A585 Windy Harbour to Skippool Improvement Scheme

TR010035

6.18 Environmental Statement Chapter 18: Non-Technical Summary

APFP Regulation 5(2)(a)

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Infrastructure Planning

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

A585 Windy Harbour to Skippool Improvement Scheme

Development Consent Order 201[ ]

ENVIRONMENTAL STATEMENT CHAPTER 18: NON-TECHNICAL SUMMARY

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1 INTRODUCTION

1.1 Background

1.1.1 Highways England is responsible for the operation, maintenance and improvements of the strategic road network in England on behalf of the Secretary of State (SoS) for Transport.

1.1.2 Highways England has been investigating options to alleviate a major bottle neck along the A585 between the Windy Harbour junction and the Skippool junction near Poulton-le-Fylde, Lancashire for a number of years. After consulting on different route options, an offline 'southern' bypass was announced as the preferred solution in October 2017 (hereafter referred to as 'the Scheme'). Construction is anticipated to commence in Spring 2020 and the road is anticipated to be open in Summer 2022.

1.1.3 The Scheme is a Nationally Significant Infrastructure Project (NSIP) under the Planning Act (2008). Therefore, an application for a Development Consent is required to be submitted to the SoS for Transport via the Planning Inspectorate (the Inspectorate).

1.1.4 The application is accompanied by an Environmental Statement (ES) prepared in accordance with the Infrastructure Planning (Environmental Impact Assessment (EIA)) Regulations 2017. This document is the Non-Technical Summary (NTS) of the ES.

1.1.5 The ES identifies and assesses the likely significant effects on the environment, resulting from the construction and operation of the Scheme and recommends appropriate mitigation to reduce the impact of the identified effects.

1.1.6 The NTS provides a summary of the Scheme and the findings of the ES in non-technical language to ensure that the outcomes are readily communicated and understood by all.

1.1.7 The following environmental topics are assessed within the ES and are summarised in this NTS:

- Air Quality
- Cultural Heritage
- Biodiversity
- Landscape
- People and Communities
- Noise and Vibration
- Road Drainage and the Water Environment
- Geology and Contaminated Land
- Materials
- Climate
- Cumulative Effects

2 DESCRIPTION OF THE SCHEME

2.1 Background to the Scheme

2.1.1 The A585 is the main road in and out of Fleetwood and surrounding areas. It is heavily congested between Windy Harbour and Skippool and drivers currently suffer from significant delays during peak periods.

2.1.2 Congestion is particularly severe at the junction with the A586 at Little Singleton and the signalised junction with the A588 at Shard Road. A high number of accidents are reported at these junctions and the volume of traffic is a concern for local people, pedestrians, equestrians and cyclists.

2.1.3 The Scheme was originally identified as a priority in the Department for Transport's Road Investment Strategy (RIS) 2014.

2.1.4 In April 2014, the then Highways Agency (now Highways England) produced the South Pennines Route Strategy document, which included the A585 between the M55 and Fleetwood. This report predicted an increased demand on the A585 route, therefore further validating the need for highway improvement.

2.2 Scheme Objectives

2.2.1 The key Scheme objectives are:

- 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
- Make the A585 route safer by reducing conflicts between users
- Improve journey time reliability by reducing congestion
- Deliver capacity enhancements to the Strategic Road Network 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
- Complement and realise the full benefits of other Operations Directorate schemes in the region

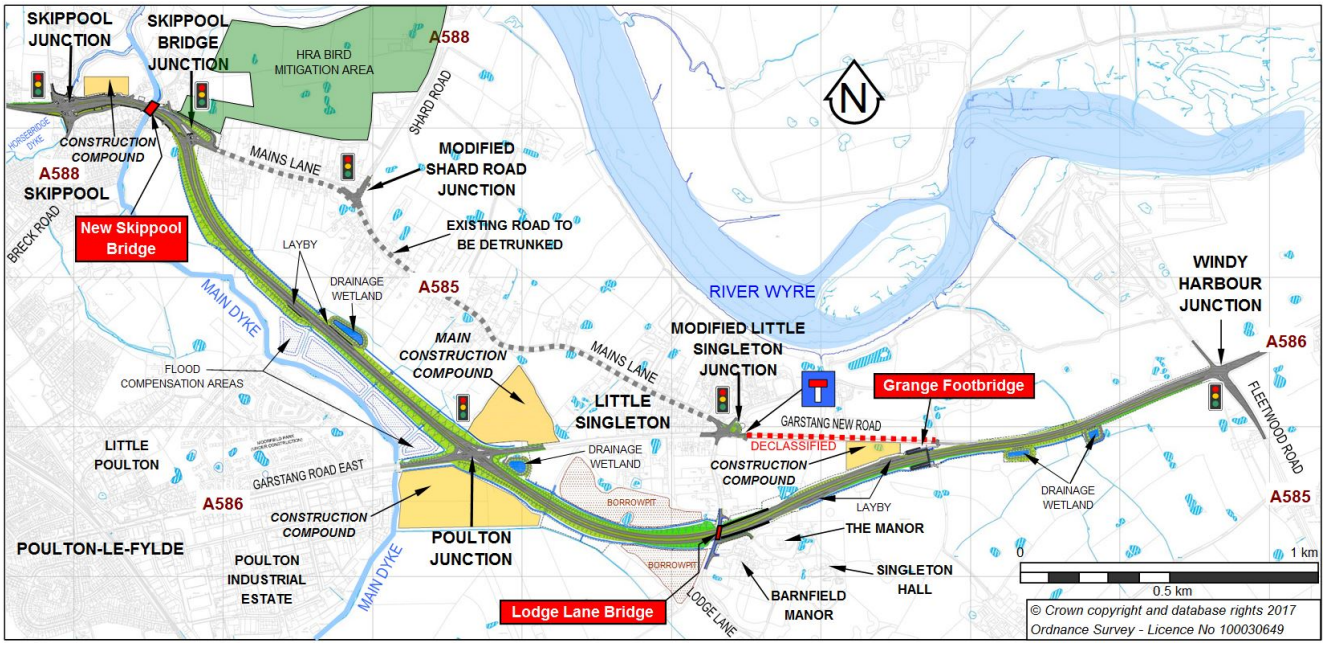
2.3 Scheme Description

2.3.1 Highways England is proposing the A585 Windy Harbour to Skippool Scheme which is to provide an improvement to 4.85km of the existing single carriageway A585 trunk road route that extends in a generally north west direction for approximately 19km between M55 Junction 3 and the port of Fleetwood at the northern end of the Fylde Peninsula.

