CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

Holloway Park

Rev 13 – Oct 2022

Quality Information

Document:	Construction Environmental Management Plan		
Project Ref:	1722	**Date**	14th October 2022
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Status: For Information

Revision History

Revision	Revision Date	Details
1	March 2021	Draft copy, issued for internal London Square comments.
2	April 2021	It was amended to pick up post-planning changes.
3	June 2021	Minor Changes
4	September 2021	Minor Changes
5	October 2021	Minor Changes
6	December 2021	Issued as part of the Planning Submission (minor changes to document)
7	June 2022	Format Changes and content changes include, but are not limited to, Foreword inserted, Arboriculturist information updated, Ecological findings on Bats found on Site and updated demolition information.
8	July 2022	Comments from Avison Young are addressed in the document.
9	August 2022	Comment from Islington addressed in this revision.
10	August 2022	Further comments from Islington, Noise, Air & Vibration parameters inserted.
11	September 2022	Amendments following comments from Islington.
12	October 2022	Amendments to the swept path, in Section 3.6
13	October 2022	Minor amendments to section 3.6

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Important note about this report

The sole purpose of this report and the associated services performed by London Square is to identify the likely construction environmental management processes required for the proposed Holloway Park Development in accordance with the scope of services set out in the contract between London Square and the Client.

In preparing this report, London Square has relied upon and presumed accurate any information (or confirmation of the absence thereof) provided by the Client and/or from other sources. Except as otherwise stated in the report, London Square has not attempted to verify the accuracy or completeness of any such information. If the information is subsequently determined to be false, inaccurate, or incomplete, then it is possible that our observations and conclusions, as expressed in this report, may change.

London Square derived the data in this report from information sourced from the Client (if any) and/or available in the public domain at the time or times outlined in this report. The passage of time, a manifestation of latent conditions or impacts of future events may require further examination of the Project and subsequent data analysis and re-evaluation of the data, findings, observations, and conclusions expressed in this report. London Square has prepared this report in accordance with the usual care and thoroughness of the consulting profession, for the sole purpose described above and by reference to applicable standards, guidelines, procedures and practices at the date of issue of this report. For the reasons outlined above, however, no other warranty or guarantee, whether expressed or implied, is made as to the data, observations and findings expressed in this report to the extent permitted by law.

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1 INTRODUCTION

1.1 BACKGROUND

The Construction Environmental Management Plan (CEMP) is submitted to The London Borough of Islington (LBI).

The CEMP outlines a series of strategies, standards, best practice techniques and procedures that will be observed through the construction process to ensure compliance with environmental legislation, regulation and London Square policies. This CEMP has been written in accordance with LBI's Code of Practice for Construction Sites 2018, as London Square recognises that we must not ignore the effect of construction works on those in the surrounding neighbourhood.

This CEMP is to be used to assist in the discharge of Planning Condition 4, which states, "a Construction Environmental Management Plan shall be submitted to the Local Planning Authority and approved in writing prior to commencement of the development.

1.2 THE APPROACH TO THE CEMP

The CEMP is structured into five sections which are as follows:

- **Section 1 - Introduction.**
- **Section 2 Construction Site Layout**
    - A review of the location of the main site compound facilities, including the provision of a secure compound to enable deliveries of construction materials.
- **Section 3 Construction Activities**
    - Provide a strategy for ensuring that the adverse effects of construction activity on residential amenities and the environment are minimised.
- **Section 4 Environmental Issues**
    - Describes the best construction practices and methods used in executing the construction works to minimise that of the works on the environment.
- **Section 5 Construction Methods**

Sets out the sustainable approach to construction adopted in the development.

1.3 SITE DESCRIPTION AND THE PROPOSED DEVELOPMENT

1.3.1 APPLICATION SITE AND SETTING

The Site comprises 4.16 hectares and is located on Parkhurst Road in the St George's Ward of the London Borough of Islington. The Site comprises the former Her Majesty's Prison (HMP) Holloway. It is occupied by several buildings previously used as prison accommodation ranging between 2 – 5 storeys in height, a visitor's centre and a series of open spaces and trees. The Site is bound to the northeast, northwest and southwest by residential properties. To the southeast, the Site is bounded by the arterial

route of Parkhurst Road/Camden Road, which has a mix of uses, including a library, commercial uses, arts and educational uses, and residential uses.

1.3.2 THE PROPOSED DEVELOPMENT

Phased comprehensive redevelopment, including demolition of existing structures; site preparation and enabling works; and the construction of 985 residential homes, including 60 extra care homes (Use Class C3), a Women's Building (Use Class F.2) and flexible commercial floorspace (Use Class E) in buildings of up to 14 storeys in height; highways/access works; landscaping; pedestrian and cycle connection, publicly accessible park; car (blue badge) and cycle parking; and other associated works.

The scheme will be delivered in phases as follows:

- **Phase 0** comprises site-wide demolition of all existing structures.
- **Phase 1** comprises the construction of Plot C, D, and E to the southwestern and western half of the Site.
- **Phase 2** comprises the construction of Plot A to the northeastern part of the Site.
- **Phase 3** comprises the construction of Plot B to the southeastern part of the Site.

This Construction Environmental Management Plan covers all phases.

1.4 KEY STAKEHOLDERS

Peabody Developments Ltd, as the Developer, has engaged London Square Development Management Ltd, via a Management Contracting Agreement, to be the Construction Manager for Works involved in developing the Holloway Park Project (Site).

As the Construction Manager, London Square will engage and manage the specialist sub-contractors required to construct all aspects of the Project.

1.5 CONSTRUCTION WORKS

The construction works associated with the development site will include, but are not limited to, the following:

1.5.1 SITE ESTABLISHMENT & WELFARE FACILITIES

One of the first activities will be establishing the area as a construction site. The working areas will be secure, and the general public will be separated from the works. Construction site areas will be made safe and secure before works commence, using solid and well maintained, 2.4m high hoardings and screening around the Site.

As detailed within the Arboricultural Impact Assessment and required by Planning Condition 5, any trees to be retained, including root protection zones, will be fenced off and protected in accordance with BS 5837:2012. Temporary hoardings will be provided on short-term boundaries and for highway works.

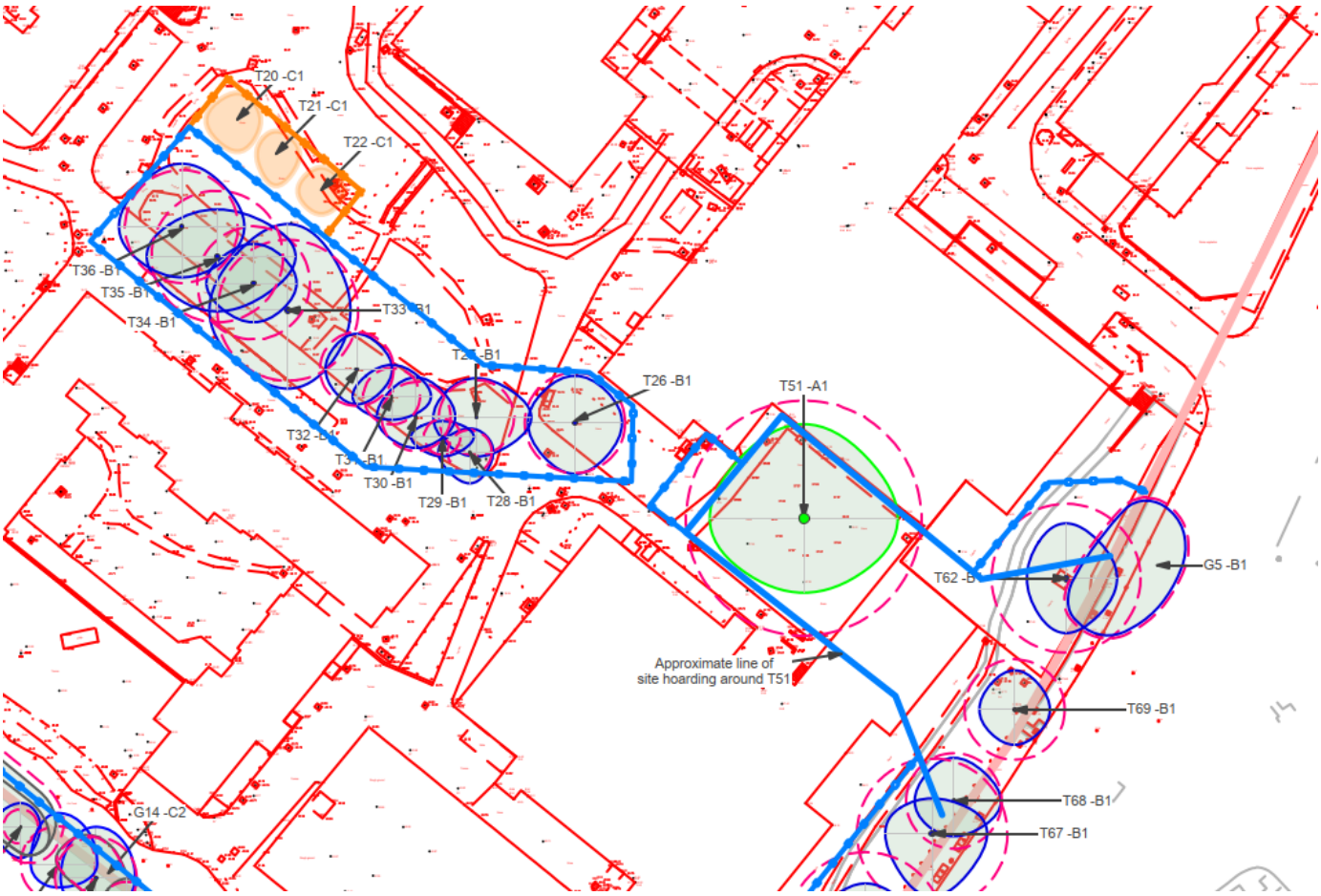


Figure 1 - Extract from the Arboricultural Method Statement

Secure access points with wheel cleaning facilities will be established at all site access and egress locations. Pedestrian access points will generally be located close to the main vehicular access gates, with separate pedestrian gates and footpaths.

The construction project offices and associated welfare facilities for the workforce will be located in the existing community building at the front of the Site. They will stay there until they are required to be demolished to facilitate the construction of Plot B, which will be the last to be constructed. At that time temporary accommodation. Welfare facilities will be established close to Plot B.

1.5.2 DEMOLITION

Phasing of the demolition works will be undertaken in accordance with the bat licence obtained from Natural England, which is expected to require that demolition of buildings that have hibernation roost potential would not be demolished during the core hibernation period. An extract of the Bat license application is included in Appendix 4.

Recent dusk and dawn surveys by ecologists and a week's façade survey in August 2022 established the presence of bats on the Site, and the location of roosting sites is shown in Figure 2, which shows the current known Bat roosts are in Blocks A, C & D within the current prison structures.

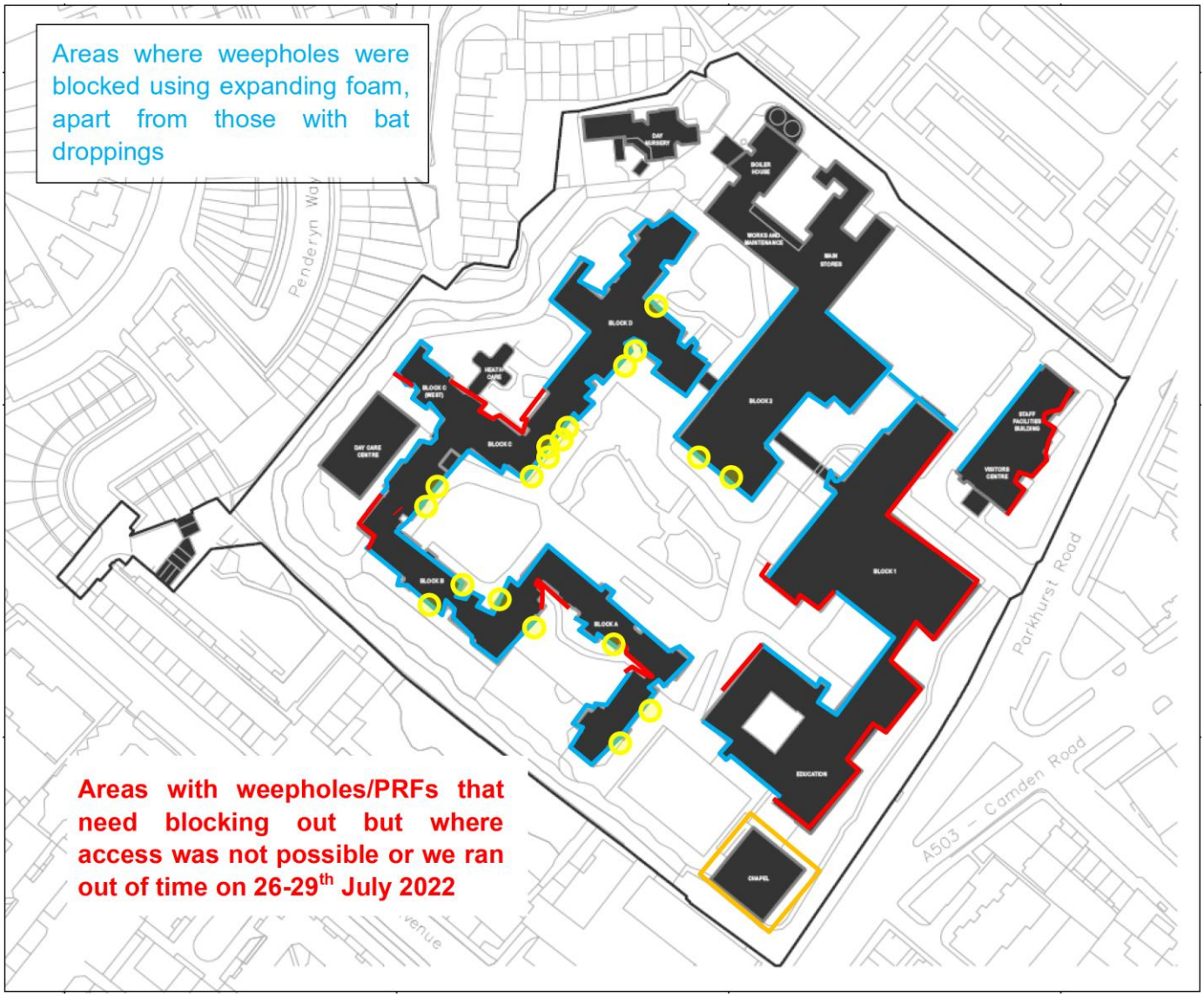


Figure 2 – Location of known Summer Bat Roosts, August 2022

At the start of July 2022, all known utilities that once served the Prison had been disconnected. The demolition contractor will utilise the existing Visitor Centre as their welfare centre for the commencement of the works, which means that following confirmation of the commencement, the asbestos removal and soft strip can commence quickly.

The first activities in the demolition of Holloway Park will be the asbestos, and soft strip works. The Soft Strip will include, but not be limited t,o the removal from the Site of the following key items:

- Fixtures and Fittings;
- Suspended Ceilings;
- Doors, Door Frames & Skirting;
- Partition Walls;
- Floor Coverings;

- Internal Glass units; and
- Fluorescent tubes and smoke alarms.

Demolition comprises the deconstruction of the existing structures on-site, along with grubbing out of foundations and obstructions.

The demolition contractor will act as the Principal Contractor for the duration of the demolition works. Refer to Appendix 3 - Demolition Management Plan for further details on the demolition methodology.

For the Demolition, the works will be split into three main stages. The first demolition stage commences with the Chapel's demolition concurrently with the Education Centre and Block A.

Figure 3 - The three stages of Demolition

Cell Block B demolition will commence after this, followed by Cell Block C, Cell Block D and the Day Care Centre demolition. The reason for starting in the area defined as Stage 1 for demolition is to accommodate the works required for Phase 1 of the Construction Works, as noted in Section 1.3.2 and as shown in Figure 4.

Figure 4 - The phasing of the Holloway Park Project

Stage 2 demolition will run in conjunction with Phase 1 construction.

This stage comprises Cell Block D demolition, asbestos and soft strips of the Works, Locks Store, Boiler House and Main Complex (Block 2). In addition, the Phase 1 construction access/egress crossover will be realigned to suit the final scheme location.

As part of Stage 2, the welfare facility that had been established within the existing Visitor Centre will be relocated to a new temporary building within the centre of the Holloway Park site, as shown in Figure 5

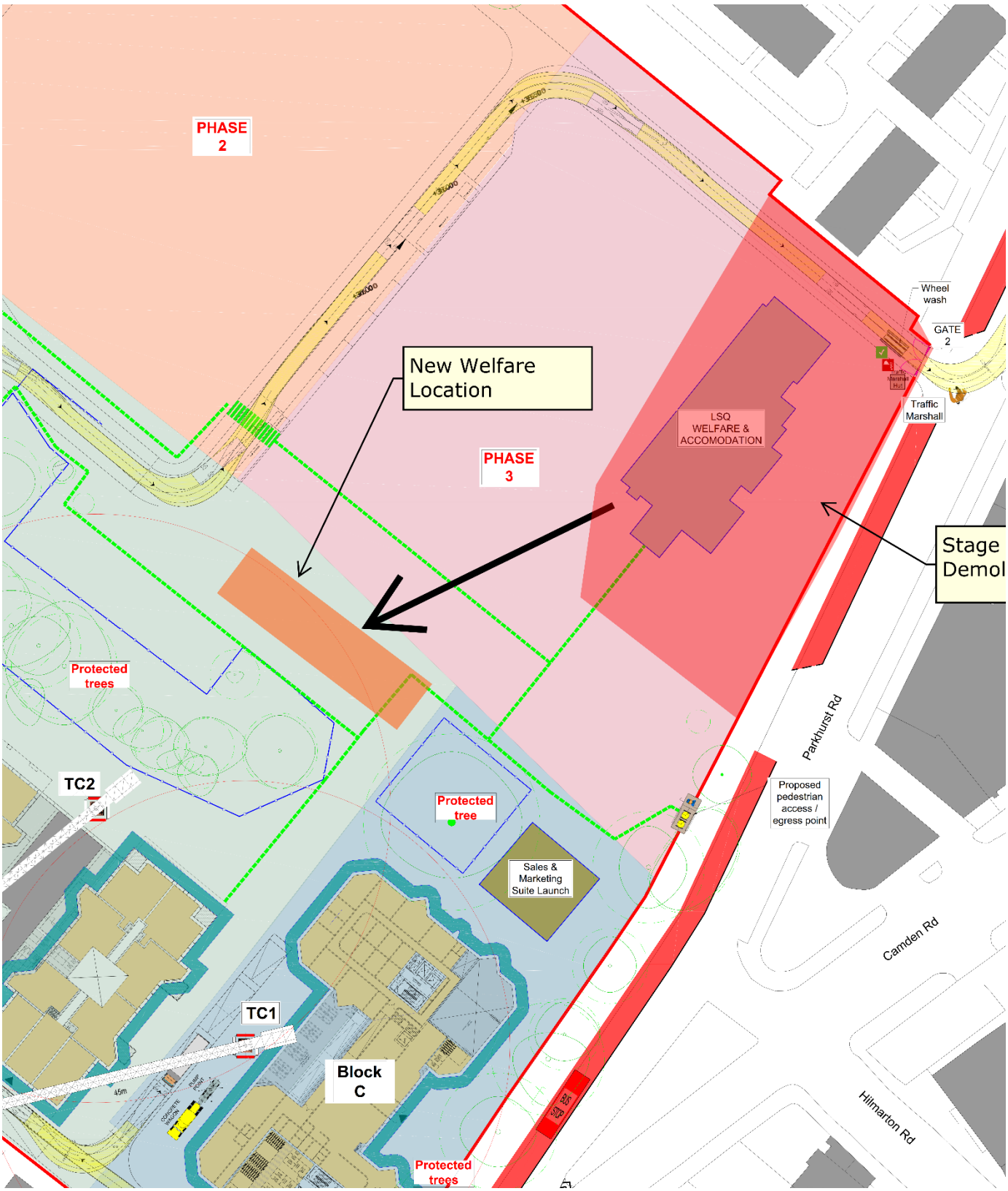


Figure 5 - Relocation of the Construction Welfare Facility within the Holloway Park Site

Stage 3 of the demolition will comprise the asbestos removal and soft strip of the visitor centre, followed by the deconstruction of the existing structure.

1.5.2.1 ASBESTOS REMOVAL

As part of the demolition works noted previously, all identified asbestos-containing materials will be removed from the Site before the demolition works commencing. The Asbestos Containing Materials AMCs) identified in the surveys will be completely removed before any intrusive or structural demolition works start.

All Demolition operatives have received training to recognise ACMs. Work will cease if additional ACMs are located within the buildings during demolition. The Site Manager will be notified, an asbestos surveyor will be called to the Site, and a sample will be taken for testing to confirm prior to works in that area continuing.

1.5.2.2 DECONSTRUCTION METHODOLOGIES

The structural deconstruction will commence following the asbestos removal and soft strip of items. The majority of deconstruction will be carried out with High Reach machinery.

Picture 1 - Example high reach demolition machine

To remove additional risk during demolition, the Demolition Contractor, where possible, will remove the need for a person to work near or in the vicinity of live machine activity when suppressing works with water and replace it with dust suppressant machines.

The front of the buildings is to be demolished first; this consists of a typical concrete steel-framed brick-clad structure.

Starting at the gable end and working through the building, the excavator will peel away the remains of the roof and the roof's steel into manageable pieces, progressing down to the outer skin of brickwork and exposing the area.

The remaining structure will be demolished using a straight arm/standard excavator; these will all be fitted with a hydraulic muncher, cracker, or grapple attachments.

Warning signs will be posted on the fence to warn of the dangers of entering the demolition exclusion zone (Red, Amber, and Green).

A banksman/operative will be positioned at the front and rear of the building, as depicted in Figure 7 below, before demolition works start.

Figure 6 - Example of Exclusion signs.

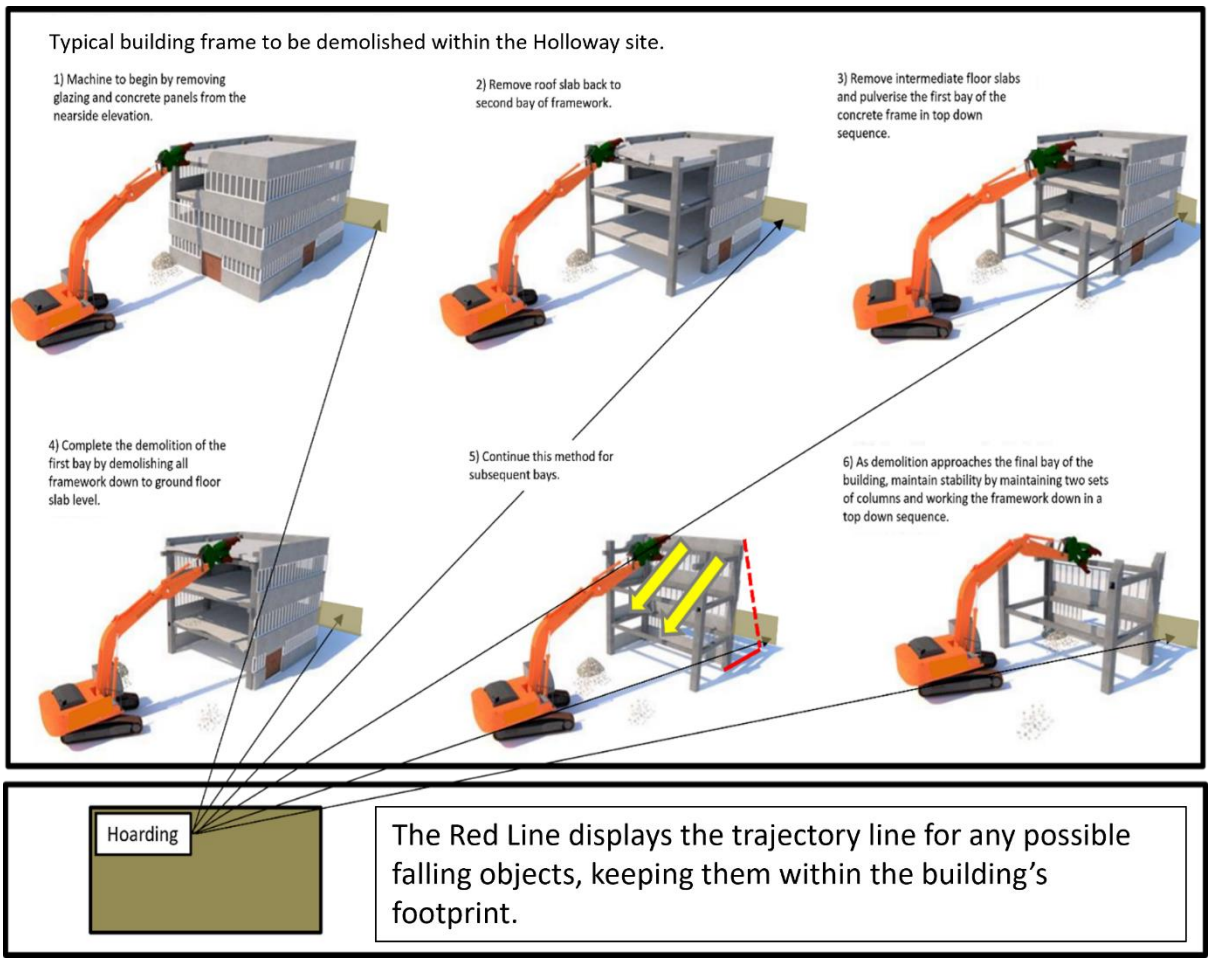


Figure 7 - Typical deconstruction methodology for Holloway Park

A banksman will be in attendance to guide the excavator operator onto the steels and significant structural elements so they can be sheered in a controlled fashion.

The excavator will proceed to reduce the remaining buildings one full bay at a time in line with the, progressively clearing debris to ground level as the works progress to remove any potential for overloading any given section of the slab at any time. The demolition method will always involve stepping the building down to maintain structural stability.

Reviews of the building make-up and methods will be carried out continuously throughout the demolition. The contractor RAMS document will be updated to reflect any changes in the demolition methodology.

The material will be allowed to fall internally to the floor below. For every 2no bays worked back into the building, 1no bay must come down on the floor below. This not only maintains the structural integrity of the building but allows the operator to see what they are always working on.

The buildings are to be demolished, so the materials stay within the structure's footprint as much as possible. No large sections of masonry are to be demolished and permitted to fall to the ground in large lumps. The brickwork must be munched into sections no larger than 500mm^2

All Demolition arisings will be stockpiled for removal to the crushing area; as the brickwork is stockpiled, operatives are to pick through the hardcore, removing any pieces of timber, plastic etc. Operatives

completing the picking must stand safely from the machine and always out of the slew radius. Gloves and an FFP3 mask must be worn if the area is dusty.

The excavator will proceed to pull apart the roof structure into small manageable sections and lower them to the ground for processing. The excavator operator must use a steady and controlled manner. The timber sections, if any, can be loaded directly into a 40yd skip for recycling.

The demolition process described above will continue down to the building's slab completing the demolition works.

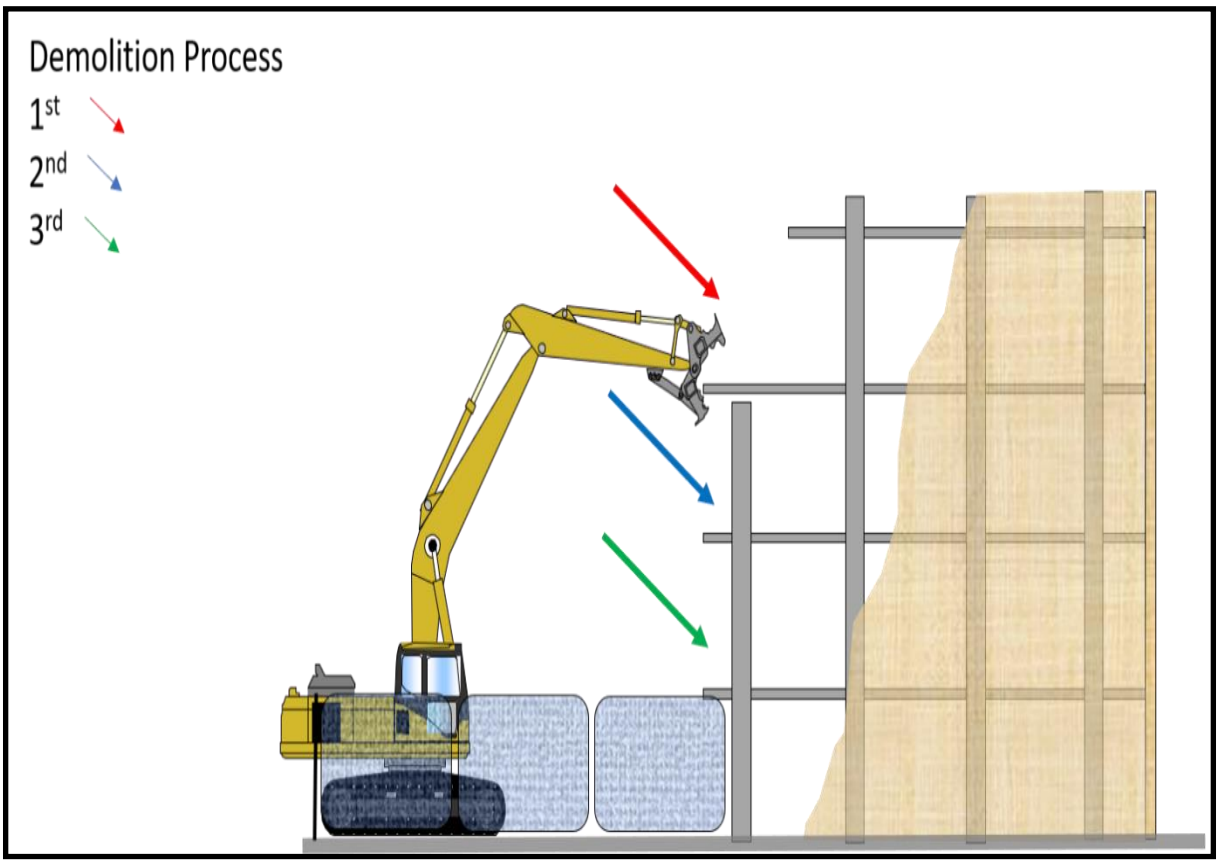


Figure 8 - Example of the demolition process.

1.5.3 EARTHWORKS, PILING, FOUNDATIONS

The Generic Quantitative Environmental Risk Assessment, prepared by Waterman, dated September 2021, confirms that ground investigations have been undertaken. No further investigations are required before commencement. A Remediation Strategy has been produced by Waterman, dated September 2021

Once Stage 1 demolition has been completed, the area will be handed over to the Groundworks and Reinforced Concrete (RC) Frame contractor. The Contractor will act as Principal Contractor for Phase 1 until façade works commence and will follow this strategy when further phased demolition has been completed and handed over.

Site preparation will begin with removing any vegetation and breaking up existing hardstanding forming and demolishing the existing prison structures, including removing any asbestos in accordance with the

Hazardous Waste Regulations 2005 (as amended)[1] and the Control of Asbestos Regulations 2012[2]. Any suitable material will be retained on-site for use in a piling mat and will be augmented by imported crushed material for that purpose. Pile probing for below obstructions below ground will be undertaken before the pile mat.

Piling will be undertaken from the existing ground levels where possible. New piled foundations are proposed, and it is anticipated that Continuous Flight Auger (CFA) concrete piles will be installed to a maximum depth of 30m. Piling details will be set out in a Piling Method Statement to be submitted under Condition 18 of the consent.

1.5.4 SUBSTRUCTURE

Due to the Site's sloping nature, localised earthworks and semi-basement excavations are proposed.

Once the bearing piles have been installed, they will be broken down, capped, and ground beams installed. Under-slab drainage and service ducts will be installed before the construction of the blinding, waterproofing, and ground floor slab.

1.5.5 SUPERSTRUCTURE

The proposed superstructures for the buildings will be reinforced concrete frames. Consideration will be given in the detailed construction planning to utilise prefabricated elements, such as staircases.

Tower cranes will be erected to construct the concrete frames and proceed with any façade installation.

The construction of Phase 1 works will commence once half of the demolition is complete, subject to any restrictions due to the bat licence obtained from Natural England; refer To Appendix 4. At that point, it is anticipated that the Site would be split into 2, with the demolition contractor in control of half of the Site and the groundworks and RC Frame contractor taking over responsibility for the other half. Both will act as the Principal Contractor for the part of the Site in their control.

1.5.6 FACADES

Facades works will commence once the RC Frame has reached the third-floor slab, with the erection of scaffolding and Metsec (steel frame system), Cement Particle (CP) board, Brickwork and Window installation. The balcony finishes, then follow.

It is currently proposed that all façade elements would be constructed in situ from external scaffolding. Any large pre-cast or cladding elements would be lifted into position by the tower cranes.

1.5.7 FIT OUT AND EXTERNAL WORKS

Finishes and services fit out of the floors to each building would commence once a level of temporary or permanent water tightness has been achieved, working from the lower floors upwards. Plant will be installed in basements and roofs when available, and services distribution will be installed across the buildings.

The fit-out works will complete the installation of finishes and fixed equipment in apartments and commercial spaces.

[1] HMSO, 2009; 'Hazardous Waste (England and Wales) (Amendment) Regulations 2009
[2] HMSO, 2012; 'The Control of Asbestos Regulations 2012

On completion of the external façade for each Plot, external hard and soft landscaping would be completed in accordance with the landscape design. As the works come to an end, temporary site accommodation and hoardings will be cleared and landscaping complete.

1.5.8 SUMMARY PROGRAMME – SITE-WIDE

SUMMARY OF KEY DATES	DURATION (WKS)	START DATE	COMPLETION DATE
VACANT POSSESSION	0	Aug-22	Aug-22
DEMOLITION START	39	Aug-22	Jun-23
PHASE 1			
PILING	17	Feb-23	Jun-23
SUBSTRUCTURE	69	Apr-23	Aug-24
SUPERSTRUCTURE	82	Jun-23	Jan-25
FAÇADE	117	Oct-23	Jan-26
SALES SUITE OPEN	0	Nov-23	Nov-23
CML PLOT C	13	May-26	Aug-26
CML PLOT D	8	Aug-25	Oct-25
CML PLOT E	13	Mar-26	Jun-26
PHASE 2			
PILING	8	Mar-24	May-24
SUBSTRUCTURE	34	Apr-24	Dec-24
SUPERSTRUCTURE	34	Nov-24	Jul-25
FAÇADE	78	Jan-25	Jul-26
CML PLOT A	17	Jul-26	Nov-26
PHASE 3			
PILING	8	Jan-25	Mar-25
SUBSTRUCTURE	30	Mar-25	Oct-25
SUPERSTRUCTURE	47	Jun-25	May-26
FAÇADE	99	Aug-25	Jul-27
CML PLOT B	39	Jan-27	Oct-27

Table 1 – Indicative Site-Wide Summary Programme

1.6 MANAGEMENT PLAN AIMS

This CEMP aims to consider the development site's key issues and provide strategies, standards, best practice techniques, and procedures observed through the construction process to ensure compliance with environmental legislation and regulations. This will ensure minimal disruption and nuisance from the construction process to the existing communities and facilities in the surrounding area.

The standards, procedures and programmes set out in the CEMP will be reviewed and updated as the design progresses.

1.7 TERMS OF REFERENCE AND FIGURES

There are also several terms of reference used throughout this document. For clarity, the main terms are defined below:

- **Method Statements** – the Construction Method Statements are a separate document from the CEMP, which set out the controls for works (precautions, mitigation methods, specific actions to prevent harm, boundaries of working area, plant and equipment requirements etc.) to ensure that project risks (including environmental) are known and managed;
- **The CDM Regulations** – the Construction Design and Management Regulations 2015, which places legal duties on everyone involved in construction work, including the Developer, designers, Principal Contractor, sub-contractors and workers;
- **The EIA Regulations** – the Town and Country Planning (Environmental Impact Assessment) Regulations 2017, under which the environmental impacts of the proposed scheme have been assessed to support the application for planning consent;
- **Planning Conditions** – planning applications can be granted subject to one or more conditions by an LPA that must be satisfied (discharged) before the proposed development can proceed. These can be restrictive, suspensive, or require the submission of details and include time limits, providing supplementary environmental information separate from the EIA and limits on the size and external appearance;
- **The Site** – the area for which Peabody (the Client) has consent to build the proposed scheme, as determined by the approved red line boundary plan.

1.8 STATUS OF THE CEMP

As this CEMP has been prepared at the start of the construction process, the methods, processes and level of detail regarding specific site/aspects of the construction work are high level and will be added to once the contractors are appointed prior to the relevant works commence.

This CEMP is intended to be a live document which will evolve during the different phases of the proposed development as detail emerges about the construction methods of the scheme and as the various detailed plans evolve and develop. As such, it will be subject to constant review to address:

- Best practice at the time of construction;
- Changes resulting from the construction methods used by the Contractor(s), and
- Unforeseen conditions encountered during construction.

Once the various Contractors have been selected, the detailed design completed and in advance of any Site preparation or construction works, the CEMP will be revised and updated by the Contractor so that it is specifically tailored to incorporate the construction methods and programming to be applied to the development. The requirements set out within the ES, and any planning consent should not be removed or altered, with the document being developed further, rather than any significant deletions being made. Where actions have been completed (e.g., a planning condition discharged, should be referenced using a completion statement.

This CEMP is a standalone document that will be maintained and updated on the Site. It will be augmented by associated design specifications and Construction (Design and Management) (CDM) 2015 Regulations documentation, such as the Principal Contractors Construction Phase Plan.

All Contractors and subcontractors must adhere to the CEMP in its final approved form.

2 CONSTRUCTION SITE LAYOUT

2.1 CONTRACTOR'S SITE COMPOUND

The location of all site compounds (London Square and Subcontractors), plant and machinery will be located, designated, and operated to minimise noise, smell, dust, and visual or other adverse impacts on existing residents and surrounding buildings.

All site welfare facilities will be located within the application site boundary, and regular inspections will be carried out to ensure that good housekeeping measures are always maintained.

The welfare facilities will be in the existing prison visitor centre for the commencement of the construction works, with cabins being set up to remain for the final duration of the programme of Holloway Park (refer to Figure 5).

Foul sewerage from the Contractor's compounds will be disposed of by suitable and approved means.

The site welfare facilities for London Square staff will be procured in line with London Square Sustainability and Green Office Policy to ensure the facilities meet the group requirements.

2.2 SCREENING AND HOARDING

Where necessary to ensure safety, individual locations within the Site where hazardous activities are being carried out will be secured with the installation of heras fence panels. The site perimeter will be delineated and provided with warning signs to inform of the dangers of construction sites and advise against unauthorised access.

Hoarding on the Site may be altered or relocated on the Site as the development progresses to ensure the safety of the new residents from site operations.

The existing inner prison wall will be left in situ for as long as possible during demolition. It forms a secure barrier to the demolition works internally and acts as an additional acoustic barrier.

Following an Arboricultural assessment of the Site, LSQ will ensure that all Protects that require protecting are protected in accordance with the written Arboricultural method statement.

2.3 WHEEL WASHING

In line with best practice initiatives on-site, the point of entry and exit from the Site onto a public highway will provide suitable wheel washing facilities. No vehicle likely to deposit mud or other material on the road surface will be permitted onto the public highway.

2.4 SITE UTILITIES

Connections to Power and Water for all stages of the Works, including the demolition phase, will be to permanent supplies.

2.4.1 ELECTRICITY

A new Temporary Building Supply (TBS) for power is currently being constructed and is targeted on being completed in early 2023. Prior to its completion, electrical connections can be made to the existing Visitor Centre. No diesel generators are to be used.

2.4.2 WATER

Water for use in welfare and construction requirements must be taken from the existing live site connection. The Construction Manager will install a water system throughout Site that is connected to a meter. All contractors on Site will be required to minimise their water usage and, where possible, will use water-saving construction techniques and methodologies.

