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1 Overview

1.1 Overview

The Ferrovia Construction and BEMO Tunnelling UK Joint Venture (FBJV) have been appointed as Principal Contractor for the TKRE project on behalf of National Grid Electricity Transmission (NGET) in order to construct the new proposed cable tunnel beneath the Thames between Tilbury and Gravesend – known as ‘the Tilbury Cable Tunnel’, referred to hereafter as ‘the Project’. This document focuses on construction works associated with the projects southern working area, on the edge of Gravesend – known hereafter as the ‘site’.

1.2 Planning Condition

The project benefits from a planning permission granted by Gravesham Borough Council – reference no. 20231313. This planning decision contains the following condition (Condition 6), relating to the requirement for a Construction Traffic Management Plan (CTMP) to be submitted to the Local Planning authority for approval:

“Prior to the commencement of the development hereby permitted a comprehensive Construction Traffic Management Plan shall be submitted to and approved in writing by the Local Planning Authority (in consultation with the Highway Authority). The plan shall include as a minimum:

- a. routing of construction and delivery vehicles to and from site,
- b. parking and turning areas for construction and delivery vehicles and site personnel,
- c. timing of deliveries,
- d. wheel washing facilities,
- e. temporary traffic management/signage,
- f. a pre-condition survey of the local roads to be used,
- g. a Sustainable Travel Plan to reduce the number of employees traveling by private car and parking in nearby public roads,
- h. timings of HGV movements to cause minimum disruption,
- i. liaison with the Lower Thames Crossing Team,
- j. loading/unloading areas within the site compound,
- k. waiting areas to avoid conflicting HGV movements,
- l. particularly on the Thames and Medway Canal Road;
- m. safe pedestrian access to the site;
- n. the impact on highway trees and shrubs of the abnormal loads,
- o. construction phasing,
- p. construction routing plans and
- q. permitted construction traffic arrival and departure times.

Thereafter all construction activity in respect of the development shall be undertaken in full accordance with such approved details unless otherwise approved in writing by the Local Planning Authority in consultation with the Highway Authority.

Reason: To ensure the development would have no adverse impact to the safe and free flow of traffic on the highway network in accordance with Policy CS11 of the Gravesham Local Plan Core Strategy (2014) and section 9 of the National Planning Policy Framework (2024).”

Table 1.1 below identifies the relevant section of this plan which addresses each of the component parts of planning condition 6:

Table 1.1 – Planning Condition inclusions locator

Planning Condition text	Document section where this information is provided
a) Routing of construction and delivery vehicles to and from site	3.2
b) Parking and turning areas for construction and delivery vehicles and site personnel	2.1 , 5
c) Timing of deliveries	4.5
d) Wheel washing facilities	5.9
e) Temporary traffic management/signage	5
f) Pre-condition survey of the local roads to be used	5.8
g) Sustainable Travel Plan to reduce the number of employees traveling by private car and parking in nearby public roads	6
h) Timings of HGV movements to cause minimum disruption	4.5
i) Liaison with the Lower Thames Crossing Team	5.14
j) Loading/unloading areas within the site compound	2.1 , 5.4 , 5.6
K & l) Waiting areas to avoid conflicting HGV movements, particularly on the Thames and Medway Canal Road	2.1 , 5.4
m) Safe pedestrian access to the site	5.12 , 5.13 , 6.3.1 , 6.4.6
n) Impact on highway trees and shrubs of the abnormal loads	2.4
o) Construction phasing	4.1
p) Construction routing plans	3.2
q) Permitted construction traffic arrival and departure times	4.2 , 4.5

1.3 Document Aim

This CTMP sets out FB JV's approach to management of vehicle movements associated with the construction works for the delivery of the TKRE project. As necessary the document will be updated to take into account lessons learnt, as well as to ensure it remains effective.

The impacts of the proposed tunnel will primarily occur during the construction phase of the project and therefore this report, identifies safe and efficient transport routes for vehicles to access the site during the construction period, with due consideration of the existing highway conditions.

This CTMP is submitted for approval by the relevant Local Highway Authority (LHA) and provides a framework for;

- The traffic management processes and proposals that will be adopted during the construction.
- The basis of the logistics strategy to be adopted during the construction stages; and,
- The travel planning that would be implemented to assist and guide the construction workforce travel patterns.

The CTMP also incorporates a Sustainable Travel Plan section which is designed to promote and encourage sustainable transport modes and reduce reliance on private cars during the construction phase of the development.

This CTMP should be read alongside the Abnormal Indivisible Load (AIL) Access Study (Report Reference: 210707-02) associated with application 20231313.

1.4 Objectives of the CTMP

The objectives of the CTMP is to:

- Provide details of the construction processes for the stage of works.
- Minimise impacts of the construction stages on the local highway network.
- Enhance safety and awareness.
- Provide information on traffic routeing and site access.
- Provide an indication of programme and key dates.
- Identify temporary traffic management, waiting and loading controls.

1.5 Structure of the CTMP

- Section 1 – Overview.
- Section 2 – Project details.
- Section 3 – Access Route Strategy.
- Section 4 - Construction Programme & Traffic Management.
- Section 5 – Vehicle Management Measures.
- Section 6 – Sustainable Travel Plan
- Section 7 – Monitoring & Enforcement.

2 Project Details

2.1 Site Location and Compound Details

The Gravesend site is served by the Thames and Medway Canal Road which is owned and maintained by Network Rail. The road is single lane and subject to a 20mph speed limit, with an approximate width of 3.0m. A pedestrian footway is provided on the northern side of the access road with four passing bays provided along the route.

