



Race Bank Offshore Wind Farm

Sea Defence Breach & Installation - Traffic Management Plan

357166

January 2016

DONG Energy RB (UK) Limited

Race Bank Export Cable Installation 2016

Sea Defence Breach & Installation - Traffic
Management Plan

January 2016

DONG Energy RB (UK) Limited

5 Howick Place,
SW1P 1WG, London,
United Kingdom

Issue and revision record

Revision	Date	Originator	Checker	Approver	Description
0	23/10/2015	A Adepoju	O Daffarn	A Agates	Draft for Comments
1	27/11/2015	A Adepoju	O Daffarn	D Agates	Revised following Client comments
2	20/01/2016	A Adepoju	M Wearmouth	R Turner	Revised following Client comments

Information class: Standard

This document is issued for the party which commissioned it and for specific purposes connected with the above-captioned project only. It should not be relied upon by any other party or used for any other purpose.

We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

This document contains confidential information and proprietary intellectual property. It should not be shown to other parties without consent from us and from the party which commissioned it.

Contents

Chapter	Title	Page
1	Introduction	1
1.1	The Project	1
1.2	Site Location	1
1.3	Purpose of this Document	2
1.4	Traffic Route to Site	3
1.5	Site Access	4
2	Outline Traffic Management	5
2.1	Overarching Principles	5
2.2	Points of Contact/Engagement	5
2.3	Distribution list	6
2.4	Scope of Works	6
2.5	Anticipated Site Traffic	7
2.6	Parking	8
2.7	Road Cleaning	8
2.8	Road Condition Survey	9
2.9	Noise	9
2.10	Speed Limit	9
2.11	Weight Restrictions	9
2.12	Review and Audit Procedures	10
	Appendices	12
	Appendix A. Figure 2	13

1 Introduction

1.1 The Project

DONG Energy RB (UK) Limited (“DONG Energy”) is developing the 580MW Race Bank Offshore Wind Farm. As part of these works it is necessary to bring 2 x 220kV export cables ashore north of Sutton Bridge, in order to connect with the onshore transmission system before connecting to the National Electricity Transmission System at Walpole Marsh, approximately 12km to the south.

Planning permission was granted for this work under references H18-0102-13 (South Holland District Council) and 13/00189/FM (the Borough Council of Kings Lynn and West Norfolk) in 2013¹. Following further design review the methodology for crossing the sea defences at Sutton Bridge has been refined, and those works are currently the subject of a revised planning application.

This Traffic Management Plan (TMP) has been prepared in support of the proposed works, which are planned to commence, subject to consent, at the start of April 2016.

