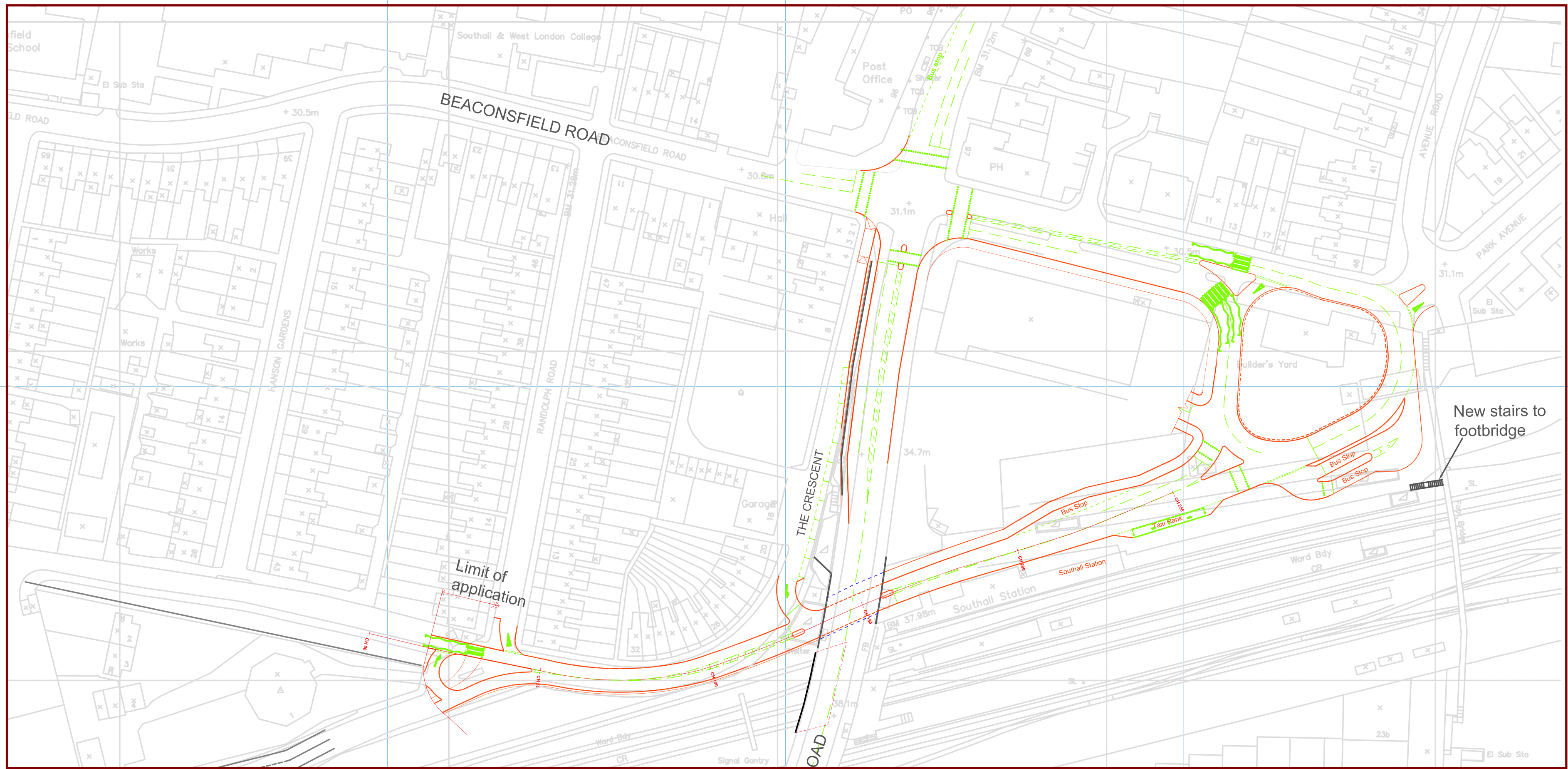
5 Access and streets

5:1. Access to the site



The proposed access from the east: This will create a link from Park Avenue via a new transport interchange next to the station. It will then pass under the South Road Bridge and south of the Watertower.

The vehicle access to the site is currently confined to a number of minor access points from Beaconsfield Road, the link from The Crescent to The Straight and the access under the railway from Brent Road. None of these access points are appropriate in their current form to serve the scale of the proposed development. The creation of new access points to the site has therefore been an important part of the masterplanning process. The aim has been to create a series of accesses that can meet the traffic and public transport needs of the site while creating an appropriate arrival experience. The design and capacity of the new access routes are described in the Capita Symonds Transport Assessment. In this section we describe the urban design implications of these access points.

Road access

The primary access points to the site need to accommodate traffic, public transport (including potentially trams), pedestrians and cyclists. In urban design terms the access points must also integrate the site with the rest of Southall. The main access points are:

