



Llywodraeth Cymru
Welsh Government

WELSH GOVERNMENT

A40 PENBLEWIN TO REDSTONE CROSS IMPROVEMENT

THE LONDON TO FISHGUARD TRUNK ROAD (A40) (PENBLEWIN TO REDSTONE CROSS IMPROVEMENT AND DE-TRUNKING) ORDER 202-

THE LONDON TO FISHGUARD TRUNK ROAD (A40) (PENBLEWIN TO REDSTONE CROSS IMPROVEMENT) (SIDE ROADS) ORDER 202-

THE WELSH MINISTERS (THE LONDON TO FISHGUARD TRUNK ROAD (A40) (PENBLEWIN TO REDSTONE CROSS IMPROVEMENT))
COMPULSORY PURCHASE ORDER 202-

**OUTLINE STATEMENT OF THE WELSH GOVERNMENT'S PRINCIPAL
SUBMISSIONS TO BE PUT FORWARD AT THE PUBLIC LOCAL INQUIRY**

September 2020

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1. Introduction and the Public Local Inquiry

- 1.1 This document (the “Outline Statement”) relates to the proposed A40 Penblewin to Redstone Cross Improvement (the “Scheme”). The detail of the Scheme is contained within the draft Orders listed at the front of this document. The Welsh Government (WG) have published the draft Orders under the Highways Act 1980 and the Acquisition of Land Act 1981.
- 1.2 This Outline Statement has been prepared in accordance with The Highways (Inquiries Procedure) Rules 1994 (SI 1994/No 3263) and The Compulsory Purchase (Inquiries Procedure) (Wales) Rules 2010 (SI 2010/No 3015).
- 1.3 At 1.8km long, the proposed Scheme comprises a Wide Single 2+1 carriageway cross-section. This provides two lanes in one direction and one lane in the opposite direction. The Scheme starts to the west of Redstone Cross junction, immediately outside the entrances to the properties of Sodston Lodge and Jacob’s Park. The Scheme ends at Penblewin Roundabout to the east. The Scheme forms part of a wider programme of A40 corridor enhancements.
- 1.4 Improvement to the A40 corridor between Haverfordwest and St. Clears has been an accepted policy for many years. There remains an ongoing commitment to deliver this highway improvement. Further details on transport policy are set out in Section 4 of this Outline Statement of Case.
- 1.5 Dates of publication of the draft Orders are given in Section 2 of this document. Following publication of the draft Orders, an objection period was held until 9 September 2020.
- 1.6 Following receipt of objections to the draft Orders, WG propose to hold a Public Local Inquiry (the “Inquiry”) into the draft Orders referred to in this Outline Statement. WG gave notice of this decision in a letter, dated 25

September 2020, which it sent to all persons who made representations to the draft Orders during the objection period.

- 1.7 An independent Inspector has been appointed by the Welsh Ministers, on nomination by the Planning Inspectorate. The purpose of the Inquiry is for the Inspector to consider the proposals and to hear and consider objections, representations and support relating to the published draft Orders for the Scheme. Following the Inquiry, the Inspector will submit a report to the Welsh Ministers presenting his findings, conclusions and recommendations.
- 1.8 This document is an outline of the case that will be presented on behalf of the Welsh Ministers at the forthcoming Inquiry. The Welsh Government will publish its Statement of Case and Proofs of Evidence (the “Statement of Case”) in October 2020. The Statement of Case will provide further detail on the topics covered in this Outline Statement.

2. The Published Draft Orders

2.1 The following draft Orders and supporting environmental reports have been published:

Draft Orders / Environmental Documents	Legislation	Publication Date	End of Objection/ Comment Period
The London to Fishguard Trunk Road (A40) (Penblewin to Redstone Cross Improvement and De-trunking) Order 202- (hereafter referred to as the "Line and Detrunking Order")	Section 10 and 12 of the Highways Act 1980	29 July 2020	9 September 2020
The London to Fishguard Trunk Road (A40) (Penblewin to Redstone Cross Improvement) (Side Roads) Order 202- (hereafter referred to as the "Side Roads Order" or "SRO")	Sections 12, 14, 125 and 268 of the Highways Act 1980	29 July 2020	9 September 2020
Environmental Statement (hereafter referred to as the "ES")	Part VA of the Highways Act 1980 (as amended) and EC Directive 2014/52/EU	29 July 2020	9 September 2020
Statement to Inform an Appropriate Assessment (hereafter referred to as the "SIAA")	Conservation of Habitats and Species Regulations 2017 and Article 6(3) of the Habitats Directive 92/43/EC	29 July 2020	9 September 2020

Draft Orders / Environmental Documents	Legislation	Publication Date	End of Objection/ Comment Period
<p>The Welsh Ministers (The London to Fishguard Trunk Road (A40) (Penblewin to Redstone Cross Improvement)) Compulsory Purchase Order 202-</p> <p>(hereafter referred to as the “Compulsory Purchase Order” or “CPO”)</p>	<p>Sections 239, 240, and 246, 250 and 260 of the Highways Act 1980 as extended and supplemented by section 250 of that Act and under sections 2 and 19(3) and paragraphs 1(1)(b), (3) and (4) of Part 1 of Schedule 2 to the Acquisition of Land Act 1981</p>	<p>5 August 2020</p>	<p>9 September 2020</p>

