

THE PRINTWORKS

SECTION 6.0 INCLUSIVE DESIGN

6.1 INCLUSIVE DESIGN PRINCIPLES

Inclusive Design

This access statement has been prepared to explain how the development will be achieved in accordance with the principles of inclusive design. In addition to discussing access requirement for the predominantly residential design, it includes elements relating to both the design and future running of the proposed commercial units, insofar as they relate to the Equality Act and inclusive design. It is intended that this access statement will therefore be the starting point of a developing document that will eventually encapsulate the full access philosophy of the commercial elements of the project.

Definition of Disability

The Equality Act 2010 describes a disabled person as someone who has a physical or mental impairment which has a substantial and long term effect on their ability to carry out normal daily activities.

Physical or mental impairment includes sensory impairments. Hidden impairments are also covered (e.g. mental illness or mental health problems, learning disabilities and conditions such as diabetes or epilepsy). People who have had a disability, within the terms of the Act, in the past are protected from discrimination even if they no longer have a disability at the current time.

Philosophy

- The principles of inclusive design include provision of places and homes that are:
- Inclusive so everyone can use them safely, easily and with dignity.
- Responsive taking account of what people say they need and want.
- Flexible so different people can use them in different ways.
- Convenient so everyone can use them without too much effort or separation.
- Accommodating for all people, regardless of their age, gender, mobility, ethnicity or circumstances.
- Welcoming with no disabling barriers that might exclude some people.
- Realistic offering more than one solution to help balance everyone's needs and recognising that one solution may not work for all.

The Applicant is committed to a policy of equality, inclusion and accessibility in the delivery of their services to those who visit and work in the commercial units, in the employment opportunities afforded to future employees, in the use of the building for residential purposes and in providing inclusive access to The Site.

Equality of opportunity

The Applicant is committed to the promotion and development of equal opportunity in all aspects of their work.

Equal opportunity principles apply to everything – from recruitment and selection, to service delivery direct to their customers. The objective is to ensure that everyone, regardless of age, disability, ethnic origin or gender is treated equally.

Employment

For the commercial aspect of the proposal, the employment provisions of the Act assign rights to the disabled in the field of employment. Under the Act, it is unlawful for any employer to treat a disabled person less favourably than someone else because of their disability. Every aspect of employment is covered including recruitment, advertising, selection, carrying out the work, promotion and training, career development, as well as retention and staff redundancy.

The access strategy recognises that, when employing someone with a disability, it will be necessary to enable that person to undertake the full remit and responsibility of the job by independent means.

Access to Goods, Facilities, And Services

Service providers must take reasonable steps to:

- Change practices, policies or procedures which make it impossible or unreasonably difficult for disabled people to use a service.
- Provide auxiliary aids or services which would make it easier for, or enable, disabled people to use a service.
- Avoid physical features which make it impossible or unreasonably difficult for disabled people to use a service.

INCLUSIVE DESIGN PRINCIPLES

Approach

Consideration will be given to people arriving by public transport, community transport, taxi or by foot. The following provisions will apply:

- Footways and footpaths will be well lit and be a firm, even surface. Excessive cross falls will be avoided wherever possible and surfaces will be non-slip.
- Footpaths to main entrances will be a minimum width of 1.8m.
- A high quality inclusive shared surface treatment including dropped kerbs where necessary will be incorporated as a component of the landscaping scheme. Tactile paving will be installed to Department for Transport (DFT) guidelines where appropriate.
- Guarding, additional lighting and guidance tactile paving will be provided to avoid obstacles or hazards.

Physical Access

The Applicant recognises that, where redevelopment work is planned, every opportunity should be taken to facilitate access.

The latest legislation and good practice guidance on accessibility will be observed during the design and construction stages.

These will include the Building Regulations Part B (Fire Safety), Part M (Access To and Use of Buildings), Part K (Protection from Falling, Collision and Impact) and BS 5588 – part 8 (Fire Precautions in the Design, Construction and Use of Buildings).

Key Access Issues of the Design

The Applicant recognises that the way buildings are designed has a particular impact on disabled people, elderly people and parents with children.

By addressing the access needs of these groups, we will all benefit from a more easily accessible built environment as accessible design is invariably good design for all.

Entrances

The entrance to the apartment blocks will have a level approach:

- The threshold to the entrance door will be flush with the external surface.
- The entrance door will provide a minimum clear opening width of 850mm with an unobstructed space of 300mm at the leading edge and will be a power assisted swing door.
- Where doors have viewing panels, there will be a zone of visibility between 500mm and 1500mm from the floor.
- Manifestation will be present on glazing.
- Mats will not impede wheelchair access.

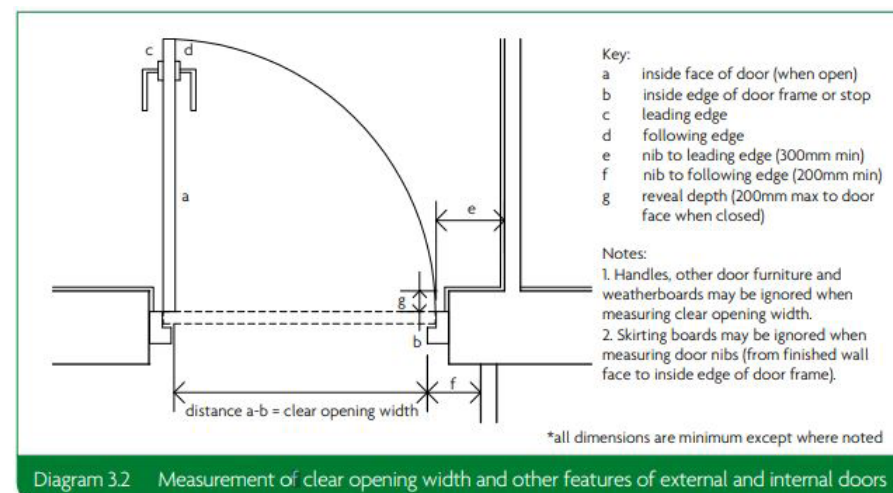


FIGURE 302. Part M Door Diagram

Horizontal Circulation

Corridors will be a minimum of 1200mm wide and clear of obstructions. Wherever possible, equipment such as fire extinguishers will be recessed or located to maintain unobstructed widths and reduce potential hazards.

Internal doors will provide a minimum clear opening width of 800mm. Where single leaf doors are proposed, 300mm of unobstructed space will be provided at the leading edge. Door furniture will contrast in colour from doors and door sets to assist partially sighted people. Vision panels will be provided in all circulation doors. Walls and floor surfaces will be chosen to minimise light reflection and sound reverberation, which can be confusing for people with sensory impairments.

Vertical Circulation

New internal steps will be designed to Approved Document M4(2) (2015) standards. The applicant recognises that appropriately designed lifts are the most accessible way for many people to travel between floors within buildings. In light of the proposed use, the applicant intends to install passenger lifts at least large enough to accommodate one manual wheelchair and an accompanying adult to the apartments.

A clear area of 1500mm x 1500mm will be provided at the lift entrance on both floors. BS EN 81-1 Electric Lifts, BS EN 81-2 Hydraulic Lifts and BS EN 81-70 Safety Rules for the Construction and Installation of Lifts will be conformed to in order to satisfy Part M.

INCLUSIVE DESIGN PRINCIPLES

Lighting

Care will be taken to ensure that lighting levels are as even as possible throughout the common parts of the building as shadows and pools of light can create optical illusions and mask potential hazards. Bright lights can produce excessive glare and be as uncomfortable as low lighting levels. Glazed screens will have the prescribed levels of manifestation so that there will be visual contrast with the background under all lighting conditions.

Emergency Access

To ensure adequate escape for disabled (wheelchair bound) customers and/or staff, personal emergency egress plans (PEEPs) will be developed as part of the management operational strategies.

Provision of evacuation plans for visitors to the commercial parts of the buildings will be developed during the project. The Applicant recognises that many people require assisted escape and therefore suitable standard PEEPs will be available for all disability groups.

Signage and Switch Heights

The Applicant recognises that good signage offers information to all users and greatly benefits people with disabilities who have difficulty with wayfinding. Information which helps orientation will be provided at junctions of circulation routes and at key destinations. Signage will comply with the guidance and design available in the Sign Design Guide: A Guide to Inclusive Signage.

The following provisions will apply:

- Key information will be available in visual, audible and tactile form and will be low enough to be touched.
- Signs will be positioned to avoid reflections from daylight and artificial lighting.
- Signs will consist of simple words, clearly separated from one another, in short sentences.
- Plain English and pictograms will be used to assist people with learning difficulties.
- Signs to facilities will incorporate the international symbol for access, for example, in the case of accessible WCs.
- The heights and overall dimensions of safety signs on glass doors and glazed screens will conform to BS 5378: Safety signs.
- Electric outlets, switches and controls will be positioned consistently throughout the building and will meet the needs of a variety of disabled people such as wheelchair users, visually impaired people and people with impaired hearing or dexterity.
- Wherever possible, controls and switches will not require the simultaneous use of both hands.
- Electric socket outlets will be switched.
- Controls will contrast in colour and luminance with backgrounds, with information associated with them embossed to aid tactile reading.
- Wherever possible, light switches will align horizontally with door handles for ease of location when entering a room.
- All switches and controls that require precise hand movement or dexterity will be in a zone 750mm –1000mm above floor level so that wheelchair users and those standing can operate them.
- Outlets, switches and controls will be at least 350mm from room corners.