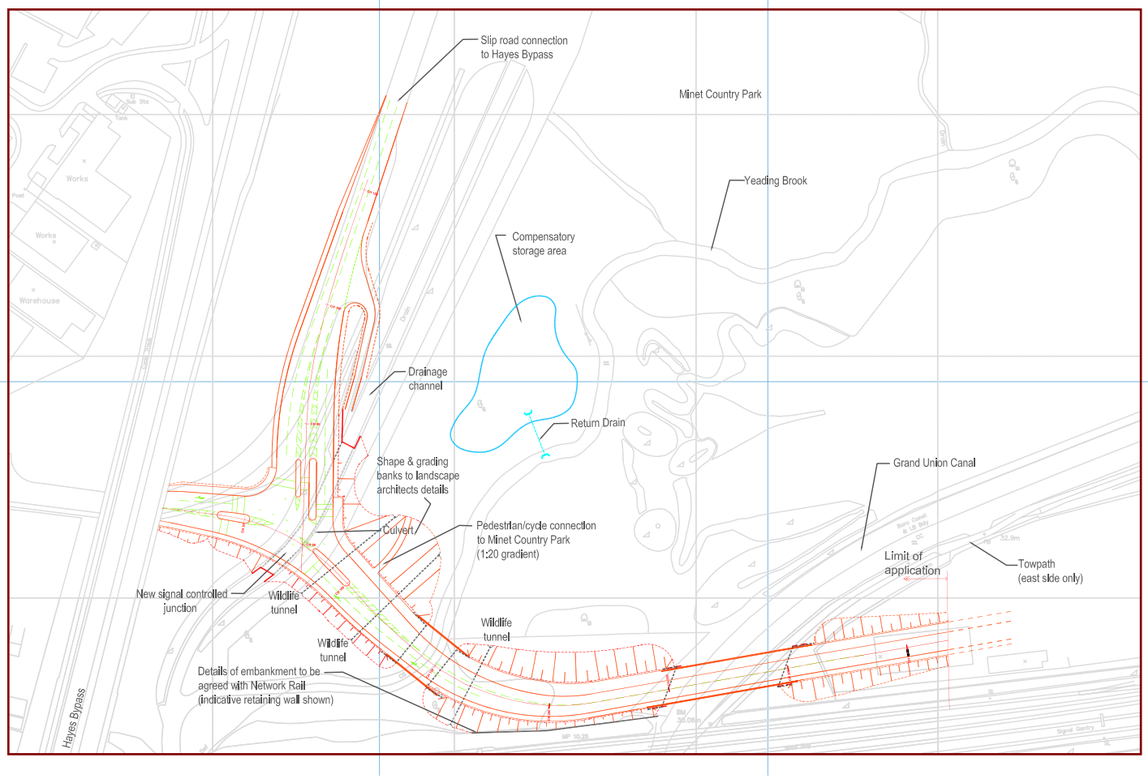
Pump Lane Link Road: This already has the benefit of outline planning consent and provides access to both the Hayes Bypass and Pump Lane (which leads to Hayes Station) from the south west extremity of the site. It will require bridges over the canal and the Yeading Brook and can provide both vehicle access to the site and pedestrian and cycle access to the Minet Country Park. The access is designed as an elevated road through a green setting that arrives at the dramatic western gateway to the site. Here it curves behind the towers fronting the canal to the western gateway public space.

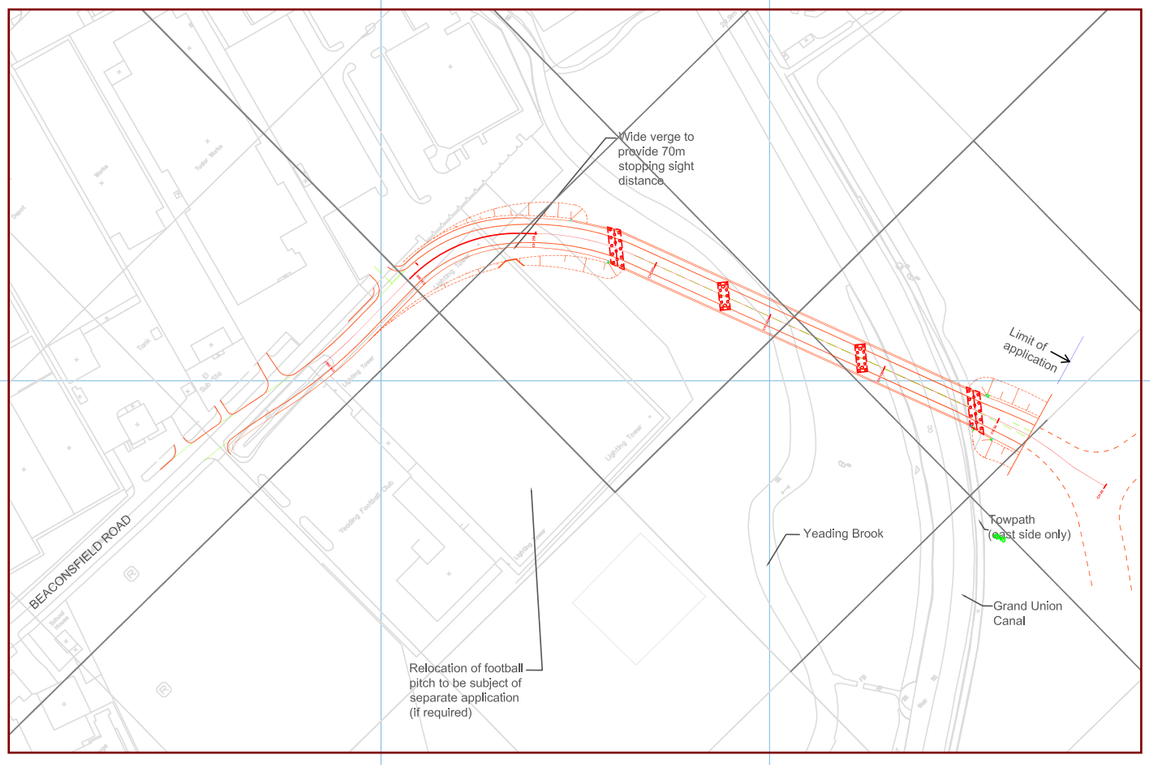
Springfield Road Link Road: This access links to the Uxbridge Road via Springfield Road and Beaconsfield Road West. It also requires bridging the canal and the Yeading Brook as well as a minor relocation of the Yeading Football ground (approximately 10m southwards). This access is brought in at an angle across the site to feed directly into the Etoile and thereby link to the main boulevard. The arrival experience is similar to Pump Lane Link Road in that the elevated road travels through the greenery of the valley to arrive in the dramatic urban space of the Etoile.

Eastern Access: The main access from the centre of Southall has been

explored in some detail. The possibility of a new skewed bridge over the railway has been investigated, however the width of the railway meant that the bridge would have to be very large, difficult to implement and prohibitively expensive, particularly given concerns expressed by Network Rail. Instead, a route passing next to The Crescent, under South Road to join Park Avenue and feed into the traffic light junction with South Road has been adopted. This has the advantage of linking the site directly to a potential interchange with the station. It also allows good pedestrian links into Southall via The Crescent. The arrival experience from Southall would be a series of dramatic views as traffic emerges from under South Road. The vista is firstly of the Water Tower which traffic passes on the left to swing around into the eastern gateway - a dramatic space enclosed by three towers. This sequential unfolding of views to the point where traffic joins the Boulevard has been modeled and creates a fitting entrance to the site.

Each of these entry points is designed to feed into the primary street network described in the following section.





Above: The Springfield Road access: This links from the end of Beaconsfield Road West to the Etoile. Yeading Football Club intend to relocate the pitch 20m to the south which would facilitate the Link Road. The Road across the valley will be partly on embankment and partly on stilts where it crosses the Yeading Brook and the Canal.