3. Background

- 3.1 A great deal of development work has previously been undertaken and informed both the location of planned improvements and the preferred route of any highway improvements along the A40 between St Clears and Haverfordwest.
- 3.2 In November 2001, the National Assembly for Wales published The Transport Framework for Wales. This outlined that the east-west transport corridor in West Wales had been the subject of a multi-modal study, which concluded that the A40 west of St Clears was in need of improvements.
- 3.3 In March 2002, the Trunk Road Forward Programme (TRFP) was published and included the A40 west of St Clears. A multi-modal study considered public transport improvements, the conclusion of which was that the costs associated with enhanced passenger services were likely to exceed revenue, thus requiring an operating subsidy.
- 3.4 It was also acknowledged that improvements to public transport would not address the identified transport problems on the A40 trunk road. Early work, therefore, steered the decision to pursue highway led enhancements on the A40 and a route options study explored single and dual carriageway options.
- 3.5 In 2004, two major single carriageway improvement schemes for the A40 west of St Clears were announced:
 - i. A40 Penblewin - Slebech Park; and
 - ii. A40 Llanddewi Velfrey - Penblewin.
- 3.6 Following a review in 2008 of the 'A40 West of St Clears Study', a Preferred Route was announced by the WG for the Penblewin-Slebech Park Improvement.
- 3.7 The first of these projects, Penblewin - Slebech Park, was completed in March 2011.

- 3.8 In July 2013, Edwina Hart AM CStJ MBE, Minister for Economy, Science and Transport, published a written statement outlining her priorities for Transport which included the proposals for improvements to the A40.
- 3.9 In 2014, WG commissioned an update to the work completed in 2004 (and reviewed in 2008) to evaluate whether changes to conditions in the region warranted additional transport interventions along the A40. This included the appraisal of options at Redstone Cross.
- 3.10 In 2017, attendees at the Public Information Exhibition for the A40 Llanddewi Velfrey Improvements expressed their support for further improvements to the A40 between Penblewin and Redstone Cross.
- 3.11 In August 2018, the Cabinet Secretary for Economy and Transport, Ken Skates AM, confirmed in writing to the Senior Coroner in response to the inquest into the death of a driver joining the A40 at Redstone Cross, that investigations would be commenced to look at improving junction safety and providing more safe overtaking opportunities along the length of the A40, which included improvements at Redstone Cross.
- 3.12 In January 2019, Arup (supported by RML), began investigating the problems and developed potential effective solutions to address the transport-related problems along the A40 between Penblewin Roundabout and Redstone Cross for the Welsh Government.
- 3.13 In July 2019, draft Orders for A40 Llanddewi Velfrey to Penblewin Improvements were published. A Public Local Inquiry was held into the project in March 2020.
- 3.14 Further development work had meanwhile been undertaken for the A40 Penblewin to Redstone Cross project. This had resulted in several proposed route options:
- Option 1A – Northern Route with staggered junction at Redstone Cross;
 - Option 1B – Northern Route with no junction at Redstone Cross;

- Option 2A – Southern Route with staggered junction at Redstone Cross

3.15 Following the feedback received at the first Public Information Exhibition, a further option, Option 2B – Southern Route with no junction at Redstone Cross, was developed, and further public engagement was undertaken.

3.16 During a period of public consultation, July to September 2019, there was clear public support for Option 2B, along with support for Active Travel measures to be included in the detrunking proposals.

3.17 Following the Public Consultation, Welsh Government published a Preferred Route in December 2019. A Public Information Exhibition was then held shortly after to explain to the public the developing proposals and to listen to the public's feedback, which has been taken into account.

4. Trunk Roads and Government Policies

The Trunk Road Network

- 4.1 The Welsh Ministers are responsible for the trunk road network in Wales and the Highways Act 1980 defines the procedures to be followed when the Welsh Ministers propose to carry out improvements to a road within the trunk road network.

Transport Policy

- 4.2 One Wales: Connecting the Nation is the Wales Transport Strategy, published in April 2008. The document establishes a national framework for transport planning in Wales and is therefore pertinent to the Scheme.
- 4.3 The main aim of One Wales: Connecting the Nation is ‘to promote sustainable transport networks that safeguard the environment while strengthening our country’s economic and social life.’ The One Wales Programme is working towards promoting sustainable transport between communities in different parts of Wales to access services, jobs and facilities where travelling is both easy and sustainable, which will support the growth of the economy.
- 4.4 One Wales: Connecting the Nation endorses the proposition that a good transport system is central to achieving a vibrant economy and social justice through equality of access and greater mobility.
- 4.5 It sees transport as having a leading role to play in adapting to the impacts of climate change. Fundamentally, economic prosperity is at the forefront of this policy in order to connect people with businesses for employment and businesses with their customers and suppliers.
- 4.6 The document contains a number of long-term outcomes falling within three main themes: social, economic and environmental. The priorities set out in the document include improving access to employment opportunities, improving accessibility within Wales and internationally, improving the actual and perceived safety of travel, encouraging healthy

lifestyles, improving the impact of transport on the local environment and adapting to the impacts of climate change.

4.7 The Trunk Road Forward Programme was originally published in 2002 with subsequent updates in 2004 and 2008. The aim of the programme was to improve the economic and social conditions in Wales, through increasing efficiency and accessibility in all areas. The A40 St Clears to Haverfordwest was identified within the programme, within which included two specific Schemes:

- i. A40 Llanddewi Velfrey to Penblewin; and
- ii. A40 Penblewin to Slebech Park.

