University College London Hospitals NHS
NHS Foundation Trust

Demolition of the existing buildings and redevelopment for a building of 6 storeys in height including ground and 3 storeys basement, for use as a specialist head and neck facility (Class D1)

Former University College London (UCL) Student Union and Royal Ear Hospital, Huntley Street, Bloomsbury

Transport Statement

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Author:	Ian Gardner
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Jacobs Ltd
New City Court
20 St Thomas Street
London
T +44 (0)20 7939 6100
F +44 (0)20 7939 6103
www.jacobs.com

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Contents

1 Introduction

1.1 Background

1.1.1 Jacobs have been instructed by NHS Foundation Trust (UCLH) to prepare the Transport Statement in support of their proposals for the redevelopment of 43-49 Huntley Street, London Borough of Camden. The development site comprises both the disused Royal Ear Hospital and old UCLH Student Union buildings, which will be demolished. The proposals are for the relocation of the Royal National Throat, Nose, Ear Hospital and the Eastman Dental Hospital from their existing locations at Gray's Inn Road to a modern combined facility at the proposed site. The new facility will have many more services on site so that patient's needs can be comprehensibly attended to during one appointment. For example there would be no need to travel to different parts of the hospital for scans and then come back later the same day, which is a regular occurrence today. This would minimise the number of trips generated.

1.1.2 This Transport Statement (TS) supports a planning application for:

> *"Application for demolition of the former University College London (UCL) Student Union and Royal Ear Hospital buildings, and redevelopment for a building of 6 storeys in height including ground and 3 storey basement comprising approximately 12,013 sq m GEA for use a specialist head and neck facility (Class D1) with 2 x pedestrian accesses from Huntley Street and Shropshire Place respectively and servicing/delivery bay accessed from Shropshire Place".*

1.1.3 The new facility is intended to be operational in 2018.

1.2 TS Scope and Structure

1.2.1 This TS, which has been produced in accordance with Department for Transport (DfT) Guidance on Transport Assessments (March 2007) and TfL's Transport Assessment Best Practice (April 2010), forms an appraisal of the traffic and transportation issues associated with the development proposal for the range of user groups that will access the site. The TS estimates the travel demands generated and assesses how these demands can be accommodated for, while ensuring the proposals reflect national, regional and local transport related planning policy and guidance.

1.3 Background - Pre-application Discussions

1.3.1 During the design stage of the proposed development, two transport specific pre-application meetings were held with LBC highways development control officers to discuss the proposals. The first pre-application meeting was held on 9th June 2014. At that stage, LB Camden requested that the designs provide on-site parking for essential users and loading. However, the designs showed that providing on-site PTS parking, disabled parking and servicing was not a feasible option, as the take up of ground floor space for vehicles would vastly limit the practical development space for the operational hospital needs. Following the meeting, it was concluded by the NHS Trust that if on-site parking was provided, then the proposed facility could not be built. However, it was identified that an on-site loading bay could be provided to aid site servicing.

1.3.2 The second pre-application meeting was held with LB Camden Officers on 10 December 2015, during which the revised access strategy was discussed. The access strategy was to assess available space on-street to accommodate disabled parking and PTS pick-up and drop-off. As the PTS control facility was being moved out of the existing buildings, background PTS parking would decrease. A strategy to relocate PTS parking was also proposed at this meeting. A dedicated on-site loading bay was also proposed, accessed via Shropshire Place.

1.3.3 LBC highway officers confirmed that should an application be submitted that placed reliance on using on-street space, in particular because of the West End project enhancements along Huntley Street, then LB Camden would absolutely require a strategy to be submitted as part of the application for PTS vehicle management. The strategy would set out the short term and long term plans for PTS vehicle management, focusing on removing the current reliance of parking for long periods on local streets.

1.3.4 The development proposals have therefore evolved to address LBC's concerns.

1.3.5 Following this introductory section, the TS is structured as follows:

- Section Two outlines the relevant national, regional and local policy considerations and guidance documents to ensure they are complemented by the development proposals;
- Section Three describes the site location and existing transport infrastructure that serves such, including the results of on-street parking beat surveys;
- Section Four considers the future baseline transport infrastructure that will be in place when the site is potentially operational, including UCLH's proposals associated with the recently approved Phase 4 development, Emergency Department reconfiguration, the Euston Circus improvements and the LBC led 'West End' project;
- Section Five describes the development proposals in greater detail, including the revised access strategy, PTS strategy, parking strategy and service and delivery strategy. It also details a multimodal trip generation assessment for all of the user groups that will access the site. This considers the impact these additional trips will have on the adjacent transport infrastructure, with these trips having informed the revised access strategy;
- Section Six sets out the principles of mitigation, principally the PTS strategy summary and Framework Construction Management Plan, which will accompany the planning application; and
- Section Seven provides the summary and conclusions.

2 Planning Policy

2.1 Introduction

2.1.1 As part of this TS, it is necessary to outline the key reference points within transport related planning policy at national, regional and local levels to ensure they are complemented by the development proposals.

2.2 National Planning Policy Framework (NPPF) (2012)

2.2.1 The NPPF sets out Government planning policy, providing a framework within which local planning policies can be produced, thus being a material consideration in planning decisions. There is however no definitive references to health care related development proposals within the NPPF.

2.2.2 In terms of transport references, the NPPF identifies that promoting sustainable transport is a way of achieving sustainable development and states that all developments that generate a significant amount of movement should be supported by a Transport Statement and that planning decisions should take account of whether:

- The opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;
- Safe and suitable access to the site can be achieved for all people; and

2.2.3 Improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.

2.2.4 NPPF states that planning decisions should ensure that developments generating significant movements are located where the need to travel will be minimised and the use of sustainable modes can be maximised, giving priority to pedestrian and cycle movements and creating safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians. The

2.2.5 With regards to car parking, NPPF does not include any standards and recommends that local planning authorities should set standards based on the accessibility of the development, availability of public transport and local car ownership levels.

2.3 London Plan (2011)

2.3.1 The London Plan, which was formally adopted in July 2011, thereby replacing the 2008 London Plan (consolidated with alterations since 2004), sets out the integrated economic, environment, transport and social framework for the development of London over 20-25 years. Together with LBC's own local planning policies, the London Plan forms part of the Local Development Plan for the borough.

2.3.2 With regards to healthcare provision, Policy 3.16 Protection and Enhancement of Social Infrastructure, states 'facilities should be accessible to all sections of the community ((including disabled and older people) and be located within easy reach by walking, cycling and public transport.' This is further reinforced in Policy 3.17 Health and Social Care Facilities, which states 'Development proposals which provide high quality health and social care facilities will be supported in areas of identified need, particularly in places easily accessible by public transport, cycling and walking'.

2.3.3 Specific transport policies are detailed within Section 6 of the London Plan. Integrating transport and development acts as the central theme, with an aspiration to encourage development that reduces the need to travel and the length of travel, especially by car and encouraging the most sustainable forms of travel, walking and cycling. Developments that are anticipated to generate high levels of trips are encouraged at locations with either current or committed high levels of accessibility to public transport, cycling and pedestrian networks, with proposals not adversely affecting the safety of these networks.

2.3.4 The London Plan identifies that development proposals should support sustainable travel through the inclusion of appropriate cycle parking and changing facilities and high quality pedestrian environments. The London Plan details maximum car parking standards for various forms of land use, although there is no apparent car parking standard for health care land uses aside from an expectation that all developments should provide designated disabled car parking provision. In terms of minimum cycle parking standards, the London Plan details 1 space per 5 staff, plus 1 space per 10 visitors. However, the Further Alterations to the London Plan (2014) changed this standard to 1 space per 5 staff for employment and 1 space per 30 staff for visitors.

2.3.5 Policy 6.3 Assessing the Effects of Development on Transport Capacity sets out the requirement that TAs should be produced in accordance with TfLs Transport Assessment Best Practice Guidance for major planning applications and that, where developments exceed relevant thresholds, TPs should be produced, along with construction logistics plans and DSPs.

2.4 LBC's Local Plan - Core Strategy

2.4.1 LBC's Core Strategy sets out the key visions for delivering development within the borough up to 2025 and forms the main part of the Local Development Framework (LDF).

2.4.2 With regards to transport, Policy CS1 Distribution of Growth, states the Council will promote the most efficient use of land and buildings by:

- expecting development that will significantly increase the demand of travel to be located in growth areas and other highly accessible parts of the borough; and
- expecting high density development in central London, town centres and other locations well served by transport.

2.4.3 The site is located in what is defined within the Core Strategy as a 'highly accessible area,' for which Policy CS3 Other highly accessible areas, is relevant, which states: 'These areas are considered to be suitable locations for the provision of… community facilities and are particularly suitable for uses that are likely to significantly increase the demand for travel.'

2.4.4 With regards to transport, Policy CS11 Promoting sustainable and efficient travel states, with regards to development, that the Council, as part of its approach to minimise congestion and address the environmental impact of travel, will "minimise provision for private parking in new developments through car free developments in the borough's most accessible locations and ensuring that growth and development has regard to Camden's road hierarchy and does not cause harm to the management of the road network".

2.5 LBC's Development Policies document

2.5.1 LBC's Development Policies document sets out the detailed planning criteria that are used to determine applications for planning permission in the Borough.

2.5.2 Policy DP16 the transport implications of development, states that the Council will seek to ensure that development is properly integrated with the existing transport network and is supported by adequate walking, cycling and public transport links. The policy states that developments will be resisted that fail to address the need for movements to, from and within a site, additional transport capacity off-site where existing or committed capacity cannot meet the additional need generated by the development and safe pick-up, drop-off and waiting areas where this activity is likely to be associated with a development. The policy details that TA's will be required for healthcare land uses in excess of 2,500sqm GFA, which should also be supported by TPs.

2.5.3 Policy DP17, walking, cycling and public transport, states that developments should make provision for pedestrians, cyclists and public transport users and will be resisted if dependent on travel by private motor vehicles. In particular, features such as high quality secure and accessible cycle parking should be provided, in accordance with policy DP18.

2.5.4 Policy DP18 Parking standards and limiting the availability of car parking also confirms that the Council will expect development to be car free within highly accessible areas, with any on-site parking provision being limited to spaces designated for disabled people and operational/servicing needs. The relevant parking standards for a hospital land use details a requirement of 1 disabled parking space per 200 beds for staff and 1 disabled space per 50 beds for visitors/patients, although the narrative that supports the policy recognises that people with disabilities who are Blue Badge holders may park in on-street spaces without a permit. Policy DP19 – Managing the impact of parking, acknowledges however that development will be resisted where it will add to on-street parking demand and cause unacceptable parking pressures. The relevant parking standards also detail that a supporting TA/TS should consider the parking provision for service vehicles, ambulances, patient transport vehicles and taxis for health care land uses.

2.5.5 In terms of delivery and servicing, Policy DP20 – Movement of goods and materials, details that the Council will promote the use of freight consolidation, effective management strategies and on-site servicing for developments.

2.5.6 Policy DP21 – Development connecting to the highway network details that the Council will expect developments to use the most appropriate roads by each form of transport in accordance with LBC's road hierarchy, with Tottenham Court Road, Gower Street and Grafton Way all identified as part of the strategic road network. The supporting narrative states that the Council will consider the relocation of kerbside parking spaces to allow access to development provided that the development funds any amendments.

2.6 LBC's Supplementary Planning Guidance – Camden Planning Guidance - CPG 7 Transport

2.6.1 LBC Planning Guidance provides supplementary guidance on how policies are applied, with CPG7 being the Supplementary Planning Document relevant to transport and being a material consideration in planning decisions, reinforcing much of what is stated within the Development Policies document.

2.6.2 CPG7 states that the Council will require submission of a TA / TS for a development that is likely to have any one of a number of travel characteristics, whilst having regard to any existing travel generated by activity on the development site.

2.6.3 CPG7 identifies the expectations with regards to a workplace TP, including the requirement to identify responsibilities, targets, monitoring management and funding.

2.6.4 CPG7 identifies the expectations with regards to delivery and service vehicle access, including refuse vehicles.

2.6.5 CPG7 identifies expectations with regards to car free development which is defined as: "A development which has no parking within the site and occupiers are not issued with on-street parking permits".

2.6.6 CPG7 further identifies that a car free development is expected within areas of high public transport accessibility.

2.6.7 CPG7 identifies expectations with regards to cycle parking, complimenting policy DP18, stating that it should be provided off-street, within the boundary of the site, be accessible and secure.

2.7 Fitzrovia Area Action Plan (FAAP) (2014)

2.7.1 The FAAP was adopted in March 2014 and provides detailed planning guidance for development proposals within the Fitzrovia area.

2.7.2 The principle of health care use for the site is acknowledged within the FAAP, which states 'Various medical / healthcare facilities could be provided in Fitzrovia, along with refurbishment and consolidation of existing facilities'. Indeed these site is identified as site 7 (Royal Ear Hospital) and site 8 (Student Union Building) within the FAAP.

2.7.3 With regards to transport, the FAAP acknowledges some constraints with streets such as Tottenham Court Road, described as 'traffic canyons,' with one way working that acts as barriers to pedestrian movements. The FAAP identifies LBC's aspirations to address these barriers through the introduction of two-way working on Tottenham Court Road and Gower Street in particular, which would facilitate the creation of simplified pedestrian crossings and more paved public space.

2.7.4 Part of the Core Strategy is to create attractive, safe and easily used places, including providing for movements to and from the site for pedestrians, cyclists and public transport (CS11). In addition, limiting development car parking to only those who are essential users, disabled users and providing for servicing needs would be expected (CS11, DP18).

3 Existing Conditions

3.1 Site Location

3.1.1 The site is located within the administrative boundary of the London Borough of Camden (LBC) and a site location plan is included as Figure 3.1. The site is bounded to the north by Capper Street, to the east by Huntley Street and to the west by Shropshire Place, all of which fall within the responsibility of LBC as the relevant local highway authority. Gordon Mansions, an existing residential apartment, borders the southern side of the site. University College Hospital Macmillan Cancer Centre, is located approximately 50m to the north of the site, along Huntley Street. The main UCH building, which encompasses the EGA maternity wing and Emergency Department is located approximately 300m north of the site.

3.1.2 The existing site at 43-49 Huntley Street is owned and operated by UCLH. In the past, the site was used as the Royal Ear Hospital and Student Union for UCLH. Existing site usage is explained more later in this section.

3.1.3 Figure 3.1 displays the site location and local highway network.

Figure 3.1: Site Location and local highway network

3.2 Local Highway Network

3.2.1 The site is located within the congestion charge zone which is bordered by Euston Road in the north, apart from the section between Tottenham Court Road and Gower Street, where Grafton Way becomes the northern extent.

3.2.2 The site is bounded to the east by Huntley Street (approx. 7.3m wide), which has a one-way southbound restriction in place operating between University Street in the north and Chenies Street to the south. The section of Huntley Street between University Street and Grafton Way is currently two-way. At the site periphery, Huntley Street has a single yellow line restriction on its western side and elements of residential parking, pay and display parking and motorcycle parking on its eastern side.

3.2.3 Capper Street borders the north of the site, and currently operates two-way, connecting Huntley Street to the east with Tottenham Court Road in the west. Capper Street has a road width of approximately 6m). Dedicated residential parking extends along the majority of the southern side of Capper Street, with a residential parking bay located on its northern side, at its junction with Huntley Street. Single yellow line restrictions extend along the majority of the northern side of Capper Street.

3.2.4 Mortimer Market has an ox-bow shape leading from and connecting to the northern side of Capper Street. Mortimer Market is primarily used for vehicular access and customer drop off to the UCLH Macmillan Cancer Centre. Pay and display and residential parking bays are also located on Mortimer Market. Mortimer Market has road widths of 4m at its narrowest, however the location of on-street parking bays reduce the minimum effective road width to 2.3m.

3.2.5 Shropshire Place boarders the west of the site and is primarily an access route for vehicles accessing the existing parking area to the rear of the site, which is associated with the current site operation. The road also provides vehicular access to the land uses in Queen's Yard. As the road is only 3.5m wide, vehicles are only able to access these locations by either reversing down Shropshire Place from Capper Street, or by driving in forward gear from Capper Street and turning at the Queen's Yard junction.

3.2.6 University Street, between Tottenham Court Road and Huntley Street, operates one-way eastbound and between Huntley Street and Gower Street operates two-way.

3.2.7 North of the site, Grafton Way and University Street form signal controlled junctions with Tottenham Court Road, which operates one-way northbound. East of the site, Grafton Way forms a simple priority junction with Gower Street, which operates one-way southbound. Gower Street consists of three general traffic lanes and a bus lane, operational during peak hours.

3.2.8 Euston Road, to the north of the site and the UCLH campus, is a two-way dual carriageway extending from Marylebone Road in the west to Pentonville Road to the east and forming a signalised junction with Tottenham Court Road and Hampstead Road (the "Euston Circus"). Through movements on the Euston Rd are made in a fly under beneath the junction. The UCLH campus is bordered to the north by the Euston Road off slip, which is a red route for which TfL are responsible, providing a link between Euston Rd and Gower Street with which it forms a signalised junction.

3.3 Pedestrian Facilities

3.3.1 The site benefits from good quality footway provision along the Huntley Street frontage which is at least 2.5m wide. The footpaths on Capper Street are more narrow, around 1.5m in width. Queen's Yard provides a pedestrianised connection between Tottenham Court Road and Shropshire Place.

3.3.2 The volume of traffic on the surrounding road network, particularly along Tottenham Court Road, results in pedestrian severance along key desire lines which is acknowledged within the FAAP. This severance is mitigated however by signalised pedestrian crossings at key junctions within the vicinity, including the Tottenham Court Road/Capper Street junction.

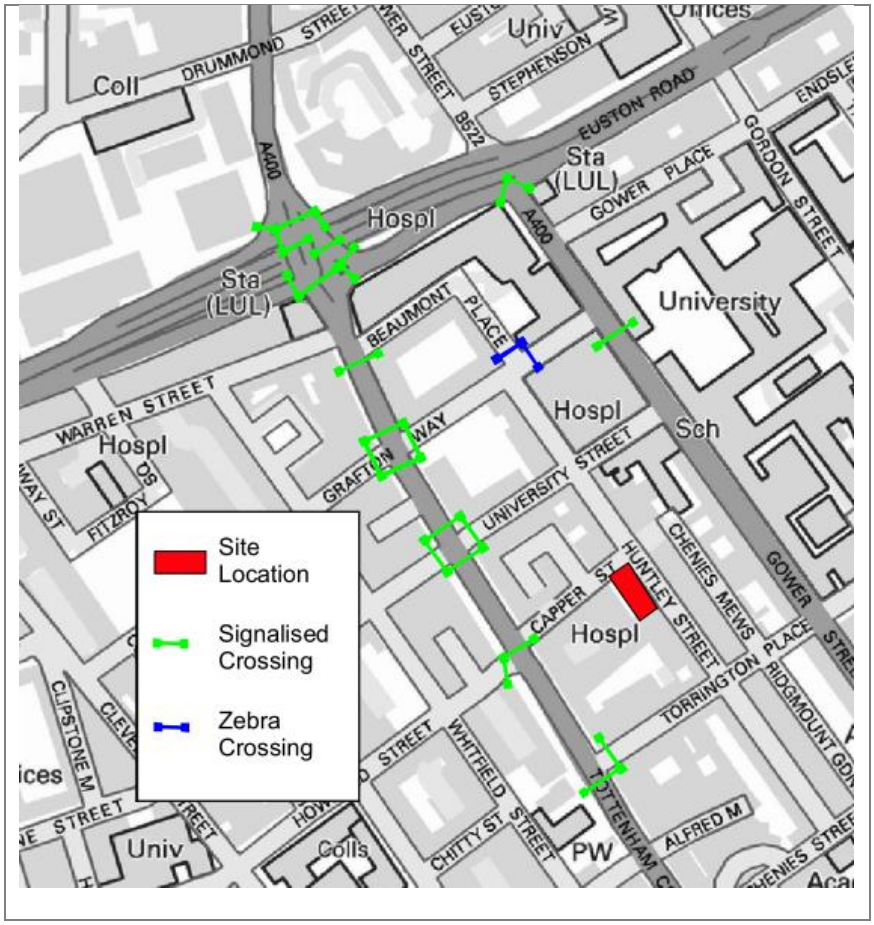
3.3.3 Signalised crossings are also provided on all arms of the University Street / Tottenham Court Road junction. This aids pedestrian movement between the site and Warren Street Underground station, located approximately 400m north west of the site.

