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# **The Hillingdon Hospital Redevelopment - Tudor Centre Extension**

Transport Statement

September 2024

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# **The Hillingdon Hospital Redevelopment - Tudor Centre Extension**

**Transport Statement**

**September 2024**

# Issue and Revision Record

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# 1 Introduction

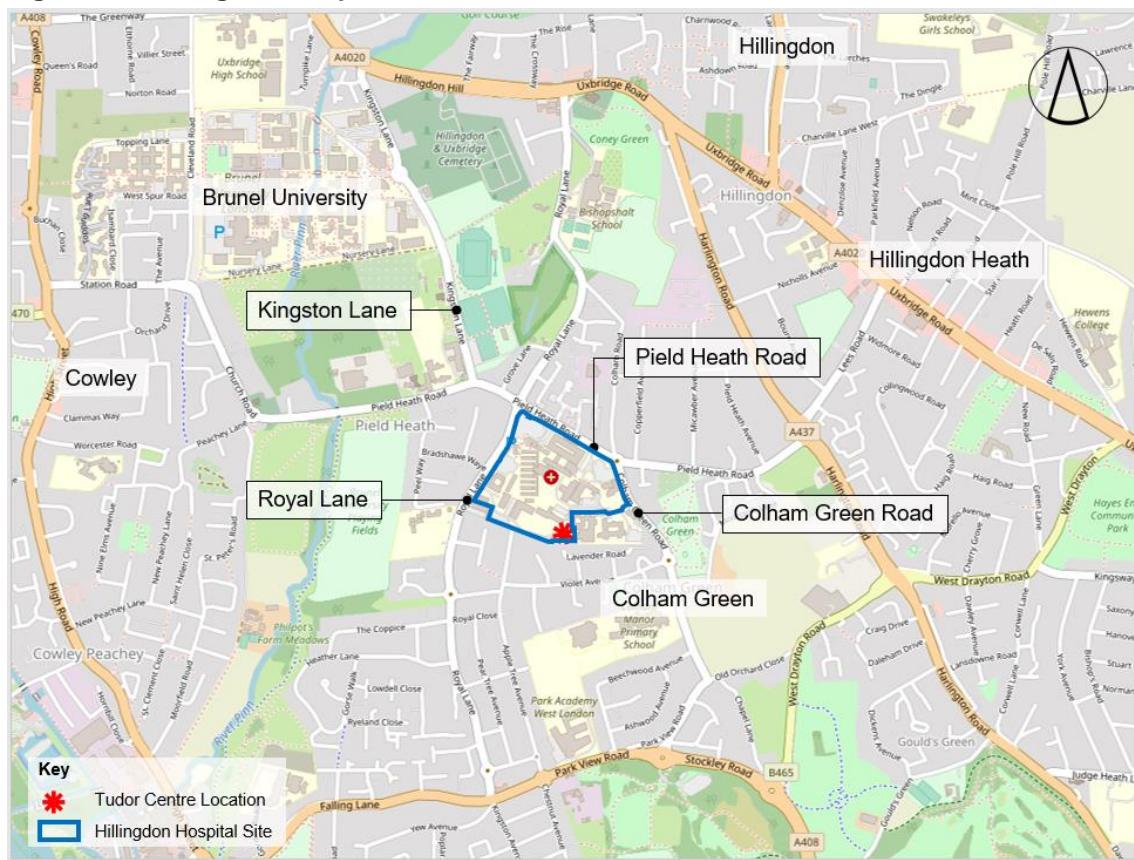
1.1.1 Mott MacDonald has been appointed by The Hillingdon Hospitals NHS Foundation Trust (The Trust) to provide transport planning consultancy services in relation to proposals for the Tudor Centre, which lies within the Hillingdon Hospital estate.

1.1.2 This scheme comprises the extension of the existing Tudor Centre, which is one of the key moves required to accommodate the education facilities for the wider hospital redevelopment.

1.1.3 This Transport Statement has been prepared to set out how the extension of the Tudor Centre will be accessed by all modes of transport, along with providing an overview of how access, pick-up/drop-off and parking will be maintained throughout the wider redevelopment and up to completion of the wider masterplan.

1.1.4 The site is located on the Hillingdon Hospital estate, which is within the London Borough of Hillingdon. The site location is shown in Figure 1.1.

**Figure 1.1: Hillingdon Hospital Site Location**



Source: Open Street Map

## 1.2 The Hillingdon Hospital Redevelopment

1.2.1 The current Hillingdon Hospital is a collection of buildings with parts of the estate built in the 1930s as emergency wartime accommodation. Some of the older wards have become unsafe and have recently been closed to protect patients and staff.

1.2.2 81% of the hospital buildings will require major repair or replacement soon. Works have been undertaken and more are planned to enable the hospital to continue providing services safely in the short term. However, many of the repairs would not be long term solutions.

1.2.3 Work is ongoing on the proposed redevelopment of the wider site, which will include:

- Phase 1a – New Hospital building with associated multi storey car park, surface car park and community mobility hub.
- Phase 1b – All interim elements that need to be put into place so the new hospital can be operational whilst the remaining hospital 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 residential development.

1.2.4 The Trust and their design team has been engaging with the LBH and TfL in relation to the proposed wider hospital redevelopment and a hybrid planning application for the wider redevelopment was approved by LBH in January 2023.

1.2.5 The Tudor Centre Extension is not included within the above Phasing of the wider hospital development but is part of the wider reconfiguration of the hospital.

### **1.3 Proposed Development**

1.3.1 This Transport Statement (TS) addresses the development of the proposed extension to the Tudor Centre.

1.3.2 This Transport statement supports the planning application for the rear extension of the Tudor Centre to accommodate the Education & Training facilities for Hillingdon Hospital. The proposal is to demolish the existing rear two-storey 'wing' to the Tudor Centre and construct a new two-storey facility to accommodate Education and Training facilities.

1.3.3 The parking facilities for the Tudor Centre have been factored into the wider Hillingdon Hospital Redevelopment proposals and were therefore allowed for within the documentation submitted for the wider hospital redevelopment that was approved by LBH in January 2023.

1.3.4 The new parking facilities for the Hillingdon Hospital will be provided in a Multi-Storey Car Park (MSCP) and it is therefore anticipated that the parking facilities for the Tudor Centre, will be decanted into the MSCP. However, some parking spaces at the front of the Tudor Centre will be retained for repurposing as disabled parking bays for those visiting the Tudor Centre.

### **1.4 Scoping**

1.4.1 A Transport Technical Note was submitted to LBH as part of pre-application discussions ('Initial Assessment of Transport Data Available for Tudor Centre', April 2023) and set out the transport elements of the proposed development in terms of access, parking, drop-off/pick-up, and servicing. The Scoping Note set out the structure of, and approach to, this Transport Statement.

### **1.5 Report Structure**

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

- Section 2 - Existing Conditions
- Section 3 – Proposed Development
- Section 4 – Trip Generation
- Section 5 – Summary and Recommendation

## 2 Existing Conditions

### 2.1 Site Location

2.1.1 The application site is located on the Hillingdon Hospital estate, which is within the London Borough of Hillingdon. The site is located approximately two miles south of Uxbridge and three miles north of West Drayton. The site location is shown in Figure 2.1