4.8 During a reprioritisation of the Programme in 2008, the two Schemes were differentiated as follows:

- i. Penblewin to Slebech Park Scheme – identified as a ‘Phase 1’ high ranking scheme (programmed ready to start between 2008 and April 2011); and
- ii. Llanddewi Velfrey to Penblewin Scheme – identified as a ‘Phase 3’ scheme meaning that further studies were needed to identify best solutions and the scheme is unlikely to be ready to start before April 2014.

4.9 The Penblewin to Slebech Park scheme was subsequently completed in March 2011 with a bypass of Robeston Wathen, to Slebech Park, only.

4.10 In 2012, the Wales Infrastructure Investment Plan identified that improvements to east-west transport links in Wales were high-level investment priorities, with specific reference being made to the continuing improvements to the A40.

4.11 In July 2013, Edwina Hart AM CStJ MBE, then Minister for Economy, Science and Transport, published a written statement outlining her priorities for transport. The statement included the following *“Improving the A40 has been identified as a priority by the Haven Waterway*

Enterprise Zone Board and I intend to undertake further development of previously proposed improvements.”

4.12 In August 2018 the Cabinet Secretary for Economy and Transport, Ken Skates AM, confirmed in writing to the H M Senior Coroner in response to the inquest into the death of a driver joining the A40 at Redstone Cross, that:

“I acknowledge the very sad circumstances surrounding the death...and accept that in your opinion there is a risk of future deaths at this location unless appropriate action is taken... Preliminary investigations have begun to develop further overtaking opportunities & safety improvements along the length of the A40. This includes improvements at Redstone Cross. These additional A40 improvements are included in the update of the National Transport Finance Plan (NTFP) (Page 17 ref ‘NEW2’).”

4.13 The strategic rationale for the Scheme is that it would improve safety at Redstone Cross Junction, whilst also improving accessibility to the Haven Waterway Enterprise Zone and employment sites on a Trans-European Transport Network (TEN-T) route.

Programme for Government

4.14 In 2016, WG published ‘Taking Wales Forward 2016-2021’. This document sets out the government’s programme to drive improvement in the Welsh economy and public services, delivering a Wales, which is prosperous and secure, healthy and active, ambitious and learning, united and connected. Improvements to the A40 in West Wales are part of the commitments under the ‘United and Connected’ theme.

4.15 In 2017, WG published ‘Prosperity for All: The National Strategy’ along with an associated well-being statement. These documents set out WG’s 12 well-being objectives. The National Strategy includes the commitment to deliver a significant improvement to the A40 in West Wales and the published Scheme therefore sits within WG’s plans to deliver those improvements.

- 4.16 In 2019, Prosperity for All: A Low Carbon Wales was published. This sets the foundations for Wales to transition to a low carbon nation and works within the context of the Environment (Wales) Act 2016, which requires WG to reduce emissions of greenhouse gases in Wales by at least 80% for the year 2050.
- 4.17 In 2019, WG declared a climate emergency in Wales to draw attention to the magnitude and significance of the latest evidence from the Intergovernmental Panel on Climate Change and highlighting the recent climate protests across the UK.
- 4.18 WG is taking action across all areas for which it has responsibility in order to meet its ambitions to tackle climate change. Prosperity for All: A Low Carbon Wales (March 2019) contains 100 policies and proposals across all ministerial portfolios. It recognises the serious challenge of decarbonising transport but contains a range of policies and initiatives encouraging a shift to active travel plus an ambitious aim for a zero-emission bus, taxi and private hire vehicle fleet by 2028. The Government's 2020-21 Budget, the first since the declaration of a climate emergency, provides more than £140m of capital funding to support decarbonisation including investment in active travel and an electric bus fleet. Therefore, whilst this Scheme would result in some small increase in greenhouse gas (GHG) emissions, this must not be seen in isolation but in the context of the WG's wider initiatives aimed at decarbonising transport, including encouraging zero and low emission vehicles and investing in charging infrastructure.

5. Existing Conditions and the Need for the Scheme

- 5.1 The A40 is a route of national and international strategic importance, forming part of the Trans-European Transport Network (TEN-T). At a regional and local level, it serves the county town of Haverfordwest, the tourist economy of central and north Pembrokeshire, the port of Fishguard and the industrial town of Milford Haven to the south.
- 5.2 Despite this, the section of the A40 between St Clears and Haverfordwest is a relatively poor-quality route. It has been described within the National Trunk Road Forward Programme as “one of the lowest standard sections of the Trans-European Road Network in the United Kingdom.”
- 5.3 A Welsh Transport Appraisal Guidance (WeITAG) study identified problems to be addressed on the A40 along the Penblewin to Redstone Cross corridor, which comprised a range of actual and perceived problems:
1. The A40 Redstone Cross Junction is below modern design standards. Poor visibility and substandard junction layout can lead to severe road accidents.
 2. Limited overtaking opportunities lead to poor journey time reliability and driver frustration.
 3. Occasional convoys of heavy goods vehicles from the ferry ports and slow-moving agricultural vehicles contribute to periods of platooning and journey time unreliability, which is exacerbated with limited overtaking opportunities.
 4. Seasonal spikes in traffic volumes along the A40, especially during the summer months, leads to slow moving traffic causing journey time unreliability, which is exacerbated by limited overtaking opportunities.
 5. There are many side roads, junctions and direct accesses to properties and agricultural fields off the A40, which contribute to operational problems along the road.