3.3.4 In addition, signalised pedestrian crossings are located at the Torrington Place / Tottenham Court Road access aiding pedestrian movement between the site and Goodge Street Underground station, located on Tottenham Court Road, approximately 500m south west of the site.

3.3.5 Pedestrian movements across Grafton Way are accommodated via an existing zebra crossing located east of the junction with Huntley Street, adjacent to the EGA maternity wing (phase 2) main entrance, with an additional zebra crossing located across Beaumont Place.

3.3.6 Pedestrian crossing facilities are indicated below in Figure 3.2.

Figure 3.2. Pedestrian Crossing Infrastructure



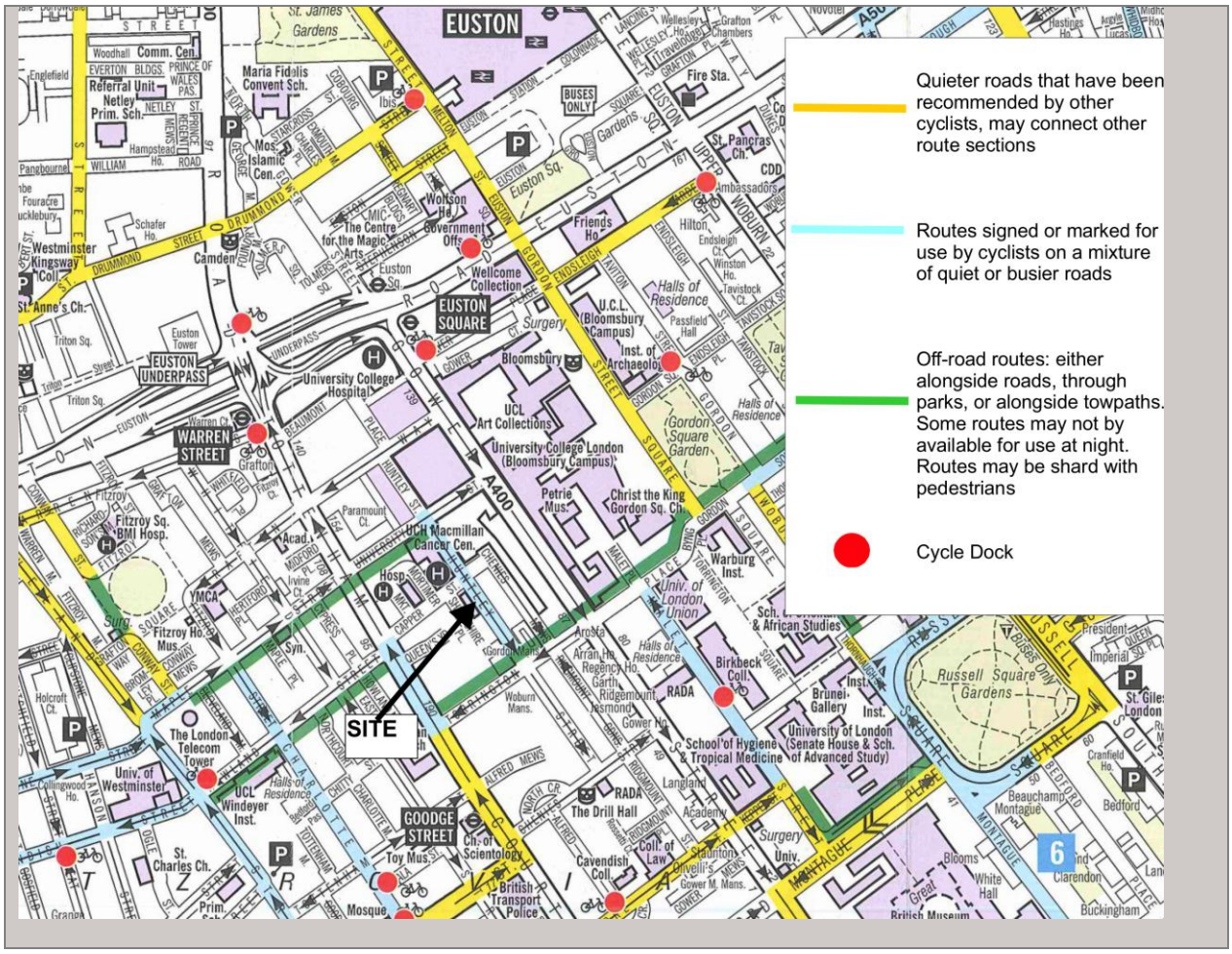
3.4 Cycle Facilities

3.4.1 The site benefits from being located adjacent to established east/west cycle routes that run parallel with Euston Road. In general, these are classified as either signed routes on a mixture of quiet or busy roads or off-street routes that run alongside the road with a number of contra-flow cycle lanes overcoming the one way arrangement of many of these roads that surround the site.

3.4.2 North/south routes are more limited however, primarily due to the volume of traffic movements along Tottenham Court Road and Gower Street and their existing one-way operation. However, Huntley Street is marked within the TfL cycle guide as 'a route signed or marked for use by cyclists on quieter roads'.

3.4.3 In addition, there are a number of existing Barclay's Cycle Hire docking stations, located within 500m (6 minutes' walk) of the site. The closest of which is located on Tottenham Court Road, immediately outside Warren Street Station. Here, there is a capacity of 26 docks. Figure 3.3 shows the local cycle routes and cycle hire locations.

Figure 3.3 Cycle Infrastructure



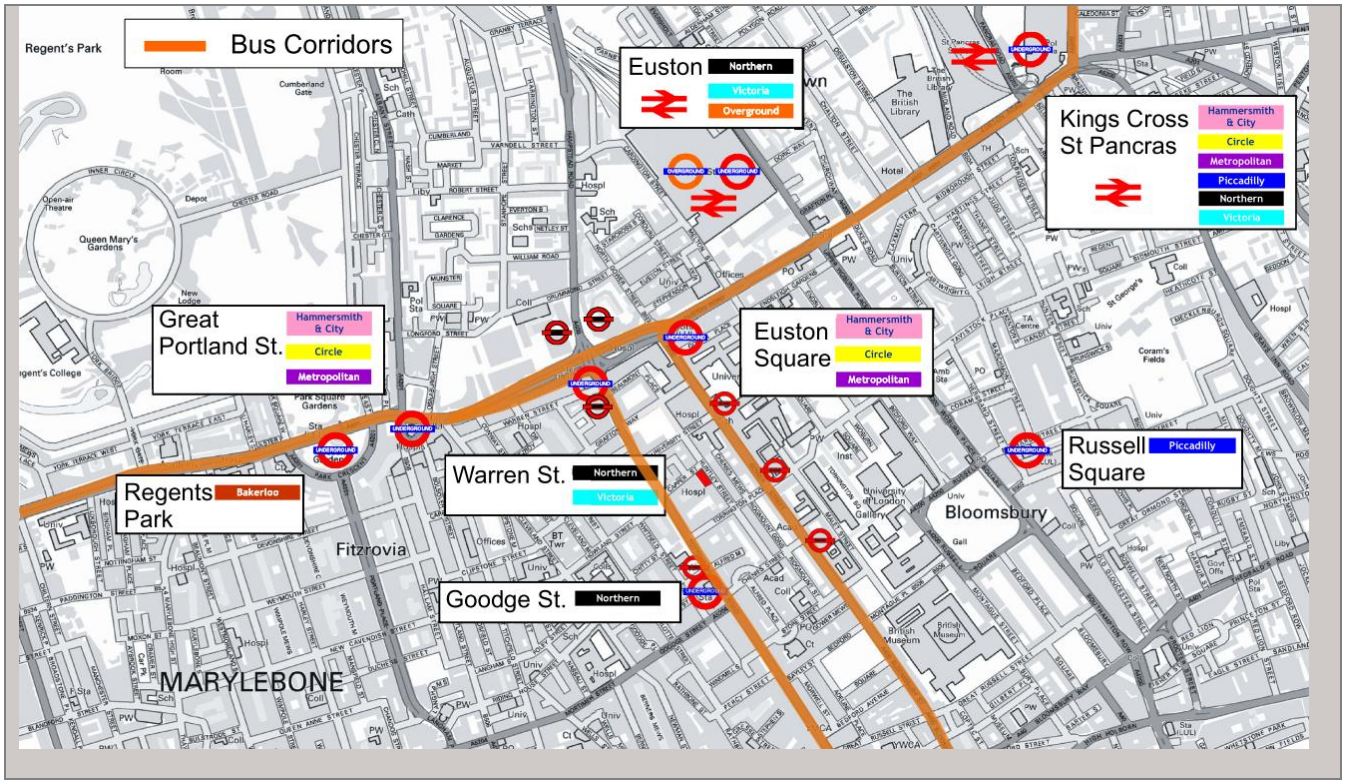
3.5 Public Transport

3.5.1 A general measure of public transport accessibility is provided by the Public Transport Accessibility Level (PTAL) rating. This is a calculation based on the proximity, frequency and number of public transport services available. All bus routes within 640m of the site and underground/national rail stations within 960m are taken into account. PTALs are measured on a scale of 1a to 6b with 1a being the lowest level of public transport accessibility and 6b being the highest.

3.5.2 TfL's land use planning website, http://webpid.elgin.gov.uk/ has been utilised to calculate the PTAL of the site, taken at the centre of the site. The tool confirms that the site has a PTAL rating of level 6b. This is the maximum possible rating and confirms that the site is highly accessible by sustainable modes of travel.

3.5.3 Public transport infrastructure is indicated below in Figure 3.4, with further information for each particular mode considered in subsequent paragraphs.

Figure 3.4: Local Public Transport Interchange Locations



3.6 Public Bus

3.6.1 The site benefits from being located adjacent to established north/south and east/west public bus corridors, operating along Tottenham Court Road (northbound), Gower Street (southbound), Euston Road and Grafton Way (westbound), with many of these roads including intermittent bus lanes. These roads accommodate high frequency routes that operate throughout the day, giving access to a wide area of Inner London.

3.6.2 The closest northbound bus stop is located on Tottenham Court Road, south of the junction with Torrington Place, approximately 270m walk distance south west of the site. The closest southbound bus stop is located on Gower Street, north of the junction with Torrington Place, approximately 260m walk distance east of the site.

3.6.3 Table 3.1 lists the service number, closest bus stop and peak hour frequencies of existing bus services that are accessible from the site (within the 640m walking distance PTAL threshold), along with a summary of the key destinations that are served by these routes.

Table 3.1: Local Bus Services

Bus Route	Closest Existing Bus Stop	Peak Hour Frequency	Selected Destinations
10	Gower Street/Torrington Place junction (southbound), Tottenham Court Road (northbound)	Every 7-11 mins	Hammersmith to King's Cross via Knightsbridge, Oxford Circus and Tottenham Court Road.
14	Gower Street/Torrington Place junction (southbound), Tottenham Court Road (northbound)	Every 5-9 mins	Gower Street to Putney Heath via Piccadilly, Green Park, Fulham and Putney
18	Warren Street Station/Hampstead Road (eastbound) Euston Road/Warren Street Station (westbound)	Every 2-6 mins	Euston to Sudbury via Regents Park, Marylebone, Royal Oak and Wembley
24	Gower Street/Torrington Place junction (southbound), Tottenham Court Road (northbound)	Every 5-8 mins	Hampstead Heath to Pimlico via Kentish Town, Leicester Square and Victoria
27	Hampstead Road (northbound) Euston Road/Warren Street Station (westbound)	Every 6-10 mins	Chalk Farm to Turnham Green via Regents Park, Marylebone, Paddington
29	Gower Street/Torrington Place junction (southbound), Tottenham Court Road (northbound)	Every 3-6 minutes	Trafalgar Square to Wood Green via Leicester Square, Camden and Finsbury Park
30	Warren Street Station/Hampstead Road (eastbound) Euston Road/Warren Street Station (westbound)	Every 7-11 mins	Hackney Wick to Marble Arch via Dalston, Islington and Regents Park
73	Gower Street/Torrington Place junction (southbound), Tottenham Court Road (northbound)	Every 3-4 mins	Stoke Newington to Victoria via Islington and Oxford Circus
88	Hampstead Road (eastbound) University College Hospital/Warren Street Station (westbound)	Every 2-6 mins	Camden Town to Clapham Common via Oxford Circus, Westminster and Vauxhall
134	Gower Street/Torrington Place junction (southbound), Tottenham Court Road (northbound)	Every 3-7 mins	North Finchley to Tottenham Court Road via Kentish Town
205	Warren Street Station/Hampstead Road (eastbound) Euston Road/Warren Street Station	Every 7 – 11 mins	Bow Church to Paddington via Mile End, Aldgate, Liverpool Street, Kings Cross, Regents Park and Marylebone

Bus Route	Closest Existing Bus Stop	Peak Hour Frequency	Selected Destinations
	(westbound)		
390	Gower Street/Torrington Place junction (southbound), Tottenham Court Road (northbound)	Every 6-10 mins	Archway to Notting Hill Gate via York Way, Tottenham Court Road and Marble Arch

3.6.4 There are also a number of additional night bus routes that operate within the vicinity. In summary the site is highly accessible by public bus.

3.7 London Underground

3.7.1 The site is located within an acceptable walking distance of five London Underground stations:

- Euston Square and Great Portland Street (for access to the Circle, Hammersmith & City and Metropolitan lines);
- Euston and Warren Street (for the Northern and Victoria Lines); and
- Goodge Street (for the Northern Line).

3.7.2 The closest London Underground stations to the site are Goodge Street (approximately 330m south west of the site), Euston Square (approx. 420m north of the site) and Warren Street (approx. 450m north of the site) stations, which give access to Northern and Circle/Hammersmith/Metropolitan and Northern/Victoria lines respectively. Existing signalised crossing facilities are provided along the desire line between the site and these stations in order to negotiate the barrier created by Gower Street and Tottenham Court Road.

3.7.3 These routes provide high frequency services throughout the day, with onward connection opportunities to other underground lines from adjacent stations at King's Cross, Tottenham Court Road and Oxford Circus. Table 3.2 below displays the peak hour underground frequencies for the London Underground lines each way, accessible within 960m walk of the site.

Table3.2: London Underground Line Frequencies (each way)

Underground Line	Peak hour frequency (tph)
Circle Line	6
Hammersmith & City Line	6
Metropolitan Line	14
Northern Line	22
Victoria Line	35
Total	83

3.8 London Overground

3.8.1 The site is within an acceptable walking distance of Euston mainline station, approximately 830m walk north east of the site, with London Overground services available toward Queens Park, Willesden Junction and Watford Junction, with three trains an hour in each direction.

3.9 National Rail

3.9.1 Euston mainline station is also the southern terminus for the West Coast Main Line, operated by Virgin trains, serving Birmingham, Manchester, Liverpool and Glasgow. Euston Station is also served by London Midland's route to Liverpool.

3.9.2 Furthermore, King's Cross and St Pancras International stations are also within relatively close proximity, accessible by bus, bicycle, a very short tube ride or even on foot. The London Overground, which provide access to the East Coast Mainline, Stratford, the South East and the continent are available from King's Cross and St Pancras International stations.

3.10 On-street Disabled Parking

3.10.1 The standard entitlements of the Blue Badge (the disabled persons' parking badge scheme) allow holders to park without a time limit or payment charge within resident's parking bays, pay and display bays and designated disabled parking bays. In addition, holders are typically allowed to park for a limited period of time on single or double yellow lines except when there are loading controls or if holders are within the LB Camden Green Zone.

3.10.2 However, the site is located within an area of Camden for which the green badge scheme takes precedence, meaning disabled drivers must also have a green permit to be allowed to park within residents and pay and display bays, with blue badge holders only allowed to park within designated disabled parking bays and not on single yellow lines (during all time periods).

3.10.3 Drivers who display a blue badge and a NHS dispensation certificate in their parked car, are permitted to park on single yellow lines, P&D bays and residential bays.

3.10.4 To qualify for a green badge, blue badge holders must either live, work or study within LBC in the Green Badge zone. However, LBC also runs a parking dispensation scheme for UCLH outpatients, which allows them to park on single yellow lines without loading restrictions.

3.11 Existing Site Parking

3.11.1 The site has a loading bay on its south western side, which accommodates up to 4 ambulances. The loading bay is accessed off Shropshire Place.

3.11.2 Huntley Street, between Capper Street and Torrington Place, accommodates 75m (15 vehicles) worth of dedicated residential car parking (Mon-Sat 0830-1830 Permit070), on its eastern side. In addition, this section accommodates up to 13 motorcycle parking spaces at its junction with Chenies Mews, on the eastern side of Huntley Street. Furthermore, the western side of this section has single yellow line (no blips) marked across its extent (136m). As per the LB Camden traffic restriction guidance, '*loading/unloading can take place at this location for an unlimited amount of time from the end of controlled hours through to 11am the next day, provided unloading and loading is continuous. After 11am and until 6.30pm, HGVs can load / unload for up to 40 minutes provided loading and unloading is continuous. The loading time for cars and LGVs will be restricted to 20 minutes from 11am to 6.30pm'*. In addition, ambulances and PTS vehicles are permitted to park on this single yellow line at all times. At this location, there is also a restriction on buses and vehicles over 5 tonnes stopping between 1830 – 2359 and 0000 – 0800 on the western side.

3.11.3 As area of motorcycle parking is available on Huntley St, near to and south of the junction with Torrington Place. It is apparent from site visits that this area of motorcycle parking could be enlarged, towards the junction with Torrington Place.

3.11.4 Capper Street accommodates space for 9 dedicated residential parking spaces with a 'Mon-Sat 0830-1830 Permit070 holder only' restriction. A residential parking bay extends some 10m from the junction with Huntley Street, along the northern side of Capper Street. In addition, approximately 105m of single yellow line restrictions extend along Capper Street, with the majority being along its northern side.

