

## Camden Road Camden Hostels



# <u>Camden Road</u> <u>Traffic Management Plan</u>

**Revision 00** 



Review and Amendments										
Revision	Date	Comments / Amendment								
00	07/12/2023	Draft review S. Breaks MS and J. McGrath PCL								

Prepared By		Reviewed and Approved By
Name		Name
Position		Position
Signature		Signature
Date	07/12/2023	Date



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## **1.0 Introduction**

The Traffic Management & Logistics plan has been developed as a proposal for the overall Logistics strategy for the execution of Camden Road (referred to as "the Project"). Throughout this document various logistics plans have been used to demonstrate visually all key locations of logistical items and these are supplemented with commentary to explain the logic behind the same.

This document is currently at DRAFT status and should be treated as live and updated / amended / reviewed at suitable intervals.

## 2.0 Project Details

#### Location

The existing hostel accommodation at 248-250 Camden Road is being redeveloped into temporary accommodation for homeless families. The development is just across from Cantelowes Gardens and up the road from Camden Road Station. The proposed site is located on Camden Road (A503). The front boundary follows Camden Road, side boundaries are shared with neighbouring properties along Camden Road and rear boundary share with properties on Camden Mews. Neighbouring properties to both sides and rear are close to the boundary and must be considered in any proposed foundation schemes.

The redevelopment will provide 39 new temporary homes for families. The building will be 4-6 storeys in height, with an external stairwell and rear balconies to all levels. There will be 2 single storey garden buildings along with tree and landscaping works to encourage use of the outside space. **Figure 1**.

The works are due to commence in April 2024 with full completion due in October 2025

#### Fig 1: Site Location





#### Local Traffic Network

The site access is situated to the West of Caledonian Park and South of Holloway Road. Traffic to the project will arrive (GREEN ROUTE) north from the A1. Turn right onto A503 and travel down Camden Road to the project entrance at Gate 1. Traffic will exit (RED ROUTE) the site via Gate 1 and travel North on the A503 before turning left onto the A1.





#### **Project Description**



Camden Rd – 39 units consisting of 36 x studio units, 2 x 1 bed units, 1 x 1 bed wheelchair adapted unit.



## **3.0 Construction Sequence**

The development project has an overall construction programme of 77 weeks which is anticipated to run between April 2024 and October 2025. We have outlined below when each phase of the works will be carried out:





#### Site Set Up Establishment including Logistics.

Key Work Elements: Site set up including Hoardings, Gates, Site Establishment.

Start Date: 9<sup>th</sup> April 2024

End Date: May 2024

Site Enabling Works

Key Work Elements:

Service Diversion, Tree Protection, Ground Preparation Start Date: 9<sup>th</sup> April 2024 End Date: May 2024 Sub Structure Works

Key Work Elements:

Foundation work Start Date: 9<sup>th</sup> July 2024 End Date: 25<sup>th</sup> Sep 2024

#### Structural works

*Key Work Elements:* Frame and Roof Structure *Start Date: 25<sup>th</sup> Sep 2024 End Date: 3<sup>rd</sup> Sep 2025* 

## MORGAN SINDALL



## Facade

Key Work Elements: Brick Work Start Date: 3<sup>rd</sup> Sep 2025 End Date: 1<sup>st</sup> Oct 2025





## Fit Out

Key Work Elements:

Start Date: 12<sup>th</sup> Feb 2025 End Date: 1<sup>st</sup> Oct 2025

## Commissioning/ Handover/ Completion

Key Work Elements: Commissioning, final snagging, FF+E, Builders clean, completion. Start Date: Oct 2025 End Date: Oct 2025



#### CT tool – Estimated vehicle quantities

We have used the CT tool to generate some approximate outputs for vehicle quantities through each month of the construction programme. This also includes quantities of each type/ size of vehicle as well as during peak hours. snippets below:

Gross floor area (sqm)	Paesid	antal ATRe	In Ind	Retail AS	Rotall	10/fc9 F	32 General	Industry 88 Storege a	d distribut	en el resteren D2 Lessure H	otel c	ther T	otal		7										
New/additional floor area Refurbished floor area Total	0	0	0	0	0	0	0	0	0	0	7,800	7,800 0 7,800													
Construction phase Site setup and demolition Basement excavation and piling Sub-structure Super-structure Cladding Fit-out, testing and commissioning	Schedule   Start month   Apr-2024   Jul-2024   Jul-2024   Sep-2024   Sep-2024   Sep-2025   Feb-2025	(mmm/yyyy) End month May-2024 Jun-2024 Sep-2024 Sep-2025 Oct-2025 Oct-2025																							
Construction phase		Schedule			Apr-2024	4 ay-2024	Jun-2024	Jul-2024	Aug-2024	Sep-2024	Oct-2024	Vov-2024	Dec-2024	Jan-2025	-eb-2025	4ar-2025	Apr-2025	4ay-2025	Jun-2025	Jul-2025	Aug-2025	Sep-2025	Oct-2026	Vov-2025	Dec-2025
	Start month (mmm/yyyy)	End month (mmm/yyyy)	Duration (Number of months)	Month number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Site setup and demolition Basement excavation and piling Sub-structure Super-structure Cladding	Apr-2024 Apr-2024 Jul-2024 Sep-2024 Sep-2025	May-2024 Jun-2024 Sep-2024 Sep-2025 Oct-2025	2 3 3 13 2	1 1 4 6 18	40 40	40 40	50	60	70	60 50	50	60	60	70	70	80	80	70	70	70	60	50 60	50		
rit-out, testing and commissioning	Feb-2025	Oct-2025	9 M Average	onthly total e daily total	80 4	80 4	50 3	60 3	70 4	110 6	50 3	60 3	60 3	70 4	150 8	180	180	120 190 10	120 190 10	120 190 10	180	210	130 7	0	0
Construction phase Site setup and demolition Basement excavation and piling Sub-structure Super-structure Cladding	≤ 3.51 10% 28% 22% 13% 15%	Vehicle type 3.5t - 7.5t 15% 22% 28% 12% 10%	≥ 7.5t 75% 50% 50% 75% 75%	Total 100% 100% 100% 100%																					











