6.0 Masterplan Principles

Summary of Site Strategy Options

Conclusions

It has been chosen to taken forward Site Approach 1 and 3 to develop a masterplan. Site Approach 1 represents a lower planning risk as it follows a similar footprint to the previous application - the risk increases with a high number of units and therefore this route is only recommended if a 200-300 unit enabling scheme is viable.

Site Approach 3 (hereafter referred to at Option 2) represents a more challenging planning proposition by relocating the leisure centre, however it is the better solution if a high number of units (500) are required for the viability due to reduced density of any housing and therefore impact on MOL

Given the viability and funding route is a much bigger question, both solutions have been developed in principle.





Leisure Centre replaced on existing site 500 Homes

~ 1.64ha site

~ 300 dw/ha

~ 11 storey av. building height

Leisure: Podium or Basement Parking

Residential: Street + Podium Parking

New
Leisure Centre at
alternative location

500 Homes

~ 3ha site

~ 167 dw/ha

~ 6.5 storey av. building height

Leisure: Podium or Offsite Parking

Residential: Street Parking





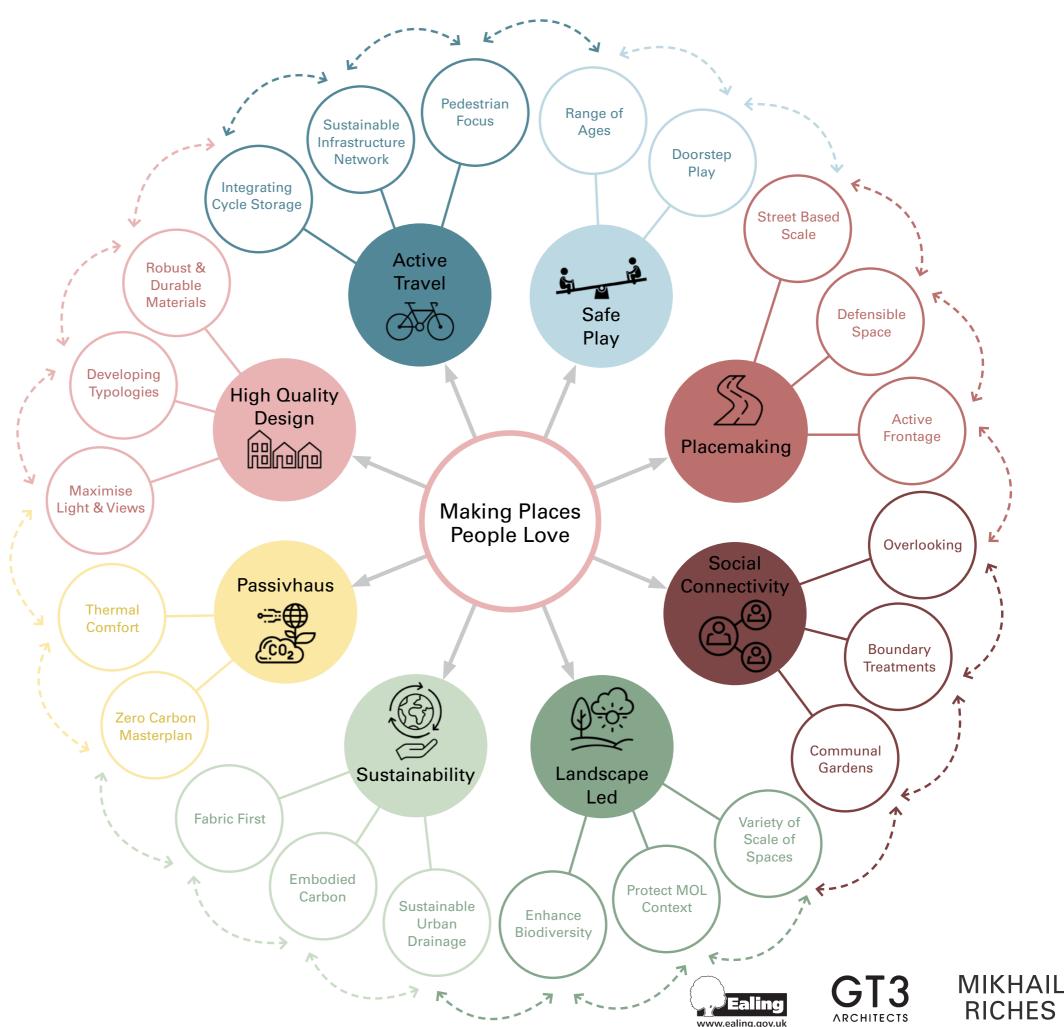


What Makes Great Homes?

Design Principles

The development of a brief for a new residentialled community at Gurnell incorporates a number of design principles which aid the creation of sustainable and beautiful places people love.

These principles establish a framework of design tools which can be used to inform the composition of a neighbourhood. The principles are integral to the design teams' methodology and can be referred back to at each stage of design as key performance indicators to assess the development of a proposal.



What Makes Great Homes?



- Consider at an early stage the site layout and good design principles along with early modelling to achieve Passivhaus as a route to affordable Zero Carbon
- Prioritise East-West orientation where possible to maximise solar gains whilst minimising overheating



- Design at all stages with sustainable principles at the forefront
- Integrating SUDS and biodiversity in landscape
- Consider embodied carbon from the start
- Evaluate reuse of existing buildings robustly and balance the benefits of reuse vs. demolition



- Provide a mix of public, private and semi-private green spaces for all ages
- Protect and enhance the character of the unique setting in the Metropolitan Open Land
- Enhance biodiversity from street trees and planting to the wider context



- Tie into existing context with scale, typologies and urban grain where possible
- Developing building forms to create great homes that maximise light and views
- Prioritising a street based scheme
- Use high quality robust materials that are durable and contribute to the character of the scheme

































What Makes Great Homes?