6. A mix of traffic types use the road, contributing to journey time unreliability and driver frustration, risky manoeuvres and collision incidents.
7. A lack of strategic public transport connectivity in Pembrokeshire generally means there is a dependence on the private car for inter-urban connections

5.4 The overarching Scheme objectives are:

1. To enhance network resilience and improve accessibility along the east-west transport corridor to key employment, community and tourism destinations;
2. To improve prosperity and provide better access to the county town of Haverfordwest, the Haven Enterprise Zone and the West Wales ports at Fishguard, Milford Haven and Pembroke Dock;
3. To reduce community severance and provide health and amenity benefits;
4. To improve the Redstone Cross Junction safety (including perceived safety) and reduce the number and severity of collisions;
5. To promote active travel by cycling, horse riding and walking to provide opportunities for healthy lifestyles;
6. To deliver a Scheme that promotes social inclusion and integrates with the local transport network to better connect local communities to key transport hubs;
7. To deliver a project that is sustainable in a globally responsible Wales, taking steps to reduce or offset waste and carbon; and
8. To give due consideration to the impact of transport on the environment and provide enhancement when practicable.

6. Description of the Scheme

- 6.1 The Scheme would comprise a 1.76km long Wide Single (WS) 2+1 Road. This would provide two lanes in the westbound direction and one lane in the eastbound direction throughout the Scheme.
- 6.2 New or diverted Private Means of Access would be provided to replace those affected by the Scheme.
- 6.3 The Scheme would commence approximately 550m west of Redstone Cross where the existing ascending A40 passes the properties known as Sodston Lodge and Jacob's Park. A new attenuation pond/basin (Pond A) would be provided south of the A40 and north-east of Jacob's Park
- 6.4 Travelling east, the Scheme would leave the line of the existing A40 at Sodston Lodge along a single lane section, which moves further to the south on its approach to the existing B4313 Redstone Road.
- 6.5 East of Sodston Lodge, a new link road would provide west access / egress from the A40 to the existing Redstone Cross Road (B4313). The link road would leave the B4313 via a simple T-junction located opposite Blaenmarlais Care Home.
- 6.6 The link road would not be accessible from the proposed westbound A40. Instead, traffic travelling westbound along the A40 and heading to the north of Narberth and the Rush Acre Enterprise Park will be directed to use the existing A40 – which would be detrunked - via the north-western arm of the Penblewin roundabout.
- 6.7 The link road would be accessible from the eastbound A40 via a new junction with a right turn refuge area in the central reserve, which would allow free-flowing traffic along the mainline whilst providing right turn traffic a safe refuge area whilst waiting for an opportunity to cross.
- 6.8 The proposed Redstone Cross T-junction would provide access from the B4313 Redstone Road to B4313 Bethesda. The section of existing A40

between Sodston Lodge and the existing Redstone Cross Junction would be stopped up.

- 6.9 Continuing in an easterly direction from the new T-junction, the A40 would then begin to descend on a gentle gradient. The single lane section would widen to a westbound 2+1 overtaking section. To the north side of the Scheme would be properties at Redstone Cross and to the south the Blaenmarlais Care Home. The B4313 Redstone Road would cross the A40 on a proposed bridge and then join the detrunked A40 on the east side of the existing Redstone Cross junction. The old A40 would be detrunked and would become a local road and extend from Redstone Cross to Penblewin Roundabout.
- 6.10 The proposed overbridge would cross the A40 mainline directly north of Blaenmarlais Care Home. The proposed bridge would maintain connectivity between Narberth and Bethesda, as well as residential/agricultural property located along the existing A40. The road width would remain consistent with the B4313 Redstone Road and a new combined cycleway/footpath would be provided along the overbridge on its eastern side. The B4313 Redstone Road would tie-in to the detrunked A40. A new attenuation pond/basin (Pond D) would be provided south of the detrunked A40 and B4313 Redstone Road tie-in.
- 6.11 East of the B4313 Redstone Road and proposed overbridge, the A40 would continue the gentle left-hand curve to cross a small watercourse north of Blaenmarlais Care Home. Here the Scheme would gradually transfer from cutting to embankment to cross lower lying land occupied by woodland.
- 6.12 Whilst on embankment, the road would continue eastwards crossing two minor watercourses. An underpass would be introduced south-east of Blackmoor Hill Farm, this would be utilised as a farm underpass and provide access to a new attenuation pond/basin (Pond B).
- 6.13 East of the underpass, the Scheme would enter a shallow right-hand bend towards Penblewin Roundabout.

6.14 At Penblewin, the Scheme would re-join the A40 trunk road at the enlarged roundabout previously proposed for the Llanddewi Velfrey to Penblewin Improvements Scheme, which forms a separate set of draft Orders. The enlarged roundabout would extend further north and west than the existing and would serve the A40 trunk road, the A478 and the trunk road link to the Penblewin Rest Area. In addition, a sixth arm would be required for a new short link to the detrunked A40 west to Redstone Cross.

