LONDON

TUNNELS

The London Tunnels

20. Construction Traffic Management Plan

PROJECT NO. 70106185
REF NO. TP00003

30 November 2023

wsp

The London Tunnels PLC

THE LONDON TUNNELS

Outline Construction Traffic Management Plan

PUBLIC

PROJECT NO. 70106185

OUR REF. NO. TLT-WSP-XX-XX-PL-TP-00003

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CONTENTS

1 INTRODUCTION

1.1.1. WSP has been appointed by The London Tunnels PLC (TLT – the ”Applicant”) to provide Transport Planning and Transport Modelling Consultancy Services to support the redevelopment of the Kingsway Tunnels and associated properties at 31-33 High Holborn (Fulwood Place) and 38-39 and 40-41 Furnival Street (the “Site”) into a world-renowned tourist attraction (the “Proposed Development”).

1.2 DEVELOPMENT PROPOSALS

1.2.1. The former Kingsway Telephone Exchange Site was constructed as a deep-level shelter in the 1940s and was operational for several different land uses until 1996 when the Site was disused. The Proposed Development is to repurpose 7,869sqm of the existing tunnels into a tourist attraction offering a range of exhibitions and other uses such as gift shop and bar. The full development description is:

Change of use of existing deep level tunnels (Sui Generis) to visitor and cultural attraction, including bar (F1); demolition and reconstruction of existing building at 38-39 Furnival Street; redevelopment of 40-41 Furnival Street, for the principle visitor attraction pedestrian entrance at ground floor, with retail at first and second floor levels and ancillary offices at third and fourth levels and excavation of additional basement levels; creation of new, pedestrian entrance at 31-33 High Holborn, to provide secondary visitor attraction entrance (including principle bar entrance); provision of ancillary cycle parking, substation, servicing and plant, and other associated works.

1.2.2. To access the tunnels there will be 2 access points, 38-41 Furnival Street, which will act as the primary visitor access and Fulwood Place, (31-33 High Holborn) which will act as the bar access and an emergency access.

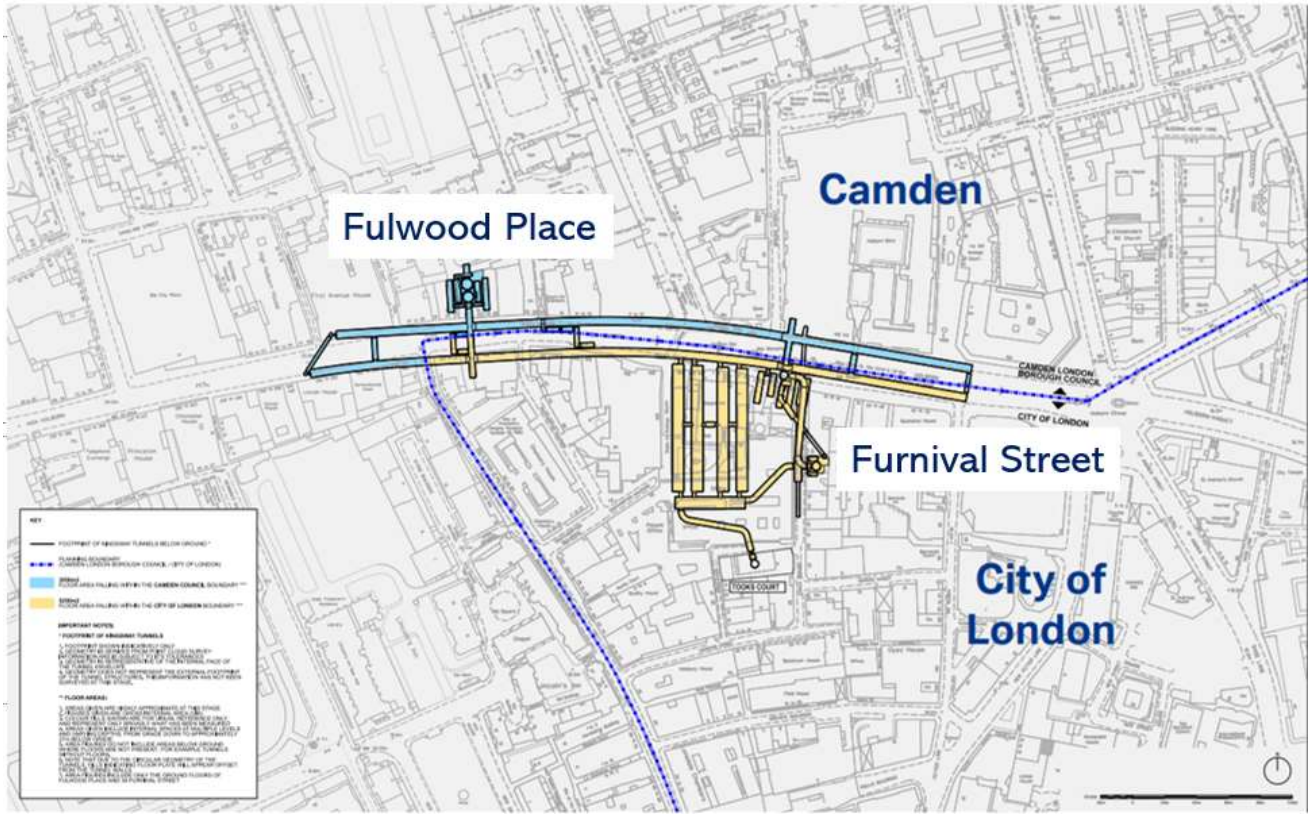
1.2.3. The full development (NIA) quantum is:

- Below Ground
  - Permanent exhibitions: 3,374sqm
  - Temporary / rotating exhibitions: 1,142sqm
  - Bar: 293sqm
- Above ground
  - Gift shop: 118sqm
  - Front of house: 6171sqm
  - Back of house: 1461sqm

1.3 SITE LOCATION

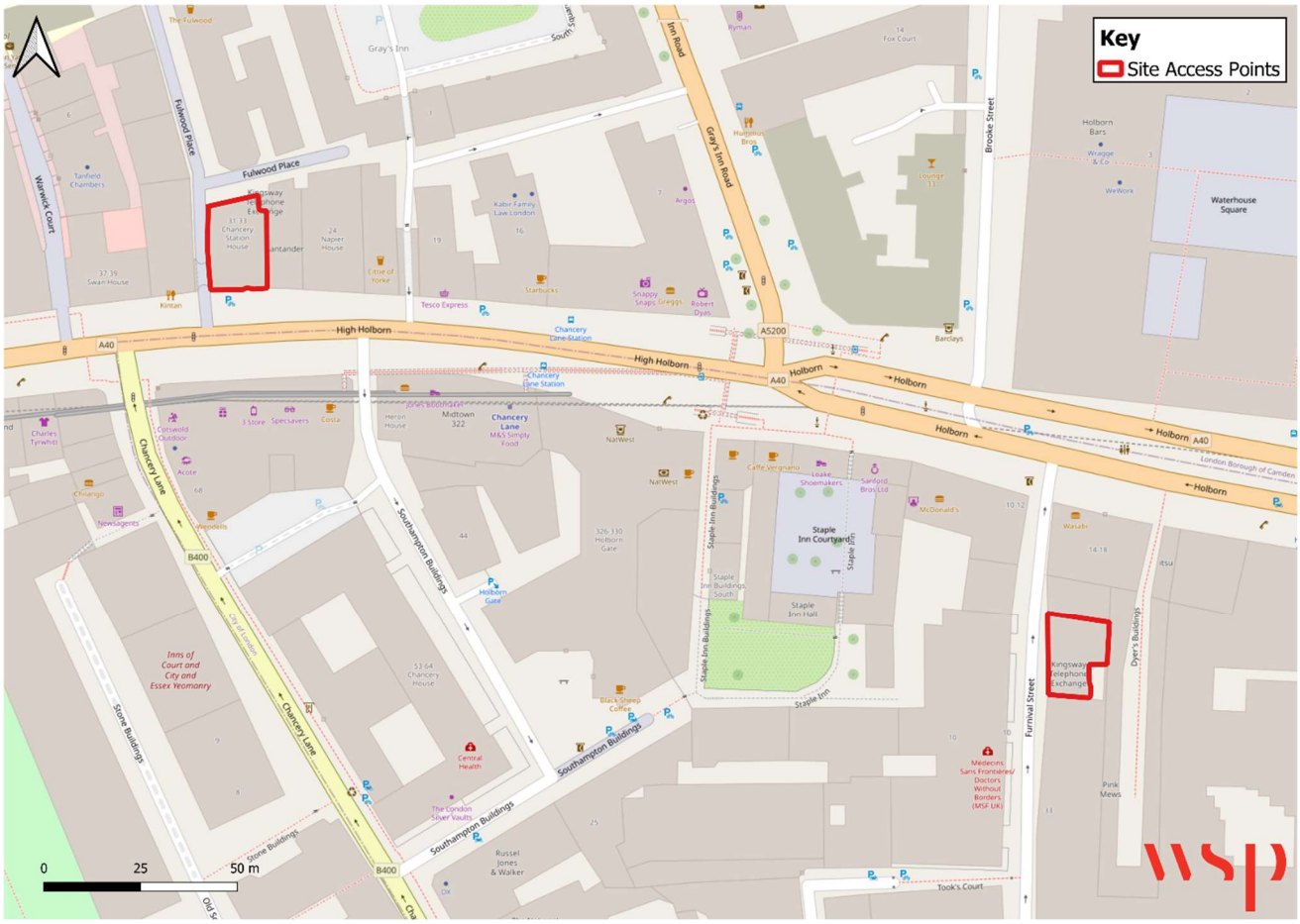
1.3.1. As shown by Figure 1-1 below, the Site lays across the border between City of London (hereafter referred to as CoL) and London Borough of Camden (hereafter referred to as LBC).

Figure 1-1 - Below Ground Site



1.3.2. As shown in Figure 1-2 the Fulwood Place access is located within LBC and the Furnival Street access is located within the CoL.

Figure 1-2 - Site Access



1.4 REPORT PURPOSE

1.4.1. This CTMP quantifies and seeks to minimise the impacts of construction on the surrounding highway network. This document is concerned with the highways and transport elements of construction and therefore should be read in conjunction with any future Construction Method Statement produced by the Principal Contractor, which would consider other construction matters not directly relating to transport and logistics.

1.4.2. This report has been prepared in accordance with Transport for London's (TfL) best practice guidance for the production of CTMPs. It provides a framework to better manage all types of freight movement to and from the construction Site.

1.5 OBJECTIVES OF THE CTMP

PURPOSE OF CONSTRUCTION TRAFFIC MANAGEMENT PLANS

1.5.1. The purpose of a CTMP is to provide a framework to manage all types of freight vehicle movements to and from construction Sites.

1.5.2. This detailed CTMP has been produced in reference to TfL's 'Construction Logistics Plan Guidance' for developers which states:

1.5.3. *"A detailed CTMP goes to a planning authority at the post-granted discharge of conditions stage, and/or at the highways design stage. This CTMP provides the planning authority with the detail of the logistics activity expected during the construction stage of the project."*

1.5.4. CTMPs apply to the design and construction phases of developments with specific aim of improving construction freight efficiency by reducing accidents, carbon dioxide emissions and congestion.

BENEFITS

1.5.5. TfL expects CTMPs to achieve the following benefits:

- Improved air quality from reduced traffic and congestion;
- Raised standards of safety on the roads, with particular emphasis on vulnerable road users;
- Better highway efficiency by reducing the effects of construction activity through better delivery management and access; and
- More cost-effective construction logistics activity.

AIMS AND OBJECTIVES

1.5.6. The primary aim of the CTMP is to:

"Provide the planning authority with the detail of the logistics activity expected during the construction stage of the project."

1.5.7. The objectives are to:

- Demonstrate how construction waste will be removed and construction materials delivered safely, efficiently and sustainably;
- Identify a strategy for reducing, re-timing or combining deliveries, particularly during network peak periods;
- Help cut congestion on the surrounding highway network and ease environmental pressures;
- Improve reliability of deliveries to the Site; and
- Reduce the fuel costs of the freight operators.

1.6 REPORT STRUCTURE OF CONSTRUCTION TRAFFIC MANAGEMENT PLAN

1.6.1. The structure of the CTMP has been prepared to reflect the structure advised within TfL's Construction Logistics Plan Guidance, as follows:

- Section 2: Context, Considerations and Challenges
- Section 3: Construction Programme and Methodology
- Section 4: Vehicle Routing and Site Access
- Section 5: Strategies to Reduce Impacts
- Section 6: Planned Measures
- Section 7: Estimated Vehicle Movements
- Section 8: Implementing, Monitoring and Updating

2 CONTEXT, CONSIDERATIONS & CHALLENGES

2.1 OVERVIEW

2.1.1. This Chapter of the CTMP describes the current situation on and around the Site, as well as the applicable policies for managing construction freight activity.

2.2 TFL CONSTRUCTION LOGISTICS PLAN GUIDANCE

2.2.1. TfL's guidance is intended to ensure that CTMPs of high quality are produced to minimise the impact of construction logistics on the road network.

2.2.2. TfL's guidance focuses on reducing the impact of construction in terms of:

- *Environmental impact: Lower vehicle emissions and noise levels;*
- *Road risk: Improving the safety of road users;*
- *Congestion: Reduced vehicle trips, particularly in peak periods; and*
- *Cost: Efficient working practices and reduced deliveries.*

2.2.3. CTMPs provide a framework for understanding and managing construction vehicle activity into and out of a Proposed Development and should detail:

- The amount of construction traffic generated;
- The routes the construction vehicles will use and consideration of local impacts;
- The impact on relevant Community Considerations; and
- Any traffic management that will be in place.

2.2.4. There are two types of CTMPs that may be required. An outline CTMP accompanies the planning application and gives the planning authority an overview of the expected logistics activity during the construction programme. A detailed CTMP is submitted to a planning authority pursuant to, and in discharge of, a condition that has been imposed on the planning permission. It provides the planning authority with the detail of the logistics activity expected during the construction programme.

2.2.5. The Guidance suggests a range of measures and strategies that should be considered to reduce the impact of construction on the local environment.

2.3 POLICY CONTEXT

2.3.1. The proposed management strategy for construction logistics has been shaped by the following national, regional, and local policies.

NATIONAL PLANNING POLICY FRAMEWORK (2023)

2.3.2. The National Planning Policy Framework, (NPPF) was last updated in September 2023.

2.3.3. The NPPF promotes the use of sustainable transport throughout the UK, safe road design, and the efficient and sustainable delivery of goods and supplies.

THE MAYORS TRANSPORT STRATEGY (2018)

2.3.4. Freight and servicing are frequently mentioned throughout The Mayors Transport Strategy which contains a strategy considering all methods of freight delivery including road, rail, pipeline, water, bicycles, and air. The document especially highlights the importance of the London Freight Plan,

Delivery and Servicing Plan's, (DSP) CTMP's and the Fleet Operator Recognition Scheme, (FORS) to encourage improved efficiency and provide a framework for incentivisation and regulation.

2.3.5. Proposal 16 states that:

"The Mayor, through TfL, and working with the boroughs and members of the Freight Forum, will improve the efficiency of freight and servicing trips on London's strategic transport network by:

a) Identifying opportunities for moving freight on to the rail network where this will not impact on passenger services and where the benefits will be seen within London;

b) Increasing the proportion of freight moved on London's waterways; and

c) Reviewing the potential benefits of a regional freight consolidation and distribution network and completing the network of construction consolidation centres in London."

LONDON PLAN (2021)

2.3.6. The London Plan refers to Deliveries, servicing, and construction within Policy T7. The document notes Construction Logistics Plans should be developed in line with TfL guidance and adopt the latest standards around safety and environmental performance of vehicles to ensure freight is safe, clean, and efficient.

2.3.7. Additionally, the document highlights the importance of reducing road dangers associated with the construction of new developments, one notable point is the mayor's introduction of the Direct Vision Standard, which rates Heavy Goods Vehicles on a star rating from 0, (lowest) to 5, (highest), based on how much the driver can see directly through the cab windows. The Proposed Development will seek to use vehicles with a higher rating of vision wherever possible.