A lorry holding area will be situated directly outside the access gate to the site compound, parking facilities for project staff will be provided within the site compound and all loading and offloading activities will be carried out within the site compound.

Figure 1 below provides an overview of the project including the Tilbury headhouse site, tunnel alignment and – of relevance to this document - the Gravesend headhouse site at the southernmost extent of the project.

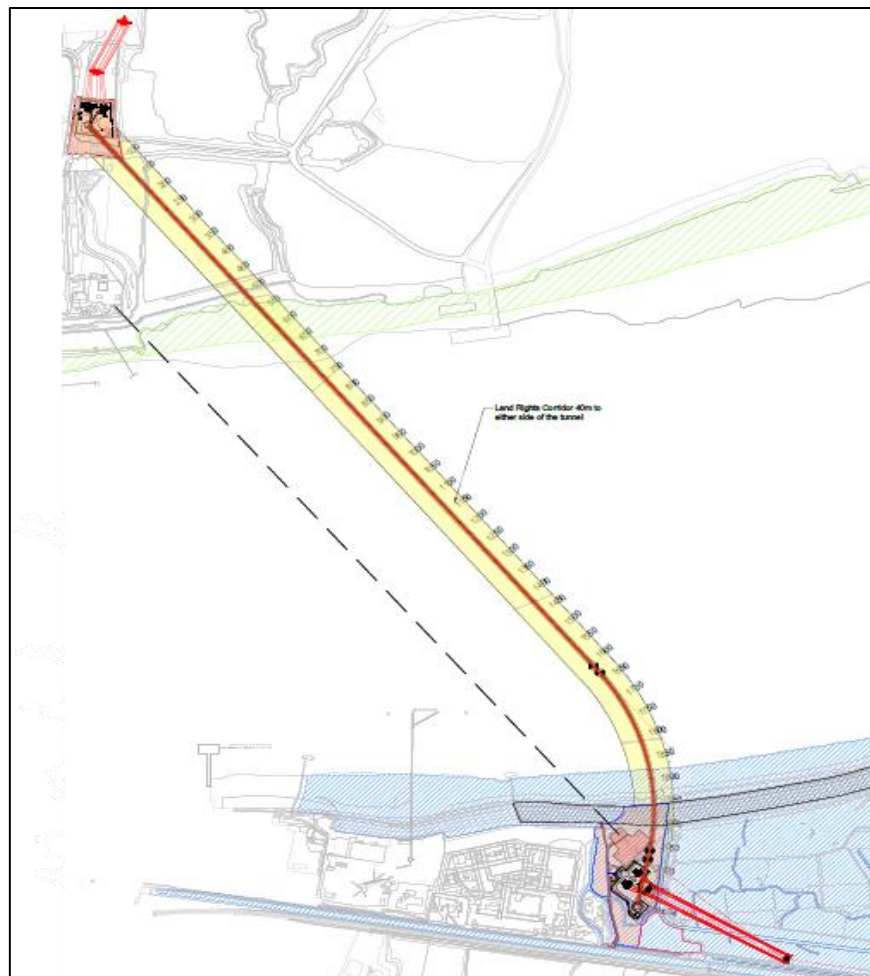


Figure 1 – Project Location

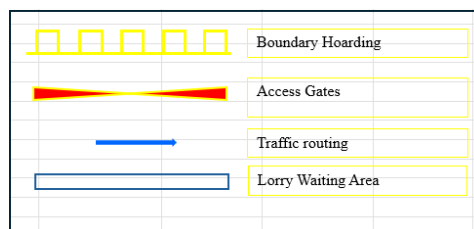


Figure 2 – Site/Compound Layout

2.2 Vehicle Classification

A number of vehicle types will be used for the construction traffic. Table 2.1 outlines each vehicle type with typical example vehicles.

Table 2.1 Typical Construction Vehicle Classification

Light Good Vehicles (LGVs)	HGV - Other Goods Vehicles 1 (OGV 1)	HGV - Other Goods Vehicles 2 (OGV 2)	Abnormal Indivisible Loads (AIL)
Car	Excavator/JCB	24-44 tonne truck	Tunnel Boring Machine Transporter
Van	Tractor Trailer	Low Loader	Cable Drum Transporter
4x4 Pickup	7.5 tonne Truck	Flat Bed	Mobile Crane
4x4 Transit		Hiab	Shaft Sinking Machine (VSM) large element
Welfare Van		Concrete Lorries/Pump	

2.3 LGV and HGV Movements

The construction phase of the proposed development will principally involve a combination of Light Goods Vehicles (LGV) and Heavy Goods Vehicles (HGV). The traffic movements associated with the construction phase are outlined in Section 4.

2.4 Abnormal indivisible Loads (AIL)

The proposed development anticipates the necessity of transporting a small number of Abnormal Indivisible Loads (AIL) for the delivery of plant and materials, including delivery & removal of elements of the Vertical Shaft Machine (VSM) as well as the removal of Tunnel Boring Machine (TBM) components. It is the aim to avoid AIL transportation during peak traffic hours and to conduct such movements during nighttime where feasible.