3.11.5 Shropshire Place has single yellow line restrictions (without blips) along the extent of its western and eastern sides.

3.11.6 University Street, west of Huntley Street, accommodates four permit holder only bays, a single disabled parking space and an area for motorcycle parking. East of Huntley Street, University Street accommodates a mix of permit holder and pay and display car parking.

3.11.7 An existing taxi rank is also located on Tottenham Court Road, immediately north of the junction with Grafton Way.

3.11.8 Figure 3.5 displays the existing on-street parking controls surrounding the site.

Figure 3.5: Existing Parking Controls Surrounding Site

3.12 Existing Operational Parking

Patient Transport Service (PTS)

3.12.1 The PTS is a free to use non-emergency service in which patients with mobility issues are transported between their home and the hospital for the attendance of medical appointments. The provision of PTS services is currently shared between UCLH itself and a number of contractor companies.

3.12.2 On collecting a patient, the PTS drivers aim to drop the patient off 30 minutes before their appointment time. On dropping the patient off, the drivers commonly park and wait to collect the patient from their appointment, arriving 15 minutes before the end of their appointment.

3.12.3 The NHS have a fleet of 16 PTS vehicles and an additional 32 vehicles which are operated by contractor companies.

3.12.4 The PTS control centre is currently located at the existing site (43-49 Huntley Street). The control centre also has facilities for PTS drivers who commonly park outside the site to use the on-site staff facilities.

3.12.5 A NHS vehicle parking beat survey was undertaken along the single yellow line extent on the western side of Huntley Street (between Torrington Place and Capper Street), on 17th February 2015. The survey determined the percentage occupancy of NHS vehicles currently utilising the full extent (23 spaces capacity) of the single yellow line section between Capper Street and Torrington Place, between 1100 and 1600hrs. It is assumed that all NHS vehicles parking on the single yellow line only park to utilise the existing staff facilities at 43-49 Huntley Street. Only the busiest time period for NHS vehicle on-street parking was surveyed (1100-1600hrs). Table 3.3 displays the results of the survey.

Table 3.3: Huntley Street (Capper St – Torrington Place section) Single Yellow Line NHS Vehicle Parking Survey Results.

Time Period	NHS Vehicles Parked	Disabled Badge Holders (inc dispensation holders)	Other Vehicle Parked	Total Number of Vehicles parked
1100-1130	2	3	1	6
1130-1200	4	3	1	8
1200-1230	8	2	0	10
1230-1300	6	2	0	8
1300-1330	4	2	0	6
1330-1400	2	3	0	5
1400-1430	3	4	1	8
1430-1500	3	4	1	8
1500-1530	5	3	0	8
1530-1600	3	3	0	6
Total	**40**	**29**	**4**	**73**
% Split	55%	40%	5%	100%

3.12.6 Table 3.3 shows that an average of 55% of all vehicles parking on the single yellow line during the most busy period, are NHS vehicles. In the future it is anticipated that none of these NHS vehicles will be parked at this location, as the staff facilities which are being used by the drivers at 43-49 Huntley Street, will be relocated.

3.12.7 In addition, Table 3.3 shows that only 5% of vehicles park on the single yellow line during the peak period, other than NHS vehicles and vehicles displaying a blue badge / dispensation pass. It was noted that all vehicles classified as ‘other vehicles’ were service vehicles which had parked.

Existing Staff Parking

3.12.8 Staff who need to drive to the UCH complex commonly park at the designated NHS car parks at 250 Euston Road or at Maple House. Existing staff mode of travel is explained more in section 3.18.

3.13 Existing Parking Demand

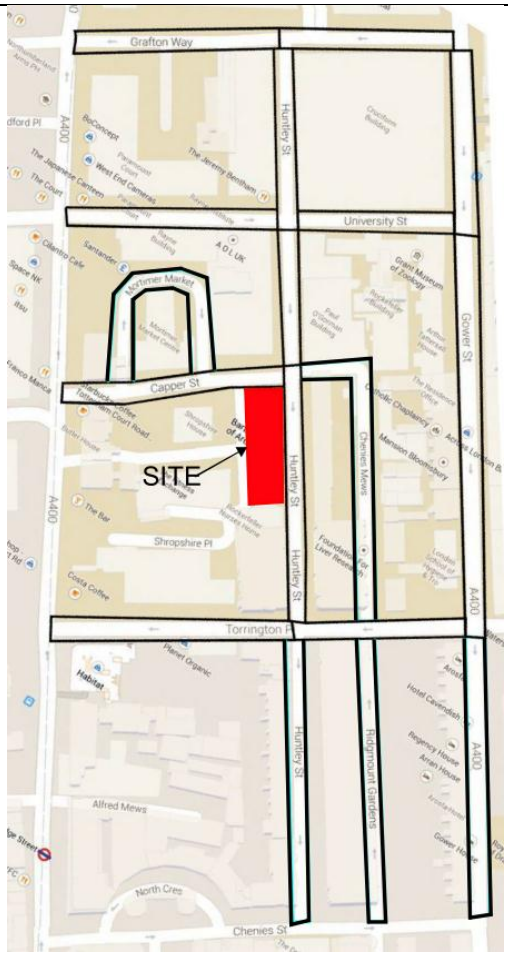
3.13.1 This TS has considered existing on-street parking demand and stress levels to establish the following:

- The current utilisation of all parking types within the local area;
- The current levels of blue badge / dispensation / green badge parking in the local area;
- The current levels of PTS / Ambulance Parking in the local area.

3.13.2 A continual 12 hour on-street parking beat survey was therefore undertaken on the local roads surrounding the site on Wednesday 4th February 2015, between 07.00-19.00hrs (a typical weekday).

3.13.3 The parking beat study area consisted of all local roads, which are believed to be within the maximum acceptable distance one would choose to park and walk to the site, encompassing areas east of Tottenham Court Road. The extent of the study area is marked in Figure 3.6.

Figure 3.6 Parking Beat Study Area



3.13.4 At the time of survey, the section of Grafton Way between Tottenham Court Road and Huntley Street was closed to general traffic. Therefore, a diversion was in place for drivers accessing Tottenham Court Road from Gower Street via Grafton Way, to divert south along Huntley Street and west via Torrington Place. It is expected that the diversion would have increased parking occupancy within the study area, as vehicles wishing to park along the closed off section of Grafton Way would park at an alternative nearby location, possibly Huntley Street. In addition, a higher percentage of vehicles would be driving along Huntley Street, which could give rise to higher parking demand. Therefore, the results reflect a worse case.

3.13.5 The surveys counted the occupation levels of all parking bays within the study area, with a single spot count undertaken each 30minutes for the full 12 hour period. The on-street parking beat survey classified the relevant parking bays according to their restrictions as follows:

- Permit holder bays (resident);
- Pay and display bays;
- Disabled bays;
- Ambulance/PTS only bay;
- Motorcycle bays;
- Hospital Permit bays; and
- Single yellow lines (accessible outside of time restrictions i.e. overnight and which are suitable for parking, i.e. excluding areas on corners, next to dropped kerbs etc.)

3.13.6 Table 3.4 therefore displays a list of the local roads which were surveyed, the total capacity and key restrictions of: pay and display, disabled only bays, ambulance/PTS bays and resident parking bays. Appendix A shows the raw survey data. Single yellow line capacity has been judged based on whether a vehicle can physically park on the single yellow line, without restricting free-flowing traffic, or blocking accesses. The table below considers single yellow line restrictions with and without kerb blips. The parking capacity has been based on a measured area, equating to an average of approximately 5.5m per space.

Table 3.4: Parking Capacity within the Study Area (key restrictions), number of bays.

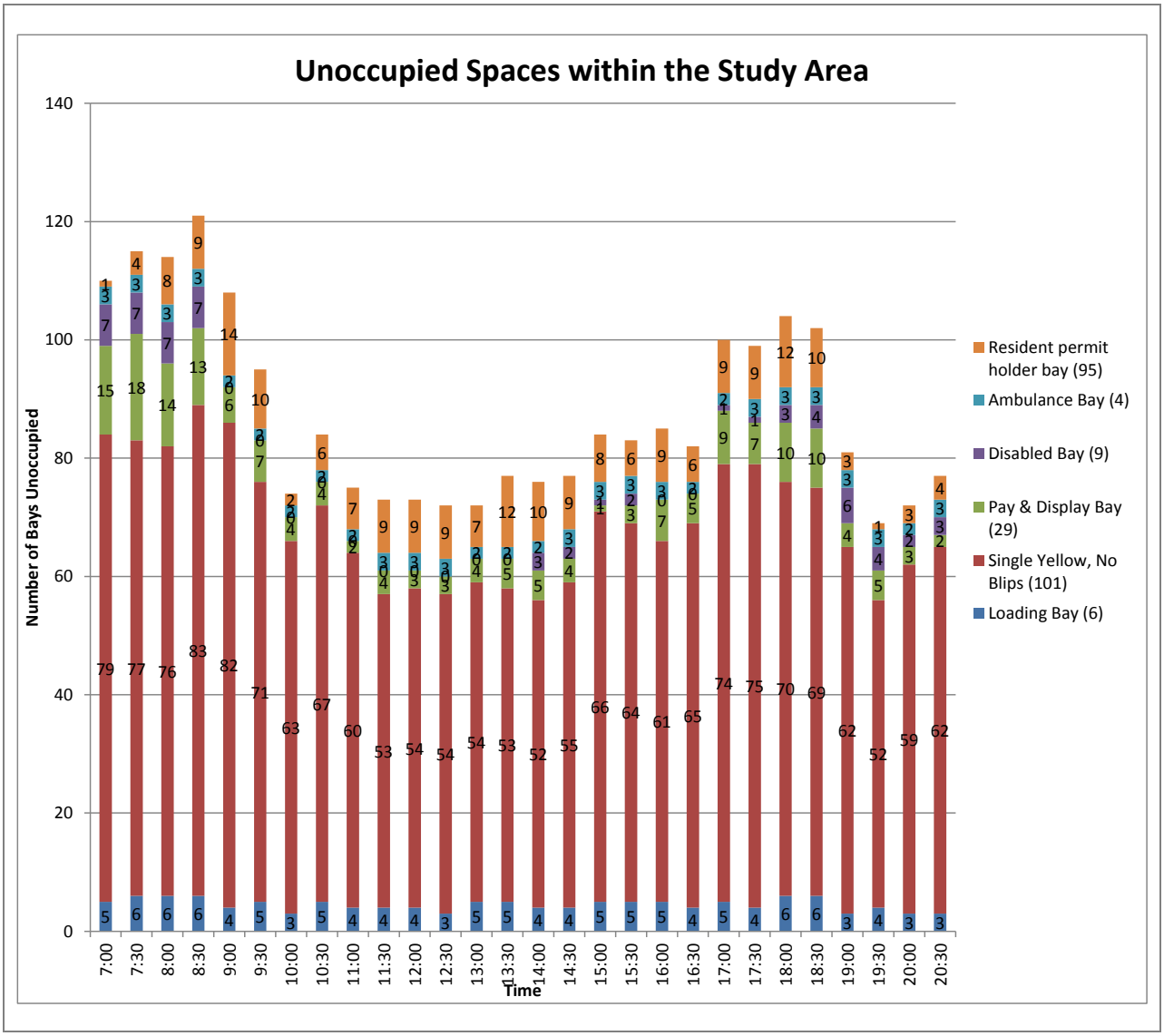
Road Section	Single Yellow (with blips)	Single Yellow (no blips)	P&D	Loading Bay	Disabled Bay	Ambulance Bay	Residential Bay
Huntley Street (Grafton Way – University St)	0	13	10	3	0	0	0
Huntley Street (Capper St – University St)	0	12	5	0	3	4	0
Huntley Street (Capper St – Torrington Pl)	0	23	0	0	0	0	15
Huntley Street (Chenies St – Torrington Pl)	0	4	2	0	0	0	31
University Street (TCR-Huntley Street)	0	3	0	0	1	0	4
University Street (Gower St-Huntley Street)	0	11	4	0	2	0	10
Mortimer Market	0	3	5	0	3	0	1
Capper Street	0	5	0	0	0	0	9
Grafton Way (TCR-Huntley Street)*	0	6	5	0	0	4	0
Grafton Way (Huntley St – Gower St)	0	0	0	0	0	0	0
Gower Street (Grafton Way – University Street)	15	0	0	0	0	0	0
Gower Street (Torrington Place – University Street)	67	0	0	0	0	0	0
Gower Street (Torrington Place – Chenies Street)	53	0	0	0	0	0	0
Chenies Mews	0	9	0	0	0	0	5
Ridgmount Gardens	0	0	3	3	0	0	20
Torrington Place (Huntley St – Gower St)	0	10	0	0	0	0	0
Torrington Place (Huntley St – TCR)	5	8	0	0	0	0	0
TOTAL	**140**	**101**	**29**	**6**	**9**	**4**	**95**

*Totals on section of Grafton Way (between TCR-Huntley Street) excluded from survey owing to road closure on survey day.

3.13.7 Table 3.4 shows that there is a capacity of 237 single yellow line spaces within the study area. However, a considerable amount of these spaces are located on Gower Street, which is considered a road unsuitable for parking owing to its status as a key route within the West End Project proposals. Therefore, a more accurate measure of single yellow line parking capacity is to count only the areas which do not have kerb marking. Therefore, within the study area, there is a capacity of 101 single yellow line spaces, without kerb markings (blips).

3.13.8 Figure 3.7 summarises the results of the parking beat survey in terms of the average number of unoccupied bays for key parking restrictions, with the total capacity for each restriction detailed in the key at the bottom of each graph.

Figure 3.7: Average Unoccupied Spaces within the Study Area



3.13.9 Figure 3.7 indicates that during the study period there was a considerable amount of available single yellow line parking (without blips) within the study area. The highest demand for single yellow line parking occurred at 14.00 and 19.30, when 52 spaces were still available. The majority of these spaces were available on Torrington Place.

3.13.10 The survey also identified that pay and display parking was available in the area. The highest demand for pay and display parking occurred at 15.00, when only 1 space was still available. The section of Huntley Street between Grafton Way and University Street had the lowest levels of occupied pay and display parking.

3.13.11 Designated disabled parking was fully utilised at a number of occasions throughout the survey day, typically from 09.00 to 14.00 and from 16.00-17.00.

3.13.12 Dedicated resident parking bays were highly utilised throughout the survey day. The highest demand for residential parking occurred at 07.00 and 19.30, where only 1 residential space was unoccupied.

3.13.13 The 4 dedicated ambulance bays were lightly used throughout the survey day.

3.13.14 At least 3 loading bays were available at all times throughout the survey day.

3.13.15 Table 3.5 summarises the minimum and maximum occupation recorded within the study area.

Table 3.5: Parking Occupation, Whole Study Area.

Type of Bay	Total number of bays	Minimum occupation	Maximum occupation
Pay and Display	29*	11 (38%)	28 (97%)
Disabled	9	2 (22%)	9 (100%)
Ambulance/PTS	4*	1 (25%)	2 (50%)
Residential	95	81 (85%)	94 (99%)
Single Yellow (no blips)	101*	18 (18%)	49 (49%)

*The spaces on Grafton Way were excluded from the survey owing to the road closure on Grafton Way between Tottenham Court Road and Huntley Street.

3.13.16 Table 3.5 therefore confirms that during the worst period, there is 51% reserve capacity on single yellow lines and 50% reserve capacity within ambulance bays. Pay and display, disabled parking bays and residential parking bays do become full, or near fully occupied during a typical day.

Disabled Badge Holder Parking – Whole Study Area

3.13.17 The survey revealed that throughout the study period, an average of 9% single yellow line parking demand was occupied by blue badge holders only and an additional 37% of single yellow line parking demand was taken up by those displaying a dispensation pass. No vehicles parking on a single yellow line displayed a green badge. Therefore the remaining 56% of vehicles parked on a single yellow line did not display a disabled badge of any kind.

3.13.18 Furthermore, the survey revealed that 2% of residential parking bay demand was taken up by blue badge holders only. An additional 0.2% of residential parking bay demand was occupied by drivers displaying a green badge. No vehicles parking within residential bays displayed a dispensation pass.

3.13.19 In addition, the survey revealed that 11% of pay and display parking demand was taken up by blue badge holders only. An additional 1% showed a green badge and 1% showed a blue badge with dispensation permit.

3.13.20 Table 3.6 summarises the duration of stay for disabled badge holders in the whole study area, for all parking restrictions. Appendix A displays the duration of stay split per parking restriction.

Table 3.6: Disabled Badge Holder Duration of Stay, Whole Study Area.

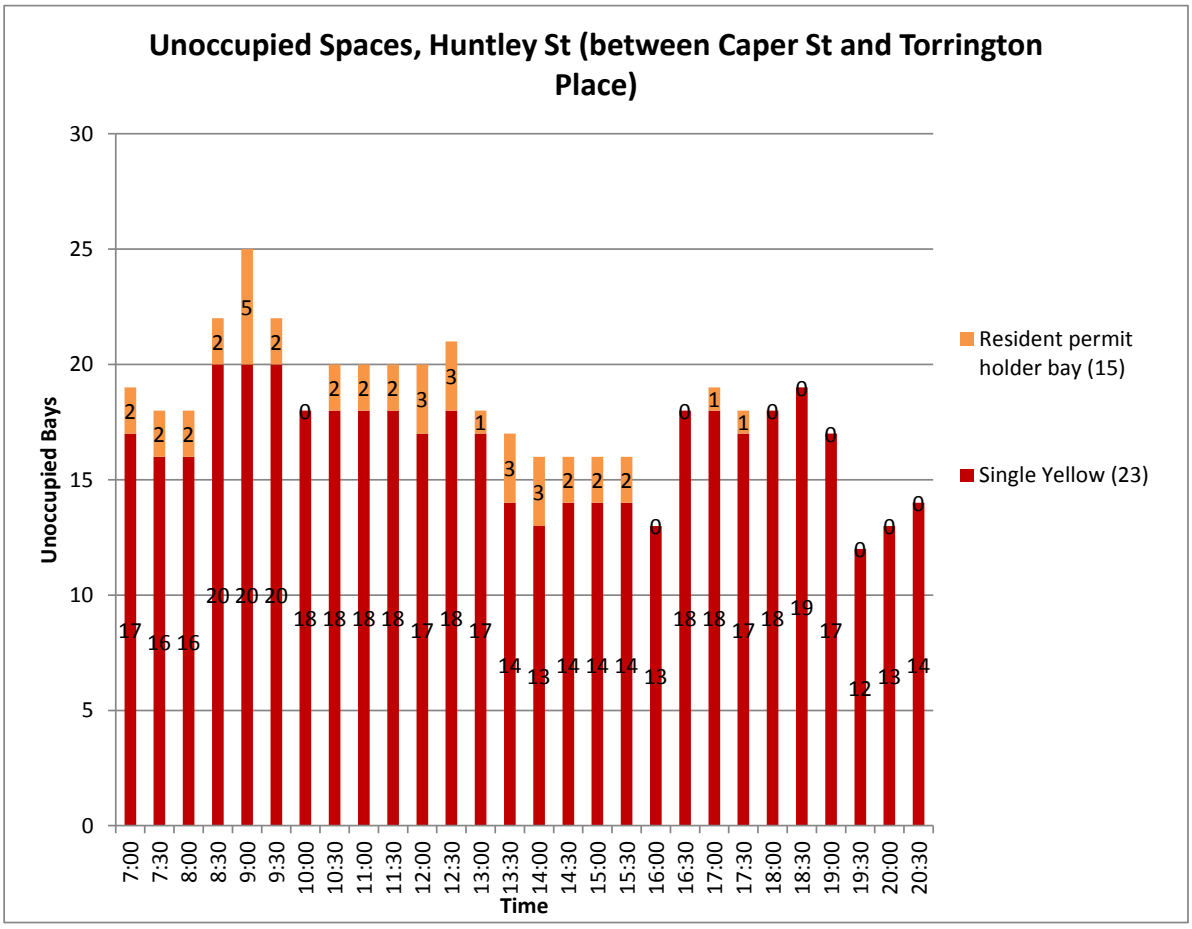
Badge Type	0-1 hrs	1-2hrs	2-3hrs	3-4hrs	4-5hrs	5-10hrs	10+ hrs	Total
Blue Badge Only	33	18	6	3	2	8	3	73
	45%	25%	8%	4%	3%	11%	4%	100%
Blue Badge and Dispensation	14	10	7	6	5	10	3	55
	25%	18%	13%	11%	9%	18%	5%	100%
Green Badge	0	1	1	0	2	0	3	5
	0%	20%	20%	0%	40%	0%	60%	100%
Total	**47 (35%)**	**29 (22%)**	**14 (11%)**	**9 (7%)**	**9 (7%)**	**18 (14%)**	**9 (7%)**	**133**

3.13.21 Table 3.6 shows that within the study area, 56% of patients displaying a dispensation notice and blue badge (combined) park for up to 3 hours, with 44% parking for longer than 3 hours.

