



The Hillingdon Hospital Redevelopment

Car Park Management Plan

May 2022

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The Hillingdon Hospitals
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1 Introduction

1.1 Background

1.1.1 This Car Park Management Plan (CPMP) has been prepared by Mott MacDonald to accompany a hybrid planning application being submitted by the Applicant, Hillingdon Hospitals NHS Foundation Trust, to the London Borough of Hillingdon.

1.1.2 The site is in West London and is located south of Uxbridge and north of West Drayton. The Local Planning Authority is the London Borough of Hillingdon (LBH).

1.1.3 The proposed development will be submitted as a hybrid planning application comprising:

- FULL application seeking planning permission for demolition of existing buildings and redevelopment of the site to provide the new Hillingdon Hospital, multi-storey car park and mobility hub, vehicle access, highways works, associated plant, generators, substation, new internal roads, landscaping and public open space, utilities, servicing area, surface car park/ expansion space, and other works incidental to the proposed development.
- OUTLINE planning application (all matters reserved, except for access) for the demolition of buildings and structures on the remaining site (excluding the Grade II Furze and Tudor Centre) for a mixed-use development comprising residential (Class C3) and supporting Commercial, Business and Service uses (Class E), new pedestrian and vehicular access; public realm, amenity space, car and cycling parking.

1.1.4 This report provides the CPMP for the proposed development and accompanies a suite of supporting transport related documents which have also been prepared in support of this application. The remainder of the documents are listed below:

- Transport Assessment
- Hospital Travel Plan Framework
- Residential Travel Plan Framework
- Delivery and Servicing Plan
- Car Park Management Plan (this report)
- Outline Construction Logistics Plan
- Mobility Hub Vision Paper

1.2 Report Purpose

1.2.1 A CPMP is developed to inform the Local Planning Authority of the arrangements for parking on a development site and to demonstrate how parking will be allocated, managed, and enforced.

1.2.2 This report has been prepared to provide a framework for the Trust to adopt and tailor as they occupy and begin to operate the new estate in the future. Parking demand is naturally a dynamic situation that is further exacerbated at hospitals with variations across the year and as a result from external forces such as parking policy, permit eligibility or tariffs. The CPMP aims to acknowledge this uncertainty and provide a framework for how the Trust can adapt these external forces to manage demand, as they already do on the existing estate.

1.3 Report Structure

1.3.1 Following this introduction, the remainder of this report is structured as follows:

- Chapter 2 – Proposed Development

- Chapter 3 – Detailed Car Park Layouts
- Chapter 4 – Hospital Car Park Management
- Chapter 5 – Monitoring
- Chapter 5 – Summary

2 Proposed Development

2.1 Introduction

2.1.1 The proposed development will be submitted as a hybrid planning application comprising:

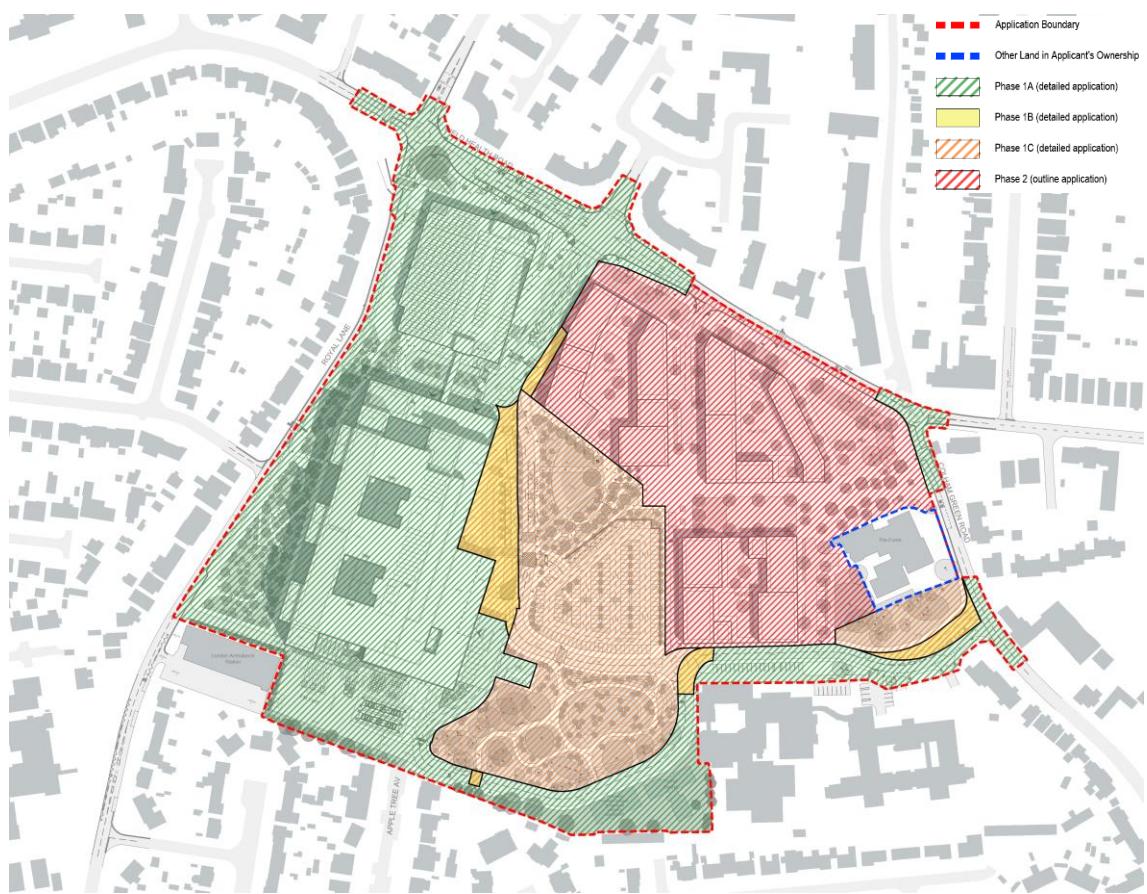
- FULL application seeking planning permission for demolition of existing buildings and redevelopment of the site to provide the new Hillingdon Hospital, multi-storey car park and mobility hub, vehicle access, highways works, associated plant, generators, substation, new internal roads, landscaping and public open space, utilities, servicing area, surface car park/expansion space, and other works incidental to the proposed development.
- OUTLINE planning application (all matters reserved, except for access) for the demolition of buildings and structures on the remaining site (excluding the Grade II Furze and Tudor Centre) for a mixed-use development comprising residential (Class C3) and supporting Commercial, Business and Service uses (Class E), new pedestrian and vehicular access; public realm, amenity space, car and cycling parking.

2.1.2 The outline planning application comprises up to 327 residential units (Use Class C3) and up to 800 sqm of town centre uses (Use Class E) in a series of buildings ranging in height from 3 up to 8 storeys with associated access and car parking for up to 302 vehicles and up to 515 cycle parking spaces, refuse storage, landscape and amenity areas and associated servicing.

2.1.3 The areas of the site are designated into different phases set out below and shown in Figure 2.1.

- Phase 1a – New hospital, MSCP, and access.
- Phase 1b – All interim elements that need to be put into place so that the new hospital can be operational whilst the remaining hospital site to the east can be demolished.
- Phase 1c – All elements of the new hospital site that can only be built once the old hospital site to the east has been demolished, including the surface car park, new bus stops, and junction access upgrades.
- Phase 2 – Outline application area for the residential development.

Figure 2.1: Site Areas and Key Phases

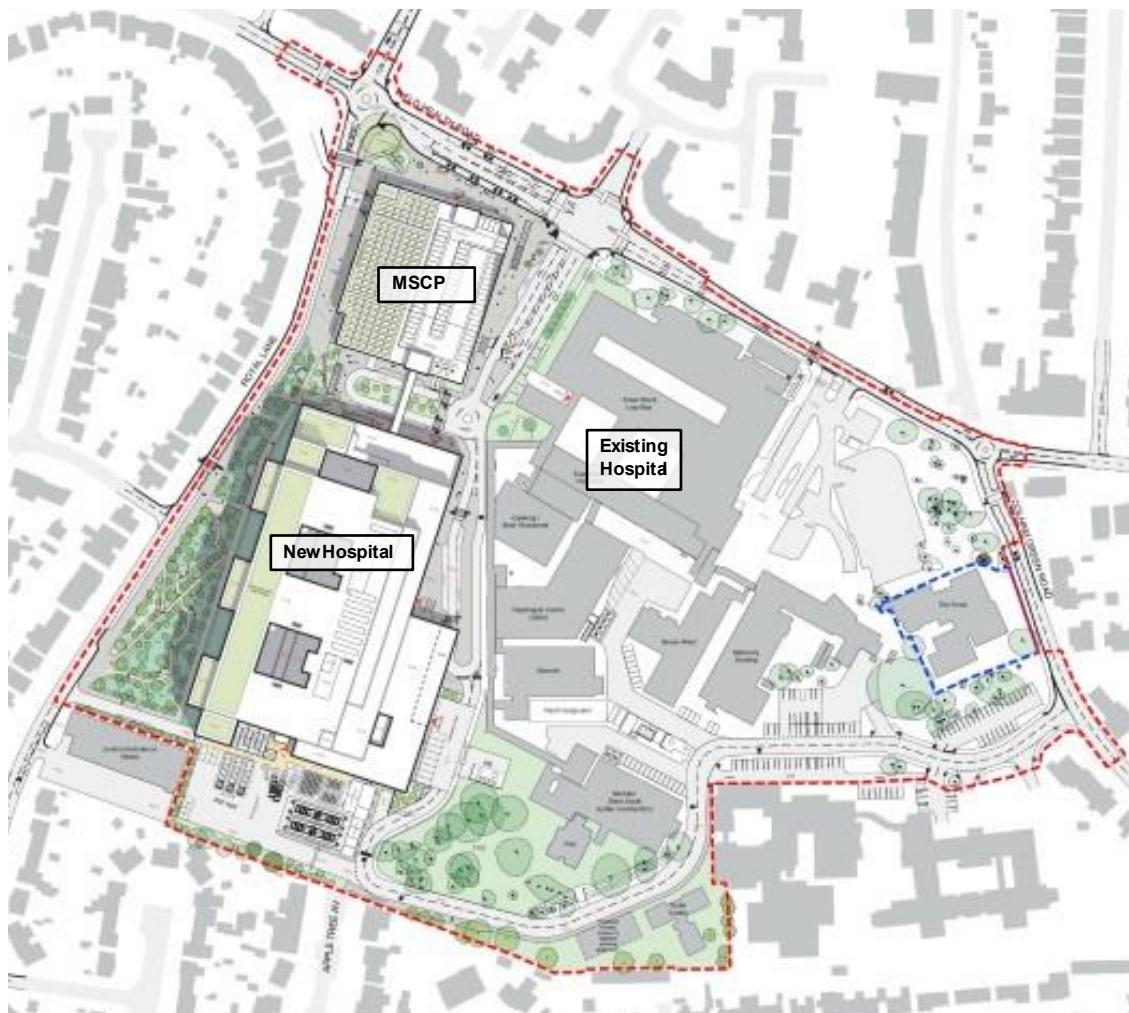


Source: IBI Group

2.2 Masterplan Phases

2.2.1 The proposed site masterplan for Phase 1b, which will be the main interim stage of the overall development is shown in Figure 2.2. The new hospital will be located in the western area of the site. The associated new MSCP will be located in the north-western corner of the site.

Figure 2.2: Proposed Phase 1b Site Layout



Source: IBI Group

2.2.2 The proposed site masterplan for Phase 2 is shown in Figure 2.3. In Phase 1c and 2 the eastern area of the site will be largely cleared making room for the construction of three Residential Plots, also known as plots P01, P02 and P03. A new surface car park will also be provided west of Plot P03.

