MORGAN AND MORECAMBE OFFSHORE WIND FARMS: TRANSMISSION ASSETS

Outline Construction Traffic Management Plan

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Glossary

Term	Meaning
400 kV grid connection cable corridor	The corridor within which the 400 kV grid connection cables will be located.
Abnormal Indivisible Loads	Loads or vehicles that exceed maximum vehicle weight, axle weight or dimensions as set out in the Road Vehicles (Construction and Use) Regulations 1986 as amended.
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, reduce or, if possible, offset significant adverse environmental effects. Primary and tertiary commitments are taken into account and embedded within the assessment set out in this Environmental Statement. Secondary commitments are incorporated to reduce effects to environmentally acceptable levels following initial assessment.
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 Borough 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~~bays 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

Term	Meaning
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.
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.
Transmission Assets Order Limits	The area within which all components of the Transmission Assets will be located, including areas required on a temporary basis during construction and/or decommissioning (such as construction compounds).

Acronyms

Acronym	Meaning
AILs	Abnormal Indivisible Loads
CLO	Community Liaison Officer
CoT	Commitment
CTMP	Construction Traffic Management Plan
DCO	Development Consent Order
ES	Environmental Statement
ESDAL	Electronic Service Delivery for Abnormal Loads
GPS	Global Positioning System
HGVs	Heavy Goods Vehicle
HDD	Horizontal Directional Drilling

Acronym	Meaning
~~LPA~~OCTMP	~~Local Planning Authority~~Outline Construction Traffic Management Plan
PRoW	Public Rights of Way
~~STGO~~	~~Road Vehicles (Authorisation of Special Types) Order 2003~~

Units

Unit	Description
kV	Kilovolt
m	Metres

1 Outline construction traffic management plan

1.1 Background

1.1.1 Introduction

1.1.1.1 This document forms the Outline Construction Traffic Management Plan (OCTMP) 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 developing a single consent application for transmission assets associated with each of the generation assets, including offshore export cable corridors to landfall and aligned onshore export cable corridors to onshore substation 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 OCTMP has been developed for onshore elements of the 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 Construction Traffic Management Plan

1.1.3.1 This OCTMP contains the control measures and monitoring procedures for managing the potential traffic and transport impacts of constructing the Transmission Assets.

1.1.3.2 The purpose of the OCTMP is to set out how the numbers and routing of Heavy Goods Vehicles (HGVs) will be managed during the construction phase, how the movement of construction worker traffic will be managed during the construction phase, details of measures to manage the safe passage of HGV traffic via the local highway network and details of localised road improvements if and where these may be necessary to facilitate safe use of the existing road network.

~~1.1.3.1~~1.1.3.3 This OCTMP will form the basis for detailed CTMPs, which will be prepared in consultation with Lancashire County Council and Blackpool Borough Council as the Local Highway ~~Authority~~Authorities and National Highways as the highway authority for the strategic road network~~.~~ (herein collectively referred to as the highway authorities).

~~1.1.3.2~~1.1.3.4 This OCTMP has been drafted based on Volume 3, Chapter 7: Traffic and transport of the Environmental Statement (ES).

~~1.1.3.3~~1.1.3.5 This OCTMP references the following documents:

- Volume 3, Chapter 7: Traffic and transport of the ES.
- Outline Highways Access Management Plan (document reference J8).
- Outline Code of Construction Practice (document reference J1).

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 OCTMP;
- **Section 1.2** presents the scope of this OCTMP;

- **Section 1.3** presents the details of the approach to the management of HGVs;
- **Section ~~1.4~~1.4** presents details of measures to control materials deposited on the highway;
- **Section 1.5** presents the details of the approach to the management of Abnormal Indivisible Loads (AILs);
- **Section 1.6** includes details of measures to manage the traffic movements during planned and unplanned events on the highway;
- **Section 1.7** presents the approach to the management of construction workforce ~~movement;~~movements (an outline workforce Travel Plan);
- ~~**Section**~~**Sections 1.8** to **1.10** presents ~~an introduction~~details of the approach to the delivery of site accesses~~;~~
- ~~**Section 1.7** presents management and mitigations;~~
- ~~**Section 1.8** presents highway~~, crossings~~;~~, compounds and offsite highway works;
- **Section 1.11** presents details of the approach to the management of highway safety; ~~and~~
- **Section 1.12** outlines a proposed strategy to assist in coordinating cumulative schemes; and
- **Section 1.12** presents the implementation and monitoring and enforcement of the ~~OTMP~~OCTMP.

1.1.5 Implementation of the Outline Construction Traffic Management Plan

1.1.5.1 ~~Following~~Subject to the granting of consent for the Transmission Assets, detailed Construction Traffic Management Plan(s) (CTMP) 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 OCTMP. The detailed CTMP(s) will require approval by the ~~relevant highways authority and National Highways as the highway authority for the strategic road network~~highway authorities.

1.1.5.2 The Applicants have committed to implementation of detailed CTMP(s) via the following commitment, CoT38 (see Volume 1, Annex 5.3: Commitments Register, document reference F1.5.3), and is secured by inclusion of Requirement 9 of the draft Development Consent Order (DCO) (document reference C1) Schedules 2A & 2B.

1.1.5.3 Below sets out the requirement wording for Morgan Transmission Assets (referred to as Project A in the draft DCO). Morecambe Transmission Assets (Project ~~B's requirement~~B) requirements mirror those of Project A for this requirement and are, therefore, not repeated):

(9) —(1) No stage of the Project A onshore works may commence until for that stage a construction traffic management plan (which must

be in accordance with the outline construction traffic management plan), as appropriate for the relevant stage, has for that stage been submitted to and approved by the relevant highway authority or in respect of the strategic road network in consultation with National Highways.

(2) Any plan submitted under sub-paragraph (1) may cover one or more stage of the Project A onshore works.

(3) Each plan approved under sub-paragraph (1) must be implemented upon commencement of the relevant stage of the Project A onshore works.

1.1.5.4 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 ~~be taken to~~ the delivery of ~~the~~ each of the offshore wind farms.

1.1.5.5 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.

1.1.5.6 Prior to the commencement of the relevant stage of works, Construction Traffic Management Plan Co-ordinator(s) (CTMPCo) would be appointed by the Principal Contractor(s) to represent each project, e.g. a CTMPCo for Project A and a CTMPCo for Project B (as required).

1.1.5.7 The CTMPCo(s) key responsibilities would include:

- Managing the implementation of the detailed CTMP(s);
- Collating monitoring data and preparing monitoring reports (as outlined in Section 1.13.1);
- Assisting the Community Liaison Officer in responding to comments from the local community;
- Regular liaison and reporting to the Applicants;
- Supporting with highway stakeholder engagement; and
- Acting as a point of contact for construction workers and sub-contractors.

1.1.5.8 The CTMPCo(s) would also be assisted in their roles by a Community Liaison Officer (CLO). The Community Liaison Officer will be the dedicated contact for liaising with residents and local businesses and will be responsible for implementing the approved Communications Plan (refer to Outline Communications Plan, document reference J1.1).

~~1.1.5.6~~1.1.5.9 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;
- Environmental mitigation;
- Biodiversity benefit works;
- Removal of hedgerows and trees;
- Surveys and investigations for the purpose of assessing ground conditions;
- Remedial work in respect of any contamination or other adverse ground conditions;
- Diversion and laying of utilities and services;
- Site security works;
- The erection of any 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 Scope of this OCTMP

1.2.1 Construction activities

1.2.1.1 Volume 1, Chapter 3: Project description of the ES sets out further details in relation to construction activities, including information on temporary construction compounds which are generally established early on in the pre-construction/ construction phases to facilitate construction activities.

1.2.1.2 The potential adverse effects resulting from the construction activities relating to traffic and transport are assessed in Volume 3, Chapter 7: Traffic and transport of the ES and comprise the following potential effects:

- On non-motorised user delay, severance, and fear and intimidation due to HGV movements.

- Due to possible increased risk to road users as a result of the passage of construction vehicles along existing roads or at site accesses.
- Resulting from the movement of AILs associated with the construction of the onshore substations.

1.3 Management of HGV movements

1.3.1 Vehicle types

1.3.1.1 A variety of heavy goods vehicle (HGV) types will need to access the construction sites. These will include, but are not limited to:

- low loaders ~~and~~ HGVs to deliver:
  - plant;
  - construction machinery;
  - ducting and cables; ~~and~~
  - fencing, welfare facilities and temporary portable cabins~~.~~; and
  - components for the onshore substations.
- tippers HGVs delivering aggregate for surfacing of compounds and haul roads;
- ~~•~~ tankers to deliver ~~water~~/remove fluids for trenchless techniques and for welfare~~; and~~
- ~~delivery of components for the onshore substations~~.

1.3.2 Vehicle routeing

1.3.2.1 The indicative access routes, shown at **Appendix A**, follow the most direct suitable route for HGV movement (considering road layout, geometries and any regulatory restrictions) using a road hierarchy of using motorways, followed by A classification roads, then B classification roads and then local roads to reach the temporary construction compound accesses. These indicative access routes therefore maximise the use of higher classification roads and minimise the use of local roads.

1.3.2.2 Potential variations to this approach may be required due to sections of the onshore cable corridor where it is not possible to provide a continuous haul road due to physical features such as railway lines or water courses, and therefore limited use of the local road network is required for access. The following bullets outline these potential variations; exact routing will be subject to detailed design and will be developed by the Principal ~~Contactors.~~Contractors (in agreement with the relevant highway authority).

- ~~A mini roundabout within Wrea Green comprising the B5259/Station Road/The Green where turning HGVs would need to cross onto the opposite side of the carriageway. HGVs to/from the temporary construction compound accesses on Bryning Lane will not therefore~~

~~turn through this mini roundabout and will travel straight across it between Station Road and the Green, as shown at Appendix A.~~

- Construction vehicles to/from access 63 located on The Hamlet have been assigned via the temporary construction compound located on Leach Lane. There is not a continuous haul road between that compound and access 63, therefore these construction vehicles may potentially travel to that compound before travelling to access 63 via Appealing Lane as shown at **Appendix B**.
- Construction vehicles to/from access 9 located on B5410 Lytham St Annes Way have been assigned via the temporary construction compound located on B5261 Queensway. There is not a continuous haul road between that compound and access 9, therefore these construction vehicles may potentially travel to that compound before travelling to access 9 via A5230 Progress Way, A583 Preston New Road, and B5410 Lytham St Annes Way as shown at **Appendix B**~~..~~.
- Construction vehicles to/from accesses 14 and 17 located on Ballam Road have been assigned via the temporary construction compound located on B5261 Queensway. There is not a continuous haul road between that compound and accesses 14 or 17, therefore these construction vehicles may potentially travel to that compound before travelling to accesses 14 or 17 via A5230 Progress Way, A583 Preston New Road, B5260 Fox Lane Ends and Ballam Road as shown at **Appendix B**. Construction vehicles to/from accesses 16 and 19 located on Ballam Road have been assigned via the temporary construction compounds located on Ballam Road. There is not a continuous haul road between those compounds and accesses 16 or 19, therefore these construction vehicles may potentially travel to one of those compounds before travelling to accesses 16 or 19 via Ballam Road as shown at **Appendix B**.~~.~~
- Construction vehicles to/from accesses 25, 26, 27, and 28 located on B5259 Saltcotes Road have been assigned via the temporary construction compounds located on Ballam Road. There is not a continuous haul road between those compounds and accesses 25, 26, 27 or 28, therefore these construction vehicles may potentially travel to one of those compounds before travelling to accesses 25, 26, 27 or 28 via B5260 Fox Lane Ends and B5259 Moss Side Lane as shown at **Appendix B**. ~~.~~
- Construction vehicles to/from access 33 located on Corka Lane have been assigned via the temporary construction compound located on Bryning Lane. There is not a continuous haul road between that compound and access 33, therefore these construction vehicles may potentially travel to that compound before travelling to access 33 via B5259 Moss Side Lane and Bryning Lane as shown at **Appendix B**. Construction vehicles to/from access 48 located on A584 Preston New Road have been assigned via the temporary construction compound located on A584 Preston New Road. There is not a continuous haul road between that

compound and access 48, therefore these construction vehicles may potentially travel to that compound before travelling to access 48 via A584 Preston New Road and A583 Blackpool Road as shown at **Appendix B**.

