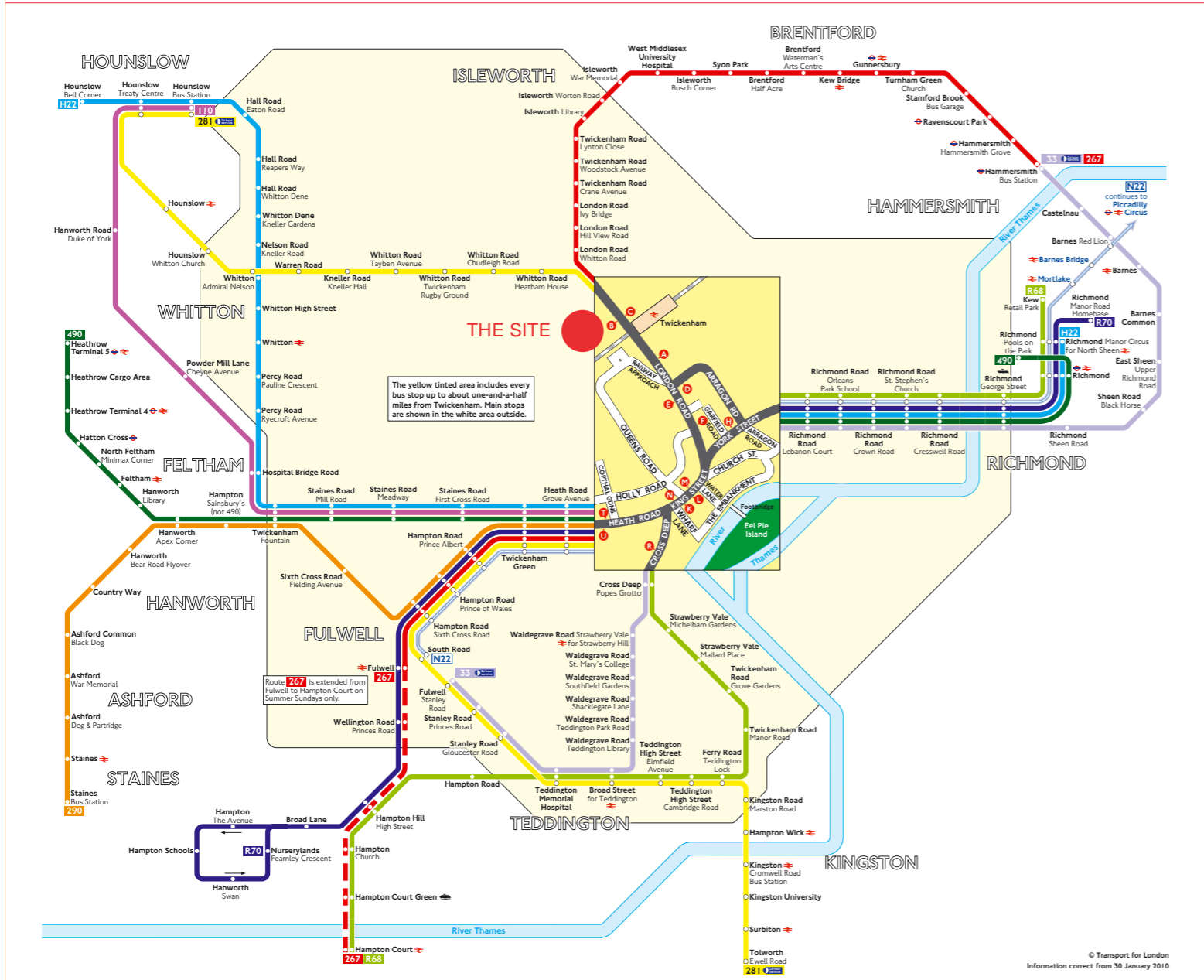


Local Bus Map



Local Bus Services

The nearest bus stops to the Site are located on London Road. All bus stops are easily accessible for pedestrians with signalised crossings provided at key points along the pedestrian routes to and from the Site.

There are two bus routes that run along London Road past the Site. The 281 runs a 24 hour service from Tolworth through to Hounslow via Kingston, Teddington, Fulwell and Whitton. The 267 route runs from Hammersmith to Fulwell via Isleworth and Brentford and on summer Sundays extends to Hampton Court. Both routes run between eight to ten buses per hour during peak times.

There are a number of other bus services passing through Twickenham town centre, a short walk away from the Site. These connect to Feltham, Whitton, Hanworth, Ashford, Staines, Barnes and Richmond. Night bus No. 22 connects Twickenham town centre to Piccadilly Circus.

