





# HIGH ROAD WEST

**HYBRID PLANNING APPLICATION** 

# CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

PREPARED FOR LENDLEASE (HIGH ROAD WEST) LIMITED BY LENDLEASE CONSTRUCTION

**MAY 2022** 

## **HRW**

#### **CONTENTS**

<b>1</b> 1.1	Introduction Construction Programme & Phasing	<b>6</b>
2 2.1 2.2 2.3	Masterplan Site and Surroundings Masterplan Site Existing Site Description The Surrounding Area	11 11 12 13
3	Description of Development	15
4.2.2 4.2.3 4.2.4 4.2.5 4.3 4.4 4.4.1 4.4.2 4.5 4.6 4.7 4.8 4.9	Sample Works Description and Methods Indicative Construction Sequence Summary of Demolition Works Demolition Phasing Consents & Licenses Site Establishment, Logistics, and Site Security Site Accommodation Demolition Works Summary of Infrastructure Works Summary of Enabling Works Site Establishment, Logistics, and Site Security Plot Enabling Works Groundworks and Substructure Superstructure/Frame Envelope, Roof, Shell and Core Fit Out and Finishes and external works Completion of retail units and shell and core fit out Public Realm Works	17 17 17 17 17 18 18 18 20 20 20 21 22 22 23 23 23
5.1.2 5.1.3 5.1.4 5.2 5.3 5.4 5.5 5.6 5.7 5.8 5.9 5.10 5.10 5.10 5.10	Site Logistics and Setup  Logistics by Phase Pre-Implementation Works Crane Bases, Service Ducts, Tower Crane Erection and RC Frames Building Envelope Fit Out Consents and Licenses Site Establishment and Security Asbestos Removal Demolition Hoarding/Fencing Within Highway Areas Site Accommodation Material Storage and Handling Visitor Management Construction Traffic Management 1 Construction Routes & Access 2 Offloading and Storage Areas 3 Personnel, Public and Vehicle Segregation 4 Temporary Road Closures	26 26 26 27 28 28 28 29 29 30 30 31 31 31 32 33 35 35
6	Safety, Health and Environmental Considerations during	
6.1 6.2 6.3 6.3.1	Construction  General Safety, Health and Environmental Consideration Control of Substances Hazardous to Health Outline Environmental, Emergency Fire and Accident Procedures Environmental Incident Procedures	<b>38</b> 38 41 41 41

6.3.2	Fire and Emergency Routes and Procedures	42
6.4	Particular Health, Safety and Environmental Considerations	43
6.4.1	Works close to TfL Highway & Network Rail Routes:	43
6.4.2	Pedestrian/Public Street Lighting Surrounding the Development	43
6.4.3	Identifying Construction Teams	44
6.5	Air Quality	44
6.5.1	General Provisions	44
6.5.2	Effective material storage and handling	44
6.5.3	Construction Plant	44
6.5.4	Vehicle Movements	46
6.5.5	Dust	46
6.6	Ecology	47
6.7	Noise and Vibration	48
6.7.1	General Provision	48
6.7.2	Construction Noise	48
6.8	Soils and Contamination	49
6.8.1	Existing Conditions	49
6.9	Waste	51
6.9.1	General Provision	51
6.9.2	Construction Waste	52
6.9.3	Control during Construction	52
6.9.4	Construction Waste Management Plan (CWMP)	53
6.9.5	Monitoring, Review and Actions to Improve	54
6.10	Hazardous Waste	54
6.11	Water Resources	55
6.12	Unexploded Ordinance	55
	Tree Management	56
	Archaeology	57
_		
7	Community Liaison and Public Relations	59
7.1	Community Liaison	59
	Considerate Constructors Scheme	60
7.2	Hoarding	61
7.3	Minimising Disruption to Public	61
-	Access	61
7.3.2	Public Areas	61
8	Work Force	64
8.1	Employment and Management Workforce	64
	Contractors Working Agreement – Union Involvement	64
8.2	Working Hours	64
9	Crowd Control	67
9.1	Existing event day strategy – pre-event strategy	67
9.2	Existing crowd flow specification – Post event Strategy	67
9.3	The high road west development and the benefits of the proposed crowd flow in its final	01
0.0	condition	69
9.4	The proposed Queuing strategy for High road west	69
9.5	Construction phases and crowd flow	71
	General Principals & Future commitments	71
	Indicative programme for future plots	73
	Phase 1 (Plot A, G & Love lane)	73
9.5.3.		73
9.5.3.		74
		74 74
9.5.4 9.5.4.	phase 2 (Plot D & F) 1 plot D	74 75
	· ·	75 77
9.5.5. 9.5.5.	Phase 3 (Plots B, C, E and Moselle square)  1 Plot B	77
9.5.5.		
9.5.5.		78 79
	a indi	, ,

### **HRW**

9.5.5 9.5.6	.4 Moselle Square Completion stage	79 79
10	Amendments to the CEMP	82
10.1	Mechanisms to amend the CEMP	82
11	Appendices	84
11.1	Appendix 1: Outline Site Access Plan	84
11.2	Appendix 2: Detailed Logistics Plan – Plot A	85
11.3	Appendix 3: Traffic Histogram	88
11.4	Appendix 4: Forecast labour histogram	91
11.5	Appendix 5: Construction Waste Management Plan	93
11.6	Appendix 6: Indicative Construction Programme	94

# 1. Introduction





#### 1 INTRODUCTION

This Construction Environmental Management Plan (CEMP) has been prepared and submitted by Lendlease (High Road West) Limited to accompany the High Road West Hybrid Planning Submission (the 'Development').

This CEMP contains the outline programme for the High Road West project which describes the nature of the activities to be undertaken. It is based on the illustrative masterplan and identifies the environmental considerations associated with these activities and outlines appropriate measures that will be implemented for their mitigation. It is envisaged that a detailed CEMP will be submitted for all future Reserved Matters Applications (RMAs).

This CEMP identifies implementation of effective management controls, for example the employment of dust suppression methods and use of effectively maintained plant. This CEMP sets out the management; monitoring, auditing and training procedures that will be put in place to ensure compliance with the relevant legislation and which ensures that any impacts on the surrounding environment are mitigated as far as possible.

The issues that have been considered within this document are as follows:

- 1. Enabling Works
- 2. Site Logistics
- 3. Construction Traffic Management
- 4. Infrastructure Works
- 5. Works Description and Methods
- 6. Safety, health and environmental mitigation provisions
- 7. Community liaison and public relations including crowd flow and management during THFC events and at other times.
- 8. Work force
- 9. Future updates to this CEMP

Additional considerations may need to be made to future detailed submissions for individual plots to satisfy any conditions or obligations that arise during further planning discussions.

Specifically, this CEMP also addresses the following key delivery considerations:

- 1. Minimising Disruption
- 2. Creating/Maintaining a Vibrant Place
- 3. Safety
- 4. Governance, Management, and Engagement

#### 1.1 CONSTRUCTION PROGRAMME & PHASING

A flexible approach to planning, logistics and programming of the Development has been applied to incorporate both the best practice currently available and to allow for future trade contractor input:

#### Sitewide Enabling:

- 1. Demolition
- 2. Infrastructure Works
- 3. Enabling Works

#### Vertical Buildings:

- 4. Pre-implementation works
- 5. Enabling works
- 6. Substructure
- 7. Superstructure
- 8. Envelope, Roof, Shell & Core
- 9. Fit Out Works
- 10. Landscaping works

The indicative programme for the overall works for the Development is set out in



Appendix 6: Indicative Construction Programme. Due to the number of buildings that will be constructed, works will be implemented working across all buildings at once and elements of the works will overlap.

#### The Demolition works will include:

- Installation / replacement of site hoarding
- Inspections and contaminated waste removal including asbestos removal where identified.
- Soft Strip of fixings/fittings/M&E etc.
- Hard strip of façade/balconies/any building attachment.
- Bulk take-down of the building
- Processing of material for re-use (crushing/grading etc.)
- Disposal of surplus materials/spoil off-site

#### The infrastructure works will include:

- Installation / replacement of site hoarding
- Inspections and contaminated waste removal
- Trenching/excavations to install new infrastructure, utilities, services etc.
- Preparing of trench foundations
- Temp connections/diversions as required for connections
- Installation of services
- Backfill and making good excavations.

#### The Enabling/Pre-implementation works will include:

- Installation / replacement of site hoarding
- Excavation and levelling for temporary roads
- Excavation and installation of temporary service connections
- Works to trees including tree felling, pruning and root protection as necessary
- Buried cable protection.
- Site engineering and setting out checks.
- Tree protection setup.
- Pre-load of materials for enabling works start.
- Pile probing and installation of temporary sheet piles
- Installation and testing of a Preliminary Test Pile (PTP)
- Pre-implementation works will be the completion of any of the above enabling works items that could not be completed by the enabling works team due to proximity to the building or other restrictions.

#### The Substructure works will include:

- Installation of Piling Mat
- Installation of drainage system, crane bases, raft foundations, CFA piling, attenuation tank

- Temporary crossovers for site access
- Services infrastructure of water, power, district heating, ducts and road crossings for services.

#### The Superstructure works will include:

- Erection of the building cores and concrete frame
- Cranage and access hoists.
- Installation of in-situ, preformed stairs

#### The Envelope, Roof, Shell, and Core works will include:

- Initial Mechanical, Electrical and Plant (MEP) fixings
- Cladding, glazing, balconies
- All roofing works and installation of external doors

#### The Fit Out works will include:

- Internal installation for MEP, dry lining, decoration, furniture, fixtures and fittings and floor finishes,
- Plant rooms
- Concierge desk and common areas

#### The Landscaping works will include:

- All public realm and courtyard/podium landscaping
- New hard and soft landscaping
- Highway works
- Signage and street furniture
- Provision of trees and planting to podium and external areas.
- Lighting installation (feature and street)

# 2. Masterplan Site & Surroundings



# 2 MASTERPLAN SITE AND SURROUNDINGS

#### 2.1 MASTERPLAN SITE

High Road West is located in North Tottenham, within the administrative boundary of the London Borough of Haringey ("the Council"). The Site occupies an area of 8.57 hectares, and is bound by:

- Cannon Road residential development
- Overground Train line (with White Hart Lane Station (WHLS)) to the West
- High Road to the East
- Brereton Road to the South

The High Road West Site boundary is shown in Figure 2-1 Planning Application Boundary Below

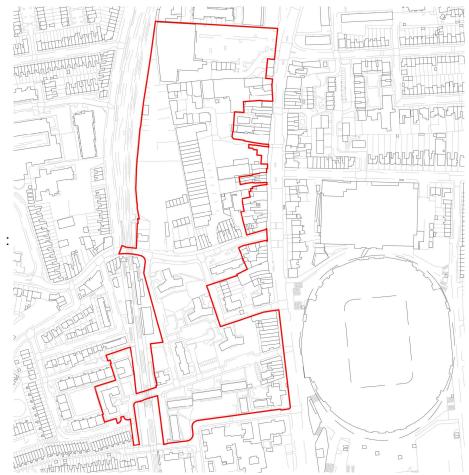


Figure 2-1 Planning Application Boundary



#### 2.2 EXISTING SITE DESCRIPTION

High Road West (HRW) comprises 8.57ha of mixed-use and residential development in North Tottenham. It is principally bound by the High Road to the east and the railway line (including WHLS) to the west. A smaller plot to the west of the railway tracks is also included, comprising Whitehall Lodge and the Whitehall and Tenterden Community Centre. The Development is split north and south by White Hart Lane.

To the south of White Hart Lane is the Love Lane Estate, which comprises of 297 residential properties spread across nine buildings. The Estate varies in height with low-rise four storey blocks alongside three 10-storey towers. There are a number of terraced buildings along the High Road which sit outside of the Estate, which include commercial and residential uses.

The north of HRW is characterised by a mix of light industrial and commercial buildings within the Peacock Industrial Estate and Carbery Enterprise Park. To the east of the Peacock Industrial Estate is the Goods Yard site, which has previously been used in conjunction with the redevelopment of Tottenham Hotspurs FC's (THFC) Stadium and predominantly comprises cleared land. It currently has a temporary planning permission for 18 months for use as a car park (Ref: HGY/2020/3001) in conjunction with Stadium. The Station Master's House is also included within this segment of the Site and is locally listed. To the south of this portion is the Grange Community Hub.

The Depot site sits to the far north of the Site on the boundary with the Cannon Road development. It currently comprises a large two-storey retail store occupied by B&M together with five small retail units and surface carpark. Within this parcel is 867 – 869 High Road, which is Grade II Listed.

Both the Goods Yard and Depot sites benefit from extant planning permissions (Refs: HGY/2018/0187 and HGY/2019/2929) which have been taken into consideration as part of this application and are reflected in the parameter plans accompanying the application to ensure consistency between such schemes and the Proposed Development should the owner of those sites implement the extant planning permissions independently of the Proposed Development. An application for full planning permission for both the Goods Yard and Depot sites was submitted in June 2021 (HGY/2021/1771) for a residential-led mixed-use development.

Along the eastern boundary, there are two relevant planning applications which overlap the red line boundary associated with the application for the Proposed Development. These comprise 807 High Road (Ref: HGY/2021/0441) and the Printworks along the High Road (Ref: HGY/2021/2283). Where required, like the Goods Yard and Depot sites, the Proposed Development has taken these into consideration and are also reflected in the parameter plans for the purposes of consistency should these be brought forward independently of the Proposed Development.

Outside of the above, the remainder of north of HRW comprises a range of properties along the High Road. These are largely characterised by a series of low-rise Victorian terraces with ground floor retail units.

Land Use	Existing Land Use GIA (sqm) 1	Existing Land Use GEA (sqm)
Use Class B2: Industrial	9,818sqm	10,800sqm
Use Class B8: Industrial	864sqm	950sqm
TOTAL USE CLASS B:	10,682sqm	11,750sqm
Use Class C3: Residential	31,109sqm	34,220sqm
Use Class C2: Institutional Accommodation	879sqm	967sqm
TOTAL USE CLASS C:	31,988sqm	35,187sqm
Use Class E (a): Retail other than hot food	8,236sqm	9,060sqm
Use Class E (b): Sale of food and drink mainly for consumption on premise	3,759sqm	4,135sqm
Use Class E (e): Medical or healthcare	818sqm	900sqm
<b>Use Class E (g):</b> offices for operational or administrative functions, R+D of products or processes, industrial processes	1,627sqm	1790sqm
TOTAL USE CLASS E:	14,440sqm	15,885sqm
Use Class F1 (d): Public Libraries or reading rooms	455sqm	500sqm
Use Class F1 (f): public places of worship	595sqm	655sqm
Use Class F2 (b): local community halls	1,023sqm	1125sqm
TOTAL USE CLASS F:	2,073sqm	2,280sqm
Sui Generis: Public House	1,086sqm	1,195sqm
Sui Generis: Sub Station	86sqm	95sqm
TOTAL USE SUI GENERIS:	1,172sqm	1,290sqm
TOTAL:	60,355sqm	66,392sqm

Table 2-1 Existing Land Use Summary

#### 2.3 THE SURROUNDING AREA

The Development is principally bound by the High Road to the east and the railway line (including WHLS), servicing the Overground, to the west. A smaller plot to the west of the railway tracks is also included, comprising of Whitehall Lodge and the Whitehall and Tenterden Community Centre, which is surrounded by the existing Headcorn and Tenterden Estate.

The South boundary of the site is adjacent to existing St Francis de Sales Church and Junior School.

The North boundary is adjacent to modern mixed-use development.

Notable surrounds to the East of the development include existing businesses (with dwelling above) on the High Street. Also to the East is the Tottenham Hotspur Football Club (THFC) Stadium.

<sup>&</sup>lt;sup>1</sup> Assumes a factor of 1.1 when converting from GIA to GEA

# 3. Description of Development



#### 3 DESCRIPTION OF DEVELOPMENT

The proposed development is described as:

"Hybrid Planning application seeking permission for 1) outline component comprising the demolition of existing buildings and for the creation of a new mixed-use development including residential (Use Class C3), commercial, business and service (Use Class E) business (Use Class B2 and B8), Leisure (Use Class E), local community and learning uses (Use Class F1/F2) and Sui Generis uses together with the creation of a new public square, park and associated access, parking and public realm works with matters of layout, scale, appearance, landscaping and access within the site reserved for subsequent approval and 2) detailed component comprising Plot A including the demolition of existing buildings and the creation of new residential floorspace (Use Class C3) together with landscaping, parking and other associated works."