- Construction vehicles to/from access 55 located on Lodge Lane have been assigned via the temporary construction compounds located on A583 Blackpool Road and A584 Preston New Road. There is not a continuous haul road between those compounds and access 55, therefore these construction vehicles may potentially travel to one of those compounds before travelling to access 55 via A583 Blackpool Road, A584 Preston New Road and Lodge Lane as shown at **Appendix B** because it cannot be accessed via the haul road.
- Construction vehicles to/from access 56 located on A583 Blackpool Road have been assigned via the temporary construction compounds located on A583 Blackpool Road and A584 Preston New Road. There is not a continuous haul road between those compounds and access 56, therefore these construction vehicles may potentially travel to one of those compounds before travelling to access 56 via A583 Blackpool Road and A584 Preston New Road as shown at **Appendix B** because it cannot be accessed via the haul road. Construction vehicles to/from access 57 located on A583 Blackpool Road have been assigned via the temporary construction compounds located on A583 Blackpool Road and A584 Preston New Road. There is not a continuous haul road between those compounds and access 57, therefore these construction vehicles may potentially travel to one of those compounds before travelling to access 57 via A583 Blackpool Road and A584 Preston New Road as shown at **Appendix B**.
- Construction vehicles to/from access 58 located on Nelson Way have been assigned via the temporary construction compounds located on A583 Blackpool Road and A584 Preston New Road. There is not a continuous haul road between those compounds and access 58, therefore these construction vehicles may potentially travel to one of those compounds before travelling to access 58 via A583 Blackpool Road, A584 Preston New Road and Nelson Way as shown at ~~**Appendix B.**~~Appendix B. The accesses along the A583, A584 and A59 (accesses 01, 03, 48, 49, 50, 51, 52, 53, 56, 57, and 62) are onto either a dual carriageway road or a four lane single carriageway road. Therefore, left in/left out access arrangements have been devised for highway safety reasons, as set out in the Outline Highways Access Management Plan (Document Reference J8).

1.3.2.3 The indicative HGV access routes and the associated access points set out ~~-~~above are presented at **Appendix B**.

1.3.2.4 The detailed CTMP(s) will include agreed methods of communication with the ~~relevant~~ highways authorities to confirm that these routes remain ~~appropriated~~appropriate and are agreed prior to commencement of construction.

1.3.2.5 The Principal Contractor(s) and any sub-contractor(s) will be required to comply with the agreed routeing plans as a part of the detailed CTMP(s) and will ensure that all drivers are informed of the need to restrict HGV movements to those specified routes. ~~In the event that complaints are received that vehicles are not following prescribed routes the Principal Contractor(s) would be responsible for the implementation of measures to record vehicle routeing, for example applying spot-checks to ensure that the agreed routes are being adhered to.~~To ensure compliance with the agreed HGV delivery routes, the following measures are proposed:

- ~~If deemed necessary by the~~ Direction signing would be implemented to direct construction traffic to the respective accesses along the assessed delivery routes (the location and design of these signs would be agreed with the relevant ~~highways~~highway authority~~,~~ prior to the commencement of the relevant stage of works);
- The delivery routes and timing would be communicated (by the CTMPCo(s) through the issuing of delivery instructions to all companies and / or drivers involved in the transport of materials and plant to and from the site by HGV construction vehicles;
- The registration numbers for all HGVs making deliveries would be recorded by the CTMPCo(s). This would allow for checking and enforcement of any non-compliance of the agreed delivery routes;
- The CTMPCo(s) would require that where ~~routine HGV vehicle movements~~vehicles are ~~generated,~~ equipped with tracking (e.g. ~~haul route aggregate, the supplier will be~~ GPS) this data is made available to the CTMPCo(s) if requested ~~to maintain a log, the purpose of which is to demonstrate compliance with following prescribed access routes and delivery times.~~. Vehicle tracking would assist the CTMPCo(s) to investigate any potential non-compliances; and

~~1.3.2.6 If deemed necessary by the relevant highways authority, construction access routes will have temporary signs posted along the confirmed routes.~~

- The CTMPCo(s) would provide an 'identifier' that would be placed within the window of all delivery vehicles to enable residents to identify if an HGV is engaged on work on the Transmission Assets and would be submitted to and approved by the relevant highway authority as part of the detailed CTMP(s).

1.3.3 Timing of HGV movements

1.3.3.1 Standard construction working hours are identified in the Outline Code of Construction Practice (J1). The core working hours will be 07.00 to 19.00 Monday to Saturday (CoT18).

1.3.3.2 There may also be up to one hour before and after for mobilisation, i.e. 06:00 to 07:00 and 19:00 to 20:00 weekdays and Saturdays. Mobilisation does not include HGV movements into and out of sites,

and suppliers using light vehicles can make use of the wider highway network outside these hours to travel to or from site.

~~1.3.3.2~~1.3.3.3 At all times, including mobilisation periods, no vehicles will be permitted to wait or queue on the public highway whilst seeking access to the construction ~~site~~sites. No vehicles will be permitted to load/unload on the public highway and all vehicles must turn off their engines ~~whist~~whilst stationary after turning off the public highway.

1.3.3.4 Any HGVs which are projected to arrive on site prior to 07:00 would be required to park at an appropriate lorry park, services and other designated overnight parking locations until they can complete their journey within the restrictions outlined above. These locations would be agreed with the highway authorities prior to the commencement of construction and would be communicated to drivers within their delivery instructions (outlined within Section 1.3.5).

~~1.3.3.3~~1.3.3.5 In certain circumstances, specific works may have to be undertaken on a continuous working basis (00:00 to 00:00 Monday to Sunday). This includes any emergency works that may be required that would not require any advanced notice to the relevant planning authorities.

~~1.3.3.4~~1.3.3.6 Consideration will be giving to the timing of HGV movements through locations with sensitive receptors, for example where HGV movements may pass through road links with schools, during school opening and closing times.

1.3.3.7 The Applicants have committed to HGV movements through Wrea Green being scheduled to occur outside of school drop-off and pick-up times, noting the Ribby with Wrea Endowed Church of England School is located adjacent to the B5260. The CTMPCo(s) would agree the exact periods to be avoided with Lancashire County Council as part of finalising the detailed CTMP(s).

1.3.4 Reducing the impact of HGV ~~movements~~Numbers

1.3.4.1 To ensure compliance with the assessed maximum design scenario for HGV trips presented within Table 7.21 of Volume 3, Chapter 7: Traffic and transport of the ES (APP-108), a booking system for deliveries would be established by the CTMPCo(s) to monitor HGVs at supply chain source and point of delivery.

1.3.4.2 The booking system would enable a daily profile of deliveries to be maintained, allow the CTMPCo(s) to ensure that the required deliveries are forecast and planned and would also serve to inform route compliance.

1.3.4.3 Should Project A and Project B be constructed concurrently to ensure compliance with the assessed maximum design scenario for HGV trips (detailed within Table 7.21 of the ES) the CTMPCo(s) for both Project A and Project B will be required to liaise to coordinate their potential forward programme for deliveries to ensure compliance.

1.3.4.4 To provide the highway authorities with an indication of when peak deliveries may occur, the detailed CTMP(s) will include the indicative profiles for monthly deliveries for the construction duration.

1.3.4.5 Load sizes are typically maximised and thus vehicle usage is typically minimised by contractors in order to minimise transportation costs and this will be encouraged by the ~~Principal Contractor~~CTMPCo(s).

~~1.3.4.1~~1.3.4.6 Site supervisors will be encouraged to re-use HGVs where possible, such as using vehicles which have ~~been~~ delivered material to remove excavated material if this needs to be removed from a site. Where practical, local suppliers will be used to minimise the distance travelled by HGVs.

1.3.5 Driver inductions

1.3.5.1 All regular HGV drivers for the Transmission Assets would be formally inducted. The induction would establish a clear set of responsibilities that all drivers would be required to follow, such as:

- Timings, pre-booked slots;
- Clarification of approved HGV routes;
- Highway safety concerns;
- Parking, waiting and loading restrictions;
- Safe driving techniques along the haul road;
- Adherence to speed limits; and
- Details of reporting accidents and 'near misses'.

1.3.5.2 To support the induction process, all drivers would also be issued with a delivery pack. This pack would include the following information:

- A plan showing the delivery routes, the location of the site access and areas with road safety concerns;
- Details of appropriate lorry parks, services and other designated overnight parking locations where drivers are permitted to stop;
- A copy of the identifier to display in the vehicle window (set out in Section 1.3.2);
- Details of restrictions on delivery hours (set out in Section 1.3.3); and
- Details of disciplinary measures for non-compliance (set out in Section 1.13.6).

1.4 Control of material on the highway

1.4.1.1 To prevent detritus and other material being deposited on the public highway, the CTMPCo(s) would be required to implement a series of site-specific measures. Prior to the commencement of the relevant stage of works, details of the measures that would be used for each

access and crossing would be submitted to and agreed with the relevant highway authority as part of the detailed CTMP(s).

1.4.1.2 It is envisaged that as a minimum, measures would include the following:

- All HGVs transporting fine and loose material will be sheeted to avoid dust and the spillage of materials onto the highway.
- Dampening of surfaces, such as the haul road in locations where it is close to the public highway, will be undertaken in dry weather where the movement of vehicles or delivery of loads may cause immoderate dust.
- Accesses and crossings would be provided with a bound surface (asphalt / concrete) to prevent mud and dirt being tracked onto the highway.
- Regular inspections of the public highway in the vicinity of the active site accesses to ensure cleanliness.
- Road sweepers on call to clear any detritus and other material from the public highway.

~~1.3.4.2~~1.4.1.3 Where there is a greater risk of ~~mud~~detritus from the construction works being ~~transport~~transported onto the highway network by HGVs i.e. where deliveries may be more intense, e.g. at each of the onshore substations, wheel cleaning facilities will be provided at the access/egress location to ensure that HGVs do not deposit ~~mud and dust~~detritus onto the highway network. Further information on dust management is provided in the Outline Dust Management Plan (~~document reference J1.2~~APP-195).

1.4.1.4 Accesses A1 and A2 are located adjacent to the beach and as such there is a greater risk at these locations of sand being transported on to the highway. In these locations, when the access is in use, the CTMPCo(s) will ensure that the access (and surrounding highway) is regularly inspected and any sand is cleared. At these locations, the CTMPCo(s) will ensure that a brush is available on site, and road sweeper is available on call.

1.4.1.5 Prior to the commencement of the relevant stage of works, the CTMPCo(s) would agree with the highway authorities an appropriate response time to remove any reported detritus / material on the highway following a report.

1.4.1.6 Prior to the commencement of the relevant stage of works the CTMPCo(s) will also be required to provide the relevant highway authority with their contact details to provide a direct line of communication to report/discuss any issues.

~~1.4~~1.5 Management of abnormal indivisible loads

1.5.1.1 It is expected that a number of abnormal indivisible loads (AILs) comprising large components such as transformers will be transported to the onshore substations.

1.5.1.2 In addition, smaller AILs will also need access for items such as cable drum deliveries to the access points along the onshore export cable corridors and 400 kV grid connection cable corridors.

~~1.4.1.1~~1.5.1.3 Cable drums are expected to be delivered to temporary construction compounds or to the relevant access points along the onshore export cable corridor and 400 kV grid connection cable corridor via specialised cable drum trailer for installation. Where cable drums are delivered to temporary construction compounds, subsequent redistribution across the onshore export cable corridor and 400 kV grid connection cable corridor may then be required. For assessment purposes, all cable drum movements have been considered as AILs. The AILs are expected to be components that exceed standard load weight and ~~possible~~possibly exceed standard width and length.