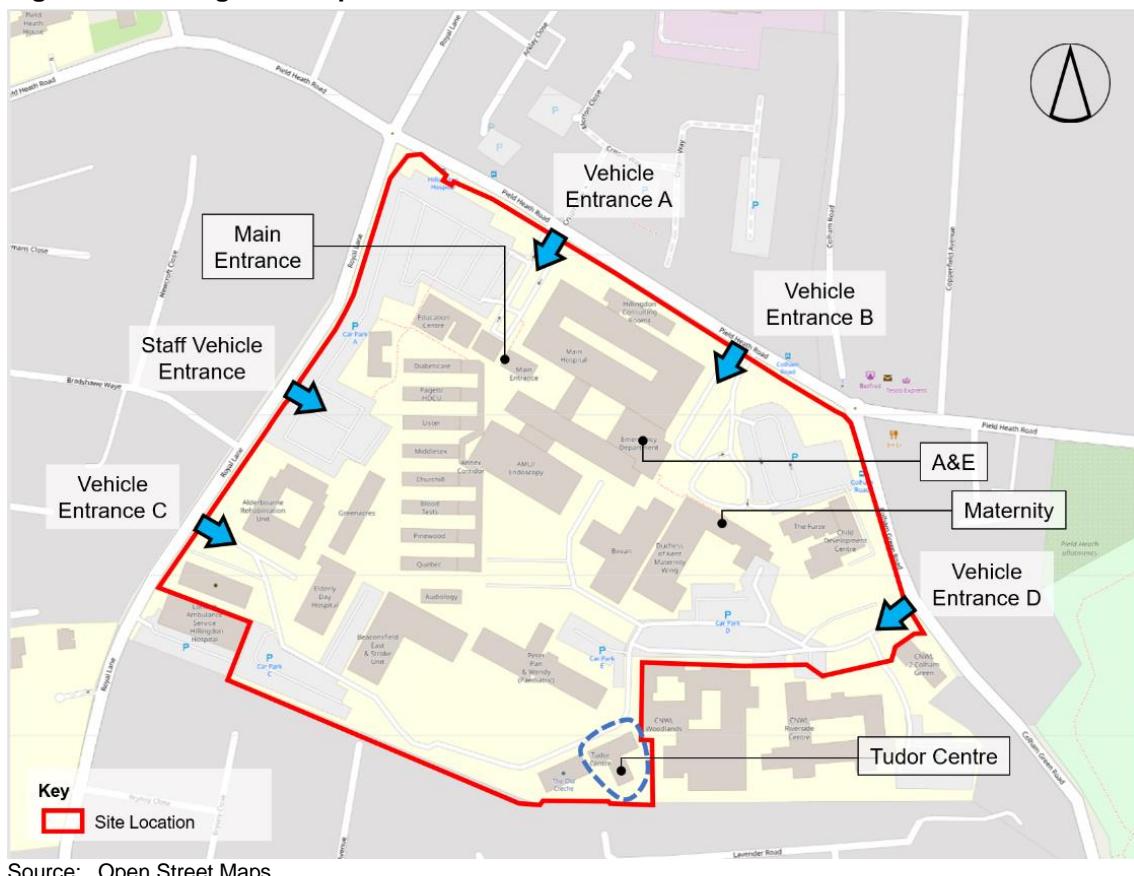
2.1.2 The area surrounding the site is residential, with nearby education facilities, convenience retail and other small businesses. The existing hospital site is accessed from five locations, shown in Figure 2.1. The five entrances are:

- Vehicle Entrance A – from Pield Heath Road (Main Entrance)
- Vehicle Entrance B – from Pield Heath Road (A&E and maternity entrance)
- Vehicle Entrance C - from Royal Lane (hospital only internal link through site to Colham Green Road);
- Vehicle Entrance D – from Colham Green Road (hospital only internal link through site to Royal Lane); and
- Staff Vehicle Entrance – from Colham Green Road (staff car park entrance)

2.1.3 The Tudor Centre is located at the south east of the hospital site and can be accessed from either Colham Green Road or Royal Lane (Vehicle Entrances C and D), shown in Figure 2.1. Both vehicle entrances are simple priority junctions. At each junction the internal hospital road is the minor arm and Royal Lane, and Colham Green Road are the major arms. Each access has footway provision linking with the site.

2.1.4 The Tudor Centre is currently used as an outpatient consultant service at ground floor level in the front section of the building with support administration functions at first floor level. The rear wing of the building is in sub-standard condition and is currently used minimally.

**Figure 2.1: Hillingdon Hospital Site Access**



Source: Open Street Maps

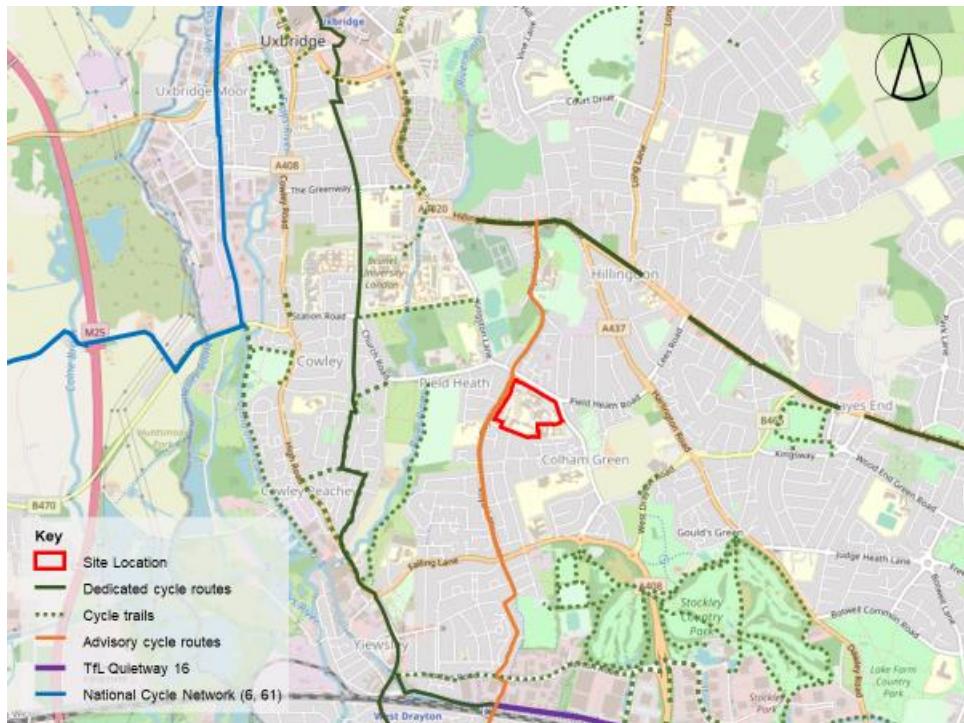
## 2.2 Walking and Cycling Accessibility

2.2.1 The hospital site is located in a predominantly residential area. The Tudor Centre can be accessed by foot/bicycle via the internal access roads between Royal Lane/Colham Green Road and the site. However, neither of these routes provide continuous pedestrian/cycling facilities and there is a lack of dropped kerbs and tactile paving.

2.2.2 Currently on the wider Hillingdon Hospital site there are 40 secure cycle parking spaces for staff, and an unsecured parking shed with 114 spaces for visitors. There is also a Santander Bike station by Entrance A. This Santander station is not part of the main Santander cycle hire scheme that is in central London; rather, this is a scheme that was introduced at Brunel University and has locations in Uxbridge Town Centre and Hillingdon Hospital.

2.2.3 There is an existing network of cycle routes in LBH. The local cycle network is shown in Figure 2.2, which details the current extent of the available cycling routes, including a TfL Quietway that exists in the local area. As shown, there is only one cycle route within the vicinity of the Tudor Centre and it is an advisory cycle route along Royal Lane.