Access

Pedestrian Routes / Access to Site

Pedestrian Routes through the Site



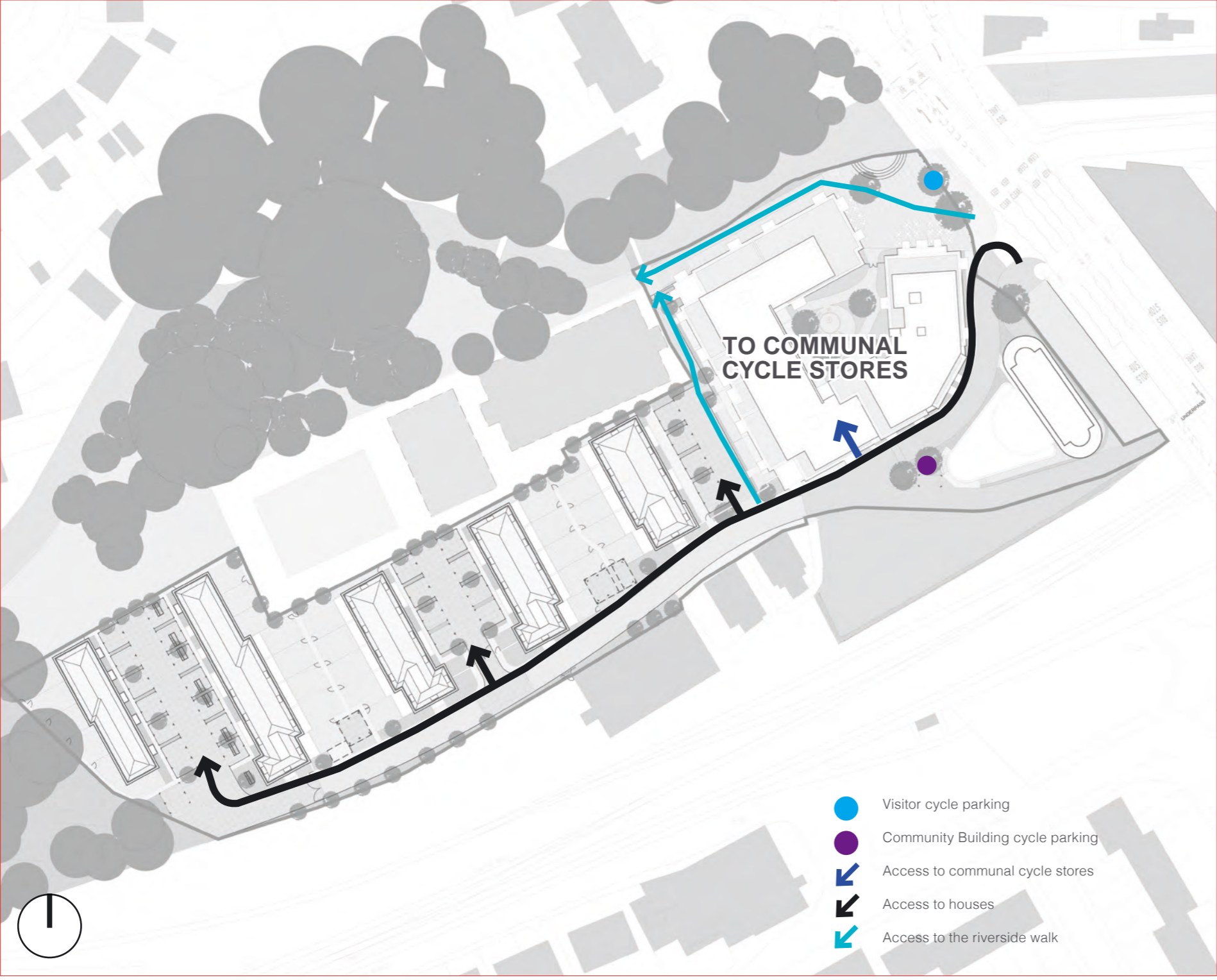
Pedestrian access to the Site is achieved off London Road, due to the constraints of the railway to the south and the River Crane to the north it is not viable to increase permeability any further to the surrounding residential neighbourhoods once within the Site.

It is proposed to connect the London Road and the adjoining LBRuT land to the west of the Site by the provision of a ramp and stairs down by the river's edge.

Access to the Mixed Use Building is directly off the public piazza on London Road between the two restaurant units through the residential courtyard.

Pedestrian access to the remainder of the Site is via the proposed ramp located between the Community Building and the Mixed Use Building. The ramp has been designed to be wheelchair friendly with a slope no greater than 1:25 ensuring a step free and rail free access route. Residents are able to walk along Brewery Lane to gain access to residential courtyards serving the terraces of houses.

Cycle Access Strategy



Cyclists are able to easily access all areas of the Site via the access ramp running along the southern edge of the Mixed Use Building. A high level of cycle parking has been distributed within the lower ground floor of the building providing secured covered storage.

A total of 198 cycle spaces are being provided for residents across the site exceeding LBRuT's policy requirements. In order to achieve 2 credits for the Code for Sustainable Homes Level 4 for the apartments, the number of cycle spaces has been increased with 2 spaces allocated for 2 bed apartments. For the houses a total of 2 cycle spaces will be provided in the back gardens. These will be accessed via pedestrian footpaths to the rear of the gardens.

Sheffield stands have been provided for 82 spaces (LBRuT Standards) and the remaining 60 spaces (to achieve Code Level 4) are accommodated using a 2 tier space efficient cycle stand that accommodates more spaces per metre square.

Sheffield stands will be located in the public piazza to accommodate cycle parking for the restaurant units. A further 5 stands will be provided for the visitors to the Community Building.

A ramp is proposed to the north of the Mixed Use Building to bridge the levels between London Road and the River Crane.



Space Efficient Cycle Racks

Access

Vehicle Tracking

All vehicles entering the Site including emergency vehicles have been tracked by the transport consultants to ensure there is adequate room to enter and exit the Site, to park and reverse out of parking bays and to pass one another.

Set out below are the tracking diagrams for a car, refuse vehicle, fire tender and a 7.5 tonne service van for the restaurant units.

Tracking for a Car



Cars will need to access most parts of the Site. They will need to be able to turn into the basement communal car park. The parking courtyards between the houses have been designed such that there is a 6 metre gap between two rows of parking bays in accordance with parking standards.