6.2 OFF STREET ACCESSIBLE CAR PARKING

This is a car free development.

One accessible car parking space is provided on the ground floor via Percival Court to the south of core C, for the PBSA staff and students. An additional disabled bay could be provided where required.

Accessible car parking spaces will meet dimensional and other specifications as set out in Approved Document Part M and local authority requirements.

KEY

-  Vehicular Access
-  Accessible parking
-  Wheelchair turning circle
-  Access



FIGURE 303. Accessible Parking Plan

6.3 ACCESSIBLE AND ADAPTABLE ROOMS

The design of the scheme with regard to accessible sleeping accommodation has been developed in response to the Building Regulations and the London Plan, particularly the GLA's Practice Note 'Wheelchair Accessible and Adaptable Student' released in November 2022.

This note confirms that PBSA development is to be treated as hotel accommodation, in line with the Building Regulations. In respect of accessible units, Policy E10(H) of the London Plan applies, and the scheme has been designed to British Standard BS8300-2:2018, Design of an accessible and inclusive built environment, Buildings Code of practice, and therefore 10% of the units are wheelchair-accessible.

BS8300 provides further detailed guidance which results in a development which proposes 5% of accommodation to be designated as wheelchair accessible accommodation, with a further 5% of rooms designed to be adaptable if demand requires.

It is worth noting that both Volumes of Approved Document M of the Building Regulations have been applied to the scheme in light of the proposed use. Accessibility considerations associated with dwellings apply in terms of the approach to, and general circulation within, the scheme, and that for non-dwellings has been used to inform the design of the sleeping accommodation.

Accessible bedrooms (M4(3) equivalent) are all studios and therefore include a kitchenette and ensuite. The bathroom is based on an in situ bathroom, designed with wet-room finishes, to meet the requirements of BS8300-2:2018. The accessible rooms are located close to the main cores and all have level and lift access.

Given the existing nature of the High Road properties, the minimal alterations proposed, and the protected status of the buildings, which are Grade II and locally listed, accessible accommodation is not proposed in this part of the scheme. As noted, the overall project allows for a comprehensive provision of accessible spaces and this is based on the overall quantum of bedrooms, including the High Road studios, not just those associated with the new elements.

KEY

- A** 1500mm Diameter Turning Circle
- B** Tip up Shower Seat and Associated Compliant Fittings
- C** Shower Curtain
- D** WC and Associated Compliant Fittings
- E** Basin and Associated Compliant Fittings

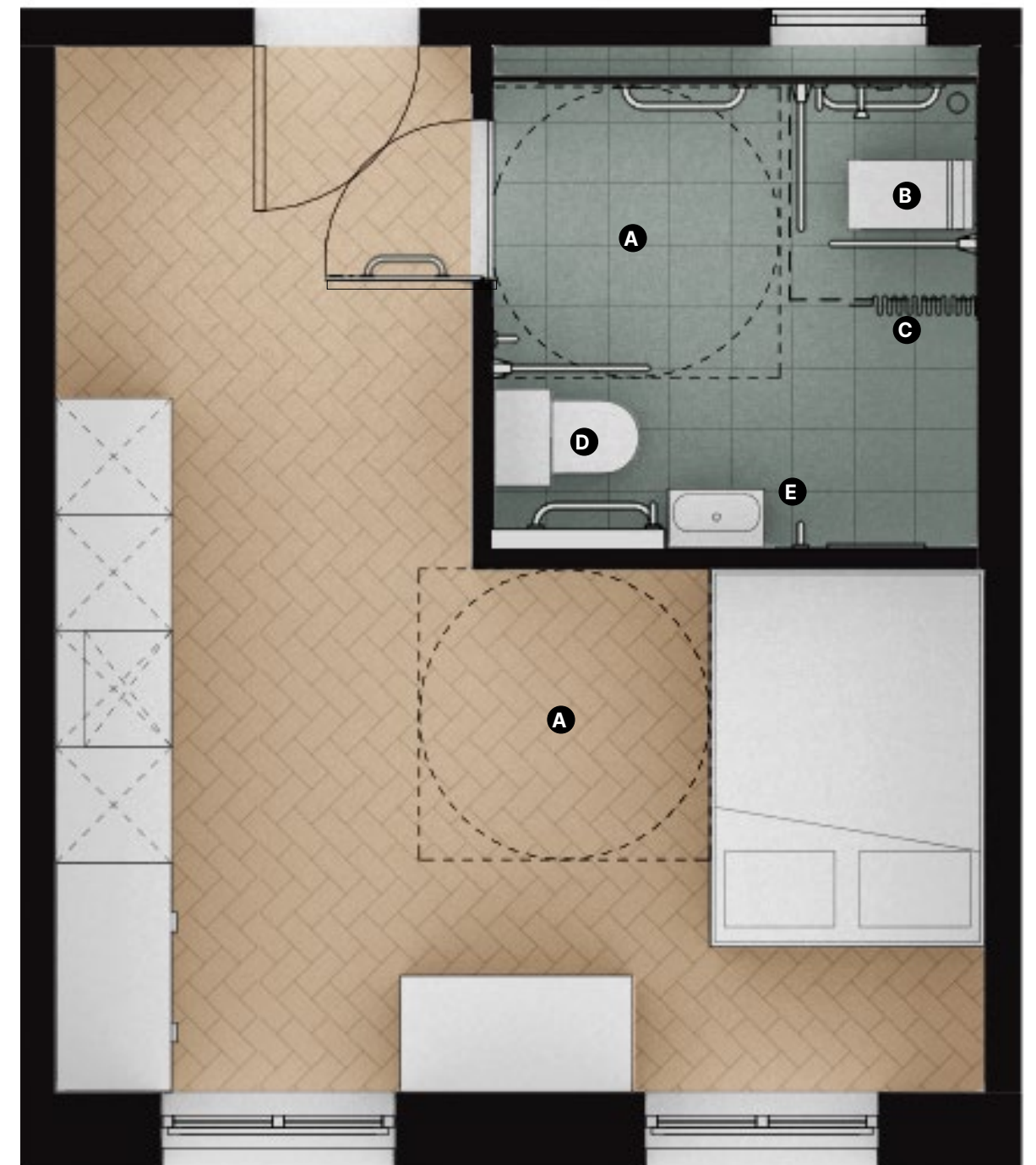
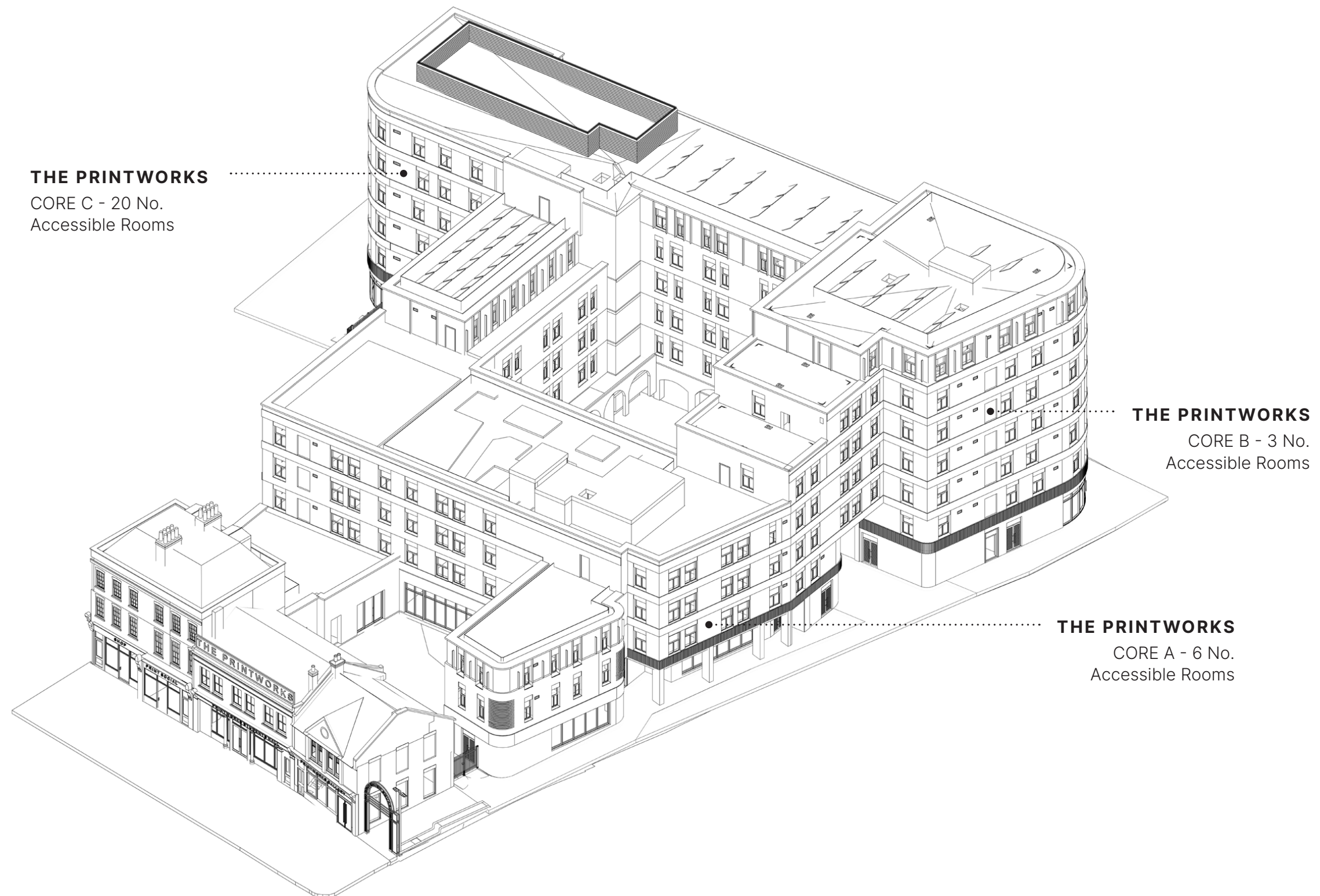