**Figure 2.2: Existing Cycle Routes**



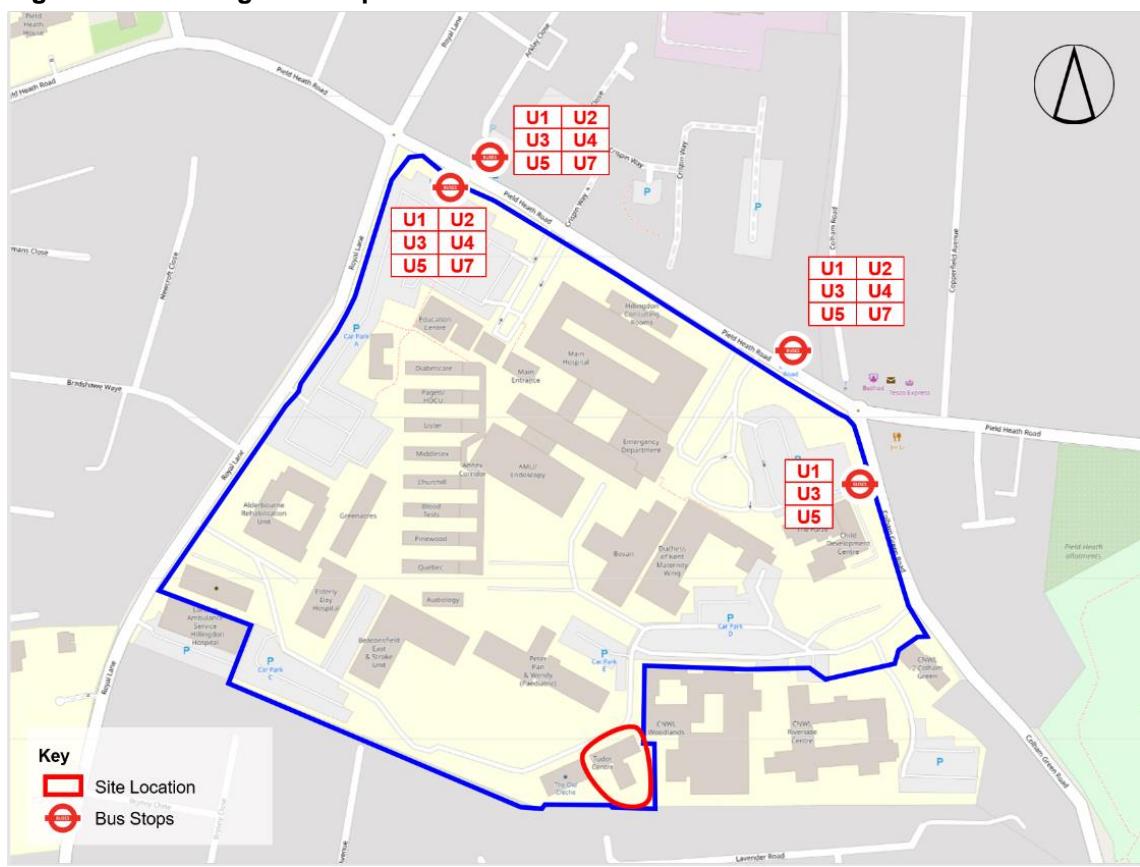
Source: Open Street Map

**2.2.4** Cycle provision is very limited in the area, with some advisory on-road provision along Royal Lane. A full review of local cycling provision and potential improvements was carried out as part of the associated wider redevelopment of Hillingdon Hospital and was reported in the Transport Assessment associated with the proposals that were approved by LBH in January 2023. It is understood that Section 106 contributions for improvements to provision were associated with, and agreed, as part of the wider hospital redevelopment.

## 2.3 Public Transport Accessibility

**2.3.1** The site is located in a largely residential area, which is well connected to the wider area through bus services, linking with onward underground and rail stations. On Pield Heath Road, two bus stops serve the hospital, two further stops are located to the north-east of the site on Pield Heath Road and Colham Green Road, as shown in Figure 2.3.

**Figure 2.3: Existing Bus Stops**



Source: Open Street Map

2.3.2 A summary of the bus services frequencies, as of September 2024, is shown in Table 2.1.

**Table 2.1: Bus Service Summary – Hourly Frequency**

Time	U1		U2		U3		U4		U5		U7	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
<b>First</b>	<b>0610</b>	<b>0513</b>	<b>0507</b>	<b>0535</b>	<b>0410</b>	<b>0451</b>	<b>0524</b>	<b>0542</b>	<b>0513</b>	<b>0539</b>	<b>0534</b>	<b>0538</b>
0400-0500	-	-	-	-	2	1	-	-	-	-	-	-
0500-0600	-	4	2	2	3	4	2	2	4	2	1	1
0600-0700	3	4	4	4	4	4	5	4	5-6	4	2	2
0700-0800	4	4	4	4	5-7	5-6	5-7	5-7	5-6	4	2	2
0800-0900	4	4	6	6	5-7	5-6	5-7	5-7	5-6	5-6	2	3
0900-1000	4	4	6	6	5-7	5-6	5-7	5-7	5-6	5-6	2	2
1000-1100	4	4	6	6	5-7	5-6	5-7	5-7	5-6	4-6	2	2
1100-1200	4	4	6	6	5-7	5-6	5-7	5-7	5-6	4-6	2	2
1200-1300	4	4	6	6	5-7	5-6	5-7	5-7	5-6	4-6	2	2
1300-1400	4	4	6	6	5-7	5-6	5-7	5-7	5-6	4-6	2	2
1400-1500	4	4	6	6	5-7	5-6	5-7	5-7	5-6	4-6	2	2
1500-1600	4	4	6	6	5-7	5-6	5-7	5-7	5-6	4-6	2	2
1600-1700	4	4	6	6	5-7	5-6	5-7	5-7	5-6	4-6	2	2
1700-1800	4	4	6	6	5-7	5-6	5-7	5-7	5-6	4-6	2	2
1800-1900	4	4	6	6	5-7	5-6	5-7	5-7	5-6	4-6	2	2
1900-2000	4	3	5	5	4	4	5	5	5-7	4-6	2	2
2000-2100	3	2	3	3	4	4	3	3	4	5	2	3
2100-2200	2	2	3	3	3	3	3	3	3	3	2	2
2200-2300	2	2	3	3	3	3	3	3	3	3	2	2
2300-0000	2	2	3	3	3	3	3	3	3	3	2	2
0000-0100	2	2	1	1	1	3	1	1	1	2	2	2
<b>Last</b>	<b>0135</b>	<b>0038</b>	<b>0008</b>	<b>0017</b>	<b>0350</b>	<b>0048</b>	<b>0009</b>	<b>0002</b>	<b>0015</b>	<b>0039</b>	<b>0105</b>	<b>0059</b>
Typical daytime frequency per hour	4	4	6	6	5-7	5-6	5-7	5-7	5-6	4-6	2	2
Typical daytime hourly services	53-63 hourly daytime services in both directions											
Total daily services	Approximately 915 daily services in both directions											

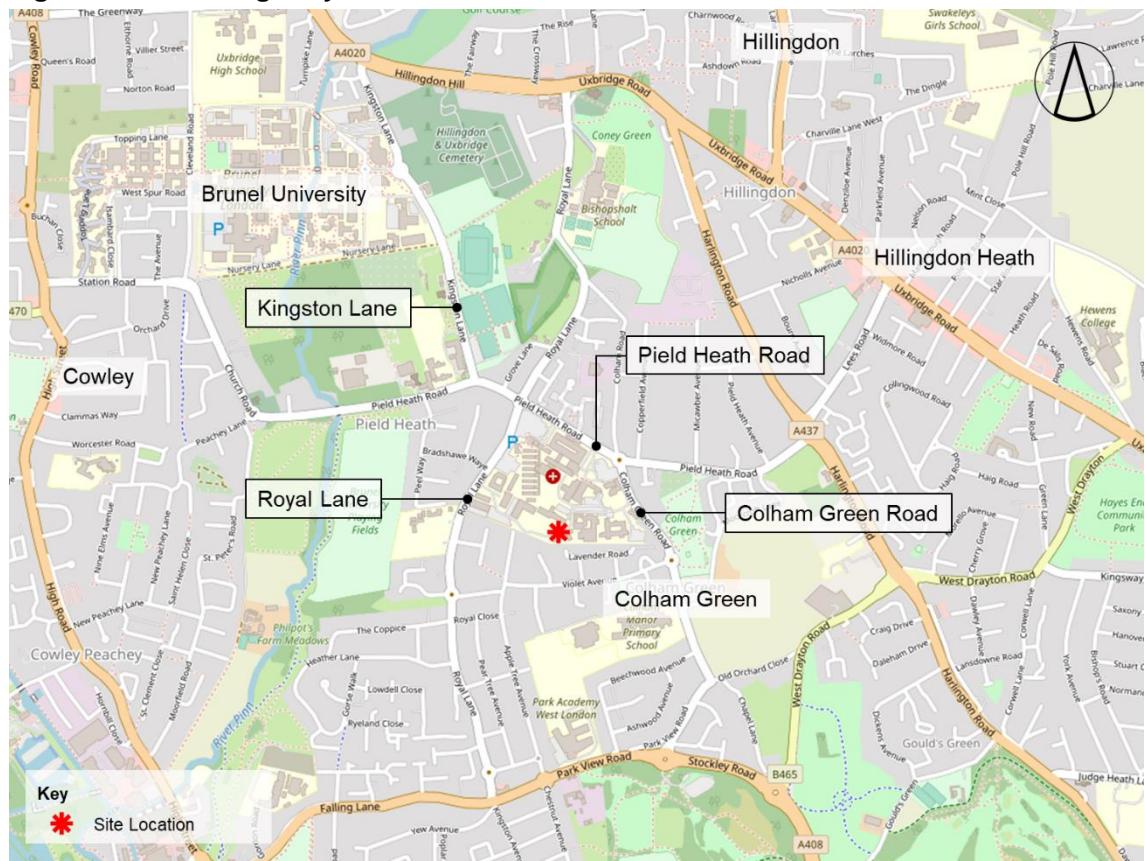
2.3.3 In peak periods, the six bus services jointly operate at a frequency of circa 60 buses per hour (both directions). This provides a high frequency convenient service which is easily accessible for the proposed nursery. A TfL bus spider map is provided in Appendix A.

2.3.4 As part of the wider redevelopment of Hillingdon Hospital, a new bus diversion route through the hospital site is proposed, with new and relocated bus stops for U1/U2 services, near the new hospital entrance as part of phase 2.