- Create a welcoming and human scale streetscape that is an appropriate scale in the context
- Create active frontage with windows and front doors onto the street.
- Create defensible buffer spaces to each home that are an asset to both resident and community



- Ensure that spaces are designed around people and cycling not cars
- Provide the infrastructure for sustainable travel modes that ties into the existing network
- Integrate cycle routes and storage into the design so that it is a meaningful alternative



- Create opportunities for social interaction
- Create semi-private communal gardens.
- Consider boundary treatments, overlooking and scale of spaces to encourage social connections



- Create pedestrian focused and safe places for play
- Ensure that play spaces are overlooked
- Create safe play area for small children close to the home
- Create a range of spaces for play for all ages





























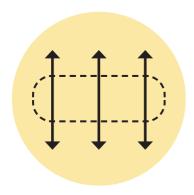




What is important for Gurnell?

Design Principles for Gurnell

Within the framework of design principles there are a series of themes which have been developed with the project team and identified as particularly important for the success of new homes at Gurnell. Emerging capacity and design proposals are tested against these.



Openness

Maintaining sense of openness to the MOL



Passivhaus

Getting the masterplan right for achieving Passivhaus



Scale

Creating human scale housing that isn't overbearing on the MOL



Community

Focus on creating a sense of community

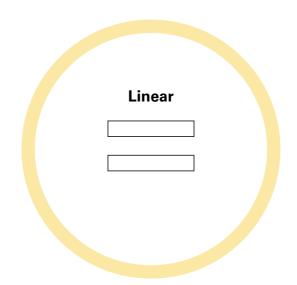




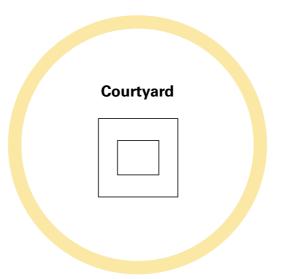
Testing Typologies



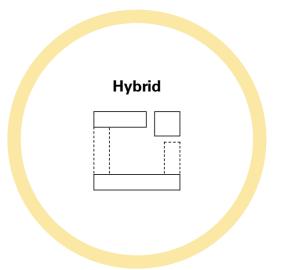
- Efficient plan and core
- Maximise envelope for daylighting/views
- Mostly dual aspect depending on units/floor
- Inefficient form for Passivhaus
- Will require east/west glazing
- Ground floor residential use challenge
- Inefficient use of site likely to be tall



- Efficient plan and core
- All orientation is optimum for Passivhaus
- Efficient form factor
- All dual aspect dep. on core arrangement
- Can incorporate townhouses and duplexes
- Doesn't allow for openness through to MOL
- Conflict of backs and fronts onto MOL



- Mostly dual aspect dep. on core arrangement
- Allows for openness through to MOL
- Efficient form factor
- Can incorporate townhouses and duplexes
- Allows for podium parking if required
- Will require some east/west glazing
- Massing could be bulky onto MOL



- All dual aspect dep. on core arrangement
- Allows for openness through to MOL
- Efficient form factor
- Efficient plan and core
- Can incorporate townhouses and duplexes
- Street based but allows for podium if required
- Will require some east/west glazing



Nordbahnhof by Sergison Bates



Brentford Lock by Mikhail Riches



Chobham Manor by Haworth Tompkins



Bridgewater Triangle by Mikhail Riches







Toolbox of Building Types

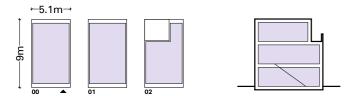
Town Houses

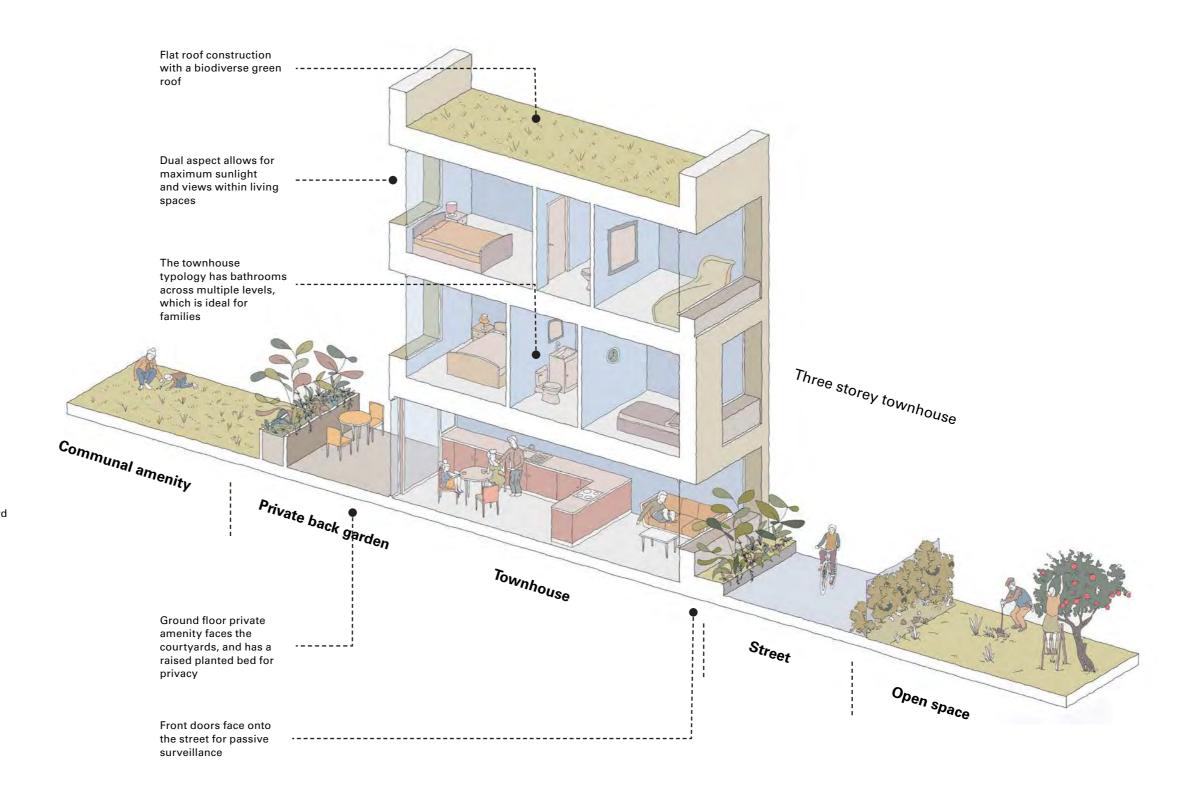
This typology is great for:

- Large family homes
- Low rise
- Active street frontages
- Each home has a front door and private back garden



Brentford Lock by Mikhail Riches





Illustrative axonometric drawing of a typical townhouse





Toolbox of Building Types

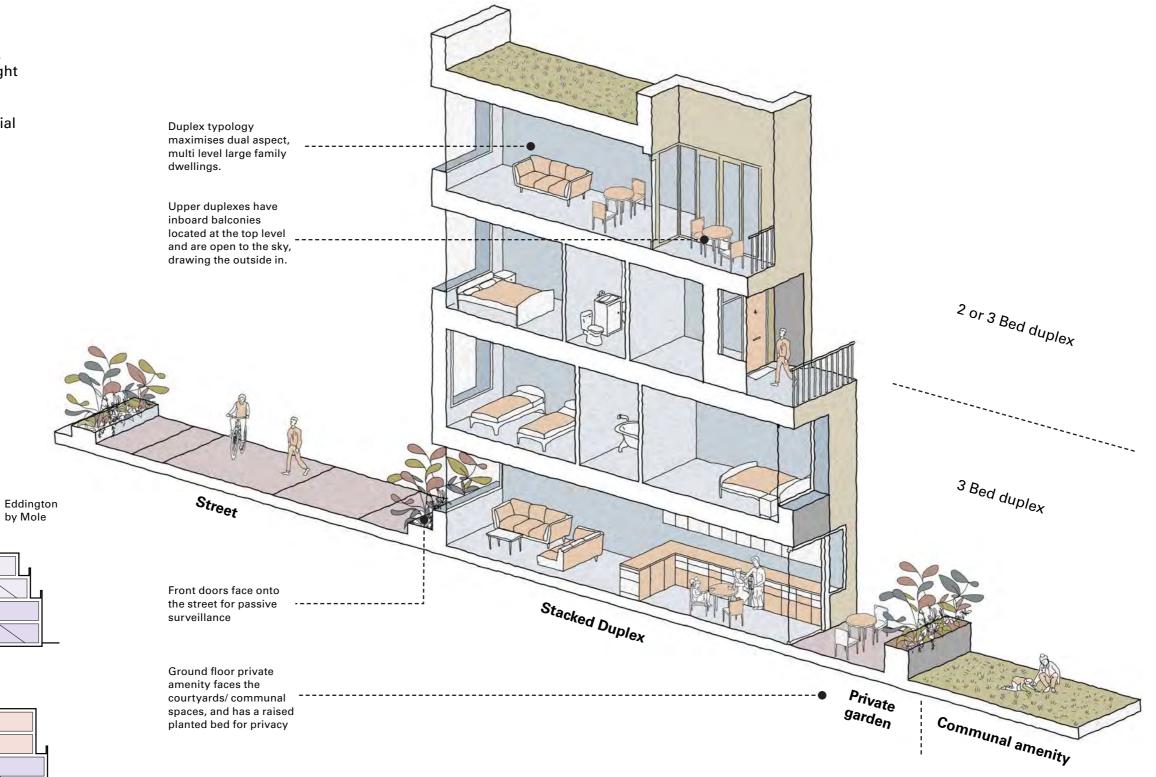
Stacked Duplexes

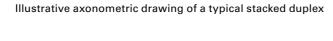
This typology is great for:

- Homes with front doors onto the street.
- Split level living offers lots of natural light and a flexible living environment.
- Kitchens face onto streets.
- Gallery decks become a welcoming social space.



--5.6m→









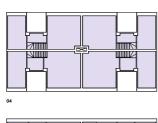
Toolbox of Building Types

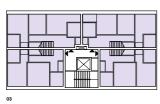
Ground and Top Floor Duplexes

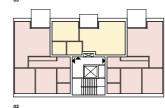
This typology is great for:

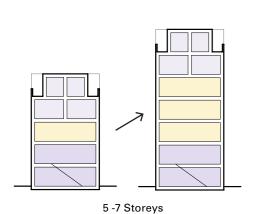
- Family homes with larger private amenity spaces.
- Ground floor duplexes have generous ground floor private amenity space and top floor duplexes have inset balconies benefiting from views across the site.
- Maximises multi-level homes creating great family housing.
- Maximises dual aspect dwellings.
- Variety of unit sizes in single building. Mix of duplexes and lateral flats located in middle floors.



