





## MORGAN AND MORECAMBE OFFSHORE WIND **FARMS: TRANSMISSION ASSETS**

**Outline Highway Access Management Plan** 









Document status							
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#### **Contents**

	LINE HIGHWAY ACCESS MANAGEMENT PLAN	
1.1	Background	
	1.1.1 Introduction	
	1.1.2 Project overview	
	1.1.3 Purpose of the Outline Highway Access Management Plan	
	1.1.4 Structure of this document	
	1.1.5 Implementation of the Outline Highway Access Management Plan	
1.2	Highway accesses	
1.3	Access designs	
	1.3.2 Haul road crossings of public highways	
	1.3.3 Road safety	
	1.3.4 Technical approval	
	1.3.5 Road safety audit	
1.4	Traffic management for temporary highway access points	
	1.4.1 Overview	21
	1.4.2 Road works	
1.5	References	27
Table 1.1: F	Preliminary access design summary	7
<b>Figures</b>		
-	Construction highway accesses and haul road crossing points	
Figure 1.2:	Haul route crossing	19
	Priority signs on a two-lane single carriageway road	
	Stop/go signs on a two-lane single carriageway road	
Figure 1.5:	Manually operated stop/go signs and priority signs	25
Figure 1.6:	Roadworks at a T-junction – traffic control by means of portable traffic signals	26
<b>Append</b>	lices	
APPENDIX	A: PRELIMINARY ACCESS DESIGNS	28







### **Glossary**

Term	Meaning				
400 kV grid connection cable corridor	The corridor within which the 400 kV grid connection cables will be located.				
Applicants	Morgan Offshore Wind Limited (Morgan OWL) and Morecambe Offshore Windfarm Ltd (Morecambe OWL).				
Commitment	This term is used interchangeably with mitigation and enhancement measures. The purpose of commitments is to avoid, prevent, reduct or, if possible, offset significant adverse environmental effects. Prim and tertiary commitments are taken into account and embedded with the assessment set out in the ES.				
Environmental Statement	The document presenting the results of the Environmental Impact Assessment process.				
Generation Assets	The generation assets associated with the Morgan Offshore Wind Project and the Morecambe Offshore Windfarm include the offshore wind turbines, inter-array cables, offshore substation platforms and platform link (interconnector) cables to connect offshore substations.				
Haul road	The haul road will provide vehicle access along the onshore export cable corridor and 400 kV grid connection cable corridor off the public highway and will be used where needed throughout the installation of the onshore export cables and 400 kV Grid Connection Cable. The haul road will be 6 m wide (excluding passing places).				
Highway Authorities	Lancashire County Council and Blackpool Council as the Local Highway Authority and National Highways as the highway authority for the strategic network collectively referred to as the Highway Authorities.				
Landfall	The area in which the offshore export cables make landfall (come on shore) and the transitional area between the offshore cabling and the onshore cabling. This term applies to the entire landfall area at Lytham St. Annes between Mean Low Water Springs and the transition joint bay inclusive of all construction works, including the offshore and onshore cable routes, intertidal working area and landfall compound(s).				
Local Highway Authority	A body responsible for the public highways in a particular area of England and Wales, as defined in the Highways Act 1980.				
Local Planning Authority	The local government body (e.g., Borough Council, District Council, etc.) responsible for determining planning applications within a specific area.				
Mean High Water Springs	The height of mean high water during spring tides in a year.				
Mean Low Water Springs	The height of mean low water during spring tides in a year.				
Mobilisation period	Period before and after standard construction working hours for deliveries, arrival of construction workers etc.				
Morecambe Offshore Windfarm: Transmission Assets	The offshore export cables, landfall and onshore infrastructure required to connect the Morecambe Offshore Windfarm to the National Grid.				
Morgan Offshore Wind Project: Transmission Assets	The offshore export cables, landfall and onshore infrastructure required to connect the Morgan Offshore Wind Project to the National Grid.				







Term	Meaning
Morgan and Morecambe Offshore Wind Farms: Transmission Assets	The offshore and onshore infrastructure connecting the Morgan Offshore Wind Project and the Morecambe Offshore Windfarm to the national grid. This includes the offshore export cables, landfall site, onshore export cables, onshore substations, 400 kV grid connection cables and associated grid connection infrastructure such as circuit breaker compounds.
	Also referred to in this report as the Transmission Assets, for ease of reading.
Onshore export cable corridor	The corridor within which the onshore export cables will be located.
Onshore substation	The onshore substations will include a substation for the Morgan Offshore Wind Project: Transmission Assets and a substation for the Morecambe Offshore Windfarm: Transmission Assets. These will each comprise a compound containing the electrical components for transforming the power supplied from the generation assets to 400 kV and to adjust the power quality and power factor, as required to meet the UK Grid Code for supply to the National Grid.
Outline Construction Traffic Management Plan	A plan establishing vehicle routing and to ensure that vehicles can safely access the onshore elements of Transmission Assets.

### **Acronyms**

Acronym	Meaning
СоТ	Commitment
СТМР	Construction Traffic Management Plan
DCO	Development Consent Order
ES	Environmental Statement
GPS	Global Positioning System
НА	Highway Authority
HAs	Highway Authorities
HAMP	Highways Access Management Plan
HGVs	Heavy Goods Vehicles
LHA	Local Highway Authority
LPA	Local Planning Authority
MfS	Manual for Street (standards)
MHWS	Mean High Water Springs
ОСТМР	Outline Construction Traffic Management Plan
ОНАМР	Outline Highways Access Management Plan
RSA	Road Safety Audit







### **Units**

Unit	Description
kV	Kilovolt







#### 1 Outline Highway Access Management Plan

#### 1.1 Background

#### 1.1.1 Introduction

1.1.1.1 This document forms the Outline Highway Access Management Plan (OHAMP) prepared for the Morgan and Morecambe Offshore Wind Farms: Transmission Assets (referred to hereafter as 'the Transmission Assets').