~~1.4.1.2 Depending on the width, length or weight of the laden vehicle, different notice periods will be provided to Highway Authorities, bridge authorities and the police. These can vary between two and five days. The following activities would need to be undertaken in accordance with the Road Vehicles (Authorisation of Special Types) Order 2003 (STGO).~~

- ~~Before the start of any journey, notify in accordance with Schedule 5 of the STGO the chief office of police for each area in which the vehicle or vehicle-combination is to be used.~~
- ~~Ensure that the vehicle or vehicle-combination is used in accordance with the requirements of that Schedule.~~
- ~~Ensure that the vehicle or vehicle-combination is accompanied during the journey by one or more attendants employed in accordance with Schedule 6 of the STGO.~~

~~1.4.1.3~~1.5.1.4 Although the movement of cable drums have been classified as AILs, this is dependent upon the cable drum size, weight and their transportation arrangements and their movement may not in fact be an AIL. All cable drum deliveries are expected to travel to the onshore export cable corridor and 400 kV grid connection cable corridor from the M55. The number of ~~AILs~~AIL movements are expected be low.

1.5.1.5 ~~Each~~The approval for the movement of AILs is administered by National Highways on behalf of the Secretary of State for Transport, through the ESDAL portal (Electronic Delivery Service for Abnormal Loads).

1.5.1.6 The ESDAL system requires hauliers to apply, (within prescribed time periods depending on the width, length or weight of the laden vehicle provided) to the highway authorities, bridge authorities and the police.

1.5.1.7 To reduce the risk of any delay to approval, prior to the submission of the formal ESDAL notification, the CTMPCo(s) will initially consult with local police authority, relevant highway authority and Network Rail and agree appropriate timings, routes (taking into consideration structures) and asset protection measures appropriate to the type of load.

1.5.1.8 Each transformer delivery would be classified as a Special Order[1] AIL delivery due to the size of the vehicle. The movement of Special Order AILs would be outside the restrictions (routes and times) contained within this OCTMP and would be subject to a separate agreement with the relevant highway authority and police through the ESDAL system.

1.5.1.9 The movement of the non-Special Order AILs (such as cable drums) would be subject to the same delivery route restrictions as HGVs (outlined in Section 1.3.2); however, the timing of movements may be outside the standard hours (outlined in Section 1.3.3) and subject to separate agreement with the relevant highway authority and police through the ESDAL system.

~~1.4.1.4~~1.5.1.10 Each AIL load would be present on the network for a short period of time and standard measures (including traffic management measures) would be applied in accordance with the ~~notification set out in **paragraph 1.4.1.2**~~processes outlined above and the heavy haulage company's insurance requirements in terms of route, timing, and method of delivering to minimise delays to other highway users. If and where relevant, this may include prior notification given to the police who will notify the locality via local newspapers/radio etc so that other users have advance notification.

1.5.1.11 Some AILs may require escorting by the police or private suitably trained and qualified operatives. The need for, and form of any escort~~, as~~ will be agreed with the local police authority and~~/or~~ in consultation with the relevant highways ~~authority~~authorities, prior to the movements taking place. ~~Escorts~~

~~1.4.1.5~~1.5.1.12 Where escorts are required, they would control the AILs as well as interacting with other road users to control, guide and protect them accordingly so as to safeguard their safe and expedient passage. This includes not just other vehicles but also non-motorised users and those who simply wish to watch/observe the movement of the AILs transporting the larger transformers from the roadside.

~~1.4.1.6~~1.5.1.13 The timing of AIL deliveries will be discussed and agreed with the relevant highways authority to minimise delay for other road users and to minimise risk to highway users.

1.6 Management of incidents

1.6.1.1 To reduce the potential for construction traffic to have an adverse effect upon the highway network during planned and unplanned events, the measures set out in **Table 1.1**~~**Table 1.1**~~ would be adopted.

[1] The Road Vehicles (Authorisation of Special Types) (General) Order 2003 (SI 1998) limits gross weight of an AIL to 150 tonnes, axle weight to 16,500kg, length to 30m and/or width to 6.1m, above which a Special Order is required from National Highways.

Table 1.1: Traffic incident management measures to be adopted during events

Measure	Rationale
Managing traffic demand during major events that impact on the highway (e.g. bike races).	The CTMPCo(s) would liaise with local stakeholders to understand when major events occur. To ensure there are limited HGV trips planned during planned major events, the CTMPCo(s) would undertake advanced planning to schedule activities and stockpile of materials in advance.
Managing traffic demand during major incidents such as accidents on the highway.	The CTMPCo(s) would monitor traffic conditions. Should the CTMPCo(s) become aware of an incident then the CTMPCo(s) would liaise directly with suppliers to suspend HGV deliveries along affected routes where required.
Managing traffic demand during road closures.	In the event that the CTMPCo(s) becomes aware that the agreed delivery routes (**Appendix A** and **B**) are unavailable (e.g. due to road closures by others) the CTMPCo(s) would initially seek to reschedule works utilising the affected links. Where this is not possible (e.g. in the case of long term closures which would disrupt the construction programme) the following approach is proposed: • The CTMPCo(s) would identify contingency diversion routes having regard for the road hierarchy (e.g. where practicable utilising A and B roads); • The CTMPCo(s) would submit details of the proposed contingency diversion routes to the relevant highway authorities who would be requested to advise if they consider the routes are suitable.
Incidents involving the Contractor(s) HGV traffic blocking the highway, such as, breakdowns, accidents, etc.	The Contractor(s) and their suppliers' fleet would have arrangements with recovery companies to allow breakdowns and accidents to be cleared as quickly as possible.

~~1.5~~1.7 Management of construction workforce movements

~~1.5.1~~1.7.1 Construction workforce travel

1.7.1.1 The value in managing and reducing the impact of the movement of construction staff is recognised. The following section outlines a range of industry good practice 'Travel Plan' measures that could be adopted to reduce the number of single occupancy vehicle trips.

~~1.5.1.1~~1.7.1.2 The detailed CTMPs will document final measures ~~that can~~to be implemented to encourage contractors to make use of sustainable transport modes where possible and where appropriate. These measures may include:

- Measures to increase vehicles occupancy such as incentives to car-share, information to facilitate car sharing and the provision of minibuses where this would allow construction workers to access sites without the need to come by car.
- The provision of public transport information where appropriate and practicable, ~~if this were~~ to assist construction workers ~~access sites or travel~~traveling by bus or train to locations where they could be picked up by minibus.

- Measures to encourage walking and cycling where appropriate where these modes offer an opportunity for construction workers to access sites, including provision of changing facilities and temporary cycle parking at work sites.
- Welfare facilities will be provided on work sites to reduce the need for construction workers to travel elsewhere during the course of the day.
- All drivers would be required to park within designated areas. Drivers not parking within the designated areas, would be subject to enforcement action as set out in Section 1.13.6.

1.7.2 Timing of LV movements

1.7.2.1 The OCoCP (APP-193) outlines that construction work for the onshore works must only take place between 07:00 hours and 19:00 hours Monday to Saturdays, with no activity on Sundays and bank holidays.

~~1.5.1.2~~1.7.2.2 The proposed working hours (between ~~7am~~07:00 and ~~7pm~~19:00 Monday - Saturday) seeks to avoid construction workers travelling during the highway network peak hours and this reduces impacts on the local road network during network peak hours.

1.7.2.3 The CTMPCo(s) will therefore require staff to arrive prior to the morning peak hour and depart before or after in the evening peak[2]. Section 1.13.4 includes details of how employee arrival and departure times would be monitored to ensure compliance.

1.7.2.4 Alternatively, it could be possible that once appointed, the Contractor(s) could require that a proportion of employees could travel during the network peak hours. In this case the numbers of vehicle movements would be shared with the highway authorities to understand if the numbers would be acceptable in the peak hours or if capacity assessments would be required.

1.7.2.5 In the event that capacity assessments are requested, the scope of these traffic surveys, modelling software and any future growth forecasts would first be agreed with the relevant highway authority.

1.7.2.6 Should the capacity assessments identify potentially significant effects, mitigation measures would be agreed with the relevant highway authority to manage effects to a level that is not significant. Any mitigation measures would focus upon 'demand management' measures to reduce peak traffic movements, such as, a higher car-sharing ratio, etc.

[2] The network peak hours are identified to be 07:30 -08:30 (AM) and 16:30 – 17:30 (PM) ref. F3.7 Volume 3, Chapter 7: Traffic and Transport, Table 7.24.

~~1.6~~1.8 Site accesses and Compounds

~~1.6.1~~1.8.1 Design

1.8.1.1 Access locations are identified in the Outline Highway Access Management Plan (~~document reference J8). Where changes to the final~~AS-053). The detailed design of ~~any site~~all accesses ~~may be required these~~and crossings will be agreed with the relevant highways authority ~~prior to installation~~as part of ~~the~~ developing the detailed Highway Access Management Plan(s).

~~1.6.1.1~~1.8.1.2 Once a construction site access is no longer required, the access will be removed (as soon as practicable), and the area returned to its original condition.

~~1.6.1.2~~1.8.1.3 Working areas will be designed to enable plant, materials and waste to be loaded/unloaded, areas will be designed ~~where practicable~~ to enable vehicles to enter and exit in forward gear. Contractors/suppliers will not be permitted to wait on or load/unload from the public highway unless under traffic management control during the formation of accesses.

~~1.6.1.3~~1.8.1.4 Areas where construction staff are working will be designed to enable designated parking facilities for construction workers. The LV measures outlined in section 1.7.1 will assist the CTMPCo(s) in ensuring that demand for employee parking is managed to avoid employees parking on the highway whilst also seeking to minimise vehicle trips.

1.8.1.5 The provision of adequate parking capacity within the construction sites will avoid the requirement for employees to park on verges or highways and also avoid the need for drivers to wait for access.

1.8.1.6 Car sharing syndicates will be planned to ensure there are suitable 'satellite' parking facilities (e.g. hotels or guest houses) or the designated driver picks up door to door.

~~1.6.1.4~~1.8.1.7 All site ~~access~~accesses will be provided with appropriate fencing. All site accesses will be designed to eliminate the risk of vehicles queueing back onto the highway by providing sufficient length and width close to the adjacent highway, which is appropriate to the types of vehicles anticipated to use the access.

~~1.6.1.5 Parking on and around construction sites will avoid parking on verges or highways, to avoid vehicles idling and waiting for access and to defer construction workers from driving to site unnecessarily.~~

~~1.7 Management and mitigation~~

~~1.7.1.1 Where there is a risk that vehicles will deposit mud and debris on the highway I.e. in the vicinity of construction site accesses at the onshore substations, wheel cleaning facilities will be provided. The condition of the adjacent highway will be monitored and if mud or debris is found to be present, measures such as road sweeping will be put in place by the Contractors to secure its removal with minimal delay.~~

~~1.7.1.2 Appropriate signage will be provided on the approach to construction site accesses to warn of turning and/or slow-moving vehicles. The design and siting of all signage will be agreed with the relevant highways authority prior to the start of work at each work site. Signage can also be placed at the exit of construction site access points to instruct construction traffic to follow the designated route.~~

~~1.7.1.3~~1.8.1.8 Contact numbers will be on display for the general public to communicate with the ~~Contractors~~CTMPCo(s) in relation to the highways~~.~~ matters.