At present FBJV do not envisage the need for the clearance or trimming of foliage adjoining the public highway in order to facilitate the movement of abnormal loads. If it later transpires that cutting back of vegetation is required, this will be discussed and agreed on a case by case basis with the relevant Highways Authority. It is considered likely that some cutting back of vegetation overhanging the (privately owned) Thames and Medway Canal Road could be required in order to facilitate transport of the VSM components, as well as removal of the TBM. Any such clearance will be undertaken under the supervision of Ecologists/following an ecological inspection, and in agreement with the relevant landowner.

Any additional infrequent AIL loads will be delivered using strategic and local road networks and are envisaged where necessary to be delivered under approved movement orders outside of peak traffic hours.

3 Access Route Strategy

3.1 Overview

This Section outlines the access route strategy which has been undertaken to review the construction haulage routes to the site. The following key considerations have been taken into account for delivering the access route strategy to the site:

- Use the shortest route available from the location of the access points to the Strategic Road Network (SRN).
- Use a sliding scale approach with regards to route assignment and road classification, utilising the 'A' classified highway network as far as practicable, before resorting to lower classifications of highway.
- Avoid single carriageway highways where alternatives are available.
- Avoid residential areas and other sensitive receptors (schools, retail areas), wherever practical.

A routing exercise has been conducted to determine which of the available routes that link the site with the higher order 'A' classified highway network/SRN, would be most suitable to support the construction of the project.

3.2 Access Routes to the site

A route analysis and review has been undertaken of the access to Gravesend.

The potential routes to access the Gravesend site from different 'A' classified roads have been identified and analysed. Each route has been 'RAG' (Red, Amber, Green) rated in terms of distance, road restrictions, sensitive land uses and road quality, to identify which route would be the most suitable for the construction vehicles to access the site. The RAG classification is as follows:

- **Green** – high quality, no constraints, low risk.
- **Amber** – reasonable quality, some constraint, medium risk.
- **Red** – poor-quality, high-risk constraints with no mitigation.

Types of Constraint/Issues

A desktop review of the access routes was supported by a site audit in April 2023 with the purpose of identifying:

- Height restrictions
- Weight restrictions
- Road classification
- Road layout
- Crossing facilities
- Traffic calming features
- Sensitive receptors e.g. schools / community facilities etc accessed by vulnerable road users
- Visibility constraints e.g. horizontal/vertical carriageway alignment, encroaching vegetation etc
- Restricted access
- Speed limits and traffic speeds
- Congestion
- Steep gradients
- Vulnerable road users (pedestrians, cyclists and equestrians)

A 'RAG' assessment is set out below in Table 3.1 below, to identify which of the routes displayed in Figure 4.6 would be most suitable for the construction traffic to access the Gravesend site.

Table 3.1 RAG assessment – Gravesend Site Access

Route	Description	Length	Restrictions	Sensitive Land Use	Road Quality	RAG
1	Exit site egress – Thames and Medway Canal – Mark Lane – Norfolk Road – Canal Road – Ordnance Road – (A226) Milton Road – (A226) East Milton Road – (A226) Rochester Road – (A226) Gravesend Road – (A289) Hasted Road – Exit to the M2 either westbound or southeast bound.	c.11.8km (typically 14–20-minute drive)	None	Gad's Hill School located off Gravesend Road. Shared use cycle lane along Gravesend Road. Kids Inc Day Nursery – Gravesend- Rochester Road. St John's Catholic Primary School on Rochester Road. St. Mary's Roman Catholic Church. St Peter's & St Paul's Church on East Milton Road. Gravesend Grammar School off Milton Road. Chantry Community Academy on Ordnance Road.	The road quality throughout the entirety of this access route is of high quality, with the exception of Thames and Medway Canal which is a narrow (3.3m) road, with a worst-case width of 2.9m.	Green
2	Exit the A2 onto Valley Drive – Old Road East (B261) – Rochester Road (A226) – East Milton Road (A226) – Milton Road (A226) – Ordnance Road – Canal Road – Norfolk Road – Mark Lane – Thames and Medway Canal	c.7.4km (typically 12–18-minute drive)	None.	Valley Drive routes through a residential area. Kids Inc Day Nursery – Gravesend- Rochester Road. St John's Catholic Primary School on Rochester Road. St. Mary's Roman Catholic Church. St Peter's & St Paul's Church on East Milton Road. Gravesend Grammar School off Milton Road. Chantry Community Academy on Ordnance Road.	Valley Drive is of high quality however, routes through a residential area with dwellings directly fronting the carriageway on both sides which would be unsuitable for construction traffic A226 is of high quality with dwellings set back a considerable distance from the carriageway and sided by wide grassed verges and footways	Amber/Red
3 (Inbound)	Exit the A2 onto the A2260 – Ebbsfleet Gateway (A2260) – Thames Way (A226) – Turn right before London Road and carry on Thames Way under the tunnel – West Street (A226) – Crooked Lane (A226) – The Terrace (A226) – Harmer Street (A226) – Milton Road (A226) – Ordnance Road – Canal Road – Norfolk Road – Mark Lane – Thames and Medway Canal.	c.8.4km (typically 14–20-minute drive)	None.	Shared use cycle lane on Thames Way (A226). Chantry Community Academy on Ordnance Road.	A2260 and A226 are high quality roads Pinch points on and town centre / residential one-way streets impacting outbound only. Inbound route not impacted by the above constraints	Amber
3 (Outbound)	Thames and Medway Canal – Mark Lane – Norfolk Road – Canal Road – Ordnance Road – Milton Road (A226) – Windmill Street – Woodville Place – Wrotham Road – Rathmore Road – Darnley Road – New Road – Overcliffe (A226) – Thames Way (A226) – Ebbsfleet Gateway (A2260) – A2	c.8.4km (typically 14–20-minute drive)	None.	Shared use cycle lane on Thames Way (A226). Chantry Community Academy on Ordnance Road.	A2260 and A226 are high quality roads Pinch points on and town centre / residential one-way streets impacting outbound only. Inbound route not impacted by the above constraints	Amber

Table 3.1 identifies the potential access routes which have been assessed in terms of distance, road restrictions, nearby sensitive land uses and road quality. All routes identify a degree of constraint due the site only being accessible through Gravesend town centre and its location in context to the A2 / M2.