# 4. Sample Work Descriptions & Methods



# 4 SAMPLE WORKS DESCRIPTION AND METHODS

#### 4.1 INDICATIVE CONSTRUCTION SEQUENCE

The indicative construction sequence for HRW is outlined below; minor changes may occur subject to detailed design development and procurement activities in accordance with Section 10 of this document.

#### 4.2 SUMMARY OF DEMOLITION WORKS

#### 4.2.1 DEMOLITION PHASING

Demolition will be phased over the duration of the project and aligns with the overall phasing and decant strategy for existing residents. Demolition will take place prior to any other plot enabling works. a demolition phasing plan is shown below in Figure 4-1 Demolition Phasing Programme below.

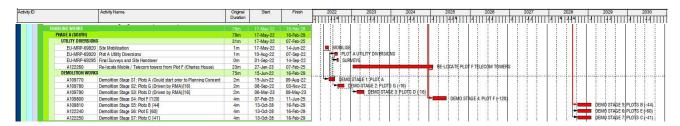


Figure 4-1 Demolition Phasing Programme

#### 4.2.2 CONSENTS & LICENSES

All statutory consents and licences required to commence an onsite activity will be obtained ahead of works commencing in a demolition area or phase and allowing for the appropriate statutory notice periods. These may include (as required):

- Notices for works on the Highway in accordance with the Highways Act 1980 (Ref 5-5) and Road Traffic Act 1998 (ref. 5-6).
- Hoarding and scaffold licences for works on the perimeter boundary.
- Section 80 Demolition Notice.
- Section 61 of the Control of Pollution Act: 1974.
- Temporary connections/disconnections to/from existing utilities and main sewers.
- Licence to discharge water from the Site into the public sewer.
- The principal contractor will obtain separate licences from/enter into agreements with the required parties for various aspects of the demolition when interacting with assets owned by TFL, Network Rail or other parties.
- The F10 Notification of Construction Project as outlined by the HSE.



Crane oversailing licence if required.

#### 4.2.3 SITE ESTABLISHMENT, LOGISTICS, AND SITE SECURITY

Upon taking possession of each plot, the first stage of the construction programme will be to establish the area as a construction site in accordance with the requirements of LBH and any planning conditions which may be issued, in addition Lendlease's internal requirements will also be implemented on site which are in excess of regulatory standards.

- Site pedestrian and access route setup.
- Installation of solid perimeter hoarding.
- Installation of vehicle and pedestrian gates.
- Installation of wheel wash facility.
- Construction of temporary vehicle entrances (subject to separate S184 agreements with Haringey Highways).
- Upgrading of temporary highway construction traffic signage to perimeter site roads.
- Installation of temporary lighting for access and task specifics (as required).
- Flood lights, walkway lights etc.
- Connection of temporary building supplies.
- Installation of security kiosks to site entrance gates.
- Establishment of perimeter site CCTV system.
- Installation of connections to temporary site water.
- Service isolation/disconnections.

Prior to any demolition works, a pre-demolition audit will take place to not only review any potential hazards and structural integrity of the buildings, but also confirm the circular economy re-use of materials.

#### 4.2.4 SITE ACCOMMODATION

- Construction of suitable temporary modular buildings to house the required number of staff and operatives during the building.
  - o Buildings will be installed using mobile cranes.
- Lendlease seek to implement sustainable site cabin solutions to reduce carbon footprint of temporary welfare where practical.
- Welfare locations will be strategically positioned in order to minimise disruption and disturbance to the local community.

#### 4.2.5 DEMOLITION WORKS

Once the site is established, demolition works can commence. The exact methodology of demolition will be developed with specialist contractors throughout the tender and bidding stages.

It is anticipated that the following methods of demolition will be employed:

- Asbestos and other hazardous material removal which will be carried out by a specialist contractor with the necessary licences.
- Soft Strip of all non-structural elements.
- Scaffold encapsulation (if required).
- Combination dismantling and high reach demolition techniques will be used:
  - Low Rise Maisonette Blocks (4 storey height) Demolition using high reach machines.
  - High Rise Blocks (>8 storey blocks) Combination of dismantling and high reach demolition machines and methods.
- A high reach demolition rig will be used to demolish structures, this machine will be equipped with hydraulic crusher/pulveriser on its high reach arm including a water spray attachment to suppress dust at source.

The Dismantling works is likely to include elements such as:

- Erection of full height external perimeter scaffold to ends of blocks which are adjacent to occupied properties or public foot paths and highways.
- Erection of external cantilevered scaffold to remove upper floors of >12 storey blocks.
- Install temporary back propping as required.
- All scaffold structures will be tied back to the structure and fully sheeted.
- Using mini—excavators operating on back propped floor slabs, floor and wall precast units will be dismantled and lifted down to ground level using mobile crane.
- Precast wall and floor units will be dismantled in the reverse order as to which they were built.
- For long low-rise blocks, the ends of blocks will be stepped back in a "pyramid profile" on a floor-by-floor basis.
- At ground level wall and floor units will be broken into smaller sections and either transported to the centrally located concrete crusher where the material will be crushed and stored on site for future use as a piling mat or surplus material will be taken offsite.
  - Note crushing is subject to further approvals in line with council policy.
- Surplus wall and floor units will be reduced in size and taken off site to a registered waste disposal facility.

The Demolition works will include:



- Upon completion of the dismantling phase of a block the remainder of the building will be demolished using a high reach demolition rig equipped with hydraulic crushers/concrete pulveriser on the machines arm.
- Dismantling and concrete munching techniques will keep noise to a minimum.
- Demolition arisings will either be loaded and transported off site or passed through the crusher for stockpiling on site for future use.

#### 4.3 SUMMARY OF INFRASTRUCTURE WORKS

Infrastructure works will, in general, be carried out prior to building construction, this is to facilitate construction access and logistics of servicing the building itself. Infrastructure works consist of:

- Utility surveys and investigations.
- Sewer diversions.
- New mains power connections.
- Duct work and service conduit installation.
- Sewer and storm water drainage systems.
- New mains water supplies.
- Telecoms and other comms networks.

#### 4.4 SUMMARY OF ENABLING WORKS

The following enabling and pre-implementation works will be carried out for various elements of the construction including demolition, infrastructure and vertical build operations. These elements will be phased to accommodate the phased nature of the construction.

#### 4.4.1 SITE ESTABLISHMENT, LOGISTICS, AND SITE SECURITY

Site establishment for enabling and infrastructure works will involve the same activities as listed above in Section 4.2.3 (Site Establishment, Logistics, and Site Security). Site establishment will take place as and when necessary for the individual plots throughout the phased construction of the project.

#### 4.4.2 PLOT ENABLING WORKS

- Site engineering and surveying.
- Pile probing (including magnetometer UXO survey where required) and other ground investigations.
- Installation of temporary tree protection and completion of relevant tree pruning.
- Installation of site wide temporary capping layer (Piling Mat).
- Site temporary electrics.

- Site hoardings and fencing (Installation or Replacement).
- Installation of connections and temporary site electrical transformer.
- Installation of temporary haul roads which will reduce the possibility of any muck being brought onto the public roads.
- Pile platforms.
- Temporary stabilisation of ground to protect surrounding buildings etc.

#### 4.5 GROUNDWORKS AND SUBSTRUCTURE

The implementation of construction work on site including further enabling works are outlined below:

- Installation of utilities, diversions, new electricity sub-station, supplies and connections as agreed with the statutory authorities.
- Excavation and installation of storm water attenuation tank (if applicable) and reinforced concrete crane bases.
- Foundation installation (mainly piling):
  - Likely reinforced concrete Piles (CFA), All piling will be undertaken using the CFA method. This process is virtually vibration free and one of the quietest forms of piling which makes it ideal for environmentally sensitive areas.
  - Smaller buildings may use a combination of raft and other foundation footing designs.
  - o Basements are likely to be supported by combi-pile solutions.
- Pile caps, deep drainage and service routing.
- A reduced level dig for the raft foundations, the storm water attenuation tank and the tower cranes.
- Reduced level excavation for basements (where applicable).
- Bases, deep drainage and service ducts for the CHP distribution etc.
- Mobile or tower cranes will be erected to assist with the erection of the building frames.
- Concrete pumps will be employed in placing concrete.
- Larger mechanical plant may be placed as ground level construction proceeds for ease of access.
- Excavate, lay and test underground drainage, coordinate and install incoming services to plot.
- Backfill including concrete surround and drainage.

Trim and prepare ground floor slab formation including concrete blinding and waterproofing system;

 Install ground or basement floor slabs - Fix rebar, shutter and pour ground floor slabs.



• If obstructions are encountered, then there may be the potential for short burst of repetitive hammering to move the obstruction but will keep within the agreed noise restrictions outlined in Section 6.7 Noise and Vibration.

#### 4.6 SUPERSTRUCTURE/FRAME

The superstructure works include:

- All buildings will be of Reinforced Concrete ("RC") or Post Tensioned ("PT") framing construction.
- An appropriate number of tower cranes (to be confirmed for each plot) will be erected sequentially to suit timing sequence between groundworks and superstructure works interface. Noting the volume of works and crane interfaces, safety exclusion zones around the foundations, fix core wall steel and assembly core wall shutters.
  - These will potentially be built in a precast Twin wall system, reducing the number of components and therefore safety and noise risk.
- The majority of frame works will be conducted via tower crane.
- Cores will be constructed either as the frame rises if in precast and twin wall, or in advance of the frame as a jump form if in-situ. Operative access to the working decks will be via scaffold staircases and hoists on the mansion block and tower and permanent staircase, stair within core or climbing screen and hoist on the tower. Reinforcement will be lifted by tower crane, concrete pumped using concrete placing booms or mobile pumps supplemented by tower crane or mobile crane.
- The Permanent stair and therefore permanent fire escape will be installed as soon as the deck and core are complete and shutters removed. They will be progressively installed as the frame rises.
- The majority of floor slabs will be constructed using traditional formwork methods.
- To facilitate the safe construction of the frame and subsequent cladding works, there may be a requirement to erect a crash deck fan or tunnels over public areas in to form a secondary means of protection measure for the public.

#### 4.7 ENVELOPE, ROOF, SHELL AND CORE

The Envelope, Roof, Shell and Core works include:

Cladding to the mansion blocks will likely be a single skin brick faced precast or hand laid system with an insulated and stud frame internal wall. The tower will be a unitised cladding system. Materials will be handled by tower cranes, mobile cranes, tele-handlers and goods/ passenger hoists operating externally to the facade. Access for operatives will be from inside the floor plates of the new building and hoists. At completion of the lift installation and appropriate

- completion of large items within the fitout activities, beneficial use will be allocated for distribution of materials.
- Where possible, balconies will be pre-fabricated prior to delivery on- site and they will be "glide on" to follow the frame and envelope construction.
- Where required, mechanical plant and roof materials will be placed by crane.
- The roof waterproofing system will be installed as soon as practically possible to achieve the earliest watertight date for all buildings.

#### 4.8 FIT OUT AND FINISHES AND EXTERNAL WORKS

The fit out, finishes and external works include:

- Fit out of residential units.
- Bathroom construction will use modular construction where possible and traditional techniques and trade sequences, serviced by cranes, loading bays, external hoists and beneficial use of lifts in the buildings.
- Residential units will be completed from first floor upwards and handed over following hoist removal and mechanical and electrical services commissioning.
- As the fitout progresses, the electric hoists will be removed. Operative movements and materials for the latter stages of apartments fitout will continue with the beneficial use of the internal lifts. Throughout the fit out, prefabricated components will be utilised where practical to limit the extent of site works.
- Public realm landscaping and individual garden landscaping.
- Completion and installation of Section 278 works these works outside the site will be phased in such a way to minimise disruption to users of the surrounding streets, some temporary footpath and road closures will be required to complete these works. Notice will be provided to local residents in advance of any road/footpath closures.

## 4.9 COMPLETION OF RETAIL UNITS AND SHELL AND CORE FIT OUT

The retail units will be completed to the appropriate standard to allow flexibility to the incoming tenant; our current intent is that all services will be brought into the units and capped off for tenant relocation. Demised walls where applicable will be built and left in its raw form (white box only).



#### 4.10 PUBLIC REALM WORKS

Works in the public realm will be carried out at the back end of each plot programme. This will complete the plot to its agreed delivery boundary, ready for opening to the public. These will include but not be limited to the following:

- Removal of all site hoardings upon completion of the works.
- Removal of all temporary services required for the construction periods.
- Removal of all CCTV and security services associated with the works.
- Removal of all temporary wayfinding and signage.
- Removal of environmental monitoring stations.
- Remediation and installation of all permanent Section 278 works including but not limited to:
  - Removal of any temporary wearing services required during the construction period.
  - Cutting back and installation of permanent base and wearing courses to all public highways within the red line demise of the development plot.
  - o Installation of all street furniture, including Wi-Fi/CCTV and lighting
  - o Installation of all soft landscaping and planting.
  - Installation of hard landscaping, paving, kerbs, edges, asphalt and concrete works.

# 5. Site Logistics & Setup





#### 5 SITE LOGISTICS AND SETUP

#### 5.1 LOGISTICS BY PHASE

This section describes the general principles of the site logistics during the key construction phases including:

- Hoarding, Access, Egress and Tree Protection
- Enabling works, Drainage and Foundations
- Crane Bases, Service Ducts and Tower Crane Erection
- Frame Erection, Hoists and loading platforms
- Envelope
- Fit out

#### 5.1.1 PRE-IMPLEMENTATION WORKS

#### Site Hoarding

The perimeter of the site will be secured by hoarding minimum of 2.4m high. Site hoarding will be inspected on a daily basis and maintained by the Principal Contractor. Hoarding licences will be secured for these works from LBH and/or TfL where necessary.

Security lighting will be secured on to the hoarding facing the street and at access points. All temporary lighting on site will be installed and maintained by the specialist temporary power contractor. This lighting will complement the street lighting already installed, and in places replace existing street lighting that may need to be removed for the construction of the development.

Access lighting will be installed in areas to allow safe pedestrian and plant access in and around the plots. This lighting will be faced down to limit any impact to neighbours and will comply with the Institute of Lighting Professionals' Guidance notes for the reduction of obtrusive light.

All lighting will be on timers to ensure they are only on when required for safety or security reasons, minimising energy consumption

Lighting will also be designed, positioned and directed so as not to unnecessarily intrude on adjacent buildings, ecological receptors, structures used by protected species and other land uses to prevent unnecessary disturbance, interference with local residents, railway operations, passing motorists, or the navigation lights for air traffic. This provision will apply particularly to sites where night working will be required.

Where solid hoarding cannot be implemented due to short term nature of works, an anti-climb mesh fence system, such as Heras, will be implemented to minimum 2m high.

#### **Tree Protection**

The tree protection zones will be if required by the arboriculture report. Protection zones will be fenced and signed appropriately.

#### Security

Security reception will be located near the pedestrian entrance to site to prevent unauthorised access. Regular patrols will be taking place during the day and perimeter will be inspected at the end of each shift. A CCTV system will also be installed to monitor the security of the site and assets. All vehicle entrances will have purpose designed lockable gates a minimum of 2.4m high. Gates will be manned by logistics personnel in order to prevent unauthorised access. Any plant, material, scaffolds or operations outside the main site boundary must be adequately secured and made safe and not aid entry to the main site.

#### **Traffic Marshalls**

Traffic Marshals will ensure that all people enter and exit the site via the designated pedestrian entrances. Gates will be "manned" continuously during site hours or kept locked if left unsupervised.

Wheel cleaning facilities will be provided (when required) using large collection gullies and water hoses as necessary to ensure no dirt is tracked onto public areas and highways. All efforts will be made to minimise the number of access and egress locations to assist and manage the safe public interface between construction vehicles, pedestrians, cyclists and other road users.

Concrete will be delivered directly to the point of pouring by concrete wagon or distributed by both mobile and static concrete pumps for access to all areas of the site. The filling of concrete columns will be by the use of concrete skips and tower cranes.

Sheet materials will generally be offloaded by a suitable vehicle (i.e. vehicle with crane attachment, forklift or rough terrain tele-handler) and distributed throughout the site vertically by hoist and tower cranes or Preston platforms and Canti-deck units.

### 5.1.2 CRANE BASES, SERVICE DUCTS, TOWER CRANE ERECTION AND RC FRAMES

The crane bases will be constructed as a piled reinforced foundation with a tower crane mast section cast within, the level will allow for the service ducts and drainage to pass around them if required. Erection of the tower cranes will commence upon proof of cube test results reaching required strength and temporary works approvals and the relevant statutory approvals from Network Rail etc. The reinforced concrete frames will follow the release of the foundations.