~~1.7.1.4 Once a construction site access is no longer required, the access will be removed, and the area returned to its original condition.~~

~~1.7.1.5 There may be a need to provide traffic management measures at some accesses and at some routes to the accesses. This may be required for various reasons and the type of traffic management measures 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. Some examples are set out below.~~

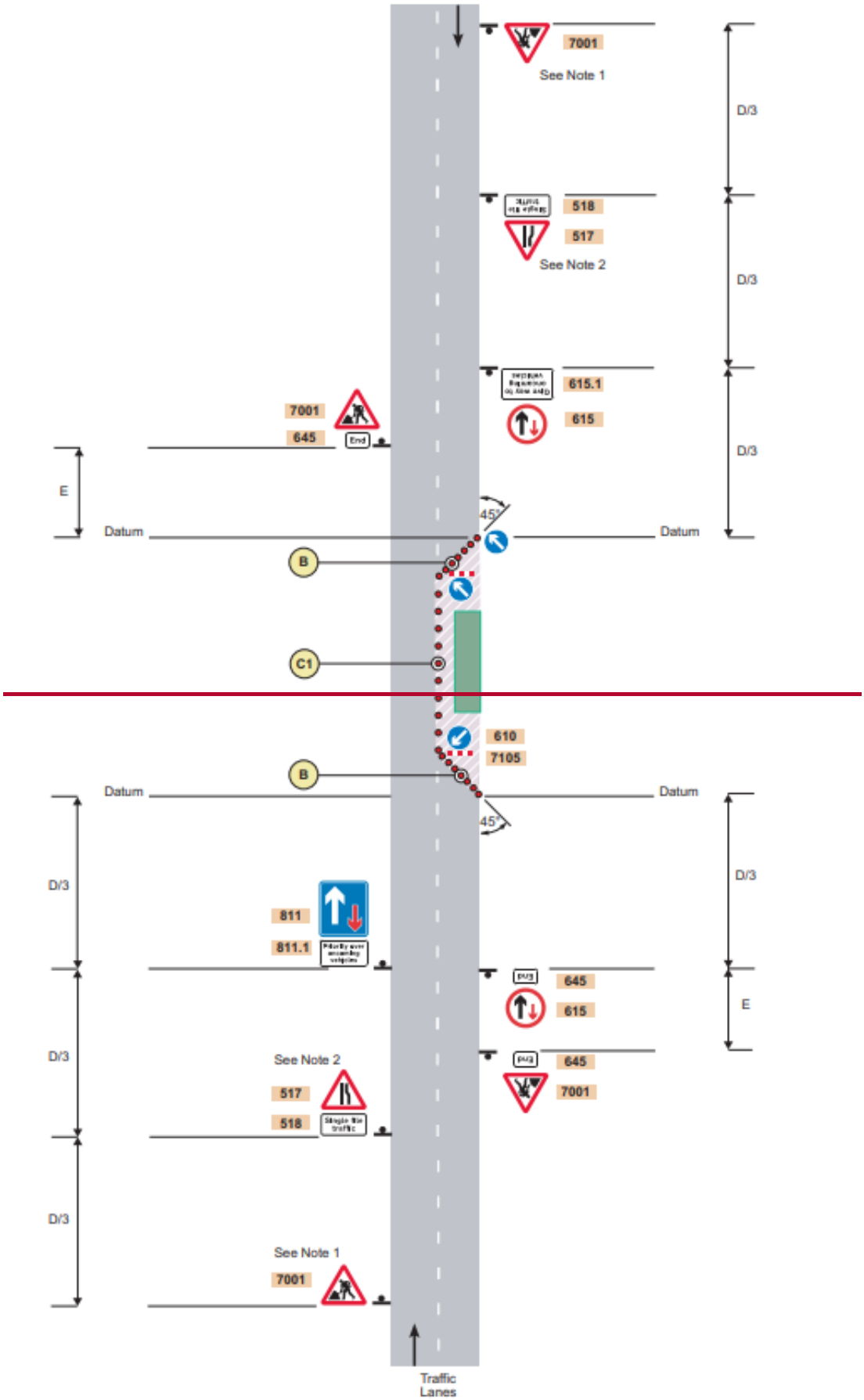
- ~~Where the requisite visibility splays cannot be provided at an access and so traffic on the highway may be temporarily stopped up to allow HGVs to exit an access safely or three-way portable signal control may be temporarily installed.~~
- ~~The highway geometries are too narrow to safely accommodate turning HGVs when exiting an access and so traffic on the highway may be temporarily stopped to allow HGVs to exit an access safely or three-way portable signal control may be temporarily installed.~~
- ~~The highway geometries are too narrow to accommodate HGVs passing an oncoming vehicle and so shuttle working may be temporarily installed.~~
- ~~The highway geometries are too narrow to accommodate simultaneous turning movements through junctions and so three-way portable signal control may be temporarily installed at T-junctions or four-way portable signal control temporarily installed at crossroads.~~

~~1.7.1.6 Where traffic on the highway may be stopped up, this could be via temporary portable signals or via manually operated stop/go signs.~~

~~1.7.1.7 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.~~

~~1.7.1.8 Some example layouts of these traffic management measures and features are shown on **Diagram 1.1** to **Diagram 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.~~



~~Diagram 1.1: Priority signs on a two-lane single carriageway road~~

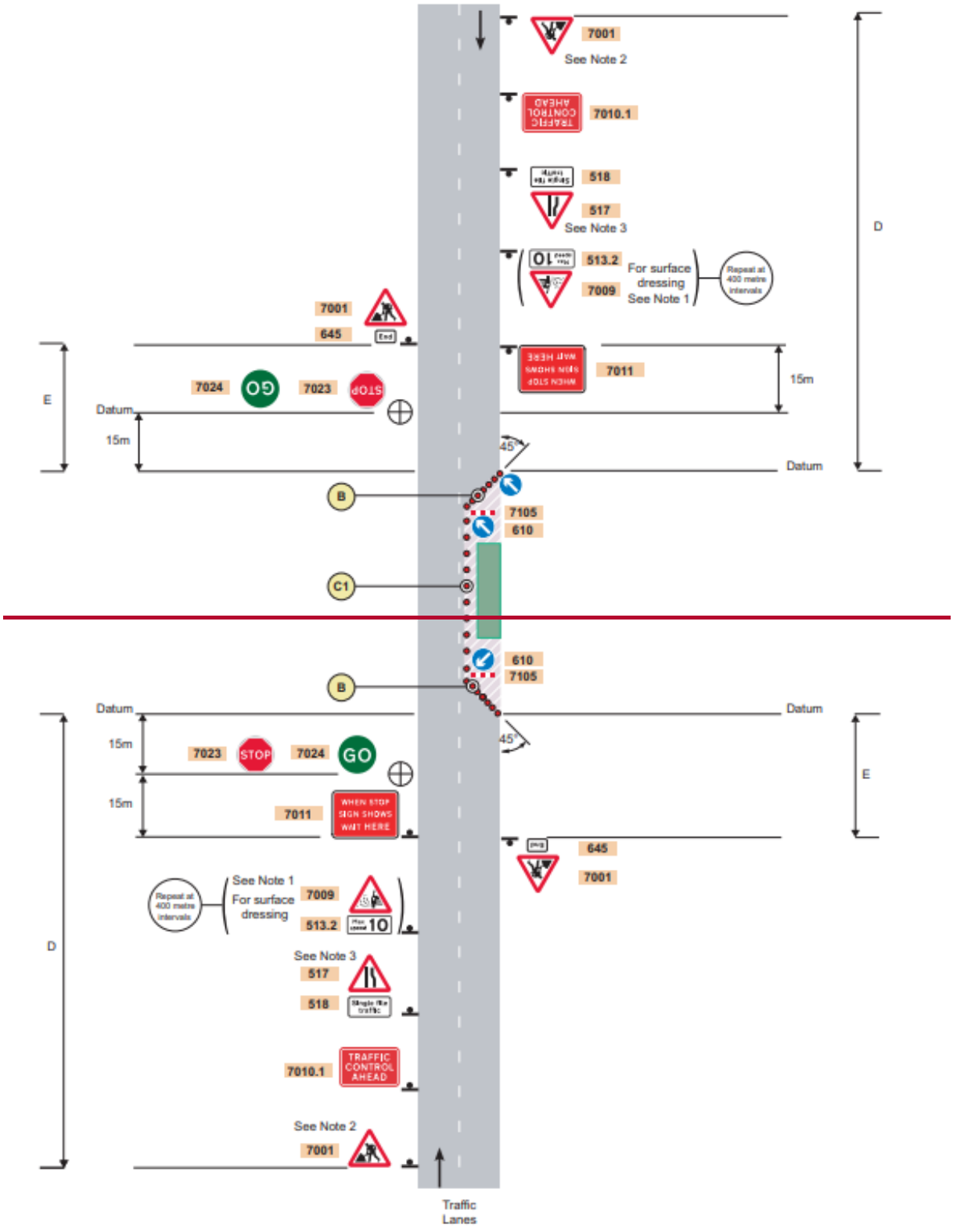
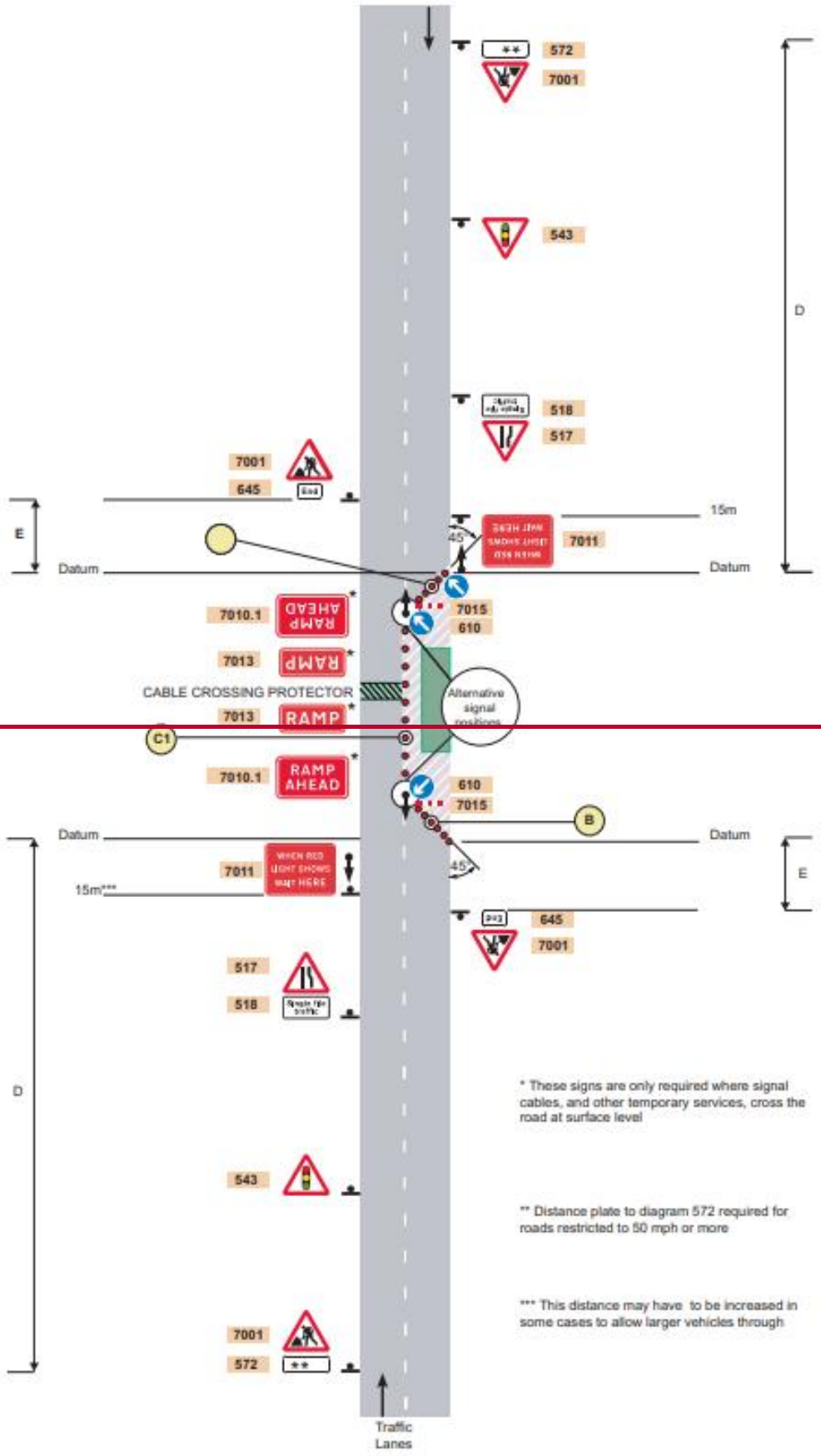
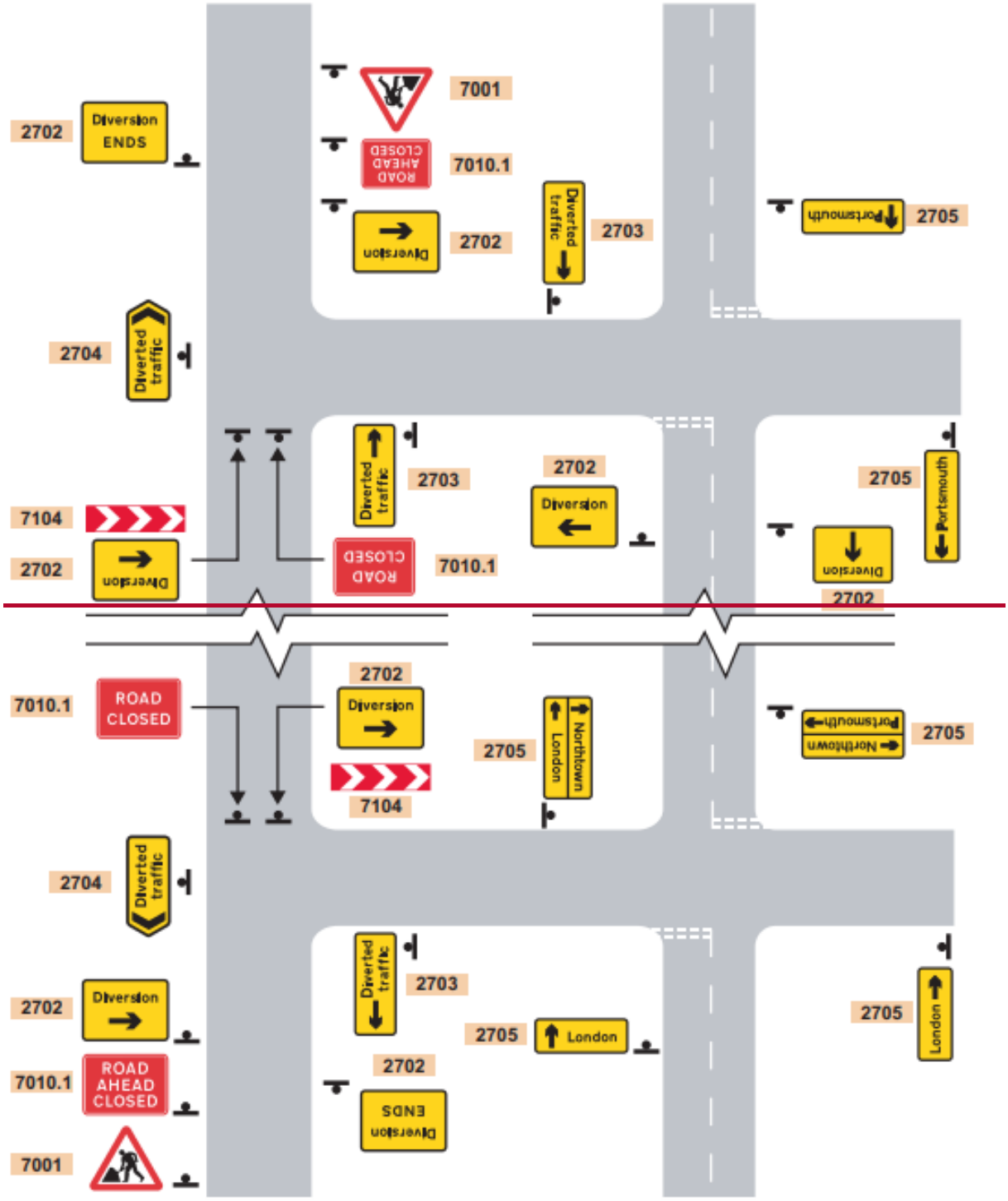