Tracking for a Refuse Truck



The refuse truck will only access Brewery Lane and will turn on the western end of the Site where a turning area is provided.

Tracking for a Fire Tender



The fire tender will have access into all areas of the Site including the residential courtyards. Space has been allowed for the truck to reverse when exiting the courtyards.

Tracking for a 7.5 tonne Box Van



The service van will only access the piazza during early morning hours for deliveries. The access point is directly off London Road.

Access

Vehicle Access & Car Parking

Vehicle Access & Car Parking Strategy



An access ramp exists on the eastern boundary of the Site adjacent to the train bridge on London Road which connects into Brewery Lane. This ramp has a legal right of way and is access for the railway cottages, the Network Rail substation and railway tracks.

No parking is being provided for the restaurant uses on the Site. It is assumed that the restaurant users would either walk or use public transport to access these uses. A new access ramp located between the Mixed Use Building and the Community Building has been designed as a shared surface for pedestrians and vehicles and was deemed appropriate due to expected low levels of vehicular movements indicated in the Transport Assessment.

Due to the high accessibility of public transport surrounding the Site the LBRuT has a cap on the number of car parking spaces at 1:1 for apartments and 2:1 for houses. Of the 28 houses proposed, each will have 2 car parking spaces. 68 car parking spaces are proposed for the apartment units which will be accommodated in a basement car park. A total of 7 of the 68 parking spaces (over 10% of total parking for apartments) are for the disabled and are dispersed evenly throughout the car park near stair and lift cores.

Access into the basement car park is off the shared surface access ramp. Access to the residential courtyards is off Brewery Lane where car parking spaces have been integrated within the landscape.

The London Plan places a large emphasis on building up the infrastructure, in particular electric charging points, to support electric vehicles, as a means for reducing carbon dioxide emissions in the capital. The Plan requires 20% of all new residential parking spaces are equipped with electric charging facilities and that a further 20% are provided with passive provision. 14 of the parking spaces within the basement car park (just over 20%) will be fitted with electric charging points with a further 13 having passive provision. All of the houses will have access to charging facilities at the outset. The overall provision is therefore in excess of the London Plan requirements.

Type of parking provided	No. spaces
Residential parking for apartments	68
Residential parking for houses	56
Visitor parking for houses	3
Total	127

Refuse & Recycling Strategy



The Code for Sustainable Homes (and the associated technical guide) sets a fixed minimum standard in relation to household recycling and facilities and waste storage. This equates to the covered external provision (within the development plot) of the greater of either enough space for LBRuT waste bins, or 100 litres for a 1 bedroom dwelling with an additional 70 litres for each additional bedroom based on a maximum collection frequency of once per week (also defined in BS5906). The recycle volume is set out by LBRuT and based on a collection of once per week. The project team have based their figures on the guidance set out by the code and this is greater than that set out by LBRuT. The standards being followed are:

Refuse & Recycling for Houses

- 3 or less Bed House: Storage capacity of 240 litres of refuse
- 3 or more Bed House: Storage capacity of 360 litres of refuse
- Recycling boxes are provided for each house individually.
- A 23 litre food waste container will be provided for each house

Refuse & Recycling for Apartments

- 1 Bed Apartments: 100 litres refuse
- 2 Bed Apartments: 170 litres refuse
- 3 Bed Apartments: 240 litres refuse
- 6 x 1100 litre bins have been provided for 80 apartments which is based on 80 litres recycling per household

The LBRuT does not currently provide a communal food waste collection service for more than 6 households. In line with the LBRuT's requirements, space has been provided within the communal bin stores if they wish to provide this service in the future.

Refuse & recycling collection is accessed via the access way (Brewery Lane) running along the length of the Site. For those properties further than 30 metres from the collection point, a temporary bin holding point has been provided which will be managed by the estate management team on collection day. A turning head is provided at the western end of the Site for the refuse truck.

For the Mixed Use Building, communal waste and recycling is located in the basement car park within communal stores located adjacent to lift cores. All residential apartment entrance doors are within 30m horizontal distance of their allocated bin store to accord with Part H of the building regulations. Refuse and recycling collection for the restaurants is provided within their kitchen areas and will be collected from the street through the entrance. On collection day, the estate management will move the bins to the temporary holding point for collection by the LBRuT.

Access

Fire & Emergency Vehicles

Fire & Emergency Access



The adjacent diagram shows the emergency access route for each area of the Site. The turning track is proposed at the western end of the Site.

Fire engine access for the apartment units will be from London Road. The fire tender will be stationed in the public piazza from where the fire engine can plug into the fire riser inlet points located in the courtyard adjacent to core entrances. All cores have been designed to be fire fighting and as such to accommodate the requirements within the stair and lift layouts.

All apartments are served off a protected communal corridor and vented vertically through the building to roof level. Travel distances in some cases are over the statutory 7.5m but this has been mitigated against by the provision of mechanical smoke vents within the corridors.

Servicing Strategy



The scheme has been designed to accommodate a range of mixed uses at ground floor to create a vibrant and sustainable community. These include restaurant and community uses and have been located to focus around the river frontage, piazza and the London Road frontage. Access for servicing and deliveries to these mixed uses has been carefully considered within the design and is outlined within the following strategy.