FIGURE 304. Accessible Room Example

ACCESSIBLE AND ADAPTABLE ROOMS

**FIGURE 305.** Accessible Room Location Diagram

THE PRINTWORKS

SECTION 7.0 TECHNICAL RESPONSE

7.1 ECOLOGY AND BIODIVERSITY APPRAISAL

Executive summary to be read with the full report:

Logika Consultants Ltd was commissioned by F3 Architects LLP, on behalf of Goodsyard Tottenham Limited (the 'Client'), to undertake an Ecological Impact Assessment (EcIA) for the redevelopment of The Printworks, High Road West at 819 – 829 High Road, London (hereafter referred to as 'the Site').

This EcIA addresses the potential effects of the Proposed Development on ecology and nature conservation. This report provides an overview of the ecological features present, or potentially present on or close to the Site, describes baseline conditions at the Site, ascribes a level of importance to each ecological feature identified and provides an assessment of the potential effects associated with redevelopment of the Site.

An ecological desk study undertaken in June 2023 identified two internationally designated statutory sites within 5 km of the Site and one nationally designated statutory site within 2 km of the Site. While no locally designated statutory sites were found, three non-statutory designated sites were identified within 2 km of the Site. The Site is within an Impact Risk Zone (IRZ) for both Walthamstow Reservoirs and Epping Forest SSSIs. Of relevance to the proposed development, Natural England require consideration of residential developments of over 100 units. However, all statutory and non-statutory designated sites, including Epping Forest SAC, are considered to be of far enough distance, with significant urban barriers, and unlikely to be affected by the proposed development.

The habitats on Site were surveyed and assessed for their suitability to support protected/otherwise notable species by Logika on 6th June 2023. The Site comprises a large building complex, which was assessed as having negligible Bat Roost Potential (BRP) with associated hardstanding and small amounts of ephemeral vegetation, including butterfly-bush, a species listed in the London Invasive Species Initiative (LISI) and requires removal from Site. These habitats are widespread on both a local and national scale, with neither being considered rare or ecologically valuable. Given the lack of vegetated habitats on Site, the proposed landscaping to be included within the development will provide a net gain in biodiversity.



FIGURE 306. Existing aerial view of site

7.2 DAYLIGHT AND SUNLIGHT

Conclusion to be read with the full report:

As the massing of the proposed development is very similar to that of the 2022 consented scheme (ref. HGY/2021/2283), we can conclude from the results of our daylight and sunlight assessment of that scheme that only three neighbouring properties could potentially be materially affected. We assessed the potential effects of the proposed development on daylight and sunlight to those three surrounding residential properties. The impacts on all other surrounding buildings will be within the BRE guidelines. There are no amenity spaces to be assessed for sun on ground.

We ran our assessments using the methodologies in the BRE guide. The advice contained therein is not mandatory and its numerical guidelines are purely advisory should be applied flexibly. As the site is located within the North Tottenham / Northumberland Park Growth Area, and within Site Allocation NT5: High Road West, referred to in the TAAP, greater flexibility should be afforded in applying the BRE guidelines, as noted in the NPPF and Mayor of London's Housing SPG.

The results indicate that the neighbouring properties will remain with acceptable levels of daylight and sunlight in the post development condition. The only impacts outside the guidelines would be: five rooms serving three flats in 831-833 High Road (three bedrooms and two living/dining rooms); five rooms serving two flats in 813-817 High Road (four bedrooms and one living/kitchen/dining room); and three rooms in 811a High Road (a kitchen, a bedroom and a living/kitchen/dining room).

Most of the affected rooms are bedrooms, which have a lower requirement for daylight and are less sensitive. In every case the residual daylight and sunlight levels with the proposed development in place would be reasonable for an urban area.

It should be borne in mind that parts of the Site are underdeveloped currently, with single-storey buildings or no massing at all. In such cases a greater impact than the BRE's default numerical guidelines may be unavoidable. Furthermore, the supplementary mirror-image assessment of 831-833 High Road shows that future daylight levels would be the same or noticeably better than the alternative target values derived from a mirror-image building reflected onto the Site.

Overall, the difference in the daylight and sunlight effects when compared to the consented scheme is minimal, and therefore the proposed scheme should be considered acceptable in daylight and sunlight terms.

It is submitted that the proposed development will not cause unacceptable harm to daylight or sunlight to existing surrounding residential properties. The layout of the proposed development is consistent with the Council's local planning policy on daylight and sunlight, particularly having regard to paragraph 125(c) of the NPPF and paragraphs 1.3.45 and 1.3.46 of the Mayor of London's Housing SPG.



FIGURE 307. Scheme tested in context

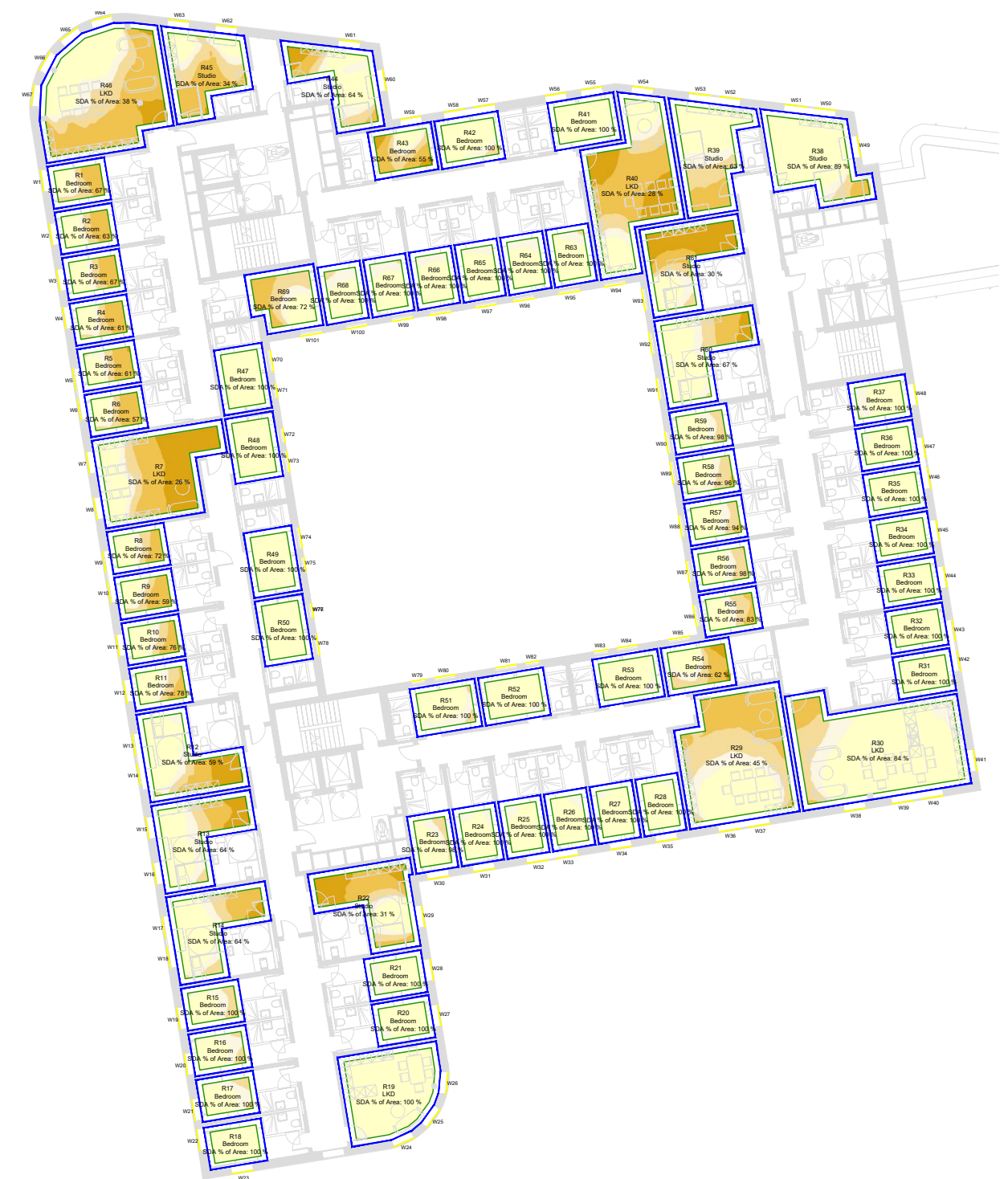


FIGURE 308. L03 Sunlight/Daylight Analysis



Not to scale

7.3 SECURED BY DESIGN

Crime Prevention

While not for approval, the following summarises how the illustrative scheme aims to address Crime Prevention measures.