Crane bases will be constructed at such a time, and number of weeks, prior to tower crane installation as agreed with structural and temporary works engineers. The cranes will be installed sequentially following the substructure and superstructure interface, as cranes will be used for the concrete frame installation. The three number



cranes proposed are positioned in such a way by specialist crane company so as to overlap and interface in terms of lifting radii but not clash.

#### 5.1.3 BUILDING ENVELOPE

The façade construction on the mansion blocks will likely be a brick faced precast outer wall with the intention to be scaffold free. The methodology adopted for construction of the building envelope comprises lifting these panels with windows and doors already installed within, onto the side of the building and fixed with specifically designed bracketry.

Bulk roofing materials will be delivered by crane to roof level. Platform hoists will be taken to roof level for on-going sundry materials and final roof materials.

The taller buildings within the masterplan will likely be constructed with a unitised cladding system; all levels will be fed via a large materials platform hoist and lifted into position via a spider crane sat internally on the slabs.

#### 5.1.4 FIT OUT

All materials for the fit out will be delivered using a "Just-In-Time" (JIT) approach and will be distributed to working floors by the methods described above including cranes, hoist and beneficial use of the passenger lifts.

#### 5.2 CONSENTS AND LICENSES

All statutory consents & licences required to commence an onsite activity will be obtained ahead of elements of works commencing and allowing for the appropriate statutory notice period. These may include (as required):

- Notices for works on the Highway in accordance with the Highways Act 1980.
- Road Traffic Act 1998.
- Hoarding and scaffold licences for works on the perimeter boundary.
- Construction Notices.
- Section 61 of the Control of Pollution Act: 1974.
- Connections to existing utilities and main sewers.
- Licence to discharge water from the Site into the public sewer.
- Approval of the CEMP.
- Crane oversailing licenses (where applicable).
- TFL overground close work proximity permits (where applicable).
- Consents will be obtained from the relevant authority where tower cranes over sail the public highway. The construction programme and precise requirements for aeronautical obstacle lighting to the mast of the tower cranes will be discussed with the appropriate airport and the Civil Aviation Authority when the construction programme and crane methodology is finalised and prior to work starting on the tallest building on the Site.

Network Rail consents for plots adjacent the railway line.

#### 5.3 SITE ESTABLISHMENT AND SECURITY

Upon taking possession of the Site, the first stage of the construction programme will be to establish the area as a construction site:

- The working areas will be secure and the general public will be separated from the works by the use of solid timber hoarding, vehicular gates and pedestrian gated entrances.
- Where required, temporary hoardings will be provided on short term boundaries.
- All site facilities will be contained within the site area or on an adjacent area of the overall development.
- All gates will be maintained by security officers during working hour.s
- Flood-lighting in areas adjacent to sensitive receptors (i.e. nearby residential properties) will generally be limited to the working hours identified in this document.
- Site lighting will be kept to a minimum taking into account the needs of site health, safety and Security.
- 24hr security patrols on site.
- Site access will be controlled in accordance with the principle contractors security and safety protocols. All operatives, staff and escorted visitors will be required to comply with minimum safety standards before being issued with a pass. Personnel gates will be controlled by secure turnstiles for entry and exit from within the wider development and no pedestrian access will be permitted through vehicle gates to or from the public highway. Personnel will not be permitted to loiter outside the site entrances and fire assembly points will be located within the site hoarding wherever possible.

#### 5.4 ASBESTOS REMOVAL

Prior to any demolition works commencing, any asbestos identified in the predemolition audit will be removed by a competent contractor using appropriate regulatory methodology.

Extensive enabling works will be undertaken on the project, to clear existing services, foundations and obstructions from the ground to a depth commensurate with the substructure of the plot. During this process asbestos or other contaminants may be encountered in the ground. Once uncovered, the appropriate asbestos management procedures will be followed in line with all relevant statutory requirements, industry best practise and serving the relevant notices. All spoil material removed from site will be tested for any trace asbestos prior to removal.



By the time of vertical construction (commencing with piling), all enabling works will be complete and as such there is no possibility for encountering asbestos.

#### 5.5 **DEMOLITION**

A specific demolition logistics plan will be developed for each plot as timing of the demolition is finalised. This will address requirements for construction vehicles, private vehicles, pedestrians, and crowd management from THFC.

#### 5.6 HOARDING/FENCING WITHIN HIGHWAY AREAS

When specific works within the highway are required, these will be secured by temporary hoardings and manged in accordance with Chapter 8 of the New Roads and Street works Act – Signing lighting and guarding.

#### 5.7 SITE ACCOMMODATION

Due to the phased nature of the project, the anticipated level of staffing will vary over time. At peak it is expected that approximately 300 Lendlease and extended supply chain management staff will be present on-site full time who will oversee and manage the construction process. At peak, circa 1400 site operatives will generally be based on site as indicated in **Error! Reference source not found.**. Due to site constraints, accommodation for site workers may be installed in multiple phases.

- Initially, accommodation will be a small temporary unit to allow for site setup and any early demolition works. This welfare will comply with minimum health and safety at work act standards, including space for changing, eating, toilets, hot water, heating etc.
- Following initial set-up, larger central facilities will be provided in line with Lendlease sustainable site cabins targets.

The required site accommodation will comprise of the following:

- Lendlease Staff Offices plus meeting and administrative space.
- Canteen with full kitchen, servery and stores to suit.
- Drying rooms with sufficient lockers to service the operatives on site (in tiers to save space).
- Male and female toilets, showers, and washing facilities.
- Security office.
- Induction Room.
- Contractors hot desk office facility.

Spaces for bicycle storage will be provided within the site boundary. The number of spaces provided will be reviewed against demand on a monthly basis and upgraded as necessary.

#### 5.8 MATERIAL STORAGE AND HANDLING

- Contractors and their subcontractors will maintain a tidy site and operate a "Just-in-Time" policy for the delivery and supply of materials for the works in order to minimise disruption to the local community. This is particularly important during the final phase of the works when onsite storage will be at a minimum:
  - Just-in-time delivery is managed by a web-based delivery management system (DMS) to ensure only approved vehicles arrive at their approved time, whilst also maintaining vehicle conformity to the project FORS standards.
  - The DMS will inform the site teams of the timing of deliveries and ensure the delivery vehicles comply with LL standards.
- Any materials that are required to be stored on Site will be sufficiently protected to minimise damage by vehicles, vandals, weather or theft.
- Tanks and drums of liquid chemicals and fuels are not encouraged but where unavoidable they will be stored in fully bunded and covered compounds with relevant COSHH precautions and assessments implemented.
- Packaging will be returned, wherever possible, and minimised by design.
- Deliveries of potentially hazardous materials will be supervised and a "Just-In-Time" delivery system will be implemented to minimise storage times and reduce the risk of potential environmental incidents upon the Site.
- Cranes will be used for general unloading and hoisting during the structural and envelope works.
- Passenger/goods materials hoists will be used to hoist materials vertically to the floors, and forklift trucks used to distribute and transport façade materials to loading bays and hoist positions.

#### 5.9 VISITOR MANAGEMENT

- Visitors will only be allowed to enter the Site via designated pedestrian security access gates leading to a dedicated segregated footpath to the main site offices for registration and obtaining PPE prior to entering the Site.
- Visitors will be expected to attend a specific site induction unless being accompanied by a member of the site team.
- Anybody visiting the Site for more than a single visit of up to a day or who intends a repeat visit will be required to undergo the Lendlease Incident and Injury Free Induction to ensure that they have a shared understanding of the implications of health and safety in a construction environment and of Lendlease's approach to ensuring that everyone leaves the Site in the same condition they arrived.



#### 5.10 CONSTRUCTION TRAFFIC MANAGEMENT

- The works will be carried out in such a way that inconvenience to the public, arising from increases in traffic flows and disruptive effects of construction traffic on local and main roads, is limited wherever practical. All diverted or replaced rights of way will be notified in advance and, where appropriate, temporary routes will be provided.
- A key principle of the traffic management strategy is to ensure the safety of all personnel (drivers & pedestrians). This means that separate dedicated routes will be established for vehicles and pedestrians. The onsite traffic flow will change through the course of construction; however, a one-way system will be used where possible, with designated areas for unloading which prevents or minimises, reversing and turning.
- All site traffic will be subject to speed restrictions. Failure to comply with onsite traffic rules shall result in appropriate measures being taken.
- Vehicles and pedestrians will be segregated on the one-way system and at site entrances by means of physical barriers. Site operatives will be required to wear high visibility clothing and full PPE.
- Banksmen will be clearly and separately identified in Hi-Viz clothing.
- Plant operators and drivers will be required to hold valid certificates and to have undergone the relevant safety training.
- Lendlease has committed, where possible, to ensuring that all HGV class drivers delivering to site have attended the Fleet Operator Recognition Scheme (FORS) course, which incorporates proof of accreditation with CLOCS (Construction Logistics and Community Safety Scheme).
- Wherever applicable, Contractors and Subcontractors operating HGVs will have a minimum FORS Silver Level accreditation, with an aspiration for the project to be Gold Level.
- Specific materials' storage areas will be identified for each area of the Site and managed as the interface locations between the bulk deliveries and the on-site distribution by forklifts, cranes and hoists.
- Dedicated circulation routes for site spoil movement will be set up and segregated where possible from the material delivery route.
- For large pre-planned loads, or abnormal loads, Haringey Council, Metropolitan Police guidelines and designated routes will be complied with.
- Site routes within the Development are unlikely to change during the construction sequence and are designed to provide the safest, most economical traffic circulation and the minimum environmental impact through noise and dust. Where modification is required due to re-sequencing of works or impacted by the future phases amendments to the CEMP will be amended in accordance with section 10.
- Site personnel access to the site will be via security-manned posts/gates and will be segregated from on-site construction traffic by means of vehicular barriers/fencing/hoardings etc.

- The siting and installation of the temporary wayfinding signage to the development site will use many of the signs already in place for the previous construction traffic. In addition to this signage the additional entrance gates to the individual work sites will be signed.
- A Traffic Management Plan will be developed for the project (in accordance with the HSE Guide The Safe use of Vehicles on Construction Sites) prior to the main site works commencing. This will take into account current legislation, Police, Fire Authority and HSE Guidance, Local Authority Transport Schemes and neighbourhood Lorry Restrictions. The Traffic Management Plan will be reviewed and updated in line with the construction programme and will typically include details of the following:
  - Temporary traffic control measures.
  - Temporary and permanent access to the works for personnel/vehicles.
  - o Off-loading and storage areas.
  - Traffic management procedures for waste disposal vehicles.
  - Personnel and vehicle segregation.
  - o Equipment, e.g. road cones, temporary fencing and signage etc.
  - Ensuring all work is planned and method statements prepared detailing safe systems of work.
  - Ensuring that all sub/trade contractors make adequate provision for vehicle selection and supervision of drivers; i.e. their own Banks men/Traffic Marshall.
  - Making vehicle safety an integral part of the Development health and safety plan.
  - Defining standards for driver competence, vehicle safety and maintenance; in accordance with the Haringey Council and TfL guidelines and initiatives.
  - Ensuring co-ordination and co-operation between contractors.
  - Ensuring all workers receive site induction training covering safe traffic routes and site rules for operating vehicles; Establishing safety monitoring procedures for the use of vehicles on site e.g. permit to work etc.
  - HGV drivers working on or delivering to the Site will be required to undertake Haringey Council cyclists' awareness course.
  - All vehicles that enter site will go through either a mechanical or manual wheel wash before re- entering the public highway.
  - Public highway condition will be monitored by LL site staff and a road sweeper deployed if required during a heavy period of site traffic.

#### 5.10.1 CONSTRUCTION ROUTES & ACCESS

Due to the positioning of the Site and restricted access, construction traffic routes will be discussed and agreed with Haringey Council, Transport for London (TfL), THFC,



and other stakeholders as part of a joint construction group to coordinate works. Construction vehicle movements will be restricted to the main arterial routes where possible and through discussion, the routes into the Site will be formally agreed. The vehicle routes form an integral part of the supplier sub-contract.

Delivery drivers will be issued with agreed routes during induction which they will be required to sign off and further informed that breaching these will result in disciplinary action and preclude them from entering any Lendlease site. To enforce adherence, the site management team will undertake "spot" visual vehicle tracking checks on a monthly basis for a 2-hour period. The outcomes of these spot checks will be reported to Haringey Council.

Please refer to Appendix 1: Outline Site Access Plan for vehicle access routes for the proposed site including routes across the wider construction Site.

The majority of construction traffic including HGVs will use the main TFL road network routes to access the site, this would be via the A406 from the North down the High Road to White Hart Lane or directly into the development. This is shown in Figure 11-3

The construction programme commences in Q1 2022, there will be a peak in HGV trips coinciding with the busiest periods of construction please refer to Appendix 3: Traffic Histogram.

Movements of large or unusual loads will be addressed in advance with the relevant highway authorities and the police in order to ensure compliance with regulations and to provide advance notification for local residents.

The Site is located close to the WHLS and is within walking distance of Northumberland Park Station and a number of bus stops. Given this proximity to public transport services, it is envisaged that the majority of construction personnel would travel to Site by public transport, there is no provision for onsite parking and this will be advised in placement of Contractors Orders and further reinforced during the site inductions.

In addition, the passage of vehicular traffic to and from the Site would adhere to the environmental procedures contained within the Environmental Management Plans and enforced on all contractors involved within the Development.



Figure 5-1 Public Transport Routes

#### 5.10.2 OFFLOADING AND STORAGE AREAS

Vehicles will be directed to their designated delivery point or holding/storage areas, which will be marshalled by logistics personnel at all times especially during unloading/manoeuvring activities, ensuring that only authorised personnel are given access.

All site deliveries will be notified in advance to the on-site Lendlease logistics team and access slots will be allocated. Lendlease will implement a safe area to check incoming vehicles for compliance with Lendlease requirements - such as FORS compliance, FSC, sustainable sourcing of fuel, and load stability/securing. Lendlease may implement a site holding facility for checking and administering these checks if space permits.

Where possible no delivery vehicle will leave the Site empty. A "take-back" policy will be encouraged whereby all returning vehicles will take associated waste/packaging with them on their return journey for recycling.

#### 5.10.3 PERSONNEL, PUBLIC AND VEHICLE SEGREGATION

#### HRW

All pedestrian routes on and around the Site will be clearly defined utilising the perimeter hoarding / temporary fencing, vehicle barriers and pedestrian route signage with traffic marshals at all public interfaces. Pedestrian crossover routes will have appropriate warning signs displayed, e.g. give-way signs, vehicles crossing etc.

All site operatives will be given a specific site induction and briefed with reference to the use of designated pedestrian access ways and crossover points.

Action will be taken against site operatives deviating from defined routes with a yellow and red card system. (Yellow for first offence and red for dismissal and removal from Lendlease Site).

#### 5.10.4 TEMPORARY ROAD CLOSURES

Part of our measures to mitigate the impact of construction activities will be to create temporary footpath closures and diversions as required whilst the hoardings are erected or modified and works within the public highway are completed. Any closure will be closely monitored by site operatives to ensure safe access and egress to the site.

Temporary Road closures may be required in order to establish and remove the cranes or to deliver large items of building plant and infrastructure items. This will be agreed with Haringey Council and TfL in advance.

Notices regarding any planned closures and diversions of either roads or footpaths will be given to Haringey Council, Bus Companies, TfL, the police, fire brigade and other emergency services.

Haringey Council generally will undertake the relevant letter drop to the local residents should a road closure or diversion be required, however, should an unforeseen emergency arise and with Haringey Council's approval LL will undertake the notification.

It is important to note that during any closure and works, access to WHLS will be maintained as required for any match day event involving the stadium. This will be agreed and coordinated with THFC operation procedures following advice from specialist consultants prior to impacting any of the existing access routes.

# 6. Safety, Health & & Environmental Considerations during Construction



#### HRW

# 6 SAFETY, HEALTH AND ENVIRONMENTAL CONSIDERATIONS DURING CONSTRUCTION

#### 6.1 GENERAL SAFETY, HEALTH AND ENVIRONMENTAL CONSIDERATION

Lendlease is a leader in environment, health and safety (EH&S) and we need to constantly challenge our performance and push the boundaries so that our approach to EH&S is aligned to the evolution of the Lendlease strategy, remains effective, and is fit for purpose for the sectors and markets in which we operate.