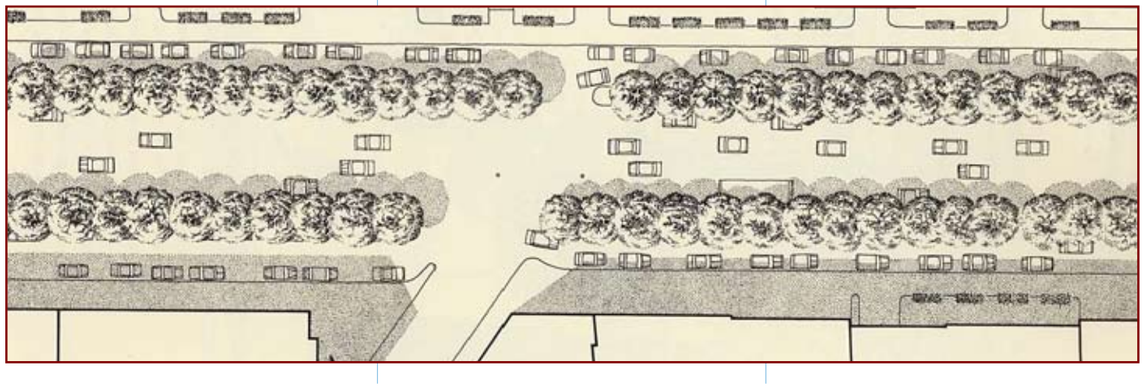
Left: The Pump Lane access: This will form a continuation of Pump Lane with a traffic-light controlled junction linking to the Hayes Bypass. The road crosses the Yeading Brook Corridor on an embankment with bridges over the Yeading Brook and the Canal in order to minimise its environmental impact.

5:2. Primary routes

Right: The primary street network.

Below: Boulevards in Barcelona (top) and Bilbao (below).

Below right and bottom: Boulevard Saint Michel in Paris analysed by Allen Jacobs in his book Great Streets. The plan has been used as a model for the northern boulevard in Southall.



The three access points naturally lead to a 'Y' shaped circulation pattern. This is set out on the plan (Above left) and creates the primary circulation routes of the site. Aside from the open space, these are the most important elements of the public realm since they take all of the through traffic as well as being the social and commercial heart of the scheme. The primary routes have therefore been designed as a boulevard strongly influenced by the French model.

There are two parts to the Boulevard. The main section runs from the Eastern entrance to the site to Etoile. It should therefore carry all through traffic and has been designed as a major commercial and traffic route. South of Etoile the traffic splits between the northern and southern access points and the boulevard therefore also changes character:

Main Boulevard: The central part of the boulevard has been designed to absorb traffic while remaining a pleasant place to meet and shop. The boulevard is 32m wide between buildings and these buildings average 7-8 storeys to create an enclosure ratio of around 1:1.5 (i.e.. The street is one and a half times wider than the height of the buildings). The 32m is allocated as follows:

- 2 x 4m pavements which may be extended by setting back the ground floor frontage of the buildings.
- 2 x 4.8m Service roads running parallel to the main boulevard and including on-street parking and servicing.
- 2 x 3.65m bus lanes, which can also accommodate the tram lines.
- 2 x 3.65m traffic carriageways.

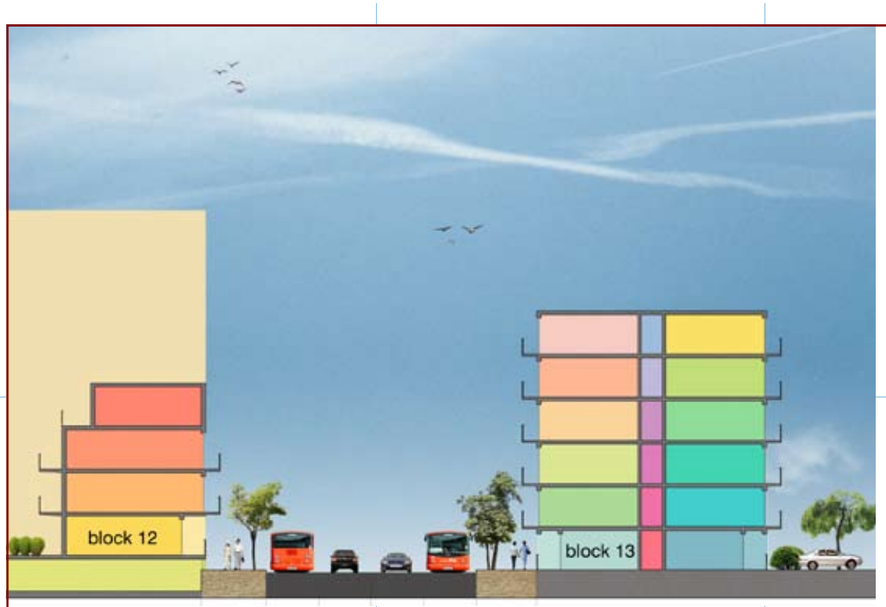
It is proposed that the boulevard has two rows of trees either on the edge of the pavement or in the margin between the service road and the main carriageway. The trees and service route will protect the pavements from the main traffic route while allowing servicing and short-term parking. In this way the boulevard is able to be a shopping area as well as a major traffic route.

Southern boulevard: The southern part of the boulevard performs a slightly different function and therefore has a different character. It will not carry quite as much traffic and there is not sufficient retail accommodation to provide active ground floor frontage.