HEALTHY STREETS APPROACH

2.3.8. The Healthy Streets approach forms the core theme of the London Plan and Mayor's Transport Strategy. Healthy Streets for London demonstrates the health benefits of more inclusive and healthier street environments which are aimed to encourage active lifestyle. Through the Healthy Streets approach and the London Plan, a transport behaviour shift is advocated to reduce Londoners' dependency on the car by creating a better and healthier approach to street design, ensuring that the street is encouraging a healthy lifestyle. According to Healthy Streets for London guidance, the street environment should be a pleasant and sustainable environment in which people can walk, cycle, and use public transport safely. This CTMP has been written with consideration of the healthy streets approach, taking due thought of the shift to active travel, ensuring not to prohibit this during the construction process.

2.3.9. 'Policy T2 Healthy Streets' outlines that development proposals should:

- Demonstrate how they will deliver improvements that support the ten Healthy Streets indicators in line with TfL guidance;
- Reduce the dominance of vehicles on London's streets whether stationary or moving; and
- Be permeable by foot and cycle and connect to local walking and cycling networks as well as public transport.

2.3.11. Table 2-1 details the ten Healthy Streets indicators outlined in the London Plan. The development proposals take account of the Healthy Streets indicators and will achieve the headline policy objectives as outlined below.

- Patterns of land use that support active travel and public transport;
- Active modes are prioritised ahead of vehicular transport; and
- Active frontages, appropriate ground floor uses and natural surveillance of public spaces.

Figure 2-1 - Healthy Streets Indicators

Source: Lucy Saunders

VISION ZERO

2.3.12. Vision Zero is a key and ambitious element of the Mayor's Transport Strategy. With Vision Zero the Mayor aims to eliminate all deaths and serious injuries on London's street network by 2041. This is an initiative being taken in major cities across the world, and within London the following elements are the cornerstones of the Vision Zero action plan:

- **Safe speeds** – encouraging speeds appropriate to the streets of a busy and populated city through the widespread introduction of new lower speed limits;

- **Safe streets** – designing an environment that is forgiving of mistakes by transforming junctions, which see the majority of collisions, and ensuring safety is at the forefront of all design schemes;
- **Safe vehicles** – reducing risk posed by the most dangerous vehicles by introducing a world-leading Bus Safety Standard across London's entire bus fleet and a new 'Direct Vision Standard' for Heavy Goods Vehicles;
- **Safe behaviours** – reducing the likelihood of road users making mistakes or behaving in a way that is risky for themselves and other people through targeted enforcement, marketing campaigns, education programmes and safety training for cyclists, motorcycle, and moped riders; and
- **Post-collision response** – developing systematic information sharing and learning, along with improving justice and care for the victims of traffic incidents.

2.3.13. The proposed measures during the Demolition and Construction phases will assist with achieving the Vision Zero target by reducing the number of private vehicles that access the Construction Site. This will reduce the likelihood of active modes of transport coming into contact with private vehicles.

FLEET OPERATOR RECOGNITION SCHEME (FORS)

2.3.14. The Proposed Development is designed to encourage fleet operators to take up green fleet management, use best practice and to increase the sustainability of London's fleet distribution. The FORS project has already been developed with trade union involvement and close collaborative partnership to engage effectively with fleet operators and facilitate the sharing of information.

2.3.15. Operators will join the scheme as members, with tiers of membership reflecting fleet operator achievements. It will offer members incentives to increase the sustainability of their operations and to develop their skills, and includes best practice guidance on:

- Training to improve safety and reduce CO2 and emissions;
- Maintenance to improve safety and reduce fuel consumption, CO2 and emissions;
- Management of road risk to improve safety, particularly for pedestrians and cyclists;
- Fuel efficiency to save costs and reduce CO2 and emissions; and
- The use of low-carbon engine technologies such as hybrid and electric vehicles, hydrogen fuel cells and biofuels to reduce CO2 and other harmful emissions.

2.3.16. It will recognise legal compliance as the base 'bronze' level and promote the uptake of best practice covering fuel efficiency, alternative fuels and low carbon vehicles, management of road risk, legal record keeping and reducing penalty charge notices through the higher 'silver' and 'gold' levels. It will also recognise operator achievements with rewards that encourage operators to raise standards to reduce, in particular, CO2 emissions and collisions between heavy goods vehicles (HGVs) and cyclists.

2.3.17. Benefits will be developed recognising operator needs. These will include a subsidised training programme called London Freight Booster which will include an NVQ Level 2 qualification that supports the ongoing competencies requirements for drivers.

2.3.18. Members will also benefit from advice about fuel efficiency, Penalty Charge Notice (PCN) reduction, legal record keeping and the management of occupational road risks. Tailored action plans to help reduce collisions, emissions and costs will also be developed.

2.3.19. The project will set FORS Standards, a quality benchmark for use by clients when awarding servicing, maintenance and supply contracts. This provides a simple way for clients to ensure the sustainable credentials of foperators.

THE LONDON LOW EMISSIONS ZONE (2008)

2.3.20. The LEZ is a scheme that aims to improve air quality in the City by setting and enforcing new emissions standards for HGV's, large vans and minibuses, and deterring the use of the most polluting vehicles by freight operators. The London LEZ is a "first" for the UK and is one of the largest schemes of its type in the world.

2.3.21. The LEZ came into force in 2008 for lorries over 12 tonnes with different vehicles affected over time and tougher emissions standards were subsequently introduced in 2012. Cars and motorcycles are not affected.

2.3.22. The LEZ operates 24 hours a day, seven days a week, every day of the year including weekends and public holidays, with a daily charge of £200 being applicable for Lorries, buses and coaches; and £100 for heavy vans and minibuses which do not meet the required standards.

2.3.23. The LEZ is enforced through fixed and mobile cameras which read your vehicle registration number plate as you drive within the LEZ and check it against a database of vehicles which meet the LEZ emissions standards or are either exempt or registered for a 100% discount, or if the LEZ daily charge has been paid.

THE LONDON ULTRA LOW EMISSIONS ZONE (2019)

2.3.24. To help improve air quality, an Ultra-Low Emission Zone, (ULEZ) has been in place in central London from 8 April 2019 in the same area as the Congestion Charge. Most vehicles including cars and vans will need to meet new, tighter exhaust emission standards, (ULEZ standards) or be liable for a daily charge to drive within the ULEZ area.

2.3.25. Similar to the Low Emissions Zone (LEZ) (see section below), a daily charge runs from midnight to midnight. If you drive within the ULEZ area across two days, for example before midnight and after midnight, you will be liable to pay two daily charges if your vehicle doesn't meet the ULEZ standards. This will be in addition to the weekday Congestion Charge and the LEZ charge and will replace the T-Charge.

2.3.26. Since 29th August 2023 the ULEZ area has been expanded to cover the entirety of Greater London.

2.4 LOCAL PLANNING POLICY

CITY OF LONDON LOCAL PLAN (2015)

2.4.1. The adopted Local Plan sets out the CoL's vision for shaping the Square Mile in the future and policies used to guide planning decisions. It forms the statutory development plan for the City of London, along with the London Plan. The overarching strategy for the City is its sustainable community strategy 'The City Together Strategy: The Heart of a World Class City'.

2.4.2. In regard to construction logistics, Core Strategic Policy CS16: Public Transport Streets and Walkways (Section 4) (v)) states that:

"Requiring developers to demonstrate, through transport assessments, construction logistics plans, travel plans and delivery/servicing plans, how the environmental impacts and road danger of travel and servicing will be minimised, including through the use of river transport."

CITY OF LONDON – DRAFT CITY PLAN 2040 (2021)

2.4.3. The CoL is consulting on the Draft City Plan (2040) and the Transport Strategy. They provide a framework for future development in the square mile, outlining priorities for our people, businesses, places and spaces until 2040 and beyond.

2.4.4. Regarding construction logistics, policy VT1 The Impacts of Development on Transport states that:

"A Construction Logistics Plans is required for all major developments or refurbishments and for any developments that would have a significant impact on the transport network during construction."

CITY OF LONDON CODE OF PRACTICE FOR DECONSTRUCTION AND CONSTRUCTION SITES

2.4.5. The CoL Code of Practice for Deconstruction and Construction Sites sets out the minimum standards and procedures for managing and minimising the environmental impacts of construction projects within the City of London. The guidance and standards relate to demolition and construction works that have the potential to affect the environment, amenity, and safety of residents, businesses, the public, and the surroundings within the vicinity of the proposed works.

2.4.6. Section 4.3 – "Vehicles, Machinery and Sustainable Travel" outlines the impact that vehicle choices and management can have on air quality within the City of London. It lays out the following policies to be adhered to:

- Ensure all on-road vehicles comply with the requirements of the London LEZ and any subsequent traffic management policies to improve air quality;
- Ensure a consideration of items in sections 4.11-4.14 (NRMM compliance, minimised generator use, appropriate concrete crusher use and no idling engines);
- Wherever possible, vehicle movements should be minimised through considered logistics planning and liaison with other Sites within close proximity. To that end, produce a CTMP to manage the sustainable delivery of goods and materials and implement a Travel Plan that supports and encourages sustainable travel to and from Site;
- Prevent the occurrence of smoke emissions or fumes from Site plant or stored fuel oils by ensuring plant is well maintained and measures are taken to ensure they are not left idling when not in use; and
- Low sulphur diesel fuel should be used.

CAMDEN LOCAL PLAN (2017)

2.4.7. LBC's 'Local Plan' is the main planning guidance document for development projects in the Borough. The Camden Local Plan was adopted on 3rd July 2017 by LBC. Until 2031, it forms part of the planning framework of the Borough.

2.4.8. In regard to construction logistics and construction management plans, it states that:

"Disturbance from development can occur during the construction phase. Measures required to reduce the impact of demolition, excavation and construction works must be outlined in a Construction Management Plan.

Construction Management Plans may be sought for:

- *major developments;*
- *basement developments;*
- *developments involving listed buildings or adjacent to listed buildings;*
- *developments that could affect wildlife;*
- *developments with poor or limited access on Site;*
- *developments that are accessed via narrow residential streets;*
- *developments in areas with a high number of existing active construction Sites; and*
- *developments that could cause significant disturbance due to their location or the anticipated length of the demolition, excavation or construction period.*

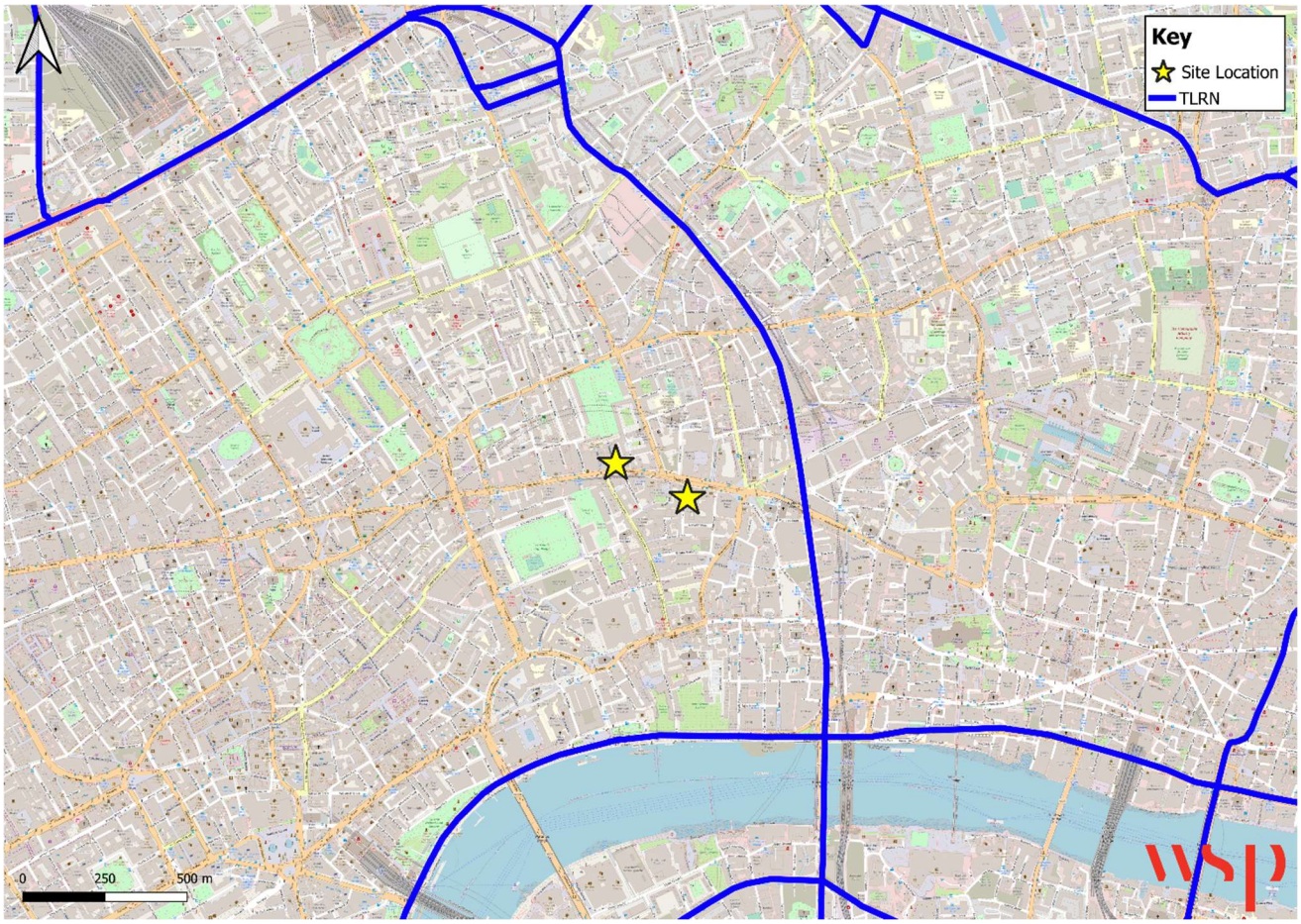
We will require Construction Management Plans to identify the potential impacts of the construction phase and state how any potential negative impacts will be mitigated.

The level of detail contained within a Construction Management Plan should be proportionate to the scale and/or complexity of the development. To assist developers in providing the right information, the Council has created a Construction Management Plan Pro-forma which is tailored towards the specific needs of the borough. The criterion in the Pro-forma are drawn from relevant aspects of Transport for London's (TfL) Construction Logistics Plans and follows TfL's construction safety best practice guidelines. Construction Logistics and Cyclist Safety scheme (CLOCS) standards and Camden's Minimum Requirements for Building Construction also form the basis for the Pro-forma criterion. The Pro-forma is available on the Council's webSite."

2.5 CONTEXT MAPS

2.5.1. The following maps show the area around the Site. Figure 2-2 shows a regional plan with the location of the Site in the context of greater London and the road network.

Figure 2-2 - Regional Plan (1:15,000)



2.5.2. Figure 2-3 shows the location of the Site in relation to the surrounding local area, whilst Figure 2-4 shows the Site boundary plan showing the extent of footways, other buildings, and road markings.