A number of principles have been developed and established:

Two 'drop-off' areas are provided to the north and the south of the scheme which are defined as such. To the north, service vehicles delivering goods to the two restaurant uses can access the piazza during certain agreed hours by obtaining permission from either of the restaurant users to lower the retractable bollards remotely from within the restaurant. Temporary parking, unloading, turning and exiting can then be carried out. To the south, deliveries to the Community Building can park within the landscaped area adjacent to the Community Hall and trolley / transfer goods by hand to the building.

Delivery hours will be specified within the early morning and late afternoon. The Estates Office is situated within the Mixed Use Building and will be able to assist with co-ordination for all deliveries / servicing. A CCTV system will also cover the development and allow the Estates Office to monitor the arrival of vehicles and other operations.

The heart of the scheme will be prioritised to pedestrians hence vehicle speeds will be low due to the design and surfacing of the public realm.

Servicing the energy centre and plant rooms within the basement car park (below the Mixed Use Building) is possible by accessing the basement car park by transit van. Larger vehicles are required to park within the southern drop-off area and deliver remotely.

Access

Lifetime Homes & Part M

The development is designed and will be built in full accordance with the Building Regulations which set out technical standards for the quality and performance of buildings. Part M of the Building Regulations concerns 'Access' and ensures that the design of buildings does not preclude access for the disabled.

In order to comply with Part M the Mixed Use Building will incorporate related measures such as ramped / flush access with suitable handrails, guarding where appropriate, disabled standard lifts and compliant lighting design. Compliant ramps are provided externally in addition to steps where changes in levels demand.

Lifetime Homes

All new homes will meet Lifetime Homes standards in providing adaptable and flexible accommodation, ranging from the proximity and size of parking spaces, level thresholds, width of circulation corridors, lifts, heights of sills, switches and sockets, location of living rooms and WCs, and allowance for the future hoist installation.

When the criteria cannot be met, for example proximity of parking or size of parking spaces, we will ensure that the design complies with the remaining principles of Lifetime Homes.

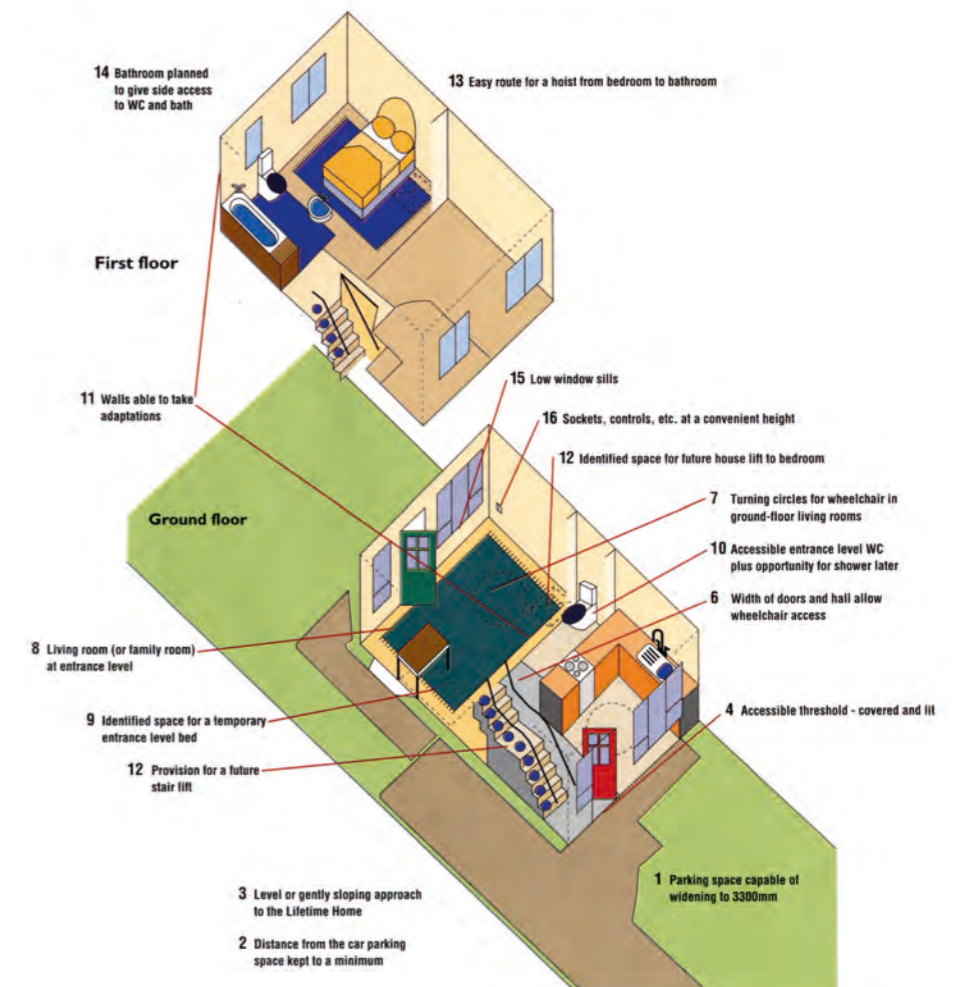
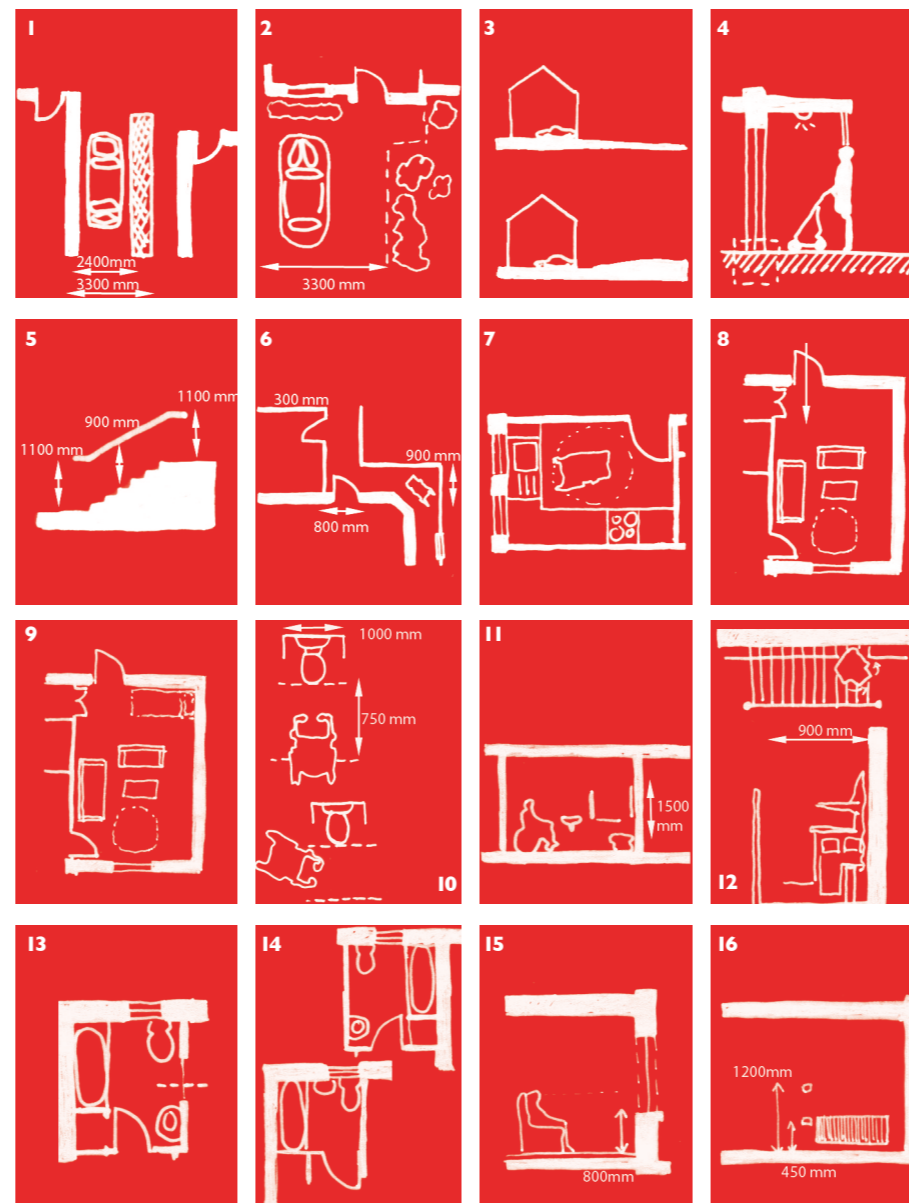
The Equality Act 2010

