The Great Grid Upgrade

Sea Link

Sea Link

Volume 7: Other Documents

Document 7.5.1.2 Outline Construction Traffic Management and Travel Plan – Kent

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Executive Summary

- The purpose of this Outline Construction Traffic Management and Travel Plan (CTMTP), which forms **Application Document 7.5.1.2 Outline CTMTP Kent**, is to set out proposals for the management of construction-related traffic along the local highway network within the vicinity of the Kent Onshore Scheme during the construction period of the Proposed Project, in order to limit any potential disruptions and implications on the overall transport network. It identifies the management of Heavy Goods Vehicles (HGVs), as well as construction staff vehicles.
- This Outline CTMTP has been informed by feedback received from stakeholders as part of the Statutory Consultation. It should be noted that as this is an outline document, certain details will remain to be developed as the Proposed Project progresses into detailed design. The full details of all measures may not be available until after consent for the Proposed Project has been determined and will be provided within the CTMTP as necessary. However, the CTMTP will need to be in accordance with this Outline CTMTP.
- Ex1.1.3 Application Document 7.5.9.2 Outline Public Rights of Way Management Plan Kent (Outline PRoWMP Kent) has also been prepared as a separate document for the Kent Onshore Scheme to identify measures to manage PRoW and mitigate any impacts as a result of the Proposed Project.
- Ex1.1.4 It should also be noted that an equivalent Outline CTMTP has been produced for the Suffolk Onshore Scheme (**Application Document 7.5.1.1 Outline CTMTP Suffolk**).

1. Introduction

1.1 Background and Scope

- The Sea Link Project (hereafter referred to as the 'Proposed Project') is a proposal by National Grid Electricity Transmission plc (hereafter referred to as National Grid) to reinforce the transmission network in the South East and East Anglia. The Proposed Project is required to accommodate additional power flows generated from renewable and low carbon generation, as well as accommodating additional new interconnection with mainland Europe.
- National Grid owns, builds and maintains the electricity transmission network in England and Wales. Under the Electricity Act 1989, National Grid holds a transmission licence under which it is required to develop and maintain an efficient, coordinated, and economic electricity transmission system.
- This would be achieved by reinforcing the network with a High Voltage Direct Current (HVDC) Link between the proposed Friston substation in the Sizewell area of Suffolk and the existing Richborough to Canterbury 400kV overhead line close to Richborough in Kent.
- National Grid is also required, under Section 38 of the Electricity Act 1989, to comply with the provisions of Schedule 9 of the Act. Schedule 9 requires licence holders, in the formulation of proposals to transmit electricity, to:
- Schedule 9(1)(a) '...have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest;' and
- 1.1.6 Schedule 9(1)(b) '...do what [it] reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects'.
- 1.1.7 The purpose of this document is to:
 - Set out a strategy for the management of construction traffic within the vicinity of the Kent Onshore Scheme on the local highway network during the construction period of the works. The purpose of this is to limit potential disruptions and implications on the wider transport network. It identifies the management of freight traffic i.e. Heavy Goods Vehicles (HGVs), as well as staff vehicles. This Outline CTMTP has been informed by consultation with Kent County Council (KCC) as the local highway authority. Further details of the engagement and associated documents are provided as part of Application Document 6.2.3.7 Part 3 Kent Chapter 7 Traffic and Transport.

1.2 The Proposed Project

1.2.1 The Proposed Project would comprise the following elements:

The Suffolk Onshore Scheme

- A connection from the existing transmission network via Friston Substation, including the substation itself. Friston Substation already has development consent as part of other third-party projects. If Friston Substation has already been constructed under another consent, only a connection into the substation would be constructed as part of the Proposed Project.
- A high voltage alternating current (HVAC) underground cable of approximately
 1.9 km in length between the proposed Friston Substation and a proposed converter station (below).
- A 2 GW high voltage direct current (HVDC) converter station (including permanent access from the B1121 and a new bridge over the River Fromus) up to 26 m high plus external equipment (such as lightning protection, safety rails for maintenance works, ventilation equipment, aerials, similar small scale operational plant, or other roof treatment) near Saxmundham.
- A HVDC underground cable connection of approximately 10 km in length between the proposed converter station near Saxmundham, and a Transition Joint Bay (TJB) approximately 900 m inshore from a landfall point (below) where the cable transitions from onshore to offshore technology.
- A landfall on the Suffolk coast (between Aldeburgh and Thorpeness).

The Offshore Scheme

 Approximately 122 km of subsea HVDC cable, running between the Suffolk landfall location (between Aldeburgh and Thorpeness), and the Kent landfall location at Pegwell Bay.

The Kent Onshore Scheme

- A landfall point on the Kent coast at Pegwell Bay.
- A TJB approximately 800 m inshore to transition from offshore HVDC cable to onshore HVDC cable, before continuing underground for approximately 1.7 km to a new converter station (below).
- A 2 GW HVDC converter station (including a new permanent access off the A256), up to 28 m high plus external equipment such as lightning protection, safety rails for maintenance works, ventilation equipment, aerials, and similar small scale operational plant near Minster. A new substation would be located immediately adjacent.
- Removal of approximately 2.2 km of existing HVAC overhead line, and installation of two sections of new HVAC overhead line, together totalling approximately 3.5 km, each connecting from the substation near Minster and the existing Richborough to Canterbury overhead line.

The Proposed Project also includes modifications to sections of existing overhead lines in Suffolk (only if Friston Substation is not built pursuant to another consent) and Kent, diversions of third-party assets, and land drainage from the construction and operational footprint. It also includes opportunities for environmental mitigation and compensation. The construction phase will involve various temporary construction activities including overhead line diversions, use of temporary towers or masts, working areas for construction equipment and machinery, site offices, parking spaces, storage, accesses, bellmouths, and haul roads, as well as watercourse crossings and the diversion of Public Rights of Way (PRoW) and other ancillary operations.

1.3 Objectives

- 1.3.1 The objectives of this Outline CTMTP, which set a framework for the CTMTP, are to:
 - minimise the volume of HGV and staff vehicles associated with the construction phase, as far as reasonably practicable;
 - maximise the safety and efficiency of movements of materials and staff required during the construction phase, as far as reasonably practicable;
 - minimise the restrictions imposed on local PRoW within the Site and ensure efficient management during the construction phase;
 - minimise the impacts on both the local community and visitors to the area who use the road network, as far as reasonably practicable; and
 - set out additional measures to be adhered to by those travelling to and from the Site to reduce the impact of the construction of the Proposed Project.
- This Outline CTMTP has been updated to support the application for development consent following the version prepared to support the statutory consultation stage, and following further consultation with KCC.
- 1.3.3 It is anticipated that these measures would be developed into a CTMTP that would be secured through a suitably worded requirement in the Development Consent Order (DCO).

1.4 Report Structure

- 1.4.1 The remainder of this Outline CTMTP is structured as follows:
 - Section 2 provides details of the site location, surrounding area, and the existing highway network;
 - Section 3 provides details of future baseline conditions during the construction phase;
 - Section 4 sets out relevant planning policy and best practice for the construction phase of the Proposed Project;
 - Section 5 summarises the HGV and staff vehicle movements which are expected to be generated by the Proposed Project across the construction period, including during the peak phase;

- Section 6 provides details of the proposed site accesses for the Proposed Project, as well as routing arrangements and internal site layout considerations including access tracks, compounds, and parking;
- Section 7 summarises the proposed measures to manage the highway network and pedestrian and cycle routes during the construction phase, as well as measures directed at HGVs and staff members, as well as for the management, monitoring, and review of the Outline CTMTP; and
- Section 8 deals with compliance and enforcement of the Outline CTMTP.

2. Existing Conditions

2.1 Study Area

- The following parts of the highway network are situated within the study area as shown on **Application Document 6.4.3.7.1 Traffic and Transport Study Area in Kent**:
 - A299 Hengist Way (between the Monkton and Sevenscore Roundabouts);
 - A299 Hengist Way (east of the Sevenscore Roundabout);
 - A256 Richborough Way (between the Sevenscore and Ebbsfleet Roundabouts)
 - A256 Ramsgate Road (south of the Ebbsfleet Roundabout);
 - Sandwich Road (between the Ebbsfleet Roundabout and Foads Lane);
 - Ebbsfleet Lane; and
 - Cottington Link Road, Cottington Road and Ebbsfleet Lane North.
- 2.1.2 The following junctions are situated within the study area and have been reviewed within **Application Document 6.2.3.7 Part 3 Kent Chapter 7 Traffic and Transport**:
 - A299/A253/Willetts Hill (Monkton) Roundabout;
 - A299/B2190/Tothill Street (Minster) Roundabout;
 - A299/Canterbury Road West (Cliffsend) Roundabout;
 - A299/A256/Cottington Link Road (Sevenscore) Roundabout;
 - A256/Ramsgate Road/Jutes Lane (Ebbsfleet) Roundabout; and
 - Sandwich Road/Ebbsfleet Lane Signalised junction.
- In addition to footways alongside the highway network, the following walking and cycling routes, identified by local PRoW reference numbers where appropriate, are situated within the wider study area. These routes have been reviewed within **Application**Document 6.2.3.7 Part 3 Kent Chapter 7 Traffic and Transport:
 - PRoW TE37 (public footpath);
 - PRoW TE39 (public footpath);
 - PRoW TE26 (public footpath);
 - PRoW EE42 (public footpath);
 - PRoW TE35 (restricted byway);
 - PRoW TE36 (restricted byway);
 - PRoW TR33 (public footpath);
 - PRoW TR15 (public footpath);
 - King Charles III England Coast Path;

- National Cycle Network (NCN) Route 15/Cantii Way;
- Contra Trail;
- Viking Coastal Trail; and
- Saxon Shore Way.

2.2 Accessing the Site

Highway Network

- The study area (see Application Document 6.4.3.7.1 Traffic and Transport Study Area in Kent) includes key areas of the surrounding highway network. The A256 runs in a north-south alignment between Dover in the south (where it joins the A2) and Cliffsend in the north (where it joins the A299 at the Sevenscore Roundabout). As it passes through the study area, the A256 is a dual carriageway with two lanes in each direction and is subject to the national speed limit, reducing to 50 mph south of the Ebbsfleet Roundabout (where it connects with Sandwich Road and Jutes Lane). Access to Richborough sub-station is taken from a roundabout on the A256, approximately 400 m south of the Ebbsfleet Roundabout.
- The A299 runs in an east-west alignment between Faversham in the west, where it joins the M2, and Ramsgate in the east. Within the study area, the A299 is a dual carriageway with two lanes in each direction and is subject to the national speed limit.
- Sandwich Road is a single carriageway road that connects the A256 at Ebbsfleet Roundabout in the south and the A299 at the Lord of the Manor Roundabout in the north and passes through Cliffsend. The speed limit varies along its length but is generally 40 mph with a section of national speed limit adjacent to the Pegwell Bay Country Park and a section of 30 mph through Cliffsend. There is also a restriction on vehicles over 7.5 t (except for access) along the length of Sandwich Road.
- Approximately 200 m north of the Ebbsfleet Roundabout is Ebbsfleet Lane with access taken from Sandwich Road via a signalised junction. It is a no-through road which provides access to residential properties and the Stonelees Golf Centre. It is a single carriageway road and has a 7.5 t vehicle weight restriction (except for access).
- Ebbsfleet Lane North and Brook Lane also pass through the study area; these are nothrough roads providing local access to some residential properties and farmland. Ebbsfleet Lane North forms the southern arm of the crossroad junction with Thorne Hill, Cottington Road and Grinsell Hill. It is a single carriageway road with a 7.5 t vehicle weight restriction (except for access). Approximately 500 m south of the junction, there is an at-grade railway crossing, immediately south of which is Brook Lane.
- Jutes Lane can be accessed via the Ebbsfleet Roundabout and runs parallel to the A256 for approximately 800 m before reaching Ebbsfleet Farmhouse. It is a single carriageway road with a 40 mph speed limit and provides access to the Weatherlees Hill Wastewater Treatment Works, as well as a couple of local businesses and a small independent secondary school.
- Additional parts of the local highway network within the northern part of the study area include the A299 between the Cliffsend Roundabout and the Monkton Roundabout (including the Minster Roundabout), as well as Cottington Link Road and Cottington Road, Tothill Street, High Street and Marsh Farm Road. The A299 is a dual carriageway

subject to the national speed limit between these two roundabouts with two lanes in each direction. Tothill Street forms the southern arm of the Minster Roundabout and runs south before becoming High Street and then Marsh Farm Road, which passes over a railway level crossing. Cottington Link Road connects with the A256 and A299 (at Sevenscore Roundabout) at its northern end, and with Cottington Road at its southern end.