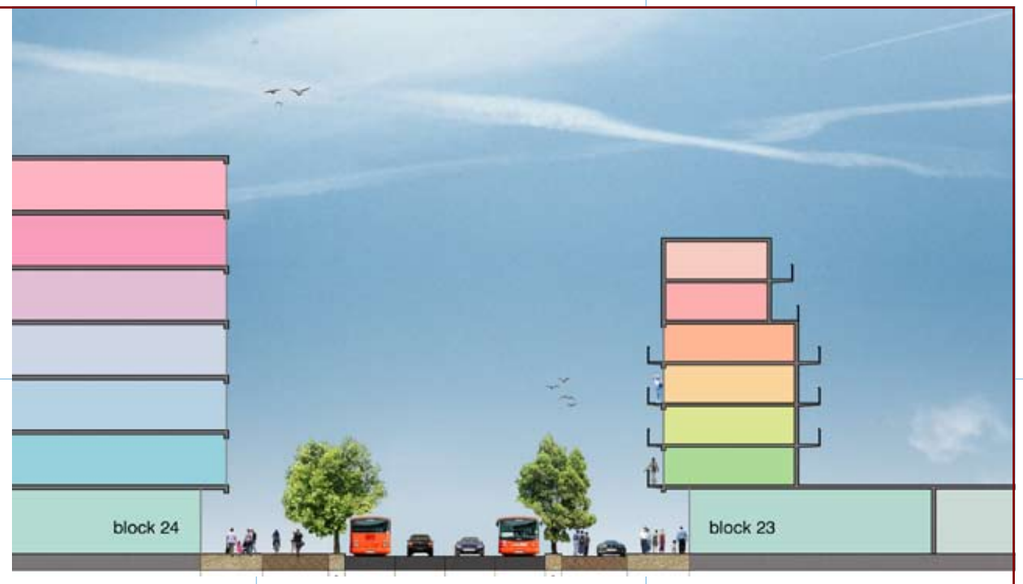
In the early schemes the southern boulevard ran parallel to the canal. It has now however been set back onto a curving route to maximise the development between it and the water. This part of the boulevard is 23m wide and the buildings vary in height with towers marking either end and the central section being 6-7 storeys. It will therefore have an enclosure ration of 1:1 or greater. The 23m between the buildings is allocated as follows:

- 2 x 4m pavements including a margin for street trees.
- 2 x 3.65m bus lanes.
- 2 x 3.65m traffic carriageways.

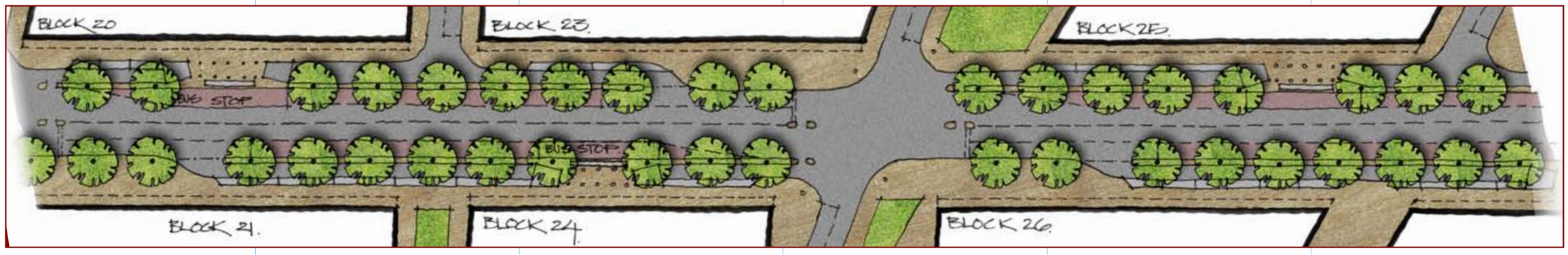
It is not proposed to have any on street parking on this part of the boulevard because it would make the bus lanes unworkable. The protection of the ground floor property and pedestrians will be achieved through the width of the pavement and the street trees. These street trees will also create a sense of continuity and enclosure on this part of the boulevard particularly where it passes next to the gas holders and railway line.



Proposed section through the southern boulevard: This is 23m wide and includes two lanes of traffic, two bus lanes and wide pavements incorporating street trees to protect the surrounding blocks. The two surrounding blocks are residential.



Proposed section through the northern boulevard: This is 32m wide and includes a central carriageway carrying traffic and bus lanes. A line of trees and a service road creates a buffer to the pavements that serve the retail space on the ground floor of the surrounding blocks. The retail space is set back to increase the width of the pavement. The upper floors of Block 24 are office space and therefore have slightly larger floor to ceiling heights. The upper floors of Block 23 are residential.



Above: A plan of the northern boulevard showing the arrangement of service roads, bus stops parking and street trees.

Left: Two examples of successful boulevards - far left the Esplanade in Southport and left a boulevard with cycles and a tram in Amsterdam.

Facing Page: An illustration of the Boulevard showing the way in which it will accommodate traffic while remaining a lively urban space.

Above: A detailed exploration of the boulevard by Lovejoys at the point where the park links to the boulevard. For more detail see the landscape assessment.

5:3. Other streets and routes

Top: A map of the secondary street network.

The rest of the page: A range of examples of good secondary streets including Store Street (above left) and Malet Street (above right) in London, Above Berlin and right a more residential scale in Hulme Manchester.

Secondary Streets:

The boulevards will carry all through traffic in the site. It is also proposed that all traffic terminating or originating in the site will use the boulevards rather than filter out through the minor streets. There will therefore be a series of traffic light-controlled junctions on the boulevard giving access to the secondary street network. These streets will be designed as traditional streets with a road carriageway, pavements, street trees and on-street parking. They should however be 20mph zones where vehicles are not allowed to dominate.

These routes are generally proposed to be17m wide. However because they give access to all parts of the scheme the height of the buildings varies as does the enclosure ratio of the streets. Nevertheless the intention is that they be designed as streets with a strong sense of urban enclosure.

Home zones:

It is proposed that all other streets be designed as pedestrian priority. This will include home zones or in some cases wholly pedestrianised routes. These routes will be designed to encourage walking and cycling and activity such as sitting and children's play along with some on-street parking and street trees. These areas will also need to deal with bin storage and collection as well as cycle parking although the solutions to this will vary depending on the nature of the adjacent blocks. It is anticipated that these home zone areas will have a different surface treatment including setts and paviors. The width of the home zones will also be around 14.5m (because of the separation of residential accommodation). This widens as part of the green spine through the northern part of the scheme.

The enclosure ratios will vary depending upon the height of the buildings. Some of the routes immediately to the north of the boulevard will have intensely urban enclosure ratios of 2:1 (i.e.. The height of the buildings is twice the width of the street). In the northern part of the site where the housing drops to three storeys the enclosure ratio is a more suburban 1:2.5 to match the existing situation on Beaconsfield Road.

