habitats that support the SPA bird species. In this case, mitigation measures would be incorporated into the Scheme



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Policy	Policy Guidance	Scheme Compliance with local policy
		design to ensure the protection of water quality during both the construction and operational phases of the Scheme. In particular, attention would be paid to ensuring protection of water quality during construction at the location of the new bridge crossing of the Main Dyke (at the western end of the Scheme) which flows directly into the Morecambe Bay and Duddon Estuary SPA and Morecambe Bay Ramsar site; and in the location of the five new watercourse crossings.
		It is concluded, on the basis of the information provided within the HRA Report and consultation and agreement with Natural England, that the Scheme would not prevent Morecambe Bay and Duddon Estuary SPA / Morecambe Bay Ramsar site from achieving their Conservation Objectives, and therefore there would be no adverse effect on the integrity of any European sites and features as a result of the Scheme.
Chapter 7: Environmental Protection and Conservation – Policy EP17	Development which is likely to impact significantly or fundamentally on the biological/ geological resources of sites defined as biological heritage sites or geological heritage sites, will not be	A review of the JNCC Geological Conservation Review, MAGIC website and GeoLancashire website indicate there are no geodiversity heritage sites, Regionally Important Geology Sites (RIGS) or geological SSSI with 1km of the Scheme.
Nature Conservation	permitted. Lancashire County Council and the Lancashire Wildlife Trust will be consulted where appropriate and account will be taken of the views obtained.  Developers may be required to prepare and submit environmental assessments,	The Skippool Marsh and Thornton Bank Biological heritage site (BHS) was identified in the desk study and field surveys and is located to the west of the Scheme. There are also 2 additional BHS designations associated with the Wyre Estuary (important at a local level) within proximity to the Scheme.
	where appropriate, having regard to the Town and Country Planning (Environmental Impact Assessment) (England and Wales Regulations 1999).	Direct physical loss, damage and pollution is considered unlikely to occur. Embedded mitigation measures are therefore considered appropriate to adequately reduce the risk of adverse effects to the BHSs. Therefore, the sites were scoped out of the



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Policy	Policy Guidance	Scheme Compliance with local policy
		assessment in the ES.
Chapter 7: Environmental Protection and Conservation – Policy EP18	Existing natural features should be retained where possible, within development schemes and where appropriate, additional features should be created as part of the development scheme. Where the retention of existing features is not practicable, replacement features will be required.	Opportunities for environmental enhancement as part of the Scheme design have been taken where possible. This includes the creation of reptile hibernacula; installation of bird boxes; bee posts and wildflower meadows, to be created around pond and wetland areas along the route corridor. Biodiversity benefits form an integral part of the proposed landscaping, including the use of wildflowers and native and fruit-bearing species, providing benefits to wildlife in general. ES Chapter 8 Biodiversity (document reference TR010035/APP/6.8) reinforces the point, stating that 'the extensive landscape planting would increase connectivity of hedgerow and woodland habitats on either side of the carriageway and is considered to represent an overall enhancement of hedgerow connectivity above baseline levels during the operational phase.'
Chapter 7: Environmental Protection and Conservation – Policy EP19	Development which would have an adverse impact upon species specifically protected under Schedules 1, 5 or 8 of the Wildlife and Countryside Act 1982 (as amended), or their habitats will not be permitted. Where development is permitted which would affect these species, or their places of shelter and breeding, the use of planning conditions and/or planning obligations will be used to:  1. Facilitate the survival of individual members of the species;	ES Chapter 8: Biodiversity (document reference TR010035/APP/6.8) identifies a number of protected or notable habitats or species that have been scoped in and out of the assessment. Only one Schedule 1 species, namely a barn owl, was scoped into the assessment. Targeted surveys identified barn owl foraging adjacent to the Scheme.  The ES goes on to state that, 'the nest / roosting sites are located more than 230m from the Scheme and therefore would not be affected by the works. The majority of habitats to be lost comprise improved species poor grassland which is intensively managed and arable crop fields. All of which are of low suitability for use by barn owls. Although, a small proportion of the foraging habitat suitable for barn owl would be lost beneath



The Evide Deve	while and Diam (An Alternal) (Ont 2005)	
Policy	gh Local Plan (As Altered) (Oct 2005) Policy Guidance	Scheme Compliance with local policy
	2. Reduce disturbance to a minimum; 3. Provide adequate alternative habitats to sustain the current levels of population.	the footprint of the Scheme, this only makes up a small amount of the available foraging habitat across the wider landscape within the typical home ranges of the barn owls confirmed as present. As such, there would be no significant effects on the barn owl population during the construction phase. Therefore, a Neutral significance category has been applied.'  'As part of the landscape design and mitigation packages to be implemented for other species such as the creation of ponds and woodland planting mixes which are to also incorporate rides comprising semi-natural grassland, positive benefits and suitable habitats local enhancements would be provided for barn owls. Therefore, these measures would lead to a long-term beneficial Slight Positive impact at the Local level during the operational phase.'
Chapter 7: Environmental Protection and Conservation – Policy EP21	In considering development proposals, particular regard will be given to the archaeological significance of the area. Where there is an identified archaeological interest on a site, developers may be required to provide an archaeological assessment or, if necessary, a field evaluation.  Proposals affecting the site or setting of remains of national importance will not be permitted.	ES Chapter 7: Cultural Heritage (document reference TR010035/APP/6.7) sets out that there are no designated archaeological remains located within the Draft DCO Limits or the Zone of Influence.  Within the Draft DCO Limits there are a total of 35 non-designated archaeological remains, the majority of which are of post-medieval and unknown date (refer to Table 7-10, ES Chapter 7: Cultural Heritage (document reference TR010035/APP/6.7)). 30 of these are within the Fylde Borough Council area.
	In relation to proposals affecting remains of local importance, consideration will be	A further 5 non-designated archaeological remains are located within the Zone of Influence, the majority of which date to the post-medieval period.



The Eylde Boroug	gh Local Plan (As Altered) (Oct 2005)	
Policy	Policy Guidance	Scheme Compliance with local policy
Policy	given to the merits of the case taking into account the importance of the remains and the need for the proposed development.  Where preservation of the remains in situ is justified, the developers will be required to make adequate provision for their maintenance. Where preservation of the remains in situ is not justified, developers will be required to make adequate provision for the recording of the remains before development commences.	The mitigation of archaeological remains would occur prior to or during construction. No archaeological mitigation would continue into the operational phase. Mitigation through archaeological excavation or by archaeological monitoring is included in the Outline CEMP (document reference TR010035/APP/7.2) and illustrated in the Environmental Masterplan (document reference TR010035/APP/6.19).  As stated in ES Chapter 7 Cultural Heritage (document reference TR010035/APP/6.7), work within the Draft DCO Limits to the north of Garstang Road would result in the direct loss of potential archaeological remains related to known Romano-British settlements to the west of the Main Dyke at Moorfield Park. This effect has been assessed within the ES as negative and significant. An archaeological watching brief, trial trenching and boreholes would therefore be undertaken (see Outline CEMP (document reference TR010035/APP/7.2) and Environmental Masterplan (document reference TR010035/APP/6.19). The proposed mitigation measures, as set out above, would assist in reducing the level of impact of the Scheme, such that this would not be significant, in compliance with planning policy guidance.
Chapter 7: Environmental Protection and Conservation – Policy EP22 Protection of Agricultural Land	Development will not be permitted which involve the permanent loss of the best and most versatile agricultural land (Grades 1, 2 and 3A) where it could reasonably take place on previously developed sites, on land within the boundaries of existing developed areas or on poorer quality agricultural land.	The agricultural assessment undertaken as part of ES Chapter 10 People and Communities (document reference TR010035/APP/6.10) concludes that the principal land use within the footprint of the Scheme is agricultural. Provisional Agricultural Land Classification (ALC) mapping shows land within the application site to be predominantly Grade 2, with Grade 3 land at the western and eastern ends. Land immediately to the south of Main Dyke, as far as Garstang Road



The Fylde Boroug	gh Local Plan (As Altered) (Oct 2005)	
Policy	Policy Guidance	Scheme Compliance with local policy
		is predominantly Grade 3b with a small area of Grade 3a land.
		There is no direct mitigation for the loss of agricultural land. However, the Scheme design (ES Chapter 2 (Description of the Scheme) (document reference TR010035/APP/6.2)) aims to reduce the overall footprint of the Scheme, the junctions and structures, which have been made as compact as practicable,
		ensuring minimal land use change and materials use. In terms of mitigation, the implementation of best practice in relation to soil handling, restoration and re-use (in accordance
		with the Defra Construction Code (2008)) would be implemented. This would include the development of a Soil Management Plan (SMP) for the Scheme is included in the
		Outline CEMP (document reference TR010035/APP/7.2).
Chapter 7: Environmental Protection and Conservation – Policy EP23	Development will not be permitted which would adversely affect the quality of coastal waters, rivers, canals, lakes, ponds and other bodies of water.  Development which would be likely to give rise to pollution of inland surface water or coastal waters will not be permitted.	Chapter 12: Road Drainage and The Water Environment (document reference TR010035/APP/6.12) of the ES assesses the Scheme in relation to Road Drainage and the Water Environment. The Scheme is located to the south of the estuary of the River Wyre. Other surface water features in the study area include the Main Dyke and the Horsebridge Dyke.
	Where development is permitted surface water resources will be protected by the	The River Wyre is classified as having an overall ecological status of Moderate Potential.
	imposition of appropriate planning conditions.	Main Dyke, is classified as a heavily modified waterbody within the study area, having an overall ecological status of Moderate Potential.
		The Register of Environmental Actions and Commitments (REAC) (document reference TR010035/APP/7.3) appended to the Outline CEMP (document reference TR010035/APP/7.2)



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Policy	Policy Guidance	Scheme Compliance with local policy
Chapter 7: Environmental Protection and Conservation – Policy EP24	Development will not be permitted which would adversely affect the quality of ground water and the ability to utilise existing or potential resources within the borough.  Where development is permitted ground water resources will be protected by the imposition of appropriate planning conditions.	would ensure the quality of the water environment does not deteriorate during construction of the Scheme. The REAC (document reference TR010035/APP/7.3) includes best practices for the management of environmental impacts during construction. It would be expected to include a Pollution Control Plan to safeguard the quality of surface water and groundwater, drawing on standard best practices and relevant CIRIA publications. It is considered that the Scheme would not adversely affect the quality of surface water resources.  There is one groundwater body underlying the study area, the West Lancashire Quaternary Sand and Gravel Aquifer. The current quantitative quality of this groundwater unit is 'Good'.  Measures embedded into the Scheme design to avoid or reduce effects on groundwater resources have been shaped by the results of the modelling studies and investigations.  The REAC (document reference TR010035/APP/7.3) would ensure the quality of the water environment does not deteriorate during construction of the proposed Scheme. The REAC (document reference TR010035/APP/7.3) includes best practices for the management of environmental impacts during construction. It would be expected to include a Pollution Control Plan in the CEMP to safeguard the quality of surface water and groundwater, drawing on standard best practices and relevant CIRIA publications.  It is considered that the Scheme would not adversely affect the quality of groundwater resources.
Chapter 7:	Development will not be permitted which	As stated in Chapter 2: Description of the Scheme (document
Environmental	is likely to give rise to unacceptable levels	reference TR010035/APP/6.2), one of the key objectives of the



The Fylde Borough Local Plan (As Altered) (Oct 2005)		
Policy	Policy Guidance	Scheme Compliance with local policy
Protection and Conservation –	of air pollution where this would prejudice other adjacent or nearby communities or land uses.	Scheme is to 'reduce/minimise the impact on the wider environment particularly for air quality and noise.'
Policy EP26 - Air Pollution	land uses.	Chapter 6: Air Quality (document reference TR010035/APP/6.6) assesses whether the Scheme would have a significant impact on air quality.
		All relevant receptors that have been selected to represent locations where people are likely to be present are based on potential impacts on human health.
		<ul> <li>Overall, the ES concludes:</li> <li>Base year (2015) monitored and modelled concentrations indicate that air quality concentrations do not exceed Air Quality Strategy (AQS) Objectives.</li> <li>The evaluation of the operational significance of effects for air quality is that the Scheme does not have a significant impact on local air quality.</li> <li>The assessment demonstrates that in terms of impact on compliance with the EU Directive on ambient air quality (2008/60/EC), the Scheme is Low Risk in relation to affecting the UKs reported ability to comply with the EU Directive in the shortest timescales possible, as exceedances of the EU limit values are not predicted.</li> <li>Construction phase impacts from dust and emissions would be negligible with the implementation of mitigation measures included in the Outline CEMP (document reference TR010035/APP/7.2).</li> </ul>



The Evide Boroug	The Fylde Borough Local Plan (As Altered) (Oct 2005)		
Policy	Policy Guidance	Scheme Compliance with local policy	
Chapter 7: Environmental Protection and Conservation – Policy EP27 Noise Pollution	Development which would unnecessarily and unacceptably result in harm by way of noise pollution will not be permitted. Where appropriate, planning permission will be granted subject to conditions to minimise or prevent noise pollution.	As stated in Chapter 2: Description of the Scheme (document reference TR010035/APP/6.2) of the ES, one of the key objectives of the Scheme is to 'reduce/minimise the impact on the wider environment particularly for air quality and noise.'  An assessment of both construction and operational road traffic noise has been undertaken within ES Chapter 11: Noise and Vibration (document reference TR010035/APP/6.11) in accordance with Highways England's Design Manual for Roads and Bridges (DMRB), which has considered road traffic noise impacts in both the short-term (year of opening) and long-term (15 years after opening).	
		The findings of the noise assessment indicate that, in the short and long-term, adverse changes in road traffic noise level above a Significant Observed Adverse Effect Level (SOAEL), where significant adverse impacts on health and quality of life from operational road traffic noise would occur, would not be of a sufficient magnitude to be considered significant. This has been achieved through the implementation of mitigation into the Scheme design, including the use of a low noise/thin surfacing system surface to be laid on new or altered roads and 2m and 3m high acoustic/landscape bunds. The locations of these measures are presented in Figure 11.4 of the ES (document reference TR010035/APP/6.11).	
		Short-term operational beneficial impacts are predicted to occur at receptors located along Garstang New Road, Garstang Road west of Little Singleton and at receptors located on the north of Mains Lane, with 82 dwellings predicted to experience a moderate or greater beneficial change above a SOAEL.	



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Policy Policy Guidance	Scheme Compliance with local policy
	Changes of this magnitude would represent a significant beneficial impact on health and quality of life. Short term adverse effects were assessed as not having a significant adverse impact on health and quality of life, as no adverse changes greater than minor adverse above a SOAEL were predicted.
	Long-term operational beneficial impacts are predicted to occur at receptors located along Garstang New Road, Garstang Road west of Little Singleton and at receptors located on the north of Mains Lane, with 55 dwellings predicted to experience a moderate or greater beneficial change above a SOAEL. Changes of this magnitude would represent a significant beneficial impact on health and quality of life. Long term adverse effects were assessed as not having a significant adverse impact on health and quality of life, as no adverse changes greater than negligible above a SOAEL were predicted.
	As all predicted daytime construction noise levels remain below the relevant BS5228 significance threshold category and a SOAEL throughout the construction period, daytime construction noise levels are therefore not considered to have a significant effect during daytime construction activities. During the night time period, noise levels are not considered to be significant in the ES Noise and Vibration Chapter (document reference TR010035/APP/6.11).
	A CEMP and Noise and Vibration Management Plan would be prepared and agreed with Fylde Borough Council and Wyre Council prior to commencing construction. An Outline CEMP



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Policy	Policy Guidance	Scheme Compliance with local policy
		(document reference TR010035/APP/7.2) has been prepared together with a REAC (document reference TR010035/APP/7.3). This includes a set of best practice working methods for the control of construction noise and vibration. Noise monitoring during construction would be undertaken at key sensitive receptors to ensure that mitigation is working effectively.
		Outside of the detailed calculation area changes in road traffic noise level on roads within the Affected Road Network (ARN) would be negligible in both the short-term and long-term. This provides a positive indication that noise impacts as a result of the Scheme would be localised to the immediate vicinity of the Scheme.
Chapter 7: Environmental Protection and Conservation – Policy EP28 - Light pollution	In relation to development proposals involving external lighting facilities, regard will be had to the issue of light pollution. Proposals should avoid or minimise harm relating to loss of local character, loss of amenity or reduction in highway safety.  External lighting scheme must be well designed and the light intensity not excessive in relation to the function it	As assessed in ES Chapter 9: Landscape (document reference TR010035/APP/6.9), during construction, lighting would be directional and kept to a minimum. For the operational phase, lighting of the Scheme has been designed to minimise light spill and trespass beyond the Scheme alignment and would be restricted to junction areas where the carriageway needs to be lit for health and safety reasons, with baffles fitted to ensure lighting remains directional and the surrounding landscape remains unlit.
	performs. Light sources must be directed at the object to be illuminated thereby minimizing extraneous emissions.	In addition, the lighting design would minimise light pollution which can cause sky glow, glare and light trespass beyond the Scheme alignment.
		Chapter 8: Biodiversity (document reference TR010035/APP/6.8) of the ES notes that the lighting scheme has been designed to minimise light spill and trespass, beyond



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Policy	Policy Guidance	Scheme Compliance with local policy
		the Scheme alignment, to improve potential landscape and amenity impacts as well as impact on adjacent habitats. This would include construction lighting seeking to avoid light-spill to common pipistrelle roosts; monitoring would be undertaken by the Ecological Clerk of Works (ECoW), during construction. Where necessary, construction hours would be restricted to daytime working (0.5 hours after sunrise to 0.5 hours before sunset, inclusive) to ensure bats are not perturbed from exiting roosts to forage or disperse to alternative roost sites.
Chapter 7: Environmental Protection and Conservation – Policy EP29	Development on land known or suspected of being contaminated will only be permitted providing the following criteria are met:  1. The proposed development is an acceptable land use in principle;  2. The applicant can demonstrate the degree of contamination, if any, and where appropriate can identify acceptable measure to remove or treat the source(s) of contamination commensurate with the proposed use;  3. The treated land and the measure necessary to achieve it do not produce any unacceptable risks to human health or the wider environment, including the contamination of surface water, ground water or sewers.	Two areas of contaminated land are the historic landfill sites adjacent to the Scheme. These are at Skippool Marsh and Skippool Creek and are located approximately 500m north of the western end of the Scheme.  The ES Chapter 13: Geology and Contaminated Land (document reference TR010035/APP/6.13) has identified that sources of potentially contaminating materials include the storage and use of fuels, oils and chemicals and the use of cement-based products would be controlled by the application of pollution prevention measures. These measures would aim to prevent the deterioration of the underlying soils through spillages/leakages. Mitigation measures have been proposed for the Scheme during the construction phase only. Potential residual effects are assessed as not significant. During the operational phase of the Scheme, no significant effects have been identified.



Γhe Fylde Borough Local Plan (As Altered) (Oct 2005)		
Policy	Policy Guidance	Scheme Compliance with local policy
Chapter 7: Environmental Protection and Conservation – Policy EP30	Development will not be permitted which would:  1. Itself be subject to an unacceptable risk of flooding;  2. Create an unacceptable increase in the risk of flooding within the development site, or elsewhere;  3. Adversely affect the water environment as a result of an increase in surface water run-off;  4. Prejudice the capability of the coast to form a natural sea defence;  5. Result in excessive culverting;  6. Prejudice essential access requirements to watercourses or flood defence.	A detailed FRA (document reference TR010035/APP/5.2) has been undertaken for the Scheme. This includes an assessment to ensure that the Scheme is not at increased risk of flooding over its lifetime due to climate change for the three climate change scenarios for the 1% Annual Exceedance Probability (AEP) event: +35% and +70% fluvial inflows.  Proposed culverts have been sized, as part of the drainage design, to maintain the current land drainage regime and to convey flood flows without causing any detriment to baseline flood risk. Culvert inverts would also be buried below existing bed levels to allow baseline bed levels, slopes and bed materials to be maintained. Bankside vegetation would be reinstated or enhanced. These measures would reduce the effects of culverting on flood risk, riverine habitats and geomorphology.  The FRA shows that the Scheme is proposed in an area currently predicted to be at risk of flooding. However, by increasing the capacity of the existing A585 crossing as part of the Scheme proposals, upstream flood extents are reduced and therefore the Scheme is not at risk of flooding for any of the design events assessed.  Based on these model results, the Environment Agency (EA) has confirmed that mitigation would be required to ensure that increases in flood risk to third parties were minimised. An area of land on the right bank of the Main Dyke immediately downstream of the A585 has accordingly been identified to provide additional floodplain storage to offset that removed by the road embankment during construction.



Table 5 Fylde Local Plan to 2032 Submission (2016)

	Fylde Local Plan to 2032 Submission (2016)		
Policy	Policy Guidance	Scheme compliance with local policy	
Chapter 5: National Policy NP1	Presumption in favour of sustainable development  When considering development proposals, the Council will take a positive approach that reflects the presumption in favour of sustainable development contained in the Framework. The Council will always work proactively with applicants jointly to find solutions which mean that proposals can be approved wherever possible, and to secure development that improves the economic, social and environmental conditions in the area.  Planning applications that accord with the policies in this Local Plan (and, where relevant, with policies in neighbourhood development plans) will be approved without delay, unless material considerations indicate otherwise.	The Scheme is considered to be compliant with the principles of sustainable development, as its objectives aim to improve journey times on the A585 between Windy Harbour and Skippool junctions; improve safety for all road users; improve access for local users, pedestrians and cyclists; and deliver capacity enhancements to support employment and residential/commercial development and growth opportunities.  The Scheme would remove traffic from the existing semi-urban route to a new rural bypass, the alignment of which has achieved a balance between minimising impacts on residents and the environment.  A comprehensive Environmental Impact Assessment has been carried out at Project Control Framework (PCF) stage 3 to accompany the Development Consent Order (DCO) and the proposals for mitigation of likely significant effects arising from the Scheme are reported within the ES (document reference TR010035/APP/6.1 – 6.20). The Statement incorporates environmental benefits as part of the Scheme design process.	
Chapter 8: General Development Policies – Policy GD1	Settlement Boundaries  The boundaries of settlements in Fylde are shown on the Policies Map	ES Chapter 10: People and Communities (document reference TR010035/APP/6.10) states that: 'on available maps the land within the application site is predominantly mapped as Grade 2, with Grade 3 land present at the western and eastern extents.'	