Additional parts of the local highway network within the southern part of the study area include the A256 between the Ebbsfleet Roundabout and the A256/A257/Ash Road roundabout, as well as the A257, Ash Road, Richborough Road and Whitehouse Drove. The A256 is initially a two-lane dual carriageway to the south of the Ebbsfleet Roundabout, becoming a single carriageway with a single lane in each direction as this approaches the A257. Ash Road runs to the east of the A256/A257/Ash Road roundabout and provides access to Richborough Road. Richborough Road provides access to Whitehouse Drove, which runs northwards towards the study area.

Sustainable Access

Public Transport

- Bus services can be accessed from the bus stops a short distance to the south of the Ebbsfleet Roundabout (within the study area). These serve bus route 45/45A which runs between Ramsgate and Sandwich approximately once per hour Monday Saturday. The first and last bus services towards Sandwich arrive at around 7am and 6:30pm, whilst the first and last services towards Ramsgate arrive at around 7:30am and 6pm.
- 2.2.10 The closest railway station to the Kent Onshore Scheme is Thanet Parkway railway station which opened in July 2023 and is located on the western periphery of Cliffsend approximately 1.4 km northeast of the proposed main site access (K-BM09) on the A256 Richborough Way. It is located between Minster and Ramsgate stations and is served by both mainline and high-speed trains, with several services running to/from London per hour, as well as hourly services to/from Ramsgate and Margate. The station includes a car park, pick-up/drop-off area, cycle storage and bus stops with a forecourt. There is limited walking/cycling infrastructure to accommodate pedestrians and cyclists between the station and the Order Limits.
- In addition to the above, Minster railway station is located approximately 2 km northwest of the A256 Richborough Way, however there is limited walking/cycling infrastructure to accommodate pedestrians and cyclists between the station and the Order Limits (e.g. Ebbsfleet Lane North) and the overall route is approximately 3-4 km. Minster station is typically served by one train per hour to Ramsgate and one train per hour to London Victoria (via Maidstone East). During the peak hours, there are additional services to London Charing Cross (via Tonbridge).
- Lastly, Sandwich railway station is located approximately 4.5 km south of the study area and can be accessed via walking or cycling along the King Charles III England Coast Path or by using bus route 45/45A. The station is typically served by one train per hour to London St Pancras International and one train per hour to Ramsgate, with additional services to London Charing Cross (via Tonbridge).

Walking and Cycling

- 2.2.13 There are many PRoW that pass through or within close proximity to the Order Limits as follows:
 - TE26 public footpath (approx. 3.3 km in length) that runs along the northern bank of the River Stour;
 - TE32 public footpath (approx. 1.9 km in length) that runs between Minster and TE26;
 - TE35 restricted byway (approx. 400 m in length) that runs between Marsh Farm and TE26 (situated to the west of TE36);
 - TE36 restricted byway (approx. 400 m in length) that runs between Marsh Farm and TE26 (situated to the east of TE35);
 - TE37 public footpath (approx. 2.9 km in length) that follows the Minster to Ramsgate rail line;
 - TE39 public footpath (approx. 1 km in length) that runs along Brooks Lane and across a field to Ebbsfleet Lane;
 - TE40 public footpath (approx. 900 m in length) that runs between Minster and TE37:
 - TR11 public footpath (approx. 200 m in length) that runs between Foads Lane and Cliffs End Road;
 - TR15 public footpath (approx. 1.2 km in length) that runs between Sandwich Road and Pegwell Road;
 - TR33- public footpath (approx. 300 m in length) that runs between Sandwich Road and the edge of Old Ramsgate Hovercraft Port;
 - TR32 public footpath (approx. 1.5 km in length) that runs between Cottington Road and Canterbury Road West to the east of the A259, passing over both a railway and the A299; and
 - EE42 public footpath (approx. 7.3 km in length) that runs along the southern bank of the River Stour. This also forms part of the long-distance walking route, known as Saxon Shore Way.
- The King Charles III England Coast Path is a long-distance footpath running between Camber in East Sussex and Ramsgate in Kent, forming part of the longest managed coastal path in the world. It follows the coastline in the proximity of the study area (noting there are some areas outside of the study area where the path may head slightly inland due to natural changes along the coast or to navigate around private land and other obstacles).
- 2.2.15 NCN Route 15 runs along the coastline between Sandwich and Whitstable. In the proximity of the study area, it is a traffic-free route running alongside the A256 to the south of Ebbsfleet Roundabout and parallel to Sandwich Road to the north of the Ebbsfleet Roundabout.
- 2.2.16 Other recreational/promoted routes include:

- Contra Trail a short-distance route between Ramsgate and Pegwell Bay. In the proximity of the study area, it follows a circular route around Pegwell Bay Country Park.
- Viking Coastal Trail a 50 km circular route on the Isle of Thanet passing along Cottington Road to the east of the A256 in proximity of the study area.
- Saxon Shore Way a long-distance footpath between Gravesend and Hastings. In the proximity of the study area, it follows the River Stour.
- Cantii Way a long-distance cycle route that operates as a loop across East Kent.
 In the vicinity of the study area, the route passes east-west through Minster and meets a coastal section of the route at Pegwell Bay. This route is shared within NCN Route 15 within the Order Limits.
- In addition to the above, an existing local pedestrian/cycle route commences at the northern end of Jutes Lane and runs northwards to the west of (and parallel with) the A256.
- There are no formal equestrian facilities (i.e. bridleways) within, or in the vicinity of the study area.

3. Future Highway Network

3.1 Future Network Changes

- During the construction phase, which is expected to be between 2026-2031, several improvements may have been implemented across the surrounding highway network within or in close proximity to the Site as a result other highway schemes and committed developments.
- Potential future network changes as a result of highway schemes/committed developments in the surrounding area are considered within **Application Document 6.2.3.13 Part 3 Kent Chapter 13 Kent Onshore Scheme Inter-Project Cumulative Effects**. There is also the potential for the A28 North Thanet Link to be delivered during the construction phase of the Kent Onshore Scheme, which will improve connectivity and resilience within the road network of Thanet. At the time of writing, the scheme is subject to design review and funding. Therefore, the A28 North Thanet Link has not been included as part of the future baseline, given that an application for planning consent has yet to be submitted.
- During the construction phase, there are not expected to be any further changes to the surrounding highway network, as a result of other projects or schemes, within or in close proximity to the Kent Onshore Scheme that require consideration.

3.2 Cumulative Developments

As above, cumulative schemes have been considered and assessed within Application Document 6.2.3.13 Part 3 Kent Chapter 13 Kent Onshore Scheme Inter-Project Cumulative Effects based on Application Document 6.4.3.13.1 Kent Onshore Scheme Short List Developments, which includes more than 25 proposed developments.

4. Best Practice and Policy

4.1 Introduction

4.1.1 This section provides an overview of the best practice guidance and planning policy that is considered to be relevant to the Outline CTMTP.

4.2 Best Practice

Construction Logistics and Community Safety (CLOCS 2022)

- The Constructions Logistics and Community Safety (CLOCS) 2022 guidance draws upon evolving best practice, standards, policies and codes of practice, providing a standard which planning authorities, developers, and contractors can implement and providing a coherent set of guidelines which can be adhered to, with the primary goals of achieving:
 - zero collisions between construction vehicles and the community;
 - improved air quality and reduced emissions;
 - fewer vehicle journeys; and
 - reduced reputational risk.

Outline Code of Construction Practice

The purpose of this document is to set out control and management measures that will be in place during construction of the Proposed Project if granted consent. It is designed to support the assessment of effects in the ES and has been developed to support the Environmental Impact Assessment (EIA).

4.3 National Policy

Overarching National Policy Statement for Energy (NPS EN-1)

The Overarching National Planning Statement (NPS) for Energy (EN-1) was most recently reviewed and updated in January 2024 and provides the basis for decisions regarding nationally significant energy infrastructure. Section 5.14 outlines the planning policy for traffic and transport, including guidance on undertaking relevant parts of the EIA. The most relevant paragraphs for this purpose are set out within **Application Document 6.2.3.7 Part 3 Kent Chapter 7 Traffic and Transport**.

National Planning Policy Framework (NPPF, 2024)

The Government's National Planning Policy Framework (NPPF) as revised in December 2024 sets out the Government's planning policies for England. It promotes the use of sustainable transport throughout the UK, safe road design, and the efficient and sustainable delivery of goods and supplies. The most relevant paragraphs in the context of transport are set out within Application Document 6.2.3.7 Part 3 Kent Chapter 7 Traffic and Transport.

4.4 Local Planning Policy

- The Kent Onshore Scheme (refer to **Application Document 2.2.3 Kent Location Plan**) lies within the jurisdiction of KCC. County planning policy which is relevant to this Outline CTMTP is as follows:
 - Local Transport Plan 4: Delivering Growth without Gridlock (2016-2031); and
 - Freight Action Plan Kent (2017).
- 4.4.2 Additional local planning policy documents relevant to traffic and transport matters are as follows:
 - Thanet Local Plan (2020);
 - Dover District Local Development Framework Core Strategy (2010);
 - Thanet District Transport Strategy (2015-2031); and
 - Dover Transport Strategy (2017).
- Further details of the above are set out within **Application Document 6.2.3.7 Part 3 Kent Chapter 7 Traffic and Transport**.

5. Construction Movements

5.1 Introduction

This section provides a summary of the forecast HGV and staff vehicle movements estimated during the construction phase of the Proposed Project within Kent, based on the proposed indicative construction programme which is included in **Appendix A**.

5.2 Construction Programme

- The main construction phase for the Proposed Project is currently predicted to be five years between 2026 and 2031, with the construction peak (in terms of total annual forecast construction traffic movements) expected to be in 2030 for the Kent Onshore Scheme. Construction vehicle movements towards the end of (and beyond) 2031 will be largely limited to demobilisation and reinstatement works which will require fewer vehicles.
- The assessment within **Application Document 6.2.3.7 Part 3 Kent Chapter 7 Traffic and Transport** is based on the shortest expected programme for the main construction phase (excluding the removal of construction compounds and reinstatement at the end of the programme) to provide a reasonable worst-case assessment.

5.3 Vehicle Types and Plant

It is expected that most construction vehicles accessing the Site will fall into the 'normal' size category, defined as a vehicle not classed as an abnormal load (i.e. cars, transit vans and HGVs). Plant and machinery are expected to be sourced locally where possible and will be delivered to the Site either by being individually driven (larger units) or by plant haulage. A summary of the vehicle types and plant which will serve the Proposed Project during the construction phase is set out below.

Construction of converter station and substation

- personnel transport vehicles;
- welfare vehicles;
- traffic Management vehicles;
- tipper lorries;
- fuel tankers:
- articulated lorries;
- concrete mixer lorries;
- medium low loaders;
- excavators;
- tele Handlers;

- piling Rigs;
- dumper trucks;
- small cranes;
- medium cranes;
- large cranes; and
- abnormal Indivisible Load (AIL) Transformer delivery specialist low loader.

Construction of HVDC cable route works

- personnel transport vehicles;
- welfare vehicles;
- traffic Management vehicles;
- tipper lorries;
- fuel tankers;
- CBS/Concrete mixers;
- articulated lorries;
- medium excavators;
- small excavators;
- dumper trucks;
- medium low loaders;
- horizontal Directional Drills (HDD);
- tractor trailers;
- lorry mounted cranes;
- AIL Cable drum delivery vehicles;
- AIL Cable drum installation side facing trailers; and
- AIL Cable drum installation rear facing trailers.

Construction of overhead line and associated works

- personnel transport vehicles;
- welfare vehicles;
- traffic Management vehicles;
- tipper lorries;
- fuel tankers;
- articulated lorries;
- excavators;

- tele handlers;
- piling rigs;
- · dumper trucks;
- large cranes;
- · concrete mixer lorries; and
- medium low loaders.

5.4 Construction Vehicle Movements

Overall Daily Peak

Table 5.1 below shows the daily peak in terms of total construction vehicle movements across all accesses (combined) on the busiest day, based on a weekday profile. Whilst the peak construction year in terms of total (annual) movements is expected to be 2030 for the Kent Onshore Scheme, the daily peak (busiest day) in terms of construction vehicle movements across all access points combined is expected to be in 2026. The daily peak is expected to occur on a single day, with lower construction vehicle movements across the remainder of the programme.