Route 1 has been identified as a 'Green' route, despite routing past some sensitive land uses and resulting in the longest journey time; it provides the safest and most suitable and convenient route to/ from the site for HGVs.

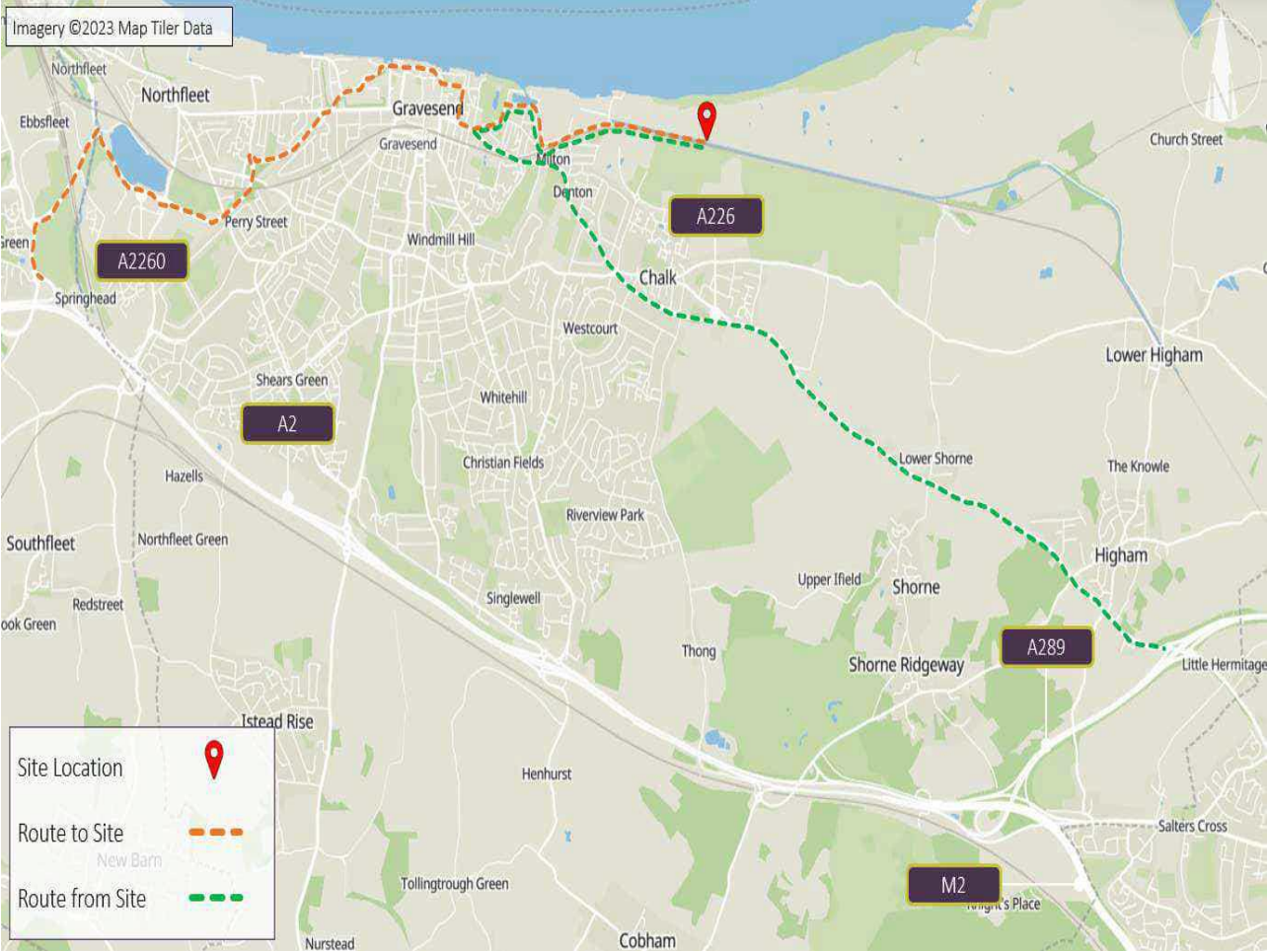
Route 2 has been identified as an 'Amber/Red' route, despite being the shortest most direct route, it passes through a populated residential area which would be unsuitable for construction traffic due to noise/air pollution and conflict with vulnerable road users.

Route 3 has been identified as an 'Amber' route as although it is of a reasonable distance to the site, it passes through narrow roads within the town centre and routes along frontages of residential areas, which could create disturbances and significantly increase the road usage due to the construction HGVs generated as a result of the proposed development.

Alternatively, a combination of Routes 1 and 3 could also be considered, wherein construction traffic would arrive via Route 3 and depart along Route 1. This would ensure an even spread of traffic across the LRN, and convenient access from the A2, a major route for HGVs.