The secured by design aspects of the proposed scheme have been reviewed with an officer from the Metropolitan Police and refined to address any issues raised.

The proposals provide a substantial benefit in terms of crime prevention over the existing site condition. The creation of a new neighbourhood will drive footfall to the area providing increased levels of day round activity, greater public amenity, and opportunity for both passive and active surveillance.

A number of meetings were held to review the scheme with PC Lee Warwick, Metropolitan Police Designing Out Crime Officer. All comments were incorporated into the scheme.

Key points discussed are summarised as follows:

- Opening up Brunswick Square considered to be a positive move in terms of 'Secured by Design' principles, offering a clear line of sight from the High Road – users of the street are therefore able to see along its length, aware of the type of activity taking place.
- With No. 829 High Road retained it would be harder to see into the space from the High Road, making people less likely to use the route.
- The proposal would allow for passive surveillance and help to reduce anti-social behaviour.
- Such alleyways are prone to illegal activity and this often results in gates having to be installed – opening up Brunswick Square would help to avoid any requirement for gating the street.
- The curved nature of the returns to the walls makes for fewer corners to hide around, again, this is likely to aid a reduction in ASB.

- We discussed the straight nature of the vehicular access vs. the slightly meandering pavement - this could be helpful in terms of combating moped crime.
- It was noted that lighting needs to be given careful consideration.

Access and Movement:

Circulation routes through the development will be designed in order that they pass through open, wide spaces between buildings, with no blind spots. Access cores to buildings will lead off each of the open spaces, creating destinations within the development, and giving function and purpose to the network of streets and small squares.

Circulation routes will be well observed throughout the development, increasing natural surveillance levels.

Routes will be clearly defined and separated from private or defensible spaces through level changes, planting, and screening.

Routes would be well lit in accordance with prescribed standards, with wayfinding incorporated to ensure clear ease of use and access. This is particularly important along Brunswick Square where a colonnade is incorporated and considered lighting design required.

Surveillance:

The nature of the layout of the 'streets and squares' approach to the overall development supports the need for a well observed public realm throughout.

Building entrances, habitable rooms, and commercial space, is oriented as much as possible to overlook the streets and public spaces.

The relationships which have been designed between the buildings and open spaces work together to ensure that:

- Criminal activity would attract the attention of onlookers.

- Offenders could not travel without fear of being seen.
- Open spaces and circulation routes are to be well lit, and generally comprise wide, open areas, with no blind spots, recesses, or hiding places.
- Blank walls will be avoided, and parking areas are located on well used routes, and overlooked by habitable rooms.

Structure:

Building 'uses' within the development are designed to be compatible with each other on The Site, and with the functions of spaces adjacent, as identified within the approved wider masterplan.

Surface vehicle parking areas are located close to the buildings, are well overlooked, and generally form part of shared access routes/zones with pedestrians and cyclists to ensure maximum levels of occupation and observation.

Layout of the development ensures occupation of all spaces throughout the scheme, through location of PBSA access cores, and overlooking of open spaces between buildings.

All open spaces serve legitimate functions, as circulation and access routes, and to contain amenity spaces.

SECURED BY DESIGN

Ownership:

Public, private, and semi-z spaces will be clearly defined through changes of level, material treatments, and physical barriers in the form of planting and screening.

The space to the west of the development is gated providing shared private amenity space for the residents of the duplex units which the space serves.

Shared courtyard gardens are accessed from all cores with and upper level terrace accessed from the north-west core – access control devices to doors would be used to manage the use of these gardens.

Defensible spaces will be created to empower residents to take control of areas close to their homes.

There will be no obvious ‘rear’ areas to the scheme, with entrances to cores located throughout the development on all sides of buildings to encourage activity within all zones.

Low walls, hedges, and fences are incorporated as demarcation of spaces where appropriate.

A management plan will be implemented to ensure that landscaping features are maintained in good order and do not begin to impede surveillance.

Activity:

The public realm would be designed to be enjoyed by all residents of the development, regardless of their age or cultural groups.

The incorporation of seating areas encourages use of the spaces by all residents.

Access routes to building entrances, and cycle stores etc. through the public realm, promote constant activity within the spaces throughout the day and evening.

Physical Protection:

Doors and windows throughout the scheme would be incorporated to meet ‘Secured by Design’ principles and standards, as an effective means of physical barrier to supplement passive measures indicated.

Building entrances would be provided with Access Control system, with linked entry phones in each dwelling.

Cycle storage is indicated in dedicated, and secure locations within the development. Cycle storage provision is designed in accordance with the London Borough of Haringey and Transport for London’s requirements.

The following design features have been considered when including gates and physical controls:

- Hold open devices, such as magnetic locks, to allow spaces to be open from dusk to dawn but closed at the touch of a button/timer system overnight.
- Systems would cut power to gates and they would close via self-closing ironmongery.
- Push to exit buttons to be placed on the inside face of the gates for free egress with fob access control from the outside.
- Careful placement of exit buttons required to be out of reach from outside the development.
- Fob systems with data logging features to allow the management team to monitor whether the system is being abused.
- All proprietary fixtures and fittings to be accredited – gates to conform to LPS 1175 SR2 which is an attack test.
- Much of the design will be bespoke and so the ‘Secured by Design’ team to comment before finalising the proposals.
- Size – min. 2.1 to 2.4m tall.

- Ability to climb – cross bar spacing considered.
- What is adjacent to gates – avoid bike stands etc which can be used to assist climbing.
- Hostile toppings – allowed for.
- Openness – Architectural aspiration considered alongside SBD requirements – i.e. railings.
- L04 terrace: SBD officers suggested that a suicide risk assessment is carried out and that reasonable measures are introduced to mitigate risks. This has been carefully considered in terms of edge treatment and pergola design.

Management and Maintenance:

An appropriate periodic management and maintenance plan would be put in place to ensure that spaces are kept tidy, attractive, and well cared for.

Creation of a sense of ownership amongst residents through clear definition of spaces would encourage implementation of personal maintenance responsibilities.

Maintenance responsibilities would be established and documented at the outset of the development process to ensure clear understanding of roles.

Any signs of previous damage, disorder or neglect should be promptly addressed to reinforce that the development is well cared for, and that crime and disorder are not tolerated.

7.4 FIRE STRATEGY



The scheme has been developed with specialist input from a fire engineering consultant BB7 via an iterative design process considering both the PBSA and commercial components of the project.

- Emergency vehicle access to The Site is improved via the widening of Brunswick Square making parking provision for an appliance immediately adjacent to the north-west and north-east cores straight forward.
- The south-west core sits at the end of Percival Court and the narrow nature of this lane makes it impassable to a fire tender. Therefore, in the interim condition, the proposals allow for a tender to access the western courtyard, via Brunswick Square, and park within a compliant distance of the south west core. With the wider masterplan brought forward, access to the south west core would be via the new street to the west, Peacock Mews.
- Hose distance from fire appliance parking locations has been tested to fall within the required standards.
- Suitable detection and sprinkler coverage is planned throughout the scheme with water tanks accommodated within plant spaces.
- Evacuation and fire fighting lifts are proposed in the residential cores where their height requires such vertical circulation measures.
- Core stairs discharge via smoke protected lobbies to the street.
- Cores are planned with smoke riser shafts and associated automatically opening vents to manage fire risk.
- The overall block layout has been planned with due regard for proximity to the boundary avoiding unprotected areas and the need to fire rate elements of the façade.

Please refer to the BB7 Fire Engineering report for further details.

KEY

- Fire Tender
- Fire Tender Route
- Fire Tender Access
- Fire Escape Point



FIGURE 309. Ground Floor Fire Strategy Diagram

7.5 TRANSPORT

Summary to be read with the full report:

The transport strategy has been developed in accordance with the relevant guidance and policies including LBH and TFL standards for cycle and car parking. The transport strategy and development impact has been considered and the Transport Assessment, prepared in accordance with TFL's guidance and a methodology agreed previously with LBH transport officers , demonstrates that the development proposals with not have an adverse impact on the local transport networks. A Framework Travel Plan and Outline Construction Logistics Plan have been prepared to support the Transport Assessment.

The transport strategy supports active and sustainable travel with over 200 cycle spaces provided for the use of students, employees and visitors. The scheme is car free except for a wheelchair accessible car parking space provided consistent with other student accommodation schemes. The layout of the development improves the permeability of the Site and the surrounding area supporting the aspirations of LBH policy as well as the Mayor of London's target for 80% of all journeys in London to be made by walking, cycling or public transport.