Table 5.1 Forecast peak daily construction vehicle movements (all accesses, weekday profile, 2026)

Time	me Staff		LGV	S	HGV	S	Total	vehicle	es
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Total
07:00-08:00	81	0	6	5	0	0	87	5	92
08:00-09:00	0	0	5	6	14	14	19	20	39
09:00-10:00	0	0	6	5	13	13	19	18	37
10:00-11:00	0	0	5	6	12	12	17	18	35
11:00-12:00	0	0	6	5	12	12	18	17	35
12:00-13:00	0	0	5	6	13	13	18	19	37
13:00-14:00	0	0	6	5	12	12	18	17	35
14:00-15:00	0	0	5	6	12	12	17	18	35
15:00-16:00	0	0	6	5	10	10	16	15	31
16:00-17:00	0	0	5	6	7	7	12	13	25
17:00-18:00	0	0	5	5	3	3	8	8	16
18:00-19:00	0	81	5	5	0	0	5	86	91
Total	81	81	65	65	108	108	254	254	508

- As shown in Table 5.1 there will be a daily peak of 254 vehicles (508 movements) including 81 staff vehicles (based on 121 construction workers), 65 Light Goods Vehicles (LGVs) and 108 HGVs associated with the Proposed Project. Of these, a total of 101 vehicles are expected to use the main site access on the A256 (K-BM02) with 82 vehicles using Ebbsfleet Lane (K-BM01), 15 vehicles using Ebbsfleet Lane North (K-BM06) and 56 vehicles using Sandwich Road (K-BM07).
- As previously outlined above, individual access peaks are expected to occur on different days across the construction programme and these have been considered.

Individual Access Peaks

Based on the current construction programme, the daily construction peak at the Ebbsfleet Lane access (K-BM01) is expected to occur in 2026 and is shown below in Table 5.2 based on a weekday profile.

Table 5.2 Forecast peak daily construction vehicle movements (K-BM01, weekday profile, 2026)

Time	Staff		LGVs	5	HGV	HGVs		Total vehicles		
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Total	
07:00-08:00	36	0	2	1	0	0	38	1	39	
08:00-09:00	0	0	2	2	5	5	7	7	14	
09:00-10:00	0	0	2	2	4	4	6	6	12	
10:00-11:00	0	0	2	2	4	4	6	6	12	
11:00-12:00	0	0	2	2	4	4	6	6	12	
12:00-13:00	0	0	2	2	4	4	6	6	12	
13:00-14:00	0	0	2	2	4	4	6	6	12	
14:00-15:00	0	0	2	2	4	4	6	6	12	
15:00-16:00	0	0	2	2	4	4	6	6	12	
16:00-17:00	0	0	2	2	2	2	4	4	8	
17:00-18:00	0	0	2	2	1	1	3	3	6	
18:00-19:00	0	36	1	2	0	0	1	38	39	
Total	36	36	23	23	36	36	95	95	190	

Based on the construction programme, the daily construction vehicle peak at the A256 access (K-BM02) is expected to take place in 2028 and is shown below in Table 5.3 based on a weekday profile. This also represents the peak period in terms of HGV activity at this access.

Table 5.3 Forecast peak daily construction vehicle movements (K-BM02, weekday profile, 2028)

Time	Staff		LGVs	i	HGVs		Total	vehicle	S
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Total
07:00-08:00	81	0	5	4	0	0	86	4	90
08:00-09:00	0	0	5	5	13	13	18	18	36
09:00-10:00	0	0	4	5	12	12	16	17	33
10:00-11:00	0	0	5	4	12	12	17	16	33
11:00-12:00	0	0	5	5	11	11	16	16	32
12:00-13:00	0	0	4	5	11	11	15	16	31
13:00-14:00	0	0	5	4	11	11	16	15	31
14:00-15:00	0	0	5	5	11	11	16	16	32
15:00-16:00	0	0	4	5	9	9	13	14	27
16:00-17:00	0	0	5	4	7	7	12	11	23
17:00-18:00	0	0	4	5	3	3	7	8	15
18:00-19:00	0	81	4	4	0	0	4	85	89
Total	81	81	55	55	100	100	236	236	472

Based on the current construction programme, the daily construction vehicle peak at the Ebbsfleet Lane North access (K-BM06) is expected to occur in 2026 and is shown below in Table 5.4 based on a weekday profile.

Table 5.4 Forecast peak daily construction vehicle movements (K-BM06, weekday profile, 2026)

Time	Staff	1	LGVs	5	HGV	S	Total	vehicle	s
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Total
07:00-08:00	15	0	1	0	0	0	16	0	16
08:00-09:00	0	0	1	1	1	0	2	1	3
09:00-10:00	0	0	1	1	0	1	1	2	3
10:00-11:00	0	0	0	1	1	0	1	1	2
11:00-12:00	0	0	1	0	0	1	1	1	2
12:00-13:00	0	0	1	1	1	0	2	1	3
13:00-14:00	0	0	1	1	0	1	1	2	3
14:00-15:00	0	0	0	1	1	0	1	1	2
15:00-16:00	0	0	1	0	0	1	1	1	2

Time	Time Staff		LGVs	LGVs		HGVs		Total vehicles		
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Total	
16:00-17:00	0	0	1	1	0	0	1	1	2	
17:00-18:00	0	0	1	1	0	0	1	1	2	
18:00-19:00	0	15	0	1	0	0	0	16	16	
Total	15	15	9	9	4	4	28	28	56	

Based on the current construction programme, the daily construction vehicle peak at the Sandwich Road access (K-BM07) is expected to occur in 2026 and is shown below in Table 5.5 based on a weekday profile.

Table 5.5 Forecast peak daily construction vehicle movements (K-BM07, weekday profile, 2026)

Time	e Staff		LGVs	3	HGV	HGVs Tota		I vehicles	
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Total
07:00-08:00	14	0	1	0	0	0	15	0	15
08:00-09:00	0	0	1	1	4	4	5	5	10
09:00-10:00	0	0	1	1	4	4	5	5	10
10:00-11:00	0	0	0	1	4	4	4	5	9
11:00-12:00	0	0	1	0	4	4	5	4	9
12:00-13:00	0	0	1	1	4	4	5	5	10
13:00-14:00	0	0	1	1	4	4	5	5	10
14:00-15:00	0	0	0	1	3	3	3	4	7
15:00-16:00	0	0	1	0	3	3	4	3	7
16:00-17:00	0	0	1	1	2	2	3	3	6
17:00-18:00	0	0	1	1	1	1	2	2	4
18:00-19:00	0	14	0	1	0	0	0	15	15
Total	14	14	9	9	33	33	56	56	112

For the purposes of the assessment within **Application Document 6.2.3.7 Part 3 Kent Chapter 7 Traffic and Transport**, the worst-case development-related traffic flows have been considered based on when and where the highest construction vehicle numbers are expected to occur across the network throughout the construction programme.

Construction Worker Peak

Based on the construction programme, there is expected to be a daily peak of 241 construction workers (equating to 161 staff vehicles) in 2030, which is shown below in Table 5.6 based on a weekday profile. This includes construction workers associated with the main site access on the A256 (K-BM02), as well as a few workers associated with the Jutes Lane access (K-BM03) at this time.

Table 5.6 Forecast peak daily construction worker vehicle movements (K-BM02 and K-BM03, weekday profile, 2030)

Time	Staff		LGVs	5	HGV	S	Total	vehicle	:S
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Total
07:00-08:00	161	0	4	3	0	0	165	3	168
08:00-09:00	0	0	3	4	4	4	7	8	15
09:00-10:00	0	0	3	3	4	4	7	7	14
10:00-11:00	0	0	4	3	4	4	8	7	15
11:00-12:00	0	0	3	4	4	4	7	8	15
12:00-13:00	0	0	3	3	3	3	6	6	12
13:00-14:00	0	0	4	3	3	3	7	6	13
14:00-15:00	0	0	3	4	3	3	6	7	13
15:00-16:00	0	0	3	3	3	3	6	6	12
16:00-17:00	0	0	4	3	2	2	6	5	11
17:00-18:00	0	0	3	4	1	1	4	5	9
18:00-19:00	0	161	3	3	0	0	3	164	167
Total	161	161	40	40	31	31	232	232	464

Variation in Activity across the Construction Programme

The construction vehicle numbers presented above are based on the busiest days of the construction programme (in terms of total construction vehicles) whilst also considering daily (localised) peaks at the four main access points. It is expected that construction works will be carried out over a five-year period (circa 60 months) and Plate 5.1 below shows the forecast levels of total construction vehicle movements (arrivals + departures) across the construction programme.

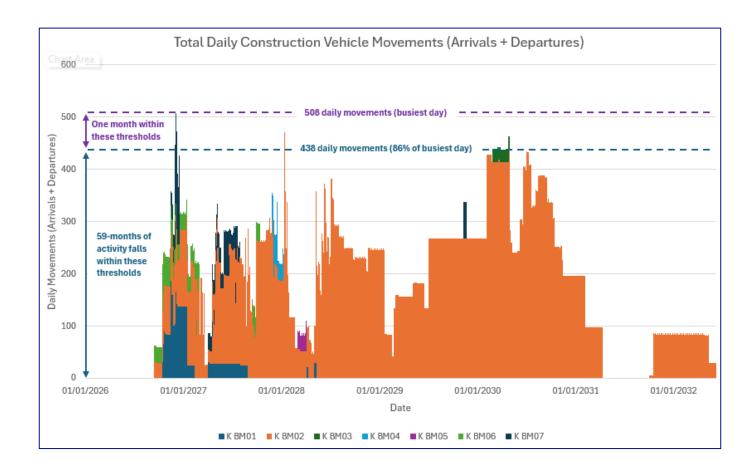


Plate 5.1 Overall Construction Vehicle Profile

The above shows that there will be a daily peak of 254 vehicles (508 movements) on the single busiest day of the construction programme, which has previously been identified in Table 5.1. Throughout the majority of the programme (59 of the 60 months) there will be no more than 219 vehicles (438 movements) which represents 86% of the level of activity experienced on the busiest day.

Forecast Trip Distribution

The forecast trip distribution in terms of trips entering/exiting the study area based on their expected points of origin when arriving to the Proposed Project (and conversely points of destination when departing) is set out in Table 5.7.

Table 5.7 Forecast trip distribution

Point of entry/exit	Staff	LGVs	HGVs
A299 (West)	60%	80%	80%
A299 (East)	15%	10%	10%
A256 (South)	25%	10%	10%
Total	100%	100%	100%

- The above distribution was informed by feedback received from KCC Highways and subsequently agreed following the KCC Highways Scoping Meeting in April 2023.
- The staff distribution has been based on 2021 Census data (TS060 Industry dataset) to identify the number of existing residents living within a 60-minute catchment of the site who also work in the construction industry and could theoretically be employed by the Proposed Project. In view of the COVID-19 pandemic, this dataset has only been used to identify the districts where construction workers live rather than estimating travel patterns. A simple gravity model has been developed to inform the trip distribution based on their proximity to the Proposed Project. Further details of the methodology and calculations are held in **Application Document 6.2.3.7 Part 3 Kent Chapter 7 Traffic and Transport**.
- In terms of the HGV and LGV trip distributions, the majority of trips are expected to enter/exit the study area via the A299 (west) as this part of the highway network ultimately serves the majority of Kent and routes to/from London and further afield. The routes via the A299 (east) and A256 (south) are more limited in terms of the areas which they serve and include local areas such as Ramsgate to the east and Dover to the south. The HGV routing plan is held in **Application Document 6.4.3.7.2 Heavy Goods Vehicle (HGV) Routing Plan**.
- In terms of trip distribution, the majority of construction vehicles are expected to use the proposed main site access on the A256 (K-BM02), with trips also assigned to Ebbsfleet Lane (K-BM01), Ebbsfleet Lane North (K-BM06) and Sandwich Road (K-BM07) based on the trip generations presented previously. A very small proportion of construction vehicles (circa 1% in total, and less than 1% HGVs) will also use Jutes Lane, Marsh Farm Road and Whitehouse Drove (see Section 6.2 for further details).
- The proposed main site access (K-BM02) is situated on the northbound side of the A256 dual carriageway, requiring all vehicles (except those transporting AILs see Section 6.5) to turn left in/left out of the access. Therefore, the majority of arrivals from the north would require vehicles to U-turn at the Ebbsfleet Roundabout to the south. In addition, the majority of departures to the south would require vehicles to U-turn at the Sevenscore Roundabout to the north.
- The adopted distribution of construction vehicle trips across the highway network are illustrated on the traffic flow diagrams held in **Application Document 6.3.3.7.G Appendix 3.7.G Traffic Flow Diagrams**.

5.5 Abnormal Vehicles

- The following abnormal vehicles are expected during the construction phase of the Proposed Project to transport AlLs:
 - a 74.72 m length vehicle to deliver the transformer to the site access on the A256 (arrival only, as the vehicle would be dissembled prior to egress); and
 - several 25.44 m length vehicles to transport cable drums to/from site via the A256 and Ebbsfleet Lane North access points (arrivals and departures).
- Both types of abnormal vehicle have been tracked at the K-BM01 and K-BM02 access junctions using swept path analysis and the outputs have been provided separately as part of the DCO (Application Document 2.13.2 Design and Layout Drawing Kent). Potential constraints to AIL access along the proposed routes are identified in Table 6.3.