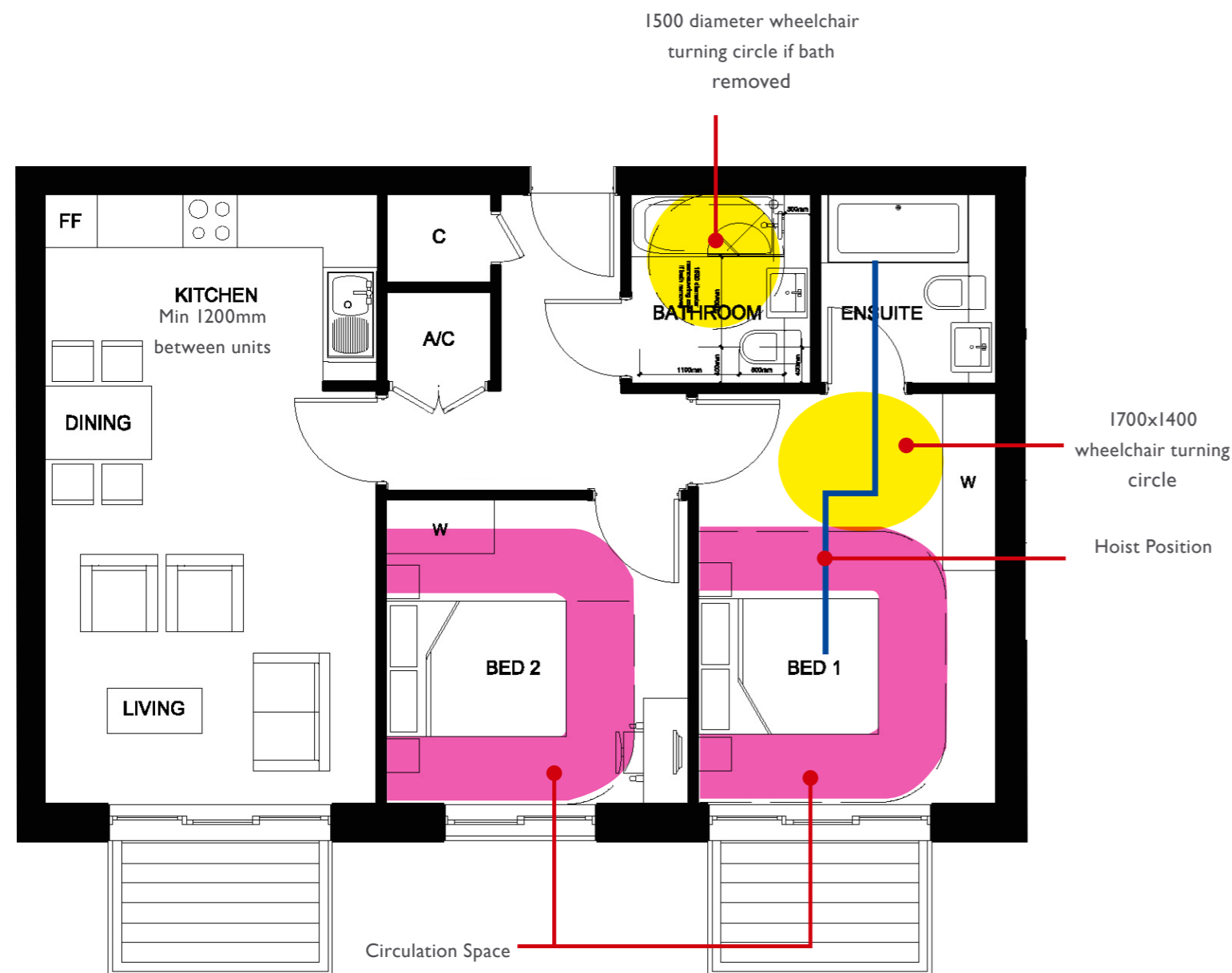
This introduced new measures aimed at ending the discrimination which many disabled people face.