Parking Utilisation – Huntley Street (between Capper Street and Torrington Place).

3.13.22 Figure 3.8 summarises the results of the parking beat survey in terms of the average number of unoccupied bays for the section of Huntley Street between Capper Street and Torrington Place.

Figure 3.8: Parking Utilisation Huntley Street (between Capper St and Torrington Place).



3.13.23 Figure 3.8 indicates that during the study period there was a considerable amount of available single yellow line parking (without blips) along the section of road. The highest demand for single yellow line parking occurred at 19.30, when 12 spaces were still available (48%), indicating 11 were occupied.

3.13.24 Dedicated resident parking bays were highly utilised. The highest demand for residential parking occurred at intermittent parts of the day, particularly between 18.30-21.00, 16.00-17.00 and 10.00, where all residential parking was occupied. The minimum residential occupancy occurred between 0900-0930, where 5 bays were unoccupied (33%).

Disabled Badge Holder Parking – Huntley Street Single Yellow Line (between Capper Street and Torrington Place)

3.13.25 Table 3.7 displays the peak period (11.00-16.00) occupancy along the single yellow line of Huntley Street (between Torrington Place and Capper Street), per disabled badge type.

Table 3.7: Existing Parking on Huntley Street Single Yellow Line (between Capper St and Torrington Place), vehicles.

Time	Blue Badge Only	Blue Badge and Dispensation Pass	Green Badge	Total with permits	Total Without Permits	Total	Total Occupancy along section (%)
11:00	2	1	0	3	2	5	22%
11:30	1	1	0	2	3	5	22%
12:00	1	1	0	2	4	6	26%
12:30	1	1	0	2	3	5	22%
13:00	1	4	0	5	1	6	26%
13:30	1	4	0	5	4	9	39%
14:00	1	3	0	4	6	10	43%
14:30	2	1	0	3	6	9	39%
15:00	3	1	0	4	5	9	39%
15:30	3	1	0	4	5	9	39%
16:00	4	1	0	5	5	10	43%
Total	**20**	**19**	**0**	**39**	**44**	**83**	**Na**
% of Total	**24%**	**23%**	**0%**	**(47%)**	**53%**	**100%**	**Na**

3.13.26 Table 3.7 shows that 47% of parking during the peak period was occupied by drivers showing a disabled pass / dispensation pass. In addition, 53% of parked vehicles did not display a disabled pass. These figures compare well with Table 3.3, which demonstrated that all vehicles parked on this section during the peak period, not showing a blue badge or dispensation pass, are either NHS vehicles, or service vehicles.

3.13.27 Therefore, Table 3.8 displays the existing parking levels along the single yellow line of Huntley Street (between Capper Street and Torrington Place) in PCUs. NHS and service vehicles have been classified as having a PCU value of 1.5.

Table 3.8: Existing Parking on Huntley Street Single Yellow Line (between Capper St and Torrington Place), in PCUs

Time	Total with permit (1 PCU per veh)	Total without permit and therefore NHS or Service vehicle (1.5 PCUs per veh)	Total PCUs parked	% Occupancy (PCUs)
11:00	3	3	6	26%
11:30	2	5	7	30%
12:00	2	6	8	35%
12:30	2	5	7	30%
13:00	5	2	7	30%
13:30	5	6	11	48%
14:00	4	9	13	57%
14:30	3	9	12	52%
15:00	4	8	12	52%
15:30	4	8	12	52%
16:00	5	8	13	57%
Total	**39**	**66**	**105**	

3.13.28 Table 3.8 demonstrates that up to 13 PCUs currently park along the single yellow line on Huntley Street, between Capper Street and Torrington Place, during an average day. This represents 57% occupancy during the worst time period.

3.13.29 Table 3.9 summarises the duration of stay for disabled badge holders on the single yellow line of Huntley Street (between Capper Street and Torrington Place).

Table 3.9: Disabled Badge Holder Duration of Stay, Single Yellow Line, Huntley Street (Capper St – Torrington Place)

Badge Type	0-1 hrs	1-2hrs	2-3hrs	3-4hrs	4-5hrs	5-10hrs	10+ hrs	Total
Blue Badge Only	4	1	2	0	0	1	0	8
	50%	13%	25%	0%	0%	13%	0%	100%
Blue Badge and Dispensation	3	0	0	1	0	1	0	5
	60%	0%	0%	20%	0%	20%	0%	100%
Green Badge	0	0	0	0	0	0	0	0
Total	**7 (54%)**	**1 (8%)**	**2 (15%)**	**1 (8%)**	**0 (0%)**	**2 (15%)**	**0**	**13**

3.13.30 Table 3.9 shows that the majority of blue badge holders only park on the single yellow line for up to 3 hours. However, 1 vehicle was identified as being parked for longer than 3 hours. Similarly, 60% of drivers showing a dispensation pass parked for less than an hour. However, 40% parked for longer than 3 hours.

Key Parking Locations Surrounding the Site

3.13.31 The survey revealed the following minimum and maximum parking occupancy at specific key locations within close proximity to the site (160m, or 2 minutes' walk), as shown in Table 3.10.

Table 3.10: Parking Occupancy – Key Locations Surrounding the Site

Location	Total Capacity	Minimum occupation	Maximum occupation
Mortimer Market, Single Yellow Line	3	0 (0%)	3 (100%)
Mortimer Market, Layby (double yellow)	4	0 (0%)	3 (75%)
Chenies Mews, Single Yellow Line (not restricting access)	9	0 (0%)	3 (33%)
Huntley Street Ambulance Bay (Between Capper St and University St)	4	0 (0%)	2 (50%)
Huntley Street, Single Yellow Line (between Torrington Place and Chenies Street).	4	0 (0%)	2 (50%)
Huntley Street, Single Yellow line (between Capper Street and Torrington Place).	23	0 (0%)	11 (52%)
University Street, Single Yellow Line (between Gower Street and Huntley Street)	11	0 (0%)	6 (54%)
Torrington Place, Single Yellow Line, no blips (between Tottenham Court Road and Gower Street)	18	0 (0%)	4 (22%)
Total single yellow line only	68	0 (0%)	29 (43%)

3.13.32 Table 3.10 shows that Chenies Mews has available parking space on its single yellow lines throughout a typical day. The greatest demand for single yellow line parking within Chenies Mews occurs between 11.00 and 13.00 where 3 vehicles park, leaving 67% unoccupied (6 spaces).

3.13.33 Table 3.10 also shows that the single yellow lines on Mortimer Market do become fully occupied on an average day. The greatest demand for single yellow line parking on Mortimer Market occurs between 11.30-13.00 when all single yellow line spaces are occupied. Parking demand at the Mortimer Market layby did not reach capacity during the survey (75% occupancy reached). The pay and display, disabled and residents bays on Mortimer Market also become fully occupied during the survey.

3.13.34 Considerable amounts of single yellow line parking were unoccupied on University Street and Torrington Place during the survey. At the worst period, 12 spaces were available on Torrington Place and 5 were available on University Street.

3.13.35 During the survey, the ambulance bay on the western side of Huntley Street (between Capper Street and University Street) did not reach full capacity. The maximum capacity reached was 2 vehicles (50% occupancy). In addition, the maximum single yellow line occupancy on Huntley Street (between Torrington Place and Chenies Street was 2 vehicles (50% occupancy).

3.13.36 Capper Street has been excluded from the table above, as the proposals for the West End Project remove the available single yellow line parking on the western side of Capper Street and therefore in the future Capper Street would not be a realistic option for single yellow line parking.

3.13.37 To conclude, at the worst period, within 160m walk of the site (2 minutes' walk), 43% of single yellow line parking is occupied, meaning 39 car parking spaces are unoccupied.

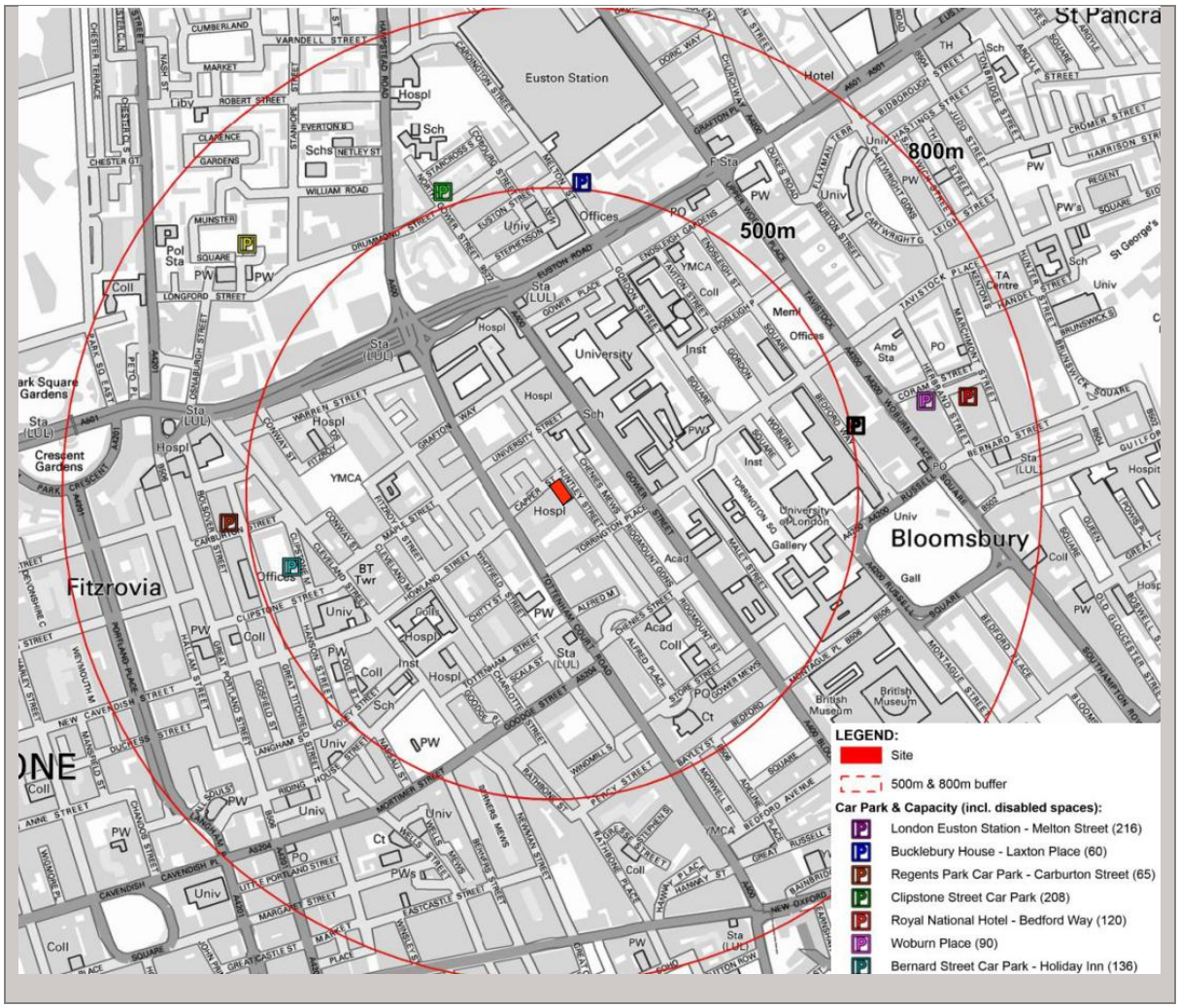
3.14 Existing Off-Street Parking

3.14.1 Whilst the analysis above has detailed some reserve capacity within the existing on-street road network, patients and visitors may choose to access off-street public car parks given the maximum permitted length of time for parking within pay and display bays is two hours. There are, therefore, seven public car parks within 800m walk of the site, which have good connections to existing bus routes. Table 3.11 below displays the existing off-street parking locations within 800m walk of the site, with their location indicated in Figure 3.9.

Table 3.11: Existing Off-street Public Car Park Locations

Car Park Name	Approximate Walking Distance from Site	Capacity (number of spaces)
London Euston Station, Melton Street (Monday – Sunday)	500m	216 (inc 4 disabled)
Bucklebury House, Laxton Place (Mon-Fri only)	500m	60
George Mews, North Gower Street (Mon-Fri only)	600m	40
Royal National Hotel, Bedford Way. (Monday – Sunday)	620m	120
Woburn Place (Monday – Sunday)	750m	90 (inc 1 disabled)
Bernard Street Car Park, Holiday Inn (Monday – Sunday)	500m	136 spaces
Clipstone Street Car Park (Monday –Sunday)	520m	208 (inc 3 disabled)
Regents Park Car Park, Carburton Street	520m	65 (2 disabled)

Figure 3.9 Off-street public access car parks



3.14.2 There are, therefore, a number of alternative publicly accessible off-street car parks within reasonable proximity of the site and which are priced and controlled (i.e. no maximum length of stay) to offer a realistic alternative to on-street parking adjacent the site.

3.15 Existing Off-Street Staff Parking

3.15.1 Within the vicinity of the development site, UCLH currently have access to existing parking at Maple House, accessed from Beaumont Place, 250 Euston Road and 43 Huntley Street. Staff parking permits are allocated on a needs-basis and supplied at cost to an individual.

3.16 Shropshire Place Loading

3.16.1 A loading occupancy survey was undertaken on Shropshire Place between Wednesday 18th June to Friday 20th June 2014. The survey identified the continual level of servicing on Shropshire Place over the 72 hour period. It also identified the building being served. The survey determined the only locations being serviced by vehicles accessing Shropshire Place were 43-49 Huntley Street (the site), Shropshire House and the businesses along Queen's Yard.

3.16.2 Table 3.12 displays the results of the survey based on an average day.

Table 3.12: Existing Shropshire Place Loading Survey Results , average day.

Building being served	43-49 Huntley Street	Queen's Yard	Shropshire House	Total
Car	1	2		3
Ambulance (to access the parking area to the rear of the site)	6			6
LGV	1	4		5
MGV	1	3	1	5
Total	**9**	**9**	**1**	**19**

3.16.3 Table 3.12 shows that, on average, 9 vehicles access 43-49 Huntley Street via Shropshire Place, per day. All ambulances access the site car park to the rear of the site, via Shropshire Place.

3.16.4 The survey also identified an average of 9 vehicles access Queen's Yard and only 1 accessed Shropshire House. In total, 19 vehicles access Shropshire Place on an average day.

3.16.5 A total of 56% of all vehicles accessing Shropshire Place reversed into the road from Capper Street and departed in forward gear. An additional 28% entered Shropshire Place in forward gear and departed in forward gear. These were typically the LGVs and ambulances. Only 18% entered Shropshire Place in forward gear and reversed out onto Capper Street.

3.16.6 On an average day, all Shropshire Place servicing and ambulance activity specifically for vehicles accessing 43-49 Huntley Street takes place between 05.00 and 19.00.

3.16.7 Appendix B displays the Shropshire Place survey data.

3.17 Royal National Throat Nose and Ear Hospital (RNTNEH) and Eastman Dental Hospital, Gray's Inn Road

Existing sites

3.17.1 RNTNEH is located at the northern end of Gray's Inn Road, at its junction with Swinton Street and is approximately 300m from Kings Cross Rail Station and a 1.8km drive, (8 min) from the current site.

3.17.2 A servicing parking compound is accessible from Wicklow Street to the north-east of the RNTNEH site and provides space for the 5 van based ambulances, plus the 3.5T Sterile Services van. There are 2 dedicated on-street ambulance bays located on Gray's Inn Road, 2 on Swinton St and an additional on-street parking on Wicklow Street of around 6/7 ambulances. An additional off street car park is available which accommodates 8 cars, once the RNTNEH is vacated.

3.17.3 The Eastman Dental Hospital is located approximately 350m south of the RNTNEH, at the junction of Gray's Inn Road / Heathcote Street. At the EDH, a servicing compound is accessible from Seddon Street to the east of the site and would provide space for all 5 UCLH ambulance vans. In 2019 the RNTNH will be vacated so the EDH would be the location for the new UCLH PTS control centre and base. The PTS strategy is described in more detail later in a separate report that accompanies the planning application. The PTS strategy is summarised in section 6 of this TS.

Existing operation of the sites

3.17.4 Currently both the RNTNEH and EDH are outpatient facilities, open from 0830-1830, Monday to Friday. The units are closed at weekends.

3.17.5 As previously stated, the proposals are for the relocation of the RNTNEH and the EDH from their existing locations at Gray's Inn Road to a modern combined facility at the proposed site. The new facility will have many more services on site so that patient's needs can be comprehensibly attended to during one appointment. For example there would be no need to travel to different parts of the hospital for scans and then come back later the same day, which is a regular occurrence today. This would minimise the number of trips generated. Therefore a survey of existing activity at the RNTNEH would provide a robust proxy for trips at the proposed site.

3.17.6 The existing RNTNEH hospital has therefore been surveyed to establish the existing pedestrian footfall, servicing levels and PTS / Ambulance demands at the hospital. The results are used later in this report to predict the future pedestrian demand profile at the proposed site.