2.3.2 The Scheme is shown on a general arrangement drawing (document reference TR010035/APP/2.5) and a summary is provided in Figure 1. The Scheme consists of:

- A 4.85km (3 miles) long dual 2-lane carriageway bypass from Windy Harbour Junction to the 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 three-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 and modification to Little Singleton Junction (also known as Five Lane Ends) to accommodate U-turning traffic including buses
- 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
- Three new major structures including: replacement of Skippool Bridge; Lodge Lane Bridge and 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 access to 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

Figure 1: The Scheme



2.4 Environmental Design Features

2.4.1 The Scheme incorporates a range of design features that have been developed to reduce adverse environmental impacts. Environmental measures in Table 1 have been incorporated into the Scheme design.

Table 1: Environmental Design Features

Environmental Design Feature	Description
Bunds / mounds	Proposed bunds / mounds, located adjacent to the highway which are approximately 2m higher than the proposed carriageway level. Bunds / mounds help to screen the Scheme and integrate it into the surrounding landscape and provide a barrier for road noise.
Low road noise surfacing	Low road noise surfacing in the form of a thin surfacing has been incorporated into the offline Scheme design.
Replacement of culvert at Skippool Bridge	Replacement of the restrictive culvert with a bridge removes a restriction to flow resulting in a reduction in floodplain extent and flood risk along the Main Dyke.
Drainage Design	Provision of drainage ponds and treatment of operational highway runoff. The drainage design also prevents pollution of watercourses receiving road drainage discharges.
Lighting Design	The lighting design has been focused around the junctions (Skippool junction and Poulton Junction). The lighting design will also use directional lighting to avoid light spill.

3 POTENTIAL ENVIRONMENTAL EFFECTS

3.1 Introduction

3.1.1 The ES identifies the environmental effects as a result of the Scheme, together with identifying measures that can reduce those effects. Measures to reduce environmental effects are also known as mitigation measures. A summary of the findings for each environmental topic is presented in the paragraphs that follow.

3.2 Air Quality

Methodology

3.2.1 The operational air quality assessment was undertaken in accordance with Volume 11, Section 3 of the Design Manual for Roads and Bridges (DMRB) (Highways Agency, 2007).

3.2.2 Air quality effects as a result of construction activities associated with the Scheme have also been undertaken in accordance with the DMRB.

Baseline

3.2.3 Existing air quality information has been gathered from Wyre Council and Fylde Borough Council, which cover the air quality study area. Highways England has also undertaken baseline air quality monitoring, which has been used to inform the baseline assessment.

3.2.4 One Air Quality Management Area (AQMA) was identified within the air quality study area in Poulton-le-Fylde; Chapel Street AQMA. The Chapel Street AQMA was declared by Wyre Council in 2009 for the exceedance of the annual mean nitrogen dioxide (NO_2) Air Quality Strategy Objective as a result of traffic emissions, congestion and the location of buildings preventing the dispersion of air pollutants.

Mitigation Measures

3.2.5 Construction phase dust emissions would be controlled by the implementation of mitigation measures within a Construction Environmental Management Plan (CEMP). An Outline CEMP (document reference TR010035/APP/7.2) has been prepared and includes standard dust mitigation measures including damping down roads to reduce dust and removing materials that have the potential to produce dust from site.

3.2.6 No operational mitigation is proposed.

Residual Effects

3.2.7 The assessment undertaken demonstrates that the operation of the Scheme is not predicted to result in air quality standards for the key traffic related pollutants being breached.

3.2.8 Construction phase impacts from dust and emissions would also be negligible following the implementation of measures within the Outline CEMP (document reference TR010035/APP/7.2).

3.2.9 As a result of the above, the Scheme is not predicted to result in significant air quality effects.

3.3 Cultural Heritage

Methodology

3.3.1 The cultural heritage assessment has been undertaken in accordance with the DMRB Volume 11 Section 3, HA 208/07, Part 2' (Highways Agency, 2007).

Baseline

3.3.2 Details of heritage receptors within a 1km study area either side of the Scheme were gathered and a desk-based assessment was undertaken (which included archival research, lidar and aerial photography analysis and cartographic review). Figure 2 presents the locations of heritage receptors.

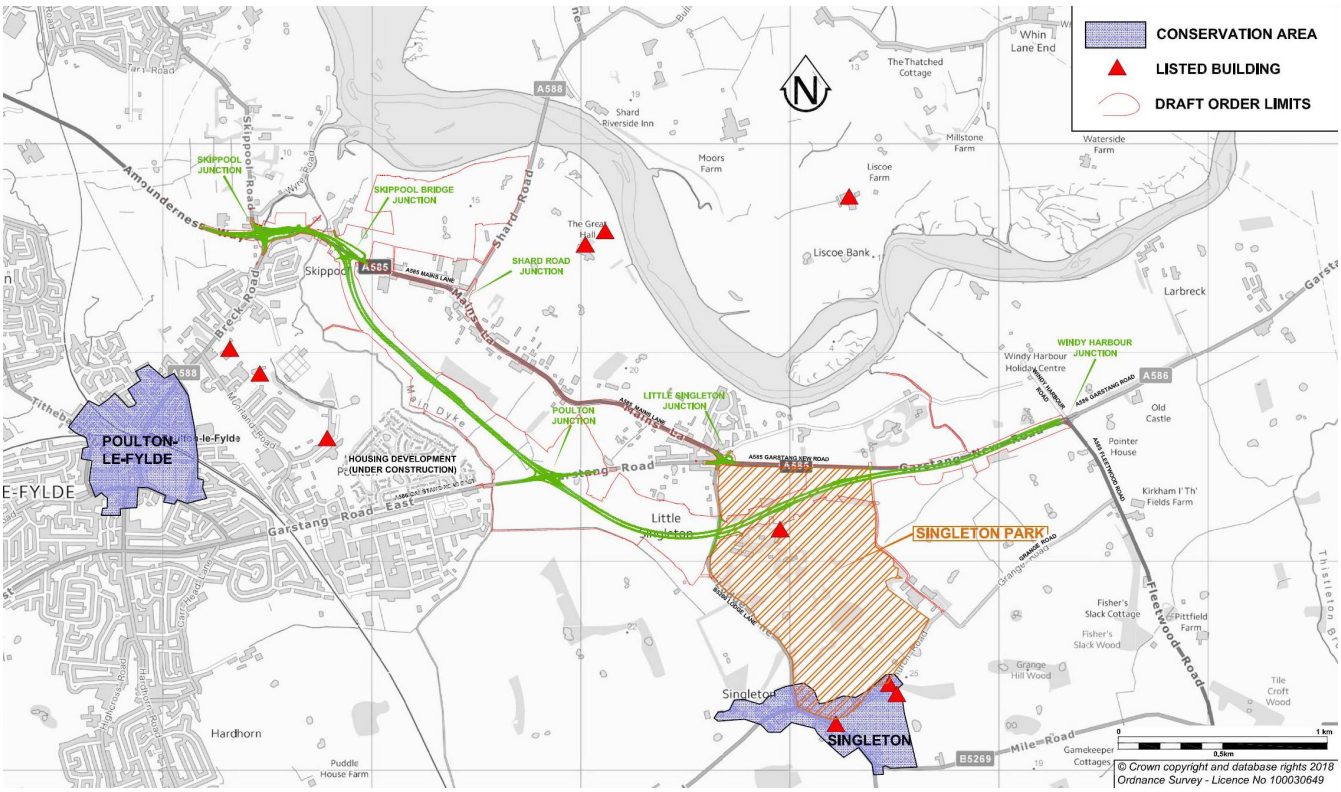
3.3.3 In addition to this, archeological investigations (including a geophysical survey and geoarchaeological survey) and a field walkover survey was undertaken.