7. Construction

- 7.1 If, following the outcome of the Inquiry, the Welsh Ministers decide to proceed with the Scheme, construction would be started in Autumn 2021. The Scheme is estimated to take 18 months to complete.
- 7.2 At the start of construction, the site would be fenced off and site clearance would begin. Main site accesses would be located at each of the junction locations. Use of the local road network would be restricted by a site Traffic Management Plan.
- 7.3 Bulk earthworks would be prioritised during the summer & autumn of 2021 with mainline pavement completion in the Spring of 2022. Construction of the B4313 Overbridge would start in Autumn 2021. The other underpass structures would be constructed in 2022.
- 7.4 Traffic would be managed to minimise disruption to the travelling public and businesses. Traffic management would be limited to Penblewin Roundabout, Redstone Road and the western tie-in (adjacent to the access to the property known as Jacob's Park). Pembrokeshire County Council will be consulted for traffic management proposals.
- 7.5 Once completed, the contractor would maintain the environmental aftercare for five years.

8. Environmental Effects of the Proposed Improvement

- 8.1 The environmental assessment of impacts and effects on the Scheme, including consideration of the construction phase, together with mitigation and enhancement measures are reported in detail in the Environmental Statement (ES). A Non-Technical Summary (NTS) is available as a freestanding document, which summarises the proposals in non-technical terms.
- 8.2 An overview of the approach to environmental assessment and the likely effect of the Scheme on the environment will be detailed in the Environmental Proof of Evidence.
- 8.3 The development of the environmental appraisal and assessment of appropriate mitigation measures were the subject of regular meetings and dialogue with representatives of Natural Resources Wales (NRW), Cadw, the relevant Local Authorities and other stakeholders as part of the consultation process for project development. The comments received were used to develop the ES.
- 8.4 The Scheme was designed to include extensive mitigation and enhancement measures, in line with the environmentally focused objectives of WG. The assessments carried out show that residual adverse environmental effects of the proposed new section of highway, taking into consideration all the proposed mitigation, are outweighed by the social, economic and environmental benefits that the Scheme would bring to Pembrokeshire and Wales as a whole.

Geology and Soils

- 8.5 An assessment of geology and soils has been undertaken, taking into account geology, geological features, mineral resources and land contamination. There are two known quarries within the Scheme area, therefore there is the potential for unknown historical quarrying and infilled land to be encountered which could be a source of contamination.

Ground investigations on site have identified a slight risk of land contamination.

- 8.6 The assessment has considered impacts associated on the underlying geology by earthworks, removal of material and building of structures. The effect on mineral resources was also considered. The potential impact of construction works on controlled waters and contamination affecting human health has been assessed. No significant effects are anticipated to affect geology in the Scheme area as all effects have been classed as neutral or slight adverse.
- 8.7 All operational effects were assessed as neutral or slight adverse meaning no significant effects were identified and no additional mitigation, aside from in-built mitigation, is required. The assessment found that a neutral / slight beneficial effect could occur through rock exposures formed by cuttings along the Scheme, therefore providing areas of geological interest.

Road Drainage and Water Environment

- 8.8 The water environment for the Scheme consists of surface watercourses including a number of unnamed tributaries and ponds, the underlying groundwater and associated groundwater dependant features. An assessment of the potential effects of the Scheme upon the water environment, which considered effects upon water quality, water quantity and flood risk was undertaken.
- 8.9 The assessment of effects during construction found that a significant effect could potentially occur on groundwater quality and was assessed as moderate adverse. To mitigate this, standard best practice construction techniques outlined in the Pre-Construction Environmental Management Plan (the Pre-CEMP) will be implemented. No other effects were deemed significant.
- 8.10 The operational assessment has identified a neutral effect on the water environment. Mitigation measures included as part of the design will be

in accordance with best practice guidelines for the design of outfalls and culverts will be implemented for all structures.

Nature Conservation (Biodiversity)

8.11 The assessment considers the following nature conservation and biodiversity interests:

- Protected sites;
- Habitats; and
- Species of fauna and flora.

8.12 During construction, the significance of effect on woodlands is assessed as moderate adverse and for hedgerows slight adverse, due to the fragmentation of green corridors and habitats. Following mitigation, the significance of effects on foraging bats is predicted to be moderate adverse, for internationally important species, to slight adverse, for locally important species. Following mitigation, the significance of effects on watercourses, dormice, otter, barn owl and spotted flycatcher, will be slight adverse. Effects on other species including breeding birds, badgers, reptiles, amphibians and some other mammals has been assessed as neutral. No significant effects are predicted for protected sites.

8.13 During operation, once planting matures the significance of effect on deciduous woodland, watercourses and hedgerows will be of neutral significance over time. The creation of 6ha of species-rich grassland will lead to a slight beneficial effect for this habitat. The inclusion of wildlife crossings and culverts will reduce the significance of effect for the internationally important bat assemblage and a neutral significance of effect for the locally important assemblage of bats. The residual effect on barn owls is slight adverse due to the risk of collisions on the road. Other measures including habitat creation, mammal fencing and ledges will result in the removal of negative effects on otter, badger, reptiles and amphibians. No significant effects are predicted for protected sites.