3 CONSTRUCTION ACTIVITIES

3.1 SITE HOURS

The core working hours for construction will be as follows:

- 08:00 – 18:00 hours on weekdays;
- 08:00 – 13:00 hours on Saturdays; and
- No working on Sundays, Bank or Public Holidays unless otherwise agreed with the LBI.

Noisy works must not take place outside of these hours. The above aligns with the LBI Code of Practice for Construction Sites.

3.2 INTERACTION WITH PUBLIC HIGHWAYS

Contractors must take all necessary measures to ensure that public roads are maintained clear from construction debris. Measures will include:

- Vehicles carrying loose aggregate and workings to the Site are always to be sheeted;
- Vehicles carrying contaminated material to off-site licenced hazardous waste facilities are to be fully sheeted;
- The provision of wheel washing facilities for all construction vehicles;
- Regular monitoring and maintenance of the wheel cleaning facilities; and
- The daily inspection of the on and off-site routes and employing road sweepers.

The need for lorries to reverse on public highways will not be allowed, but if urgently required, it will be carried out under the strict control of a traffic marshal.

All construction deliveries will be coordinated with the site delivery booking management system. All contractors and suppliers will be required to book a slot on the online system to ensure a flow of deliveries and to avoid congestion on the local road network.

Figure 9 - FORS Silver Accreditation

To reduce the road danger associated with the construction of new developments and enable the use of safer vehicles, appropriate schemes such as CLOCS (Construction Logistics and Community Safety) and/or FORS (Fleet Operator Recognition Scheme) can be used to plan for and monitor site conditions.

As a minimum (and in compliance with Planning Condition 4), all delivery vehicles and operational vehicles that will travel on public roads to the Site will have FORS Level Silver as a minimum.

The Fleet Operator Recognition Scheme (FORS) is a voluntary accreditation scheme for fleet operators which aims to raise the level of quality within fleet operations and to demonstrate which operators are achieving exemplary levels of best practice in safety, efficiency, and environmental protection.

3.3 ESTIMATED VEHICLE NUMBERS

The Project to construct Holloway Park is estimated to continue until late 2027. As Phase 1 nears completion, Phase 2 will have commenced, and Phase 3 will be starting, resulting in the peak of vehicles; servicing the Project coming to the Site will be sometime in Q2 2026.

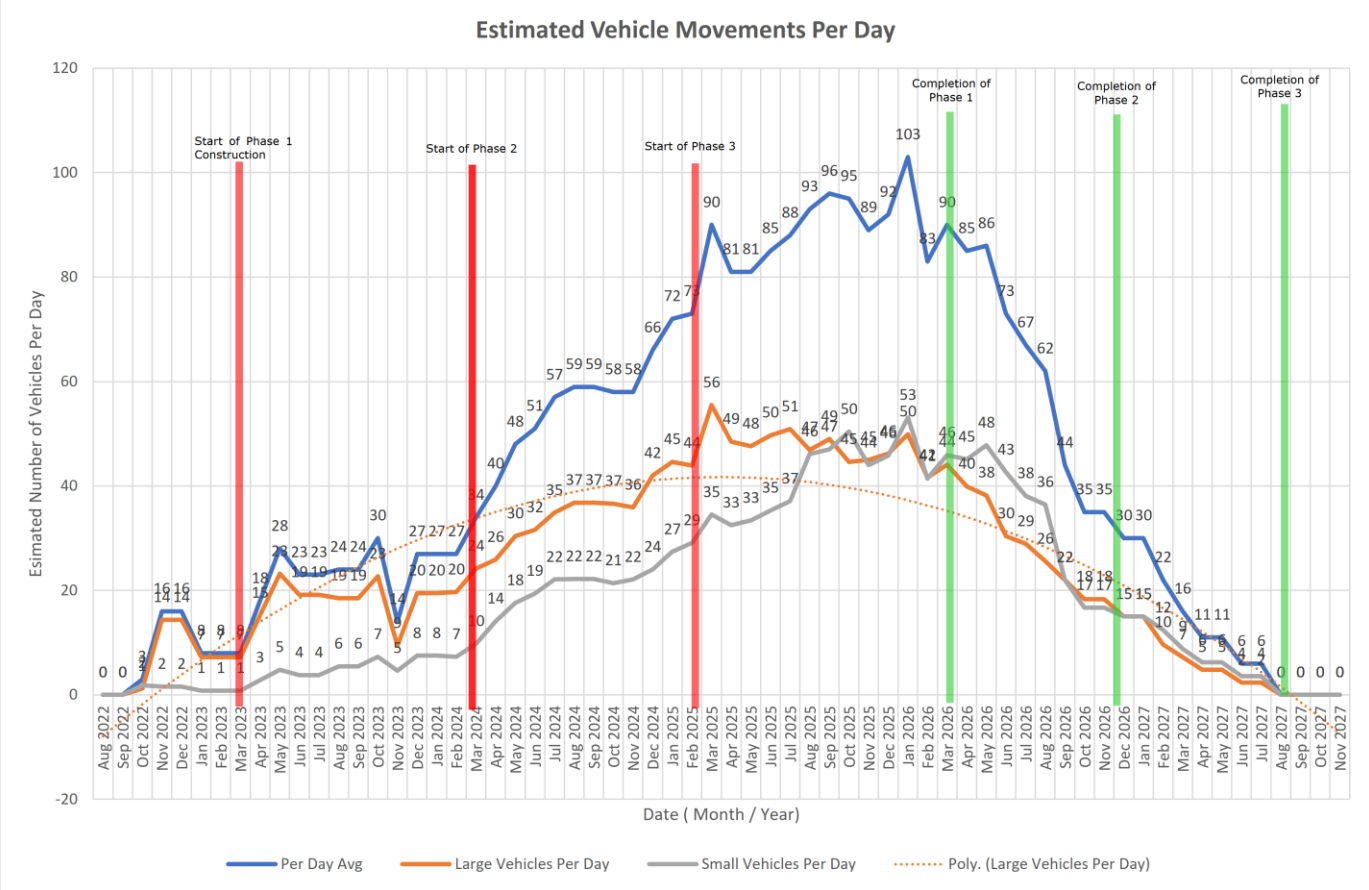


Figure 10 - Estimated Vehicle Movement

The numbers of vehicles noted in Figure 10 are based on an assumed estimate of vehicle movements per square meter of residential and commercial space. As the Project continues and more contractors are engaged, the estimation of vehicle movements will become more accurate.

3.4 PROTECTION MEASURES FOR PEDESTRIANS AND CYCLISTS

The site access will be manned by a banksman who will ensure that vehicles entering and leaving the Site will be WRRR compliant and considerate of pedestrians and cyclists using the public highway.

3.5 EXISTING ACCESS

Access to the Site will be from Camden/Parkhurst Road, with two towage gates for commercial deliveries and pedestrian access to site offices from a turnstile/gate. All deliveries will be booked on the Site's online system.

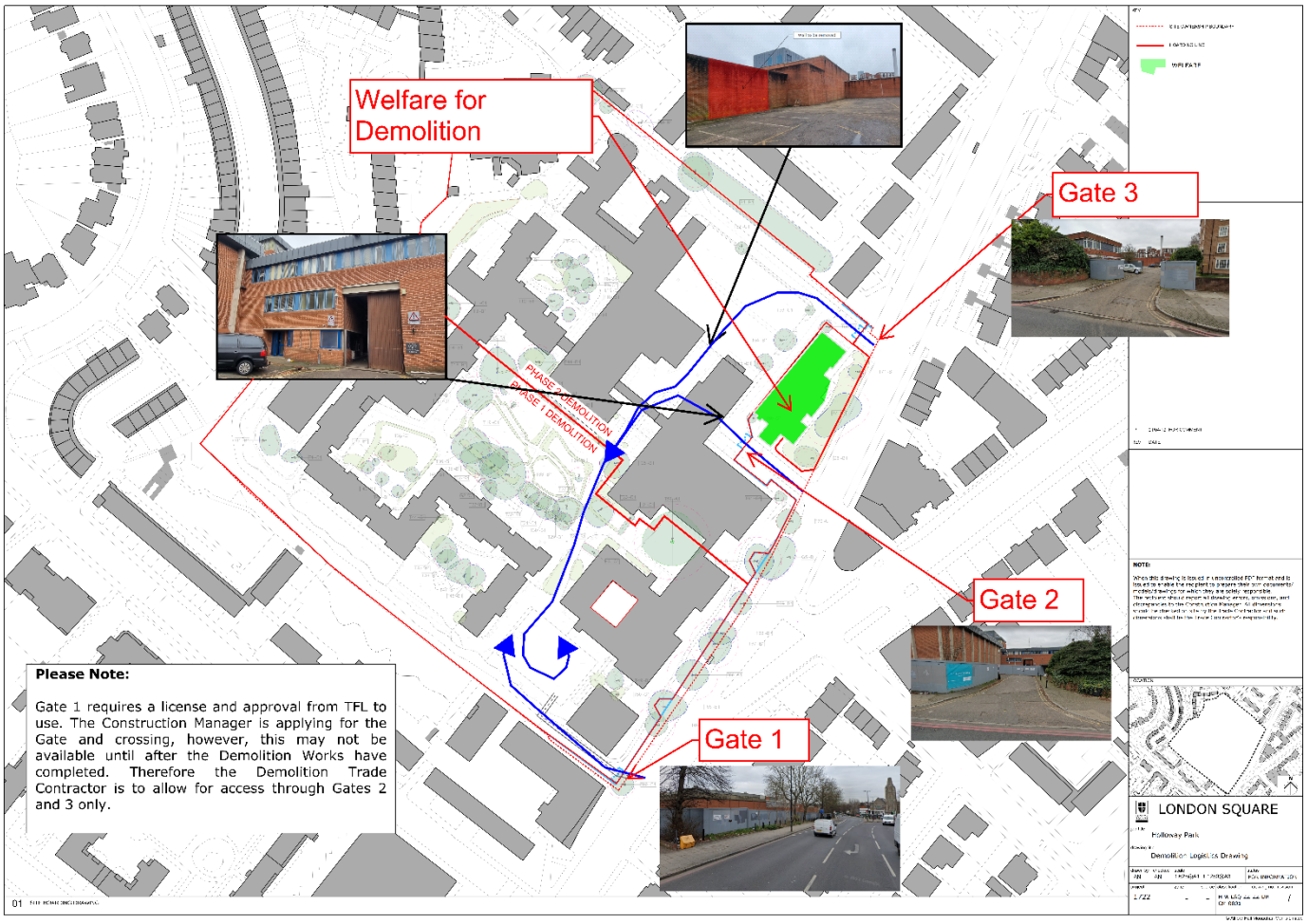


Figure 11 -Site access during demolition.

One site gate will be located on Camden Road via a new crossover providing one access point, and a site gate on Parkhurst Road providing one egress point during the demolition phase.

Gate 1, as noted in Figure 11, requires a Section 278 agreement to allow access for construction to be used. The approval process could take up to a year to complete; therefore, Gate 2 and Gate 3 will be used instead.

The construction phase strategy is for the two gates to remain throughout the construction phase until just before the first completion of Plot D. At this point, the site gate will be removed on Camden Road to open the permanent public access road facilitating Plot D. Plot C will then establish its own isolated site access/egress gate off the new access road. This will be removed upon Plot C's completion, and Gate 2 will become the main point of access/egress.

Adequate space for servicing and emergency vehicle access, including turning manoeuvres, will be provided for each phase before the use/occupation of that phase.

All vehicles have to enter and exit the Site at any of the entrances in forward gear; no vehicle is to reverse onto or off of any public road.

3.6 ACCESS ON AND OFF THE SITE

To ensure there is a minimum to no impact to the roads and road users when vehicles exit and enter the Site, a swept path an articulated lorry and rigid lorry have been shown on the two gates, that will be used during construction.

Figure 12 - ACCESS LEFT & RIGHT TURN 16.5m ARTICULATED VEHICLE

Figure 13 - ACCESS LEFT & RIGHT TURN 10m RIGID VEHICLE

Figure 14 - EGRESS LEFT TURN ONLY 16.5m ARTICULATED VEHICLE

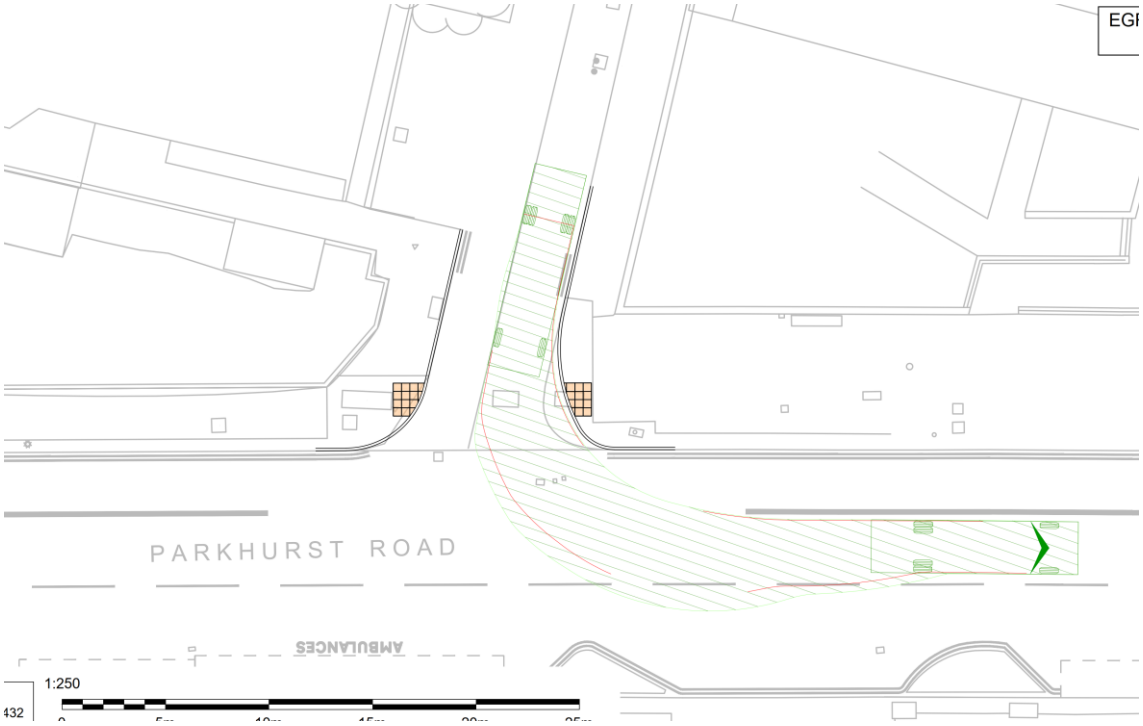


Figure 15 - EGRESS LEFT TURN ONLY 10m RIGID VEHICLE

Traffice Managers will be stationed at the entrance to Gate 1, to manage any large/articulated vehicle, turn left into Site, to prevent Left Hooking of cyclist's.

In all cases, banksman must be presence to assist vehicle entering and exiting the site at all time.

'Left Hooking' or also known as a 'left hook' involves a motor vehicle overtaking a person cycling, then turning left across the latter's path. This needs to be manaded as it is extremely dangerous when performed by HGVs, especially those without side guards, as the cyclist can become crushed under the lorry's wheels.

As all Contractors are required to comply with FORS Silver (as a minimum) refer to Section 3.2, for further details.

No holding area will be used for any vehicles coming to the Site. A booking system will be used for all deliveries and vehicles coming to the Site. If a vehicle turns up at the Site that is not booked in for an allotted time, it will be turned away[3].

Taking all the above into consideration, all construction vehicles should use the most convenient routes to approach the site in either directions, this is to reduce HGV mileage in the inner London area.

3.7 PUBLIC LIAISON

Procedures will be implemented to ensure effective liaison with the neighbouring properties, adjacent residents and local community through the following measures:

- Any circulated newsletters will be displayed outside the site entrance, along with letter drops to nearby residents when construction activities are likely to affect the local residents;
- Information boards mounted at the site entrance will provide details of the following information;
    - Developer/ Contractor details;
    - Local Authority details (London Borough of Islington);
    - Nature and duration of the Project;
    - Principal milestones of the Project;
    - Site operating time and
    - Site management names and contact details.
- The Construction Manager is to organise regular residents' community forum meetings to update residents and other stakeholders on project progress and to respond to issues raised. A monthly newsletter to be made available to nearby residents and stakeholders and anyone else interested

[3] Vehicles will not be held on the road, while the legitimacy of their delivery slot is verified, they will be allowed to enter into site safely, then turned around within the Site and sent away.

3.8 CONSIDERATE CONSTRUCTORS SCHEME (CCS)

Before starting works, the Site will be registered to the Considerate Constructors Scheme to ensure an external audit is carried out at regular intervals. This will enable the construction process to be monitored to maintain the highest possible standards of the Site within the construction industry.

The Code of Considerate Practice commits the Site to care about appearance, respect the community, protect the environment, secure everyone's safety and value their workforce.

One of the London Square's commitments relating to 'Our Vision' commits all live construction sites registered with CCS to achieve a minimum score of 38 points in each site audit.

3.9 COMPLAINTS PROCEDURE

Any site person receiving a concern or complaint from adjacent properties or passing pedestrians shall immediately refer the matter to the site manager, who will record the fact and refer the matter to the management team, who will subsequently investigate.

The site management team will record and categorise any complaints into the following categories: Noise; Dirt and Dust; Parking; Safety; Inconsiderate Behaviour; Road Conditions and Vehicle Movements; Environmental Concerns; Pedestrian Access Obstruction; Property Damage; Site Lighting; Working Hours and Other Issues.

The site management team will record the complaint's date, time and reason and what action has been taken to investigate and respond to the complaint.

3.9.1 DEMOLITION WORKS COMPLAINTS PROCEDURE

The following complaints procedure shall always be implemented during the demolition works, with a complaint investigated and confirmed by an authorised Council officer:

- If a satisfactory resolution cannot be found, the enquiry will be investigated for further possible mitigation measures that can be established on-site with the works. The public liaison officer will make personal visits to properties or individuals to discuss the concerns should this be required.

- If a satisfactory resolution can still not be found, further measures will be investigated for individuals or individual properties, including additional soundproofing measures or access requirements where applicable.

- If a satisfactory resolution can still not be found, a meeting will be held with the affected parties to discuss what the complainant requests for further mitigation.

Where the complaint has not been satisfactorily resolved, quiet periods of two hours and two hours off shall be implemented for the specific activity(s) at the specific work site location(s).

For the avoidance of doubt, a quiet period enforced at one location of the Site against a specific task may not necessarily be applied to the whole Site, dependent on the circumstances of the complaint.

4 ENVIRONMENTAL ISSUES

All contractors and sub-contractors shall be provided with appropriate induction and ongoing briefings and toolbox talks (TBT) regarding the management of environmental issues (i.e., dust mitigation measures required from the works they are carrying out, etc.), in full compliance with the LBI Code of Compliance for Construction Sites.

Potential effects on Demolition and Construction workers will be mitigated by adhering to mandatory health and safety requirements under the Construction (Design and Management) Regulations 2015, Control of Substance Hazardous to Health (COSHH) Regulations 2002, the Confined Space Regulations 1997, and the Control of Asbestos Regulations 2012. Therefore, site workers will be required to use appropriate personal protective equipment (PPE) and respiratory protective equipment (RPE), thereby minimising the risk of exposure to potentially contaminated soils, dust, ground gas, and vapours. Adherence to legislative requirements and good practice will significantly reduce the potential health and safety risk posed to demolition and construction workers from ground contamination and elevated concentrations of ground gas and vapours.

Protocols will be implemented on-site instances of emergencies and environmental incidences.

4.1 AIR QUALITY

During the construction phase, suspended and re-suspended fugitive dust emissions from demolition/construction activities and vehicular emissions from construction traffic, including re-suspended dust from HGV movements, may affect the air quality around the Site.

The Site will be following 'best practice' measures in accordance with GLA Guidance and the LBI Code of Best Practice, including the following:

4.1.1 GENERAL MANAGEMENT

- Solid barriers in the form of hoarding to be erected around the site boundaries;
- No unauthorised burning of any material anywhere on Site;
- Hard surface to be provided to haul roads; and
- A trained and responsible manager on-site during working hours to maintain a logbook and carry out site inspections

4.1.2 CONSTRUCTION TRAFFIC

- Use wheel washers and other appropriate means for vehicles leaving the Site where appropriate to minimise the amount of mud and debris deposited on the roads;
- All vehicles carrying contaminated material to off-site tips to be fully sheeted;
- Use of dust-suppressed tools for all operations;
- Ensuring that all construction plant and equipment are maintained in good working order and not left running when not in use;
- On-road vehicles to comply to set emissions standards;

- Hard surfacing and effective cleaning of haul roads and appropriate speed limit around the Site;
- Regular water spraying and sweeping on surfaced and unsurfaced roads to minimise dust and remove mud and debris;
- A 15-mph speed limit will be imposed on surfaced and ten mph on un-surfaced haul roads; and
- All construction deliveries are pre-booked using our chosen logistics contractor's online delivery management system.

4.1.3 EARTHWORKS AND STOCKPILES

- Completed earthworks will be covered or vegetated as soon as is practicable;
- Dampening of exposed soil and material stockpiles, if necessary, using sprinklers and hoses;
- Minimise surface areas of stockpiles to reduce the area of surfaces exposed to wind pick-up;
- Appropriate siting, storage, bunding, and covering of waste materials; and
- Concrete crushed during the demolition stage to be used for pile mat to reduce the number of vehicle trips.

4.1.4 CUTTING, GRINDING AND SAWING

- Dust extraction techniques to be used where appropriate;
- All equipment to be fitted with water suppressant systems;
- Local exhaust ventilation to be used as necessary; and
- All fans and filters to be regularly serviced to ensure that they are properly maintained

4.1.5 CHUTES AND SKIPS

- All skips are to be securely covered during construction and the transportation of skips;
- Drop heights are to be minimised to control the fall of materials by using chutes;
- Areas, where skips are to be stored, are on a hard surface; and
- Skips will be labelled according to segregated waste streams on-site consisting of; metal, timber, plasterboard and general waste.

4.1.6 NON-ROAD MOBILE MACHINERY (NRMM)

The Construction Manager and any relevant sub-Contractor (any that utilise Non-Road Mobile Machinery) are to sign up to London's 'Low Emission Zone' for Non-Road Mobile Machinery (NRMM). NRMM is a broad category which includes mobile machines and transportable industrial equipment or vehicles which are fitted with an internal combustion engine and not intended for transporting goods

The London Atmospheric Emissions Inventory 2019 estimates that NRMM exhaust emissions in construction are responsible for approximately 70 Tonnes of Particulate Matter (PM) and 1350 Tonnes of toxic Oxides of Nitrogen (NOx) emissions in London each year.

As other industries address their contribution to poor Air Quality, the construction industry must also make changes to safeguard the health of their employees and the public. In 2015 the Mayor of London introduced bold new standards for machinery used on construction and demolition sites to combat this.

Cleaner Construction is a London-wide Local Government initiative working in partnership with the construction industry to improve air quality.

The standards for the NRMM Low Emission Zone will get progressively tighter over time:

- From 1 January 2025, the standards will be stage IV throughout London
- From 1 of January 2030, the standards will be stage V throughout London
- From 1 of January 2040, only zero-emission machinery will be allowed.

All NRMM plant is to be targeted where feasible and available to meet Stage IV emission standards ahead of the 2025 deadline.

4.2 NOISE CONTROLS

The noise impacts from the Site will be minimised by the following mitigation measures and good practice management practices:

- Where acoustic covers are fitted or temporary screens are used, they will be kept closed whenever the machine is used. Vehicles and plant will be shut or throttled down to a minimum in the intervening periods between work;
- Each project section will be planned to identify all working requirements and the timescales;
- All construction plant will be regularly serviced and will be provided with fully operational exhaust systems;
- The shouting out of instructions on Site will be strictly forbidden. All site management and supervisors will be with site communication radios;
- The playing of radios or other musical devices on-site will be strictly forbidden at all times;
- The sounding of hooters on-site or in any adjacent street will be strictly forbidden;

- No commercial vehicles will be allowed to park or stop on the opposite residential streets while waiting for site access, particularly with the engines left 'ticking over.';
- During demolition, the external prison security wall will be left standing as long as feasibly possible, as this forms an acoustic barrier to the residents to the south and west of the estate;
- Where possible, all site plant will be effectively silenced and located in areas of the Site to cause the minimum amount of noise migration to the surrounding neighbours; and
- All plant deliveries, collections, and waste management requirements will be coordinated to ensure the noise impact from all such vehicles' effects on the community is kept to a minimum and within agreed times.
- All construction vehicles that require reversing alarms will use Broadband Reversing Alarms. Broadband Reversing Alarms are audible warning devices., that generate white sound that dissipates quickly outside the hazard zone, eliminating distraction and noise disturbances beyond the work area
- Where feasible, relevant acoustic screening will be used to reduce the spread. Acoustic plant screens make an ideal noise reduction solution for mechanical plant equipment, shielding noise between operating areas and noise-sensitive areas.
    - During the demolition process, the external wavy prison wall (as shown in Picture 2) will be left in place as long as feasibly possible while the buildings in close proximity to the walls are demolished. The wall will act as an additional noise barrier to the surrounding neighbours.

Picture 2 - External Prison Perimeter Wall

As part of the design and planning process, WSP carried out noise measurements in locations shown in Figure 16.

Figure 16 - Noise Measurement Locations pre-demolition[4].

4.3 NOISE AND AIR MONITORING METHODOLOGY

The Construction Manager is proposing to install dust, noise and vibration monitors along the southern boundary, western boundary, and northern boundary during construction works, which includes but is not limited to piling and concreting activities. Residential dwellings surround the Site on north-east, northwest, and southwest boundaries. A minimum of two monitoring locations (1 and 2 below) will be required during the commencement of the Phase 1 demolition and construction phases; this could extend to three locations when the Phase 2 demolition /construction works begin (shown by Location 3 below in Figure 2).

[4] Please Note: Figure 16 refers to the Noise Survey collection points, which were part of the survey undertaken in October 2019 except for long-term measurement P7, which took place in June 2021

Figure 17 – Closest and worst-case receptors

The precise monitoring location will be discussed and agreed upon with the project team before installation on Site. A specialist monitoring company will manage it (yet to be appointed). Indicative monitoring locations are shown in figure 2 below.

Figure 18 - Proposed Monitoring Locations

The monitoring will comprise real-time continuous unattended dust, noise, and vibration measurements at the fixed location(s). It will be possible to relocate the monitoring devices, should this be deemed necessary. Attended monitoring would only be carried out upon request from the Contractor or by the Local Planning Authority following receipt of validated complaints.

The key parameter that will be measured during the construction noise monitoring will be the A-weighted equivalent continuous noise level (LAeq). The noise monitoring equipment will be a Class 1 instrument capable of recording audio samples based on level exceedances. This will allow playback/analysis for noise source identification purposes in the event of any queries/complaints related to construction activities.

The vibration parameter that will be measured will be Peak Particle Velocity (PPV) in all three geocentric coordinates (X, Y and Z axis).

The dust parameter that will be measured will be particulate matter PM10 levels, and the instrument will be MCERTS certified. The dust limit is based on the current best practice advice given by the Institute of Air Quality & Management, which superseded the London Dust Emissions SPG 2014 Document.

4.3.1 MONITORING BRIEF

Table 2 below summarises the Project's recommended dust, noise, and vibration limits. These limits will be adopted throughout the construction phase of the works, and all of the monitoring systems will be configured to send an email and/or text message alerts to appropriate recipients (i.e., the Construction Manager, Project Manager, Acoustics Consultants etc.) in the event of any exceedances of the recommended levels.

Monitoring Equipment	Limit	Reference Periods
Dust	190 mg m^{-3} 60-minute mean for PM10 concentrations – IAQM current guidance (amber trigger level) or 250 mg m^{-3} 15-minute mean for PM10 concentrations – London SPG (amber trigger level)	0800-1800hrs on weekdays (Monday through Friday) 0800-1300hrs on Saturdays
Noise	Existing ambient +10 dB LAeq, T (amber trigger level) Existing ambient +15 dB dB LAeq,T (red action level)	0800-1800hrs on weekdays (Monday through Friday) 0800-1300hrs on Saturdays
Vibration	1 mms^{-1} PPV (amber trigger level) 3 mms^{-1} PPV (red action level)	0800-1800hrs on weekdays (Monday through Friday) 0800-1300hrs on Saturdays

Table 2 - Recommended Construction Monitoring Limits at Nearby Sensitive Receptors

NOTE: Any works outside of the normal operational hours (0800-1800 hours Monday to Friday and 0800-1300 Saturdays) will be subject to prior approval with LBI unless they are emergency works.

4.3.2 EXCEEDANCE PROTOCOL

Amber Trigger Level Exceedance Protocol

In the event of any exceedances of the recommended amber trigger levels, the following actions should be taken:

- The Construction Manager should ascertain the cause of the exceedance by reference to the timing of the alert, site diaries and a knowledge of the current site activity.
- The Construction Manager should inform the acoustics consultant managing the monitoring of the cause of the exceedance (if construction-related) so it can be documented for reporting purposes. Non-construction-related exceedances would be disregarded.
- For construction-related exceedances, the Construction Manager should ensure that the activity causing the alert is carried out in such a way as to minimise construction emissions as far as

reasonably practicable (as per the mitigation and management measures outlined in section 5 of this document).

- If the works believed to be the cause of the alerts are still to be completed, it is recommended that notice be provided to nearby sensitive receptors with an explanation of the types of works being undertaken and an indication of the likely remaining duration to manage their expectations of the works.

Following receipt of any construction-related amber trigger level exceedances, construction emissions will be kept under close review as activities continue to minimise the risk of red actionable exceedances occurring.

Red Actionable Level Exceedance Protocol

In the event of any exceedances of the recommended red actionable levels, the following actions should be taken:

- The works believed to be causing the action level exceedance should temporarily cease while alternative working solutions are investigated. If no source can be identified, then the site manager will query whether an accident triggered the alert.
  - The Construction Manager should ascertain the cause of the exceedance by reference to the timing of the alert, site diaries and a knowledge of the current site activity.
  - The Construction Manager should inform the acoustics consultant managing the monitoring of the cause of the exceedance (if construction-related) so it can be documented for reporting purposes. Non-construction-related exceedances would be disregarded.
- If there is a risk of repeat red actionable level exceedances from the site activity identified, then the Contractor may convene a meeting with interested parties/ the Local Planning Authority. The purpose of the meeting would be to carefully review the working method/ practices and machinery to determine if any reasonable alternative measures could be implemented to further reduce construction emissions to minimise the risk of a re-occurrence.

Following receipt of any construction-related red actionable exceedances, construction emissions will be kept under close review until all related site activity is completed.

False Alerts

It is often the case at construction sites that monitoring equipment can measure unacceptably high emissions, only to find that it is a false alert caused by the monitoring equipment being knocked, inadvertently moved or a heavy item of plant passes in close proximity to it, local atmospheric conditions etc. Whilst the measured level might be high, it will not necessarily be representative of the receptor location.

In the event of a false alert, the Construction Manager is to identify the cause of the alert (if possible) and inform the specialist monitoring company that a false alert has been raised and the likely reason for it. Should multiple false alerts be raised in close succession and the cause of them cannot be prevented, at the end of the working day, the Construction Manager should email the specialist monitoring company to confirm the likely reason for them.

4.4 CONSTRUCTION TRAFFIC

The following measures are to be employed as best practice to ensure that construction traffic noise effects remain insignificant:

- Vehicles employed for any activity associated with the construction works will, where reasonably practicable, be fitted with effective exhaust silencers and shall be maintained in good working order and operated in a manner such that noise emissions are controlled and limited as far as reasonably practicable;
- Time slots are adopted for deliveries to ensure that convoys of vehicles do not arrive simultaneously and avoid unnecessary idling on-site;
- The Construction Manager will enforce a policy of no idling/revving of plant or vehicles on Site or surrounding roads at all times. This will be enforced by traffic marshals and site construction management
- Strict control to prevent temporary parking on kerbsides in the vicinity of noise-sensitive receptors; and
- The use of sufficient clear signage to ensure that construction vehicles use only designated routes.

Consideration will be given to monitoring ambient noise levels at particular points in the works programme, where it is felt that there is the potential for most disturbance.

Where noise levels are exceeded, London Square will review the operation and what alternative plant and equipment measures can be utilised. London Square will also review the activities' timings and liaise with neighbours to ensure minimal disruption.

4.5 VIBRATION

British Standard 5228:2009 Part 2 provides guidelines on the acceptable vibration levels during the construction works. The guidance in the British Standards gives a vibration limit of 15mm/s above which cosmetic damage to neighbouring buildings may occur; the construction works will be carried out in such a manner as to ensure that this limit is not exceeded.

To reduce potential vibration impacts due to piling, the Contractor will use a piling technique that is least likely to cause adverse vibration impacts (CFA piling) to ensure that the likely effect of vibration is reduced or avoided at nearby receptors. Piling details will be set out in a Piling Method Statement to be submitted under Condition 18 of the consent.

The Construction Manager and all Construction sub-contractors are to adhere to the best practice and mitigation methodologies as detailed in the Islington Code of Practice for Construction Sites in relation to the control and management of vibration.

4.6 POLLUTION CONTROL

To eliminate the risk of any potential ground, watercourse, or drainage contamination from the various liquids which are used on-site and from generated effluents, the following control measures and best practices will be implemented on-site:

- All diesel fuel for the site plant will be stored on hardstanding areas, with 110% double bunded bowsers. They will be located at prearranged points for easy access, and a refuelling procedure will be communicated to all site operatives to prevent any pollution incidents. Lorries and other vehicles normally used on public roads will not be refuelled on Site;
- The plant refuelling areas will have spill kits readily available in case of any diesel spillage, which will be cleaned immediately. Any spill over 5 litres will be reported to the Site Manager and Sustainability Advisor for investigation and review;
- Other items requiring storage on Site, such as hydraulic oils etc., will be stored in a fuel storage area with a 100% surrounding bunded area, secure fixings and the content's name and capacity labelled on it;
- All site welfare facilities and sewerage discharge will be disposed of and collected by suitable and approved means to a sewerage treatment facility;
- All active drainage points within and adjacent to the Site will be clearly identified, and drain protection will be installed where necessary;
- At no time will any dust control water sprays be allowed to generate a flow of runoff water into surrounding drains. All such water spray operations will be controlled and managed by appointed site personnel at all times.
- Dust suppression water run-off and all other waste washers will be disposed of in accordance with the requirements of the Environment Agency, and appropriate licences will be obtained;
- All on-site drainage systems and those adjacent to the site boundary will be regularly inspected to ensure that they are maintained in an efficient state of repair, remain free of contamination, and are not providing a potential means of wildlife access;
- All hazardous waste will be segregated and stored in a COSHH area. A specialist waste contractor will be employed to dispose of any hazardous wastes found on Site and disposed of by relevant regulations; and
- The piling methodology and design will be such that there will be no risk of polluting underground water sources. This will be incorporated into the piling design to be submitted under Planning Condition 5.

Whilst developing this document London Square has reviewed and ensured compliance with the BRE four-part Pollution control guides' Controlling particles and noise pollution from construction sites and the BRE four-part Pollution control guide, Part 1 Pre-Project planning and effective management; 'Controlling particles, vapour and noise pollution from construction sites.

A Remediation Strategy has been produced by Waterman. All construction activities will work with this Strategy.

4.7 TEMPORARY LIGHTING

To ensure the impact of visual intrusion from temporary lighting on adjacent areas is controlled, the Site's lighting will be kept at the minimum luminosity necessary for adequate security and safety. In addition, lighting will be located and directed such that it does not cause undue intrusion to adjacent properties.

All working areas and emergency escape routes will be lit to ensure adequate lighting is sufficient for the site operative to safely carry out the site activities.

When the Site is closed, all unnecessary lighting will be turned off, and only adequate security lighting will be maintained.

4.8 ECOLOGY

Pre-clearance Ecological Walkover: As the status of protected species can change over time, a site walkover will be undertaken by suitably qualified Ecologist(s) before the demolition works start.

Phasing of the demolition works will be undertaken in accordance with the bat licence obtained from Natural England (refer to Appendix 4), which is expected to require that demolition of buildings that have hibernation roost potential would not be demolished during the core hibernation period.

A toolbox talk will be given to the Contractor by a licensed Bat Ecologist ahead of any demolition works commencing. The Contractor will ensure that all site workers are aware of the presence of on-site bats and know what to do if a bat is encountered or suspected.

Works will be stopped if a bat or signs of a bat are identified. The licensed bat ecologist will be contacted for further advice.

4.9 MONITORING DATA

As per the Islington Code of Practice for Construction Sites, a summary of monitoring data containing any breaches and best practice reviews and actions taken is to be sent to the Islington EPPP Team on a monthly basis.

4.10 COMMUTING /PRIVATE VEHICLES

The use of private vehicles for commuting to the Site will be discouraged, with low volumes of parking spaces offered to the Construction Manager and sub-contractor personnel.

The Site is supported by a good train and bus network, with quick links into Central London; therefore, parking spaces will be limited, with site-based staff encouraged not to drive.

5 CONSTRUCTION METHODS

The proposed development in Islington will adhere to the London Borough of Islington Code of Practice for Construction Sites. In addition to this, the Construction Manager will hold regular Best Practice reviews with staff and sub-contractors to ensure that any new, more efficient best practices can feasibly be implemented into the delivery of the Project.

5.1 SUSTAINABILITY

The proposed development in Islington will adhere to the sustainable principles outlined in the London Square Sustainability, which will involve:

- Creating a sustainable community in LOCATION that incorporates a range of uses and tenure appropriate to local socio-economic needs;
- The regeneration and development of a brownfield site to provide more homes and community space for the town;
- Enhancing the local environments by incorporating amenities and landscapes areas;
- Making efficient use of natural resources and considering the long-term environmental impacts;
- Developing successful partnerships with our stakeholders and engaging with them in our work towards sustainability;
- Working with our suppliers and subcontractors to develop sustainable relationships; and
- Managing the construction site in a manner that mitigates environmental impact.

London Square will target BREEAM 'Excellent' score or higher in non-residential areas.

One of London Square's commitments is to undertake site sustainability assessments that will formally assess the Site by monitoring:

- Waste Management;
- Ground and Water Pollution Prevention;
- Fuel/COSHH Storage and Handling;
- Materials Storage and Housekeeping;
- Energy and Water Efficiency;
- Dust and Noise;
- Ecology;
- Transport Management;
- CCS and Community Involvement; and

- Sustainability Paperwork.

During construction, regular visits will be made by the sustainability advisor to monitor the Site's performance against these criteria and advise the site management team on improvements or innovative ideas.

5.2 REDUCTION, RE-USE AND RECYCLING OF CONSTRUCTION WASTE

The disposal of waste, including excess soil, will be managed to maximise the environmental and development benefits from the use of surplus material and to reduce any adverse effects of disposal.

A Site Waste Management Plan (SWMP) will be implemented to encourage the principles of the waste hierarchy, which are to reduce > reuse > recycle > dispose of waste. London Square is committed to recycling waste, with a minimum of 95% of the waste removed from the Site. The following measures will be implemented:

- Ensuring that all contractors are contractually obliged to participate in reducing waste from the Site, which is included in the London Square Sustainability Policy;
- Reduction of materials wastage through efficient buying, good storage and handling;
- Use of Modern Methods of Construction for a significant proportion of the development, allowing significant reductions in waste and facilitating greater recycling;
- Entering into agreements with suppliers for recovery and disposal of their products, including plasterboard offcuts, insulation offcuts and timber pallets;
- Ensuring that all suppliers of materials provide returnable, practicably recyclable packaging;
- Providing sustainability training, including waste minimisation, for all of the London Square site team;
- Regular toolbox talks throughout the construction phase to raise awareness of the importance of minimising; segregating, and recycling wastes during the construction process;
- Ensuring adequate waste storage facilities are provided for both raw materials and waste streams generated (e.g. Timber, Metal, Plasterboard and General Waste);
- Ensuring adequate security measures are in place;
- Targets for segregation and recycling of key demolition products (KDP), based on the pre-demolition audit, to be agreed with the demolition contractor;
- Targets for reclamation of specific materials and named items, based on the pre-demolition audit, to be agreed with the demolition contractor;
- Adequate on-site practices for removal and storage of products and materials for reclamation and recycling; and

- A template for monitoring waste management routes, with which contractors will be asked to comply.