Fylde Local Plan	to 2032 Submission (2016)	
Policy	Policy Guidance	Scheme compliance with local policy
	The significant loss of the best and most versatile agricultural land will be resisted unless it is necessary to deliver	Grades 1, 2 and 3a land is considered to be best and most versatile land.
	development allocated in the Local Plan, or for strategic infrastructure.	There is no direct mitigation for the loss of agricultural land. However, the Scheme design (ES Chapter 2 (Description of the Scheme) (document reference TR010035/APP/6.2)) aims to reduce the overall footprint of the Scheme, the junctions and structures, which have been made as compact as practicable, ensuring minimal land use change and materials use. In terms of mitigation, the implementation of best practice in relation to soil handling, restoration and re-use (in accordance with the Defra Construction Code (2008)) would be implemented. This would include the development of a SMP, which has been prepared in draft and appended to the Outline CEMP (document reference TR010035/APP/7.2)  The SMP would be finalised by the Contractor in advance of construction to ensure protection, conservation and reinstatement of soil material, its physical and chemical properties and functional
		capacity for agricultural use. The draft SMP is based on current industry best practice and published guidelines as detailed above.
Chapter 8: General Development Policies – Policy GD4 - Development in the Countryside	Development in the Countryside, shown on the Policies Map, will be limited to: a. that needed for purposes of agriculture, horticulture or forestry; or other uses appropriate to a rural area, including uses which would help to diversify the rural economy, including small-scale tourist accommodation, holiday caravan sites and very	The Scheme falls entirely within the countryside. Whilst the development of a highway scheme is not listed as an exception to the permitted development within countryside, it is accepted that the improvements to the A585 can only take place within the area identified for the Scheme. Fylde Borough Council has stated its support for the Scheme (see Consultation Report (document reference TR010035/APP/5.1)).  Three route corridors were considered during Highways
	exceptionally, larger scale tourism	England's options stage (PCF Stages 1 and 2) which were an



Fylde Local Plan	to 2032 Submission (2016)	
Policy	Policy Guidance	Scheme compliance with local policy
	development; b. the re-use or rehabilitation of existing permanent and substantial buildings; c. minor extensions to existing homes and other buildings; d. development essentially needed for the continuation of an existing	online, southern and northern corridor route option. A further 5 options were identified for the southern corridor (S1-S5), with 2 options for both the northern (N1 and N2) and online corridors (O1 and O2). The options were differentiated in terms of their junction arrangements, number of lanes as well as their use. A total of 9 options were considered at the options stage.
	enterprise, facility or operation, of a type and scale which would not harm the character of the surrounding countryside; e. isolated new homes in the countryside which meet the criteria set out in policy H6.	As part of this exercise, 2 Environmental Assessment Reports (EARs) were prepared (1 at PCF Stage 1 and 1 at PCF Stage 2) which assessed the route options in accordance with DMRB Volume 11. The EARs provided an assessment of the Scheme options in relation to air quality, cultural heritage, landscape effects, noise, biodiversity, geology and soils, road drainage and the water environment, people and communities and materials. The conclusions of the assessments undertaken were used to inform the selection of the preferred option.
		The preferred option (1), the southern bypass, was announced by Highways England on the 24 October 2017. Details of the rejected route options is provided in ES Chapter 3 Alternatives (document reference TR010035/APP/6.3).
Chapter 12: Infrastructure, Service Provision and	Land within Fylde is proposed for part of the route of the Preston Western Distributor Road which will link up to a new Junction 2 on the M55, and the	The Scheme proposes the implementation of the A585 Skippool  – Windy Harbour Improvements and will include the following elements:
Transport – Policy T1 - Strategic Highway	Cottam Link Road. Planning permission will not be granted for any development in Fylde that would prejudice the construction of these roads, which are	4.85 kilometres (3 miles) of new 2-lane, all-purpose, dual- carriageway bypass connecting Windy Harbour Junction and Skippool Junction
Improvements	shown on the Policies Map. The delivery of the following strategic highway	Four new junctions including:



Fylde Local Plan to 2032 Submission (2016)	
Policy Guidance	Scheme compliance with local policy
improvements within Fylde will be supported: c. The A585 Skippool – Windy Harbour Improvements.	<ul> <li>Conversion of Skippool Junction to a traffic signal-controlled crossroads with A588 Breck Road and B5412 Skippool Road;</li> <li>Skippool Bridge Junction in the form of a 3-arm traffic signal-controlled junction with the existing Mains Lane;</li> <li>Poulton Junction in the form of a signal-controlled crossroads connecting the new bypass to A586 Garstang Road East; and</li> <li>Modification to Little Singleton Junction (also known as Five Lane Ends) to accommodate U-turning traffic including</li> </ul>
	<ul> <li>buses.</li> <li>Between Skippool Bridge Junction and Poulton Junction the bypass is on embankment. East of Poulton Junction through to east of Lodge Lane the bypass is mostly in cutting.</li> </ul>
	Three new major structures including:  • Replacement of Skippool Bridge;
	<ul><li>Lodge Lane Bridge; and</li><li>Grange Footbridge.</li></ul>
	Alterations to the existing road network on completion of the bypass include:  • De-trunking the A585 between Skippool Bridge Junction and the end of Garstang New Road east of Little Singleton;



Fylde Local Plan to 2032 Submission (2016)		
Policy	Policy Guidance	Scheme compliance with local policy
		<ul> <li>Applying a reduction in speed limit to 30mph and providing a combined footway/cycleway along Mains Lane between Shard Road Junction and Little Singleton;</li> <li>Altering Garstang New Road east of Little Singleton to allow restricted farmers' fields and provide a shared footway/cycleway route between Windy Harbour Junction and Little Singleton;</li> <li>Applying a reduced speed limit of 30mph along Garstang Road East between the proposed Poulton Junction and Little Singleton and upgrading the lighting along Mains Lane and Garstang Road East.</li> </ul>
Chapter 12: Infrastructure, Service Provision and Transport – Policy T4 - Enhancing Sustainable Transport Choice	In order to secure the long-term viability of the Borough and to allow for the increased movement of people and goods expected, the Council will work with neighbouring authorities and transport providers to improve accessibility across the Borough, improve safety and quality of life for residents and reduce the Borough's carbon footprint. Over the Local Plan period the Council will work with the Highway Authority (LCC), Highways England, Network Rail and transport providers to:  a. Improve community health and wellbeing by providing alternative means of transport such as walking and cycling.	<ul> <li>Where the Scheme affects existing footways and cycleways along the existing A585 and PRoW mitigation measures would be implemented, as set out in ES Chapter 10: People and Communities (document reference TR010035/APP/6.10), including: <ul> <li>'Siting of compound buildings and material storage areas away from PRoW;</li> <li>A new footbridge (Grange Footbridge) which would improve safety for NMUs and therefore improve the permeability of the area;</li> <li>Landscaping including tree, shrub and hedgerow planting and bunding to reduce noise and visibility of the Scheme;</li> <li>Putting clear and concise signposts in place, indicating any temporary diversions;</li> <li>Ensuring that any closure periods are kept to a minimum;</li> </ul> </li> </ul>



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Policy	Policy Guidance	Scheme compliance with local policy
	This will be achieved through protecting and enhancing the existing public rights of way network; the provision of additional footpaths, cycleways and bridleways, where appropriate; and safeguarding land for the provision of a continuous footpath, cycleway and bridleway network along Fylde's coastline;  b. Reduce the environmental impact of transport through suitable mitigation and design	Utilising social media to update members of the public of any closures and diversions which are in place; and     Liaise directly with PRoW officers from local authorities in order to keep them fully appraised of works and of any diversions / closures which would be put in place.'  ES Chapter 10: People and Communities (document reference TR010035/APP/6.10) sets out that there would be slight impacts on PRoWs during construction. Whilst PRoW 5-11-FP 2 would be severed as a result of the Scheme, reconnection of the footpath between Little Singleton and Windy Harbour Junction, replacing an existing uncontrolled road crossing, would be made with the new Grange footbridge. This would be constructed off-site. The route would be increased in length by approximately 10 - 15m and would replace an existing uncontrolled road crossing, leading to positive impacts.  During operation, the new and improved crossing facilities would improve connectivity, enhancing the permeability of the area.  Elsewhere, the existing provision for cyclists, equestrians and pedestrians in the vicinity of the Scheme would not be detrimentally affected and the Scheme proposals would improve access for pedestrians and cyclists at Five Lane Ends Junction.  ES Chapter 10 (People and Communities) (document reference TR010035/APP/6.10) concludes that the Scheme would have an overall significant positive effect on NMUs, in compliance with planning policy. Chapter 10 considers that the improved connectivity as a result of the Scheme has the potential to improve



Fylde Local Plan to 203	2 Submission (2016)	
Policy Policy	Guidance Scheme compliance with local policy	
	human health through increasing opportunities for walkin cycling. This is particularly important as physical activity l both Fylde and Wyre Council areas are below the nation average.	levels in
	With regards to air quality, ES Chapter 6 Air Quality (doc reference TR010035/APP/6.6) states that both NO <sub>2</sub> and predicted to be below the respective Air Quality Strategy Objectives for both the Base Year and Opening Year of t Scheme and no significant effects on human health are pas a result of the Scheme.	PM <sub>10</sub> are he
	ES Chapter 11 Noise and Vibration (document reference TR010035/APP/6.11) states that the construction noise le would have no significant adverse impacts on health and life as a result of the Scheme. In terms of operational roa noise impacts, it is predicted that beneficial impacts woul at five Noise Impact Areas (NIAs) in the short-term and the long-term and therefore a significant beneficial effective expected to occur at these NIAs.	evels, quality of d traffic d occur hree NIAs
	It is also maintained that the design of the new road to a highway standard will help reduce uncertainty, fear and of stress. The Scheme is therefore predicted to have a beneficct on human health through reduced stress levels typedelayed or congested road use. Travel time savings of beand 4.5 minutes per journey are forecast to be saved by users due to the scheme, which is also expected to result decrease of around 30 accidents and 120 casualties over year appraisal period.	driver eficial pical of etween 2 road t in a



Fylde Local Plan	to 2032 Submission (2016)	
Policy		Scheme compliance with local policy
Policy	Policy Guidance	As set out in ES Chapter 15 (Climate) (document reference TR010035/APP/6.15), the Scheme seeks to reduce greenhouse gas emissions as far as practicable to contribute to the UK's net reduction in carbon emissions. The Scheme design (ES Chapter 2 (Description of the Scheme) (document reference TR010035/APP/6.2)) aims to reduce the overall carbon footprint of the Scheme by reusing excavated materials where practicable. The footprint of structures and junctions have been made as compact as practicable, ensuring minimal land use change and materials use. Throughout the Scheme's design, material resources have been evaluated and their carbon emissions calculated, ensuring that material resources with lower carbon emissions have been fully considered.  The predicted increase of carbon dioxide equivalent (CO <sub>2e</sub> ) in emissions over 60 years of the Scheme's operation would be caused primarily by an increase in traffic volume and flow along the route of the Scheme. This increase, however, is deemed to be negligible when compared against the Government's carbon
Ob a material A O		budgets.
Chapter 13 - Water Management, Flood Risk and Climate Change - Policy CL1 - Flood	Planning decisions should follow the sequential, risk-based approach to the location of development, as required under paragraph 100 of the Framework. All new development is required to minimise flood risk impacts on the environment, retain water quality and	The Flood Risk Assessment (document reference TR010035/APP/5.2) shows that although the Scheme is proposed in an area currently predicted to be at risk of flooding, by increasing the capacity of the existing A585 crossing as part of the Scheme proposals, upstream flood extents are reduced and therefore the Scheme is not at risk of flooding for any of the design events assessed.
Alleviation, Water Quality	water efficiency, and mitigate against the likely effects of climate change on	Mitigation measures will be implemented to provide suitable construction site drainage systems, including cut-off ditches and



	to 2032 Submission (2016)	
Policy	Policy Guidance	Scheme compliance with local policy
and Water Efficiency	present and future generations.	Sustainable Drainage Systems (SuDS), or equivalent, with suitably sized treatment facilities and ensure that SuDS required
	This will be achieved by:  a. Ensuring that development	for the permanent works, would be completed before the start of earthwork operations.
	incorporates the most sustainable form	
	of managing surface water, subject to the requirement for approval from the drainage authority. This will be expected to be investigated and confirmed as part of any planning application submission.	Chapter 15: Climate (document reference TR010035/APP/6.15) of the ES sets out how the Scheme takes account of the projected impacts of climate change. This assesses the impacts on greenhouse gas emissions and vulnerability of the Scheme to climate change. The FRA includes an assessment to ensure that
	It will be necessary to attenuate any discharge of surface water through the incorporation of sustainable drainage	the Scheme is not at increased risk of flooding over its lifetime due to climate change.
	systems (SuDS), following the SuDS hierarchy. This would be greenfield runoff rate on greenfield sites. On previously developed land, surface water betterment will be expected. The preference will be for no surface water	Chapter 12: Road Drainage and the Water Environment (document reference TR010035/APP/6.12) of the ES allows for increased rainfall intensities due to climate change (+30%) thus the storage to attenuate runoff rates to greenfield, incorporating an allowance for climate change.
	to discharge to the public sewer, directly or indirectly, if more sustainable alternatives are available. The priority options for the management of surface water are set out in detail in the	The Scheme has identified an area of land on the right bank of the Main Dyke immediately downstream of the A585 which would be used to provide additional floodplain storage to offset that removed by the road embankment during construction.
	Infrastructure Delivery Plan d. Ensuring that new development is	In relation to water quality, Chapter 12: Road Drainage and the Water Environment (document reference TR010035/APP/6.12) of the ES identifies that the Scheme is located to the south of the estuary of the River Wyre. Other surface water features in the
	directed away from areas at high risk of flooding and incorporating appropriate mitigation against flooding in areas of	study area include the Main Dyke and the Horsebridge Dyke.  These surface water features are presented in Figure 12.1 of the ES. The River Wyre and Main Dyke are both monitored under the



Fylde Local Plan	to 2032 Submission (2016)	
Policy		Scheme compliance with local policy
	lower risk. e. Ensuring that watercourses, which require watercourse consent are protected from encroachment and adverse impacts and that water quality	Water Framework Directive (WFD), as illustrated in Figure 12.3 at Appendix A of the ES. There is one groundwater body underlying the study area, the West Lancashire Quaternary Sand and Gravel Aquifer.
	g. Ensuring that new development does not adversely affect the quality of surface and groundwater resources in	The Outline CEMP (document reference TR010035/APP/7.2) would ensure the quality of the water environment does not deteriorate during construction of the Scheme. The Outline CEMP includes best practice for the management of environmental impacts during construction. It would be expected to include a
	Source Protection Zones and where possible contributes towards improving it.  h. Ensuring there is no risk of pollution to controlled waters from land	Pollution Control Plan to safeguard the quality of surface water and groundwater, drawing on standard best practice and relevant CIRIA publications would be prepared prior to the start of construction.
	contamination on previously developed sites.	'To promote the sustainable use of water resources, measures would be implemented during construction to promote general water use efficiency and particularly reduce the use of potable water. Examples that could be adopted include rainwater
Chapter 13 - Water Management, Flood Risk and Climate Change -	Discharge rates should be agreed as part of any pre-application negotiations between the relevant parties. New development must incorporate the following sequential attenuation measures:	harvesting, to provide water supply for welfare facilities and for use in dust suppression; the collection of greywater for use in wheel washing facilities; and leakage prevention. These measures would be set out in a Construction Water Management Plan as detailed in the Outline CEMP (document reference TR010035/APP/7.2) and REAC (document reference
Policy CL2 - Surface Water Run-Off and Sustainable Drainage	a. Store rainwater for later use; or b. The first 5mm of rainfall should infiltrate. In areas where infiltration rates are slow, e.g. soils with a high proportion of clay, then permeable surfaces may be under-drained. This will	TR010035/APP/7.3).'  During operation, the pollution potential of the Scheme has been tested, during both routine runoff and accidental spillage scenarios, using Highways Agency Water Risk Assessment Tool (HAWRAT). The findings, detailed in the drainage strategy, which





Fylde Local Plan	to 2032 Submission (2016)	
Policy	Policy Guidance	Scheme compliance with local policy
	Where there is no public sewer capacity the applicant must provide a detailed technical assessment of how surface drainage will be dealt with. Proposals may also need to include an independent assessment of potential solutions, the cost of which must be met by the applicant	
Chapter 14: Preserving and Enhancing the Natural, Historic and Built Environment – Policy ENV1 - Landscape	Development will have regard to its visual impact within its landscape context and the landscape type in which it is situated. Development will be assessed to consider whether it is appropriate to the landscape character, amenity and tranquility within which it is situated, as identified in the Lancashire Landscape Character Assessment, December 2000 or any subsequent	The assessment undertaken within ES Chapter 9: Landscape (document reference TR010035/APP/6.9), notes that the application site lies outside of any statutory or non-statutory designated landscapes.  However, the site does lie within landscape National Character Area 32: Lancashire and Amounderness Plain and within the county-level LCA 15d: The Fylde, within LCT 15: Coastal Plain. The wider study area also includes LCA 18c Wyre Marshes, and Urban Landscape Type Suburban.
	update. In addition:  a. A landscaped buffer of appropriate depth and species will be provided for development that impacts upon land in or adjacent to the Countryside, and wherever necessary includes advanced planting, in order to limit the visual impact of development;  b. Development proposals will ensure	The Scheme within Fylde falls within 3 LCAs and 3 TCAs, and as a result their character and/or features would be directly impacted upon by the Scheme. The remaining local LCAs and TCAs are visually separated from the Scheme by intervening existing built form or tree cover. These LCAs and TCAs are therefore considered unlikely to undergo even indirect effects.  Landscape and visual mitigation measures form an integral part of the Scheme, including:  A combination of amenity grass, grassland with bulbs and
	that existing landscape features will be conserved, maintained, protected and	species rich grassland for integrating the Scheme,



Fylde Local Plan to 2032 Submission (2016)	
	Scheme compliance with local policy
wherever possible enhanced through increased tree and shrub cover including soft edge / transitional areas of planting;	<ul> <li>providing visual amenity and enhancing nature</li> <li>conservation and biodiversity.</li> <li>Soft landscape measures including woodland planting,</li> </ul>
c. In the event of the loss of landscape features, the impact will be minimised or, where loss is unavoidable, their likefor-like replacements will be provided. Where such features, including trees, woodlands, hedgerows and field ponds, are lost and replaced, measures will be put in place to manage these new features;  d. Suitable landscape planting of native species, appropriate to its context should be incorporated within or, where appropriate, close to new development. Measures should be put in place for the management of such landscaping. Specific consideration should be given to how landscaping schemes will minimise the rate of surface water runoff;	<ul> <li>Soft landscape measures including woodland planting, linear belts of trees, shrub and scrub planting, with intermittent tree planting to aid the landscape integration of the Scheme within its context, provide visual screening and amenity and to promote nature conservation and enhance biodiversity.</li> <li>Individual tree planting as features to enhance the built environment, providing a positive contribution to the character areas, aiding visual amenity and providing visual screening.</li> <li>Earthwork cuttings (typically 2m higher than the highway carriageway) to provide visual screening and integrate the Scheme within the surrounding landscape.</li> <li>Following mitigation, the effects on LCAs 4, 5 and 6 and TCAs 3 and 5 are considered to be significant during construction. Over time, and by year 15, the proposed mitigation planting would become established and start to mature, and the overall planting scheme itself would form a notable integrating landscape feature within LCAs 4, 5 and 6. The planting would also further reduce the visibility of traffic travelling along the Scheme. By</li> </ul>
e. Details of the ongoing maintenance of all landscaping areas will be presented for approval by the Council.	year 15 the overall magnitude of impact on LCAs 4, 5 and 6 would reduce to moderate adverse. With moderate sensitivity, this would result in a moderate adverse and significant effect.
	In relation to monitoring the landscape works, it is stated that