Lendlease is committed to operating Incident & Injury Free wherever we have a presence and exploring every opportunity to have a positive impact on the environment. The Group's Environment, Health & Safety (EH&S) approach is based on this Vision and is supported by the Operating Discipline and Behaviours within the organisation. The linked elements of Vision, Operating Discipline and Behaviours form the core of the EH&S culture at Lendlease.

Lendlease strives to go beyond mere compliance with statutory and organisational minimum requirements hence it introduced a set of Global Minimum Requirements (GMRs) which set out the Lendlease minimum environment, health and safety standards designed to control the risks associated with both asset and construction operations. The GMRs include common criteria for the planning and delivery of assets and construction operations, with the physical GMR standards being established for asset and construction operations separately due to the differing nature of hazards and activities. The GMRs apply to all Lendlease operations – which include construction projects, developments, offices, and assets we develop, control, maintain, own, or operate. The GMRs have been updated and re-issued with compulsory training in 2021.

The stages of governance outlined in GMRs 1-4 (investment, design and procurement, establishment, and delivery) provide a specific focus on low likelihood, high impact events that have the potential to lead to catastrophic and fatal outcomes. The GMRs apply to all Lendlease operations. This includes all Lendlease projects, developments, assets, joint ventures (JVs), alliances, partnerships, multi-site teams, facilities and offices. The GMRs do not apply to tenancies once handed over to operating entities with management or control of a tenancy or third-party users of that tenancy(s)

The life cycle below shows the GMR involvement throughout the lifecycle of a project from investment through to delivery. By implementing standards early, we are able to design out a number of construction risks that may prevent incidents occurring in the future of the project.

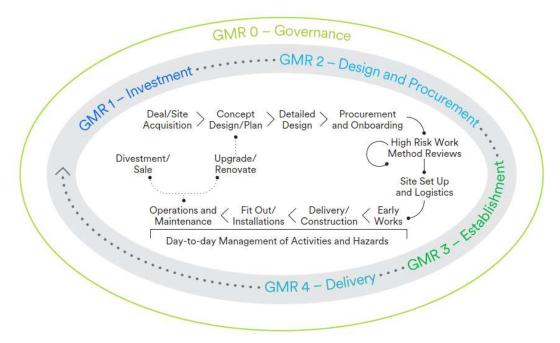


Figure 6-1 GMR Life Cycle

Lendlease GMR 4 – DELIVERY focuses on the construction deliverables specifically looking at industry wide high risk works. the GMRs set a framework of risk control above regulatory requirements, around the following activities:

- 4.1 Fall of person
- 4.2 Fall of material/object
- 4.3 Vehicle and plant incident (work sites)
- 4.4 Uncontrolled release of electrical energy
- 4.5 Fire and explosion
- 4.6 Crane and hoisting equipment incident
- 4.7 Impact from moving parts of machines
- 4.8 Excavation and stockpile collapse
- 4.9 Failure of structures (temporary or permanent)
- 4.10 Occupational health exposure
- 4.11 Public health exposure
- 4.12 Mental health and fatigue
- 4.13 Degradation or pollution of the environment
- 4.14 Vehicle and plant incident (public areas)
- 4.15 Uncontrolled release of stored energy (non-electrical)
- 4.16 Tunnel collapse
- 4.17 Failure of fixtures or fittings
- 4.18 Drowning
- 4.19 Confined space incident
- 4.20 Essential service failure

#### **HRW**

The centrepiece of Lendlease EH&S culture is what is termed Uncompromising Leadership. This requires leaders at all levels of the organisation to not only understand the vision of the organisation, but also the systems, standards and responsibilities applicable to them. This will enable leaders to continually make decisions that contribute towards eliminating incidents and injuries and create positive EH&S outcomes within assets we develop, control, maintain, own, or operate.

Construction works will be carried out in such a way as to limit, as far as is practicable, adverse environmental impacts and works will be carried out in accordance with the following general provisions:

- Planning approvals from Haringey Council.
- Lendlease Incident and Injury Free Procedures.
- Lendlease Global Minimum Requirements.
- Considerate Constructors Scheme.
- Requirements of highways and utility authorities.
- Design for durability and low maintenance.
- Design for flexibility and adaptability.
- Use of materials from sustainable sources.
- Use of local materials where possible.

Safety, health and environmental issues on the Development are the primary factor in influencing the construction methods adopted. The construction team will develop detailed health and safety plans, specific environmental, fire and accident procedures to suit the construction sequences of the development. It is intended to agree a protocol process with Haringey Council Environmental Services Division under Section 61 of the Control of Pollution Act: 1974 in relation to controlling hours of operation, noise, vibration and pollution impacts of equipment used on the Site.

Contractors involved in the development will ensure:

- That all non-English speaking employees are provided with relevant health and safety information in a means they can understand.
- That adequate multi-lingual supervision is provided so as to ensure that employees continue to be adequately and effectively informed and supervised on all matters affecting their health and safety.
- That suitable bi-lingual arrangements are in place to ensure that statutory related matters are complied with.

All contractors will be required to adopt the Construction Skills Certification Scheme (CSCS) or equivalent skills certification. This will be combined with the Lendlease in house behavioural safety programme; Incident and Injury Free (IIF). General operatives will be required to complete the health and safety training element of the CSCS scheme and may be given the opportunity to pursue a relevant NVQ qualification. All contractor supervisors will receive additional Lendlease training, including our Engage and Influence leadership programme as a minimum. These

trainings are design to facilitate our frontline leaders with the tools they need to suitably put people to work and safely manage the team throughout the duration of the task.

A formal Health & Safety Policy Statement will be adopted, in accordance with the requirements of the Health & Safety Executive and other statutory and local authority guidelines. Compliance with the following mandatory provisions will be carefully monitored and where required enforced:

- COSHH, 1999
- Provision and Use of Work Equipment Regulations, 1998
- Highly flammable Liquids & Petroleum Gases Regulations, 1972
- Health & Safety at Work Act, 1974
- Mandatory attendance at Lendlease's Incident & Injury Free (IIF) training programme

#### 6.2 CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH

All substances coming onto site and all work activities which may involve or generate hazardous substances will be managed and controlled in accordance with the 'Control of Substances Hazardous to Health' regulations (COSHH), 1999 and best practice guidance, such as that published by the Environment Agency.

Examples of the control measures to be employed are as follows:

- All fuels and chemicals will be stored in designated areas, with deliveries of all hazardous materials supervised.
- Storage tank or container facilities will be appropriately bunded with designated areas as far as possible from any watercourses or surface drains.
- In case of spills or discharges, immediate remedial action will be undertaken in line with Lendlease's Health and Safety Plan.
- A logistics plan will be developed to take into account the management and control of hazardous substances on site.
- Personal protective equipment (PPE) suitable to prevailing conditions will be used by all construction workers.

#### 6.3 OUTLINE ENVIRONMENTAL, EMERGENCY FIRE AND ACCIDENT PROCEDURES

#### 6.3.1 ENVIRONMENTAL INCIDENT PROCEDURES

Measures will be carried out to avoid environmental incidents, however if these occur then the following types must be reported to the responsible person within the construction team. Lendlease responds to environmental incidents in the same way as a safety incident, whereby the incident is logged (using Lendlease reporting tool Enablon) and investigated to find the root cause of the incident.



To prevent incidents from occurring Lendlease implements a number of controls, such as:

- Regular inspections and audits by in-house and 3rd party auditors.
- GMRs (as outlined in Section 6.1 General Safety, Health and Environmental Consideration.
- Suitable material and COSHH storage.
- Preventative spill 'nappies' and bunds.

The overall strategy in the event of a spillage will be to "Stop-Contain-Notify (SCN)"

Spills or discharges to the atmosphere, water supplies, sewerage systems, rivers and other watercourses, or to the ground of:

- Any chemical product or formulation.
- Oils and fuels.
- Effluents/fumes and gases.
- Waste or contaminated materials.

#### Damage to existing:

- Trees and wildlife.
- Flora and existing local habitats.

Any environmental incident that could lead to

- Local authority or regulatory enforcement.
- Public complaint.

#### 6.3.2 FIRE AND EMERGENCY ROUTES AND PROCEDURES

Emergency routes and procedures will be continuously adapted to suit the construction sequence and stage of the development. An Emergency Fire and Accident plan will be prepared, generally following the guidelines for plan contents below and updated on a regular basis to take account of construction progress:

- Definition of the management organisation and responsibility for safety.
- Definition of appropriate fire prevention measures, including good housekeeping of site, welfare facilities and offices.
- Use of non-flammable/fire retardant materials for protection of finished works
- Safe use and safe storage of flammable materials of all categories, whether solid, liquid or gas.
- Appropriate waste management procedures.
- Monitoring the type and frequency of fire inspection/audits.
- Suitable site accommodation location, construction and detection/firefighting systems.

- During construction, the installation of temporary detection and alarm systems will be implemented.
- Development of evacuation plans, to include escape routes, muster stations, means of sounding alarms and the setting of systems in place to ensure that emergency vehicles have been called and all personnel have safely left the area.
- Training and fire drills.
- The application of permit systems for Hot Works, Confined Space Entry and Electrical Access Control.
- The provision of Fire Watchers and First Aiders.
- Checking that emergency routes/exits are available and unobstructed at all times.
- Dissemination of the plan.
- Continuous liaison with fire brigade/police/ambulance services and other emergency services, plus clients/occupants of adjacent buildings.

The Emergency Fire and Accident Plan as outlined above will be developed in consultation with the local Fire Brigade and emergency services. As sites are dynamic environments, emergency planning will be under constant and critical review to ensure the continued relevance of the plan and procedures. This will be the responsibility of the Fire and Emergency Co-ordinator. First aid facilities will also be established in locations as appropriate around the site.

#### 6.4 PARTICULAR HEALTH, SAFETY AND ENVIRONMENTAL CONSIDERATIONS

#### 6.4.1 WORKS CLOSE TO TFL HIGHWAY & NETWORK RAIL ROUTES:

Works shall be carried out in accordance with Haringey Council and TfL approval procedures for all activities in close proximity to existing assets.

Lendlease (HRW) will continue engagement with Network Rail and TFL during design development of the scheme. Lendlease (HRW) plan to enter into a basic asset protection agreement (BAPA) with Network Rail and TfL for the areas of the masterplan which are adjacent to these stakeholders/asset owners.

#### 6.4.2 PEDESTRIAN/PUBLIC STREET LIGHTING SURROUNDING THE DEVELOPMENT

The current proposals do not anticipate reducing the street lighting surrounding the site. This will be reviewed on a monthly basis and any impacts on the surrounding street lighting will be dealt with as necessary in the interest of public and pedestrian safety.



#### 6.4.3 IDENTIFYING CONSTRUCTION TEAMS

All Lendlease sites have minimum PPE requirements, including the wearing of high visibility clothing. To ensure construction teams are easily identifiable, all construction workers will wear suitable High Road West Development branding. They will also carry site identification naming their employer and the development plot.

#### 6.5 AIR QUALITY

#### 6.5.1 GENERAL PROVISIONS

Construction works will be carried out in such a way as to limit the emissions to air of pollutants (particularly dust and fine particles (PM10)), employing Best Practicable Means. The Site will be managed to minimise the potential effects on air quality from construction. Generally, the site will be laid out to locate dust causing activities and plant away from any sensitive receptors where reasonably practical.

#### 6.5.2 EFFECTIVE MATERIAL STORAGE AND HANDLING

Handling and storage areas will be sited as far away as is reasonably and practically possible from public/residential areas. Handling and storage areas will be actively managed and fine, dry material will be stored inside enclosed shield/coverings or within a central storage area. Any storage areas that are not enclosed will be covered/sheeted. Prolonged storage of debris on site will be avoided.

#### 6.5.3 CONSTRUCTION PLANT

Construction plant can be a significant source of emissions although control measures can be implemented to minimise any adverse impacts. The following measures will be employed:

- Site plant and equipment will be kept in good repair and maintained in accordance with the manufacturers' specifications. Plant will be selected on the basis of which has the least potential for dust and emissions.
- Plant will not be left running when not in use.
- Plant with dust arrestment equipment will be used where practicable.
- Where possible all existing fossil fuel plant and equipment will use alternative fuels such as electric or hydrotreated vegetable oil (HVO) to greatly reduce the carbon emissions and any impact to local air quality.
- Enclosures will be erected around major construction plant items as appropriate and where practical.

- Site entrances will be positioned to reduce queuing of vehicles to enter the project.
- Any use of generators will be limited with permanent renewable energy sourced grid connections implemented as soon as possible.

The project will ensure compliance with the emission requirements for Non-Road Mobile Machinery (NRMM), as set out in the Greater London Authority's Control of Dust and Emissions during Construction and Demolition Supplementary Planning Guidance (2014). The project will ensure all plant in use on site meets EU Stage IV in accordance with central London guidance.

The anticipated plant for the project is shown below in **Error! Reference source not found.** below:

Plant	Enabling & Demolition	Piling & Substructure	Superstructure & Envelope	MEP and Fit-out	Landscape & External Works
Mobile Cranes		✓	✓	✓	✓
Tower Cranes		✓	✓	✓	
Breakers	✓	✓			✓
Pulverisers	✓				
Crushers	✓				
Mechanical Excavators	✓	✓	✓	✓	✓
Piling Cranes		✓			
Piling Rigs		✓			
Concrete Pumps		✓	✓		
Floodlights	✓	✓	✓	✓	✓
Lorries and vans	✓	✓	✓	✓	✓
Scaffolding and hydraulic access platforms	<b>~</b>	<b>√</b>	<b>√</b>	<b>√</b>	
Compaction Plant and equipment (including concrete vibrators)	<b>~</b>	<b>√</b>	<b>√</b>		<b>√</b>
Forklifts/telehandlers	✓	✓	✓	✓	✓
Water pumps	✓	✓	✓	✓	✓
Generators	✓	✓	✓	✓	✓
Fuel/Water bowsers	✓	✓	✓	✓	✓
Mechanical road sweepers	✓	✓	<b>√</b>	✓	✓

Table 6-1 Anticipated Plant



#### 6.5.4 VEHICLE MOVEMENTS

Vehicle movements may result in dust emissions (by re-suspending dust from the road or from spilling dusty loads) and exhaust emissions. The principal contractor will look to implement a number of measures to eliminate or minimise such emissions:

- Wheel washing facilities on site to prevent mud from construction operations being transported on to adjacent public roads.
- Damping down of site haul roads by water bowser during prolonged dry periods.
- Regular wet cleaning of hard-surfaced roads used to enter site.
- Ensuring that dusty materials are transported appropriately (e.g. sheeting of vehicles carrying spoil and other dusty materials).
- Confinement of vehicles to designated haul routes within the site.
- Restricting vehicle speeds on haul roads and other unsurfaced areas on the site.
- Hoarding and gates to prevent dust breakout.
- Appropriate dust site monitoring will be included within the Site management practices informing site management of the success of dust control measures used.

#### 6.5.5 **DUST**

Control measures will be implemented to prevent the release of potentially contaminated dust entering the atmosphere and/or being deposited on nearby receptors. These would include the use of water sprayers and hoarding, dust covers, the restriction of drop heights onto lorries and appropriate storage locations of dusty materials.

- Dust control will be best achieved at sources, and if possible, activities will be carried out in a manner so as to preclude dust generation.
- Dust levels will be controlled and, if required, consent sought from the Haringey Council under the Control of Pollution Act 1974, Environmental Protection Act 1990 and local policy guidelines, to ensure that the Development is operated in a way which is not detrimental to the amenity of local residents.
- If dust is generated, steps will initially be taken to protect workers in the vicinity who shall, as a minimum, be issued with dust masks. Dust will, if possible, be contained in the location in which it is generated and be controlled and managed therein. Dust suppression measures will be carried out to ensure that dust nuisance affecting neighbouring properties is minimised.
- Dust emissions from construction will be controlled through careful pre-project planning and effective site management. The following control measures and good management practices, will be employed:

- Site operations will be planned to take into account local topography, prevailing wind patterns and local sensitive receptors e.g. schools, residences and ecological designated sites;
- Burning of materials on site will be prohibited;
- Loading and unloading will only be permitted in designated areas;
- Provision of water sprays and wind/dust fences where possible, particularly in dust sensitive locations, for example, during demolition works. Water spraying and/or screening will be undertaken prior to and during demolition;
- Stockpiles of soil, arising or other granular material will be sheeted and/or treated using "Dust Buster" or similar to prevent dust raising that may cause risk to health or nuisance to the public;
- An appointed person will oversee/control activities and handle complaints; and
- o Dust on tree foliage will be minimised where practical.
- During construction works that are well-known to cause excessive dust the project team will monitor Air Quality. This will be undertaken in line with IAQM Guidance on Air Quality.
- Monitoring to ensure active management of environmental outputs.
- If there are a series of dry and windy days which cause significant dust arising's from the Site works will be ceased until the dust can be reduced to a manageable level.