In alignment with the OCTMP approved under planning decision 20231313, Figure 3.1 illustrates the proposed access routes to/from the Gravesend site. It is noted however that while the project will promote inbound and outbound traffic related to the project as outlined in Figure 3.1, movements in both directions may be permitted along both route options proposed

Figure 3.1 HGV proposed routing to/from the site



4 Construction Programme & Traffic Management

4.1 Overview

This Section outlines the construction programme and phases of the proposed development including a high-level estimation of the typical construction HGV movements associated with each phase/activity.

The duration of the entire construction programme is approximately 46 months. Outline phases and durations are listed below.

Table 4.1 Indicative Construction Phases

Activity	Start	Finish
Site Setup	Q2 25	Q4 25
Shaft Piling & Shaft Sinking (Gravesend)	Q4 25	Q3 26
Tunnel Construction (From Tilbury Only)	Q1 26	Q4 26
Headhouse, cable connections & Sealing End Compound	Q1 27	Q1 29

Traffic movements will principally be associated with the following sources:

- The delivery and/or collection of plant
- The delivery of construction materials and/or removal of waste materials; shaft lining segments and concrete.
- The construction workforce
- Consumables / Welfare

Construction activity varies considerably on a day-to-day basis, and it is not possible to predict the daily variation with certainty. However, the following estimates are representative of typical activity based on the expected construction programme.

With regard to the terminology in this section, the definition of a “two-way” movement is defined ‘as a vehicle arriving at and then departing the site’. Therefore, one two-way movement is one vehicle arriving and one vehicle departing.

To supplement the on-site offices, a separate remote satellite office has been procured for use in Central London. This office will facilitate staff who do not need to be directly on-site, therefore reducing vehicle traffic to the construction site.

4.2 Construction Hours and Delivery Times

Consideration will be given to the programming of HGV movements and the timing of deliveries, thus minimising disruption to traffic on the LRN. Typical movements will be during standard working hours 0800-1900, although some deliveries may be programmed when the public roads are at their quietest (such as the movement of Tunnel Boring Machine components). As outlined in Section 2, it is the projects’ intention that ALL movements will be transported outside of network peak hours, and if and wherever practicable, transferred during nighttime hours.

Standard construction working hours (outside of quiet site set up/shut down activities) will be 0800-1900 daily though certain activities including shaft construction are anticipated to be undertaken over 24 hours, with agreement made (as necessary) with the Local Planning Authority.

It is anticipated that two x 12-hour shifts will be adopted for the shaft sinking phase (shift changeover at 07:00 and 19:00). Utilising this type of shift pattern will assist in minimising the number of construction operative movements through the local road network during peak hours.

Potential local receptor sites for excavated material are being investigated for practicability and sustainability credentials. Pending agreements with the Local Planning Authority and the operators/owners of those sites, there is

potential for night-time or outside of peak hours vehicle movements to transport spoil during the quieter periods of the local road network

4.3 Construction Workers

The approximate number of construction workers based at the site will comprise 40 personnel at any given time.

4.4 Shaft Excavation

Once the site has been established, shaft sinking shall commence. Shaft excavation is expected to take up to six months, involving the excavation of approximately 9,000m³ of bulked material.

4.5 Summary of HGV Movements

This section set out an indicative overview of the HGV movements associated with each key phase of the construction works being undertaken at the site.

To reduce impacts upon the highway network, FBJV will schedule HGV movements during off-peak times 09:00 – 16:00 where practical. The delivery booking system will be configured so as to not permit applications from suppliers for delivery during peak times. Daily cut-off times for deliveries and collections will be implemented to simplify monitoring. While the intention is to have HGV deliveries/collections during off-peak hours, events outside of project control (breakdowns, traffic jams, abnormal loads with police instructed movement times) may result in exceptional events. In addition to the construction HGV movements there would be some private vehicle movements associated with staff and visitors.

Table 4.2 below outlines the planned operating hours for the construction works inc HGV deliveries, staff and Construction workers and highlights the Peak Traffic hours on the road network between 7:00 – 09:00 and between 14:00 and 16:00.

Table 4.2 Gravesend – Typical Shift Patterns and HGV delivery window

Shift Type	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00
Peak hours																										
Deliveries - HGV																										
Office Staff																										
Standart Construction Hours																										
Dayshift 24/7 operations																										
Nightshift 24/7 operations																										

Key		
Shoulder hours		
Normal Operating Hours		

Table 4.3 below details the vehicle movements on the public highway required during the construction of the Project.

Table 4.3 Gravesend – Indicative Construction HGV Movements

Construction Phase - Gravesend	Total HGV Movements (in and out of site)	Total 2-way HGV movements	Average 2-way movements per day	Peak 2-way movements per day	Approximate duration - weeks
Phase 1 - Site Setup					
Aggregates	100	50	0.7	6	15
Concrete	80	40	0.5	10	15
Cabins/Plant Facilities	30	15	0.8	6	4
Site Installations	50	25	0.3	5	15
Total Site Set-up	260	130	1.7	10	15
Phase 2 - Shaft Construction					
Shaft Spoil Removal	2000	1000	7.7	15	26
Shaft Consumables Delivery	260	130	0.8	3	33
Shaft Segments Delivery	256	128	1.0	3	26
Shaft Concrete	450	225	15.0	40	3
Total Shaft Construction	2966	1483	24.5	40	33
Phase 3 - TBM Removal					
TBM Supporting Vehicles	110	55	2.75	11	4
Abnormal Indivisible Loads (AIL) TBM Delivery	10	5	0.25	3	4
Total TBM Deliveries	120	60	3	14	1
Phase 4 - Headhouse Construction					
Shaft Fit Out & Headhouse Construction	128	64	0.2	4	52
Cable Sealing End Compound Construction	780	390	7.5	10	26
Total Compound Construction	908	454	8	10	52

5 Vehicle Management Measures

5.1 Overview

This Section outlines the vehicle management measures that will be implemented on the project.