3.3.4 From this information it was identified that there are no designated heritage receptors (Scheduled Monuments, Listed Buildings, Registered Battlefields, Registered Parks and Gardens, Protected Wrecks and World Heritage Sites) located within the draft order limits (draft order limits are the red line boundary) of the Scheme. There are 2 designated receptors located within the cultural heritage study area that have the potential to experience change; the Grade II listed Ice House (within the grounds of the Manor at Singleton Hall) and Singleton Conservation Area.

3.3.5 There are no designated archaeological remains or historic landscapes located within the draft order limits or cultural heritage study area.

3.3.6 There are a total of 52 non-designated heritage receptors within the draft order limits and study area that have the potential to experience change, including, for example, Singleton Park, bronze age pottery, peat deposits and ridge and furrow.

Figure 2: Heritage Receptors



Mitigation Measures

3.3.7 Archaeological mitigation uses a phased approach where the results from one phase inform the next. The results of the geophysical survey and geoarchaeological assessment have informed how mitigation is approached. Trial trenching would be used to target identified receptors within the draft order limits. The trenches would reveal the presence or absence of archaeology. If archaeological remains are present, they can then be assessed.

3.3.8 Any archaeological remains identified during the trial trenching may be considered for mitigation if considered to be significant enough. The exact form of this mitigation would be outlined in a Mitigation Strategy and draft Written Scheme of Investigation (WSI) following the completion of the trial trenching. This mitigation would be prepared in consultation with the local planning archaeological advisor. This would most likely comprise excavation within discrete areas or archaeological monitoring during construction.

3.3.9 Operational mitigation is outlined in detail in the Environmental Masterplan (document reference TR010035/APP/6.19) and includes woodland planting, individual tree planting, linear planting and noise barriers to help reduce impacts on the setting of the Grade II listed Ice House and views from the Conservation Area.

Residual Effects

3.3.10 The setting of the Grade II listed Ice House at Singleton Hall would still be impacted during both construction and operation following the implementation of mitigation. The rural setting of the Ice House is part of the receptor's significance and this would be altered by the presence of the Scheme nearby. Impacts are considered to be significant on this receptor.

3.3.11 All other effects to heritage receptors including the Conservation Area are considered to be only slightly negative or neutral following mitigation being implemented.

3.4 Biodiversity

Methodology

3.4.1 The biodiversity assessment was undertaken in accordance with the DMRB Volume 11, Section 3, Part 4, Ecology and Nature Conservation, Chapter 7 (Highways Agency, 1993) and Interim Advice Note (IAN) 130/10 Ecology and Nature Conservation: Criteria for Impact Assessment (Highways Agency, 2010). Where appropriate, the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines were also considered.

3.4.2 A Habitats Regulations Assessment has also been carried out due to the presence of Morecambe Bay and Duddon Estuary Special Protection Area (SPA) and Morecambe Bay Ramsar Site adjacent to the Scheme (refer to Habitats Regulations Assessment, document reference TR010035/APP/5.4).

Baseline

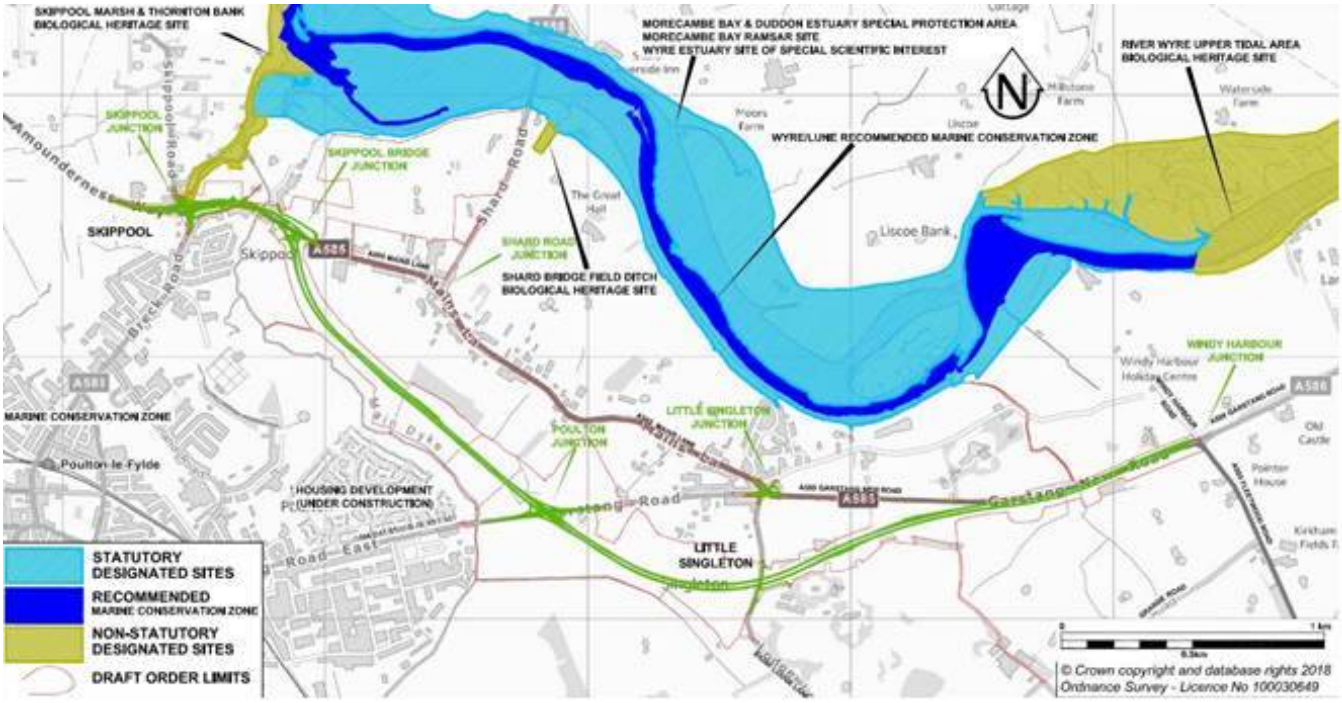
3.4.3 Baseline data was gathered through a desk study and field surveys. A number of field surveys including a habitat survey, breeding and wintering bird surveys, great crested newt surveys and bat surveys were undertaken between 2014 and 2018 to establish a detailed baseline.