Landscape and Views

- 8.14 The Scheme occupies part of a prominent ridge and plateau with steep scarp slopes that surround the head of the Afon Marlais and Lampeter Vale. The ridge and plateau are dissected by steep-sided valleys that drain into both Taf and Cleddau rivers. The surrounding area has an undulating topography with numerous river valleys, often with wooded slopes. Pembrokeshire hedge-banks, hedgerows with trees and blocks of woodland cross the landscape and a network of narrow lanes connects villages, single dwellings and rural settlements. There are a number of important designated sites within close proximity to the Scheme area including the Pembrokeshire Coast National Park and Blackaldern Registered Historic Park and Garden.
- 8.15 This assessment concludes that during construction and in the first year after construction is complete, the Scheme will have a slight adverse effect upon three landscape character areas of Narberth, Llanddewi Velfrey Ridge and Lampeter Velfrey Slopes. This effect will be reduced as the proposed landscape mitigation measures become established. The impact on views from Sodston House Lodge, Blaenmarlais, Blaenffynnon and Penblewin will be adverse during construction and in year 1 of the Scheme. The visual impact assessment of 190 residential properties predicts that there will be an initial significant adverse impact on 11 properties during construction.
- 8.16 For the Landscape Character Area of Narberth Rural there will be a large negative impact during construction and year 1. By year 15, this will be reduced to slight negative. For the whole study area, the impact by year 15 would be neutral. By year 15, these negative effects will be moderated by the development of landscape mitigation, which includes false cuttings, Pembrokeshire banks, extensive tree and shrub planting. Some vertical noise barriers are also proposed, and these will assist in screening views of traffic. The visual impact assessment shows an adverse impact on four residential properties by year 15.

Archaeology and Cultural Heritage

- 8.17 A number of heritage features have been identified within the 3km study area including Scheduled Ancient Monuments, Listed Buildings, field systems and bridges. Geophysical surveys also identified a number of areas that could potentially contain buried archaeology
- 8.18 The construction effects on the heritage assets within the study area have been identified as neutral, however there are some exceptions. The Toll road between St Clears and Canaston Bridge, circular features, a Lane on the Tithe Map and Blaenmarlais house and barn are classed as having a neutral or slight significance of effect. The field system and circular cropmark are identified as having a slight effect. A standing building is identified as having a slight or moderate significance of effect.
- 8.19 There is also a high possibility that intrusive works on the Scheme may uncover previously unrecognised archaeological deposits. As a mitigation measure, an archaeological evaluation programme is planned which will involve recording existing archaeological remains and trenching.
- 8.20 No significant effects have been identified for the setting of designated historical assets during the operation of the Scheme. The Redstone Cross Barrow Group will experience an improvement, as the main road will move further away from the barrows. The vast majority of designated sites (scheduled ancient monuments and listed buildings) identified in the 3km buffer zone will have no views of the Scheme when it is operational, due to hills and increasing distance.

Community and Private Assets (excluding agriculture)

- 8.21 The assessment of community and private assets includes effects on community facilities, including; doctor surgeries, hospitals, aged people homes, schools, shops, post offices, places of worship, parks, play areas and other public open space and sports centres. It also assesses effects

on private and commercial assets, including private property and associated land take, commercial property and development land.

- 8.22 The potential effects for the construction phase will be temporary. Throughout construction of the Scheme, nuisance from access restrictions, noise, dust and vibration will be mitigated as best as possible through measures outlined in the Construction Environmental Management Plan (the CEMP). In addition, temporary traffic management will be used wherever necessary to maintain access to communities. The Blaenmarlais Care Home, residential receptors and a commercial property will experience minor adverse effects including noise, dust, vibration and journey impacts for visitors to the care home caused by traffic management.
- 8.23 During operation, there will be beneficial impacts on the care home and residential receptors due to the provision of a shared use footway / cycleway and separation from the A40 traffic. For other residential properties, there will be a positive effect, assessed from neutral to moderate beneficial, from moving the A40 trunk road further away through reduced noise and vibration and improved air quality. Walking and cycling access to and from Narberth will be improved for residential properties located to the north of the existing A40 as the need to cross the A40 trunk road at grade will be removed.

Community and Private Assets: Agriculture

- 8.24 The assessment examined the potential effects on agricultural land resources and farm businesses. In assessing land resources, the agricultural land was measured on a scale according to its quality and therefore its sensitivity to effects. The assessment of farm businesses considered the physical effects, including land loss, severance, the potential effects on the movement of livestock, field accesses, drainage and the use of farm buildings, as well as the longer-term consideration of whether the land could continue to be of beneficial agricultural use.

8.25 There are five farms affected by the permanent land acquisition for the Scheme. Some land would be required on a temporary basis for construction, which would be returned to the owners upon completion of the Scheme. In terms of severance, access to the land during construction is expected to be capable of being maintained, with the exception of one field. Good construction practices will be undertaken to ensure no agricultural weeds or diseases are spread between farms. Mitigation measures include reducing the impact of crop loss by giving advance warning to enable farmers to plan ahead for the year. Timing the start of sections of work to start just after harvest and monitoring the drainage of the fields will be implemented. In the event that water supplies are affected, temporary or permanent solutions will be offered to the owners affected. All effects are classed as being moderate adverse and therefore significant.

8.26 An area of 12.8 hectares of agricultural land and associated woodland will be lost permanently to the Scheme. This cannot be mitigated however can be compensated. A further 0.8 hectare will be re-contoured and returned to agricultural use post-construction. The land required is not considered of the best and most versatile quality and therefore the effects are considered to be as minor adverse and not significant.

Air Quality

8.27 A detailed air quality assessment was undertaken to establish the potential effects of the Scheme on local and regional air quality. Annual mean levels of nitrogen dioxide and particulate matter (PM10) were measured near to multiple sensitive receptors, such as schools and houses, and were then compared to the predicted levels they will change to if the Scheme were built and traffic consequently altered.