5.2 Driver Information Packs

Information packs will be provided to all contractors, which will form part of the contractual agreement between the contractors and Subcontractors/Suppliers. The information pack will contain the following details:

- HGV restrictions.
- Mandated construction routes.
- CTMP protocols and indications required for all contractors including a code of good practice.
- Guidance on standard communication procedures between contractors and site.
- Site contacts (emergency and non-emergency).
- Non-compliance guidance; and,
- Complaints procedure.

5.3 Traffic Management Measures

A driver information pack will be provided to supply chain prior to any deliveries/collections taking place at the site to ensure drivers are familiar with all relevant procedures outlined within this CTMP, including:

- routes to site.
- site rules; and,
- Identifier site contact.

Due to the information contained within the driver information packs, the navigation systems present within the vehicles themselves, as well as the relatively simple routing to and from the working area, it is not envisaged that directional signage is required to be installed on the public highway.

5.4 Site Access Control

A traffic marshal will be appointed to control access to and from each site where required and ensure drivers have been through any required site induction procedures. It will be the responsibility of the traffic marshal to guide incoming traffic and be aware of any egressing vehicles. Construction vehicles delivering to the site will be under continuous control of the traffic marshal. Banksman will also be in position as and when required.

During periods of construction where higher frequency of movements are expected, traffic marshals will coordinate inbound and outbound movements along the extent of the Network Rail owned Thames and Medway Canal Road utilising the 4 available laybys to avoid blockages along the route to site. The project Vehicle Management Booking System (VMBS) will also be used as a tool to ensure even spreading of deliveries to site to avoid congestion. Management of movements in this way will avoid the need for offsite vehicle holding areas.

A booking system (Vehicle Management Booking System/VMBS) will be utilised as described previously within this plan to minimise deliveries during periods of peak traffic on public highways as far as is practicable, as well as to increase the distribution of deliveries across the working period to minimise vehicle dwell times. This booking system will also form part of the monitoring process to assure compliance with this CTMP.

5.5 HGV Emissions

All vehicles used in the construction of the proposed development will be at least Euro V standard.

5.6 Parking & Loading

Upon arrival to the site compound, all deliveries will report to the Project Traffic Marshalls who will then contact the sited delivery contact. This will be communicated to all suppliers and subcontractors within their Driver Information Pack. Additionally, the Traffic Marshalls will ensure that all delivery vehicles are properly parked and unloaded in designated areas to avoid any disruption to the site operations. They will provide guidance and assistance to drivers to ensure that all safety protocols are followed during the delivery process. This comprehensive approach aims to streamline the delivery process, enhance site safety, and improve overall efficiency.

Whilst on-site, the delivery operation will be controlled by a trained Traffic Marshal, from the point of guiding a vehicle to its designated off-loading area to guiding the vehicle back onto the Highway. Both the Traffic Marshal and drivers will follow relevant safety procedures and operate the same signalling systems.

Whilst the site is a considerable distance from the nearest public highway, nonetheless construction personnel, including contractors and suppliers, will not be authorised to park outside of the site boundaries, including on the public highway. On-site parking will be managed to ensure safety of all personnel. Parking terms and regulations will be clearly displayed using signage displayed in the immediate vicinity of the parking provision.

Dedicated parking facilities will be provided within the site compound for project staff

5.7 Road Safety

Suitable space within the works site will be provided for all vehicles to park, unload and manoeuvre, therefore enabling all egressing vehicles to exit onto the access road in a forward-facing direction.

A 'Near Miss' reporting system for all highways incidents. The contractor will ensure that all accidents and near misses are recorded within this system and that drivers are instructed to report all issues recorded through the system. Any accidents or near misses involving vehicles travelling to / from the site will be recorded, investigated, and reported internally and to the client referring specific incidents to the LHA as deemed necessary.

1. **Recording:** All accidents and/or near misses regarding vehicles are reported in the first instance to the Logistics Team.
2. **Reporting:** Workforce and/or Drivers will be instructed to report any vehicle issues to the Logistics Team
3. **Investigation:** Any accidents or near misses will be investigated by the Logistics Team
4. **Internal Reporting:** Incidents are reported internally.
5. **Client Reporting:** Incidents are reported to the client if deemed necessary
6. **Referral to LHA:** Specific incidents are referred to the Local Highway Authority (LHA)

5.8 Road Condition Surveys

Each access point to the LRN by any access road or track used by the proposed development will be inspected. These inspections shall take place before first use, regularly during use and following final use.

A thorough pre and post works condition survey will be undertaken upon the Thames and Medway Canal Road. During the works, regular inspections of the Thames and Medway Canal Road will be undertaken, with findings recorded. Where identified as necessary, remedial action will be taken to remove any dirt and debris resulting from construction operations.

5.9 Wheel Washing

All vehicles exiting from Gravesend will be checked and cleaned manually if deemed necessary prior to leaving the site. The cleansing of vehicles will ensure the removal of debris from all vehicles ahead of joining the road network.