The main thrust of the Act is to improve access for disabled people to employment, education and services. Therefore non-residential uses have all been located either entirely on the ground floors of blocks for easy access, or have compliant stair / lift access to upper floors to allow access for all.

Safe access to many buildings is achieved through the treatment of the site as a landscaped shared views, placing the pedestrian first, and the car last thus reducing vehicle speeds to a minimum.

The majority of requirements covered by the Act in relation to residential dwellings are already covered by the various sections of the Building Regulations, particularly Part M (Access). These measures include level access, lighting, handrail design, lift / stair design, textures of materials.





All new homes comply with July 2010 Lifetime Homes standards in providing adaptable and flexible accommodation, ranging from the proximity and size of parking spaces, level thresholds, width of circulation corridors, lifts, heights of sills, switches and sockets, location of living rooms and WCs, and allowance for the future hoist installation.

1. Car Parking

Where car parking is adjacent to the home, it should be capable of enlargement to attain 3.3m width, to provide disabled parking space.

2. Access from Car Parking

Minimum distance between parking and house and level or gently sloping route.

3. Approach

The approach to all entrances should be level or gently sloping.

4. External Entrances

All entrances should be illuminated and covered, and have a level access over the threshold.

5. Communal Stairs

Communal stairs and lifts should provide easy access.

6. Doorways & Hallway

The width of internal doorways and hallways should conform to building regulations Part M.

7. Wheelchair Accessibility

There should be space for turning a wheelchair in dining and living rooms.

8. Living Room

The living room should be at entrance level.

9. Entrance level Bed space

In houses of 2 or more storeys space at entrance level for a bed space should be provided.

10. WC

Wheelchair accessible toilet at entrance level with drainage provision for a shower room in the future.

11. Bathroom & WC Walls

Walls in the bathroom and WC should be capable of taking adaptations such as handrails.

12. Lift Capability

The design should incorporate provision for a future stair lift.

13. Main Bedroom

A reasonable route for a potential hoist from a main bedroom to the bathroom.

14. Bathroom Layout

The bathroom should be designed for ease of access to the bath, WC & wash basin.

15. Window Specification

Living room window glazing should begin no higher than 800mm from the floor level.

16. Fixtures & Fittings

Switches, sockets, ventilation and service controls should be at a height usable by all.

Access

Wheelchair Adaptability



As part of the aims of the Site to meet Lifetime Homes requirements and planning policy a total of 9 of the 82 apartments (10.9 % of apartments) are being provided as wheelchair adaptable units, all of which will be 2 bedroom units.

Parking spaces for these units are located within the basement car park and are accessible directly from the lift cores to which they all have level access. All common corridors and doors have been sized for wheelchair access and all areas outside of lifts have been sized to be a minimum of 1.5m x 1.5m for ease of use by those in a wheelchair.

Inside the apartments internal doors and corridors are sized for wheelchair access and the main bathrooms have outward opening doors. All living rooms and bedrooms conform to Part M of the Building Regulations and allow for wheelchair access and turning.

Once apartments are adapted space will be available adjacent to the front door to park a wheelchair. Toilets will be fully wheelchair compliant and in addition a direct relationship exists between the main bedroom and bathroom allowing installation of a hoist lift.

As all the wheelchair adaptable units on the development are two bedroom apartments, sufficient space is available to enable the change to wheelchair compliant.

The wheelchair adaptable units are units B7, B14, B16, B23, B25, B33, C5, C10 and C14.