- A specialised haulage service will be employed to allow these components to be transported with the necessary escort, permits and traffic management, with the applicant consulting the relevant highways authorities to ensure the correct permits are obtained. The police will also be given advanced notification of these journeys under the Road Vehicle Authorisation of Special Types Order 2003.
- The abnormal vehicles will be required to follow the abnormal vehicle routing strategy (see **Application Document 6.4.3.7.3 Abnormal Load Routing Plan**) when travelling to/from the Site. A number of highway improvements will be required to accommodate the abnormal vehicle movements, including some of those outlined in Section 7.2 Further details of these abnormal loads are set out within Section 6.3 of this Outline CTMTP.

6. Site Access and Vehicle Routing

6.1 Vehicle Routing

- Construction traffic is ultimately expected to arrive at the Site from the A299 to the north and the A256 to the south as shown by Application Document 6.4.1.4.8 Kent Onshore Scheme Traffic Routes during Construction and Operation, as well as Application Document 6.4.3.7.2 Heavy Goods Vehicle (HGV) Routing Plan and Application Document 6.4.3.7.3 Abnormal Load Routing Plan.
- 6.1.2 Construction vehicles (LGVs and HGVs) will use the following types of routes when travelling to/from the Site.
- Public highway routes (primary) access routes: These are generally considered to provide suitable access routes to the Site for the duration of the Proposed Project. The majority will be A roads, most notably the A299 and A256, however other lower category routes are expected to be used where the size/geometry of these roads is considered to be suitable.
- Mobilisation and trenchless works routes: These are access routes for HGVs or other construction vehicles/plant to access the construction corridor to construct site access junctions, the temporary haul road (and to decommission the same), and to access areas that are between watercourse crossings where advanced works may be required from both sides of a watercourse prior to installing a haul road crossing. These routes are also expected to provide access for light vehicles for the duration of the construction works. The routes are generally minor roads (predominantly rural lanes), and many are subject to the constraints typically associated with constrained highway geometry and weight/height restrictions. Therefore, appropriately sized vehicles and controls in terms of timings would be used to reach the site.
- Permanent access routes: Permanent access routes (taking access from the highway network) would be established to allow for the future maintenance of the substation, the converter station, and the buried HVDC cable. To facilitate future replacement of the transformer, if needed, permanent access routes to the substation and converter station would need to account for the abnormal transformer and pick-up truck access. The permanent access road to the substation and converter station via the A256 and the main site access (K-BM02) will be the only permanent access for the Kent Onshore Scheme.
- Permanent field access routes: Access to the cable routes would be needed and would be in the form of permanent field access routes, whereby an agreement with the relevant landowner would be established to allow access to the former construction swathe in each field that the cable passes through, following existing tracks and field entrances where possible. All field access routes have been designed to accommodate a 16.5 m articulated lorry, in the event that these vehicles are required for more significant repairs along the cable alignment during the operational period.
- 6.1.7 AlL route for transformer and cable drum deliveries: Routes identified as AlL transformer routes may also be used as AlL cable delivery routes due to the less onerous vehicular swept paths. Due to the anticipated swept paths, both the transformer AlL vehicle and cable drum delivery AlL vehicle will need to travel southbound on the

northbound carriageway of the A256, and as such it will be necessary to close the road for the duration of these manoeuvres. This would require a Temporary Traffic Regulation Order/Notice from the Highway Authority.

6.1.8 **Cable drum AIL access routes**: Routes marked as Cable Drum AIL Access Only indicate those routes to be used by the cable drum delivery vehicle (not the transformer AIL). This may be due to differing site entry requirements, or the geometry of the route. Smaller construction vehicles would also be expected to use the Cable Drum AIL access routes.

6.2 Construction Access

Proposed Access Arrangements

- The Kent Onshore Scheme will be predominantly accessed via the following four access points during the construction phase (as shown on **Application Document 6.4.3.7.2 Heavy Goods Vehicle (HGV) Routing Plan**):
 - A256 Northbound Carriageway (K-BM02): Main access during both construction (for mobilisation/trenchless work and the haul road to the west of the A256 to access/construct Minster Converter Station and Minster Substation) and operation (permanent access/field access) – to be used throughout the construction programme accommodating circa 91% of all construction vehicle trips (circa 5 years, peak year in terms of total annual movements expected in 2030, with a daily peak in 2028);
 - Ebbsfleet Lane (K-BM01): Access during both construction (for the haul road, compound, storage of materials and HDD location to the east of the A256) and operation (permanent field access) to be used for approximately 10 months during construction (prior to 2030 peak) accommodating circa 4% of all construction vehicle trips;
 - Ebbsfleet Lane North (K-BM06): Secondary access during construction for vegetation clearance works, utility diversion works for the Over Head Line (OHL), survey works, and limited mobilisation movements associated with the construction of the A256 access – to be used for approximately six months during construction (prior to the 2030 peak) accommodating circa 2% of all construction vehicle trips; and
 - Sandwich Road (K-BM07): Secondary access during construction to access a compound and facilitate foreshore works (via the existing Pegwell Road access track) for compound installation, soil stripping, haul road installation, compound stone and surfacing, and drainage, as well as for duct installation and cable installation to be used for approximately six months during construction (prior to 2030 peak) accommodating circa 2% of all construction vehicle trips.
- In addition to the above, a very small proportion of construction vehicles (circa 1% in total, and less than 1% HGVs) will use the following three access points:
 - Jutes Lane (K-BM03): To be used for utility connection works.
 - Marsh Farm Road (K-BM04): To be used to undertake temporary diversion works to the OHL, including constructing a temporary structure, realigning conductors and building scaffold protection towers. Vegetation clearance and survey works would also be undertaken at this access.

Whitehouse Drove (K-BM05): To be used to access the bridge location to enable the
construction of the southern abutments, this will require laying track way and
constructing water course crossings (culverts). Vegetation clearance and survey
works would also be undertaken at this access.

Minster Converter Station and Minster Substation Access

The Proposed Project requires one converter station in Kent (Minster Converter Station), as well as a substation (Minster Substation). The converter station and substation will be located to the west of the A256 and will be accessed for construction via the A256 Richborough Way (and K-BM02).

Access Considerations

- Factors considered for all routes have included overall distance of access route, geometry, anticipated traffic management measures, vegetation clearance, and other general constraints.
- The construction routes include two instances requiring the traversing of railway level crossings:
 - the existing Marsh Farm Road crossing located circa 150 m west of Minster railway station including to access the OHL works to the north of the River Stour (this will be lightly used – see above); and
 - the existing farm access track crossing located circa 900m southeast of Minster railway station, which will be used to access the OHL works to west of the railway line and to the south of the River Stour (this will be used more frequently).
- The level crossing to the southeast of Minster railway station is likely to requirement improvement and surveys will be carried out to determine the level of improvement works required. This activity will involve ongoing engagement with Network Rail.

Access Layouts

- The proposed access junctions have been designed in accordance with the Design Manual for Roads and Bridges (DMRB), specifically Volume 6, Section 2, CD123 (Geometric Design of Priority Junctions). The latest revision was published by Highways England (now National Highways) in 2019. The access points are expected to be managed using a combination of temporary and permanent traffic management systems.
- The construction makeup of these access points would likely consist of typical highway construction materials or reinforced concrete slabs poured in-situ. In either case, further details would need to be determined by the contractor at a later design stage and agreed with the local highway authority.
- Bellmouth layouts have been prepared for K-BM01 and K-BM02 which are provided within **Application Document 2.13.2 Design and Layout Drawings Kent**.

Visibility Splays

The DMRB Volume 6, Section 1, CD 109 (Highway Link Design) identifies desirable minimum Stopping Sight Distances (SSDs) based on the design speed of the carriageway. The latest revision was published by Highways England (now National Highways) in 2020. The desirable minimum speed values are adopted within DMRB CD 123 (Geometric design of at-grade priority and signal-controlled junctions) in order to determine the visibility requirements (the 'y' distance) at priority junctions, measured along the edge of the major road carriageway from the centreline of the minor arm at the junction. These requirements are shown in Table 6.1 below.

Table 6.1 Desirable minimum SSDs based on design speed

Design speed (kph)	SSD ('Y' distance)	
50	70 m	
60	90 m	
70	120 m	
85	160 m	
100	215 m	
120	295 m	

- The minimum distance from which the visibility splays are measured at simple priority junctions is at a 2.4 m setback (the 'x' distance) from the give-way line.
- The 'Desirable Minimum' SSDs in DMRB are based on a driver perception/reaction time of two seconds and a deceleration rate of 0.25 g (2.45 m/s2). The 'Absolute Minimum' (one step below Desirable Minimum) SSD values use the same reaction time and a deceleration rate of 0.375 g (3.68 m/s2).
- The visibility splays are shown on the bellmouth drawings provided within **Application Document 2.13.2 Design and Layout Drawings Kent**.

6.3 Abnormal Vehicles

- Constraints to access have been identified using a combination of aerial imagery, street view tools and National Highways' website portal ESDAL (Electronic Service Delivery for Abnormal Loads), which is located at https://gov.uk/esdal-abnormal-load-notification (as accessed 04/07/2024).
- The ESDAL tool reported five structures that would be crossed by the Abnormal Indivisible Load (AIL) access routes. These structures are listed in Table 6.2 below.

Table 6.2 Constraints identified by ESDAL

Internal Ref	Name	Structure Type	Coordinates
A1	Chalk Farm Accommodation	Overbridge	636196, 164582
A2	Ramsgate Tunnel West Portal	Overbridge – Tunnel Portal	636220, 164333
A3	Ramsgate Tunnel	Underbridge – Tunnel Deck	636655, 164155
A4	Ramsgate Tunnel East Portal	Overbridge – Tunnel Portal	636913, 164029
A5	Western Undercliff	Under and Over Bridge	637286, 164097

- Further review with the asset owners, including KCC, will be required at the next stage of the design to determine whether these structures are suitable for the required Proposed Project AIL loading, and whether further assessment or strengthening is required.
- Along the proposed AIL vehicle routes there are several access constraints. The location and extents of these constraints are shown in Table 6.3 below. It is expected that the contractor will review all access constraints in more detail at a later stage and carry out any additional assessments where necessary. Alternative routes will also be used if necessary.

Table 6.3 Locations of access constraints for proposed AIL routes

Ref.	Location	Constraint
AC1	Monkton Roundabout	Tight geometry – street furniture removal may be required
AC2	A299 Roundabout	Transformer delivery - AILs only access from west
AC3	A299/Canterbury Road West Roundabout	Tight geometry – street furniture removal may be required
AC4	A299/A256 Roundabout	Tight geometry – street furniture removal may be required
AC5	Ramsgate Road Roundabout	Tight geometry – signpost and bollard removal for AILs
AC6	Ebbsfleet Lane/Ramsgate Road junction	Tight geometry - street furniture removal including traffic signals, bollards (illuminated and non-illuminated) and pedestrian guardrail
AC7	Lord of the Manor Roundabout	Tight geometry - street furniture removal including signals and signs may be required

Ref.	Location	Constraint
AC8	Royal Harbour Approach/A255 Roundabout	Tight geometry – street furniture removal including gate may be required
AC9	Royal Harbour Approach Tunnel	Clearances will need to be confirmed/agreed once final load dimensions and vehicles are confirmed.
AC10	Port of Ramsgate	Clearance of route to be agreed with Port including removal of temporary concrete and stone barriers

6.3.5 Once AIL movements have been finalised, a Special Order request should be submitted at least 10 weeks before the scheduled move. Five days clear notice should also be given to the Police and to Road and Bridge Authorities.

6.4 Vehicle Swept Paths

- As part of the determination of access routes and access junction designs, swept paths have been carried out for the following three types of construction vehicle and one emergency vehicle:
 - Cable Drum Delivery Vehicle (25.44 m in length);
 - Design Articulated Vehicle (16.48 m in length);
 - Transformer AlL AL50 Girder 12 Axial (74.72 m in length); and
 - Dennis Sabre Fire Tender (7.7 m in length).
- The swept paths (which have been provided separately as part of the DCO) provide indicative road and access dimensions required to safely transport vehicles and equipment throughout the project site and the surrounding area and demonstrate that all construction vehicles will be able to access the site without overrunning any kerb lines.
- In case of emergency, it would be necessary for an emergency vehicle (Dennis Sabre Fire Tender) to access the project site from any given access. Each access has been designed to accommodate this vehicle for both entry and exit.

6.5 Construction Compounds and Access Tracks

- As described in Application Document 6.2.1.4 Part 1 Introduction Chapter 4
 Description of the Proposed Project and shown indicatively on Application
 Document 2.14.2 Indicative General Arrangement Plans Kent, there will be six construction compounds in total.
 - One compound will be located by Pegwell Bay to provide foreshore access during the construction phase and serve as storage areas for post-installation and remediation works (to be accessed via K-BM07 on Sandwich Road);
 - Two compounds will be located west of St Augustine's golf course to serve HDD activities, both for landfall and for crossing the A256 (the eastern compound will be accessed via K-BM01 on Ebbsfleet Lane and the western compound will be accessed via K-BM06 on Ebbsfleet Lane North); and

- Three Minster construction compounds (all to be accessed via K-BM02 on the A256):
 - An eastern compound to serve for both cable and converter/substation works;
 and
 - Two western compounds to provide flexibility for OHL works as well as converter/substation works.
- At this stage of the design, it is anticipated that the construction haul road would be 7m wide. The haul road is expected to be constructed of unbound stone, potentially with a geogrid reinforcement or ground stabilisation (subject to detailed design and agreement) for ease of trafficking by heavier vehicles together with wheel washing facilities at main compounds if required and regular road sweeping to reduce mud and debris brought onto the public highway.