Figure 2-3 - Local Context Plan (1:3000)

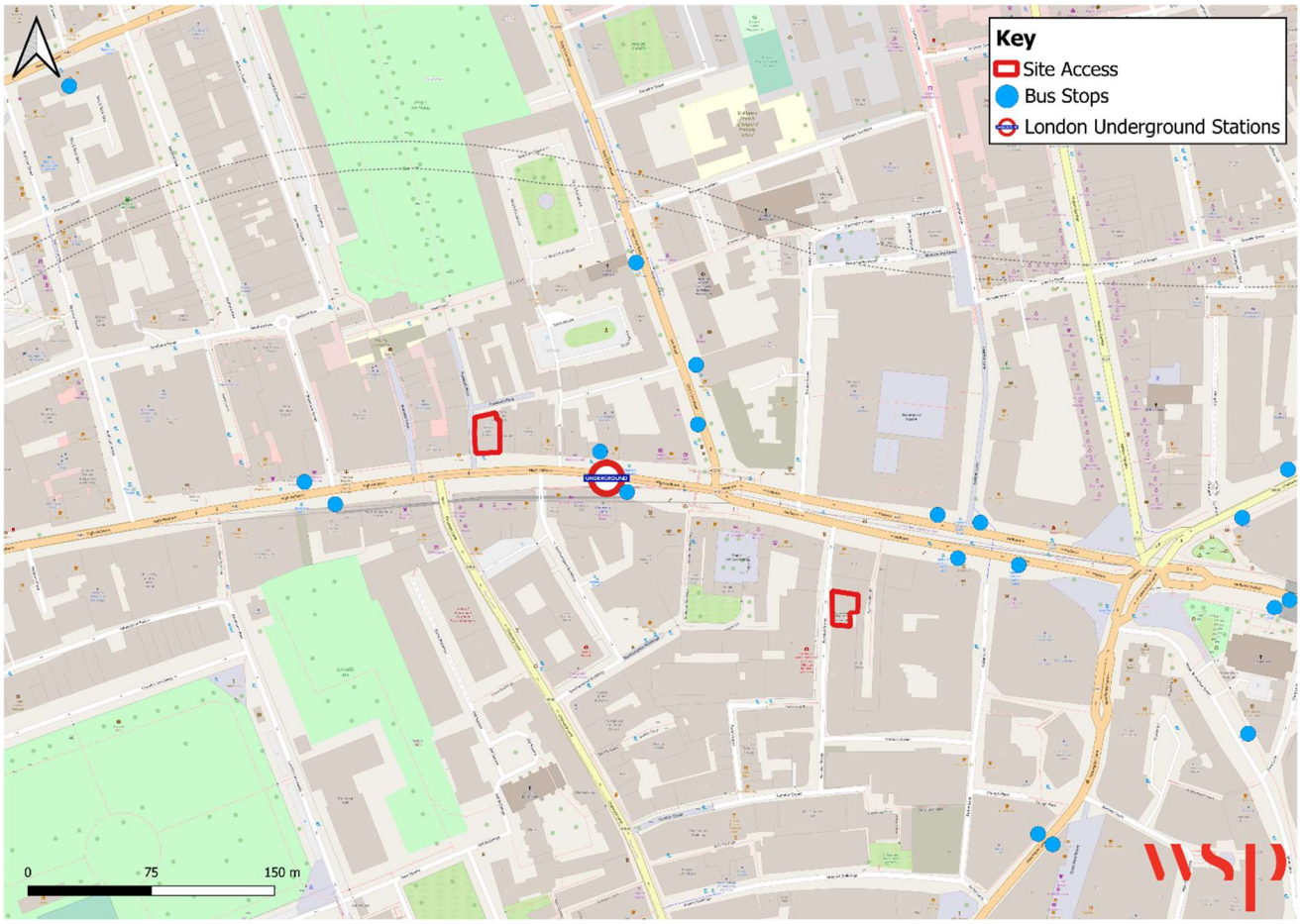


Figure 2-4 - Site Plan (1:1000)

2.6 HIGHWAY

2.6.1. The local highway network in the vicinity of the Site consists of Furnival Street, High Holborn, Gray's Inn Road (A5200) and Chancery Lane.

2.6.2. The primary access to the Site is located at 38-41 Furnival Street, which is a CoL managed road. Furnival Street is subject to a 20mph speed limit and is approximately 155m in length. The road has carriageway width of 4.3m at the widest and 2.5m at the narrowest. The localised narrowing present on Furnival Street is to enforce the northbound one-way restriction for vehicle movements but allows for contraflow cycle movements. The one-way system operates between the Furnival Street / Norwich Street priority junction to the Holborn / Furnival Street priority junction (approx. 130m in length). The one-way system is enforced by signage, localised narrowing and by a TfL enforcement camera.

2.6.3. Furnival Street is included within the study area for CoL's Chancery Lane enhancement strategy, but no improvements are proposed at present.

2.6.4. The secondary access is located at Fulwood Close, which is a pedestrianised street with a width of 2m at its narrowest and 7m at its widest. The closest vehicle access points to the Fulwood Close access are Holborn and Sandland Street.

2.6.5. Holborn is a major distributor road that forms part of the A40 route from London to Fishguard in Wales. It runs eastbound towards Gray's Inn Road and westbound towards Drury Lane, with a speed limit of

20mph. From High Holborn to Holborn Circus, it has two separate east and westbound lanes with a central reservation in the middle. Each carriageway is approximately 8m in width (4m wide bus lane and 4m normal traffic lane) and both directions have a bus lane. Furnival Street is located on the southern side of the road and Fulwood Place is situated on the northern side of the road. There are numerous crossing points including a large, signalised crossing by Chancery Lane Station. It is also possible to cross the road through Chancery Lane Station, which has two exits north of High Holborn and two exits on the southern side.

2.6.6. Gray's Inn Road starts at the junction with High Holborn at the City of London boundary and forms an important road in the Bloomsbury district of Central London, running to King's Cross and St. Pancras Station. It has single lane traffic travelling north and southbound. The road has a width of approximately 11m including dedicated cycle lanes that run in both directions from High Holborn to the junction with the A401. There are signalised crossings along the road, and it has a speed limit of 20mph. There is a bus lane that runs southbound towards Holborn.

2.6.7. Chancery Lane is a single carriageway one way road in a northbound direction, connecting High Holborn and the Strand / Fleet Street. It is subject to a 20mph speed limit. As mentioned in section 3.3.5. it is currently subject to an experimental scheme restricting weekday traffic between 7am and 7pm. Chancery Lane is approximately 6m in width for the duration of the road.

2.6.8. The closest rear highway access to Fulwood Place is on Sandland Street which is to the northwest of the Fulwood Place access. Sandland Street can be accessed from High Holborn via travelling northbound up Red Lion Street. Red Lion Street is a two-way road measuring approximately 8m in width. It has a Santander docking station and car parking on the eastern side of the road.

2.6.9. Sandland Street is a two-way road running east to west that connects to Red Lion Street, Bedford Row and Brownlow Street. It has marked car parking on both sides of the street and is 14m at its widest point and 6m at its narrowest sections. There is a lime bike docking station and access to the Gray's Inn Gardens from this street.

2.6.10. Brownlow Street is a one-way street running southbound from Sandland Street to High Holborn. It is a narrow 20mph road measuring 2m at its widest points. This street is unsuitable for large vehicles.

2.6.11. Bedford Row is a wide two-way street that intersects Theobalds Road in the north and Sandland Street in the south. The road has an approximate width of 11m for the duration of the road with pavements measuring 4.5m on each side of the road. The road has marked resident parking spaces on each side and includes taxi ranks and a car club space at the northern end of the road. When taking into account the size of parking spaces the road has a usable width of 7m which would be suitable for larger vehicles to use.

2.7 LOCAL PEDESTRIAN CONNECTIVITY

2.7.1. There is a comprehensive network of pedestrian routes linking the Site to the surrounding areas with footways provided. The existing pedestrian environment is of good quality with high standard footways which are wide, well maintained and well lit.

2.7.2. The main access to the Site will be located at 38 and 41 Furnival Street. Furnival street is a one-way street for vehicles travelling northbound. Furnival Street intersects joins Holborn at the northern end of the street and Cursitor Street at the southern end. There is also access to Norwich Street on the eastern side of the road approximately 25m from the intersection with Cursitor Street. The road is 4m in width at its widest points and 2.5m at its narrowest point. The widest sections of pavement for

pedestrian's measure at 3.5m and the narrowest sections at 1m. Furnival Street is lit throughout and features CoL bollards to prevent vehicle overrun of the footway. Furnival Street has a marked advisory cycle lane running southbound (in a contraflow arrangement) on the eastern side of the road. This is a non-segregated lane with sporadic markings running along the road. The street has no formalised pedestrian crossing facilities, only dropped kerb crossings and the Site access is located on the eastern side.

2.7.3. The secondary Site access is located on Fulwood Place. The entrance to Fulwood Place is an alley on the northern side of High Holborn, of approximately 2m in width at its narrowest, located slightly to the east of the crossing point which opens out after 20 metres to widths of 7m at its widest. Fulwood Place is a well-lit wide pedestrian-only street.

2.7.4. High Holborn and Holborn have 3-metre-wide pavements at their narrowest sections with pavements in some sections stretching to 5m in width. The road has regular crossings at short intervals in the near vicinity to the Site. These include puffin, pelican, and non-signalised crossings with central island refuge areas. In particular, there is a pelican crossing that allows pedestrians to cross from north to south over Holborn at Chancery Lane station. Pedestrians can also use Chancery Lane station underpass to cross the road with the station having two exits on the north and south side of Holborn.

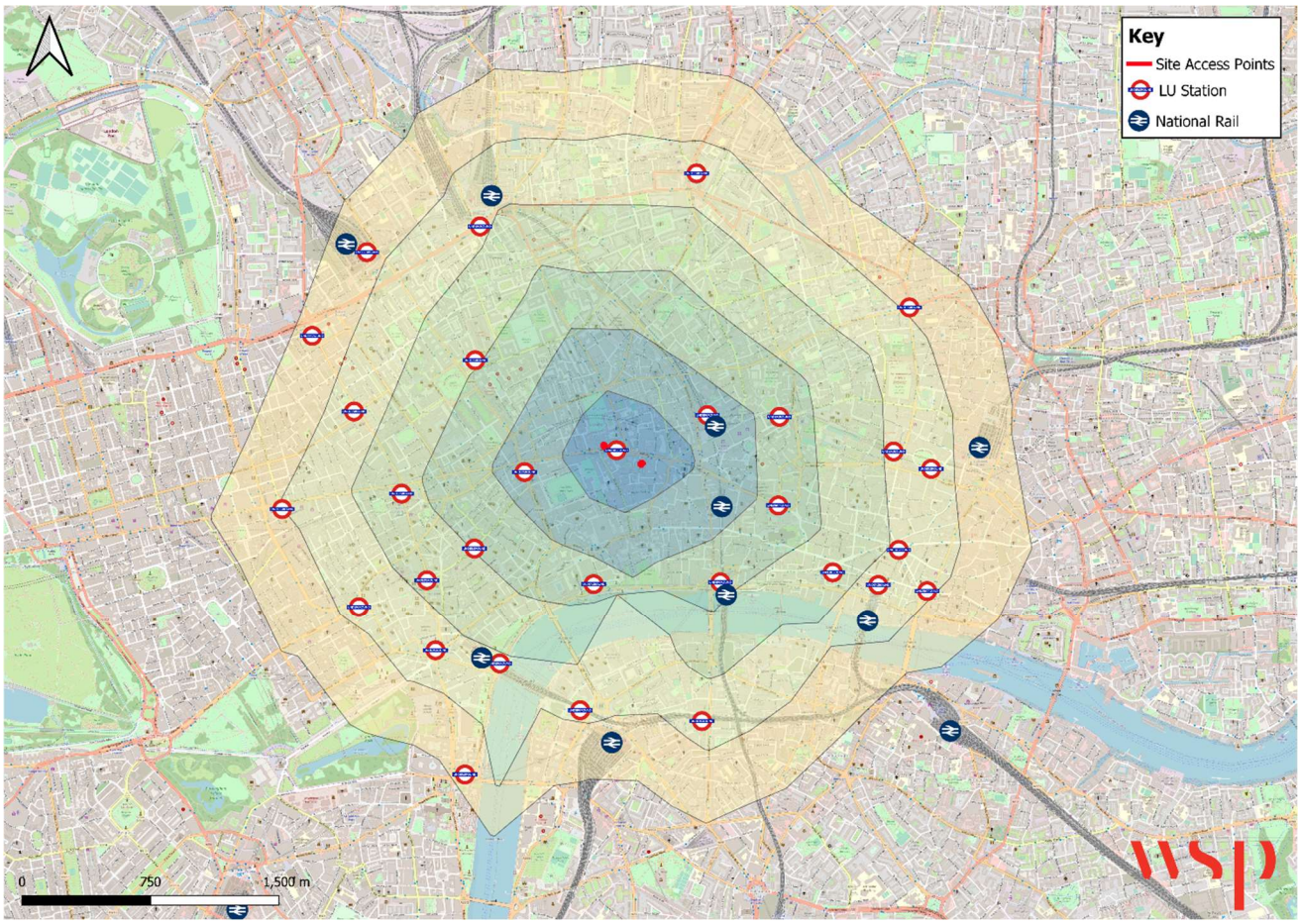
Pedestrian Priority Streets Programme

2.7.5. In a new experimental scheme, the CoL is providing more space for people and improving their comfort and safety through the Pedestrian Priority Streets programme.

2.7.6. On the 20th of February 2023, one of these schemes was introduced on Chancery Lane, restricting traffic on Chancery Lane between 7am-7pm, Monday-Friday, but allows taxis and vehicle access to properties and parking and loading bays. The experiment is to run for 18 months and will be monitored closely to identify the impacts on Chancery Lane and the surrounding streets. This has a potential to impact positively reducing traffic flow around the Fulwood Place access and creating a safer environment along Chancery Lane for active travel users arriving to the Site.

2.7.7. Figure 2-6 shows the areas accessible within different walking times from the Site. As shown, a large part of central London and the South Bank is accessible within a short walk of the Site.

Figure 2-5 - Local Pedestrian Isochrone



2.8 LOCAL CYCLE CONNECTIVITY

2.8.1. The Site is well served for cycle routes connecting to several major destinations. Due to the nature of the roads in London and the significance of cycling as a sustainable mode of travel, cyclists are encouraged to use the existing highway network to undertake their journeys. This is encouraged through regional and local planning policy.

2.8.2. Cyclists using Holborn and High Holborn are required to use the bus lanes which are approximately 4m in width. There are sporadic sections of designated light segregated cycle lanes and advanced cycle stop boxes at main junctions and traffic lights. Both roads have 20mph speed limits.

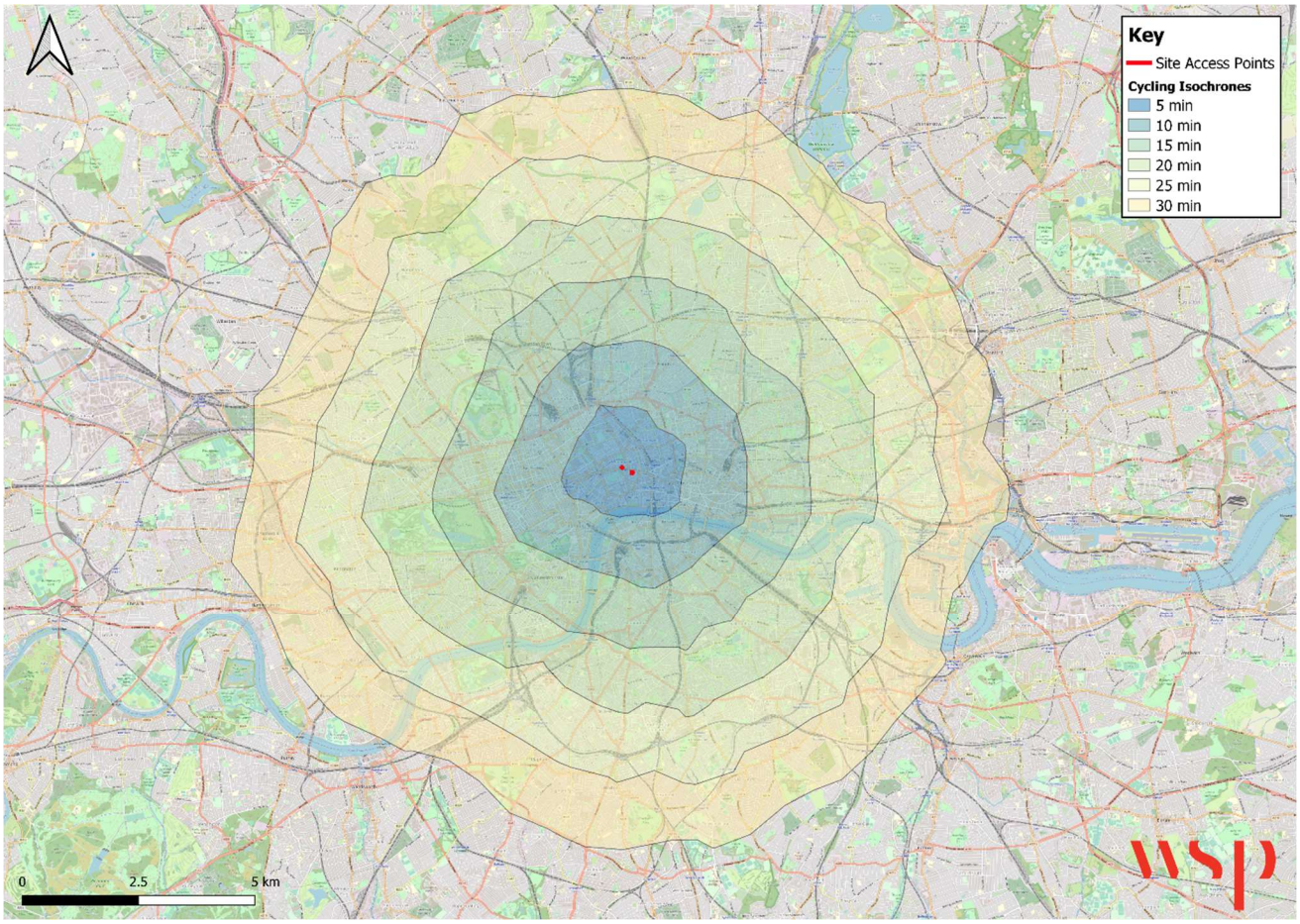
2.8.3. Grays Inn Road connects with High Holborn at Chancery Lane Station and runs from Kings Cross St Pancras in the North to Holborn in the South. It has had permanent segregated cycle lanes since 2021, in the form of mandatory cycle lanes with partial sections of light segregation in the shape of white lining and wands. The lanes run on both sides of the road and are approximately 1.5m in width for the length of the road.