 Wheel Chair adaptable units

Access

Wheelchair Adaptability



Unit B14 (and repeat unit B23) before conversion



Unit B16 (and repeat units B25 & B33) before conversion



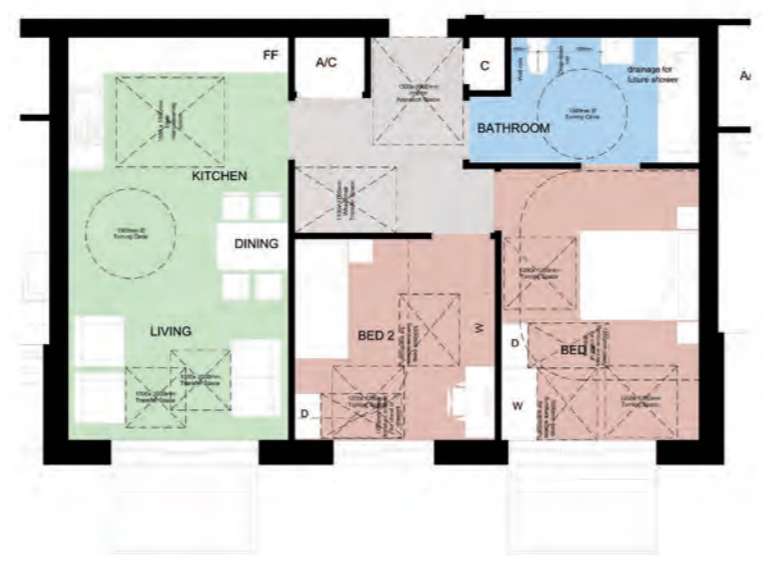
Unit C5 (and repeat units C10 & C14) before conversion



Unit C5 (and repeat units C10 & C14) after conversion



Unit B14 (and repeat unit B23) after conversion



Unit B16 (and repeat units B25 & B33) after conversion



6. Sustainability

Overview

104

Sustainability

Overview

The Berkeley Group's Vision 2020

Sustainable development at design, construction and operational stages is central to the Berkeley Group's business ethos.

This commitment is documented in Vision 2020, the Group's ten year sustainability strategy which aims to establish the Berkeley Group as one of the most successful and sustainable businesses in Britain.

Launched in May 2010, Vision 2020 is structured around four key action areas that reflect where the Group's performance needs to be outstanding in order to achieve this;

- The Customer Experience; providing exceptional service to our customers throughout the purchasing process and after completion.
- Building Greener Homes; creating high quality, well designed comfortable homes with low environmental impact.
- Delivering Sustainable Communities; developing sustainable places where people choose to live, work and spend leisure time.
- Running a Sustainable Business; managing the environmental, social and economic impacts of our business whilst delivering strong financial performance.

In total the Berkeley Group has set 86 sustainability commitments across the 4 action areas outlined above. These commitments aim to raise the standard of sustainable development in new homes and have been designed to deliver improvements in sustainability performance by 2020.

Examples of Group sustainability commitments for the period May 2012 – April 2014 include the following;

- Design all new homes to achieve at least Level 3 of the Code for Sustainable Homes
- Ensure that all commercial space achieves BREEAM 'Very Good' or is capable of achieving BREEAM 'Very Good' if the fit out is undertaken by the tenant

- Assess all new developments using the Building for Life criteria and achieve a score of at least 14 out of 20
- Apply the principles of Lifetime Homes in the design of all new homes

Proposals for the Former Royal Mail Sorting Office have been developed in accordance with the Vision 2020 commitments. As detailed below, the scheme will achieve Code for Sustainable Homes Level 4 with the commercial units achieving a BREEAM 'Very Good' rating. The preliminary Building for Life Assessment undertaken achieves a score of 16.5 out of 20 and all units have been designed to meet Lifetime Homes standards.

Sustainable Design

Sustainable design has been central in developing proposals for the Site. The proposed scheme promotes a design which has considered sustainability from the outset in order to reduce the development's environmental impacts.

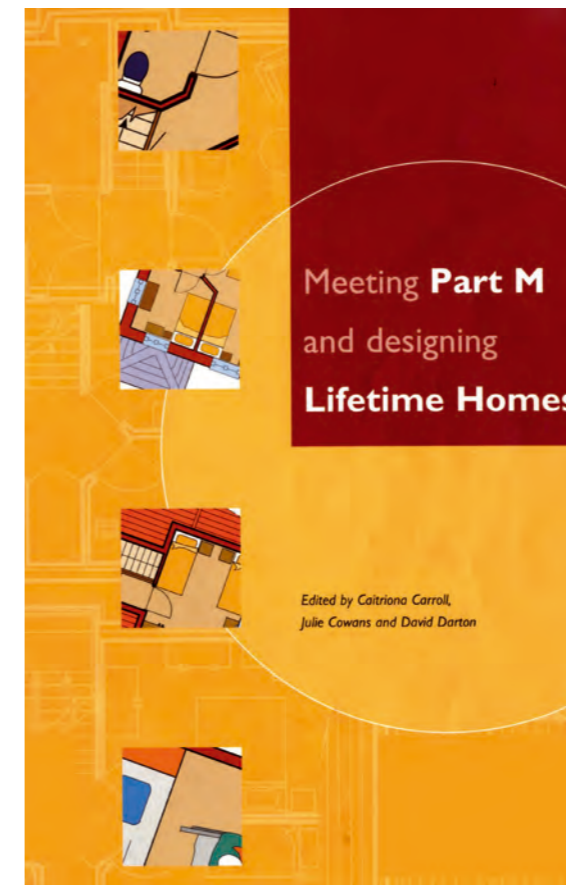
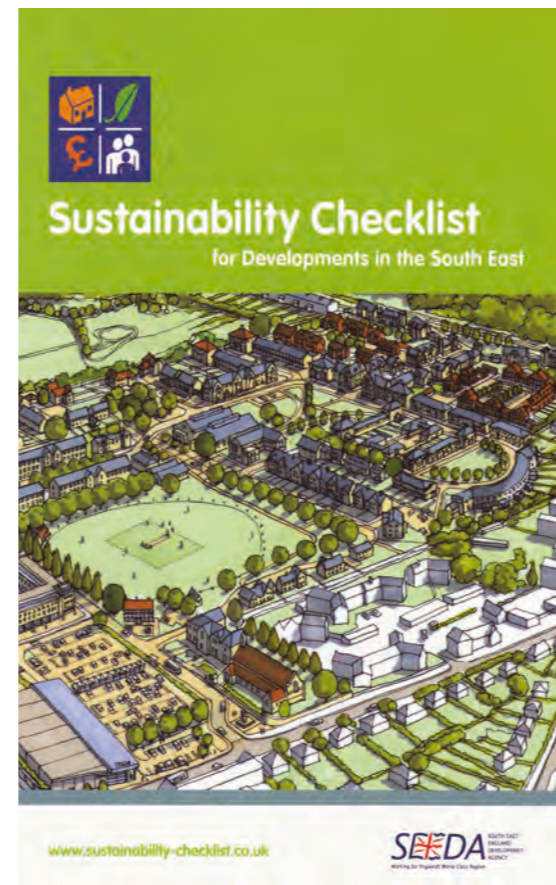
In line with national, regional and local planning policy and the Berkeley Group's own Vision 2020 commitments the proposed development seeks to substantially reduce energy demand and carbon dioxide emissions.