Pedestrianised Routes: Some of the tertiary routes will exclude traffic altogether. These are indicatively shown in green on the plan but the decision as to which are pedestrian will depend

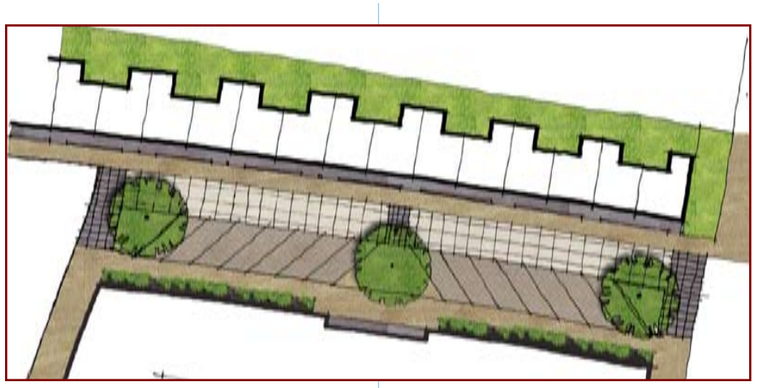
on the design of the final scheme. In some cases it is proposed that the the underground parking will extend underneath these areas in which case they will be pedestrianised. Section 7.2 describes how the ground levels of the site should be contoured to achieve this.

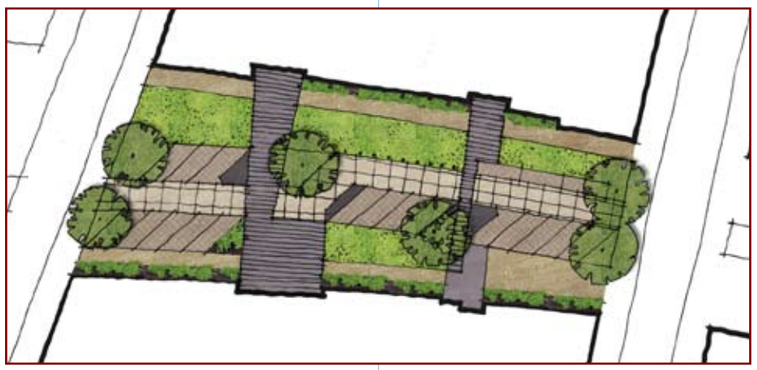
The pedestrianised network is used to link the scheme to the surrounding areas. This includes:

- 4 links to Beaconsfield Road – a link to the existing footpath by Blair Peach School, Ranelagh Road, Trinity Road, and West End Road. The Trinity Road route would be a secondary street to give access to the early phases.
- Pedestrian links to Grange Road, Hanson Gardens, Randolph Road and The Crescent with new steps up to South Road and the Station.
- Improvements to the underpass to Dudley Road to the south
- A link to Brent Road under the existing road tunnel under the railway.
- Links to the canal towpath running north and south
- An attractive, wide pedestrian route alongside the Pump Lane Link Road.

- A new pedestrian bridge from Etoile over the canal and Yeading Brook linking to the Minet Country Park.
- An attractive, wide pedestrian route alongside the Springfield Road Link Road.

The intention is to treat the entirety of the home zone / pedestrianised environment as one in terms of design and materials but to control access to certain areas. In this way the scheme will integrate seamlessly to the surrounding residential areas even where the traffic routes are blocked.





Above left: Residential home zones in Germany (left) and Holland (right) and attractive busy pavements in Germany.

Above: Typical Home Zone designs showing how cars, on-street parking and amenity space can be combined.

Left: Illustrative public realm plan showing how the Home Zones and pedestrian routes could work.

Facing page: An illustration of the character of the Home Zone streets in the residential areas.

Above: A more detailed plan by Lovejoys of part of the residential area showing the arrangement of secondary streets, home zones housing.

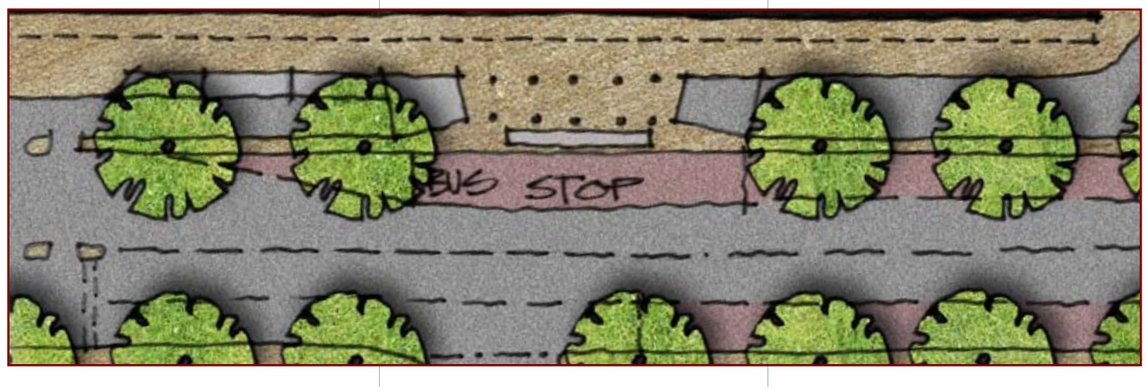
5:4. Public transport and cycles

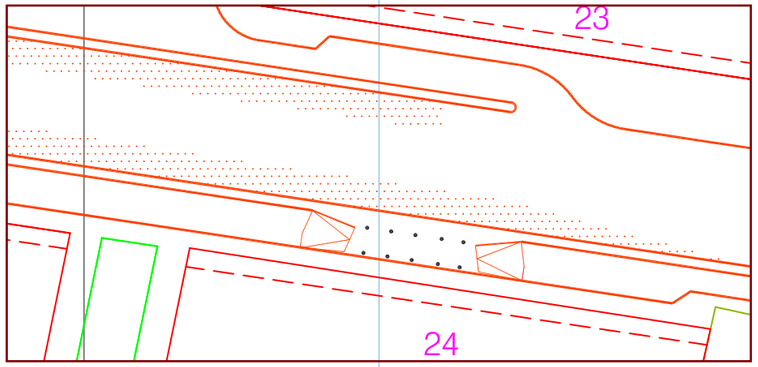
Public transport

The scheme is based on a public transport spine running along the primary street network. This network provides for bus routes to connect to Hayes, Uxbridge Road and South Road. The bus lanes have been designed so that they could accommodate the tram including a link to the proposed depot. In order to give buses priority on the more constrained access points to the site, bus gates are proposed. These will use traffic lights to stop traffic when a bus approaches so that the bus can travel through without stopping. In this way the bus lane is combined with the traffic carriageway on the main access points to the site.