3.4.4 The desk study and field surveys identified the following key constraints on and in the

vicinity of the Scheme (refer to Figure 3 for site locations):

- Morecambe Bay and Duddon Estuary SPA and Morecambe Bay Ramsar Site – which are both important at an International and European level for their bird populations
- Morecambe Bay Site of Special Scientific Interest – which is nationally important for its estuarine habitat and for its bird populations
- Skippool Marsh and Thornton Bank Biological Heritage Site – which is locally important for its saltmarsh habitats, flowering plants and ferns
- Shard Bridge Field Ditch Biological Heritage Site – locally important for its flowering plants and ferns
- River Wyre – Upper Tidal Section Biological Heritage Site – locally important for its coastal habitats and flowering plants and ferns
- Great crested newts – a European protected species
- Bats – a European protected species
- Badgers – protected by the Protection of Badgers Act 1992
- Otters – a European protected species

Figure 3: Biodiversity Features



Mitigation Measures

3.4.5 In order to reduce impacts on important habitats and species a number of mitigation measures were designed to reduce negative effects. Mitigation for specific habitats and species includes:

- SPA / Ramsar bird species – An area of land would be provided for pink-footed geese, curlew, and lapwing at the northern end of the Scheme. This would

provide an alternative area for them to forage in during winter throughout the construction phase. The location of this land is presented on Figure 1. The land would be managed to be suitable for the 3 bird species through, for example, crop management, providing scrapes, and preventing shooting within and adjacent to the land

- Deciduous woodland – To compensate for the loss of woodland, new woodland planting is proposed
- Hedgerows – To compensate for the permanent loss of hedgerows, new linear planting is proposed to be incorporated into the Scheme design
- Ponds – Ponds removed during construction would be reinstated once the main construction works are complete
- Great crested newts – Mitigation has been designed with Natural England and would be outlined within a protected species licence. Mitigation includes providing compensatory habitat
- Breeding birds – Mitigation includes avoiding vegetation removal during the breeding season and placing exclusion zones around retained hedgerows
- Bats – Mitigation has been designed with Natural England and would be outlined within a protected species licence. Mitigation includes providing new roosting sites and ensuring sensitive lighting i.e. adding baffles to construction lighting
- Otters – Mitigation includes ensuring sensitive site lighting at night i.e. during construction to avoid disturbance. Excavations would be fenced off to avoid otters becoming trapped. Permanent otter fencing would be installed at appropriate locations and culverts designed for otters to use
- Badgers – A pre-construction badger survey would be required to identify any newly established setts and if necessary a licence would be submitted to Natural England which would outline necessary mitigation measures. Crossing points for badgers have also been provided as part of the Scheme design

Residual Effects

3.4.6 During construction there would be a significant loss of deciduous woodland. However, this would be a temporary loss as once the new planting proposed for the Scheme has matured, there would be a long-term net biodiversity gain.

3.4.7 Overall, following the implementation of mitigation, the Scheme's residual effects on ecology and biodiversity (aside from deciduous woodland) were assessed as being a combination of slightly negative, neutral or slightly positive, depending on the species or habitat. However, none of these effects have been judged as significant.

3.5 Landscape

Methodology

3.5.1 The assessment of effects on landscape character (including features and elements) and visual receptors during construction and operation was undertaken in accordance with Highways England's Interim Advice Note (IAN) 135/10.