St James Group embraces the hierarchical approach to achieving energy efficient homes as set out by the Code for Sustainable Homes. In line with requirements of The London Plan the proposed development will achieve Code for Sustainable Homes Level 4 resulting in a 35.53% reduction in carbon emissions across the Site. This exceeds the requirements of the LBRuT Development Management Plan Policy DM SD1.

The sustainability scoring in accordance with the Code for Sustainable Homes will primarily be achieved through the installation of a district heating scheme with a 70kW_e CHP serving the apartments proposed and 34.8kW_p of photovoltaic panels serving the houses proposed. The commercial element of the scheme will be delivered to a BREEAM 'Very Good' rating.



Our vision
for your future



BUILDING FOR LIFE



7. Appendices

Building for Life Assessment	108
Indicative Floor Plans	112
Schedule of Areas	115
Mayor's Housing SPG, EIP Draft	116
Management Strategy	119
Ownership & Security	120
CGI's	121

Appendices

Building for Life Assessment

The Building for Life Standard is awarded to new housing projects that demonstrate a commitment to high design standards and good placemaking. The aim is to reward builders of high quality developments and increase awareness of the importance of good design and architecture and landscaping to the public buying new homes.

Our approach in designing the Site is to consider the principles of Building for Life and to address these as part of this document, to help ensure a high quality sustainable development is delivered.

ANTICIPATED BUILDING FOR LIFE ASSESSMENT EXERCISE

**Note, assessment exercise for the Site has been conducted by John Thompson & Partners prior to the new Building for Life Criteria taking effect (September 2012). Scoring for this exercise has been based on an assessment using former Building for Life Criteria of 20 questions.

ANTICIPATED SCORE: 16.5

ENVIRONMENT & COMMUNITY

1. Does the development provide (or is it close to) community facilities, such as a school, parks, play areas, shops, pubs or cafés?

The development provides a flexible Community Building located on the eastern edge of the Site, fronting the busy thoroughfare London Road. The building contains a café/bar as well as bookable spaces that the wider community can use, including flexible workspace, performance/rehearsal space and meeting spaces. The Community Building is located with the development's Mixed Use Quarter. The quarter includes two restaurants as well as an outdoor public piazza space, which can accommodate events throughout the year. An outdoor gathering space was identified as priority by people in the local area.

The Site is located in the busy urban centre of Twickenham, which is already home to a number of community facilities including shops (both high street and independent), supermarkets, office space, pubs, cafes, as well as the popular youth centre, Heatham House.

ANTICIPATED SCORE: 1.0

2. Is there an accommodation mix that reflects the needs and aspirations of the local community?

The development includes 1 and 2 bedroom apartments (82 units) and 3 and 4 bedroom houses (28 units). The area is sought after by both first time buyers and families.

ANTICIPATED SCORE: 0.5

3. Is there a tenure mix that reflects the needs of the local community?

The development includes a provision of affordable housing. The exact proportion of affordable housing is to be determined based on the Section 106 agreement.

ANTICIPATED SCORE: 0.5

4. Does the development have easy access to public transport?

The scheme has excellent access to local transport facilities including London overground services and bus services. The Site is located directly opposite the Rail Station which has frequent, direct services to Kingston, Reading, Whitton, Windsor and London Waterloo.

In terms of bus services, there is a bus stop for the 267 (towards Hammersmith) and the 281 (towards Hounslow) directly adjacent to the site. Twickenham is also serviced by buses running to Richmond, Heathrow Airport, Teddington and central London (Piccadilly Circus).

The Site's Public Transport Accessibility Level (PTAL) rating is 5 along the London Road frontage and a rating of 4 towards the western edge of the Site.

ANTICIPATED SCORE: 1.0

5. Does the development have any features that reduce its environmental impact?

Measures taken to ensure compliance with the relevant level of Code for Sustainable Homes include the use of photovoltaic panels to the houses and a CHP plant to the apartments to reduce energy use, environmental impact and improve overall performance.

ANTICIPATED SCORE: 1.0

ANTICIPATED SUBTOTAL 4.0