#### 6.6 ECOLOGY

All construction works will be carefully planned and managed to minimise and mitigate their potential environmental impact through implementation of this plan as agreed with all relevant statutory bodies (Haringey Council, the Environment Agency (EA) and Natural England).

Procedures to minimise risk of pollution incidents relating to machinery or building materials will be as agreed with the EA and facilities installed for rapid appropriate response to any accidental spillages.

As part of this Hybrid Planning submission a number of ecology surveys have been completed including tree surveys and a bat survey, please refer to section 29 of this submission for further details. During the planning determination period and in advance of future plots commencing, further ecology reviews (including endangered species) will be taking place. These reviews will confirm the requirements for provision of any temporary relocation if required. This will be subject to further review for individual plot determinations.

Notwithstanding this, should roosting bats be discovered during the enabling works or vertical build, works will cease and an appropriate mitigation strategy will be agreed with and approved by Natural England.



Any trees which are identified for removal on the Site will be undertaken outside the bird breeding season, wherever possible. However, where works are required to be undertaken during the bird breeding season an ecologist will inspect any trees to be felled, scrub and/or tall vegetation to be cleared within 24 hours prior to clearance.

A strategy of eradication or control of noxious weeds will be developed before works commence.

Monitoring, control and eradication will take place on a continual basis. Japanese Knotweed (Reynutria Japonica) has not been identified on site to date.

#### 6.7 NOISE AND VIBRATION

#### 6.7.1 GENERAL PROVISION

In a project of this scale and nature, it is recognised that noise, vibration and dust could give rise to local disturbance. These impacts are an inevitable consequence of the HGV traffic, and other heavy construction activities. Site-specific best practice measures, and the principles of 'best practicable means' (BPM), as defined in the Control of Pollution Act (CoPA) 1974 would therefore be implemented by contractors to minimise the disturbance to local residents and other potentially sensitive receptors.

#### These measures would include:

- Appropriate and well-maintained marketing & attractive hoardings constructed on the boundaries of adjacent noise-sensitive premises, which may include sound absorbing materials.
- Careful selection of construction methods and plant, including its location, to be used
- Switching off plant when not in use.
- Regular maintenance and servicing of vehicles, equipment and plant.
- Operational hours (to be agreed with Haringey Council).
- The use of temporary acoustic barriers where appropriate and the use of enclosures and screens around noisy fixed plant where practicable.
- Appropriate handling and storage of materials.
- Damping down surfaces during dry weather.
- The use of dust screens.
- Adherence to relevant British Standards.
- An appropriate choice of plant that would ensure compliance with the vibration targets agreed with Haringey Council.

#### 6.7.2 CONSTRUCTION NOISE

Infrastructure works, excavations and foundation construction will be among the most significant activities. The noisiest activities are likely to be concreting

operations although, the levels generated would not be considered to be significant.

As construction commences above ground, there will be noise from works support elements such as scaffolding and formwork erection but the majority of activities and plant (e.g. concrete pumping and crane movement) are considered to generate low noise levels.

On occasions it may prove necessary to carry out noisy activities outside of normal working hours. In such instances prior consultation and agreement will be requested from Haringey Council, with works only commencing once approval received.

Where work outside of agreed hours is required, this shall only proceed subject to notification to Haringey Council Environmental Health Officer and approval.

During elements of the construction works that are well-known to cause excessive noise and dust the project team will monitor noise at the site perimeter using an automated detection system.

In line with this Noise Trigger Levels shall be:

70dB(A) Laeq 10hr 08.00 - 18.00hrs

75dB(A) Laeq 15min

Noise Action levels shall be:

75dB(A) Laeq 10hr 08.00 - 18.00hrs.

80dB(A) Laeq 15min.

#### 6.8 SOILS AND CONTAMINATION

#### 6.8.1 EXISTING CONDITIONS

A desk-based study of ground contamination and an intrusive Site Investigation at the Site have established that owing to historical activities on the Site, there is the potential for localised contamination to exist on the Site. Due to the historical redevelopment of the Site, the most likely source of contamination is likely to relate to the presence of Made Ground and previous uses of the Site.

A more detailed Site Investigation survey will be undertaken during the determination period of the Hybrid Planning application.

If a contamination hot spot is identified on site, further Site Investigation and details of the removal of this will be agreed with the Local Planning Authority prior to its removal.

The strategy for controlling and mitigating potential adverse environmental or health and safety effects during construction will be to adopt the procedures and methods set out within this CEMP.



Table 6-2 below summarises the desktop study.

	Likely Significant Effect	Mitigation Measures	Likely Residual Effect
Demolition and Const	ruction		
Effects on Human Hea	Ith from Contamination ar	nd Ground Gas	
Site Operatives exposure to potentially contaminated materials or gas.	Negligible.	Adoption of appropriate PPE and RPE.	Negligible.
Adjacent site users exposed via airborne dust.	Temporary, local, adverse effect of minor significance.	The adoption of appropriate dust suppression measures and monitoring on Site boundaries.	Negligible.
Effects on Soils and C	ontrolled Waters		
Increased infiltration from rainwater and surface water runoff impacting the Secondary A aquifer.	Temporary, local, adverse effect of minor significance.	The development of a CEMP will outline appropriate mitigation measures.	Temporary, local, adverse effect of minor significance.
Accidental spillage or leakage of potentially hazardous substances or construction materials stored onsite impacting the Secondary A aquifer.	Temporary, local, adverse effect of moderate significance.	The development of a CEMP will outline appropriate mitigation measures.	Temporary, local, adverse effect of minor significance.
Increased infiltration from rainwater and surface water runoff impacting Surface Waters (Moselle Brook).	Negligible.	N/A	Negligible.
Potential impact on Principal aquifer from deep foundations/piling.	Negligible.	Foundations unlikely to extend to deep aquifer or designed subject to a FWRA	Negligible.
Effects on Human Hea	Ith from Unexploded Ordr	nance	
Potential effect of UXO on human health.	Temporary, local, adverse effect of major significance.	Adherence to mandatory health and safety requirements and the implementation of the mitigation measures outlined within the UXO survey reports.	Negligible.
Disposal or Ruse of E	xcavated Material		
Disposal of excess material and the reuse of site won	Negligible.	Adherence to relevant legislation and guidance.	Negligible.

Issue	Likely Significant Effect	Mitigation Measures	Likely Residual Effect		
Effects on Human Health from Contamination and Ground Gas					
Potential exposure of end users to potentially contaminated soil	Negligible.	The adoption of design interventions such as hardstanding or clean cover on landscaped areas.	Negligible.		
The potential for ground gas to accumulate in confined internal spaces presenting a potential toxic or explosive atmosphere.	Permanent, local, adverse effect of minor significance.	Assess soil gas regime through ground investigation and design appropriate mitigation measures as required.	Negligible.		
Effects on Soils and Controlled Waters					
Potential infiltration of hazardous substances.	Negligible.	All highways and parking areas will be provided with interceptors and appropriate abatement controls.	Negligible.		
Effects on Flora and Land	Iscaped Areas				
Potential impact on flora from potentially contaminated soil.	Negligible.	Soft verge or landscaped areas will be subject to the importation of clean topsoil and subsoil to act as a suitable growing medium.	Negligible.		
Effects on Buried Structures and Services					
Potential impact on foundations and buried services from potentially aggressive ground conditions.	Negligible.	Aggressive ground conditions will be assessed through ground investigation. Appropriate concrete class will be adopted for foundations and barrier pipe utilised for potable supplies if required.	Negligible.		

Table 6-2 Summary of Existing Contamination Study

#### 6.9 WASTE

#### 6.9.1 GENERAL PROVISION

The disposal of waste generated during construction, including any surplus spoil, will be managed to maximise the environmental and development benefits from the use of surplus material and to reduce any adverse effects of disposal. In general, the principles of the waste management hierarchy, which favours waste minimisation, re-use of materials and recycling over disposal to landfill will be favoured.



The project has been set up on Footprint, to collect and monitor environmental performance concerning waste, energy, and water aspects. This is an online system which is continually updated throughout the life of the project. In addition, the Project will produce a Resource Management Plan, in order to satisfy Lendlease Mandatory Environmental requirements as well as those set by BREEAM for Waste reporting.

It is an effective system which accurately captures information on the forecasted waste volumes and contains options for waste avoidance; re-use, and recycling that are tailored to the limitations and opportunities of the project.

The working version of the document has been attached at Appendix 4 of this document. Once the procurement of the individual trades has been completed the forecast section of the document will be completed, specifying the types and quantities of waste expected to be produced in the project.

Alongside the forecasting, planning and monitoring, Lendlease will carry out ongoing training via toolbox talks and inductions to educate site operatives on the importance of waste reduction and recycling on site. At the end of the project a final report will be produced from Footprint and the Resource Management Plan to be handed over to the client.

#### 6.9.2 CONSTRUCTION WASTE

Methods for waste reduction will form a basic strategy for construction waste management from the start. These materials will generally be inert or environmentally benign and may have alternative uses elsewhere on the Site. Opportunities will be investigated to maximise the recycling potential of construction materials.

Some contaminated materials may be found during the Development. Any contaminated materials that may be generated shall be stored and disposed of in accordance with relevant best practise guidance and legislation.

Licensed carriers will remove other residual waste, i.e. general office waste, etc. from site to suitable licensed disposal sites. Where possible, segregation and recycling of materials, such as office paper, food waste will be undertaken.

Please refer to chapter 30 which contains the Site Waste Management Plan.

#### 6.9.3 CONTROL DURING CONSTRUCTION

The Principal Contractors will ensure minimisation of wastes arising on site and its reuse where possible, either directly or by recycling, waste monitoring and target setting. Recyclable materials such as metal, timber, cardboard and office paper will be put in colour-coded bins, ready for collection by the appropriate contractor

Initiatives to reduce other waste streams include as far as practically possible:

- Minimising raw material waste through analysing design and construction techniques where possible.
- A commitment to develop waste minimisation opportunities by maintaining a role in the management of the supply chain during construction. Measures such as bulk buying will be utilised to facilitate this.
- Liaison with suppliers to enable packaging material is to be sent back for reuse, the use of off-cuts where possible and the recycling of off-cut material by the supplier.
- Engaging contractors in the process of maximising the use of recycled aggregates for hard-core and alternative cements according to application
- To ensure compliance with legislative requirements, only Environment Agency licensed waste hauliers, waste management contractors and landfill sites will be used.
- Suitable protection measures will be incorporated in the design of the waste management area to prevent pollution, and regular inspections carried out to ensure that stored waste is covered to prevent accidental spillage and from being blown away.
- Movement of waste by haul road and public highways will avoid, where possible, the use of access routes through residential areas. When leaving site, vehicles will be sheeted/covered to prevent any escape of materials onto the public highway.
- Waste transfer notes will be retained and will fully describe the waste in terms of type, quantity and containment in accordance with relevant regulations. Information regarding the type and quantity of material returned to the supplier and the contractor or contractors will also hold copies of all waste documentation.
- Materials stored on site for disposal (e.g. spoil arising) will be subject to the provisions of the duty of care, and may require a waste management permit. Where this is identified the permit or any exemption will be managed by Lendlease.

#### 6.9.4 CONSTRUCTION WASTE MANAGEMENT PLAN (CWMP)

At the outset, a CWMP will be produced using Lendlease's standard environmental metric reporting system. The Project will also produce a Resource management Plan to forecast waste and identify options for reuse, recycling, and avoidance of landfill. We will use Footprint to record actual waste arising's and their re-use.

The CWMP will also record responsibilities for waste management on site, any waste eliminated or reduced through the design process, compliance with the "Duty of Care", Environmental Protection Act 1990, and any training or awareness raising measures undertaken and reviews undertaken. It will also provide environmental KPI's which will be used to demonstrate performance levels against specified targets. The CWMP will be used in evidence toward environmental building assessments such as the Home Quality Mark



Packages will be bought on the basis of trades disposing of their own major packaging waste in a sustainable fashion as far as possible. For example, materials should be packed in re-usable crates which are returned with the delivery transport or recyclable packaging which also leaves site in the same way

Shared skips will be provided as necessary for fitting out trades where use will be controlled and segregated at site as far as possible, although space limitations are likely to dictate that segregation will be undertaken away from site by the skip provider.

#### 6.9.5 MONITORING, REVIEW AND ACTIONS TO IMPROVE

The Footprint Online system has and will be used to accurately monitor and review waste arising's as they occur.

Active monitoring through the online system enable quick identification and review of high-volume waste streams. In the previous phase, this identified a number of waste streams which were possible to remove through sustainability framework agreements, such as material take back schemes, these included large volumes of packaging, pallets and other temporary materials. These are now a standard part of the next phase.

The CWMP was used as a basis for training providing education to all staff and operatives on the "No Waste" Strategy to eliminate waste from creation rather than focusing on disposal methodology.

The Lendlease team will work closely with design teams and supply chain to eliminate waste through design. Primarily by reducing off-cuts and standardising of design and material sizing. Pre-fabrication and off-site manufacturing will reduce the volume of materials brought to site and waste associated with their manufacture.

Practices from previous Lendlease projects will be carried over into High Road West, which will be assessed in terms of process improvements and lessons learned after Practical Completion.

The streamlined practices will flow into the development as the construction practices are joined up through the use of Lendlease's Footprint system, and overall site Project and Environment and Sustainability Managers to cascade information.

Best practice will continue to be developed throughout the project utilising technology to enable data collection and reporting to review practices throughout the project whilst on-site and after practical completion. Lessons learned will be spread and actions set for improvements as and when they are identified.

#### 6.10 HAZARDOUS WASTE

Hazardous wastes will be segregated and stored separately from other waste fractions to avoid contamination and risk to the environment and personnel.

#### 6.11 WATER RESOURCES

The works will be carried out and working methods adopted to ensure that construction activities do not disturb ground contamination to adversely affect surface water and ground water quality. The following best practice measures will be adopted:

- Discharge to public sewers after prior agreement with Thames Water.
- The existing storm water drainage system will be retained where possible during construction, with modifications made as necessary to prevent ingress of debris utilising silt traps etc.
- Discharge via sediment traps/settlement tanks or ponds.
- Installation of interceptors.
- Control of spoil and other materials to prevent spillage, particularly during period of high local surface flood risk (September to March), and through appropriate handling and selection of spoil/material storage locations.
- Issues relating to contaminated land affected by the construction, together with proposals for protection of surface and groundwater.
- All drainage arrangements will be determined in consultation with the Environment Agency and Haringey Council.
- Careful siting and bonding of fuel storage facilities and any areas used for the storage of potentially hazardous materials.

Appropriate construction techniques will seek to ensure that groundwater seepage into excavated areas does not take place

Groundwater discharges will be via consent from Thames Water to foul sewerage network, and not to surface drains.

Thames Water's requirements Consents to discharge from the Environment Agency or Thames Water may be subject to specified conditions. Monitoring will be undertaken as appropriate and records kept demonstrating compliance with any specified conditions.

#### 6.12 UNEXPLODED ORDINANCE

Prior to any disturbance of ground, a detailed UXO study will be undertaken. This study will confirm the level of risk of UXO threat around the site and detail any mitigation measures to be followed for the areas of risk identified.

As a minimum, we will implement:

- Operational UXO Risk Management Plan:
  - Appropriate Site Management Documentation will be held on Site to guard and plan for the actions which should be undertaken in the event of a suspected or real UXO discovery. (This plan will be supplied by a



relevant subcontracting specialist in the field of Unexploded Ordinance such as 6 Alpha and Bactec (Safelane Global)).