#### 1.1.2 Project overview

- 1.1.2.1 Morgan Offshore Wind Limited (Morgan OWL), a joint venture between bp Alternative Energy Investments Ltd. (bp) and Energie Baden-Württemberg AG (EnBW), is developing the Morgan Offshore Wind Project. The Morgan Offshore Wind Project is a proposed wind farm in the east Irish Sea.
- 1.1.2.2 Morecambe Offshore Windfarm Ltd (Morecambe OWL), a joint venture between Zero-E Offshore Wind S.L.U. (Spain) (a Cobra group company) (Cobra) and Flotation Energy Ltd, is developing the Morecambe Offshore Windfarm, also located in the east Irish Sea.
- 1.1.2.3 The purpose of the Transmission Assets is to connect the Morgan Offshore Wind Project: Generation Assets and Morecambe Offshore Windfarm: Generation Assets (referred to collectively as the 'Generation Assets') to the National Grid.
- 1.1.2.4 Morgan OWL and Morecambe OWL (the Applicants) are jointly seeking a single consent for their electrically separate transmission assets comprising aligned offshore export cable corridors to landfall and aligned onshore export cable corridors to separate onshore substations, and onward connection to the National Grid at Penwortham, Lancashire.
- 1.1.2.5 The key components of the Transmission Assets include offshore elements, landfall and onshore elements. Details of the activities and infrastructure associated with the Transmission Assets are set out in Volume 1, Chapter 3: Project Description of the Environmental Statement (ES) (document reference F1.3).
- 1.1.2.6 This OHAMP has been developed for onshore elements of Transmission Assets, landwards of Mean High Water Springs (MLWS). The elements of the Transmission Assets relevant to this plan are:
  - Landfall:
    - landfall site: this is where the offshore export cables are jointed to the onshore export cables via the transition joint bays. This term applies to the entire area between Mean Low Water Springs (MLWS) and the transition joint bays.
  - Onshore elements:







- onshore export cables: these export cables will be jointed to the offshore export cables via the transition joint bays at the landfall site, and will bring the electricity generated by the Generation Assets to the onshore substations;
- onshore substations: the two electrically separate onshore substations will contain the components for transforming the power supplied via the onshore export cables up to 400 kV; and
- 400 kV grid connection cables: these export cables will bring the electricity generated by the Generation Assets from the two electrically separate onshore substations to the existing National Grid substation at Penwortham.
- 1.1.2.7 Full details of the activities and infrastructure associated with the Transmission Assets are set out in Volume 1, Chapter 3: Project Description of the Environmental Statement.

## 1.1.3 Purpose of the Outline Highway Access Management Plan

- 1.1.3.1 The purpose of this OHAMP is to present the details and preliminary access designs for the accesses and haul road crossings associated with the Transmission Assets. The general arrangement for any street works which may be necessary to facilitate the installation of any site accesses has also been included.
- 1.1.3.2 The detailed HAMP(s) will set out any updated to the access designs including the location, frontage, general layout, visibility and embedded mitigation measures for points of access to the Transmission Assets.
- 1.1.3.3 This OHAMP references the following documents:
  - Volume 3, Chapter 7: Traffic and transport of the ES.
  - Outline Construction Traffic Management Plan (OCTMP) (Document reference J5).
  - Outline Code of Construction Practice (document reference J1).
- 1.1.3.4 Wider traffic management measure, including information on delivery routes and any potential monitoring are provided in the OCTMP (see document reference J5).

#### 1.1.4 Structure of this document

- 1.1.4.1 This document is set out as follows.
  - Section 1.1 presents an introduction to the OHAMP.
  - Section 1.2 presents outline details for highway accesses.
  - Section 1.3 presents the preliminary access designs and requirements for securing accesses.
  - Section 1.4 presents traffic management relating to accesses and haul road crossings.







# 1.1.5 Implementation of the Outline Highway Access Management Plan

- 1.1.5.1 Following the granting of consent for the Transmission Assets, detailed Highway Access Management Plan(s) (HAMP) will be prepared on behalf of Morgan OWL and/or Morecambe OWL, prior to commencement of the relevant stage of works and will follow the principles established in this OHAMP. The detailed HAMP(s) will require approval by the relevant highways authority.
- 1.1.5.2 The Applicants have committed to implementation of detailed HAMP via the following commitment, CoT23 (see Volume 1, Annex 5.3: Commitments Register, document reference F1.5.3), and is secured by inclusion of Requirement 10 of the draft Development Consent Order (DCO) (document reference C1) Schedules 2A & 2B.
  - (10) (1) No stage of the Project A onshore works may be commenced until for that stage written details (which accord with the outline highway access management plan) of the siting, design, layout, sequencing and timing and any access management measures for any new permanent or temporary means of access to a highway to be used by vehicular traffic, or any alteration to an existing means of access to a highway, have been submitted to and approved by the highway authority.
    - (2) The highway access for that stage must be constructed or altered, and the works described in paragraph (1) in relation to access management measures carried out, in accordance with the approved details before the relevant highway accesses are brought into use for the purposes of the authorised project.
    - (3) Onshore site preparation works must be carried out in accordance with the applicable details set out in the outline construction traffic management plan and the outline highway access management plan.
- 1.1.5.3 The Transmission Assets may adopt a staged approach to the approval of DCO requirements enabling requirements to be approved in part or in whole, prior to the commencement of the relevant stage of works according to whether a staged approach is to be taken to the delivery of the each of the offshore wind farms.
- 1.1.5.4 For onshore and intertidal works this approach will be governed by the inclusion of Requirement 3 within the draft DCO, which requires notification to be submitted to the relevant planning authority/authorities detailing whether Project A or Project B relevant works will be constructed in a single stage; or in two or more stages to be approved prior to the commencement of the authorised development.
- 1.1.5.5 Pre-construction and/or site preparation activities may be undertaken prior to the commencement of construction. These activities would comprise the following, in accordance with the definition of 'onshore site preparation works' as defined by the draft DCO and deemed marine licenses (Document Reference C1) and Volume 1, Chapter 3: Project Description:







- site clearance:
- demolition;
- early planting of landscaping works
- archaeological investigations;
- environmental surveys;
- ecological mitigation;
- biodiversity benefit works;
- removal of hedgerows and trees;
- surveys and investigations for the purpose of assessing ground conditions:
- remedial work in respect of contamination or other adverse ground conditions:
- diversion and laying of utilities and services;
- site security works;
- the erection of temporary means of enclosure;
- the erection of temporary hard standing;
- the erection of welfare facilities and compounds for welfare facilities;
- creation of site accesses;
- onshore substation preparatory ground works; and
- temporary display of site notices or advertisements.

#### 1.2 Highway accesses

- 1.2.1.1 This OHAMP includes temporary construction accesses onto the public highway and haul road crossings of the public highway as presented on **Figure 1.1**.
- 1.2.1.2 The construction accesses provide for both ingress and egress to and from the public highway.
- 1.2.1.3 Access points assigned as 'haul road crossing only points' will only permit construction traffic to cross from one side of the existing public highway to the other from one part of the haul road to another. No construction ingress or egress to or from the public highway would be permitted at these points.
- 1.2.1.4 There are some highway access points presented on **Figure 1.1** that also act as haul road crossing points. These will provide for both ingress and egress to and from the public highway and will also be used to cross the public highway from one part of the haul road to another.
- 1.2.1.5 The onshore substation temporary accesses will also become permanent access points to enable ongoing access for operation and maintenance phases.