## 2.4 Local Highway Network

2.4.1 The local road network around the site is shown in Figure 2.4.

**Figure 2.4: Local Highway Network**



Source: Open Street Map

2.4.2 Royal Lane links Pield Heath Road (north) with Park View Road (south) via a predominantly residential area. The road is subject to a 20mph speed limit and has intermittent on-street parking along much of its length. There are also speed cushions in place along sections of the road to aid traffic calming. There are footways along both sides of the carriageway, however they are not continuous.

2.4.3 Colham Green Road links Pield Heath Road (north) with Park View Road (south). The road is subject to a 30mph speed limit and has intermittent on-street parking along some of its length. There is a footway along its western edge, and a footway along its eastern edge south of Violet Avenue. The footways link with internal footways at vehicle entrance D on the eastern site frontage.

2.4.4 The external footways provide a continuous network of routes to reach surrounding residential areas. There are existing crossing facilities at all key locations. As part of the future redevelopment of Hillingdon Hospital a range of improvements are proposed which will improve the pedestrian infrastructure. These are anticipated to include, amongst other elements:

- Priority east/west crossing on Royal Lane south of its junction with Pield Heath Road
- Priority north/south crossing Pield Heath Road west of its junction with Royal Lane
- Priority east/west crossing on Colham Green Road south of its junction with Pield Heath Road
- Footway widening on Pield Heath Road
- A new crossing on Royal Lane at Bradshawe Waye

- Improved pedestrian routes and public realm within the overall hospital site

2.4.5 The development of these proposals is ongoing in consultation with LBH and TfL.

## 2.5 Parking

2.5.1 There is no dedicated parking provision for the Tudor Centre, and its provision is included within that across the wider Hillingdon Hospital site. Staff and Patients using the existing Tudor Centre are understood to park in spaces on the internal hospital access road, in the spaces directly across from the centre, or in cars parks C1, C2 and C3 detailed in Figure 2.5 below.

**Figure 2.5: Current Parking Provisions**



Source: Northmores

## 2.6 Deliveries and Servicing

2.6.1 The existing Tudor Centre is serviced alongside the wider Hillingdon Hospital Site. There is no dedicated delivery and servicing access from the highway network. There is no direct access to the service yard from Pield Heath Road. The existing service yard and waste compound with the current access is shown in Figure 2.6.

**Figure 2.6: Existing Service Yard**



Source: Open Street Map

## 2.7 Existing Travel Demand and Usage

2.7.1 The existing travel demand for the Tudor Centre has been taken from the Clinical Travel Demand Model (CTDM) developed for the wider Hillingdon Hospital Site. The CTDM has been validated against baseline surveys at each of the access junctions, that measured the total amount of vehicles coming into and out of the site. The demand has been taken as a proportion from the total clinical and education service GFA on the existing Hillingdon Hospital site. The Tudor Centre equates to approximately 1.1% of the total GFA for that element of the site.

2.7.2 The current operation of the Tudor Centre shows car driver and car passenger are the highest utilised modes. With cyclists, rail users and HGVs recording 0 trips throughout a typical day. The majority of arrivals to the Tudor Centre arrive between 08:00-09:00 and depart at 16:00-17:00. The current demand generates approximately 66 car driver trips in total across the day.

2.7.3 The current parking demand of the Tudor Centre, has been analysed using data sourced from the CTDM. Table 2.2 below details the parking accumulation for the Tudor Centre, split between staff and patients. There is a total demand for 30 car parking spaces throughout the day, with a maximum accumulation of 3 within any hour.

**Table 2.2: Tudor Centre Existing Parking Demand**

	Staff		Patients		Total		Accumulation
	Arrival	Departures	Arrival	Departures	Arrival	Departures	
Total	3	4	27	27	30	30	
08:00-09:00	2	0	4	2	6	3	3
09:00-10:00	0	0	3	3	3	4	3
10:00-11:00	0	0	3	3	3	3	3
11:00-12:00	0	0	3	3	3	3	2
12:00-13:00	0	0	3	3	3	3	2
13:00-14:00	0	0	3	3	3	3	3
14:00-15:00	0	0	3	3	3	4	2
15:00-16:00	0	1	3	3	3	4	2
16:00-17:00	0	1	3	3	3	4	0

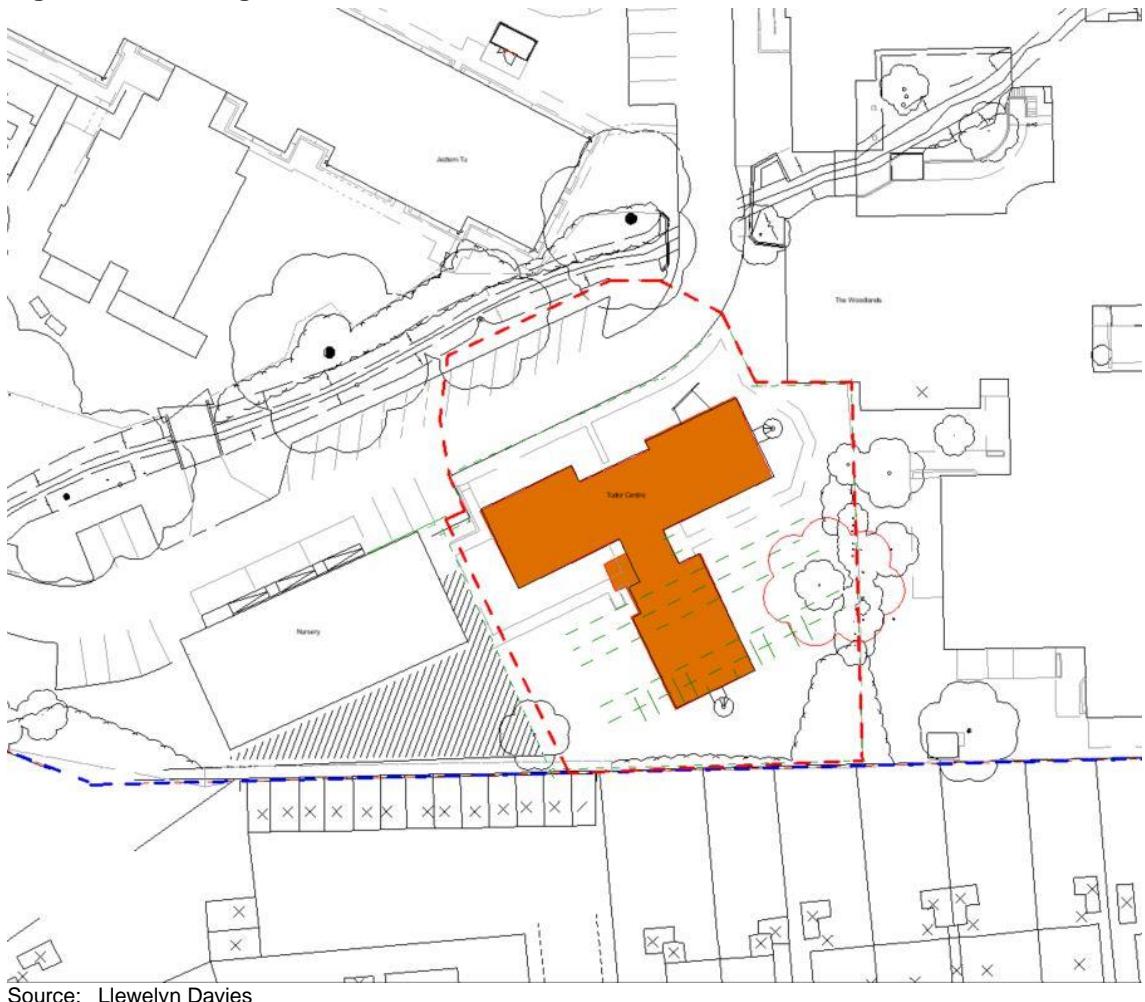
## 3 Proposed Development

### 3.1 Proposed Development

3.1.1 The proposed development at the Tudor Centre is for the creation and extension of a new hub for medical education and training services. This will be created via the demolition of the rear 'wing' of the existing Tudor Centre and the construction of a new two storey facility to accommodate the education and training facilities. The existing Gross Floor Area (GFA) for the rear 'wing' is 198m<sup>2</sup> (over two floors). The new GFA for the extension will be 594m<sup>2</sup> (over two floors). The Tudor Centre building GFA would therefore increase from 672m<sup>2</sup> to 1,068m<sup>2</sup>. This includes the retained existing front 'wing' of 474m<sup>2</sup>.