Fylde Local Plan	Fylde Local Plan to 2032 Submission (2016)		
Policy	Policy Guidance	Scheme compliance with local policy	
		'the proposed mitigation measures set out in this Chapter should be reviewed at regular intervals during their establishment period (15 years), and especially within the first five years to ensure these are providing for effective mitigation'	
Chapter 14: Preserving and Enhancing the Natural, Historic and Built Environment – Policy ENV2 - Biodiversity	Section 1. Nature Conservation Sites and Ecological networks  A The hierarchy of nature conservation sites The Council is committed to ensuring the protection and enhancement of Fylde's biodiversity and geological assets and interests. In order to do this, the Council will have regard to the following hierarchy of nature conservation sites when making planning decisions, according to their designation:  International Ramsar Sites Special Areas of Conservation (SAC) Special Protection Areas (SPA)	Chapter 8: Biodiversity (document reference TR010035/APP/6.10) has considered the likely impacts of the Scheme on designated sites of international, national and local importance, protected species, habitats and other species of principal importance for the conservation of biodiversity.  There are no statutory designated sites for nature conservation within the Draft Order Limits, with the Skippool Marsh and Thornton Bank BHS (a non-statutory designation) located to the west of the Scheme. The Wyre Estuary SSSI and Morecambe Bay and Duddon Estuary SPA/Morecambe Bay Ramsar site are located to the north of the Scheme. There are also two additional BHS designations associated with the Wyre Estuary (important at a local level) within proximity to the Scheme.  In relation to the BHSs, direct physical loss, damage and pollution is considered unlikely to occur. Embedded mitigation	
	<ul> <li>Candidate SACs or SPAs The strongest possible protection will be given to sites of international</li> </ul>	measures are therefore considered appropriate to adequately reduce the risk of adverse effects to the BHSs. Therefore, the sites were scoped out of the assessment in the ES.	
	importance, predominantly the Ribble and Alt Estuaries SPA/Ramsar site.	The Statement of Reasons (document reference	
	National Nature Reserves (NNR)	TR010035/APP/5.2) states that the 'permanent land required for	
	Sites of Special Scientific Interest	the Scheme has been minimised as far as possible balancing	
	(SSSI) • Marine Conservation Zones	the need for flexibility within the limits of deviation together with	



the need to include appropriate mitigation particularly with regards to water attenuation, flood mitigation measures, landscaping and environmental bunds. Temporary land require for the Scheme has been minimised as far as possible.'  The ES states that 'no construction works would take place within the Special Protected Area (SPA)/Ramsar site/SSSI itselor within the intertidal habitat adjacent to the River Wyre.
for the Scheme has been minimised as far as possible.'  The ES states that 'no construction works would take place within the Special Protected Area (SPA)/Ramsar site/SSSI itselor within the intertidal habitat adjacent to the River Wyre.
within the Special Protected Area (SPA)/Ramsar site/SSSI itselection within the intertidal habitat adjacent to the River Wyre.
•
Therefore, the Scheme would not give rise to any direct impact upon the key habitats of the species for which the SPA is designated.'
An HRA Report (document reference TR010035/APP/5.4), including HRA Screening and Appropriate Assessment, has been undertaken for the Scheme. This has concluded that installation of a new bridge crossing over Main Dyke has the potential to lead to changes in water quality downstream and potentially within the SPA itself which could affect habitats utilised by the water bird assemblage. In this case, mitigation measures would be incorporated into the Scheme design to ensure the protection of water quality during both the construction and operational phases of the Scheme. In particular, attention would be paid to ensuring protection of water quality during construction at the location of the new bridge crossing of the Main Dyke (at the western end of the Scheme) which flows directly into the Morecambe Bay and Duddon Estuary SPA and Morecambe Bay Ramsar site; and in the location of the five new watercourse crossings.
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Evide Local Plan	to 2032 Submission (2016)	
Policy	Policy Guidance	Scheme compliance with local policy
Policy	nature conservation, or mitigation can avoid affecting site integrity.  3. Consideration should be given to the impact of development proposals on the County-wide Lancashire     Ecological network and, where possible, opportunities to support the network by incorporating biodiversity in and around the development should be encouraged;  4. Where development is considered necessary, adequate mitigation measures and compensatory habitat creation will be required through planning conditions and/or obligations, with the aim of providing an overall improvement in the site's biodiversity value. Where compensatory habitat is provided it should be of at least equal area and diversity, if not larger and more diverse, than that which is being replaced. Measures should be put in place for the ongoing management of such features. Where it has been demonstrated that significant harm cannot be avoided appropriate mitigation or, as a last resort, replacement or other compensation will be required	HRA document reference TR010035/APP/5.4) would be included in the Scheme design (and included in the Draft DCO Limits). The Bird Mitigation Area would be secured by the Applicant as essential mitigation and would provide alternative foraging habitat for the duration of the construction period. It is intended the mitigation would be in place for the birds to use from October 2019. Further details are included in the Bird Mitigation Strategy (appended to the Outline CEMP - document reference TR010035/APP/7.2). Natural England has agreed the size and location of the mitigation area.  It is concluded, on the basis of the information provided within the HRA Report and agreement with Natural England, that the Scheme would not prevent Morecambe Bay and Duddon Estuary SPA / Morecambe Bay Ramsar site from achieving their Conservation Objectives, and therefore there would be no adverse effect on the integrity of any European sites and features as a result of the Scheme.  With regards to wider biodiversity, a number of embedded mitigation measures are proposed as part of the Scheme proposals. These would include:  New woodland planting; Reinstatement and new planting of hedgerows; Reinstatement/replacement of ponds and new ditches; Minimisation of disturbance including the sensitive timing of works; Bat boxes to replace removed potential roost features; Culverts for use by otters;



struction badger surveys; ign of lighting to avoid light-spill; ive searches and safe working practices to
ign of lighting to avoid light-spill;
injury or disturbance to animals during stion; on of structures underneath the carriageway to habitat connectivity and; and linear planting to offset habitat loss.
for environmental enhancement as part of the in have been taken where possible. This includes freptile hibernacula; installation of bird boxes; bee allower meadows, to be created around pond and along the Scheme corridor. Biodiversity benefits all part of the proposed landscaping, including the vers and native and fruit-bearing species, providing diffe in general. ES Chapter 8 (Biodiversity) erence TR010035/APP/6.8) reinforces the point, extensive landscape planting has been not the Scheme design. This would increase frequency and woodland habitats on either side eway and is considered to represent an overall of hedgerow connectivity above baseline levels erational phase.



Evido Local Blas	2022 Submission (2016)	
Policy	n to 2032 Submission (2016)  Policy Guidance	Scheme compliance with local policy
Policy	<ul> <li>v. directly or indirectly damaging or severing links between nature conservation sites, green spaces, wildlife corridors and the countryside; and</li> <li>vi. impeding links to the wider ecological network and nature conservation sites that are recognised by neighbouring planning authorities.</li> <li>Section 1 (Nature Conservation Sites and Ecological networks) of this policy applies to all presently designated nature conservation sites, which are identified on the Policies Map and to any nature conservation sites or ecological networks that may be designated in the future by appropriate agencies. The Fylde Ecological Network, comprising the Grassland Network, the Wetland and Heath Network and the Woodland Network has been identified and mapped by LCC and Lancashire Wildlife Trust, in compliance with the Framework and is accessible on the Planning Policy website.</li> <li>Section 2. Priority Species Protection</li> </ul>	With regards to notable habitats, a total area of 6,287m² of deciduous woodland would be lost as a result of the Scheme, along with the permanent (4,221m²) and temporary (2,091m²) loss of hedgerows. Six ponds would be lost during construction of the Scheme, although three of these would be temporary and would be reinstated in their original location once works had been completed. The planting of deciduous woodland totalling 47,287m² and hedgerows totalling 9,437m² would result in a net increase in these habitats as mitigation for the Scheme.
	Network has been identified and mapped by LCC and Lancashire Wildlife Trust, in compliance with the Framework and is accessible on the Planning Policy website.	



Fylde Local Plan	to 2032 Submission (2016)	
Policy	Policy Guidance	Scheme compliance with local policy
	for development which would have an adverse effect on a priority species or its habitat, unless the benefits of the development outweigh the need to maintain the population of the species in situ. Should development be permitted that might have an adverse effect on a priority species or its habitat, planning conditions or agreements will be used to:	
	<ul> <li>a. Ensure the survival of the individual species affected; and where this cannot be achieved:</li> <li>b. Reduce the disturbance to a minimum;</li> <li>c. Provide adequate alternative habitats to enhance the viability of the local population of that species; and</li> <li>d. Promote the preservation, restoration and recreation of priority habitats.</li> </ul>	
Chapter 14: Preserving and Enhancing the Natural, Historic and Built Environment – Policy ENV5 – Historic	Historic Environment Proposals within or affecting the setting of any of the ten designated conservation areas in Fylde, listed below, or within any additional conservation areas designated during the lifetime of the Local Plan, should conserve or enhance those elements	As set out in ES Chapter 7: Cultural Heritage (document reference TR010035/APP/6.7) there are no designated receptors located within the Draft DCO Limits of the Scheme. However, there are two designated receptors which are located within the Zone of Influence. One of these is the Singleton Conservation Area (CA2), located 775m to the south of the Draft Order Limits.  The ES chapter states that: 'Construction activity such as an



Fylde Local Plan	to 2032 Submission (2016)	
Policy	Policy Guidance	Scheme compliance with local policy
Environment	that make a positive contribution to their special character and appearance and setting. Proposals that better reveal the significance of these areas will also be supported  • Singleton	increase in traffic within the surrounding area and noise and visual intrusion from construction has the potential to affect the setting of Singleton Conservation Area (CA2). With mitigation, which would comprise re-routing construction traffic there would be a negligible magnitude of impact to this medium value receptor which results in a slight significance of effect.'
	Scheduled monuments and other archaeological remains	Once operational, whilst there is the potential for the Scheme to cause visual and noise intrusion on the setting of Singleton Conservation Area, with mitigation in place in the form of acoustic fencing, this would result in a neutral/slight significance of effect, which is not considered to be significant.
	Where there is the potential for non- designated archaeology, developers will be expected to investigate the significance of the archaeology prior to the determination of an application for	Within the Draft DCO Limits there are a total of 35 non-designated archaeological remains, the majority of which are of post-medieval and unknown date. 30 of these are within the Fylde Borough Council area.
	the site. Where this demonstrates that the significance is equivalent to that of designated archaeology, proposals which cause harm to or loss will not be	A further five non-designated archaeological remains are located within the Zone of Influence, the majority of which date to the post-medieval period.
	supported.	The mitigation of archaeological remains would occur prior to or during construction. No archaeological mitigation would
	Where proposals affect non-designated archaeology of local significance, this will be a material consideration when determining any planning applications for development.  Developers need to undertake research	continue into the operational phase. Mitigation through archaeological excavation or by archaeological monitoring would be outlined in the Outline CEMP (document reference TR010035/APP/7.2) and illustrated in the Environmental Masterplan (document reference TR010035/APP/6.19).
	Developers freed to undertake research	As stated in ES Chapter 7 Cultural Heritage (document



Fylde Local Plan to 2032 Submission	on (2016)	
Policy Policy Guidance		Scheme compliance with local policy
at an appropriate where archaeolog  Where it can be of substantial public proposals outweig council will need significance of refersure mitigation preservation of the preferred solution justified, the deverto make adequate excavation and reduring developments also demonstrate	early stage to find out gical remains are.  demonstrated that the sebenefits of any gh the harm, the to consider the mains and seek to of damage through he remains in situ as a n. Where this is not eloper will be required the provision for exercing before and / or ent. Proposals should thow the public and appreciation of such	reference TR010035/APP/6.7), work within the Draft DCO Limits to the north of Garstang Road would result in the direct loss of potential archaeological remains related to known Romano-British settlements to the west of the Main Dyke at Moorfield Park. This effect has been assessed as significant. An archaeological watching brief, trial trenching and boreholes would therefore be undertaken. These proposed mitigation measures would assist in reducing the level of impact as a result of the Scheme, such that this would not be significant in compliance with planning policy guidance.  The ES provides detail relating to the residual effects on archeology. It concludes that all remaining residual effects on the non-designated heritage receptors would be slight adverse or neutral.

Table 6 Wyre Resaved Policies of the Wyre Borough Adopted Local Plan 1999

Wyre Resaved Policies of the Wyre Borough Adopted Local Plan 1999		
Policy	Policy Guidance	Scheme compliance with local policy
SP4 Change of	The change of use of land in a green belt	It is acknowledged that the Scheme is an 'inappropriate use'
Use of Land in	will be permitted if the proposal is for	within the Green Belt and therefore compliance against the five
Green Belts	agriculture, forestry, sport, recreational	purposes of permitting development within the Green Belt (as
	purposes or other appropriate green belt	set out in paragraphs 133-147 of the NPPF) is referred to below:
	uses, and it does not prejudice the	
	associated green belt objectives of	To check the unrestricted sprawl of large built-up areas
	landscape protection and enhancement,	The section of Scheme lying within Green Belt land is limited to



Wyro Bosayod I	Policies of the Wyre Borough Adopted Loc	al Plan 1000
Policy	Policy Guidance	Scheme compliance with local policy
Policy	nature conservation interests and improved access to the countryside generally. Development will be resisted where the use, even if appropriate in principle, would become so intensive relative to the size of the site that it could no longer be considered an open use appropriate to a green belt.	improvement works to Skippool Junction and Amounderness Way, extending a short distance (401m) to the west of the existing Skippool roundabout. The Scheme involves alteration of the Junction from a priority roundabout to a 4-way traffic signal-controlled crossroads junction with designated turning lanes. The section of Amounderness Way proposes widening within the existing highway boundary to accommodate predicted increase in traffic flows. In view of the nature of the Scheme proposals and their containment within the existing highway boundary, it is considered that this will not lead to an extension of the urban area, nor further incursion into the Green Belt.  To prevent neighbouring towns from merging into one another. The Scheme involves remodelling of the existing Skippool Junction, as well as the necessary widening of part of Amounderness Way, within the highway boundary. The Scheme would not involve the development of land outside of the highway boundary within the Green Belt and would not therefore facilitate the merger of neighbouring towns. It would also not impact on or reduce the ability of the Green Belt to prevent neighbouring towns from merging.  To assist in safeguarding the countryside from encroachment The highway improvement works to the west of the Skippool Junction define the extent of the Scheme proposals within the Green Belt. The Scheme would not involve the development of land outside of the highway boundary within the Green Belt. Based on the purpose and extent of the proposals and their relationship to the existing highway infrastructure, this does not, in itself, represent encroachment into the countryside.



Wyre Resaved P	olicies of the Wyre Borough Adopted Loc	cal Plan 1999
Policy	Policy Guidance	Scheme compliance with local policy
		To preserve the setting and special character of historic towns There are no historic towns within the area of Green Belt affected by the Scheme, thus there is no change to the setting and character of historic towns within the Green Belt.
		To assist in urban regeneration by encouraging the recycling of derelict and other urban land The Scheme aims to improve journey times on the A585 between Windy Harbour and Skippool Junctions in delivering capacity enhancements to support employment and residential/commercial development and growth opportunities. This is seen as having a positive effect on bringing forward development land in the area.
		The Scheme proposals within the Green Belt will be restricted within the highway boundary therefore avoiding the need for developing greenfield land beyond.
		Based on the above assessment, potential harm to the Green Belt is minimal and is clearly outweighed by the other important and relevant considerations in relation to the need for the Scheme. That there is no harm identified to the Green Belt is a significant factor in demonstrating the Scheme's compliance with relevant guidance for development within Green Belt land.
ENV7 Trees on Development Sites	Proposals for development that are likely to affect trees within a site will only be approved in those circumstances:  A. Where the scheme includes measures for the selection, retention and protection of those trees which are healthy and have (or would have) a public amenity	ES Chapter 9: Landscape (document reference TR010035/APP/6.9) states that there are a number of trees and lengths of hedgerow within the order limits, including those protected by TPOs. However, none of these protected trees would be affected by the Scheme within Wyre.



Wyre Resaved F	Policies of the Wyre Borough Adopted Loc	cal Plan 1999
Policy	Policy Guidance	Scheme compliance with local policy
	benefit, and B. Where appropriate, new trees of a suitable species are proposed for planting in a scheme to be agreed with the local planning authority, and C. Where the setting and character of trees (including where possible any trees adjacent to the site) is taken into account in considering the development of sites containing trees, and D. Where development is sited so as to avoid damage to existing trees by ensuring adequate spacing, and E. Where the proposals do not conflict with any other provisions of the local plan, and F. Where the proposal does not have an adverse effect on the integrity of an ancient woodland.	
ENV13 Development and Flood Risk	Development in areas at direct risk from flooding will only be permitted where: A. It would not cause or exacerbate flooding in other areas, and B.A satisfactory standard of flood protection already exists, or C. Mitigation measures will be included in a scheme.  Where there is no adequate information for sites strongly expected to be at risk from flooding, developers will be required	A detailed FRA (document reference TR010035/APP/5.2) has been undertaken for the Scheme. This includes an assessment to ensure that the Scheme is not at increased risk of flooding over its lifetime due to climate change for the three climate change scenarios for the 1% Annual Exceedance Probability (AEP) event: +35% and +70% fluvial inflows.  The FRA shows that the Scheme is proposed in an area currently predicted to be at risk of flooding. However, by increasing the capacity of the existing A585 crossing as part of the Scheme proposals, upstream flood extents are reduced and therefore the Scheme is not at risk of flooding for any of the design events



Wyre Resaved F	Policies of the Wyre Borough Adopted Loc	cal Plan 1999
Policy	Policy Guidance	Scheme compliance with local policy
	to carry out detailed technical investigations to evaluate the extent of the risk and to implement any necessary agreed measures.	Based on these model results, the Environment Agency (EA) has confirmed that mitigation would be required to ensure that increases in flood risk to third parties were minimised. An area of land on the right bank of the Main Dyke immediately downstream of the A585 has accordingly been identified to provide additional floodplain storage to offset that removed by the road embankment during construction.  The highways drainage system would limit discharge from the highway to existing rates to avoid increasing the risk of flooding.
ENV15 Surface Water Run-Off	Development which will generate increased rates of surface water run-off will not be permitted where it would lead to adverse impacts such as an increased risk of flooding, river channel instability, or damage to habitats. developers will be expected to cover the cost of assessing surface water drainage impacts and any appropriate mitigation works, including long-term maintenance.	Surface water features in the study area include the Main Dyke and the Horsebridge Dyke (both EA Main Rivers). These watercourses drain to the Wyre Estuary via the Skippool Creek at the western extent of the study area.  Mitigation measures will be implemented to provide suitable construction site drainage systems, including cut-off ditches and SuDS, or equivalent, with suitably sized treatment facilities and ensure that SuDS required for the permanent works, would be completed before the start of earthwork operations; obtaining the necessary consents/ environmental permits for any soakaway or filtration systems or to enable discharge of surface water runoff from the construction site.  The highways drainage system would limit discharge from the highway to existing rates to avoid increasing the risk of flooding. Modelling assessments have been undertaken as part of the ES, quantify baseline flood risk from rivers and the sea and calculations have been done to quantify rainfall runoff rates,



Wyre Resaved P	Wyre Resaved Policies of the Wyre Borough Adopted Local Plan 1999		
Policy	Policy Guidance	Scheme compliance with local policy	
		informing the drainage design. The new culverts have been sized, as part of the drainage design, to maintain the current land drainage regime and to convey flood flows without causing any detriment to baseline flood risk. Culvert inverts would also be buried below existing bed levels to allow baseline bed levels, slopes and bed materials to be maintained. Bankside vegetation would be re-instated or enhanced. These measures would reduce the effects of culverting on flood risk, riverine habitats and geomorphology.	
		Chapter 15: Climate (document reference TR010035/APP/6.15) of the ES sets out how the proposal takes account of the projected impacts of climate change. This assesses the impacts on greenhouse gas emissions and vulnerability of the Scheme to climate change. The FRA includes an assessment to ensure that the Scheme is not at increased risk of flooding over its lifetime due to climate change.	
		Chapter 12: Road Drainage and the Water Environment (document reference TR010035/APP/6.12) of the ES allows for increased rainfall intensities due to climate change (+30%) thus the storage to attenuate runoff rates to greenfield, incorporating an allowance for climate change.	
		The Scheme has identified an area of land on the right bank of the Main Dyke immediately downstream of the A585 which could be used to provide some additional floodplain storage to offset that removed by the road embankment during construction.	
ENV16 Ground Water	Development proposals will not be permitted where they are likely to have	In relation to water quality, Chapter 12: Road Drainage and the Water Environment (document reference TR010035/APP/6.12) of	



Wyre Resaved P	Policies of the Wyre Borough Adopted Lo	cal Plan 1999
Policy	Policy Guidance	Scheme compliance with local policy
Protection  ENV17 Surface	an adverse impact upon the quality or supply of ground water resources and planning conditions or planning obligations cannot be applied to secure water quality.  Development proposals will not be	the ES identifies that the Scheme is located to the south of the estuary of the River Wyre. Other surface water features in the study area include the Main Dyke and the Horsebridge Dyke. These surface water features are presented in Figure 12.1 of the ES. The River Wyre and Main Dyke are both monitored under the WFD, as illustrated in Figure 12.3 at Appendix A of the ES. There
Water Protection	permitted where they are likely to have an adverse impact upon the quality or supply of ground water resources and	is one groundwater body underlying the study area, the West Lancashire Quaternary Sand and Gravel Aquifer.
	planning conditions or planning obligations cannot be applied to secure water quality.	The CEMP would ensure the quality of the water environment does not deteriorate during construction of the Scheme. The Outline CEMP (document reference TR010035/APP/7.2) includes best practice for the management of environmental impacts during construction. It would be expected to include a Pollution Control Plan to safeguard the quality of surface water and groundwater, drawing on standard best practice and relevant CIRIA publications.
		'To promote the sustainable use of water resources, measures would be implemented during construction to promote general water use efficiency and particularly reduce the use of potable water. Examples that could be adopted include rainwater harvesting, to provide water supply for welfare facilities and for use in dust suppression; the collection of greywater for use in wheel washing facilities; and leakage prevention. These measures would be set out in a Construction Water Management Plan as detailed in the Outline CEMP (document reference TR010035/APP/7.2) and REAC (document reference TR010035/APP/7.3).'
		During operation, the pollution potential of the Scheme has been



Wyre Resaved F	Policies of the Wyre Borough Adopted Loc	cal Plan 1999
Policy	Policy Guidance	Scheme compliance with local policy
		tested, during both routine runoff and accidental spillage scenarios, using HAWRAT. The findings, detailed in the drainage strategy, which is appended to the FRA (document reference TR010035/APP/5.2), have informed the drainage design.
		'A drainage design has been developed for the operational Scheme that rapidly removes water and prevents flooding of the carriageway. The Scheme would discharge to the receiving water environment via existing and new outfalls. Attenuation would be provided to achieve agreed discharge rates, inclusive of an allowance for climate change resilience. The drainage design also includes appropriate measures to manage the quality of highway runoff. Measures include vortex oils and grit separators, vegetation treatment systems (constructed wetlands) and shut off valves to contain pollutants in the event of an accidental spillage. These treatment measures have been tested using the HAWRAT. All outfalls achieve a Pass with the proposed mitigation measures in place.'
		Residual effects are assessed in the ES as being not significant during both the construction and operational phases.
TREC12 Public Rights of Way	In order to ensure that public access to the countryside is maintained and enhanced, the borough council as local planning authority will, through its responsibility for controlling the development and use of land, safeguard all public rights of way including footpaths, bridleways, byways and unclassified county roads.	<ul> <li>Where the Scheme affects existing footways and cycleways along the existing A585 and PRoW during construction, measures have been developed to reduce potential impacts. Mitigation measures, as set out in ES Chapter 10 (People and Communities) include:</li> <li>'Siting of compound buildings and material storage areas away from PRoW;</li> <li>Landscaping including tree, shrub and hedgerow planting and bunding to reduce noise and visibility of the Scheme;</li> </ul>