The public transport routes are designed with stops approximately every 400m. These include:

- **Western gateway:** Where the stop will be part of the public space proposed outside the hotel.
- **Waterside:** a stop that will serve the housing along the canal.
- **Etoile:** a stop serving the cafes, restaurants and bars at the western end of the boulevard.
- **Parkside:** A stop half way along the boulevard that links to the point where the park connects with the boulevard. This will serve the northern residential area.
- **Southall Rise:** A stop serving the heart of the shopping area at the eastern gateway to the site.
- **Southall interchange:** On the eastern side of South Road we have proposed that the access to our site could link to a interchange with the station. This would allow buses to interchange with train services.





The public transport stops on the boulevard have been considered with some care. It is proposed that the traffic runs in the centre of the street so that passengers only need to cross the service road to get to the

bus stops. This is achieved by creating traffic tables on the service road and removing parking to create an attractive bus stop (Plans facing page).

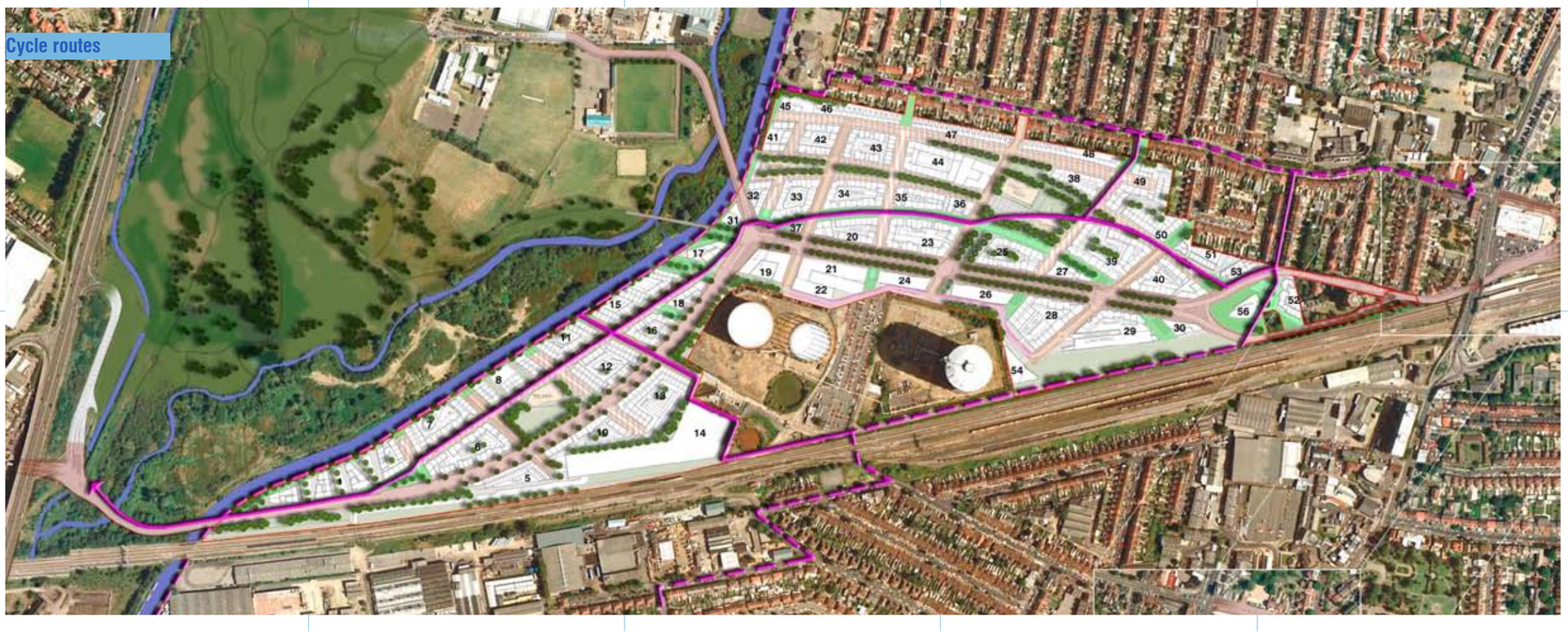
Cycle routes

Cycle routes and cycle use have been planned as an integral part of the illustrative scheme. This is based on the existing and proposed cycle routes set out in the UDP. These include:

- A route along the canal towpath
- A route from the canal via the footpath around Blair Peach school and along Beaconsfield Road
- A route from the south via Spencer Street and the pedestrian underpass to The Straight.

The scheme accommodates each of these routes and links them to new routes through the site. This avoids the boulevard in favour of a series of pedestrian and home zone routes through the scheme. This route will be marked as a cycle route and will create an attractive and safe route through the scheme with sign posting to Southall Broadway and Hayes.

The other public parts of the scheme will be sympathetic to cycles by virtue of their home zone design but will not have designated cycle lanes. The housing will also be designed with adequate cycle parking. For apartments and commercial buildings cycle parking should be in the semi-basement parking areas. For the low rise apartments the parking should be in the courtyards and for the housing within the curtilage of each house.



Proposed cycle routes

UPD cycle routes

5:5 Disabled access

Above: Speed tables allow pedestrians to cross the street without kerbs.

Below: A raised area in front of housing creates a separation from the street. This is ramped at either end for disables access.

Right: Ramps built into steps, for example down to the canal, will allow disabled access to all parts of the site.

The Illustrative Masterplan has been designed to encourage cycling, walking and to ensure disabled access and mobility for people with disabilities. The scheme, buildings and public realm areas should be fully accessible.

Public realm accessibility:

The masterplan recognises the need to create routes that can accommodate through traffic while creating a people-friendly public realm. The boulevard has therefore been designed to accommodate traffic and public transport in a central corridor with service roads and trees creating a buffer zone to the pavements. This will allow disabled parking along the boulevard and allow a wide, pleasant pedestrian environment. The bus stops on the boulevard have also been designed to allow level access to the stops across the service road.

Throughout the rest of the scheme the car will be subservient to pedestrians, cyclists and the disabled. This will be an environment of home zones and secondary roads where shared surfacing and speed tables will make it possible to move around without going up kerbs. The entirety of this area will therefore be accessible to wheelchair users.

Where changes of level are planned - along the canal and in some of the main public spaces there will be steps. However in all cases it is proposed that there will be ramped access at a gradient no greater than 1:20.