- For all groundworks in all areas:
  - UXO Safety & Awareness briefings;
  - The briefings are essential when there is a possibility of explosive ordinance encounter and are a vital part of the general safety requirement. All personnel working on the Site should receive a briefing on the identification of UXB, what actions they should take to keep people and equipment away from such a hazard should it be encountered and in what way to alert the Site Management. Information concerning the nature of UXB threat should be held in the site office and displayed for general information on notice boards, both for reference and as a reminder for the ground workers. The safety awareness briefing is an essential part of the Health & Safety Plan for the Site and helps to evidence conformity principles laid down in the CDM (Construction Design and Management) Regulations 2015. (This briefing will be supplied by a relevant subcontracting specialist in the field of UXO and UXB).
- Piling and Bore Holing in all medium/high risk areas:
  - An Intrusive Magnetometer Survey; An intrusive survey (employing down hole Magnetometer or ConeMag techniques) ahead of piling and bore holing activities is strongly recommended. Such surveys should extend to the estimated bomb penetration depth or the maximum depth of works or whichever is encountered first.
- Bulk excavations and trenching in all previously Undisturbed Medium/High Risk Areas:
  - EOD Engineer Equipped with a Hand-held Magnetometer; EOD Engineer to "scan ahead" as the work proceeds and to oversee the intrusive construction activities in the EOD Banksman Role

#### 6.13 TREE MANAGEMENT

Where trees are identified for retention, construction work will be undertaken in accordance with relevant guidelines in BS 5837:2012 ('Trees in relation to Construction - recommendations') and in line with the Tree Protection Plan. This document will ensure that any construction within close proximity of these trees is undertaken without significantly impacting on them. Retained trees will also be adequately protected from damage throughout the construction process. Please refer to Section 36 which has the Arboricultural / Tree Impact Assessment. An arboriculture method statement will be produced detailing step by step mitigation procedures required when working in close proximity to retained trees such as:

Assessment of location of roots.

- The Root Protection Areas (RPA) will be designated as a construction no person zone (NPZ) within which trees will be protected from activities that have a potential to cause damage. NPZ's will be appropriately protected, e.g. fencing. Any works within a NPZ will need to be undertaken by hand or heavily supervised with machines.
- Generated in accordance with BS5837:2012 provides a sufficient precautionary zone where rooting conditions are more or less open, unobstructed and level.
- Where root conditions are such that it is not possible to confidently accept the RPA as providing a more or less accurate illustration of the location of roots then it will be necessary to carry out soil investigation to ascertain location of roots.
- Prepare detailed Arboriculture Method Statements for specific operations near trees.
- Training (e.g. tool box talks) in how to avoid tree damage.
- Facilitation Pruning.
- Supervision of sensitive operations and regular monitoring by an Arboriculture Consultant
- Appropriate Tree Protection Fencing and Barriers.
- Appropriate Ground Protection measures.
- Contingency planning.
- provision of appropriate protective fencing to reduce the risks associated with vehicles passing over root systems or beneath canopies.
- selective removal of lower branches to reduce the risk of damage by construction plant and vehicles.
- standard guidance for working within root protection zones, including procedures to follow in the event that significant roots are uncovered during work.
- Any tree surgery and felling operations will comply with the recommendations in BS 3998, Tree work. Recommendations, as appropriate.
- Tree planting and replacement strategies.

#### 6.14 ARCHAEOLOGY

The principal contractor(s) may need to allow for archaeology (buried heritage) and built heritage, in terms of written schemes of investigation and measures if findings are discovered, together with monitoring (structural or condition surveys). The requirements for this will be determined through further conversations with GLAAS and Historic England.

# 7. Community Liaison & Public Relations



### 7 COMMUNITY LIAISON AND PUBLIC RELATIONS

#### 7.1 COMMUNITY LIAISON

Throughout the planning process, Lendlease has sought to engage as widely as possible with the local community and neighbours. This process has involved a range of activities such as newsletters, emails, exhibitions, walk and talks, one to one meetings, and meetings with resident association members (as required). During the construction process, Lendlease will seek to maintain a number of methods to communicate with the local community to keep them informed of progress on the scheme and enable concerns to be voiced and listened to, such as:

- A single point of contact will be provided to the neighbouring residents and relevant statutory and non-statutory bodies and a contact telephone number (which is already established) will be provided to ensure clarity of communication and to coordinate any concerns.
- Meetings will be held on a one to one basis with particular key stakeholders and also attendance at local TRA's. Drop-in sessions will be held at the project community hub so that people are able drop in to discuss any questions or concerns with members of the project team directly.
- Drop-in sessions will be held at the project community hub so that people are able drop in to discuss any questions or concerns with members of the project team directly.
- A regular project newsletter will be circulated to the surrounding streets and works will be coordinated as far as possible with the works on adjacent sites
- Any special or unusual activities to take place (such as road closures or deliveries of large plant) will be notified by way of a supplementary letter, issued to the relevant neighbours and local amenity centres.
- A complaints register will be established to provide a permanent record of the performance of the project. Any complaint from residents or other parties will be treated seriously, with the complaint logged and the cause investigated. Analysis of any complaints made will allow procedures to be implemented with the aim of avoiding any re-occurrence.
- The site hoarding will be used to display information regarding the Development, in order that the Local community and passers-by can be informed of progress.



#### 7.1.1 CONSIDERATE CONSTRUCTORS SCHEME

The Site will be registered with the 'Considerate Constructors Scheme' which is a self-financing organisation owned by Construction Umbrella Bodies (Holdings) Ltd. This is a voluntary code of practice that seeks to:

- Minimise any disturbance or negative impact (in terms of noise, dirt and inconvenience) sometimes caused by construction sites to the immediate neighbourhood.
- Eradicate offensive behaviour and language from construction sites.
- Recognise and reward the constructor's commitment to raise standards of site management, safety and environmental awareness beyond statutory duties.

The scheme requires constructors to adhere to a Code of Practice that includes the following principles:

- Be environmentally aware in the selection of resources. Pay particular attention to pollution avoidance and waste management. Use local resources wherever possible and keep to a minimum at all times noise from construction site activity.
- Be considerate to the needs of all those affected by the construction process and of its impact on the environment. Special attention to be given to the needs of those with sight, hearing or mobility difficulties.
- Keep the Site clean and in good order and ensure that the surrounding area is kept free from mud, spillage and any unnecessary construction debris.
- Be a good neighbour by undertaking full and regular consultation with neighbours regarding site activity from pre-start to final handover. Provide site information and viewing facilities where practical.
- Promote respectable and safe standards of behaviours and dress. Derogatory behaviours shall not be tolerated under threat of the strongest possible disciplinary action.
- Be safe. All construction operations and vehicle movements to be carried out with care of the safety of passers-by, neighbours and site personnel.
- Be accountable to the public by providing site contact details and be available to deal with their concerns and develop good local relations.
- All contractors will be required to adhere to the requirements of the code of practice.
- Information about the scheme will be provided to all personnel at induction and through on-going awareness raising such as posters and toolbox talks as appropriate.
- The scheme will also be publicised to local residents by the use of appropriate banners and posters with contact details posted at the boundary of the Site.

#### 7.2 HOARDING

The Site will be completely hoarded with a minimum height of 2.4m high solid timber hoarding, designed to limit noise and ensure security. The hoarding will prevent public access to the site. Any hoarding which are required to be placed onto the public highway will have the necessary Haringey Hoarding License in place prior to erection. Hoarding will either be secured with concrete blocks, or posts fixed into the ground. Hoarding will be erected prior to any works taking place and will be monitored with CCTV and regular security patrols.

The hoarding will be used to display publicity about the project, including; programme, telephone contact numbers for complaints and enquiries, the name of the site representative as well as statutory health and safety information. If possible, a provision of safe observations panels will be included in the hoarding.

The hoarding will also be used for marketing, community messaging and Lendlease have an ambition to use some of the hoarding linked to a local community project. The details of these proposals will be discussed in full detail with Haringey Council prior to implementation. A separate application for advertisement consent will be made if required. The proposed hoarding line is shown on the logistics drawing in Appendix 1.

There may be short durations of works which take place outside of the main work areas, which will be secured using Heras or similar anti-climb mesh fencing. This will be minimum 2m high.

#### 7.3 MINIMISING DISRUPTION TO PUBLIC

#### **7.3.1 ACCESS**

The control measures identified in the preceding document are implemented to minimise disruption to the public, residents, and existing businesses in the area. Access will be maintained to all existing businesses and residences by ensuring construction vehicle routes do not block access ways. For each plot a specific vehicle movement plan will be developed to address this.

Suitable access will also be maintained to all existing public transport. If temporary public transport closures are required, then suitable alternative arrangements will be agreed with TFL and Haringey Highway authorities.

For all stadium events an agreed route of access/egress will be established and agreed with THFC operational plans, LBH, and other stakeholders for all phases to the south of White Hart Lane. This will be in accordance with crowd movement reviews completed by a suitably qualified consultant and submitted for approval as part of future RMAs. Further details are set out in Section 10 of this CEMP.

#### **HRW**

#### 7.3.2 PUBLIC AREAS

As mentioned above, construction areas will be suitably segregated from public areas. Suitable green and play space will be maintained around existing residents. Prior to closing existing play spaces, new play spaces will be created, either as meanwhile use, or as part of the permanent works.

# 8. Work Force





#### 8 WORK FORCE

#### 8.1 EMPLOYMENT AND MANAGEMENT WORKFORCE

- Catering and other essential welfare facilities will be provided on site.
- An employment strategy will be delivered in line with the employment and training strategy submitted to the council. This will be delivered by Lendlease, BeOnsite (or potentially another provider), Haringey Council, local agencies, training providers and Contractors. The Contractors will engage with the workplace training co-ordinator service to encourage local residents to apply to meet the employment requirements of construction.
  - BeOnsite (or potentially another provider) is a not-for-profit organisation focussed on helping with local employment.
- Appendix 3: Indicative labour histogram for the development.

#### 8.1.1 CONTRACTORS WORKING AGREEMENT – UNION INVOLVEMENT

- The Contractor will endeavour to ensure that all appropriate measures necessary are taken to maintain good industrial relations in connection with the Development.
- The Contractor will notify Trade Unions of the scheme and estimated timetable. A list of contractors together with, where applicable, the National Joint Council for the Building Industry (NJCBI) register number and/or reference with the Building and Civil Engineering Holiday Scheme Management or its equivalent will also be supplied.
- The contractor/sub-contractors (Building Trades) appointed must abide by the terms of National Working Rule Agreements as appropriate. Contractors outside Building Trades are to abide by their national agreements as appropriate.
- An Equal Opportunities Policy will be adopted and contractors (and their subcontractors) must adopt a positive approach to the employment and training of ethnic minority groups.

#### 8.2 WORKING HOURS

It is important that we minimise disruption for the local community. As such, we will agree prescribed hours of work with Haringey Council. Due to the proximity of residential dwellings and commercial activities to the Site, it is likely that the standard hours of work would be prescribed as follows:

08:00 to 18:00 hours Monday to Friday (with soft start from 07:00 to 08:00)

- 08:00 to 13:00 hours Saturday
- No undertaking of noisy works on Sundays, Bank Holidays or Public Holidays

In order to maintain the above working hours, the Principal Contractor may require at certain times a period of up to two hours before and after normal working hours to start and close down activities (known as soft start and soft finish - this will not include works that are likely to exceed agreed maximum construction noise levels). Specialist construction operations and deliveries may also be required to be carried outside these core hours in agreement with Haringey Council.

Although night-time, out-of-hours or weekend working would not normally be permitted, it is conceivable that certain specialist construction operations and deliveries may have to be undertaken during these periods. In such cases prior agreement with Haringey Council will be sought.

If works are approved to take place outside these hours it will mostly be within noise limits set by Haringey Council. Consultation with Haringey Council will be required prior to noisy activities taking place outside normal hours of operation, with the exception of emergency work which may need to take place as required.

Additional event day/night exceptions will also be implemented as required. During special and match day events access routes and roads will be closed and works on site will be ceased where required.

# 9. Crowd Control



#### 9 CROWD CONTROL

The High Road West development is located adjacent to THFC's football stadium (the "Stadium") which has seating capacity of circa 62,850. This section of the CEMP will outline how the Applicant proposes to provide at least equivalent or better queue widths, areas for queueing and general queue safety for crowds during the various construction phases, such that crowds are capable of being managed with at least equivalent levels of efficiency and safety as existing, as well as identifying opportunities to enhance the existing situation.

Several consultation meetings have been held with LBH, THFC and other key consultees presenting the proposals for HRW to seek comment, culminating in a presentation to the Safety Advisory Group (SAG), which includes THFC amongst others, on the 06<sup>h</sup> May 2022. The construction phasing and the proposed crowd flow as developed in this document is the result of the extensive consultation and feedback received from LBH, members of the SAG (including THFC), independent crowd flow specialists and other key stakeholders.

#### 9.1 EXISTING EVENT DAY STRATEGY – PRE-EVENT STRATEGY

Generally, in the period before events, the flow of people to the Stadium is spread over a longer duration, without a single event causing movement of people, such as the final whistle of a typical event. As such, crowd build up and management of movement from White Hart Lane Station is not provided to the same level as post-event within the red line of the HRW site.

For the existing event management strategy, an the general spatial principles presented in this document would allow for it these to be delivered safely within the current event management strategy.

Where there are events that require additional measures beforehand, the Applicant will consult with the SAG to plan effectively for any special or high-risk events to ensure that the appropriate precautions can be put in place.

#### 9.2 EXISTING CROWD FLOW SPECIFICATION – POST EVENT STRATEGY

Figures 9-1 and 9-2 below shows the existing route, area and widths that are used to manage crowd flow to WHLS by THFC. In summary:

- The existing post event crowd flow route runs West along Whitehall Street before turning North up Love Lane to WHLS for the Southbound platform.
   Visitors using the Northbound platform from WHLS primarily utilise White Hart Lane to access the station.
- 3 lanes are provided for crowd flow along Love Lane / Whitehall Street; a Southbound, Northbound, and Contraflow route, to allow visitors to move



between the queues as needed to access the correct platform as managed by stewards.

- The Southbound route is 3.6m at its narrowest point (see location 2 in Figure 9-2) and the total queueing area is 780m<sup>2</sup>
- The Northbound route is 1.5m at its narrowest point and the total queuing area is 1,380m<sup>2</sup>
- The Contraflow route is provided with a width of 1.4m.



Figure 9-1 Existing Crowd Flow Specification - Queue Areas

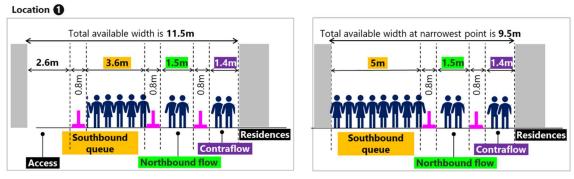


Figure 9-2 Existing Crowd Flow Specification - Queue Widths of (1) Love Lane and (2) Whitehall Street

## 9.3 THE HIGH ROAD WEST DEVELOPMENT AND THE BENEFITS OF THE PROPOSED CROWD FLOW IN ITS FINAL CONDITION

In its final condition, the High Road West Development will enable crowds to queue for WHLS with at least equivalent levels of efficiency and safety as the existing situation.

The proposed enhancements to the existing situation include:

- A more direct route through the area towards WHLS, improving the line of sight from the High Road and a straighter route for visitors.
- A reduced travel distance between WHLS and the Stadium.
- A more flexible space to manage crowd flow to and from the Stadium, which was noted by the Met Police as a much-improved scenario to the current arrangement.
- An enlarged space which offers opportunities to increase the flexibility and accessibility for fans, residents and the wider community.
- A managed estate with monitored CCTV that can be used during events.

#### 9.4 THE PROPOSED QUEUING STRATEGY FOR HIGH ROAD WEST

Although this section focuses on the construction phases, understanding the finished end state is essential to ensure that the change in route from the current arrangement to the final arrangement is managed carefully: this will minimise the number of changes or disruption to visitors and the management of the crowds.

In the end state, visitors leaving the Stadium to travel to WHLS will be able to see the station from the Stadium, cross the High Road and enter the proposed queuing system located at the proposed entrance to the Moselle Square.

At this point, and in accordance with the existing specification, the three-queue system will commence. Such system will ensure that at least the minimum existing queue width is maintained at all times.

The queue width within the High Road West Development's proposed route at its narrowest point between buildings will be 21m, as secured within the Parameter Plans. This is an increase of 11.5m from the narrowest point of the existing route (9.5m along Love Lane).

The existing minimum queue areas required to safely manage crowd flow will also be maintained or exceeded in the end state, with the northbound queue having 1,420m<sup>2</sup> and the southbound queue having 1,480m<sup>2</sup>. Figures 9-3 and 9-4 illustrate this end state.