## NO. OF VEHICLES IN PEAK PHASE (EX. OTHER PHASES)

Construction phase	Period of stage	No. of trips (monthly)	Peak no. of trips (daily)
Site setup and demolition	Q2 2024 - Q2 2024	40	2
Basement excavation and piling	Q2 2024 - Q2 2024	50	3
Sub-structure	Q3 2024 - Q3 2024	70	4
Super-structure	Q3 2024 - Q3 2025	80	4
Cladding	Q3 2025 - Q4 2025	60	3
Fit-out, testing and commissioning	Q1 2025 - Q4 2025	120	6
Peak period of construction	Q3 2025 - Q3 2025	210	11

## NO. OF VEHICLES IN PEAK PHASE (INC. POSSIBLE OVERLAP OF SUBSEQUENT PHASES)

Construction phase	Period of stage	No. of trips (monthly)	Peak no. of trips (daily)
Site setup and demolition	Q2 2024 - Q2 2024	80	4
Basement excavation and piling	Q2 2024 - Q2 2024	80	4
Sub-structure	Q3 2024 - Q3 2024	110	6
Super-structure	Q3 2024 - Q3 2025	210	11
Cladding	Q3 2025 - Q4 2025	210	11
Fit-out, testing and commissioning	Q1 2025 - Q4 2025	210	11
		1	



#### **Construction Segregation**

We will erect timber hoardings 2.4m high around the perimeter of each construction zone to safely segregate construction works from the general public; a turnstile system will also be installed on Camden Road which will allow controlled access to our site for all operatives.

Indicative hoarding line and turnstile position shown below:





#### Site Opening Hours

All activities and project work, including the arrival and departure of vehicles delivering or removing materials from or to the site, shall be carried out between the hours of:

- 8:00am to 6:00pm Monday to Friday
- 8:00am to 1:00pm Saturdays

We do not plan to be working on Sundays and Bank or Public Holidays.

## 4.0 Key Considerations

We are aware the project is located within densely populated areas so ensuring a safe and secure environment is essential for all project stakeholders and neighbours through the duration of the project. This will require constant engagement with all stakeholders and the upholding the best standards for logistical management and perception of the site.

#### Site Constraints

- The site is situated on Camden Road which is a busy route South of Holloway Road.
- Access and use of the site via Camden Road will be limited to rigid vehicles only (12.49m max.)
- The logistics for the site is tight due to restrictions and protected tree zones in the key Logistics zones for materials and site operatives.
- Just in time deliveries are crucial to avoid stacking up of lorries and vehicles.
- Engagement and communication will be key, and management of the Delivery Management System around key times will be a core focus to reduce any impact on the local surroundings.
- Good communication and sequencing of any works that impact any areas of this operation will be key.
- 246 Camden Road Party Wall Agreement with Scaffold on this elevation.
- 252 Camden Road Abuts to the North Elevation of site and adjacent to vehicle loading bay.
- 99 & 99A Camden Mews Rear of these dwellings butt up to the East Elevation of site and will need to be monitored throughout the build.



## 5.0 Vehicle Management

#### **Logistics Route**

It is essential that adequate and safe vehicle delivery routes are utilised and agreed with Camden Highways to ensure that the roads can take the additional road users, that additional HGV vehicles will not affect other road users that utilise the route and that the route can spatially take the size of the HGV vehicles.

The access to and from site will depend upon the starting and end point for the delivery. All deliveries will keep to the main strategic road network where possible and work their way to Camden Road where the site is situated. All vehicles will then reverse into site where we will have our designated unloading area throughout the construction period. The exit from site will be via Camden Road and then turning right in a north bound direction towards Holloway Road. Please refer to the Camden Road Driver Induction document attached.

To minimise the likelihood of congestion during the works, strict monitoring and control of vehicles entering and egressing the sites will be implemented. Construction deliveries will be carefully planned with delivery times agreed with each contractor using a site wide booking system. Delivery schedules will be produced in order to look at the profiles of up-and-coming deliveries, and to regulate deliveries and eliminate bottle necks. This will ensure deliveries are restricted to allocated slot only time. Co-ordination meetings will also be set up with the contractor delivering to site along with cargo bike deliveries also.