Wyre Resaved Policies of the Wyre Borough Adopted Local Plan 1999		
Policy	Policy Guidance	Scheme compliance with local policy
TR9 Cyclists	Proposals will not be permitted which: A. Adversely affect any existing public right of way, and the public's enjoyment of it unless a satisfactory alternative is provided, or B. Detract from the character of any existing right of way, or C. Do not accord with the need to improve and provide access to the countryside for the disabled.  The borough council together with the county council, will safeguard the routes of the borough's existing and proposed cycleways as shown on the proposals map, and undertake environmental improvements and other such methods to increase their attractiveness.  A. Incorporating facilities for cyclists in highway designs, traffic management and traffic phasing, particularly in relation to proposals for residential development of 3.5 ha or greater (policy h3);  C Investigating the potential for, and designating new, cycle routes throughout the borough.	<ul> <li>Putting clear and concise signposts in place, indicating any temporary diversions;</li> <li>Ensuring that any closure periods are kept to a minimum;</li> <li>Utilising social media to update members of the public of any closures and diversions which are in place; and</li> <li>Liaise directly with PRoW officers from local authorities in order to keep them fully appraised of works and of any diversions / closures which would be put in place.'</li> <li>During operation, the Scheme would minimise potential conflicts for NMUs by improving the safety of pedestrians, equestrian and cyclists around the existing A585, which will be de-trunked. At both the Skippool Bridge and Poulton Junctions, pedestrian and cycle access would be provided. A new footbridge (Grange Footbridge) will include the creation of a new, accessible footpath with links across Garstang New Road and to the wider PRoW network. These improvements would greatly improve connectivity of the footpath with other routes; and would improve the standard of the path giving beneficial effects.</li> </ul>



Table 7 Lancashire County Council, Joint Lancashire Minerals and Waste Development Framework Core Strategy DPD: Managing our Waste and Natural Resources: February 2009 and Joint Lancashire Minerals and Waste Development Framework Site Allocations and Development Control Policies Local Plan, September 2013

Allocations and Development Control Policies Local Plan, September 2013			
Lancashire County Council, Joint Lancashire Minerals and Waste Development Framework Core Strategy DPD: Managin			
our Waste and N	atural Resources: February 2009 and Joir	nt Lancashire Min	erals and Waste Development Framework Site
Allocations and I	Development Control Policies Local Plan,	September 2013	
Policy	Policy Guidance	Scheme complia	ance with local policy
Core Strategy DPD: Managing our Waste and Natural Resources: February 2009  CS1 Safeguarding Lancashire's Mineral Resources	Lancashire's mineral resources, including those shown on the Key Diagram, and including its former mineral workings, will be identified and conserved, where they have an economic, environmental or heritage value.  Mineral resources with the potential for extraction now or in the future will be identified as Mineral Safeguarding Areas	Within the Draft DCO Limits, two Mineral Safeguarding Areas (MSAs) have been identified.  A Mineral Assessment Report, contained in Appendix 4, identifies areas of land within the order limits that are located within the mineral safeguarding area. The first MSA (MSA1) is near the proposed Poulton Junction and the second (MSA2) is immediately east of Lodge Lane. Both apply to sand and gravel reserves.  Table 5.1 of the Mineral Assessment Report provides a detailed	
	and protected from permanent sterilisation by other development	repeated below:	ompliance with policy M2. This is largely
	Extraction of mineral resources prior to other forms of development will be encouraged	The mineral concerned is no longer of	Based on historical mapping and the evidence of the intrusive ground investigation, neither MSA1 or MSA2 have
Site Allocations and Development Control Policies Local Plan, September 2013 Policy M2 Safeguarding Minerals	Within the Plan area, Mineral Safeguarding Areas have been delineated on the Policies Map around all deposits of:  • Limestone  • Sand and Gravel  • Gritstone [Sandstone]  • Shallow Coal	any value or has been fully extracted	been fully extracted and the mineral resources is still present in these areas. In the location of MSA1 minor extraction in the form of old sand pits and old clay pits may have taken place as identified in the historical maps. From aerial photos, there appears to be a historic pit present within MSA2. The deposits encountered within both MSAs included clay deposits and a peat layer was



Allocations and Development Control Policies Local Plan Policy Guidance	Scheme compliance with local policy
<ul> <li>Brickshales</li> <li>Salt</li> <li>Within these mineral safeguarding areas identified, planning permission will not be supported for any form of development that is incompatible by reason of scale, proximity and permanence with working the minerals, unless the applicant can demonstrate to the satisfaction of the local planning authority that: <ul> <li>The mineral concerned is no longer of any value or has been fully extracted.</li> <li>The full extent of the mineral can be extracted satisfactorily prior to the incompatible development taking place.</li> <li>The incompatible development is of a temporary nature and can be completed and the site returned to its original condition prior to the minerals being worked.</li> <li>There is an overarching need for the incompatible development that outweighs the need to avoid the sterilisation of the mineral resource.</li> <li>That prior extraction of minerals is</li> </ul> </li> </ul>	present in MSA1. These materials and overburden such as topsoil would need to be separated from the mineral (at additional cost) before they would be suitable for use. Testing would be required to confirm that the minerals have the appropriate properties for use within the industry.  The full extent of the mineral can be extracted satisfactorily prior to the incompatible development taking place.  The full extent of the mineral can be extracted satisfactorily prior to the incompatible development taking place.  The full extent of the mineral can be extracted satisfactorily prior to the incompatible development taking place.  The full extent of the mineral can be extracted satisfactorily prior to the incompatible development taking place.  The full extent of the mineral can be extracted satisfactorily prior to the incompatible developments or structures are present within the MSAs, however there are residential properties / roads in proximity or crossing the MSA, which need to be considered.  Glaciofluvial Deposits of the desired sand and gravel have been identified in both MSAs at varying depths.  To achieve vertical alignment, for the new A585, mineral resources in the area of MSA2 will be removed during the construction of the cutting under Lodge Lane. The extracted minerals will thus be of benefit and re-used within the Scheme design.  If extraction took place in MSA1, the highway is at grade, and the void created would need to be infilled with suitable material before the road could be constructed or the area used as



Lancashire County Council, Joint Lancashire Minerals and Waste Development Framework Core Strategy DPD: Managing our Waste and Natural Resources: February 2009 and Joint Lancashire Minerals and Waste Development Framework Site Allocations and Development Control Policies Local Plan, September 2013 Policy Guidance **Policy** Scheme compliance with local policy not feasible due to the depth of the a temporary compound. This could create problems of future settlement and damage to deposit. Extraction would lead to land the new highway. stability problems. The The Scheme consists of permanent highway incompatible structures that transect both the MSAs. development The northern extent of MSA1 will be used as is of a a temporary site compound during the temporary construction works of the road. Once this nature and work has been completed then this area can be would be available for extraction in the future completed along with the majority of MSA1. and the site returned to its original condition prior to the minerals being worked. There is an The Department for Transport (DfT) identified the Scheme in the 2014 Road Investment overarching need for the Strategy (RIS) and as one of the routes in greatest need of improvement. The Scheme incompatible development was included as a priority in the RIS for



Lancashire County Council, Joint Lancashire Minerals and Waste Development Framework Core Strategy DPD: Managing our Waste and Natural Resources: February 2009 and Joint Lancashire Minerals and Waste Development Framework Site Allocations and Development Control Policies Local Plan, September 2013 **Policy** Policy Guidance Scheme compliance with local policy delivery in Road Period 1 to commence that outweighs construction by March 2020. This was the need supported by policy in the RIS which stated its to avoid the intention for the Scheme to improve all road sterilisation journeys, enhance connectivity across the of the region, help deliver environmental goals and boost local economic activity. mineral In April 2014, the then Highways Agency resource produced the South Pennines Route Strategy (SPRS) document with supporting evidence and a Technical Annex. The Strategy identified that the 4.5 kilometres section of the A585 between Windy Harbour Junction and Skippool Junction is a severe bottle-neck, affecting people's journeys between the M55 and the northern part of the Fylde peninsula. Journey times and safety are identified as in need of improvement since it is among the worst 10% of routes in the north west (South Pennines Route Strategy Evidence Report). The South Pennines Route includes the whole of the A585 from the M55 through to Fleetwood. The SPRS reports on the planned growth for the area and the possible new uses for the Port of Fleetwood, implying a

growth

and

significant increase in demand for the A585 route. There is a need therefore to improve capacity on the route to support employment, development

economic



detrimental effect upon ground stability and

the wider water environment. Consideration

would need to be given to properties near to

the extraction as settlement may occur. Larger

buffers may need to be applied to reduce this risk, however this would reduce the volume of

mineral available for extraction.

Lancashire County Council, Joint Lancashire Minerals and Waste Development Framework Core Strategy DPD: Managing our Waste and Natural Resources: February 2009 and Joint Lancashire Minerals and Waste Development Framework Site Allocations and Development Control Policies Local Plan, September 2013 Policy Policy Guidance Scheme compliance with local policy opportunities, ensuring that the route can accommodate anv future arowth is recognised as a key priority. That prior The depth to the Glaciofluvial Deposits of extraction of sand and gravel is considered relatively shallow and therefore could be extracted. minerals is not feasible Groundwater is however encountered at due to the shallow depth and therefore dewatering depth of the activities are likely to be required during the deposit. extraction. Given the shallow depth of groundwater within both MSAs, dewatering activities are likely to be required to fully extract the mineral resource. Such an activity may have a Extraction

would lead

to land

stability

problems.



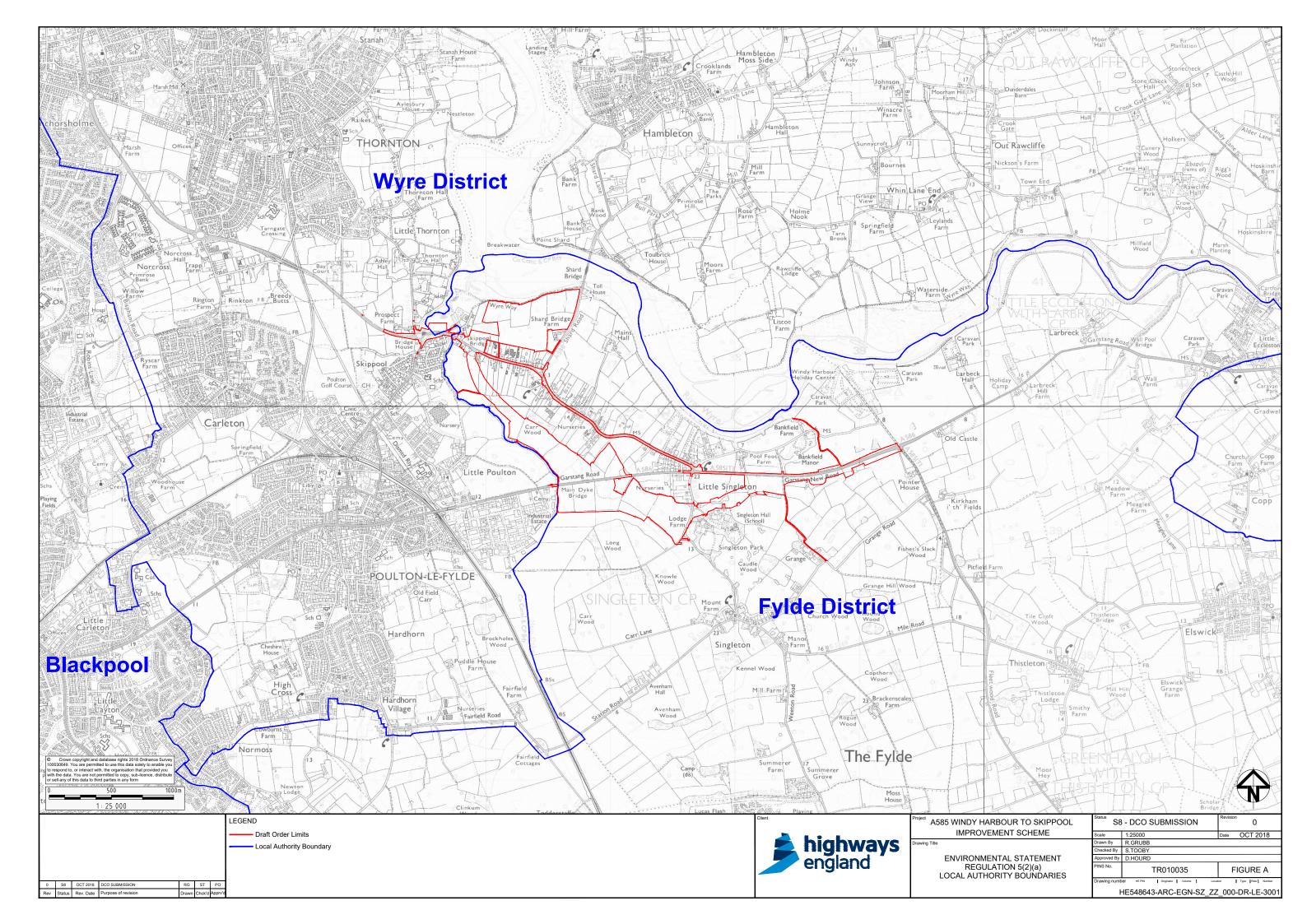
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# **Appendix 3 - Drawings**



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# **Appendix 4 – Mineral Assessment Report**



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# A585 Windy Harbour to Skippool Improvement Scheme

TR010035

# 7.1.1 Mineral Assessment Report

APFP Regulation 5(2)(q)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

Volume 7

OCTOBER 2018



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#### Infrastructure Planning

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

# A585 Windy Harbour to Skippool Improvement Scheme

Development Consent Order 201[]

#### MINERAL ASSESSMENT REPORT

Regulation Number:	Regulation 5(2)(q)
Planning Inspectorate Scheme	TR010035
Reference	
Application Document Reference	TR010035/APP/7.1.1
Author:	A585 Windy Harbour to Skippool Improvement Scheme Project Team, Highways England

Version	Date	Status of Version
Rev 0	October 2018	DCO Submission



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#### 1 INTRODUCTION

#### 1.1 Terms of Reference

- 1.1.1 The Department for Transport (DfT) outlined in its Road Investment Strategy (RIS) Statement 2014, its aims for the Strategic Road Network (SRN). Part of this was to identify key investment needs on the SRN as a result the Highways England developed a Route Based Strategy (RBS) to focus on those routes in the greatest need of improvement. The A585 Windy Harbour to Skippool Improvement Scheme was identified as a priority and included in the RIS for delivery in Road Period 1 (to start construction by Spring 2020).
- 1.1.2 Within the boundary of the Improvement Scheme, two Mineral Safeguard Areas (MSAs) have been identified. Other MSAs are present within the local area, however they are not within the Development Consent boundary and are therefore not considered within this report.
- 1.1.3 This mineral assessment report has therefore been prepared to support the application for the Development Consent Order for the Scheme.
- 1.1.4 The objective of the report is to assess the MSA looking at the extent and quality of any mineral resources, the physical site setting and the proposed development, informing the likelihood of any resources being worked in the future. This will quantify the possible magnitude of mineral sterilisation and consider whether the prior extraction of minerals is feasible (practically and economically) and environmentally acceptable.

#### 1.2 Proposed Improvement Scheme

1.2.1 The A585 Windy Harbour to Skippool Improvement Scheme is to provide an improvement to 4.85km of the existing single carriageway A585 trunk road. This road route extends in a generally north-west direction for about 19km between M55 Junction 3 and the port of Fleetwood at the northern end of the Fylde Peninsula as shown in Figure 1.1 below.



BLACKPOOL

BLACKPOOL

BLACKPOOL

M555

A585(T)

THE FYELDE

Figure 1-1 – Site location plan

- 1.2.2 The Scheme is comprised of a new two-lane all-purpose dual-carriageway bypass connecting Windy Harbour junction and Skippool junction with the following junctions from east to west:
  - Conversion of Skippool Junction to a traffic signal-controlled crossroads,
  - Skippool Bridge junction in the form of a three-arm traffic signal-controlled junction,
  - Poulton Junction in the form of a signal-controlled crossroads connecting the new bypass to A586 Garstang Road East and;
  - Modification to Little Singleton Junction (also known as Five Lane Ends) to accommodate U-turning traffic including buses.
- 1.2.3 The Scheme will involve the development of four new structures:
  - Skippool Clough culvert to be replaced by a new culvert to the east of the existing culvert either in advance of the Scheme or as part of the Scheme;
  - Skippool Bridge;
  - Lodge Lane Bridge;
  - Grange Footbridge.



1.2.4 The scheme development area and route are shown in Figure 1.2 below.

Break water

Toulbright

House

Figure 1-2 - Scheme development area

- 1.2.5 The development at Poulton Junction to Windy Harbour consists of a bypass section which would climb at up to 4% gradient in an eastward direction from Poulton Junction. Immediately east of Poulton Junction, the bypass would be on a short length of embankment before entering a deep cutting (8.6m at its deepest) for the route to pass under the B5260 Lodge Lane that would be carried over the bypass on a new bridge.
- 1.2.6 The cutting at Lodge Lane will transect the Mineral Safeguarding Area immediately east of Lodge Lane and is discussed further in the report.
- 1.3 **1.3 Mineral Planning**
- 1.3.1 Lancashire County Council (Ref. 1) Minerals and Waste Local Plan (LMWLP) Policy M2 highlights several considerations to be considered during the mineral assessment, as follows:
- 1.3.2 The National Planning Policy Framework (NPPF) (Ref. 2) identifies the use of minerals as being an aspect of sustainability as outlined in paragraph 203 "It is essential that there is a sufficient supply of minerals to provide the infrastructure, buildings, energy and goods that the country needs. Since minerals are a finite natural resource, and can only be worked where they are found, best use needs to be made of them to secure their long-term conservation". The NPPF outlines a series of guideline planning policies for local planning authorities to follow to ensure that specific mineral resources of local or national importance are not needlessly sterilised by non-mineral development. However, these policies carry no presumption that the resource will be worked in the future.



- 1.3.3 Lancashire County Council have set out a number of policies with regards to minerals and waste in the LMWLP and provides site specific policies and allocations for minerals and waste planning.
- 1.3.4 The LMWLP Policy M2 Safeguarding Minerals states that within the plan area, MSA have been delineated on the Policies Map around all deposits of the following:
  - Limestone
  - Sand and Gravel
  - Gritstone (Sandstone)
  - Shallow Coal
  - Brickshales
  - Salt
- 1.3.5 Policy M2 goes on to state that within these MSA, planning permission will not be supported for any form of development that is incompatible by reason of scale, proximity and permanence with working the minerals, unless the applicant can demonstrate to the satisfaction of the local planning authority that:
  - The mineral concerned is no longer of any value or has been fully extracted.
  - The full extent of the mineral can be extracted satisfactorily prior to the incompatible development taking place.
  - The incompatible development is of a temporary nature and can be completed and the site returned to its original condition prior to the minerals being worked.
  - There is an overarching need for the incompatible development that outweighs the need to avoid the sterilisation of the mineral resource
  - That prior extraction of minerals is not feasible due to the depth of the deposit.
  - Extraction would lead to land stability problems.
- 1.3.6 Policy M2 is read in conjunction with the Core Strategy (CS1) which requires those minerals that have economic, environmental or heritage value and potential for extraction now or in the future to be identified and shown as MSA on the Policy Map.
- 1.4 1.4 Limitations and Expectations
- 1.4.1 This report has been prepared for the client in accordance with the terms and conditions of appointment. Arcadis cannot accept any responsibility for any use of or reliance on the contents of this report by any third party. The copyright of this document shall remain the property of Arcadis.
- 1.4.2 This report has been compiled from several sources, which Arcadis believes to be trustworthy. However, Arcadis is unable to guarantee the accuracy of information provided by others. The report is based on information available at the time of writing. Additional information may become available in the future which may have a bearing on the conclusions of this report and for which Arcadis cannot be held responsible.



#### 2 SITE SETTING

#### 2.1 Mineral Safeguarding Areas (MSAs)

- 2.1.1 This mineral assessment report will focus on the two MSA that the proposed bypass route transects, as opposed to the Scheme as a whole. The first MSA (MSA1) is near the proposed Poulton Junction and the second (MSA2) is immediately east of Lodge Lane. Both apply to sand and gravel reserves. Note that only the southern extent of MSA1 is affected by the proposed route. Therefore, it is possible that the remaining area may be extracted in the future.
- 2.1.2 Figure 2.1 shows the locations of MSA1 and MSA2 in relation to the Development Consent boundary and Figure 2.2 shows the proposed road alignment within the boundary.



Figure 2-1– Locations of mineral safeguarding areas in relation to the Development Consent boundary.