	Key transport impacts / issues	Solutions / mechanisms
Site and surroundings	The Site lies immediately to the east of High Road and is bound by residential and commercial development to the north and south, and Peacock Industrial Estate to the west. The Site is surrounded by a comprehensive network of footways that form part of the existing urban fabric. Wide footways are provided on High Road providing direct access to the commercial units fronting it. The Site has a PTAL rating ranging from 4 to 5 and is easily accessible by walking, cycling and public transport.	The proposed development has been designed to significantly improve the pedestrian and cycle permeability of the Site, providing a high-quality low trafficked environment for pedestrian and cyclists. Pedestrian routes along the northern boundary of the Site will comprise no less than 2m wide footways adjacent to vehicle corridors. Cycle parking facilities will be provided, in line with London Plan (2021) standards and LCDS to encourage active travel. The development will provide wheelchair accessible car parking only in line with a PTAL of 4 to 5.
Active Travel Zone	The ATZ has identified several key destinations within a 20-minute cycle of the Site. The identified routes highlight how well connected the Site is to the public transport network as well as leisure, educational, cultural and commercial amenities.	Public realm improvements and increased permeability will improve the Site's connectivity with the surrounding existing walking and cycle routes as well as amenities and public transport facilities. Recommended active travel routes to / from key destinations in the wider area would be promoted through information and wayfinding.
London-wide network	The development proposals are forecast to generate a reduction in trips by all modes and compared to the consented land uses.	No mitigation is deemed necessary as the reductions by individual modes would have no perceptible impact on the operation of the local transport networks.
Construction	The Site is well located to the strategic highway network. The outline CLP, included as Appendix B to this TA, shows that the number of construction vehicles are expected to be low. The CLP forecasts a peak of around 18 vehicle per day during the peak period of construction (Q1 2025), which equates to approximately two vehicles per hour or one vehicle every 30 minutes.	The outline CLP identifies measures to support sustainable construction. The Site is well located in relation to the strategic highway network and trips from and to the Site will have a minimal impact. The primary construction access and egress route to the Site for demolition and construction HGV's will follow the TLRN until the final approach to the Site where High Road and White Hart Lane are used for access.

FIGURE 310. Transport Assessment Summary

7.6 SUSTAINABILITY AND ENERGY

Energy and overheating modelling analysis has been carried out to review the design proposals in line with the range of criteria set out within the following guidance documents

- National Planning Policy Framework
- London Plan 2021
- Haringey Strategic Policy 2013-2016 and Development Management 2017

The energy strategy for the development has been defined using the Lean, Clean, Green energy hierarchy set out in London Plan 2021 policy SI2 and associated guidance. Analysis has been carried out to assess the energy and carbon reductions of the proposed buildings against two scenarios, with either a District Energy Network connection or onsite air source heat pumps if a network connection is unavailable.

Table 1 sets out the key measures within the design strategy for the development to reducing carbon emissions in operation. Following the energy hierarchy, the development achieves an improvement over the Part L 2021 notional building of 10% with a connection to a DEN and 16% with onsite heat pumps. All residual regulated carbon emissions will be offset via a cash-in-lieu payment.

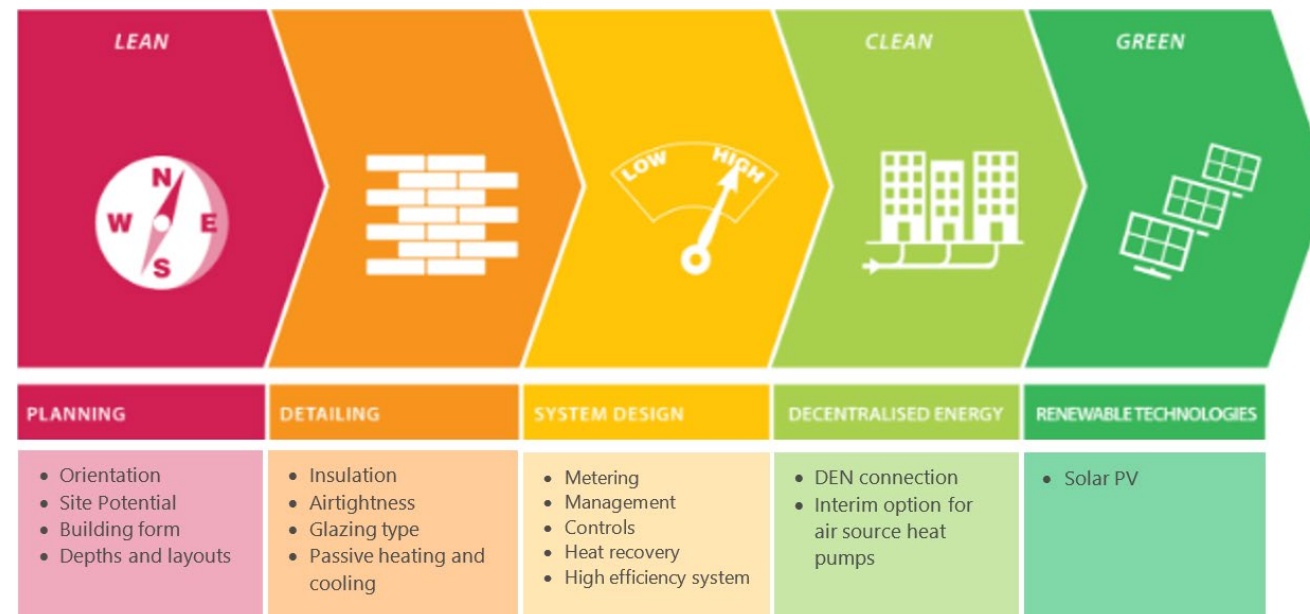


FIGURE 311. The Lean, Clean, Green Energy Hierarchy

Energy hierarchy step	Design measures
Lean	Façade configuration and specification designed to balance winter passive solar gains but avoid summer overheating
	Building fabric specification lower than Part L notional building
	Low air permeability targeted
	High efficiency mechanical ventilation with heat recovery
	High efficiency lighting (LED) and controls
Clean	Connection to District Energy Network to provide low carbon heat for space heating and domestic hot water
	Option for interim onsite Air Source Heat Pumps if a DEN connection is not available at construction
Green	Photovoltaic arrays proposed on roof areas where feasible for renewable electricity generation
Net Zero	Residual regulated carbon emissions for both residential and non-residential units will be offset by a cash-in-lieu payment to achieve net zero regulated emissions
Seen	The metering strategy for all buildings will be designed in line with building regulations and GLA's 'Be Seen' guidance to ensure the building energy consumption can be interrogated and controlled

FIGURE 312. Energy Hierarchy: Design measures to reduce carbon emissions in operations

SUSTAINABILITY AND ENERGY

Overheating

The risk of overheating has been mitigated through passive design measures and by applying the cooling hierarchy, as set out in Policy SI 4 of the London Plan 2021. TM52 modelling has highlighted that natural cooling alone would be insufficient to avoid overheating in the student bedrooms while complying with Part O acoustic comfort requirements. Active cooling systems have therefore been included across the scheme with the annual load minimised as far as possible. Design measures implemented are set out in Table 2.

Cooling hierarchy step	Design measures
Reduce the amount of heat entering the building	Energy efficient lighting, Rationalised glazing ratios, Low solar transmittance glazing, efficient domestic equipment
Minimise internal heat generation	Passive Design Principles have been prioritised across the scheme, including optimised U-values, y-values and g-values.
Manage heat with thermal mass	The building’s thermal mass used to store heat in the day and release at night, heat storage in the day and release at night.
Passive ventilation	Openable windows are incorporated to allow for natural purge ventilation Due to acoustic constraints under Part O, natural ventilation is not sufficient to meet the thermal comfort of occupants according in line TM52.
Mechanical ventilation	Mechanical ventilation with heat recovery (MVHR) is proposed for the student rooms including a summer by-pass mode to allow for free cooling of the space using external air. MVHR systems will be designed and sized to meet whole unit background ventilation requirements ensuring that window opening is only required for purge scenarios.
Active cooling	Acoustic constraints during day and night time mean that natural ventilation strategies do not provide comfortable temperatures for the student rooms in line with TM52. Air conditioning is therefore proposed as a necessary strategy for ensuring the thermal comfort of occupants.

FIGURE 313. Cooling Hierarchy: Design Measures Implemented

7.7 BREEAM

A BREEAM pre-assessment has been carried out following BREEAM UK New Construction Version 6.1. According to the Haringey Sustainable Design and Construction SPD and Local Plan, the council require a minimum of 'Very Good' to be achieved for non-residential buildings with an aspiration for Excellent where feasible.

The pre-assessment demonstrate that a BREEAM Very Good score of 58.5% should be readily achievable for the development based on low risk credits and credits achieved. This score can be elevated past the 70% 'Excellent' threshold if a number of process-based BREEAM credits are dealt with via additional appointments for RIBA Stage 2. Note that the individual targeted credits may vary between the pre-assessment and final certification score, and that the feasibility of achieving Excellent will be continually reviewed as the project progresses.



FIGURE 314. BREEAM Pre-Assessment Score

7.8 AIR QUALITY

Executive summary to be read with the full report:

The air quality impacts associated with the proposed mixed-use, student accommodation-led development at 819-829 High Road in Tottenham have been assessed. The development is known as “The Printworks” and the proposals involve the demolition of some of the existing buildings and structures occupying the site, and the subsequent redevelopment of the site to provide a student accommodation-led development, with supporting commercial, business and service uses.