Figure 2.3: Proposed Phase 2 Site Layout



Source: IBI Group

2.3 On-Site Parking Timeline

2.3.1 Parking on site will be affected by the proposals. In the decant and construction phase there will be a loss of parking on-site. Then as the new development is constructed over Phase 1 and 2 parking will be provided in different locations. This CPMP considers the following key phases:

- Existing Situation – existing site (maximum capacity)
- Decant Phase – reduction of on-site parking and formation of off-site decant/temporary staff car park
- Car park
- Phase 1b – new hospital completion (with multi storey car park)
- Phase 2 – masterplan completion (with additional hospital surface parking)

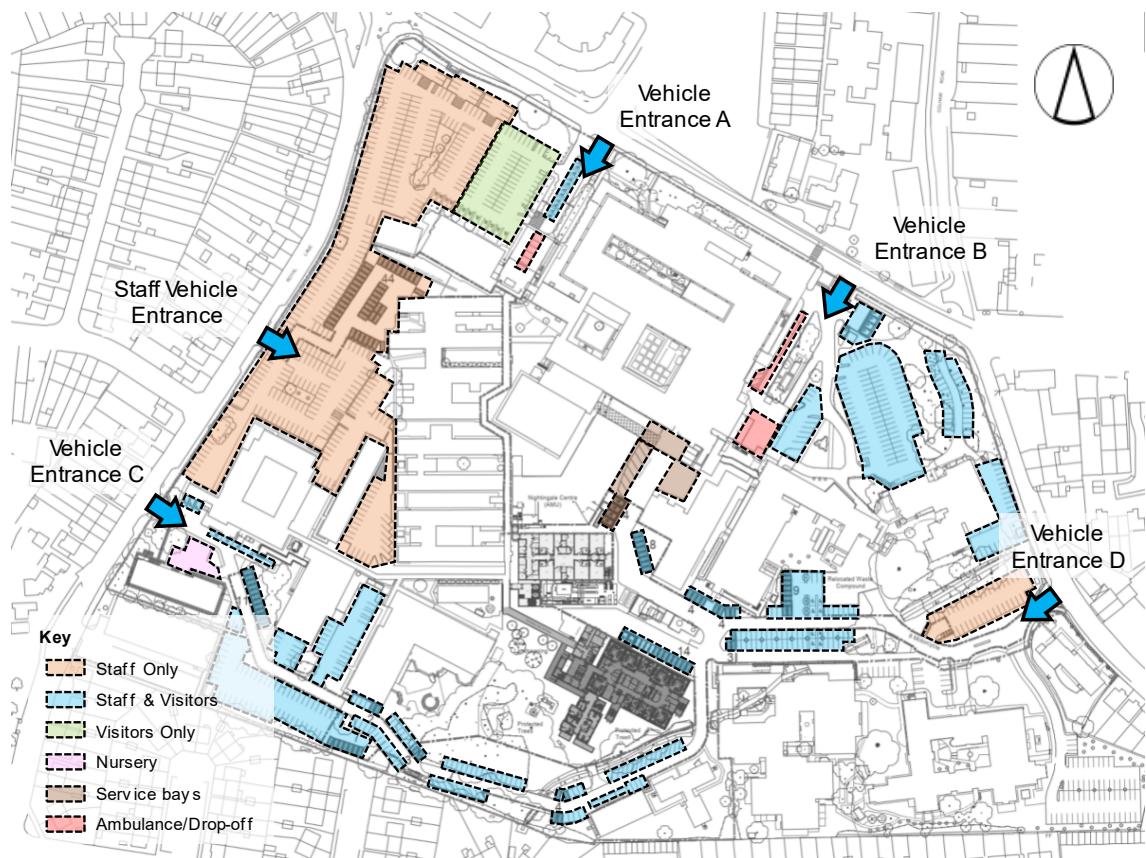
2.3.2 The locations and number of parking spaces at each stage identified in the list above are discussed and illustrated below.

Existing Site

2.3.3 Car parking is currently spread across the site. Due to the nature of development, over time parking has been added and rearranged over the years, resulting in a fragmented layout in

terms of both access roads within the site and physical car parking spaces. Figure 2.4 shows parking locations across the site along with broad allocations, noting some more intricate allocations which are reflected in Table 2.1.

Figure 2.4: Existing On-Site Car Parking



Source: Mott MacDonald

2.3.4 The allocation of on-site car parking is strictly controlled and enforced by parking wardens. The visitor only car park is accessed internally from Vehicle Entrance A. Mixed staff and visitor parking is accessed via Vehicle Entrance B and is also barrier controlled. All other parking areas are either controlled by staff permit or pay and display. A summary of car park allocations across the site is shown in Table 2.1.

Table 2.1: On-Site Car Park Allocation Summary

Parking Type	Current Spaces (No.)	Committed Spaces (No.)	Total Spaces	Comments
Visitor (pay & display)	56	0	56	
Visitor Disabled	8	0	8	
Mixed Staff and Visitor (pay & display)	320	67	387	
Mixed Disabled	40	6	46	
Staff Standard	391	44	435	
Staff Disabled	4	0	4	
Nursery Standard	8	0	8	

Parking Type	Current Spaces (No.)	Committed Spaces (No.)	Total Spaces	Comments
Drop-off (20 mins)	17	0	17	
Ambulance only	7	0	7	
Consultant only	12	0	12	
Fleet/servicing only	7	0	7	
Motorcycle	0	8	8	
Ambulance yard	0	0	0	Hatched area in ambulance yard with capacity for five emergency ambulances parked perpendicular to the A&E access.
Service yard	0	0	0	Hatched area in service yard with capacity for four 10m rigid HGVs parked perpendicular to the service yard access road
Total spaces	870	125	995	

2.3.5

For a variety of reasons, including reductions in parking on-site due to development and other interruptions, the Trust currently leases additional off-site parking. The locations of these car parks in context of the site are shown in Figure 2.5.

Figure 2.5: Off-Site Car Parking



Source: [Open Street Map](https://www.openstreetmap.org)

2.3.6

The parking levels at each location are:

- 75 at the Brunel University Campus (not shown in Figure 2.5)

- 75 at Brunel Sports Park
- 25 at Walter Pomeroy Hall

2.3.7 A designated list of staff permit holders have been allocated spaces at these off-site locations. These car parks are all used by the designated users on weekdays and access is restricted to those designated to park in these locations, who pay for their parking. These car parks are not used as overflow parking.

2.3.8 The total level of car parking currently used by the hospital is therefore 1,162 car spaces, not including space within the service yard or the ambulance yard for deliveries/servicing or emergency ambulances. This level of car parking is subject to fluctuation due to ongoing construction works on the hospital site.

Decant and Construction Phase

2.3.9 As part of the decant phase, approximately 600 parking spaces on the site will be lost to enable the construction footprint to be cleared. A summary of parking provision available through the decant and construction phase is:

- Up to 300 parking spaces maintained on-site;
 - Parking on-site will be maintained to the maximum number possible and prioritized for:
 - Blue badge parking for staff;
 - Blue badge parking for patients and visitors;
 - Key operational parking (i.e. PTS ambulances);
 - Patients and visitors; and
 - Any other key users/operations as required by the Trust.
- 127 spaces will be relocated to Mount Vernon Hospital (planning ref: 3807/APP/2021/3328); and
- 400 to 450 spaces are planned to be relocated to a temporary off-site car park near to the existing hospital site (subject to a separate temporary planning application).

2.3.10 To enable the decant and ease travel demand, a range of non-clinical staff roles are being moved off-site. Some staff can also adopt partial remote working to reduce travel demand over the decant and construction period. Furthermore, the Covid-19 pandemic has brought about an acceleration of the adoption of remote working, with the NHS delivering many outpatient appointments virtually, where this is possible and practical. This will also reduce demand.

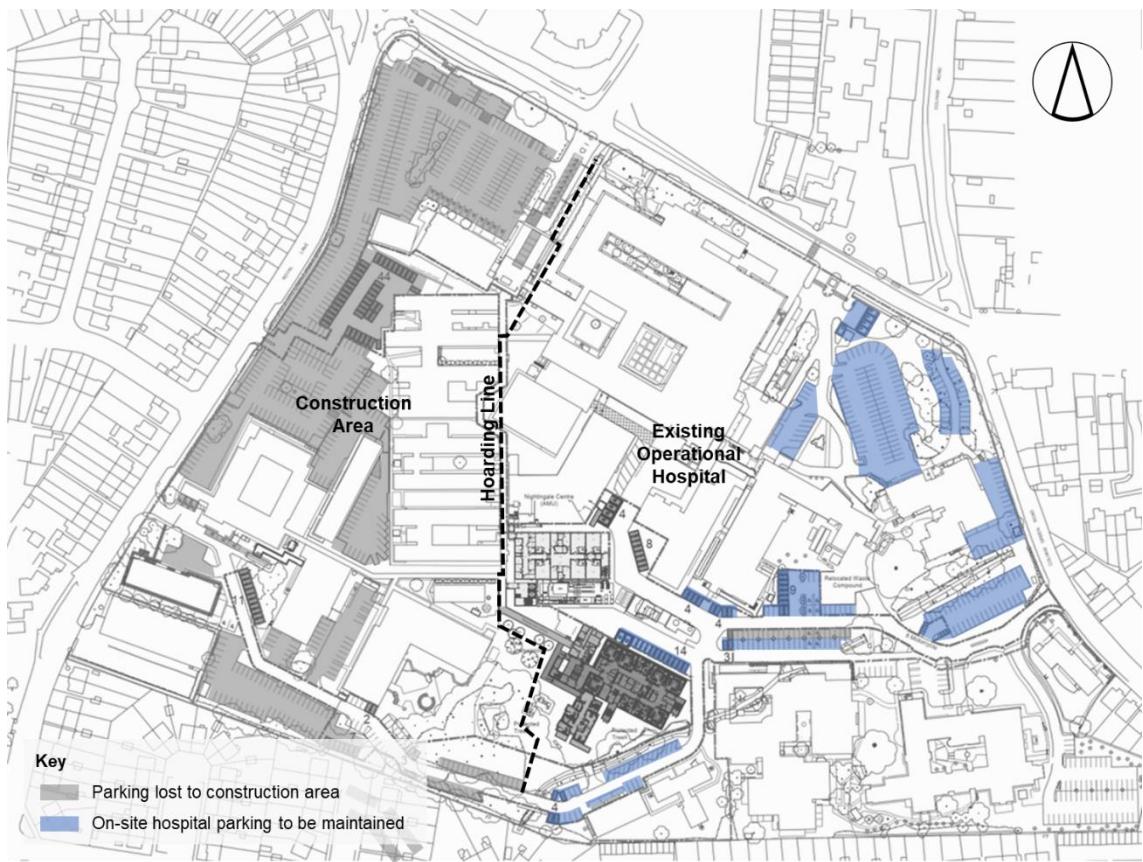
2.3.11 During the decant phase key patient and visitor parking will be retained on-site in the eastern area of the site. Based on agreement with the Trust, this parking will be prioritised for:

- Disabled parking (staff, patients and visitors);
- Key operational parking (i.e. PTS ambulances);
- Patients and visitors; and
- Any other key users/hospital operations as required by the Trust.

2.3.12 The vast majority of staff parking will take place off-site in a temporary decant car park.

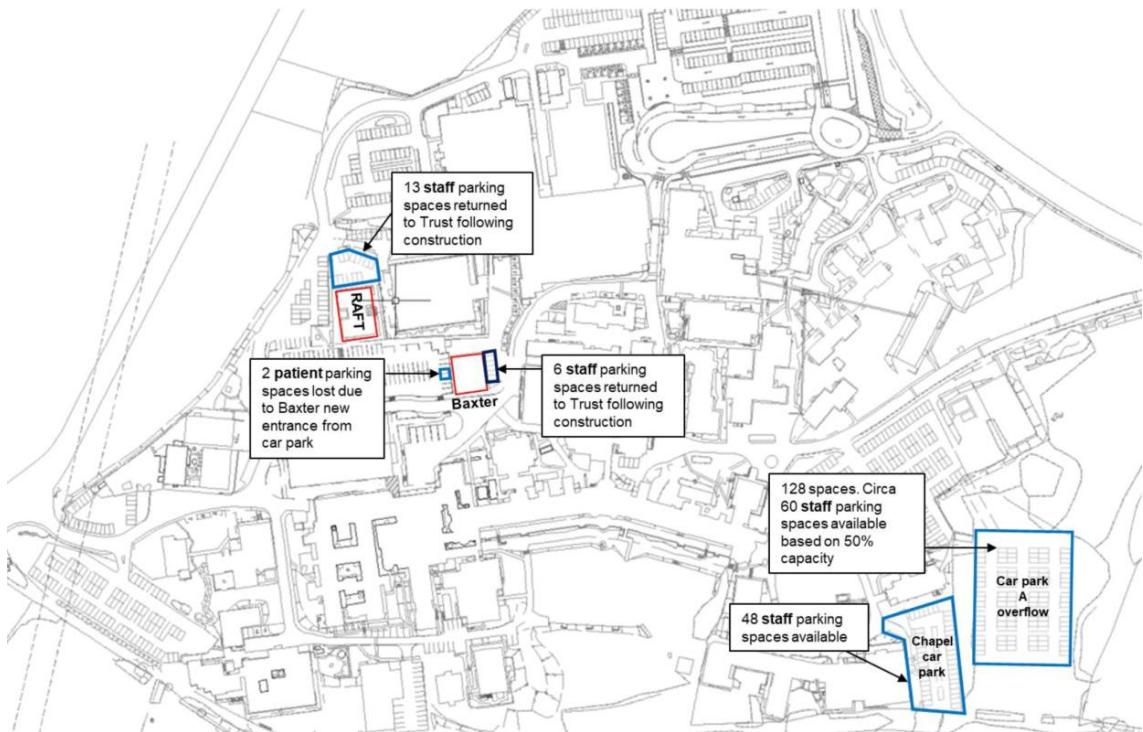
2.3.13 The reduced parking levels on-site will be supported by the ongoing travel planning measures that the Trust has been successfully promoting. The Trust is also in discussions with specialist providers to develop pilot schemes for a car club and car share scheme on-site. These are intended to be rolled out incrementally based on ongoing success and will be used to drive down single occupancy car use (lift share) and reduce the need for staff to bring a private car to work for business travel (car club).