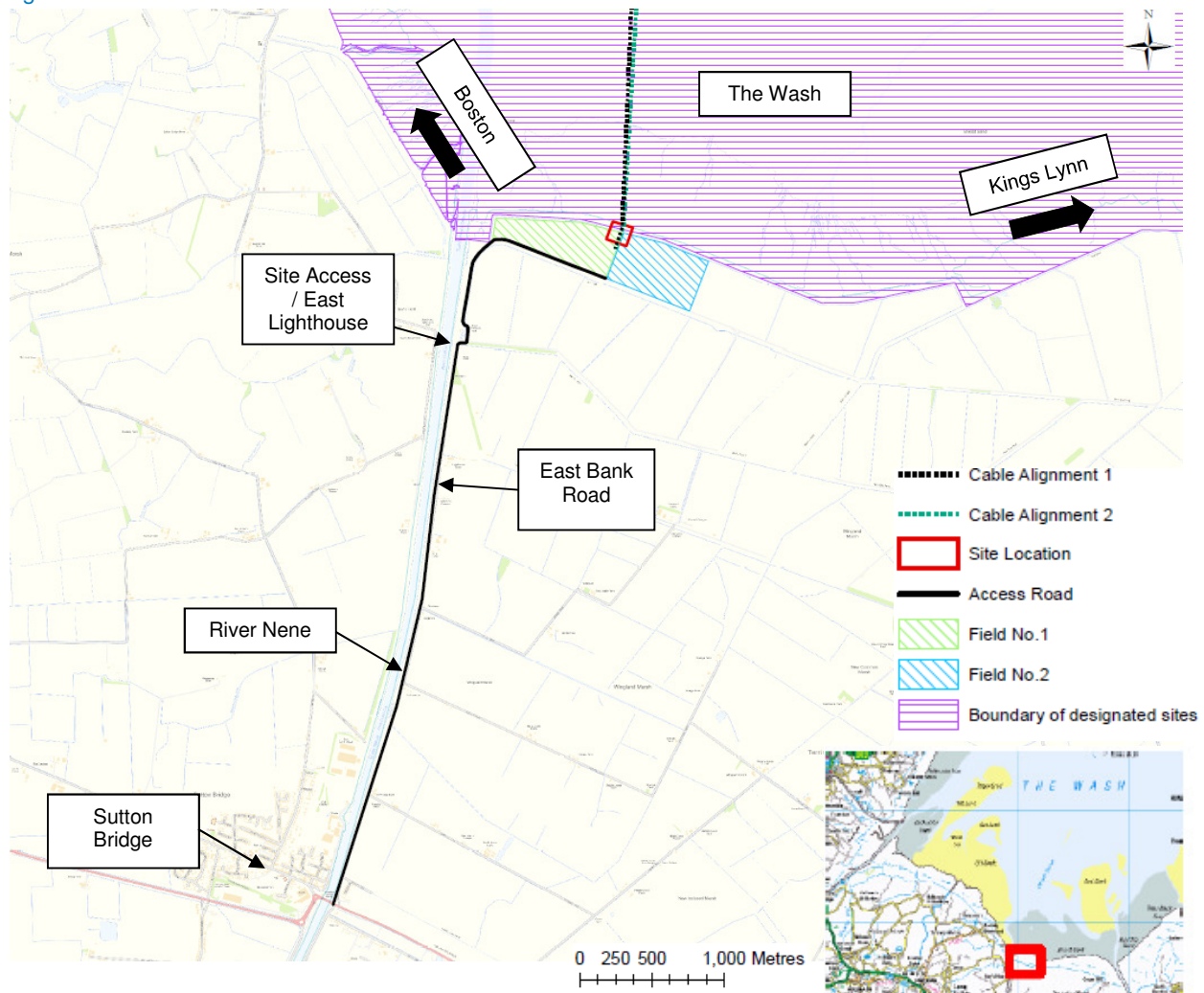
1.2 Site Location

The proposed breach and reinstatement location (the “Site”) is on the north east facing coastline of The Wash, north of Sutton Bridge.

This plan seeks to manage the traffic effects of the onshore construction works associated with the sea defence breach and reinstatement operations, which will be focused in Field 1 and Field 2 (Figure 1-1 below refers).

¹ Subsequently amended under references H18-0082-15 (South Holland District Council) and 15/00129/F (Borough Council of Kings Lynn and West Norfolk).

Figure 1.1: Site Location Plan



1.3 Purpose of this Document

This TMP sets out the outline traffic management measures that DONG Energy will require its contractors to adopt and implement for all relevant construction traffic activities in relation to the Project proposed sea defence breach and reinstatement works in 2016 ('the Project'), managing the potential environmental impacts of traffic during the construction of the Project and limiting the disturbance from construction traffic as far as reasonably practicable.

This TMP is intended to provide an overview of the approaches to traffic management that will be taken during the construction of the Project. Detailed management plans and method statements will be prepared once a Principal Contractor (herein after referred to as the “Contractor”) has been appointed and will be prepared within the framework set out by this document.

The TMP will apply to traffic management for all construction works carried out in relation to the Project. The term ‘construction’ in the TMP includes all site preparation, enabling works, material delivery, earthworks, excavated material disposal, and all related engineering and construction activities as defined in the planning application (SHDC reference to be confirmed). The TMP will apply throughout the construction and commissioning period and will include the reinstatement of temporary construction areas.