Baseline

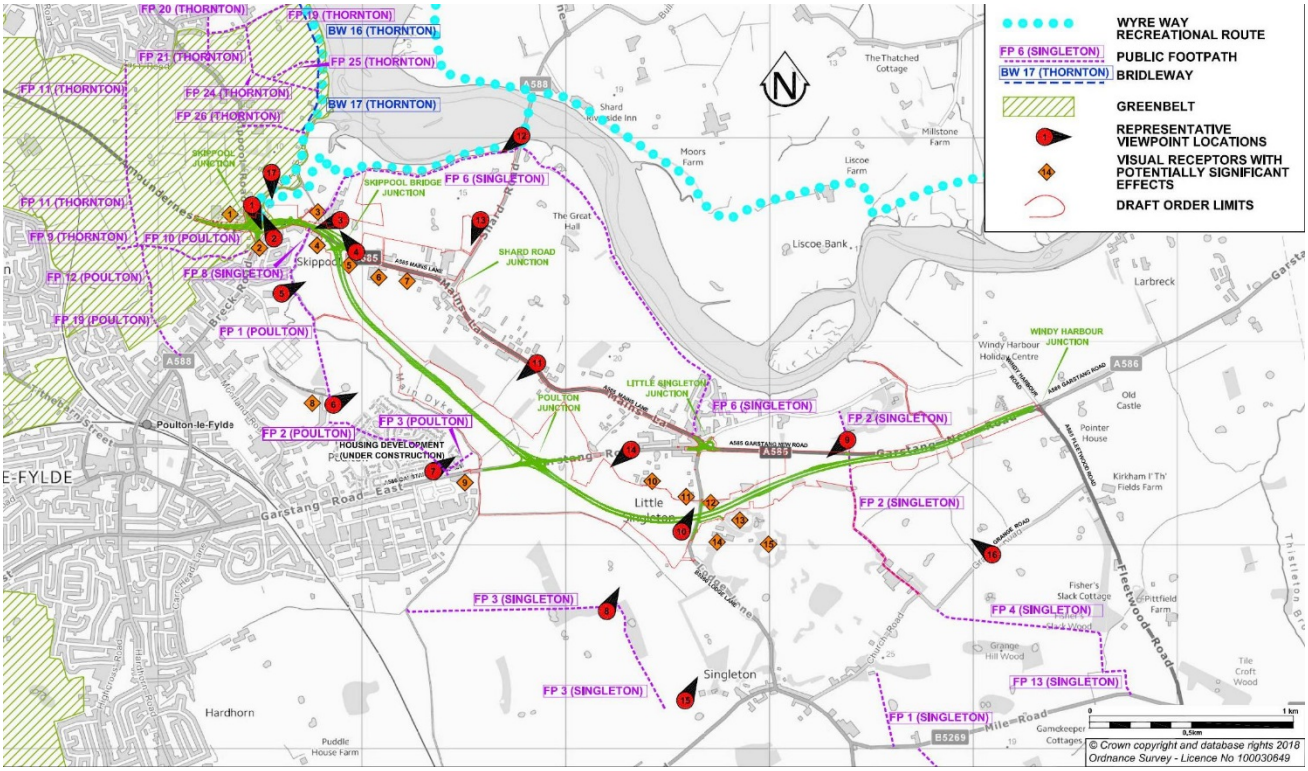
3.5.2 Data was gathered though a review of readily available information and a number of site visits undertaken in 2017 and 2018. The site comprises a mix of predominantly farmland with areas of existing urban / infrastructure development and a small area of designed (but undesignated) parkland. The application site is crossed by a number of small drainage ditches, and by a public footpath (at the eastern end of the Scheme). The footprint of the Scheme includes a number of hedgerows and trees (some covered by Tree Preservation Orders (TPOs)).

3.5.3 The site lies outside of any designated landscapes at either the statutory / national or non-statutory / local levels. The nearest listed building is the Grade II Listed Ice House at Singleton Hall.

3.5.4 The application site lies within National Character Area (NCA) 32: Lancashire and Amounderness Plain, and within county-level Landscape Character Area (LCA) 15d: The Fylde. The national and county-level character types cover relatively large areas so a Scheme-specific character study has been undertaken to add local detail to the character descriptions. The Scheme-specific character study has identified 6 Local Character Areas (LCA) and 9 local Townscape Character Areas (TCA).

3.5.5 The large scale of the Scheme, combined with the low-lying topography, means that there is theoretical visibility towards the Scheme from much of the surrounding area within 1-2km of the Scheme. However, this is restricted in parts by existing built form and vegetation. There may be visibility towards the Scheme from a number of residential properties, from certain sections of the local footpath network, and from certain parts of the local highway network. Twenty-one representative viewpoints were selected based on the theoretical visibility of the Scheme. These were agreed with Wyre Council and Fylde Borough Council.

Figure 4: Landscape Features



Environmental Design

3.5.6 Landscape and visual mitigation measures proposed include the planting of native woodland, shrubs, linear planting, roadside specimen trees, wildflower meadows and amenity grassland and verges. The Scheme also includes cuttings, bunds / mounds and embankments. These mitigation measures are presented in detail in the Environmental Masterplan (document reference TR010035/APP/6.19)

Landscape Character Residual Effects

3.5.7 The Scheme would become a prominent new feature in the landscape in what is currently a shallow rural valley. Some of this would be raised above the existing ground level on an embankment and some would be lowered in cutting (under Lodge Lane). The character of 5 of the LCAs and TCAs in this area would be significantly changed from what they are currently.

3.5.8 The Scheme would be visible from a number of properties including some of those located on the south side of Mains Lane. During the construction phase, views from 10 representative viewpoints would experience large adverse visual effects during the construction phase, with 2 viewpoints experiencing very large adverse effects.

3.5.9 When the road is first opened, 9 of the 21 representative viewpoints would experience significant negative visual effects. These are at properties located closest to the new road (within 450m). These significant adverse effects would still occur after 15 years of planting growth although the planting would help to integrate the Scheme into the landscape more by this time.

3.5.10 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 already filtered as a result of existing vegetation and the nature of the properties being set back from the highway.

3.6 People and Communities

Methodology

3.6.1 The assessment was undertaken in accordance with the DMRB, Volume 11 'Environmental Assessment', Section 3, Part 6 'Land Use' Chapter 1 – 11, Section 3 Part 8 'Pedestrians, Cyclists and Equestrians and Community Effects', and Section 3 Part 9 'Vehicle Travellers.'

3.6.2 The People and Communities assessment includes effects on land-use (private assets, development land, tourism and agricultural land), journey length, severance, amenity and vehicle travellers (incorporating views from the road and driver stress).

Baseline

3.6.3 Data was gathered through a review of readily available information and field surveys for the area within the draft order limits and within a 500m study area. Surveys included local footpath usage surveys. Features are presented on Figure 5.

3.6.4 Two properties are located within the draft order limits, West Wynds (which is in the ownership of Lancashire County Council) and the Beeches.