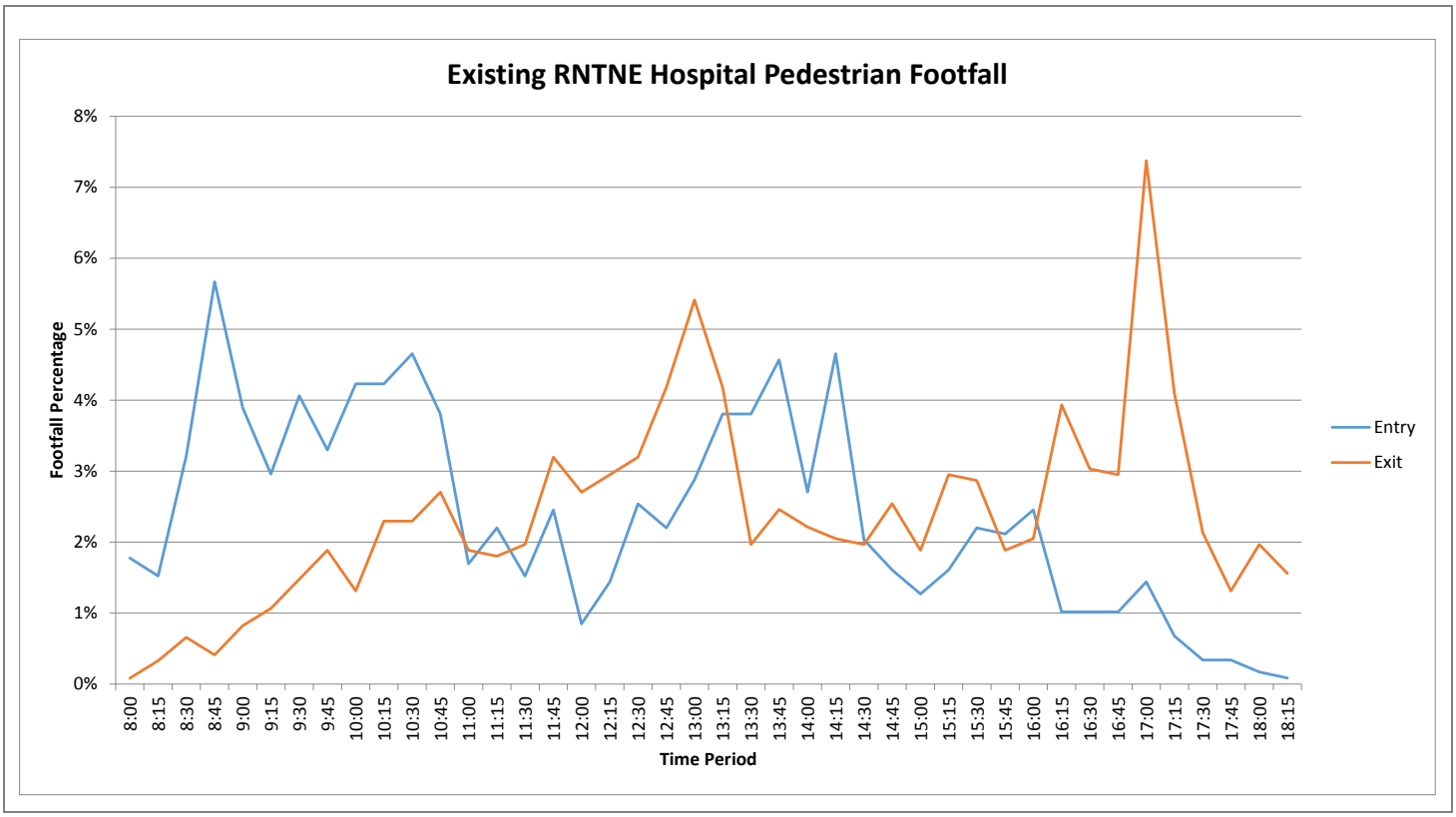
3.17.7 The pedestrian footfall, servicing and PTS / Ambulance survey was conducted at the RNTNEH Hospital (on Gray's Inn Road) on 11th February 2015 (a typical weekday), between the operational times of 0830 and 1830. The survey comprised of a 15 minute beat count. The results of the surveys are explained in more detail in the following section of this report.

Existing RNTNEH Hospital Pedestrian Footfall Survey

3.17.8 The RNTNEH Hospital has a total of three existing pedestrian entrances for patients and visitors. The main pedestrian access leads onto Gray's Inn Road (A501). Two other pedestrian access are located on the southern side of the site, accessed of the northern side of Swindon Street (A201). There is also a small car park associated with the site, which is only used by senior staff. Usage of this car park was omitted from the survey.

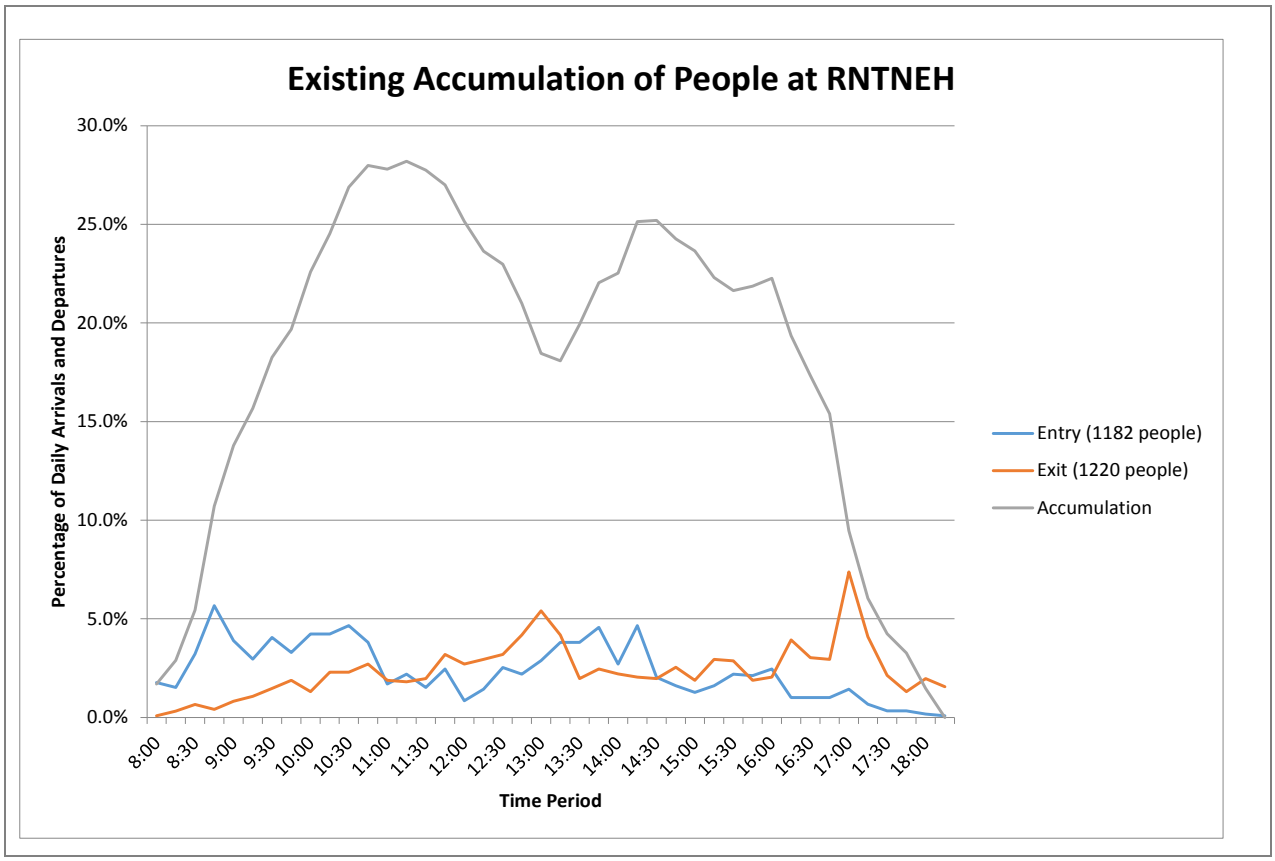
3.17.9 The pedestrian footfall survey revealed that 1182 people entered and 1220 exited over the day, which is expected as it is an outpatient facility. The results of the pedestrian footfall survey are displayed below in Figure 3.10.

Figure 3.10: Pedestrian Footfall, Existing RNTNEH Hospital.



3.17.10 Figure 3.10 shows the pedestrian entry peak to be between 08.30-08.45 in the morning, where 5.7% of the daily entries occurred. The pedestrian exit peak occurred between 17.00-17.15, where 7.3% of daily pedestrian exits occurred. An additional exit peak occurred between 12.45-13.00, where 5.4% of daily pedestrian exits occurred. Figure 3.11 displays the accumulation profile of people at the existing RNTNEH.

Figure 3.11: All Person Arrivals at the Existing RNTNEH



3.17.11 Figure 3.11 shows the highest accumulation of people at the existing RNTNEH occurs between 10.30 and 11.30, when 366 people accumulate within the building. A secondary peak occurs between 14.00 and 15.00 where up to 316 people accumulate within the existing building.

Existing RNTNEH Hospital Servicing Survey

3.17.12 There is only one servicing access at the existing RNTNEH, located off Wicklow Street. The survey established the usage of the servicing area including length of stay per vehicle and vehicle classifications between 06.00-19.00, which covered all daily servicing trips. The RNTNEH is not serviced during the evenings.

3.17.13 Table 3.13 displays the results of the existing RNTNEH servicing survey.

Table 3.13: Existing RNTNEH Servicing Levels

Delivery made by	Existing Number of trips per day
MGV	3
car	9
Motorcycle	7
LGV	6
Pedal Cycle	3
Total	**28**

3.17.14 Table 3.13 demonstrates there are currently 28 deliveries per day to the existing RNTNEH. However, 7 of these are motorcycle deliveries and 3 pedal cycle deliveries. Therefore, 18 four wheel vehicle deliveries are made to the site per day.

3.17.15 Appendix C displays the results of the survey.

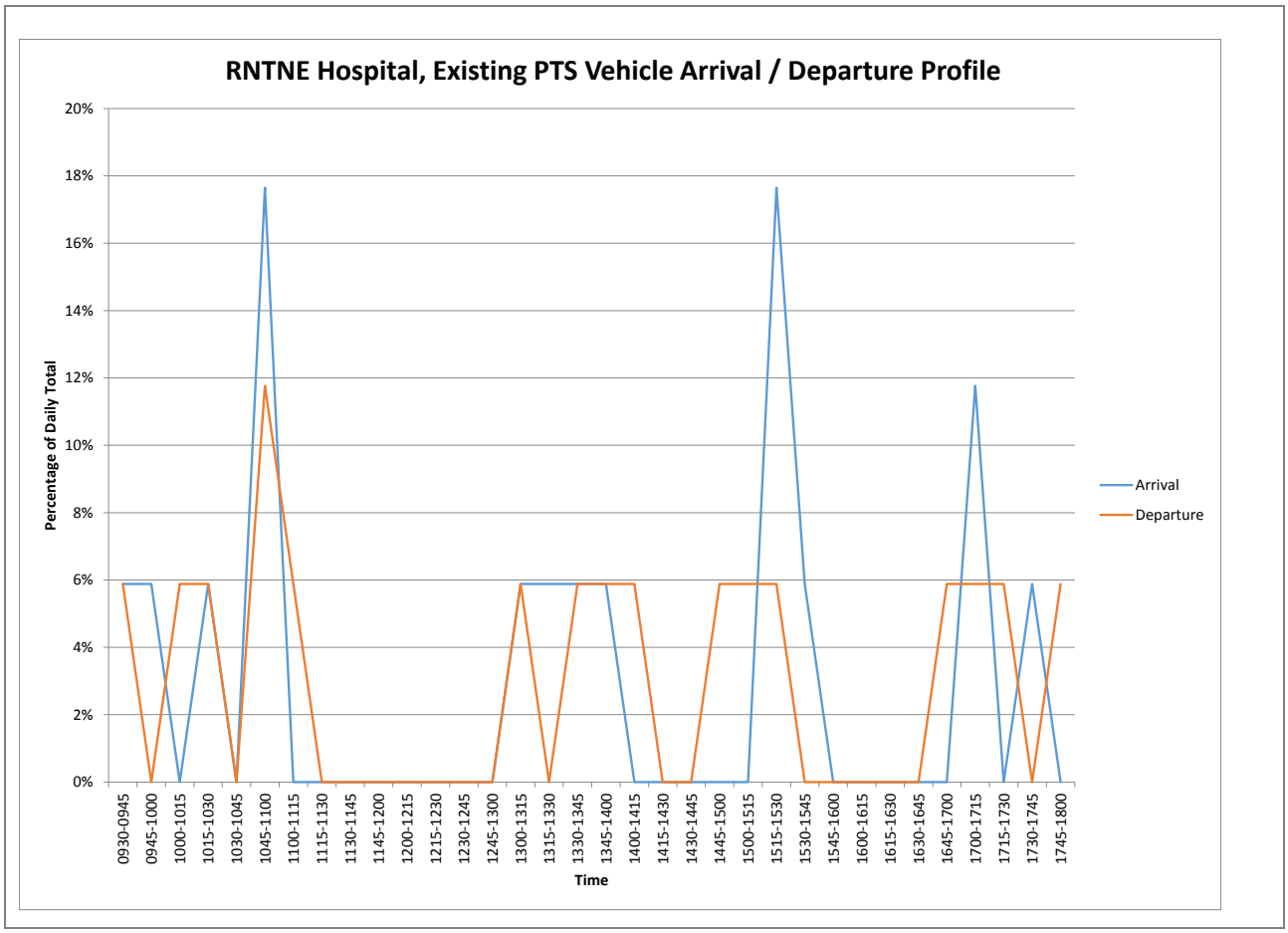
Existing RNTNEH PTS /Ambulance drop off

3.17.16 A PTS vehicle survey was undertaken on Wednesday 11th February 2015 between 0800-1830hrs (existing RNTNEH operational times) to establish existing PTS drop off / pick up demand at the RNTNE Hospital. Currently, PTS vehicles drop off / collect patients at two locations surrounding the TNE Hospital. These are as follows:

- An approx. 10m long bay located on the eastern side of Gray's Inn Road, immediately outside the main TNE Hospital pedestrian access.
- An approx. 10m long bay located on the northern side of Swindon Street, outside the Audiology Centre pedestrian access; and

3.17.17 Figure 3.12 displays the existing arrival and departure profile of PTS vehicles at the existing RNTNEH.

Figure 3.12: Existing arrival and departure profile of PTS vehicles at the existing RNTNEH.



3.17.18 Figure 3.12 shows there to be three arrival peaks during an average day. These occurred at 10.45 (where 17.8% of daily arrivals occurred), 15.15 (where 17.8% of daily arrivals occurred), and 1700hrs (where 11.8% of daily arrivals occurred).

3.17.19 The survey also identified that no NHS vehicles stopped on Wicklow Street during the survey day. However, a parking occupancy survey was conducted on Wicklow Street on Wednesday 11th February 2015 which identified the level of demand on the section of road between Britannia Street and the site servicing access on Wicklow Street.

3.17.20 The survey revealed the section of Wicklow Street to be a 110m stretch of road, with single yellow parking on both sides of the road (no kerb markings). The road width is approximately 6m indicating that continuous parking could only occur on one side of the road, thus allowing enough available road width for vehicles to pass. The survey also identified the capacity of parking on the stretch to be 20 cars (at an average of 5.5m length per vehicle) or potentially up to 15 van ambulances.

3.17.21 The survey concluded that a maximum occupation of 2 vehicles currently park on this stretch of Wicklow Street, indicating at least 18 car spaces or 13 van ambulances are available for parking during the day.

3.17.22 Appendix C displays the relevant RNTNEH PTS survey information.

3.18 Existing RNTNEH and EDH Mode Split

3.18.1 The existing mode split at the RNTNEH and EDH has been identified. A mode of travel survey was conducted on Monday 14th February 2013, which identified the main mode of travel to both hospitals for staff, patients, chaperones and visitors. The results of the survey are summarised in the sections below.

Existing Staff Mode Split - RNTNEH and Dental Hospital

3.18.2 A total of 440 staff employed at the RNTNEH responded to the survey. Table 3.14 displays the results of the mode of travel survey.

Table 3.14: RNTNEH and Dental Staff Mode Split

Mode	Staff Surveyed	Percentage Split
Drive alone	0	0%
Car share (as driver)	1	1%
Car share (as passenger)	0	0%
Underground	46	42%
Mainline rail	33	30%
Bus	10	9%
Walk	12	11%
Cycle	6	6%
Motorcycle / Moped	1	1%
Total:	**109**	100%

3.18.3 Table 3.14 shows that less than 1% of staff choose to drive to work in a car. The vast majority (82%) choose to access the site by public transport. An additional 17% choose to either walk or cycle to work.

3.18.4 The full modal split survey results are displayed as Appendix D.

Existing Patient Mode Split – TNE and Dental Hospital

3.18.5 A total of 417 patients at the TNE and Dental Hospital (combined) responded to the survey. Table 3.14 displays the results of the patient mode of travel survey.

Table 3.14: Existing TNE and Dental Hospital Patient Mode Split

Mode	Patients Surveyed	Percentage Split
Drive alone	11	3%
Car share (as driver)	3	1%
Car share (as passenger)	19	5%
Underground	189	45%
Mainline rail	73	18%
Bus	87	21%
Walk	11	3%
Cycle	5	1%
PTS	5	1%
Taxi	14	3%
Total:	417	100%

3.18.6 Table 3.14 shows that 3% of patients drive alone to the respective hospitals. In addition, 3% arrive by taxi and 5% as car passengers. The vast majority (84%) choose to access the site by public transport. An additional 4% choose to either walk or cycle to the Hospital units. Only 1% of patients arrive by PTS vehicle.

3.18.7 In addition, out of the 417 patients who responded to the survey, 20 said they were blue badge holders (4.7%) and 1 said they were a green badge holder (0.2%). Of the 20 blue badge holders, 11 (2.6%) arrived by car (either as a passenger or as a driver).

3.18.8 In addition, 13 chaperones and 3 visitors responded to the survey. Only 1 chaperone arrived as a car driver and one other arrived by taxi. The remainder used public transport. The visitors all arrived by public transport.

3.18.9 The full survey results are displayed as Appendix D.

4 Committed Development

4.1.1 Whilst Section Three identified the existing transport infrastructure that is available from the site, there are a number of committed and proposed changes to this infrastructure, which are either currently being implemented or may be implemented over the medium to longer term when the site is operational. The more significant strategic proposals are highlighted within subsequent paragraphs.

4.2 Crossrail

4.2.1 Tottenham Court Road is identified as a station along the central route of Crossrail, which being two stops south from Warren Street on the northern line, will be an important mode of travel for staff and visitors accessing the wider area.

4.2.2 Running between Maidenhead/Heathrow and Shenfield/Abbey Wood, Crossrail will relieve existing capacity constraints on the existing London Underground network and in particular the Central Line with an anticipated 24 trains per hour, with operation intended for 2018.

4.3 High Speed 2

4.3.1 Euston station is currently identified as the terminal station for the proposed High Speed 2 route between London and Birmingham, with ongoing connections to Manchester and Leeds.

4.3.2 Changes to the streets around the station are proposed including Cardington St.

4.4 West End Project Highways Proposals

4.4.1 LBC are currently developing plans for the introduction of two-way working to much of the highway network that surrounds UCH.