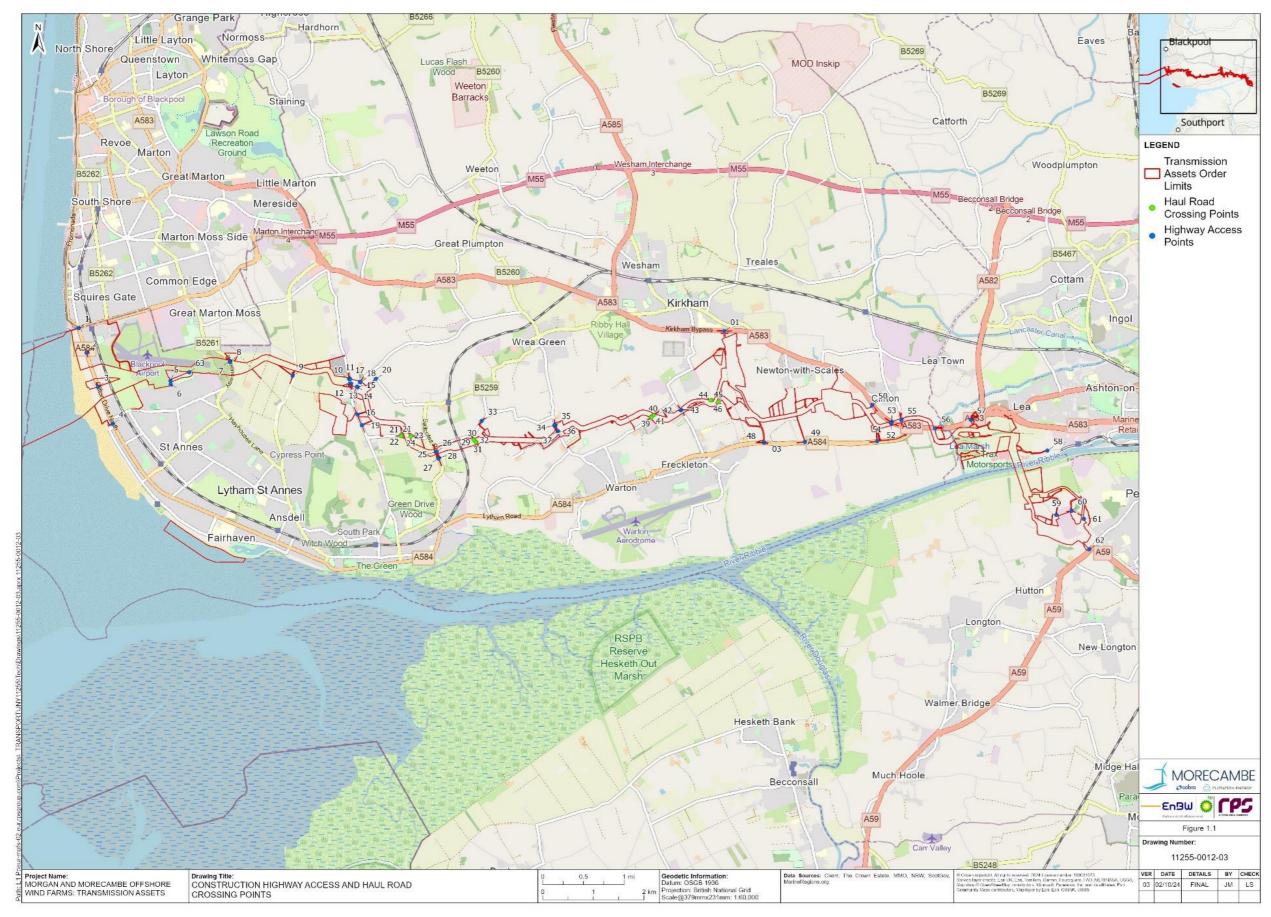


Figure 1.1: Construction highway accesses and haul road crossing points







#### 1.3 Access designs

- 1.3.1.1 Access designs of the accesses and crossings are included at **Appendix A**.
- 1.3.1.2 **Table 1.1** presents the construction accesses and crossings, the operation and maintenance accesses for which construction works are required and the preliminary design drawing numbers related to each. Should changes to these access designs need to be made post-consent, including the movement of the location of the access points within the Order Limits, these will be agreed in accordance with Requirements 10 of the DCO.







Table 1.1: Preliminary access design summary

Access ID	Road name	Access type	Posted Speed Limit (PSL) or measured speed (mph)	Required visibility splay distance for the PSL or measured speed (*) **	Drawing number	Notes
A1	Starr Gate	Existing Access	30 (PSL)	N/A	PC1165-RHD-ZZ- XX-SW-TP-0066	N/A
A2	Clifton Dr N	Existing Access	30 (PSL)	90m	PC1165-RHD-ZZ- XX-SW-TP-0149 & 0150	N/A
A3	A584	Existing Access	33.5 (Measured Speed)	90m	PC1165-RHD-ZZ- XX-SW-TP-0001 & 0050	N/A
A4	A584, opp. Norwood Road	Existing Access	30 (PSL)	90m	PC1165-RHD-ZZ- XX-SW-TP-0074 & 0068	N/A
A5	Blackpool Road N/ Leach Lane	New Access (Existing pedestrian access)	20 (PSL)	43m (MfS)	PC1165-RHD-ZZ- XX-SW-TP-0147 & 0148	N/A
A6	Leach Lane	New Access	20 (PSL)	70m	PC1165-RHD-ZZ- XX-SW-TP-0002 & 0051	N/A
A7 & A8	B5261	New Access	40 (PSL)	120m	PC1165-RHD-ZZ-	N/A
	B5261	New Access	40 (PSL)	120m	XX-SW-TP-0004 & 0052	N/A
A10 & A11	Peel Road New Access 40	40 (PSL)	120m	PC1165-RHD-ZZ-	N/A	
		New Access	40 (PSL)	120m	XX-SW-TP-0084,	







Access ID	Road name	Access type	Posted Speed Limit (PSL) or measured speed (mph)	Required visibility splay distance for the PSL or measured speed (*) **	Drawing number	Notes
					PC1165-RHD-ZZ- XX-SW-TP-0085	
A12 & A13		New Access	40 (PSL)	120m	PC1165-RHD-ZZ-	
		New Access	40 (PSL)	120m	XX-SW-TP-0086, PC1165-RHD-ZZ- XX-SW-TP-0087	
A14 & A15	Ballam Road	New Access	40 (PSL)		PC1165-RHD-ZZ-	N/A
		New Access	40 (PSL)	120m	XX-SW-TP-0088, PC1165-RHD-ZZ- XX-SW-TP-0089	
A16	Ballam Road	New Access	44.7 (Measured Speed)	160m	PC1165-RHD-ZZ- XX-SW-TP-0005 & 0053	N/A
A17 & A18	Ballam Road	New Access	40 (PSL)	120m	PC1165-RHD-ZZ-	N/A
		New Access	40 (PSL)	120m	XX-SW-TP-0090, PC1165-RHD-ZZ- XX-SW-TP-0091	
A19	Ballam Road	New Access	44.7 (Measured Speed)	160m	PC1165-RHD-ZZ- XX-SW-TP-0006 & 0054	N/A
A21 & A22	Peg's Lane	New Crossing	60 (PSL)	215 (Reduced to 120m)	PC1165-RHD-ZZ- XX-SW-TP-0094	The posted speed limit on Peg's Lane
	Peg's Lane	New Crossing	60 (PSL)	215 (Reduced to 120m)		is 60mph. It is considered however that vehicles would







Access ID	Road name	Access type	Posted Speed Limit (PSL) or measured speed (mph)	Required visibility splay distance for the PSL or measured speed (*) **	Drawing number	Notes
A23 & A24	Peg's Lane	New Crossing	60 (PSL)	215 (Reduced to 120m)	PC1165-RHD-ZZ- XX-SW-TP-0093	not be travelling at the posted speed limit due to the
	Peg's Lane	New Crossing	60 (PSL)	215 (Reduced to 120m)		narrow nature of the existing road. It is assumed that vehicles will be traveling at no more than 40mph on this road. Therefore, a visibility splay of 120m, equivalent to a design speed of 40mph, is proposed.  A temporary reduction in the speed limit would be adopted at this access.
A25 & A26	B5259	New Access	48.3 (Measured Speed)	160m	PC1165-RHD-ZZ- XX-SW-TP-0011 & 0056	N/A
	B5259	New Access	48.3 (Measured Speed)	160m		
A27 & A28	B5259	New Access	48.3 (Measured Speed)	160m		N/A