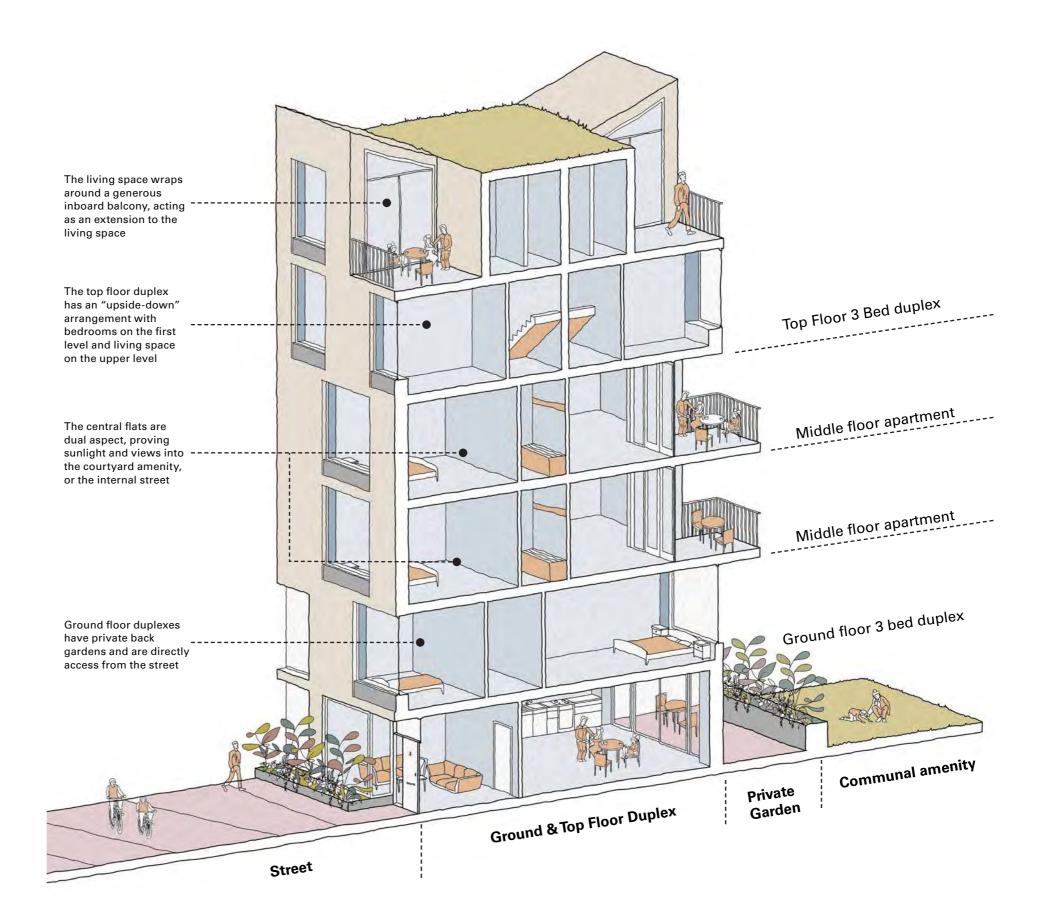








22.9m



Illustrative axonometric drawing of a typical ground and top floor duplex







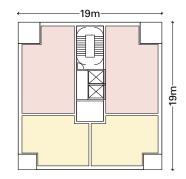
Toolbox of Building Types

Apartment Buildings

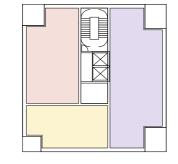
This typology is great for:

- Generous cores with front doors cluster around 2 lobbies on each floor
- With a central core, these typologies maximise dual aspect units with long river and landscape views.
- Generous double height lobbies and through cores provide good connection to courtyard amenity.
- Flexibility to incorporate a range of different unit mixes per floor plate.



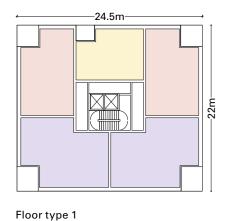


Floor type 1

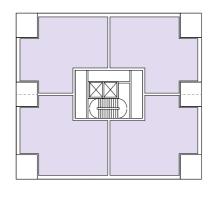


Floor type 2

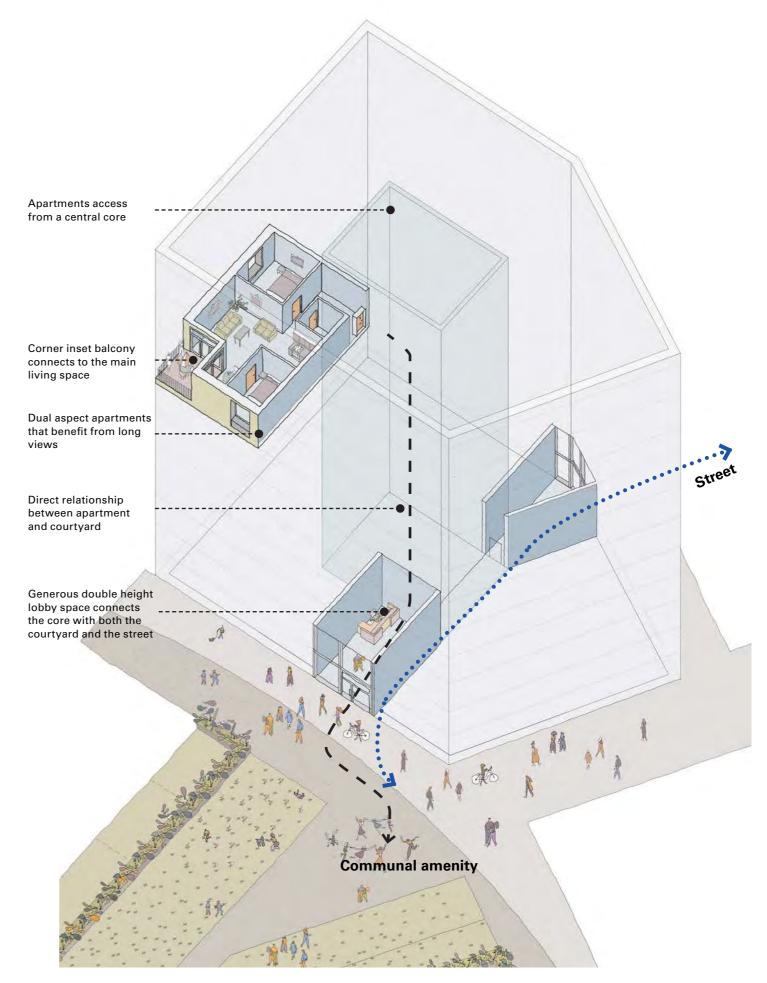
Floor type 2



24.5m



Floor type 3



Illustrative axonometric drawing of a typical apartment building







Residential Parking and Streets







Streets direct the eye North, framing views of the MOL parkland and the wooded landscape beyond.

The streets are 15m wide and are arranged with a green corridor running down one side and onstreet parking spaces concentrated on the other. Concentrating car parking to one side of the street avoids the public realm becoming too car saturated.

Street trees soften the hard landscape and extend the parkland character. The green corridor forms an attractive buffer between the carriageway and the footpath, and the carriageway itself is relatively narrow to slow traffic speeds and prioritise the comfort and safety of pedestrians and cyclists.