During the construction works, a range of best practice mitigation measures will be implemented to reduce dust emissions and the overall effect will be ‘not significant’; appropriate measures have been set out in this report, to be included in the Dust Management Plan for the works.

The proposed development will be ‘car-free’ and will not provide any car parking spaces, with the exception of one accessible parking space for blue-badge holders only. As such, there will be no significant effect upon local air quality with regards to development-generated traffic emissions.

The proposed development will utilise an all-electric energy strategy and will not include any back[1]up emergency diesel generators. As such, there will be no combustion plant and thus no point sources of emissions within the proposed development.

The suitability of the site for its proposed uses has also been considered. Pollutant concentrations will be below the relevant air quality objectives and air quality for future users and residents will thus be acceptable.

Overall, the construction and operational air quality effects of the proposed development are judged to be ‘not significant’.

The proposed development has also been shown to meet the London Plan’s requirement that new developments are at least ‘air quality neutral’.

7.9 LAND CONTAMINATION ASSESSMENT

Executive summary to be read with the full report:

An Initial Conceptual Site Model has been determined and a Preliminary Risk Assessment with respect to ground contamination has been carried out for the Site on the basis of desk based data. At this preliminary stage of this project the main sources of potential contamination have been identified and the potential risks have been qualitatively assessed.

The assessment is based upon the Site in its current condition, but it also includes consideration of the potential risks associated with any below ground works (e.g. site investigation or future foundation works etc.) and the proposed future use. A summary of the potentially significant risks (i.e. greater than Low) is presented below. These potential risks are capable of mitigation.

Receptor	Source	Potential risk
Investigation and construction workers	Soil contamination associated with: Previous on-site industrial uses: brewery, printworks, builders yard Made Ground associated with previous development on site and surrounding area Current land uses in surrounding area Historical surrounding land uses	Moderate
Future site users / visitors (residents, workers)		Moderate / low
Offsite occupiers / visitors of neighbouring land		Moderate / low
Shallow Aquifer (Kempton Park Gravels)		Moderate / low
Investigation and construction workers	Hazardous ground gas arising from: Made Ground associated with previous development on site and surrounding area	Moderate / low
Future site users / visitors (residents, workers)		Moderate
Buildings / structures		Moderate

FIGURE 315. Summary of potential risks

7.10 DRAINAGE STRATEGY



Executive summary to be read with the full report:

The proposed surface water discharge rate for the development has been reduced to 2.0 l/s which is in line with the greenfield rate for the 1 in 100 year event for the site (2.03 l/s). The surface water network is proposed to discharge to the 610mm TW surface water sewer on High Road via TW manhole 8512.

The surface water drainage strategy has been developed in accordance with the drainage hierarchy set out in the London Plan. The surface water strategy has been developed to attenuate surface water in a combination of below ground drainage systems in the form of permeable surfacing with below ground geocellular storage, tree pit attenuation as well as bioretention areas within the two courtyards at L00. Green roofs are proposed at roof level to reduce the rate of runoff and pre-treat runoff prior to entry to the below ground drainage system. The implementation of SUDS features will help to attenuate and reduce the surface water discharge rate from the proposed development.

The proposed peak foul water discharge rate for The Printworks is 12.82 l/s which is an increase from the estimated existing peak rate of 0.36 l/s and is proposed to discharge to the existing 250mm foul sewer located on Brunswick Square via TW manhole 8507.

Consultation with Thames Water has been carried out as part of a pre-development enquiry for the proposed development. We are currently awaiting response from Thames Water to confirm whether they have any objection to the proposed drainage strategy.

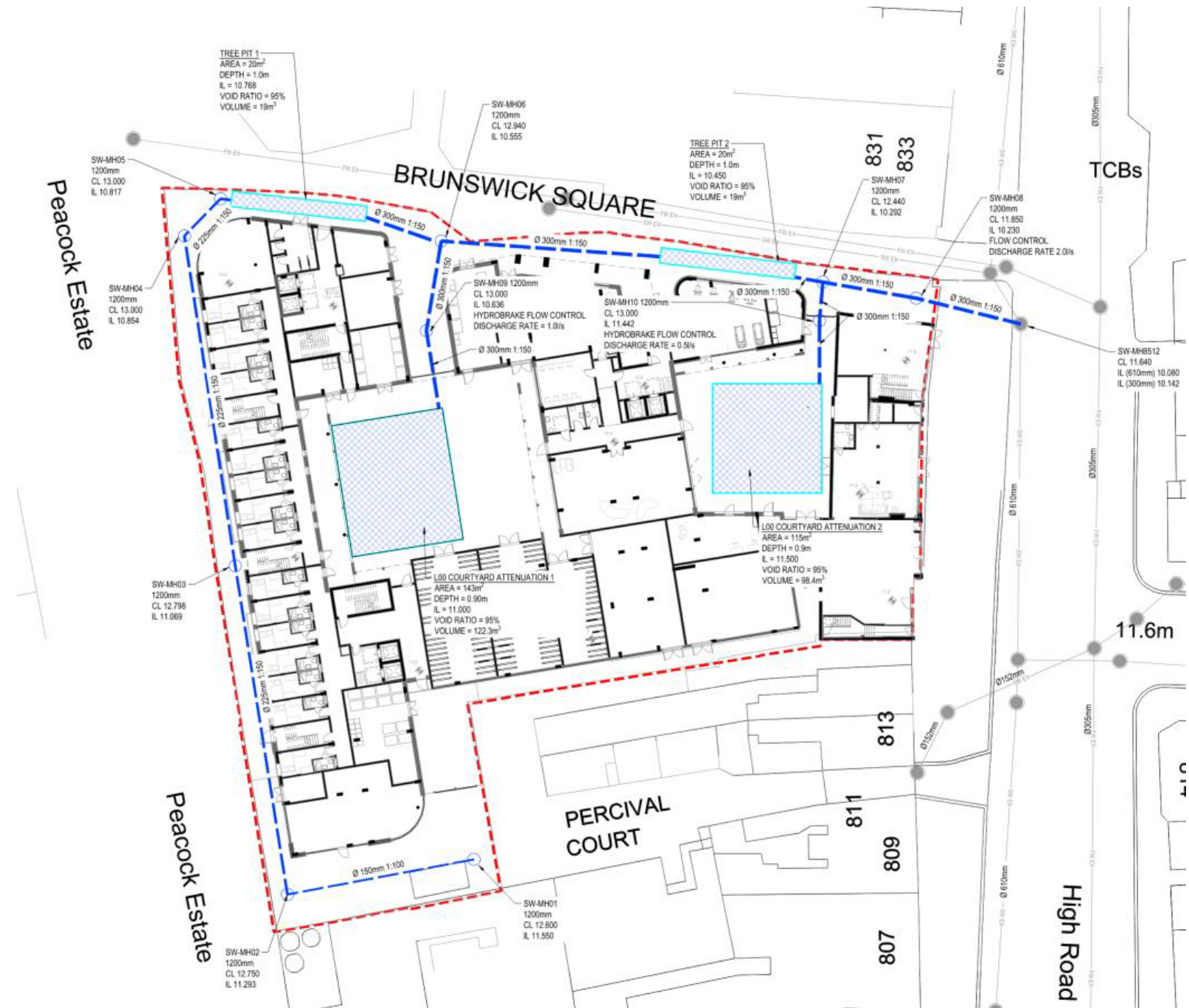


FIGURE 316. L00 Surface water drainage proposal

7.11 WASTE AND REFUSE



Summary to be read with the full report:

The waste management strategy has been developed in accordance with guidance provided by the LBH waste officers and BS 5906:2005 Waste management in buildings – a code of practice.

The commercial waste rooms have been sized for two days' worth of waste storage however collections are to be undertaken daily. Each block has a commercial waste store sized to accommodate the anticipated amount of waste generated by the commercial tenants in that block. Waste will be taken to the stores by the tenants and collected directly from the stores by the appointed commercial waste contractor. Commercial tenants will collect residual, mixed dry recyclable, glass and food waste separately.

Student accommodation waste is collected weekly and storage space has been provided in accordance with the generation rates provided by LBH waste officers previously for residents (as one bedroom should be counted as one dwelling). Space has also been provided for food waste storage and for bulky waste. Student waste stores are provided for each core for students to deposit their waste. Waste will be consolidated to a single store accessible from Brunswick Place for collection.



FIGURE 317. Commercial unit waste store distribution



FIGURE 318. Core A/B PBSA waste store layout



FIGURE 319. PBSA waste collection (L00)



FIGURE 320. PBSA waste distribution (L02)

7.12 UTILITIES STATEMENT



Not to scale

Executive summary to be read with the full report:

There are a number of utilities with existing infrastructure in the Printworks site boundary, namely Cadent gas, BT Openreach telecommunications, and Thames Water drainage and potable water supply infrastructure, while UKPN electricity connections are also assumed. These are predominantly smaller diameter assets which were used for the distribution of utility services at the pre-developed site and will require abandonment and removal to facilitate the construction of the proposed development.

Preliminary utility demands have been estimated for the new development and a connection the main High Road West utility corridor is proposed to the development, which will provide electricity, potable water, drainage, district energy and telecommunications.