The following measures will be communicated between the Supply Chain/Trade Contractors and the Logistics Contractor. And the below practices agreed routes will be implemented to ensure the agreed delivery routes are followed causing as little disruption as possible:

- Delivery Management System (DMS) (Please refer to page 26 for a sample image of the DMS Portal)
- Our DMS will have the agreed routes mapped on the dashboard to inform all suppliers booking in deliveries, prior to them arriving on site.
- The portal will also have a driver induction that the driver will be required to read before a delivery slot can be allocated. This will specify the route to site.
- Supply Chain DMS workshops will be carried out at agreed intervals during the different stages of the build before each subcontractor commences works on site.
- GPS Plug and Play units for certain HGV trades, such as Muck Away, Steel Deliveries or Block/Brick deliveries and Fit Out deliveries could be utilized.
- A Vehicle Holding Area will be proposed to the Trade Contractors to aid with the Traffic Management Flow of Traffic into and around site



## Delivery vehicle Routes to and from site

We have reviewed the delivery routes from various locations when driving to the project and when leaving as outlined below:

The site access via Camden Road is located South of Holloway Road where all deliveries will access site from.

As a result, access to and from the site access on Camden Road is as follows: Approach from the North via A1, Turn right onto A503, and travel down Camden Road and enter site via Gate 1, reversing in.





The site egress is via Gate 1 on Camden Road turning right and heading North towards Holloway Road, then Left onto the A1.





## Potential Vehicle Holding Area

We have identified a potential holding area which is approximately 30 minutes transit from site. It can help capture delivery vehicles approaching London from North and East that may be earlier than the allocated booked time.

Snippet below showing the route from holding area to the project.





Some information on the holding area below:

#### VEHICLES HOLDING AREAS ( VHA ) PROPOSAL

#### **OPTION 4**

NUMEROUS POTENTIAL VHA AREAS - ORIENT WAY







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#### Site Logistics Management

The site logistics strategy will utilise the attributes of the surroundings without adversely affecting other users of the area. In doing so we believe that a practical solution has been found will allow us to safely construct the development in the time frame and remove the impact on others.

All deliveries to and from the Project are to follow the project construction vehicle route. Vehicles will approach the site along an approved route and approach the access gates at the time prescribed in the DMS booking confirmation.





#### Vehicle Access and Egress via Camden Road

The main delivery gate will be controlled with qualified Traffic Marshalls who will hold an accredited Traffic Marshall training. We will have to reverse vehicles into the loading bay. Traffic Marshals will be trained to manage the pedestrian footway so that no reversing will be done without turtle barriers being used with the presence of a TM. Once all safety procedures are in place the vehicle will be safely reversed into the allocated loading bay. Once safely into place the footway will be reopened, and pedestrians will have safe access.

#### Segregation

Consideration has been taken of the five primary issues that affect traffic and road movements, which are:

- Maintaining site security.
- Segregation of plant and operatives / the public.
- Manoeuvring of vehicles & plant
- Delivery coordination, loading and storage.
- Delivery times

Regulation 15 of the Construction (Health and Safety) Regulations requires that every construction site shall be organised in such a way that pedestrians and vehicles (and / or plant) can move safely and without risk or injury to all parties.

Therefore, wherever vehicles (and / or plant) and pedestrians are required to utilise adjacent access routes during construction around the Camden Road project will have suitable physical segregation with signage shall be installed to demarcate safe pedestrian routes. The vehicle entry gates point will be either hoarding or Constantina barriers with chapter 8 barriers.



This arrangement satisfies the aforementioned requirements but will be reviewed as the project progresses to ensure that any construction activities do not present additional risks. Should any additional risk be subsequently identified then appropriate action will be taken to eliminate or minimise such risk.

The following measures will also be introduced to make both pedestrians and vehicles aware of each other around site:

- The crossing point at the main gate on Camden Road will be maintained.
- Signage to warn pedestrians on public areas of site entrances.
- Signage to warn site vehicle operatives of pedestrian crossings, also driver induction training will cover this.
- Physical demarcation within working areas between site operatives and site vehicles (and / or plant) by pedestrian or VCB barriers
- Suitably trained Traffic Marshals to ensure safe access / egress; clearly identifiable wearing orange hi-vis vests / jackets and helmets of the appropriate colour.
- No uncontrolled pedestrian traffic to be allowed through the site.

#### Signage

Appropriate signage will be discussed and agreed with the Camden Highways team to ensure that roads and footpath users are given the correct guidance regarding the variations to existing road networks and to assist locals with route diversion and safety if required.

#### **Abnormal Loads**

Abnormal loads pose a significant threat to other road users as they are typically wider, heavier, and more difficult to manoeuvre than normal loads. For this reason, any abnormal load will need to be delivered to site with special measures in place to mitigate any risk.

Under government guidelines an abnormal load is defined as:

- a weight of more than 44,000kilograms
- an axle load of more than 10,000 kilograms for a single non-driving axle and 11,500 kilograms for a single driving axle
- a width of more than 2.9 metres
- a rigid length of more than 18.65 metres

Typical examples, for the project, of loads that would fall into this category would be a piling rig, the steel trusses, mobile crane, or an excavator arriving on a flatbed articulated lorry. If the load exceeds any of the above, then the following protocol is to apply.