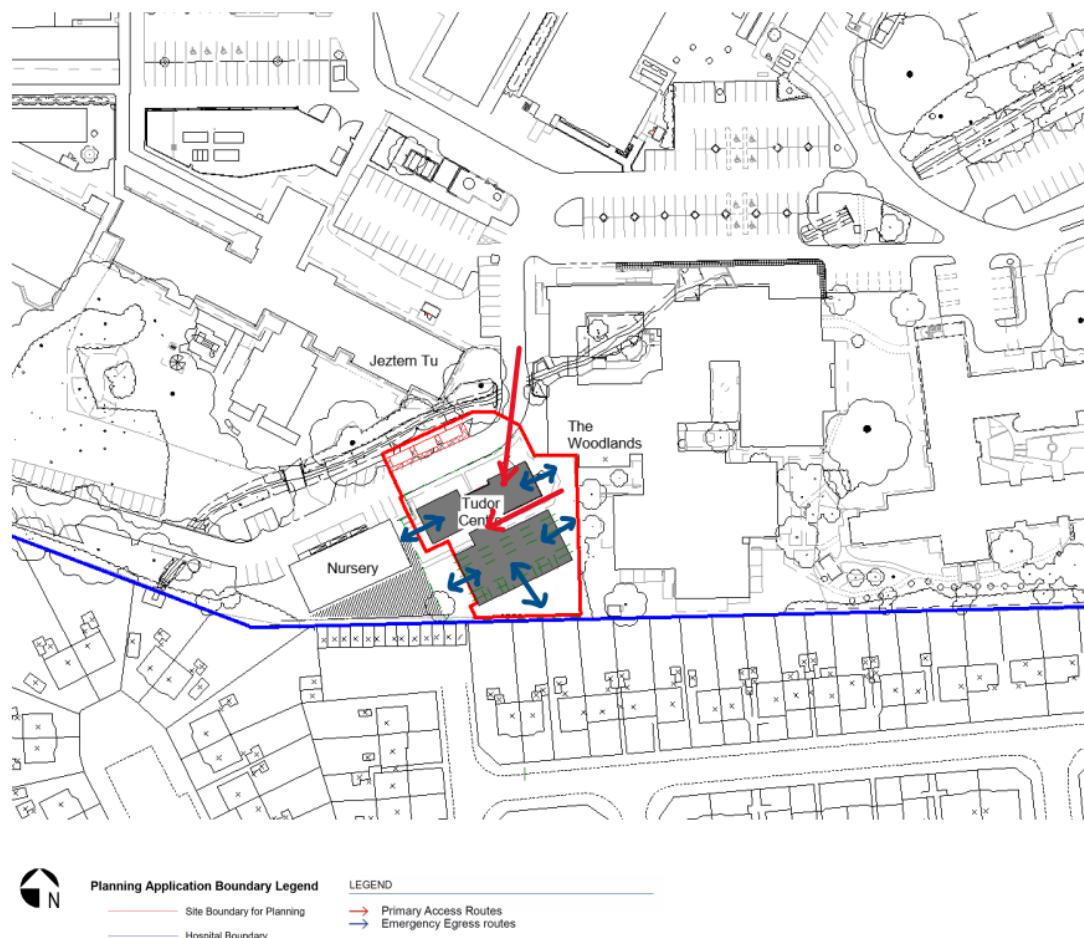
3.1.2 The location of the Tudor Centre in relation to adjacent existing hospital facilities is shown below in Figure 3.1.

**Figure 3.1: Existing Tudor Centre**



3.1.3 Figure 3.2 below details the proposed extension, in relation to the existing adjacent hospital facilities. The proposed access routes to the development are included.

**Figure 3.2: Proposed Tudor Centre**



Source: Llewelyn Davies

3.1.4 As noted above, the front section of the Tudor Centre is to be retained and will continue to be used for outpatient services and clinical administrations offices, until these are moved to the new Hillingdon Hospital Site. The clinical administration offices are to be relocated to the Furze and the outpatients are to move to the new hospital once construction of Phase 1c is complete.

3.1.5 The rear section of the building, the rear 'wing', which is set to be demolished and re-built will be used by Education and Training.

## 3.2 Cycle Parking

3.2.1 The demands for cycle parking for the new Tudor Centre have been assessed within the wider Hillingdon Hospital Transport Assessment that was approved by LBH in January 2023. As a result, the majority of the cycle provision will be included within the wider hospital transport provision. However, as part of the proposed Tudor Centre development, there will be five stainless steel Sheffield cycle stands provided near to the entrance, or access points, to facilitate trips by students coming from elsewhere in the hospital site.

### **3.3 Parking and Drop-Off**

3.3.1 The extension of the Tudor Centre doesn't require any additional parking or drop off facilities. These have all been included and allowed for within the provision being made for the wider Hillingdon Hospital redevelopment that was approved by LBH in January 2023.

#### **Interim Period (Assumed to be 2025-2030)**

3.3.2 To allow construction of the new hospital and Multi-storey car park, car park C3 will be removed, with car parks C1 and C2 also anticipated to be removed around a year later. However, during this period staff will be able to park in a temporary car park facility being provided by the Trust, leaving remaining spaces within the hospital site for patients. This temporary staff facility is planned to be at Moorcroft Lane but it is acknowledged this is still subject to confirmation and associated planning permission.

3.3.3 The existing parking provision in front of the Tudor Centre is expected to be retained temporarily during this interim period, but could be designated as disabled parking only, or potentially for disabled and patients only.

3.3.4 Staff and patients will be able to park in the multi-story car park once its construction has been completed, around three years into the overall hospital redevelopment programme. This will be located on the wider hospital site, on the site of the former C1 car park and has been sized to accommodate demand from the whole hospital, including the Tudor Centre.

#### **Fully Operational**

3.3.5 Once fully operational as an education and training facility, parking will continue to be provided as per the later element of the interim provision, with parking provided in the MSCP.

### **3.4 Disabled Access**

3.4.1 The proposals are intended to be fully accessible in line with BS 8300:2018. To facilitate disabled access, the following measures are generally recommended:

- Disabled bays should be the nearest bays to the main building entrance;
- Disabled bays should be easily identifiable with clear and consistent directional signage;
- The design should ensure there is enough space so that wheelchair users can access vehicles with space available to manoeuvre a wheelchair;
- Disabled bays should be well lit;
- Dropped kerbs should be provided within the car park and where access is to a pedestrian route;
- Wall mounted/upright signage should be used to identify disabled parking bays when ground is covered in leaves/snow;
- Slip-resistant pedestrian surfaces should be used where possible;
- Signage should allow for visually impaired users; and
- There should be clear demarcation of access routes.

3.4.2 The retained front façade of the Tudor Centre has step free, ramped access with handrails, which leads to the main entrance and will be retained. The entrance is a public entrance into the Outpatient accommodation at ground floor level.

3.4.3 The proposed rear 'wing' extension will have a second main entrance for the education and training facility and will also have a level access ramp.

3.4.4 Internally there is a stair / lift core that connects the ground and first floor levels. The lift will allow for wheelchair access to the first floor. This will be shared with the new rear wing, with floor levels in the new wing designed to link through to those in the retained front building and stair / lift core.

3.4.5 Disabled Parking is not currently provided as part of the existing Tudor Centre arrangements, with the parking provision opposite the main entrance, not currently dedicated with any disabled parking provision. The London Plan (2021) states that "*All non-residential elements should provide access to at least one on or off-street disabled persons parking bay*". The quantum of disabled parking provision proposed for the Hillingdon Hospital site has been considered and accounts for a minimum of 6% of total parking provision, as detailed within the Hillingdon Hospital Transport Assessment that was approved by LBH in January 2023. The existing provision at the Tudor Centre is expected to be retained and it is recommended that this be repurposed to provide suitable disabled parking bays, with the current bay provision decanted into the MSCP.

### 3.5 **Redevelopment Phasing Considerations**

3.5.1 To reflect the emerging hospital estate that will be experienced over the longer term, and up to completion of the whole hospital redevelopment, access (including drop-off and parking) has been considered at all of the key phases of the overall hospital redevelopment, as follows:

- Immediate future – taking account of access, drop-off and parking using the existing estate. This is expected to remain as at present and has been detailed in earlier sections of this report
- New Hospital Construction – taking account of the formation of a construction haul route for the new hospital along the front of the new building. Taking account of the closure of Royal Lane and other Hospital entrances.
- New Hospital Completion – taking account of the retained access from Colham Green Road, and ultimately Pield Heath Road.

### **New Hospital Construction**

3.5.2 Upon commencement of construction of the new hospital, vehicle entrance C will be stopped up in order to free up the western area of the hospital site for the footprint of the new hospital and a surrounding compound. During the construction of the new hospital there is the possibility that construction traffic will route via vehicle entrance D, using the internal service route to reach the construction site. It may eventually be decided that construction access is taken solely from the main entrance from Pield Heath Road. This has been considered in more detail in the Outline Construction Logistics Plan prepared in support of the wider hospital redevelopment planning application that was approved by LBH in January 2023. However construction logistics proposals will be developed further by the contractor appointed for the new hospital construction.