To minimise the demand for primary agreements, it is intended to recycle suitable demolition material for use on-site in the redevelopment works wherever possible. For example, the inert materials from the demolition works will be crushed on-site and reused in the permanent works to form a piling mat and hard surfaces for haul roads or fill material.

Figure 19 shows the segregation and diversion targets for this development and is discussed below:

- 95% of waste materials will be reused, recovered, or recycled, where practical, for which;
    - 20% will be reused on Site;
    - 75% will be reused, recovered or recycled off-site; and
    - The remaining 5% will be sent to the landfill.

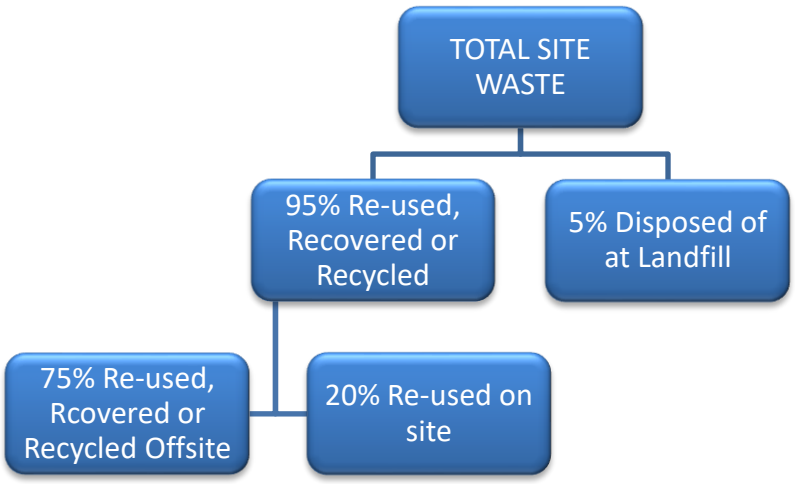


Figure 19 - Segregation and Diversion Targets

5.3 PLANT

The following plant has been identified as required for each construction work stage.

Plant	Site Enabling Works	Demolition	Piling (Excavation)	Substructure	Superstructure	Fit-Out	Roads and Landscaping
Bulldozers	✓	✓	✓	✓			
Compaction plant				✓			
Cranes and hoists	✓	✓	✓	✓	✓	✓	✓
Cutters, drills and small tools	✓	✓		✓	✓	✓	✓
Crushers		✓	✓				
360º excavators		✓	✓				
Floodlights	✓	✓	✓	✓	✓	✓	
Forklift truck		✓		✓	✓	✓	✓
Generators	✓	✓	✓	✓	✓	✓	✓
Hydraulic benders and cutters		✓		✓	✓	✓	
HGVs/lorries/vans	✓	✓	✓	✓	✓	✓	✓
Piling rigs	✓		✓	✓			
Scaffolding and mobile hydraulic access platforms	✓	✓			✓	✓	✓
Ready-mix concrete lorry				✓	✓	✓	
Concrete pump				✓	✓	✓	
Mortar batching plant					✓	✓	
Water Pump			✓	✓			
Temporary Supports			✓	✓	✓	✓	

Table 3 - Plant Selection through the stages of construction.

6 CONCLUSION

The Construction Environmental Management Plan (CEMP) is submitted to the London Borough of Islington to discharge Planning Condition number 4.

The CEMP outlines the construction site layout, construction activities, environmental issues and construction methods that will occur during the development of the former Holloway prison, Islington, in order for the Site to dutifully manage the environmental responsibilities and minimise disturbance and nuisance to neighbours of the Site.

APPENDIX 1 – HIGH-LEVEL PROJECT PROGRAMME

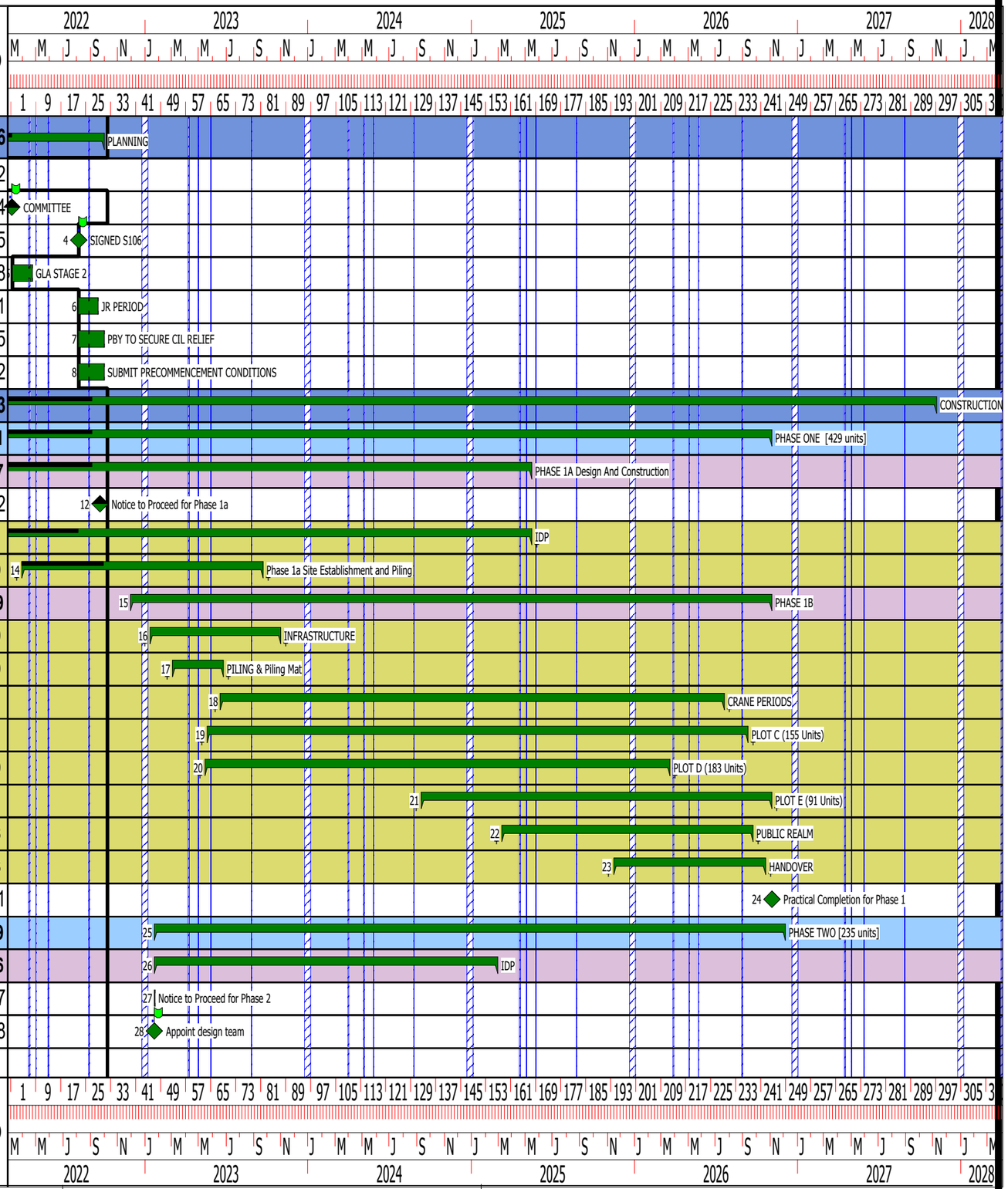
London Square

Holloway Park

Construction Programme

1 York Rd, Uxbridge, UB8 1RN. Tel:- 01895 627300 W:- www.londonsquare.co.uk

Line	Name	Duration	Start	Finish	Bar ID
1	**PLANNING**	**45w**	**Mon 01/11/21**	**30/09/2022**	**271606**
2	PLANNING SUBMISSION		Mon 01/11/21 *	01/11/2021	271612
3	COMMITTEE		Tue 08/03/22 A	08/03/2022 A	271604
4	SIGNED S106		Fri 05/08/22 *	05/08/2022	271605
5	GLA STAGE 2	6w	Thu 10/03/22	22/04/2022	293788
6	JR PERIOD	6w	Fri 05/08/22	16/09/2022	293791
7	PBY TO SECURE CIL RELIEF	8w	Fri 05/08/22	30/09/2022	293785
8	SUBMIT PRECOMMENCEMENT CONDITIONS	8w	Fri 05/08/22	30/09/2022	293782
9	**CONSTRUCTION PERIOD SERVICES**	**286w 4h**	**Tue 25/01/22 A**	**09/11/2027**	**293803**
10	**PHASE ONE [429 units]**	**236w 2d**	**Tue 25/01/22 A**	**05/11/2026**	**293801**
11	**PHASE 1A Design And Construction**	**163w**	**Tue 25/01/22 A**	**15/05/2025**	**293797**
12	Notice to Proceed for Phase 1a		Thu 22/09/22 A	22/09/2022 A	373062
13	**IDP**	**163w**	**Tue 25/01/22 A**	**15/05/2025**	**15593**
14	**Phase 1a Site Establishment and Piling**	**73w 1d**	**Thu 31/03/22 A**	**21/09/2023**	**374899**
15	**PHASE 1B**	**193w 1.25d**	**Tue 29/11/22**	**05/11/2026**	**293799**
16	**INFRASTRUCTURE**	**40w 4.2d**	**Thu 12/01/23**	**01/11/2023**	**212610**
17	**PILING & Piling Mat**	**15w 2.5d**	**Fri 03/03/23**	**26/06/2023**	**125339**
18	**CRANE PERIODS**	**152w 1.5d**	**Mon 19/06/23**	**21/07/2026**	**168161**
19	**PLOT C (155 Units)**	**163w 3.5d**	**Fri 19/05/23**	**14/09/2026**	**117871**
20	**PLOT D (183 Units)**	**140w 2d**	**Tue 16/05/23**	**23/03/2026**	**339959**
21	**PLOT E (91 Units)**	**106w 1d**	**Wed 11/09/24**	**05/11/2026**	**339961**
22	**PUBLIC REALM**	**76w 2d**	**Tue 11/03/25**	**23/09/2026**	**117918**
23	**HANDOVER**	**45w 3d**	**Mon 17/11/25**	**21/10/2026**	**168163**
24	Practical Completion for Phase 1		Thu 05/11/26	05/11/2026	340421
25	**PHASE TWO [235 units]**	**191w 4.51d**	**Mon 23/01/23**	**04/12/2026**	**212569**
26	**IDP**	**103w 4.38d**	**Mon 23/01/23**	**28/02/2025**	**293806**
27	Notice to Proceed for Phase 2	1d	Mon 23/01/23	23/01/2023	302007
28	Appoint design team		Mon 23/01/23 *	23/01/2023	293808



Programme No. : LSq/HyP/CP-002 | Revision: B | Updated on: 25/08/2022 | Notes : Based on an NTP Release of 19th September 2022

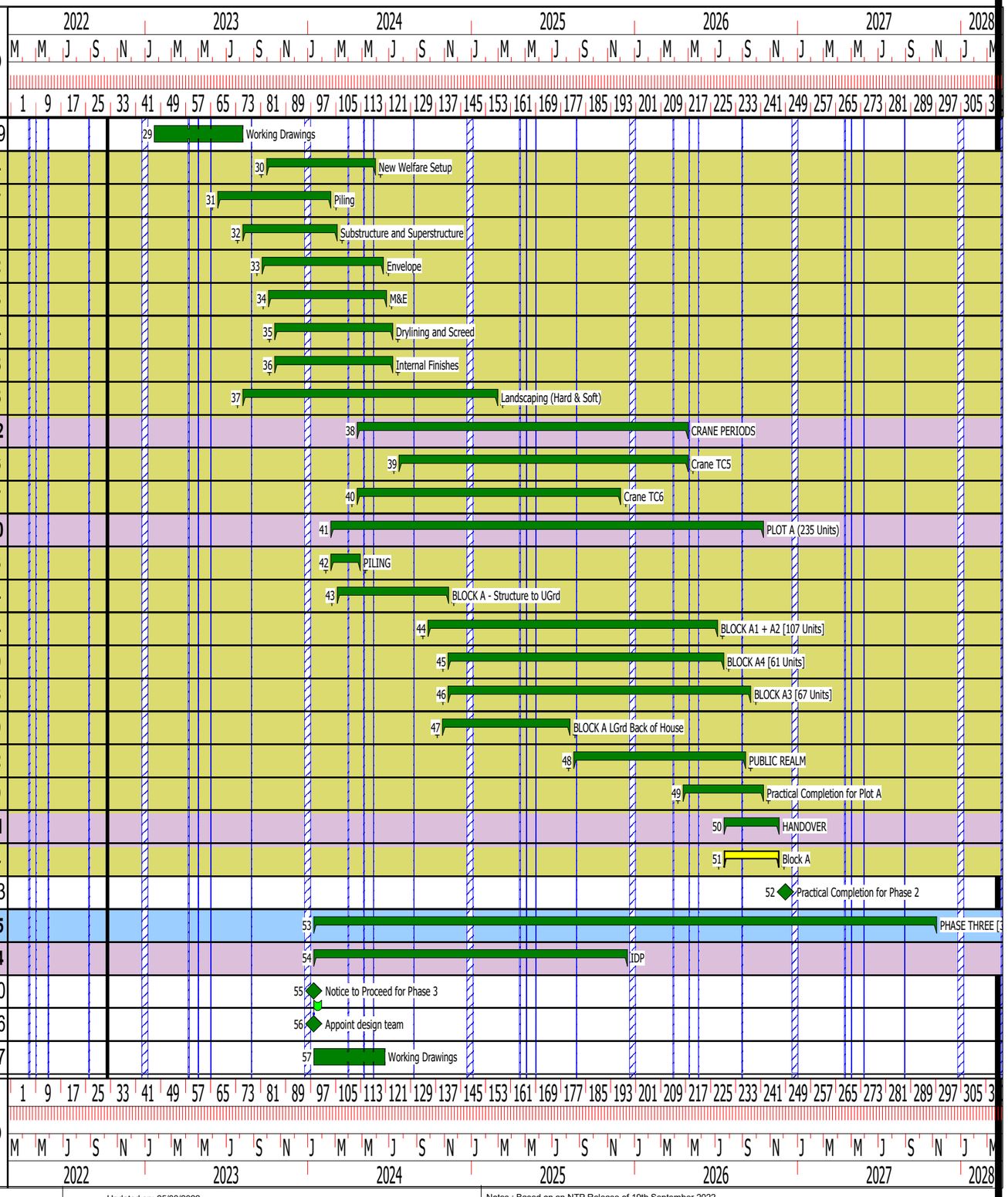
London Square

Holloway Park

Construction Programme

1 York Rd, Uxbridge, UB8 1RN. Tel:- 01895 627300 W:- www.londonsquare.co.uk

Line	Name	Duration	Start	Finish	Bar ID
29	Working Drawings	27w 2.5d	Mon 23/01/23	08/08/2023	293809
30	New Welfare Setup	32w	Fri 29/09/23	30/05/2024	340664
31	Piling	34w	Tue 13/06/23	21/02/2024	294747
32	Substructure and Superstructure	28w	Tue 08/08/23	06/03/2024	293811
33	Envelope	36w	Wed 20/09/23	18/06/2024	293812
34	M&E	35w	Wed 04/10/23	25/06/2024	293813
35	Drylining and Screed	35w	Wed 18/10/23	09/07/2024	293814
36	Internal Finishes	35w	Wed 18/10/23	09/07/2024	293815
37	Landscaping (Hard & Soft)	76w 1.88d	Tue 08/08/23	28/02/2025	340435
38	CRANE PERIODS	99w 4.5d	Fri 19/04/24	30/04/2026	181082
39	Crane TC5	86w 4.5d	Tue 23/07/24	30/04/2026	181086
40	Crane TC6	80w 3.5d	Fri 19/04/24	01/12/2025	181087
41	PLOT A (235 Units)	131w 2.01d	Wed 21/02/24	16/10/2026	340000
42	PILING	9w	Wed 21/02/24	26/04/2024	181083
43	BLOCK A - Structure to UGrd	34w 3.5d	Wed 06/03/24	11/11/2024	192634
44	BLOCK A1 + A2 [107 Units]	86w 4d	Thu 26/09/24	06/07/2026	188104
45	BLOCK A4 [61 Units]	82w 2d	Mon 11/11/24	20/07/2026	291020
46	BLOCK A3 [67 Units]	90w 4.2d	Mon 11/11/24	18/09/2026	275808
47	BLOCK A LGrd Back of House	38w	Tue 29/10/24	08/08/2025	199120
48	PUBLIC REALM	51w 4d	Tue 19/08/25	07/09/2026	188112
49	Practical Completion for Plot A	25w 4.1h	Tue 21/04/26	16/10/2026	340240
50	HANDOVER	17w 2.2d	Tue 21/07/26	20/11/2026	212571
51	Block A	17w 2.2d	Tue 21/07/26	20/11/2026	199184
52	Practical Completion for Phase 2		Fri 04/12/26	04/12/2026	340543
53	PHASE THREE [321 units]	189w 1.5d	Mon 15/01/24	09/11/2027	240635
54	IDP	96w 1.88d	Mon 15/01/24	16/12/2025	294094
55	Notice to Proceed for Phase 3		Mon 15/01/24	15/01/2024	302010
56	Appoint design team		Mon 15/01/24 *	15/01/2024	294096
57	Working Drawings	22w	Mon 15/01/24	20/06/2024	294097



Line | Name | Duration | Start | Finish | Bar ID

Programme No. : LSq/HyP/CP-002 | Revision: B | Updated on: 25/08/2022 | Notes : Based on an NTP Release of 19th September 2022

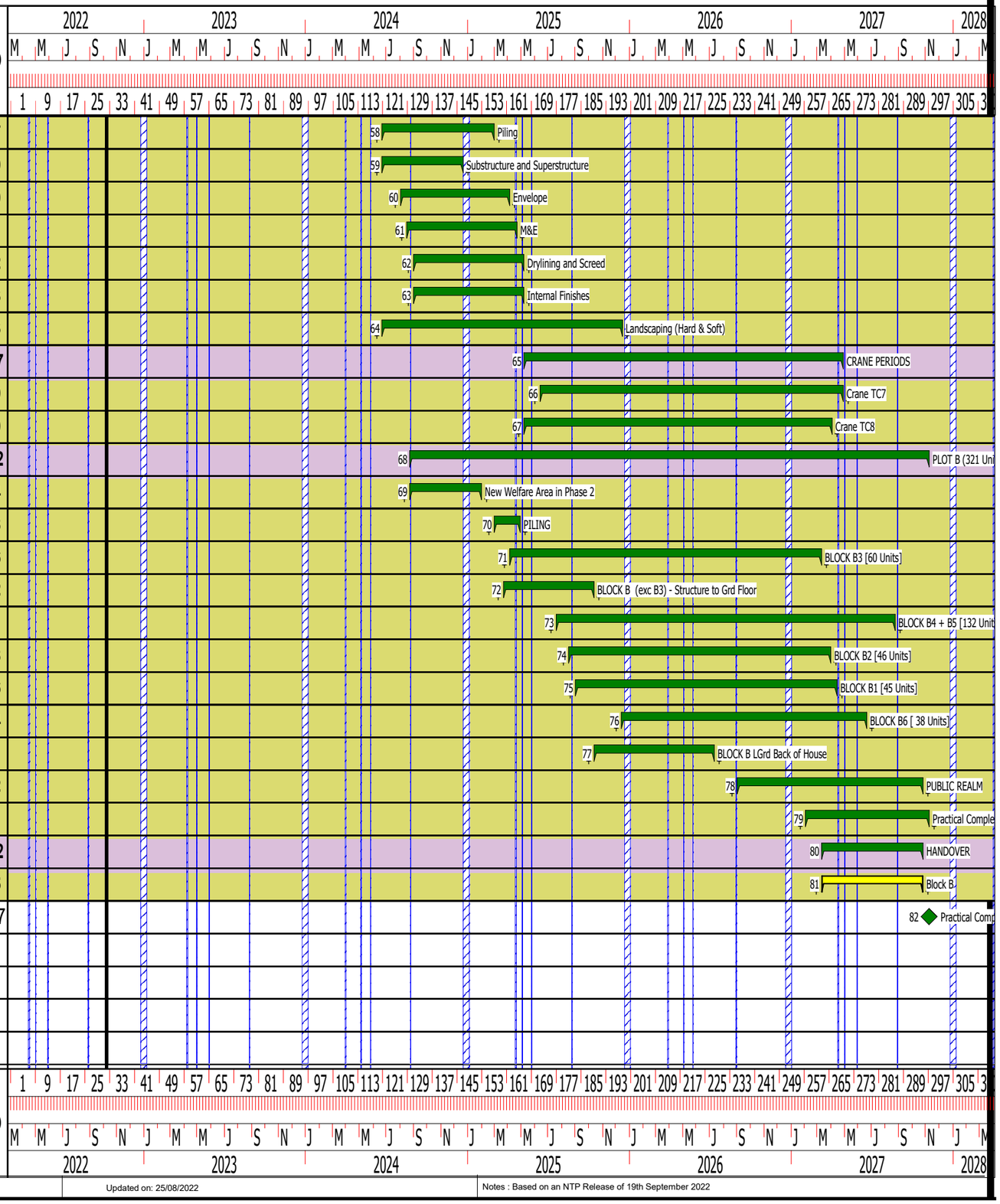
London Square

Holloway Park

Construction Programme

1 York Rd, Uxbridge, UB8 1RN. Tel:- 01895 627300 W:- www.londonsquare.co.uk

Line	Name	Duration	Start	Finish	Bar ID
58	Piling	34w	Fri 21/06/24	28/02/2025	294947
59	Substructure and Superstructure	26w	Fri 21/06/24	20/12/2024	294099
60	Envelope	33w	Fri 02/08/24	07/04/2025	294100
61	M&E	33w	Fri 16/08/24	23/04/2025	294101
62	Drylining and Screed	33w	Mon 02/09/24	08/05/2025	294102
63	Internal Finishes	33w	Mon 02/09/24	08/05/2025	294103
64	Landscaping (Hard & Soft)	74w 1.88d	Fri 21/06/24	16/12/2025	340483
65	CRANE PERIODS	97w 1d	Thu 08/05/25	28/04/2027	240637
66	Crane TC7	92w 1d	Fri 13/06/25	28/04/2027	240649
67	Crane TC8	94w	Thu 08/05/25	02/04/2027	240650
68	PLOT B (321 Units)	158w 1.81d	Thu 22/08/24	09/11/2027	340002
69	New Welfare Area in Phase 2	21w	Thu 22/08/24	31/01/2025	340734
70	PILING	8w	Mon 03/03/25	29/04/2025	240638
71	BLOCK B3 [60 Units]	94w 3d	Mon 07/04/25	10/03/2027	280456
72	BLOCK B (exc B3) - Structure to Grd Floor	28w 1d	Mon 24/03/25	13/10/2025	240662
73	BLOCK B4 + B5 [132 Units]	103w 1.69d	Mon 21/07/25	24/08/2027	251071
74	BLOCK B2 [46 Units]	79w 2d	Mon 18/08/25	31/03/2027	283188
75	BLOCK B1 [45 Units]	79w 2d	Tue 02/09/25	14/04/2027	288146
76	BLOCK B6 [38 Units]	73w 2d	Mon 15/12/25	21/06/2027	295014
77	BLOCK B LGrd Back of House	36w	Tue 14/10/25	10/07/2026	240641
78	PUBLIC REALM	56w 4.5d	Wed 02/09/26	26/10/2027	295022
79	Practical Completion for Plot B	38w 4.5d	Wed 03/02/27	09/11/2027	340321
80	HANDOVER	31w 3.5d	Thu 11/03/27	26/10/2027	240642
81	Block B	31w 3.5d	Thu 11/03/27	26/10/2027	240675
82	Practical Completion for Phase 3		Tue 09/11/27	09/11/2027	340547



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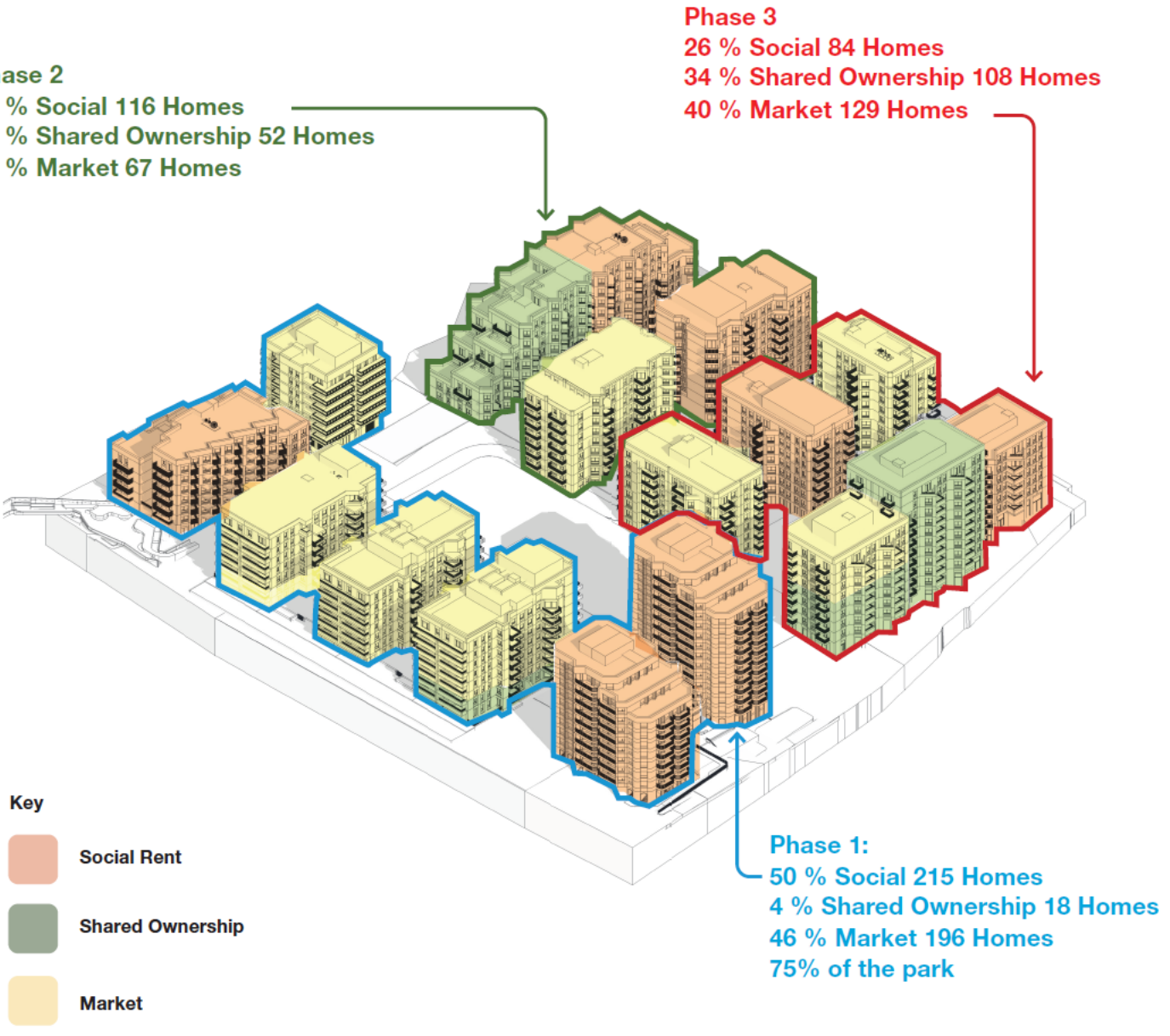
APPENDIX 2 – HOLLOWAY PARK TENURE


Phase 2
49 % Social 116 Homes
22 % Shared Ownership 52 Homes
29 % Market 67 Homes
Phase 3
26 % Social 84 Homes
34 % Shared Ownership 108 Homes
40 % Market 129 Homes
Phase 1:
50 % Social 215 Homes
4 % Shared Ownership 18 Homes
46 % Market 196 Homes
75% of the park
Key
Social Rent
Shared Ownership
Market

APPENDIX 3 - DEMOLITION MANAGEMENT PLAN

DOWNWELL GROUP

Enabling Solutions

Demolition Management Plan

Holloway Prison
Parkhurst Road
London
N7 0NU

Date: 6th July 2022

Proudly Working with – London Square

LONDON SQUARE

Revision Number: ***00***

DOWNWELL GROUP
Enabling Solutions

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Document Register				
Revision No.	Comments	Revised/Created By	Approved	Date
00	**Initial issue**	**David Goulding**	**Shane Fountain**	**06/07/22**

Any amendments or alterations following the previous issue is in **RED** so that they can easily be found and read.

Project Contacts

Contract Title & Address	Holloway Prison Parkhurst Road London N7 0NU
Principal Contractor	Downwell Demolition Newcastle House Oliver Close West Thurrock Essex RM20 3EE
Asbestos Removal Contractor	Innercity Environmental Unit 5 Schooner Park Schooner Court Crossways Business Park, Dartford DA2 6NW
Local Authority	Islington Council 222 Upper Street Islington N1 1XR
HSE	HSE 151 Buckingham Palace Road, London SW1W 9SZ
Principal Designer	TBC
Client	London Square York Road Uxbridge UB8 1RN

Introduction

This Demolition Management Plan has been prepared specifically for the enabling demolition phase of this project in accordance with the CDM 2015. On completion of the demolition phase our role as Main Contractor will come to an end.

The plan has been formulated by taking into consideration the pre-construction information provided by the client, Principal Designer, designers, following surveys and risk assessment of the environment by the operations management team responsible for this project.

The Company's Health, Safety and Environmental (HS&E) Standards contain the core arrangements for managing health and safety in all our operations.

In addition, a management system has been compiled for assisting the project's operations management team in the planning, management of, recording and communicating of relevant health and safety information to provide a safe place of work, safe systems of work and to provide uniformity and consistency in the management of health and safety. Every project will have at least one copy of the Company's Health, Safety and Environmental Standards, with every manager receiving their own personal copy.

Company HS&E Standard – "Construction, Design and Management" details how the Company manages the CDM process. The contents page for the Company Standards and for the health and safety management system documents can be found in Company Health & Safety Policy Document producing safe systems of work tailored to the project.

We aim to reduce the provision of generic paperwork and to only provide in this Health and Safety Plan project specific paperwork that should help with the communication and risk management of this project. Other information this file makes reference to, but is not project specific, will be clearly identified with the location where it is available, if there is a need to review these documents they will be provided on request.

The aim of this Construction Health and Safety Plan is to provide clear, concise, and specific information required to manage the works and the arrangements for controlling significant project specific site risks.

We are committed to providing a safe place of work and continually review our HS&E Standards and systems to provide clear and relevant information through all stages of the project's life.

Should any of Downwell sub- contractors change during these works, Downwell will inform all concerned parties prior to the new sub-contractor's work commencing. Downwell will ensure the new sub-contractors will have the relevant certifications and training to carry out their agreed works.

The project team members responsible for the compilation, review and maintenance of this Demolition Management Plan are Operations Manager David Goulding – 07342 990510 and Health & Safety Manager Shane Fountain – 07469 082100.

1. Project Details

1.1 Location and Description of the Project

The project described in this document is made up of a former Her Majesty's Prison (HMP) Holloway and is occupied by several buildings previously used as prison accommodation ranging between 2 – 5 storeys in height a visitors' centre and a series of open spaces and trees. The works involve providing an intrusive demolition and refurbishment survey, demolishing the structures, removing the ground slabs and foundations, and crushing.

The site is located within a mainly residential, commercial, and educational uses within the St George's Ward of the London Borough of Islington. The demolition works, and subsequent construction works are part of a regeneration project.

1.2 Scope of the Works

The scope and sequence of works is listed below. This sequence has been chosen as it has been identified to be the most efficient. Each item will be specifically referred to in the methodology section.

- Asbestos removal.
- Ecology.
- Tree and foliage removal.
- Soft strip.
- Structural demolition.
- Slab and Foundation removal.
- Crushing.
- Leave the site clean and tidy.

Should the scope of works change, or the sequence be altered, this document will be updated and inducted to all involved.

1.3 Timing of the Works

Contract Period	34 Weeks
Site Start Date	3rd October 2022
Planned Contract Completion	2nd June 2023
Form F10 Date Submitted	TBC

The normal hours of work are as follows:

Monday to Friday	08:00-18:00
Saturday	08:00-13:00
Sunday and Bank Holidays	No Working Permitted

1.4 Pre-Construction Information

All pre-construction information (as seen below) is adequate for starting and completing the works to the required specification.

- Noise & Vibration impact assessment – British Standard limit of 15mm/s
- Asbestos surveys – Full Circle (Downwell Group).

1.5 Liaison Between Parties

A letter drop by Downwell (if required) will be distributed to the surrounding properties prior to the demolition works being carried out and throughout the project.

All topics relevant to the works will be discussed with the main objective aimed at the health and safety of the site together with any breach to the site boundaries.

Daily briefings will be held by Downwell at the start of each shift. During this briefing the upcoming workday will be discussed. At the end of the shift the briefing form is then to be signed off by both the demolition Supervisor and site team.

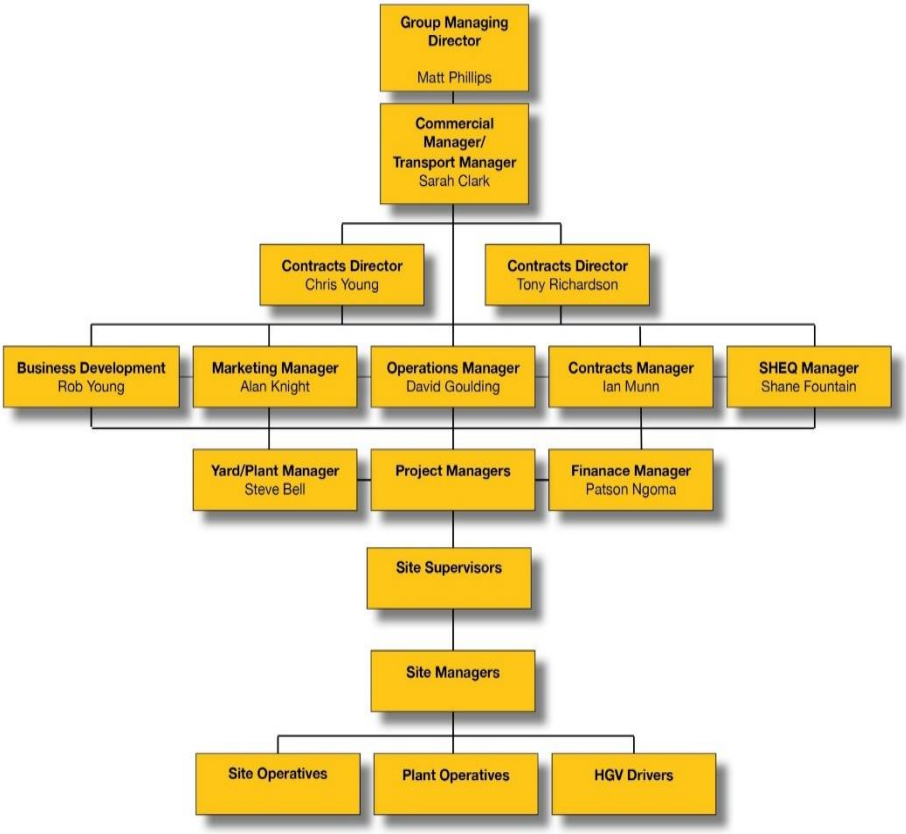
Downwell Demolition operates a near miss procedure and all the work force are familiar with the procedures required to operate this procedure in the correct manner and diligence it deserves. In the event of an accident or near miss this is to be reported directly to London Square within 24 hours, an investigation will take place immediately to establish the cause and with immediate respect any necessary control will be implemented to rectify the incident with reviews to ensure that there is no re-occurrence.

2. Safe Management of the Work

2.1 Management Structure, Competence & Responsibilities

A dedicated site Supervisor will control all aspects of the work from commencement to completion. He will be supported by our Operations Manager (David Goulding), and H&S Manager (Shane Fountain) who will be contactable throughout the project and make weekly visits to site and attend progress meetings. In the event that the management structure is to be changed formal notice will be given and the replacement manager will attend site together with the former manager to ensure that all aspects of the project are understood.

The site supervisor will ensure that all practices and procedures are kept up to date together with all training requirements for all personnel on site. Furthermore, they will ensure that all aspects of the Health and Safety file are updated on a continual basis and all plans of work and risk assessments are in place and relayed to all members of staff with the completion of the mandatory registers.



The site supervisor will ensure that all aspects of the work are undertaken in compliance with the plans of works and risk assessments and will carry out toolbox talks with a minimum talk being carried out on a weekly basis on a topic that is relevant to the work being undertaken.

In the event that a major non-conformance is found all works will cease until an investigation has been carried out and all factors have been rectified and all operatives have been made aware of the deficiency and the procedures to ensure that the same occurrence is not repeated. The non-conformance will be reviewed in accordance with our quality policy.

The general health and safety responsibilities are as laid out in the Downwell Health and Safety Policy and the competency of the operations management team are as identified on the Company's competency matrix which can be found in the Company's Health, Safety and Environmental policy

The Company have formally appointed Chris Young to be the Director responsible for this project; David Goulding – Operations Manager; Ian Munn - Contract Manager and TBC – Site Supervisor; all other key persons are shown at the front of this document.

Issues regarding H&S will be communicated to Shane Fountain. He is the projects H&S Manager. External H&S advice will be obtained from Prime Safety.

The following table shows the different roles on the site and what the minimum competency level will be for that job role.

Project Management Competencies	
Job Role	Minimum Competency
H&S Manager	NEBOSH – CCDO Black card
Operations/Contracts Managers	CCDO Black card – level 6 NVQ
Site Supervisors	CCDO – Gold card – SSSTS – Asbestos awareness, First aid
Plant Operators	CPCS – Asbestos awareness
Demolition Operatives	CCDO – Asbestos awareness – Manual handling – Face fit

The following table shows how management will be visible on site.

Management Identification (Hat Colour)	
Job Role	Hat Colour
H&S Manager	Black
Operations/Contracts Managers	Black
Site Supervisors	Black – Green sticker for first aid
Plant Operators	White
Demolition Operatives	White

2.2 Health & Safety Goals for the Project

The Downwell H&S goals for the project are:

(a) To carry out weekly health and safety inspections and close out any areas for improvement within 2 days.

(b) Complete the project in a safe manner and completing it within the designated programme.

(c) Zero harm to operatives and the public.

2.3 Health & Safety Monitoring

Copies of all Health and Safety Monitoring carried out on this site by the operations management team, the Company's own management team, the Health, Safety and Environmental Advisor, HS&E Auditor or by a contractor's health and safety team / representative will be presented to the client if they require them to be.

In addition to visiting site on a regular basis the HS&E Advisor will provide health and safety support as requested or deemed necessary.

Fortnightly health & safety audits will be conducted by Downwell with copies of the report issued to the client & Principal Designer.

The project will be provided with up-to-date HS&E Standards and notified of any legal or system changes via communication from the Health, Safety and Environment Department to ensure current legislative and organisation requirements are continually updated.

The health and safety advisor will attend site and carry out a review process once a month a report will be prepared and left on site for action and close out purposes.

Please see attached Health and Safety Policy

2.4 Methods of Communication

The project specific methods of effective communication are through prestart induction as recorded on our induction sheet and through toolbox talks as given by our supervisor and contained within our toolbox talk books carried by all supervisors.

Toolbox talks, and method statement briefings will be used as methods of consultation with the workforce and the Downwell demolition management as a minimum; the company also operates an "open door" Policy on all projects. Toolbox talks, and method statement briefings will be recorded and can be located in the site file.

Daily briefings will be conducted prior to the start of the working day. These briefings must be attended by all contractors working on the site at the time. Details of works to be completed and the current site conditions are to be discussed.

Any major deviations from the documented method of work will be communicated to the project team prior to the work commencing. Enough time will be given to allow discussion and review of the new proposed method of work.

(a) The exchange of health and safety information between contractors

- Site specific induction for all persons who require access to site areas
- Daily task sheets will document and communicate activities on site.
- Project progress meetings (frequency to be agreed with London Square).