Diagram 1.2: Stop/go signs on a two-lane single carriageway road



~~Diagram 1.3: Portable traffic signals on a two-lane single carriageway road~~



~~Diagram 1.4: Layout of signs for road works on single carriageway roads with diversions~~

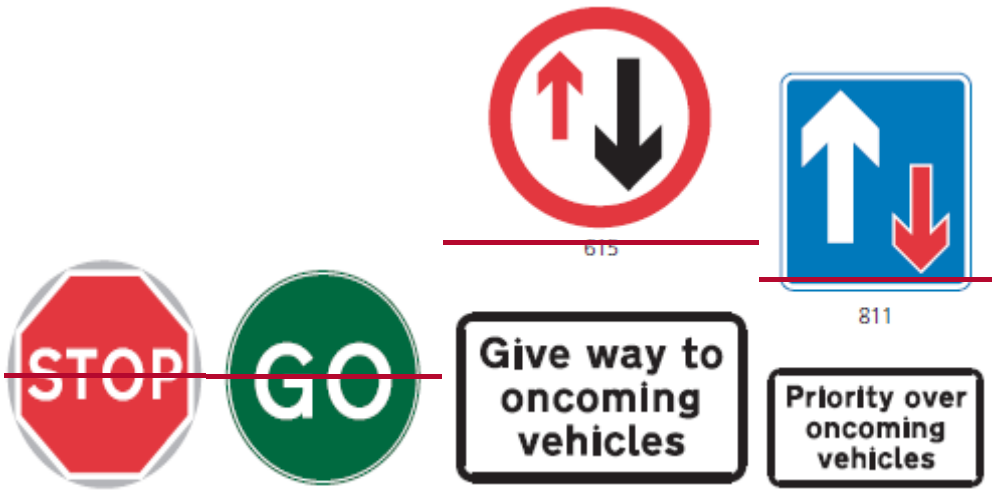
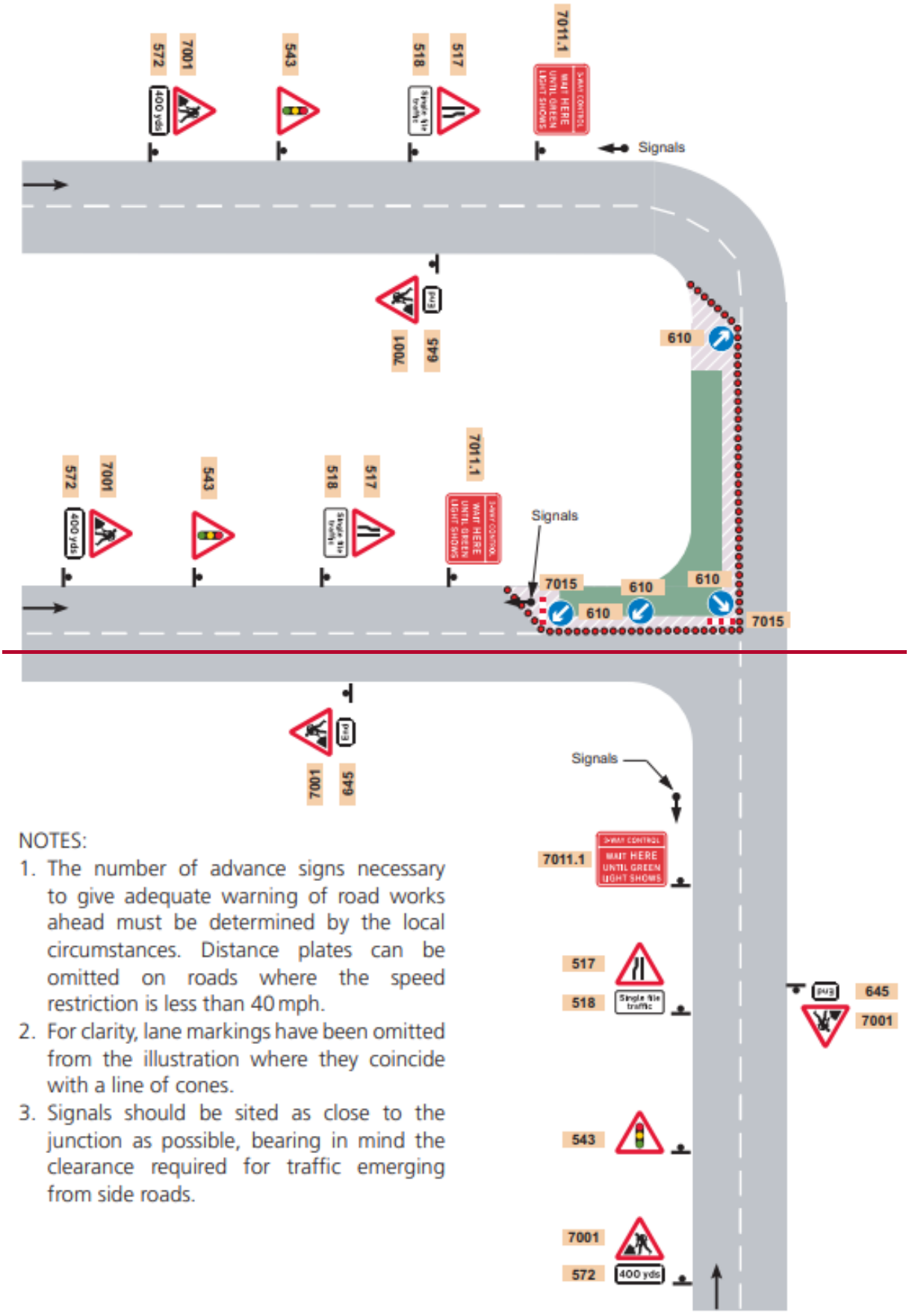


Diagram 1.5: Manually operated stop/go signs and priority signs



NOTES:

1. The number of advance signs necessary to give adequate warning of road works ahead must be determined by the local circumstances. Distance plates can be omitted on roads where the speed restriction is less than 40 mph.
2. For clarity, lane markings have been omitted from the illustration where they coincide with a line of cones.
3. Signals should be sited as close to the junction as possible, bearing in mind the clearance required for traffic emerging from side roads.

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

1.9 Offsite Highway Works

1.9.1.1 The Applicants have identified two narrow 'last leg' links within the traffic and transport study area, namely:

- Link 41 (Ballam Road); and
- Link 39b (the B5259).

1.9.1.2 These links are typically between 5.0 to 6.0m in width and allow for the two-way movements of most vehicles but present a potential constraint to the passing of two HGVs at localised points.

1.9.1.3 To minimise the potential for driver delay, and road safety concerns at these locations, it would be proposed to provide localised traffic management measures. A range of mitigation measures are proposed that could be adopted including:

- Using mobile traffic management, such as an escort / pilot vehicle to guide HGVs along roads and manage oncoming traffic;
- Use of temporary traffic signals at pinch points to control two-way traffic movements; or
- The provision of localised passing areas and widening at pinch points.

1.9.1.4 In addition to these narrow two-way roads, the Applicants have also identified two links (Link A33b – Corka Lane and Link 101 - Howick Cross Lane) where the road width currently prevents two-way movements for all vehicle types and drivers are required to give-way.

1.9.1.5 To minimise the potential for driver delay, and road safety concerns along these narrow links, a range of mitigation measures are proposed that could be adopted including:

- Improving/ formalising existing passing areas;
- Using mobile traffic management, such as:
  - An escort / pilot vehicle to guide HGVs along roads and manage oncoming traffic;
  - 'Stop-works' signage to hold traffic back (for up to two minutes in any 15 minutes) whilst HGVs travel along routes; or
  - 'Temporary obstruction' signage to hold traffic (for up to 15 minutes with a subsequent gap of at least one hour) whilst HGVs travel along routes.

1.9.1.6 Prior to the commencement of construction of the relevant phase, the CTMPCo(s) would formalise and agree the measures to be adopted for each road. The final choice of measures would be agreed in liaison with Lancashire County Council as part of the detailed CTMP(s).

1.9.1.7 Where road / junction widening or new / improved passing places are proposed, they would be contained within the public highway and the technical approvals for the designs would be submitted to and agreed with Lancashire County Council under Section 62 and Section 278 of the Highways Act 1980.

1.9.1.8 The technical approval process would include submission of finalised drawings, showing full details of the improvements, including drainage, lighting, signing, and standard construction details.

1.9.1.9 The technical approval documentation would also include a Stage 1 and 2 Road Safety Audit and a Road Safety Audit Response Report (on behalf of the designers).

1.9.1.10 All road / junction widening would be temporary and following completion of construction would be reinstated to their former state unless otherwise agreed with Lancashire County Council.

1.9.1.11 Street works will be in accordance with the provisions of the DCO and applications for road space booking would be made via Street Manager.