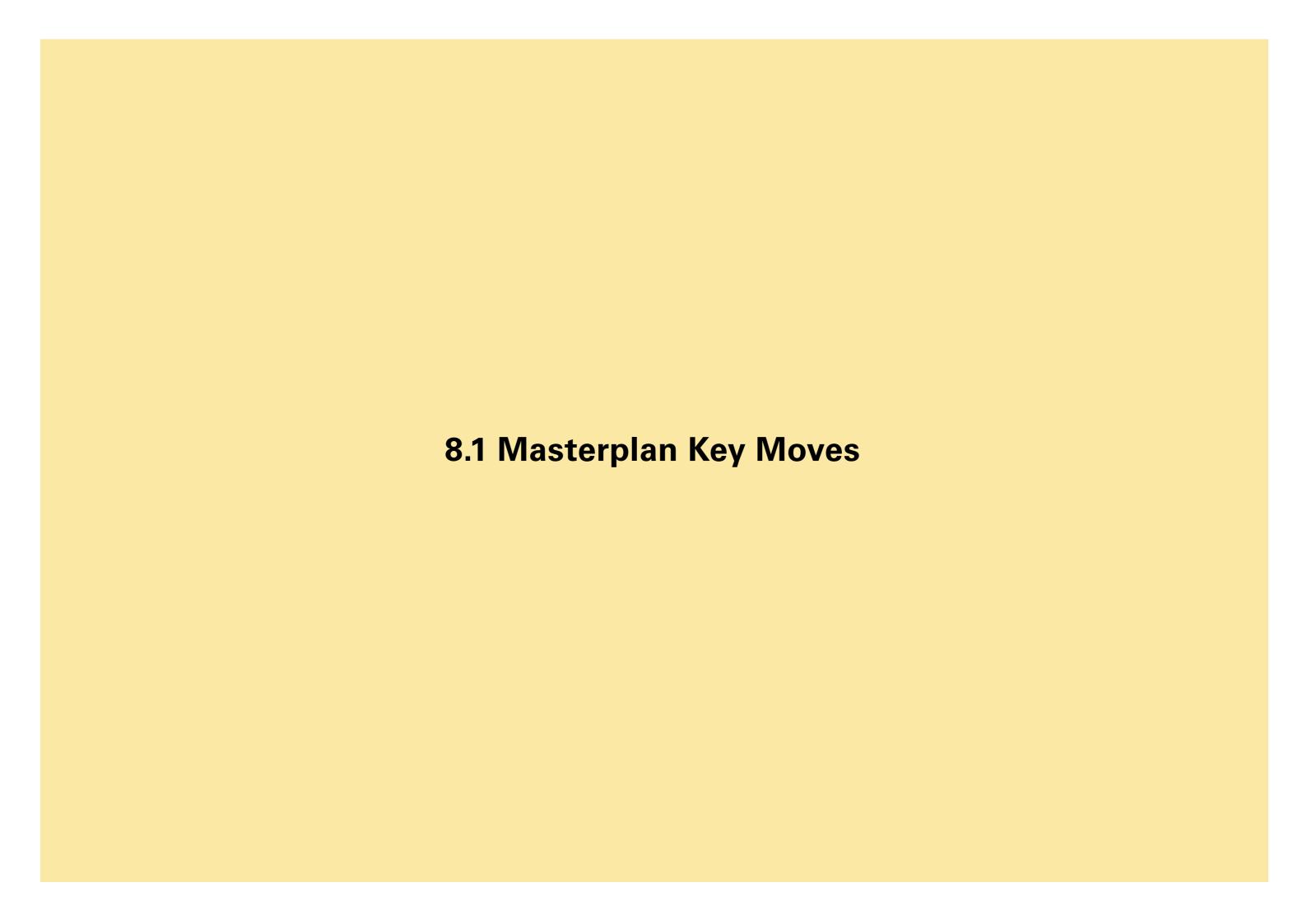


Street view of Arcus Road, Lewisham. The street design incorporates naturalistic planting between the footpath and carriageway.

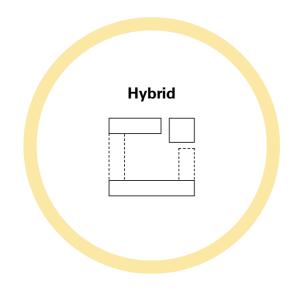




8.0 Site Option 01



Testing Typologies on site

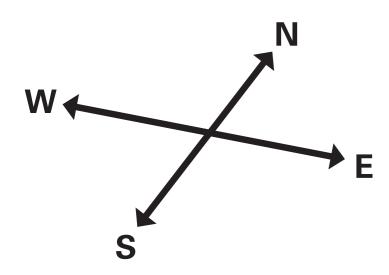


Learning from Capacity Studies

Having tested typologies on site, a hybrid approach may offer a solution which takes the advantages of each and combines them on site to make a coherent neighbourhood.

Site Orientation

A hybrid approach can take advantage of orientation to prioritise a passive solar scheme, helping to create a sustainable neighbourhood.









Key Moves

Green Streets and Views

Green streets running perpendicular to Ruislip Road East frame views of the MOL parkland and the wooded landscape beyond. Street trees and naturalistic planting extend the parkland character.





Key Moves

Routes and Connections

The placement of buildings on site maintains a sense of openness and connection to the green spaces throughout the site. Streets create links through to the park whilst also providing the framework for access to the new homes with front doors along these.

A series of secondary routes enhances experience of the landscape spaces with new routes connecting to both the wider leisure landscape and the more intimate courtyard green and play spaces.