3.5.3 It is not expected that the existing parking provision at the front of The Tudor Centre will be affected by the new hospital construction.

3.5.4 Once the demolition phase of the new hospital has commenced, access to The Tudor Centre will be via Colham Green Road only, with no through route to Royal Lane and the wider hospital site. The ability for patient drop off will be retained and continuous and safe pedestrian routes will be provided linking the nearby spaces with the Tudor Centre.

3.5.5 Details of temporary arrangements for access, parking and servicing across the Hillingdon Hospital site, where known, have been captured in the Transport Assessment and associated

documents supporting the wider Hospital redevelopment planning application that was approved by LBH in January 2023.

### **New Hospital Completion**

- 3.5.6 As part of the new hospital proposals, the through route which runs from Colham Green Road to Royal Lane will not be available, and the existing Royal Lane entrance will be closed. The entrance to the Tudor Centre will be retained from Colham Green Road, and as the wider site is redeveloped, access will ultimately be available from Pield Heath Road.
- 3.5.7 It is suggested that the parking bays north of the Tudor Centre are repurposed to provide suitable disabled parking bays, with the main Tudor Centre car parking spaces decanted to the MSCP.

### **3.6 Proposed Development Summary**

- 3.6.1 The proposed development is for the rear extension of the existing Tudor Centre, for Education and Training purposes. The Tudor Centre is currently used as a hybrid of Outpatient support admin (first floor) and consultant purposed (ground floor). The outpatient services and clinical offices are to be retained until approximately 2025 and 2030 respectively as elements of the new hospital are been completed.
- 3.6.2 The extension of Tudor Centre will be used for educational and training facilities, with the rear 'wing' demolished and rebuilt, with the aim of being fully operational by late 2025. The facility is expected to continue at its current operational timings, between 08:00-17:00.
- 3.6.3 The parking for Tudor Centre will be decanted into the MSCP once completed, but it is suggested that the parking at the front of the Tudor Centre be repurposed as disabled parking bays.

## 4 Trip Generation

### 4.1 Preamble

4.1.1 The trip generation methodology was initially discussed in the Tudor Centre Extension Transport Technical Note (April 2023) prepared to support the pre application discussions for the extension of the Tudor Centre.

4.1.2 Trip generations are not known for the current Tudor Centre in isolation but data for the wider hospital site, which includes the Tudor Centre, was collected to inform the wider hospital redevelopment proposals. This information included both baseline data for the existing site and derived future data for two scenarios for the redeveloped site. These data sets have therefore been used to derive anticipated trip generations.

4.1.3 The methodology for the trip assessment uses the Clinical Travel Demand Model (CTDM) built for the wider Hillingdon Hospital redevelopment planning application that was approved by LBH in January 2023. This Tudor Centre assessment is split into three stages, to reflect the transition and interim periods. The methodology for each step is detailed below:

- Baseline Assessment
  - The existing Tudor Centre trips have been captured by the baseline CTDM assessment. The total GFA for the existing Tudor Centre (672sqm) has created a percentage against the existing footprint of the hospital site, and the total patients, staff and visitor trips have been calculated based on this percentage.
- Interim Period
  - The interim period is split into outpatient services (the retained front wing), trips for which are calculated using the same process as the baseline assessment, with the retained GFA (474sqm).
  - The Tudor Centre extension GFA (594 sqm) during this period, has its trips calculated using the staff mode share from the Baseline CTDM, with the students assumed to already be on the wider Hillingdon Hospital site. The assumed staff numbers are 32 FTE based on information provided by the Trust.
- Fully Operational Assessment
  - The Tudor Centre assessment for its full operation as an Education and Training facility only. The 32 FTE staff will not have changed. The mode share for this scenario will be taken from the Scenario 2 CTDM staff mode share, taking into account proposed modal shift.

### 4.2 Trip Generation Assessment

#### Baseline Assessment

4.2.1 The Tudor Centre currently has a GFA of 672sqm which, using the wider existing hospital trip data, is expected to be generating around 76 arrivals and 76 departures (**152 trips in total**) during the period it is open, from 08:00 to 17:00, all of which would be outpatient and admin related. Using the wider hospital modal split it is expected these will include around 33 car driver arrival and departure trips (**66 car driver trips in total**). This is shown in Table 4.1 and Table 4.2 below.

**Table 4.1: Tudor Centre Current Arrival Demand**

	Total	Walk	Cycle	Car Driver	Car Passenger	Bus	Taxi	Ambulance (Emergency)	Ambulance (PTS)	LGV	HGV	Rail Users
<b>Total</b>	<b>75</b>	<b>8</b>	<b>0</b>	<b>33</b>	<b>17</b>	<b>12</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>
08:00-09:00	16	2	0	7	4	3	0	0	0	0	0	0
09:00-10:00	8	1	0	4	2	1	0	0	0	0	0	0
10:00-11:00	7	1	0	3	2	1	0	0	0	0	0	0
11:00-12:00	7	1	0	3	2	1	0	0	0	0	0	0
12:00-13:00	7	1	0	3	2	1	0	0	0	0	0	0
13:00-14:00	8	1	0	4	2	1	0	0	0	0	0	0
14:00-15:00	8	1	0	4	2	1	0	0	0	0	0	0
15:00-16:00	7	1	0	3	1	1	0	0	0	0	0	0
16:00-17:00	6	1	0	3	1	1	0	0	0	0	0	0

**Table 4.2: Tudor Centre Current Departure Demand**

	Total	Walk	Cycle	Car Driver	Car Passenger	Bus	Taxi	Ambulance (Emergency)	Ambulance (PTS)	LGV	HGV	Rail Users
<b>Total</b>	<b>76</b>	<b>8</b>	<b>0</b>	<b>33</b>	<b>18</b>	<b>13</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>
08:00-09:00	7	1	0	3	2	1	0	0	0	0	0	0
09:00-10:00	10	1	0	4	2	2	0	0	0	0	0	0
10:00-11:00	8	1	0	3	2	1	0	0	0	0	0	0
11:00-12:00	7	1	0	3	2	1	0	0	0	0	0	0
12:00-13:00	8	1	0	3	2	1	0	0	0	0	0	0
13:00-14:00	7	1	0	3	2	1	0	0	0	0	0	0
14:00-15:00	9	1	0	4	2	1	0	0	0	0	0	0
15:00-16:00	9	1	0	4	2	2	0	0	0	0	0	0
16:00-17:00	11	1	0	5	3	2	0	0	0	0	0	0

## Interim Period

4.2.2 Following the opening of the rear extension there will be an interim period where the full educational and training facilities have relocated from the existing site on the north-west of Hillingdon Hospital site. Both the outpatients and clinical admin services, and the extended education and training facilities will be in operation at the Tudor Centre throughout this period.

4.2.3 The retained 474sqm (front 'wing') of the Tudor Centre will continue to be used for outpatients and clinical admin services. Based on the wider hospital data, it has been calculated that this would generate around **106 total trips (53 arrivals and departures)** between 08:00 and 17:00. The arrivals and departures are shown in Table 4.3 and Table 4.4 respectively.