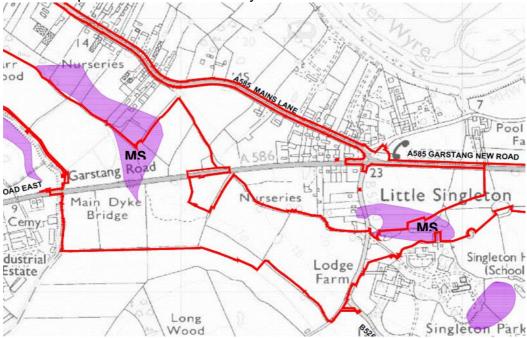
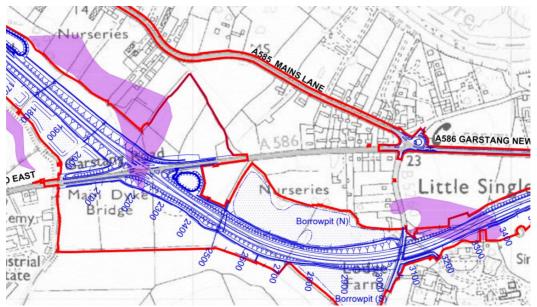


Figure 2-2 - Proposed road alignment with the MSAs





#### 2.2 Physical Setting

2.2.1 The following provides a summary of the physical setting of the MSAs shown in Table 2-1 below.

Table 2-1 – Summary of the sites physical setting



With reference to the online British Geological Survey (BGS) Geoindex map viewer (Ref. 3) and the BGS published geology map Sheet 66 Blackpool 1975 (Ref. 4) the anticipated geology is as follows:

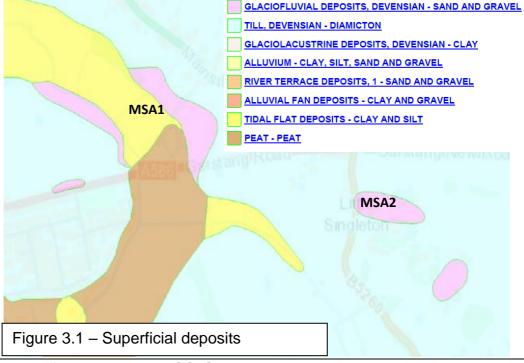
#### Superficial Deposits

MSA1 comprise Tidal Flat Deposits of clay and silt as well as Peat, underlain by Glaciofluvial Deposits of sand and gravel.

MSA2 is shown to be comprised of Glaciofluvial Deposits of sand and gravel.

• **Bedrock Geology** beneath both sites comprises the Singleton Mudstone Member.

Geological maps from BGS are shown in Appendix A and Figure 3.1 below.



#### Historical Boreholes

With reference to the BGS Geoindex online map viewer, there are two historic boreholes are within the MSA1 southern boundary near to Garstang Road. The full historic borehole log is shown in Appendix B and summarised below:

• SD33NE18 (336772, 439374) – Topsoil / made ground to 2.6m, sandy clay to 4.2m, silty sand to 9.7m and sandy gravel to 10m.



	<ul> <li>SD33NE/10 Clayey topsoil to 0.2m, Peat to 0.4, silty Clay to 4.1m, clayey silt to 5.6m, clayey fine SAND to 6.9m, Sand and Gravel at 8.4 with Stiff Clay to 9.2m</li> </ul>
	No historical boreholes are shown within or close to MSA2 boundary.
Coal Mining	According to the Coal Authority interactive map viewer (Ref. 5) the site is not located within a coal mining reporting area; there are no records of mine entries in the area and the site is not located in an area of probable historic or shallow mine workings.
Hydrogeology	With reference to the DEFRA MAGIC interactive map viewer (Ref. 6) the following hydrogeological features were noted:
	<ul> <li>Superficial deposits are classified as Secondary A aquifers and Unproductive aquifers in MSA1, and Secondary A aquifer and Secondary (Undifferentiated) aquifer in MSA2.</li> </ul>
	The Singleton Mudstone Member is classified as a Secondary B aquifer in both MSA.
	The sites do not lie within Source Protection Zones.
Hydrology	The main surface water feature in the vicinity is the River Wyre, approximately 800m north-east from MSA1 and 500m north of MSA2. There is also a man-made culvert that flows south-east to north-west in to the River Wyre, approximately 150m west of MSA1.

#### 2.3 Mineral Resources

- 2.3.1 With reference to the BGS Mineral Resource Information for Lancashire (Ref. 7), MSA1 and MSA2 are designated as mineral resources which may be of current or economic interest comprised of Glaciofluvial Deposits of sand and gravel.
- 2.3.2 The Glaciofluvial sand and gravel are products of glacial meltwaters and are described as sheet like layers or ridges on top of boulder clay or as irregular lenses within the till sequence. The thickness of the deposits is variable but may be as high as 20 30m.
- 2.3.3 An extract of the BGS Mineral Resource Information map is shown in Figure 3.1 below:



SAND & GRAVEL
Superficial deposits

Sub-alluvial: Inferred resources

River Terrace deposits

Glaciofluvial deposits

Blown Sand

PEAT

MSA1

MSA2

Figure 2-3 – Extract from the BGS mineral resource information map for Lancashire

#### 2.4 MSA Descriptions

- 2.4.1 A Phase 2 site investigation was undertaken by SOCOTEC UK Limited between the 8th of January and 20th of March 2018, the description of the site from the works (Ref. 8) has been used in conjunction with a desk-based review to provide a general site description of the two MSA:
- 2.4.2 A Phase 2 site investigation was undertaken by SOCOTEC UK Limited between the 8th of January and 20th of March 2018, the description of the site from the works (Ref. 8) has been used in conjunction with a desk-based review to provide a general site description of the two MSA:

#### MSA1 – Poulton Junction

2.4.3 MSA1 is elongated in shape and runs roughly north-west to south-east / south. The total area of MSA1 is approximately 62,650m2. The size within the redline boundary is approximately 21,750m2 (a third of the total size). The site mostly comprises agricultural land, which is sub-divided into fields separated by hedgerows. This area is known to be occupied by nurseries. Carr Wood is noted on the north western extend of the MSA. The general ground conditions in the area have been described as wet and boggy. The MSA extends under Garstang Road to the south with more agricultural fields beyond. The proposed route passes through the south-western extents of the MSA, were the new Poulton Junction is proposed.

#### MSA2 - Lodge Lane

2.4.4 The MSA2 is elongated and extends from the west to the east. The MSA is comprised mainly of agricultural fields with some areas of woodland. MSA2 is approximately 29,860m2 in total with approximately 14,760m2 in the red line boundary. The MSA



underlies a small section of Lodge Lane and encroaches on to properties at the western extent. The ground in the area has been described as undulating and the topography rises at Lodge Lane before gently falling down towards the River Wyre and the existing A585 to the north.

#### 2.5 Surrounding Area

2.5.1 The Improvement Scheme is set in a semi-rural location on the north-eastern outskirts of Poulton-le-Fylde. Directly north of the proposed route is the existing A585 road which extends from Skippool to Windy Harbour Junction. Beyond the road is a series of agricultural fields and the River Wyre which meanders to the north-east. More agricultural fields and a sporadic scattering of farm houses are located to the east of the route, while more fields and the village of Singleton and Poulton Industrial Estate are located to the south.

#### 2.6 **Site History – Mineral History**

- 2.6.1 The site history of the site and surrounding area has been derived from publicly available historical maps (Ref. 9) dated between 1847 to 1993 and comprise 1:2,500 and 1:10,560 scale Ordnance Survey Maps.
- 2.6.2 The earliest map available is the 1847 1:10,560 historical map, which shows that both MSAs are located in rural settings and are comprised of agricultural fields.
- 2.6.3 An old clay pit and an old sand pit are labelled within MSA1, however there are no significant features shown within MSA2. The surrounding area is predominantly agricultural, with little significant features that may impact the MSA, except for a number of clay pits that surround both MSA in all directions.
- 2.6.4 The 1847 to 1914 historical maps show clay pits north of MSA1 adjacent to the road (current A585) and two pits are shown approximately 200m to the south-east. Near MSA2, clay pits are shown to the north (approximately 200m) and north-east (approximately 212m) of MSA2. Pits are also shown approximately 50m to the southwest and 200m to the east of MSA2.

Carr Wood
Claire-use

To 6377

Old sand pit

170

180

180

170

180

180

Old clay pit

Figure 2-4 - Old Sand Pit and Old Clay Pit in area of MSA1



Figure 2-5 - 1895 historical map of MSA1 & MSA2, black marks are historical clay pits



- 2.6.5 By 1930s historical maps, the pits are shown as disused with many shown as ponds. There are no other significant changes within the MSA or the surrounding area from this point onwards.
- 2.6.6 The historical maps suggest that MSA1 has undergone small scale extraction in the past with reference to the old clay pit and old sand pit shown within the MSA boundary. There is no evidence from the historical maps that MSA2 has undergone historical extraction. However, there are several clay pits in all directions surrounding both MSA.
- 2.6.7 From current aerial photography there appears to be a historic pit in the eastern end of MSA2 as shown in the photo below.

Plate 2-1- Historic pit within MSA2





#### 3 INTRUSIVE INVESTIGATION REVIEW

- 3.1.1 An intrusive ground investigation has been undertaken along the proposed Improvement Scheme. The available information has been reviewed to provide evidence of the geology / mineral resources located in both MSAs.
- 3.1.2 The data is taken from the factual report for the ground investigation report prepared by SOCOTEC UK Limited (Ref. 8).
- 3.2 Exploratory Holes
- 3.2.1 The exploratory holes undertaken in each MSA are detailed below and the relevant exploratory hole location plans are included in Appendix C.

Table 3-1 – Summary of exploratory holes in MSA1

Exploratory Hole ID	Туре	Depth (m bgl)
WS106	Window Sample	7.00
CPT17	Cone Penetration Test	9.06
CPT18	Cone Penetration Test	8.42
TP03	Trial Pit	3.50

Figure 3-1- Exploratory hole locations in the southern extent of MSA1

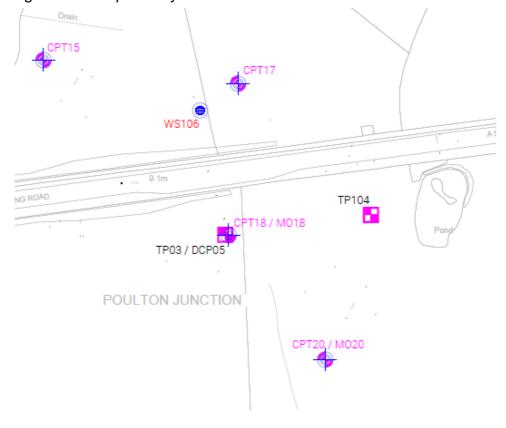
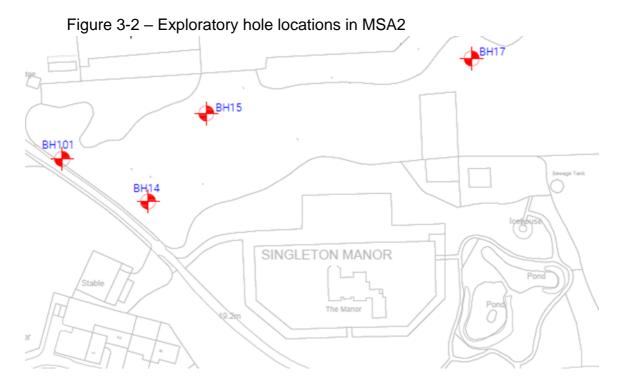




Table 3-2 – Summary of exploratory holes in MSA2

Exploratory Hole ID	Туре	Depth (m bgl)
BH101	Cable Percussion with Rotary Follow On	33.00
BH17	Cable Percussion	11.15
BH15	Cable Percussion	20.00
BH14	Cable Percussion	19.5



#### 3.3 **Ground Conditions**

3.3.1 The following ground conditions in each MSA are summarised below. For full details of the exploratory positions please refer to the factual report (Ref. 8) or the exploratory hole logs provided in Appendix D.

#### MSA<sub>1</sub>

3.3.2 The exploratory holes within MSA1 boundary are all located in the southern extents of the area near Garstang Road and may not represent the entire MSA area. The ground conditions encountered are summarised in Table 3.3.



Table 3-3 – Summary of ground conditions in MSA1

Exploratory	Ground Conditions (bottom depth of strata stated)
Hole ID	(
TP04	<ul> <li>MADE GROUND – 0.4m - Soft dark brown slightly sandy slightly gravelly CLAY with frequent rootlets and rare cobbles of brick and clay pipe</li> </ul>
	<ul> <li>GLACIAL TILL – 3.5m – Comprising soft to stiff CLAY with varying amounts of sand and gravel.</li> </ul>
	<ul> <li>TOPSOIL – 0.25m - Soft to firm brown slightly sandy silty CLAY with frequent rootlets.</li> </ul>
WS106	<ul> <li>GLACIOFLUVIAL DEPOSITS – 2.0m – Comprising soft to firm brown and mottled brown CLAY with varying amounts of sand, gravel and cobbles. Spongy brown fibrous PEAT deposits between 1.0m to 1.2m.</li> </ul>
	<ul> <li>GLACIOFLUVIAL DEPOSITS – 7.0m – Comprising loose to medium dense orangish brown SAND with gravel.</li> </ul>
	TOPSOIL – 0.3m - Soft dark brown slightly gravelly sandy clayey SILT with occasional roots and frequent rootlets.
CPT17	<ul> <li>NO DESCRIPTION – 3.37m – Alternating bands of soft to very stiff CLAY and very loose to medium dense SAND with varying amounts of gravel and cobbles.</li> </ul>
	• NO DESCRIPTION – 9.04m – Very loose to dense SAND.
	TOPSOIL – 0.5m - Firm, brown, slightly gravelly, clayey SILT with frequent rootlets and occasional roots.
CPT18	<ul> <li>NO DESCRIPTION – 4.54m – Soft to very stiff CLAY and SILT with varying amounts of sand and gravel.</li> </ul>
	<ul> <li>NO DESCRIPTION – 8.42m – Medium dense to very dense SAND.</li> </ul>



#### MSA2

3.3.3 The exploratory holes within MSA2 provide good coverage of the area and the ground conditions are summarised in Table 3.4 below.

Table 3-4 – Summary of ground conditions in MSA2

Table 3-4 – Summary of ground conditions in MSA2		
Exploratory Hole ID	Ground Conditions (bottom depth of strata stated)	
	TOPSOIL – 0.4m - Soft friable brown slightly gravelly sandy SILT with frequent rootlets.	
BH101	<ul> <li>GLACIOFLUVIAL DEPOSITS – 3.5m - Loose reddish brown silty fine SAND with pockets of slightly gravelly clay.</li> </ul>	
БППОТ	<ul> <li>GLACIAL TILL – 26.9m – Comprised of stiff to very stiff brown CLAY with varying amounts of sand and gravel.</li> </ul>	
	SINGLETON MUDSTONE — 33.0m — Comprising SILTSTONE and MUDSTONE.	
	TOPSOIL – 0.4m - Soft brown slightly sandy slightly gravelly SILT with frequent rootlets.	
BH14	<ul> <li>GLACIOFLUVIAL DEPOSITS – 4.7m – Comprising soft sandy gravelly CLAY to 2.4m and very loose to loose SAND with gravel to 4.7m.</li> </ul>	
	<ul> <li>GLACIAL TILL – 19.5m – Comprising stiff to very stiff brown slightly sandy slightly gravelly CLAY.</li> </ul>	
	TOPSOIL – 0.6m - Soft brown slightly sandy slightly gravelly SILT with frequent rootlets.	
BH15	<ul> <li>GLACIOFLUVIAL DEPOSITS – 5.0m – Comprising soft sandy gravelly CLAY to 1.7m and loose to medium dense silty SAND to 5.0m.</li> </ul>	
	<ul> <li>GLACIAL TILL – 20m – Comprising stiff to very stiff brown sandy gravelly CLAY.</li> </ul>	
	TOPSOIL – 0.7m - Soft brown slightly sandy slightly gravelly clayey SILT with occasional rootlets and some plant material.	
BH17	<ul> <li>GLACIOFLUVIAL DEPOSITS – 3.7m – Comprising soft silty sandy gravelly CLAY to 1.6m and medium dense silty gravelly SAND to 3.7m.</li> </ul>	
	<ul> <li>GLACIAL TILL – 11.15m – Comprising firm to very stiff brown sandy gravelly CLAY with cobles.</li> </ul>	



#### 3.4 Groundwater

3.4.1 The groundwater conditions in both MSA are summarised in Table 3.5 below:

Table 3-5 – Summary of groundwater conditions from exploratory holes

Exploratory Hole ID	Depth of Groundwater (m)	Geology		
MSA1	MSA1			
TP04	3.00	GLACIAL TILL – sandy gravelly CLAY		
WS106	1.04	PEAT		
MSA2				
BH14	8.00	GLACIAL TILL – sandy gravelly CLAY		
BH15	2.60 and 8.50	GLACIOFLUVIAL DEPOSITS – silty SAND & GLACIAL TILL – sandy gravelly CLAY		
BH101	5.60	GLACIAL TILL – sandy gravelly CLAY		

3.4.2 Groundwater is relatively shallow in MSA1 (TP04 & WS106) and slightly deeper in MSA2. The groundwater is mostly encountered in the Glacial Till comprising sandy gravelly Clay, which underlies the Glaciofluvial Deposits. Groundwater was only identified in the Glaciofluvial Deposits in BH15 (MSA2) at 2.60m.

#### 3.5 Minerals Encountered

3.5.1 Based on the above investigation data the following is assumed for each area.

#### MSA1

- The safeguarded mineral (sand and gravel) has been recorded within the exploratory holes undertaken.
- The mineral is recorded at varying depths ranging from 2.0m to 4.54mbgl.
- Groundwater is encountered between 1 to 3mbgl.



#### 4 SITE SUITABILITY AND VALUE OF MINERAL RESOURCE

4.1.1 Based on the information presented in the sections above, below is a general discussion about the suitability of each MSA for extraction in turn.

#### 4.2 **MSA1**

- 4.2.1 MSA1 is located on the western side of the Scheme. The area of the MSA within the red line boundary is approximately 21,750m2. Garstang Road is present at the southern extent and properties including nurseries are present to the north along the existing A585. When considering these factors, the area available for extraction within the MSA would be reduced.
- 4.2.2 The intrusive ground investigation indicates that Glaciofluvial deposits are present in this area at shallow depth (beneath the topsoil) but the initial layer has a high clay content. Peat was encountered within this strata between 1.0-1.20m. The full depth and extent of the Glaciofluvial deposits (sand and gravel) across the MSA is unknown.
- 4.2.3 To provide an indication of the potential volume of mineral that could be extracted, we have assumed an area of 19,000m2 (reduced due to existing road / properties etc) and have assumed a thickness of mineral of 4m. This depth includes the sand strata encountered in the CPT locations. This provides a potential volume of 76,000m3 of mineral. There would be an initial 4m overburden to remove before the sand and gravel strata could be excavated. Groundwater was encountered at 3.0m bgl in one location and therefore is it likely that dewatering would need to be undertaken to extract the minerals from depths below 3.0m.
- 4.2.4 The proposed development in the area of MSA1 is a signalled junction between Garstang Road and the new A585. The northern part of this area is proposed to be a temporary compound area. The signalled junction would be at the current ground level and therefore no large scale earthworks is proposed in this area. If extraction of the mineral was to take place prior to construction of the road, the majority of the void created would need to be infilled in order for the road to be constructed. Consideration of the groundwater regime would be required during infilling to ensure that similar permeable material is used to infill the voids so that the groundwater regime in this area is not significantly altered.
- 4.2.5 The MSA area outside the Development Consent boundary and the area of the temporary compound could be extracted in the future as access could be from the existing A585 / Garstang Road or the new A585. Consideration would need to be given to the residential and light industrial (nurseries) properties to the north along the existing A585. Cost implications may need to be applied due to the disruption of industries.
- 4.2.6 Taking the above into consideration, the area of MSA1 effected by the permanent road construction is relatively small (see Figure 2.2).

#### 4.3 **MSA2**

- 4.3.1 MSA2 is located on the eastern part of the Scheme. The area of the MSA within the red line boundary is approximately 14,760m2 which is approximately half of the total MSA in this area.
- 4.3.2 The intrusive ground investigation indicates that Glaciofluvial deposits (sand and gravel) are present beneath the topsoil at shallow depth. Groundwater was



encountered within the Glaciofluvial deposits at a depth of 2.0m bgl. The full depth and extent of the mineral deposits across the MSA is unknown, however Glacial Till was encountered beneath the deposit at depths ranging between 3.6m and 5.0m depth where sampled. Given that groundwater was encountered at shallow depth it is likely that dewatering would need to be undertaken to extract minerals to their full depth in MSA2.

- 4.3.3 To provide an indication of the potential volume of mineral that could be extracted, we have assumed an area of 13,000m2 (reduced due to existing road / properties etc) and have assumed a thickness of the mineral of 3m. This provides a potential volume of 39,000m3 of mineral. There would be an initial overburden of approximately 2m to remove prior to extraction. Groundwater was encountered at shallow depth and therefore is it likely that dewatering would need to be undertaken to extract the minerals from depth.
- 4.3.4 The proposed development in the areas of MSA2 is a deep cutting which allows the route to pass under Lodge Lane before re-joining the existing A585 to the east. The cutting is 8.6m at its deepest and therefore any suitable material extracted during the construction of the cutting would be used within the development of the new road for structures (embankments) and general earthworks. This would include the Glaciofluvial deposits.
- 4.3.5 The MSA area outside the Development Consent boundary could be extracted in the future however the area / volume would be small as the western end encroaches on to Lodge Lane and properties to the west. A buffer would need to be placed around these features therefore reducing the area / volume of the mineral available for extraction.

#### 4.4 Value of Mineral Resource

- 4.4.1 It is difficult to estimate the specific value of a construction mineral resource, as many operational factors such as processing costs, overburden ratios, water management, as well typically high capital costs for items such as land acquisition, planning and permits, and plant and infrastructure are bound up in the cost of producing the mineral. Different mineral products (i.e. rock types, sizes) will have different market values determined by their end uses, and factors of supply and demand. In general, aggregate products are only cost effective if transported over relatively short distances, and thus in order to make extraction viable, there must be a source of demand near-by.
- 4.4.2 In the case of these sites and especially MSA1 (as MSA2 minerals will be re-used within the Scheme) the construction industry within local area of Skippool would form the predominant markets for materials extracted in this area, with higher value materials travelling further afield. The nature of the road network must also be considered as traffic movements would increase during the extraction process. The proposed new by-pass is required due to already high levels of traffic and therefore any new industry would increase the burden on already congested roads.
- 4.4.3 Extraction and processing of the mineral deposits requires significant up-front investments in processing plant to produce saleable products from the raw materials. Such large investments require a suitably large mineral reserve to justify the life of the investment. The reserves within MSA1 and MSA2 within the Development Consent boundary, whilst the total extent and volume is unknown, are considered to be



relatively small and therefore not economically viable for extraction.