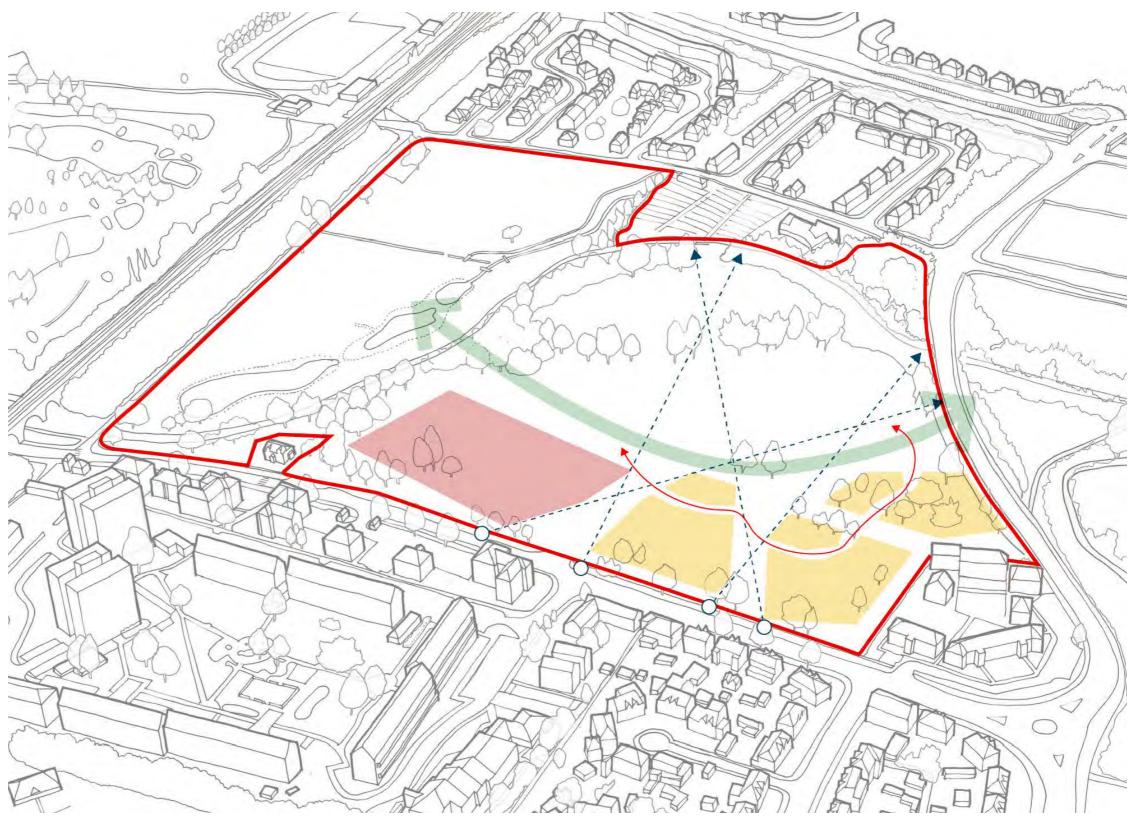
KEY:

O--→ Views through to MOL

← Play Route

MOL Route









Key Moves

A Range of Scales of Landscape Spaces

There is an opportunity for a range of landscape spaces across the site which each knit into and enhance the existing context.

Streets create green fingers through the site, whilst a series of pocket parks each with a distinct character provide places for a neighbourhood to play and enjoy outdoors.

The residential buildings are arranged into loose courtyard forms, allowing for central green spaces to be enjoyed communally by residents.

KEY:

Courtyards

Streets

Pocket Parks

Sports Landscape

Parkland

Cafe Terrace





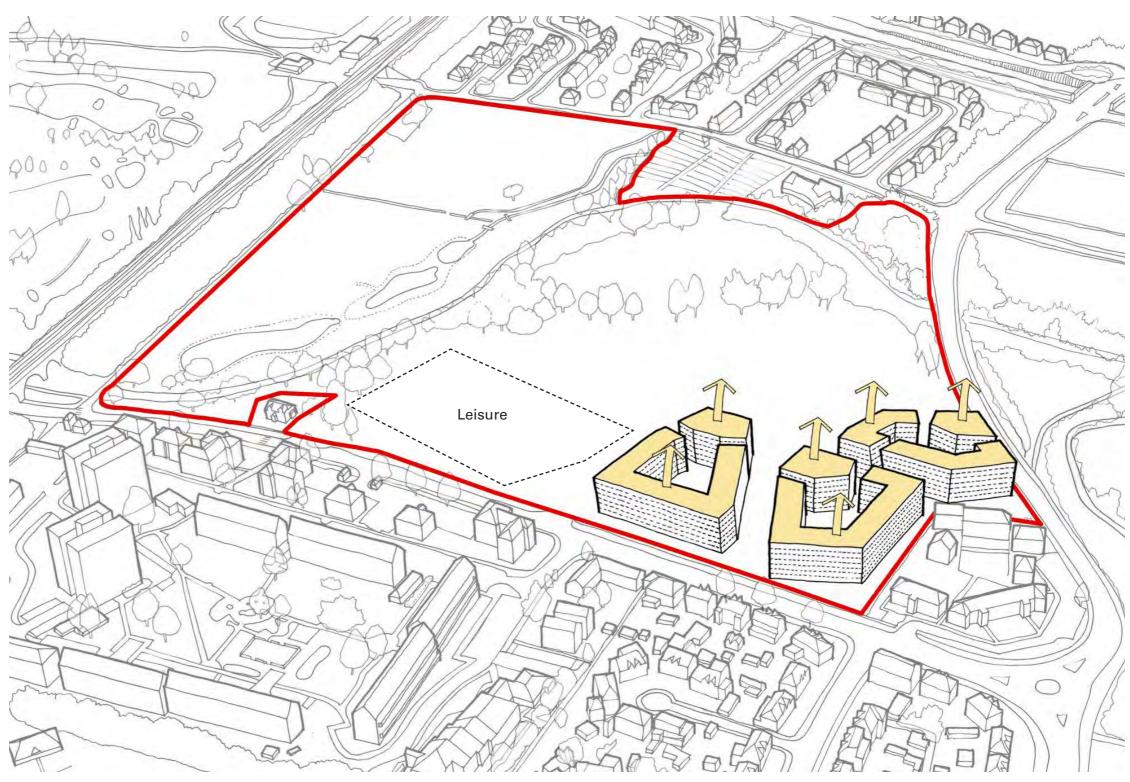




Key Moves

Average Height of 7 Storeys

Using a range of typologies, and arranging building footprints efficiently on site, an average building height can be established as a first step to start developing a more nuanced building massing.