6.6 Vehicle and Cycle Parking

- During the construction phase of the works, a typical converter and substation works construction compound would accommodate a total of 150 car parking bays, 14 minibus bays, and 28 LGV parking bays in addition to a laydown area for HGVs and an AlL parking bay. A typical OHL and cable works construction compound would accommodate approximately 60 car parking bays and 12 minibus bays in addition to two laydown areas for LGVs and HGVs. It should be noted that the exact sizes/layouts of these compounds will be designed to accommodate the specific needs of the Proposed Project at each compound location. Sufficient space will be allocated within the compound layouts to accommodate cycle parking for construction staff.
- Construction workers arriving on site will be transported around the works site via minibus where travel distance exceeds a reasonable walking distance. The usage of the car parks will be monitored and the potential to introduce additional parking will be explored during peak construction, if required, to ensure that parking does not occur outside of the works site.

6.7 Permanent Access

The new permanent access point for Minster Converter Station and Minster Substation will be via K-BM02 off the A256. The permanent access road will be finished with a bound surface material. AlL access will be very infrequent during the operational phase and will only be required in the event of a transformer unit needing replacement. The access arrangement is provided within **Application Document 2.13.2 Design and Layout Drawings – Kent** which has been designed to accommodate this AlL via a contraflow arrangement when a temporary road closure would be implemented.

7. Management and Mitigation

7.1 Introduction

This section of the Outline CTMTP outlines the construction traffic management measures that will be implemented in support of the Proposed Project, to reduce any adverse impacts on the surrounding networks during the construction phase. This includes travel planning measures which will be directed at construction staff.

7.2 Highway Network

Highway Safety

- A review of the most recently available Personal Injury Accident (PIA) data obtained from KCC for the highway network within the agreed study area is set out within **Application Document 6.2.3.7 Part 3 Kent Chapter 7 Traffic and Transport**.
- The review shows that there are several locations where more than five PIAs were recorded within the five-year period, which may suggest that these locations are more sensitive to an increase in traffic from a highway safety perspective. Further details of the collisions at these locations are set out within **Application Document 6.3.3.7.A Appendix 3.7.A Transport Assessment Note**. There are also several locations which appear to have a good safety record with two or fewer PIAs within the five-year period, which suggests that these locations are less sensitive to an increase in traffic from a highway safety perspective. In terms of PIAs involving large vehicles, no locations recorded more than two PIAs involving such vehicles within the five-year period, suggesting that there are not any current issues regarding large vehicle road safety that need to be considered.
- The residual assessment within **Application Document 6.2.3.7 Part 3 Kent Chapter 7 Traffic and Transport** demonstrates that no significant effects have been identified as a result of the Proposed Project on Road Safety or Hazardous/Large Loads with the proposed mitigation in place.
- 7.2.4 With reference to road safety measures identified as GG11 within **Application Document 7.5.3.1 CEMP Appendix A Outline Code of Construction Practice**, appropriate site layout and housekeeping measures will be implemented by the contractor(s) at all construction sites. This will include, but not be limited to:
 - managing staff/vehicles entering or leaving site, especially at the beginning and end
 of the working day; and
 - managing potential off-site contractor and visitor parking.
- 7.2.5 With reference to mitigation, the measure GG12 identified within **Application Document 7.5.3.1 CEMP Appendix A Outline Code of Construction Practice**,
 requires vehicles to be correctly maintained and operated in accordance with the
 manufacturer's recommendations and in a responsible manner. All plant and vehicles
 will be required to switch off their engines when not in use and when it is safe to do so.

In addition, plant and vehicles will conform to relevant applicable standards for the vehicle type. These requirements will be the responsibility of the contractor.

Mitigation measure TT01 identified within Application Document 7.5.3.1 CEMP Appendix A Outline Code of Construction Practice, relates to the measures set out within this Outline CTMTP to reduce route and journey mileage to and from, as well as around site, and minimise nuisance to the residents, businesses and the wider community caused by parking, vehicle movements and access restrictions. This also relates to providing suitable control for the means of access and egress to the public highway and sets out measures for the maintenance and upkeep of the public highway. This Outline CTMTP also identifies access for emergency vehicles and sets out measures to reduce safety risks through construction vehicle and driver quality standards and measures to manage abnormal loads.

Highway Improvements

- 7.2.7 The following highway improvements will be required to accommodate construction vehicles travelling to/from the works site:
 - Ebbsfleet Lane: vegetation clearance and temporary parking restrictions.
 - Cottington Lane: vegetation clearance and widening of lane.
 - New access point from A256: proposed to be a left-in/left-out junction with acceleration and deceleration lanes.
 - Jutes Lane: the existing track and cycleway that follows the west side of the A256 will be locally realigned at the proposed access (K-BM02).
 - Ebbsfleet Lane North will be used for utility diversions, survey works, vegetation clearance and mobilisation for the construction of the A256 access (a turning head will also be provided north of the K-BM02).
 - Whitehouse Drove: Existing farm track to be upgraded to provide a temporary haul road access to the area of the site south of the River Stour.
- The Order Limits include the areas required to accommodate the above improvements where required. The proposed extent of any carriageway works to be delivered in support of the Proposed Project are to be agreed with KCC Highways.
- In addition, localised highway improvement works may be required for some of the construction vehicle routes. This may include localised widening and temporary removal of street furniture as previously identified in Table 6.3. It is expected that the contractor will review all access constraints in more detail at a later stage and carry out any additional assessments where necessary.

Localised Traffic Management Measures

- Temporary Traffic Management (TTM) measures will be required to accommodate the construction of each of the access points, which could entail temporary traffic signals or stop/go signage, lane closures and diversions, and restrictions to pedestrian access and car parking. In addition, traffic management will be required through Richborough where routes are narrow and there are two railway level crossings.
- 7.2.11 Where practicable, National Grid will inform the relevant Local Authority and other relevant stakeholders (e.g. Royal Mail) of any road closures, diversions or access

arrangements that are considered to impact their operations at the earliest possible opportunity.

Stage 1 Road Safety Audit

- A Stage 1 Road Safety Audit (RSA) will be carried out as part of the technical approval process for the following where required:
 - preliminary design of the proposed site access points and crossovers for the Proposed Project; and
 - preliminary design of any proposed highway improvements should these be required, including those identified above.
- The preliminary design of the above will subsequently be revised (where necessary) in line with the Designer's Response to the Stage 1 RSA.
- The highway improvements will be secured by the DCO, and further details of the works required to deliver the improvements will be provided in the CTMTP.

7.3 Pedestrian and Cycle Routes

- A total of two temporary PRoW closures/diversions are proposed during the construction phase as a result of the Proposed Project as follows:
 - Cottington Lane is to be used during construction for mobilisation and staff
 movements. It is therefore proposed to temporarily (and locally) divert PRoW TE37
 along the northern grass verge of Cottington lane, with site fencing to be installed
 along the diverted route that will sit parallel to Cottington Lane before this connects
 back into the existing route to the west. This diversion is to be in place for the full
 construction phase of the project, to avoid any interactions between PRoW users
 and construction vehicles. The existing route will be reinstated after construction.
 - PRoW TE39 interacts with the proposed haul road, HVDC cable, and permanent
 access route. It is proposed to temporarily (and locally) divert PRoW TE39 within the
 adjacent field during construction. Site fencing and gates will be established at the
 haul road crossing point during construction, with monitoring when this is in use.
 This diversion is to be in place for the full construction phase of the project. The
 existing route will be reinstated after construction (although this will be locally
 realigned at the permanent access route).
- Further details of the anticipated interactions between the construction works/routes and existing PRoW, including any proposed closures/diversions and how these will be managed during the construction phase, are set out within **Application Document 7.5.9.2 Outline PRoWMP Kent**.
- The King Charles III England Coast Path, NCN Route 15/Cantii Way, the Contra Trail and Viking Coastal Trail will all be managed during trenchless works. There will be a managed vehicle crossing point of the King Charles III England Coast Path to access works at the foreshore, which will only be used by LGVs, with fewer than five LGVs per day. Otherwise no additional crossing points or diversions are expected during the construction phase for these walking and cycling routes.
- 7.3.4 Saxon Shore Way will be managed as follows:

- The HVAC OHL route will interact with Saxon Shore Way at three locations. Safety scaffolding and netting will be installed for the installation and restringing of OHL conductors, allowing the route to remain open. This provision will remain in place for the entire construction phase of the project. A short-term closure (one to five days) will be required to install netting, with stop/go boards and staff on site managing the public.
- The temporary bridge structure will span across the River Stour interacting with Saxon Shore Way at one location. Sufficient clearance will be provided between the bridge soffit and the route with safety scaffolding and netting to be installed to ensure the route remains open and provides access for river maintenance. This provision will remain in place for the full construction phase of the project. A shortterm closure (one to five days) or local diversion (up to four weeks) around the works (within the Order Limits) will be required on Saxon Shore Way for installation of these safety measures.
- In terms of the River Stour itself, the public right of navigation will be temporarily stopped up/closed (short term closure of one to five days) whilst the bridge is lifted into place and secured. The bridge will be designed so that once in place the river remains navigable.
- As previously stated, the existing pedestrian/cycle route which commences at the northern end of Jutes Lane and runs northwards to the west of (and parallel with) the A256 will be temporarily diverted during the construction phase (during cable trenching works only) and then locally diverted (realigned) to cross the permanent access road during the operational phase. Access to the pedestrian/cycle route will retained all times with the proposed diversions in place. Further details relating to this route are shown on Application Document 2.7.2 Access, Rights of Way and Public Rights of Navigation Plans Kent.

7.4 Management Measures and Controls

Introduction

- The following measures will be implemented to manage the potential impacts of HGV deliveries to the works site. Further details are set out under separate headings below:
 - working hours restrictions;
 - road condition surveys;
 - delivery management system;
 - traffic management and monitoring;
 - defining HGV routes;
 - HGV timing restrictions;
 - banksmen and site management;
 - communication strategy;
 - appropriate site access arrangements;
 - necessary escort, permits, and traffic management for AILs; and

measures to minimise/safely manage interactions with pedestrians and cyclists.

Working Hours

- The proposed construction core working hours (unless otherwise approved by the relevant Local Planning Authority) for all terrestrial works in Kent and Suffolk are:
 - Monday Friday: 0700 to 1900; and
 - Saturday, Sundays and Bank Holidays: 0700 to 1700.
- The core working hours exclude start up and close down activities up to one hour either side of the core working hours. These activities include staff arrival, briefings, checking plant, loading equipment, compound general maintenance activities, debriefing, storing equipment and plant, and staff leaving site.
- 7.4.4 Exceptions to the above core working hours include, but are not limited to:
 - trenchless crossing operations including beneath highways, railway lines, woodlands, or watercourses;
 - the installation and removal of conductors, pilot wires and associated protective netting across highways, railway lines, or watercourses;
 - the jointing of underground cables (save for the cutting of underground cables);
 - the continuation of operations commenced during the core working hours to a point where they can safely be paused;
 - delivery to the transmission works of abnormal loads and any highway works requested by the highway authority to be undertaken outside the core working hours;
 - the testing or commissioning of any electrical plant installed as part of the authorised development;
 - the completion of works delayed or held up by severe weather conditions which disrupted or interrupted normal construction activities;
 - activity necessary in the instance of an emergency where there is a risk to persons or property;
 - marine works (all works below the mean high water springs line);
 - security monitoring;
 - intrusive and non-intrusive surveys;
 - mechanical and electrical installation works within buildings once erected and enclosed;
 - any highway works requested by the highway authority to be undertaken on a Saturday or Sunday or outside the core working hours; and
 - activity necessary in the instance of an emergency where there is a risk to persons or property.
- Percussive pilling works would be limited to Monday Friday: 0700 to 1900 and 0700 to 1700 on Saturdays and may not occur on Bank Holidays, unless otherwise approved by the local planning authority.

Subject to the exceptions listed in paragraph 4.6.9 above, Heavy Goods Vehicles (HGV) deliveries would be limited to Monday – Friday: 0700 to 1900 and 0700 to 1700 on Saturdays and may not occur on Bank Holidays, unless otherwise approved by the relevant highway authority.