Firstly, the route to site will be plotted and a risk assessment conducted to ensure that there are no collisions with highways structures. This can be conducted using <u>www.freightjourneyplanner.co.uk</u>

Next the police and highways agency are to be notified of the abnormal load and provided with the intended route, timings for the journey and the load being transported.

Abnormal loads will typically require a police escort and they require a minimum of 48hour notice before the intended delivery date to organise the escort. The police will assist by stopping traffic as required, providing a visual warning to other road users ahead of the vehicle and assist in manoeuvres. The police escort will not take any responsibility for the route to site, as this is the responsibility of the haulier.

There are restrictions on when abnormal loads can be permitted.

No abnormal loads are allowed within the following time periods.

- Monday to Friday 07:00 10:00 and 16:30 to 19:00
- Saturday 10:00 19:00
- No restrictions for deliveries taking place on a Sunday.



Likely abnormal loads will include but are not limited to:

- Piling rig delivered
- Mobile cranes
- Tower crane delivery
- Others as required during works.

Should any abnormal loads be required to site outside of working hours (as required by Police/Highways) we will always give sufficient notice to local residents by letter drop, updates on project website, posts to the local Facebook pages and telephone calls to local representatives, all in coordination with Camden Councillors and Press team. This will be managed by our Community Liaison, Helen Ruddy.

#### Spillages

Spillages can cause unnecessary environmental impacts which can easily be mitigated. Planning for responding to incidents and emergencies is an important part of the project environmental management. Emergency response and contingency plans should take account of the location of the local drainage system; requirement to engage with the emergency services, location and contents of spill kits, notification process and emergency contacts list in the event of an incident etc.

All vehicles are to be inspected regularly to ensure that they are in good working order ahead of any deliveries being made. As a precautionary measure a spill kit will be stationed at each gate. This will consist of bunding, hazard tapes, and signage, sand, and absorbent cloths. A designated spill response team will be trained (these will typically be the site traffic marshals) and in the unfortunate event that a spill does occur they will bund the area, place signage, warn others around, and soak up the spill to be disposed of in the correct manner. The primary requirement is to ensure that any spill doesn't enter the drainage system and become a pollutant.

#### Neighbourhood Liaison

It is recognised that understanding the key interests and concerns of neighbours and enabling strategic and open communication is critical to the success of any construction project. Our single point of contact, Helen Ruddy, will keep local stakeholders informed on all project communications. The need for newsletters, particularly the frequency or period of issue, will be decided at resident's meetings and internal meetings.

There are several neighbours surrounding the development on all sides. It is important that a relationship is established with all these parties and maintained throughout the works.

The local neighbours who may be affected by the development are defined below:

- Camden Road Residents
- Camden Park House Nursing Home

A regular coordination meeting will be established with all these parties from prior to construction starting until completion of the project. The purpose of which is to notify the neighbours of upcoming elements of works and any impact this may have on them.

#### **Vehicle Parking**

There will be no parking permitted on or around the site. This requirement will form part of the subcontract orders and reiterated in all inductions and other interfaces with the operatives on site. This will be monitored by the site team as far as is reasonably practicable.

No queuing of delivery vehicles will be permitted on either the surrounding street network or the internal roadway within the Project.



## 6.0 Work Related Road Risk (WRRR) & Protection of Vulnerable Road Users

#### **Drivers Induction**

We will prepare a drivers induction guidance sheet which will be issued out to every company as they book a delivery slot. This will inform them of the planned delivery notice to site, any restrictions on the local road network, any particular items to be aware of or site constraints but most importantly stress for all vehicles to be either CLOCS or FORS registered and ensure the driver is clear they can only arrive at the allocated arrival time. Anyone arriving early will be directed to a holding area, prior to being called to site by our traffic marshals.

#### Fig 21: CLOCS and FORS logos



#### **Pedestrian Management**

The pavement on Camden Road at the main gate will be managed and monitored by the traffic management team. It will be temporarily closed whilst a delivery in approaching or exiting site to ensure clear segregation from the public and our site boundary. This will be managed with turtle barriers either side of the main gate opening. Traffic barriers and Constantina barriers will be used to segregate the public and our site deliveries with hoarding installed to all elevations.

#### **Cyclist Management**

Our Traffic Marshals will also be trained on how to deal with cyclists and also how to specifically manage cyclists in the site area. The most vulnerable manoeuvres for cycle and road traffic are on Camden Road.

#### **Quality Operation**

Fleet operators are required to ensure their transport operation meets the standard of an approved independent fleet management audit. This ensures a baseline level of compliance against all regulatory requirements relevant to the road transport operation.

This can be demonstrated through current certification from an approved independent audit body such as FORS, Van Excellence or any other equivalent standard.



On the project will be using FORS as the benchmark with the bronze award being the minimum standard of acceptance.

#### **Traffic Routing - Fleet Operators**

Fleet operators shall properly communicate any routing and access requirements provided by Morgan Sindall to all drivers accessing the site. The circumstances (if any) under which drivers may deviate from a specified route, such as a temporary road closure or road traffic accident shall be clearly specified and agreed.