Figure 2.6: Decant and Construction Phase Parking Maintained On-Site



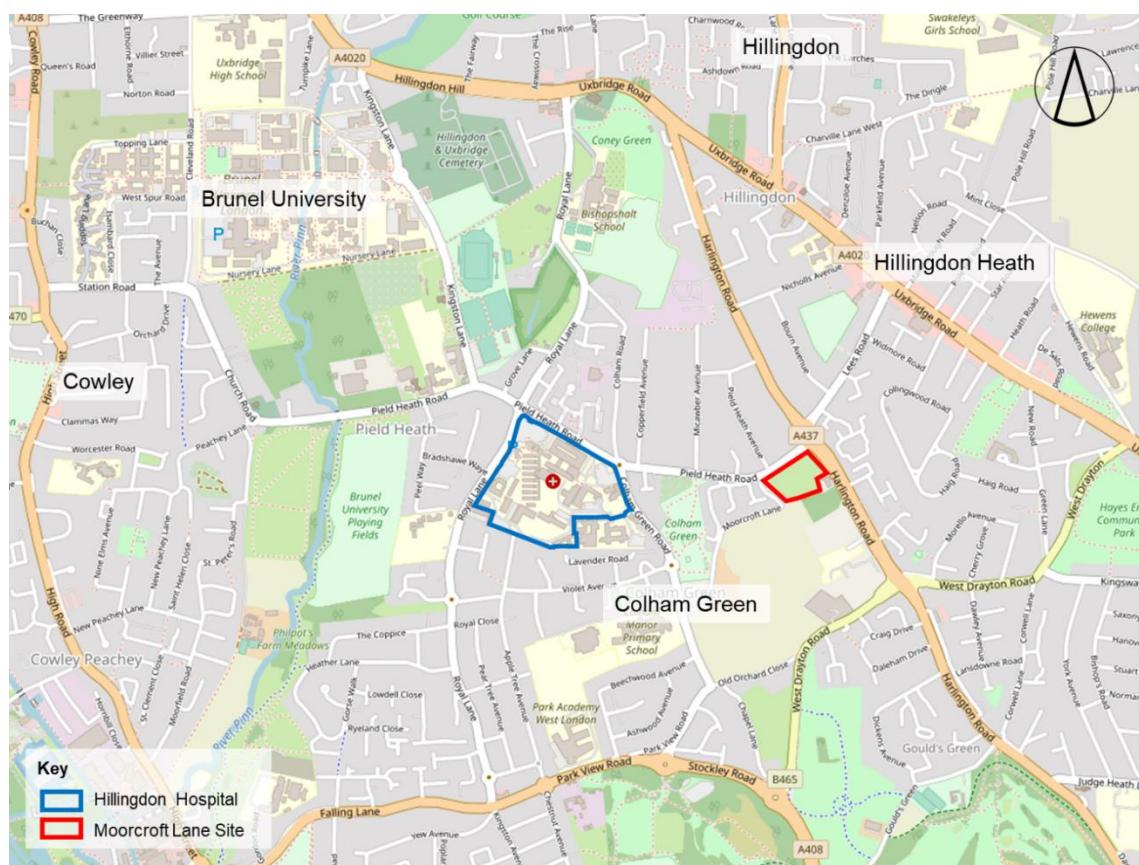
Source: IBI

Figure 2.7: Decant and Construction Phase Parking at Mount Vernon Hospital



Source: Mott MacDonald

Figure 2.8: Decant and Construction Phase Parking at Temporary Off-Site Car Park



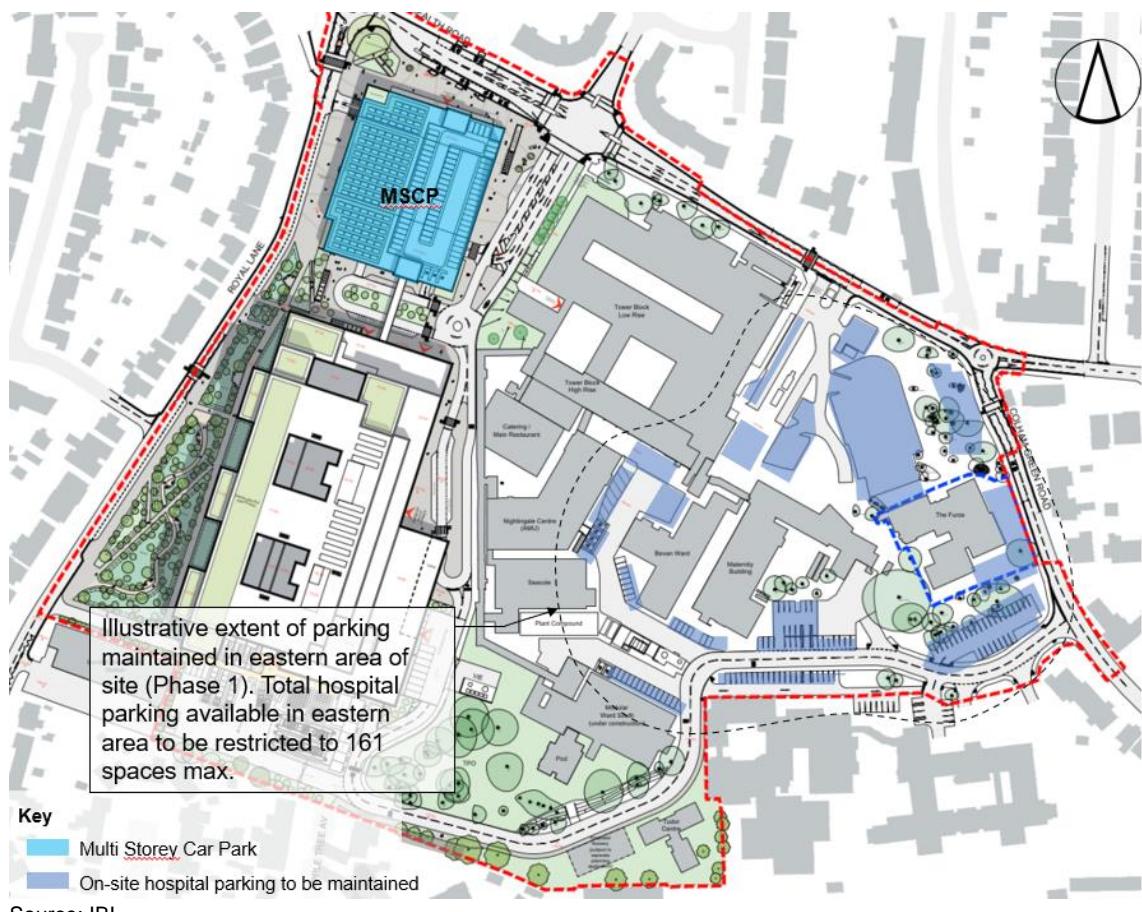
Source: [Open Street Map](#)

2.3.14 The temporary car park is intended to be used during the decant and construction phase only, up to completion of Phase 1b at which point the MSCP on-site will be operational. Once the MSCP is operational it is intended that the temporary car park will be removed and the Moorcroft Lane site reinstated and made good to its current (pre-use) condition.

Phase 1b Completion Hospital Parking

2.3.14.1 Upon completion of the new hospital, there will be up to 942 parking spaces for patients, visitors and staff at the hospital. Hospital parking will be provided in a new multi storey car park with capacity for 781 vehicles. Parking maintained in the eastern area of the site will be used to accommodate the balance up to a maximum of 161 hospital parking spaces. Use of the maintained parking in the eastern site area will require some areas of parking in the eastern area of the site to be closed off or restricted to avoid unintended use above a maximum of 161 spaces. The Phase 1b parking arrangements are illustrated in Figure 2.9.

Figure 2.9: Phase 1b Completion Hospital Parking



Source: IBI

2.3.14.2 On completion of Phase 1b and the decant of the hospital to the new building, the Phase 1c and 2 construction activity will take place and the locations and numbers of the parking spaces in the eastern area of the site are expected to fluctuate based on the locations of Phase 2 construction activity and hoarding lines/construction access points.

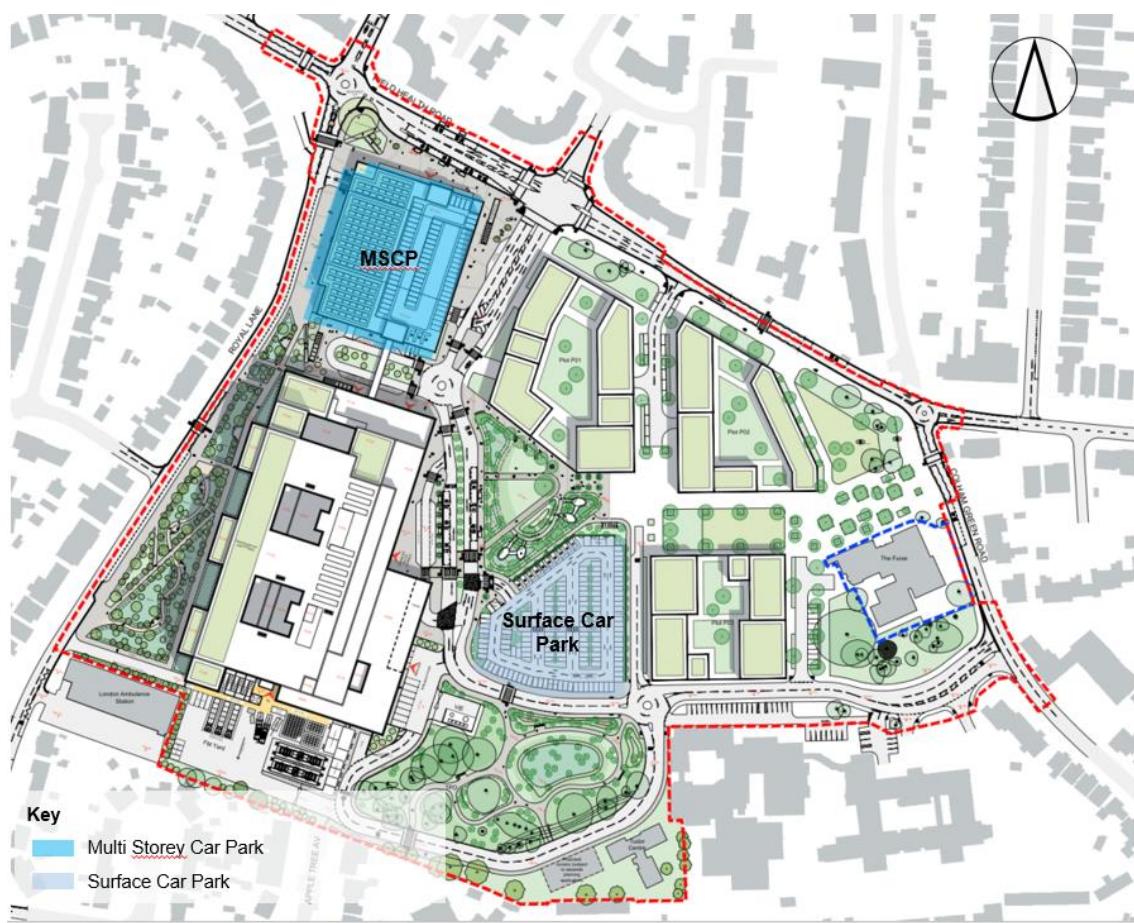
2.3.15 With the MSCP available and operational, the proposed decant parking site on Moorcroft Lane will be vacated and the site made good to its current condition.

Phase 1c Hospital

2.3.16 Upon the completion of the Phase 1c construction, the new surface car park will have been formed east of the hospital boulevard and west of Plot P03. This surface car park has capacity to provide up to 161 parking spaces.

2.3.17 The MSCP will be retained as per Phase 1b with 781 parking spaces. The parking arrangements for the hospital upon completion of Phase 1c are illustrated in Figure 2.10.

Figure 2.10: Phase 1c Completion Hospital Parking



Source: IBI

2.3.18 Upon completion of Phase 1c, the hospital will have parking for staff, patients and visitors on-site totalling up to 942 spaces in the MSCP and surface car park. A detailed breakdown of the car park layouts and allocation of spaces follows in Chapter 3.

2.3.19 A monitor and manage framework for on site car parking will be used to review whether the surface car parking is still required once Travel Plan measures to reduce the number of car trips have been successful. This will determine whether the surface car park is still needed, or whether it can be repurposed as green space or used for hospital expansion.

2.3.20 Phase 1c will divert buses from Pield Heath Road and Colham Green Road through the site, where they will stop at new bus stops located between the main hospital entrance and the A&E entrance. There will be two two-lane carriageways to the east of the A&E drop off loop, which will consist of a 3.8m wide bus lane and a 3.2m wide traffic lane. This arrangement has been provided so that the buses can stop without blocking traffic accessing the surface car park or ambulances accessing the Ambulance Yard.

2.4 Hospital Parking Summary by Phase

2.4.1 A summary of parking locations and numbers by phase is shown in Table 2.2.

Table 2.2: Hospital Parking Summary by Phase

Phase	On-site	Off-site	Total	Comments
Existing	955	175	1,130	
Decant / Construction		400 to 450 at Moorview Lane 127 Mount Vernon Hospital	827 to 877	To be provided at two off-site locations (Mount Vernon & Moorcroft Lane)
Phase 1b	781 MSCP up to 161 maintained parking spaces in eastern site area	0	Up to 942	Off-site parking withdrawn
Phase 2	781 MSCP up to 161 surface car park	0	Up to 942	Off-site parking withdrawn

3 Detailed Car Park Layouts

3.1 Accessible Design Considerations

3.1.1 The car parking spaces and facilities need to be fully accessible. A range of detailed considerations have therefore been given to the car parking layouts at this stage to ensure parking is provided to appropriately cater for the varying needs of all users.