8.28 No exceedances of the air quality objectives are predicted with or without the Scheme in any of the scenarios assessed. There is only one receptor location predicted to have a minor adverse impact, which is

Blaenmarlais Care Home. All other receptors are predicted to have either a negligible, minor beneficial, moderate or major beneficial impact. The impact of any dust-emitting activities can be greatly reduced by applying best practice construction mitigation, such as regular monitoring of site activities and location of machinery and dust causing activities away from receptors where possible.

8.29 The Scheme will move the main A40 traffic away from the existing road alignment. This will provide a slight beneficial effect on air quality for receptors on the existing alignment of the A40. There is a minor adverse impact predicted where the road moves closer to receptors. No mitigation measures are required.

Noise and Vibration

8.30 A noise and vibration assessment was undertaken to determine the significance of temporary and permanent effects of noise and vibration during the construction and operation phases. The dominant noise source is road traffic from the existing A40.

8.31 The noise assessment identified that significant effects will be experienced at four of the receptor locations during construction. Appropriate mitigation to reduce these effects will be implemented through the CEMP. The assessment of vibration effects due to all construction activities are reported as 'not significant' at all receptors.

8.32 For properties where the realigned A40 is closer than the existing A40, adverse significant effects have been avoided by the inclusion of landscape/noise mitigation (landscaped bunds) between the Scheme and the properties.

All Travellers

8.33 The assessment of all travellers includes vehicle travellers and walkers, cyclists and horse riders (WCHR). The potential effects are considered on Public Rights of Way, Cycle routes and other WCHR routes, public

highways, overbridges and underbridges, public transport and bus stops, community severance, driver stress and detrunking. Within the study area, the presence of PRow is sparse with only two links available to WCHR. A footpath runs north-south following agricultural land boundaries and currently terminates on the existing A40 east of Blackmoor Hill Farm. Access to the footpath via the A40 is currently unattractive, with no pedestrian footways in an eastbound or westbound direction, providing no wider connectivity. A bridleway runs west-east to the south of the Scheme between the A478 and B4313. The route is clearly signed at both intersections.

8.34 During construction, the assessment identified that there will be minor adverse effects due to temporary disruption to services and journeys caused by the overbridge construction, traffic management and diversions. A slight adverse effect is considered on driver stress due to traffic management and construction. Construction traffic management will be implemented as part of the CEMP. All mitigation for all travellers in the Scheme is embedded into the design, such as the creation of the new overbridge.

8.35 The assessment predicts a moderate beneficial effect on local road connectivity due to the provision of an overbridge, which is considered significant. Other slight beneficial effects include connectivity improvements through linkages onto the detrunked A40 and overbridge, over the A40 road itself and across the A40 via the overbridge, improved road conditions reducing driver stress and an improved WCHR route along the detrunked A40.

Materials

8.36 The construction of the Scheme will require the use of material resources and the generation and management of waste. The assessment has taken into account the types and quantities of materials and waste associated with the construction and operation of the Scheme, their storage and the management of the waste streams.

- 8.37 During construction, the use of capping and subbase construction is considered a neutral or slight significance due to the availability of local sources. For waste, the significance of effect has been assessed as neutral or slight adverse as the waste will be reused where possible. The Site Waste Management Plan outlines the mitigation measures, which include the use of best practice construction techniques and adherence to the waste hierarchy.
- 8.38 During the operational phase, there are not anticipated to be any significant effects associated with material resources or the generation of waste. Ongoing maintenance of the Scheme will be undertaken in line with best practice and the principles of the waste hierarchy

Population and Human Health

- 8.39 The population and human health assessment examines how the Scheme may influence public health and well-being in the areas surrounding the Scheme and includes the distribution of impacts within different social groups where possible.
- 8.40 The assessment has identified that there will be minor adverse health effects as a result of construction noise, air quality for vulnerable groups such as children, older people and the long-term sick. Construction activities could make active travel a less desirable option during this time. Accessibility is not considered to be affected. These effects are only likely to persist for the duration of construction and are therefore temporary. In order to mitigate these effects, there would be effective community liaison throughout construction, and works would be carried out in accordance with the CEMP to minimise construction impacts.
- 8.41 During operation, minor beneficial health effects have been identified for improved access to open space and nature. Improved PRow connectivity will improve participation in active travel and improved access to work as a result of an improved road network and the corresponding reduced congestion

Climate Change

8.42 Three assessments were carried out for Climate Change:

- a greenhouse gas (GHG) emissions assessment, which quantifies the potential impact
- a climate change resilience (CCR) assessment, which evaluates the effectiveness and feasibility of adaptation measures integrated into the Scheme; and
- an in-combination climate change impact (ICCI) assessment, which evaluates the combined effect of the Scheme and potential climate change impacts on the environment during construction and operation.

8.43 The GHG assessment identified that the emissions generated during the construction phase will account for 1.1% of the total emissions predicted over the 60-year appraisal period. The main sources of the increase in carbon emissions are those within the construction materials and emissions from plant and transport on site. Mitigation measures shall include using local suppliers of resources and materials. This will minimise the journey distances to the Scheme, therefore reducing the carbon impact required to transport materials to site. The ICCI assessment concluded that sufficient mitigation measures are already outlined in the Pre-CEMP. These measures include ensuring resilience to extreme weather events and providing sufficient site drainage.

8.44 The GHG assessment identified that emissions from vehicles using the road will account for the vast majority of emissions over the project life (99%). The carbon impacts associated with replacement of the road surface during maintenance are estimated at 0.97ktCO₂e over the 60-year project life.