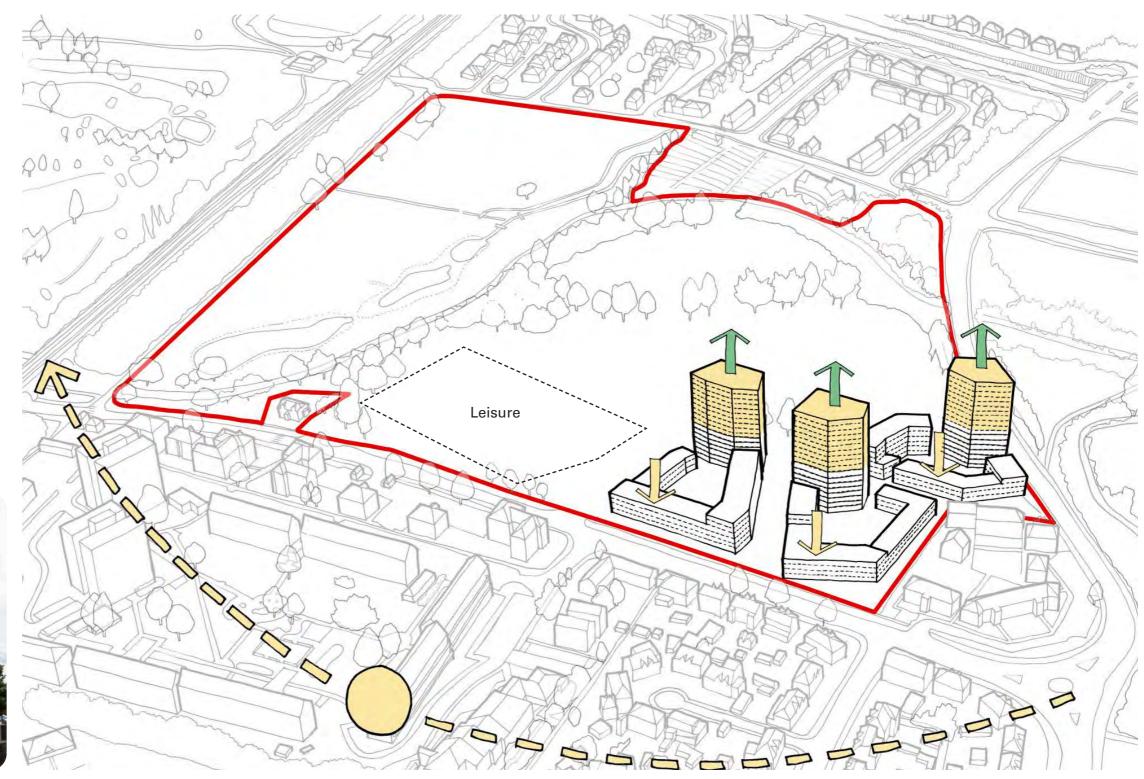


Key Moves

Building Heights Developed

The development of the massing strategy across the site is informed by a series of parameters and opportunities. Lower heights to the south help to ensure adequate daylight and sunlight conditions both internally and externally. There is an opportunity for buildings to be higher to the north where they do not overshadow communal amenity space, and where dwellings can take advantage of good views over the park.

In a 300 unit scenario, the villas would be circa. 8 storeys, and in 500 units, they could reach up to 18 storeys.