2.5 Selection and Control of Contractors

The Company HS&E Standards require that all contractors be evaluated prior to selection, where high risk activities are being undertaken the HS&E advisor will be notified by the Project Co-ordinator to provide assistance in the evaluation process.

All contractors will receive a thorough evaluation of competence. Contractors will be selected across all aspects of intended work which they have potential for participation. Records of contractor evaluations are kept at head office.

All contractors working on the site whilst Downwell are PC, will have their method statements reviewed on a weekly basis. Any changes must be documented in the method statement review log with the Downwell Supervisor making sure that the changes are inducted to the workers completing the works.

2.6 Site Security

Downwell are responsible for the security of the site 24/7 during our contracted period.

The minimum standards for ensuring protection of the public and a secure site are as defined in the standards for demolition BS6187 :2011 will be adopted.

Downwell are responsible for the security of the site, The sites security is extremely important. Nobody other than the contractors working on the site are to be permitted to enter the site. The entrance to the demolition area is to be kept closed at all times when not in use. At the start of every shift, especially during structural demolition the building will be checked to ensure that no intruders have gained access through the night.

All areas of the site will be secured when not in use with the appropriate signs displayed at all entrances. The entrance gates will be closed at all times when not in use.

Warning signs will be erected around all areas of the site boundary warning people not to enter site, with a large Multi Board at the site entrance. These signs will address the dangers of entering the site, especially young children who may attempt to enter the site.

2.7 Site Inductions and on-Site Training

All demolition personnel and other contractors on site are required to have a main contractor Downwell Demolition specific induction. This will be carried out for all persons required to work on site, they shall be recorded using the site induction form, Site specific training requirements i.e., toolbox talks will be recorded on Toolbox Talk instruction sheet. A copy of the site-specific induction for this project and the records of induction and site-specific training carried out can be located in the site file. These records will be maintained securely as part of the project's data protection policy.

The competency levels of persons working on site will be identified prior to the commencement of the project and persons provided with the appropriate training for the tasks to be undertaken. Where additional training is identified during health and safety planning or individual's performance development reviews this will be arranged in conjunction with the Company's Human Resources Department.

Operatives will only be provided with on-site training for specific activities if required. The safety aspects of all operations will be discussed prior to commencing the activity via method statement briefings or toolbox talks. The HS&E Advisor allocated for this project will provide such on site as is necessary to ensure personnel are working to suitable safe systems of work and thus not reducing the likelihood and severity of injury to personnel, visitors, and members of the public.

The competency levels for personnel operating equipment, plant etc. whilst working on the site will be checked by the operations management team, identified on the site induction form and copies of any formal training certificates will be kept on site until the work is completed, they can be located in the site file.

The competency levels for persons on this project are in line with the Competency Training Matrix provided in the Company HS&E Standards.

In line with the company standards, all personnel completing works on behalf of Downwell Demolition will have preferred certification to CSCS, CCDO or CPCS standards or other equivalent certification qualification.

2.8 Welfare Facilities and First Aid

Welfare facilities will be provided by London Square for the duration of the project. These units will be of the self-contained type and will be positioned in a suitable location to the front of the site.

Welfare units on site will be diesel powered with all effluent stored within the unit and regularly collected by a specialist waste removal company.

Welfare Cabin's will be supplied by London Square where required and will be situated within the site compound once established.

A typical site welfare unit

Welfare units on the site will have the following features.

- Adequate space for the number of personnel on site
- Toilet facilities adequate for the number of personnel on site
- Enough seating for all personnel
- Changing areas and clothes storage
- Hot and cold water suitable for washing and drinking
- Means to make warm drinks and heat food.
- Adequate space for the Supervisor of all contractors working on the site to complete their work. This space must be separate from the other demolition workers.

The minimum standards to be complied with are as set out in the health and safety at work act, and the CDM regulations 2015.

The first aid requirements for this project will be specifically risk assessed for the type of work and numbers of persons on the site.

The first aider on site will be: Site Supervisor (TBC) (3-day first Aid qualification)

No. of first aid boxes & size: 1 x large First Aid Boxes

Location of first aid boxes: The site welfare office

Resuscitation Equipment: The nearest one will be located with information of its location displayed on site.

The first aid boxes and equipment will be re-filled after each use, visibly checked each week during the weekly inspections and monthly checks carried out. All first aid boxes will be replaced when the use by dates have been exceeded.

2.9 Accident Reporting, Recording and Investigation

The accident reporting, recording and investigation will be in line with the requirements outlined in the Company's HS&E plan. All incidents will be investigated, the person undertaking the investigation and the type of investigation will depend upon the severity or potential severity. The operations management team will report any potential RIDDOR injuries immediately to the project's HS&E Advisor who will provide support and assistance.

The requirement to report all incidents, method of recording and online addresses etc. will be communicated to persons working on the project during the site induction.

Where any accident is reportable to the Health and Safety Executive the employer of the injured person will be responsible for ensuring it is reported, a copy of the F2508 will be available electronically on the site. The information on the form is to be kept confidentially.

Where a contractor does not provide evidence of reporting to the Health and Safety Executive the project's operations management team will report it directly to the Health and Safety Executive on behalf of the contractor.

There is no longer a paper form for RIDDOR reporting, since the online system is the preferred reporting mechanism. Should it be essential for you to submit a report by post, it should be sent to:

RIDDOR Reports
Health and Safety Executive
Redgrave Court
Merton Road
Bootle, Merseyside
L20 7HS

By Telephone

0345 300 9923 (opening hours Monday to Friday 8.30 am to 5 pm).

Investigations will be carried out and risk assessment reviews undertaken following the investigation. Where lessons can be learnt Safety Alerts, Toolbox Talks, Information Sheets or other appropriate media will be used to communicate the information across the Company.

Significant near misses will be treated in the same manner as an accident with appropriate investigations undertaken.

The specific method of near miss reporting for this project is the completion of near-miss cards or verbal instruction via the open-door policy.

Incident information and records of investigations shall be kept in the site file securely for data protection of any individual's who may be named. Incident report forms and incident investigations shall not be released to any third party without formal permission from the Company's senior management team.

2.10 Risk Assessments and Safety Systems of Work

Risk Assessments will be provided for the workplace and for individual operations involved in the project. Method statements and permit to work systems will be introduced as applicable, these will be mandatory for high-risk activities. The Company Health, Safety and Environmental plan include the systems to be used for identifying hazards and for recording risks assessments. These shall be completed for risks identified on the project undertaken by our employees. The following major hazards have been identified within the project and will be covered within the method statement and risk assessment document. All hazards identified on site will have the risk associated with reduced as far as reasonably practical prior to arrival to site. Any operatives who are then exposed to the residual risk will be protected using PPE and other protection measures.

Main Hazards

- **Falls from height** – No works to be completed by any open edges. All open edges will be protected using fixed barriers. Scaffolding if applicable must only be accessed once it is completed and signed off.
- **Instability of structure** – Adequate exclusion zones to be established within work areas. NFDC publication on Exclusion Zones must be referenced when setting out exclusion zones.
- **Exposure to asbestos** – All asbestos works are to be completed by our licensed asbestos removal contractor. Areas having asbestos works completed must be suitably barriered off. All operatives on site must have asbestos awareness training
- **Moving plant and machinery** – Operatives working on the ground must have keep clear of moving plant and never work behind a working machine. Machine operators are not to move plant without facing in the right direction.
- **Live Substation** – Operatives working near to the Live substation must always maintain an adequate exclusion zone. Checks by the site supervisor to the Live substation at the start and end of each shift are to be carried out, along with continuous checks throughout the day during demolition works.

A log of all contractors and risk assessments/ method statements will be kept on site this will be updated as contractors are appointed through the lifetime of the project. The project's operations

management team will ensure that all risk assessments and method statements have been briefed to all relevant personnel and keep records of briefings held on site.

Where contractors are used to undertake the works, the operations management team will review the risk assessments and method statements they produce, where the work is identified as high-risk additional support will be provided by the HS&E Advisor. Contractors will not be allowed to work on this project until they have provided a relevant risk assessment / method statement as appropriate and received a positive review back from the operations management team. Method statements and risk assessment reviews will be attached to the document reviewed.

All Risk Assessments and Method Statements will be reviewed by the client and any comments they may have will be actioned as necessary and all documentation amended where required.

The requirements for other risk assessments required by specific legislation are also identified in the Company HS&E Standards and where risks are identified they shall be used.

A "permit to work" shall be issued by the appointed person, the persons issuing and receiving the permit will sign it off and a copy of the permit will be held by both parties, when the work is complete the appointed person will check the work area before closing out the permit. Permits to work include "Hot Cutting" with fire extinguishers positioned. A fire watch will be done at regular intervals and all hot works will cease one hour before the end of the shift; a final check will be carried out prior to leaving the site.

Copies of permits to work will be filed in the site file.

2.11 Site Rules

Site rules for this project are briefed during the site induction and are located in the site file on the reverse of your induction form. Ensure these are read and understood before signing your name. A copy of these rules will be issued to all contractors at the pre-start meeting / induction and will be brought to the attention of every person working on site during the site induction. A copy of the site rules will be displayed on the project's health and safety notice board; these will be reviewed throughout the project's duration.

Employees who breach health and safety site rules will be subjected to the disciplinary procedures as laid down in the Company's H & S Policy. Where contractors breach site rules the Project Manager or Site Manager will first issue TWO verbal warnings. If a third breach takes place, a written warning is issued to the offending contractor(s) management personnel and or temporary suspension from site. Any further breach in rules that expose themselves or others will be firmly dealt with by removal from site.

A formal report will then be sent to Downwell Demolition Ltd main offices in West Thurrock to advise relevant Contract Directors of the action taken and causation.

Drugs and Alcohol

Downwell Demolition Ltd operates a 'zeros tolerance attitude to drink and drug abuse and will proceed to take swift and prompt action against those who breach company policy or site rules.

A copy of the 'Drugs & Alcohol' Policy can be found on the site notice board. This policy will also be clear to site personnel during Inductions and safety briefing sessions.

A full list of site rules will be sited within the welfare facilities. They will be updated on a regular basis and will consist of but not limited to the following.

- All PPE must be worn at all times applicable to the tasks being carried out. The minimum requirement for PPE on site will be Hard Hat, Gloves, Safety Boots, safety glasses and Hi Vis Garments. Other PPE task specific will be worn as stipulated with the method stamen and risk assessments produced for the specific item of work.
- All tools must be kept clean and maintained in good working order and be locked away or made safe at the end of the working shift.
- All personnel must be aware of the contents of the method statements, risk assessments and company health and safety policy and the registers should be signed and dated by each member of staff before works commence.
- All operatives must observe a strict hygiene policy and thoroughly wash hands before eating or drinking to eliminate hand/mouth contamination and the possibility of infection due to Weils Disease.
- All staff must be aware of all evacuation procedures and location of assembly points and first aid stations together with positions of alarms and fire points.
- All staff must act in a responsible way at all times on site and ensure their safety and safety to others is paramount at all times. Any horseplay will result in immediate dismissal from site
- The site will be a no smoking site smoking will be allowed in designated areas only.
- Anyone caught either under the influence of alcohol or drugs will be dismissed from site.
- All staff will report any near misses to their site supervisor who will assist in compiling the relevant form
- Staff will report all accidents to the site management however small and all details will be entered within the accident book sited within the site office.
- All staff must be suitably dressed for their work application.
- The site boundary must remain undamaged and be suitable to prevent unauthorised access to the site.
- No one other than trained personnel with permission to do so will operate any plant or equipment.
- All keys must be removed, and doors locked when plant is not being used
- No personnel are to congregate outside the site during break times.
- No parking is permitted outside the site entrance prior to 08:00 in the morning.
- Members of the public must be treated the upmost respect at all times.
- No traffic to build up in front of the hotel.
- Site Vehicles to have wheels washed down before leaving site (if required).

2.12 Fire and Emergency Procedures

A fire and emergency plan and risk assessment will be created and included within the induction prior to the start of the works. This emergency plan must include locations for the fire points, where the nearest defibrillator is and where the nearest fire exit is from the site.

The plan must also inform every one of the locations of the muster point and the quickest route for getting there. Once at the muster point you should not go back into the site until you have been given all clear to by the Demolition Supervisor and or the emergency services.

The fire plan must illustrate which fire extinguishers are present on the fire points and which can be used on the different types of fires.

All persons qualified in First Aid must be contained in the emergency plan. Their contact details must be communicated to everyone during the induction, with the location of the first aid box and accident book also included.

In the event of a fire the following procedure must be followed.

- If small the fire can be extinguished with the available extinguishers. Only do so if chance of injury is minimal.
- Leave the area in the safest and most direct route telling everyone to leave the area
- Use the air horns at the fire points to warn people to leave site. Use the following pattern 1,2,3……1,2,3……1,2,3……. In a continuous pattern. If people are in areas likely to have not heard speak to the site manager and get him to call them.
- Make your way to the muster point. The site manager should be the last person there and have the signing in register in his possession.
- Call the fire brigade and inform them of the site address, which is – Holloway Prison, Parkhurst Road, London, N7 0NU.
- Wait at the muster point until told return the site by the fire brigade. Never return to the buildings for any personal belongings.
- In the event of a non-fire emergency or injury please follow this procedure.
- Assess the incident and check for injured persons
- If the incident involves no injured personnel, then calmly instruct people to stay clear of the area and when possible, cordon the area off using fencing.
- If people are injured contact the first aider immediately by phone. The first aider will be the Supervisor.
- If you cannot reach them by phone stay with the injured person and flag somebody else down to go and get the first aider.
- Do not touch the injured person as this could cause further injury. Do move them, however if they are still in danger of being injured.
- Call the emergency services on the telephone and let them know of the injuries having been sustained.

References:

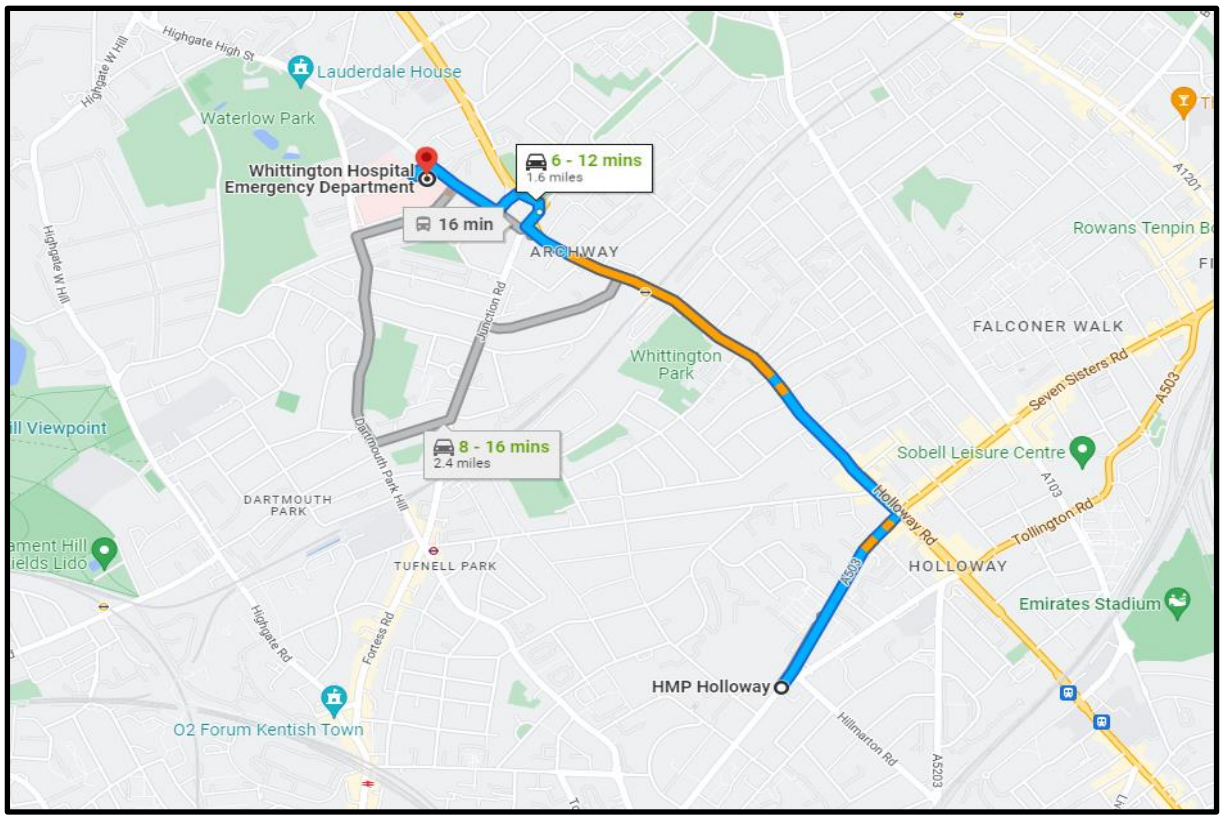
Health and Safety Guidance HS (G) 168. Legislative Requirements: www.opsi.gov.uk –HSAWA 1974. MHSW 199. CDM 2015 regulations and the regulatory Reform (Fire Safety) Order 2005.

If there is a fire within the site and it is small enough to safely fight operatives must use the fire extinguishers from the fire points. At no point must anyone put their own safety at risk.

If the fire is too big to fight operatives must use the air klaxons that are available to raise the alarm and leave the site via the designated route.

Nearest Hospital and Route:

Whittington Hospital
18 Magdala Avenue
London
N19 5NF



2.13 Delivery, Storage & Removal of Materials

All vehicles servicing the site are to use the main site entrance on Parkhrst Road This road is a commercial road so all vehicles **MUST** drive in a slow and considerate manner. Acces. All vehicles are to stick to the agreed transporation routes as suggested by Islington Council. These routes must be

printed off and issued to all contractors and suppliers servicing the site. See section 2.19 fo these routes.

Vehicles entering the site will be banked in by a trained Banksman. He is responsible for the movement of vehicles which require access & egress to the site. The gate will be kept closed at all times when not being used, the Traffic Marshal will ensure that all site rules and the procedures are adhered to by those entering and leaving the site.

All delivery/collection drivers must wear correct PPE during this time. Drivers are permitted to stay with their vehicle and not walk onto or around the site area. Prior to any driver having to walk around /across the site they will receive a full site induction.

All vehicles entering and leaving the site must do so in a slow and controlled manner ensuring that pathways/kerbs are driven on and always be aware of pedestrians and other road users. Vehicles are not permitted to wait outside the site in the morning causing congestion to the access road in front of the hotel.

No reversing of vehicles on site is permitted without the use of a Banksman. Reversing out onto the road is strictly forbidden.

On the approach to the site the vehicle driver must call the site to let them know they are almost onsite, Hands-free communication devices must be used. This allows the gates to the site to be opened. After entering with the aid of the Traffic Marshal, they will then be guided into the site, to the point of the delivery or collection.

All equipment and materials must be dropped in the secure deliveries area. The materials must be stacked in a safe way so that they are not at risk of falling onto anyone and stacked in a way that makes the most of the space within the delivery area. At no point, must heavy materials be climbed or sat on as this may cause them to fall, potentially hurting you. If materials are being stored out of the deliveries area, then they must be enclosed within a fenced exclusion zone to prevent being getting too close.

Prior to leaving the site, all vehicles must be checked for loose debris, and anything wedged between the wheels must be removed.

Housekeeping

Good housekeeping on site is essential to ensure that the access routes to and from the entrances and exits from the site are obstruction free. This includes both plant and equipment storage and waste storage. Agreed access routes and pedestrian paths must be left unobstructed throughout the works.

Combustible waste materials must not be stored close to boundary lines, plant or any areas that are to be retained.

Throughout the day the site is to be checked for the accumulation of debris that could be building up at the site boundary. Any lightweight items that may have blown to the boundary must be bagged up and disposed of.

Plant

All plant will be delivered on a low loader or flatbed lorry. As plant is being unloaded the Banksman is to be present and supervising the plant disembarking the low loader and crossing the threshold into the site. Only CPCS operators can driver the plant from the low loader and into the site.

Approximate Vehicle Movements Table – Longley House		
Type/Reason	Quantity/ Frequency	Period of Movements
Contractors in small vehicles	8 every day	Throughout our programme
Plant deliveries – Large low loader articulated vehicle	8 in total of no more than 2 in any one day	1 at the start until asbestos and soft strip has been removed. 3 during the structural demolition and 4 at the end of the project when the plant is removed.
Waste removal – tipper and roro vehicles	30. No more than 10 in any one day.	Spread out throughout the project. Mostly during the soft strip and asbestos removal.
Small tools and equipment deliveries – small vans	10	Throughout project
Welfare deliveries – Hiab flatbed	4 in total	At the start and then the end of the project
Delivery Restrictions		
Day/Time	Type	Restriction Details
Mon - Fri	HGV Rigid	Delivers and collection from site are to be restricted between 10:00 and 15:00
Sat	HGV Rigid	Delivers and collections to be scheduled between 10:00 and 13:00
Mon-Fri	HGV Artic	Delivers and collection from site are to be restricted between 10:00 and 15:00
Sat	HGV Artic	Not permitted
Mon-Fri	Small Vans & Cars	Delivers and collections scheduled for after 08:00 and before 15:00. Cars driving to site no restrictions
Sat	Small Vans & Cars	Delivers and collections scheduled for after 08:00 and before 13:00. Cars driving to site no restrictions

2.14 Services

At present no isolation information has been issued to us. **At present treat all services as live.**

A site review of all the disconnected services is to be carried out prior to any demolition works.

If there are any services to remain live during the demolition works these must be clearly marked, protected, and then included within the site induction.

The works are to be completed during the summer/winter seasons the lack of light on site could be an issue. Temporary task lighting if required is to be used to give adequate light to safely complete the works. These lights are to be 110v lights which can be powered from an external generator.

2.15 Adjacent Land Use

The site is bounded by residential properties to the Northeast, Northwest and Southwest. To the Southeast the site is bounded by operational commercial businesses, educational uses and residential properties.

Should during the implementation of this project and a neighbouring project begin. The strain on local roads will be assessed to ensure that the logistics plans for the site is not causing too much of a disturbance to residents. Contact details for any neighbouring projects will be collected and meetings arranged to discuss site logistics will be arranged, if required.

2.16 Temporary Works

Temporary works are not part of the current scope in this project.

Downwell demolitions CCDO Gold card supervisors and Project managers are all trained temporary works supervisors.

The following procedure will be adopted prior to the implementation of any temporary works.

- Temp works appointment letters to be issued to the TWD, TWC and TWS.
- The works will be scoped out and designed and have RAMS created
- The designs and RAMS will be checked before being issued to the TWC and TWS.
- The works will be installed.
- The works will be signed off by the TWD and a permit to load issued.
- Temporary works are to be inspected daily at the beginning of each shift.

2.17 Preventing Falls

Works at height are being minimalized through the methods used to complete the project.

The scope of works dictates that there is no need to work at height. Should the requirements change, this will be carried out from MEWPS, all MEWP operators will hold the correct IPAF training for the item of plant being used.

Where working from towers is required to access height, they must be erected by a PASMA trained operative. This trained person must ensure it is erected on flat, sturdy ground and according to the manufacturer's specification.

Where sub-contractors fail to produce a system of work that sufficiently reduces risks to members of the workforce, the Downwell Demolition H&S Advisor, in conjunction the relevant contractor(s) will develop a suitable system of work to ensure the health and welfare of site personnel performing significant works, other personnel and members of the public.

2.18 Subcontractor information

Subcontractor Selection procedure.

Downwell have a database of suppliers that have been established for a minimum of 5 years and therefore have a trading history and are performance checked.

They are reviewed as part of our ISO 9001 management reviews and any non-compliances are addressed. All suppliers are required to submit Health and Safety information and accreditations on an annual basis.

All supplier details are logged onto a spread sheet and are contacted prior to any renewal deadlines for up-to-date information.

On site all subcontractors are monitored using a subcontractor performance sheet which is filled in by the Site Supervisor and is kept as part of the Health and Safety file.

New suppliers are required to fill in a questionnaire as attached.

Primarily as a Demolition Contractor our subcontractors are:

- Scaffolding
- Asbestos Removal
- ME
- Temporary works
- Waste removal
- Tree Surgeons

2.19 Maintenance of Plant & Equipment

All plant and equipment will be subject to daily inspection by the operator / user as a minimum. All vehicles on site must have provision of inspection or service before arrival on site. Regular greasing and oiling of plant and equipment is to be completed by the operator during the plants time on site.

Copies of all inspection sheets will remain in the file on the specific item of plant.

All plant and machine operators will have suitable certification for items of plant intended for use. This includes the 12-monthly thorough examination certificate which will be on site.

Downwell are aware of the NRMM scheme which monitors the emissions of plant and equipment on construction sites. All the plant that is part of the Downwell fleet is checked against the NRMM requirements and only plant that meets the requirement of this site will be used on the project. Plant deliveries for site will be booked to site through the NRMM online portal.

Reason: To safeguard the amenities of the adjoining occupiers, the area generally and contribution of developments to the air quality of the borough in accordance with the requirements policies A1 of the Local Plan.

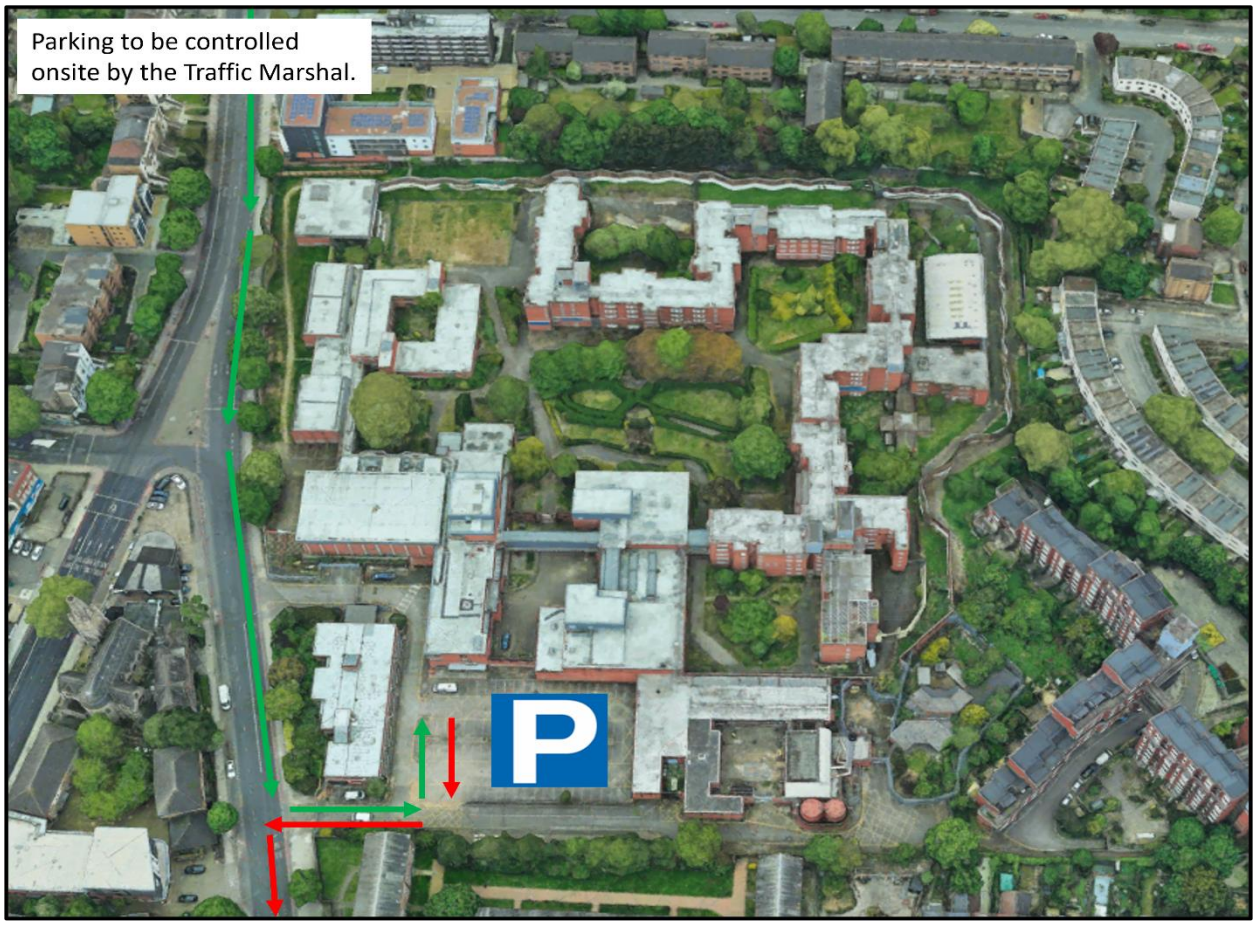
2.20 Traffic Routes, Segregation & Parking

There is Parking on site for the site work force and visitors (TBC) the demolition supervisor must be consulted with before bringing a vehicle to site.

There are only a few available spaces on site and these need to be managed by the traffic marshal.

Access is to be gained of Parkhurst Road, this will be monitored and managed throughout the project.

When walking around site it is advised to use existing hard standings whenever possible. Always give vehicles and plant a wide birth when walking around them. Never walk or drive close to exclusion zones, waste bins or buildings being demolished.


Parking to be controlled onsite by the Traffic Marshal.
P


Site Access and Egress
Traffic Marshall to control Access and Egress to the site, closing off the site as and when required.

All of Downwell vehicles are FORS/CLOCS compliant. We have achieved our FORS GOLD status which means all of our vehicles and their drivers are up to this standard. When using 3rd party hauliers, we expect them to have at least the same safety standards as our own vehicles. This will all be verified before the haulier is permitted to start work on the site.

As the demolition phase unfolds areas for parking and lay down areas may change, if and as they do this will be communicated to all site personnel and revised plans placed on display and into the site file. Care sharing and public transport is to be encouraged and communicated to all employees and sub-contractors prior to the start of the works. Only temporary waiting of no longer than 5 minutes will be permitted whilst the site gates are opened in the mornings/evenings etc.

All vehicles servicing the site must ensure they call ahead to the site manager, when driving on the site the vehicles must stick to the sites 5mph speed limit. When driving off the main through road of the site the vehicle must be escorted by a banksman as there may be personnel moving around the site. No reversing on site without a banksman at any time.

All traffic will arrive from a pre-determined route to ensure vehicles only use routes appropriate to their vehicle types. The primary aims of the routing strategy are to prohibit all vehicles associated with the development from using unsuitable roads and to retain all vehicles on the strategic highway network, (SRN/TLRN), for as long as practically possible.

2.21 Waste Management

All waste arising from the works will be separated into the necessary categories and placed into their respective skips for disposal to the necessary recycling centre. All skips will be signed showing their contents. A full waste management plan will be compiled at the start of the project and will be updated as each item of waste are removed. All duty of care documentation will be submitted to the client's representative.

All waste arising from the works will be dealt with in accordance with the Environmental Protection Act 1990. Most waste from the works will be classified as Non-Hazardous although there will be numerous skips of asbestos waste.

All skips will be checked that they are correctly locked and sheeted before leaving site. No materials must be hanging out of the skips or extending up past the top.

The waste must leave in skips via main site entrance into Albany Road. The vehicles must be pre-booked and must be scheduled to site within their agreed time slot. This is important to allow for smooth running of the site and to cause as least disruption to neighbours.

Asbestos waste will be collected by the asbestos removal contractor and disposed of at a licensed facility. All waste notes for this asbestos will be kept on site. All waste is to be recorded into Smart Waste system.

2.22 Permit to Work

A permit to work system is to be gained from Downwell and will be employed throughout the duration of the works these will include the following operations.

- Hot works
- Work at height
- Permit to work (required for working in areas where live services are present)

Before any works commence within the above categories the area of works will be inspected to identify any known hazards and identify if it is safe for works to continue. After all controls, have been put into place and all staff are familiar with proposed scope of the works the relevant permit will be raised. It will be raised by the site management and will be signed on by the person supervising the works. At the end of the works or shift the permit will be signed off after a final inspection of the workplace has been inspected by the site management.

2.23 Stability of Structures

The structures on the site are to be demolished in a steady and controlled manner, ensuring that the stability of the structure is maintained throughout and at the end of each shift. No free-standing sections are to be left up or loose debris on high up edges at the end of any shift.

Adequate exclusion zones are to be established around the areas being demolished so that in the unlikely event of collapse, no personnel will be in the area. With the demolition works being close to the boundary an additional buffer zone is to be established as the demolition progresses through the building. These buffer zones are to be 3m outside of the hoarding and are to be always manned by a Banksman.

Downwell will ensure that all demolition is done in accordance with the agreed demolition method which is outlined in the demolition method statement. This method must not be deviated from without the document being revised and approved by the project director.

2.24 Working at Height

When any working at height is undertaken areas will be delineated using barriers to eliminate the risk of falling objects. The barrier will be suitably signed. All of the floor openings within the site must be boarded over prior to the main demolition team coming to site.

Before any works of this natures are carried out a toolbox talk will be held advising all staff of the areas of works and the type of works being carried out.

Any access to high level ceilings within the building will be undertaken using MEWPs or mobile towers and podiums. MEWPs will only be operated by IPAF trained operatives and Towers will only be erected by PASMA trained operatives.

All scaffolders on site must be working behind a handrail at all times. Harnesses must also be worn and secured to a secure anchorage at all times.

Where working at height is required using a MEWP. The area above the work at height must be checked for over head power cables or other obstructions. The operator of the MEWP must have a valid IPAF training cert for the machine.

2.25 Control of Lifting operations

Any lifting operations will only be conducted in accordance with an accepted lifting plan. This must be provided in adequate time for the document to be inspected before the works can start. This includes the delivery of site cabins, moving attachments around site and unloading items from lorries using the arm of the machine. The cabin provider must provide a lift plan prior to the delivery of the cabins. This plan should outline the method for safely fixing the chains to the cabins without having to climb on then.

All vehicles delivering cabins must be suitably positioned on firm level ground. All non-essential personnel must be asked to clear the area whilst the lifting operations are being completed.

All lifting operations will be conducted in accordance with the Lifting Operations and Lifting Equipment Regulations 1998 and Use of Work Equipment Regulations (PUWER) 1998

2.26 Plant & Equipment – Loading and Off-Loading Plant

All equipment will be suitable for the tasks being carried out and all test certificates will be available for inspection within the site office. Further copies will be kept within the file on each item of plant.

All plant operators will be trained in accordance with the CPCS (Construction Plant Competency Scheme) or NPORS (National Plant Operators Scheme). All plant operatives will be in possession of their cards with copies within the file situated in the site office. Any new operatives joining the company will have their cards verified with their respective training organisations.

All plant will be switched off when unattended with the keys removed. When machines are being operated the keys must be attached to a lanyard that is then attached to the operator's clothes. This will help to prevent keys being accidentally left in machines as the operator leaves.

All plant will be stored in a central area at the end of each working period and immobilised by removing the isolator switch.

All fuels will be kept in bunded tanks/bowsers which will be kept in a designated area where all refuelling will be undertaken. Spill kits will be available on site and all necessary fire fighting equipment will be sited adjacent to the refuelling areas and shown on the site fire plan.

Any electrical equipment will be pat tested in accordance with the Electricity Regulations. All tools will be inspected daily by a competent person.

All excavators are fitted with rear facing cameras and mirrors that allow the operator to see clearly around them. All drivers are trained not to reverse the machine without first slewing the cab around so they can clearly see where they are going.

If reversing of plant is an essential, then a banksman must be there to accompany the reversing whilst always standing at a safe distance but within view of the operator so that signals can be clearly seen.

2.27 Excavations

Excavations and breaking of ground are required for this project, a permit to dig is to be issued by Downwell Group, prior to any ground being broken. The permit to dig can only be issued once the agreed area has been scanned by a trained Cat+ and Genny operative working from the service drawings that have been supplied by London Square.

2.28 Confined Spaces

It is not envisaged that any working by Downwell in confined spaces will be required within this project. If any confined space becomes apparent or are uncovered during the works, all required monitoring will be carried out and any operative entering the space will have confined space training and the necessary escape equipment where necessary.

Before any confined space is entered until a detailed risk assessment and method statement have been compiled and approved.

No operatives will enter a confined space until a permit to enter a confined space has been raised. Any personnel entering a confined space will be trained in accordance with the confined space regulations 1997. The training will include emergency evacuation procedures.

2.29 Scaffold

Scaffolding only on one tree protection acting as a dust/protecting screen. This scaffolding is required due to the proximity of the building to the tree.

A full design (if required) for the scaffolding is to be issued and included within the TWD file for the project. This design is to be passed onto the TWS prior to the installation of any scaffolding. These designs will always be kept on site. Please refer to the separate Scaffold RAMS provided.

This scaffolding will be encapsulated with flame retardant Monarflex/dust screen. The Monarflex/dust screen is required to prevent small fragments and dust leaving the footprint of the building during demolition.

The scaffolding must be inspected, tagged, and signed off to ensure the structure has been completed as per design before demolition can commence. The scaffolding must also be inspected, tagged, and signed off on a weekly basis (every 7 Days), following any adaptions, or following any adverse weather, this is to be carried out by a competent individual.

2.30 PPE Maintenance

The site will be a mandatory PPE site with the minimum requirement of Hard Hats, Safety Footwear, Hi Vis Vests and Gloves. All PPE will be issued to each and every operative and each item issued will be documented in the PPE issue register.

All operatives will wear the above equipment with the addition of any other PPE appropriate to the tasks being carried out and listed within the method statement and risk assessments i.e.: - Ear protection, Eye Protection, respirators, and Fall Arrest Equipment.

All PPE will be of the correct type for the task being carried out and the relevant BS-EN number will be imprinted on each item of equipment.

Any operative found not to be complying with the company requirements or any applicable legislation will be dealt with in accordance with our disciplinary procedures as listed within our company health & safety policy.

When any breach of PPE regulations occurs a toolbox, talk will be held containing detailed requirements of PPE for the particular tasks being undertaken. The person/s involved in the breach of regulations will be dealt with as appropriate.

All equipment required to safely complete the works will be issued free of charge.

2.31 Soft Strip

All the buildings on the site will firstly be soft stripped.

***Note:* The soft strip element is not likely to cause any damage to the substation as the works are internal to the building.**

The items listed below will be removed from the buildings by a gang of operatives working on a floor at a time. Full PPE must be always worn and additional PPE that is task specific. Ear defenders and anti-vibration gloves for any breaking and flame-retardant clothing for any hot works. Glasses and long sleeves must be worn when handling any glazing units.

The tools to be used will be but not restricted to the following.

- Mattocks/hammers
- 110v reciprocating saws
- Abrasive wheels
- Pinch bars
- Steps/Podiums
- Battery powered drills

All tools and equipment that fall within the category of hot works will be covered under and ‘Hot Works’ permit system.

Fixtures and Fittings:
Any loose fixtures and fittings remaining will where of a suitable size be removed from the building whole, taken to the loading area by hand before being loaded directly into the waiting waste skips, larger elements will be dismantled/downsized using small tools, reduced into manageable sized sections, and again transported to the disposal point.

Suspended Ceilings:
Any suspended ceilings will be removed via mobile scaffold tower or podium steps, tiles will be lifted and twisted from the suspension system and lowered to the ground, from here tiles will be bundled and then be periodically loaded into the waste skip. Suspension system will be dismantled as tiles are removed with supports cut with croppers, the system then loaded directly into the waste skip. All towers and podiums must be built by a PASMA trained operative need to be inspected daily and tagged.

Doors, Door Frames & Skirting:
Door frames and skirting will to be removed by operatives using pinch bars and hammers. The items are to be gradually pried from their place of fixing, any obtrusions and nails are to be removed or hammered over with all resultant materials then being transported for disposal.

Doors will be removed by operatives stripping off the door furniture, prying the door from its hinges again utilizing pinch bars and mattocks, doors will then be either downsized for ease of disposal or carried whole to the disposal point.

Partition Walls:
Any stud partitioning is to be removed by the operatives using suitable hand-held tools, namely pinch bars, picks and hammers. The wall structure is to be dismantled by removing the coverings using the hammers and pinch bars. Once exposed, the remaining stud work is to be prized free and de-nailed or have nails hammered over. Resultant arising's are to be transported to the loading area.