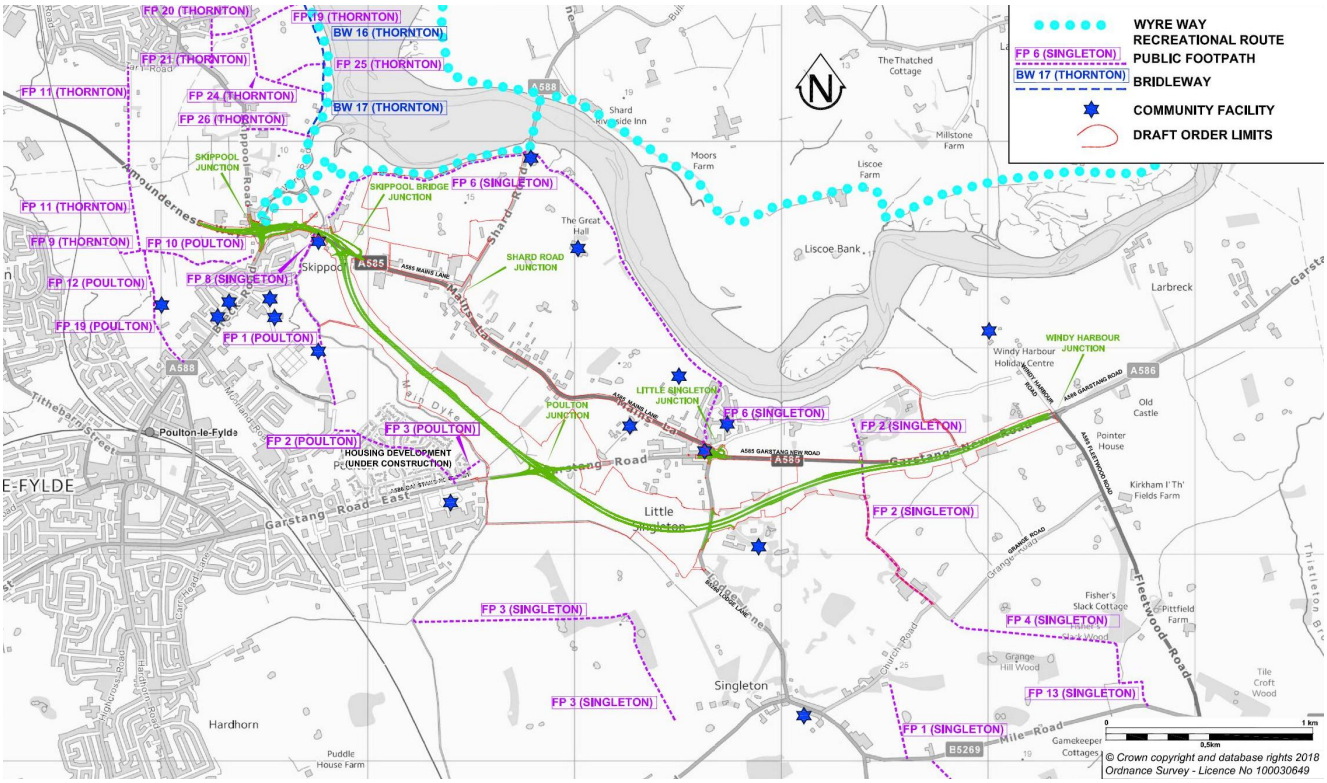
3.6.5 Details of community land and facilities within 500m of the draft order limits include,

for example, 3 caravan parks, Skippool Service Station and the Singleton Lodge Country House Hotel.

3.6.6 The principal land use within the footprint of the Scheme is agricultural. Provisional Agricultural Land Classification mapping shows land within the site is predominantly Grade 2, with Grade 3 land on the eastern edge. Grade 2 is considered to be best and most versatile (BMV) together with Grade 3a. However, it is not clear if the Grade 3 land within the site is Grade 3a or 3b (Grade 3b is not BMV), therefore all the Grade 3 land was assumed to be 3a.

3.6.7 A number of Public Rights of Way and recreational routes are located within the people and communities study area including part of the Wyre Way (a recreational route). Surveys were undertaken at 10 locations in December 2017 to determine the level of usage of the local footpath network. The surveys concluded there is relatively low usage levels of routes affected by the Scheme.

Figure 5: People and Communities Features



Mitigation Measures

3.6.8 Mitigation measures identified to minimise adverse effects of the Scheme include: construction best practice, appropriate traffic management measures and measures to compensate landowners and occupiers for land-take.

3.6.9 A new footbridge would be provided (Grange Footbridge). The location of Grange Footbridge is presented on Figure 1.

3.6.10 The Scheme has also been designed to minimise land-take where possible. More detailed environmental mitigation is set out within the Outline CEMP (document reference TR010035/APP/7.2) which also includes a draft Soil Management Plan.

Residual Effects

3.6.11 West Wynds and the Beeches would be demolished as a result of the Scheme and therefore would result in a significant impact on those properties.

3.6.12 Access to nearby local businesses, including the Skippool Service Station and the Singleton Lodge Country House Hotel, would be maintained during the duration of the construction period.

3.6.13 There would be a permanent loss of 44ha of BMV agricultural land which is considered to be a significant effect. There would be no residual effects in relation to farm businesses viability.

3.6.14 There would be some disruption to existing Public Rights of Way as a result of construction activities, particularly given the proximity of a number of footpaths to the Scheme. One footpath would be severed by the Scheme, however, the provision of Grange Footbridge would improve safety for footpath users and therefore improve accessibility. Usage levels of Public Rights of Way in the vicinity of the Scheme are relatively low and the impact on journey length, severance and amenity was therefore assessed as slight and not significant, with severance impacts assessed as slight.

3.6.15 The de-trunking of the existing A585 which forms part of the Scheme would improve connectivity and minimise potential conflicts for footpath users by improving the safety of pedestrians, equestrians and cyclists; the impact of the Scheme in terms of journey length, travel patterns and amenity is, therefore, considered to be moderate beneficial. New and improved crossing facilities would improve connectivity, enhancing the permeability of the area, thus reducing community severance.

3.6.16 As part of the Scheme, road signs and traffic signals would be used to explain route changes and direct drivers with the aim of reducing uncertainty, delays and driver stress for those drivers using the new road layout. The new road would also be designed to a higher highway standard than the existing road, which would help to reduce uncertainty, fear and driver stress.

3.7 Noise and Vibration

Methodology

3.7.1 The construction noise assessment was undertaken in accordance with BS5228.

3.7.2 The operational noise assessment was undertaken in accordance with the DMRB, Volume 11 Section 3 Part 7 (HD213/11) ‘Noise and Vibration’ and IAN 185/15.

Baseline

3.7.3 Existing noise levels were established though a review of readily available information, Ordnance Survey mapping, attended noise monitoring at 8 locations and un-attended noise monitoring at 8 locations. The locations of un-attended noise monitoring were agreed with Fylde and Wyre Councils.

3.7.4 Within the noise study area there are a large number of residential properties, 30 sensitive receptors including schools and nursing homes and 10 Noise Important Areas. Noise Important Areas are the 1% of the population that are affected by the highest noise levels from major roads according to the results of the strategic noise mapping.

Mitigation Measures

3.7.5 Construction mitigation includes adopting best practical means (BPM) on site. BPM includes measures such as ensuring machinery is switched off when not in use, not permitting radios on site and using close board fencing around compounds. More detailed environmental mitigation is set out within the Outline CEMP (document reference TR010035/APP/7.2).