2.8.4. Chancery Lane intersects with High Holborn directly to the south of the Fulwood Place Site access and connects with the Strand. It is a one-way, 20mph road travelling in the direction of south to north and has a cycle lane (1.5m width) on the right-hand side of the road running southwards. As mentioned previously in section 3.3.6 Chancery Lane is currently trialling a new scheme for restricting motor

vehicle usage and will be more welcoming for cyclists due to the reduced traffic flows. Cycleway 41 can be accessed 400m to the West of the Site. The cycleway runs Northbound up Red Lion Court and connects with Cycleway 6 at Tavistock Place. Cycleway 6 runs from Elephant and Castle to Kentish Town along safer roads. Cycleway 6 can also be directly accessed approximately 550 metres to the East of the Site.

2.8.5. Figure 2-6 shows the areas accessible by bicycle from the Site within different cycling times.

Figure 2-6 - Cycle Iscochrones



2.9 BUS & UNDERGROUND ACCESSIBILITY

2.9.1. The closest bus stop to the Fulwood Place Site access is the Chancery Lane Station bus stop, 125m to the east. The 38-41 Furnival Street access is closest to the bus stop at Holborn Circus, 120m to the north-east of the access point. Chancery Lane Station bus stops are located between the two access points on Fulwood Place and 38-41 Furnival Street. The stops are served by 5 services, the number 8, 59, 133, N8, N25, and N242.

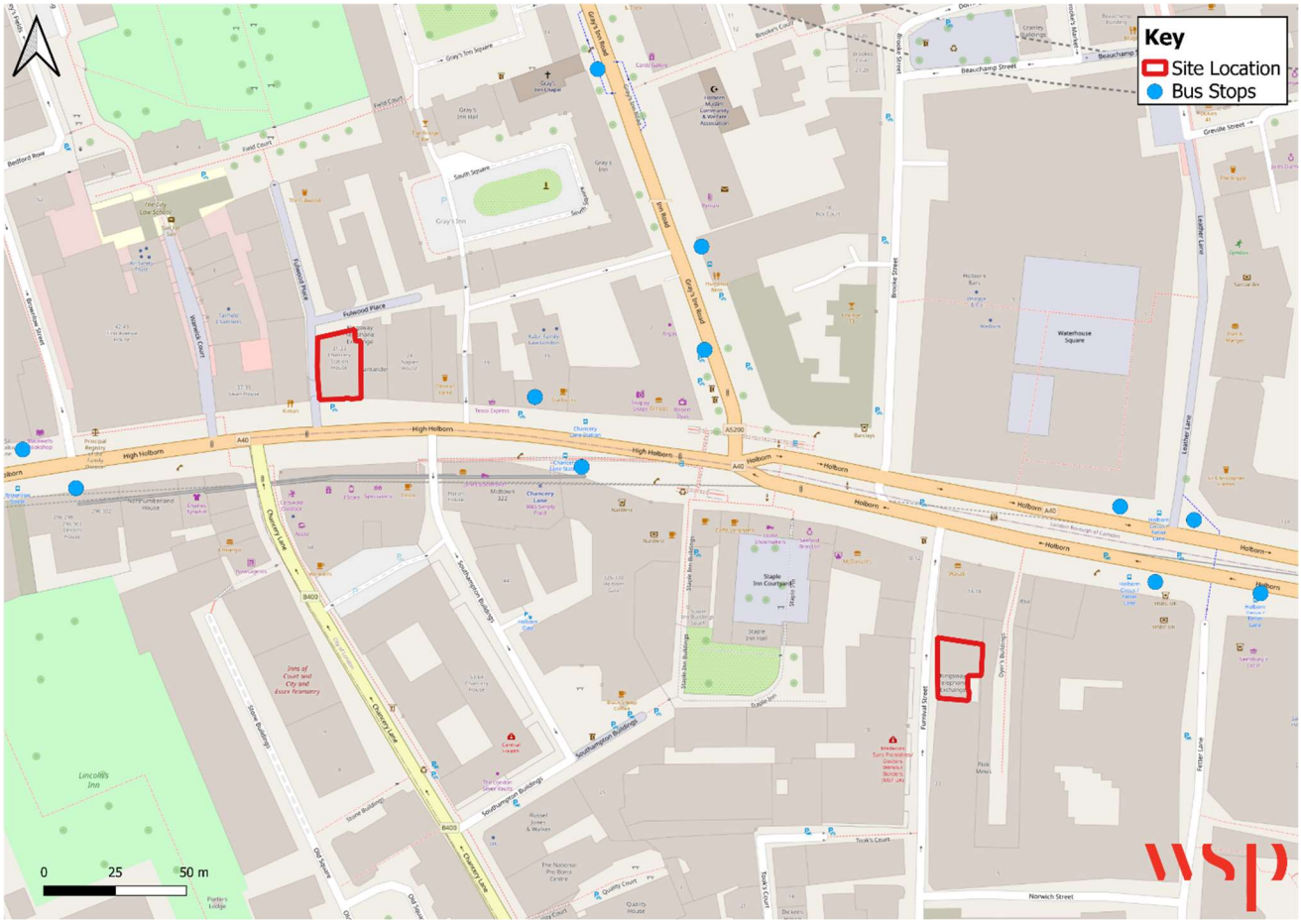
2.9.2. The peak hour frequency of bus services in the Site vicinity has been assessed and presented in the table below, together with a summary of the bus routes and stopping points.

Table 2-1 - Local Bus Network (Weekday / 0800 – 0900 & 1700 – 1800)

Service No.	Nearest Stop	Walk Time (mins)	Route	Buses per Hour	
				AM Peak	PM Peak
8	Chancery Lane Station	2	Bow Church – Tottenham Court Road	7	7
17	Holborn Circus (Stop J)	3	Archway Station – Holloway Road	6	6
46	Holborn Circus (Stop J)	3	Paddington Station – Eastbourne Terrace	5	5
59	Chancery Lane Station	2	Streatham Hill – St Bartholomew's Hospital	7	7
133	Chancery Lane Station	2	Streatham - Holborn	6	6

2.9.3. Figure 2-7 below outlines the bus stops in the vicinity of the Site.

Figure 2-7 - Local Bus Stops



2.9.4. The Site has 5 different bus stops within a five-minute walking distance offering a wide range of services. It can therefore be concluded that the Site is well served by the local bus network with daytime bus routes and three-night bus routes in operation. Weekday frequencies are up to 31 buses in per hour which equates to a bus every 2 minutes with a verity of destinations available. The public bus service at the Site has an excellent level of service providing visitors with a public transport alternative to the underground. Accessible evening services are also available to and from the Site are also available via the following routes:

- N8 – Great Titchfield Street to Oxford Circus Station
- N25 - Great Titchfield Street to Oxford Circus Station
- N242 – Homerton Hospital to Wardle Street

2.10 LONDON UNDERGROUND

2.10.1. The Site is in close walking distance of London Underground (LU) stations, namely Chancery Lane Station (c.130 metres), Farringdon (c.650 metres) and Holborn (c.700 metres). Chancery Lane provides a direct connection to the Central Line and is reachable within 2 minutes on foot. Farringdon provides access to the Circle Line, Hammersmith and City Line, Metropolitan Line and the Elizabeth Line. Holborn (one stop from Chancery Lane) provides onward connection to the Piccadilly Line and Central line.

2.10.2. Peak Hour frequencies for these services are set out below in Table 2-2

Table 2-2 – London Underground Peak Hour Frequencies

Station	Service	No. of Services AM Peak (0800 – 0900)	No. of Services PM Peak (1700 – 1800)
Chancery Lane	Central Line - Eastbound	24	27
Chancery Lane	Central Line - Westbound	22	25
Farringdon	Metropolitan Line – Eastbound	17	16
Farringdon	Metropolitan Line - Westbound	16	16
Farringdon	Hammersmith and City Line - Eastbound	6	6
Farringdon	Hammersmith and City Line - Westbound	6	6
Farringdon	Circle Line - Eastbound	6	6
Farringdon	Circle Line – Westbound	6	6
Farringdon	Elizabeth Line – Eastbound	24	24
Farringdon	Elizabeth Line – Westbound	24	24
Holborn	Piccadilly Line - Eastbound	20	21
Holborn	Piccadilly Line – Westbound	21	20
Holborn	Central Line – Eastbound	23	23
Holborn	Central Line - Westbound	23	23
Holborn	Elizabeth Line - Eastbound	24	27
Holborn	Elizabeth Line - Westbound	22	25

2.10.3. As seen above, the Site is well served by a multitude of different services providing frequent services across London. In addition, the Central Line runs for 24 hours on Fridays and Saturdays. The figure below shows the location of Chancery Lane Station, Farringdon Station, and Holborn Station in relation to the two Site access points.

2.11 NATIONAL RAIL

2.11.1. Farringdon Station is an 8-minute walk away (approximately 650m to the northeast of the Site). In addition to providing access to the Circle, Hammersmith & City, Metropolitan, and Elizabeth Line, Farringdon Station also has access to National Rail services, via Thameslink. The station is served by regular trains to St Albans, Cambridge, Brighton, Horsham, and Bedford, amongst others.

2.11.2. City Thameslink is a 10-minute walk away approximately (800m south of the Site). It is served by trains operated by Thameslink on the Thameslink Route which is a 24-hour main-line route, running from Bedford, Luton, St Albans City, Peterborough and Cambridge via Central London to Sutton, Orpington, Sevenoaks, Rainham, Horsham, Brighton and East Grinstead.

2.11.3. It should also be noted that the London Underground and London Bus Services offer the opportunity to connect to all other London Rail stations, making the Site accessible to all of the London transport network. A summary of services from both stations is included below in Table 2-3.

Table 2-3 – National Rail Peak Hour Frequencies

Station	Destination	No. of services AM Peak (0800 – 0900)	No. of services PM Peak (1700 – 1800)
Farringdon / City Thameslink	St Albans City	7	7
Farringdon / City Thameslink	Cambridge	5	5
Farringdon / City Thameslink	Brighton	5	5
Farringdon / City Thameslink	Peterborough	5	6
Farringdon / City Thameslink	Sutton (London)	7	6
Farringdon / City Thameslink	Horsham	6	6
Farringdon / City Thameslink	St Albans City	11	10
Farringdon / City Thameslink	Rainham (Kent	6	8
Farringdon / City Thameslink	Luton	9	7
Farringdon / City Thameslink	Three Bridges (Gatwick Airport)	9	8
Farringdon / City Thameslink	Bedford	8	6

3 CONSTRUCTION

3.1 INTRODUCTION

3.1.1. This chapter sets out some of the indicative construction elements for the Proposed Development. Once a construction company (construction company – “Principal Contractor ”) is appointed, a detailed CTMP will be prepared (potentially as a condition of planning consent) providing further detail and confirming the programme and detailing the construction methodology.

3.2 OUTLINE PROGRAMME

3.2.1. A detailed development programme has not yet been finalised, which is entirely appropriate for a scheme at this stage in the development process. However, this draft / outline CTMP has been prepared for submission as part of this application, which includes a number of assumptions. These assumptions have been informed by an understanding of current and future projected market conditions, logistical arrangements, technical considerations and professional experience. The assumptions will be reviewed, and an outline programme will be produced, by the Principal Contractor.

3.3 INTERFACE WITH KEY STAKEHOLDERS

3.3.1. Once formally appointed, the Principal Contractor will assume responsibility for fostering good community relationships with all neighbouring residents and key stakeholders. The Principal Contractor will initiate early communications to establish a dialogue with the community which will help to mitigate and reduce problems that may arise during the demolition and construction process.

3.3.2. Information boards will be displayed on the Site hoarding which will highlight the key personnel on Site including their contact details.

3.4 ENABLING WORKS

3.4.1. In accordance with the discharge of planning conditions of any prospective planning permission, a number of surveys and investigations would be agreed in advance with the Council and undertaken prior to the commencement of works on-Site. There would also be a requirement for various consents and licences. The requirement for the following surveys and investigations will be confirmed by the Principal Contractor, for the purpose of the outline CTMP, the following are envisaged:

- Asbestos surveys (demolition surveys i.e. intrusive);
- Nesting birds survey (if Site clearance works are to be undertaken between the months of March to August inclusive);
- Geotechnical and Geo-environmental surveys (where deemed relevant) to determine items such as: soil types, land contamination (type and levels), ground conditions, groundwater levels and bearing capacities. Geoarchaeological monitoring may be required during these works;
- Surveys of existing utilities,

3.4.2. All Statutory, CoL, LBC and TfL consents and licences required to commence an on-Site activity would be obtained ahead of the works commencing, giving the appropriate notice period. These would include but not at this stage be limited to:

- Notices and agreements for works on the highway in accordance with the Highway Acts 1980 and Road Traffic Act 1988;
- Permanent Road Orders;
- Temporary Traffic Orders and parking bay suspensions;
- Hoarding and scaffold licences;
- Details of pedestrian or cycle route diversions;
- Crane operator permit - required if mobile cranes / cherry pickers are to be used on the public highway;
- Crane over sail licence;
- Connections to existing statutory services and main sewers;
- Licence for discharge of water from the Site into the public sewer;
- Party wall act notices and agreements.

3.5 SITE OFFICES AND WELFARE FACILITIES

3.5.1. Central, good-quality welfare facilities would be provided on the Site and would include toilets, washing and changing facilities. These temporary provisions would be expanded to meet the requirements of the anticipated maximum construction workforce numbers.

3.5.2. Site offices for the Principal Contractor and sub-contractors would also be provided together with the Applicant.

3.5.3. Temporary utility connections would be made to existing utility services for temporary accommodation and for construction use where no existing connections exist.

3.5.4. Site offices and welfare will be located in 40-41 Furnival Street while 38-39 Furnival Street is demolished. After this demolition offices and welfare will be located in temporary Portacabins.

3.5.5. There is a possibility that a nearby office space will have to be rented during the construction of the new 38-41 Furnival Street buildings until the new buildings are completed. These new buildings can be used for offices and welfare while the Site are being fitted out.