Floor Coverings:
Wooden floor coverings are to be removed by the operatives using mattock picks and shovels. Carpet tiles and vinyl floor tiles are simply to be prized up using hand tools, then bundled and taped with resultant materials transported to the disposal point. Carpets where of a roll-able nature will be cut into strips, whilst still laid, and then rolled up for collection in strips, these will then be transported to the disposal point.

Internal Glass units
Any internal glass units and/or windows will be removed as complete units where possible, an exclusion zone/crash decks will be employed as required and operatives will wear hard hats, safety boots, gloves, and goggles. The glass will be handled with care and placed into skips to be disposed of in a safe manner.

Fluorescent tubes and smoke alarms:
Any fluorescent tubes and smoke alarms or smoke heads are to be removed as required, they will be removed as if being changed, bulbs and heads collected and placed into a specialist waste coffin, these will be stored on site during soft strip works and removed as specialist waste once all items are removed.

All the materials removed from the buildings are to be transported to the external windows above the designated drop zone areas. The drop zone areas are to be established in the above illustrated areas. The fencing protecting the drop zone must be Heras fencing panels erected in a continuous enclosure secured with fencing clips. Warning signage must be displayed on the fence panels at points of possible entry. The location of the drop zones must be included within the induction.

Ideally specific skips will be placed within the drop zones for the type of materials being removed to allow for recycling of each individual product and minimize double handling.

Where site limitations prevent the placement of numerous skips then materials are to be separated and stored on the floors until stockpiles are sufficient to fill a skip. Once materials have been expelled into the drop zones, they can be loaded using hydraulic selector grapples fitted to excavators to the bin for that waste stream.

The Downwell supervisor/site manager on site is to ensure that all combustible materials take priority in being removed from site and that they are not allowed to build up in areas onsite to the point they become fire hazards.

On the same note such materials should be stored well away from any hot works areas or source of ignition.

Regularly dousing of such stockpiles with water via hoses is considered good practice even on sites with no hot works.
Locations of neighboring occupied surrounding buildings and structures should be considered when choosing stockpile locations.

Whilst any plant or lorries are operating in the drop zone, expelling any materials will cease and the perimeter fencing to said drop zone will be in place and erected to prevent operatives coming into contact with the moving plant.

2.32 Asbestos

All identified asbestos containing materials will be removed from the site prior to the demolition works commencing. The ACM identified in the surveys are of the licensed and non-licensed category. They will be completely removed prior to the start of any intrusive or structural demolition works.

All clearance certs and hazardous waste notes will be contained within the site file and issue to London Square at the end of the project.

All Downwell operatives have received training to recognise ACM's, should any additional ACMs be located within the buildings during demolition, work will cease, and the Site Manager notified, an asbestos surveyor will be called to site, and a sample taken for testing to confirm, prior to works in that area continuing.

Asbestos RAMS are to be provided by Innercity Environmental.

Should anyone become accidentally exposed to asbestos fibres the following procedure must be adopted.

- Stop work move away from the immediate area but do not go to the welfare or other areas where other people are.
- Phone or call for assistance.
- The area must be cordoned off and warning signage displayed.
- Instruct the people what has happened and not to approach you (this is key to reduce the likelihood of exposing others)
- Ask the help to bring some disposable overalls, an FFP3 disposable mask and some asbestos waste bags.
- The exposed person must remove all clothing and place it inside the asbestos waste bag.
- The person assisting must call for asbestos analyst and for a decontamination unit to be delivered to site.
- The asbestos analyst must monitor the area to identify the type of asbestos present and conduct background air monitoring.
- The exposed operative must clean themselves thoroughly inside the decontamination unit.
- The exposed person must then seek medical advice.
- If the analyst confirms that it was asbestos that was disturbed, the incident must be reported to the Reporting of Injuries, Diseases and Dangerous Occurrences (RIDDOR) Regulations.

2.33 Manual Handling

Manual handling will be encountered on this site and will be assessed within the method statement. Heavy lifting must be a last resort and mechanical lifting must be the preferred method for moving heavy items.

In the event that the manual handling cannot be avoided team lifting will be incorporated.

Where lifting in excess of 20kg cannot be avoided specific risk, assessments will be compiled. All staff will be trained in manual handling.

2.34 Noise

Downwell demolition will minimise noise as far as possible by using plant which is well maintained with silencers which give the best noise reduction. When plant is idle, it will be switched off. All generators will be of the silenced type.

No construction vehicles will be permitted to wait outside the site with their engines running, with exception to those vehicles waiting for the Traffic Marshal to open/close the entrance gate. If there is a delay to access/egress the site entrance the driver will be told and will then switch off the engine.

When loading bins, material must be lowered in at the start to ensure that there is a layer of material at the bottom to reduce the noise from dropping subsequent layers on top. As the layers of material are placed in the bin they may need to be compacted. This must only be done by gradually lowering the arm of the excavator into the bin and pressing down. The operator must not bang down on the bin from a great height.

To help reduce the noise when using breakers to breakers the foundations in the ground noise barrier enclosures will be erected using Heras's fence panels covered in noise reduction quilts. These barriers will help to ensure noise is reduced in areas close to boundaries with residential properties.

Excessive noise signs will be posted warning of the activity and the requirement of mandatory hearing protection**.**

Strategically placed noise monitoring devices will be placed within the site boundary. The equipment will monitor noise levels and notify the project team and other key personnel who require the readings, should levels exceed those set by the local authority/EA suggested levels. If levels exceed then the current work activities will cease, and the incident will be investigated? Work methods and protection measures can then be adapted to try and ensure that an exceeded level does not happen again.

2.35 Dust

If exposure to dusty works cannot be avoided, then adequate PPE must be provided to personnel on site. For all respiratory equipment used on site a valid face fit test must have been completed. This can be provided by the Downwell SHEQ department. Only respiratory equipment with a minimum value of FFP3 is to be used.

To help prevent dust from the demolition works water is to be used to help suppress this dust. Water will be sprayed onto the works to keep the areas dampened. The dust suppression techniques will vary as the works. At height demolition works will have hoses fed up though the arms of the machines or by using a hose attached to the basket of a MEWP. For medium to low level dust mist spraying units (Dust Boss) will be used to spray a fine water mist at the works. When working on the ground water hoses/moto fog will be used to keep the ground and stockpiles of concrete damp and prevent dust from blowing off the ground of the stockpiles.

Dust monitoring will be visually carried out within the site boundary. The site supervisor and site team will monitor the dust levels and notify the project team and other key personnel should levels exceed those expected and set by the local authority/EA suggested levels. If levels exceed then the current work activities will cease, and the incident will be investigated? Work methods and protection measures can then be adapted to try and ensure that an exceeded level does not happen again.

Where stockpiles of material maybe left on site, they must be kept dampened to prevent the wind from blowing off the stockpile.

2.36 Vibration

Excessive vibration is unlikely to be a factor for this project. The party wall to the substation is to be noted and visually checked by our supervisor when working within proximity. To help minimise the vibration passed through an element of hand separation and saw cutting is to be completed before any mechanical demolition is to be carried out.

When loading materials into bins/lorries the material must be gradually lowered in and not dropped from height. Once a layer of material is in the bottom of the bin this will act as a cushion for the remaining material to be loaded in.

As bins become full, they may need to be compacted down using the attachment of the excavator. This is to be done carefully by pressing down on the contents of the bin and not hitting it from height.

Excessive plant movements must be avoided when working close to the boundary lines with neighbouring properties. To help reduce the impact of vibrations travelling through the ground where possible machines are to sit on a bed or demolition debris to act a s a cushion.

The Control of Vibration at Work Regulations 2005. The exposure limit value ELV is a daily exposure of 5m/s2 A(8).) An operative rotation system will also be employed.

A strategically placed vibration monitoring device (if required) will be placed within the site boundary. The equipment will monitor levels and notify the project team and other key personnel who require the readings, should levels exceed those set by the local authority/EA suggested levels. If levels exceed then the current work activities will cease, and the incident will be investigated. Work methods and protection measures can then be adapted to try and ensure that an exceeded level does not happen again.

2.37 Control of Substances Hazardous to Health

A full and comprehensive COSHH assessment will be included within the RAMS document for the project. This will detail the COSHH items identified on the site, how you can protect yourself from them and how they are to be safely handled and stored.

Upon taking possession of the site, Downwell operatives will collect any drums or containers of chemicals and place them in a secure storage area to be agreed by the Demolition Supervisor. All containers will be placed on a drip tray suitable to carry 110% of the estimated volumes. This area will be suitably signed with current legislative compliant warning signs with spill kits and suitable means of fire fighting equipment local to the store in the way of a Fire point. This fire point will contain a means of raising the alarm and suitable extinguishing aids.

Once collected into the compound an external licenced removal company will attend site to ascertain the volumes and contents of the containers for which COSHH assessments can then be compiled and all items can then be removed to a licensed disposal facility

For the demolition works in general, COSHH assessments will be complied before any of the works commence. The materials that will be brought to site are limited ranging from fuels, oils, oxygen, and propane. For all materials on site there will be a technical data sheet present within the site office.

Where possible non-toxic agents will be used in the welfare so to reduce the exposure to operatives during the contract.

All bowsers containing fuel will be of the double bunded type with locking nozzles. A Dedicated refuelling area will be set up in the appropriate work sites. All refuelling areas will be fenced off. Spill kits will be present in all areas.

Hot cutting is unlikely to be required with most works being undertaken by mechanical means, any gas bottles will be stored in a designated are delineated using Heras's fencing. Oxygen and propane will be store separately. There will be a requirement of Propane to fuel the heating systems within the welfare units and the hot water within the decontamination units.

All gas bottles will be stored in an upright position and all storage areas will be adequately signed.

2.38 UV Rays

Depending on the time of year that the works start will depend on what precautions have to be taken in regard to UV rays. Excessive exposure to the sun's rays during the workday can go unnoticed and the people on site must be encouraged to wearing sunscreen. Excessive rays could be expected from the sun during this period, sun blocks will be available and should be applied if working outside in the sun for long periods.

Operatives should be discouraged from wearing short sleeves and from working outside for long periods of time.

2.39 Structural Demolition

As you are all aware, demolition can be a dangerous environment when the correct measures, procedures and protection have not been implemented. This document is to make individuals aware of the **RED**, **AMBER**, and **GREEN** colour coding areas of site and where this can be implemented. This system will be used as 'best practice' due to some sites not allowing the colour stepping method to be carried out.

Colour coding definitions-

RED ZONE – Is an EXCLUSION ZONE that is defined as being the most restricted and is "an area of a site where no person may work". Different structures require different methods of demolition. Key to designing and selecting the method is considering what can go wrong. Those decisions will lead to the size and nature of the designed RED ZONE.

AMBER ZONE – There may be other areas on site where access will be RESTRICTED to work undertaken by specialist occupationally qualified personnel as required by risk assessment and method statements. These are called AMBER ZONES.

GREEN ZONES – Some sites operate a GREEN or SAFE zone area where no PPE is required such as offices, site welfare and car parking. Demolition is a fluid process, and the exact position of zones are likely to move and change with time.

Colour Coding Zones Explained

RED:

The most dangerous areas on site are the exclusion or RED ZONES and these are quite simply places where no worker access is allowed. Obvious examples include inside unchecked dangerous structures and in the designed drop zone during machine demolition.

When a high reach machine is being used, the base of the machine will NOT NORMALLY be able to sit in the RED ZONE. This is because despite having cab, screen and falling object protection (FOPS/FOG and laminate glass) it is unlikely that the driver will have adequate protection if large pieces of the structure fall or slide down the boom and hit the cab. The boom and tools and therefore the slewing area/working zone of the machine will be in the RED ZONE.

Demolition works are progressive in nature and the RED ZONES may well move, change size and even category during the project as the works progress. A simple example of this would be during top-down demolition when a lift shaft is used as a chute for the arisings; the area at the bottom of the shaft may alter from RED ZONE when materials are being dropped to an AMBER ZONE depending on if access is needed to remove the materials. Demolition contractors are experienced in managing this type of operation with normal controls including radio communications, locking out mid-levels, and physical barriers at the top to prevent material being put in the chute when loading operations are happening at the bottom.

Despite technological improvements such as the introduction of zero tail swing excavators, working around machines is still potentially extremely dangerous for people. Local areas can be designated as a RED ZONE where no one may enter when the machine is working. During processing and loading materials designating zones is only formalising what happens in practice on site.

During “top down” or multi-storey deconstruction projects consideration must be given to the need for RED ZONES to prohibit access on the floors below the working area. This will require a proof of concept, where engineering calculations are used to predict the worst-case outcome of falling materials or plant. The solution will then be site specific and will depend on the structure, its integrity, and the proposed equipment.

If any area could pose a high-risk red zone, set your barriers in a way they are secure, fixed and cannot be moved. You may be able to bolt them down to the floor or attach them to the property that is due to be demolished.

This method can also be used on areas that are not for sub-contractors to enter, areas that have access to open edges, machines working in a small area with a high risk if operatives to enter etc.

AMBER:

There are many reasons why access to parts of a site whilst permitted may need to be strictly controlled. Areas where work removing hazardous materials such as asbestos are carried out, or noise protection zones, may require specific training, PPE, and containment. The normal management of these makes them easy to designate as AMBER ZONES.

During machine demolition the areas where not only the machine sits but the supervisor, sentry banksman and dust suppression operatives work forms another obvious restricted access AMBER ZONE. The people working in these zones need to be well briefed so that they understand what the plan is, experienced so that they can understand when it is not working and capable of maintaining the necessary vigilance. It is strongly suggested that access to these areas is allowed only to NFDC CCDO or equivalent scheme card holders.

With machine demolition the physical location and size of these zones may change relatively quickly but must be implemented within your site.

GREEN:

The site offices, welfare and parking are normally considered to be an area where construction site PPE is not required and therefore, they form a GREEN SAFE ZONE.

Barriers, signs, and technology to democrat ZONES:

The normal options for temporary physical fencing include

- Designed Timber Hoarding (2m to 2.4m high)
- Metal Heras Type Fence panels with or without debris netting (PREFERRED)
- Metal Crowd Control Barrier
- “Chapter 8” plastic fencing
- Chestnut Paling
- Scaffold “A” Frames 7. Road pin and netting

Below is the signage to be used on our sites and will be made available on all projects.

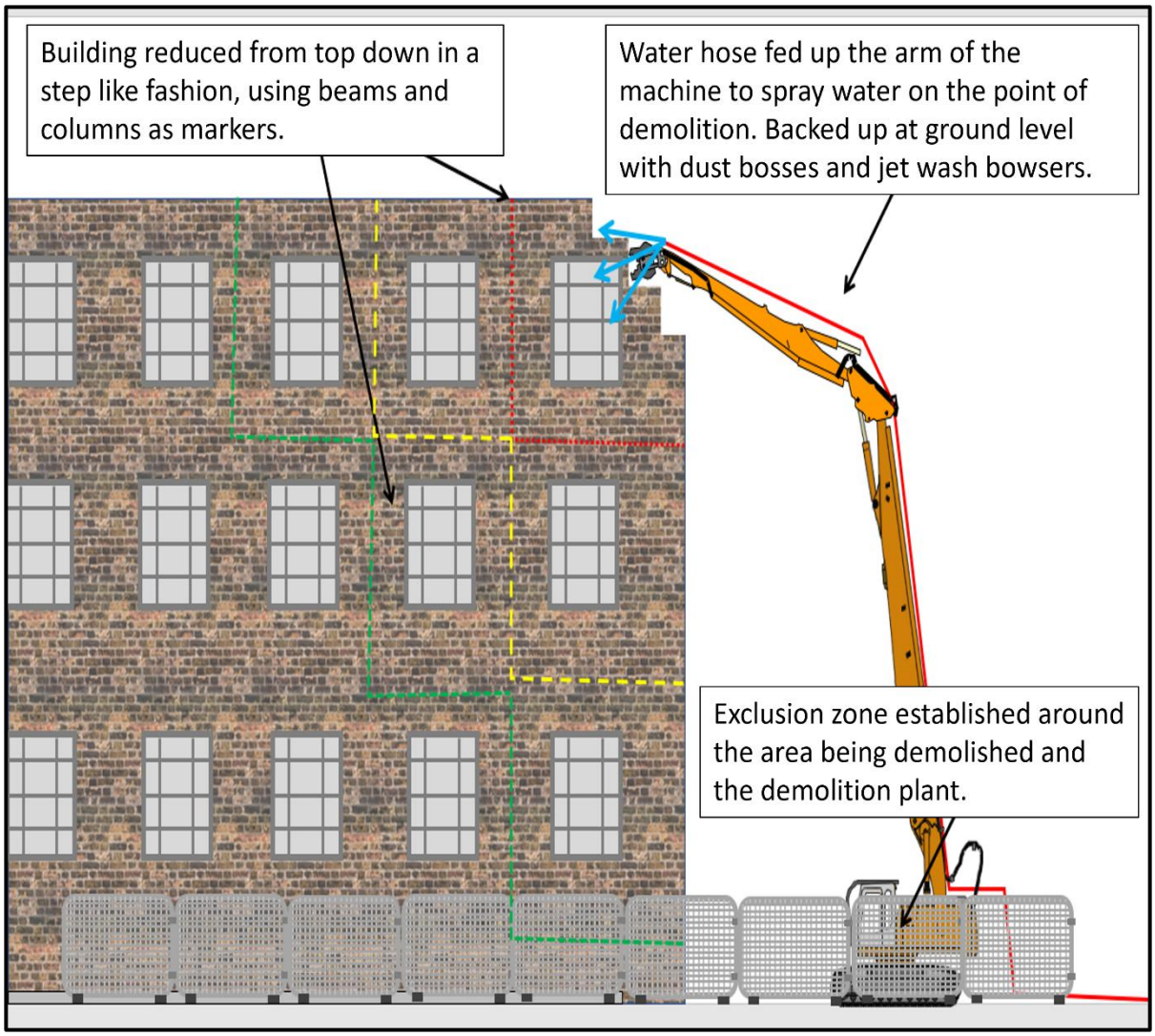
High Reach/Straight Arm Operations:

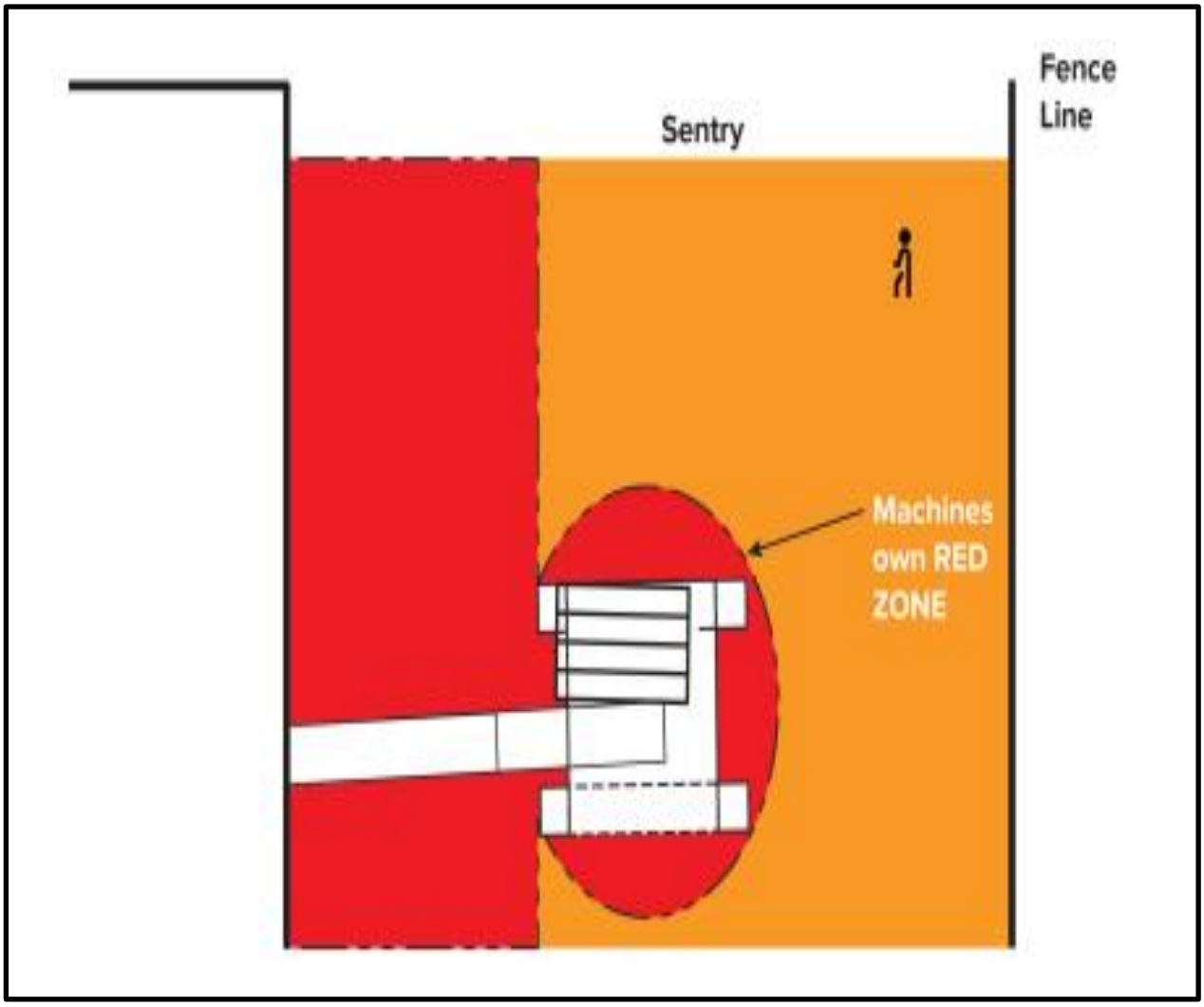
When high reach/straight arm works are being carried out, the area that is being demolished in line with the front of the tracks and the rear slew radius should be classed as a red zone area.

The high reach/straight arm machines own RED ZONE is only live when the machine is in operation. It is not live when made safe or when the machine operator is out of the cab.

i.e., There will be a lag in the correct zone marking on the ground and the machine will be working in what was the previous RED ZONE.

To remove additional risk, Downwell Demolition, where possible, will remove the need for a person to have to work near or in the vicinity of live machine activity when suppressing works with water and replace with dust suppressant machines. Where the purple line is showing is best practice to separate live works with the use of barriers as mentioned above and treat beyond that as a red zone.





Asbestos has been identified within the buildings from the survey, this will firstly be removed by our licensed contractor Innercity environmental.

Upon completion of the asbestos works the structure will be handed back to the Downwell site manager who will walk the structure with the asbestos supervisor and sign the works off.

All relevant if required air clearances and re-occupation certificates will be issued by an independent UKAS accredited analyst.

This structure will be demolished using a straight arm/standard excavator, this will all be fitted with hydraulic muncher, cracker, or grapple attachments.

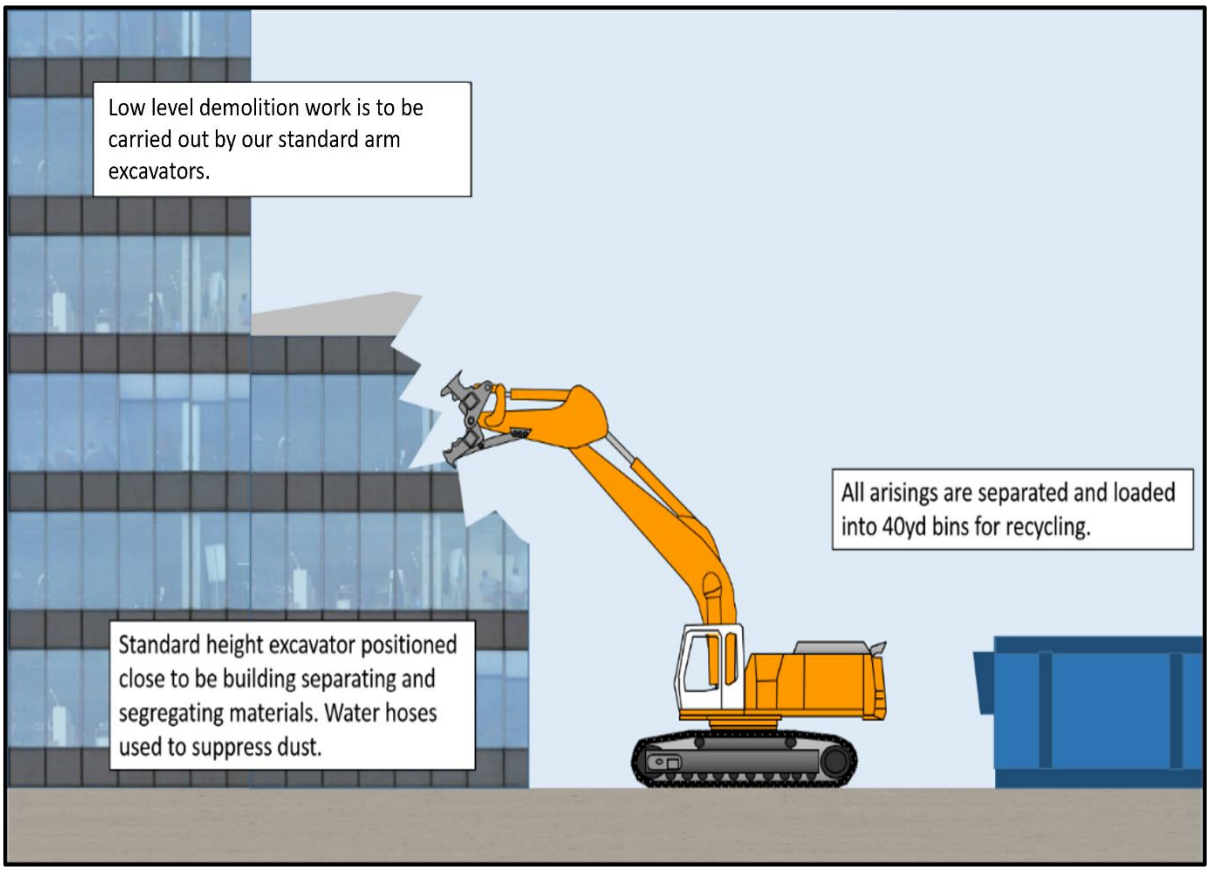
Before the start of any structural demolition works services are to be checked to ensure they have been appropriately disconnected. Isolation certs should have been received by Downwell from London Square and show where the services have been isolated and the location on the site boundary of the disconnection.

The building must be checked for personnel or intruders before the start of the building being demolished with doors sealed to prevent access to the structure.

The Dust boss will supply a direct feed of water suppression to the required areas from the ground.

Warning signs will be posted on the fence to warn of the dangers of entering the demolition exclusion zone.

NO ACCESS IS ALLOWED WITHIN THIS ZONE DURING THE DEMOLITION SEQUENCE!



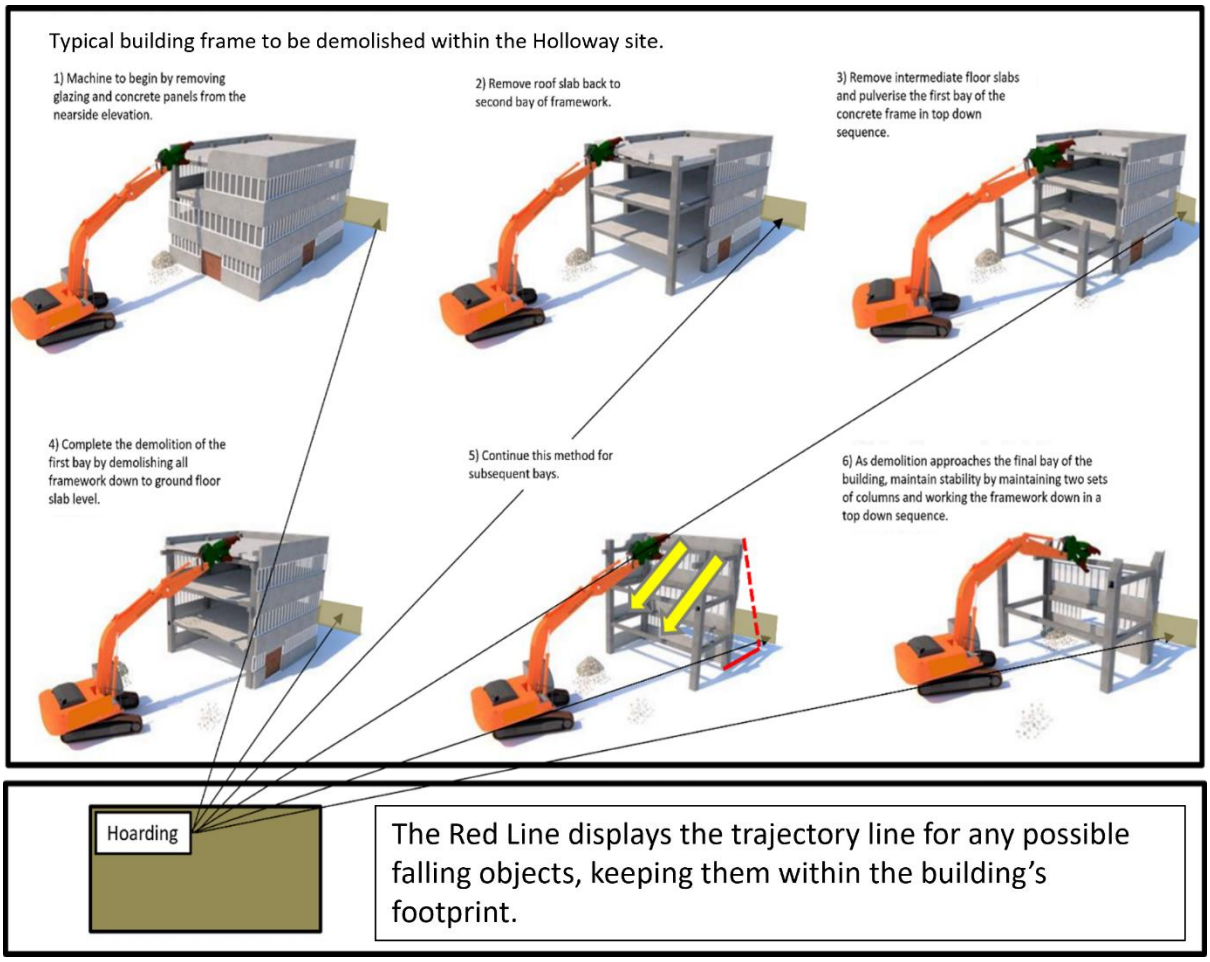
The front of the buildings is to be demolished first this consists off a typical concrete steel framed brick clad structure.

Starting at the west gable end working east through the building the excavator will proceed to peel away the remains of the roofs steel into manageable pieces progressing down to the outer skin of brickwork and exposing the area.

The remaining structure will be demolished using a straight arm/standard excavator, these will all be fitted with hydraulic muncher, cracker, or grapple attachments.

Warning signs will be posted on the fence to warn of the dangers of entering the demolition exclusion zone (Red, Amber, and Green).

A banksman/operative will be positioned at the front and rear of the building as depicted below prior to any demolition works starting.



A banksman will be in attendance to guide the excavator operator onto the steels so they can be sheered in a gentle controlled fashion.

The excavator will proceed to the reduce the remaining buildings 1 full bay at a time in line with the sequence above, progressively clearing debris to ground level as the works progress to remove any potential for overloading any given section of slab at any time. The demolition method will always involve stepping the building down to maintain structural stability.

Reviews of the building make up and methods are to be carried out continuously throughout the demolition and this RAMS document will be updated to reflect any changes in the demolition method.

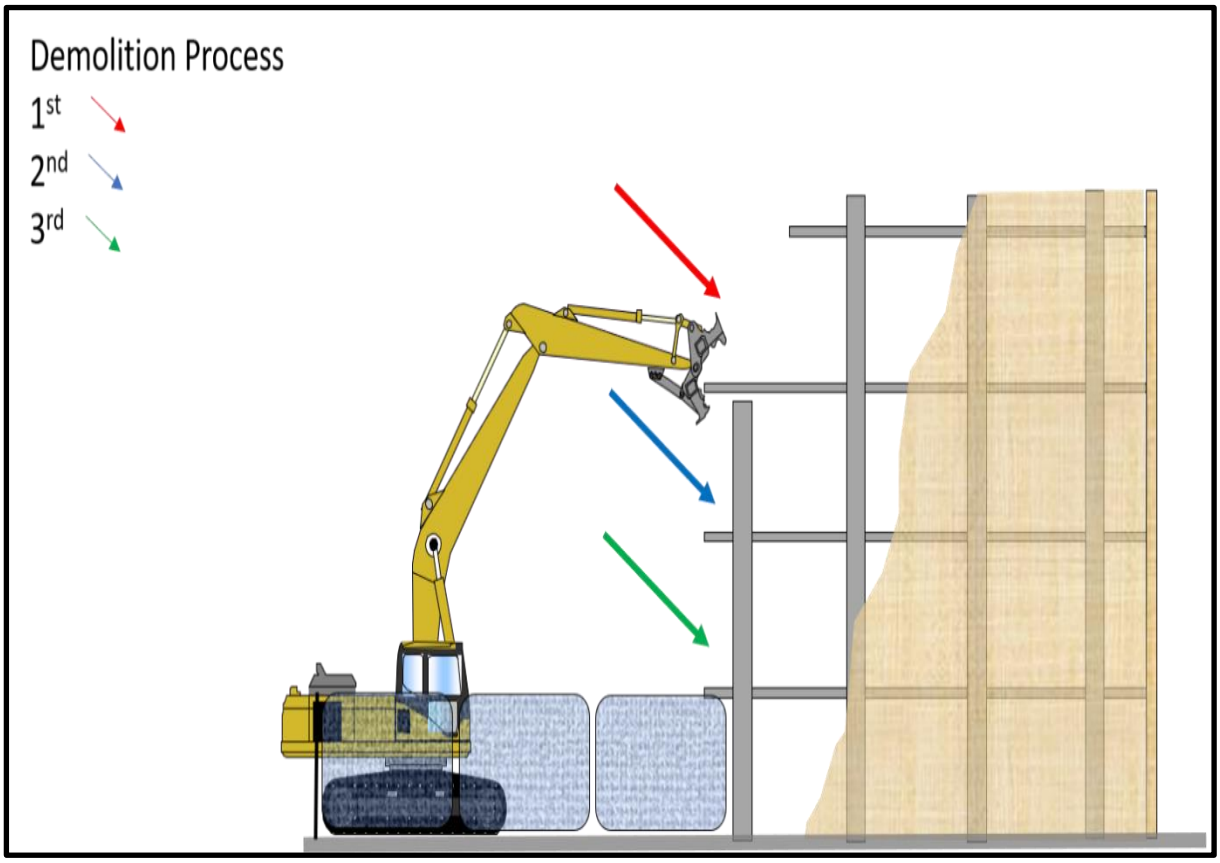
The material will be allowed to fall to the internally to the floor below. For every 2no bays worked back into the building, 1no bay must come down on the floor below. This not only maintains the structural integrity of the building but allows the operator to see what they are always working on.

The buildings are to be demolished so that the materials stay within the footprint of the structure as much as possible. No large sections of masonry are to be demolished and permitted to fall to the ground in large lumps. The brick work must be munched into sections no larger than 500mm^2

All Demolition arisings will be stockpiled for removal to the crushing area, as the brick work is stockpiled operatives are to pick through the hardcore removing any pieces of timber, plastic etc. Operatives completing the picking must stand at a safe distance from the machine and always out of the slew radius. Gloves must be worn and an FFP3 mask if the area is dusty.

The excavator will proceed to pull apart the roof structure in small manageable sections and lower them to the ground for processing. The excavator operator must use a steady and controlled manner. The timber sections if any can be loaded directly into a 40yd skip for recycling.

The demolition process described above will continue down to the buildings slab completing the demolition works.



2.39 Design, Work Methods & Sequence

The demolition method is to be checked weekly by the Demolition Supervisor so that it remains an accurate account of the works on site. If the work method or sequence is required to be altered to suit the site conditions, then the demolition method statement must be revised.

The new revision must then be issued to the site team where everyone completing the works can be inducted.

All changes must be trackable and clearly visible in the new revision. The author must also sign their name on the revision and get the changes approved by a Downwell Director.

2.40 Ecology

There are ecology works required onsite, a recent dusk survey by ecologists established the presence of bats on the site and the below location of the roosting sites. Workers are asked to be vigilante when working on the site and moving stored materials and within excavations, i.e., for hedgehogs

and badgers, should these or any other species of animals be found to be nesting on site, works should stop, and the Site Supervisor informed immediately.

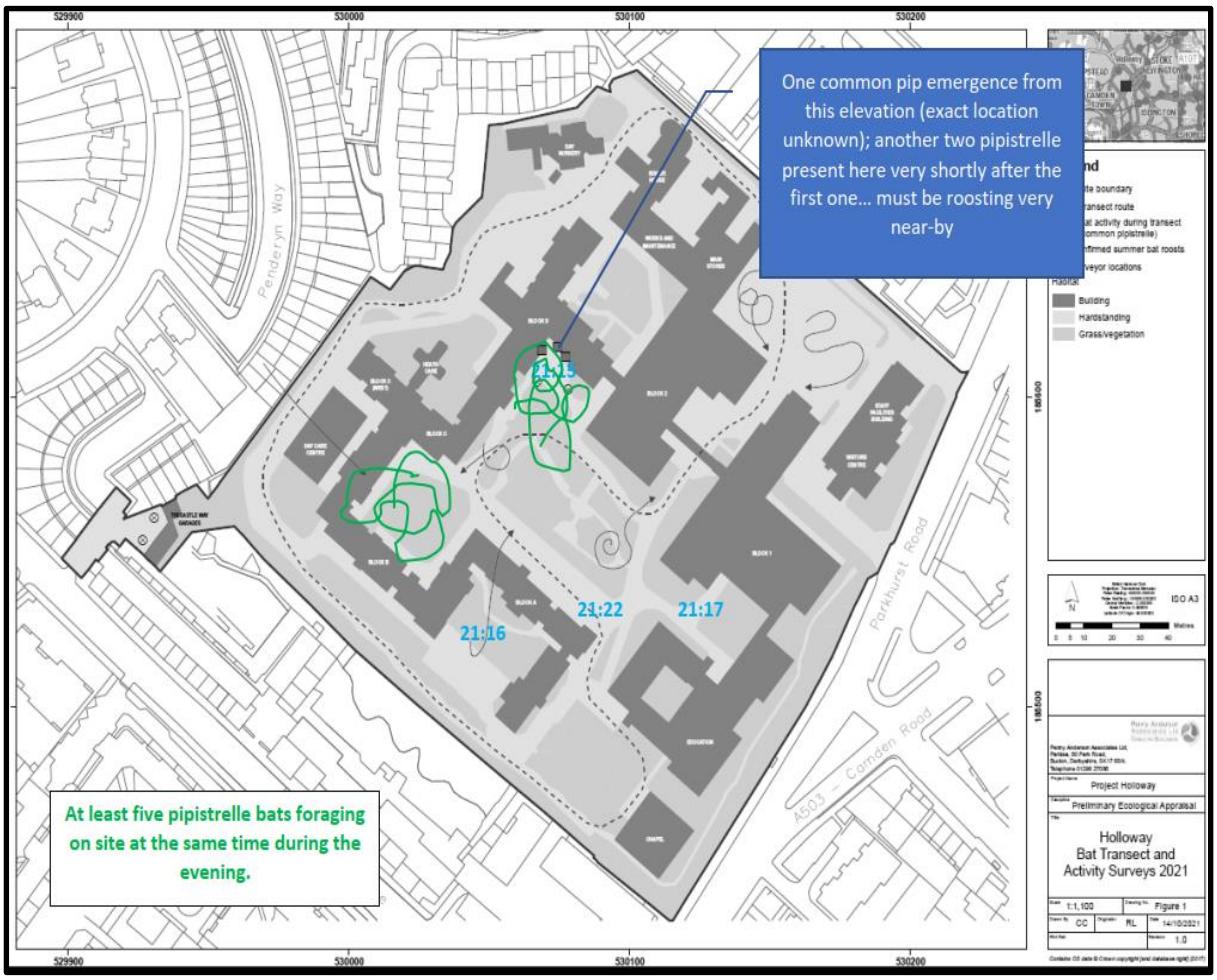


Figure 1 - Bat survey carried out in May 2022

2.41 Resident Liaison

Downwell and London Square will be handling all aspects of the community liaison. They will adopt the following practices to ensure that the impression of the site is a positive one and that our works affect the surrounding neighbours as least as possible.