3.7.6 Operational mitigation to reduce the impacts of noise includes the provision of acoustic fencing and providing bunding / mounding along the Scheme. Locations of bunding / mounding is presented on the Environmental Masterplan (document reference TR010035/APP/6.19).

Residual Effects

3.7.7 The noise and vibration assessment concludes that daytime and nighttime construction noise levels would not be significant or lead to impacts upon on health and quality of life.

3.7.8 Levels of vibration from piling activities during construction were predicted to range from negligible to slight negative.

3.7.9 Noise impacts from heavy vehicles using the local road network during the construction phase were predicted to increase by no more than 1dB(A). A change of less than 1dB(A) is classed as negligible as it is not perceptible by the human ear, therefore, no impacts upon on health and quality of life or significant effects were predicted.

3.7.10 The assessment of permanent operational road traffic noise was undertaken in accordance with industry standard guidance and it considered road traffic noise impacts in both the short-term (in the year of opening) and long-term (15 years after opening). Short-term operational impacts in the opening year of the Scheme are summarised as:

- In the short-term, negative impacts from noise would occur at receptors within close proximity of the Scheme and along Garstang Road East. While negative noise impacts greater than moderate are predicted at 203 dwellings (of 2,242 assessed), there are no negative changes that would result in adverse impacts on health and quality of life
- Short-term positive impacts (i.e. reductions in current noise levels) 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 positive change. Changes of this magnitude would represent a significant positive impact on health and quality of life

3.7.11 Long-term operational impacts 15 years after opening are summarised as:

- In the long-term, negative impacts from noise are predicted at receptors within close proximity of the Scheme and along Garstang Road East. While negative noise impacts greater than moderate were predicted at 120 dwellings (of 2,242 assessed), there are no negative changes that would result in adverse impacts on health and quality of life
- Long-term positive 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 positive change. Changes of this magnitude would represent a significant positive impact on health and quality of life

3.8 Road Drainage and the Water Environment

Methodology

3.8.1 The assessment of residual effects has been undertaken in accordance within the DMRB, Volume 11, Section 3, Part 10 (HD45/09).

Baseline

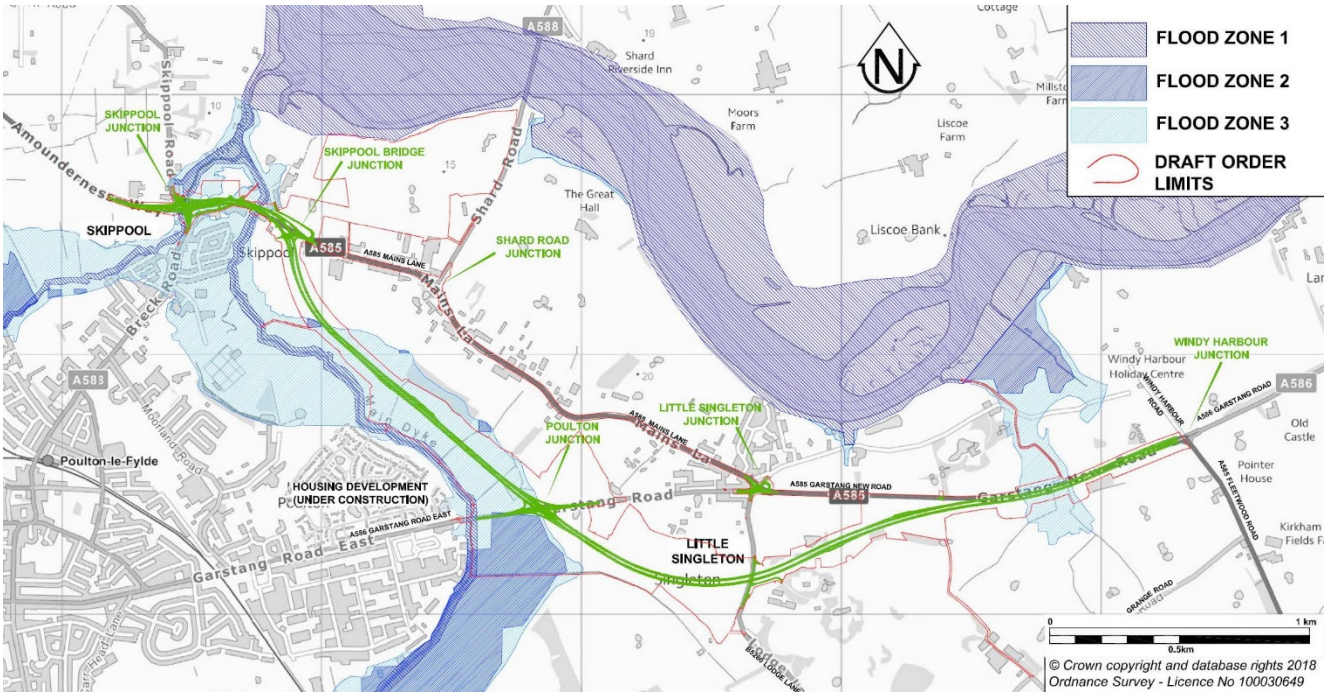
3.8.2 Baseline information was gathered though a review of readily available information and consultation with the Environment Agency. The Scheme is located to the south of the estuary of the River Wyre which is tidally influenced. Within the vicinity of the Scheme are Main Dyke and Horsebridge Dyke which are both classed as Main Rivers by the Environment Agency.

3.8.3 Information on surface and groundwater quality has been drawn from the Water Framework Directive (WFD) 2015 second cycle and watercourses within the vicinity of the Scheme achieve 'Moderate' or 'Good' overall status.

3.8.4 Across the majority of the site deposits support an aquifer classified as Secondary (undifferentiated). There is also 1 groundwater body underlying the Scheme, the West Lancashire Quaternary Sand and Gravel Aquifer.

3.8.5 Existing flood risk was determined using published data sources in addition to bespoke modelling studies. The Environment Agency Flood Map for Planning illustrates that the Scheme crosses land that is considered at high risk of flooding from rivers and the sea (Flood Zone 3). Although the majority of the Scheme is in Flood Zone 1. Flood Zones are presented on Figure 6.

Figure 6: Flood Zones



Mitigation Measures

3.8.6 Mitigation measures would be implemented during construction to prevent pollution / water quality degradation and to reduce runoff. Details of mitigation measures are outlined within the Outline CEMP (document reference TR010035/APP/7.2).