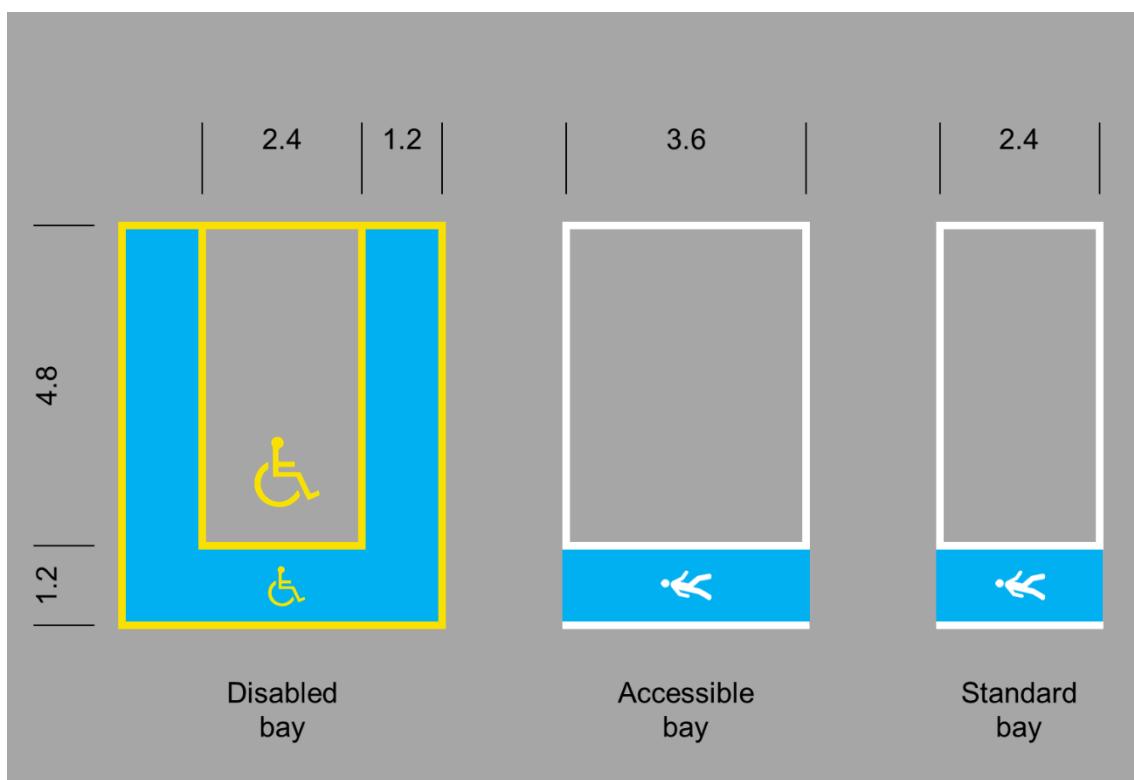
Bays Sizes

3.1.2 The London Plan requires three different parking bay types for cars. The three bay types are described below:

- Standard bays
 - Parking spaces for use by any driver should be 2.4m wide by 4.8m long with a 1.2m wide pedestrian zone provided at the rear outside the traffic zone.
- Disabled bays
 - Parking spaces designated for use by disabled people should be 2.4m wide by 4.8m long with a zone 1.2m wide provided between designated spaces and at the rear outside the traffic zone, to enable a disabled driver or passenger to get in or out of a vehicle and access the boot safely.
- Accessible bays
 - Enlarged standard spaces 3.6m wide by 6.0m long that can be adapted to be parking spaces designated for use by disabled people to reflect changes in local population needs and allow for flexibility of provision in the future.

3.1.3 For reference, the size of standard, accessible and disabled bays are illustrated in Figure 3.1.

Figure 3.1: Parking Bay Size Requirements



Source: Mott MacDonald

Temporary Disabilities

3.1.4 The Department of Health published Health Technical Memorandum 07-03 (HTM 07-03) in 2015. HTM 07-03 explains that:

“NHS car-parks should consider patients with temporary disabilities. While some NHS organisations make allowances for patients with temporary disabilities, most NHS organisations do not appear to have any measures in place to assist these patients. The organisation should decide how to classify a temporary disability.”

3.1.5 The Trust does not currently operate a scheme for short term parking. The redevelopment provides an opportunity to provide suitable infrastructure at the transition point between disabled parking spaces and standard parking spaces for any users who may have a temporary, or short-term need for more accessible spaces.

3.1.6 The London Plan requires that six per cent of bays are designated disabled parking bays; and that four per cent of bays are enlarged bays. Enlarged bays are in essence bays that are wider than standard bays, measuring 3.6m in width in-line with disabled bay width requirements. This enables firstly for enlarged bays to be used by those who may not have a temporary or permanent disability and do not qualify for disabled parking or a blue badge; and secondly also enables the future repurposing of enlarged bays into formal disabled bays as and when monitoring would suggest it is required.

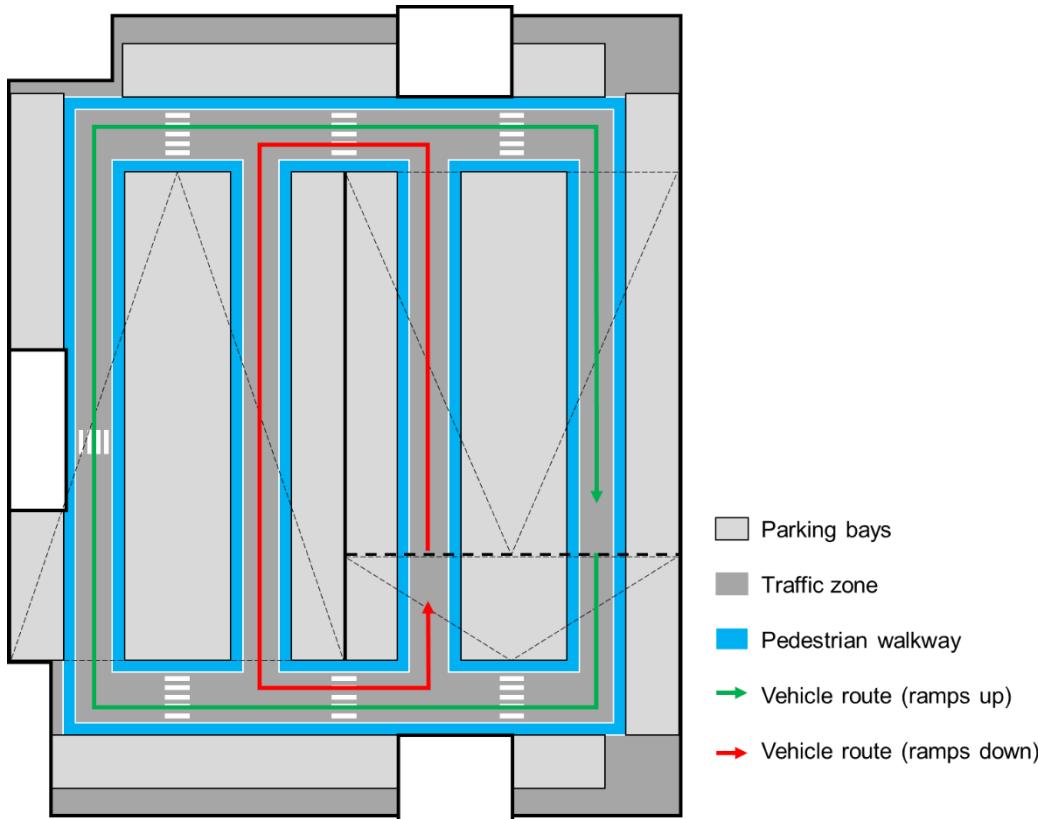
Pedestrian Walkways and Crossings

3.1.7 A pedestrian walkway will be provided at the rear of all parking spaces and clear of the traffic zone. The walkway will be clearly marked with pedestrian markings and in a contrasting colour to the traffic zone.

- Where the traffic zones are one-way the traffic zone will be 3.6m to allow 1.2m pedestrian walkways each side and 6.0m minimum clearance between spaces for reversing.
- Where the traffic zones are two-way the traffic zone will be 6.0m to allow two-way flow of traffic and 1.2m pedestrian walkway either side of the traffic zone.

3.1.8 The standard floor layout within the MSCP including the illustrative pedestrian zones is shown in Figure 3.2.

Figure 3.2: Pedestrian Zones within the MSCP



Source: Mott MacDonald

3.1.9 Pedestrian crossing points will be provided at all key locations to provide pedestrians with priority access to and from the lift and stair cores.

3.1.10 A similar layout and approach will be implemented on the surface car park to be delivered in Phase 1c. The detailed design of the surface car park will be the subject of a reserved matters application.

EV Charging Accessibility

3.1.11 As the UK transitions to adopt Electric Vehicles (EVs) it is important to consider the accessibility of charging infrastructure. In the roll out of EV charging infrastructure to date many chargers have been designed and installed without due consideration of their use by disabled drivers.

3.1.12 Common issues include:

- EV charging not being installed in disabled bays meaning disabled drivers having to use standard bays
- Barriers or lack of space around charge points meaning disabled users, particularly wheelchair users, not being able to access the charge point;

- Charger screens, sockets and cables being positioned too high and being inaccessible to wheelchair users;
- Heavy cables and sockets being difficult to move for vulnerable or weakened drivers; and
- Poor lighting at and around charge points.

3.1.13 The UK Government has announced new accessibility standards for electric vehicle charge points to help disabled people charge, which are expected to be released in summer 2022. The guidance is being prepared by the DfT in partnership with British Standards Institution and Motability and will result in charge points that are accessible for all as we accelerate towards a zero-emission future. The guidance will consider aspects such as kerb height, adequate space between bollards and charge points being of a height suitable for wheelchair users.

3.1.14 Where EV charging units are installed, these should be installed at a height that is accessible for all users. The EV charging that has been specified and allocated for the site has been allocated evenly across all parking bay types proportionately. This allocation should be adhered to upon installation and EV charging installed in standard, accessible and disabled bays.

3.1.15 The Trust will need to review the appropriate guidance in the lead up to installation of EV charge points at the site and ensure that EV charging is installed to be inclusive and accessible for disabled drivers.

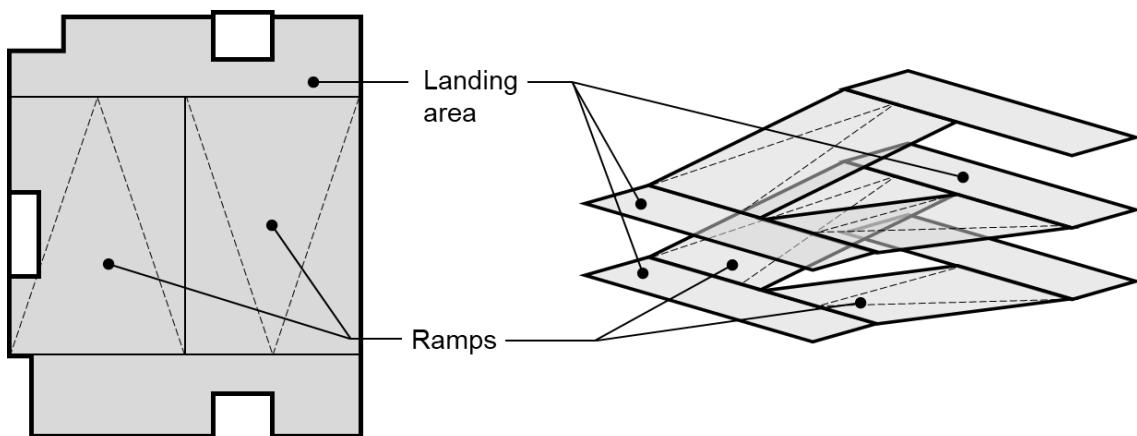
3.2 MSCP Layout

3.2.1 The MSCP will be completed in Phase 1b of the redevelopment and will provide parking for staff, patients and visitors.

3.2.2 The MSCP floor plans and layout have been developed to maximise efficiency and usable spaces whilst minimising the mass of the building as far as is possible.

3.2.3 The MSCP layout spirals upwards from the ground floor, with a flat landing area at the northern and southern extent of the building. The typical floor layout is shown in Figure 3.3.

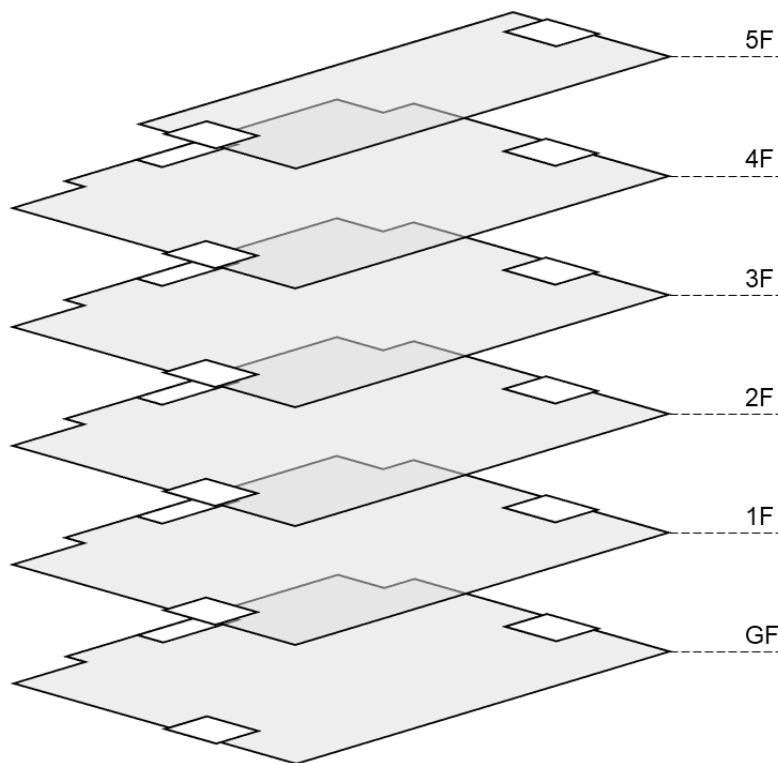
Figure 3.3: MSCP Typical Floor Layout



Source: Mott MacDonald

3.2.4 Parking will be provided over five and a half floors, with the upper most floor being a partial floor (half deck). This is illustrated in Figure 3.4.