Pre-planning applications have been submitted to UKPN and Thames Water regarding their relevant statutory undertakings to provide budget estimates and point of connections for the new development. However, responses from UKPN and Thames Water have not been received at the time of writing this report.

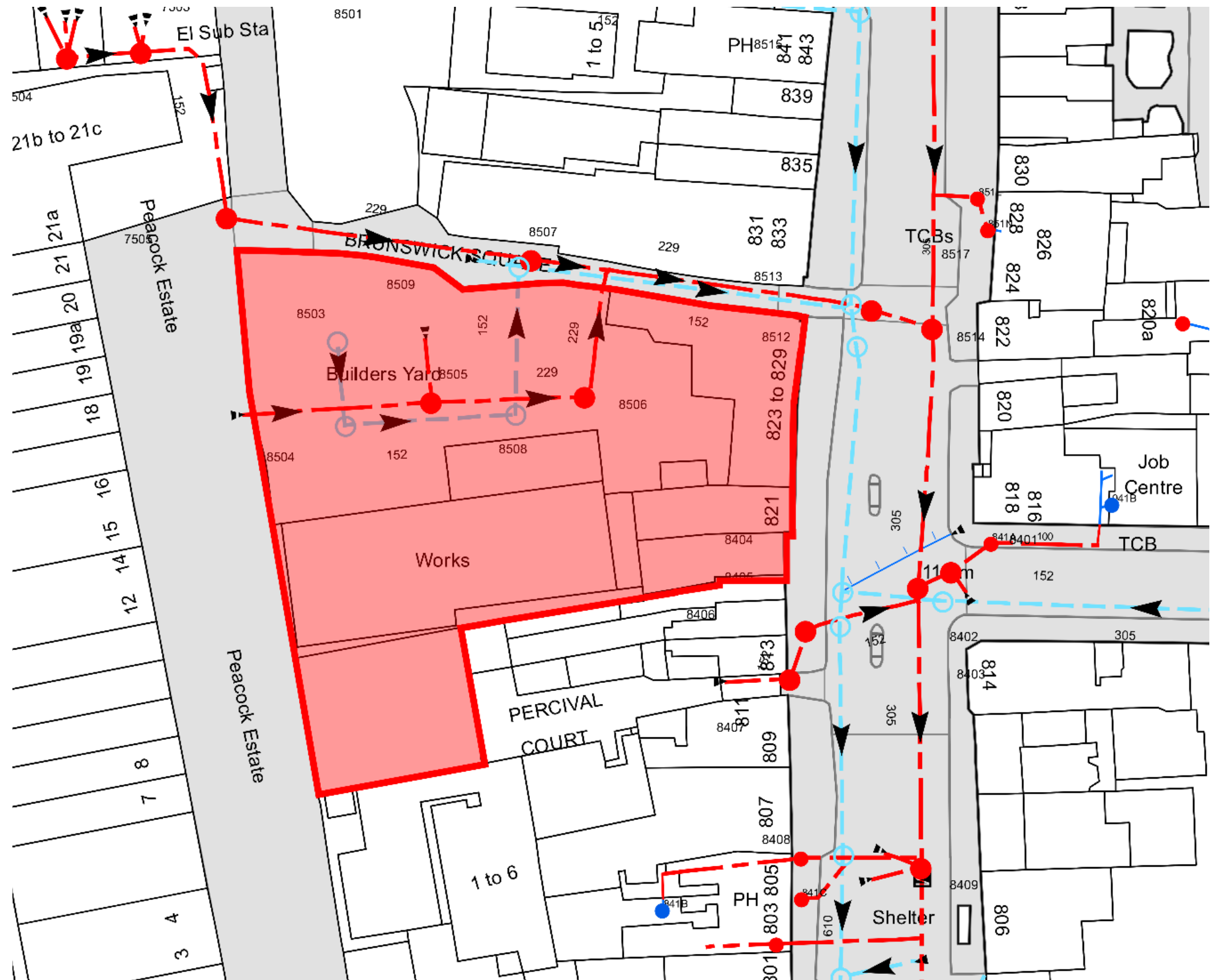


FIGURE 321. Thames Water and foul water drainage network

7.13 FLOOD RISK ASSESSMENT

Executive summary to be read with the full report:

This FRA has been carried out as part of the full planning application and listed building consent for the proposed development for High Road West for the Printworks. The proposed development will contain purpose-built student accommodation, commercial, business and service uses, as well as hard and soft landscaping, parking, and associated works.

According to the national flood map produced by the EA, the entire site is located within Flood Zone 1, which is classified as having a low risk of flooding from rivers and the sea. The nearest watercourse to the proposed development is the Moselle River, which is culverted below White Hart Lane to the south of the site. Tidal and fluvial flood risk are considered to be low for the proposed development.

In accordance with the NPPF, all of the land uses for the proposed development are appropriate for Flood Zone 1. The proposed development consists of residential accommodation, which is classified as More Vulnerable. The proposed commercial, business and service uses, alongside the parking, the hard and soft landscaping and associated works, are considered Less Vulnerable in accordance with the NPPF.

The surface water flood map produced by the EA indicates that the site is predominantly classified as having a very low probability of surface water flooding. The majority of the site has a very low risk of surface water flooding. There are areas central on the Printworks site with a low to medium to risk of surface water flooding. This corresponds to localised depressions in the topography.

Surface water is proposed to be discharged by gravity to the existing TW surface water sewer in the High Road, to the east of the site, at a discharge rate of 2.0 l/s for the 1 in 100 year event, inclusive of a climate change allowance. This is less than the calculated greenfield discharge rate of 2.03 l/s and represents a significant reduction in the peak rate of surface water runoff currently estimated to enter the TW sewer. With the proposed Foul and Surface Water Drainage Strategy in place, the risk of flooding from surface water and the surcharge of combined sewers is considered to be low.

Since the proposed surface water drainage strategy represents an improvement in surface water flood risk, both to the site and the adjacent land, it is considered that the requirements for development within CDAs outlined within Policy DM26 of the LBH Development Management DPD is satisfied.

Foul water from the proposed development is proposed to be discharged to the existing TW foul sewers at a peak rate of 12.82 l/s, which represents a significant increase from the estimated foul water discharge from the existing site. A pre-development enquiry was submitted to TW in order to present the proposed drainage strategy for the previous scheme, which had lower foul water discharge rate (3.53 l/s) due to the proposed land-use for the scheme. TW confirmed capacity within their systems for the lower discharge rate and a new pre-development enquiry has been submitted for the new foul water discharge rate of 12.82 l/s. At the time of writing a response is yet to be received from TW. However, since all surface water is proposed to be discharged to a dedicated surface water sewer and there are no known issues associated with lack of capacity of the existing TW foul water sewer network, the risk of flooding from the foul sewers is considered to be low.

There are no documented records of groundwater flooding within the proposed development site according to the LBH SWMP and the SFRA. The site is located in an area with increased potential for elevated groundwater. However, no basements are proposed as part of the development and the risk of groundwater flooding to the proposed development is considered to be low.

The map showing the risk of flooding from reservoirs, produced by the EA, indicates that the site is not located within the maximum extent of flooding that would occur if an upstream reservoir were to fail. The risk of flooding caused by the failure of a reservoir is therefore considered to be low and mitigation is not required.

The overall approach to flood risk management is considered to be in accordance with the requirements of Policy SP5 of the LBH Strategic Policies DPD and Policy DM24 of the LBH Development Management DPD.

It is concluded that the risk of flooding from all sources, for the

entire design life is considered to be low and that the proposed development will not increase the risk of flooding elsewhere. Moreover, it is considered that the inclusion of the installation of SuDS within the proposed development will reduce the risk associated with surface water flooding.

7.14 ARCHAEOLOGY



Not to scale

Executive summary to be read with the full report:

In terms of relevant nationally significant designated heritage assets, no World Heritage sites, Scheduled Monuments, Historic Battlefield or Historic Wreck sites are identified within the study site or its immediate vicinity.

In terms of relevant local designations, the study site lies within a Tier II Archaeological Priority Area, as defined by the London Borough of Haringey and their archaeological advisors at the Greater London Archaeological Advisory Service.

The study site can be considered likely to have a theoretical archaeological potential for the Roman period, associated with the road alignment running along the eastern boundary, together with a low to moderate archaeological potential for the Medieval period. The available information indicates that areas of the study site were developed from the eighteenth century onwards. If hitherto unknown archaeological remains were to be present within the study site, they are considered most likely to be of local significance. Past post depositional impacts within the study site are considered likely to have been severe, as a result of previous and existing development.

Additional archaeological mitigation measures are anticipated in advance of construction impacts, to be secured by condition to the granting of planning consent.