The TMP will cease to apply after completion of the secondary cable alignment reinstatement and demobilisation of the site by the contractor.

The TMP incorporates legislative requirements, current standards and best practice measures, however compliance with this TMP will not absolve the Contractor or subcontractors from compliance with all legislation and bylaws relating to their construction activities.

1.4 Traffic Route to Site

The existing traffic route plan is shown in Figure 1.2 below. The main access to the site is via East Bank Road off the A17, a distance of 5.85 km to the proposed site entry point. The East bank road provides access to several residential properties and extensive areas of farmland.

The A17 carries traffic from Newark-on-Trent past Sleaford towards Kings Lynn to connect the A47/A10 and A149. On approach to East Bank Road Junction, the Cross Keys Bridge has a structural width and height restriction. The width restriction is 12 feet. The arches over the bridge allow HGV’s but no specific height or environmental restriction is placed on the bridge. The maximum allowable height will be clarified by the local authority to enable the transportation of any specialist equipment if required. No abnormal loads are anticipated to be needed however. If HGVs with large loads are required, as stated in Section **Error! Reference source not found.**, a request will be made to the

local authority. If HGVs with abnormal load exceed the width or height restriction at the bridge the Cross Keys Bridge will not be used.

Figure 1.2: Traffic Routes



Source: See Appendix A for full figure

1.5 Site Access

The site is accessed from a secure gate near the east bank of the River Nene close to the East Lighthouse (also known as the Peter Scott Lighthouse).

The gate is accessed from the single lane East Bank road that runs along the east bank of the River Nene to Sutton Bridge. A concrete apron-type single track lane provides vehicular access from the gate to the boundary between Field No. 1 and Field No. 2. The land between the primary and secondary sea defences is used for arable farming.

2 Outline Traffic Management

2.1 Overarching Principles

The following criteria have been used in developing the traffic management plan:

1. Consideration that construction & site traffic do not obstruct/disrupt residential and farm traffic
2. Existing traffic regulations and restrictions are observed

2.2 Points of Contact/Engagement

A notice listing contact details of the DONG Energy and Contractor points of contact for the construction phase will be displayed at the entrance to the construction site. At the time of writing this TMP, the Contractor has not been appointed.

The relevant contact at DONG Energy in respect of this version of the TMP is:

Ian Renshaw - Environmental and Consents Manager
DONG Energy - Environment & Consents UK
Tel. +45 99 51 53 95

Email: IANRE@dongenergy.co.uk

During the construction phase a TMP Co-ordinator (TMPC) will be nominated. The TMPC will have a critical role in ensuring that the TMP is implemented, managed, monitored and reviewed over time. The TMPC will co-ordinate the on-going development and management of the TMP, including further measures, raising awareness, monitoring and review.

The TMP will be the subject of monthly review through the construction works, but may also be reviewed more frequently if a need for further/interim review is identified by the TMPC and/or through site and contractor staff or local community feedback. In practice there will be 'peaks' of traffic at the start and end of works, as the site is mobilised and demobilised. The period in-between will be lightly trafficked, mostly by staff and visitor movements to and from site in light vehicles only.

The works site is remote from any public transport opportunities and it is considered unrealistic to expect staff to access the site using anything aside from private vehicles. The main opportunities for sustainable travel will arise from lift sharing for staff and visitors coming

to site. DONG Energy will encourage and facilitate that among its staff and contractors.

In summary, the duties of the TMPC will be:-

- Acting as a point of contact;
- Encouraging sustainable travel choices for staff, principally lift sharing during the construction phase;
- Monitoring and reviewing the TMP, encouraging staff feedback and managing any improvements to the TMP; and,
- Liaison with the Borough Council, County Council and Parish Council as may be necessary.

2.3 Distribution list

Copies of the final TMP and any subsequent updates will be placed on deposit with the following parties. Any update to the TMP will be communicated to the necessary DONG Energy / construction contractor development staff at the soonest practicable opportunity.