~~1.8~~1.10 Highway crossings

~~1.8.1~~1.10.1 Onshore export cable corridor and 400 kV grid connection cable corridor highway crossing locations and operation

~~1.8.1.1~~1.10.1.1 ~~It is envisaged that all~~All crossings of the public highway (except for Leach Lane) will be undertaken using Horizontal Directional Drilling (HDD) or other trenchless technologies, including direct pipe or micro-tunnel. ~~Except for Leach Lane.~~ Proposed crossing methodologies for roads are set out within the Volume 1, Annex 3.2: Onshore crossing schedule of the ES.

~~1.8.1.2~~1.10.1.2 Trenchless methods for cable installation means that there is no disturbance (i.e. no shuttle working nor road closures) to other users of the road with the exception of material delivery and arrival/departure of construction staff.

~~1.8.1.3 There~~ To minimise delays to road users along Leach Lane, it is proposed that traffic will be ~~some locations whereby~~managed through the ~~haul road crosses the highway and/pr where traffic management will be required. The traffic management methods to be used will depend on the location of the highway crossing, the nature and level of traffic on the highway link being cross, what is served by the highway link and the alternative routes available. Methods may include temporary shuttle working, crossings, or temporary~~lane closure~~.~~

~~1.8.1.4~~1.10.1.3 ~~Indicative priority, stop/go and~~ via the use of signalled shuttle working arrangements ~~are shown on **Diagram 1.1** to **Diagram 1.3**. On lightly trafficked links, shuttle working can operate on a priority basis or be managed manually without the need~~as shown on **Diagram 1.1**~~**Diagram 1.1**~~. Street works will be in accordance with the provisions of the DCO and applications for ~~traffic signals. On busier links it is expected that temporary signals will be used~~road space booking would be made via Street Manager.

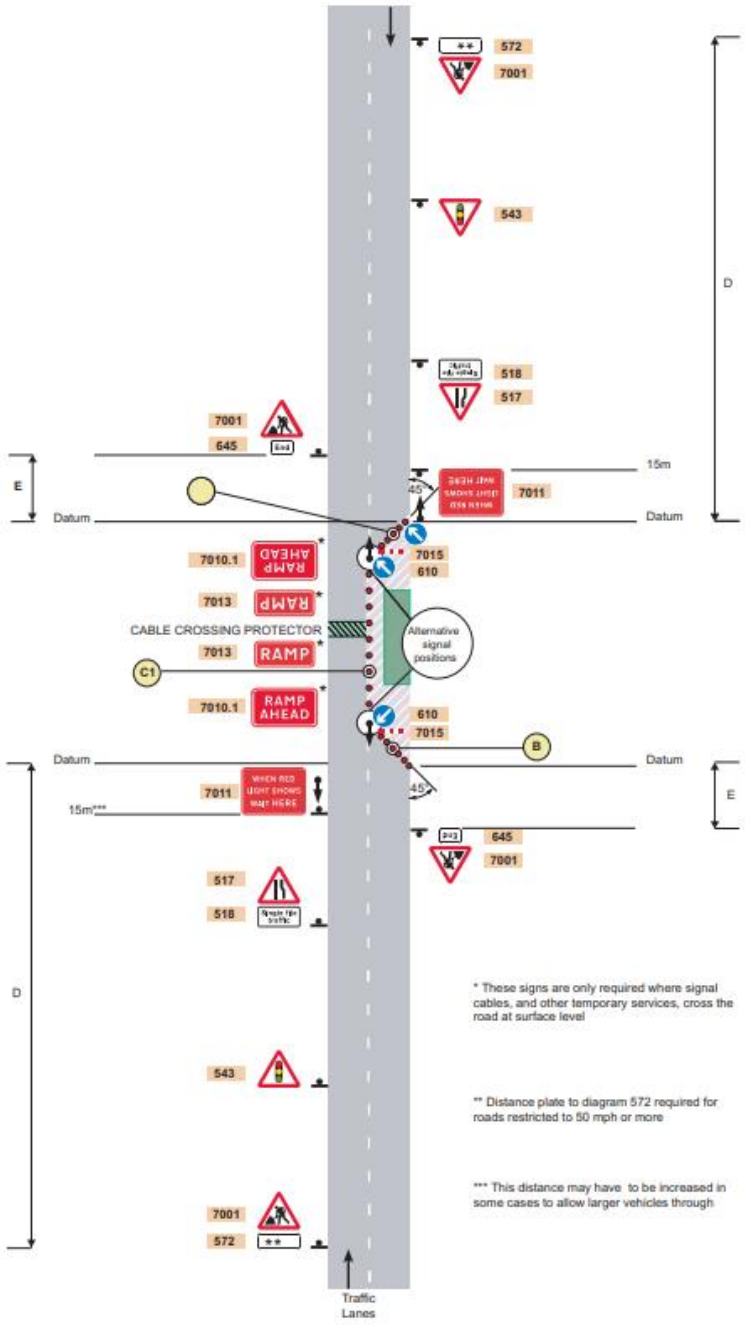


Diagram 1.1: Portable traffic signals on a two-lane single carriageway road

~~1.8.2~~1.10.2 Agreement, management, and advance notification

~~1.8.2.1~~1.10.2.1 Where traffic management measures are required, these will be agreed in advance with the relevant highways authorities.

~~1.8.2.2~~1.10.2.2 Any temporary road closures/introduction of one-way roads and any diversions will be advertised in advance and alternative routes indicated through signage.

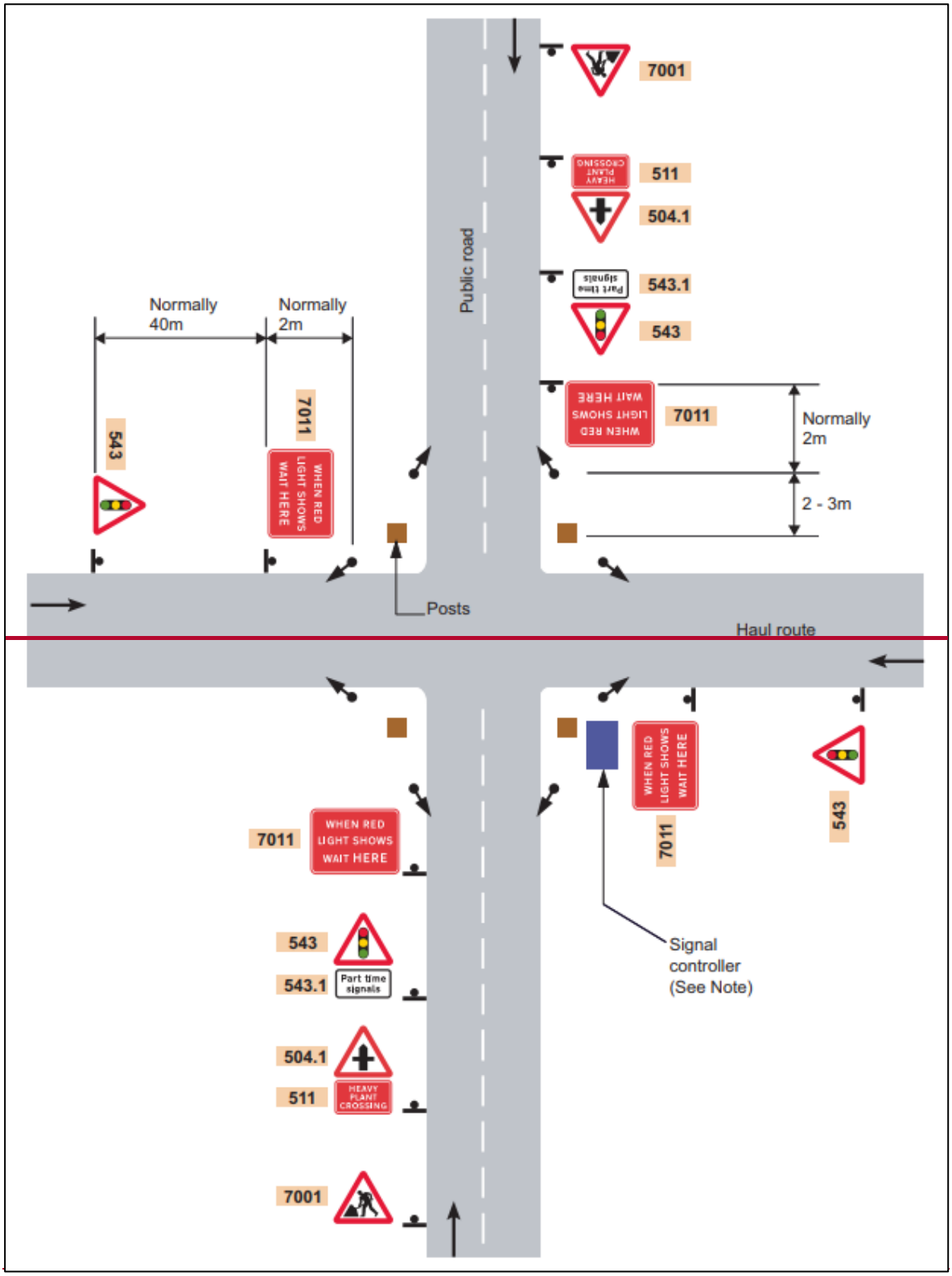
~~1.8.2.3~~1.10.2.3 Measures will be put in place to discourage unauthorised access to the onshore export cable corridor and 400 kV grid connection cable corridor from the highway at crossing points and that the adjacent works sites are secure.

~~1.8.2.4~~1.10.2.4 Any works within the highway will be reinstated to a standard commensurate prior to the commencement of the works and agreed with the relevant highways authority.

~~1.8.3~~1.10.3 Haul road and its crossings with the highway

~~1.8.3.1~~1.10.3.1 A haul road will be constructed along the majority of the onshore export cable corridor and 400 kV grid connection cable corridor to provide for the HGV access for construction, with gaps (or 'lock-outs') only ~~occuring~~occurring at some ~~HDD~~trenchless technique crossing locations and road crossings. The haul road will enable vehicles to move along the onshore export cable corridor and 400 kV grid connection cable corridor and relieve the need for construction traffic to rely on longer sections of the local road network during construction. Vehicle movements should be via the construction haul road, where practicable, to minimise adverse impacts on the local road network.

~~1.8.3.2~~1.10.3.2 The haul road would operate with a low-speed limit (10mph) to ensure the safety of the workforce and plant operatives in the vicinity. Where the haul road crosses existing highway links, traffic management would be used to ensure that safe crossing by highway traffic and haul road vehicles. ~~An example layout is set out in **Diagram 1.7**, 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). If the crossing is not signal controlled, the variant of diagram 511 (as shown on **Diagram 1.7**) 'heavy plant crossing' should be placed in advance of the crossing place. The precise layout for each will be confirmed by the Principal Contractor(s) based upon the specific requirements of each location.~~



1.10.3.3 ~~Diagram 1.7: Haul road crossing~~Crossing locations are identified in the Outline Highway Access Management Plan (AS-052). The detailed design of all crossings will be agreed with the relevant highway authority as part of developing the detailed Highway Access Management Plan(s).

~~1.8.4~~1.10.4 Public rights of way

~~1.8.4.1~~1.10.4.1 Several Public Rights of Way (PRoW) and areas of land with informal public access will potentially be affected by the construction of the Transmission Assets. Prior to any temporary stopping up or localised diversion of the PRoW, measures will be agreed in accordance with those established in the Outline Public Rights of Way Management Plan (document reference J1.5) to manage the interface between the works and PRoW with the relevant PRoW officers.

1.10.5 Preston Guild Wheel cycle route

1.10.5.1 The Applicants have identified that access to the section of 400 kV grid connection cable corridor between the A583 and River Ribble from access 57 would require construction traffic to interface with users of the Preston Guild Wheel cycle route on the A583 overbridge. This overbridge has a weight limit of 32 tonnes.

1.10.5.2 To manage the potential for conflict on this overbridge, construction vehicles to access 57 (as shown in Appendix B) would first be required to travel to the temporary construction compounds located on the A583 Blackpool Road and A584 Preston New Road.

1.10.5.3 Material deliveries would be broken down/divided on to smaller HGVs, such that the gross vehicle load does not exceed 30 tonnes (i.e. below the overbridge weight limit) and employees would also be grouped into vehicles to reduce single occupancy trips.