#### Warning Signage

All vehicles over 3.5 tonnes gross vehicle weight shall display external pictorial stickers and marking to warn vulnerable road users not to get too close to the vehicle.

#### **Blind Spot Minimisation**

All vehicles over 3.5 tonnes GVW are to have front, side, and rear blind-spots completely eliminated or minimised as far as is practical and possible through a combination of fully operational direct and indirect vision aids and driver audible alerts. This will improve visibility for drivers and reduce the risk of close proximity blind-spot collisions.

A class VI mirror shall be fitted to all vehicles where they can be mounted, with no part of the mirror being less than 2 metres from the ground.

Needless to say, all indirect vision systems shall be fully operational and fleet operators shall make regular checks and take all reasonable measures to ensure they remain operational.

It will be incumbent on the fleet operator to ensure that drivers recognise that use of indirect vision systems is an integral part of their job.

Vehicle manoeuvring warnings- All vehicles over 3.5 tonnes GVW are to be equipped with enhanced audible means to warn other road users of a vehicle's left turn manoeuvre. This is to reduce the risk of close proximity collisions by audibly alerting vulnerable road users to vehicle hazards.

Regular checks shall be undertaken by the fleet operator and random checks at the site by suitably trained operatives.



## Fig: CLOCS Checklist

Cont	ractor	Project	
Date	(a	Present	Completed by
CLOCS Stand recom those The qu	S monitoring is designed to establish w ard itself includes a number of requin mended or optional (designated by 'sh sites going beyond compliance and bes uestions highlighted in <b>bold</b> below indic	hether the client/principal cont ements, some of which are m ould' and 'may'). As well as loc t practice, with the aim of raisin ate the compliance requiremen	ractor is achieving compliance with the CLOCS National Standard. Th andatory (designated by 'shall' within the Standard) while others an oking to establish compliance, the monitoring process aims to recognis ng standards across the industry. Its of the CLOCS National Standard, while the non-bolded questions lool
o est	ablish and capture performance beyond a also see the guidance note 'Preparing	these minimum requirements. for your CLOCS monitoring visit	for additional information.
	CLOCS National Standard r	equirements	Monitor comments
1	CONSTRUCTION LOGISTICS P	LAN (3.4.1)	
	Clients shall ensure that a Constructi partnership with fleet operators who	on Logistics Plan is in place and i may have valuable views on ho	is fully complied with. Clients should approach this in a spirit of w to achieve safety goals
1.1	Is there evidence of an approved Co includes measures to minimise vehic for collisions with vulnerable road us	nstruction Logistics Plan (CLP) t de trips, and reduce opportunit sers e.g. sites near schools.	hat lies
1.2	Does it appear that the CLP is being	fully complied with?	
1.3	Have fleet operators been consulted	in the development of the CLP?	
1.4	Is there evidence that the CLP is regu	larly reviewed and revised?	
2	SUITABILITY OF SITE FOR VEH	IICLES FITTED WITH SAFE	TY FEATURES (3.4.2)
2.1	Does gradient appear to be acceptate features and side under-run protect	ole for vehicle fitted with safety ion?	
2.2	Are regular reviews of the topograph necessary, are diversions implemented	y of the site completed and, wh ed as the site landscape changes	ere s?
2.3	Is the ground graded where the const	truction phase allows?	
3	SITE ACCESS AND EGRESS (3.4 Clients shall ensure that access to an	4.3) d egress from the site is approp	riately managed, clearly marked, understood and clear of obstacles.
3.1	Is the access to and egress from the clearly marked, understood and clea	site appropriately managed, ir of obstacles?	
3.2	Has the site attempted to eliminate h systems, traffic lights and calming me	azards by design, e.g. one way asures?	
3.3	Where visibility is restricted or where traffic marshal available to assist with	it is deemed necessary, is a tra vehicle manoeuvring?	ined
3.4	Has the site considered the use of ad spot safety mirrors to aid the driver's	ditional equipment such as bline view of the road?	d=
3.5	Can the site demonstrate suitable tra	ffic marshal training has been nel?	



Fig 24: FORS Requirements



#### Non-Road Mobile Machinery (NRMM)

NRMM is defined as any mobile machine, item of transportable industrial equipment, or vehicle - with or without bodywork - that is:

- not intended for carrying passengers or goods on the road
- installed with a combustion engine either an internal spark ignition (SI) petrol engine, or a compression ignition diesel engine

Examples of non-road mobile machinery include, but are not limited to:

- generators
- bulldozers
- pumps
- construction machinery
- industrial trucks
- forklifts and telehandlers
- mobile cranes

There are two sets of standards:

- Greater London where the normal standards apply.
- the Central Activity Zone (CAZ) and Canary Wharf

Please check emissions zones on interactive map <u>http://nrmm.london/lez-map</u> for further details.

#### **Emission Standards**

NRMM used on the site of any major development within Greater London will be required to meet Stage IIIA of the Directive as a minimum; and NRMM used on any site within the Central Activity Zone or Canary Wharf will be required to meet Stage IIIB of the Directive as a minimum.