Copies of the final TMP will be kept on site in a communal/welfare area where all staff can access it should they wish to. Hard copies of the most up to date TMP will be provided to and held by the following people:

Nominated TMPC/construction team leads

DONG Energy development team

County Council Highways team

District Council Planning Officer

Sutton Bridge Parish Council

Local Landowner(s)

2.4 Scope of Works

The proposed works involve the installation of two 220kV electricity of sheet piles that cross from the seaward side, through the sea defence embankment and then through the ditch on the landward side of the

sea defence allowing excavation for the installation of two x 220kV export power cables serving the offshore wind farm.

Excavation works are required to support and enable the proposed works. Excavated material is expected to be stored on site in the contractor's site compound but in the event that backfill materials need to be imported, up to 5000m³ of materials may be required. If required, the imported backfill material will be stored on site in the contractor's site compound.

2.5 Anticipated Site Traffic

The expected site establishment and removal traffic movements are listed below. Up to 340 two-way HGV movements (total of 680 movements) are anticipated for the Project covering both site establishment and close down of the Site. These are broken down as follows:

- 6 HGV's with excavator/s, dump truck and
- 4 HGV's with sheet piles
- 2 HGV for small dump truck and compaction plant
- 2 HGV with flood protection materials/equipment/plant
- 4 HGV for placing protection mats for 700m access road to site, mats for the site compound and mats for the access ramps and around the ditch
- 1 HGV for working platform materials
- 2 HGV for site cabin(s)
- 4 HGV's delivering heavy plant for cable related works
- Up to 150 HGV's for delivery of compliant reinstatement material to site²
- Up to 150 HGV's for removal of compliant reinstatement material to site

² It is currently unknown whether the material the defence is made of will be suitable for reuse in its reinstatement. For contingency purposes DONG Energy assume that up to 100% new material will need to be imported to ensure the quality of the reinstatement. . As a worst case, therefore, the volume to be imported would be up to approximately 1,700 m³, which equates to 150 two-way trips (total of 300 journeys) for a truck with 20 m³ capacity. The number of trips would be duplicated if 1,700m³ of non-compliant material had to be removed. A total of up to 300 two way journeys would be generated by this activity therefore. This is considered to be a conservative worst case estimate as it is likely that at least some material will be reused.

The expected daily traffic for site operation is estimated as follows. Again, these are two-way trips:

- Approximately 10 short wheel base vans for construction staff
- Approximately 2 private cars for DONG Energy staff and stakeholders
- Fuel bowser once or twice a week
- Up to 3 HGV's providing daily supplies.

2.6 Parking

Dedicated parking for daily site traffic is to be managed within the site compound. There will be no parking of any vehicles on the farm tracks or on East Bank road leading to the site. HGV movements will be co-ordinated so that queuing does not occur on the A17 or on the East Bank road. Discussions are underway to provide a HGV holding area in a yard just off the East Bank road, where the road narrows near Nene Lodge (approximately halfway between the A17 and the East Bank Lighthouse).

All vehicles will be logged in and out of site and no unauthorised parking will be permitted.

2.7 Road Cleaning

Throughout all phases of the construction there will be the requirement to carry out road sweeping in the immediate vicinity of the construction site. The contractor will enforce measures to avoid the environmental nuisance of the depositing of mud on roads in the immediate vicinity of the construction area. These measures will include but are not limited to:

- Use of road sweeping equipment to clean the site of any mud or debris deposited by site vehicles within the vicinity of the site;
- Adequate sheeting of vehicles carrying waste materials; and
- Measures will be taken to ensure that mud and detritus is not swept into gullies.

Cleaning of roads within the compound and the tracks between East Lighthouse and the site will be carried out daily, and the frequency will

be increased as necessary. Road conditions in the immediate vicinity of the construction site will be monitored consistently throughout the day and swept as necessary. In dry conditions water spraying may also be required at least twice per day.