1.10.5.4 Before departing the temporary construction compounds, drivers would be required to ensure that a banksperson is in place. Once, the banksperson is in place (one either side of the bridge) they will radio the driver to advise them to proceed and temporarily stop any users of the overbridge until the construction traffic has cleared the bridge.

1.10.5.5 To support the banksperson in their duties, the CTMPCo(s) will ensure that warning signs are erected either side of the overbridge.

1.10.6 Starr Gate access

1.10.6.1 The Applicants have identified a potential need for low-tide vessels to be launched during construction activities to facilitate installation of the landfall. Access to the beach in the event of emergencies would also be required.

1.10.6.2 To facilitate this, the Applicants propose that access could be taken via access 1 (as shown in Appendix B) from the existing boat ramp from Starr Gate. Access would be infrequent and only required by light vehicles (e.g. a 4x4 towing a trailer). No HGVs would be permitted to access via Starr Gate.

1.10.6.3 To manage the potential for any conflict on the boat ramp and Starr Gate, drivers would be required to travel with a banksperson. The

banksperson would be responsible for managing traffic and non-motorised users to ensure that the boat can traverse down the ramp.

1.10.6.4 The final form of mitigation would be discussed and agreed with Blackpool Borough Council as part of finalising the detailed CTMP(s).

~~1.9~~1.11 Management of highway safety

~~1.9.1~~1.11.1 Existing accident record

~~1.9.1.1~~1.11.1.1 Within section 7.6.5 of Volume, Chapter 7: Traffic and transport of the ES, an analysis of existing Personal Injury Accident data has been undertaken to identify clusters of Personal Injury Accidents (four or more occurring at the same location of within 25 m of each other). A further analysis looked at those clusters, severity, and any consistent contributory factors. No matters in relation to the ~~exiting~~existing highway layout or geometries were discovered to be the cause of the incidents.

~~1.9.2~~1.11.2 Monitoring and mitigation for Transmission Assets

1.11.2.1 ~~HGV~~Management measures to minimise the impact on highway safety during the construction phase are:

- Driver inductions and training. Drivers would be informed of the areas with existing highway safety issues (through discussions with highway authorities) and appropriate training would be provided to minimise the effect on highway safety;
- Driver information packs. Any existing highway safety issues would be highlighted to drivers within information packs provided inside their delivery instructions. If emerging issues are identified through accident and near miss reporting the packs would be updated; and
- Near miss reporting. Drivers would be requested during the induction to report any collisions or near misses. This would allow any potential highway safety concerns to be identified early and remedial action taken.

~~1.9.2.1~~1.11.2.2 Any injury accidents and near misses associated with the Transmission Assets construction vehicles will be monitored to identify ~~whether there are any safety deficiencies in the highway network due to the increased level of HGV traffic associated with the construction works~~if there are any emerging issues.

~~1.9.2.2~~1.11.2.3 ~~If~~If emerging issues are identified localised mitigation measures ~~are required, these will be~~would be proposed and agreed with the Highway Authorities and incorporated into the detailed CTMP(s).

~~1.9.3~~1.11.3 Highway condition

1.11.3.1 ~~Where necessary and where agreed with the relevant highways authority as a part~~To establish the residual asset life of the ~~detailed~~

~~CTMP(s), video surveys may be undertaken of those local roads where it is considered that the passage~~highway and how any changes in HGV traffic could impact upon this, prior to the commencement of construction~~ HGVs may cause deterioration of highways. These roads~~, the CTMPCo(s) will ~~not include motorways,~~ be required to undertake highway condition surveys for all roads, excluding A roads~~,~~ and ~~B roads.~~ motorways, within the traffic and transport study area.

1.11.3.2 The ~~schedule~~final form of ~~highways to~~surveys would be ~~surveyed will be agreed~~agreed with the relevant highway authority however, it is envisaged that this would initially comprise of a Coarse Visual Inspection survey (in accordance with the UK Pavement Management System standard). This will record the general surface condition of the highways, verges and footways.

1.11.3.3 These results would be shared with the relevant ~~highways authorities prior to any~~ highway authority to define areas where more detailed surveys may be required, and the form of these surveys (e.g. deflectograph surveys or core samples).

~~1.9.3.1~~1.11.3.4 The results of the surveys would be interrogated to establish the residual asset life of the highway and if there would be a requirement for preventative maintenance, e.g. works to repair/strengthen the highway in advance of the construction~~ activities taking place.~~.

1.11.3.5 Where measures are required, these would be discussed with the relevant highway authorityand either delivered by the Contractor(s) or a financial contribution made to the relevant highway authority to deliver the works.

~~1.9.3.2~~1.11.3.6 Once construction activities have ceased in a given location the ~~video survey of the associated highway links~~surveys would be repeated to identify any significant changes in highway condition. The results will be discussed with the relevant highways authority ~~and where it is agreed that damage has resulted from the passage of HGVs associated with construction work a remediation strategy will be discussed with the highways for any damage agreed to have resulted from vehicle movements associated with Transmission Assets.~~to agree:

- if the damage has directly resulted from the passage of HGVs associated with construction work; or
- if the passage of HGVs associated with the construction works has proportionately contributed toward the damage.

1.11.3.7 Following the agreement of the damages, a remediation strategy will be discussed with the relevant highways authorities. This would either include a proportionate financial contribution being made to the highway authorities to cover the cost of remedial works or the Contractor(s) undertaking the repairs.

1.11.3.8 In addition to undertaking surveys prior to and on completion of the construction works, the CTMPCo(s) would also undertake regular inspections of sections of the highway network to identify any emerging issues (such as damage to verges or potholes forming). The frequency

of these surveys would be agreed with the highway authorities prior to the commencement of construction.

1.11.3.9 Where emerging issues are identified as a result of the Transmision Assets construction traffic, the CTMPCo(s) would request the relevant highway authority to undertake the repairs (with any relevant costs being recharged to the Contractor).

1.12 Transport Working Group

1.12.1.1 Prior to the commencement of construction, the CTMPCo(s) would establish a Transport Working Group (TWG) to assist the highway authorities in coordinating the competing requirements from the schemes within the traffic and transport study area.

1.12.1.2 The highway authorities would be requested to nominate staff and invite relevant third-party members to the TWG. It is expected that membership would include the nominated staff from the highway authorities, the CTMPCo(s), and other major infrastructure projects under construction at the same time as the Transmission Assets.

1.12.1.3 The TWG would allow developers to discuss matters and coordinate with the aim of minimising disruption where practicable. Topics for discussion could include opportunities for coordination in relation to:

- Road works and road/lane closures;
- Forecast peak HGV demand;
- Any emerging issues, areas for improvement, lessons learnt that can be shared;
- Highway improvements; and
- Timing of AIL movements.

1.12.1.4 It is proposed that TWG meetings will be monthly, unless agreed otherwise between the members of the TWG. The membership of the TWG will be kept under review throughout construction, with members added or removed as required.

~~1.10~~1.13 Monitoring of the CTMP

~~1.10.1~~1.13.1 Compliance and monitoring

~~1.10.1.1~~1.13.1.1 Compliance with all the monitoring plans, including the detailed CTMP(s) will be monitored and a responsibility of the ~~Principal Contractor~~CTMPCo(s).

~~1.10.1.2~~1.13.1.2 The ~~Principal Contractor~~CTMPCo(s) will be responsible for ensuring that all sub-contractors are aware of the requirements of the detailed CTMP(s) and of the monitoring obligations.

~~1.10.1.3~~1.13.1.3 The role of the ~~Principal Contractor(S~~CTMPCo(s) will continue throughout the onshore construction duration. They will be the central point of contact for all monitoring processes during their respective construction phases.

1.13.2 ~~If necessary,~~ HGV numbers

1.13.2.1 To ensure compliance with the ~~Principal Contractors~~assessed daily HGV trips (outlined in Table 7.21 of the ES), the CTMPCo(s) would operate a booking system for all deliveries. The booking system would be monitored (by the CTMPCo(s)) to ensure the assessed number of trips are adhered to.

1.13.2.2 The CTMPCo(s) will implement a system to record the arrival and departure times of HGVs at each access.

1.13.3 HGV routing

~~1.10.1.4~~1.13.3.1 The CTMPCo(s) will be responsible for implementing a system whereby construction HGVs employed on the Transmission Assets are identifiable~~.~~ from other traffic on the network. It is proposed that each vehicle would be required to display a unique identifier within the window of the cab (a recognisable logo) that would allow members of the public to report any concerns such as driver behavior or the use of unapproved routes via a published telephone contact number. Prior to the commencement of the construction of the relevant phase, the CTMPCo(s) will submit details of the unique identifier to the highway authorities for their records.

1.13.3.2 ~~Where practicable and necessary,~~To assist the CTMPCo(s) in responding to any complaints regarding HGV routing, the booking system would provide an initial check. The booking system would allow the CTMPCo(s) to check if the reported HGV may have been employed in delivering to the Transmission Assets, e.g. allowing checking of number plates, supplier names, scheduled timings and origin and destination, etc.

~~1.10.1.5~~1.13.3.3 The CTMPCo(s) will also ensure data will be collected from ~~construction~~ HGVs that are fitted with monitoring devices (such GPS tracking) to record their routes, timing and speeds ~~which~~ will be made available to aid any compliance investigations.

~~1.10.1.6~~1.13.3.4 ~~Where necessary, the~~ The registration numbers and unique identifier for all construction HGVs accessing compounds would be recorded.

1.13.3.5 The registration numbers and unique identifier, together with the delivery records would serve to augment data from vehicle monitoring to allow the CTMPCo(s) to respond to any complaints and provide a complete evidence base.

~~1.10.1.7~~1.13.3.6 Establishing these central points of contact will help to ensure that all works in a given location at a given time will be the responsibility of a single individual to ensure clarity of responsibility and to facilitate effective communication.

~~1.10.1.8~~1.13.3.7 Monitoring activities and responsibilities will be agreed with the relevant highways authority as a part of the detailed CTMP(s). The detailed CTMP(s) will include contact details of those responsible for

the detailed CTMP(s) along with a clear schedule of monitoring activities and timescales.

1.13.4 Employee monitoring

1.13.4.1 The CTMPCo(s) will require all employees and visitors to sign in and out when arriving/departing site. This process would capture travel details including the employee's method of travel to work and arrival / departure times and origin.

~~1.10.2~~1.13.5 Monitoring records

1.13.5.1 Data recorded from the monitoring processes outlined above would be drawn together by the CTMPCo(s) to produce a monthly monitoring report during construction of the relevant phase and shared with the highway authorities.

1.13.5.2 In compiling the monitoring report, the CTMPCo(s) would be able to identify effective / ineffective measures and the requirement for any remedial action to achieve the agreed targets.

~~1.10.2.1~~1.13.5.3 Any auditing or corrective action will be monitored. This will ensure that the construction activities are being undertaken in accordance with the approved CTMP.

~~1.10.2.2~~1.13.5.4 The procedure for addressing breaches and ensuring corrective action is undertaken is below.

- A log will be used to record details of any traffic and transport related incident and or non-compliance with the detailed CTMP(s).
- A log will also be used to record any inadequacy as a result of monitoring, inspection, surveillance and complaint.
- The log will also record any actions taken, any action required will be allocated to the appropriate person, along with a timescale for the action to be undertaken.

~~1.10.2.3~~1.13.5.5 Records of the above will be retained by the ~~Principal Contractor~~CTMPCo(s).

~~1.10.3~~1.13.6 Enforcement and corrective measures

1.13.6.1 To ensure that the detailed CTMP(s) can be effectively enforced, the following matters have been defined as non-compliance that would be investigated to understand if corrective measures would be required:

- Exceedance of target daily HGV numbers;
- Failure to display the unique identifier, or to remove the unique identifier when not making deliveries to the Transmission Assets;
- Construction workers overspill parking on the public highway;
- HGV drivers parking/waiting at non-designated locations;
- Vehicles being driven in contravention of the highway code;

- Construction traffic operating outside agreed hours; or
- HGV drivers not adhering to the agreed routes / times.