Potential receptors which may be affected by the works have been identified and consulted by Downwell and London Square. All parties are to be kept up to date throughout the demolition works.

Downwell will review the demolition management plan should there be any comments on vibration, debris, and dust management. These will be acknowledged and addressed in a revised DMP if required, which will be confirmed as acceptable by all parties.

Downwell and London Square if required will carry out a newsletter drop to the local businesses/residents to notify them of the works, explain site setup and logistics and provide contact details to address any queries.

- Downwell are aware that issues regarding pollution and dust migration. The requirement in reducing the noises omitted during the works was a great factor in deciding the demolition methods to use.
- London Square will issue a programme of Downwell's work to all properties on the boundary of the site that are affected by the works.
- Prior to the start of the demolition works a resident's letter will be drafted. This will be checked off by all relevant parties before the letters are dropped to a selected area around the site.
- Downwell will maintain on site, a system for recording any incidents and any ameliorative action taken.
- Vehicles leaving the site will be checked for loose debris and have their wheels cleaned if excessively dirty. The roads surrounding the site will be regularly checked for debris and dirt. If identified this will be cleaned at the earliest convenience. Run-off water is to be allowed to disperse down the surface water drainage that has had a filter cover placed over it to prevent soil/dirt from entering the drain.
- No vehicles will be permitted to idle outside the site during the early hours of the morning. Drivers will be instructed to come to site within the below working hours. Any drivers that come to site must not be allowed to block access to neighbouring properties.
- During breaks the workers will not be permitted to congregate outside the neighbouring properties. Shouting, swearing and other nuisance behaviour will not be tolerated by our staff.
- The working hours on site will be 08:00 – 18:00 (Light permitting) Monday-Friday and Saturday 08:00 – 13:00.

In the event of a complaint from a neighbour or a member of the public in relation to any site activity, they will be given the Site Managers details.

Should complaints about odour, noise, dust, or vibration be received, they will be addressed directly by Downwell to enable results at the time of the complaint to be reviewed, and where appropriate immediate actions employed to rectify the problem.

Records will be kept of all complaints, including details of any actions taken.

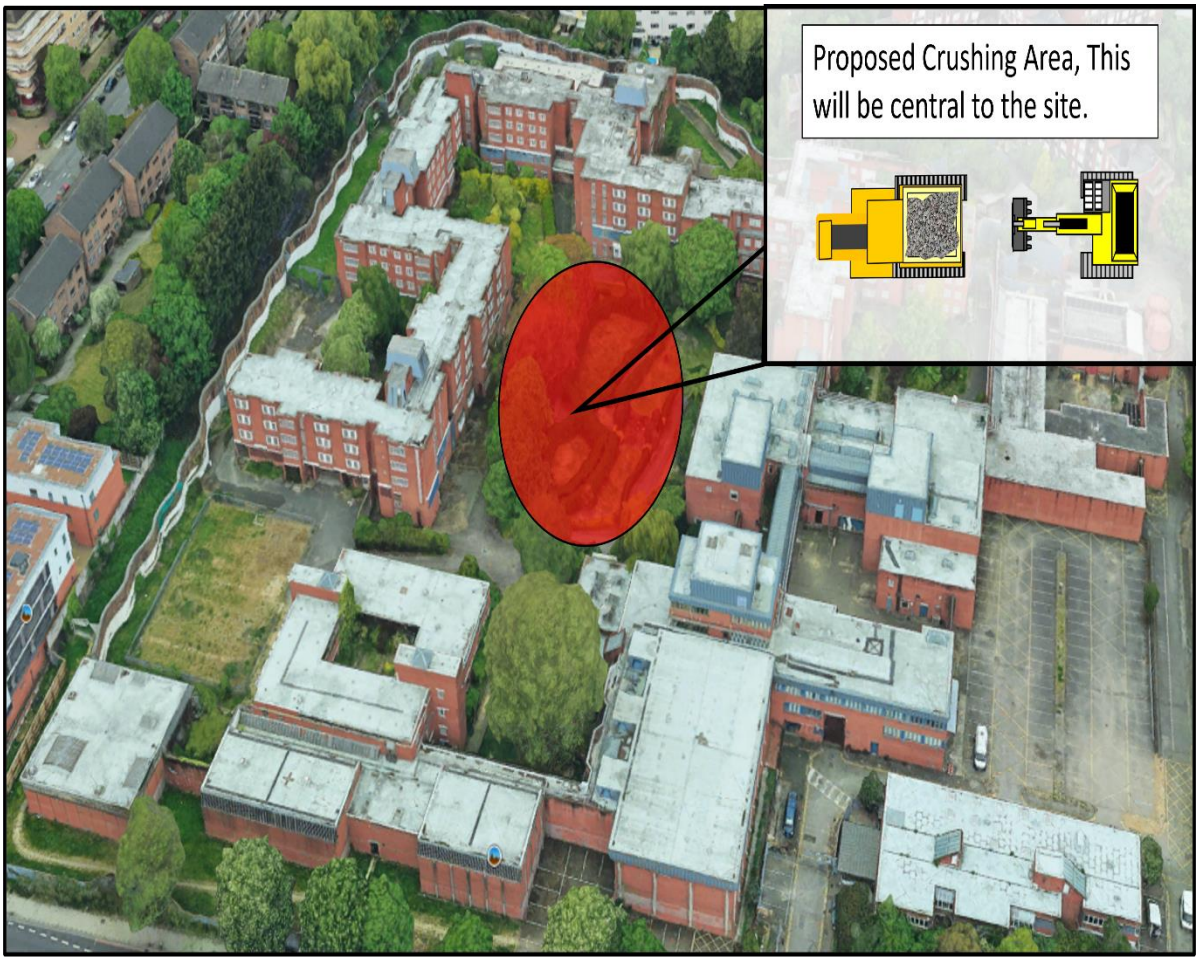
2.42 Concrete Crushing

Crushing is required for this project. At a point in the works where it becomes required a mobile crushing plant will be brought to site to crush the hard demolition arisings down to 6F2 materials.

The materials will be crushed into a location agreed with London Square to facilitate the follow-on works sequence so as not to double handle the materials. This must be marked on a drawing by London Square and submitted to Downwell in good time so that previous operations during demolition works allow the materials to be stockpiled in the correct location ready for the crusher's arrival.

The crusher operator is not to work on the crusher whilst it is being operated. He may only get on the crusher once it has been shut off. If the crusher becomes jammed it must be shut down before attempting to unblock it.

The crusher is to be positioned in a strategic location of the site, away from any neighbouring properties. This will allow easy loading from the stockpiles and subsequently an ejection of crushed materials near the final stockpile area. An adequate water supply is to be attached to the crusher so that the dust is suppressed before leaving the crusher belt. Additional hoses can be used to dampen the stockpiles before and after the crushing.



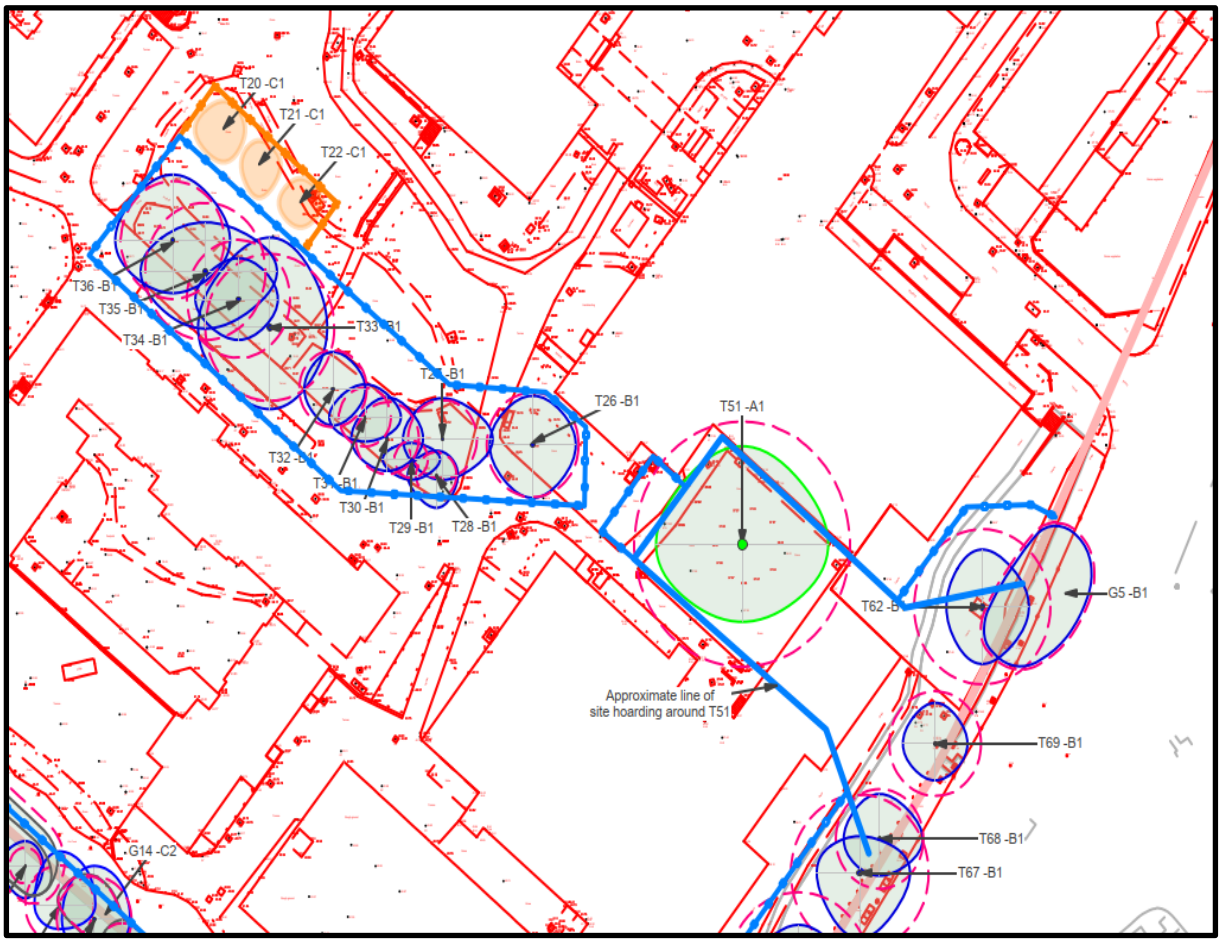
Heras fencing or barriers are to be erected where practicably possible around the crusher to protect site operatives from the magnetic belts that remove small bits of metal and rubbish during the crushing procedure.

An excavator will position itself on the stockpile of material to be crushed. It will begin to progressively load the material into the hopper of the crusher. The operator of the excavator will keep an eye on the level of the crushed material around the belt. Once the crushed material starts to reach the top of the belt the excavator will move down to that end of the crusher and clear the heap of crushed material.

The stockpile of crushed material is to be left in an agreed location with London Square, this will be a sturdy stockpile with battered sides that are not too steep.

2.43 Tree Removal

Downwell are to remove trees demarcated by London Square within the demolition site boundary (if required), As detailed within the Arboriculture Impact Assessment, any trees to be retained that support the planning application, including root protection zones, will be fenced off by London Square prior to Downwell Demolition works.



2.44 Drainage Routes

The current drainage routes within the site are to be identified and marked out by London Square. Downwell will only be using water from the agreed London Square water source, all clean run off water will disperse from site down the agreed drainage system. Any drains identified by London Square to Downwell requiring filters or bungs will be placed prior to any works starting.

2.45 Environmental Considerations

- **Water Contamination** – the site team are to be made aware of the control measures in place, eliminating the mitigating risk associated with contamination of the associated water source.

- **Noise** – Operatives, contractors and visitors are to wear hearing protection in any hearing protection zones that have been established (these will be identified by the relevant signage).

  No noisy works are to begin before 08:00am. This will reduce the impact of the works on surrounding residents.

  Vehicles will not be permitted to idle their engines outside the site early in the morning. They must switch off their engines as soon as they arrive to site.

- **Dust –** Control is paramount and kept to a lower level a level as reasonably practicable. To mitigate nuisance dust to the surrounding properties, the workface itself will be doused with water initially to dampen at source, water hoses held by operatives or secured to barriers will be positioned to capture any nuisance dust.

  The dust suppression system (dust bosses) is a tried and tested method of effective dust suppression, units are mobile and can be positioned as required throughout works to be as effective as possible in the reduction of dust emissions, water is fed via metered hydrant, for constant supply.

- **Dirt –** All reasonable measures will be taken during demolition works to prevent dirt being deposited on the site access road and main road. Such measures will include, but are not limited to:
  Good housekeeping on site, checking wheels for debris before it leaves site.

  Regular inspections of the roads will be completed and if deemed necessary a road sweeper will be employed to make passes along the roads surrounding the site.

- **Control of Vibration** – This will be helped with the use of the most modern low vibration tools available in the industry for the task will be used to reduce the level of noise emissions from the tools as far as reasonably practicable.

  No Large sections of masonry or concrete ae to be demolished and allowed to fall to the ground. Sections of the building will be reduced to no larger than 500mm^2

  When loading bins with demolition arisings the material must be initially lowered into the bottom of the bin and not dropped from height. This will also help to reduce noise.

When skips need compacting by the arm of the machine this must be done carefully and not too voraciously. The attachment is pushed down gradually and not slammed down to hard.

2.46 First Aid

First Aid on site will be in accordance with the requirements of the Health and Safety (Furst Aid) regulations 1981 and will be available prior to works starting on site.

This will include:

- Adequate amount of first aiders onsite
- Fully stocked first aid box.
- Eye wash station.
- First aiders training certificates up to date.
- An Accident report book (will be located in the site office).

Signage must be posted around the site of works indicating Site First Aiders and Location of First Aid boxes.

2.47 Risks &Controls

Risk is assessed in accordance with the HSE's Guidance Note INDG16 "Five Steps to Risk Assessment" as: -

- Look for hazards
- Decide who might be harmed and how
- Evaluate the risks and decide what control measures are required
- Record the findings
- Review the assessment and revise if necessary

For a contract such as this, we separately assess Health and Safety, COSHH and the Environment.

A full and thorough risk assessment will be carried out prior to any works commencing.

The following risks and control measures for the works will be:

- Working around a live sub-station
- Fire (combustible materials not allowed to build up, machines and fuel storage away from buildings, no smoking on site)
- Any hot works to be carried out under a Hot Works Permit.
- All work to be controlled by competent Demolition Manager/Supervisor
- All operatives to be competent trained and CSCS/CCDO/CPCS accredited
- All operatives to use appropriate personal equipment as outlined in the induction and displayed around the site
- Exclusion zones with appropriate signage will be erected where necessary. These exclusion zones need to include adequate segregation between plant/site traffic and pedestrians moving around the site (These must be communicated to everyone on site)

2.48 Compilation H&S File

Downwell use a construction management system for the tendering and project management. The system is called Deltek.

The system is accessed via a web browser by all our management team including our site supervisors.

All documentation relating to the Health and Safety file is logged into the Health and Safety file relating to that project on our system under each specific project.

The system logs copies of emails relating to the project.

Downwell also keep a manual copy of the Health and Safety file, this is kept on site.

All the health and safety information for the site is forwarded to the Principal Designer appointed for the project.

A full Health and Safety file will be sent to the client upon completion.

2.50 Risk Assessment

RISK ASSESSMENT		
Site Location	Date of Assessment	Assessed by
Holloway Prison	06/07/22	David Goulding
Description of Work Assessed	Demolition Works on former prison site	

0 – 5 = Low Risk 6 – 10 = Moderate Risk 11 – 15 = High Risk 16 – 25 = extremely high unacceptable risk		Severity of the potential injury/damage				
		Insignificant damage to Property, Equipment or Minor Injury **1**	Non-Reportable Injury, minor loss of Process or slight damage to Property **2**	Reportable Injury moderate loss of Process or limited damage to Property **3**	Major Injury, Single Fatality critical loss of Process/damage to Property **4**	Multiple Fatalities Catastrophic Loss of Business **5**
Likelihood of the hazard happening	Almost Certain **5**	5	10	15	20	25
	Will probably occur **4**	4	8	12	16	20
	Possible occur **3**	3	6	9	12	15
	Remote possibility **2**	2	4	6	8	10
	Extremely Unlikely **1**	1	2	3	4	5

Persons Affected				
E=Employee	VS=Visitors	YP=Young Persons	CN=Contractors	PB= Members of the public

Ref №	Risk Assessments
1	Noise & Noise Nuisance.
2	Slips, Trips and Falls.
3	Material Transport & Traffic Management
4	Loading and Unloading of Roll On/Off Skip Handler
5	Dust (including silica)
6	Fire
7	Use of Machinery including 360 Tracked Excavator
8	Operations which could present a hazard to the public and third parties.
9	Temporary instability of structure
10	Demolition arising's falling into or onto adjacent live area's
11	Oxy-Propane cutting
12	Manual Handling
13	Falling and Flying Debris
14	Hand Tools in Demolition
15	Leptospirosis

Assessment Number Hazards identified & Risks Associated	Risk Ranking			Persons Affected	What is Already in Place Main Control Measures and Extent of Controls	Residual Risk Ranking		
	Probability (P)	Severity (S)	Significance (PxS)			New Probability (P)	New Severity (S)	New Significance (PxS)

1. Excessive Noise ***Hazard:*** Noise induced hearing loss. Complaints from site neighbours.	3	3	**9**	**E,** **CN,** **PB,** **VS**	***Controls:*** • Use most modern silenced plant available. • Percussive demolition tools are not to be used. • Operatives, contractors and visitors to wear hearing protection in hearing protection zones that are established. • Noise monitoring equipment to be utilised in sensitive areas as required. • Materials are to be lowered into bins and not dropped ***Extent to which they control the risk:*** • Reduces the levels of noise emissions. • Brings the person's noise exposure levels below the Noise at Work Reg's 2005. • Ensures noise exposure can be monitored when required with work procedures amended as required. • Reduces the exposure to neighbouring properties • Reduces the noise pollution from the site	1	3	**3**

2.Slips, Trips and Falls ***Hazard:*** Possible injury whilst traversing around the site • Poor housekeeping. • Spillages of liquids. • Mud and loose rubble. • Uneven floors and ground areas. • Obstructions. • Inadequate lighting. • Inadequate signage. • Open edges where there is a risk of a fall. • Work at height.	4	3	**12**	**E, CN, PB, VS**	***Controls:*** • Good housekeeping to be maintained on site and public access routes to the outside areas of site. • Clear up any spillages promptly. • Eliminate uneven floor and ground areas where reasonably practicable. • Maintain clear access routes – clear away any accumulation of rubbish, materials, cables and hoses to prevent obstructions. • Install adequate lighting to work areas, corridors and stairs. • Display information/safety signage. • Erect guardrails to open edges. ***Extent to which they control the risk:*** • Reduces the risk of slips, trips and falls and possible injury to the public, visitors and to site personnel. • Provides adequately lit work areas and access/egress routes to prevent possible slips, trips and falls. • Allows people to know of possible dangers and safe pedestrian routes.	1	3	**3**

3.Material Transport & Traffic Management ***Hazard:*** Possible physical injury, Collision, mud left on roads	3	5	**15**	**E, CN, VS**	***Controls:*** • Vehicles to be fitted with reversing alarm / flashing amber beacon. • Ensure that all vehicles use the agreed traffic routes on site, and traffic management plan is adhered to. • Vehicles to be banked at all times while on site, loading/unloading. • Site entrance gates manned by trained traffic marshal • Site gates kept closed at all times when not in use. • Vehicles to be checked for loose or lodged debris before going on the public road. ***Extent to which they control the risk:*** • Helps to avoid collision with objects, vehicles and personnel. • Reduces the risk of impact injury occurring. • Will make others aware of the presence of danger. • Keeps the site gates secure • Prevents debris from spreading on the surrounding roads.	1	5	**5**

4. Loading and Unloading of Roll On/Off Skip Handler ***Hazard:*** Crushing of personnel Tipping of vehicle Falling objects	3	5	**15**	**E, CN, VS,** **PB,**	***Controls:*** • Ensure unnecessary personnel clear of work/skip area. • Ensure truck is in line with laden skip before loading. • Ensure maximum sideways slope of 5 degrees. • Always check the area for the potential of overhead cables. • Loads to be levelled prior to recovery and sheeted prior to leaving site. • Operatives to wear all necessary PPE once on site. • Banksmen to be in position when vehicles are reversing. • Vehicle drivers to carefully exit cab when required. • Vehicle drivers to wear full mandatory PPE when exiting the vehicle. ***Extent to which they control the risk:*** • Will keep persons away from falling objects/swinging load. • Reduces risk of vehicle overturning. • Reduces risk of electrocution. • Will help to protect against falling or flying debris. • Helps to avoid collision with objects, vehicles and personnel. • Keeps the driver visible and protected from injury.	1	5	**5**

5. Dust Including Silica ***Hazard:*** Dust inhalation Silicosis Lung cancer COPD (chronic obstructive pulmonary disease) Asthma Irritation to eyes Complaints from site neighbours	3	3	**9**	**E, CN, PB, VS**	***Controls:*** • Limit number of persons exposed to dust where practicable. • Screen off areas to prevent dust spreading. • PF3 disposable masks to be worn during demolition works when required. • All mask users to have been face fit tested. • Use water during demolition to suppress dust at ground level. • Keep levels down so far as reasonably practical below the Workplace Exposure Limit (WEL) of 0.1 mg/m³ Time Weighted Average (TWA) over an 8hr period. • Employees to wear suitable eye protection. • Toolbox talks to given to all operatives throughout the works to include dangers of dust, silica dust information, eye protection and fire. • Water suppression to control nuisance dust. ***Extent to which they control the risk:*** • Reduces the amount of airborne dusts and the possible effects. • Protects neighbouring properties from possible contact with excessive dust. • Protects site operatives from possible contact with excessive dust. • Raises awareness of dangers of inhaling respirable and inhalable dusts.	2	3	**6**
6. Fire ***Hazard:*** Possible or potential death, Burns, Plant Damage, Possible property Damage	3	5	**15**	**E, CN, PB, VS**	***Controls:*** • Fire plan to be in place and displayed at various points around site. • Fire extinguishers suitable for the possible types of fire to be available on site. • Minimize piles of flammable materials and no intentional fires on site. • Air horns to be provided at fire points to raise alarm. • Combustible debris to be cleared away as they are created ***Extent to which they control the risk:*** • Makes persons on site aware of what to do if a fire occurs and reduces the likelihood of a fire occurring. • Gives warning for evacuation of site. • Ensures adequate time to check for any signs of smouldering materials or points of ignition. • Reduces the risk or arson	1	5	**5**

7. Use of machinery including 360 excavators ***Hazard:*** Potential physical injury/crushing/death Potential collisions, property or plant damage Possible damage to hearing Tipping of plant	4	5	**20**	**E, CN VS**	***Controls:*** • Only operatives trained to CPCS standard for specific plant used to operate machinery. • Each machine to be inspected prior to use and entered in to the PUWER or LOLER register as applicable once a week. • Machines to be banked at all times while in use. • Mirrors or CCTV to be in place on machine to allow for 360˚ vision for machine operator. • Provide flashing amber light and / or reversing warning siren for all plant required. • Only operate on firm level ground to ensure centre of gravity at all times. • Safe working areas to be clearly signed and inducted to workers. Hard barriers to be used. ***Extent to which they control the risk:*** • Machine will be used in a competent safe manor. • That the machines are in a state fit for their use. • Protects the user from possible dangers while operating the machine. • Will reduce the risk of hearing damage. • Reduces the risk of machine coming into contact with object or person therefore preventing injury or damage. • Will reduce the risk of vehicles or plant from tipping over during operation.	1	5	**5**

8. Operations which could present a hazard to the public and third parties. ***Hazard:*** Injury to the public or third party	5	4	**20**	**E, YP, PB,** **VS,** **CN**	***Controls:*** • Site boundaries to be guarded using timber hoarding and lockable gates. • Warning notices to be displayed around exclusion zone and site boundaries. • Induction training and PPE to be provided for all visitors to site. • Safe working practices to be employed. • Banksmen to be used for controlling traffic movements and to marshal pedestrian traffic on the shared access road. • Constant interface between the public and local authorities as required. • In highly sensitive areas or periods banksmen to communicate to machine operators when pedestrians are passing • Check structure prior to starting work for any 3rd parties or wildlife. ***Extent to which they control the risk:*** • Will help prevent unauthorised access onto site. • Will warn people outside the site of the dangers within. • Induction training and PPE to be provided for all visitors to site. • Will inform of the dangers on site before gaining access, PPE will help prevent injury. • Will help reduce accidents and unnecessary discharge of dusts/fumes. • Will reduce likelihood of impact with member of the public. • Will help control the work sequence and allow for safer working practices. • Will help control and monitor the flow of pedestrian traffic. • Will ensure that structure is empty of 3rd parties and wildlife prior to commencing works.	1	4	**4**

9. Temporary instability of structure ***Hazard:*** Possible uncontrolled Collapse Possible physical Injury Possible plant Damage Operatives, contractors and member of the public being hit by falling debris.	3	5	**15**	**E, YP, CN, PB, VS**	***Controls:*** • Control access to structure prior to and during demolition. • Trained/experienced operatives to carry out demolition works and continually asses the structure as work progresses. • Maintain demolition exclusion zones with relevant warning signage attached. Exterior of walls to be inspected at the end of each shift to look for signs of cracking or instability. ***Extent to which they control the risk:*** • Reduces the risk of injury to operatives and members of the public. • Reduces the risk of uncontrolled collapse of structures. • Ensures risks to operatives are minimised, utilising remote demolition techniques where possible. • Ensures that operatives and members of the public are segregated from high risk areas.	1	5	**5**
10. Demolition arising's falling into or onto adjacent live areas, public highways, neighbouring properties ***Hazard:*** Possible damage to adjacent property Possible physical injury to member of the public	4	5	**20**	**PB**	***Controls:*** • Set up demolition exclusion zone around each structure/phase and demolish in a controlled manor using demolition procedures as detailed in this method statement. • Use competent, experienced and trained demolition personnel to carry out the works. • Trained operative to bank machines during works close to the boundary line. • Sequence works to minimise risk when working in close proximity to the site boundary. • Ensure machine operators are aware of the proximity they are working to the site boundary. ***Extent to which they control the risk:*** • Reduces the likelihood of debris falling into adjacent properties. • Trained operators should be aware of the dangers involved and be able to operate in a safe manner. • Reduces the risk of machinery from over sailing boundary line and coming into contact with the public or other vehicles and possible damage to property. • Reduces the likelihood of debris falling into adjacent live areas.	1	5	**5**

11. **Hot Cutting (Oxy/Propane)** ***Hazard:*** Fires Burns Explosions Respiratory problems Systemic poisoning	4	5	**20**	**E, CN VS**	***Controls:*** • Only trained/experienced operators undertake the task. • Hoses and bottles are to be inspected daily for damage or leaks. • Box goggles are to be used, with a housing made to comply with BS EN175 and fitted with the appropriate filters to BS EN 169. • Hands, arms and legs are to be covered at all times whilst cutting. • Where necessary leather gauntlets, jackets and spats shall be issued. • Coveralls are to be of a flame resistant material. • A permit to work system is to be in place for all hot works. • Cylinders are to be kept upright and secure. • Hearing protection is to be worn. • Fire risk of building structure to be assessed before hot works begins. • RPE to be used with filter conforming to EN143 P2 where there is a risk of poisonous fumes being produced through the cutting process i.e. lead paint finishes or galvanised surfaces. ***Extent to which they control the risk:*** • Trained/experienced operators should be aware of risks and operate equipment safely. • Will help prevent failure of hoses during operation. • Helps prevent injuries to operator and any persons nearby. • Provides extra protection to operator. • Prevents clothing catching fire. • Will reduce the possibility of fire both during works and after works have finished. • Will be able to react rapidly to extinguish small fires should they occur. • Reduces the risk of cylinders falling. • Helps prevent damage to ears. • Reduces the risk of a fire occurring. • Reduces the risk of inhalation of poisonous or toxic fumes.	1	5	**5**

12. **Manual Handling + Manual Work** ***Hazard:*** Possible physical Injury	4	3	**12**	**E**	***Controls:*** • Operatives to assess physical capability prior to lift. • Utilise mechanical lifting and carrying aids where possible. • Team lifts to be employed where necessary. • Operatives to be trained in kinetic method of lifting. • Ensure good housekeeping standards i.e. site kept tidy/waste build-up minimized. • Operative to wear PPE against substance or material being carried as required by the COSHH assessment. • Maximum weight for repetitive lifts not to exceed: Male = 20kgs, Female = 15kgs ***Extent to which they control the risk:*** • Ensures operative capable of carrying out the task. • Reduces the amount of manual lifting required. • Team lifting will help reduce strains. • Ensures operative capable of carrying out the task. • Helps ensure clear/safe route for carrying load thus reducing potential for trips / falls. • Provides some protection to operative against injury and contamination. • Will reduce the risk of workers suffering injuries from lifting and handling.	2	3	**6**

13. **Falling and Flying Debris** ***Hazard:*** Damage to Structures property Injury to operatives or third parties	3	5	**15**	**E, CN, PB, VS**	***Controls:*** • Demolition activities carried out in accordance with BS6187, adopting techniques which reduce falling/flying debris to a practical minimum. • Works will be managed and suitably secured to present a physical barrier to entry of works area. • Banksmen will be present throughout works in sensitive areas to ensure safety when arisings are dropped/ felled. • Communication to be maintained between operatives during any dropping of arisings. ***Extent to which they control the risk:*** • Minimises the likelihood of passers-by/third parties coming into contact with arisings. • Ensures security and control of the site perimeter where demolition is taking place and falling materials are likely. • Ensures operatives are made aware of ongoing activities and at no point work below falling debris.	1	5	**5**

14. **Hand Tools in Demolition** ***Hazard:*** Falling materials Falls due to access problems Impact with the tool Musculo skeletal injuries HAVS Inhalation of dust	4	2	**8**	**E, CN, VS,** **PB**	***Controls:*** • Ensure that the tool is correct for the job. • Ensure that the tool is in good working order. • Ensure that the operative is instructed how to use the tool safely. • Ensure that lighting is sufficient. • Ensure that the access is safe with any working platform compliant with Work at Height Regulations. • All leading edges must be guarded with double rails and toe boards to comply with Work at Height Regulations. • Work should be suitably scheduled/phased. • PPE appropriate to the task is issued and used. • Select low vibration tools and limit the use of equipment to restrict vibration dose. • Work to manufactures guidance and rotate work force so as not to expose workers to high levels of vibration. • Keep hands warm/massage fingers during work (gloves to be worn). • Only trained/experienced operators to operate equipment. • Carry out six monthly health surveillance checks. ***Extent to which they control the risk:*** • Will reduce the likelihood of strains, sprains etc. • Helps to reduce the risk of injury from breaking tools. • required & the risk of 62musculo-skeletal injury. • Should ensure that all personnel work to the safe method. • Will help to prevent slips, trips and falls. • Should prevent operatives working below dangerous areas. • Will help to protect against falling or flying debris, cuts and noise when used correctly. • Will reduce vibration and the risk of developing HAVS. • Warming the hands improves blood circulation and reduces the risk of developing HAVS • Health surveillance should identify symptoms at an early stage and ensure that operatives do not develop HAVS.	2	2	**4**

15. **Leptospirosis** ***Hazard:*** Disease from vermin. Clearing of fly tip material and general rubbish.	3	5	**15**	**E, CN, VS**	***Controls:*** • Wear issued PPE and maintained rigorous hygiene. • Training of operatives with issue of information cards at site induction. • Maintain good housekeeping, dispose of discarded food in a closed bin. ***Extent to which they control the risk:*** • Will help prevent contamination/spread of disease. • Provides information to operative of disease and what to do if contracted. • Prevents attracting vermin and spread of disease.	1	5	**5**

DOWNWELL GROUP
Enabling Solutions

Acknowledgment Sheet

Project Name & Number	
Project Start Date	
RAMS Inducted by	
Document Name & Revision	

By signing below, I confirm that I have been given the required information to complete the works on site in a safe manner and am aware of all the requirements on site to protect mine and everyone else on sites safety.

First Name	Last Name	Signature	Date

APPENDIX 4 – EXTRACT OF NATURAL ENGLAND BAT LICENSE APPLICATION

WML-A13a-E5a&b – WORK SCHEDULE FOR BAT

ANNEXED LICENCE

Site name and address (as stated on the application form or licence granted): Former Holloway Prison, Parkhurst Road, London N7 0NU

Please ensure that the work schedules are S.M.A.R.T and appropriate timescales are provided for each activity, to fit with order of events.
Complete these schedules to show timings for all categories of work (mitigation and compensation measures), and to show the main construction period. The most common activities are listed here, and you can add up to 6 more if needed. Leave blank if not applicable. Enter timing by stating **start and end dates, to nearest month and year** (see first lines for examples). Enter comments if you need to clarify timings. For very complex schemes (e.g. high impact or phased development schemes) if additional lines are needed please do add in. This work schedule will form part of any annexed licence.

E5a

PLEASE INCLUDE DATE OF SUBMISSION (e.g. 01 July 2016). This will be referenced in the annex →	

Activity	**Timing**	**Comments**
Pre- development activity		
Example: Bat house creation (in advance of licence)	***Sept-14 to Nov-14***	***Also put up 3 bat boxes before end of December 2015, in advance of works commencing***
Creation of standalone bat feature/s (state completed and fit for purpose if created before licensable works due to commence)		
Installation of bat boxes pre-development works (state completed and fit for purpose if created before licensable works due to commence)	Aug 2022	Installation of two bat boxes on retained trees
Permanent exclusion measures (e.g. use of one-way excluders prior to permanent blocking of access points or destruction of roost)		

Mid-development activity		
Example: Capture exercise (e.g. by hand /hand-held nets, etc)	***Sept-2016***	***By hand***
Pre-works inspection by Named Ecologist or Accredited Agent		
Installation of protective measures (e.g. separation membranes whilst working in lofts)		
Disturbance by noise, illumination or vibration (please specify)		
Temporary exclusion measures (e.g. use of one-way excluders with access re-instated following works)		
Permanent exclusion measures (e.g. use of one-way excluders prior to permanent blocking of access points or destruction of roost)	September 2022	Use of one -way excluders to accessible PRFs by licenced ecologist prior to dismantling
Capture exercise (e.g. by hand / hand-held nets, etc – please state)	September 2022 -June 2023	Capture of bats to be undertaken if found under the following conditions: Under ecological supervision, capture will only take place when it is dry and mild and temperatures have not dropped below 8c for 3 days
Destructive search by soft demolition	September 2022 -June 2023	Dismantling of PRFs by hand under supervision by ecologist. Care will be taken to avoid rousing any torpid bats found. Do not expose the bat or cause the bat to fly out of the roost on its own accord. If a bat is found care should be taken during transfer to a suitable location which may include a bat box.
During development		
Example: Mechanical demolition	***Oct-2016***	***Buildings X and Y will be knocked down after sign off from Named Ecologist***
Mechanical demolition of all or part of structures (once declared free of bats by Named Ecologist or Accredited Agent) – please state	October 2022 -June 2023	
Construction period start and end dates	Feb 2023 - Dec 2027	
Site checks and maintenance during construction	Feb 2023 - Dec 2027	

Post construction mitigation/compensation on 'development' site or other (provide details below)		
Example: Installation of access points and bat boxes	***Feb-2017***	***Access points will be installed after completion of new roof structure; remaining 3 x bat boxes installed by end of this month.***
Creation of mitigation/compensation post development (e.g. installation of bat tubes, bricks, boxes, access points, etc – specify in comments section)	**Aug 2023 - Dec 2027**	**Sixteen bat boxes to be integrated in new buildings (as and when buildings get built)**
Habitat reinstatement or restoration (following temporary impacts)		
Hedgerow or woodland planting (please specify)		

E5b) Post-development works - type a "Y" where each activity will occur for a given year and leave blank for no activity.

Year:	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Monitoring												
Habitat management												
Site maintenance												

Year:	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Monitoring		Yes	Yes									
Habitat management												
Site maintenance												

The Conservation of Habitats and Species Regulations 2017

Bats – Method Statement template to support a licence application

The Method Statement will be used to determine the impact of the proposal on the favourable conservation status (FCS) of the species concerned (Regulation 55(9)(b)).
You are strongly advised to refer to the Bat Mitigation Guidelines.
Please use recent photographs to support your application.

Wildlife Licensing
Natural England
Horizon House
Deanery Road
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BS1 5AH.
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Important advice:

The format below must be used. Please enter text below each heading keeping information as concise as possible.

All maps/figures that will become part of any annexed licence granted must be submitted as separate documents (with the site name and date included on the map/figure. See section I for list – all others may be included within the Method Statement document (e.g. survey maps/figures) if preferred).

A separate work schedule must also be submitted on form WML-A13a-E5a&b to accompany the Method Statement.

A Executive summary

Provide an overview (no more than 1 side of A4) of what works are proposed and how the impacts identified will be addressed in order to ensure no detriment to the maintenance of the population at a favourable conservation status.

The proposal entails the proposed demolition of the former Holloway Prison buildings, prior to phased comprehensive redevelopment.

The surveys have confirmed that Blocks A and D are used as a day roost (and potential hibernation) roost by a low number of common and soprano pipistrelle bats.

It is requested that this licence is granted under Regulation 44 (2) (e) of the Conservation (Natural Habitats, & c.) Regulations 1994, for the purpose of reasons of overriding public interest.

The client confirms that there were no other available options that met the requirements. We therefore believe that this development therefore meets Regulation 44(3)(a) 'that there is no satisfactory alternative'.

The work will have little or no effect on the conservation status of bats in Greater London.

Taking the proposed mitigation measures, it is expected that the proposal will not be detrimental to the maintenance of the species concerned at a favourable conservation status in their natural range (Regulation 44(3)(b)).

B Introduction

B1 Background to activity/development:

Include a brief summary of:

- Why the activity and a licence are necessary (*e.g. bridge structure repairs are required and will affect a known maternity roost of Daubenton's bats, which will be temporarily lost whilst works are being undertaken; renovation works to an office building will result in the permanent loss of three day roosts of common pipistrelle bats; demolition of an existing hospital to be replaced with flats will result in the loss of a brown-long eared bat maternity roost*).

The demolition of the buildings will affect day (and potential hibernation) roosts used by a low number of common and soprano pipistrelle bats, which will be permanently lost; with potential disturbance to bats themselves during dismantling/demolition works.

- Include current status of planning permission (if applicable) *e.g. full planning permission with all relevant wildlife conditions discharged; permitted development; demolition with prior notification of demolition issues resolved*. If the proposal is for demolition only of a structure supporting a bat roost/s, please confirm whether there are plans to develop the site in the future and if so when.

Full planning permission P2021/3273/FUL with one wildlife condition to be discharged

B2 Relationship with other nearby development and cumulative impacts

B2.1 Is the current application part of a larger development project? For example, is it part of a phased or multi-plot housing development that will require more than one bat licence? Enter Yes, No or N/A in the text box below. If yes, note a separate ***master plan*** document will be required.

No, although the construction will be phased, the demolition will not be phased.

Important Advice: If yes to the above, please note that sections in this Method Statement on impact assessment and mitigation measures must explicitly relate *only* to impacts from the works currently proposed.

A project-wide master plan must detail the overall impact assessment and mitigation and explain where, and why, each of the bat licences will be required. The master plan must be included as a separate document to this application: see http://www.naturalengland.org.uk/Images/WML-G11_tcm6-9930.pdf for details that are to be included in this separate document. The separate master plan is expected to take due regard of the overall project to ensure that in-combination effects are considered, and mitigation and compensation measures are both sufficient and coherent.

If the current development is part of a larger development project, summarise very briefly here how the current application relates to the larger project and how the in-combination effects are considered and mitigation/compensation is sufficient.