#### 4.5 Mineral Planning Compliance

4.5.1 With regards to section 1.3 of this report and Policy M2 of the Lancashire Minerals and Waste Local Plan the following considerations have been made:

Table 4-1 – Mineral assessment in relation to Policy M2 of the Lancashire Minerals and Waste Local Plan

Policy	als and Waste Local Plan Discussion
Statement	
The mineral concerned is no longer of any value or has been fully extracted	Based on historical mapping and the evidence of the intrusive ground investigation, neither MSA1 or MSA2 have been fully extracted and the mineral resources is still present in these areas. In the location of MSA1 minor extraction in the form of old sand pits and old clay pits may have taken place as identified in the historical maps. From aerial photos, there appears to be a historic pit present within MSA2.
	The deposits encountered within both MSAs included clay deposits and a peat layer was present in MSA1. These materials and overburden such as topsoil would need to be separated from the mineral (at additional cost) before they would be suitable for use. Testing would be required to confirm that the minerals have the appropriate properties for use within the industry.
The full extent of the mineral can be extracted satisfactorily	Only small proportions of both MSA1 and MSA2 are affected by the scheme, and both reside mainly located in agricultural fields with easy access. No significant overlying permanent developments or structures are present within the MSAs, however there are residential properties / roads in close proximity or crossing the MSA which need to be considered.
prior to the incompatible development	Glaciofluvial Deposits of the desired sand and gravel have been identified in both MSAs at varying depths.
taking place.	To achieve vertical alignment, for the new A585, mineral resources in the area of MSA2 will be removed during the construction of the cutting under Lodge Lane. The extracted minerals will thus be of benefit and re-used within the Scheme design.
	If extraction took place in MSA1, the highway is at grade, and the void created would need to be infilled with suitable material before the road could be constructed or the area used as a temporary compound. This could create problems of future settlement and damage to the new highway.
The incompatible	The Improvement Development Scheme consists of permanent highway structures that transect both the MSAs.
development is of a temporary nature and can be completed and the site returned to its	The northern extent of MSA1 will be used as a temporary site compound during the construction works of the road. Once this work has been completed then this area would be available for extraction in the future along with the majority of MSA1.



original condition prior to the minerals being worked.	
There is an overarching need for the incompatible development that outweighs the need to avoid the sterilisation of the mineral	With reference to Highways England A585 Windy Harbour to Skippool Description of the Scheme document:  "In April 2014, the then Highways Agency produced the South Pennines Route Strategy (SPRS) document. The South Pennines route includes the whole of the A585 from the M55 through to Fleetwood. The SPRS reports on the planned growth for the area and the possible new uses for the Port of Fleetwood. This implies a significant increase in demand for the A585 route. Consequently, ensuring that the route would accommodate any future growth is a key priority.  The A585 Windy Harbour to Skippool Improvement Scheme (the Scheme)
resource	was identified as a priority and included in the RIS for delivery in Road Period 1 (to start construction by Summer 2020)."
That prior extraction of minerals is not feasible due to the depth of the deposit.	The depth to the Glaciofluvial Deposits of sand and gravel is considered relatively shallow and therefore could be extracted. Groundwater is however encountered at shallow depth and therefore dewatering activities are likely to be required during the extraction.
Extraction would lead to land stability problems.	Given the shallow depth of groundwater within both MSAs, dewatering activities are likely to be required to fully extract the mineral resource. Such an activity may have a detrimental effect upon ground stability and the wider water environment. Consideration would need to be given to properties near to the extraction as settlement may occur. Larger buffers may need to be applied to reduce this risk, however this would reduce the volume of mineral available for extraction.



#### 5 SUMMARY

- 5.1.1 The proposed A585 Windy Harbour to Skippool Road Improvement Scheme intersects two MSAs, reported as MSA1 (near Poulton Junction) and MSA2 (immediately east of Lodge Lane). Policy M2 of the Lancashire Mineral and Waste Local Plan requires proposals for development other than mineral extraction, to demonstrate that they will not sterilise the resource or that consideration has been given to prior extraction, and that the need for the development outweighs the economic value of the resource.
- 5.1.2 The scheme affects a small proportion only, of both MSA's.
- 5.1.3 From the limited intrusive site investigation data, it is known that the mineral resource is present however further testing would be required to accurately confirm the physical properties of the deposit to demonstrate that the extracted mineral can be processed to meet the relevant product specifications. The full extent and depth of the mineral is currently unknown and would need to be investigated further.
- 5.1.4 Studying the geology and mineral resource of Glaciofluvial Deposits of sand and gravel in the local area, this resource is common in Lancashire, with opportunity to extract the resource in areas outside of the proposed scheme. Other MSAs are detailed in the local area which could be used for extraction in the future.
- 5.1.5 Extraction activities of this nature have the potential to cause adverse effects on the local environment from activities such as blasting, noise, dust and traffic impacts and are likely to result in opposition from local residents in the area. Given that residential properties are situated in close proximity (to the north-east of MSA1 and directly west and south of MSA2), these factors are likely to be unacceptable and / or increase the buffers applied to the areas which could be extracted. Prior extraction at the site especially in MSA1 would result in the creation of a void which would need to be infilled (in part) to allow for the construction of the new bypass. Other areas could result in long term negative visual impacts on the landscape.
- 5.1.6 The extraction of aggregate is a high (relative to product value) cost exercise, requiring significant 'up-front' investment from an operator associated with obtaining the relevant planning permissions and permits to operate and backfill the site (where necessary). In addition, costs for the purchasing of the necessary processing and mobile plant along with transportation of material would be costly. Given the high capital costs for extraction and processing plant, prior extraction could only be viable if the mineral could be transported and used within the locality.
- 5.1.7 Whilst the proposed development will cross the MSAs, areas of the MSAs not effected by the road would not be sterilised and could be extracted in the future as access would be available via existing infrastructure.



#### 6 CONCLUSIONS

- 6.1.1 A Mineral Resource Assessment has been carried out for the proposed A585 Windy Harbour to Skippool Road Improvement Scheme. Data sources obtained from the public domain and from intrusive investigation have been consulted to produce a conceptual geological model for the area.
- 6.1.2 Given the small areas / volume of both MSAs (MSA1 76,000m3 and MSA2 39,000m3) within the Development Consent boundary it is considered commercial unviable and environmentally unacceptable to extract the minerals from the area.
- 6.1.3 In the case of MSA2, minerals will be extracted (possibly not to the full depth) during construction and will be re-used within the Scheme. Other materials derived through extraction during the development will be re-used within the Scheme, subject to confirmation of their properties to reduce the demand for importation of construction aggregates from off-site sources.
- 6.1.4 The area of the temporary construction compound within MSA1 could be available for extraction in the future once the road has been constructed. Only a small area of MSA1 near to the existing Garstang Road will be sterilised as it will be built over, resulting in a small overall negative impact on this MSA.
- 6.1.5 Overall, this mineral assessment report has confirmed that in line with the requirements of Policy M2 of the Lancashire Mineral and Waste Local Plan, it is not considered feasible to undertake prior extraction in advance of the proposed development, and that there is an overarching need for the development that outweighs the need to avoid the part sterilisation of the relatively small mineral resource.



#### 7 REFERENCES

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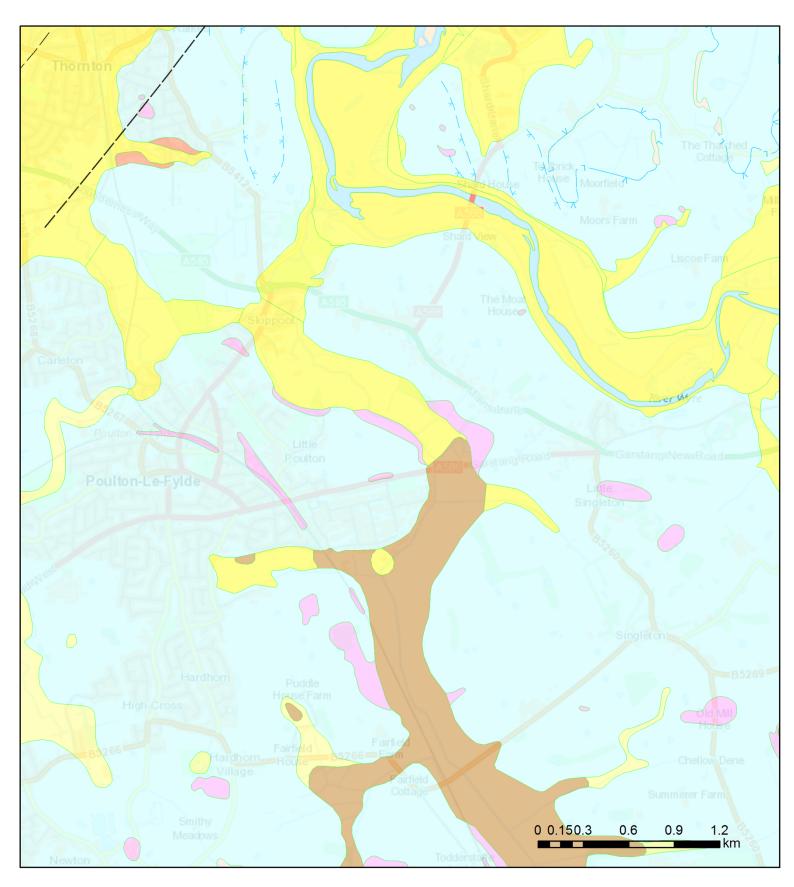
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#### Appendix A – BGS Geoindex Geological Maps

# **Superficial Deposits**





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GeoIndex Onshore Data Sources: NERC, Natural England, English Heritage and Ordnance Survey

#### **Map Key**

#### Superficial deposits 1:50,000 scale

- GLACIOFLUVIAL DEPOSITS, DEVENSIAN SAND AND GRAVEL
- TILL, DEVENSIAN DIAMICTON
- GLACIOLACUSTRINE DEPOSITS, DEVENSIAN CLAY
- ALLUVIUM CLAY, SILT, SAND AND GRAVEL
- RIVER TERRACE DEPOSITS, 1 SAND AND GRAVEL
- ALLUVIAL FAN DEPOSITS CLAY AND GRAVEL
- TIDAL FLAT DEPOSITS CLAY AND SILT
- PEAT PEAT

Linear features 1:50,000 scale

- Backfeature\_Lake\_margin
- Drumlin\_Line\_at\_base
- Fold\_Syncline



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#### **Appendix B- Historical Borehole Logs**



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BGS ID: 1428 : BGS Reference: SD33NE18 British National Grid (27700) : 336772,439374

Report an issue with this borehole

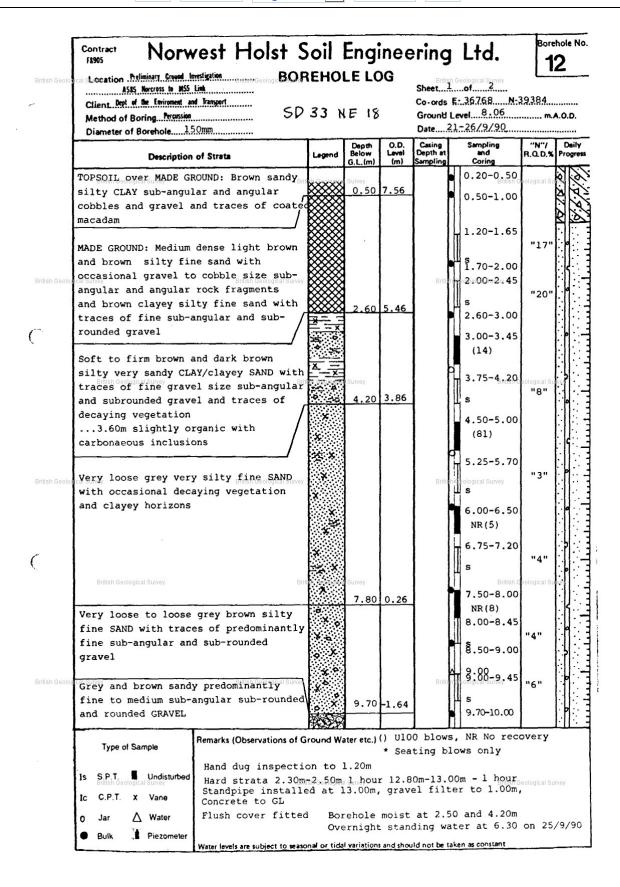
<<

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Page 1 of 2

Next >







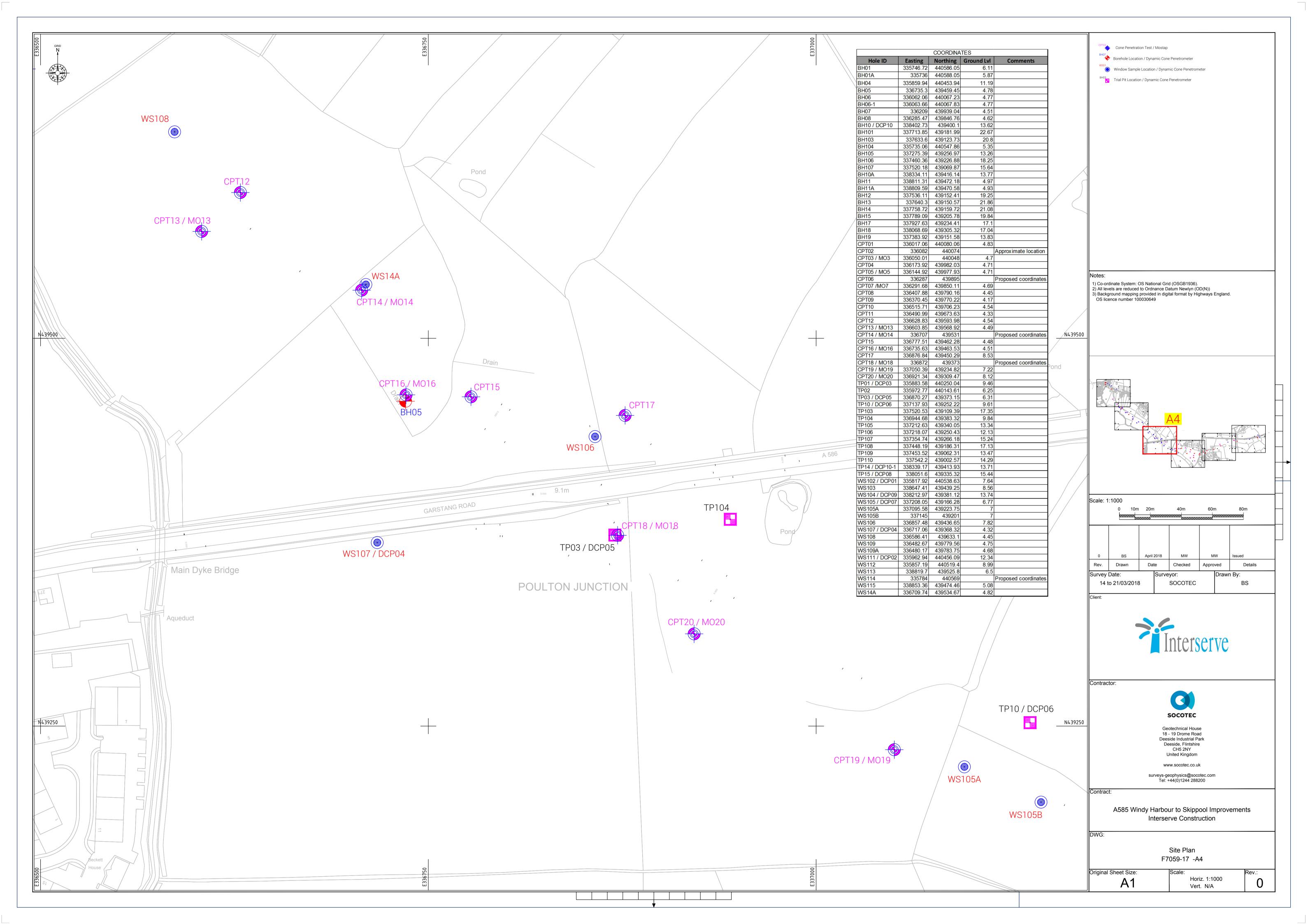
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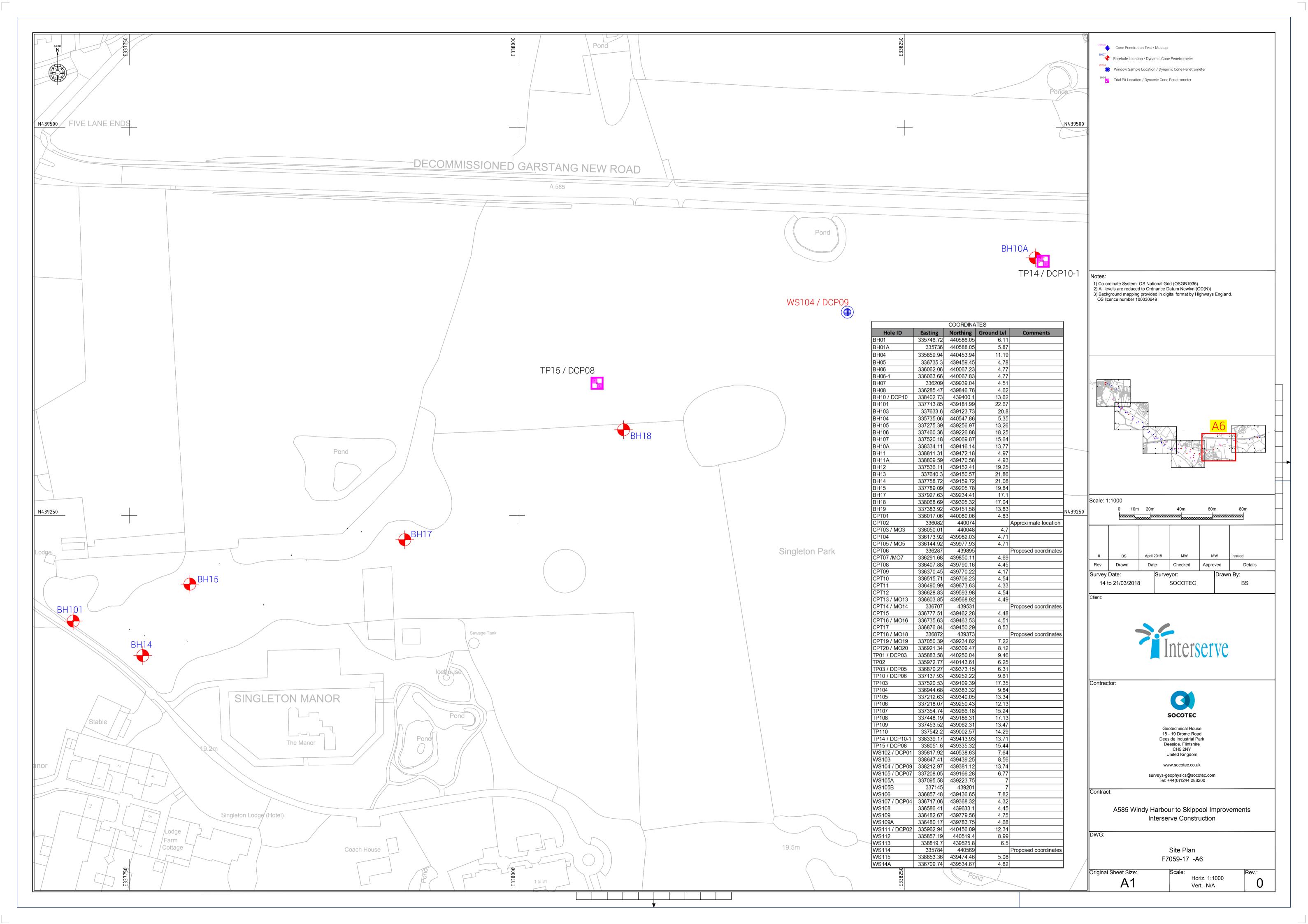


#### **Appendix C - SOCOTEC UK Limited Exploratory Hole Plans**



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#### **Appendix D - Exploratory Hole Logs**