Figure 3.4: MSCP Levels



Source: Mott MacDonald

3.2.5 Spaces in the MSCP have been allocated based on the forecast travel demand that has been developed by Mott MacDonald through liaison with the Trust. The detail of the forecast is reported in the Transport Assessment.

3.2.6 The MSCP will provide dedicated parking for:

- Staff
 - Standard bays
 - Accessible bays
 - Disabled bays
 - Car share bays (standard bays marked 'car share only')
 - EV charging applied evenly across all bay types
- Patients and Visitors
 - Standard bays
 - Accessible bays
 - Disabled bays
 - EV charging applied evenly across all bay types
- Car Club
 - Standard bays all with EV charging

3.2.7 In Phase 1b, some parking will also be maintained in the eastern site area where up to 161 parking spaces will be used to supplement the MSCP ahead of the Phase 1c surface car park being delivered at a later date.

3.2.8 In the Phase 1b period the Trust may determine it appropriate to allocate up to 161 additional spaces in the MSCP to patients and visitors (approximately 1 typical floor). In this case in Phase

1b the maintained parking in the eastern area of the site would then be allocated fully to staff parking.

3.2.9 The Phase 1b allocations would then be amended in Phase 1c upon delivery of the new surface car park to reflect the forecast allocation as shown in Figure 4.1.

3.3 Surface Car Park Layout

3.3.1 The surface car park will be completed in Phase 1c of the redevelopment and will provide parking for patients and visitors along with a rapid charge hub (EV charging).

3.3.2 At the time of preparing this report, the surface car park layout has been developed at a preliminary stage but does not reflect the full requirements of the proposals. This is due to the phasing and the planning strategy where the surface car park sits within the outline application. Full details of the car park layout will be provided as part of a reserved matters application where a supporting parking statement will be provided.

3.3.3 The proposed site plan shows capacity for up to 161 parking spaces based fully on standard spaces. Mott MacDonald has advised the Trust and design team that the efficiency of the surface car park will be reduced once the layout takes account of the requirement for:

- Accessible bays;
- Disabled bays;
- EV charging; and
- EV rapid charge hub.

3.3.4 The scale and illustrative layout of the surface car park will be as shown in Figure 3.5.

Figure 3.5: Surface Car Park Illustrative Layout



Source: IBI

4 Hospital Car Park Management

4.1 Introduction

4.1.1 Car park management plays a vital role in the successful running and operation of a Trust, particularly in relation to patient experience and delivery against expectations. Without appropriate car park management, the patient and visitor experience will be poor. A contributory factor associated with many missed appointments (known as Did Not Attends or DNAs) is the difficulty of parking at a site.

4.1.2 Through the planning of this redevelopment the Trust estates team, responsible for parking management, have been consulted with in relation to the current estate conditions, parking demand and known issues.

4.1.3 The feedback has been taken on-board and used to steer the development of the proposals for the new hospital and associated car parking.

4.1.4 Alongside the feedback from the Trust estates team, detailed analysis has also been undertaken looking at the current profile of staff using the site, their trip origin (home postcode) and their ability to reach the site at shift times by sustainable modes. This has in turn also enabled an evidence-led view to be taken on the required capacity at the site, to drive positive change in staff travel behaviour towards more sustainable end goals.

4.1.5 Under the proposals for the redevelopment the parking capacity over the whole site is technically being reduced from the current position through the removal of off-site parking. The key challenge will be overseeing the positive shift away from single occupancy car trips among staff to ensure the parking that remains on the site provides adequate capacity to accommodate all patients and visitors and to avoid DNAs. The required shift will be led by positive interventions such as the community Mobility Hub and Travel Plan measures, along with tightening of the criteria for the issue of staff parking permits.

4.2 Guidance

4.2.1 Health Technical Memoranda (HTMs) give comprehensive advice and guidance on the design, installation and operation of specialised building and engineering technology used in the delivery of healthcare. The focus of HTM guidance remains on healthcare-specific elements of standards, policies and up-to-date established best practice. They are applicable to new and existing sites.

4.2.2 HTM 07-03 (2015) sets out best practice in car-park management and sustainable transport. It identifies how the NHS patient, visitor and staff car parking principles can be implemented within an NHS organisation's carparking provision and what measures need to be considered when developing strategies and policies.

4.2.3 The guidance contains a number of measures that have been used by NHS organisations to reduce the demand on parking and promote better use of car parks on NHS sites. These measures have been broken down into the following three categories:

- Sustainable transport;
- Car park management; and
- Car park equipment.

4.3 Management System

4.3.1 The HTM guidance indicates that there will need to be a combination of intelligent controls and systems, such as the following:

- Barrier free car park entry
- ANPR cameras on entry
- Pay by mobile or machine on exit
- ANPR controlled barrier at exit
- Automated staff parking permit system
- Manual patrols
- Security cameras

4.4 Parking Allocation

4.4.1 HTM 07-03 advises that staff parking areas should be kept separate from patient/visitor parking. In multi storey car parks, it indicates that it may be worth having specific floors for staff parking that are clearly signed and that adequate signage should be provided for staff parking areas.

4.4.2 Taking account of the above recommendations in HTM 07-03, spaces in the MSCP have been allocated to staff on the upper floors.

4.4.3 A breakdown of the proposed allocation of parking spaces in the MSCP is shown in Table 4.1.

Table 4.1: Phase 1b MSCP Parking Summary

Car Park	Level	Spaces (Disabled)	Staff	Patients	Disabled	EV Active (Passive)	Comments
MSCP (Phase 1b)	0	98 (6)	0	94	6% Disabled 4% Accessible	15 (9)	Inc. 4 Car Club spaces on GF
	1	152 (9)	0	152		18 (15)	
	2	157 (9)	133	24		33 (15)	Inc. staff car share spaces on 2F
	3	157 (9)	157	0		34 (16)	
	4	157 (9)	157	0		34 (16)	
	5	60 (4)	60	0		13 (6)	
Total		781 (46)	507	270		147 (77)	

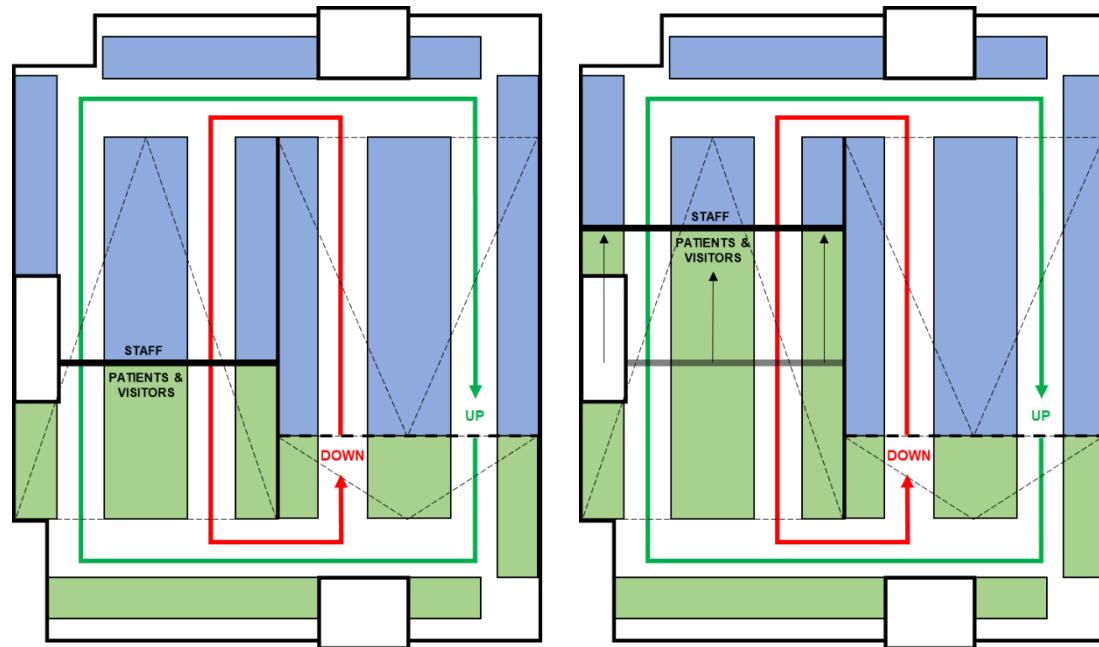
4.4.4 All staff parking will be contained in the upper levels of the MSCP. Patient and visitor parking will be split between the MSCP and the new surface parking area (in Phase 1c).

4.4.5 In the Phase 1b period the Trust may determine it appropriate to allocate up to 161 additional spaces in the MSCP to patients/visitors (approximately 1 typical floor). In Phase 1b the maintained parking in the eastern area of the site would then be allocated fully to staff parking.

4.4.6 The Phase 1b allocations would then be amended in Phase 1c upon delivery of the new surface car park to reflect the forecast allocation.

4.4.7 The MSCP layout will enable flexibility in how parking is allocated between staff, patients/visitors, car club and car share. The car park layout makes it simple to reallocate spaces from staff to patients/visitors by relocation of hanging signage and relocation of markings and/or wall signage, as reflected in Figure 4.1.

Figure 4.1: Flexible MSCP Allocation



Source: Mott MacDonald

4.4.8 The reallocation of spaces between staff and patients/visitors can be done very quickly and on a reactive basis if ever needed. Access control and parking tariffs will be applied at entry/exit by ANPR cameras. This will recognise the vehicles of staff who have a parking permit, or alternatively apply the appropriate parking charge to cars that do not have a permit.

4.4.9 Parking tariffs and the ANPR management system are discussed later.

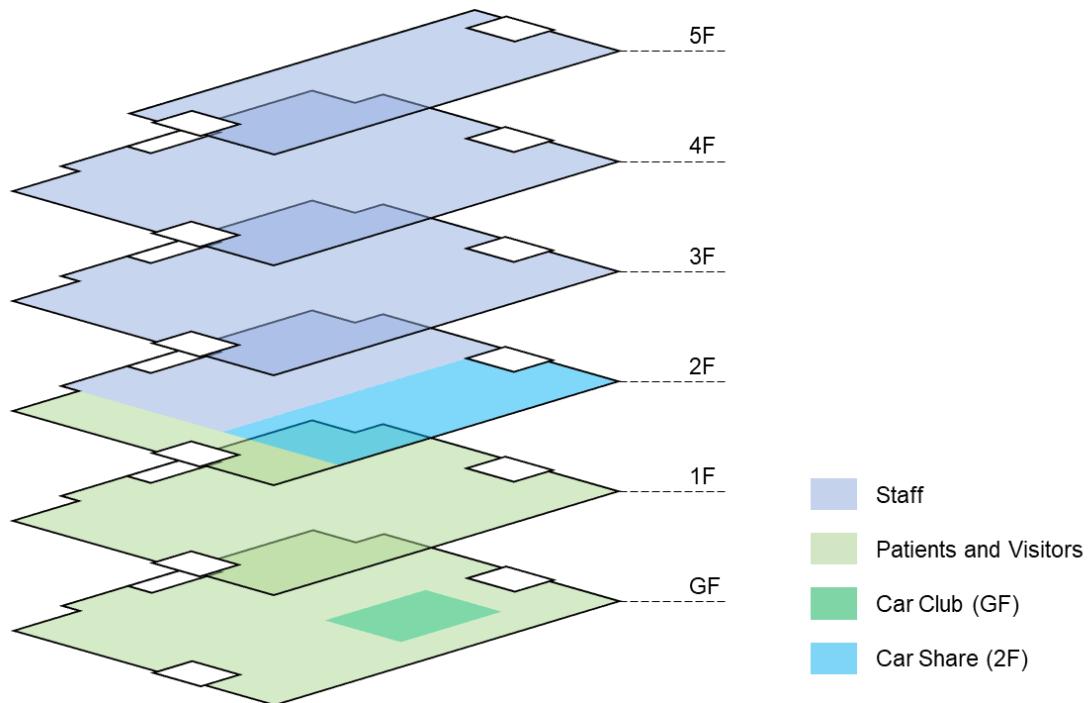
4.4.10 As the Travel Plan is implemented and travel demand, including parking demand, is monitored the objective will be to manage down parking demand over time. The MSCP flexibility can then be used to reallocate parking from staff to:

- Patients/visitors;
- Car club; and
- Car share.