A drive over inspection of the East Bank road will be carried out once a day and if necessary a road sweeper will be despatched to sweep particular sections.

2.8 Road Condition Survey

Condition surveys have already been carried out for the East Bank road and farm tracks that connect the site from the East Bank Lighthouse. A further set of condition surveys will be carried out following the construction works. That will form the basis for any discussions with regard to road repair due to wear and tear that may be attributable to the works.

2.9 Noise

The increase in noise levels generated by anticipated volume of daily construction traffic is expected to be negligible with minimal impact on local receptors. The following measures will also reduce the level of noise generated by construction traffic.

- HGV speed restriction 30mph on East Bank Road and farm tracks.
- Traffic management to ensure no queuing traffic on surrounding roads.
- No idling policy on site – when not in use vehicles and equipment will be turned off.

2.10 Speed Limit

East Bank Road has a national speed limit. A maximum speed limit of 30mph will be enforced by the Project for all HGV construction traffic using the road.

2.11 Weight Restrictions

There are several weight restrictions along roads leading to the East Bank road, refer to Figure 1.2. Construction traffic and HGVs will be routed accordingly to avoid violating the weight restrictions.

2.12 Review and Audit Procedures

This TMP will be supplemented by DONG Energy's appointed construction contractors prior to the commencement of development.

As stated at in Section 2.2, during the construction phase a TMP co-ordinator (TMPC) will be nominated. The TMPC will have a critical role in ensuring that the TMP is implemented, managed, monitored and reviewed over time.

The TMP will be the subject of monthly review through the construction works, but may also be reviewed more frequently if a need for further/interim review is identified by the TMPC and/or through site and contractor staff feedback.

Compliance with the TMP will also be monitored, with spot checks being carried out by both the TMPC and representatives of DONG Energy.

In summary, the duties of the TMPC will be:-

- Acting as a point of contact;
- Marketing and promotion of the Travel Plan;
- Providing sustainable travel information to site and construction staff;
- Monitoring and reviewing the TMP, encouraging staff feedback and managing any improvements to the TMP; and,
- Liaison with the Borough Council, County Council and Parish Council as may be necessary.

This TMP (or later updated version) will be provided to all potential contractors as part of the contract tender process and all bidders will be required to demonstrate how they will deliver, implement and manage their final TMP for the duration of the construction phase of the project.

DONG Energy will carry out periodic environmental compliance audits through the construction phase of the project. An assessment of compliance with the approved TMP document will be a key part of that compliance assessment.