3.8.7 The design of the Scheme includes for climate change resilience and would also offer potential for betterment in treating highway runoff prior to discharge to the surface water environment.

3.8.8 The Scheme also involves the removal of an existing constricting culvert at Skippool Bridge as part of the construction of a new bridge.

Residual Effects

3.8.9 The risk of pollution of watercourses would be minimised though implementing the mitigation measures noted above therefore potential effects on water quality as a result of the Scheme are generally considered to be negligible.

3.8.10 Once constructed, the Scheme would be more effective in terms of drainage attenuation and treatment of polluted highway runoff compared to the existing A585 Mains Lane in this location. Negligible to minor beneficial impacts are predicted for all receptors that receive discharges of highway runoff.

3.8.11 The Scheme provides a river flood risk benefit upstream of the crossing of the Main Dyke, by removing an existing restricting twin culvert. This reduces baseline flooding and would have a positive impact. However, modelled tidal flows in the future scenario (which includes for a large climate change allowance) with the Scheme would result in a small, localised increase in flooding. This is currently being discussed with the Environment Agency.

3.8.12 The construction of a cutting in the Lodge Lane area is predicted to have a minor to moderate negative impact on groundwater resources within the aquifer by changing the local groundwater flow regime. However, the assessment methodology applied is highly conservative and a slight negative effect is considered more likely and is concluded to be not significant.

3.9 Geology and Contaminated Land

Methodology

3.9.1 The assessment of geology and contaminated land has been undertaken for the construction phase in accordance with the DMRB, Volume 11 and Model Procedures for the Management of Land Contamination (CLR11) (Environment Agency 2004). No further effects on Geology and Contaminated land are anticipated during the operation of the Scheme and so have not been considered further.

Baseline

3.9.2 Existing conditions have been determined though a review of readily available information, consultation with the Environment Agency, consultation with local planning authorities and have been supplemented with the results of the ground investigation.

3.9.3 The Scheme is located in a rural setting with light industry (garden nurseries, poultry houses and timber yard) being identified along the existing road. These are some distance from the proposed new alignment.

Environmental Design

3.9.4 Mitigation measures proposed for the Scheme during the construction phase are outlined in detail within the Outline CEMP (document reference TR010035/APP/7.2) and a summary is presented below.

3.9.5 Sources of potentially contaminating materials including the storage and use of fuels, oils and chemicals and the use of cement-based products would be controlled by application of pollution prevention measures. These measures would aim to prevent the deterioration of the underlying soils through spillages / leakages.

3.9.6 Stripped and excavated soils / arisings would be appropriately stored on site to ensure that they are suitable for re-use within the Scheme or by others.

3.9.7 Activities during construction would involve the stripping of soils across the Scheme. The impacts on construction workers include potential damage via skin, ingestion and inhalation exposure to contamination, if present would be controlled through the use of appropriate clothing.

Residual Effects

3.9.8 Following the implementation of mitigation measures, significant effects on human health are not anticipated.

3.9.9 Surface water and groundwater are considered, once mitigation is in place, to experience negligible effects.

3.9.10 All potential effects are considered to be short-term when significant earthwork movements are taking place and no operational effects are anticipated.

3.10 Materials

3.10.1 Materials would be required for the construction of the Scheme, for example, concrete, steel, aggregate and tarmacadam. The key environmental effects resulting from the use of material resources are: the impact on the availability of material resources; impacts on the demand for key construction materials; and the depletion material resources. The material resource that would be required in the largest quantity would be aggregates (e.g. to build up features such as mounds / bunds and embankments).

3.10.2 The Scheme would also involve substantial earthworks. Where fill material would be required (e.g. to construct embankments, mounds / bunds, etc.) it would as far as is practicable come from within the same section of works. The remaining import would be sourced locally or obtained from excavating the potential borrowpits (areas where material could be taken to reduce the amount of imported material required). The location of the potential borrowpits is presented on Figure 1.

3.10.3 The Scheme would also generate other types of waste which would require appropriate management on site. The key environmental effects resulting from the generation and management of waste is the temporary occupation of waste management facilities and a wider reduction in landfill capacity.

3.10.4 Following the implementation of appropriate mitigation measures, including the preparation of a Materials Management Plan and a Site Waste Management Plan there would be no significant effects from the use of material resources and no significant effects from the arisings and management of waste as a result of the construction of the Scheme.

3.11 Climate

3.11.1 An assessment has been undertaken of the effects of the Scheme on greenhouse gasses and the vulnerability of the Scheme to climate change during the construction and operation phases.

Effects on Climate

3.11.2 Overall, the effects on climate are anticipated not to be significant due to the scale of the works. However, at this stage, it is anticipated that due to the quantity of material resources required for the Scheme, a further carbon assessment, including greenhouse gas emissions, would be beneficial to be undertaken post-construction.

Vulnerability to Climate

3.11.3 The Scheme has been designed to withstand future events such an increase precipitation and flooding as a result of climate change. The Flood Risk Assessment has fed directly into the design of the Scheme and influenced vertical alignment and drainage blanket design. The drainage design has also been designed to allow for future climate change events. For these reasons no significant effects were predicted as a result of the Scheme.

4 COMMENTING ON THE APPLICATION

4.1 Further Details

4.1.1 Following acceptance of the application by the Inspectorate, consultees and the local community would be able to review the documents and provide representations. A copy of the ES would be made available for inspection at the Wyre Civic Centre and Thornton Library during normal opening hours:

Wyre Council
Civic Centre
Breck Road
Poulton-le-Fylde
Lancashire
FY6 7PU

Thornton Library
Victoria Road East
Thornton-Cleveleys
Lancashire
FY5 3SZ

4.1.2 Copies would also be available directly from Highways England. Paper copies would be made available at a reasonable cost to cover printing and postage. Electronic copies of the Environmental Statement and hard copies of this Non-Technical Summary can be made available on request for free.

4.1.3 An electronic copy would also be available on the Planning Inspectorates website https://infrastructure.planninginspectorate.gov.uk/projects/north-west/a585-windy-harbour-to-skippool-improvement-scheme/?ipcsection=overview as well as the Scheme website. Further details about making a representation and how to get involved in the planning process are provided in the Inspectorates Advice Note 8 (December 20161) Overview of the nationally significant infrastructure planning process for members of the public and others.

[1] https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2013/04/Advice-note-8.0.pdf