3.5.6. The Fulwood Place access will require a satellite office in nearby temporary space.

3.6 TEMPORARY ROAD CLOSURES

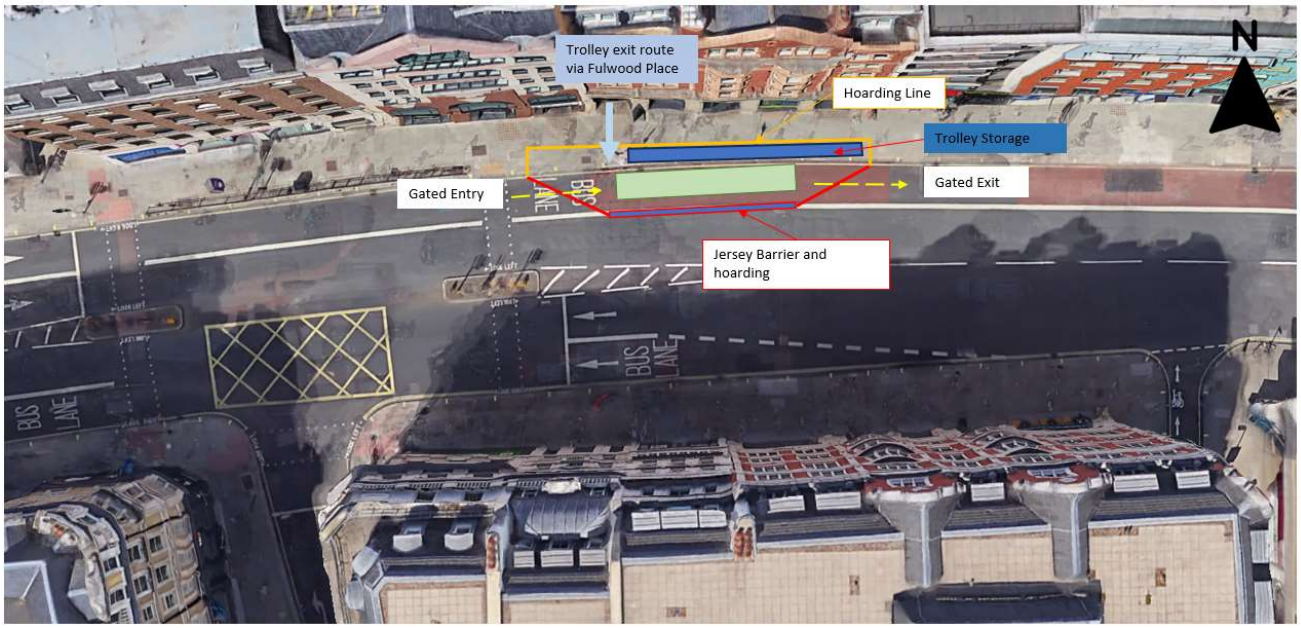
3.6.1. Due to the constraints of the above ground infrastructure, to facilitate the construction of the tunnels, it is anticipated that road closures will need to occur. It is proposed that the primary construction access point will be provided at 38-41 Furnival Street, and a partial closure of the carriageway will be required. As per the indicative programme, during the demolition phase of No.38-41 Furnival Street and the works to the Furnival Street lift shaft, the Fulwood Place lift shaft will be utilised to enable continuous access to the tunnels. To allow for loading and unloading a lane closure on High Holborn will be proposed.

3.6.2. Figure 3-2 and Figure 3-3 provide indicative closure plans which will be discussed with CoL, LBC and Transport for London officers prior to implementation.

Figure 3-1 - Furnival Street Road Closure Plan

Reference: Blue Sky Building

Figure 3-2 - Fulwood Place / Holborn Closure



Reference: Blue Sky Building

3.6.3. As stated, the Fulwood Place / High Holborn lane closure will be only required during the demolition phase of the works to allow for continuous access to the tunnels via the Fulwood Place shaft. Whereas, the Furnival street closure will likely be required for duration of the construction phase.

3.7 HOARDING, GATES, AND SCAFFOLDING

3.7.1. Prior to the commencement of works, the boundaries to working areas would be secured to segregate the general public from construction works using solid, well-maintained hoardings and screening where required.

3.7.2. It is proposed to retain pedestrian access to Furnival Street throughout the construction process, although certain sections of the footway and road will be closed. Cyclists will be expected to dismount to navigate the closure area.

3.7.3. The exact hoarding locations would be identified and agreed with highways officers at the CoL as part of the Principal Contractor liaison with the CoL/LBC respectively. Licences for hoardings located on the public highway would be obtained from the borough.

3.7.4. Secure vehicle access points would be established at the Site entrance locations. A pedestrian access point with security would generally be located close to the main vehicular access gate with a separate pedestrian gate and footpath provided for the workforce.

3.7.5. The hoarding would be decorated appropriately with marketing graphics/logos. Regular inspections would be carried out to ensure that the integrity of the hoarding is maintained, and the hoarding would be kept clean and in a good state of decoration. Offensive graffiti would be removed as soon as possible. Sharp or splintered edges would be avoided to ensure pedestrian safety.

3.7.6. Fans and façade netting would be installed to contain falling debris. Site works on scaffolding would be carried out behind sheeting such as Monarflex, installed tight to the scaffold, to act as a dust and visual barrier.

3.7.7. Construction logistics guidance indicates that there may be a requirement for out-of-hours security and / or a CCTV system to secure the demolition and construction Site. The Site-specific security strategy would be developed on appointment of the Principal Contractor, would be outlined in the final CMP, and would be agreed with CoL and LBC, following guidance where practicable.

3.8 UTILITY DIVERSIONS / REMOVALS

3.8.1. Utility providers would be contacted at the earliest opportunity to ensure that any diversion works which may be required are carried out in a timely manner. Any existing occupied commercial or residential units would not be affected by any disconnections.

3.8.2. Prior to any demolition works taking place, the location of services would be identified and marked on Site using utilities record drawings and on-Site investigation techniques such as hand dug trial holes and scanning using a cable avoidance tool.

3.9 DEMOLITION / EXCAVATION WORKS

3.9.1. The existing Site access at 40-41 Furnival Street is due to be demolished, including the existing single storey basement in 40 Furnival Street with a depth of 3.5m. There will be excavations over the entire Site area to a depth of 14m from the top slab.

3.9.2. Excluding the existing basement, it is estimated that approximately 1583.8 tonnes of material will be removed to accommodate the works.

3.9.3. There is no demolition and excavation proposed for the 31-33 Fulwood Place access.

3.9.4. Once formally appointed, the Principal Contractor will provide detail regarding the construction Site phases. This will then be incorporated into the full CTMP.

3.10 PILING AND EXCAVATION WORKS

3.10.1. The excavation works will commence immediately after initial ground clearance has been undertaken. It is expected that 12no 750mm diameter piles extending 15m below the base slab will be required.

3.10.2. Once formally appointed, the Principal Contractor will be able to provide additional information with regards excavation procedures and programme.

3.11 CONSTRUCTION WORKS

3.11.1. The substructure and above ground construction works would commence immediately after the excavation, basement and piling works. As such, the Site would already be secured with a 2.4m high full solid hoarding. There would be some alterations and adaptions required to accommodate the construction sequencing or methodology.

3.11.2. Appropriate hoarding, gates, scaffolding and security installations will be provided in accordance with CoL and LBC guidance.

3.11.3. A secure enclosure around construction vehicles, inclusive of a lockable door would also be provided to prevent unauthorised access at any time.

3.11.4. Once formally appointed, the Principal Contractor will provide a clear construction programme outlining the various phases and stages for the development.

3.12 ENVELOPE WORKS

3.12.1. The details of the envelope works will be confirmed by the principal contractor, it is envisaged that Concrete post tensioned slabs and reinforced concrete walls will be provided for external walls of No.40-41 Furnival Street. The existing brickwork from No.38-39 Furnival Street will be reconstructed and rebuilt within the new facade.

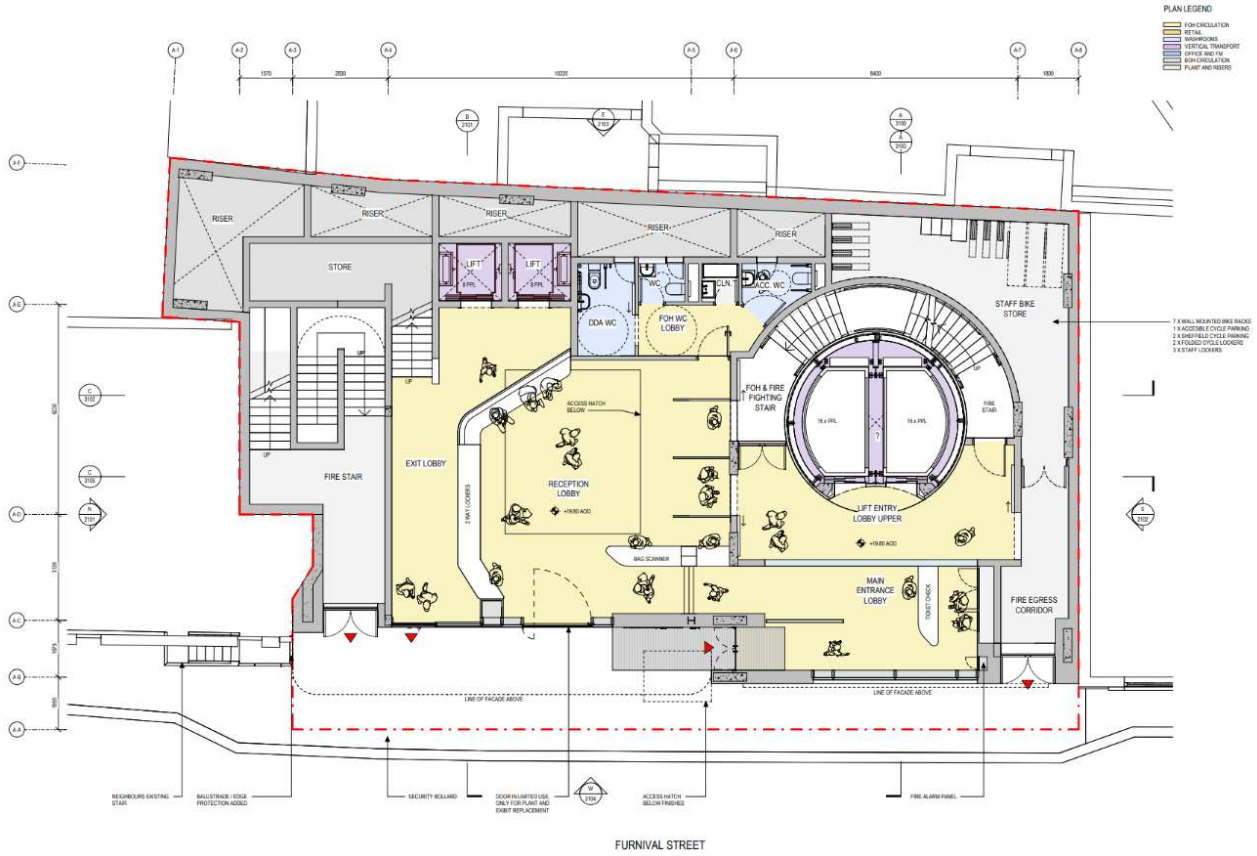
3.13 FIT OUT WORKS

3.13.1. Following assessment of structural integrity and the achievement of water tightness, fit out works would commence with the installation of tunnel linings, installing services including drainage, cables, lighting, ductwork, sprinklers/mist system and lastly fit out the exhibitions.

3.14 EXTERNAL / HIGHWAYS WORKS

3.14.1. Public realm works would be completed to Furnival Street at the completion of the construction works. As shown, to increase the footway width along the frontage of the development by setting the building line of No.40-41 Furnival Street back by 2.05m and reducing the carriageway width of Furnival Street by 0.9m. This will provide a 3.6m to 2.1m wide footway along the building frontage whist still maintaining adequate carriageway width for vehicles to manoeuvre along Furnival Street. This level of localised narrowing is consistent with narrowing seen further south on Furnival Street. For this section of Furnival Street, it is proposed that the carriageway of Furnival Street will be raised to footway level to accommodate a shared surface with CoL bollards.

Figure 3-3 - External / Landscape Works



3.14.2. It is envisaged that no stopping up orders for existing highways would be required for the Proposed Development. It is possible that some short, temporary road closures may be required for special lifts or events such as dismantling of any cranes at the end of construction and in association with the connection of main utility services. Such events would first be agreed with the borough before any road closures occur, and the necessary highways notices given.

3.14.3. A highways contractor would be used, and road signs and temporary barriers would be used to inform road users when road works are taking place.

3.15 UTILITIES AND SERVICING INSTALLATION

3.15.1. The locations of the principal and secondary utility corridors are subject to detailed design development and will be the responsibility of the Principal Contractor to assess once formally appointed.

3.16 EXCAVATION QUANTITIES AND CONSTRUCTION WASTE MANAGEMENT

3.16.1. Table 3-1 below provides a breakdown of the anticipated excavation quantities and waste to be generated during construction. The quantities are approximate at this stage and will be fully evaluated following the formal appointment of a Principal Contractor.

Table 3-1 - Forecast Excavation Waste Quantities

Material	Estimated Volume (tonnes)
Total Excavation Volume	1584
Concrete tonnes conversation	33254
Steel	2001
Other materials	984
Plant	53

3.17 CONSTRUCTION MATERIAL VOLUME

3.17.1. Table 3-2 below details the indicative approximate volumes of construction materials calculated at this stage. Please note the below figures are indicative only. The principal contactor will confirm the full amounts. For this stage of work, only concrete and steel volumes have been provided.

Table 3-3 - Estimated Construction Material Volume

Material	Estimated Volume (tonnes)
Concrete	1449
Steel	2470

3.18 CONSTRUCTION AND CONTRACTING STRATEGY

3.18.1. It is expected that the initial enabling works and excavation works would be procured under a contract to include environmental management responsibilities.

3.18.2. A Principal Contractor would be appointed to carry out the new build works which would include environmental and logistics management responsibilities. The logistics management may also extend to overseeing logistics operations by the enabling and excavation contractors, and any other contractors, to ensure full co-ordination across the Site.

4 VEHICLE ROUTING & SITE ACCESS

4.1 SITE ACCESS AND EGRESS

4.1.1. The proposed demolition, any road closures and construction traffic access onto the Site would be agreed with TfL and CoLand LBC highways officers as part of the final CTMP, prepared by the Principal Contractor.

4.1.2. However, in considering prospective routing for this Outline CTMP, it has been assumed that to facilitate the works, Furnival Street would be closed, and a temporary access would be provided to the Site. Fulwood Place will also need to be utilised during the demolition of No.38-39 Furnival Street to allow for access to the Site. Vehicle routing to both Furnival Street and High Holborn (adjacent 31-33 Fulwood Place) has been demonstrated.

4.1.3. Any construction traffic routing will be subject to agreement with the principal contractor and is subject to change.

4.2 VEHICLE ROUTING AND TRAFFIC MANAGEMENT

4.2.1. Construction vehicle routes have been prepared with regard to the London Councils Safer Lorries Scheme and the Transport for London Road Network. Vehicles would use the Strategic Road Network to access the immediate vicinity of the Site.

FURNIVAL STREET ROUTING

4.2.2. As stated, Furnival Street will be the primary construction point for the Site, with loading and unloading proposed within a closed section of the highway.

4.2.3. It is proposed that most construction traffic would access the Site from the north, originating from along the A501, before travelling south along the A5201 then proceeding west along the A40 (Holborn) to the Site, as seen in Figure 4-1 when reaching the Furnival Street turn, drivers will need to perform a reversing manoeuvre from Holborn into Furnival Street to the small nature of the street and because it is one way, this is detailed in Figure 4-2 and swept path analysis of this movement has been demonstrated in Figure 4-3.