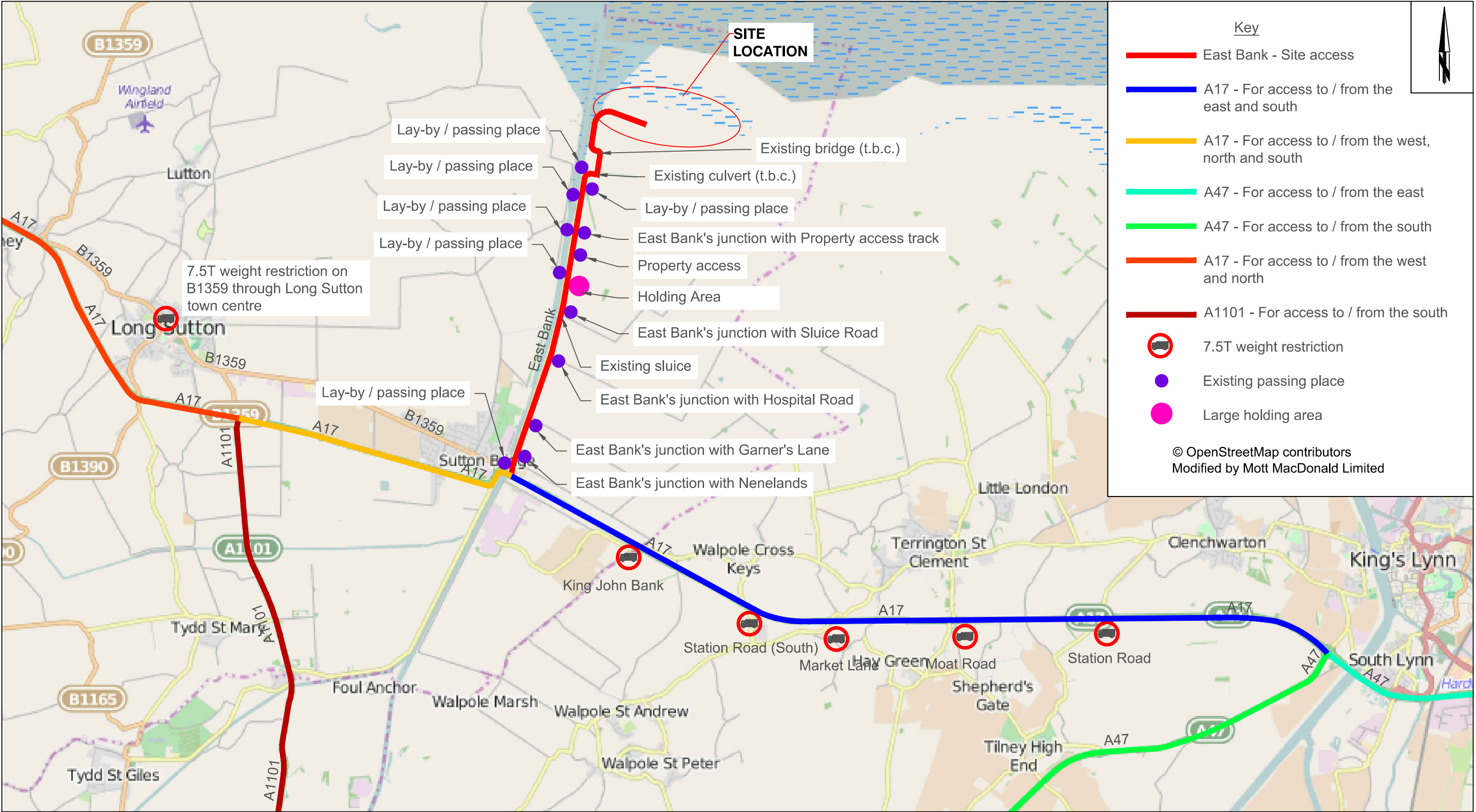
DONG Energy will manage any corrective actions and iterative updates to the TMP documents. The outcome of those audits and future versions of the TMP documents will be made available to the Borough Council on request.

The TMP will be subject to a comprehensive review every six months during the construction phase as a minimum and as frequently as may be required in the intervening period. All measures set out in the TMP will be communicated to site and contractors, including all parties who will access the site to make deliveries, at staff level via a programme of 'toolbox talks' and on site presentations, or other such mechanisms that may be deemed most effective on site in consultation between DONG Energy and their contractor management team.

Appendices

Appendix A. Figure 2_____ 13

Appendix A. Figure 2



© Mott MacDonald
This document is issued for the party which commissioned it and for specific purposes connected with the captioned project only. It should not be relied upon by any other party or used for any other purpose.
We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

 Mott MacDonald House 8-10 Sydenham Road Croydon, CR0 2EE United Kingdom T +44 (0)20 8774 2000 F +44 (0)20 8681 5706 W www.mottmac.com	Client DONG Energy Wind Power 33 Grosvenor Place Belgravia London, SW1X 7HY United Kingdom	Rev	Date	Drawn	Description	Ch'k'd	App'd	Title	Drawn	J C Witard	
		P1	10/15	JCW	For Planning	OD	DA		Checked	O Daffarn	
		P2	11/15	AA	For Planning	OD	DA		Approved	D Agates	
									Scale at A3		
									N.T.S.		
								Drawing Number	Security	Status	Rev
									STD	PRE	P2