~~1.10.3.1~~1.13.6.2 If the ~~Principal Contractor~~CTMPCo(s) are made aware of a potential ~~breach~~non-compliance of the detailed CTMP(s) (except where otherwise agreed with the relevant ~~LPA~~highway authority or in the event of an emergency), they will be required to investigate the circumstances and create a report for the relevant highways authority~~, and any subsequent will be discussed and agreed with the relevant highways authority, as appropriate.~~.

1.13.6.3 The report would outline the outcome of the investigation and what corrective action (as necessary) has been implemented. If the non-compliance is found to be material, the CTMPCo(s) would take appropriate action within the jurisdiction of the contract and report back to the relevant highway authority.

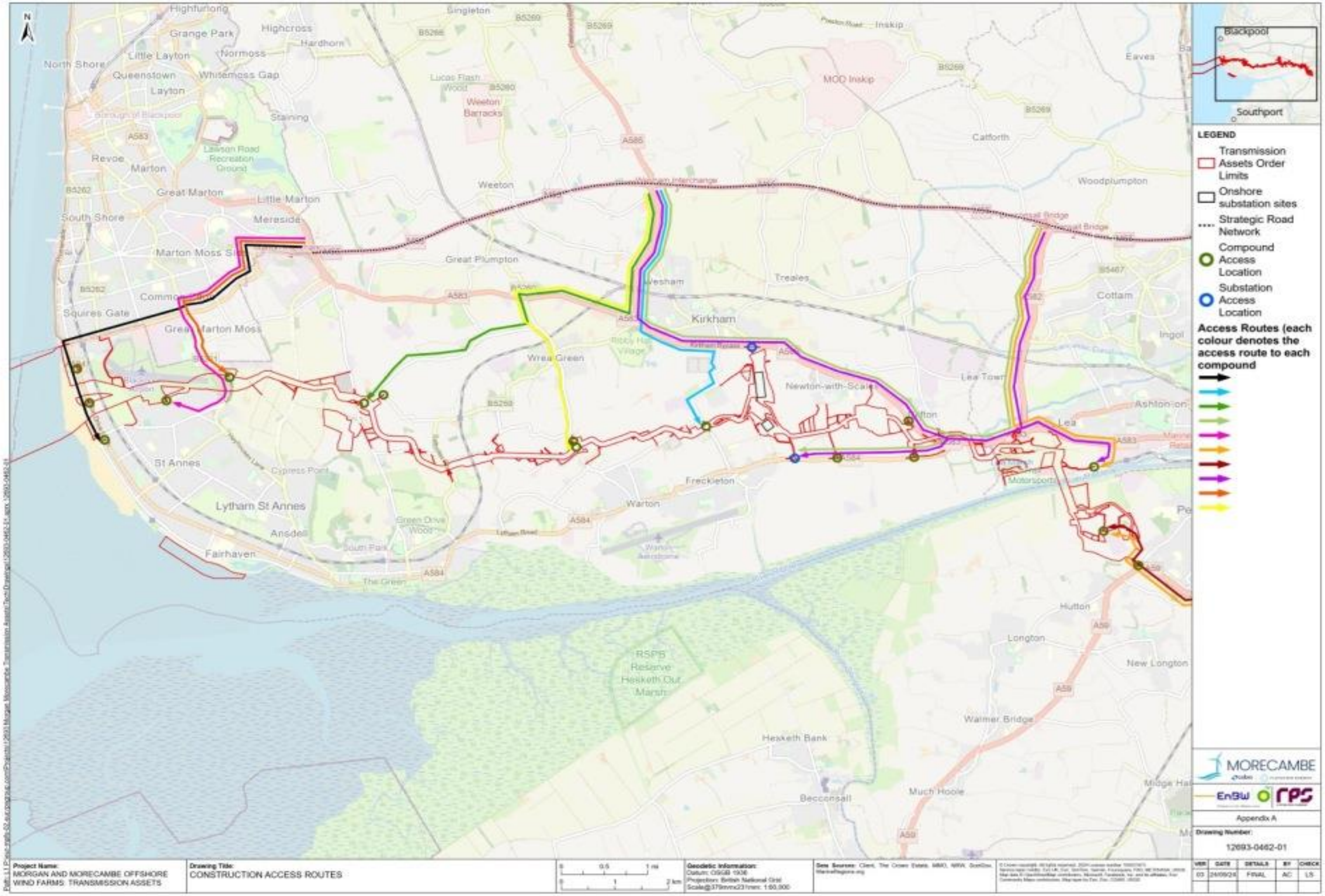
1.13.6.4 Individual employee non-compliances would be addressed through UK employment law whereby the process outlined above may form the basis for disciplinary proceedings, if appropriate.

~~1.11~~1.14 References

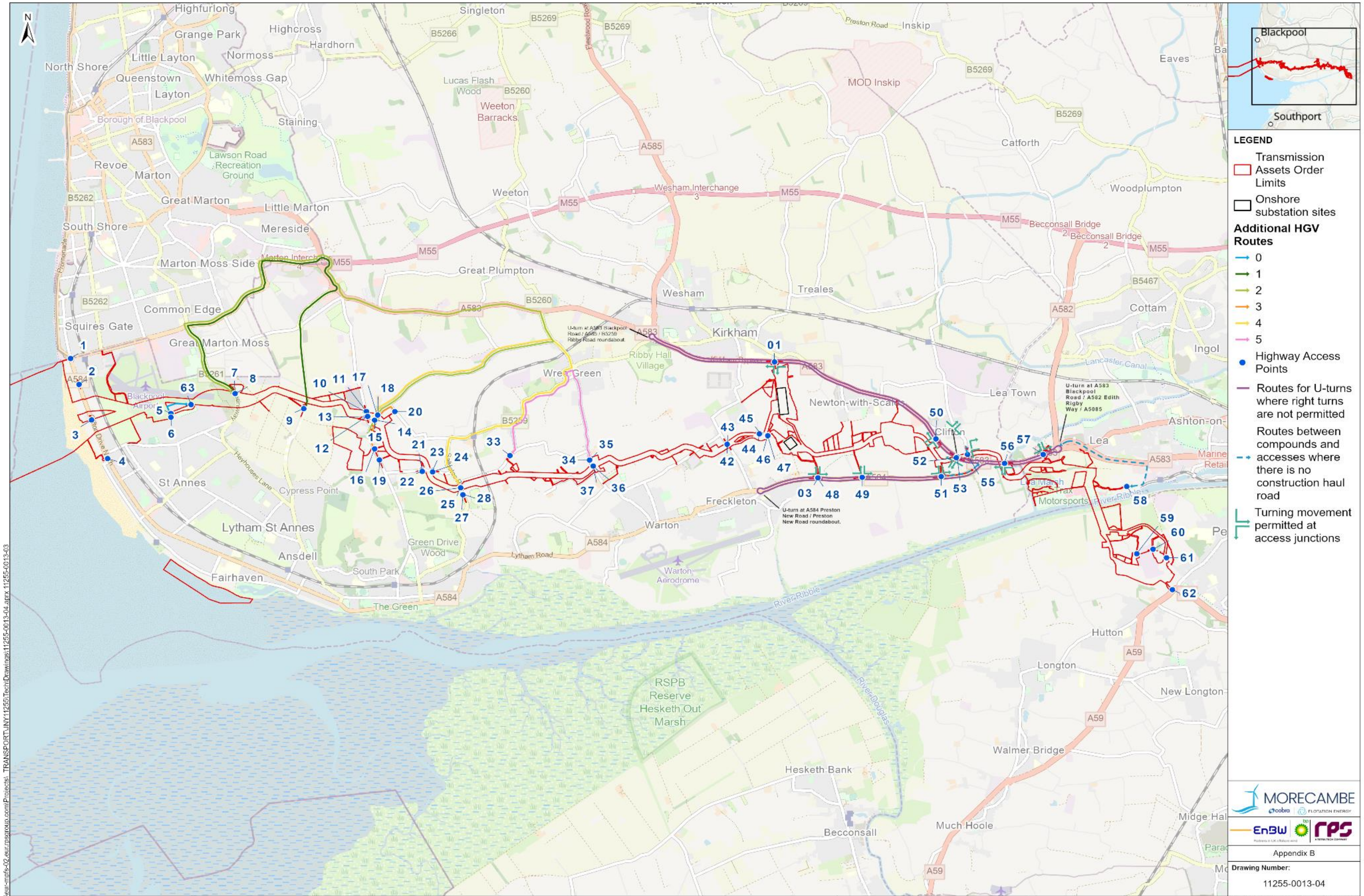
Department for Transport/Welsh Government/Transport Scotland/Department for Infrastructure (2009) Traffic Signs Manual Chapter 8, Traffic Safety Measures and Signs for Road Works and Temporary Situations Part 1: Design. Available at https://assets.publishing.service.gov.uk/media/5a74adeaed915d7ab83b5ab2/traffic-signs-manual-chapter-08-part-01.pdf. Accessed ~~August 2024~~May 2025.

The Secretary of State for Transport (2003) The Roads Vehicles (Authorisation of Special Types) (General) (Order). ~~Available at : https://www.legislation.gov.uk/uksi/2003/1998/article/4/made?view=plain. Accessed : December 2023~~Available at : https://www.legislation.gov.uk/uksi/2003/1998/article/4/made?view=plain. Accessed : May 2025.

Appendix A: Indicative construction vehicle route plan


Blackpool
Southport
LEGEND
Transmission Assets Order Limits
Onshore substation sites
Strategic Road Network
Compound Access Location
Substation Access Location
Access Routes (each colour denotes the access route to each compound
Appendix A
Drawing Number:
12693-0462-01
Project Name:
MORGAN AND MORECAMBE OFFSHORE WIND FARMS: TRANSMISSION ASSETS
Drawing Title:
CONSTRUCTION ACCESS ROUTES
Geodetic Information:
Kirkham
Wesham
Treales
Lytham St Annes
St Annes
Freckleton
Warton
Wrea Green
Great Plumpton
Weeton
Staining
Great Marton
Little Marton
Mereside
Squires Gate
Newton-with-Scales
Woodplumpton
Catforth
Cottam
Hutton
Longton
New Longton
Walmer Bridge
Hesketh Bank
Much Hoole
Becconsall
Fairhaven
Ansdell
RSPB Reserve Hesketh Out Marsh

Appendix B: Additional indicative HGV routes plan


N
Blackpool
Southport
LEGEND
Transmission Assets Order Limits
Onshore substation sites
Additional HGV Routes
0
1
2
3
4
5
Highway Access Points
Routes for U-turns where right turns are not permitted
Routes between compounds and accesses where there is no construction haul road
Turning movement permitted at access junctions
U-turn at A583 Blackpool Road / A585 / B5259 Ribby Road roundabout.
U-turn at A584 Preston New Road / Preston New Road roundabout.
U-turn at A583 Blackpool Road / A582 Edith Rigby Way / A5085
Kirkham
Wesham
Lytham St Annes
St Annes
Ansdell
Fairhaven
Warton
Freckleton
Clifton
Lea Town
Newton-with-Scales
Wrea Green
Great Marton
Marton Moss Side
Squires Gate
Hutton
Longton
New Longton
Hesketh Bank
Much Hoole
Walmer Bridge
RSPB Reserve Hesketh Out Marsh
River Ribble
River Douglas
Warton Aerodrome
MORECAMBE
Appendix B
Drawing Number:
11255-0013-04

Project Name:	Drawing Title:	Scale	Geodetic Information:	Data Sources:
MORGAN AND MORECAMBE OFFSHORE WIND FARMS: TRANSMISSION ASSETS	HGV ACCESS ROUTES WHERE THERE ARE RESTRICTIONS	0 0.5 1 mi; 0 1 2 km	Datum: OSGB 1936 Projection: British National Grid Scale@379mmx231mm: 1:60,000	Client, The Crown Estate, MMO, NRW, ScotGov, MarineRegions.org

VER	DATE	DETAILS	BY	CHECK
03	24/09/24	FINAL	AC	LS

Path: L1 P:\eur-mpfs-02.eur.rpsgroup.com\Projects_TRANSPORT\JNY11255\Tech\Drawings\11255-0013-04.aprx 11255-0013-03