4.4.2 For Gower Street, two-way working would be introduced throughout and the Euston Road slip contraflow bus lane will become an all traffic route.

4.4.3 Grafton Way would remain one-way westbound, with the addition of an eastbound contraflow cycle lane.

4.4.4 Huntley Street would remain one way south bound. Footways on Huntley Street's western footway, north of University Street, would be widened whilst retaining sufficient carriageway width for one-way traffic. A contra-flow cycle lane is planned for the entire length of Huntley Street.

4.4.5 Capper St will be closed at the junction with Tottenham Court Road to become a 'Pocket Park'.

4.4.6 Tottenham Court Road will become two-way but with restricted access on certain sections to just buses, taxis and bicycles.

4.4.7 Chenies Mews is proposed to have a new one way southbound vehicle entrance permitted from Huntley Street (via the north of Chenies Mews), whilst two way access will continue to be permitted via Torrington Place (via the south of Chenies Mews). Vehicles entering Chenies Mews from the south would be required to perform a U turn to exit the street.

4.4.8 Shropshire Place is proposed to become a shared surface for pedestrians, linking Shropshire Place with Tottenham Court Road via Queen's Yard.

4.4.9 The West End Project proposals result in a net loss of 2 PTS ambulance parking bays in the immediate area, despite new facilities being provided by UCLH at the Proton Beam Therapy centre on Grafton way and at the Euston Slip.

4.5 UCLH Emergency Department Proposals

4.5.1 Construction has recently begun for the proposed redevelopment of UCLH's emergency department (application reference 2013/2824/P).

4.5.2 The proposals involve the infilling of the existing emergency ambulance set down area, accessed from Gower Street, with an alternative access strategy for emergency ambulances and a reconfiguration of the wider site layout.

4.6 UCLH Proton Beam Therapy Centre ('Phase 4')

4.6.1 Approval was granted to UCLH on 22nd September 2014 at the former Odeon site and Rosenheim Building for:

> *"Redevelopment of the former Odeon site and demolition of the Rosenheim Building to provide a Proton Beam Therapy (PBT) cancer treatment facility and day surgery facilities in 4 levels of basement; inpatient medical facilities and a ground floor retail unit (175 sq m approximate GIA) in a 7 storey development above ground (34,596.5 sq m GIA in total) including roof plant, a new pedestrian entrance on corner of Grafton Way and Huntley Street, a new service entrance on Huntley Street, a ground floor drop-off area off Grafton Way, and three roof gardens; and the relocation of the oxygen tanks to University Street frontage inside a new enclosure". The planning application ref. is 2013/8192/P.*

4.6.2 An off street drop off for 2 PTS vehicles will be provided as part of the proposals. Demolition will be complete by the end February 2015 and construction will begin in March 2015.

5 Development Proposals

5.1 Introduction

5.1.1 This section outlines the development proposals, likely trip generation and the traffic impact of the development on the local highway network.

5.1.2 The planning application is for:

> *"Application for demolition of the former University College London (UCL) Student Union and Royal Ear Hospital buildings, and redevelopment for a building of 6 storeys in height including ground and 3 storey basement comprising approximately 12,013 sq m GEA for use a specialist head and neck facility (Class D1) with 2 x pedestrian accesses from Huntley Street and Shropshire Place respectively and servicing/delivery bay accessed from Shropshire Place".*

5.1.3 The new facility is intended to be operational in 2018. This will be an outpatient facility only, open between Mon –Fri with no overnight stays. The Hospital will not be open at weekends, but will be operational 08.00-18.00, Monday to Friday. A total of 250 staff are expected to work at the hospital per day. An average of 1000 patients are expected at the hospital per day.

5.1.4 The access strategy and traffic impact for each user group is therefore summarised below.

5.2 Proposed Access Strategy

5.2.1 The proposed site layout is indicated on the project architects site plans SBA-DRW-A2024-REV6 and SBA-DRW-A2023-REV4.

5.2.2 The proposed layout provides a dedicated internal loading bay on-site at the rear of the Site, accessed off Shropshire Place. The general principle is for night-time servicing inside the internal loading bay to minimise noise. It is also possible for service or delivery vehicles to wait in the space in front of the loading bay on Shropshire Place during the daytime. Use of this space would not impede access to Shropshire Place.

5.2.3 PTS vehicles and ambulances would continue to stop outside the Site on Huntley Street. However there would be fewer PTS vehicles and ambulances as the PTS control centre would no longer operate from the Site. The only PTS vehicles and ambulances would be those dropping off patients at the development. It is important to ensure that these vehicles get as close to the front door of the hospital building as possible so 2 dedicated bays are proposed where there is currently single yellow lines. The proposed minor change to the road markings is discussed in more detail later in this section.

5.2.4 No staff or patient car parking is proposed on site. However, patients choosing to drive to site will either make use of the existing off-street parking provision, or utilise the local road network. This is discussed in more detail below.

5.2.5 Wider footpaths will be provided by setting the building back from its current position on Huntley Street. This will aid both pedestrians accessing the site and those using the Huntley Street.

5.2.6 The proposals are intended to be operational in 2018 with construction beginning in 2016.

5.3 Proposed Modal split

Proposed Staff Modal Split

5.3.1 A total of 250 staff are proposed to work at the new site on a daily basis. The existing RNTNEH and EDH modal split has been used to identify the anticipated modal split at the site. Table 5.1 applies the existing staff modal split to the proposed daily staff numbers.

Table 5.1: Proposed RNTNEH and Dental Staff Mode Split

Mode	Percentage Modal Split	Proposed Staff modal split (250 staff)
Drive alone	0%	0
Car share (as driver)	1%	2
Car share (as passenger)	0%	0
Underground	42%	106
Mainline rail	30%	76
Bus	9%	23
Walk	11%	28
Cycle	6%	14
Motorcycle / Moped	1%	2
Total:	100%	250

5.3.2 **Table 5.1** shows that 2 staff are expected to arrive by car on a daily basis. No staff car parking is proposed at the site. Therefore staff choosing to drive to the Hospital will make use of either the pay and display facilities or the nearby car parks.

5.3.3 The vast majority of staff (204 staff) will likely to arrive by public transport. Using the same modal split as the existing RNTNEH centre, 14 staff are expected to cycle to work and 28 would walk.

Proposed Patient Modal Split

5.3.4 A total of 1000 patients are expected at the site per day. The existing RNTNEH and EDH patient modal split has been used to identify the anticipated modal split at the site. Table 5.2 applies the existing patient modal split to the proposed daily patient numbers.

Table 5.2: Proposed RNTNEH and Dental Hospital Patient Mode Split

Mode	Existing and Anticipated Percentage Modal Split	Proposed Modal Split
Drive alone	3%	26
Car share (as driver)	1%	7
Car share (as passenger)	5%	46
Underground	45%	453
Mainline rail	18%	175
Bus	21%	209
Walk	3%	26
Cycle	1%	12
PTS	1%	12
Taxi	3%	34
Total:	100%	1000

5.3.5 Table 5.2 shows that the development proposals are likely to attract 26 single occupancy car driver patient trips per day. In addition, 7 shared occupancy patient car trips are expected. This equates to 37 patient car trips per day, or 4 per hour over a 10 your day. As identified in the existing RNTNEH survey, patients arriving by car as a blue badge holders account for 2.6% of those arriving at the Unit. This equates to 26 car drivers, which will be included in the 37 total car trips to the site. In addition, 34 patients are expected to arrive by taxi per day. Overall, new vehicle trips will not create any noticeable impacts on the local roads. Indeed, as discussed later, there will be very little net change in vehicle movements.

5.3.6 A total of 12 patients per day are expected to arrive by PTS vehicle, some of whom are expected to be aided to and from the site by a chaperone.

5.3.7 The vast majority of patients (837 patients per day) are expected to arrive by public transport (9 per hour). An additional 26 patients are likely to walk to the site per day. An additional 12 patients are expected to cycle to the unit per day. It is expected that this increase in trip generation is minimal and can be catered for within the local public transport network.

5.3.8 As this is an outpatient facility, minimal numbers of visitors for patients are expected at the Hospital.

5.4 Proposed PTS Drop offs / Pick Ups

5.4.1 Table 5.2 demonstrated that 12 patients are expected to arrive and depart by PTS vehicle per day. Table 5.3 displays the anticipated accumulation of PTS vehicles at the site, based on the existing PTS profile at the RNTNEH.

Table 5.3: Future PTS Parking Accumulation

Time	PTS Arrivals	PTS departures	Proposed PTS Accumulation
9:00	1	0	1
9:30	1	1	2
10:00	1	1	1
10:30	2	1	2
11:00	0	1	1
11:30	0	0	1
12:00	0	0	1
12:30	0	0	1
13:00	1	1	2
13:30	1	1	2
14:00	0	1	1
14:30	0	1	0
15:00	2	1	1
15:30	1	0	2
16:00	0	0	2
16:30	0	1	1
17:00	1	1	1
17:30	1	1	1
Daily Total	**12**	**12**	**na**

5.4.2 Table 5.3 shows that a maximum accumulation of 2 PTS vehicles are expected at the site at any given time during an average day. Therefore, to enable the safe transfer of vulnerable patients who have no other way of getting to the site, a 20m bay is proposed on the western side of Huntley Street (between Torrington Place and Capper Street) to accommodate up to 2 PTS vehicles. VN50118.14-ECC-TR-001-10 shows the proposed location of the 20m bay and the proposed swept paths. The bay is to be a minimum of 2.2m wide to accommodate the PTS vehicles. As shown in the drawing, 3.1m of effective road width would be available for general traffic to pass the PTS bay taking into account the residential parking on the opposite side of the road. This is a sufficient available width for vehicles to pass and is the same as provided to the north of the Site between Capper St and University St both today and with the West End Project proposals.

5.4.3 The rest of the western side of Huntley Street between Capper Street and Torrington Place would retain its current single yellow line restriction.

5.4.4 If for any reason the 2x PTS drop off / pick up bays are fully utilised, then additional drop off / pick up locations have been identified as:

- The ambulance bay on the western side of Huntley Street (between Capper Street and University Street), which has at least 1 vehicle space available at any given time.
- The layby on Mortimer Market, which has 1 vehicle space available at any given time.

5.4.5 The existing parking surveys identified there to be a maximum parking occupation of 48% on the single yellow line on Huntley Street (between Capper Street and Torrington Place). The relocation of the UCLH PTS base and the introduction of the PTS strategy will remove ambulance parking from this area. As a result, even more available parking will be freed up on this section of road for other road users and disabled patients.

5.4.6 The PTS strategy is summarised in Section 6 of this TS and included as Appendix F.

5.5 Proposed Disabled Car Parking

5.5.1 No dedicated disabled car parking is proposed at the site. Furthermore, at the request of LB Camden, no disabled parking provision will be supplied on-street. Instead, disabled drivers would continue to be able to obtain dispensation permits to allow them to park their vehicles on the local road network, as permitted, for up to 3 hours.

5.5.2 The existing parking survey identified 56% of patients displaying a dispensation notice and blue badge (combined) park for up to 3 hours on local roads, with 44% parking for longer than 3 hours. As LB Camden only permit patients who display a blue badge and dispensation pass to park for up to 3 hours, there may be a need to enforce disabled parking to prevent people from parking for significantly longer than the allotted period (as has been recorded).

5.5.3 As previously identified, based on the existing patient surveys at the RNTNEH, 2.6% of disabled patients arrive by car. This equates to 26 essential car drivers arriving at the site per day (based on 1000 patient visits per day).

5.5.4 Table 5.4 displays the expected parking accumulation of blue badge patients (with dispensation passes) driving to the development site per day, based on the existing arrival and departure profile at the existing RNTNEH.

Table 5.4: Predicted Development Disabled Driver Parking Accumulation

Time Period	In	Out	Accumulation
0800-0900	3	0	3
0900-1000	4	1	5
1000-1100	4	2	7
1100-1200	2	2	7
1200-1300	2	3	5
1300-1400	4	4	6
1400-1500	3	2	6
1500-1600	2	2	6
1600-1700	1	3	4
1700-1800	1	4	1
Total	26	26	na

5.5.5 Table 5.4 shows that a maximum accumulation of 7 disabled drivers are expected at the site on an average day, with the greatest accumulation occurring between 10.00-12.00. This peak period co-insides with the peak hour all person accumulation at the existing RNTNEH.

5.5.6 The main locations disabled drivers are expected to park are the same as the existing situation, defined as:

- On the single yellow line on the western side of Huntley Street (between Capper Street and Torrington Place), which currently has a maximum occupation of 48%.
- In residential parking bays (where permitted). Typically this would be on Huntley Street (between Capper Street and Torrington Place), which have a minimum occupancy of 33% during the day.
- On other available single yellow lines close to the site. These locations would typically be on University Street, Torrington Place or Huntley Street (between Torrington Place and Chenies Mews) and Chenies Mews.

5.5.7 Table 3.9 in Section 3 identified that at least 39 car parking spaces are available on single yellow lines within 160m (2 minutes walk) of the site.

5.5.8 Therefore the 7 disabled driver/passenger vehicles can be accommodated on nearby streets. This is even without the removal of the UCLH PTS vehicles as discussed previously.

5.5.9 Appendix E displays the data sheets.

5.6 Parking Impact on the Huntley Street Single Yellow Line (between Capper Street and Torrington Place)

5.6.1 Section 5.5 has demonstrated that there is sufficient parking availability within 2 minutes walk of the site to accommodate the proposed level of parking. This section now analyses the impact on the single yellow line of Huntley Street (between Torrington Place and Capper Street) by assuming the worst case of all development related disabled cars parking on this section of road.

5.6.2 Therefore, the future baseline situation assumes that only those drivers who currently show a blue badge and / or dispensation pass will continue to park on the single yellow line (between Capper St and Torrington Place) as the ambulances will be relocated. Table 5.5 displays the worst case parking impact along the single yellow line of Huntley Street (between Capper Street and Torrington Place), following the development proposals, during the peak period of activity (11.00-16.00).

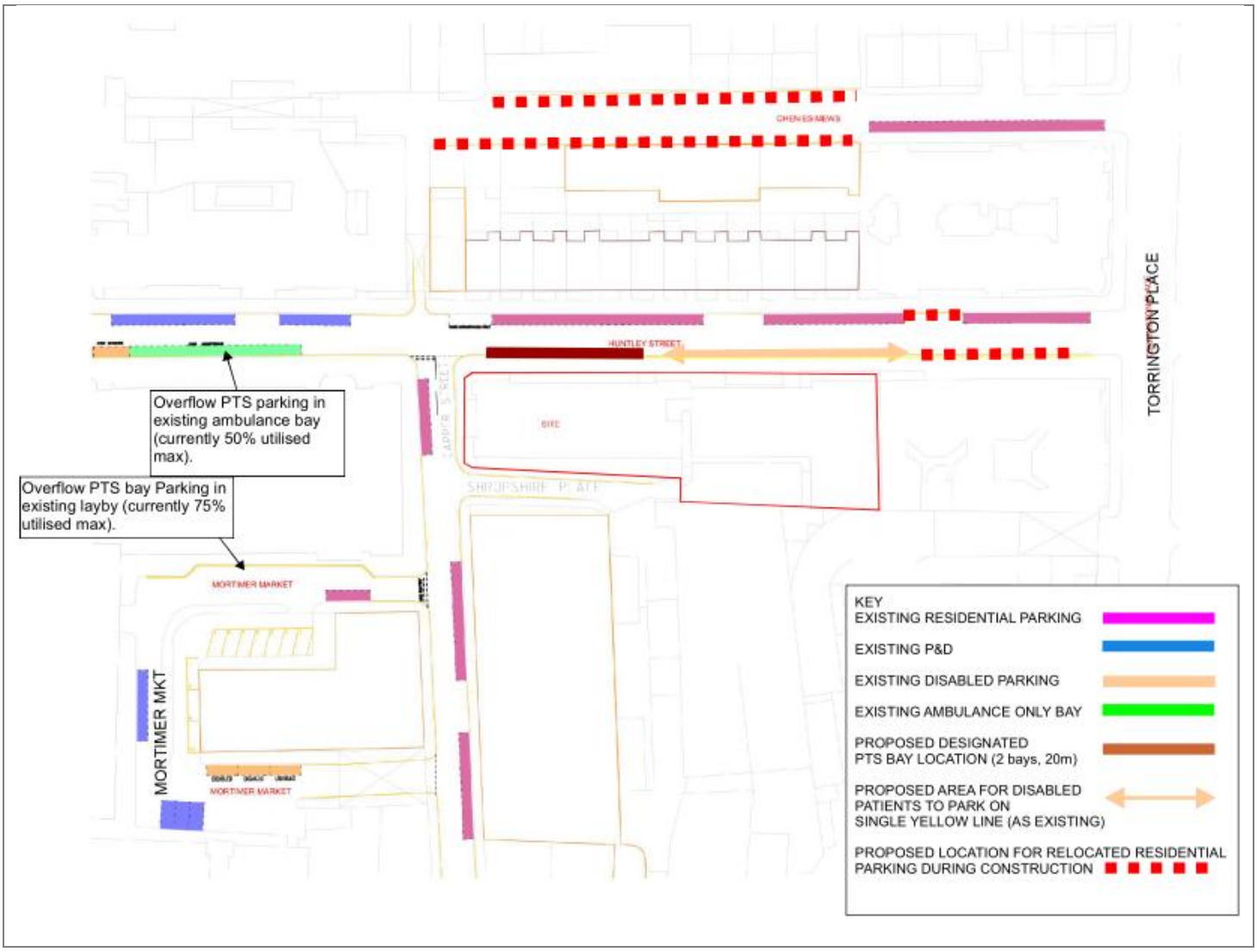
Table 5.5: Worst Case Parking Impact, single yellow line of Huntley Street (Capper Street – Torrington Place).

Time	Future Baseline (existing drivers showing a blue badge and / or dispensation pass)	Future Development Disabled Parking Demand	Proposed PTS Parking bays (2 bays proposed)	Future Parking Demand on single yellow line section (Future Base + Development)	Future Parking Demand on single yellow line section (PCUs)	Future % Occupancy on Single Yellow Line
11:00	3	7	2	12	13	57%
11:30	2	7	2	11	12	52%
12:00	2	6	2	10	11	48%
12:30	2	6	2	10	11	48%
13:00	5	4	2	11	12	52%
13:30	5	5	2	12	13	57%
14:00	4	5	2	11	12	52%
14:30	3	6	2	11	12	52%
15:00	4	6	2	12	13	57%
15:30	4	5	2	11	12	52%
16:00	5	5	2	12	13	57%

5.6.3 Table 5.5 shows that a maximum accumulation of 13 single yellow line spaces are expected to be occupied in the future base + development situation. This represents an occupation of 57%, which is the same as the existing occupancy level. Therefore, the development proposals create no change in the amount of space being used by vehicles on the single yellow line of Huntley Street (between Capper Street and Torrington Place), during the worst time period. Appendix E shows the full analysis.

5.6.4 Figure 5.1 displays the proposed vehicle parking strategy at the site.

Figure 5.1: Proposed Site Parking Strategy.