Figure 4-1 – Furnival Street Vehicle In Route (1:15000)

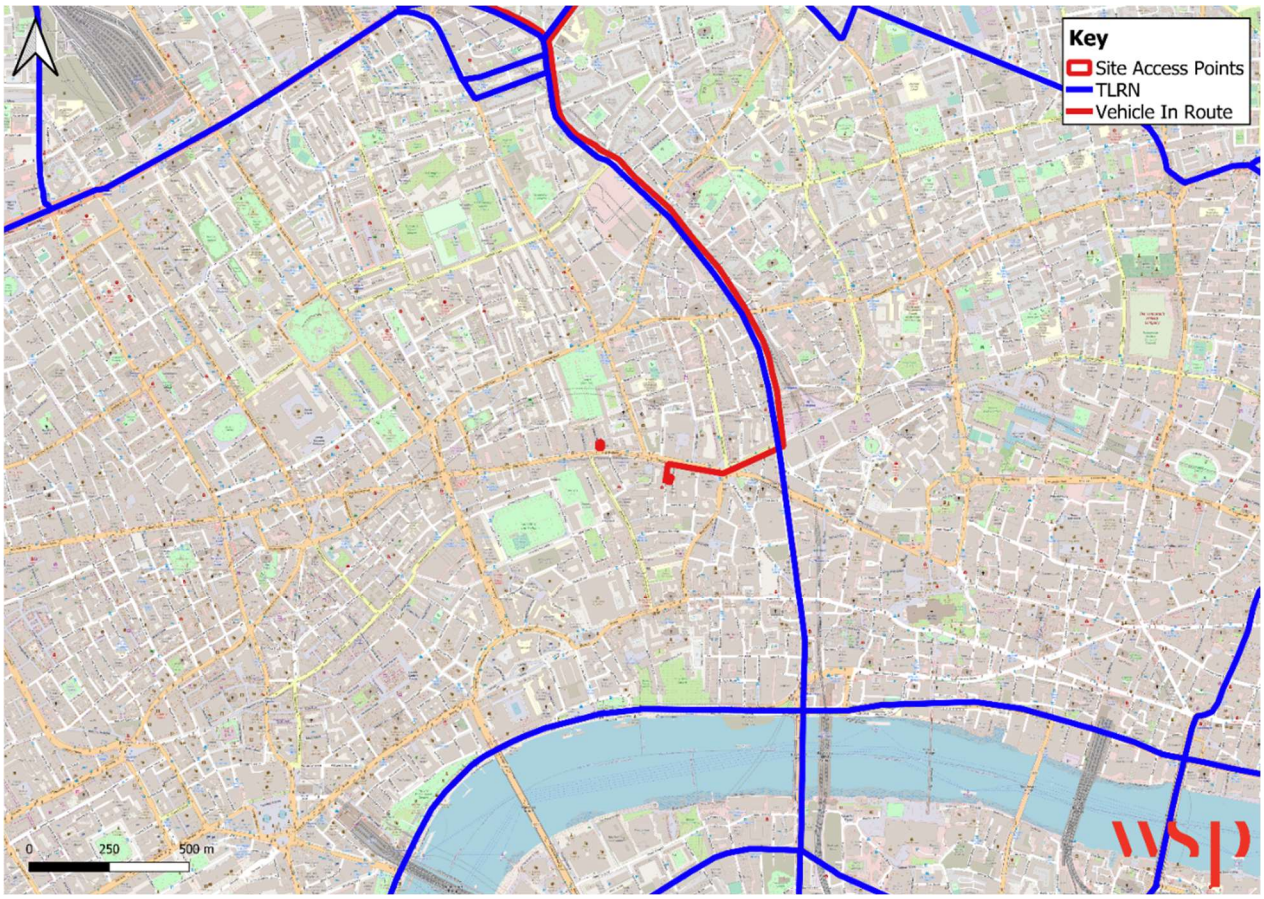


Figure 4-2 – Furnival Street Vehicle In Route (1:3000)

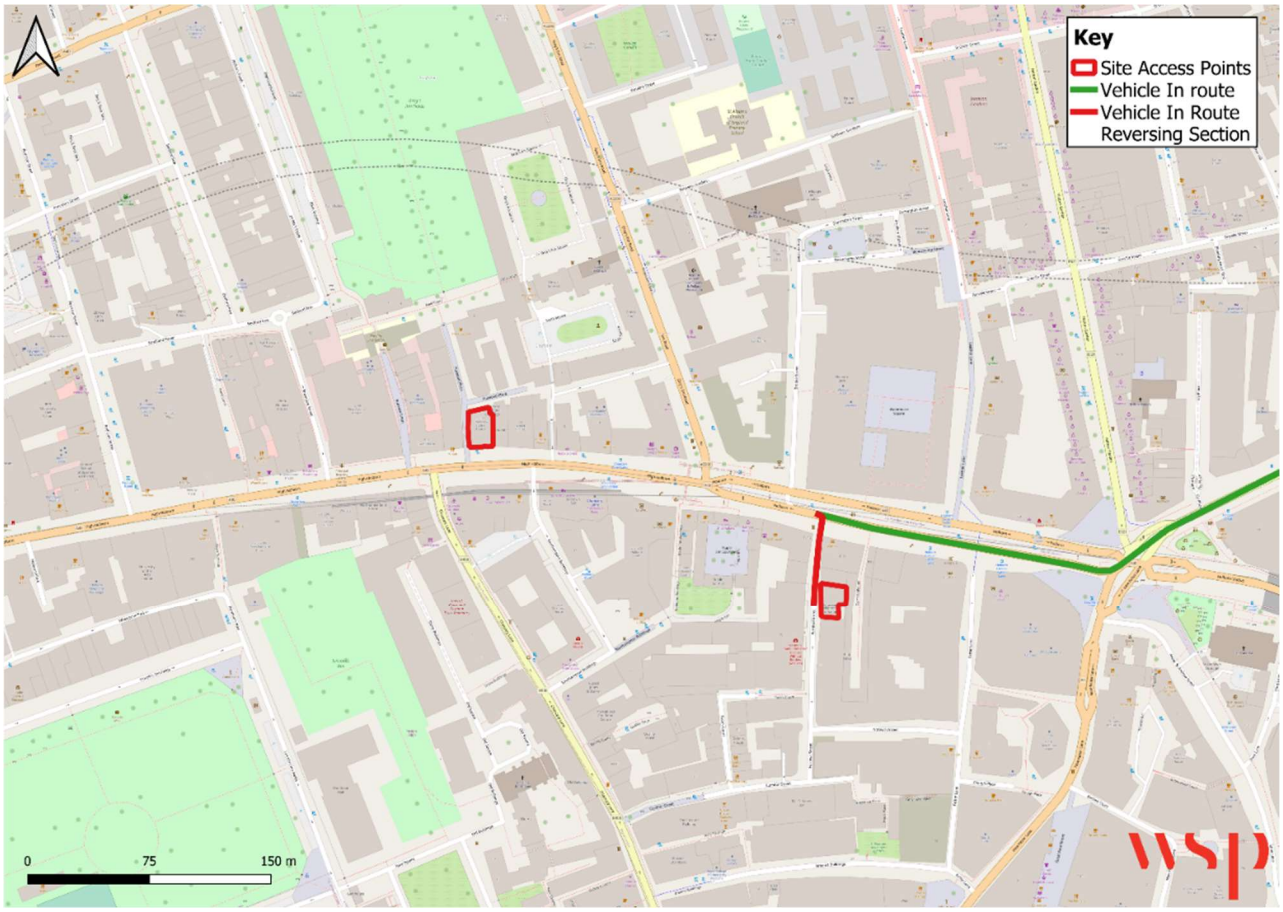
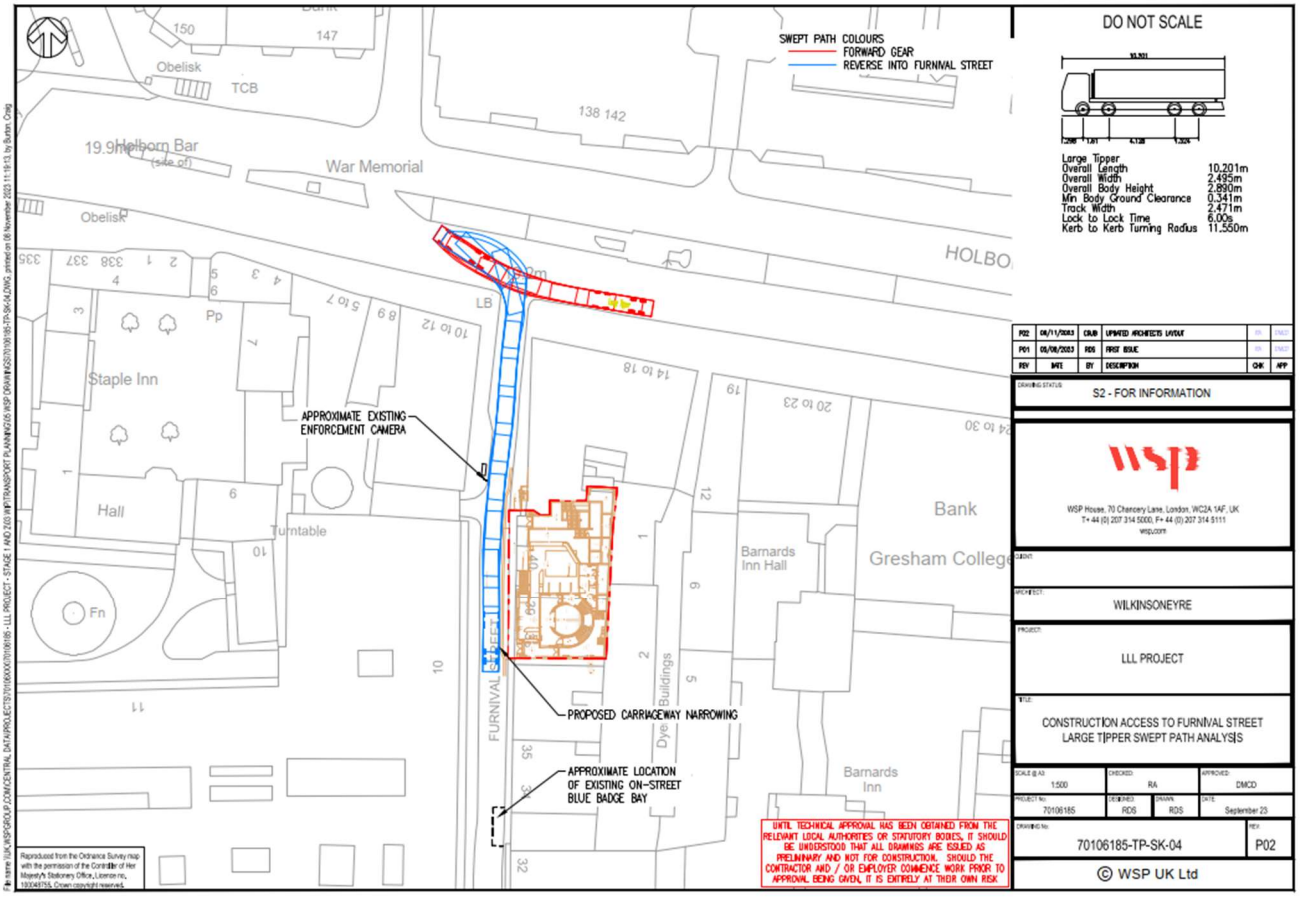


Figure 4-3 – Furnival Street Construction Route Swept Path Analysis



4.2.4. Vehicles will then exit the Site back onto Holborn before turning onto Gray's Inn Road (A5200) and follow until they are able to get back onto the TLRN on the A501, as seen in Figure 4-4 and Figure 4-5.

4.2.5. It is considered that these routes make the most practical use of the major road network, ensuring that minimal construction traffic is routed along smaller residential areas and roads. The routes would be agreed with the CoL, LBC, TfL and the police as required.

4.2.6. A diversity of routes close to the Site would reduce the pressure on individual road junctions, so balanced use of a selection of routes is anticipated. This would be confirmed within the final draft of the CTMP and once the Principal Contractor is formally appointed.

Figure 4-4 – Furnival Street Vehicle Out Route (1:15000)

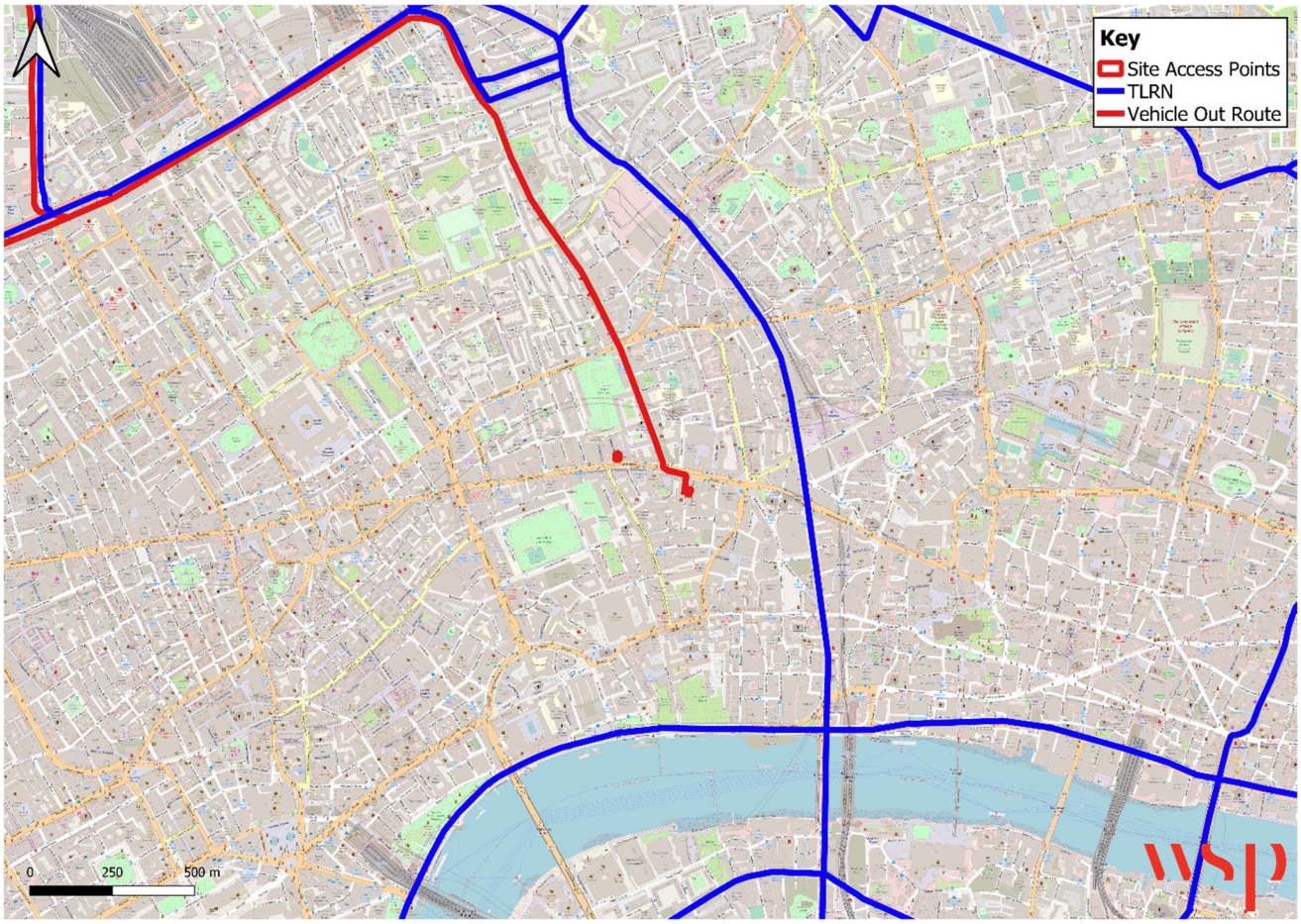
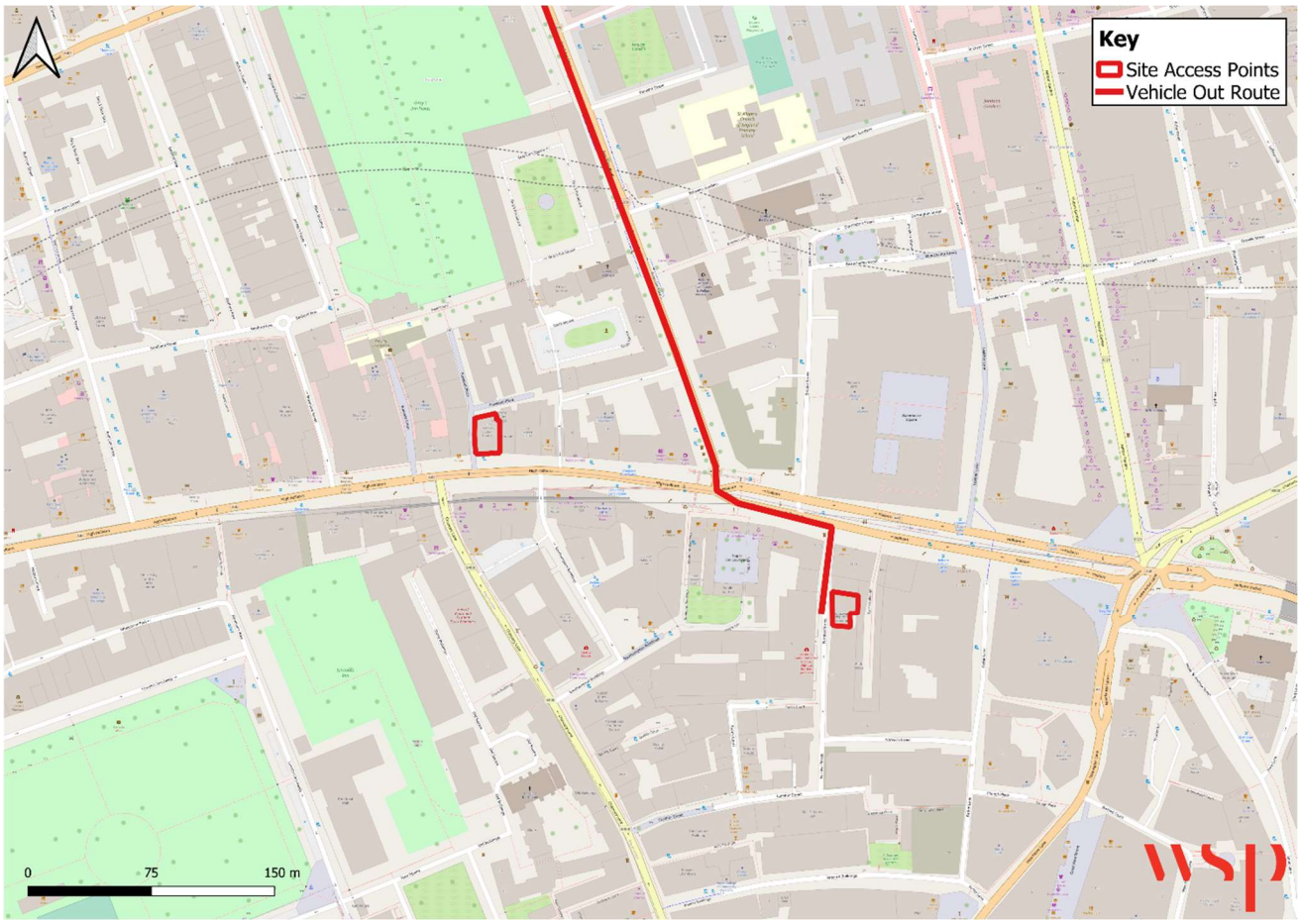


Figure 4-5 – Furnival Street Vehicle Out Route (1:3000)



HIGH HOLBORN HGV ROUTING

4.2.7. As stated, the 31-33 Fulwood Place access will need to be used during the construction phase to allow for constant access into the tunnels. Fulwood Place is a pedestrianised street, to enable vehicle access, sections of the eastbound High Holborn carriageway will therefore need to utilised. Figures 4-6 and 4-7 show the proposed routing strategy for HGVs to access A40 (High Holborn).