Access ID	Road name	Access type	Posted Speed Limit (PSL) or measured speed (mph)	Required visibility splay distance for the PSL or measured speed (*) **	Drawing number	Notes
	B5259	New Access	48.3 (Measured Speed)	160m	PC1165-RHD-ZZ- XX-SW-TP-0013 & 0057	
A29 & A30	Huck Lane	New Crossing	60 (PSL)	215 (Reduced to 120m)	PC1165-RHD-ZZ- XX-SW-TP-0044 & 0129	The posted speed limit on Huck Lane is
	Huck Lane	New Crossing	60 (PSL)	215 (Reduced to 120m)		60mph. It is considered however that vehicles would
A31 & A32	Huck Lane	New Crossing	60 (PSL)	215 (Reduced to 120m)	PC1165-RHD-ZZ- XX-SW-TP-0045	not be travelling at the posted speed limit due to the
	Huck Lane	New Crossing	60 (PSL)	215 (Reduced to 120m)	1 & 0130	single-track nature of the existing road. It is assumed that vehicles will be traveling at no more than 40mph on this road. Therefore, a visibility splay of 120m, equivalent to a design speed of 40mph, is proposed.
						A temporary reduction in the speed limit would be adopted at this access.







Access ID	Road name	Access type	Posted Speed Limit (PSL) or measured speed (mph)	Required visibility splay distance for the PSL or measured speed (*) **	Drawing number	Notes
A33	Cartmell Lane	New Access	60 (PSL)	215 (Reduced to 90m)	PC1165-RHD-ZZ- XX-SW-TP-0138 & 0139	The posted speed limit on Cartmell Lane is 60mph. It is considered however that vehicles would not be travelling at the posted speed limit due to the narrow nature of the existing road.  It is assumed that vehicles will be traveling at no more than 30mph on this road. Therefore, a visibility splay of 90m, equivalent to a design speed of 30mph is proposed.  A temporary reduction in the speed limit would be adopted at this access.
A34 & A35	Bryning Lane	New Access	47.5 (Measured Speed)	160 (Reduced to 120m)		The posted speed limit on Bryning







Access ID	Road name	Access type	Posted Speed Limit (PSL) or measured speed (mph)	Required visibility splay distance for the PSL or measured speed (*) **	Drawing number	Notes
	Bryning Lane	New Access	47.5 (Measured Speed)	160 (Reduced to 120m)	PC1165-RHD-ZZ- XX-SW-TP-0015 & 0058	Lane is 60mph, but the measured speed at this location is 47.5mph. This
A36 & A37	Bryning Lane	New Access	47.5 (Measured Speed)	160 (Reduced to 120m)	PC1165-RHD-ZZ- XX-SW-TP-0017	
	Bryning Lane New Access	New Access	47.5 (Measured Speed)	160 (Reduced to 120m)	<b>&amp;</b> 0059	160m visibility splay at this location would interfere with the building and third-party land to the north. To avoid this, a visibility splay of 120m, equivalent to a design speed of 40mph, is proposed.
					A temporary reduction in the speed limit would be adopted at this access.	
A38 & A39	Hillock Lane	New Crossing	60 (PSL)	215 (Reduced to 120m)	PC1165-RHD-ZZ- XX-SW-TP-0095	limit on Hillock Lane
	Hillock Lane	New Crossing	60 (PSL)	215 (Reduced to 120m)		is 60mph. It is considered however that vehicles would not be travelling at the posted speed







Access ID	Road name	Access type	Posted Speed Limit (PSL) or measured speed (mph)	Required visibility splay distance for the PSL or measured speed (*) **	Drawing number	Notes
						limit due to the narrow nature of the existing road. It is assumed that vehicles will be traveling at no more than 40mph on this road. Therefore, a visibility splay of 120m, equivalent to a design speed of 40mph, is proposed.  A temporary reduction in the speed limit would be adopted at this
A40 & A41	Hillock Lane	New Crossing	60 (PSL)	215 (Reduced to 120m)	PC1165-RHD-ZZ- XX-SW-TP-0019	access.  The posted speed limit on Hillock Lane is 60mph. It is considered however that vehicles would not be travelling at the posted speed limit due to the single-track nature of the existing road. It is assumed that vehicles will be
	Hillock Lane	New Crossing	60 (PSL)	215 (Reduced to 120m)		







Access ID	Road name	Access type	Posted Speed Limit (PSL) or measured speed (mph)	Required visibility splay distance for the PSL or measured speed (*) **	Drawing number	Notes
						traveling at no more than 40mph on this road. Therefore, a visibility splay of 120m, equivalent to a design speed of 40mph, is proposed.  A temporary reduction in the speed limit would be adopted at this access.
A42 & A43	Kirkham Road	New Access	40 (PSL)	120m	PC1165-RHD-ZZ- XX-SW-TP-0022 & 0060	N/A
	Kirkham Road	New Access	40 (PSL)	120m		
A44 & A45	Lower Lane	New Crossing	41.4 (Measured Speed)	120 (Reduced to 70m)	PC1165-RHD-ZZ- XX-SW-TP-0023	The posted speed limit on Lower Lane is 60mph and measured speeds to the north of this location are
	Lower Lane	New Crossing	41.4 (Measured Speed)	120 (Reduced to 70m)		41.4mph. This speed requires a visibility splay of
A46 & A47	Lower Lane	New Crossing	41.4 (Measured Speed)	120 (Reduced to 70m)	PC1165-RHD-ZZ- XX-SW-TP-0024	120m. However, existing bends and







Access ID	Road name	Access type	Posted Speed Limit (PSL) or measured speed (mph)	Required visibility splay distance for the PSL or measured speed (*) **	Drawing number	Notes
	Lower Lane	New Crossing	41.4 (Measured Speed)	120 (Reduced to 70m)		woodland on Lower Lane prevent achieving a 120m visibility splay. Given the existing bends and narrow nature of the road it is anticipated that vehicles will travel at lower speeds than the posted speed limit and measured speeds to the north (where the road is straighter). It is assumed that vehicles will be traveling at less than 30mph on this road. Therefore, a visibility splay of 70m, equivalent to a design speed of 30mph, is proposed.  A temporary reduction in the speed limit would be adopted at this access.