Important Advice: to accompany this Method Statement also include Figure. B2.1 for a Master plan overview - and see section I "Map checklist" at the end of this document.

B2.2 Apart from any mention in B2.1, please inform us of any past or future development or other projects (in the last 5 years or next 5 years) in the vicinity which may have significantly impacted or are likely to significantly impact on the same population/s of bats as this application (e.g. loss of maternity or hibernation roosts). You must make reasonable efforts to establish this, including discussions with your client and the Local Planning Authority – stating below what you undertook. A brief summary of the project/s should be provided including the site name and location, dates and if known the licence reference number(s).

Please note we are not expecting details of every licence/planning permission issued within the vicinity of the site – we are only concerned with projects that have the potential to significantly impact or have impacted on same population of bats (maternity and hibernation roosts). Note: Natural England is aiming to make available licensing records from the last 5 years publically available.

https://magic.defra.gov.uk/MagicMap.aspx was consulted on 10th January 2022. The following licences were found within 5km of the site and :

- at 2.6km to the NE: TQ32218727: 2016-20176-EPS-MIT, C-PIP,S-PIP - Licence Start Date10/02/2016 End Date 09/02/2021
- at 4.4km o the SE: TQ34288318 : EPSM2013-6226, C-PIP - Licence Start Date17/09/2013 End Date 01/09/2016
- at 3.6km to the S: TQ29368200: 2014-6253-EPS-MIT, C-PIP - Licence Start Date18/02/2015 End Date 31/03/2020
- at 3.9km to the SW: TQ26708348 : 2015-9230-EPS-MIT, C-PIP,S-PIP - Licence Start Date 30/04/2015 End Date 29/04/2020
- at 4km to the SW: TQ26508358: 2015-10291-EPS-MIT, C-PIP- Licence Start Date 08/05/2015 End Date28/04/2020

The mitigation licences were requested under a 'Freedom of Information request' and one was for a hibernation roost for a single common pipistrelle bat (licence - 2015-10291-EPS-MIT), the others being for day roosts only.

Important Advice: locations of other bat mitigation sites that may have significantly impacted or are likely to significantly impact on the same population/s of bats as this application must be shown on Figure B2.2.

C Survey and site assessment (also see section 5 of the Bat Mitigation Guidelines)

C1 Pre-existing information on the bat species at the survey site:
Please undertake a historical data search within a 2km search radius and provide a summary of the results of this search. For example, records from local environmental records centres, local bat groups and previous survey work undertaken at the site is all relevant. Please briefly comment on the results in relation to your project/site

- Should no historical records be found from your search please state this – and specify what searches you undertook.
- Note that you must not include records from National Biodiversity Network (NBN) without first obtaining written permission from the relevant Data Provider.

A desk study was undertaken with eCountability Ltd in 2019 within a 1km search radius of the site. Bats have been recorded within the search area, with records of common, soprano and Nathusius pipistrelle, noctule, Leisler's and non-specific bat species reported between 2007 and 2015. They range from 270m to 1km distance from site. The table below shows the number of each species of bat recorded in the study area and the proximity to the site to the closest record for each:

Species		Date	Closest Record (approx. distance from site)
Unknown bat species	Chiroptera	April 2009	503m SE
Common pipistrelle	*Pipistrellus pipistrellus*	May 2012	273m SE
Pipistrelle species	*Pipistrellus* sp.	July 2015	549m E
Soprano pipistrelle	*Pipistrellus pygmaeus*	July 2010	999m SE
Nathusius's pipistrelle	*Pipistrellus nathusii*	May 2012	273m SE
Nyctalus bat species	*Nyctalus* sp.	2010	999m SE
Lesser noctule	*Nyctalus leisleri*	September 2011	930m S
Noctule bat	*Nyctalus noctula*	September 2011	930m S
Common vesper bats	*Vespertilionidae*	April 2007	494m N

C2 Status of the bat species: Detail conservation status at the local, county and regional levels. Please complete the following table, justifying your assessment, and add additional lines where necessary. If the status is unknown then please enter 'unknown'.

Species	Conservation status assessment		
	Local	County	Regional
Common pipistrelle	Widespread	Common across Greater London	Abundant and widespread
Soprano pipistrelle	Widespread	Common across Greater London	Abundant and widespread

* ***Please note** that you can add more rows to the table: right click in any cell choose Insert > Insert rows below.*

C3 Objectives of the survey to inform this proposal: Please complete the following table, entering 'Yes', 'No' or N/A' to indicate the objective of your survey and provide comments/explanation where necessary:

Survey objective	Yes / No / N-A	Comments
Determine presence / absence of bats	Yes	
Determine bat usage of site (e.g. maternity, hibernation, night roosts in various structures (specify)).	Yes	The site offers suitable hibernation crevices for pipistrelle bats and surveys were carried in an effort to ascertain this.
Identify foraging, commuting or swarming sites (explain)	No	
Other (explain)	N/A	

C4 Site/habitat description: Please provide:

- Brief descriptions of the site, including total size of the development site (ha) (most often within the red line planning boundary) and areas of the site with potential value to bats (ha).

Project Holloway is on the site of the former HMP Holloway Prison. The site occupies 4.16 hectares and is occupied by a number of prison buildings arranged around an existing central garden with a number of existing trees and vegetation. The site has been used as a prison in various guises since the middle of the 19th Century until 2016.
The site has been unmanaged for some time and areas of introduced trees and shrub and associated amenity grassland planting which occurred throughout the site in discrete 'garden' areas are becoming overgrown. Patches of ephemeral short perennial vegetation have encroached, in places, into areas of hardstanding. Trees and shrubs were mainly of exotic, ornamental species and included some mature specimens of silver birch, weeping willow, Robinia 'Frisia', tulip tree and Eucalyptus spp.

- Brief descriptions of the structures on site indicating their roosting suitability (low, moderate or high), differentiating between **those surveyed** and **not surveyed**, with an explanation why. Ensure structures are referenced and consistently indicated on relevant figures and tables.

The 2020 PEA states:
The buildings exhibited 'Low' potential for summer bat roosting (at best) and the habitats within the site were similarly ranked as being of 'Low' value overall for foraging and commuting bats, although within the site it was possible to identify those areas which were of relatively higher habitat suitability due to the presence of vegetation cover and level of disturbance from lighting. There was also potential for bats to use the buildings as a hibernation roost in winter due to the presence of slots in brickwork which may lead into a cavity in the external wall structure.

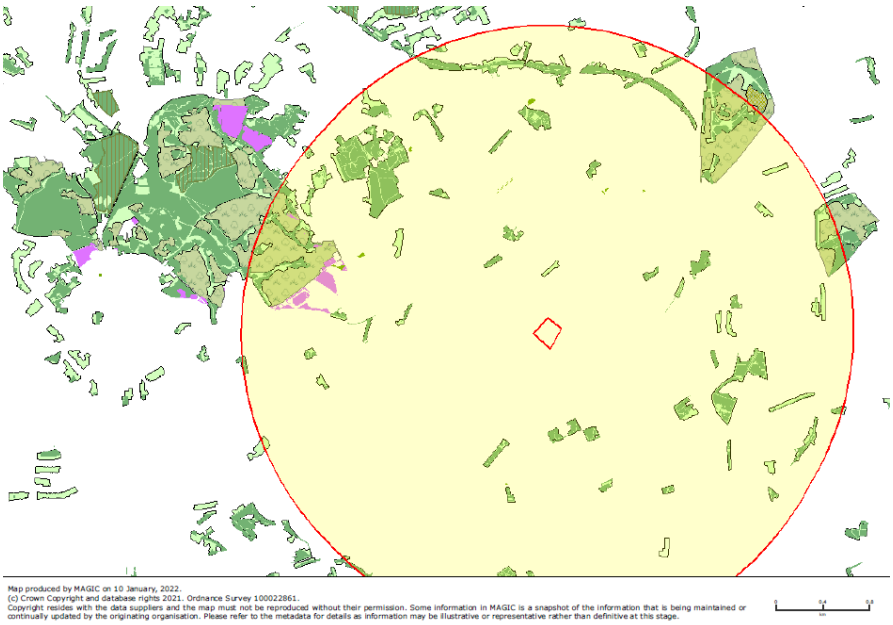
It should be noted that this 'low' suitability for roosting bats (as per the Bat Conservation Trust Good Practice Guidelines (2016)) was then scaled as Relative Bat Habitat Suitability:

- Higher bat habitat suitability
- Moderate bat habitat suitability
- Lower bat habitat suitability

The bat survey methodology was agreed upon with the LBI London Borough of Islington Ecology Officer.

- A description of adjacent areas/offsite habitats, specifying any relevance to bats, including descriptions of habitat/s relevant to bat commuting/foraging behaviour.

The site is very urban and, apart from street trees, there is very little suitable foraging habitat near the site, with only a few pockets within 1km. But wider expense of suitable habitat is present over 2km to the W and NE.



The desk-based search showed there are ten Sites of Importance for Nature Conservation (SINC, recognised by the Greater London Authority and London Borough Councils as important wildlife sites) within the 1km search area. The table below lists the SINC recorded and the reason for their designation.

Site Name	Approx. Distance from Site	Reason for Interest
Tufnell Park Primary School Gardens	160m W	Nature area within primary school grounds. Pond in centre with emergent vegetation including marsh foxtail, watermint, great pond sedge and kingcup. Frogs have been recorded breeding in the pond.
Royal Northern Hospital	625m NE	A park with a good diversity of habitats including amenity grassland, ornamental shrubberies and scattered trees. Approximately 10% of the park has been turned into a wildlife meadow.
Foxham Gardens	628m NW	A small park with native trees and shrubs. A planted boarder along the edge is effectively scrub habitat, providing food and shelter for common birds and insects.
Holloway Road to Caledonian Road Railsides	671m SE	Site includes a section of the Kings Cross main line supporting sizeable areas of ruderal and roughland habitats, with many common birds and butterflies.
Caledonian Park	672m S	Managed park, compromising of native shrubbery, amenity grassland, flower beds and scattered trees. Part of the amenity grassland is left to grow long in order to encourage wild flowers and insects to colonise.
Market Road Garden	756m N	Small garden adjacent to Caledonian Park. Consists of a wildlife garden and an area of parkland with mature trees.
Whittington Park	809m N	Park with wildflower meadows, native hedgerows and a small woodland. Good habitat for birds, with regular sightings of mistle thrush, goldfinch and greenfinch.
Junction Road Railway Cutting	950m NW	An isolated but well-vegetated section of the Crouch Hill line. The sides of the cutting support secondary woodland and scrub dominated by sycamore ash and bramble.
Drayton Park Railsides and Olden Garden	1km E	Typical railside habitats, including roughland areas where plants grow among the debris on wasteland, and extensive patches of scrub. The site also includes a community garden.
Isledon Road Railsides	1km E	This site supports open grassy habitats typical of former industrial land.

- Please also include annotated (cross reference the structures) and dated photographs (showing both internal and external survey areas) as these are very useful as an assessment aid. These can be inserted below or submitted as a separate (referenced) document.

Photos from the Sept 2019 site visit for the PEA (as per 'Appendix 3 Bat Building Inspection Results'):

Building Reference	External Description	Summer Roost Potential	Photo
Chapel	Single-storey brick construction, concrete slab roof, all well sealed. No roof cavity. Wooden louvres above door into a small concrete cavity. Low suitability.	Low/negligible.	
Education	One to two-storey and brick flat roof. Contains a swimming pool. All day lit, no evidence of bats. Cement-sealed coping. Open window.	Low/negligible.	No photo
Block 1	Three to five-storey brick and metal flat roof. Open window. No gaps in bricks apart from air gaps along courses and some gaps at flashing.	Low/negligible.	
Block 2	As Block 1 - Three to five-storey brick. Metal coping open windows, gaps in bricks. Minor potential. Looks well-maintained no gaps. Minimal interest, plus grills. Walkway constructed of metal/plasticised. Has lead flashings with some gaps but limited potential. Some air gaps in wall of walkway.	Low	
Staff Facilities and Visitors Centre	Two-storey brick gaps in between hanging tiles (all slate) plus grilles. Flat roof, metal copings. Plastic heavy tiles quite flush.	Low/negligible.	
Main Stores	Brick with few windows, two to three-storey high mostly metal topped, flat.	Low/negligible.	
Works and Maintenance	Wall of works unit have some air gaps in walls.	Low/negligible.	
Boiler House	One-storey brick. Metal chimney. Flat or metal clad roof. Good condition. Tanks adjacent.	Negligible	

Day Nursery	One-storey. Only part accessible - pitched roof without slate tiles plus metal/fabric ridge. Mostly intact but some lifted areas. Wide eaves. Very cobwebbed with no visible gaps. Ivy covered. To rear some gaps in roof and at gable end. Flat roof pre-fabricated extension with closed windows or boarded up. Very overgrown.	Low/negligible.	
Day Care Centre	Curved corrugated metal roof. Two-storey with metal sheet plus brick construction. No potential.	Low/negligible.	
Block A	Flat roof, four to five storeys, red brick. Air vents at several levels. Metal window shutters, metal window frames. Vents with and without mesh. Several grilles. Wood cladding (honey bee nest). Peeling paint, no gaps. Open windows and cobwebbed. No potential.	Low	
Block B	As Block A. Concrete copings. Minimal to no gaps. Otherwise same construction with vents and grills and some open windows. Well-maintained with no cracks. Wood cladding. Alcove (see photo) with cobwebs and evidence of bats.	Low	
Block C	As above.	Low	
Block D	As above. Some wood cladding with no gaps. Pigeons roosting. Metal grilles and open windows giving access to building interior. Grilles have mesh behind. Metal copings and sills. No potential.	Low	
Healthcare	Pantile roof single storey, possible gaps at ridge (integrated ridge system). Soffits with grill. No gaps. Flashings neat, no gaps. Any gaps cobwebbed.	Low/negligible.	
Perimeter Wall	Wall brick with razor wire in very good condition, no cracks or gaps.	Negligible	No photo

Other photos:

Typical hardstanding area Jul 21

Typical internal access road Jul 21

Typical ornamental planting Jul 21

Typical ornamental tree planting Sept 19

Typical overgrown planting and tree Jul 21

Typical view through site Sept 19

C5 Field survey(s):

Surveys must be up to date and have been conducted within the current or most recent optimal season. Where a site/structure/tree has demonstrable hibernation potential appropriate surveys must be carried out. Surveys must be undertaken in accordance with the most up to date edition of the Bat Conservation Trust (BCT) *Bat Surveys for Professional Ecologists – Good Practice Guidelines* and the *Bat Mitigation Guidelines*.

C5a Justification for surveys that deviate from the best practice guidelines: Please provide full justification below if your surveys deviate from the aforementioned best practice guidelines, confirming how you have obtained a full appreciation of the bat species roosting at the site, and of the type and status of roosts they use on site and in the context of the immediate surrounding area. **Please note that inadequate survey information is likely to cause delays to your licence application and may result in a Further Information Request.**

N/A

C5b Please complete the following tables and add additional lines where necessary (*right click in any cell outside the grey box area. Choose Insert > Insert rows below)*. Please enter 'N/A' if the table is not applicable to your survey. Please ensure the information is consistent with Figure **C5b** (showing all buildings, structures and habitats that are within the survey area and distinguishing those that were surveyed and those that were not; indicate where surveyors were located):

Visual inspection

Date of each survey visit (e.g. format 01/06/13)	Structure reference / location	Equipment used (e.g binoculars, endoscope)	Weather – *(Include temps, precipitation, Beaufort wind scale etc)*
03/09/2019	All site	close-focussing binoculars and a high powered torch	
Comments (to include # of surveyors used for each visit): 2 surveyors Helen Hamilton and Sacha Rogers			
04/12/2019		Endoscope (From a 'spider' mobile elevated work platform (MEWP)	
Comments: 1 surveyor Helen Hamilton			
Comments:			
Comments:			

Please provide surveyors names *(including Class Licence registration number if applicable)* and ensure the <u>above</u> table states the number of surveyors used for each survey visit undertaken.

Helen Hamilton (MCIEEM, Natural England Bat Survey Licence Level 23) and Sacha Rogers CEnv MCIEEM of Penny Anderson Associates Ltd.

Dusk survey

Date of each survey visit (e.g. format 01/06/13)	Start and end times and time of sunset	Structure reference / location	Equipment used (include make of bat detectors and logging equipment)	Weather – *(Include start and end temps, precipitation, Beaufort wind scale etc)*
24/05/2022	Start time: 20:45 Sunset: 20:59 End time:22:30	Blocks A, B, C and D mainly, but also rest of site using static detectors	Batbox Duet, Elekon Batscanner, EM Touch 2 Pro and 4x Anabat Express static detectors	Conditions: Dry and calm. 40% cloud cover. Temperature: 15°C decreasing to 14°C.
Comments (to include # of surveyors used for each visit): 4 surveyors and three additional static bat detectors at other locations throughout the site. K Bresso, M Austin, J Hayes and Steve Stanley.				
01/07/2021	Start time: 20:55 Sunset:21:21 End time:22:30	Block D	Batbox Duet and Anabat SD1	Conditions: Dry and calm. 20-30% cloud cover. Temperature: 20°C decreasing to 18°C. Humidity: 41% increasing to 57%.
Comments (to include # of surveyors used for each visit): 2 surveyors RL and BH				
02/08/2021	Start time: 20:30 Sunset: 20:47 End time: 21:10	Block D	Batbox Duet and Anabat SD1	Conditions: Dry with light wind and >90% cloud cover. Temperature: 18°C decreasing to 15°C. Humidity: 45% decreasing to 40%.
Comments: 1 surveyor RL				
24/09/2019	Start time: 18:40 Sunset: 18:55 End time: 20:25	Blocks B, C and D	Batbox Duet and Anabat SD1	Conditions: Dry and calm with 60% cloud cover decreasing to 30%. Temperature: 17`C decreasing to 16`C. Humidity: 66% increasing to 77%.

Comments: 3 surveyors RL BH PG				
Comments:				

Please provide surveyors names *(including Class Licence registration number if applicable)* and ensure the <u>above</u> table states the number of surveyors used for each survey visit undertaken.

Staff of Penny Anderson Associates:
Rob Lamb ACIEEM (Licence no. 2020-44441-CLS-CLS)
Gerard Hawley MCIEEM
Beth Howes Qualifying member of CIEEM
Connie Webb Qualifying member of CIEEM
Phoebe Gray

All have the necessary experience of surveys for protected species, including bats, and are appropriately qualified to carry out this work based on the CIEEM competencies for survey.

Staff of KB Ecology:
K Bresso CEnv MCIEEM, a qualified professional consultant ecologist with over 20 years of experience , licensed bat surveyor (Class Survey Licence Registration Number 2015-11917-CLS-CLS (CL15 Bat Roost Visitor Level 1) and 2015-11918-CLS-CLS (CL18 Bat Survey Level 2)) and Registered Consultant of the Bat Low Impact Class Licence with Natural England
M Austin: 10 years' experience in bat surveys and undertaken Analook Training Course in 2014
J Austin: 3 years' experience in bat surveys
J Hayes: first year surveying
L Anscomb: first year surveying
T Austin: first year surveying
P Austin: 2 years' experience in bat surveys
S Stanley: 10 years' experience in bat surveys
L Hoadley: 5 years' experience in bat surveys

Dawn survey

Date of each survey visit (e.g. format 01/06/13).	**Start and end time and time of sunrise**	**Structure reference / location**	**Equipment used (include make of bat detectors and logging equipment)**	**Weather – *(Include start and end temps, precipitation, Beaufort wind scale etc)***
01/06/2022	Start time: 03:45 Sunrise: 04:49 End time: 05:00	Blocks 1,2, A, B, C and D	Batbox Duet, Elekon Batscanner, EM Touch 2 Pro and Anabat Express static detectors	Conditions: Dry and calm to begin with 0% cloud cover. Temperature: 10°C decreasing to 9°C.
Comments (to include # of surveyors used for each visit): 7 surveyors: K Bresso, M Austin, L Anscomb, T Austin, P Austin, J Austin, L Hoadley				
13/07/2021	Start time: 03:30 Sunrise: 04:57 End time: 05:05	Block D	Batbox Duet and Anabat SD1	Conditions: Dry and calm to begin with 70-90% cloud cover. Temperature: 18°C decreasing to 16.5°C. Humidity: 69% increasing to 93%.
Comments (to include # of surveyors used for each visit): 2 surveyors RL and CW				
25/09/2019	Start time: 05:20 Sunrise: 06:51 End time: 06:45	Blocks A, C, D	Batbox Duet and Anabat SD1	Conditions: Dry and calm to begin with. Light rain from 06:25, becoming heavy from 06:35. Temperature: 14`C increasing to 15.3`C. Humidity: 87% decreasing to 85%.
Comments: 3 surveyors RL BH PG				

Comments:				
Comments:				

Please provide surveyors names *(including Class Licence registration number if applicable)* and ensure the <u>above</u> table states the number of surveyors used for each survey visit undertaken.

Staff of Penny Anderson Associates:
Rob Lamb ACIEEM (Licence no. 2020-44441-CLS-CLS)
Gerard Hawley MCIEEM
Beth Howes Qualifying member of CIEEM
Connie Webb Qualifying member of CIEEM
Phoebe Gray

Staff of KB Ecology:
K Bresso CEnv MCIEEM, a qualified professional consultant ecologist with over 20 years of experience , licensed bat surveyor (Class Survey Licence Registration Number 2015-11917-CLS-CLS (CL15 Bat Roost Visitor Level 1) and 2015-11918-CLS-CLS (CL18 Bat Survey Level 2)) and Registered Consultant of the Bat Low Impact Class Licence with Natural England
M Austin: 10 years' experience in bat surveys and undertaken Analook Training Course in 2014
J Austin: 3 years' experience in bat surveys
J Hayes: first year surveying
L Anscomb: first year surveying
T Austin: first year surveying
P Austin: 2 years' experience in bat surveys
S Stanley: 10 years' experience in bat surveys
L Hoadley: 5 years' experience in bat surveys

'Other' survey (please specify e.g. trapping, remote, etc)

Date of each survey visit **(e.g. format 01/06/13).**	**Start and end times**	**Structure reference / location**	**Equipment used (include make of bat detectors and logging equipment)**	**Weather – *(Include start and end temps, precipitation, Beaufort wind scale etc)***
03/03/2022- Winter survey	Star time: 17:30 Sunset: 17:44 End time: 20:40 start of survey 40min after sunset and carrying on until 3h30 after sunset	Transect of all site and internal corner of block D in particular	Batbox Duet, Elekon Batscanner, EM Touch 2 Pro and 4x Anabat Express static detectors	Dry with no wind and 90% cloud cover. Temperature: 11°C decreasing to 10°C.
Comments: A second 'Winter/Frost swarming survey' was planned to take place on 28/02 (postponed due to rain that evening) but the night temperatures didn't go lower than during the 05/01/2022 survey but it was decided to still carry out the second survey. 3 surveyors: 2 walking the site constantly, one throughout checking known roost at D. Additionally, three more Anabat Express static detectors were left recording throughout the survey at three locations across the site. K Bresso, M Austin and Steve Stanley.				
05/01/2022- Winter/Frost swarming survey	Star time:16:45 Sunset: 16.06 End time: 19:35 start of survey 40min after sunset and carrying on until 3h30 after sunset	Transect of all site and internal corner of block D in particular	Batbox Duet, Elekon Batscanner and 4x Anabat Express static detectors	Dry with light wind and <10% cloud cover at start, up to 70% at end. Temperature: 5°C decreasing to 3°C.
https://www.researchgate.net/publication/306098306_Swarm_and_switch_on_the_trail_of_the_hibernating_common_pipistrelle Discussions with Dutch and German bat workers suggest that Frost swarming happens from 50min after sunset and lasts for a number of hours: and is best conducted by the first and second night that the temperature is predicted to go below zero degree Celcius.				

We therefore monitored the temperature since 20th December 2021 and did the survey on the first night when the temperature was due to fall to -1C. Additionally, three more Anabat Express static detectors were left recording throughout the survey at three locations across the site.				
Comments:3 surveyors: 2 walking the site constantly, one throughout checking known roost at D. K Bresso, M Austin and J Austin				
24th October to 5th November 2019 (12 nights) – remote survey	recording from 1830 for six hours	3 locations throughout site	3 x Weatherproof SM2 static bat detectors	Overnight temp: Min 0.3°C / Average 7.1°C / Maximum 14.8°C Daytime temp: Min 1.3°C / Average 9.4°C / Maximum 16.5°C
3rd to 19th December 2019 (16 nights) – remote survey	recording from 1630 for six hours	2 locations throughout site	2 x Weatherproof SM2 static bat detectors	Overnight temp: Min 0.3°C / Average 5.3°C / Maximum 10.1°C Daytime temp: Min 0.8°C / Average 6.3°C / Maximum 11.5°C
24th January to 7th February 2020 (14 nights) – remote survey	recording from 1600 for 16 hours	2 locations throughout site	2 x Weatherproof SM2 static bat detectors	Overnight temp: Min 2.3°C / Average 6.6`C / Maximum 11.2`C Daytime temp: Min 2.3°C / Average 8`C / Maximum 12.3`C
02/08/2021 – transect survey	Start time: 21:10 Sunset: 20:47 End time: 22:40	All site	Batbox Duet and Anabat SD1	Dry with light wind and >90% cloud cover. Temperature: 18°C decreasing to 15°C. Humidity: 45% decreasing to 40%.
Comments: 1 surveyor - Rob Lamb				
18/09/2019 – transect survey	Start time: 19:00 Sunset: 19:10 End time: 20:50.	All site	Batbox Duet and Anabat SD1	Conditions: Dry with light wind and no cloud cover. Temperature: 17.9`C decreasing to 14.4`C. Humidity: 54% decreasing to 39%.
Comments: Victoria Burton and Caroline Boffey				

Please provide surveyors names *(including Class Licence registration number if applicable)* and ensure the <u>above</u> table states the number of surveyors used for each survey visit undertaken.

Rob Lamb ACIEEM (Licence no. 2020-44441-CLS-CLS) of Penny Anderson Associates
Victoria Burton and Caroline Boffey of Penny Anderson Associates

Staff of KB Ecology:
K Bresso CEnv MCIEEM, a qualified professional consultant ecologist with over 20 years of experience , licensed bat surveyor (Class Survey Licence Registration Number 2015-11917-CLS-CLS (CL15 Bat Roost Visitor Level 1) and 2015-11918-CLS-CLS (CL18 Bat Survey Level 2)) and Registered Consultant of the Bat Low Impact Class Licence with Natural England
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J Hayes: first year surveying
L Anscomb: first year surveying
T Austin: first year surveying

P Austin: 2 years' experience in bat surveys S Stanley: 10 years' experience in bat surveys L Hoadley: 5 years' experience in bat surveys

Please explain any constraints on the survey/s undertaken (time of year, cold weather, refused access, safety issues preventing access etc – justify as necessary and include evidence where required). If access was refused please provide evidence (letter/email) to demonstrate this.

N/A

Also complete the following:

- If DNA analysis of droppings has been undertaken, please indicate below (Yes, No, N/A) and ensure that **Figure C5b** (if applicable – see below) details the locations where the samples were taken. Where long-eared bats are detected but cannot be identified to species level visually, DNA analysis of any droppings will be needed where grey long-eared bats may be present.

Yes - The aerial roost inspection confirmed bat roosting within three adjacent shallow crevices/weepholes clustered together on the southern wall of Block D. The roost sites were confirmed by the presence of droppings in all three locations. DNA testing of dropping samples collected from one of the crevices confirmed their use by common pipistrelle. These roosts were considered to be summer day roosts as they are too shallow as to provide minimal protection from weather and temperature variations.

- Please confirm that a walk over survey/check has been carried out within 3 months *prior* to application submission by a suitably experienced ecologist to ensure that conditions have not changed since the most recent survey was undertaken. Provide details of any changes to conditions and habitats and/or structures on site since the surveys were undertaken.

Date of walkover survey/check	01/06/2022 by K Bresso of KB Ecology
Details of any changes to conditions and habitats and/or structures, if there are no changes please insert 'None'	No changes

C6 Survey results: Summarise your findings in the tables below and cross reference to **Figure C6** (which must also include flight lines, access points, dimensions of existing roosts etc). If you did not undertake a specific survey type please add N/A to the relevant table/s. Raw data is to be appended to the Method Statement (including sonograms, DNA analysis results etc).

Roost t*ypes to be referenced as:* *Day, Night, Feeding Perch, Transitional, Satellite, Maternity, Hibernation confirmed, Foraging Area, Commuting Route, Swarming Site, Other*. See end of document for "Definitions" of these roosts.

When completing "**Notes/observations" include** reference *to direct observations, extent and age of droppings, presence of field signs, emergence or re-entry, echolocation analysis. Also include DNA results if applicable and include nil results)*

Visual inspection results

Date (e.g. format 01/06/13)	**Species and numbers**	**Roost type** *(to be consistent with the above listed types)*	**Structure reference** *(consistent with relevant figures and other text)*	**Roost location**	**Access points (include # of them)**	**Dimensions of existing roosts or explanation of where the roost is (as appropriate)**
03/09/2019	none					
Notes/observations:						
04/12/2019	Common pip (droppings	These roosts were	Block D	Three adjacent	Three adjacent	southern wall of Block D

	only)	considered to be summer day roosts as they are too shallow as to provide minimal protection from weather and temperature variations.		shallow crevices clustered together, considered as a unique roost	shallow crevices clustered together	
Notes/observations:						
Notes/observations:						
Notes/observations:						

Provide further (brief) comments/explanation if required:

Dusk survey results

Date (e.g. format 01/06/13)	**Start and end times**	**Species and numbers**	***Roost type*** *(to be consistent with the above listed types)*	**Structure reference** *(consistent with relevant figures and other text)*	**Roost location**	**Access points (include # of them)**	**Dimensions of existing roosts or explanation of where the roost is (as appropriate)**
24/05/2022	Start time: 20:45 Sunset: 20:59 End time:22:30	One common pipistrelle	Day roost	Block D, internal corner on southern wall	Unsure, expected to be weephole	Unsure, expected to be weephole	If weephole: estimated 5cm x 2cm x 10xm
Notes/observations: Activity by common pipistrelle bats was recorded in three other locations on site during the first 30min after sunset, indicating that these bats are roosting near-by.							
01/07/2021	Start time: 20:55 Sunset:21:21 End time:22:30	No bats emerging					
Notes/observations:							
02/08/2021	Start time: 20:30 Sunset: 20:47 End time: 21:10	2 common pipistrelle	Day roost	Block D	unsure	Top of top window	southern wall of Block D
Notes/observations:							
24/09/2019	Start time: 18:40 Sunset: 18:55 End time: 20:25	No bats emerging					
Notes/observations:							
Notes/observations:							

Provide further (brief) comments/explanation if required:

Dawn Survey results

Date (e.g. format 01/06/13)	**Start and end times**	**Species and numbers**	**Roost type** *(to be consistent with the above listed types)*	**Structure reference** *(consistent with relevant figures and other text)*	**Roost location**	**Access points (include # of them)**	**Dimensions of existing roosts or explanation of where the roost is (as appropriate)**
01/06/2022	Start time: 03:45 Sunrise: 04:49 End time: 05:00	One soprano pipistrelle bat	Day roost	Block A, internal corner on southern wall	Weephole, 5th floor, just below roof line	Weephole, 5th floor, just below roof line	If weephole: estimated 5cm x 2cm x 10xm
Notes/observations: Some foraging activity by common and soprano pipistrelle but all bats were seen leaving the site. They must therefore roost outside the site.							
13/07/2021	Start time: 03:30 Sunrise: 04:57 End time: 05:05	2 common pipistrelle bats	Day roost	Block D on southern wall	unsure	Top of top window	southern wall of Block D
Notes/observations:							
25/09/2019	Start time: 05:20 Sunrise: 06:51 End time: 06:45	No bats re-entering					
Notes/observations:							
Notes/observations:							
Notes/observations:							

Provide further (brief) comments/explanation if required:

'Other' results – please specify.

Date (e.g. format 01/06/13)	**Species and numbers**	**Roost type** *(to be consistent with the above listed types)*	**Structure reference** *(consistent with relevant figures and other text)*	**Roost location**	**Access points (include # of them)**	**Dimensions of existing roosts or explanation of where the roost is (as appropriate)**
03/03/2022- Winter survey	No emergence recorded, no swarming recorded. But a single common pipistrelle bat was seen foraging on site along the prison wall to the west, where trees are present on the other side of the wall (first heard 52min after sunset).					
05/01/2022- Frost swarming survey	No emergence recorded, no swarming recorded. However some bat calls were recorded, the earliest being 1h44min after sunset. D1 17:50, 45pip, 1 pass, very faint 17:53, 45pip, 1 pass (also heard by surveyor on bat detector, not seen) 18:00, 45pip, 2 passes (also heard by surveyor on bat detector, not seen) D2 No data D3 17:50, 45pip, 2 passes					

	17:59, 45pip, 2 passes D4 No data During walking transect, 45pip, 1 pass, over trees beside prison wall in the east, opposite Block B.
24th October to 5th November 2019 (12 nights) – remote survey	**Table 1 Results of Static Detector Survey, Autumn** **Detector** / **Number of Nights Bat Activity Detected** / **Peak Daily Number of Calls** / **Activity Levels on Site** Location 1 / 1 / 1 / A single passing common pipistrelle call was detected on 26/10. Activity very low in this area. Location 2 / 0 / 0 / No bat call activity detected Location 3 / 6 / 71 / All calls were of common pipistrelle. Activity on average began at 18:30, ceasing 22:48 at latest. Social calls were picked up on three nights from 01/11 onwards. **Overnight temp:** Min 0.3°C / Average 7.1°C / Maximum 14.8°C **Daytime temp:** Min 1.3°C / Average 9.4°C / Maximum 16.5°C
3rd to 19th December 2019 (16 nights) – remote survey	**Table 2 Results of Static Detector Survey, Early Winter** **Detector** / **Number of Nights Bat Activity Detected** / **Peak Daily Number of Calls** / **Activity Levels on Site** Location 3 / 3 / 10 / This detector picked up a lot of static noise, creating hundreds of noise files. Calls analysed were of common pipistrelle. Earliest calls ranged from 16:31-17:59. The latest detected calls were between 16:45-19:07. Location 4 / 4 / 7 / All calls were of common pipistrelle. Earliest call ranged from 16:46 to 17:07 and latest at 16:52-19:05. **Overnight temp:** Min 0.3°C / Average 5.3°C / Maximum 10.1°C **Daytime temp:** Min 0.8°C / Average 6.3°C / Maximum 11.5°C
24th January to 7th February 2020 (14 nights) – remote survey	**Table 3 Results of Static Detector Survey, Late Winter** **Detector** / **Number of Nights Bat Activity Detected** / **Peak Daily Number of Calls** / **Activity Levels on Site** Location 3 / 4 / 36 / All calls were of common pipistrelle. When present, evening activity typically commenced at 17:06-17:40 and ceased shortly after at 18:11-18:57. Frequent night time calls were picked up on 01/02 from 01:00 to 02:47. Location 4 / 3 / 32 / All calls were of common pipistrelle. When present, evening activity typically commenced at 17:04-17:47 and ceased shortly after at 18:23-18:42. Night time calls were picked up on 01/02 from 00:58 to 02:42. **Overnight temp:** Min 2.3°C / Average 6.6°C / Maximum 11.2°C **Daytime temp:** Min 2.3°C / Average 8°C / Maximum 12.3°C
02/08/2021 – transect survey	No bats emerging/entering. Common pipistrelle bats were already active when the survey commenced. This was the only bat species encountered during the transect survey. The transect survey confirmed a low to moderate amount of common pipistrelle activity throughout the site, with most sightings made in the central courtyard of the site nearby the confirmed roosts and groupings of mature trees. Feeding buzzes and foraging swoops were recorded frequently in this courtyard. The most common pipistrelle observed at the same time was three, in the central courtyard.
Notes/observations:	
18/09/2019 – transect survey	No bats emerging/entering. Common pipistrelle was the only bat species encountered during the transect surveys. Because of the timings of the first encounter with the species at fifteen minutes after sunset, it was considered that these bats are likely roosting nearby. The transect surveys confirmed a low to moderate amount of common pipistrelle activity throughout the site, with less activity towards the well-lit main road. Less activity was observed in open, vegetated areas, with bats typically foraging around the tops of buildings, particularly in the northern and western part of the site. Possible linkage with off-site foraging habitats was noted to the north, east and west of the site.
Notes/observations:	

Notes/observations:						
Notes/observations:						

Provide further (brief) comments/explanation if required:

C7 Interpretation/evaluation of survey results (also see the Bat Mitigation Guidelines section 5.8 and Figure 4 for conservation significance of roost type): Please complete the following table:

Structure reference *(ensure consistency with other text and Figures)*	**Species**	**Count / estimate of number of individuals**	**Roost location**	**Site status assessment (e.g. maternity, feeding roost, swarming site, hibernation confirmed etc)**	**Conservation significance of roost**
Block D	common pipistrelle	5	Three adjacent shallow crevices/weepholes clustered Together on southern wall	Day and potential hibernation	Low conservation significance
Block A	Soprano pipistrelle	5	weephole on southern wall	Day and potential hibernation	Low conservation significance

If hibernation roost(s) were not identified in the survey, please indicate the hibernation roost potential of the site and/or structure(s) which will be impacted by the proposal by ticking the relevant box.	☐ **High** ☐ **Medium** ☒ **Low**

Provide details on the assessment and rationale of the hibernation roost potential.

Where a site/structure/tree has hibernation potential and/or hibernation roosts have been confirmed, Natural England expects any works which may impact on hibernating bats, or their roosts, to be undertaken outside of the hibernation period.

The results of the 2020 remote winter surveys and the additional 2022 frost swarming/winter surveys suggest that the site may be used as a hibernation roost but only by a small number of common and soprano pipistrelle bats; no evidence of hibernation was found however.

Provide further (brief) comments / explanation if required:

Important Advice:

Survey maps that must be included in this section of the Method Statement, or as separate documents if preferred, are listed in *section I "Map checklist" at the end of this document.*

Insert survey figures, photographs etc below here if not submitting them as separate documents

D Impact assessment <u>in absence of mitigation or compensation for each species / roost type</u>

(also see section 6 of the Bat Mitigation Guidelines). Where appropriate you must take into consideration cumulative impacts of your proposals on the bat species and populations identified in your survey in each section.

Guidance on quantifying roosts for the purpose of licensing: *To be considered the same roost, the locations need to have the same **functional** and **qualitative** (e.g. physical) characteristics, be used by the **same species** for the **same purpose** (e.g. day roosting) and be within the **same building / structure**. If the physical characteristics are different (e.g. one roost is in external crevices in the wall and the other is in the roof void against internal timbers) then they should be considered different roosts - because they offer bats different roosting opportunities. If the physical characteristics are similar and provide the same functional characteristics, used by the same species for the same purpose (e.g. transitional roost) but with different individual roosting locations within the overall building / structure, that could be considered one transitional roost. If two species are using an area which provides the same characteristics, for the same function, it is still two roosts - as there are two species.*

D1 Initial impacts: The impact/s of activities undertaken on site pre-development and during works must be considered and explained. **Consider disturbance** (such as human presence, noise, vibration, dust,

lighting, access obstruction due to scaffolding and plastic sheeting etc), **temporary damage and temporary loss of roosts and injuring/killing.**
E.g. Unsupervised contractor removing roof tiles has the potential to crush 3 common pipistrelle bats using the roof tiles as day roosts. Major negative impact at a site level; Demolition of an extension to a building will take place adjacent to a maternity roost of common pipistrelle bats situated under the soffit board of the retained building. Potential for significant disturbance if demolition works are undertaken during the maternity period through vibration, noise and dust. Medium negative impact on a local level.

Dismantling of building prior to demolition has the potential to crush bats. Major negative impact at site level.

Confirm number of roosts to be damaged: 1

D2 Long-term impacts: Consider and explain the impacts of the proposed works on the different species populations at a site, local, regional, and national level**.**

D2.1. Roost modification: e.g. changes to roosts/access points, new entrances (including human access e.g. for servicing/maintenance etc), change in size of roost space, changes in air flow, temperature and humidity, light etc. Please detail the access points into each roost and the type/s of roosts which will be modified.
E.g. Non-mitigated changes to the roof structure, which requires replacing, will lead to the modification of 3 access points into a common pipistrelle maternity roost which will result in bats being unable to enter or exit the roost. Moderate negative impact on a local level.