4.4.11 The idea of the flexible car park also sits well with the surface car park that will be delivered in Phase 1c. The surface car park will be fully allocated to patients and visitors (except for a small rapid charge hub open to any hospital user). Subject to the success of the ongoing Travel Plan, parking spaces in the surface car park can also be withdrawn in the future.

4.4.12 The proposed allocation of spaces in the MSCP, as reported in Table 4.1, is shown illustratively in Figure 4.2.

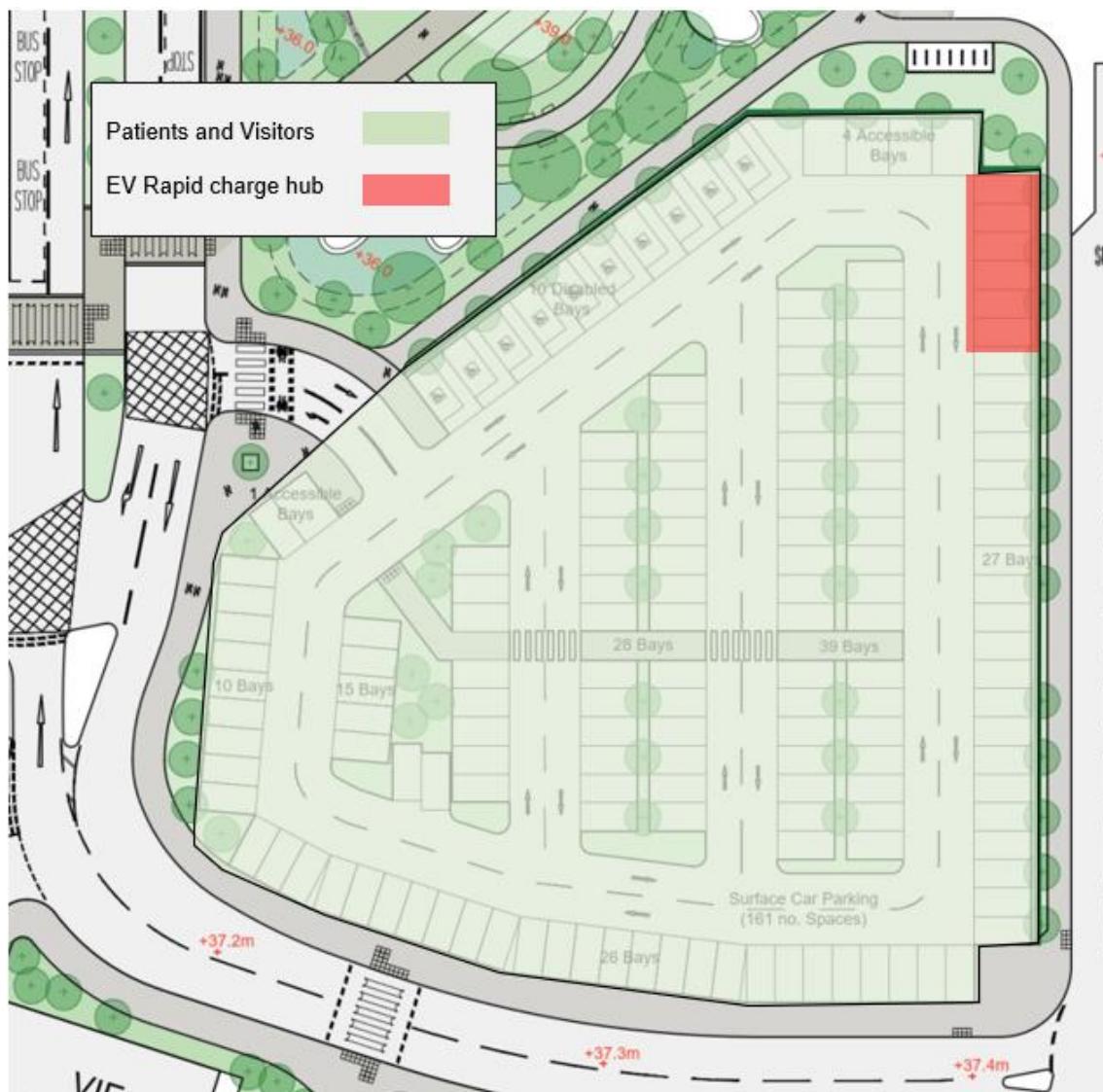
Figure 4.2: Phase 1b MSCP Car Park Allocation



Source: Mott MacDonald

4.4.13 Parking in the Phase 1c surface car park will be fully allocated to patients, except for a EV rapid charge hub of 6 spaces which will be open for use by any appropriate vehicle (staff, patients/visitors, taxi etc.).

Figure 4.3: Phase 1c Surface Car Park Allocation



Source: IBI Group/Mott MacDonald

4.4.13.1 A summary of proposed parking provision for the Phase 1c surface car park is shown in Table 4.2.

Table 4.2: Phase 1c Surface Parking Summary

Car Park	Level	Spaces (Disabled)	Staff	Patients	Disabled	EV Active (Passive)	Comments
Surface (Phase 1c)	N/A	161 (10)	0	155	6% Disabled 4% Accessible	25 (15)	Inc. 6 Rapid Charge Hub spaces
Total		161 (10)	0	155		25 (15)	

4.5 Site Entry Signage

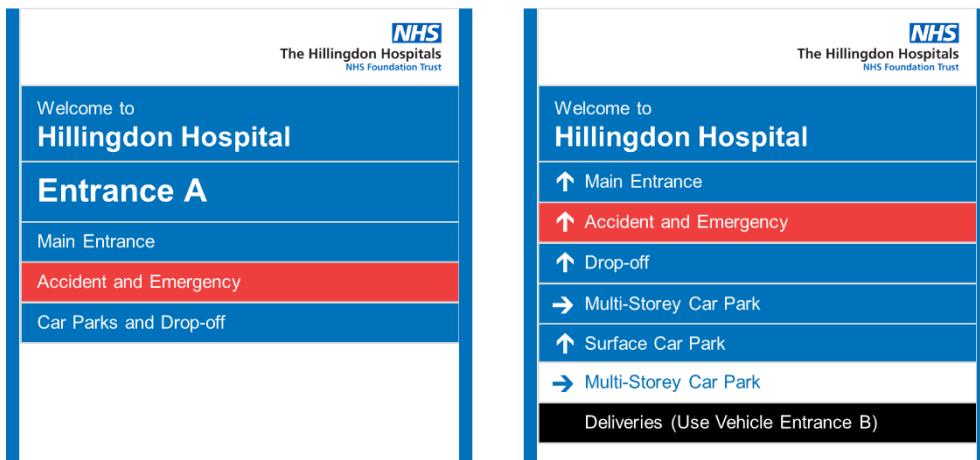
4.5.1 Directional signage will be provided at site entry points directing to appropriate locations on the site. Signage will clearly state:

- The vehicle entrances;

- Direction for Main Entrance
- Direction for Accident and Emergency
- Direction to car parks
- Direction for deliveries

4.5.2 Illustrative signage is shown in Figure 4.4. Signage similar to these examples will be required at vehicle entrances and within the site to direct users unfamiliar with the site to the appropriate locations.

Figure 4.4: Illustrative Site Entry Signage



Source: Mott MacDonald

4.6 Car Park Signage

4.6.1 Best practice in car parks is to provide clear and legible information to assist drivers to identify a safe and secure parking space. The more information provided, the easier it will be for the driver to locate a parking space. However, it is also important to avoid unnecessary sign clutter.

4.6.2 Clear signage will need to be provided at key decision points, such as where drivers turn to enter a car park or drop-off area on the site.

4.6.3 These signs should provide key information to drivers clearly and simply. Care should be taken to ensure signage is not cluttered and does not confuse drivers.

4.6.4 Signage will include, but not be limited to:

- Directions:
- Restrictions
 - vehicle type (car, van, servicing, Electric Vehicle Charging, motorcycle)
 - Vehicle height (max. headroom)
 - User type (patient/visitor, staff, car club, car share)
 - Duration (max stay 10 minutes);
- Charges and tariffs; and
- Exemptions.

4.7 Car Park Access

MSCP

4.7.1 The hospital site is almost exclusively for use by NHS (and other emergency services) staff, patients and visitors. Other users who require access will include taxi drivers, delivery drivers and maintenance workers. It is key that parking is safeguarded for all these user groups and specifically for patients/visitors and Trust staff who have an eligible parking permit or critical need to park on site.

4.7.2 The site is located in a largely residential area. Though there are some small-scale commercial uses, education uses, and other ancillary land uses around the site, it is expected that people not using the site will be detracted from parking at the hospital by standard parking tariffs that will be in place for any and all users who do not have a valid staff parking permit, are not disabled users and/or do not have a form of exemption authorised by the Trust.

4.7.3 Signage on approach to the car parks and at car park entry points will make clear that the car park is associated with the hospital, as NHS branded signage will be installed. Illustrative signage that would be appropriate is shown in Figure 4.5.

4.7.4 Different signage will be appropriate for the MSCP which will comprise both staff and patient/visitor parking, and the surface car park which will be reserved for patients and visitors only (save for a rapid charge station for use by any hospital users requiring access to rapid charge EV bays).

Figure 4.5: Illustrative Branded Parking Signage



Source: Mott MacDonald

4.7.5 Further NHS branded signage will be in place across the site and will provide directions to the following:

- MSCP – for patients/visitors and staff (inc. car share bays and car club);
- Surface Car Park – for patients/visitors (inc. rapid charge bays for EV charging use by any site users, restricted to EV);
- A&E Drop-off – dedicated drop-off area adjacent to the A&E Entrance; and
- Main Drop-off - dedicated drop-off area adjacent to the Main Entrance.

In Phase 1b a proportion of staff and patient/visitor car-based trips will arrive and depart via the Royal Lane MSCP Access junction.

4.8 Parking Management

4.8.1 Both car parks will be covered by Automatic Number Plate Recognition (ANPR) cameras.

4.8.2 ANPR is a technology that uses optical character recognition to read vehicle registration plates to create vehicle location data. In a car park management setting the cameras record the number plate of vehicles entering a car park and use this information to determine appropriate charges for that vehicle. Using an ANPR system for parking management enables the application of various rules and exemptions on different user groups, driver types and vehicle types. The appropriate classifications in this instance are outlined below.

4.8.3 Parking use and exit from the car park can be restricted using ANPR by means of two methods briefly summarised below:

- Fully barrier free – ANPR captures number plate on arrival and departure, any vehicles that have failed to pay for their duration of parking will be issued with a parking charge notice (PCN); and
- Barrier on exit – ANPR captures number plate on arrival and departure, departure cameras check the payment has already been made by specific vehicle and raises exit barrier.

4.8.4 The Trust will need to seek expert advice on car park operation and such systems at the time of detailed specification.

Staff Permit Holders

4.8.5 The Trust operates a staff parking permit system. The system currently determines the eligibility of staff to obtain a parking permit based on set criteria as outlined in the Trust's Parking Policy (updated periodically). Staff eligible for permits would need to register their vehicles for inclusion on an ANPR database prior to use.

4.8.6 The ANPR system would be able to identify when a registered vehicle enters the car park by recognising the number plate on approach and checking it against those registered against permits. Depending on the exit management system adopted the ANPR system would also either:

- With a barrier exit system would open the barriers for vehicles that have a valid permit; or
- With a barrier free exit system would record the vehicle on exit and if not covered by a valid permit would automatically issue a PCN.

Car Club Cars

4.8.7 A Car Club will be in operation at the hospital and will be located in the MSCP. As with permit holders the ANPR system will have a log of all registered Car Club vehicles.

4.8.8 The ANPR system would recognise a registered Car Club vehicle on approach to and upon exit from the car park.

4.8.9 Depending on the exit management system adopted the ANPR system would either:

- With a barrier exit system would open the barriers for registered Car Club vehicles; or
- With a barrier free exit system would record the vehicle on exit and if not a registered Car Club vehicle would automatically issue a PCN.

Non-Permit Holders

4.8.10 Patients and visitors will largely be made up of non-permit holders. The ANPR system would record the number plate of vehicles that do not have a permit of any type on entry to the car park along with the time of arrival.

4.8.11 A pay before exit system will be in operation at the car parks. Where a user is returning to their vehicle, they will need to visit one of the payment terminals in or near the car parks. They will enter their number plate which will prompt the system to look up their number plate and determine their parking charge.

4.8.12 Depending on the exit management system adopted the ANPR system would either:

- With a barrier exit system would open the barriers for vehicles where the correct parking charge has been paid; or
- With a barrier free exit system would record the vehicle on exit and if the vehicle has not paid would automatically issue a PCN.

Concessions

4.8.13 The Trust currently operates parking concessions for the following:

- Free parking for disabled Blue Badge holders in either designated disabled parking spaces or, if these are not available, in general parking spaces;
- Free 20-minute drop off points;
- Weekly visitor parking permits for £12 (equivalent to £1.71 per day);
- Monthly visitor parking permits for £25 (equivalent of 82p per day);
- Reduced cost parking for cancer patients at £1 a day; and
- Patients who have arrived for their outpatient appointment to find it has been cancelled are entitled to free exit.

4.8.14 These rules may still be in place upon occupation of the new hospital. The ANPR system will enable number plates to be manually entered by the car parking team to enable concessions.