Disabled parking:

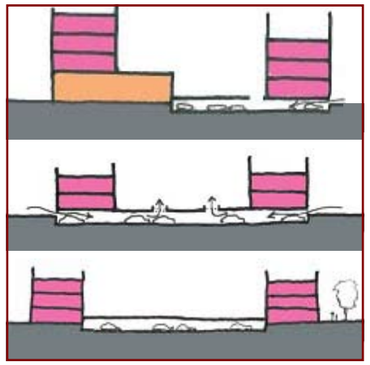
As mentioned above the service roads on the main boulevards will allow disabled access directly outside the shopping and leisure areas. In addition to this the capacity of the multi-storey car parks have been calculated assuming 20% disabled parking. This is also true of the residential parking which has been designed to accommodate 20% disabled parking. It is proposed that the residential parking whether at semi-basement or ground level will also be linked to the lifts within the blocks giving access to all levels.

Access to housing

The average unit floor areas used to calculate the residential yields have been set at a level that will allow Lifetime Homes standards to be implemented. The work on housing typologies has been based on the assumption that all accommodation should be accessible by lift where appropriate.

One of the most important accessibility issues for the masterplan is the ground floor access to the apartment blocks. Retail and commercial space will provide level access from pavements. However, residential blocks are raised up by 0.5-1m. This is partly to accommodate semi-basement parking but also to create a separation between living spaces and the pavement. This separation is typical of Georgian housing and is normal in urban areas. It does however create issues with disabled access to the ground floor properties. There are a number of ways in which this can be overcome. A half level can be incorporated into the lift core, ramps can be created alongside the pavement or access can be provided from the courtyard to the rear. The courtyard option can be linked to disabled car parking.

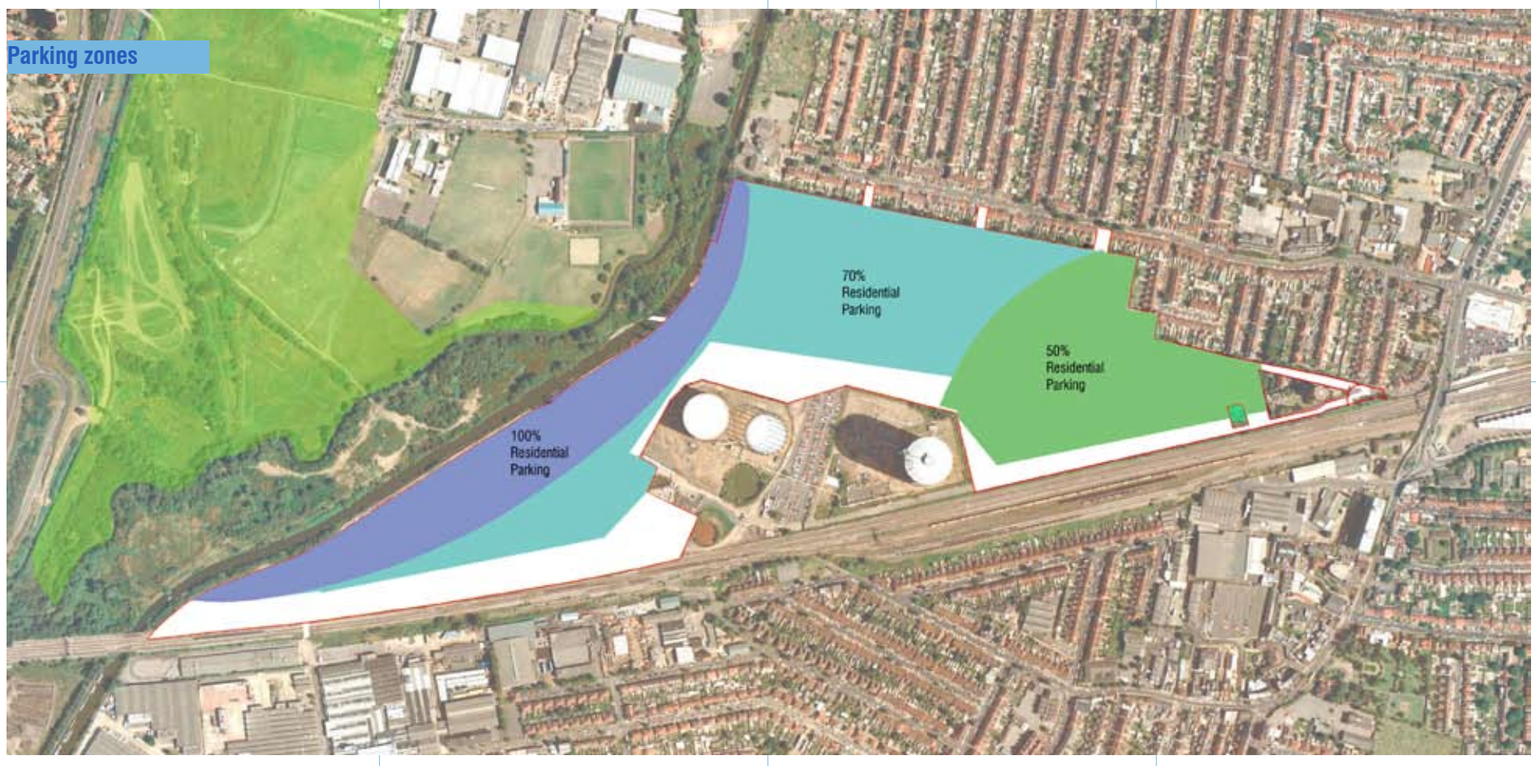
5:6 Parking strategy



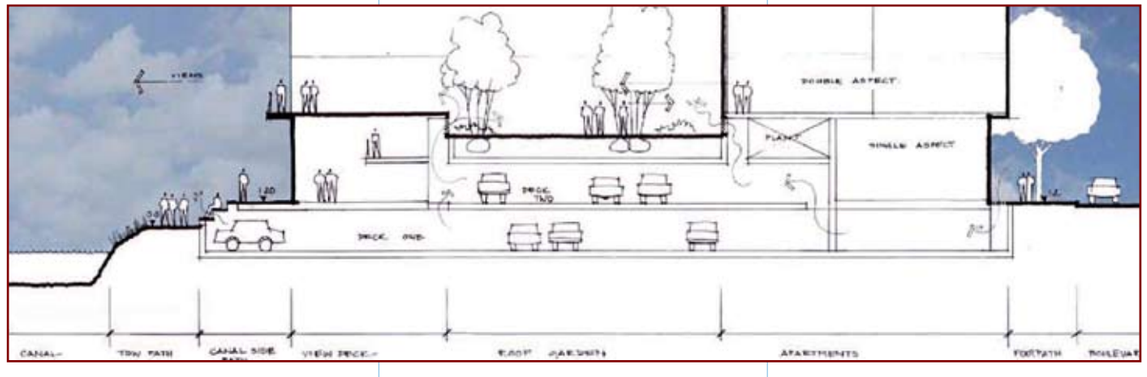
Far left: Covered courtyard parking at Greenwich Millennium Village. Left - the parking, right the landscaping above the parking.