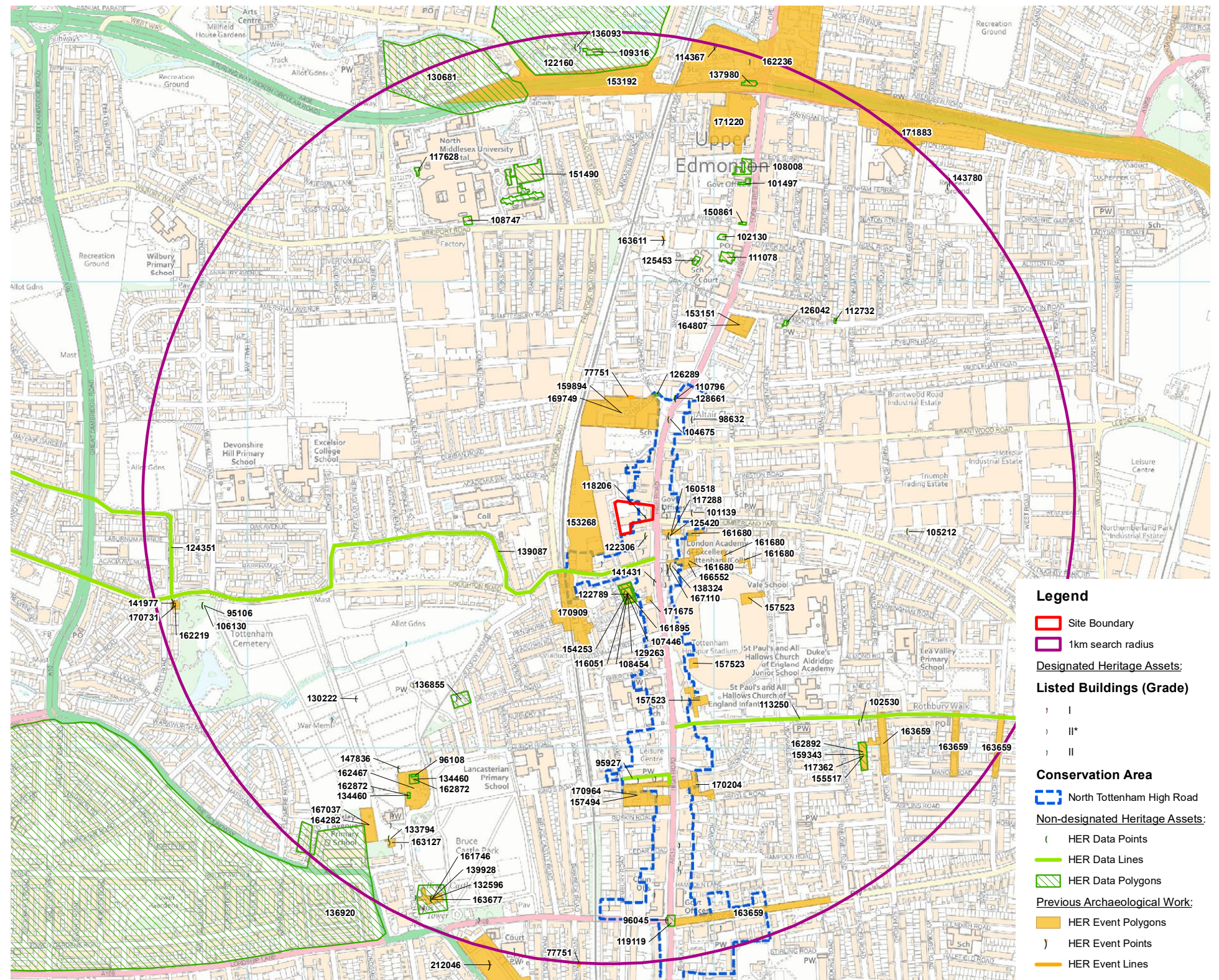


FIGURE 322. Summary of archaeological findspots and cultural heritage designations (data from GLHER)

7.15 NOISE ASSESSMENT



Design criteria for the development have been set, based on relevant British Standard documentation, guidelines for noise control contained within the London Plan and Haringey Development Management DPD.

A thorough noise survey was undertaken to assess the existing ambient and background sound environment, which includes the noise sources from existing developments. The design of this development is based on the aforementioned noise survey and therefore takes into consideration the existing developments. Glazing specifications and overheating analysis takes into consideration the existing noise environment and is designed accordingly.

An acoustic survey was conducted by WSP with supplementary surveys carried out by Buro Happold in the vicinity of the development site to assess the existing noise climate. The WSP locations are considered to be acceptable for this assessment as measurement position ST 1 is the noise due to the railway that will impinge on the western side of the development. Measurement positions ST 2 and ST 3 are indicative of the traffic flow noise along High Road.

In terms of noise break-in, the noise-sensitive areas of the proposed development (notably the residences apartments) are proposed to be provided with full mechanical supply and extract ventilation, limiting the ingress of noise via openings in the façade. In addition, robust laminated glass is specified (refer to Table 5—3) to control noise levels to within acceptable levels outlined in BS 8233.

Plant noise limits set 5 dB below the typical background level have been proposed to which, given the context of the site, will have No Observed Effect Level at existing noise sensitive receivers. In the absence of specific plant locations and selections, fixed plant noise limits have been identified at existing noise-sensitive receivers. These limits are based on a BS 4142 assessment of typical background sound level.

A study was carried out to assess the effects of open windows to mitigate overheating. The majority of the building is not suited for open windows, solely, as an overheating strategy, therefore the use of MVHR units providing cooling to student clusters, as a part of the MEP ventilation strategy, is expected to be a suitable solution.

The Site is considered suitable and satisfies the planning policies outlined in Section 2 of this report, provided that the mitigation measures detailed above are satisfactorily implemented. Therefore, acoustic concerns are not considered to represent any barrier to development.



FIGURE 323. Noise sensitive receptor and measurement locations

THE PRINTWORKS

SECTION 8.0 CONCLUSION

8.1 CONCLUSION

The proposed scheme for the redevelopment of the PW site embodies the Applicant's aim to transform this area into a new, better connected neighbourhood which offers an exciting and balanced mix of uses for residents and visitors alike to enjoy, and build a neighbourhood that is a successful and cohesive mixed community where residents can live, study and work.

There are considerable benefits arising from The Site's redevelopment and an opportunity to act as a catalyst for the regeneration of Site Allocation NT5. As well as being appropriate in their own right (i.e. the 'interim' or 'meanwhile' masterplan state), the PW scheme has been designed to integrate with the emerging schemes at both the Goods Yard and The Depot. These sites are within the Applicant's control and benefit from an extant planning permission (HGY/2021/1771), and a more recent resolution to grant consent (HGY/2022/0563), for their comprehensive redevelopment – the proposals satisfy the Council's strategic regeneration aims for this allocation and optimise their development potential in accordance with design and policy objectives.

Considering the PW, Goods Yard and The Depot collectively from the outset of their respective design development has allowed the Applicant to consider the future masterplan state and relationship between these sites effectively, ensuring that they can integrate with each other as the NT5 allocation is delivered as a whole, and maximising the synergy and benefits that arise from such a comprehensive approach.

The Printworks site is in the Upper Lee Valley Opportunity Area, a Growth Area and a specific site allocation (reference NT5) where major residential-led development is supported. Since the adoption of Site Allocation NT5, the need for new homes in Haringey has increased with the Borough delivering just 60% of their required housing for the past three years. This equates to a significant shortfall of over 1,700 homes against Haringey's minimum requirements.

The proposals give due regard LBH's DPD DM1(A) (Haringey Development Charter) and are appropriate in all development management matters and comply with the relevant planning policies of the Development Plan and other material considerations. They adopt the relevant principles of the HRWMF and would act as a catalyst for regeneration of the High Road West area, being a key interface site between the High Road frontage and remainder of the masterplan area. The design led response of the proposed scheme has sought to respect, enhance and secure The Site's heritage significance and create a contextually inspired high quality addition to the High Road and development to the rear, that plays an integral role interfacing with the new neighbourhood created by HRWMF.

The proposals redevelop an underutilised site and optimise its development potential through a design-led approach. They meet the regeneration aims for the area and accord with the requirements of the NPPF and Development Plan.

The public benefits arising from The Printworks are significant and comprise: -

- Responding to Haringey's acute housing needs including the delivery of affordable housing. This is of relevance given the low delivery of housing in recent years in Haringey.
- Creating a new, high-quality entranceway to Brunswick Square that opens views into a well-designed and active streetscape and is a significant improvement above the existing unattractive and unsafe alleyway. A radical transformation of the public space along Brunswick Square would be achieved that is fully accessible to the public. This route will form an important High Road interface for one of the primary east west routes of the HRWMF, including the primary southern connection to the main public space within the northern portion of the HRWMF (Peacock Park).
- Achieving a better townscape legibility and integration of the wider site allocation.
- Making a meaningful contribution to the wider regeneration objectives for North Tottenham and Site Allocation NT5.

- Attracting new investment and visitors to North Tottenham. Annual spending by workers and student residents could be in the region of £1.3m, significantly boosting the local economy.
- The creation of new employment opportunities during the construction and operational phases, with opportunities for local recruitment and skills development.
- Acting as a catalyst for investment and further regeneration of Site Allocation NT5 and the wider area, redressing inequality and halting further decline in Tottenham without prejudicing other development in the vicinity.
- Secure the long-term future of the Grade II listed 819-821 High Road the locally listed buildings at 823-827 High Road.
- Integrating the statutorily and locally listed buildings at 819-827 High Road within the development, better revealing their significance in the process and enhancing their overall appearance and setting within the Conservation Area.
- Complementing the ongoing regeneration of Tottenham that has taken place to the east, notably within the NDP and Northumberland Terrace.



F3