Access ID	Road name	Access type	Posted Speed Limit (PSL) or measured speed (mph)	Required visibility splay distance for the PSL or measured speed (*) **	Drawing number	Notes
A48 (incorporating A03)	A584/Preston New Road	New Access	50 (PSL)	160m	PC1165-RHD-ZZ- XX-SW-TP-0107, 0108 and 0121	Transformer consideration for A03 only.
A49	A584/Preston New Road	New Access	50(PSL)	160m	PC1165-RHD-ZZ- XX-SW-TP-0126 & 0127	N/A
A50	A583	New Access	50 (PSL)	160m	PC1165-RHD-ZZ- XX-SW-TP-0025 & 0061	N/A
A51	A584	New Access	50.2 (Measured Speed)	160m	PC1165-RHD-ZZ- XX-SW-TP-0026 & 0062	N/A
	A583	New Access	50 (PSL)	160m	PC1165-RHD-ZZ- XX-SW-TP-0028 & PC1165-RHD- ZZ-XX-SW-TP- 0063	N/A
A52 & A53	A583	New Access	50 (PSL)	160m		
A55	Lodge Lane	New Access	50 (PSL)	160m	PC1165-RHD-ZZ- XX-SW-TP-0029, PC1165-RHD-ZZ- XX-SW-TP-0064,	N/A
A56	A583/Preston New Road	New Access	50(PSL)	160m	PC1165-RHD-ZZ- XX-SW-TP-0113 & 0114	N/A







Access ID	Road name	Access type	Posted Speed Limit (PSL) or measured speed (mph)	Required visibility splay distance for the PSL or measured speed (*) **	Drawing number	Notes
A57	A583/Blackpool Road	Existing Access	50 (PSL)	160m	PC1165-RHD-ZZ- XX-SW-TP-0124 & 0125	N/A
A58	Wallend Road	New Access	20 (PSL)	43m (MfS)	PC1165-RHD-ZZ- XX-SW-TP-0115 & 0116	N/A
A59	Howick Cross Lane	Existing Access	30 (PSL)	43m (MfS)	PC1165-RHD-ZZ- XX-SW-TP-0134 & 0135	N/A
A60	Howick Cross Lane	Existing private access + proposed widening	30 (PSL)	43m (MfS)	PC1165-RHD-ZZ- XX-SW-TP-0136 & 0137	N/A
A61	Howick Cross Lane	Existing Access	30 (PSL)	43m (MfS)	PC1165-RHD-ZZ- XX-SW-TP-0154 & 0155	N/A
A62	A59/Liverpool Road	Existing Access	40 (PSL)	120m	PC1165-RHD-ZZ- XX-SW-TP-0132 & 0133	N/A
A63	The Hamlet	New Access	20 (PSL)	43m (MfS)	PC1165-RHD-ZZ- XX-SW-TP-0152 & 0153	N/A
A01	A583/Kirkham Bypass	New Access	50 (PSL)	160m	PC1165-RHD-ZZ- XX-SW-TP-0103, 0104 and 0119	N/A







Access ID	Road name	Access type	Posted Speed Limit (PSL) or measured speed (mph)	Required visibility splay distance for the PSL or measured speed (*) **	Drawing number	Notes
A02	Lower Lane (West of Morecambe Substation)	New Access	60 (PSL)	215 (Reduced to 120m)	PC1165-RHD-ZZ- XX-SW-TP-0142 & 0143	The posted speed limit on Lower Lane is 60mph. It is considered however that vehicles would not be travelling at the posted speed limit due to the narrow nature of the existing road.
						It is assumed that vehicles will be traveling at no more than 40mph on this road. Therefore, a visibility splay of 120m, equivalent to a design speed of 40mph, is proposed.

<sup>\*</sup>Number in brackets represents where a visibility splay less than required for the posted speed limit has been assumed. Further explanation of the rational for this adopted approach is provided within the notes column.

<sup>\*\*</sup>Visibility splays have been informed by the requirement of the Design Manual for Roads and Bridges unless noted otherwise by (MfS) where Manual for Street standards have been adopted.







#### 1.3.2 Haul road crossings of public highways

- 1.3.2.1 Where the haul roads cross the public highway, traffic management would be used to ensure the safety of highway users and haul road vehicles. An example of a haul road crossing using traffic signals is set out on **Figure 1.2**, extracted from The Traffic Signs Manual, Chapter 8, Part 1, Traffic Safety Measures and Signs for Road Works and Temporary Situations, Department for Transport/Highways Agency, 2009.
- 1.3.2.2 If the crossing is not signal controlled, the variant of diagram 511 (as shown on **Figure 1.2**) 'heavy plant crossing' should be placed in advance of the crossing place.