**Table 4.3: Clinical and Admin Services Trip Generation Arrivals (Interim)**

	Total	Walk	Cycle	Car Driver	Car Passenger	Bus	Taxi	Ambulance (Emergency)	Ambulance (PTS)	LGV	HGV	Rail Users
<b>Total</b>	<b>53</b>	<b>5</b>	<b>0</b>	<b>23</b>	<b>12</b>	<b>9</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>
08:00-09:00	11	1	0	5	3	2	0	0	0	0	0	0
09:00-10:00	6	1	0	3	1	1	0	0	0	0	0	0
10:00-11:00	5	1	0	2	1	1	0	0	0	0	0	0
11:00-12:00	5	0	0	2	1	1	0	0	0	0	0	0
12:00-13:00	5	0	0	2	1	1	0	0	0	0	0	0
13:00-14:00	5	1	0	2	1	1	0	0	0	0	0	0
14:00-15:00	5	1	0	3	1	1	0	0	0	0	0	0
15:00-16:00	5	1	0	2	1	1	0	0	0	0	0	0
16:00-17:00	5	0	0	2	1	1	0	0	0	0	0	0

**Table 4.4: Clinical and Admin Services Trip Generation Departures (Interim)**

	Total	Walk	Cycle	Car Driver	Car Passenger	Bus	Taxi	Ambulance (Emergency)	Ambulance (PTS)	LGV	HGV	Rail Users
<b>Total</b>	<b>54</b>	<b>6</b>	<b>0</b>	<b>23</b>	<b>13</b>	<b>9</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>
08:00-09:00	5	1	0	2	1	1	0	0	0	0	0	0
09:00-10:00	7	1	0	3	2	1	0	0	0	0	0	0
10:00-11:00	6	1	0	2	1	1	0	0	0	0	0	0
11:00-12:00	5	1	0	2	1	1	0	0	0	0	0	0
12:00-13:00	5	1	0	2	1	1	0	0	0	0	0	0
13:00-14:00	5	1	0	2	1	1	0	0	0	0	0	0
14:00-15:00	6	1	0	3	1	1	0	0	0	0	0	0
15:00-16:00	7	1	0	3	1	1	0	0	0	0	0	0
16:00-17:00	8	1	0	3	2	1	0	0	0	0	0	0

4.2.4 On completion of the rear 'wing' extension, the education and training facility will be fully operational, and is expected to have 32 full time staff (equivalent). It is assumed these staff will arrive and depart at the start and end of operating hours, consistent with the wider hospital admin staff. The breakdown of these trips is summarised in Table 4.5. The interim Education and Training Facility is expected to produce around **23 Car Driver trips**, for both arrival and departures, totalling **46 car driver total trips**.

**Table 4.5: Education and Training Facility Staff Trip Generation Arrivals and Departures (Interim)**

	Arrivals	Departures	
<b>Walk</b>	5	15%	5
<b>Cycle</b>	1	3%	1
<b>Car Driver</b>	12	37%	11
<b>Car Passenger</b>	8	25%	9
<b>Bus</b>	6	19%	6
<b>Taxi</b>	0	1%	0
<b>Ambulance (Emergency)</b>	0	0%	0
<b>Ambulance (PTS)</b>	0	0%	0
<b>LGV</b>	0	0%	0
<b>HGV</b>	0	0%	0
<b>Rail Users</b>	0	0%	0

4.2.5 It should be noted that in addition to the above, an average of 55 nursing students will be at the Tudor Centre at any given time and a further 70 to 80 medical undergraduate students on placement at the hospital will also have access to the facility, albeit this will only be for inductions / group teaching sessions and to access undergrad staff. However, these students will already be based at the hospital and are expected to access the facility for education and training purposes at various times during the day, away from their usual role and location within the hospital. It is therefore expected that they will access the Tudor Centre on foot, having parked elsewhere as per their usual work routine, and will not generate additional car-based trips to the Tudor Centre, or the hospital as a whole.

### Fully Operational

4.2.6 Eventually it is anticipated that the Tudor Centre would be used as for Education and Training purposes only. Staffing would remain at 32 full time equivalent staff. The mode shares for this scenario are taken from the Scenario 2 CTDM, which encapsulates The Trusts mode share targets.

4.2.7 Nursing student numbers are expected to remain unchanged at an average of 55 at the Tudor Centre at any given time and once again 70 to 80 medical undergraduate students on placement at the hospital will also have access to the facility. However, it should again be noted that these students will already be based at the hospital and are expected to access the facility for education and training purposes at various times during the day, away from their usual role and location within the hospital. It is therefore once again expected that they will access the Tudor Centre on foot, having parked elsewhere as per their usual work routine, and will not generate additional car-based trips to the Tudor Centre itself, or the hospital as a whole.

4.2.8 The final proposed trip generation for the Tudor Centre, upon completion of the wider hospital development, is shown in Table 4.6.

**Table 4.6: Education and Training Facility Staff Trip Generation**

	Arrivals		Departures	
Walk	5	17%	5	17%
Cycle	2	5%	2	5%
Car Driver	10	32%	10	32%
Car Passenger	8	25%	8	25%
Bus	7	21%	7	21%
Taxi	0	0%	0	0%
Ambulance (Emergency)	0	0%	0	0%
Ambulance (PTS)	0	0%	0	0%
LGV	0	0%	0	0%
HGV	0	0%	0	0%
Rail Users	0	0%	0	0%

### 4.3 Trip Generation Summary

4.3.1 Section 4.2 above details the different stages of the Tudor Centre extension, to capture the baseline, interim and completed stages of the project's development. Table 4.7 below summarises the proposed trip generation for the Tudor Centre during each stage of the development.

**Table 4.7: Trip Generation Summary**

	Baseline		Interim Period		Fully Operational	
	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
Walk	8	8	10	10	5	5
Cycle	0	0	1	1	2	2
Car Driver	33	33	35	35	10	10
Car Passenger	17	18	20	21	8	8
Bus	12	13	15	15	7	7
Taxi	2	2	1	1	0	0
Ambulance (Emergency)	1	1	0	0	0	0
Ambulance (PTS)	1	1	0	0	0	0
LGV	1	1	1	1	0	0
HGV	0	0	0	0	0	0
Rail Users	0	0	0	0	0	0
<b>Total</b>	<b>75</b>	<b>76</b>	<b>85</b>	<b>86</b>	<b>32</b>	<b>32</b>

4.3.2 As detailed above, the resulting extended Tudor Centre, once fully operational, has a reduction of 23 car trips to the site, compared to the baseline scenario. There is a slight increase in car driver trips (two trips for arrivals and departures) for the interim period, where the Clinical Admin and Outpatients services are operating alongside the 32 staff working for the reduced scale Education and Training services.

## 5 Summary and Recommendation

### 5.1 Summary

5.1.1 Mott MacDonald has prepared this Transport Statement to consider relevant highways and transport issues associated with the extension of the Tudor Centre within the Hillingdon Hospital site.

5.1.2 The proposed development comprises the extension of the current Tudor Centre, which is located on the eastern side of the wider Hillingdon Hospital site. The rear 'wing' of the building is set to be demolished and rebuilt, increasing the total floor plan. The proposed site will house the Hillingdon Hospital education and training facilities.

5.1.3 This Transport Statement has been prepared to set out how the extension of the Tudor Centre will be accessed by all modes of transport and to provide an overview of how access, pick up/drop off and parking will be maintained throughout the wider redevelopment and up to completion of the wider masterplan.

5.1.4 Although the extension of the Tudor Centre is not expected to result in an uplift in the number of trips made to the site, and therefore no increase in vehicle trips, an analysis of the trip generation for each stage of the development has been undertaken utilising the Clinical Travel Demand Model for Hillingdon Hospital.

5.1.5 The trip assessment shows that upon completion, and in its final use form, the Tudor Centre will have a reduction of 23 car driver trips, from the existing baseline. The trips for the interim period are slightly higher than for the existing situation due to two services being operational from the Tudor Centre simultaneously, whilst the wider hospital site is redeveloped.. During this interim period, the car driver trip increase equates to two arrivals and two departures, for a typical day but these are already accounted for within the wider hospital proposals that were approved by LBH in January 2023. It is expected that the Tudor Centre continues with its current operational hours between 08:00-17:00.

5.1.6 The site will retain its access from Colham Green Road for the duration. The access from Royal Lane will be removed in line with the ongoing wider Hospital redevelopment. Ultimately, it is envisaged that access could also be achieved from Pield Heath Road.

5.1.7 The parking in front of the current Tudor Centre is currently assumed to remain in use. However, it is recommended that these bays be repurposed into disabled parking bays once the wider hospital parking provision has been decanted into the MSCP that forms part of the wider hospital redevelopment.

5.1.8 Five Sheffield stands will be provided for cycle parking directly outside the new facility, equating to capacity for ten cycles. The Sheffield stands are intended for use for internal hospital cycle trips.