5.10 Tipper Covers

In accordance with the Traffic Management Act 1991, all tippers importing or removing loose material via the public Highways will be covered and it is the responsibility of the Traffic Marshall to ensure vehicles do not leave site without the appropriate covers. Any vehicles arriving to site without appropriate covers will be reported to the logistics team, who will remind the supplier of the requirements for the project to ensure the supplier is informed and appropriate action taken.

5.11 Vehicle Identification

All HGV construction vehicles associated with the proposed development will be clearly identifiable using a vehicle marking scheme. The purpose of this is to assist with the monitoring process of the construction vehicles within the LRN.

5.12 Pedestrian Access Routes

Safe pedestrian access routes between car parking locations, access points, work areas, site offices and welfare facilities will be provided within the site. Where pedestrian and vehicle routes interact, appropriate crossing points and segregation will be provided.

5.13 Public Right of Way (PRoW) Diversion

The project has identified that there would be a benefit in a diversion of the existing PRoW and National Cycle Network (NCN) Route 1 that currently runs along the Thames and Medway Canal Road during peak traffic periods of the project. The project is committed to seeking this diversion for reasons of public Non-Motorised User safety and has accordingly made a submission to Kent County Council, as the relevant Highways Authority, in order for the appropriate orders to be put in place.

5.14 Interface with local Stakeholders

The project team will arrange for regular meetings with local stakeholders such as, Network Rail, Thames and Medway Canal Trust, Metropolitan Police Training Centre, National Maritime Training Centre and Lower Thames Crossing to share information on interfacing works and traffic movements with the aim of minimising impacts on the local road network.

6 Sustainable Travel Plan

6.1 Overview

This section comprises a Sustainable Travel Plan (STP), meeting the requirements of the planning condition. It is written to promote and encourage the use of sustainable transport modes and reduce reliance on the private car during the construction phase of the development.

6.2 Construction Staff & Working Hours

To supplement the on-site offices, a separate remote satellite office has been established within central London. 51 Eastcheap London EC3M 1DT. This office accommodates staff who do not need to be directly on-site, reducing travel on local road networks.

Gravesend construction staff vehicles will follow Thames and Medway Canal Road. The road is a single lane and subject to a 20mph speed limit, with an approximate width of 3.0m. A pedestrian footpath is provided on the northern side of the access road with four passing bays provided.

The approximate number of construction workers based at the site will comprise 40 personnel during daytime working hours, dropping to circa 20 at nighttime during periods of 24/7 working. Expected shift patterns are indicated within Table 4.2.

6.3 Existing Sustainable Access to the Site

6.3.1 Walking and Cycling

Walking and cycling are encouraged as alternatives to car travel and can be integrated with public transport for longer trips. Existing pedestrian footways aside public highway provides for safe and convenient access to/from the site and Gravesend Train Station, with a walk journey time of approximately 45 minutes and a cycle time of approximately 10 minutes.

6.3.2 Public Transport – Bus Services

To reach Thames & Medway Canal Road from Gravesend Station, you can take either the 190 or 490 bus. The journey takes approximately 35 minutes.

- **Board the Bus:** Take the 190 or 490 bus from Gravesend Station.
- **Travel Time:** The bus ride will take around 35 minutes.
- **Get Off:** Alight at Empress Road.
- **Cross Over:** Cross over to Marks Lane.
- **Continue Walking:** Proceed along Marks Lane until you reach Thames & Medway Canal Road.
- **Walking Time:** The walk from Empress Road to Thames & Medway Canal Road is approximately 25 minutes.

6.3.3 Public Transport – Train Services

FBJV will provide a shuttle service for transporting construction staff between Gravesend Railway Station and the site. This service will consist of a minibus that will collect and return rail users before and after shifts. Additionally, the service will run throughout the day to transport site workers to local transport and other sites.

6.3.4 Car Sharing

Car sharing is a relatively convenient form of travel, offering a significant potential to reduce overall private mileage of construction workers and visitors. It is this mode of transport which often forms one of the most convenient methods of sustainable travel for construction workers. FBJV have appointed a Travel Plan Coordinator (TPC) among whose roles will be to promote a car-sharing scheme throughout the construction program.

6.4 STP Measures

6.4.1 Roles and Responsibilities

FBJV have appointed a TPC who has the key role in managing, monitoring and implementing the measures within the STP.

The responsibilities of the TPC include:

- Ensuring the contractual obligations of contractors/ sub-contractors related to the STP to be adhered to.
- Ensuring the STP notice board is located in a prominent position and that the information is kept up to date.
- Acting as the key point of contact for issues related to construction traffic.
- Undertaking a snap-shot parking survey on one day per month to check car park occupancy targets are being met.
- Reviewing cycle parking provision on a monthly basis.
- Engaging with local stakeholders.
- Monitoring performance against the targets of the STP.
- Implementing additional measures if not delivering on targets set.
- Managing how staff travel to and from the Site.
- Encouraging and promoting the use of sustainable transport measures included within the STP; and,
- Organise transport link between for workers from local transport points to site.

6.4.2 Sustainable Travel Information & Travel Plan Communication

All construction staff upon their induction will be made aware of sustainable travel information to travel to and from the site. This will include the following information:

- An introduction to the STP, its purpose and highlighting that a copy of the STP is available to construction staff.
- Information on the health benefits of using active modes of transport.
- A brief of the sustainable travel modes available together with access to information.
- FBJV policy related to travel.
- Details of the collection / drop off service; and
- Details of the car share scheme and alternative modes of transport.