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### Borohole Log



orilled CC ogged RF checked MW opproved MW	07/02/2018 <b>End</b> 08/02/2018	Equipment, Methods and Rem Dando 2000 Hand dug inspection pit to 1.20n				(m) (m) 0.00 10.00 10.00 19.60	iameter (mm) (m) 200 10.00 150 10.20	Ground Level Coordinates (m) National Grid		21.08 mOE E 337758.72 N 439159.72
Samples and	Type & No	. Records	Date	Time	Strata Description	ON Main	Detail	Depth, Level	Legend	Backfill
0.00 - 0.40	B 1	-	07/02/18	Water 0800	Soft brown slightly sand	dy slightly gravelly SILT	-	(Thickness)		ه . ۵
0.20 0.40 - 1.20	ES 1 B 2			Dry		Gravel is subrounded to of mudstone, siltstone and	_	(0.40) - 0.40 +20.6		
- 0.40 1.20	52	-			sandstone. (TOPSOIL)	ntly gravelly sandy CLAY.	/ -	0.40		
					Gravel is subrounded to mudstone, saltstone, sal	rounded fine to coarse of	-			
- 1.00	ES 3	-			(GLACIOFLUVIAL DEP	POSITS)	=			
							=	(2.00)		
- 1.70 - 2.15	SPTS	N=6 (1,2/2,1,2,1)	1.50	Dry			=			
1.70 - 2.15 1.70 - 2.15	D 3 B 4	-								
		-					-			
2.40	D 5	-				dish brown very silty fine	-	2.40 +18.6	8 × × ×	
2.70 - 3.15 2.70 - 3.15	SPTS D 6	N=2 (1,1/1,0,0,1)	2.70	Dry	SAND, locally grading to gravelly sandy silt. (GLACIOVLUVIAL DEF	o very soft to soft slightly		1	××××	
2.70 - 3.15 - 3.00	B 7 KFH	k=4.3E-6 m/s			(GLACIOVLOVIAL DEP	00110)		1	××××	
							-		××××	
3.40 -	D 8	-					-	(2.30)	×××××	
3.70 - 4.15 3.70 - 4.15	SPTS D 9	N=5 (2,1/1,2,1,1)	3.70	3.00			-		×××	
3.70 - 4.15	B 10						-		$\times \times \times 1$	LH
4.40	D 11	_					4.40 Silty fine and		× × ×	
-	SPTS	N=21 /2 E/7 7 9 0\	4.70	4.00			medium sand	4.70 +16.3	*	
4.70 - 5.15 4.70 - 5.15 4.70 - 5.15	D 12 B 13	N=31 (3,5/7,7,8,9)	4.70	4.00	gravelly CLAY. Gravel is	s subrounded to rounded		4.70 +16.3	°	
<del></del> -					quartz, granite and lime	one, siltstone, sandstone, estone.	-			
- - 5.40	D 14	-			(GLACIAL TILL)		=			
5.70 - 6.15	UT NR	100 blows No Recovery	5.70	5.50			-			
5.70 - 6.15 - —	B 15	-								
- -										
- - 6.40 -	D 16	-					-			
6.70 - 7.15	UT 17	100 blows 100% rec	6.00	Dry			6.70-7.15 Sandy.			
<del>-</del>							_			
7.20	D 18	-					-			
· -										
7.70 - 8.15	UT 19	100 blows 80% rec	6.00	Dry						
. 0.20	D 00									1 🌣 🖊
8.20	D 20						=	1		- $Y/$
- · 8.70 - 9.15	UT 21	100 blows 95% rec	6.00	7.70				]		
				3				1		
9.20	D 22						9.20 Reddish brown	1		
<del>-</del>							slightly gravelly silty fine sand.	1		
9.70 - 10.15	UT 23	100 blows 70% rec	6.00	8.00						
· ·			07/02/18	1600			-			
Groundwater Entrie	ne e		10.20	8.00	Depth Related Remarks			Hard Boring		
No. Depth Strike		10.00m.	Depth Seal	ed (m)	Depths (m) Remarks 1.20 - 19.60 SPT Hamn	ner ID: AR1318 ER=67% ed to maintain borehole stability.		Depths (m)	Duration (min	s) Tools use
otes: For explanatio				A58	5 Windy Harbour to Skippod	ol Improvements		Borehole		
duced levels in met ackets in depth colu	res. Stratum thick umn.	ness given in Project	No.	F70	59-17				<b>BH14</b>	
© Co Scale 1:50	pyright SOCOTE	C UK Limited AGS 04/2018 14:26:30 Carried	out for	Inte	rserve Construction				Sheet 1 of 2	

### Rorehole Log



orilled CC ogged RF checked MW opproved MW	07/02/2018 <b>End</b> 08/02/2018	Equipment, Methods and Rem Dando 2000 Hand dug inspection pit to 1.20n		ission bor		Depth from (m) 0.00 10.00		iameter (mm) 200 150	Casing Depti (m) 10.00 10.20	Ground Level Coordinates (m) National Grid		21.08 mOE E 337758.72 N 439159.72
Samples and	Type & No	. Records	Date	Time	Strata Descriptio	Main			Detail	Depth, Level	Legend	Backfill
-	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Casing	Water	Stiff to very stiff brown s	slightly sandy sl				(Thickness)		
- 10.20 -	D 24	-	08/02/18 10.20	0800 1.50	gravelly CLAY. Gravel is fine to coarse of mudsto	one, siltstone, s				=		
-				1.50	quartz, granite and lime: (GLACIAL TILL)	stone.						
- 10.70 - 11.15 -	UT 25	100 blows 60% rec	10.70									
	D 26								-			
- 11.20	D 20											
- · 11.70 - 12.15	UT 27	100 blows 65% rec	11.70									
-										=		
12.20	D 28	-								(14.90)		
<del>-</del>												
12.70 - 13.15	UT 29	100 blows 25% rec	12.70	13.30						=		
<u>-</u>									_			
- - - 13.30	D 30											
										=		
13.70 - 14.15	UT 31	100 blows 20% rec	11.70	13.00								
· <del>-</del> ·									-			
14.20	D 32	-										
14.50	B 33			40.50						_		
- 14.70 - 15.15 - -	UT 34	100 blows 70% rec	14.70	13.50								
 - - 15.20	D 35								-			
- - - 15.50	B 36									_		
- - 15.70 - 16.15	UT NR	100 blows No Recovery	18.70	15.00								$\mathbb{Z}$
- 15.70 - 16.15 -	B 37	-							_			
- 16.20	D 38	-								$\exists$		
-												
- - 16.70 - 17.15 - 16.70 - 17.15	UT NR B 39	100 blows No Recovery	16.70	Dry						=		$\mathbb{Z}$
<del>-</del>									-			
17.20	D 40	-								=		
• = •												
- 17.70 - 18.15 - -	UT 41	100 blows 100% rec	17.70	Dry								
· 18.20 - 18.50	D 42								-			
<del>-</del> -										=		
- 18.50 · 18.70 - 19.15	B 43 UT 44	100 blows 45% rec	18.70	Dry								
—				•					_			
- 19.20	D 45	-								=		
- - 19.50	B 46	-	08/02/18 19.60	1600 Dry						<b>]</b>		
					END OF EXPL	ORATORY H	OLE			19.60 +1.48	3 = :=	
-									_	1		
Groundwater Entries					Depth Related Remarks					Hard Boring		
No. Depth Strike	(m) Remarks		Depth Seal	ed (m)	Depths (m) Remarks					Depths (m)	Duration (mins	s) Tools use
otes: For explanation	n of symbols and	abbreviations <b>Project</b>		A58	5 Windy Harbour to Skippoo	I Improvements				Borehole		
ee Key to Exploratory educed levels in metrorackets in depth column	y Hole Records. A es. Stratum thick	All depths and			59-17						BH14	
© Cop Scale 1:50	pyright SOCOTE	C UK Limited AGS	out for		rserve Construction						Sheet 2 of 2	

#### Rorehole Log



orilled MF ogged RF checked MW opproved MW	07/02/2018 <b>End</b> 12/02/2018	Equipment, Methods and Rema Dando 2000 Hand dug inspection pit to 1.20m.			(m) (m) 0.00 6.50 6.50 20.00	ameter Casing Depth (mm) (m) 200 6.00 150 19.70	Ground Level Coordinates (m National Grid	)	19.84 mOE E 337789.09 N 439205.79
Samples and Depth	Type & No	. Records	Date Tim		Main	Detail	Depth, Level	Legend	Backfil
0.10 - 0.60 0.20 - 0.60 - 1.20 - 1.00 - 1.50 1.70 - 2.15	B1 ES2 B3 ES4	60 blows 100% rec	Casing Wat	Soft brown slightly s with frequent rootlet rounded fine to coar sandstone and quar (TOPSOIL) Soft reddish brown s Gravel is subround mudstone, siltstone, (GLACIOFLUVIAL D	slightly gravelly sandy CLAY.  Id to rounded fine to coarse of sandstone, coal and quartz.  DEPOSITS)  addium dense reddish brown SAND.		(0.60) 0.60 +19.2 (1.10)		• . 4
2.20 - 2.50 2.70 - 3.15 2.70 - 3.15	D 7  D 8  SPTS B 10	N=6 (1,2/1,2,1,2)	2.70 2.6	,	y	2.20 Very soft to soft slightly gravelly sandy silt. Gravel is subrounded to rounded fine and medium of mudstone, siltstone and sandstone.		*	1 🗵
3.50 3.70 - 4.15 3.70 - 4.15 3.70 - 4.15	D 11 SPTS D 12 B 13	N=18 (1,2/3,4,5,6)	3.70 2.6	50		3.50-4.15 Sand — becomes fine and - medium - -	(3.30)		
4.50 4.70 - 5.15 4.70 - 5.15 4.70 - 5.15	D 14 SPTS D 15 B 16	N=22 (1,0/1,5,8,8)	4.70 3.0	Stiff to very stiff brow gravelly CLAY with le subrounded to round	vn slightly sandy slightly ow cobble content. Gravel is ded fine to coarse of	-	5.00 +14.8	X X X X X X X X X X X X X X X X X X X	
5.50 5.70 - 6.15 - 6.20	D 17 UT 18 D 19	110 blows 75% rec	5.70 D 07/02/18 160 6.00 D	Cobbles are subroui sandstone. (GLACIAL TILL)	sandstone and quartz. nded of siltstone and				
6.50 6.70 - 7.15 - 7.20	D 20 UT 21 D 22	125 blows 70% rec	08/02/18 080 6.00 6.3 6.70 D	00					
7.50 7.70 - 8.15 - 8.20	D 23 UT 24 D 25	120 blows 90% rec Carried out post lab testing	7.70 D	гу		7.70-8.15 - occasional pockets - of silty sand -			
8.50 8.70 - 9.15 8.70 - 9.15	D 26 UT NR B 28	125 blows No Recovery	8.70 8.6	50					2 🗷
9.70 - 10.15 9.70 - 10.15	UT NR B 30	125 blows No Recovery	9.70 9.0	00		-			000
roundwater Entrie lo. Depth Strike 1 2.60 2 8.50		sand band	Depth Sealed (m)				Hard Boring Depths (m) 8.70 - 8.85	Duration (min 30	Chisel
tes: For explanatio e Key to Explorator duced levels in met ackets in depth colu	y Hole Records. A res. Stratum thick	All depths and ness given in Project I		585 Windy Harbour to Skip 7059-17	pool Improvements		Borehole	BH15	

# Borehole Loa



rilled MF pgged RF hecked MW pproved MW	07/02/2018 D End 12/02/2018	Equipment, Methods and Remain Stando 2000 land dug inspection pit to 1.20m			(m) (m) 0.00 6.50	Diameter (mm) (m) (m) 200 6.00 150 19.70	Ground Level Coordinates (m) National Grid		19.84 mOI E 337789.09 N 439205.76
Depth	Type & No.	Records	Date	Time Water	Main	Detail	Depth, Level (Thickness)	Legend	Backfi
10.50 10.70 - 11.15 10.70 - 11.15	D 31 UT NR B 33	125 blows No Recovery	Casing	Dry	Stiff to very stiff brown slightly sandy slightly gravelly CLAY with low cobble content. Gravel is subrounded to rounded fine to coarse of mudstone, siltstone, sandstone and quartz. Cobbles are subrounded of siltstone and sandstone.  (GLACIAL TILL)		(10.70)		
11.50 11.70 - 12.15	D 34 UT 35	125 blows 100% rec	11.70	Dry		-			
12.20 12.50 12.70 - 13.15	D 36 D 37 UT 38	125 blows 75% rec	12.70	12.50		- - - - - - -			
13.20 13.50 13.70 - 14.15	D 39 D 40 UT 41	125 blows 80% rec	13.70	13.00					
14.20 14.50 14.70 - 15.15	D 42 D 43 UT 44	125 blows 75% rec	14.70	Dry					
15.20 15.50 15.70 - 15.82 15.70 - 16.15 15.70 - 16.15	D 45 D 46 SPTS D 47 B 48	50 (25 for 70mm/50 for 55mm)	08/02/18 15.70 15.70 09/02/18 15.70	1600 15.40 15.15 0800 12.30	Very dense brown sandy silty subangular to rounded fine to coarse GRAVEL of mudstone, siltstone, sandstone and quartz with pockets of clay.	15.20-15.70 Very - gravelly -	15.70 +4.14 (0.50)	****	
16.50 16.70 - 17.15	D 50 UT 51	125 blows 100% rec	16.70	15.00	(GLACIAL TILL) Stiff to very stiff brown slightly sandy slightly gravelly CLAY. Gravel is subangular to rounded fine to coarse of mudstone, siltstone and sandstone. (GLACIAL TILL)				
17.20 17.50 17.70 - 17.99 17.70 - 18.15 17.70 - 18.15	D 52 D 53 SPTS D 54 B 55	50 (10,15 for 55mm/19,23,8 for 10mm)	17.70	16.00		-	(3.80)		
18.50 18.70 - 19.15	D 56 UT 57	125 blows 100% rec	18.10	17.00		18.70-19.15 Very - soft	(3.60)		
19.50 19.70 - 19.89 19.70 - 19.80	D 58 SPTS D 59	50 (25 for 60mm/30,20 for 50mm)	19.70 09/02/18 19.70	18.00 1600 18.00	END OF EXPLORATORY HOLE		20.00 -0.16		
roundwater Entries o. Depth Strike (			Depth Seal	ed (m)	Depth Related Remarks Depths (m) Remarks		Hard Boring Depths (m) 15.20 - 19.70	Duration (mins)	Tools u Chisel
tes: For explanation Key to Exploratory uced levels in metre ckets in depth colum	Hole Records. All es. Stratum thicknown.	I depths and	No.		5 Windy Harbour to Skippool Improvements 59-17		Borehole	BH15	

#### **Borehole Log**



Drilled Start quipment, Methods and Remarks Depth from Casing Depth Ground Level 17.10 mOD (m) 11.15 (mm) 150 (m) 10.70 ΕI .oaaed 13/02/2018 Coordinates (m) E 337927.63 Hand dug inspection pit to 1.20m. Cable percussion boring to 11.15m. No groundwater encountered Checked MW National Grid End N 439234.41 Approved MW 15/02/2018 Samples and Tests Strata Description Backfill Depth, Level Legend Type & No. Records Detail Casing Wate Soft brown slightly sandy slightly gravelly clayey SILT with occasional rootlets and some plant 0.20 ES 2 material. Gravel is subangular to subrounded fine (0.70)to coarse of sandstone and siltstone. (TOPSOIL) 0.70 - 1.00 В3 0.70 Soft brown slightly sandy slightly gravelly silty (0.30) CLAY with rare rootlets and some organic plant material. Gravel is subangular to subrounded fine 1.00 +16.10 to coarse of sandstone and siltstone. Driller notes О brown SAND with clay bands. 13/02/18 1.50 1400 Dry 0 (GLACIOFLUVIAL DEPOSITS)
Soft brown slightly sandy slightly gravelly silty
CLAY with some plant material. Gravel is
subangular to subrounded fine to coarse of 1.50 1.60 1.70 - 2.15 1.70 - 2.15 1.70 - 2.15 D 6 D 7 SPTS 14/02/18 1.70 1.70 1.60 0 N=21 (2,3/4,5,6,6) sandstone and siltstone.
(GLACIOFLUVIAL DEPOSITS) Ō Medium dense brown slightly gravelly slightly silty SAND. Gravel is subangular to subrounded fine to O coarse of sandstone, siltstone and quartz. (GLACIOFLUVIAL DEPOSITS) 0 D 10 (2.10)О SPTS D 11 B 12 2.70 - 3.15 2.70 - 3.15 2.70 - 3.15 N=13 (2,2/3,3,4,3) 2.70 2.70-3.15 Silty sand. Ō Ō 3.50 D 13 3.70 - 4.15 UT 14 80 blows 70% rec 3.70 3.70 +13.40 Firm brown slightly sandy gravelly CLAY. Gravel is subangular to subrounded fine to coarse of sandstone, siltstone and quartz. (GLACIAL TILL) (1.00)4.20 D 15 4.50 D 16 4.70 - 5.15 4.70 - 5.15 4.70 - 5.15 SPTS D 17 B 18 N=30 (4,3/6,5,10,9) 4.70 Dn 4.70 +12.40 Stiff becoming very stiff brown slightly sandy gravelly CLAY with low cobble content. Gravel is subangular to subrounded fine to coarse of sandstone, siltstone and quartz. Cobbles are subangular of sandstone. (GLACIAL TILL) 5.50 D 19 5.70 - 6.15 5.70 - 6.15 125 blows No Recovery 5.70 Dr 6.50 D 22 N=43 (7,10/9,11,12,11) Dry 6.70 - 7.15 6.70 - 7.15 D 23 B 24 D 25 7.50 UT 26 125 blows 80% rec 7.70 7.70 - 8.15 Dry (6.45)D 27 8.20 8.50 D 28 8.70 - 8.96 SPTS 50 (13,12 for 70mm/30,20 for 40mm) 8.70 Drv 8.70 - 9.15 D 29 8.70 - 9.15 B 30 9.50 D 31 9.70 - 10.15 UT 32 125 blows 90% rec 9.70 Dn Groundwater Entries Depth Sealed (m) No. Depth Strike (m) Remarks Depths (m) Remarks Depths (m) Duration (mins) Tools used SPT Hammer ID: VC02 ER=64% Water added to maintain borehole stability. 60 A585 Windy Harbour to Skippool Improvements Notes: For explanation of symbols and abbreviations Project Borehole see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column. **BH17** © Copyright SOCOTEC UK Limited AGS Project No. F7059-17

Carried out for

### **Borehole Log**



Drilled MF Start Depth from Casing Depth Ground Level quipment, Methods and Remarks to (m) 11.15 (mm) 150 (m) 10.70 Dando 2000 Hand dug inspection pit to 1.20m. Cable percussion boring to 11.15m. No groundwater encountered ΕI Coordinates (m) .oaaed 13/02/2018 E 337927.63 Checked MW National Grid N 439234.41 End 15/02/2018 Approved MW Samples and Tests Strata Description Depth, Level (Thickness) Backfill Legend Records Detail Casing Wate Stiff becoming very stiff brown slightly sandy gravelly CLAY with low cobble content. Gravel is subangular to subrounded fine to coarse of sandstone, siltstone and quartz. Cobbles are subangular of sandstone. 10.20 D 34 10.50 D 35 subangular of sandstone. (GLACIAL TILL) 10.70 - 10.91 10.70 - 11.15 SPTS D 36 50 (25 for 75mm/28,22 for 60mm) 10.70 Dr 11.15 END OF EXPLORATORY HOLE Depth Related Remarks No. Depth Strike (m) Remarks Depth Sealed (m) Depths (m) Duration (mins) Tools used Depths (m) Remarks Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column. A585 Windy Harbour to Skippool Improvements Project Borehole **BH17** © Copyright SOCOTEC UK Limited AGS Project No. F7059-17 Carried out for Interserve Construction

### Borehole Loa



led SL/WB ged RF/AG cked MW proved MW	07/02/2018 <b>End</b> 13/02/2018	Equipment, Methods and Re Dando 2000/MTEC6 Hand dug inspection pit to 1.20 33.00m.		ussion bor	ing to 28.00m. Rotary coring to  (m) (m) 0.00 15.00 15.00 28.00 28.00 33.00	ameter (mm) (m) (m) 200 15.00 1550 25.50 125 27.50	Ground Level Coordinates (m) National Grid		22.67 m E 337713 N 439181
amples and	Type & No	. Records	Date	Time	Strata Description	Detail	Depth, Level	Legend	Back
0.15 0.20 - 0.40 0.30 0.40 - 1.20	D 2 B 1 ES 3 B 4	. Records	07/02/18	0815 Dry	Soft friable brown slightly gravelly sandy SILT with frequent rootlets. Gravel is subrounded to rounded fine to coarse of mudstone, siltstone, sandstone and quartz.  (TOPSOIL)  Loose reddish brown silty fine SAND with pockets of slightly gravelly clay. Gravel is subrounded to rounded fine and medium of mudstone, siltstone,	/	(0.40) (0.40) (0.40)	7	· A
1.50 1.50 1.70 - 2.15 1.70 - 2.15 1.70 - 2.15	ES 6 D 7 SPTS D 8 B 9	N=7 (1,2/2,1,2,2)	1.50	Dry	sandstone and quartz. (GLACIOFLUVIAL DEPOSITS)	1.70-2.50 Very soft to soft reddish brown sandy silt with rare fine gravel.			
2.50 2.70 - 3.15 2.70 - 3.15 2.70 - 3.15	D 10 SPTS D 11 B 12	N=6 (1,1/1,2,2,1)	07/02/18 1.50 08/02/18 2.50 2.70	1300 Dry 0800 1.90 2.20					
3.50 3.70 - 4.15 3.70 - 4.15 3.70 - 4.15	D 13 SPTS D 14 B 15	N=18 (2,3/3,4,5,6)	3.70	3.30	Stiff to very stiff brown slightly gravelly sandy CLAY with low cobble content. Gravel is subrounded to rounded fine to coarse of mudstone, siltstone, sandstone and quartz. Cobbles are subrounded of siltstone. (GLACIAL TILL)		3.50 +19.1	7	
4.50 4.70 - 5.15	D 16 UT 17	100 blows 70% rec	4.50	Dry		-	(2.10)		
5.20 5.50 5.70 - 6.08 5.70 - 6.15 5.70 - 6.15	D 18  D 19  SPTS D 20 B 21	50 (9,11/13,17,20 for 75mm)	5.70	5.30	Very dense brown gravelly fine to coarse SAND. Gravel is subrounded to rounded fine to coarse of mudstone, siltstone, sandstone and quartz. (driller notes clay bands) (GLACIAL TILL)			7	1 🗷 0
6.50 6.70 - 7.07 6.70 - 7.15	D 22 SPTS B 23	50 (7,14/15,17,18 for 66mm)	6.70	5.90	Very stiff brown slightly gravelly sandy CLAY with medium cobble content. Gravel is subrounded to rounded fine to coarse of mudstone, siltstone, sandstone, quartz and limestone. Cobbles are subrounded to rounded of granite, sandstone and siltstone. (GLACIAL TILL)		6.50 +16.1	7	000
7.50 7.70 - 8.15	D 24 UT 25	100 blows 60% rec	7.50	Dry					
8.20 8.50 8.70 - 9.15	D 26 D 27 UT 28	100 blows 85% rec	8.50	Dry					
9.20	D 29	-	08/02/18 8.50 09/02/18	1600 Dry					
9.50 9.70 - 10.15	D 30 UT 31	100 blows 70% rec	9.00	9.50					
oundwater Entrie  o. Depth Strike  5.60	(m) Remarks	m after 20 minutes.	Depth Seal	ed (m)	Depth Related Remarks Depths (m) Remarks 1.20 - 27.95 SPT Hammer ID: SL01 ER=77%		Hard Boring Depths (m) 5.90 - 6.20 6.80 - 7.30 8.20 - 8.50 9.20 - 9.70	Duration (mi 50 60 140 70	ns) Tools of Chisel Chisel Chisel Chisel
es: For explanation Key to Explorator uced levels in metr ckets in depth colu © Col cale 1:50	y Hole Records. A res. Stratum thick umn.	All depths and ness given in Project AGS		F70:	5 Windy Harbour to Skippool Improvements 59-17 rserve Construction		Borehole	BH10'	