Left: One of a series of studies undertaken by Jestico While to explore parking options.

Parking zones



Right: Section through one of the waterside blocks showing the potential for two basement parking levels



The parking strategy for the scheme has sought to balance the need to reduce traffic with the commercial viability of the development. This is described in the Transport Assessment. The masterplanning process has explored ways in which the parking can be accommodated without undermining the quality of the environment and the urban design of the scheme.

The table on the following page shows the potential overall distribution of parking in the indicative masterplan. This is based on 3,500 residential parking spaces and 1,300 spaces for other uses.

Residential parking

The overall level of residential parking represents a parking ratio of 78% for the scheme as a whole. It is proposed that there should be three parking zones as illustrated on the plan to the left. The blocks nearest to Southall Station are planned with 50% parking, those in the central part of the site have 75% parking and the blocks along the canal have 100% parking.

The illustrative masterplan has been tested to ensure that these levels of parking can be achieved. The table overleaf shows that the blocks do not always meet the target. However by sharing parking between blocks these parking levels can be achieved through a combination of the following means:

- **Semi-basement parking:** This is the most common form of parking and exists under most of the high density blocks. This parking will be serviced by the cores to give access to the flats above.
- **Ground floor covered parking:** In some cases parking is provided at ground level within the blocks with amenity space at first floor level. The section to the left shows a combination of semi basement and ground floor parking on a canalside block.
- **Courtyard parking:** On the lower blocks (such as 10,13, 43 and 50) surface level parking is provided within the courtyards.
- **On-street parking:** Further parking will be available on street as on the secondary streets and home zones. These will likely be part of a Controlled Parking Zone (CPZ) to ensure that they are available to residents.

Illustrative parking table - Based on the illustrative masterplan

Block No.	Residential Parking							Non-residential parking						
	No. Residential Units	Semi-basement Parking	Ground Floor Parking within building	Courtyard Parking	On-street Parking	TOTAL RESI. SPACES	Residential parking ratio	Commercial	Retail	Leisure	Transport	Community	TOTAL NON-RESI. SPACES	NOTES
1	479	308	96	58	7	469	98%							
5	0									212			212	Hotel
6	193	144			9	153	79%							
7	181	75	75		26	176	97%							
8	127	156			10	166	131%							
10	90			54	16	70	78%		2					
11	99	33	33		31	97	98%							
12	222	143			9	152	68%							
13	119			96	5	101	85%							
14	0													
15	121	68	68		0	136	112%							
16	157	65			24	89	57%							
17	88	38			18	56	64%							
18	0							78					78	In MSCP
19	0							151					151	In MSCP
20	185				36	36	19%		42				42	In MSCP
21	0							84	49				133	In MSCP
22	0													Airport Parking
23	186	127				127	68%		43				43	In MSCP
24	0							60	35				95	In MSCP
25	150	65			30	95	63%		41				41	In MSCP
26	0							70	41				111	In MSCP
27	71	25			10	35	49%		24				24	In MSCP
28	120		59			59	49%		133				133	
29	51		72			72	141%	35					35	In MSCP
30	119				11	11	9%							
31	69	37				37	54%			16			16	In MSCP
32	46	20			21	41	89%			21			21	In MSCP
33	126	81				81	64%			48			48	In MSCP
34	153	146	44			190	124%							
35_36	117	121				121	103%							
	51													
37	0									8				
38	71	33			40	73	103%							
39	168	194				194	115%							
40	207	95			17	112	54%		30	18			48	In MSCP
41	82	42			18	60	73%							
42	85	64			14	78	92%							
43	86	93				93	108%							
44	56			14	34	48	86%					54	54	School and Heath centre
45	22				16	16	73%							
46	27				18	18	67%							
47	29				18	18	62%							
48	33				20	20	61%							
49	15			15	6	21	140%							
50	96			48	18	66	69%							
51	43	17		4		21	49%							
52	35			18		18	51%							
53	49			24		24	49%							
54	0											15	15	Community Centre
56	76			50		50	66%							
	4,500	2,190	447	381	482	3,500	78%	478	438	511		69	1,300	

- **In-curtilage parking:** The housing along the northern boundary of the site will have in-curtilage parking.
- **Multi-storey parking:** The scheme includes 2 multi-storey car parks (see below). These could be used to accommodate 131 residential parking spaces for the adjacent blocks.

Non-residential parking

There are a total of 1,300 new non-residential parking spaces as part of the scheme. Much of this is accommodated in two multi-storey car parks in Blocks 22 and 29. These will accommodate 1,392 spaces of which 131 will be used for housing leaving 1,261 spaces to serve the B1, retailing and leisure uses along the boulevard. These spaces serve the following uses:

- **B1:** A total of 478 spaces are provided in the multi-storey car parks at a rate of 1 space per 100m^2.
- **Retailing:** A total of 438 retail spaces are provided. of which 133 relate to the supermarket in Block 28. These are provided at ground floor level with the supermarket on the first floor accessed by travellators in a double-height lobby. The balance of the retail parking is provided at 1 space per 28m^2.
- **Leisure uses:** The hotel (Block 5) has 212 parking spaces and the balance of the leisure uses are provided at 1 space per 28m^2.
- **Community uses:** In addition to this 18 spaces are provided for the school, 36 for the surgery (at semi-basement level) and 15 for the community building (Block 54).

Airport parking

In addition to this we have accommodated up to 3,500 airport parking spaces in Block 14. This is designed to accommodate the current parking operation thereby safeguarding the exisiting jobs on the site. The parking structure will be used intensively to achieve this level of parking in a multi-storey structure. The parking can be serviced off the existing access to Brent Road.