5.7 Taxi Drop Offs

5.7.1 Taxi drop offs are able to occur where space permits, typically on the western side of Huntley Street, between Torrington Place and Capper Street, or on the section of Huntley Street further north which is being used for taxi access to/ from the Macmillan Cancer Centre. Furthermore, the West End Project proposals allow taxis to utilise Tottenham Court Road during the day and in the evening. In addition, as a considerable about of loading spaces is proposed on Tottenham Court Road as part of the West End Project proposals, taxis would be permitted to drop off and pick up passengers within these loading bays. Patients can access Tottenham Court Road via Capper Street and Queen's Yard for taxi access on Tottenham Court Road.

5.8 Pedestrian Access (patients / staff and visitors)

5.8.1 A total of 2 main pedestrian accesses are provided for all hospital users, accessed via Huntley Street and Shropshire Place. An additional staff access is provided on Shropshire Place, adjacent to the loading bay. Figure 3.11 displays the anticipated demand profile of pedestrians accessing the site during a typical day.

5.8.2 As previously stated, Shropshire Place is proposed to become a public shared space as part of the West End Project. The shared space would therefore provide a continuous pedestrian environment between Tottenham Court Road and Capper Street via Queen's Yard. However, the businesses located in Queen's Yard as well as the development will continue to use Shropshire Place for service vehicle access. It is recommended that the traffic restriction along Shropshire Place is changed from single yellow lines to become a *'Pedestrian Zone, no vehicles apart from access. No stopping at any time'*. Such a restriction would still permit waste collection, site vehicular access and Queen's Yard vehicular access along Shropshire Place.

5.8.3 Part of the site frontage on Huntley Street has been given up to provide wider footpaths to the benefit of pedestrians accessing the site and all pedestrians using Huntley Street.

5.9 Staff Cycle Parking

5.9.1 The proposed level of cycle provision is in line with the Draft Further Alterations to the London Plan (Jan 2014), which states that, for C2 Hospitals, 1 long stay cycle space should be provided per 5 staff. For 250 staff using the site per day, this equates to 50 dedicated staff cycle spaces.

5.9.2 A total of 25.7 sqm GFA (approx. 7m by 3.5m) will be designated as staff cycle parking and provided at basement level 1. This floor benefits from having 4m high ceilings. Therefore, either a two tier stacking system can be installed, or stepped inclined cycle parking racks (10 spaces per 2.6m high x 2.5m long x 1m wide stands). This level of provision is enough for 50 bicycles, with space to spare for manoeuvrability. This is in line with LB Camden planning guidance.

5.9.3 Dedicated shower, locker and changing facilities will be provided adjacent to the staff cycle parking facility.

5.10 Visitor Cycle Parking

5.10.1 Visitors will make use of the 4 Sheffield stands proposed on the western footpath of Huntley Street. This level of provision is enough to accommodate 8 cycle spaces. This level of provision is in line with the Draft Further Alterations to the London Plan (Jan 2014), which states that, for C2 Hospitals, 1 short stay cycle space should be provided per 30 staff, for visitor use. For 250 staff using the site per day, this equates to 8 dedicated visitor cycle spaces.

5.11 Site Servicing / Deliveries and Waste Collection

5.11.1 The development proposal will generate a demand for a range of goods and materials, including clinical and pharmacy, medical gases cleaning, catering, linen, laundry and stationary, as well as waste collection.

5.11.2 As a health care related land use, service and delivery movements are anticipated to occur 24 hours a day, reflecting a just-in-time delivery strategy. Most servicing will occur via a redesigned Shropshire Place. A dedicated loading bay is proposed to the rear of the site, within the site boundary, accessed off Shropshire Place.

5.11.3 As many movements as possible will occur at night to minimise the effect of these vehicles on the proposed pedestrian dominated spaces on Shropshire Place. The internal loading bay will be the only area used during the night and is provided for bulk deliveries and clinical waste collections, which require more time to unload / load. The loading bay will be enclosed and a shutter will be provided which will be operated manually as required. The dedicated loading bay would minimise any noise impact associated with loading or waste collection. Gas cylinder delivery trucks who would wait in front of the loading bay doors without impeding access to Queen's Yard.

5.11.4 All delivery / service vehicles accessing Shropshire Place would be required to enter Capper Street via Huntley Street and reverse into Shropshire Place via Capper Street. Vehicles would be required to exit east onto Capper Street. A qualified supervisor would oversee any manoeuver involving development related vehicles reversing down Shropshire Place.

5.11.5 As at present, due to the restricted width of Shropshire Place and Capper Street the maximum sized vehicle which could access Shropshire Place is a 8m long HGV. Furthermore, there is a height restriction of 5m at the internal loading bay (vehicles would be no more than 4.5m in height to allow for clearance).

5.11.6 Swept Path drawings VN50118.14-ECC-TR-001-07, VN50118.14-ECC-TR-001-08 and VN50118.14-ECC-TR-001-09 display the anticipated manoeuver of delivery / service vehicles to the loading bay. The swept path drawings show that a permanent TRO will need to be implemented on sections of single line on Capper Street, which will be required to carry out the proposed access manoeuvre to / from Shropshire Place. No parking bays will be lost as a result of the proposed servicing access strategy.

5.11.7 Table 5.6 displays the likely level of servicing at the site.

Table 5.6: Proposed Site Deliveries / Servicing

Delivery Type	Anticipated number of deliveries / collections per day	Anticipated time of delivery	Anticipated Location for delivery	Anticipated delivery vehicle size (8m long veh max)
Boc gas cylinder vehicle	1 per day	PM daytime	Shropshire Place	Max 6m long MGV
Café supplies	1 per day	AM daytime	Shropshire Place	LGV
Water cooler deliveries	1 per week	Night time	Shropshire Place, LB	Max 6m long MGV
Pharmacy deliveries	1 per day	Night time	Shropshire Place, LB	LGV
Catering deliveries	1 per day	AM daytime	Shropshire Place	LGV
Linen deliveries & collection	1 per day	Night time	Shropshire Place, LB	Max 6m long MGV
Medical consumables for doctors and patients	1 per day	Night time	Shropshire Place, LB	Max 6m long MGV
Mail vehicle delivery	Various courier deliveries	daytime	Huntley Street / local roads	Motorcycles / Max LGV
Clinical waste	2 per day	Night time	Shropshire Place, LB	Max 8m long specialist clinical waste vehicle
Recycling waste	2 per day	PM daytime	Shropshire Place	Max 8m long medium refuse vehicle
General waste	2 per day	PM daytime	Shropshire Place	Max 8m long medium refuse vehicle

5.11.8 Table 5.6 shows that 5 night time deliveries / collections are expected on an average night, with an additional occasional water cooler delivery one per week. All night time deliveries will take place via the loading bay on Shropshire Place.

5.11.9 Table 5.6 also shows there to be a total of 7 delivery / service vehicles accessing Shropshire Place during the daytime. All daytime deliveries and servicing operations will be managed so that only one development related vehicle will be present on Shropshire Place at any one time.

5.11.10 As previously identified, 9 vehicles currently access 43-49 Huntley Street via Shropshire Place during the daytime. Therefore, the anticipated daytime level of site servicing via Shropshire Place is 2 vehicles less than current levels. Therefore the development proposals will benefit the vision for Shropshire Place becoming a shared space by proposing less vehicle access via Shropshire Place during the daytime.

5.11.11 It is an aspiration of UCLH to serve its portfolio of buildings via an expanded dedicated consolidation centre which combines various types of goods delivery into one single delivery, thus reducing the number of deliveries to their sites. However, this is a long term aspiration which may not be implemented in the short term.

5.11.12 A Framework Waste and Servicing Management Plan has been submitted as part of this application, which details the management strategies that UCLH will implement to achieve reduced delivery and servicing pressures and reduce the impact on adjacent commercial and residential land uses, in the short term. The full Waste and Servicing Management Plan can be secured as a condition to planning approval.

6 Mitigation

6.1.1 This section describes how the traffic impact of the development will be mitigated against.

6.1.2 A separate document entitled “Strategy for Patient Transport Services” is submitted as part of this application and provides the short term and longer term strategy for PTS and Ambulance drop offs. The strategy is summarised below.

6.2 PTS Strategy

6.2.1 Following redevelopment of old Student Union building, it is proposed that the UCLH PTS ambulance fleet base will move to the current site of the Royal National Throat Nose and Ear Hospital (RNTNEH), whose medical facilities will be moving the redeveloped old Student Union building. In 2019 the UCLH’s lease at the RNTNEH will expire. The UCLH PTS ambulance fleet base will then move to the Eastman Dental Hospital (EDH)

6.2.2 Consequently there are two phases to the relocation of fleet base.

Phase 1

6.2.3 Moving the fleet base to the RNTNEH will remove the need for UCLH PTS vehicles to park on Huntley St outside the existing base when not picking up or dropping off patients. Parking here is most common at lunchtimes between 12 and 2pm. These vehicles would now park at the RNTNEH, where space is available on site. Ambulance vans that have more than 30 minutes between patient pick ups or drop offs would wait at the RNTNEH. If less than 30 minutes, the vans would wait in the car park and service area behind 250 Euston Rd. Ambulance vans would park securely overnight at RNTNEH.

6.2.4 Ambulance cars would, other than if using the base at the RNTNEH at lunchtime, park in the underground car park at 250 Euston Rd.

6.2.5 Drivers of both the UCLH PTS cars and vans would be fully aware that they must not park on street within a new exclusion zone proposed as part of this strategy. The zone would be bordered by Fitzroy St to the west, Torrington Place to the south, Gower St to the east and Euston Rd to the north. The zone is shown on Figure 6.1 in Appendix F of this report.

Phase 2

6.2.6 Following the vacation of the RNTNEH in 2019 by UCLH, an alternative off street PTS vehicle holding location will be found. One option is EDH, which could operate as described above for the RNTNEH. The PTS cars would continue using the facilities available at 250 Euston Road.

6.2.7 Figure 6.1 also shows the routes that will be taken by the vehicles between the UCLH campus and the new base at the site of the EDH. It is proposed that the ambulance bays on the streets around the RNTNEH should continue to be available for use for PTS vehicles after 2019 when the RNTNEH is vacated.

Phase 2.2

6.2.8 The EDH will be vacated by UCLH on some date in the early 2020’s. When the EDH is sold a clause or covenant could be written into a contract/land deal saying the new owner had to provide sufficient space for PTS parking as part of their scheme.

Proposals for Contractor Fleet

6.2.9 This section focuses on the options available to the contractor fleet.

6.2.10 Some 80 contractor vehicles visit the UCLH campus per day, with around 12 on site at any one time. The proposal is for contractor vehicles to park at RNTNEH/EDH if they have over 30 minutes between pick ups and drop offs. This would cover a significant proportion of contractor vehicles.

6.2.11 Otherwise, if they have only a short gap between appointments, occasional waiting is possible along the length of Drummond St and Longford St where there are single yellow lines. Either way, the contractors vehicles would be instructed that they must not park with the exclusion zone discussed previously, within and immediately adjacent to the UCLH campus.

Getting to RNTNEH and EDH

6.2.12 Figure 6.1 shows the routes that will be taken by the vehicles between the UCLH campus and the RNTNEH and EDH. Figure 6.1 also shows distances and journey times.

6.3 Framework Construction Management Plan

6.3.1 A framework construction management plan is provided as part of this application. The final construction management plan could be secured as a planning condition. This section summarises the construction strategy.

6.3.2 Construction is anticipated to start in 2016 and continue until 2018. As demolition will require the removal of debris, up to 3 stories below ground level, the footpath on the western side of Huntley Street at the site frontage is planned to be closed for the duration of the demolition and construction period. Hoarding is proposed to be erected covering the site boundary and the aforementioned footpath.

6.3.3 Hoarding will be required to protrude into the centre line of Huntley Street carriageway, along 30m of the site boundary extent. This hoarding will be used as an enclosed set down space for up to 3 construction vehicles. Vehicles will enter from the north via a proposed gated access within the hoarding and will exit via the south, thus utilising the one way system on Huntley Street. Up to 3 HGVs will be able to be stored within this location. The largest vehicle anticipated to access the site is an 8.5m long truck. Approximately 50m of single yellow line parking on Huntley Street will be taken up by the workable HGV set down area. This leaves approximately 55m of single yellow line space for alternative uses.

6.3.4 Traffic will still be able to pass the hoarding, as 4.25m of effective carriageway width will be retained. However, it is anticipated that 6 residential parking bays will be required to be temporary relocated to Chenies Mews. Chenies Mews has been identified within the parking beat survey as a road with a high percentage of parking availability on its existing yellow lines (33% occupied maximum).

6.3.5 Furthermore, a gantry is proposed to extend over Capper Street at its junction with Huntley Street. This gantry will support cabins for the contractors. As a result, the displacement will result in the temporary relocation of 2 resident parking spaces, which are proposed to be relocated to either Chenies Mews, or on part of the single yellow line space on the eastern side of Huntley Street (between Torrington Place and Capper Street), south of the hoarding.

6.3.6 In addition, the hoarding is planned to extend to the rear of the site, covering part of Shropshire Place. This section will also incorporate a gated access for a vehicle to be stored within the hoarding. Service access to Queen's Yard will be maintained.

6.3.7 Throughout the demolition and construction process, pedestrian safety will be maintained at all times. Banksmen will be provided at gated access points and a set pedestrian diversion will be set up along the eastern side of Huntley Street, to aid pedestrians travelling north / south along Huntley Street.

6.3.8 At peak times, it is expected that up to 20 vehicles will enter and 20 depart the site per day (max of 3 in and 3 out per hour). The proposed construction traffic routing for vehicles entering the site is via Euston Road (A501), turning into Gower Street, performing a right turn (west) into Grafton Way prior to turning left (south) into Huntley Street. Vehicles exiting the site will exit south via Huntley Street, west via Torrington Place and north onto Tottenham Court Road to access Euston Road (A501). Following the West End Project changes along Tottenham Court Road (to change Tottenham Court Road from one way general traffic to two way buses and cycles only), construction vehicles will exit south along Huntley Street, east via Chenies Street and north via Gower Street to access Euston Road (A501).

6.3.9 Vehicle movements and demolition / construction works will be limited to 09.30-16.30 Monday-Friday and 08.00-13.00 on Saturdays. No works will be undertaken on Sundays or public holidays.

6.3.10 Wheel wash facilities will be provided within the hoarding, located on Huntley Street.

6.4 Travel Plan

6.4.1 UCLH are in the process of adopting a new campus wide Travel Plan that will cover all of the existing hospital facilities within Bloomsbury and which is formatted to encompass future development proposals such as this site. Reflecting the approach that was adopted for the Phase 4 planning application, the measures, management strategies and reporting included within the updated TP will be implemented for this proposed development site, with no site specific TP therefore required.

7 Summary and Conclusions

7.1.1 The parking beat analysis has shown that there are currently 39 unoccupied single yellow line spaces within 160m (2 minutes' walk) of the site, during the worst period.

7.1.2 Furthermore, there will be no net change in traffic or on-street parking levels as a result of the development proposals.

7.1.3 Two dedicated PTS drop off / pick up spaces are proposed at the site façade (a 20m long bay), located on the western side of Huntley Street.

7.1.4 A dedicated short term and long term PTS strategy will be in place, which will reduce the daily number of PTS vehicles accessing 43-49 Huntley Street to 12 per day. Although the proposals suggest an increase of disabled parking activity at the site, this is offset by the net decrease in levels of local PTS and ambulance parking owing to the proposed PTS strategy.

7.1.5 This TS has demonstrated that the proposals will attract 26 disabled driver trips to the site per day. The largest accumulation of development related disabled parking is expected to be 7 vehicles at any given time. Assuming the worse case of all development related disabled parking to occur on the single yellow line of Huntley Street (between Capper Street and Torrington Place) and the same level of existing background blue badge / dispensation parking to occur on the same section, then there will be a maximum parking occupation of 57% along this section (13 PCUs), including the 2 PTS spaces. This is the same as the existing situation and therefore the proposals have no impact on local parking demand.

7.1.6 A total of 9 vehicles currently access 43-49 Huntley Street via Shropshire Place during the daytime. However, the anticipated daytime level of site servicing via Shropshire Place is 7 vehicles, which is 2 vehicles less than currently access the site. Therefore the development proposals will benefit the vision for Shropshire Place becoming a shared space.

7.1.7 Bulky deliveries and clinical waste collections are planned to take place during the night time utilising the proposed loading bay to the rear of the site, accessed off Shropshire Place. The loading bay will be enclosed within the site and therefore mitigates any noise impact of night time deliveries. All day and night time deliveries arriving and departing Shropshire Place are planned to be supervised by a qualified person.

7.1.8 Construction is likely to result in the temporary displacement of 6 residential parking spaces from Huntley Street and 2 residential parking spaces from Capper Street. The parking survey has identified that 6 of these spaces can be temporary relocated to Chenies Mews and 2 spaces can be relocated to the section of single yellow line parking on the eastern side of Huntley Street (between Capper Street and Torrington Place).

7.1.9 In conclusion, the proposed development is likely to have a negligible traffic impact on the local highway network. In addition, the expected trip generation from all user groups at the site can be catered for within the existing public transport network.