### Borohole Log



rilled SL/WB ogged RF/AG hecked MW pproved MW	Start 07/02/2018 End 13/02/2018	Equipment, Methods and Rema Dando 2000/MTEC6 Hand dug inspection pit to 1.20m. 33.00m.		sion bori	ing to 28.00m. Rotary coring to	Depth from (m) 0.00 15.00 28.00		meter Casing Dep (m) (m) 200 15.00 150 25.50 125 27.50	th Ground Level Coordinates (n National Grid	)	22.67 mOE E 337713.88 N 439181.99
Samples an	d Tests		Date	Time	Strata Description	1		_		T	
Depth	Type & No	. Records	Casing	Water		ain	01 11/ W	Detail	Depth, Level (Thickness)	Legend	Backfill
10.20	D 32	-			Very stiff brown slightly gi medium cobble content. ( rounded fine to coarse of sandstone, quartz and lin subrounded to rounded of	Gravel is subr mudstone, sil nestone. Cobb	ounded to Itstone, oles are				
10.70 - 11.15	UT 34	100 blows 100% rec	9.00	Dry	siltstone. (GLACIAL TILL)	r granite, sand	astone and				
11.20	D 35										
11.50	D 36	-							1		
11.70 - 12.15	UT 37	100 blows 100% rec	9.00	Dry							
12.20	D 38										
12.50	D 39	-							=		
12.70 - 13.15	UT 40	100 blows 100% rec	9.00	Dry							
13.20 13.20 - 13.70	D 41 B 42	-									
13.50	D 43	-							=		$\mathbb{Z}$
13.70 - 14.15	UT 44	100 blows 75% rec	9.00	Dry							
14.20	D 45	-							3		
14.20 - 14.70 - 14.50	B 46 D 47								3		
14.70 - 15.15	UT 48	100 blows 100% rec	9.00	Dry							
 15.20 15.20 - 15.70	D 49 B 50	-									
15.50	D 51	-							3		
15.70 - 16.15	UT 52	100 blows 90% rec	15.00	Dry							
-								16.00-17.15 Firn band	. ∃		
16.20 16.20 - 16.70	D 53 B 54	-							3		
- 16.50	D 55	-		_					=		
16.70 - 17.15	UT 56	100 blows 100% rec	16.50	Dry					(20.40)		
17.20 17.20 - 17.70	D 57 B 58	-									
17.70 - 18.15 17.80	UT 60 D 59	100 blows 95% rec	17.50	Dry							
_			09/02/18 18.00	1600 Dry					1		
18.20 18.20 - 18.70 - 18.50	D 61 B 62 D 63	-	12/02/18 18.00	0800 6.00							
18.70 - 19.15 18.70 - 19.50	UT NR B 64	100 blows No Recovery	18.70	9.30							
=											
- 19.50 - 19.88 19.50 - 19.95 19.50 - 19.95	SPTS D 65 B 66	50 (3,5/9,15,21,5 for 7mm)	19.30	9.70					(20.40)		
19.50 - 19.95	В 00										
Groundwater Entrie			Donth S1	d (ma)	Depth Related Remarks				Hard Boring	Dureties ()	) Tools ::
No. Depth Strike	(III) Remarks		Depth Sealed	4 (III)	<b>Depths (m) Remarks</b> 18.70 - 19.15 U100 liner sr	napped off.			<b>Depths (m)</b> 14.20 - 14.30 18.90 - 19.10 20.00 - 20.30	Duration (mins 55 50 75	Chisel Chisel Chisel Chisel
otes: For explanation	ry Hole Records. A	All depths and		A58	5 Windy Harbour to Skippool	Improvements			Borehole		
educed levels in met rackets in depth colu		Project N	No.	F70	59-17				1	<b>BH101</b>	

### Borehole Loa



led SL/WB gged RF/AG ecked MW proved MW	Start 07/02/2018 End 13/02/2018	Dar Har	uipment, Methods and Remando 2000/MTEC6 nd dug inspection pit to 1.20m. 00m.			Depth from to (m) (m) (m) (m) to 15.00 15.00 15.00 28.00 28.00 33.00	Diameter (mm) (m) 200 15.00 15.00 25.50 125 27.50	Ground Level Coordinates (m) National Grid		22.67 mC E 337713.8 N 439181.9
amples and				Date	Time	Strata Description		Depth, Level	Legend	Back
20.30 20.50 - 20.88 20.50 - 20.95 20.50 - 20.95	D 67 SPTS D 68 B 69	3	Records 50 (3,4/7,9,13,21 for 75mm)	Casing 20.50	13.20	Main  Very stiff brown slightly gravelly sandy CLAY with medium cobble content. Gravel is subrounded to rounded fine to coarse of mudstone, sittstone, sandstone, quartz and limestone. Cobbles are subrounded to rounded of granite, sandstone and siltstone.  (GLACIAL TILL)	Detail	(Thickness)		
21.30 21.50 - 21.95 21.50 - 21.95	D 70 UT NF B 71	2	100 blows No Recovery	21.00	16.90		_			
22.00 - 22.50 22.30 22.50 - 22.83 22.50 - 22.95	B 72 D 73 SPTS D 74	5	50 (5.8/10,14,17,9 for 26mm)	22.50	21.30					
23.50	D 75			12/02/18 22.50	1600 22.70		_			
24.00 - 24.36 24.00 - 24.45	SPTS B 76		50 (7,9/13,16,21 for 63mm)	24.00 13/02/18 24.00	7.30 0800 7.30					
25.50 - 25.66 25.50 - 25.95	D 77 SPTS B 78	3	50 (25 for 63mm/31,19 for 26mm)	25.50	9.70					
26.50	D 79									
27.00 - 27.16 27.00 - 27.45	SPTC B 80		50 (25 for 64mm/39,11 for 18mm)	25.50	14.80	Brown SILTSTONE recovered as angular to subangular fine to coarse gravel. (SINGLETON MUDSTONE)			× × × × × × × × × × × × × × × × × × ×	
27.50 - 27.57 27.50	SPTC D 81		50 (25 for 33mm/50 for 38mm)	25.50 13/02/18 27.50 16/02/18	17.30 1600 17.30 0800	AZCL.		(1.10) 28.00 -5.33	× × × × × × × × × × × × × × × × × × ×	
28.00 - 29.00	70 50 33		Flush: 28.00 - 30.00 Water	27.50	1.70	(SINGLETON MUDSTONE)  Extremely weak to very weak reddish brown with grey mottling MUDSTONE with numerous gypsur veins. Discontinuities Set 1: Joints subhorizontal (0-20deg.) closely to medium spaced, planar and undulating, smooth with clay smearing.  Discontinuities Set 2: Joint, subvertical (approx. 20deg.) planar and stepped smooth.		(0.30) 28.30 -5.63		
29.00 - 30.00	75 70 65		95%Brown			90deg.) planar and stepped, smooth. (SINGLETON MUDSTONE)				
Depth	TCR SCR RQD	If	Records	Date Casing	Time Water					
undwater Entries . Depth Strike (i				Depth Seal	ed (m)	Depth Related Remarks Depths (m) Remarks 28.00 - 29.00 Core recovered on second attempt		Hard Boring Depths (m) 21.80 - 22.20 24.50 - 25.00 25.50 - 25.70 26.20 - 26.70	Duration (mins 60 80 75 85	s) Tools Chise Chise Chise
s: For explanation Key to Exploratory ced levels in metre kets in depth colum © Copy ale 1:50	Hole Records es. Stratum th nn.	s. All di icknes	epths and		F70	5 Windy Harbour to Skippool Improvements 59-17 rserve Construction		Borehole	<b>BH101</b> Sheet 3 of 4	

# **Borehole Log**



led SL/WB	Start	Ī <sub>E</sub> .	quipment, Methods and Rema	ırks		İn	epth from	to Dia	ameter Casing Depth	Ground Level		22.67 mOl
	07/02/20		quipment, Methods and Rema ando 2000 MTEC6	11.42		De	(m)	(m) (	mm) (m)	Coordinates (m)		
=		Ha	and dug inspection pit to 1.20m	. Cable percu	ussion bor	ng to 28.00m. Rotary coring to	15.00	15.00 28.00	150 25.50	•		E 337713.8
cked MW	End		3.00m.				28.00	33.00	125 27.50	National Grid		N 439181.9
roved MW	13/02/20					Otroto Decemberto				1		
mples an				Date	Time	Strata Description			1	Depth, Level	Legend	Backfi
Depth	TCR SCR RQD	If	Records/Samples	Casing	Water	Main			Detail	(Thickness)	Logona	Dackiii
30.11 - 30.32			CS 2			Extremely weak to very weal grey mottling MUDSTONE w						
	85					veins. Discontinuities Set 1:	Joints subhor	rizontal				
30.00 - 31.00	65 45					(0-20deg.) closely to medium undulating, smooth with clay		inar and	30 60 30 70 NI			
	45					Discontinuities Set 2: Joint, s	subvertical (a	ipprox.	30.60-30.70 NI = 30.70-30.85 AZCL. =	(4.70)		
						90deg.) planar and stepped, (SINGLETON MUDSTONE)	smootn.					
31.13 - 31.38			CS 1						=			
	400											
31.00 - 32.00	100 95	NI 170							-			
	80	430	95%Brown		4000							
				16/02/18 27.50	1600 1.70							- $/$ $/$
				19/02/18	0800				32.00-32.33 AZCL.			//.
	_			27.50	5.50				32.33-33.00			
32.00 - 33.00	67 57 35								Decemend of	1		1/
	35								brown clay and - gravel			
				19/02/18 27.50	1600							
			1	<u> </u>		END OF EXPLORA	ATORY HOL	E	<u> </u>	33.00 -10.33		
									] =			
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Indwater Entri		<b>'</b> C		Dont's C	alo-i	Depth Related Remarks				Chiselling Detail		n) Tas!-
Depth Str	ike Remar	KS		Depth Se	ealed	Depths (m) Remarks				Depths (m) 27.20 - 27.50	Duration (mins 60	S) Tools u Chisel
s: For explanation	on of symbols	and at	obreviations <b>Project</b>		A58	5 Windy Harbour to Skippool Imp	rovements			Borehole		
Key to Explorato ced levels in me	ory Hole Reco	rds. All	depths and ess given in									
ets in denth co	lumn		UK Limited AGS			59-17					3H101	
	- ~ , grit 000	J. LU	Carried		1	serve Construction					Sheet 4 of 4	

# **Borehole Log**



lled	NF	Start	Ed	quipment, Methods and Rema	ırks			Depth from to		meter Casing Depth	Ground Le	vel		7.82 mO
gged	RF/AG	23/01/201		lobal Geo and dug inspection pit to 1.20m	Dunamia (w	indaulaaa	) compling to 7 00m	(m) (m) 0.00 4.00	(n	<b>nm) (m)</b> 87 2.00	Coordinate	es (m)		E 336857.4
ecked	MW	End	П	and dug inspection pit to 1.20m	. Dynamic (w	indowiess	) sampling to 7.00m.	4.00 5.00 5.00 6.00		77 67	National G	rid		N 439436.6
proved	MW	24/01/201	8					6.00 7.00		57				
ample	es and	Tests					Strata Descriptio	n			1			
	epth	TCR SCR	lf	Records/Samples	Date	Time		lain		Detail	Depth, I		Legend	Backfi
		RQD			Casing	Water	Soft to firm brown slightl		ith		(Thickness)		X//XX//X	
	0.20	ES 1		-			frequent rootlets.	y canay only obtain	J	=	(0.25) 0.25	+7.57		
	0.20	D 2					\(\((TOPSOIL)\) Soft to firm grey mottled	brown slightly sandy	/	-				
	).50 ) - 1.00	ES 3 B 4		-			slightly gravelly CLAY was Gravel is rounded to sub			-	(0.75)			
							mudstone, siltstone and	sandstone. Cobbles		-				<u>-</u>  / /
4	.10	D.F.			23/01/18	1600	subrounded of sandston (GLACIOFLUVIAL DEP		/	_	1.00	+6.82	8002 8002 8	1₹/
1.20	1.65	D 5 SPTS		N=0 (0,0/0,0,0,0)	2.00	0800	Spongy brown fibrous P (GLACIOFLUVIAL DEPO	EAT.	/		1.20 (0.20)	+6.62	a site site	
1.20	.20 - 1.65	D 6 D 9			24/01/18 2.00	0.80	Soft brown slightly sand	y slightly gravelly CLA		_				
1.20	- 2.00	L		100% rec, diameter 87mm			with occasional pockets angular cobble. Gravel is	of spongy peat and 1	nr		(0.80)			
1	.80	D 10		-			medium of mudstone an	d siltstone.		-				
	- 2.45	SPTS		N=11 (3,3/4,3,2,2)	2.00		(GLACIOFLUVIAL DEPO	JSHS)		_	2.00	+5.82		
	) - 2.45 ) - 3.00	D7 L		78% rec, diameter 87mm			Loose orangish brown s	lightly clavey SAND			2.22	+5.60		
2	2.50	D 11					(GLACIOFLUVIAL DEP			_				
	50	011								-				
										2.76-2.86 Becomes clayey.	(1.28)			$  \cdot   /$
	- 3.45	SPTS		N=4 (1,0/1,1,1,1)	2.00					- Jayoy	1			
	) - 3.45 ) - 4.00	D 8 L		58% rec, diameter 87mm						-				
2 52	1 100	D 40								-	3.50	_4 on		
3.50	- 4.00	B 12					Loose becoming mediur gravelly clayey fine and			-	3.50	+4.32	7	$ \cdot /$
							subrounded fine to coars	se of mudstone.	EI 15	-			7	
	- 4.45	SPTC		N=7 (1,1/2,1,2,2)	2.00		(GLACIOFLUVIAL DEP	OSITS)					7	
4.00	- 5.00	L		66% rec, diameter 77mm						=				
										-				[/
										-	1			
										-			7	
	- 5.45	SPTC		N=11 (2,2/2,3,3,3)	2.00					_			-	
5.00	- 6.00	L		60% rec, diameter 67mm						-	(3.50)			
										-	(0.50)			
										-	1			/ ,
										- -	1			
	- 6.45	SPTC		N=10 (2,3/3,2,2,3)	2.00					_	1			
	- 7.00	L		Diameter 57mm						-	1			$      / \rangle$
6.45	i - 6.90	SPTC		N=38 (5,6/8,9,10,11)	2.00					-	1		7	/ ,
0.40	0.00	51.10		6.45-6.90 SPT Possibly	2.00					-				
				affected by piping.	24/01/18	1600				- -	1			
					2.00	0.80	END OF EVDI				7.00	+0.82		
							END OF EXPL	ORATORY HOLE			1			
										- -	1			
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ındwa	ter Entries				<u> </u>		Depth Related Remarks				Chiselling	Detail	s	
	epth Strike	Remark			Depth Se	aled	Depths (m) Remarks				Depths (n			ns) Tools u
	1.04	Rose to	0.95 m	n after 20 minutes.			6.45 - 6.90 Sand blowin	ng up to 3.50m - water in	casing (r	rising) to 0.80m.	1			
											1			
s: For 4	explanation	of symbols	and ah	obreviations <b>Project</b>		A58	5 Windy Harbour to Skippool	Improvements			Borehole			
Cey to E	Exploratory	Hole Recor	ds. All	depths and		A30:		p. o vomonto			20,0,0,0			•
ets in	els in metre depth colum	อ. อแสเนศ) 1 าท.	пикпе	UK Limited AGS Project Carried	No.	F70	59-17					١	<b>NS10</b>	б
_ 1	© Copy :50	yrıgnt SOCO	JIEC ل	JK Limited AGS 2018 16:26:15 Carried	out for	Inter	serve Construction				I		Sheet 1 of 1	

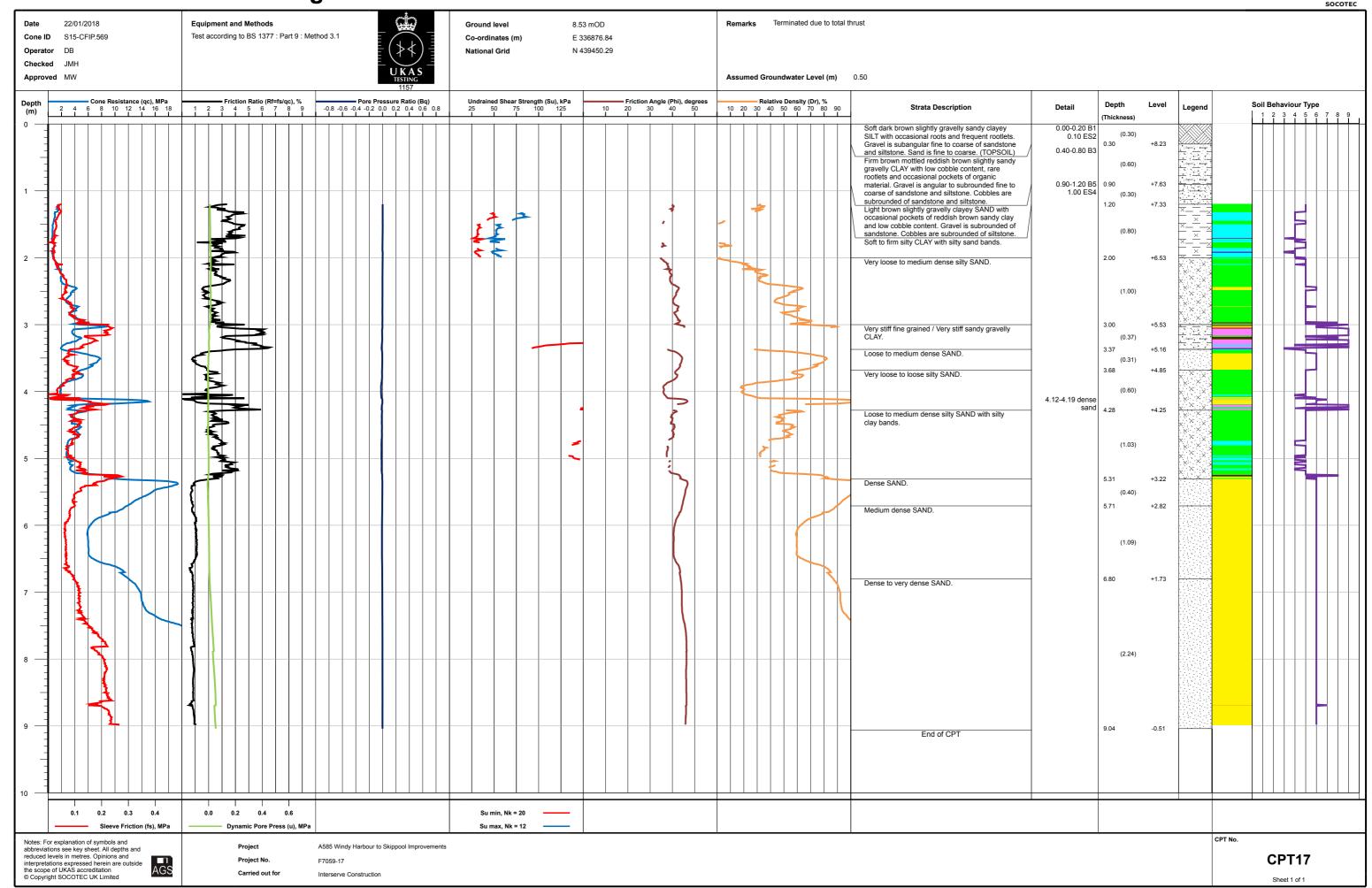
# **Trial Pit Log**



Dimension and Orientation Ground Level quipment, Methods and Remarks AG Logged racked excavator fachine excavated trial pit to 3.50m. Coordinates (m) 07/02/2018 E 336870.27 AG Checked 0.45 m Width National Grid N 439373.14 End 90 (Deg) MW Length 2.50 m Approved 07/02/2018 Strata Description Samples and Tests Depth, Level (Thickness) Backfill Legend Type & No. Records Detail MADE GROUND: Soft dark brown slightly sandy slightly gravelly CLAY with frequent rootlets and rare cobbles of brick and clay pipe. Gravel is subangular fine and medium of mudstone. (0.40)0.40 Soft yellowish brown slightly gravelly sandy CLAY. Gravel is subangular fine and medium of mudstone. (GLACIAL TILL) (0.20)0.60 Firm to stiff reddish brown slightly sandy slightly gravelly CLAY with sand bands and frequent pockets of grey sand. Gravel is subangular to subrounded fine to coarse of mudstone. (GLACIAL TILL) HV ES5 D6 p 84kPa, r 20kPa 1.50 1.50 1.50 - 2.00 ES7 (1.90)D8 B9 2.00 D10 2.50 2.50 - 3.00 2.50 +3.81 Stiff brown slightly sandy slightly gravelly CLAY. Gravel is subangular to subrounded fine to coarse of mudstone. (GLACIAL TILL) D13 (1.00) 3.50 END OF EXPLORATORY HOLE Groundwater Entries Stability Stable No. Depth Strike (m) Remarks Depth (m) 0.60 - 0.60 Land drain struck, 100mm diameter clay pipe. Very low flow. Shoring None Overcast and frost Weather Notes: For explanation of symbols and abbreviations see Key to Exploratory Hole Records. All depths and reduced levels in metres. Stratum thickness given in brackets in depth column. Project A585 Windy Harbour to Skippool Improvements Trial Pit **TP03** Project No. F7059-17 © Copyright SOCOTEC UK Limited 1:25

# **Cone Penetration Test Log**





# **Cone Penetration Test Log**