Road Condition Surveys

Road condition surveys will be carried out pre-construction, during construction, and post-construction, to identify any defects that arise to highways assets/verges during the construction phase of the Proposed Project for re-instatement. At this stage, it is proposed to carry out road condition surveys in the vicinity of the proposed access points on the A256, Ebbsfleet Lane, Ebbsfleet Lane North and Sandwich Road only. Further discussions will be held with KCC Highways to identify any additional locations where road condition surveys may be required within the Order Limits.

Delivery Management System

A Delivery Management System (DMS) will be implemented to control bookings of HGV deliveries from the start of the construction period. This will be used to regulate the arrival times of HGVs via timed delivery slots, as well as to monitor compliance of HGV routings which will be communicated to all suppliers in advance. In addition, measures will be in place to ensure no queuing back from accesses occurs onto the surrounding road network.

Traffic Management and Monitoring

- A Traffic Management and Monitoring System (TMMS) will be developed to provide details of the technologies and other means employed to monitor HGV movements to/from the site e.g. Global Positioning System (GPS) and Automatic Number Plate Recognition (ANPR). This will enable the Applicant to monitor the following:
 - Compliance with the HGV routes;
 - Compliance with the number of HGV limits on Sundays/Public Holidays in terms of number of deliveries arriving and departing at any one time and over the course of the day (see further below); and
 - Compliance with the timing restrictions.
- 7.4.10 In addition, the TMMS will record all LGVs which enter and exit the Site, allowing all vehicles to be monitored. Should a complaint be made in relation to inappropriate routes being used, then this will be cross-referenced with the TMMS to allow appropriate actions to then be taken.
- 7.4.11 With reference to mitigation measure TT02 identified within the **Application Document**7.5.3.1 CEMP Appendix A Outline Code of Construction Practice, the contractor(s) will implement a monitoring and reporting system to check compliance with the measures set out within this Outline CTMTP. This will include the need for a GPS tracking system to be fitted to HGVs to check for compliance with authorised construction routes. The contractor(s) will also be expected to monitor the number of construction vehicles between the site and the strategic road network. Deviations from the authorised routes or changes to traffic levels that are higher than the assumptions set out within this Outline CTMTP will require discussion with the relevant highways authorities to determine whether additional mitigation measures are needed.

The precise form of TMMS will be determined following the appointment of a contractor and will include a summary of the contractual requirements which those visiting the Site will have to adhere to, along with the measures to be taken for non-compliance.

HGV Routes

HGVs will be required to comply with the proposed routing strategy. Routing strategies for both HGVs and abnormal vehicles will be defined. In the case of exceptional circumstances where the proposed routing to the Site is compromised due to an incident or road closure for example, then it is considered acceptable for HGVs to be redirected via an alternative route or to deliver outside of the established scheduling, if required.

HGV Timing Restrictions

- To reduce the potential impact of HGV deliveries, the arrival and departure times will be managed to minimise the number of HGVs travelling to the Site during the network peak hours for the local highway network; identified within **Application Document 6.2.3.7**Part 3 Kent Chapter 7 Traffic and Transport.
- 7.4.15 The timing restrictions, considered likely to be implemented at this stage are:
 - Limiting HGV arrivals or departures on a weekday between 8am-9am and 5pm-6pm;
 - No HGV arrivals or departures outside of the core hours, unless required for certain exceptions; and
 - Limiting HGV arrivals or departures on Sundays and public holidays (there will be a maximum of 30 HGVs permitted per day on Sundays and public holidays).
- The restrictions imposed on deliveries by HGVs will be set out within the DMS and TMMS produced by the primary contractor.

Banksmen and Site Management

- In addition to other measures, suitably qualified banksmen will be positioned at the proposed site accesses when these are in use by construction vehicles, and at internal crossing points when required, to allow vehicle arrivals and departures, as well as internal vehicle movements to be safely controlled during the construction period. This includes the internal access routes and any road/rail/pedestrian/cycle crossing points within the Site. Appropriate visibility will be maintained between construction vehicles and other users at the crossing points (through hedgerow clearance for example), and advanced signage will be provided to warn users of the potential presence of construction vehicles and crossing points.
- Construction vehicle movements will be controlled by gates at any crossing points, with the default position that construction routes would be gated off to provide priority to other users. Further details are contained within **Application Document 6.3.1.4.A Appendix 1.4.A Crossings Schedule**.

Communication Strategy

A Communication Strategy will be developed by the Applicant in consultation with the primary contractor to ensure that the measures contained within the CTMTP are

communicated to the workforce. This will include an information pack setting out the contractual requirements which will be provided to the contractors. Furthermore, regular meetings will be held with contractors to discuss HGV management and to address any issues associated with travel to/from the Site as well as to relay information including any restrictions and requirements which should be followed.

Site Access Arrangements

- The site access layouts have been designed to accommodate HGVs as shown by the vehicle swept paths provided within **Application Document 2.13.2 Design and Layout Drawings Kent**. A hardstanding surface will be provided at the proposed accesses to ensure the weight of the HGVs can be accommodated. In addition, wheel washing facilities may be utilised (if required) at the main compound (i.e. associated with K-BM02) to minimise mud from being trafficked onto the highway. Road sweepers will also be used to remove mud/debris from the local highway network.
- Vegetation clearance will be carried out at the proposed site accesses, where required, to achieve appropriate levels of visibility, subject to agreement with the local highway authority

Abnormal Vehicles

As set out previously, a specialised haulage service will be employed to allow AILs to be transported, with the necessary escort, permits, and traffic management in place. The relevant contractor will consult with the relevant highway authority to ensure the correct permits are obtained. The timing of AIL movements will also be agreed with the relevant highway authority when the permits are obtained. The police will be given advanced notification under the Road Vehicle Authorisation of Special Types Order 2003, which will be submitted at least ten weeks before the scheduled move.

Pedestrians and Cyclists

- Application Document 7.5.9.2 Outline PRoWMP Kent sets out the management and mitigation measures to be implemented during all phases of the Proposed Project to minimise the traffic impacts on pedestrians and cyclists. All pedestrian and cycle routes will be maintained, managed as appropriate, and remain unobstructed at all times when in use, to ensure the continued safe passage of the public including when using the PRoW through the Site and at crossing points. The measures will be secured through a requirement of the DCO, primarily through Application Document 7.5.9.2 Outline PRoWMP Kent, as well as via the Application Document 7.5.3.1 CEMP Appendix A Outline Code of Construction Practice.
- 7.4.24 With reference to mitigation measure TT03, identified within **Application Document**7.5.3.1 CEMP Appendix A Outline Code of Construction Practice, all designated PRoW have been identified along with any potential temporary closures applied for/detailed in the application for development consent. All designated PRoW crossing the working area will be managed with access only closed for short periods while construction activities occur. Any required temporary diversions will be clearly marked at both ends with signage explaining the diversion, the duration of the diversion, and a contact number for any concerns.

7.5 Staff Measures and Controls

- There is expected to be a daily peak of 241 construction workers associated with the Kent Onshore Scheme (which is a maximum daily figure). All construction workers will travel to/from the Site at the start and end of the working day. An average vehicle occupancy factor of 1.5 construction workers per vehicle has been adopted for the site-based construction staff, which is considered to be reasonable, yet robust, given that all staff have been assumed to travel by vehicle (rather than other modes) and that a formal Car Share Scheme will be implemented to match potential car sharers.
- Further to the Communication Strategy identified previously, staff movements will be managed through the implementation of the following measures:
 - limited car parking;
 - · car sharing;
 - walking and cycling;
 - public transport information;
 - staff arrival and departure times; and
 - minibus service transferring staff across the Site.

Limited Car Parking

The proposed car parking spaces will be situated within the construction compounds. The capacity of the car parks will be limited to accommodate the expected parking demand of construction staff during the peak period (expected to be 161 vehicles based on 241 staff, to be accommodated across three compounds), with additional parking available for minibuses. Construction workers will not be permitted to park outside of the designated parking areas. The usage of the car parks will be monitored and the potential to introduce additional parking will be explored during peak construction if required.

Car Sharing

To reduce the potential impact of vehicles associated with local staff during the construction period, the Applicant will implement measures to encourage car sharing to reduce the number of vehicles travelling to/from the Site each day. The benefits of car sharing will be promoted to encourage multi-occupancy vehicle use, such as reduced fuel costs and ease of parking with guaranteed spaces for those car-sharing within the compounds. A Car Share Scheme will be implemented to match potential sharers and to help staff identify any colleagues who could potentially be collected along their route to/from the Site, and the limited car parking and will encourage staff to travel together.

Walking and Cycling

- 7.5.5 Walking and cycling will be promoted as sustainable modes to construction staff, where this is a viable transport mode for all or part of their journey. The following measures are proposed to promote walking and cycling:
 - Construction staff will be made aware of sustainable travel information including maps of walking and cycling routes and links with public transport;

- The Transport Co-ordinator will promote the health benefits of active travel modes to construction staff;
- Suitable changing facilities will be provided on-site within the construction compounds;
- A communal toolbox including a puncture repair kit, cycle tools, oil etc. will be made available to construction staff if required; and
- Secure cycle storage will be provided within the construction compounds.

Public Transport Information

Public transport information including routes and destinations, service frequencies and the locations of nearest bus stops shall be provided in an information pack prepared electronically and sent by email to construction staff prior to them starting work at the Site. This information would also be displayed on travel information boards. The Transport Co-ordinator will be responsible for keeping this information up to date.

Staff Arrivals and Departures

- 7.5.7 As set out previously, the proposed working hours of staff are set out below:
 - Monday to Friday (7am-7pm); and
 - Saturday, Sundays and Bank Holidays (7am-5pm).
- The network peak hours for the local highway network have been established from the traffic surveys carried out in support of the ES. Construction workers will be expected to arrive in the hour before the start of their shift and to depart in the hour after the end of their shift. Based on the above, all staff are expected to avoid the network peak hours. The proposed working hours are therefore designed to minimise additional trips at the busiest times in terms of trips on the surrounding highway network.
- Further to the above, it is expected that there will be up to 50% fewer LGV and staff vehicle movements on Sundays and Bank Holidays than the number of movements anticipated to be experienced on weekdays and Saturdays.
- To minimise additional vehicle trips on local roads, construction staff will be requested to use the main routes to get to the Site, in particular via the A299 and the A256.

Internal Minibus Service

- Construction workers will be transported around the Site by minibus (where travel distance exceeds a reasonable walking distance) to reduce vehicle trips on the surrounding highway network i.e. when travelling between access points, as well as along the internal haul road. The minibuses will be stored and accessed from within the construction compounds.
- There is also the opportunity for the minibus service to transfer construction workers to and from Thanet Parkway railway station, which is located on the western periphery of Cliffsend approximately 1.4 km northeast of the proposed main site access (K-BM02) on the A256 Richborough Way. This would both encourage and increase the viability of rail travel amongst construction workers, reducing vehicle trips on the surrounding highway network.

7.6 Management Structure

- The overall management and implementation of this Outline CTMTP and the CTMTP will be the responsibility of the Applicant.
- Overall roles and responsibilities are presented in Table 7.1. These roles may be delivered by multiple people across the wider project team who are designated with that specific responsibility e.g. Environmental Clerk of Works.
- The roles and responsibilities set out in Table 7.1 are consistent with those identified within **Application Document 7.5.9.2 Outline PRoWMP Kent** to allow both PRoW and street works to be co-ordinated where necessary, including any programmes of closures which may involve users of both the highway and PRoW networks, to reduce any impacts on those using these networks.

Table 7.1 Roles and Responsibilities

Role	Organisation	Responsibilities
Environmental Manager	Contractor	The Environmental Manager will be responsible for the maintenance of all environmental plans and registers, including monitoring that the environmental measures and mitigation are implemented on site and as recorded within the CTMTP. They will be the main point of contact for all environmental matters on the Proposed Project. They will also develop good working relationships with external stakeholders such as the relevant highways officers.
Environmental Clerk of Works	National Grid	The Environmental Clerk of Works will monitor the works so that they proceed in accordance with the relevant environmental DCO requirements and adhere to the required mitigation measures. The Environmental Clerk of Works will be supported by appropriate technical specialist advisors depending on the location and potential impacts.
Permits and Consents Manager	Contractor	The Permits and Consents Manager will work with the Environmental Manager to draft and submit permits and consents on behalf of the Proposed Project, track progress, provide updates and communicate approvals.
Works Supervisor	Contractor	The Works Supervisor will be responsible for delivering the site works in accordance with the requirements of the CTMTP and implementing good environmental practices required by the Environmental Manager. They will be responsible for managing operatives, plant and their areas of work in accordance with the principles of good environmental practice.

Role	Organisation	Responsibilities
Technical Specialist Advisors	Contractor / National Grid	These advisors will be made available on an on- demand basis to respond to questions raised on their specialism through the works. The advisors will have the relevant experience to supervise the relevant aspects of the works, to include but not limited to arboriculturists, land contamination specialists, soil specialists, ecologists and archaeologists.