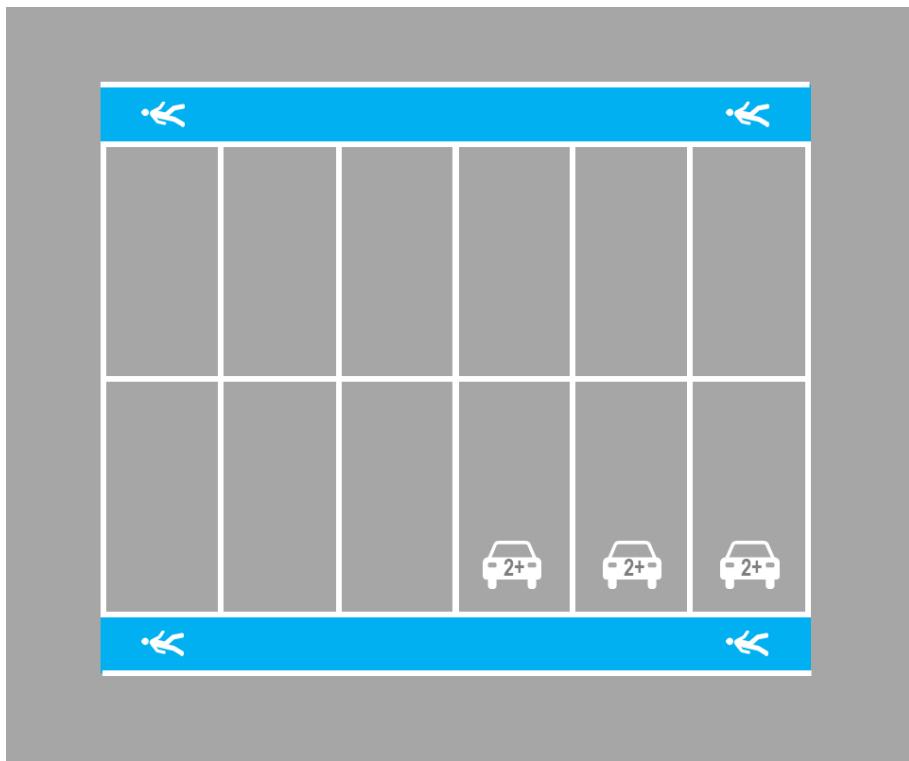
4.9 Car Share

4.9.1 Staff will be encouraged to Car Share through the Hospital Travel Plan. LiftShare are a Car Share specialist and have been engaged to assist the Trust in developing a pilot car share scheme at Hillingdon Hospital to operate in the lead up to construction.

4.9.2 Subject to the Car Share pilot scheme being a success, a number of standard car park spaces in the allocated staff car park spaces will be dedicated to validated Car Share vehicles.

4.9.3 These spaces will be marked clearly as car share spaces and supplemented with signage making clear the spaces are restricted to multiple occupancy vehicles who must have a Car Share permit and must have used the LiftShare app to validate their Car Share trip. An example marking arrangement is shown in Figure 4.6.

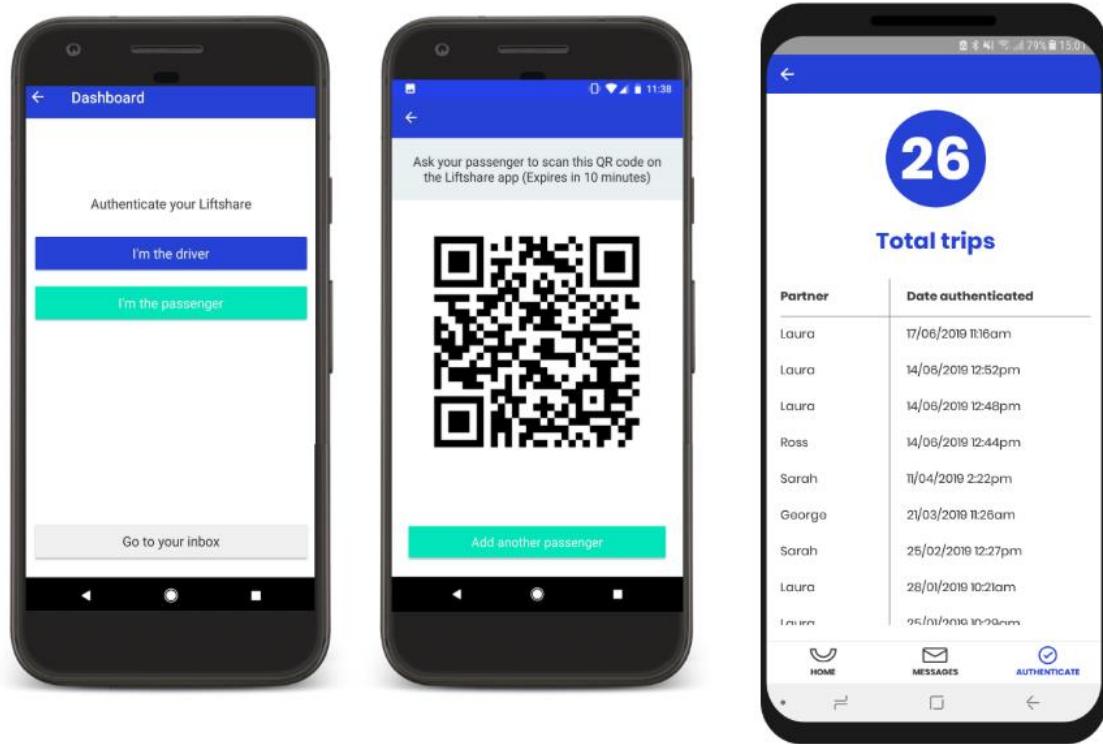
Figure 4.6: Illustrative Car Share Bays



Source: Mott MacDonald

4.9.4 The LiftShare mobile application enables members to authenticate a shared car journey by physically matching their smartphones. The passenger uses their phone to scan a QR code on the drivers' phone, as illustrated in Figure 4.7. This authenticates that the phones are together along with the location of the scan meaning the trip is now an authenticated shared trip.

Figure 4.7: Lift Share Trip Authentication



Source: Lift Share

4.9.5 The Trust car parking management team (or appointed third party) will be able to access this information and use this to manually check the number plates of vehicles parked in the designated car share spaces to ensure compliance and take action if required.

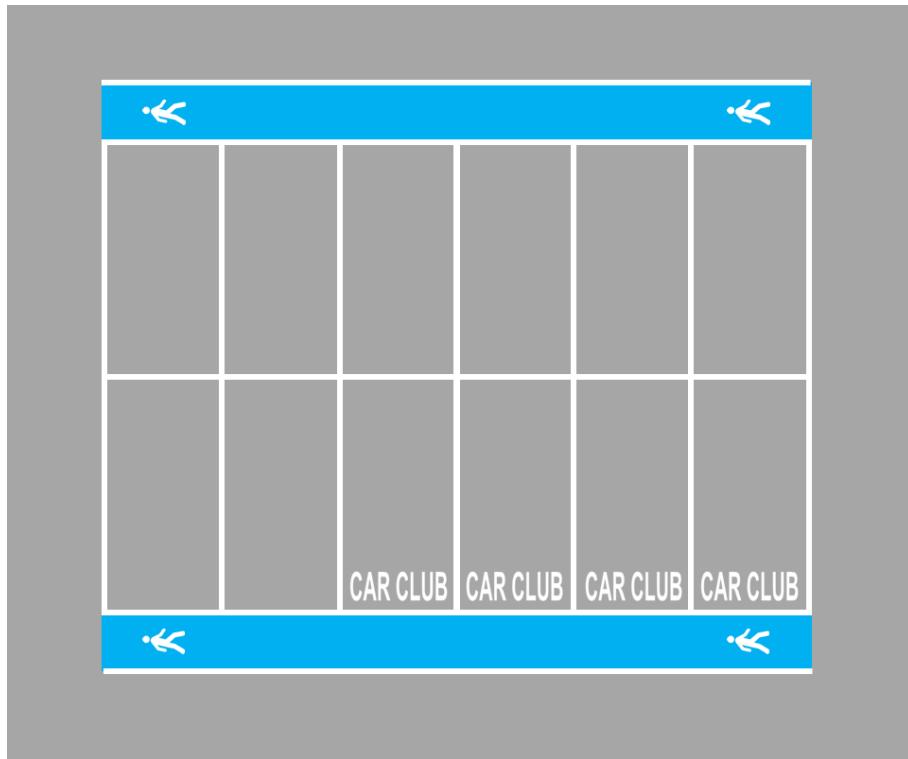
4.10 Car Club

4.10.1 The MSCP will contain a Car Club, in-line with the requirements stipulated in the London Plan. Enterprise Car Club have been engaged to assist the Trust in developing a pilot Car Club scheme at Hillingdon Hospital to operate in the lead up to construction of the new hospital.

4.10.2 Subject to the Car Club pilot scheme being a success, it is intended that a number of standard car park spaces on the ground floor of the MSCP will be dedicated to the Car Club. The precise number is still to be confirmed but, at present, four spaces are allocated indicatively.

4.10.3 All of these spaces will have active 22kW EV charging and will be marked clearly as Car Club spaces, with supplemental signage making clear the spaces are restricted to Car Club vehicles at all times, as illustrated indicatively in Figure 4.8. This will ensure bays are reserved for their intended use and will help users to quickly locate their booked car.

Figure 4.8: Illustrative Car Club Bays



Source: Mott MacDonald

4.10.4 Based on the recommendation of Enterprise, the Car Club has Initially been sized at four bays and four Car Club vehicles. At other similar NHS Trusts Enterprise have worked with, where a Car Club has been introduced, uptake has been so successful that the Car Club has increased in scale substantially over time. The MSCP will be arranged so that at any point in the future further standard bays can be reassigned to the Car Club with appropriate 22kW EV coverage in all Car Club bays.

4.11 EV Charging Bays

4.11.1 The level of EV charging provision has been specified based on analysis of the specific travel characteristics and charging requirement of users at the hospital. The approach adopted looked at the travel characteristics of staff and patients and assigned each group EV charging speeds suitable for their requirements.

4.11.2 A summary of the approach adopted is as follows:

- An average range of an EV (2021) is 198 miles (from EV database);
- An average staff member (excluding those living within 3 miles) travels a 22 mile round trip to and from the hospital (11 miles one-way);
- An average member of staff could drive to the hospital around nine times on a single charge (so a charge would be needed every 9 trips to and from the hospital)
- An average patient travels a 12 mile round trip to and from the hospital (6 miles one-way);
- An average patient could drive to the hospital around 18 times on a single charge (so a charge would be needed every 18 trips);
- 11% of staff drivers (1/9) would need to charge on a given day (excluding other trip purposes) assuming that all users drive EVs in the future scenario;

- 6% of patients (1/18) would need to charge on a given day (excluding other trip purposes) assuming that all users drive EVs in the future scenario;

4.11.3 Discussions were held with EV charging providers as the proposals have developed. In discussion it was highlighted that EV charging bays are often mistakenly used by EV drivers for standard parking (i.e. the bay is used by an EV vehicle that is not charging); likewise some drivers overstay in an EV bay beyond the point when a car is fully charged. For robustness, to account for the inefficiencies of use highlighted by these discussions, the proportions of staff and patient parking requiring EV charging noted above have been doubled, with 10% EV charging then added on top as passive provision for future expansion.

4.11.4 EV charging bays will be provided in the MSCP and surface car park as follows:

- 22% active EV charging in staff parking bays (inc. car share bays)
 - 7kW active charging in 15% of staff bays
 - 22kW active charging in 7% of staff bays
 - Passive provision for future EV charging in 10% of staff bays
- 12% active EV charging in patient and visitor parking bays
 - 22kW active charging in 12% of patient and visitor bays
 - Passive provision for future EV charging in 10% of patient and visitor bays
- 100% active EV charging in Car Club bays
 - 22kW active charging in 100% of Car Club bays
- 100% active EV charging in Rapid Charge Hub
 - 43kW+ active charging in 100% of Rapid Charge Hub bays

Management of EV Charging Bays

4.11.5 EV charging providers have been consulted with in relation to the possible charging mechanisms and how these can be used to encourage efficient use and turnover over of users in EV charging bays.

4.11.6 The principle of installing a variety of different speeds of charging was validated and itself presents an opportunity to encourage efficient use. The different allocations and speeds of charging are outlined above (7kW, 22kW and 43+kW).

4.11.7 Each speed of charger can be provided as part of a network of chargers that suit requirements of the users. This means, for example, that staff EV charging could be slower chargers due to the length of time staff will park, whilst patient/visitor charging spaces could have faster chargers. Examples of how this could be done in operation is shown below:

- Staff EV (7kW) – reserved for staff spaces only and charged by kWh
- Staff EV (22kW) – reserved for staff spaces only and charged based on duration of use. It is suggested that the hourly rate increases incrementally following an initial set duration (i.e. charged at a set rate for 1 or 2 hours, then increasing to a higher rate thereafter). This higher rate encourages users to only use the 22kW chargers if needed and to return to the car to avoid paying a higher rate, thus freeing up the charger for others.
- Patient/Visitor (22kW) – reserved for patient spaces only and charged based on duration of use. It is suggested that the hourly rate increases incrementally following an initial set duration (i.e. charged at a set rate for 1 or 2 hours, then increasing to a higher rate thereafter). This higher rate encourages users to only use the 22kW chargers if needed and to return to the car to avoid paying a higher rate, thus freeing up the charger for others.
- Rapid charge station (43kW+) – for use by any hospital users (including taxi drivers) in need of a rapid charge. A set kWh charge for the rapid chargers would be higher but the rapid

chargers are only likely to be utilised by those in need of a very fast charge. Signage and on-screen messaging would make clear that rapid charge bays are to be vacated following completion of charge.