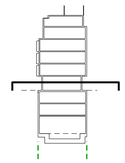
Figures

Rev.	Date	Description	By
1	07/01/15	Planning App Draft	SRP
2	13/02/15	Planning App Draft	SRP
3	20/02/15	Planning App Draft	LM
4	25/02/15	Planning Application	LM

Notes

- Boundary line above ground
- Boundary line below ground
- Facade line above
- PTS Area

Key Plan



ARCHITECTS sba STEFFIAN BRADLEY
45 Gee Street
5th Floor
London
EC1V 3RS
T (020) 7549 4050
www.steffian.com

Pilbrow & Partners
t: +44 (0) 20 3696 7000
e: info@pilbrowandpartners.com
www.pilbrowandpartners.com

Project Number	Scale
8219.0000	1:100 @ A1

Client
UCLH

Project
Phase 5 Project

Title
Ground Floor

Drawing No
SBA-DRW-A2024-REV6

Revisions

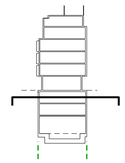
Date	Drawn	Checked	Approved
25/02/15	SRP	PT	PT

Rev.	Date	Description	By
1	07/01/15	Planning App Draft	SRP
2	13/02/15	Planning App Draft	SRP
3	20/02/15	Planning App Draft	LM
4	25/02/15	Planning Application	LM

Notes

- Boundary line above ground
- Boundary line below ground

Key Plan



ARCHITECTS STEFFIAN BRADLEY

sba

45 Gee Street
5th Floor
London
EC1V 3RS
T (020) 7549 4050
www.steffian.com

Pilbrow &Partners

t: +44 (0) 20 3696 7000
e: info@pilbrowandpartners.com
www.pilbrowandpartners.com

Project Number	Scale
8219.0000	1:100 @ A1

Client
UCLH

Project
Phase 5 Project

Title
Basement B1

Drawing No
SBA-DRW-A2023-REV4

Revisions

Date	Drawn	Checked	Approved
19/02/15	SRP	PT	PT

LEVEL -01

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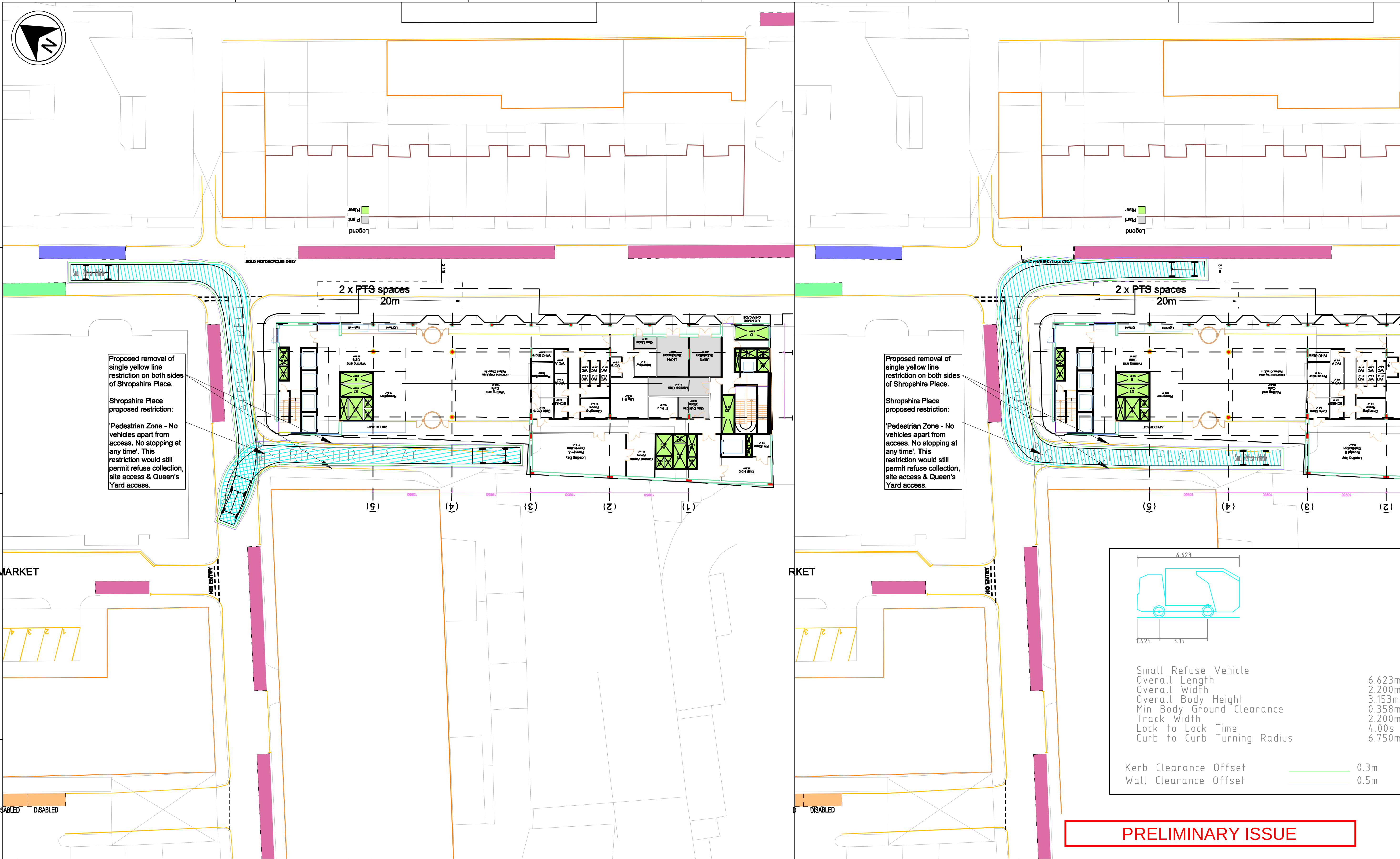
0 1 5 10



PRELIMINARY ISSUE

REV	DATE	DRAWN	REV'D	APP'D	REVISION

JACOBS

New City Court
20 St Thomas Street
LONDON SE1 9RS
UNITED KINGDOM

Tel: +44 20 7939 6100
Fax: +44 20 7939 6103
Web: www.jacobsskm.com

CLIENT
UCLH NHS FOUNDATION TRUST

PROJECT
REDEVELOPMENT OF UCLH STUDENT UNION AND ROYAL EAR HOSPITAL, HUNTLEY STREET

DRAWN	DRAWING CHECK	REVIEWED	APPROVED
IG	AKS	IG	MF
DESIGNED IG	DESIGN REVIEW IG	DATE Oct '14	DATE Oct '14

TITLE
MOVEMENT OF A SMALL REFUSE VEH

SCALE	DRAWING No	REV
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A3

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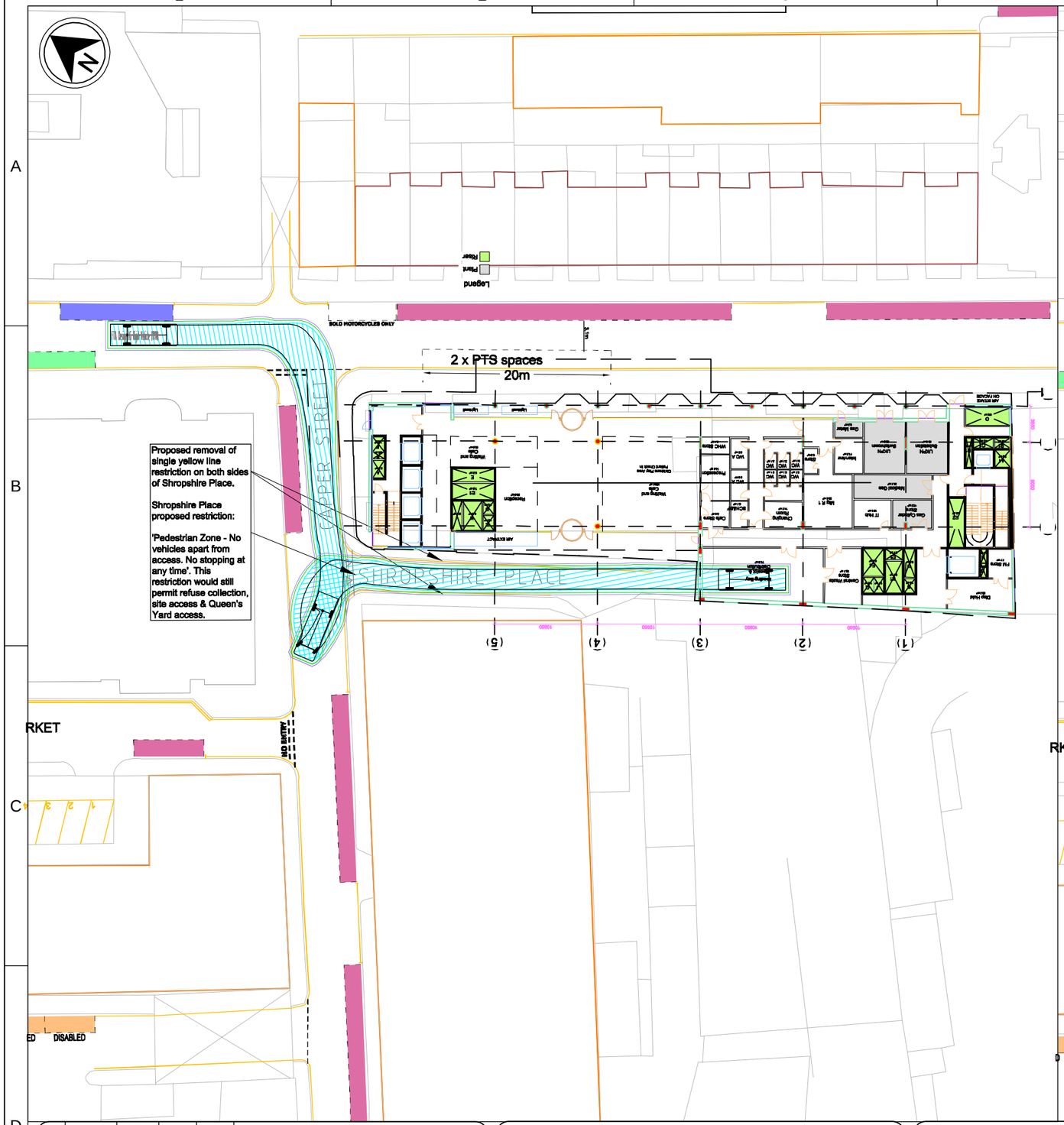

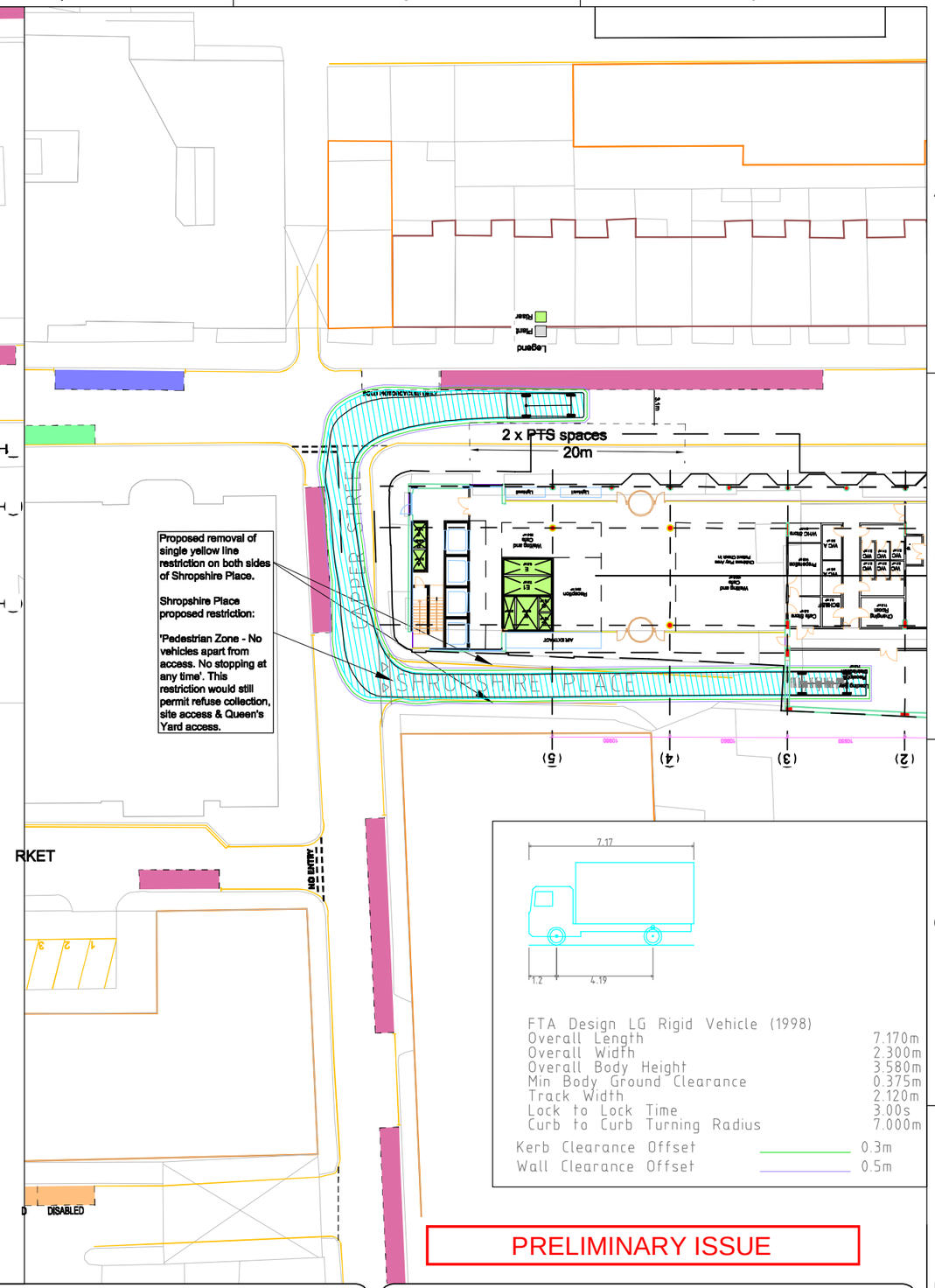

PRELIMINARY ISSUE

REV	DATE	DRAWN	REV'D	APP'D	REVISION

JACOBS
New City Court
20 St Thomas Street
LONDON SE1 9RS
UNITED KINGDOM
Tel: +44 20 7939 6100
Fax: +44 20 7939 6103
Web: www.jacobsskm.com

CLIENT: UCLH NHS FOUNDATION TRUST

PROJECT: REDEVELOPMENT OF UCLH STUDENT UNION AND ROYAL EAR HOSPITAL, HUNTLEY STREET

DRAWN	DRAWING CHECK	REVIEWED	APPROVED
IG	AKS	IG	MF
DESIGNED	DESIGN REVIEW	DATE Oct '14	DATE Oct '14
IG	IG		

TITLE: MOVEMENT OF A 7.2m MEDIUM RIGID VEHICLE

SCALE	DRAWING No	REV
1:500	VN50118.14-ECC-TR-001-8	A

Proposed removal of single yellow line restriction on both sides of Shropshire Place.

Shropshire Place proposed restriction:

'Pedestrian Zone - No vehicles apart from access. No stopping at any time'. This restriction would still permit refuse collection, site access & Queen's Yard access.

2 x PTS spaces
20m

SHROPSHIRE PLACE

UPPER STREET

RKET

NO ENTRY

DISABLED

Legend
Plant
Floor

8.01
1.21
4.25

7.5t Box Van

Overall Length	8.010m
Overall Width	2.100m
Overall Body Height	3.556m
Min Body Ground Clearance	0.351m
Track Width	2.064m
Lock to Lock Time	4.00s
Curb to Curb Turning Radius	7.400m
Kerb Clearance Offset	0.3m
Wall Clearance Offset	0.5m

PRELIMINARY ISSUE

REV	DATE	DRAWN	REV'D	APP'D	REVISION

JACOBS

New City Court
20 St Thomas Street
LONDON SE1 9RS
UNITED KINGDOM

Tel: +44 20 7939 6100
Fax: +44 20 7939 6103
Web: www.jacobsskm.com

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DRAWN	DRAWING CHECK	REVIEWED	APPROVED
IG	AKS	IG	MF
DESIGNED	DESIGN REVIEW	DATE Oct '14	DATE Oct '14
IG	IG		

TITLE: MOVEMENT OF A 8m CLINICAL WASTE VEHICLE

SCALE	DRAWING No	REV
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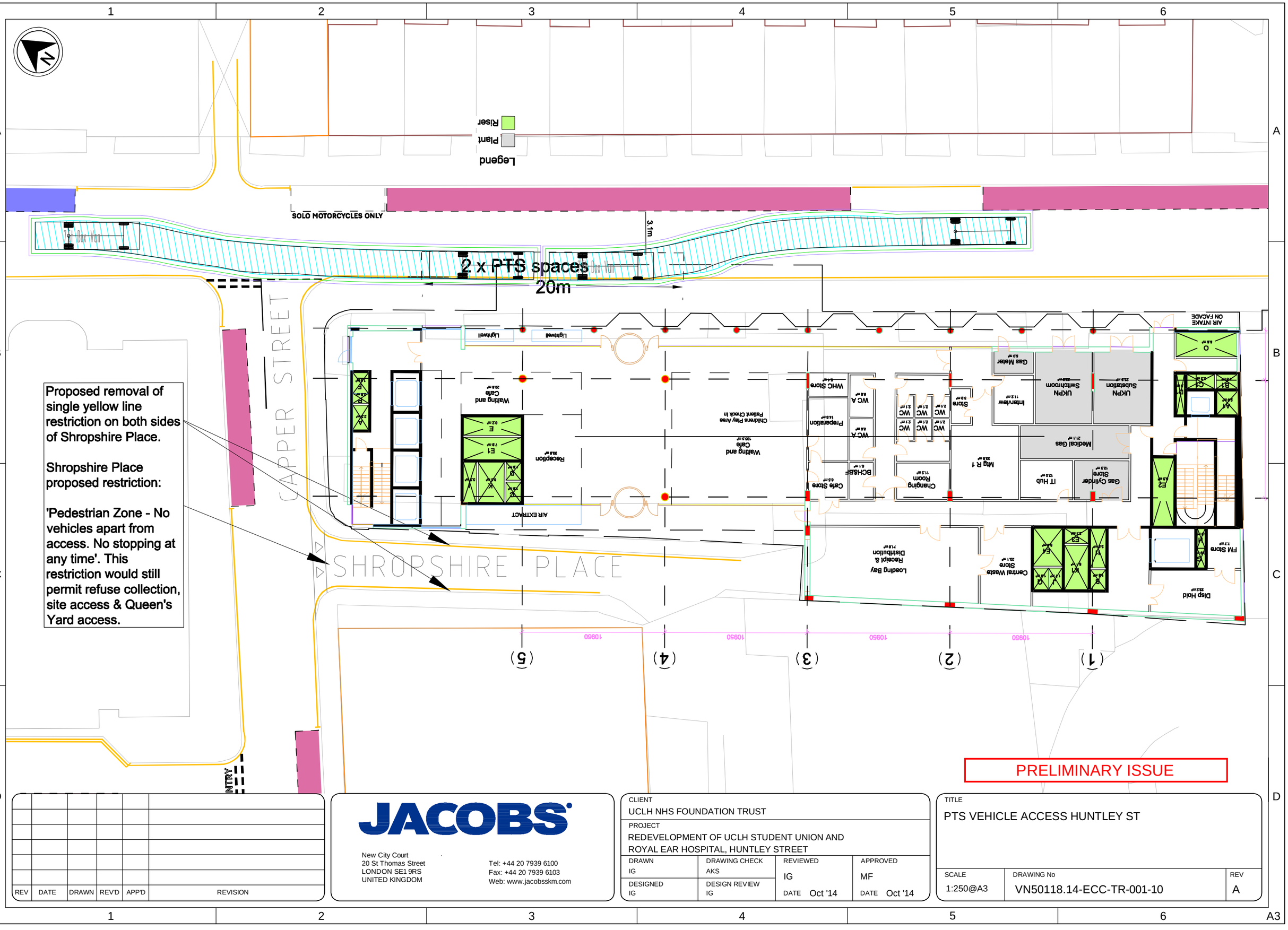

PRELIMINARY ISSUE

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JACOBS

New City Court
20 St Thomas Street
LONDON SE1 9RS
UNITED KINGDOM

Tel: +44 20 7939 6100
Fax: +44 20 7939 6103
Web: www.jacobsskm.com

CLIENT
UCLH NHS FOUNDATION TRUST

PROJECT
REDEVELOPMENT OF UCLH STUDENT UNION AND ROYAL EAR HOSPITAL, HUNTLEY STREET

DRAWN	DRAWING CHECK	REVIEWED	APPROVED
IG	AKS	IG	MF
DESIGNED	DESIGN REVIEW	DATE Oct '14	DATE Oct '14
IG	IG		

TITLE
PTS VEHICLE ACCESS HUNTLEY ST

SCALE	DRAWING No	REV
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A3

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