- A Transport Co-ordinator will be appointed by the Applicant to implement, manage, and develop the CTMTP at the appropriate time/stage. The CTMTP will include the following information:
 - Specifics of any carriageway widening, or improvement works if required;
 - Specifics of the design of TTM measures;
 - Details of the works to accesses, to accommodate the swept paths and to include provision of visibility splays;
 - Further details in respect of the design and management measures required to accommodate AILs: and
 - Information on sanctions for breaches of the routing strategies.
- 7.6.5 The Transport Co-ordinator will take responsibility for implementing the CTMTP and will:
 - Implement and monitor the CTMTP to identify successful measures and areas for improvement;
 - Promote the CTMTP to all staff and contractors travelling to and from the Site to ensure compliance with its requirements;
 - Liaise as appropriate with local transport and traffic groups, local planning authorities and the local highway authority;
 - Monitor data relating to HGV routes, timing of HGV arrivals and departures and compliance with the DMS/TMMS;
 - Manage the Car Share Scheme; and
 - Discuss any issues with relevant parties and identify any amendments to the CTMTP (including measures) to ensure compliance is maintained.

7.7 Monitoring and Review

Heavy Goods Vehicles

- The CTMTP will be monitored and revised to ensure that contractors are complying with the document. This process will be led by the Transport Co-ordinator.
- The Transport Co-ordinator will monitor data relating to HGV routes, timing of HGV arrivals and departures and compliance with the DMS/TMMS. The results of the data monitoring will be reported to identify any issues which need to be resolved and any

additional measures which should be implemented to prevent these from arising again. The reports will be shared with the Applicant, local authority and the highway authority (i.e. KCC Highways).

Staff Vehicles

- A Car Share Scheme will be implemented and managed by the Transport Co-ordinator, to match potential car sharers and to help staff identify any colleagues who could potentially be collected along their route to/from the Site. The car share database will be available to staff that have signed up, to allow them to identify their own potential matches. Car sharing staff will be given preferential parking provision as an incentive to reduce single occupancy (and therefore overall) car travel to the construction compounds.
- Construction staff will be directed to available parking bays upon arrival to assist them to park in a timely manner. Given the working patterns identified, it is expected that the car parks will be managed between 6am-9am and 5pm-8pm, to cover the periods when the majority of staff are expected to arrive and depart. Appropriate signage will be provided to clearly identify the entry and exit points to the car parks. It should be noted that the usage of the car parks will be monitored and that the potential to introduce additional parking will be explored during peak construction if required.

Additional Monitoring

- The following monitoring will also be carried out during the construction phase of the Proposed Project, and secured as part of the CTMTP:
 - Construction vehicles (HGVs) will be monitored to ensure HGV drivers are adhering to the proposed routing strategy; and
 - Road safety will be monitored within the Site including at the proposed access points and at the internal PRoW crossing points.

8. Compliance and Enforcement

8.1 Introduction

This section of the Outline CTMTP provides a summary of the mechanisms that will be implemented to ensure compliance with the CTMTP.

8.2 Best Practice

- The Applicant will use internal management procedures to maximise compliance with the requirements of this Outline CTMTP and subsequent CTMTP, including:
 - Contractor kick-off meetings: contractors will be reminded of the Applicant's standards and expectations as set out in contract documentation.
 - Site induction: drivers will be briefed on the aims and objectives of the CTMTP, including the booking system, designated routes and expected driver behaviour. A copy of the CTMTP will be provided to each contractor to provide details of how the site will be managed as well as the rules and regulations.
 - Reporting: incidents of non-compliance will be investigated by the Transport Coordinator and recorded as part of the management of the CTMTP. Reports from each incident will be raised and shared with the relevant contractor. The CTMTP will be updated where necessary to resolve any ongoing issues.

8.3 Contractual Conditions

Each contractor will be provided with a contract setting out their contractual requirements in terms of compliance with the CTMTP upon appointment. A copy of the CTMTP will be provided along with details of the proposed routing strategy for HGVs to ensure that this route is followed by HGV drivers.

8.4 Information Packs and Communications

- In accordance with good practice, information packs will be provided to all contractors once they have been confirmed. The information pack will form part of the agreement between the Applicant and the designated contractors. The information pack will include details of the following:
 - Code of practice;
 - Details of the Transport Co-ordinator;
 - Delivery routing restrictions;
 - Worker routing;
 - Emergency procedures;
 - Non-compliance guidance; and

Compliant procedures.

8.5 Community Engagement and Public Information

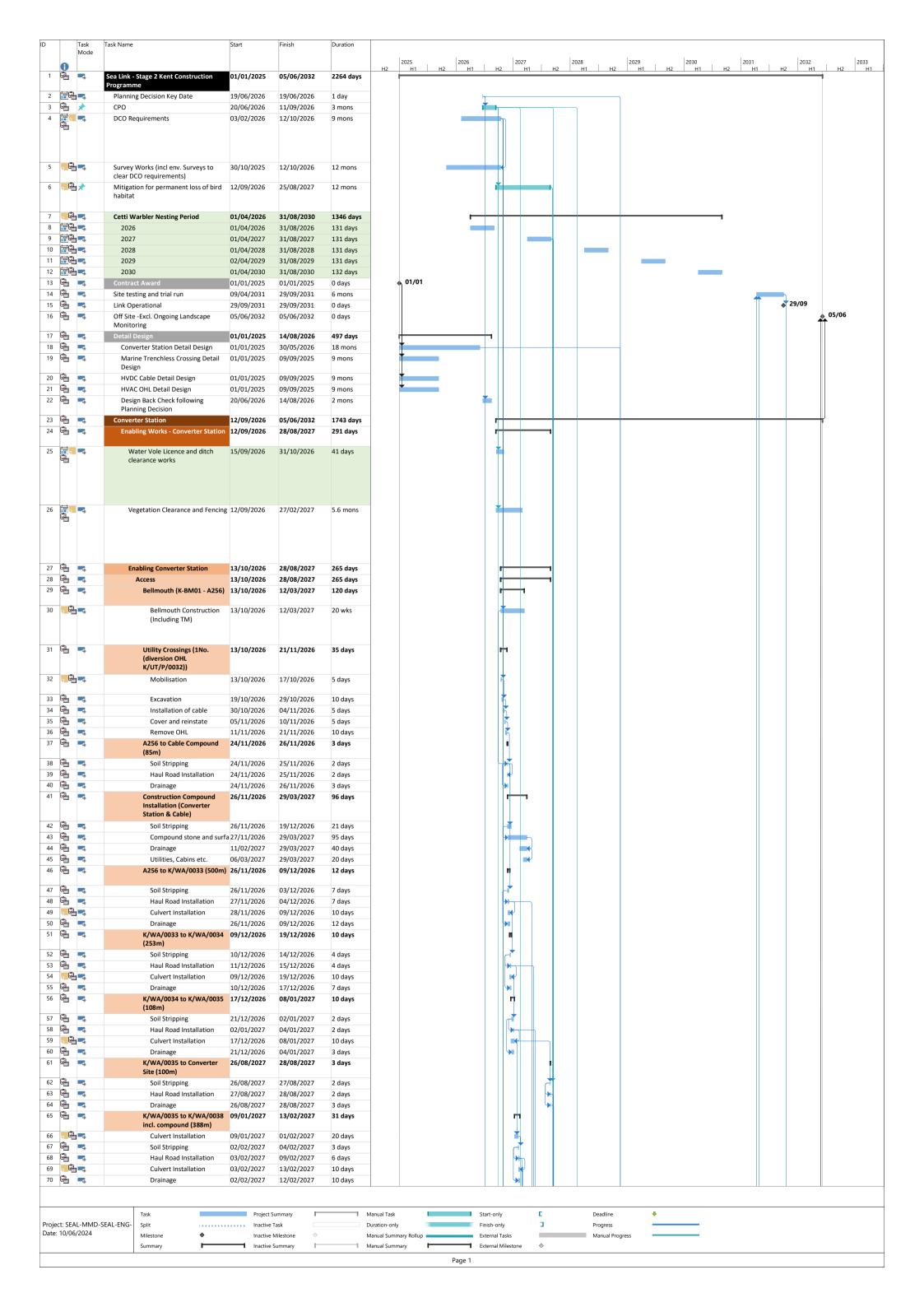
- The contractor will implement a system for the provision of information to local residents and occupiers about the works. A community relations team will be appointed to provide dedicated community relations and external communication support during construction. The information to be provided to local residents will be specific to the type of work, the duration of works, and the hours to be worked.
- Local residents will be informed of the commencement and likely duration of the construction work activities through a letter drop, which will be carried out once per year throughout the construction phase. The letter(s) will be tailored to specific areas and will reflect the works to be carried out and the duration of works in those areas. The letter will include a contact telephone number for public information. In addition, good practice measure GG10 within the Application Document 7.5.3.1 CEMP Appendix A Outline Code of Construction Practice states that an emergency number will also be displayed at the entrance to the compounds.
- The name and contact details of the contractor/site manager will be displayed at the entrance to the main site compound. This will include an emergency telephone number. In addition, details of the works, including contact details, will be provided to the relevant community groups, such as the local parish councils and landowners before work commences.
- A free telephone project helpline and project website will be maintained and managed by the Applicant's community relations team. The project helpline and website information will be visible on boards placed in appropriate locations where they will be visible to the public, including the main site compound. The telephone number and project website details will be provided to relevant planning authorities and other relevant parties.
- The community relations team will record the details of any complaints and how these are to be investigated and appropriately managed. Further details about the complaint's procedure can be found in **Application Document 7.5.3.1 CEMP**.