6.4.3 Temporary Car Park

A temporary construction worker car park will be provided within the Gravesend site compound. Construction staff parking at the site will be monitored, controlled and recorded to ensure that single occupancy car use is minimised.

6.4.4 Transport Link to site (Drop-off Service)

FBJV will provide a transport link for transporting construction staff between Gravesend train station and the site. This will comprise a minibus that will collect and return rail users during peak times prior to and the end of shifts, with the service being provided throughout the working day to transport site workers, from sites or local transport when required. This would have the benefit of reducing the number of vehicular trips on the local road network.

The contractor would encourage the use of common hotels and B&Bs by staff that are not from the local area, to encourage the use of shared transport modes such as minibus.

6.4.5 Car Sharing

The TPC is responsible for promoting a web-based car share database for construction staff to / from the collection / drop off locations and encourage car sharing during briefings and promoting other web-based databases such as Lift share (<https://liftshare.com/uk>).

To encourage car sharing, the following will be implemented:

- Provide details of the local and national car share websites such as Lift share.
- Encourage Construction staff to car share to / from the collection / drop off locations where practicable.
- Provide preferential parking or other incentives for staff that car share; and,
- Manage, where practicable, the number of contractors on site at any one time to reduce trips generated and promote car sharing.

6.4.6 Walking & Cycling

The promotion of walking and cycling as a sustainable mode will be made to all construction staff, for all or part of their journey.

Staff from the project will be arriving and departing during predictable times outside of peak hours which will remove the risk of interface between vehicle movements and pedestrians and cyclists to ensure safe movements along Thames & Medway Canal Road

The following measures are proposed in order to promote walking and cycling:

- All construction staff will be made aware of sustainable travel information which will include maps of walking and cycling routes that link to local public transport, through briefings and information provided in the staff welfare areas.
- The TPC will be responsible for promoting the health benefits of active modes to staff.
- The Site will provide suitable changing facilities for staff; and,
- Secure cycle storage will be provided.

6.4.7 Public Transport Information

Information about all available forms of public transport including routes and destinations, service frequencies and locations of nearest bus stops shall be provided in an information pack and sent to construction staff prior to them starting work at the Site. Public transport information will be displayed on the travel information boards. It will be the responsibility of the TPC to ensure that this information is kept up to date.

6.4.8 Work Hours / Shift Patterns

Working hours on the site, like most major construction sites, will be relatively long. Arrival and departure of staff vehicles therefore tend to be spread over the peak periods, rather than all falling in the traditional peak hours, thereby minimising the impact on any particular time period.

6.5 Monitoring & Review

6.5.1 Monitoring

The TPC will act as the central point regarding the implementation of the STP initiatives and will be responsible for the ongoing monitoring of the STP.

To enable the success of the STP to be established, the TPC will monitor the implementation of the measures and review where necessary.

The TPC will be responsible for a regular check on car parking, in consideration of the mode share target, and keep a record of its usage. The mode share target for vehicle occupancy is an average of 1.5 noting that FBJV may implement alternative solutions to ensure the number of vehicles remains at or below the peak calculated with an occupancy rate of 1.5.

6.5.2 Review

The TPC will be responsible for the overall implementation and review of the adopted STP. Its efficacy will be reviewed on an annual basis, and the plan updated where identified as necessary to ensure it remains appropriate to encourage sustainable and efficient worker travel.

7 CTMP Monitoring & Enforcement

7.1 Overview

This Section reviews the structure that will oversee the CTMP, that the objectives are met, and that continued monitoring and review of the CTMP is maintained.

FBJV acknowledges the following transport related responsibilities:

- Liaise with and report to the LHAs regarding mitigation and any remedial measures, if required.
- Update the CTMP as necessary.
- Resolve issues and problems through liaison with relevant stakeholders including (but not limited to) adjacent landowners, traffic management contractors, LHA/LPA etc.

7.2 Monitoring

FBJV will undertake monitoring as necessary to assure compliance with the requirements of the CTMP and this will include the maintenance of records and traffic management measures.

The contractor will ensure that a suitable, qualified member of staff is employed to conduct surveys and monitor vehicle construction activity.

7.3 Compliance

As part of the CTMP a series of mechanisms will be established to provide all parties with a clear understanding of the enforcement procedures that will be applied if the requirements contained within this CTMP are not achieved. It is anticipated that these mechanisms can be determined and agreed at a later stage and will include a three-stage process:

- Risk Assessment Method Statement (RAMS) procedures – FBJV will implement the CTMP, adhere to the requirements and meet the goals through management practices. This will include site inductions for contractors, briefing on the obligations of NGET standards, induction and adherence to RAMS procedures, DMS briefing, driver inductions and compliance guidance.
- Monitoring – to be employed as part of this CTMP compliance methodology; and,
- Actions – to be employed if commitments of this CTMP are breached.

7.4 Enforcement & Corrective Measures

To ensure that the aims of the CTMP can be effectively met, and its obligations enforced, it is important to define what will constitute a breach. The following actions will constitute a breach of the CTMP, whereby corrective measures will be required (this list is not exhaustive):

- Construction HGVs not adhering to the agreed routes/times; or
- Construction traffic being driven inappropriately.

On receipt of a report for a potential breach of the requirements a process has been put in place to manage any breaches, as indicated below in Figure 7.1.

Figure 7.1 Off Route/Non-Compliance Procedure