8.45 The CCR assessment highlighted that, whilst most of the near term risks are classed as 'low' or 'very low' risk, two risks associated with flooding

caused by extreme rainfall events are classed as 'medium' risk, though not significant, in the longer term. No risks identified in the ICCI assessment were classed as significant.

Cumulative Effects

8.46 An assessment of cumulative effects is required due to the potential for separate effects of more than one project to incur a significant effect on receptors. This includes the potential effect associated with the construction and operation of the proposed A40 Llanddewi Velfrey to Penblewin scheme to be constructed over a similar period time. Two principal types of cumulative effects are considered:

- interrelationships between effects generated by the Scheme, and
- the interaction of effects of the Scheme with other developments.

8.47 For the impact of interrelationships, the assessment identifies a 'modest' effect, based on the extent and complexity of the receptors.

8.48 For the impact of in combination, a total of nine 'short listed' projects were identified and these included a range of land uses, with residential and the separate A40 scheme. The concurrent A40 scheme represents most potential for a significant in-combination impact, with majority of receptors likely to be affected.

Summary of likely environmental impacts

8.49 The Scheme would provide an improved carriageway designed and built to current standards with good overtaking opportunities.

8.50 The environmental assessments have determined that there would be some beneficial and adverse impacts on the local environment as a result of the Scheme. Where adverse impacts are identified, these would be mitigated where feasible as part of the design. The mitigation measures have been developed in collaboration with the statutory environmental bodies, landowners and other key stakeholders.

8.51 The Scheme is designed following the principles of sustainability and would reuse excavated materials within the Scheme. Measures to protect watercourses, including five balancing ponds, have been included in the Scheme proposals to minimise pollution risks during construction and operation.

8.52 Mitigation measures have been designed to reflect the landscape character of the area, to provide some visual screening, ecological mitigation and enhancement. The ES also considers the effects of the Scheme in combination with other proposed developments in the area and concludes that there would be no significant cumulative effects.

9. Sustainable Development

- 9.1 The development of this Scheme has considered the requirements of the Well-being of Future Generations (Wales) Act 2015 (WFGA 2015), and a Sustainable Development Report has been produced and will be published ahead of the Inquiry.
- 9.2 Evidence will be presented examining the extent to which the development of the Scheme adhered to the sustainable development principle now set out in the WFGA 2015, concluding that the selection of the final design of the Scheme does accord with the five ways of working. Evidence will also be presented showing how the Scheme would contribute to the seven well-being goals of the WFGA 2015 and the delivery of WG's Well-being objectives set out in Prosperity for All, in addition to other relevant well-being objectives including those of Pembrokeshire County Council as the relevant local Public Service Board.
- 9.3 In summary, the Scheme ensures that this strategic road of national importance can continue to contribute to the Welsh economy, society, culture and environment in a positive way.
- 9.4 Benefiting from the design and development of the Scheme in accordance with the five ways of working advocated by the WFGA 2015, the development would help secure the long-term prosperity, resilience, health and community cohesion of the local communities, benefiting both current and future generations.
- 9.5 Evidence demonstrates that the Scheme would: improve road safety; improve journey time reliability and overtaking opportunities; and increase network resilience.
- 9.6 The Scheme is also expected to result in some adverse environmental impacts including a marginal increase in GHG emissions when compared to projected emissions without the Scheme. The approach to construction would use resources efficiently and would provide

employment opportunities, including commitments to employ local workers with the training of local people.

- 9.7 Whilst acknowledging the potential impacts of the Scheme, these are balanced with opportunities, which align well with the national well-being goals and the relevant local well-being objectives, whilst the project team has and continues to work in a sustainable way.
- 9.8 Overall, the Scheme is expected to help WG and other relevant public bodies satisfy their well-being duties by contributing to improving the economy, society, culture and the environment.
- 9.9 The proposals are therefore considered to represent sustainable development within the definition of the WFGA 2015.

10. Objections, Representations and Support

10.1 22 objections, 2 representations and 2 letters of support have been received in relation to the draft Orders for this Scheme to date.

11. Land Acquisition and Compensation

11.1 WG (through the Welsh Ministers) acquires and manages land for the trunk road network in Wales. It is normally acquired by means of compulsory purchase procedures under the Acquisition of Land Act 1981.

11.2 The land-take and rights as shown in the draft CPO are the minimum necessary to construct, mitigate, operate and maintain the proposed Scheme. Land required only during the construction period, for temporary works such as traffic diversions, has been identified separately as part of the publication of the draft CPO.

11.3 The Scheme would require approximately 21.5 hectares of land in total. Approximately 0.9 hectares of land would be required temporarily to undertake construction works and temporary traffic management operations.

11.4 The Engineering Proof of Evidence will identify the reasons for both permanent land take and temporary land take, the latter necessary during the construction period.

11.5 The Environmental Proof of Evidence will explain why land is required for essential environmental mitigation.

11.6 Levels of compensation are not a consideration at Public Local Inquiries. These matters would be dealt with if the Welsh Ministers decide to make the Orders and Notices to Treat and Enter onto land are served. Compensation would then be negotiated by the Valuation Office Agency, which acts on behalf of WG. If agreement cannot be reached, affected parties could refer their case to the Upper Tribunal (Lands Chamber) for determination.

11.7 Liaison with those affected by the draft CPO is ongoing and will continue. Matters of accommodation works would be discussed with affected parties during the detailed design stage.