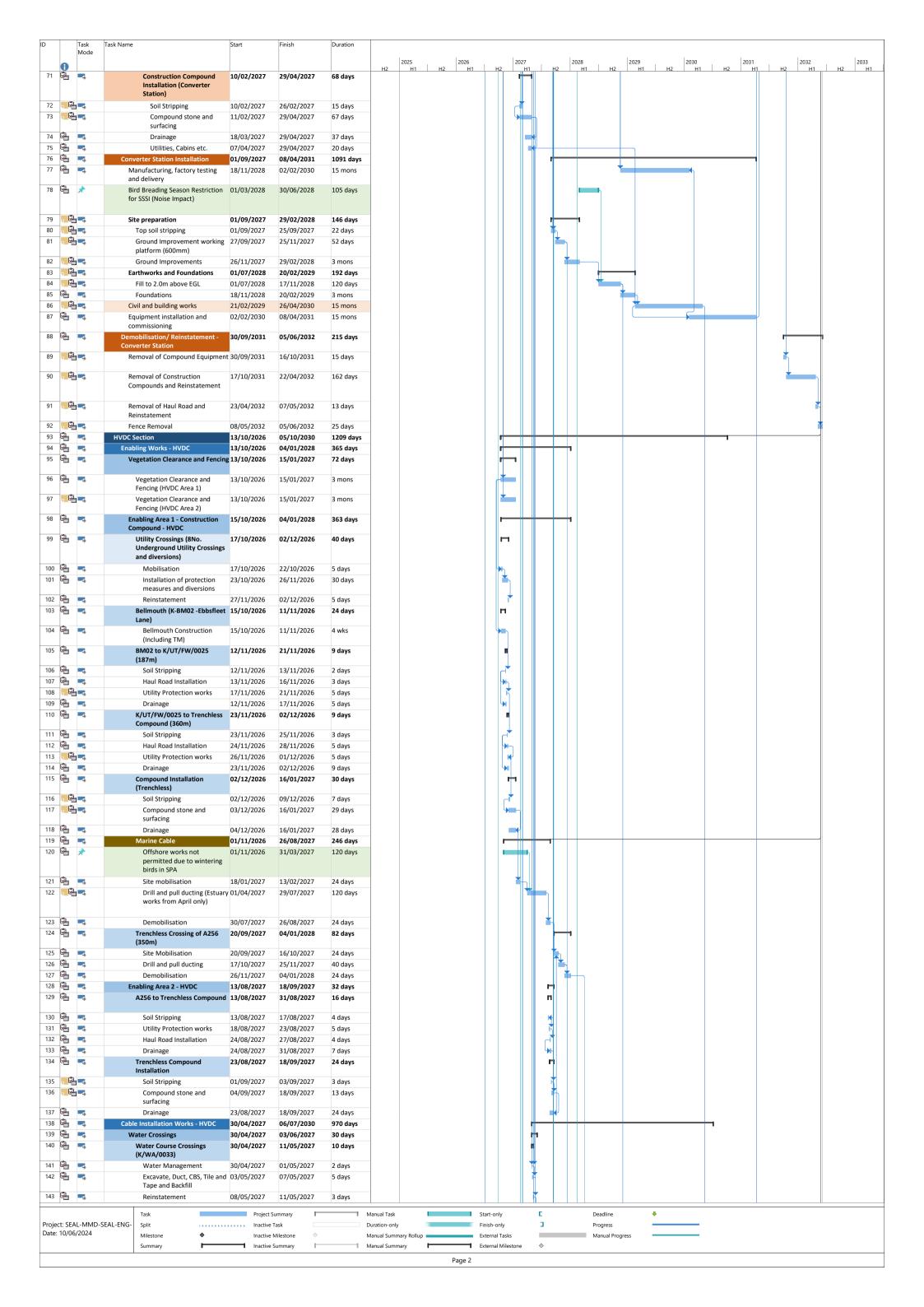
8.6 Enforcement

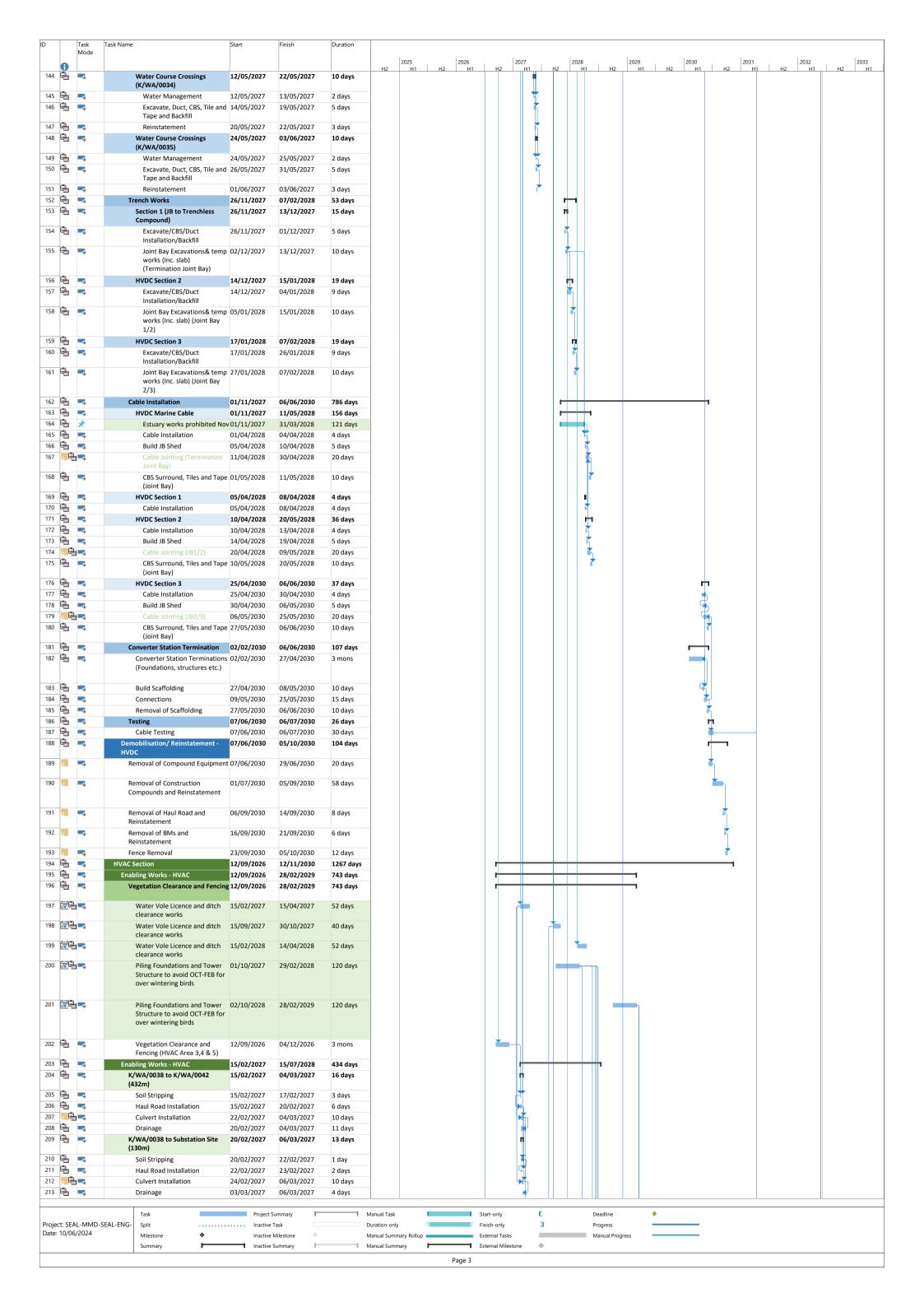
- The Applicant will take all reasonable steps to avoid any breach of the CTMTP through the implementation of the management measures. However, should any breaches occur, then enforcement procedures will be followed:
 - The Transport Co-ordinator will notify the Applicant of any breaches of the CTMTP arrangements as and when they occur.
 - The Applicant will issue a warning letter to the relevant contractor outlining what action would be taken in the event of any further non-compliance (in general terms).
 - The Applicant will report the details of the response to the Transport Co-ordinator as part of the monitoring report. The monitoring report will be made available to the relevant local planning authorities and relevant highway authority, at their request, to ensure compliance and to demonstrate that action is being taken where necessary.

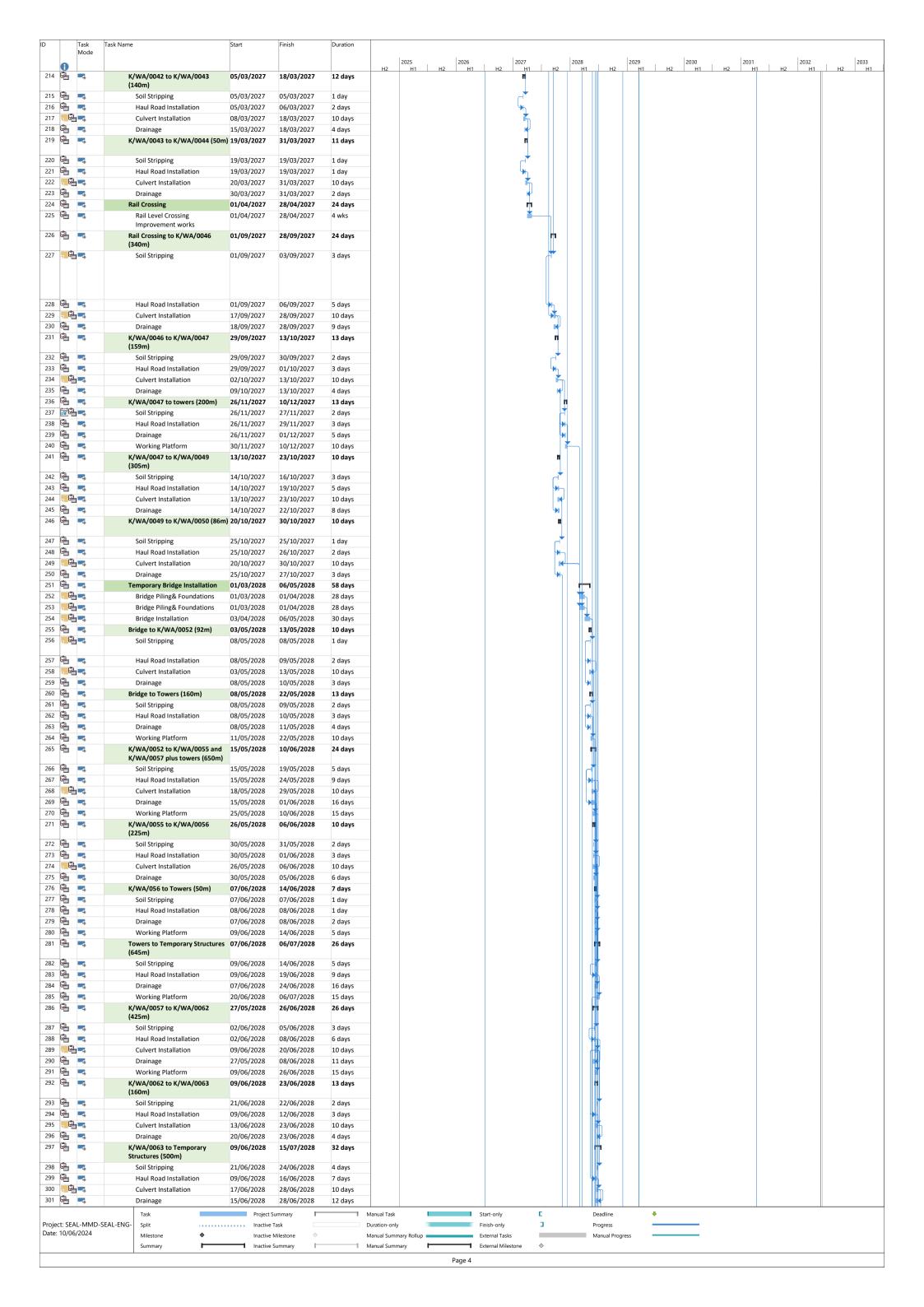
8.6.2	Further detail on the sanctions which could be applied will be included within the CTMTP.

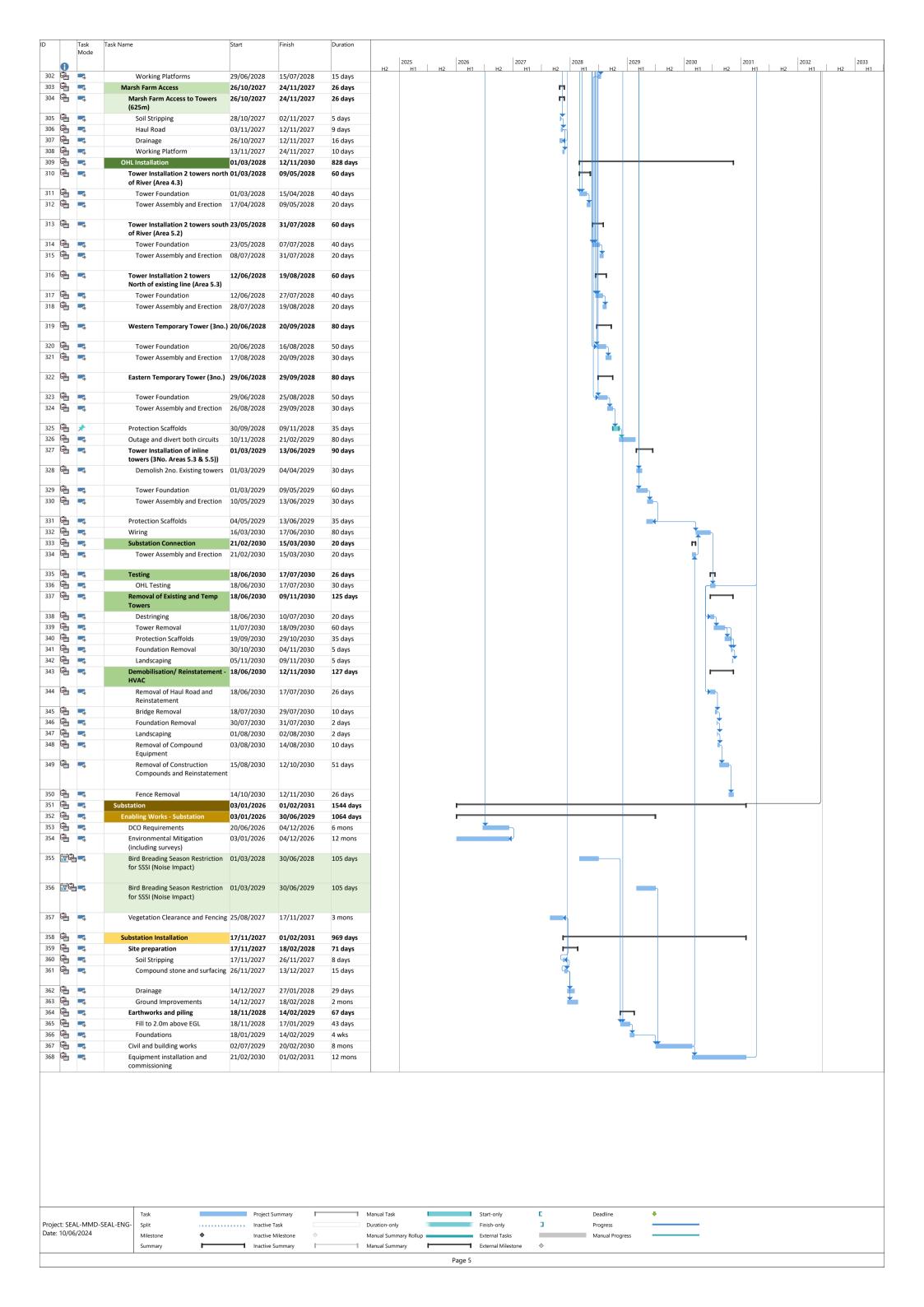
Appendix A Kent Onshore Scheme Indicative Construction Programme











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National Grid plc National Grid House, Warwick Technology Park, Gallows Hill, Warwick. CV34 6DA United Kingdom

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