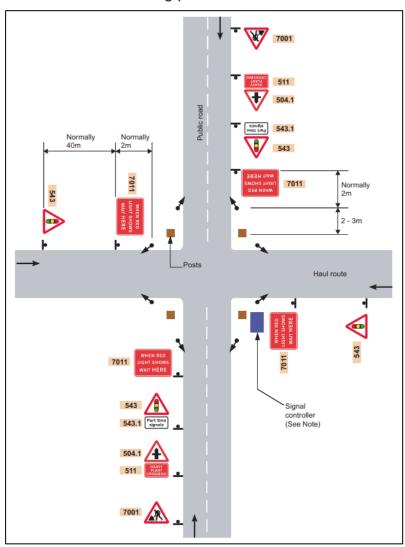


Figure 1.2: Haul route crossing







#### 1.3.3 Road safety

- 1.3.3.1 The following mitigation measures have been developed to reduce the risk to the travelling public and construction personnel and are applied to accesses and crossings, where applicable.
  - Temporary direction and warning signs to advise of turning vehicles would be provided for all accesses. This signage would highlight the proposed accesses to construction personnel traffic to avoid late breaking manoeuvres and highlight to the travelling public the potential for turning vehicles.
  - Temporary warning signs to advise of crossing vehicles would be provided for all crossings. This signage would highlight to the travelling public the potential for crossing vehicles.
  - Where applicable, crossings constructed to prevent access from the highway, ensuring vehicles do not attempt to access or egress these locations.
  - All priority controlled accesses and crossings provided with appropriate visibility splays to allow vehicles to safely ingress and egress. Visibility splays identified within the Order Limits will be maintained by the Principal Contractor(s) for the duration of use of the access.
  - All accesses onto and crossings over the public highway to incorporate a bound (concrete or asphalt) surface to prevent dust and dirt being tracked on to the highway.
  - Temporary reduction in the existing speed limit in the vicinity of all accesses and crossings to be considered to reduce the speed of vehicles in the vicinity of these locations. Any such traffic management would be agreed prior to construction.
  - Where appropriate a banksman will be situated at an access to assist construction vehicles to ingress and egress.

#### 1.3.4 Technical approval

- 1.3.4.1 Once Principal Contractor(s) have been appointed, any updates to the detailed designs for the accesses, crossings and any associated traffic management measures will be submitted to the relevant highways authority, in accordance with DCO (document reference: C1).
- 1.3.4.2 The technical approval process will include submission of any updated drawings, showing information, including any relevant access and crossing arrangements, drainage, lighting, signing, and standard construction details.
- 1.3.4.3 The accesses highlighted within this OHAMP are temporary, save for those to the permanent access points for each of the onshore substations, and following completion of construction would be reinstated to their former state.







1.3.4.4 All temporary speed limit restrictions associated with temporary accesses will be implemented by the relevant highways authority following an application the Applicant(s) or Principal Contractor(s).

#### 1.3.5 Road safety audit

1.3.5.1 The technical approval process will comply with the Road Safety Audit (RSA) process (as outlined within the Design for Manual Roads and Bridges GG 119, National Highways, January 2022) for all accesses and crossings. The RSA process comprises of a systematic process for the independent safety review of highway schemes. The purpose of the RSA process is to minimise the future occurrences and severity of collisions once a scheme has been built.

# 1.4 Traffic management for temporary highway access points

#### 1.4.1 Overview

- 1.4.1.1 Where applicable, temporary traffic management will be implemented at each of the accesses and crossings to maintain highway safety and to ensure minimal delays to existing road users.
- 1.4.1.2 In addition, to minimise the impacts of construction traffic on the wider highway associated with the construction of the accesses and crossings, wider control measures proportionate to the scale of the proposed works are detailed below. Details of traffic management not related to temporary access points, and therefore related to wider traffic management will be included in the detailed Construction Traffic Management Plan(s) (see document reference J5, for the Outline Construction Traffic Management Plan).

#### 1.4.2 Road works

- 1.4.2.1 Traffic management measures may be required for various reasons and the type of traffic management measure to adopt will depend upon the location on the highway, the nature and level of traffic on the highway, what is served by the highway, and the alternative routes available.
- 1.4.2.2 Traffic management measures that could be used would include stopping traffic on the highway, this could be via temporary portable signals or via manually operated stop/go signs.
- 1.4.2.3 Shuttle working is where one direction of travel receives priority over the other. This could be via temporary portable signals or via give way signs.
- 1.4.2.4 Some example layouts of these traffic management measures and features are shown on **Figure 1.3** to **Figure 1.6**. These examples are extracted from The Traffic Signs Manual, Chapter 8, Part 1, Traffic Safety Measures and Signs for Road Works and Temporary Situations, Department for Transport/Welsh Government/Transport Scotland/ Department for Infrastructure, 2009. The extracts are generic in nature,







and they are not designed to be specific to any particular location or circumstance but designed to be implemented in accordance with the advice contained within the document.