#### **HRW**

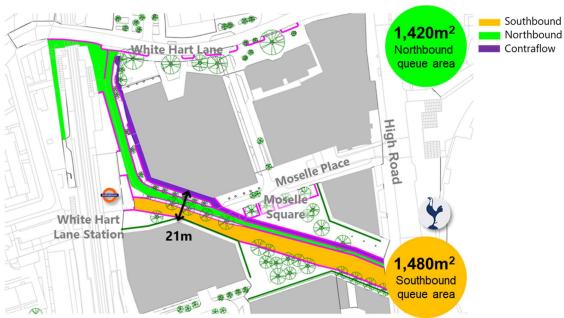


Figure 9-3 HRW Masterplan South Final Condition - Queue Areas

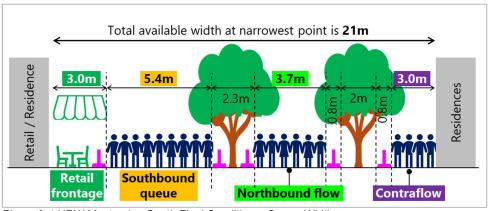


Figure 9-4 HRW Masterplan South Final Condition – Queue Widths

Table 9.1 compares the existing strategy with the proposed strategy for construction and the final condition once works are completed.

Comparison Areas	Existing Strategy	Proposed Strategy – Construction	Proposed Strategy – Final Condition
Minimum width of queuing/circulation area at narrowest point	9.5m	9.5m (equals spec)	21m (11.5m increase)
Northbound queue area	1,380m²	≥1,380m²	1,420m²
Southbound queue area	780m²	≥780m²	1,480m²

Total queuing area	2,160m²	≥2,160m² (equals spec)	2,900m <sup>2</sup> (740m <sup>2</sup> increase)
Direct route and line of site to WHLS from Stadium	No – route via Whitehall Street with a 90 degree turn along Love Lane to station. No direct line of site.	No - similar to existing strategy as proposals come froward	Yes – a shorter more direct route across the HRW masterplan with station in direct line of site.

Table 9-1 Comparison Between Existing, Construction Specification, and Illustrative Masterplan proposed strategy

#### 9.5 CONSTRUCTION PHASES AND CROWD FLOW

#### 9.5.1 GENERAL PRINCIPALS & FUTURE COMMITMENTS

All future plots included within the outline element of the Application will be brought forward via Reserved Matters Applications (RMAs) using a phased approach.

The RMAs will fix the building footprints, ground floor uses and entrances, and these will need to consider how the space for crowd flow is provided and managed. Detailed construction methodology and logistics plans will be submitted as part of the RMAs which will demonstrate the Applicants ability to provide at least the equivalent of the crowd flow specification as set out within this document. This information will be included within the CEMP that will be submitted with each RMA.

Prior to submission, meetings will be held with the SAG and relevant consultees to discuss the RMA for each plot, and each RMA's CEMP.

In addition to the above, the Applicant will ensure:

- Blue Book All future plots including public realm works will comply with the Blue Book dated summer 2018.
- Hoardings Site hoardings will be established for each plot as soon as vacant possession has been granted. Based on the current advice at the time of the review, the Counter Terrorism Security Advisors (CTSA) may require two different hoarding types be used across the development, these are:
  - O Hoarding design type 1 will be a non-fixed type: an example of which could be rhino barriers with mesh panel used along routes where the queuing strategy is to be implemented. This hoarding type will address the potential crush effect in the event of a crowd surge as highlighted by the CTSA during the consultation held on the 06<sup>th</sup> May 2022.
  - o **Hoarding design type 2** will be a full timber hoarding to a minimum height of 2.4m or higher if required under a plot specific risk assessment and with a specific design. This hoarding type will be used on elevations where there is no interface with the queuing strategy.

#### **HRW**

- Hoarding inspections will occur every week by a qualified engineer from the Applicants temporary works engineering department or a nominated third-party consultant engineer.
- Hoarding Security CCTV will be is installed around the hoarding in addition to security lighting and hoarding lights (as a minimum). These will be in accordance with the planning consent and any planning conditions.
- Lighting Lighting will be reviewed with the both the Regeneration and Highway teams from LBH alongside other key stakeholders from the SAG to address areas of concern or where lighting levels are deemed insufficient.
- Consultation If the development obtains outline planning approval, a series of workshops will be held with attendees from the SAG. These will be held during the design stages, prior to the submission of the RMAs. These will ensure that the requirements of the stakeholders are delivered and the safe movement of people throughout the site is facilitated.
- Deliveries Deliveries will be scheduled in accordance with both the pre & post event restrictions allowing sufficient time for departing vehicles to clear the area.
- Storage of Materials There will be no storage of materials, plant and equipment outside of any plot boundary at any time.
- Obstructions Site boundaries will be reviewed to ensure there are no obstructions or projections into the crowd flow area.
- Event Co-ordination An enabling works strategy for altering or updating the crowd flow route will be developed by the Applicant, with THFC, LBH in consultation with the SAG as each plot comes forward (as required).
- Integration Prior to any hoarding being removed from a plot, a detailed coordination exercise will be undertaken with LBH in consultation with the SAG as required to ensure that the plot landscaping works can seamlessly tie into areas that are used for the crowd flow strategy without impacting on the queuing system. These meetings will be used to ensure all relevant parties are aware of the key dates for handover to ensure that the updated crowd flow strategy can be successfully implemented

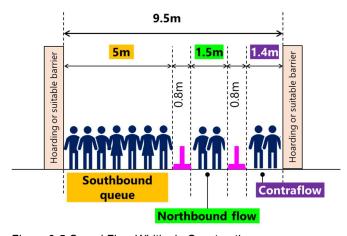


Figure 9-5 Crowd Flow Widths in Construction

As developed in previous sections, equivalent or greater widths for queues will be provided throughout the construction phases. Figure 9-5 illustrates the specification applied to the illustrative diagrams in Section 9.5.3 through 9.5.6.

#### 9.5.2 INDICATIVE PROGRAMME FOR FUTURE PLOTS

Shown below is the proposed indicative programme with Plot references. For Crowd Flow, this Section will only consider the Plots south of White Hart Lane.

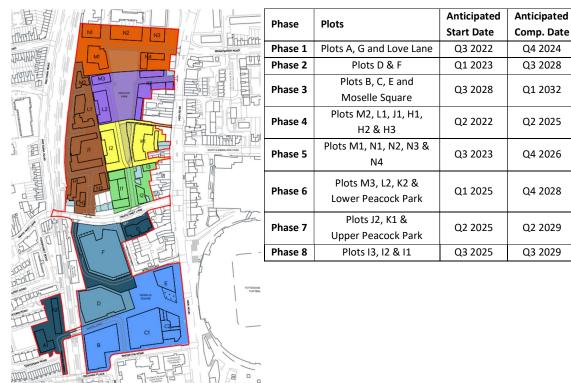


Figure 9-6 HRW Indicative Phasing and Programme

#### 9.5.3 PHASE 1 (PLOT A, G & LOVE LANE)

Phase 1 works will consist of:

- Demolition and site clearance of Plot A (Whitehall Mews) and the construction of 60 affordable units including the landscape and infrastructure to support.
- Demolition and site clearance of Plot G followed by the construction of circa 40 affordable units.
- Love Lane diversion works around Plot F. Stopping up of the remainder of Love Lane following the diversion works.

#### 9.5.3.1 PLOT A & G

Neither Plot A or Plot G have an impact on the existing crowd flow strategy due to their location. The detailed information around the sequence and construction methodology for Plot A is included within Section 4 and 5 of this document, and Chapter 6 of the Environmental Statement submitted as part of the Outline and Detailed submission in October 2021 and the subsequent ES addendum issued February 2022. Detailed



construction methodology information for Plot G will be submitted as a separate RMA, this will include an updated CEMP, construction methodology and logistics plan for the Plot.

The Love Lane diversion and stopping up works will interface with the crowd flow strategy in a small area next to WHLS. For access, however, it will follow the principles as set out in 9.5.1 and works will be coordinated to achieve this. Detailed information on these works will form part of a future RMA.

#### 9.5.3.2 LOVE LANE DIVERSION

In order to start Plot D Love Lane requires diverting so the remainder of the road can be "Stopped up". A new piece of public highway will be created across the corner of Plot F. During construction of this diversion:

- Strategy will remain unchanged up to the entrance of WHLS.
- Hoarding will be constructed around the works to Love Lane, there will be no impact on the queuing area required or the pedestrian access into WHLS.
- The construction specification on widths will be maintained, as illustrated in Figure 9-5.

Both Plot A and G will be delivered in accordance with the principles/considerations detailed out in 9.5.1 as well as the Bluebook dated 2018. The existing queuing area and system with be maintained as shown in Figure 9-7 below

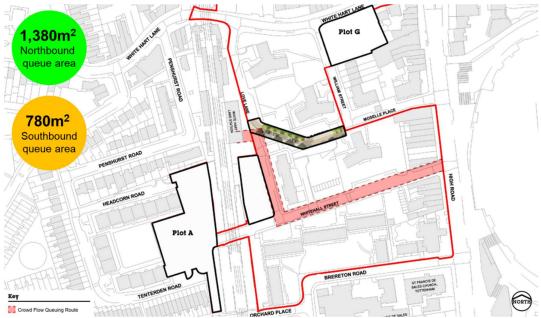


Figure 9-7 Phase 1 Crowd Flow Strategy during Plot A and G construction.

#### 9.5.4 PHASE 2 (PLOT D & F)

Phase 2 works consist of:

#### High Road West | Construction Environmental Management Plan

- Demolition and construction of Plot D which is situated between WHLS, Love Lane, Whitehall Street, and the existing railway line.
- Demolition and construction of Plot F which is situated between White Hart Lane, Love Lane and William Street.

This phase brings forward Plot D and Plot F and detailed information on these works will form part of future RMAs.

#### 9.5.4.1 9.5.1PLOT D

Plot D will be the first plot interfacing directly with the queuing system. As outlined in Section 9.5.1 Plot D will follow the key considerations, including the hoarding design, to consider the elevation of the Plot D boundary facing directly onto the queuing system. It will be the first plot where the route for visitors is altered to accommodate the construction of a plot on the HRW development.

Prior to Plot D commencing, enabling works will be required to facilitate the crowd flow route: this will involve creating a new route through the landscaped area of Ermine House so the queuing system can connect into the newly completed / diverted Love Lane. As identified under Section 9.5.1, these enabling works will be agreed within the RMA.

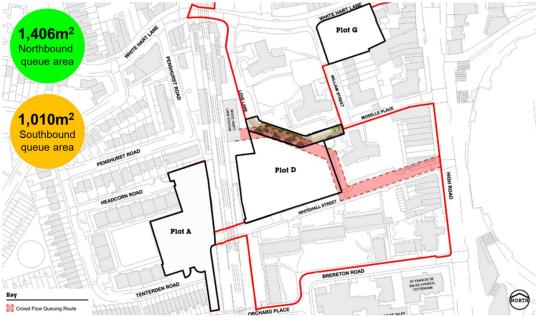


Figure 9-8 Phase 1 Crowd Flow Strategy

The revised route will be as follows:

- Visitors will exit the Stadium and cross the High Road and onto Whitehall Street as per the current strategy.
- From Whitehall Street, the new route will turn north where the Whitehall Street meets the hoardings of Plot D.

 Visitors will continue north, where they will merge with the newly completed Love Lane Road and access the station entrance via the controlled and managed point.

Prior to Plot D completing, the Applicant will hold a series of transitional workshops, these will be used to agree:

- How the Plot D landscaped areas can be tied into, coordinated and completed with the finished areas being used for the queue system.
- Review the plan for the crowd flow once the hoardings have been removed and once suitable barriers to manage crowd flow are put in place.
- Agree suitable dates and times for the hoarding removal to ensure all necessary plans and actions are in place for crowd management.

#### 9.5.4.2 PLOT F

Plot F will also interface directly with the queuing system, however the overall route through the site will remain unchanged. As outlined in Section 9.5.1 Plot F will follow the key considerations, this includes the hoarding design, with an elevation of the Plot F boundary facing directly onto the queue system.

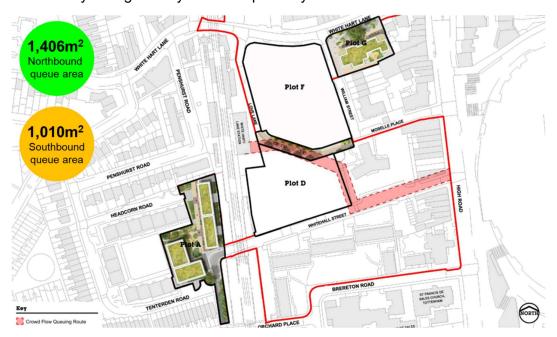


Figure 9-9 Phase 1 & 2 showing Plot A and G now complete, and Plot F commencing (Q2 2025).

Plot D's completion in Q4 2026 will complete the southern elevation of the route outside of WHLS. The completion of Plot F in Q3 2028 will then complete the works outside of WHLS and Phase 2 of HRW.



Figure 9-10 Phase 1 & 2 showing Plot A. D. F and G now complete (Q3 2028).

#### 9.5.5 PHASE 3 (PLOTS B, C, E AND MOSELLE SQUARE)

Phase 3 works consist of:

- Demolition and construction of Plot B which is situated between Whitehall Street, Orchard Place and Brereton Road, with the existing railway line to the west and Plot C to the east.
- Demolition and construction of Plot C which is situated directly facing the Stadium on the High Road and south of Moselle Square, and is a large mixeduse plot.
- Demolition and construction of Plot E which is situated directly facing the stadium on the High Road and on the western side of the proposed Moselle Square. Plot E is a Learning Centre with library and other community facilities.

As outlined in section 9.6.1, each plot will come forward as part of the RMA process with key stakeholders / SAG members consulted ahead of the submission of the RMA for the plots.

#### 9.5.5.1 9.5.19.5.1PLOT B

Plot B will bring forward the first plot south of Whitehall Street. The overall crowd flow strategy will be consistent with the Phase 2 strategy with minimal changes to the Phase 2 proposals. Only a small frontage of the site is adjacent to the existing crowd flow route. The first diversion will be in place before Plot B commences and will not impact on the route. However, a detailed CEMP will be submitted with the RMA and the principles set out in section 9.6.1 will be followed.



Figure 9-11 Phase 1, 2 & 3 showing Plot B coming forwards with Plot A, D, F & G now complete.

#### 9.5.5.2 PLOT C

During the construction of Plot C the crowd flow route applies the first change to the strategy since the commencement of Plot D. The connection of crowd flow route will be adjusted to join the High Road south of Whitehall Road into the final position, through the works on Plot C.

Due to its proximity to the stadium and the crowd flow route, the Applicant will hold reviews with SAG to ensure requirements for events days are incorporated into the detailed CEMP provided with the RMA. These reviews and meetings will take place once the design stages commences.

The updated strategy is as follows:

- Visitors will exit the stadium and cross the High Road to the new entry point which is located just south of the existing point. The new entry point will align with the end-state entrance to Moselle Square for the final crowd flow strategy.
- From the mid-point of Whitehall Street, the route connects with the previous phase connection onto the completed Plot D area, and continues north to WHLS.

#### High Road West | Construction Environmental Management Plan

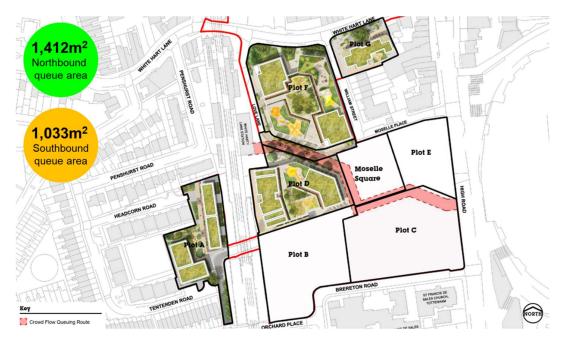


Figure 9-12 Phase 3 commences (Plot B and C) with Phase 1 fully complete (Plot A and G) including Plot D (Phase 2).

#### 9.5.5.3 PLOT E

Plot E will commence after the new crowd flow described in 9.5.5.2 is complete for Plot C, and illustrated in 9-11 above. The completion of Plot E will complete the connection to the High Road, prior to Moselle Square's completion.

Due to its proximity to the stadium and the crowd flow route, the Applicant will hold reviews with SAG to ensure requirements for events days are incorporated into the detailed CEMP provided with the RMA. These reviews and meetings will take place once the design stages commences.

#### 9.5.5.4 MOSELLE SQUARE

During the construction of Moselle Square the route through the square may have to be altered before the final-end state is reached. The RMA for this public space will cover this in detail and care and careful programming of works will be used to minimise the impact on the route and number of changes to it throughout its construction.