Confirm number of roosts to be modified:

D2.2. Roost loss: Loss or deterioration of roosting sites, access points, habitat, etc must be considered. Please detail the access points into each roost and types of roost/s which will be lost.
E.g. Demolition of building reference X in June will lead to the loss of a night roost in the porch used by 1 lesser horseshoe bat and the loss of a maternity brown-long eared bat roost in the loft space. This will lead to the death and/or injury of bats including dependent young and permanent destruction (loss) of both roosts. Moderate negative impact at a site level for lesser horseshoe bats and moderate negative impact at a local level for brown-long eared bats.

Non-mitigated demolition of blocks A and D would lead to loss of common and soprano pipistrelle bat day roosts, high negative impact on a local level but low on county level as common species.

Confirm number of roosts to be destroyed: 1

D2.3. Fragmentation and isolation: Will the proposed works results in these impacts? E.g. loss of linear features such as hedges, tree lines, increased lighting, severance of flight lines by roads/rail lines, separation of breeding/hibernation sites from feeding grounds, etc.
E.g. In addition to the removal of common pipistrelle day roosts in trees along the proposed road, removal of hedgerows, shown on Figure D, and the construction of the new road will fragment a significant commuting and foraging route for a lesser horseshoe maternity roost. This may cause a reduction in the long term success of the breeding colony of lesser horseshoes by restricting existing foraging range or killing bats on the road. Potentially major negative impact at a site and local level.

Although most of the vegetation will be lost during the demolition, the best mature trees will be retained and incorporated a new publicly accessible park. Biodiverse- and brown-roofs are proposed, as are a number of vegetated open spaces:
• Nature Garden – public open space north-west of Plot A (triangular areas that lies between Plot A and Bakersfield Estate);
• Women's Garden – serves the Women's Building of Plot C. It is not publicly accessible;
• Communal Resident Gardens are communal gardens which serve the residents of Plot A, Plot B, Plot D and Plot E respectively;
• Extra Care Garden – for the use of residents of the 60 extra care homes of Plot E.
• Rooftop Gardens – communal gardens at roof level; and

Therefore, it is expected that the proposal will provide suitable foraging opportunities in the long-term.

D3 Post-development interference impacts: e.g. extra street lighting or other external lighting, use of loft space as storage, increased noise. Please also consider other direct or indirect post development impacts which may include disturbance/ injuring/killing.

E.g. Security lighting being installed will shine on the brown-long eared bat maternity roost access points which may affect emergence patterns and lead to a reduction in foraging times. This may cause a reduction in the long term success of the breeding colony or cause the roost to be abandoned. Moderate to high negative impact at a site and local level.

The site was a prison and thus security lighting was in regular use. The level of lighting proposed is not expected to impact the local pipistrelle population, which is not a light-sensitive species.

D4 Predicted scale of impact of this development/activity on species status (also see section 6.5 of the Bat Mitigation Guidelines and the BCT's Bat Survey Good Practice Guidelines): Please complete the following table to explain what this is likely to be at the site, local/county and regional levels for each roost type and species. Add additional lines when necessary

Roost types to be referenced as: Day, Night, Feeding Perch, Transitional, Satellite, Maternity, Hibernation confirmed, Foraging Area, Commuting Route, Swarming Site, Other.

Species and Numbers (which will be affected at the time works will be undertaken)	**Roost type**	**Predicted scale of impact *(place X in relevant column)***			**Notes** (include impact on roost – damage / destruction /modification etc)
		Site	**County**	**Regional**	
5 x common pipistrelle bat	Day and potential hibernation roost	x			Loss due to demolition
5 x soprano pipistrelle bat	Day and potential hibernation roost	x			Loss due to demolition

* ***Please note** that you can add more rows to the table: right click in any cell outside the grey box area. Choose Insert > Insert rows below.*

Provide further comments/explanation as required (this helps understand how the impacts will be mitigated or compensated for when assessing section E):

Not applicable

Important Advice:
Please ensure that a separate 'Impact map' is provided (Figure D) which must show all structures or habitats (clearly referenced) that will be disturbed, damaged or destroyed, detailing where the roosts and access points are etc. Also *see section I "Map checklist" at the end of this document*.

E Mitigation and Compensation (please also see section 7 and 8 of the Bat Mitigation Guidelines)

E1 Please explain why this design was chosen over other potential solutions - set out what other designs were considered and why they were not feasible (*e.g. if the proposal is to construct a new stand-alone roost, explain why it is not possible to retain the roost in the existing structure etc).* The mitigation solution being proposed in the method statement should be the one that delivers the 'need' with the least impact on the bat population.

The retention of the buildings on site was not economically viable for the re-development of the site. And because it's a former prison block, it's not suited for residential use.

E2.2 Capture and release (if applicable):

Please confirm that you agree to undertake the following procedures for the capture and exclusion of bats, where these are applicable:

a. The use of endoscopes, artificial light from torches, destructive search by soft demolition (see Definitions), temporary obstruction of roost access, temporary or permanent exclusion methods (including installation) and use of static hand held nets must only be undertaken or directly supervised by the Named Ecologist, or an Accredited Agent.

b. Where capture and/or handling of bats are necessary, only the Named Ecologist, Accredited Agent, or an Assistant directly supervised by the Named Ecologist may do so. Capture/handling/exclusion of bats must only be undertaken in conditions suitable for bats to be active.

c. Where bats are discovered and taken (excluding unexpected discoveries during adverse weather conditions) they must either be relocated to an alternative roost (see Definitions) suitable for the species, or where bats are held this must be done safely and bats released on site at dusk in, or adjacent to, suitable foraging/ commuting habitat in safe areas within or directly adjacent to the pre-works habitat.

d. Endoscopes and hand held nets are only to be used to assist with the locating and capture of bats.

e. Temporary and permanent exclusion must be carried out using techniques specified in the most up to date edition of the '*Bat Workers Manual*'. If one-way exclusion devices are to be used, each device must remain in position for a period of at least 5 consecutive days/ nights throughout a spell of suitable weather conditions, or remain longer until these conditions prevail.

f. Prior to destructive works, an inspection using torches and/or an endoscope must be performed internally to search for the presence of bats. If any licensed vesper bat species is found and is accessible, each will be captured by gloved hand or hand-held net, given a health check and then each placed carefully inside a draw-string, calico cloth holding bag or similar for transport. If any licensed horseshoe bat species is found, the capture methods outlined in (h) will only be used after it has been shown that overnight dispersal or exclusion are no longer practicable methods.

g. Following inspection and exclusion operations, the removal of any feature with bat roost potential, will be only performed by hand in suitable weather conditions and under direct ecological supervision. Where applicable, materials will be removed carefully away and not rolled or sprung to avoid potential harm to bats. The undersides of materials will be checked by the Named Ecologist or Accredited Agent for bats that may be clung to them before removal.

h. For sites where the presence of horseshoe species has been confirmed, the following exclusion method will be used: prior to work commencing, the Named Ecologist or Accredited Agent will conduct a thorough internal inspection for the presence of horseshoe bats. Only after the void is shown to be unoccupied will the destructive search commence, or all apertures into that void be closed and sealed (windows, doors, etc) by use of boarding, sealed tarpaulin or similar.

   If a horseshoe bat is encountered, it will be left undisturbed during daylight. After all bats have dispersed overnight, the void will be sealed as described above. If all bats have not emerged, the Named Ecologist will either use torchlight and non-tactile human presence to disturb the bat to encourage it to emerge and disperse, during night only, or through use of a hand held net. Only after all bats have emerged from the building or void will it be sealed.

Yes, I agree / No, I don't agree
Yes

If NO, please provide justification below. Please use this text box to describe any additional information on protocols to be employed if bats are found during works. Non-standard capture and exclusion apparatus must be shown on **Figure E2**.

Should your proposals include capture (taking) please specify numbers of each species that will be affected at the time the works are to be undertaken:

Species	**Expected number of bats to be captured at the time works will be undertaken**. *Note: this may be different to the number of bats using the roost at its optimum time as timings for works will be at a time when bats are least likely to be*

	present.
common pipistrelle bat	5
soprano pipistrelle bat	5

** * Please note that you can add more rows to the table: right click in any cell outside the grey box area. Choose Insert > Insert rows below.*

E3 Bat roost and access point retention, modification and creation: Please detail how all impacts to each species (as identified in sections C and D) will be mitigated. If not applicable to your proposals please state 'N/A' in the relevant text boxes.

Please note that breathable roofing membranes must not be installed into a roof used by bats. If the use of roof membranes is necessary, only Bitumen type 1F felt with a hessian matrix will be permitted under licence:

N/A

E3.1 Retention of existing roost(s) – *Works may include, for example, maintenance works that result in no material changes to the roost but may cause disturbance or temporary damage e.g. t*emporary *exclusion of a roost to allow investigative and repair works to a bridge*. Provide details of all works including:

- Number and description of roosts to be retained, with an explanation of how they will be retained. Confirm dimensions to be retained.

Not applicable

- Number of access/entrance points to be retained and how this will be achieved. If enhancements to the roosts will be provided, such as through crevice provision, please detail.

Not applicable

- Mitigation for any other impacts e.g. new lighting at the site.

Not applicable

E3.2 Modification of existing roost(s) - *Works may include, for example, reduction in roof void height, change of tiles and roof lining (stating the type of membrane that will be used), alteration of access point through replacement of soffits etc.* Please provide the following:

- Dimension details of modified roosts: clearly state what the original roost dimensions were and what the dimensions of the modified roost will be.

Not applicable

- Dimension details of modified access points: clearly state how the access points are being modified.

Not applicable

- Details of any other modifications to be made to roosts.

Not applicable

- Mitigation for any impacts of lighting on the modified roost/s if appropriate.

Not applicable.

E3.3 New roost creation (including bat houses, cotes and bat boxes etc).

Note – creation of compensation for high impact cases (e.g. loss of a maternity roost) must be protected in the long term. Any bat boxes or roost structures that are part of a licence proposal which do not show signs of bats must be retained for a minimum of 5 years from date of completion of the development/works. Typically this will be around 5 years for low conservation status roost compensation (e.g. bat boxes) and longer for other significant roosts (e.g. bat houses, lofts etc). The exact time period will be specified in any licence issued. For high conservation status roost loss, the compensation roost/s must still be protected in the long term by another means (such as a s106 agreement), which is particularly important if the structure is likely to change ownership.

E3.3a Please complete the table below for the species and roost types listed. For all other species and roost types please provide information under **E3.3b**.

Species & Roost type for which new roost creation will be provided Select 'yes' for those species impacted or 'N/A' if not applicable to this application	**New roost creation**		
	Compensation should be in line with the *Bat Mitigation Guidelines*. Where compensation is being provided, there should be at least **one compensation feature, suitable for the species concerned, per roost and per species to be impacted**, OR If a proposal impacts more than one bat species and / or roost type then cumulative impacts must be considered when designing the compensation; this should always be in line with the species and / or roost type which will be subject to the greatest impact and ensure that the requirements of all species impacted are met.		
	Compensation Feature	**Quantity**	**Location of Compensation Feature** (as shown on Figure E3)
Common pipistrelle ☒ Yes ☐ N/A *Day roost* *Night roost* *Feeding* *Transitional/Occasional*	☒ Bat box ☒ Integrated bat box/ bat brick/ bat tube ☐ Bat tile (including ridge tile) ☐ Other (specify): ☐ None	2 16	☐ In same building ☐ In other existing building on site ☒ In new building ☒ Other (specify): on retained trees
Soprano pipistrelle ☒ Yes ☐ N/A *Day roost* *Night roost* *Feeding* *Transitional/Occasional*	☒ Bat box ☒ Integrated bat box/ bat brick/ bat tube ☐ Bat tile (including ridge tile) ☐ Other (specify): ☐ None	2 16	☐ In same building ☐ In other existing building on site ☒ In new building ☒ Other (specify): on retained trees
Whiskered ☐ Yes ☒ N/A *Day roost* *Night roost* *Feeding* *Transitional/Occasional*	☐ Bat box ☐ Integrated bat box/ bat brick/ bat tube ☐ Bat tile (including ridge tile) ☐ Other (specify): ☐ None		☐ In same building ☐ In other existing building on site ☐ In new building ☐ Other (specify):
Brandt's ☐ Yes ☒ N/A *Day roost* *Night roost* *Feeding* *Transitional/Occasional*	☐ Bat box ☐ Integrated bat box/ bat brick/ bat tube ☐ Bat tile (including ridge tile) ☐ Other (specify): ☐ None		☐ In same building ☐ In other existing building on site ☐ In new building ☐ Other (specify):
Daubenton's ☐ Yes ☒ N/A *Day roost* *Night roost* *Feeding* *Transitional/Occasional*	☐ Bat box ☐ Integrated bat box/ bat brick/ bat tube ☐ Bat tile (including ridge tile) ☐ Other (specify): ☐ None		☐ In same building ☐ In other existing building on site ☐ In new building ☐ Other (specify):
Natterer's ☐ Yes ☒ N/A *Day roost* *Night roost* *Feeding* *Transitional/Occasional*	☐ Bat box ☐ Integrated bat box/ bat brick/ bat tube ☐ Bat tile (including ridge tile) ☐ Other (specify): ☐ None		☐ In same building ☐ In other existing building on site ☐ In new building ☐ Other (specify):

Brown long-eared ☐ Yes ☒ N/A *Day roost* *Night roost* *Feeding* *Transitional/Occasional*	Note: boxes for this species will only be acceptable in certain circumstances, where this is justified on an ecological basis ☐ Bat box, justification ☐ Other (specify): ☐ None		☐ In same building ☐ In other existing building on site ☐ In new building ☐ Other (specify):
Serotine ☐ Yes ☒ N/A *Day roost* *Night roost* *Feeding* *Transitional/Occasional*	Note: bat boxes are not suitable for this species. Compensation should replicate, as closely as possible, the existing roost: ☐ Bat tile ☐ Bat brick ☐ Other (specify):		☐ In same building ☐ In other existing building on site ☐ In new building ☐ Other (specify):
Lesser Horseshoe ☐ Yes ☒ N/A *Day roost* *Transitional/Occasional*	A proportionate number of bat features suitable for the species. The provision of one feature, suitable for the species concerned (eg void) per roost to be impacted will be considered appropriate: Specify:		☐ In same building ☐ In other existing building on site ☐ In new building ☐ Other (specify):

E3.3b For all species and roost types not covered in the above table please provide the following:

- New roost dimension details or features (to include bat tiles/boxes as applicable).

In total 16 summer roosting boxes/also suitable for use in mild winters ('Vivara Pro Build-in WoodStone Bat Boxes' or equivalent) will be provided within the facades of the new buildings.

- Access points and size of access points.

See specifications below:

http://www.vivarapro.co.uk/?product=208

- Location details (including an 8-figure grid reference for bat houses or bat lofts relating to the structure. 8-figure grid references are not required for positions of individual boxes, tiles etc).

Circa TQ301855 as per below:

- Two boxes on E2
- One box on A1
- Four boxes on A2
- One box on B6
- One box on B4
- Three boxes on B3
- Three boxes on D1
- One box on D2

- Aspect. Explain how the internal conditions of the roost will be created.

Not applicable

- Details of the materials to be used e.g. timber, sarking, felt etc.

Not applicable

- Justification for any variation from the original roost and/or deviations from recommendations in the Bat Mitigation Guidelines. (*Diagrams of widely available standard bat box designs are not required; just refer to bat box name and reference number, e.g. Schwegler 1FF*).

Little variation to existing roost, the boxes have been shown to be used by the target species.

- Mitigation for any impacts of lighting if appropriate.

None proposed but there is a commitment to avoid direct illumination of artificial bat roost features. Also, in subsequent discussions with LBI since submission,"It is agreed that the uplighting of trees should be avoided due to the potential effects that this could have on bat foraging and bird nesting/roosting behaviour."

- Structures for access for monitoring / maintenance purposes (if applicable)

None proposed

E3.4 Other habitat re-instatement or creation (e.g. retention of existing flight lines, retention or creation of appropriate vegetation around roost entrances where applicable) – please include details of:

- Habitat replacement (following works resulting in temporary impacts) or creation not covered by sections E2 to E3 such as hedgerow/woodland planting or enhancement. State the length of hedgerow planting and areas (ha) of other planting to be provided such as woodland and anticipated establishment period etc.

N/A

- Creation of flight lines/routes of connectivity.

N/A

- Foraging area enhancements, etc

N/A

- Mitigation for any impacts of lighting if appropriate.

N/A

E3.5 Wider biodiversity gains:
Please indicate if enhancements, over and above what is necessary to mitigate the impact of the activity of the licence proposal, are being provided. Please indicate if enhancements are included to satisfy the requirement of a planning permission, and if so state the relevant planning condition, or other consents in your response below. Please also state if an applicant wishes to provide more than is typically required to mitigate for the impacts. Enter N/A if this is not applicable to your application.

Note: *Any licence granted will only cover mitigation and compensation required to fulfill licensing requirements, but will acknowledge additional biodiversity enhancements*.

N/A

Important Advice:
Scaled maps/plans of mitigation/compensation must be provided as separate maps/figures (also ***see section I "Map checklist" at the end of this document)***:

- **Figure E2** if non-standard capture and exclusion apparatus is proposed please include diagrams/photographs.
- **Figure E3** to show specifications for mitigation / compensation to be provided and annotate where it will be provided. Should the scheme be large or complicated it may be necessary to submit more than one figure.

NOTE: It must be possible to compare these with the survey results plan (**Figure C6**) and 'Impacts' Figure (**D)**.

E4 Post-development site safeguard: Further guidance and explanation on post-development monitoring requirements are included within our 'How to get a licence' document http://www.naturalengland.org.uk/Images/wml-g12_tcm6-4116.pdf. Also see Section 8.7 of the Bat Mitigation Guidelines.

E4.1 Habitat/site management and maintenance: Is any specific post-development habitat management and site maintenance planned? If 'No; state 'N/A'. If 'Yes' include the following:

- The period (years and months) for which habitat management and maintenance will take place. Ensure that this is consistent with the post development works detailed in section **E5b** of the **Work Schedule document, WML-A13-a-E5a&b**.

N/A

- Details of what will be undertaken in terms of site maintenance required to ensure long-term security of the affected population (e.g. maintain, repair or reinstate access points; maintain and repair heaters and /or data loggers; maintain, repair or restore bat feature / bat loft in good condition; repair or replace inspection hatches; management and maintenance of lighting regime, or bat boxes etc).

N/A

- Details of what will be undertaken in terms of habitat management (e.g. planting cover around roost structure, hedgerow management regime, checking establishment of habitat creation; reduction of shade around roosts, woodland management to maintain species and structural diversity etc). Ensure this relates to the relevant map.

N/A

Note – for phased or multi-plot developments a separate habitat management and maintenance plan is required, which must be submitted with the master plan: see guidance on phased developments.

Important Advice:
Please include **Figure E4** as a separate figure to show which structures and habitats will be managed, maintained and monitored post development as part of your proposal – also *see section I "Map checklist" at the end of this document)*.

E4.2 Population monitoring, roost usage etc: This should be in line with the monitoring requirements detailed in the Bat Mitigation Guidelines section 8.7 and Figure 4.

E4.2a Please complete the table below for the species and roost types listed. For all other species and roost types please provide information under E4.2b.

Species	**Roost type**	**Post-development monitoring requirement**
Common pipistrelle **Soprano pipistrelle** **Whiskered** **Brandts**	*Day roost* *Night roost* *Feeding* *Transitional/Occasional*	☒ None. There is no post-development requirement for proposals affecting bat roosts supporting up to any 3 species indicated, of the roost types listed, where they are used by low numbers of each species.

Daubenton's **Natterer's** **Brown long-eared**		☐ A single presence / absence survey at an appropriate time of year is to be undertaken. This should not take place in the first year following completion of development. Timing (year): ☐ Other (specify):
Serotine	*Day roost* *Night roost* *Feeding* *Transitional/Occasional*	☐ A single presence / absence survey at an appropriate time of year is to be undertaken. This should not take place in the first year following completion of development. Timing (year): ☐ Other (specify):
Lesser Horseshoe	*Day roost* *Transitional/Occasional*	☐ A single presence or absence survey at an appropriate time of year to be undertaken in year 2 post development plus a check of the condition and suitability of the roost. ☐ Other (specify):

E4.2b For all species and roost types not covered in the above table please include details of:

- Timing – state the years and months post development monitoring or other will be undertaken. Ensure that is consistent with the post development works detailed in section **E5b** of the **Work Schedule document WML-A13-a-E5a&b**.

2 years of post-development monitoring

- The type of monitoring which will be undertaken – include survey methods and equipment to be used. If it is expected any bats are to be taken or disturbed during this period please state anticipated numbers per species against each licensable activity.

The proposed integrated boxes will be high up on the buildings, thus no close inspection monitoring possible.
A single dusk emergence survey to be undertaken in July/August is proposed, as well as 'frost swarming survey' with four remote bat detectors in Dec-Feb and a transect.

- Specify which compensation/mitigation measures will be subject to monitoring (as referenced on Figure E4).

The emergence surveys will focus on the integrated summer boxes. The frost survey will involve the deployment of four detectors throughout the site.

Please note that it will be a requirement of the licence to undertake remedial action should monitoring identify that further management/maintenance is required of any compensation/mitigation provided, to ensure that mitigation/compensation measures are working effectively and are fit for purpose.

Important advice: Please always consider whether any *post development* monitoring effort should be staggered over alternate years in cases where use of the compensation measures may not occur in the same year of provision.

E4.3 Mechanism for ensuring safeguard of mitigation/compensation and post-development management, maintenance and monitoring works:

Please explain what mechanism is in place to ensure safeguard of mitigation/compensation provisions (e.g. Restrictive Covenant, clause to relinquish future development rights in S106 agreement, NERC Act agreement, explicit recognition of site in local planning documents, designation as County Wildlife Site or similar.) The need for this, and the type of mechanism, will vary with the scheme and impact. For substantial impact schemes (e.g. destruction of a significant maternity roost, or important hibernation site), some mechanism is always required. If you offer no specific mechanism, explain how you believe the population will be free of threats as far as can be reasonably determined (**the expectation of the granting of a licence should not be used for this purpose**).

N/A

Explain how all post-development works (management, maintenance (including remedial action) and monitoring, as appropriate) will be ensured? Include a commitment that the monitoring, habitat management and maintenance work will be undertaken. Mechanism/s for ensuring delivery must be in place before applying for a licence (also see Section F).

The licence applicant understands the need and their commitment to undertake management, maintenance and monitoring as part of this licence.

E5 Timetable of works: Please complete the **work schedule document WML-A13-a-E5a&b found on the 'bat' application form web page and append to your application pack.**

Important Advice: *Please note that from end of March 2014 a separate work schedule is a mandatory requirement to support a new bat licence application when using this template.*

F Declarations

If the mitigation/compensation area/s is/are not owned by the applicant, you must have consent from the relevant land owner(s). You must have also secured details of how any measures to maintain the population in the long term will be achieved (e.g. a legal agreement).

F1 Declaration Statement(s) – **You must <u>include</u> the following declarations within your Method Statement and include the appropriate answer (Yes/No/Not applicable):**

F1.1 **Re: section E1 -** I confirm that relevant landowner consent/s has/have been granted to accept bats into roosts or access into roosts on land outside the applicant's ownership:

N/A

F2.2 **Re: section E2 -** I confirm that landownership consent/s has/have been granted to allow the creation of the proposed compensation on land outside the applicant's ownership

N/A

F2.3 **Re: section E3** - I confirm that consent/s has/have been granted by the relevant landowner/s for monitoring, management and maintenance purposes on land outside the applicant's ownership

N/A

Comments if applicable:

Important Advice: Unsecured consents statement: If you have been unable to secure consents for any of the three declarations please explain why and detail any plans you have in place to obtain the consent(s) or provide details of any right(s) or agreement(s) that will enable the lawful implementation of the proposed mitigation, compensation and monitoring. Failure to provide the appropriate landowner consents means that the Method Statement is unlikely to meet the requirements for the FCS test to be met. It is therefore in your interest to ensure that the appropriate consents have been secured *before* applying for a licence.

G References: List any references cited, and include credits for source information.

H Annexes (supporting documents please append to your application pack)

H1 Pre-existing survey reports;

H2 Raw survey data.

I Check list of figures to be submitted with each Bat Method Statement

With your Method Statement and supporting documents please submit the following maps/figures – see table below. Note that some can be included within the Method Statement itself (if preferred) and others must be submitted individually (i.e. separate documents)**.** Maps/Figures must include the title, site name as referenced on your application form, date and figure reference. If a grid reference is more applicable (e.g. a bat house is being provided please included this). Include a scale bar (appropriate to the situation e.g. 100m on site maps, 1km on location maps) and direction of North etc.

Additional maps, photographs or diagrams should be included where necessary to adequately explain the scheme.

Figure reference	Mandatory as will be included in the annexed licence, if applicable	Mandatory for assessment purpose only, but will not be included in the annexed licence	What it must show (also see details above on site reference, dating and naming).
Figure B2.1	-	Yes, if the application is part of a phased or multi-plot development	**Master plan overview-** note – this is not the same as a master plan document, for which you should follow the guidance as stated in section B2.1.
Figure B2.2	-	Yes, if applicable	**Locations of other nearby bat licensed sites, or sites which will be impacted on by future development.**
Figure C5a	-	Yes	**Location map** at an appropriate scale for the application (often 1:50,000 or 1:25,000)
Figure C5b	-	Yes	**Survey area** showing all buildings, structures and habitats that are within the survey area and distinguishing those that were surveyed and those that were not. Indicate where surveyors were located for each of the surveys and their respective field of view. Aerial photographs should be provided where possible (ensure you have permission to use copy righted maps). If automated detectors and/or transect routes were used, ensure that these are indicated (as appropriate).
Figure C6	-	Yes	**Survey results -** provide clear, annotated and cross-referenced maps/plans/photographs to show the survey results (access points, location of roosts, flight lines, results of activity surveys where DNA samples were taken etc). Ensure the Figure is at a suitable scale to show the results. If presenting multiple survey results on a single Figure, ensure the results are clearly differentiated.
Figure D	**Yes**	**-**	**Impacts plan –** map/figure which must show all structures or habitats (clearly referenced) that will be disturbed, damaged or destroyed, detailing where the roosts and access points are.
Figure E2	**Yes** – but only if applicable to the application	**-**	**Non-standard capture and exclusion apparatus.** If these are proposed please include diagrams/photographs.
Figure E3	**Yes**	**-**	**Specifications for mitigation / compensation** (including all dimensions for bat lofts/houses/stand-alone structures and materials to be used etc and 8-figure grid reference). Mitigation / compensation (must show all habitat creation, restoration, boxes). It may be necessary to submit more than 1 figure if the proposal is large or complicated.
Figure E4	**Yes** – when monitoring and maintenance will be included in the licence	**-**	**Monitoring, management and maintenance map.** Please indicate the specific structures and habitat that are to be managed, maintained and monitored as part of this licence proposal. Ensure that they are correctly referenced and are consistent with other

			parts of the Method Statement and figures.

Definitions of roost types to be included in the application (further detail can also be found in the Bat Mitigation Guidelines and the BCT's "Bat Surveys Good Practice Guidelines"):

.

a. **Day roost**: a place where individual bats, or small groups of males, rest or shelter in the day but are rarely found by night in the summer.

b. **Night roost**: a place where bats rest or shelter in the night but are rarely found in the day. May be used by a single individual on occasion or it could be used regularly by the whole colony.

c. **Feeding roost**: a place where individual bats or a few individuals rest or feed during the night but are rarely present by day.

d. **Transitional / occasional roost**: used by a few individuals or occasionally small groups for generally short periods of time on waking from hibernation or in the period prior to hibernation.

e. **Swarming site**: where large numbers of males and females gather during late summer to autumn. Appear to be important mating sites

f. **Mating sites**: sites where mating takes place from later summer and can continue through winter.

g. **Maternity roost**: where female bats give birth and raise their young to independence.

h. **Hibernation roost**: where bats may be found individually or together during winter. They have a constant cool temperature and high humidity. Sites where hibernating bats have been confirmed by appropriate survey effort should be classed as '**hibernation confirmed**'.

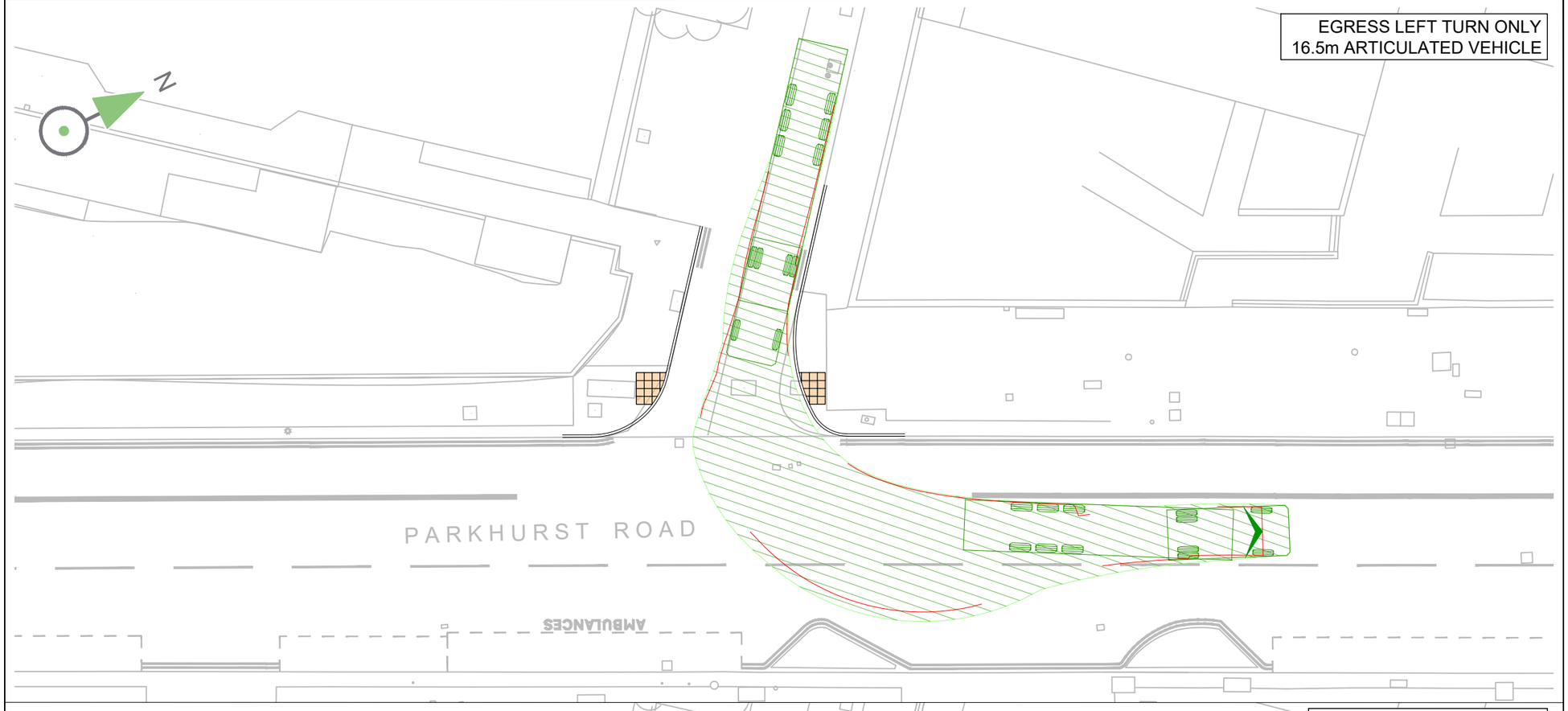
i. **Satellite roost**: an alternative roost found in close proximity to the main nursery colony used by a few individual breeding females to small groups of breeding females throughout the breeding season.

j. Other – please explain what the roost type is if not one of the above (we recognise that roost types are interchangable and not always easy to classify according to the nuances of certain species).

k. An **'alternative roost'** shall include: a purposely installed bat box; an existing roost which will not be impacted by the works; or other new/enhanced roosting opportunities. Any alternative roost must be suitable for the species, within or close to the existing roost and free from additional disturbance or development pressure.

APPENDIX 5 – SWEPT PATH ANALYSIS DRAWINGS

Appendix

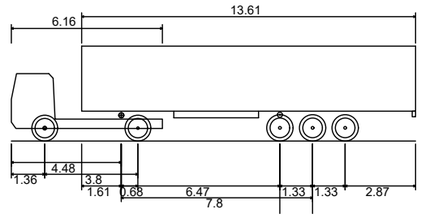


1:250

0 5m 10m 15m 20m 25m

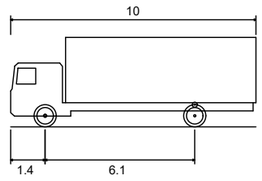
Notes:

1. DO NOT SCALE FROM THIS DRAWING.
2. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
3. THIS DRAWING IS TO BE PRINTED IN COLOUR.
4. THIS DRAWING HAS BEEN ISSUED FOR INFORMATION PURPOSES AND MUST NOT BE USED FOR CONSTRUCTION.



FTA Design Articulated Vehicle (2016)

Overall Length	16.480m
Overall Width	2.550m
Overall Body Height	3.870m
Min Body Ground Clearance	0.515m
Max Track Width	2.470m
Lock to lock time	3.00s
Kerb to Kerb Turning Radius	6.600m



FTA Design 13/18 Tonne Rigid Vehicle (2016)

Overall Length	10.000m
Overall Width	2.550m
Overall Body Height	3.645m
Min Body Ground Clearance	0.440m
Track Width	2.470m
Lock to lock time	3.00s
Kerb to Kerb Turning Radius	11.000m

Rev	Date	Description	Drn	Chk	App
A	14/10/22	FIRST ISSUE	MC	DM	DM

Velocity Transport Planning

Drawing Status
S2 - FOR INFORMATION

Client
LONDON SQUARE

Architect
VERETEC

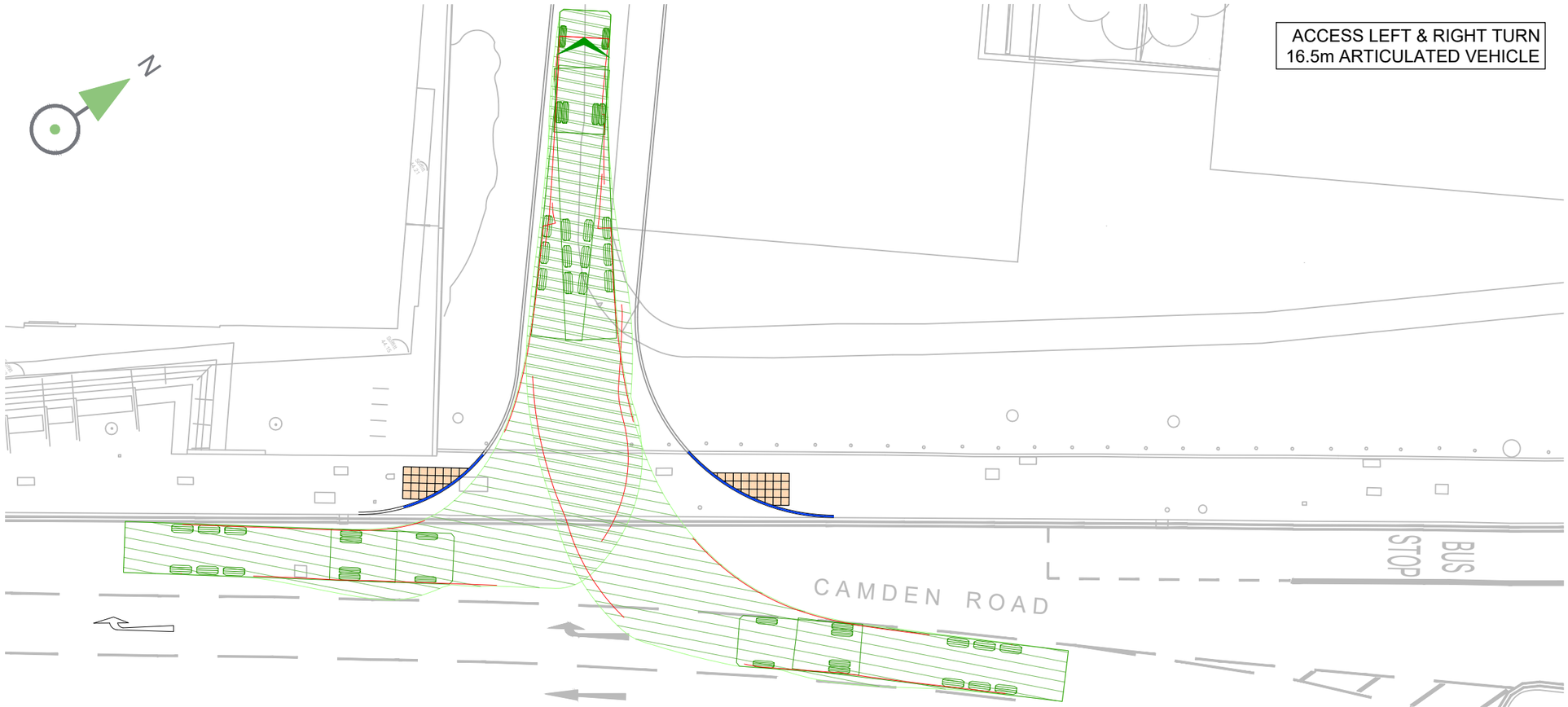
Project Title
HOLLOWAY PARK

Drawing Title
SWEPT PATH ANALYSIS
CONSTRUCTION EGRESS GATE
16.5m ARTICULATED & 10m RIGID VEHICLES

Scale @ A3	Date	Designed/Drawn	Checked	Approved
1:250	13/10/22	MC	DM	DM

Project Ref	Drawing Number	Rev
2490/1130	2490-1130-T-025	A

Drawing file: 2490-1130-T-024-026-A - Construction Access & Egress Swept Path.dwg Date: Oct 13, 2022 - 5.43pm



Notes:

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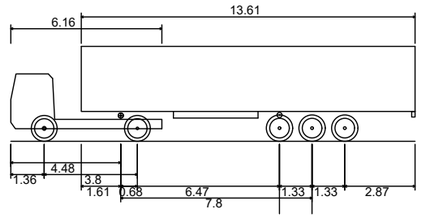
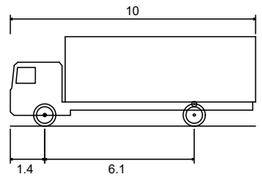
2. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
3. THIS DRAWING IS TO BE PRINTED IN COLOUR.
4. THIS DRAWING HAS BEEN ISSUED FOR INFORMATION PURPOSES AND MUST NOT BE USED FOR CONSTRUCTION.



FTA Design Articulated Vehicle (2016)

Overall Length	16.480m
Overall Width	2.550m
Overall Body Height	3.870m
Min Body Ground Clearance	0.515m
Max Track Width	2.470m
Lock to lock time	3.00s
Kerb to Kerb Turning Radius	6.600m



FTA Design 13/18 Tonne Rigid Vehicle (2016)

Overall Length	10.000m
Overall Width	2.550m
Overall Body Height	3.645m
Min Body Ground Clearance	0.440m
Track Width	2.470m
Lock to lock time	3.00s
Kerb to Kerb Turning Radius	11.000m

Rev	Date	Description	Drn	Chk	App
A	14/10/22	FIRST ISSUE	MC	DM	DM

Velocity Transport Planning

Drawing Status: S2 - FOR INFORMATION

Client: LONDON SQUARE

Architect: VERETEC

Project Title: HOLLOWAY PARK

Drawing Title: SWEPT PATH ANALYSIS
CONSTRUCTION ACCESS GATE
16.5m ARTICULATED & 10m RIGID VEHICLES

Scale @ A3	Date	Designed/Drawn	Checked	Approved
1:250	14/10/22	MC	DM	DM

Project Ref	Drawing Number	Rev
2490/1130	2490-1130-T-024	A

Drawing file: 2490-1130-T-024-026-A - Construction Access & Egress Swept Path.dwg Date: Oct 13, 2022 - 5:43pm