#### From 1 September 2020 the following will apply:

- NRMM used on any site within Greater London will be required to meet Stage IIIB of the Directive as a minimum.
- NRMM used on any site within the Central Activity Zone or Canary Wharf will be required to meet Stage IV of the Directive as a minimum.

These requirements may be met using the following techniques.

- Reorganisation of NRMM fleet
- Replacing equipment (with new or second-hand equipment which meets the policy)
- Retrofit abatement technologies.
- Re-reengining

All eligible NRMM should meet the standards above unless it can be demonstrated that the machinery is not available or that a comprehensive retrofit to meet both PM and NOx emission standards is not feasible. In this situation every effort should be made to use the least polluting equipment available including retrofitting technologies to reduce particulate matter emissions.

#### Side Under-run Protection

Fleet operators shall ensure fitment of side-guards to all rigid mixer, tipper, and waste type vehicles over 3.5 tonnes gross vehicle weight (GVW) that are currently exempt from fitment. By so doing it will minimise the probability and severity of under-run collisions with vulnerable road users.

Evidence shall be provided by fleet operators that all rigid mixer, tipper, and waste-type vehicles over 3.5 tonnes GVW are fitted with side-guards fitted on both sides unless this is proved to be impractical or impossible.

## 7.0 Delivery Management

This section will describe the management process of vehicles delivering to the site. There are several key considerations to consider that are primarily for the benefit of the local environment but that are also crucial to the efficient provision of materials, plant, tools, and equipment to maintain the construction programme.

For local residents and the London Borough of Camden effective delivery management will provide the following benefits:

- Less congestion on local roads
- Reduced emissions from deliveries contributing towards CO2 reduction targets.
- Fewer goods vehicle journeys lowering the risk of collisions.
- Better quality of life for local residents through reduced noise and lower risk of accidents

For the Camden Road project benefits include:

- Ensuring compliance with health and safety legislation
- Efficient deliveries and improved security
- More reliable deliveries resulting in less disruption to normal business practices.
- Timely deliveries
- Better highway efficiency by reducing the effects of construction activity through better delivery management and access.
- More cost-effective construction logistics activity

It should be noted that as the project progresses the types and frequency of deliveries will change and through the forward planning of bookings by the sub-contractors the system will provide us with sufficient information to accurately forward plan and maintain a steady flow of materials to meet the

programme requirements.



#### **Delivery Management System**

Deliveries will be scheduled using the Delivery Management System supplied by Pure Construction Logistics portal.

This will allow the logistics team to control the flow of vehicles that attend site at any one time.

- All Trade Contractors shall adhere to the agreed booking in system for all deliveries.
- A pre-determined period of 48Hr notice in advance of the delivery is required. Wherever possible, a computerized delivery booking system will be used and notified routes via Mare St will be raised in coordination meetings and with Local representatives.
- This will allow the Traffic Management Team to be aware of and manage any delivery with sufficient planning and foresight.
- Upon arrival at the site entrance, all delivery vehicles will report to the Security/Banksman/Traffic Marshal at the delivery gate to sign in.
- All delivery drivers must have a contact name and number so that contact can be made, and the load or off load done in a speedy manner so that delays will be avoided.
- If vehicles arrive outside of the booked slot, they may be held away from site until access can be given. To simplify this, all contractors are to ensure that a contact number is on the booking form.
- Under certain circumstances, it may be necessary to turn away certain deliveries.
- The provision for waiting vehicles is prohibited around the site; therefore, any deliveries that arrive unannounced **will** be refused entry to the site.
- Fully trained Traffic Management Operatives will be provided for the purpose of Traffic Control and Management. The Traffic Management Operatives will be required for the manoeuvring of vehicles into and out of site. They will also assist with the introduction of vehicles back onto the public road.
- Notices and details of traffic management proposals associated with works to the highway and footpaths will be given under the Highway Acts 1980 and Road Traffic Act 1998 and will be provided and maintained for the duration of the construction phase on approaches to the site access.



## Fig: DMS Dashboard

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	<b>On Hold</b> ETA: 2:15 PM Gate: 01 Residential Only	Delivery Ref : Lorem001 Company :Crystal IT Contact Name : Jon	Booked Time : <b>2:10pm</b> Material : <b>Plaster Boards</b> Method : <b>Hoist 2,</b>	Driver Induction: Yes CLOCS: Yes FORS: GOLD			
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#### Fig: Delivery DMS Screenshot:



## 8.0 Roles & Responsibilities of the Delivery Management Team

#### Logistics management

A dedicated site manager will be responsible for all logistical requirements, a deputy will be designated also in case of sickness, holiday cover, etc.

The Manager will be responsible for:

- Ensuring that the approved traffic control measures are established, implemented, and maintained in accordance with the approved plans.
- Carrying out regular inspections and auditing of the traffic control measures to ensure that they are effective and are being followed.
- Amending and updating the plans, as required, to ensure that they remain current as the work progresses.
- Identifying locations and times where traffic congestions or unsafe conditions for vehicles, cyclists, pedestrians, and workers are occurring, and providing recommendations for improvement.
- Maintaining current copies of the Traffic Management Plan, and its controlled distribution
- Liaising with Morgan Sindall on traffic management matters for the construction site.
- Facilitating traffic awareness and giving toolbox talks to site personnel.
- Managing Traffic Marshalls & Delivery Management System (DMS)

The Logistics Manager will be the single point of contact for all drivers approaching the site who require assistance.