4.2.8. As shown by the below figures, the proposed routing strategy to the Site is for the majority of the construction traffic would access the Site from the north, originating from along the A501, before travelling south along the A5200 then proceeding east along the A40 (Holborn) to the Site.

Figure 4-6 - Fulwood Place Vehicle In Route (1:15000)

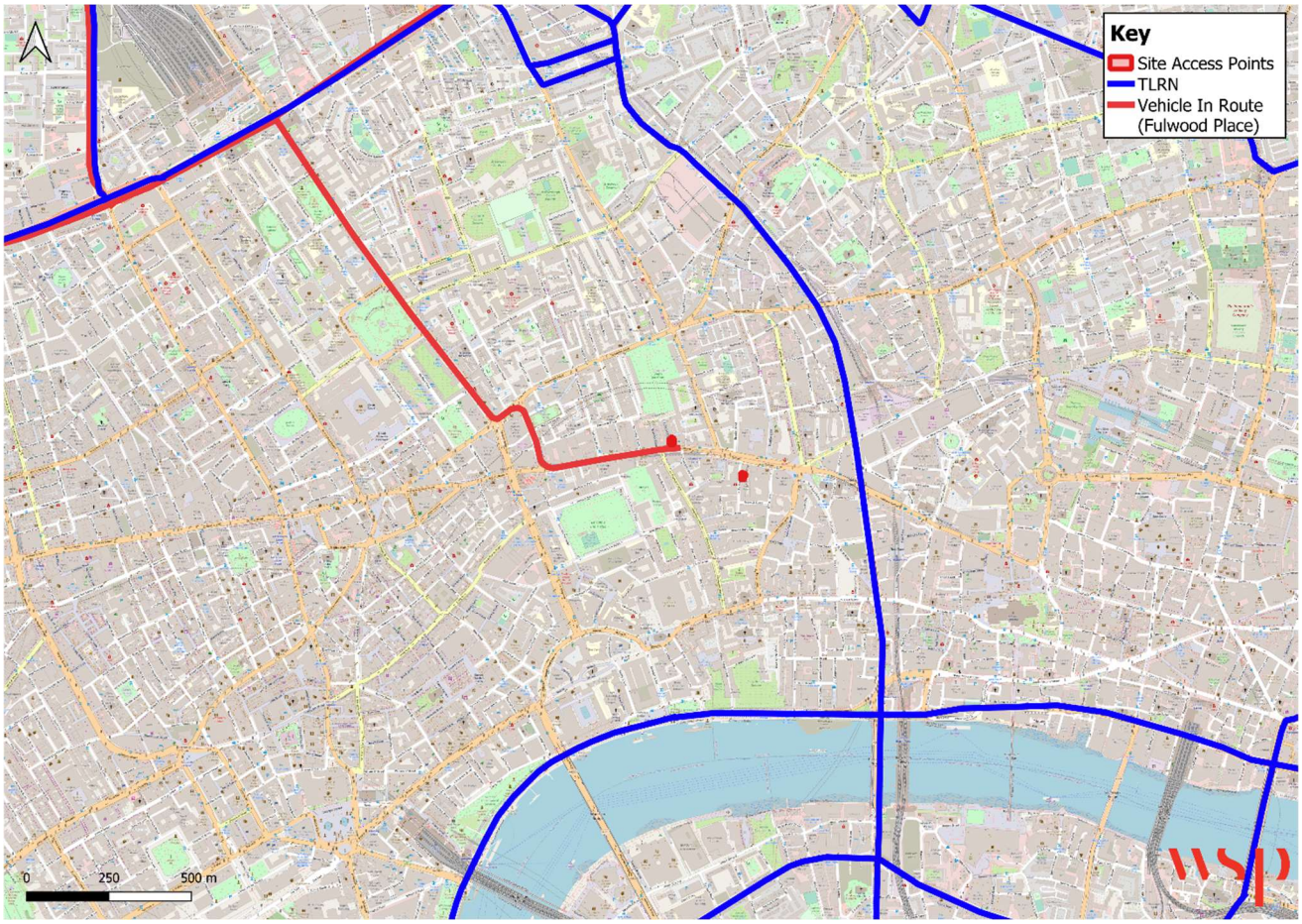
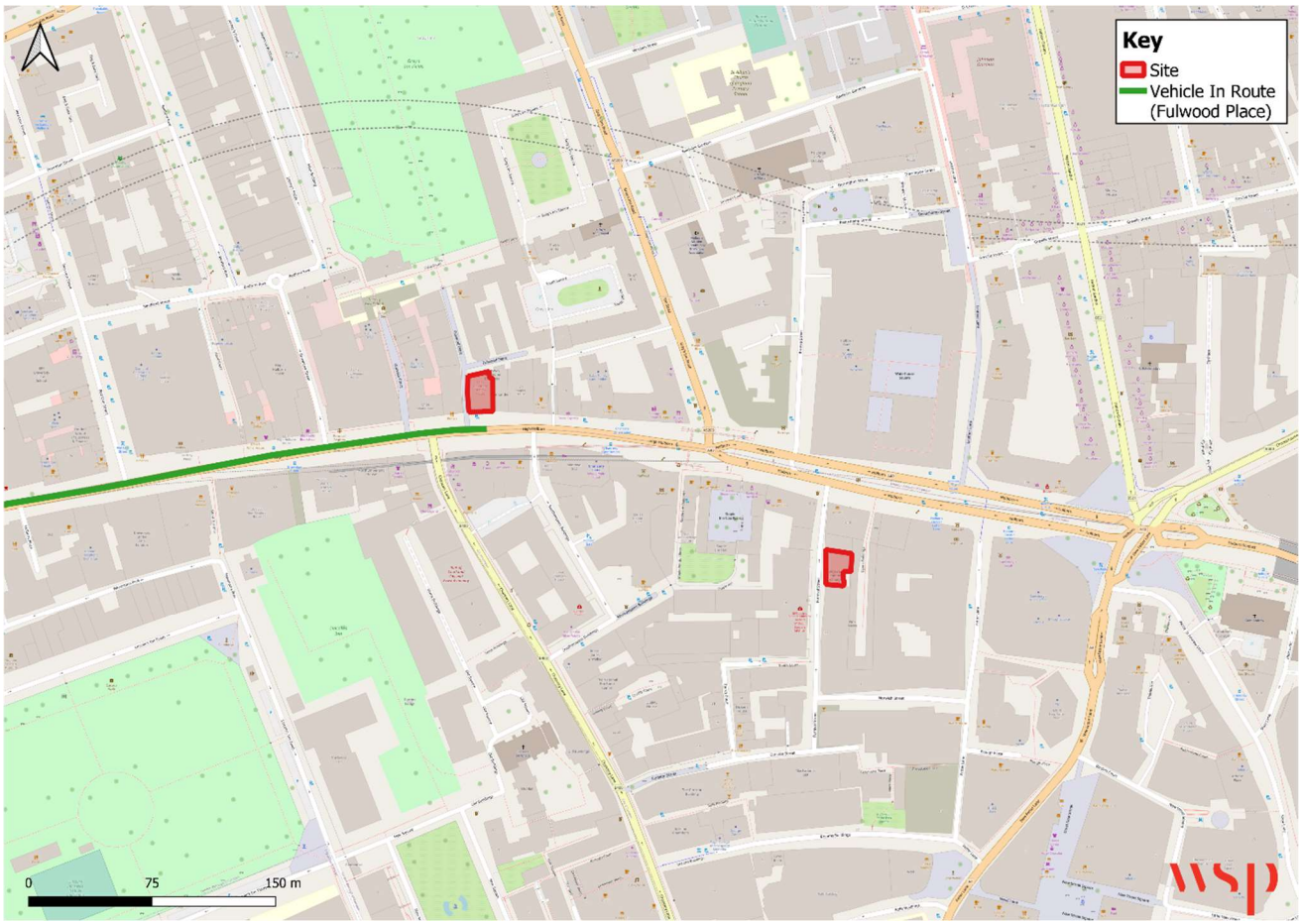


Figure 4-7 - Fulwood Place Vehicle In Route (1:3000)



4.2.9. As shown in Figures 4-8 and 4-9 for HGVs to exit the Site, it is proposed that will travel eastbound on A40 (High Holborn) tuning left onto Charterhouse Street and then north bound on the A201 which is part of the TLRN and then onwards to the A501.

Figure 4-8 - Fulwood Place Vehicle Out Route (1:5000)

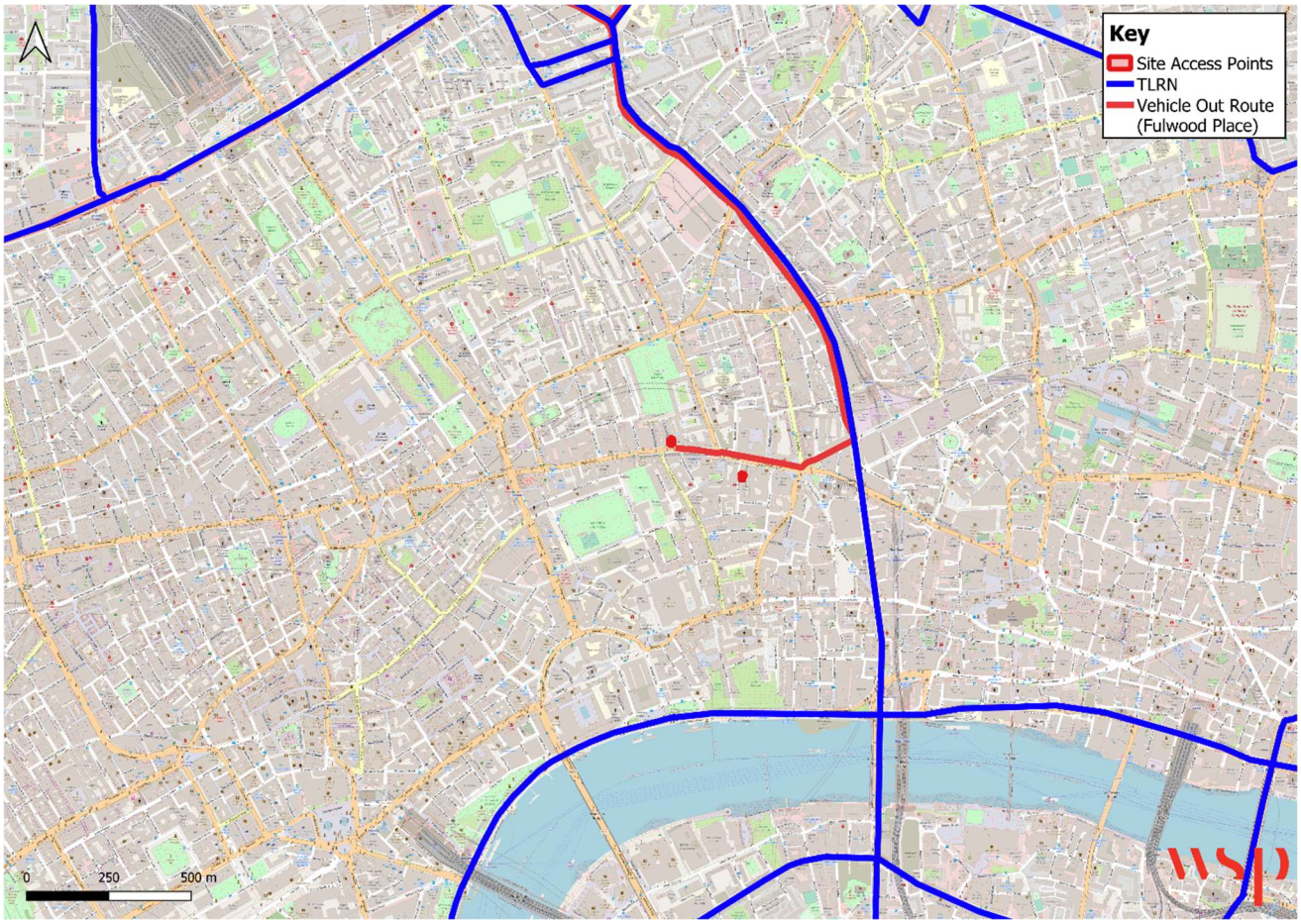
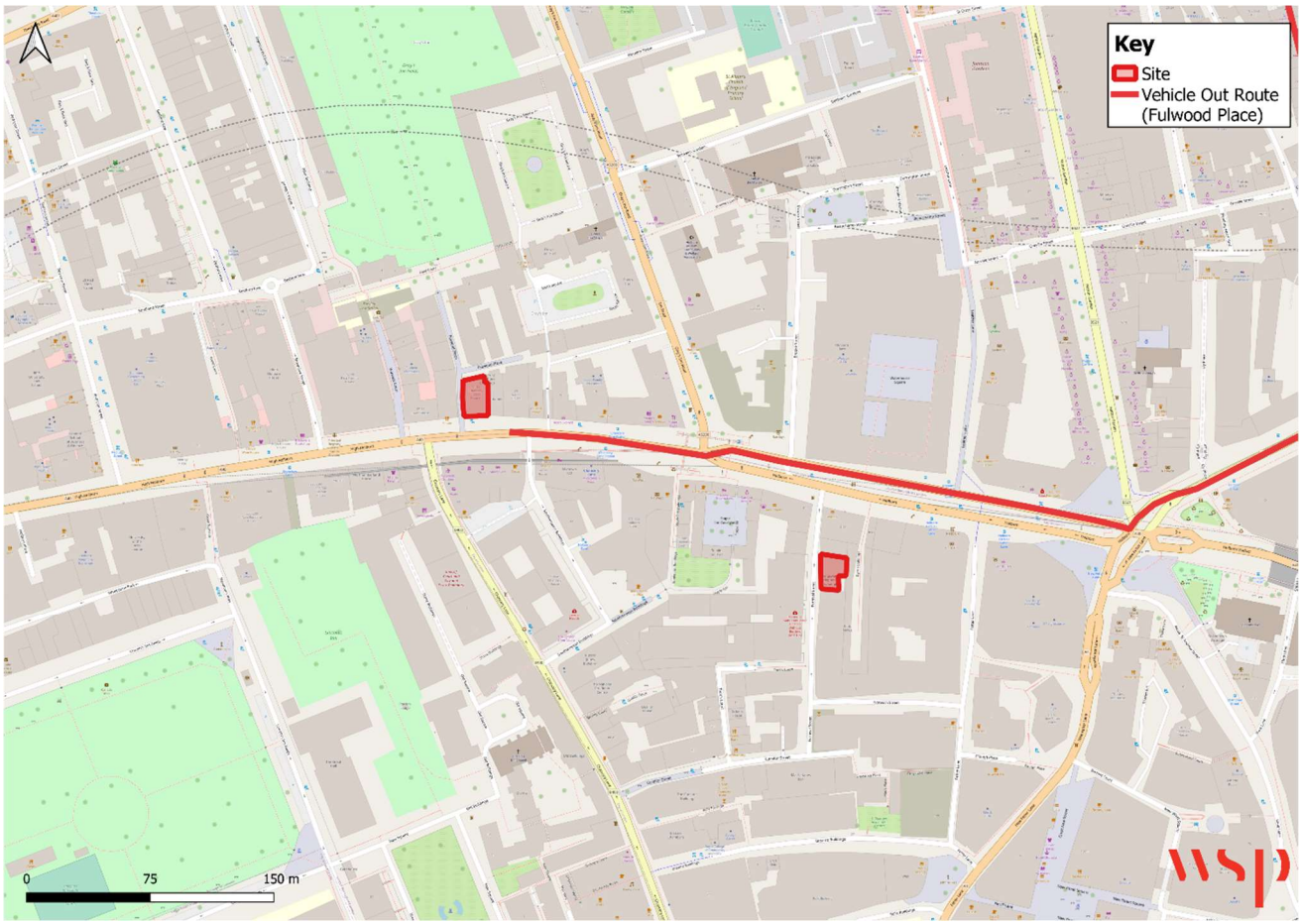


Figure 4-9 - Fulwood Place Vehicle Out Route (1:3000)



4.2.10. To minimise the likelihood of congestion during the demolition and construction works, strict monitoring and control of vehicles entering and egressing the Site would be implemented through a CTMP.