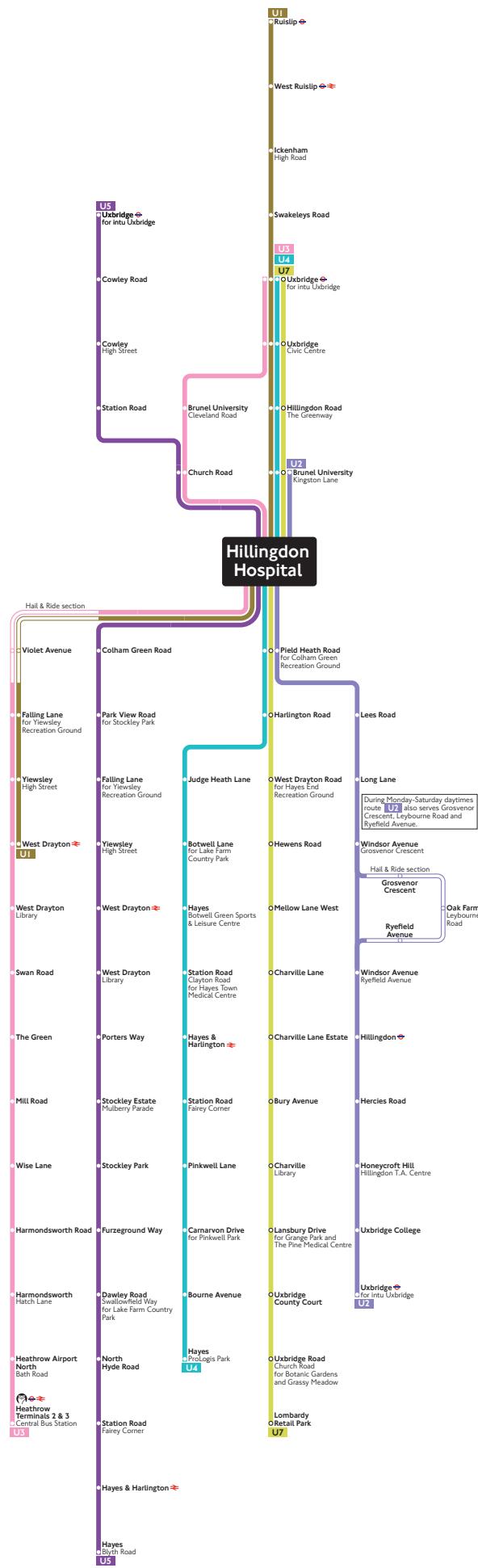
### 5.2 Recommendation

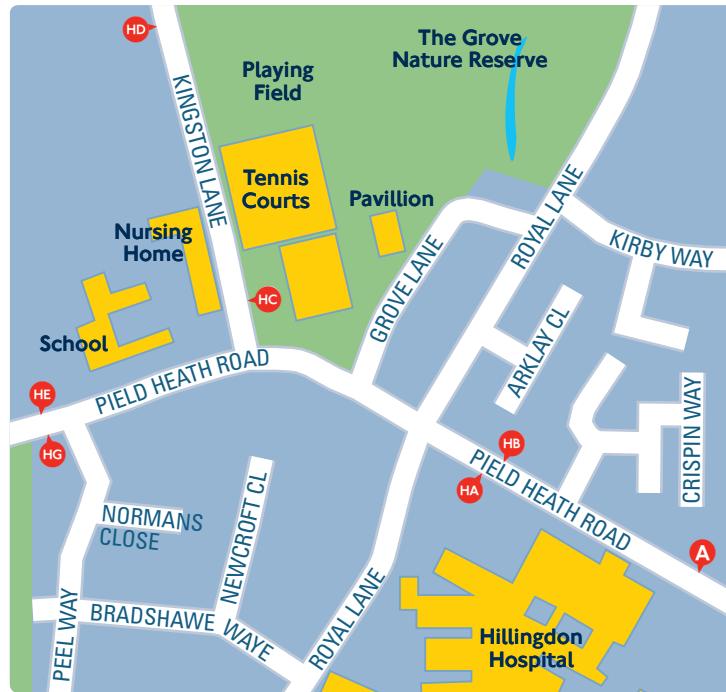
5.2.1 Based on the information presented in this report, it is considered that the proposed development will not result in any additional impact on the local highway network when compared against the existing site operations, or significant uplift in trip generation.

5.2.1.1 The proposed development will not have a significant adverse impact on the operation or safety of the surrounding highway network and therefore, in accordance with the NPPF, there should be no reason the application cannot be recommended in terms of highways and transportation.

## A. TfL Bus Spider Map

## Buses from Hillingdon Hospital





## Destination finder

Destination	Bus routes	Bus stops	Destination	Bus routes	Bus stops
<b>B</b>			<b>M</b>		
Botwell Lane for Lake Farm Country Park	U4	A, HB, HC	Mellow Lane West	U7	A, HB, HC
Bourne Avenue	U4	A, HB, HC	Mill Road	U3	A, HB, HE
Brunel University Cleveland Road	U3	HA, HB, HC	North Hyde Road	U5	A, HB, HE
Brunel University Kingston Lane	U1, U2, U4	HA, HB, HC	<b>O</b>		
Bury Avenue	U7	A, HB, HC	Oak Farm Leybourne Road	U2	A, HB, HC
<b>C</b>			<b>P</b>		
Carnarvon Drive for Pinkwell Drive	U4	A, HB, HC	Park View Road for Stockley Park	U5	A, HB, HE
Charville Lane	U7	A, HB, HC	Pield Heath Road for Colham Green Recreation Ground	U2, U4, U7	A, HB, HC
Charville Lane Estate	U7	A, HB, HC	Pinkwell Lane	U4	A, HB, HC
Charville Library	U7	A, HB, HC	Porters Way	U5	A, HB, HE
Church Road	U3, U5	HA, HB	<b>R</b>		
Colham Green Road	U5	A, HB, HE	Ruislip	U1	HA, HE
Cowley High Street	U5	HA, HS	Ryefield Avenue	U2	A, HB, HC
Cowley Road	U5	HA, HS	<b>S</b>		
<b>D</b>			Station Road	U5	HA, HE
Dawley Road Swallowfield Way for Lake Farm Country Park	U5	A, HB, HE	Station Road Clayton Lane for Hayes Town Medical Centre	U4	A, HB, HC
<b>F</b>			Station Road Fairey Corner	U4	A, HB, HC
Falling Lane for Yiewsley Recreation Ground	U1, U3, U5	A, HB, HC	<b>T</b>		
Furzeground Way	U5	A, HB, HE	The Green	U3	A, HB, HE
<b>G</b>			<b>U</b>		
Grosvenor Crescent	U2	A, HB, HC	Uxbridge for intu Uxbridge	U1, U4, U7	HA, HE
<b>H</b>			U2		A, HB, HC
Harmondsworth Hatch Lane	U3	A, HB, HE	U3, U5		HA, HE
Harmondsworth Road	U3	A, HB, HE	<b>Uxbridge Civic Centre</b>	U1, U4, U7	HA, HE
Harlington Road	U4, U7	A, HB, HC	Uxbridge College	U2	A, HB, HC
Hayes Blyth Road	U5	A, HB, HE	Uxbridge Court	U7	A, HB, HC
Hayes Botwell Green Sports & Leisure Centre	U4	A, HB, HC	Uxbridge Road Church Road for Botanic Gardens and Grassy Meadow	U7	A, HB, HC
Hayes ProLogis Park	U4	A, HB, HC	<b>V</b>		
Hayes & Harlington	U4	A, HB, HC	Violet Avenue	U1	A, HB, HC
U5		A, HB, HE	U3		A, HB, HE
Heathrow Airport North Bath Road	U3	A, HB, HE	<b>W</b>		
Heathrow Terminals 2 & 3	U3	A, HB, HE	West Drayton	U1	A, HB, HC
Bath Road			West Drayton	U3, U5	A, HB, HE
Central Bus Station			West Drayton Road for Hayes End Recreation Ground	U5	A, HB, HE
Hercies Road	U2	A, HB, HC	West Ruislip	U1	HA, HE
Hewens Road	U7	A, HB, HC	Windsor Avenue	U2	A, HB, HC
Hillingdon	U2	A, HB, HC	Windsor Avenue Grosvenor Crescent	U2	A, HB, HC
Hillingdon Road The Greenway	U1, U4, U7	HA, HE	Windsor Avenue Ryefield Avenue	U2	A, HB, HC
Honeycroft Hill	U2	A, HB, HC	Wise Lane	U3	A, HB, HC
Hillingdon T.A. Centre			<b>Y</b>		
<b>I</b>			Yiewsley High Street	U1	A, HB, HC
Ickenham High Road	U1	HA, HE	U3, U5		A, HB, HE
<b>J</b>					
Judge Heath Lane	U4	A, HB, HC			
<b>L</b>					
Lansbury Drive for Grange Park and The Pine Medical Centre	U7	A, HB, HC			
Lees Road	U2	A, HB, HC			
Lombardy Retail Park	U7	A, HB, HC			
Long Lane	U2	A, HB, HC			

## Ways to pay

	Use your contactless debit or credit card. It's the same fare as Oyster and there is no need to top up.
	Top up your Oyster pay as you go credit or buy Travelcards and bus & tram passes at around 4,000 shops across London.
	Sign up for an online account to top up online and see your travel history and spending.

## Key

	Connections with London Underground
	Connections with National Rail
	Tube station with 24-hour service Friday and Saturday nights
	Mondays to Saturdays daytime only