The role will also include advising delivery companies and their drivers of the most appropriate route to follow when approaching the site, in particular providing advice on any local restrictions on vehicle width, height, and weight.



#### Traffic Marshal / Banksmen

The responsibilities of these marshals will include:

• Banksmen should be suitably clothed to stand out from others on site by wearing orange high visibility/reflective coats/vest, orange safety helmets etc.

#### Fig: Example of Traffic Marshals



#### The banksmen will be trained to:

- Bank site vehicles (assistance to trades) including the control/protection of pedestrians and other traffic.
- Monitor vehicle movements on site to ensure site traffic rules are adhered to by all drivers.
- Monitor vehicles on site to ensure that traffic flow is maintained, 'moving on' vehicles as necessary and ensuring 'bottlenecks' do not occur.
- Only use the set relevant safety procedures and signalling systems for the site
- Give clear and precise messages and signals.
- Ensure that construction vehicle drivers/operators can be seen during all manoeuvres, and vice-versa.
- Warn and stop any pedestrians from entering the area of the manoeuvre.
- Ensure safe access and egress for the vehicle and themselves; do not ride on construction vehicles which do not have a designed method to ensure their safety.
- Report any known or potential hazards to their supervisors.
- Stop the movement of any construction vehicle that is being driven with disregard to the safe systems of work for the site.
- Stop directing the movements of pedestrians and construction vehicles if they are under the influence of alcohol or drugs.
- The Traffic Marshals will only assist in directing traffic on to the Highway as per the control measures as highlighted in the attached Risk Assessment for Public Traffic (Exposure) Integration.



#### Fig 28: Traffic Marshalls assisting traffic.



#### Sub-Contractors and Suppliers Delivery Vehicles

- Comply with traffic management strategy.
- Report issues with strategy.
- Ensure all personnel attend project induction.
- Provide competent workforce and supervision.
- Investigate any accidents / incidents and ensure necessary control measures are put in place and communicated to the Principal Contractor.
- Provide plant / equipment which complies with relevant statutory obligations.
- Provide their own banksmen and manage all their own delivery manoeuvres onto site.

#### Drivers / plant operators

- Should be competent and trained to the appropriate standard required.
- Drive with care and comply with the requirement of project strategy.
- Use the correct equipment for the task, ensuring they are suitable for use, marked with safe working load, properly maintained, inspected, and thoroughly examined regularly.
- Not move unless directed to do so by traffic marshal / banksman.

## 9.0 Material Distribution / Storage

It is envisaged that materials will be distributed via several means, mainly mechanical in order to reduce the amount of manual handling. This will be a combination of the following:

- Tower Crane
- Mobile cranes
- Power pallet trucks
- Pallet trucks
- Trollies
- Telehandler

Most materials will be removed from the delivery vehicle using either TC / Manual Handling or Hi-Ab.

Deliveries will arrive to site pre slung or handrails will be in place/ available to allow access to the back of the vehicle.

For deliveries using the Tower Cranes, the crane will lift to the desired location ideally without having to lay down. It is not intended for the crane to be used to offload deliveries and lay down at ground floor

(unless to storage point) for other methods to distribute. This is to avoid double handling DAL

#### Allocations & Booking System

The allocation of the site resources requires strict control to manage the flow of materials up through the building. It is the intention of this plan that specific Hoists & TC's will be allocated for periods to specific trades.

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The Delivery Management System shall be utilized to manage this process and ensure that deliveries are planned to avoid congestion at the ground floor level.

The allocation is to be determined at the weekly logistics meetings and Daily Activity Briefings with any free slots taken as necessary.

#### **Tower Crane**

All lifting operations are to be carefully planned out, with a lifting plan approved by an appointed person. An onsite crane supervisor will oversee all lifting operations, with assistance from slinger/signallers.

#### Lifting operations procedures

- All lifting operations to be carried out under the project specific lift plan.
- AP to develop and implement the above lift plan.
- All trade contractors that supply lifting equipment, lifting accessories, or lifting operatives will require a site-specific induction with the site AP.
- All required documentation to be issued to the site AP.

#### **Mobile cranes**

Mobile cranes will be used for various lifts throughout the construction programme which may include TC install etc. but we will limit these as much as possible.

## 10.0 Plant

There will be various types of plant all of which are required to conduct a different function on the project. List of them as outlined below:

- Tower Crane
- Mobile Crane
- Cutters, drills, and small tools
- Small excavator
- Piling rig
- Concrete pump
- Generators
- Hydraulic breaker/ cutters
- HGVs, Lorries, and Vans
- Scaffolding
- Mobile elevated platforms
- Water pumps
- Temporary supports



All plant will be regularly maintained and will be complaint with any relevant standards.