4.2.11. Construction deliveries would also be carefully planned with delivery times agreed with each contractor using a web-based booking system. Delivery schedules would be produced in order to look at the profiles of forthcoming deliveries and to regulate journeys and eliminate bottlenecks.

4.2.12. An off-Site vehicle holding area would be identified in the local area and would be used in conjunction with a just-in-time delivery management policy. Whilst it is not considered necessary for this development, the benefits and use of a logistics / consolidation centre would be considered to further reduce vehicle movements to the Site, if possible.

4.2.13. As an additional measure, it is envisaged that there would be a facility for some stacking of trucks within the Site area. The potential location for this on-Site holding area would be established by the Principal Contractor and confirmed with the local authorities where relevant.

4.2.14. The Principal Contractor would co-ordinate all deliveries and collections to / from the Site, and ensure that as far as possible:

- All delivery and collection vehicles are aware of the proposed routing;

- Prior to a delivery or collection, haulers would notify the relevant authorities (TfL, Police, Highways Authority etc.) in accordance with the Road Vehicles (Authorisation of Special Types) (General) Order 2003 if required;
- Liaison would be undertaken with occupants of adjacent buildings to avoid delays to service deliveries due to construction vehicles; and
- Larger vehicle movements would be scheduled to avoid peak hours on the local road network, if possible.

4.2.15. At this stage, temporary road closures are anticipated to establish and remove cranes or to deliver large items of building plant and infrastructure items, this will be outlined in advance to the Highway Authority. Any necessary lane / road closures on the local highway network would be agreed with the City of London and Camden Council prior to commencement.

4.2.16. Notices regarding any planned closures and diversion of either roads or footpaths shall be given by the Principal Contractor to the Local Highway Authority, the police, fire brigade and other emergency services sufficiently in advance of the required closure or diversion.

4.2.17. Notices and details of traffic management proposals associated with works to the highway and footpaths would be given under the Highway Acts 1980 and Road Traffic Act 1988.

4.2.18. Effective wheel washing facilities would be provided at the Site gate together with a concrete hard standing. Recycled water would be used wherever possible. Supplementary cleaning would be provided as necessary using suitable means to keep the surrounding highway clean. Collected debris would be disposed of as controlled waste at a licensed waste disposal facility.

4.2.19. Contractors would undertake regular liaison meetings and reviews with neighbouring Sites and CoL and LBC highways officers to plan the works so that they do not cause unnecessary disruption.

4.3 PARKING AND UNLOADING

4.3.1. Delivery vehicles will have designated unloading bays to be agreed with CoL, LBC and TfL and will be managed by the Principal Contractor's traffic manager. Banksmen will be attendance to supervise the safe offloading of deliveries, ensuring that only authorised personnel are allowed in the vicinity.

4.3.2. If for any reason it is necessary to load and unload outside of the Site, the details and procedure for this will be agreed in advance with the Highways Officers from the CoL, LBC and TfL.

5 STRATEGIES TO REDUCE IMPACTS

5.1 INTRODUCTION

5.1.1. This section identifies the measures that will be implemented to manage the potential impacts of the demolition and construction activities at the Site.

5.2 WORKING HOURS

5.2.1. The hours of operation of the Site would be agreed with the CoL and LBC prior to any works taking place on the Site. It is likely that the Site would operate between:

- 0800 - 1800 hours Monday to Friday; and
- 0800 - 1300 hours Saturday.

5.2.2. No works would be permitted to be undertaken on Sundays and Bank Holidays, unless otherwise agreed with the Local Authority.

5.2.3. Out of hours working hours within the tunnels will be investigated and will be subject to the acoustic impact on surrounding residents and commercial operations.

5.3 COORDINATION OF DELIVERIES

5.3.1. The Principal Contractor will co-ordinate all deliveries and collections to/from the Site, and ensure that as far as possible:

- All delivery and collection vehicles connected with the Site are aware of the suggested routing;
- Prior to a delivery or collection, if required, hauliers will notify the relevant authorities (TfL, Police, Highways Authority etc.) in accordance with the Road Vehicles (Authorisation of Special Types) (General) Order 2003;
- Liaison will be undertaken with occupants of adjacent buildings to avoid delays to service deliveries due to construction vehicles; and
- Deliveries will be made on a 'just in time' basis.

5.3.2. Larger vehicle movements will be scheduled to avoid peak hours on the local road network, if at all possible. If an alternative construction traffic route is required for any reason, this will be agreed in advance with the borough.

5.3.3. A pre-booking system for deliveries will be implemented and managed so as to ensure minimal impact to the free flow of traffic on the public highway. All deliveries will be made to the designated areas within the Site. If for any reason it is necessary to load and unload outside the Site boundary, the details and procedure for this will be agreed in advance with the borough.

5.4 CONSIDERATE CONTRACTORS SCHEME

5.4.1. All Contractors will be required to register under the Considerate Constructors Scheme.

5.5 FLEET OPERATORS RECOGNITION SCHEME

5.5.1. The Principal Contractor will use contractors who are members of the Fleet Operators Recognition Scheme (FORS), wherever possible.

5.6 CLOCS

5.6.1. The Principal Contractor will aim to meet the Construction Logistics and Community Safety (Construction Logistics and Community Safety- “CLOCS”) standard for construction logistics. By being recognised as a member of FORS and will already demonstrate a number of requirements to meet the CLOCS standard. Any additional requirements such as driver training will be agreed on the award of contracts.

5.7 SITE ENCLOSURE

5.7.1. Hoarding, approximately 2.4m in height will be installed to secure the Site. All construction activities will be contained within the hoarding line. Where construction works are to be carried out within close proximity of the adjoining A40 (High Holborn), sheeting or debris netting will be installed as a safety precaution.

5.7.2. Suitable signage will be installed to warn pedestrians and highways users of the presence of HGVs.

5.8 CONSTRUCTION PERSONNEL TRAVEL

5.8.1. On-carriageway parking on Furnival Street will be limited to those construction personnel required to carry heavy or specialist equipment to/from the Site. Construction personnel will otherwise be encouraged to use public transport, walk or cycle to the Site, given the Site’s excellent public transport connectivity.

5.8.2. The Principal Contractor will advise all construction personnel of the existing parking restrictions in force in the vicinity of the Site.

5.9 CONTROL OF DUST AND DIRT

5.9.1. All vehicle routes used by construction traffic will be regularly inspected for any deposits of soil/debris depoSited by construction traffic and if necessary, the road will be swept using a mechanical sweeper.

5.9.2. Effective wheel/body washing facilities will be provided and used as necessary before vehicles egress the Site.

5.9.3. Dust suppression will be achieved by ensuring that all materials transported to/from the Site are enclosed or fully sheeted. During dry periods the Site surface will be dampened to control the generation of dust.

5.10 EMERGENCY ACCESS

5.10.1. Safe access routes for the emergency services will be maintained and controlled by a Traffic Marshal permanently located at the principal construction Site access.

5.11 SITE MANAGEMENT

5.11.1. Welfare facilities and Site offices for the Principal Contractor and all sub-contractors will be located on-Site. Operatives will only be permitted to access the Site after receiving induction training and will be required to enter and leave via a security gate.

5.11.2. Site notice boards will be provided at the Site entrance. These will display the project particulars, contact details, access and egress procedures, Site rules and all necessary health and safety information.

5.11.3. All plant and materials will be safely secured and stored at the end of each day.

5.11.4. The Principal Contractor will consult with residents regarding traffic management protocols.

5.12 DEVELOPMENT SPECIFICATION

5.12.1. The Development Specification outlines the following expected commitments which the development will follow during the construction phase:

- Hours of working externally and noisy activity generally will be limited to 08:00 to 18:00 hour Monday to Friday and 08:00 to 13:00 hours on Saturdays. From time to time, out of hours working externally will be necessary and any such event will be formally notified to and considered by COL and LBC Environmental Health Officers at least 48 hours in advance;
- Air quality mitigation measures will be applied in line with the Greater London Authority's (GLA) 'Best Practice Guidance for the Control of Dust and Emissions from Construction and Demolition, November 2006';
- Locations for wheel washers will be established close to Site entrances as required. Public highway in the near vicinity will be spray washed from time to time;
- Construction vehicles will be routed as set out in Section 4;
- Contractors will be required to implement a travel plan for employees encouraging the use of public transport and other sustainable modes of transport, as well as vehicle sharing. Any necessary on Site car parking for contractors will be situated within the operational Site;
- Site security will be maintained through hoardings, controlled gated access, access control systems to record visitor details, and out-of-hours movement sensitive lighting and CCTV; and
- In order to potentially reduce the overall demolition and construction vehicle numbers and reduce the peak hour period the following would be considered further;
- Use of off-Site consolidation facilities to reduce part loads i.e. courier deliveries by white van;
- Alternative modern construction methods (this may give rise to fewer, but larger, loads); and
- Adjusting delivery patterns over the day to reduce the peak hour vehicle number.

6 PLANNED MEASURES

6.1 TFL STANDARD MEASURES

6.1.1. The following planned measures should be committed to:

- Safety and environmental standards and programmes
- Adherence to designated routes
- Delivery scheduling
- Collaboration with other Sites in the area
- Implement a staff travel plan

6.1.2. The following planned measures should be proposed for further study/detail:

- Re-timing for out of peak deliveries
- Re-timing for out of hours deliveries
- Use of holding and vehicle call off areas
- Use of logistics and consolidation centres
- Freight by Water
- Freight by Rail
- Design for Manufacture and Assembly (DfMA) and off-Site manufacture
- Re-use of material on Site Smart procurement

6.2 CITY OF LONDON AND LONDON BOROUGH OF CAMDEN CONSTRUCTION SPECIFIC MEASURES

6.2.1. Table 6-1 provides an action plan to be adhered to through the implementation of the CTMP.

Table 6-1 - CTMP Implementation Action Plan

Indicator	Description	Benefit	Timescale	Responsibility
Adoption of the CTMP	'Buy in' from the developer and its Principal Contractor is essential to ensure the success of the CTMP.	Involvement of the Principal Contractor will ensure the implementation of measures.	Prior to commencement.	Applicant / Principal Contractor.
Raise awareness and promotion of initiatives	Site information, construction forum meetings with workers and suppliers.	To encourage construction workers to travel to the Site by non-car modes and/or car share, and to encourage sustainable supply chains.	Prior to commencement and during construction.	Principal Contractor.
Access routes for construction vehicles	Provide clear, signed routes for construction vehicles.	Minimise local congestion impacts and ensure there are no access issues.	Prior to commencement.	Principal Contractor.
Construction workers	No car parking available on-Site for construction workers	Minimise construction impacts.	Prior to commencement.	Principal Contractor.
Construction	The Development Specification will set out how and when vehicles can best access the Site and will set out protocols to consolidate and reduce vehicle movements where possible.	Minimise construction impacts	Prior to commencement.	Principal Contractor.
Use of local materials	Encourage contractors to source materials locally (aim for more than 50% from within 35 miles).	Sourcing items from the local area will reduce trip lengths. Using the same suppliers will reduce the frequency of movements.	Prior to commencement and on-going.	Principal Contractor.
Site information	Publish details of construction facilities and procedures for workers and suppliers, including: 1) Best time to make deliveries; and 2) Delivery drop locations.	Encourage deliveries outside network peak hours and use 'best practice' companies.	Upon Commencement.	Principal Contractor.

7 ESTIMATED VEHICLE MOVEMENTS

7.1 EXCAVATION / DEOMLITION VEHICLE TRIPS

7.1.1. Based on the preliminary construction strategy, it is estimated that removal of excavated material, demolition of no.38- 41 Furnival Street and strip out of the tunnels will generate a total of 2,792 HGV movements in each direction across the course of the demolition programme.

7.1.2. The indicative construction programme envisages the excavation / demolition is expected to start in July 2024 and finish in Jan 2026 a total of 17 months to complete. This would equate to 164 HGV movements per month in each direction, or approximately 6 to 7 movements a day in each direction. (excluding Sundays)

7.1.3. Once the construction programme has been defined by the Principal Contractor, the daily profile of these vehicle movements can be estimated in greater detail.

7.2 CONSTRUCTION VEHICLE TRIPS

7.2.1. The principal construction materials required for the project are concrete and steel. Transporting these materials to the Site would generate an estimated 246 HGV movements in each direction across the course of the construction programme, The majority of steel and concrete will be required to reconstruct No.38-41 Furnival Street.

7.2.2. The average weekly number of vehicle movements during construction is expected 2-3 HGVs a week and is much lower than during the excavation phase.

7.2.3. Once the construction programme has been defined by the Principal Contractor, the daily profile of these vehicle movements can be estimated in greater detail.

8 IMPLEMENTING, MONITORING & UPDATING

8.1 MANAGEMENT

8.1.1. The developer will work with the appointed Principal Contractor to implement the measures as identified above. The continuing management of the CTMP will be the responsibility of the Principal Contractor and will cover the lifetime of the planned construction works.

8.1.2. The CTMP will be implemented from the commencement of the initial excavation phase at the Site.

8.2 MONITORING AND REVIEW

8.2.1. The Principal Contractor will nominate a member of staff to be responsible for the day-to-day organisation and monitoring of construction logistics for the Site, which given the size and complexity of the project may be a full-time role. The responsibilities of this Logistics Manager role will include the implementation and management of the CTMP for the lifetime of the construction project.

8.2.2. As well as planning and co-ordinating the day-to-day Site deliveries, on-Site arrangements to accommodate delivery vehicles and the arrangements for special deliveries, the Logistics Manager will liaise with nominated representatives of the developer and representatives / Lead Construction personnel for nearby planned, consented and active/on-going construction projects to ensure logistical cohesion and to agree, where practical, the consolidation of vehicle activity and other measures to support the running of the CTMP. The Logistics Manager will also liaise regularly with key personnel at the CoL and LBC.

8.2.3. The Logistics Manager will also be responsible for liaison with local residents and groups.

8.2.4. The CoL / LBC will be notified of the nominated individual prior to commencement of activities at the Site.

8.2.5. The CTMP is a ‘live’ document and will be regularly reviewed with key stakeholders and updated throughout the project’s construction. Should updates be required, these will be undertaken, and an updated version issued to the CoL / LBC and other key stakeholders for review and information. Should the review identify that no material changes are required, this too will be articulated to the CoL and LBC and key stakeholders.

8.2.6. The Logistics Manager will monitor vehicle movements on a daily basis and will carry out surveys of vehicle movements and routing at regular intervals throughout the construction period.

8.2.7. In addition, the following aspects of construction logistics will be monitored:

- Early deliveries / collections systems and vehicle holding systems on surrounding public highway so that the sub-contractor and/or supplier can be notified and warned of the need to follow the strategies outlined in this document;
- The number of vehicle movements during the network peak hours to assist in minimising impacts during peak times; and
- Construction staff travel patterns.

8.3 SECURING THE CTMP

8.3.1. This document which will be implemented from the commencement of development, following the approval of the CTMP beforehand and full CMP, as part of the grant of any planning permission for the redevelopment of the Site.

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