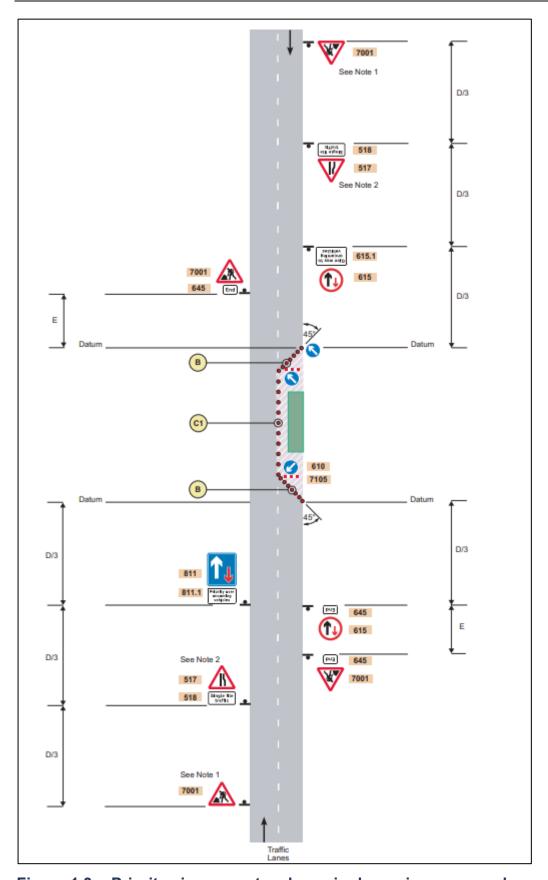


Figure 1.3: Priority signs on a two-lane single carriageway road







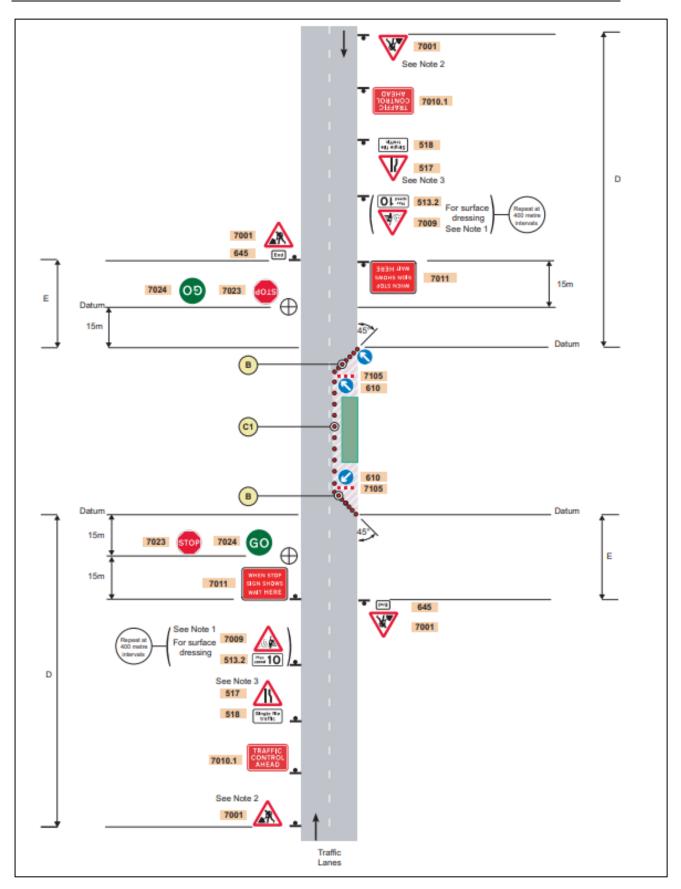


Figure 1.4: Stop/go signs on a two-lane single carriageway road







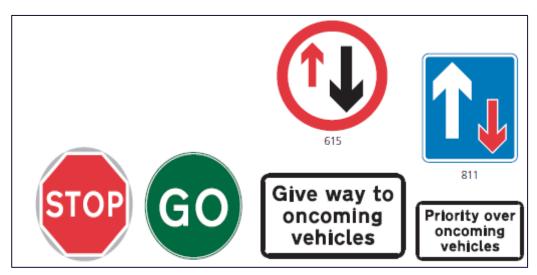


Figure 1.5: Manually operated stop/go signs and priority signs







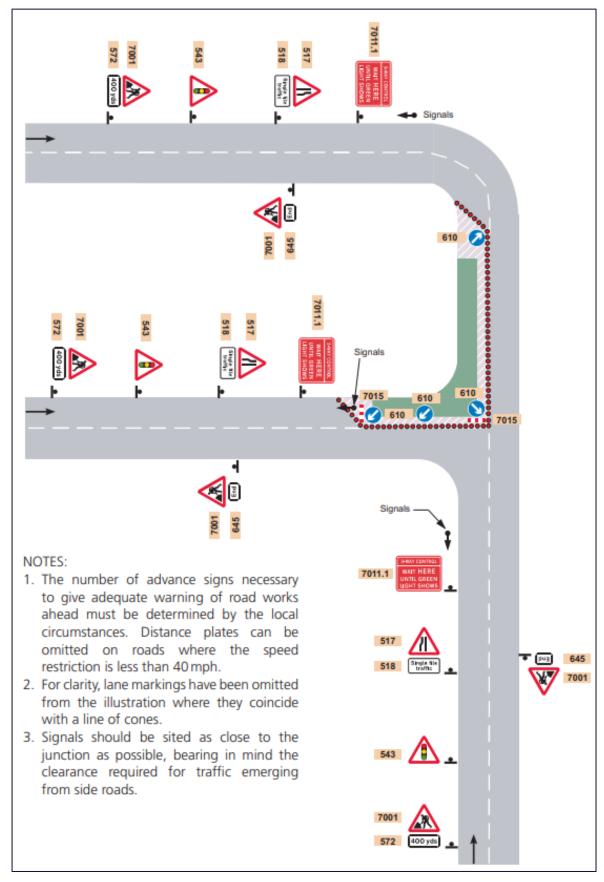


Figure 1.6: Roadworks at a T-junction – traffic control by means of portable traffic signals.







#### 1.5 References

Department for Transport/Welsh Government/Transport Scotland/Department for Infrastructure (2009) Traffic Signs Manual Chapter 8, Traffic Safety Measures and Signs for Road Works and Temporary Situations Part 1: Design. Available at https://assets.publishing.service.gov.uk/media/5a74adeaed915d7ab83b5ab2/traffic-signs-manual-chapter-08-part-01.pdf. Accessed December 2023.

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## Appendix A: Preliminary access designs