## **11.0 Loading / Unloading Procedures**

The following process will be followed for the safe loading and unloading of vehicles:

- Risk Assessment and Method Statement, the contents of which must be communicated to all parties involved with the loading/unloading process.
- The type of delivery vehicle, the method of unload, the equipment required, and the eventual storage or installation position all need to be agreed in advance of any delivery arriving on site.
- Logistics manager to confirm clear areas for storage to the DMS administrator.
- Vehicles only to be off loaded or loaded when on level ground.
- Safe techniques for unloading/loading i.e., methods of attaching crane hooks etc. must be employed by the logistics team.
- No operatives are to climb onto the bed of a vehicle without fall protection in place and a safe means of access.
- All vehicle information to be provided to the DMS System prior to arrival on site.
- Ground Protection to the Protected Tree Roots to be applied.

## **12.0 Security Arrangements**

The site will be secured by hoardings that comply with the London Borough Camden requirements. These will be maintained and periodically adapted as and when necessary, throughout the duration of the project to suit the progress of the works.

CCTV will be installed around the perimeter of the site which will be monitored by a security company 24 hours per day.

Any specific site security operations on the project will be undertaken using a Security Industry Authority (SIA) approved contractor. This includes not only physical methods, but a continued awareness of personnel security and information security.

#### **Biometric Access**

Face Scanner Access control security system (1no. Full height turnstiles) will be in use for all personnel to access site, ensuring only authorised personnel may gain access to the site. This specification will be M Site which is widely used within the industry.

There will be a method of spot-checking operatives on site to ensure they have used the access control facilities. The system will be capable of allocating certain permissions to operatives as required.



## **13.0 Travel to Site – All Operatives**

With the development located in central London there are lots of public transport options available which will reduce the reliance on road traffic.

#### **Public Transport**

Camden Road Station is located just a few minutes away from site which includes an overground line lines going to all London areas.

#### **Car Park Facilities**

There is no provision of parking facilities on site.

As part of the Morgan Sindall Safety Induction all persons being inducted are advised of the parking restrictions on site and that parking in the surrounding areas is forbidden. They will be advised that public transport should be used where possible as a means of transport to the site.

No provision of parking facilities for sub-contractors.

#### Cycling

Morgan Sindall is a major promoter of cycling to work and is part of the Cycle to Work Scheme. Cycling will be encouraged on this development by providing secure cycle racks and shower facilities on site.

## **14.0 Dust, Noise & Vibration (See AQDMP for further details)**

#### **Dust Mitigation on Site**

Numerous dust mitigation preventative measures will be employed relative to the likelihood and severity of dust generation. All contractors will employ methods which avoid the generation of dust to the lowest practical level.

The following measures are proposed:

- isolation of dust generating activities i.e., enclosures/areas sealed off by means of visqueen or similar sheeting.
- demolition activities enclosed by means of scaffolding enclosed with monoflex sheeting (to
- remain for construction)
- dust suppression by means of water spray.
- enclosure of waste leaving site by means of fly sheeting/sealed skips.
- engineering controls i.e., Local Exhaust Ventilation (LEV) filtration

Morgan Sindall shall review all contractors' proposed methods for dust control.

The generation of dust will be continually monitored by the Project Manager and Site Management Team.

As the vehicle loading bay is on solid prepared ground, we are not expecting dust to be produced from our site vehicles, if this was to happen then we would ensure to damp down where we can.

#### **Noise & Vibration**

Noise and vibration control will be important throughout the construction phases. Specific control measures will be put into place to ensure that construction activities have the least possible impact on all adjoining parties. A section 61 will be applied for with the London Borough of Camden council to establish the parameters to which the project can work within.

Initially, the ambient noise and vibration criteria will be established by a detailed specialist survey to records existing conditions. Maximum effectiveness can only be achieved with the co-operation of the adjoining parties.



This information will provide data from which we will assess the likely effects of the various construction activities in addition to existing noise levels and provide benchmarks to aim at. Any plant considered for the project will be reviewed not only from a performance criterion, but also a noise and vibration criteria.

Construction plant and methods will be chosen which, by their nature, generate the least possible noise and vibration. There will be operations that have higher noise or vibration levels than ideal. It may prove necessary to carry out such operations during restricted periods. Given the diverse nature of the adjoining parties, detailed discussions will be undertaken to reach consensus agreement as to what the restricted periods will be with local residents and applicable Environmental Health Departments.

Various measures can be used to assist in attenuating noise at source. Mentioned above is the preference to use plant and methods with low inherent noise generation. Additional noise control is possible using acoustic screens around operations, and by sealing building openings with acoustic baffles.

Key noise control measures will include:

- Communication with and recognition with neighbours
- "Crushing", rather than "breaking" methods of demolition.
- Restricted working hours for particular activities
- Attenuated plant and equipment
- "Silent" running hoists.
- Careful plant and equipment selection

Morgan Sindall fully acknowledges any likely restrictions imposed by notice of any relevant Environmental Health Departments.

#### Monitoring

Continuous monitoring of ambient noise levels and vibration will occur throughout the life of the project by strategically positioned noise and vibration monitoring equipment.

Localised noise assessment and monitoring shall be undertaken by Trade Contractors to establish levels and determine the necessary controls required. Refer to suggested noise reduction methods overleaf.

Monitoring stations will be set up 3 months prior to works commencing on site to enable a base line to be set for the project, we will then work within the parameters permittable.