#### 9.5.6 COMPLETION STAGE

Coordination meetings with THFC, SAG and any other appropriate consultee will be held for any plot which interfaces with the crowd flow route so that the landscape works can be seamlessly be tied in with the landscaped areas outside of the plot (phase). This will ensure works needing to be undertaken can do so without impacting on the crowd flow strategy or visitors to the stadium

Transitional workshops will be held with these plots and THFC/SAG members to ensure robust plans are in place for when the hoarding is removed. The final condition of the site will be delivered at this point, and the end-state provision illustrated in Figure 9-13 will be complete.



Figure 9-13 HRW South of White Hart Lane completed and end-state crowd route implemented.

# 10. Amendments to CEMP





#### 10 AMENDMENTS TO THE CEMP

The CEMP document above sets out the nature of the activities and programme for undertaking the works for High Road West. It identifies the environmental considerations associated with these activities and outlines appropriate measures that will be implemented for their mitigation.

This plan identifies implementation of effective management controls, setting out the management, monitoring, auditing and training procedures that will be put in place to ensure compliance with the relevant legislation and which ensure that any impacts on the surrounding environment are mitigated as far as possible.

#### 10.1 MECHANISMS TO AMEND THE CEMP

As each plot progresses a revised version of the CEMP will be included within each RMA. In addition over the life of the project it is likely that some of these management controls need to be amended to make them more appropriate and effective. A suggested procedure is included below to allow for the amendment of the CEMP:

- Lendlease shall submit in writing to Haringey Council ("the Council") any proposed amendment to the CEMP;
- The Council shall respond in writing to the proposal. If the Council accepts the proposal, the amendment shall be incorporated into the CEMP on receipt by Lendlease of the Council's written acceptance. If the Council does not accept the proposed amendment, the Council shall provide written reasons for its decision to Lendlease.
- If the Council fails to respond to Lendlease within 15 working days the proposed amendment shall be deemed to be accepted.

# 11. Appendices

### 11 APPENDICES

#### 11.1 APPENDIX 1: OUTLINE SITE ACCESS PLAN



Figure 11-1 Primary Network Routes



Figure 11-2 Primary Access to the Southern Plots. Northern Plots will Access in and out of White Hart Lane

#### 11.2 APPENDIX 2: DETAILED LOGISTICS PLAN - PLOT A

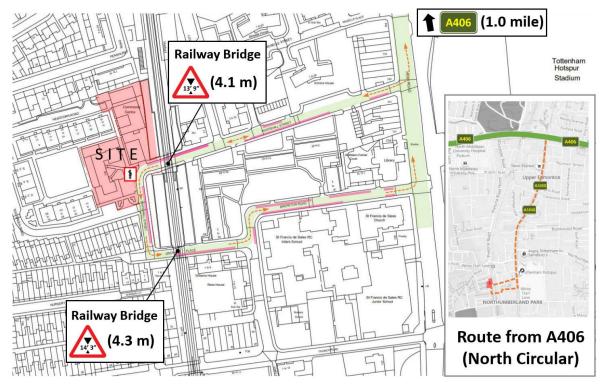


Figure 11-3 Preferred Logistics Route (Note large vehicle in/out of Whitehall St)

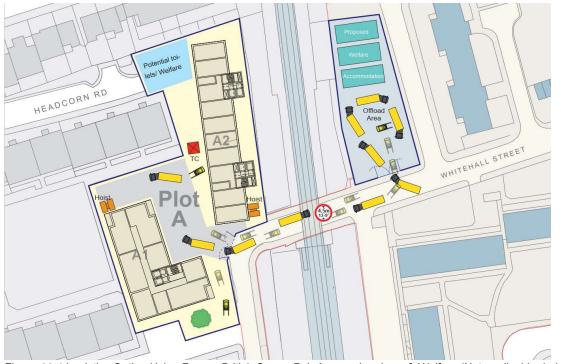


Figure 11-4 Logistics Option Using Former British Queen Pub Area as Laydown & Welfare (Not applicable during Plot D construction)

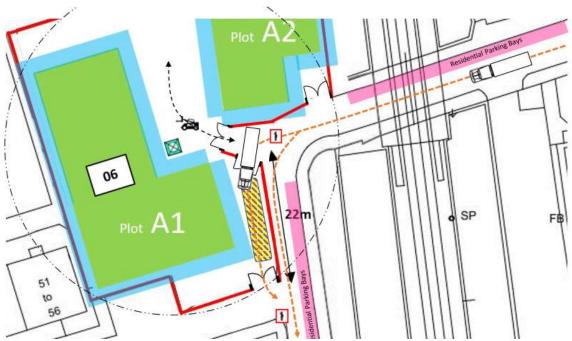


Figure 11-5 Potential Unloading Area and Vehicle Gates for use of single crane

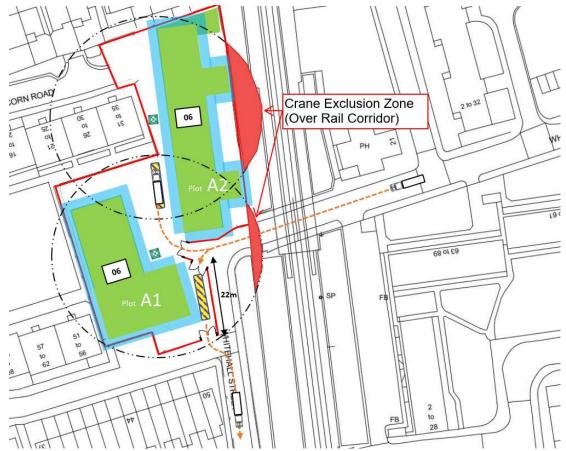
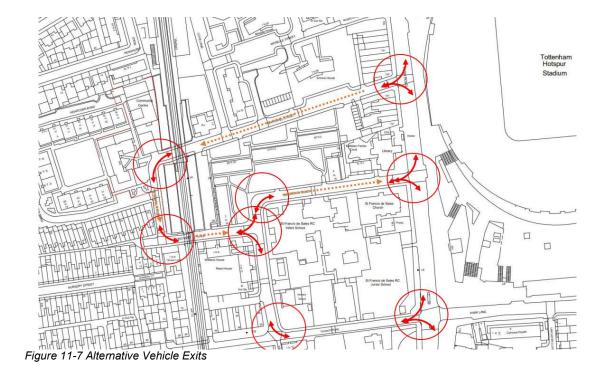


Figure 11-6 Potential Unloading and Vehicle Gates for use of optional 2 cranes

#### High Road West | Construction Environmental Management Plan





#### 11.3 APPENDIX 3: TRAFFIC HISTOGRAM

Using the current delivery metrics for the development we are expecting to see a range in the number of vehicles over the period. For the plots South of White Hart Lane, the forecast peak HGVs in a month is 2000 in mid-2026, this equates to approx 40/day. The peak year is 2026 with 11,520 movements in the year. This is represented in Figure 11-8 Anticipated Vehicle Movements/Quarter (Excl. THFC Plots) below.

For the total scheme (incl. plots North of White Hart Lane), the forecast peak HGVs in a month is 2700 in mid-2026, this equates to approx 90/day. The peak year is 2026 with 16,700 movements in the year. This is represented in Figure 11-9 Anticipated Vehicle Movements below.

Further reviews of these vehicle histograms will be made as further information is received from the trade contractors used to deliver the scheme.

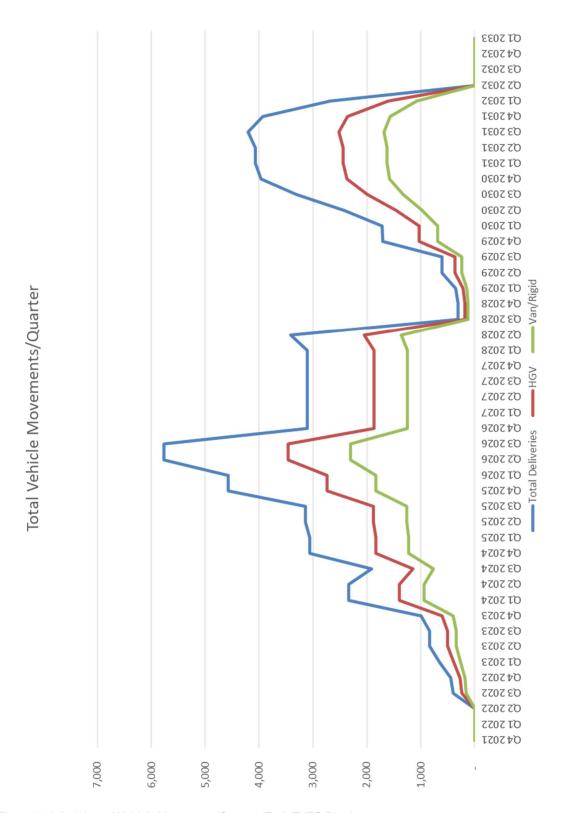


Figure 11-8 Anticipated Vehicle Movements/Quarter (Excl. THFC Plots)

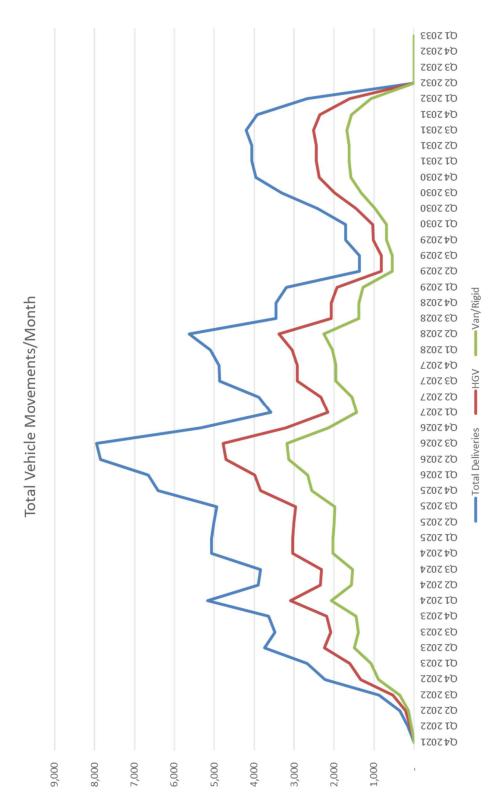


Figure 11-9 Anticipated Vehicle Movements

#### 11.4 APPENDIX 4: FORECAST LABOUR HISTOGRAM

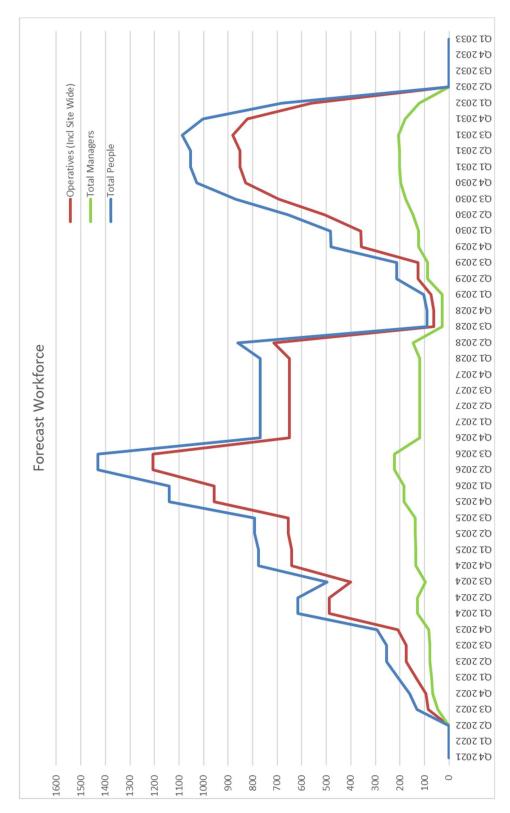


Figure 11-20 Forecast Workforce (Excluding Plots Delivered by THFC)

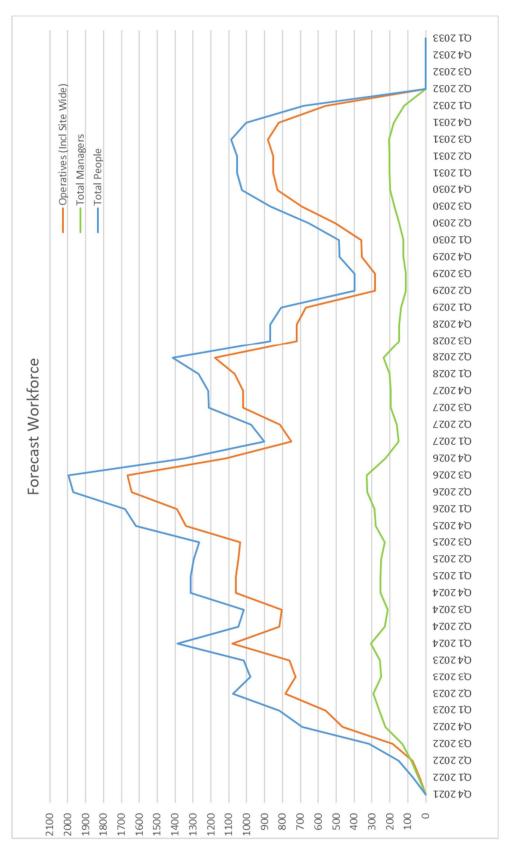


Figure 11-11 Workforce Forecast Over Delivery Period

# 11.5 APPENDIX 5: CONSTRUCTION WASTE MANAGEMENT PLAN

Please refer to the LL resource Management Plan (Site Waste Management Plan). This is the working version which will be updated on an ongoing basis.

Current forecast waste types are shown in the table below.

Waste type	Data source	Type of waste	Estimate amount (m³)
Construction	Best estimate	Bricks (17 01 02)	3,316.7
Construction	Best estimate	Tiles and Ceramics (17 01 03)	317.0
Construction	Best estimate	Concrete (17 01 01)	3,755.8
Construction	Best estimate	Inert (17 01 07)	8,456.4
Construction	Best estimate	Insulation materials (non-hazardous) (17 06 04)	1,491.1
Construction	Best estimate	Metals (17 04 07)	921.7
Construction	Best estimate	Packaging materials (15 01 06)	4,271.4
Construction	Best estimate	Plasterboard / Gypsum (17 08 02)	3,386.6
Construction	Best estimate	Binders (17 01 01)	232.4
Construction	Best estimate	Plastic (excluding Packaging waste) (17 02 03)	1,797.4
Construction	Best estimate	Timber (17 02 01)	6,725.2
Construction	Best estimate	Floor coverings (soft) (20 01 11)	145.5
Construction	Best estimate	Electrical and electronic equipment (non-hazardous) (20 01 36 or 16 02 14)	107.5
Construction	Best estimate	Furniture (20 03 07)	30.4
Construction	Best estimate	Canteen/Office/Adhoc waste (20 03 01)	1,464.5
Construction	Best estimate	Liquids (16 10 02)	114.6
Construction	Best estimate	Oils (13 01 13*)	5.3
Construction	Best estimate	Bituminous mixtures (non-hazardous e.g. asphalt) (17 03 02)	425.9
Construction	Best estimate	Hazardous waste	422.4
Construction	Best estimate	Other waste	1,969.7
Construction	Best estimate	Mixed construction and/or demolition waste (17 09 04)	11,893.9
Total			51,251.4

Table 11-1 Forecast Construction Waste

#### 11.6 APPENDIX 6: INDICATIVE CONSTRUCTION PROGRAMME

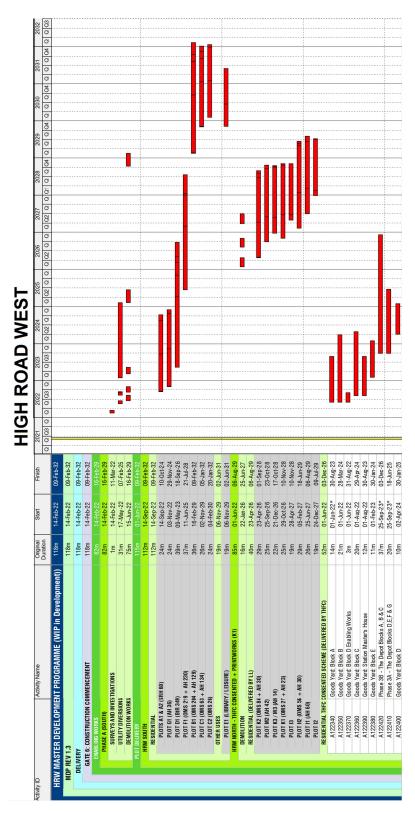


Figure 11-12 HRW Indicative Construction Programme