4.11.8 The Trust will need to liaise directly with an EV charging provider in order to explore in further detail the specific charging systems to be applied to each charger type and for each user type. Many of the EV systems are adaptable meaning that with software updates EV charging tariffs can be adjusted with ease.

4.12 **Parking Tariffs**

4.12.1 NHS organisations should regularly review car-parking tariffs. It is recommended where possible to split tariffs into hourly rates as opposed to large groupings such as 1–3 hours. Implementing hourly rates is likely to improve the patient and visitor experience, as some patients and visitors may feel aggrieved paying for three hours of parking when they only need to park for one hour.

4.12.2 Implementing hourly tariffs is also likely to result in a higher turnover of parking spaces. Therefore, finding a parking space will be easier for patients and visitors, which will also improve their overall experience.

4.12.3 The ANPR system that will be provided at the car parks enables all users (not covered by a permit) to pay before they exit the car park, meaning users will only pay for the duration of parking that has been used.

4.12.4 The Trust has the current car park tariffs published on their website (correct as of 23rd February 2022).

Table 4.3: Car Park Tariffs - 24 hours a day

Duration	Charge
0 - 10 minutes	No charge
1 hour	£1.70
2 hours	£3.20
3 hours	£4.70
4 hours	£6.20
5 hours	£7.70
6 hours	£9.20
7 hours	£10.70
8 hours	£12.20
9 hours	£13.70
10 hours	£15.20
11 hours	£16.70
12 hours to 24 hours	£18.20
Each extra 24-hour period	£18.20
Disabled spaces	No charge
20 minute drop off points	No charge
Concessionary parking (approved by ward manager)	Patient and visitors of long-term patients - 1 week: £12, 1 month: £25. Cancer patients - £1 per visit

4.12.5 The Trust currently provides motorcycle parking which is free to use. It is anticipated this may well remain the case but could be revisited by the Trust in future policy updates.

4.12.5.1 The Trust reviews their Car Parking Policy every three years as a minimum. The current Trust Car Parking Policy was adopted by the Trust Board on 26 September 2021. This policy covers and regulates all car parking and associated activities within the Trust's sites. The next review date is currently expected to be on 01 May 2022. It is recommended the Trust continues to review their Car Parking Policy and regularly review the car park tariffs, in order to continually progress towards more sustainable objectives.

4.13 Parking Enforcement

4.13.1 Parking enforcement will be carried out using a variety of means:

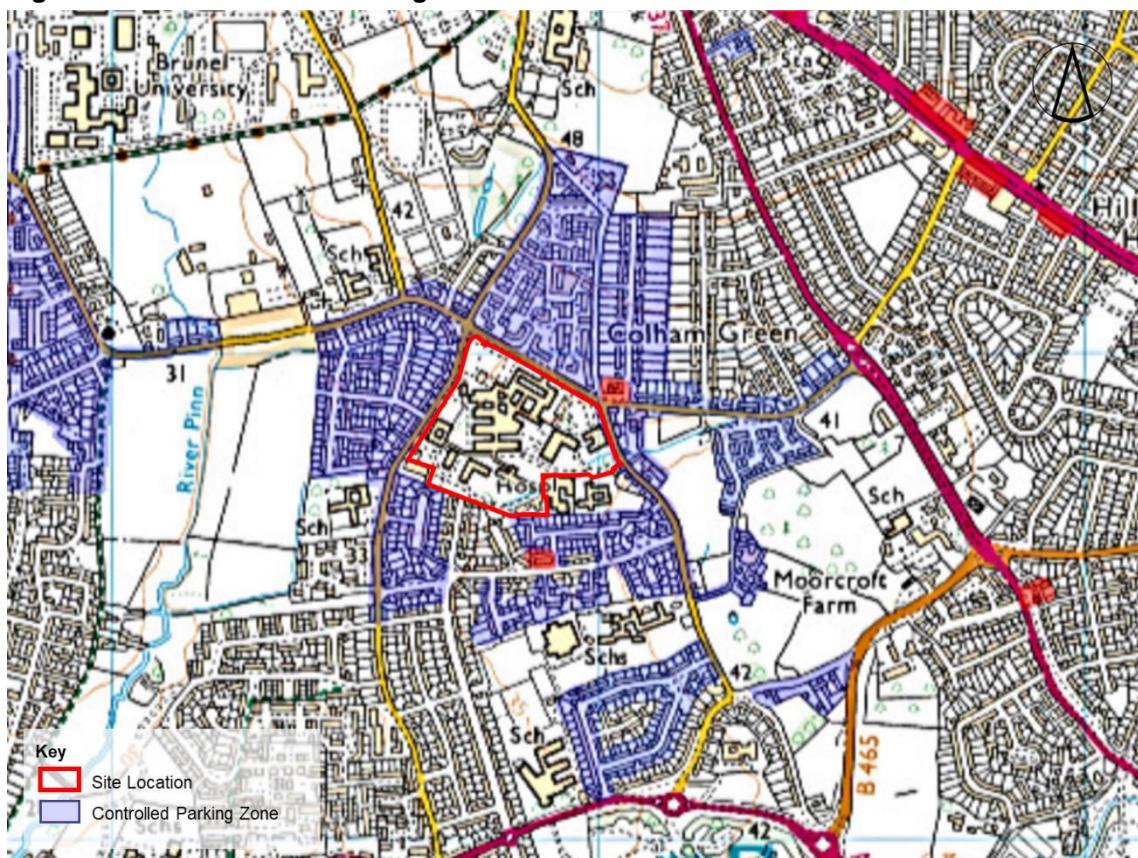
- Automatic parking enforcement notices (parking tickets)
 - ANPR cameras check number plates for registration
- Manual enforcement
 - Manual checks that vehicles are parked fully within single bays
 - Manual checks that vehicles are using correct bays (i.e. staff allocated bays, disabled bays, EV charging bays)

4.13.2 Parking enforcement will need to be adapted in the future. This will particularly be for EV charging fleets in the UK and as the adoption of EVs increases. Enforcement of the correct use of EV bays may need to be reflected in future CPMPs and revised Trust Car Park Policy.

4.14 Controlled Parking Zone Enforcement

4.14.1 The site is located within a Hillingdon Controlled Parking Zone (CPZ), residents parking zone 'HH'. The extents of the HH zone are shown in Figure 4.9. During operating hours (9am to 5pm, Monday to Friday), any person parking in this zone is required to display a residents parking permit. The operating hours and permit zone are shown on signs at each parking bay. Outside the operating hours, anyone can park in a permit holder only bay.

Figure 4.9: HH Residents Parking Zone



Source: London Borough of Hillingdon

4.14.2 The HH CPZ allows residents to secure on-street parking nearby their homes by preventing overflow parking on-street that could otherwise be generated by the hospital. This assists with maintained safe operation on the local highway network and also assists the Trust in taking proactive measures to reduce car reliance, particularly amongst staff.

4.14.3 Community engagement will allow the public the opportunity to call the Trust parking team helpline should residents need to report anything. This will ensure any issues, such as staff and patients/visitors using the surrounding streets when the permit scheme is not in operation hours (i.e. overnight), are addressed and appropriate action is taken.

5 Monitoring

5.1 Introduction

5.1.1 HTM 07-30 advises that monitoring and data collection should be carried out annually. This will provide information to stakeholders on how successful the Trust is being in reducing single-occupancy trips (amongst staff), increasing the use of sustainable transport and improving the patient and visitor experience.

5.1.2 A Hospital Travel Plan Framework has been prepared alongside this CPMP. The Hospital Travel Plan Framework includes details on the proposed monitoring regime, including details of the proposed surveys to be captured on the site to analyse capacity, demand, mode share, travel times, dwell time/duration of stay etc.

5.1.3 The infrastructure that has been specified for the redevelopment presents the opportunity to monitor mobility using live data from a variety of sources in many cases; including ANPR car park entry/exit records, car club usage records and car share validation records. There are further supplementary records that can be collected to analyse any possible themes in demand, again this is particularly helpful for staff travel.

5.1.4 All data will be captured as part of a regular reporting process carried out by the Trust. This will also overlap with other data and reporting covered by the Travel Plan.

5.2 Suggested Monitoring Data

5.2.1 There is an opportunity to capture valuable data via a combination of automated and live data (ANPR, car club platform reporting, car share platform reporting) and manual surveys (manual enforcement records, photos, videos surveys).

5.2.2 Details of the data that can be captured and used to report on progress and inform future strategy/policy changes are detailed below.

Automated Monitoring Data

5.2.3 A list of information that will be able to be captured as part of an automated (and live) monitoring framework is as follows:

Car Park Use

- Record of vehicle entries and exits
- Dwell times (breakdown by time period, day, week etc.)
- Staff use (based on staff permits registered and observed entering/leaving)
- Staff use estimate (based on vehicles exceeding a notional dwell time – for example over 4 hours)
- Patient and visitor use estimate (based on vehicles leaving within a notional dwell time – for example under 4 hours)
- Revenue generation of car parks

EV Charging

- Frequency of use of EV charging in specific spaces and on specific charging networks, for example:
 - dedicated staff 7kW
 - dedicated staff 22kW

- patient and visitor 22kW
- Revenue generation of EV charging

Car Share Scheme

- Number of sign-ups via Lift Share platform
- Number of validated car share trips on a given day, week, month, year
- Trip origin of validated car share trips

5.2.4 Car Club Scheme

- Who uses the Car Club, including frequency of use and other user insights
- The origin and destination of Car Club trips, which can enable the Trust to see if an alternative mode could have been used or if there was a justified reason to travel at all
- The behaviour and driving standards of users, including vehicle speed
- Car Club vehicle mileage with a detailed breakdown by specific time periods and from single days through to months and years, which provides insight on usage and can inform the Trust if more or less Car Club vehicles are required
- The same telematics equipment can also be added to the Trusts own fleet of vehicles. This enables Trust fleet vehicles to be bookable by Trust staff, and for the same detailed reporting on their use

Trust Data

- Number of staff parking permits issued
- Number of staff on waiting list for parking permits
- Number of inquiries to Travel Plan Co-ordinator
- Number of inquiries to car parking management team
- Number of enforcement notices issued (grouped by type of contravention)

Manual Monitoring Data

5.2.5 Manual surveys will also need to be carried out periodically to capture other data as follows:

- Staff use (based on use of allocated staff parking bays)
- Patient and visitor use (based on use of allocated patient and visitor bays)
- Disabled bay use
- EV charging use and misuse of EV charging bays (parking but not charging, or overstaying after charge)
- Camera surveys at site access points to capture total vehicle arrivals and departures
- Dwell times in dedicated drop-off bays (time restricted)

5.3 Review

5.3.1 The data captured will provide the Trust with in-depth data on parking activity and use of the car parks and associated facilities by staff, patients and visitors.

5.3.2 This data should be reviewed in depth in a standardised manner so that reporting is regular and consistent. The reporting should be reviewed to determine any changes to the car parks themselves or to the car park management systems or policies, as deemed appropriate.

5.3.3 Such changes may include but are not limited to:

- Reallocation of spaces between staff and patients/visitors
- Update of car park tariffs

- Increase in size of Car Club
- Increased allocation of car share spaces
- Change tariffs for EV charging
- Increase number of EV charging bays

6 Summary

6.1 Summary

- 6.1.1 This CPMP has been prepared to set out the arrangements for parking at the Hillingdon Hospital site through the lifespan of the proposed redevelopment. The CPMP provides a summary of the arrangements for parking during the decant and construction phase, upon occupation of the new hospital in Phase 1b and up to completion of the wider masterplan in Phase 2.
- 6.1.2 The CPMP provides details of design considerations that have already been made and should be revisited and / or followed through further design development and during construction and operation. This is particularly important in relation to the design for accessible spaces and EV charging and is also important in relation to the safe movement of pedestrians and interaction of traffic within the MSCP and surface car park.
- 6.1.3 The CPMP provides details of the proposed allocation of spaces split between staff and patients/visitors and also demonstrates how this can be adjusted on a regular basis by simple changes to markings and/or signage within the MSCP. This offers flexibility in how spaces are allocated to staff, staff car share bays, patients and visitors and car club bays.
- 6.1.4 The CPMP includes details of how car parking can be managed by the Trust or an appointed specialist operator. This includes hard measures such as signage and information that needs to be provided at site entry points and within car parks. This also includes details of softer measures and technology that can be used to manage parking and monitor usage of spaces, car club use and EV charging bays for example.
- 6.1.5 The CPMP also provides details of enforcement measures that could be used in the car park. The design, services and management measures within the car park will provide a range of methods that can be used, including automated enforcement and manual enforcement to ensure appropriate and intended use of the car parking on site.
- 6.1.6 The report also provides the Trust with details of how the automated and manually collected data can be used to monitor usage, review management and allocations and to drive future changes to the Trusts car park policy, management measures and the infrastructure it provides in its car parks as changes are experienced.