Housing - A New Community in the Park





Dual Aspect Villas overlooking MOL



Typologies create family homes with front doors



Front Gardens animate the street frontage



Human scale streets



Green Street characters link through to MOL



Courtyards with private and communal gardens



Townhouse scale respond to context and daylighting



Scales of play throughout the landscape







Housing - Summary of Proposals

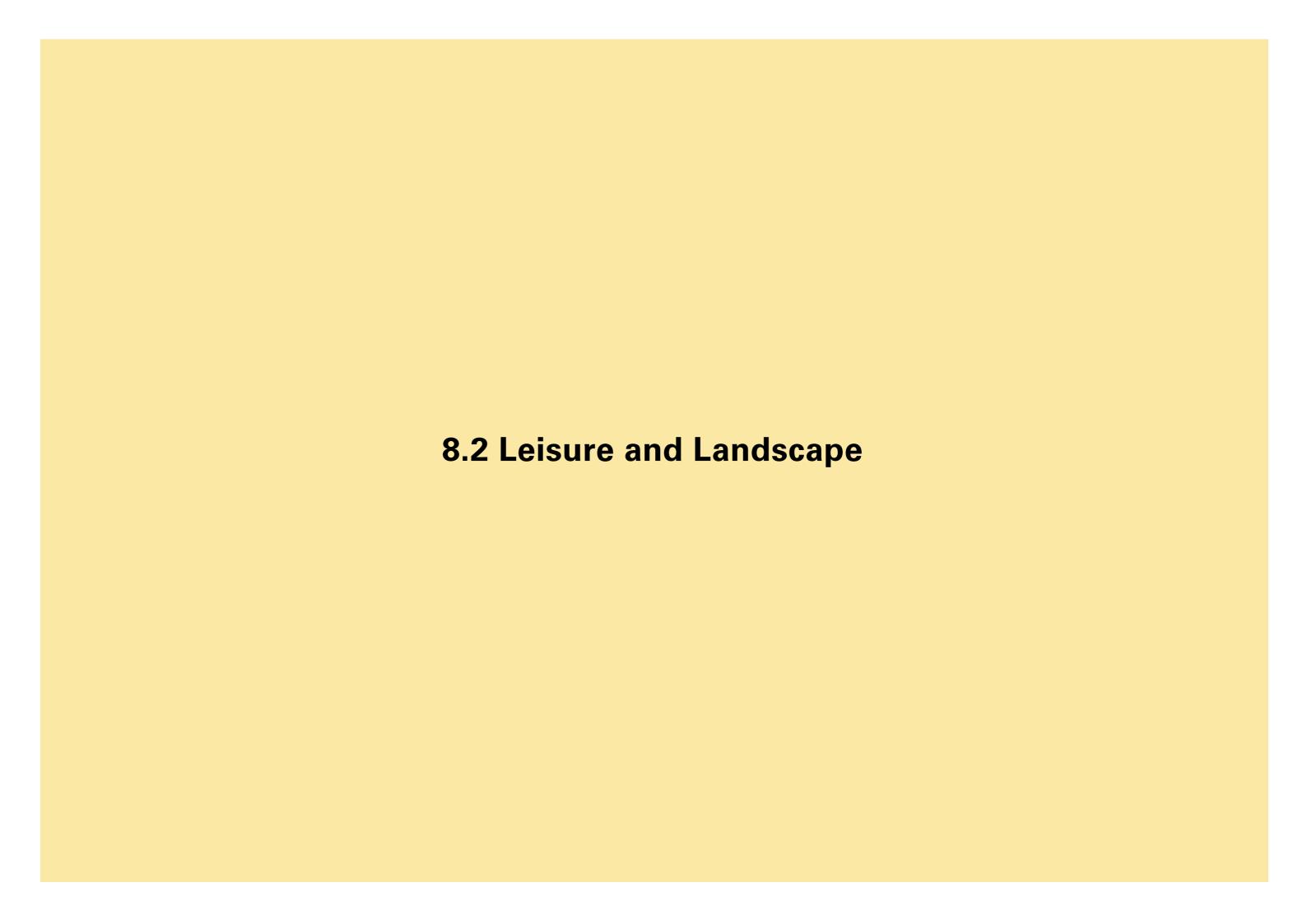
- Generous streets and landscape zones provide green links that connect Ruislip Road East to the parkland beyond
- Public squares around existing mature trees provide generosity to Ruislip Road East whilst creating gathering places near leisure centre
- 3 Courtyard gardens provide both private and communal spaces to create a sense of community between neighbours
- Variation in building heights create human scale streets with front doors and kitchen windows overlooking the street
- Pocket parks provide play close to home and communal gathering space that spill out into the wider parkland
- Pedestrian route along park edge links courtyards with villas and front doors animating the edge and creating a green link between homes and park
- Wider parkland connected with paths linking existing desire line from Argyle Road down through the new homes
- New bridge over the river Brent connects leisure with housing and knits into the wider pedestrian network
- 9 Villas form sculpted punctuations overlooking the park, maximising views from flats with balconies providing surveillance over the park
- New street provides frontage for Peel Gardens and ties it into the new neighbourhood



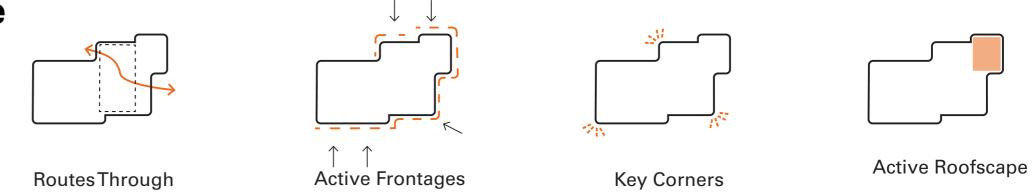


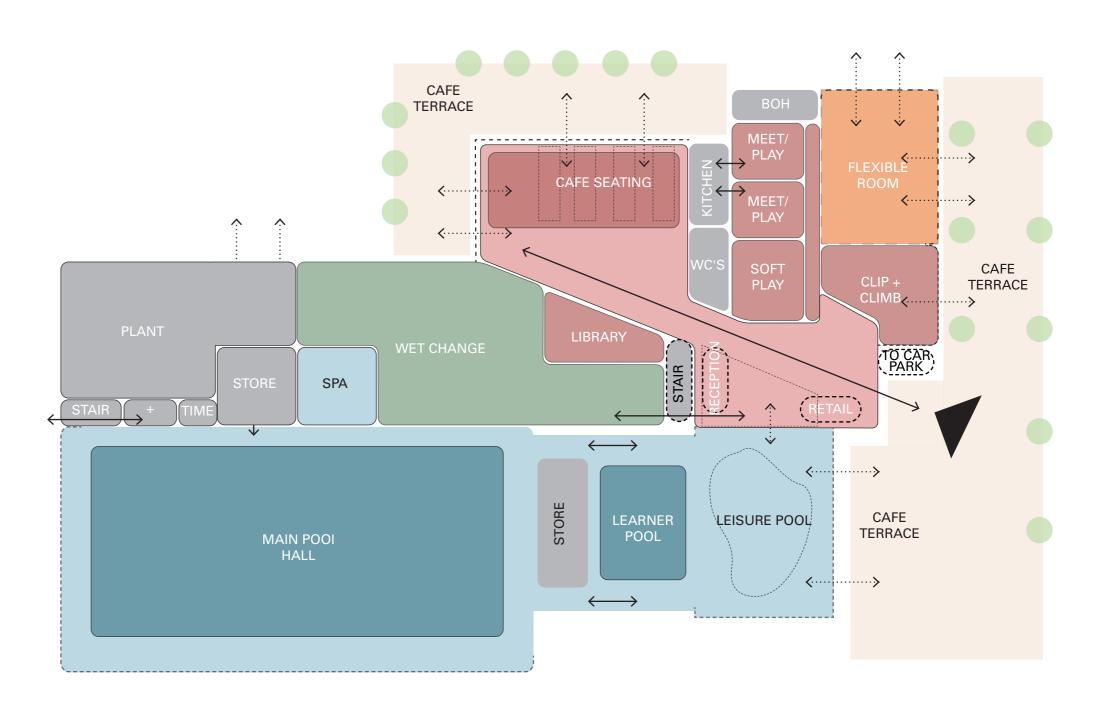






Leisure - Ground Floor Plan

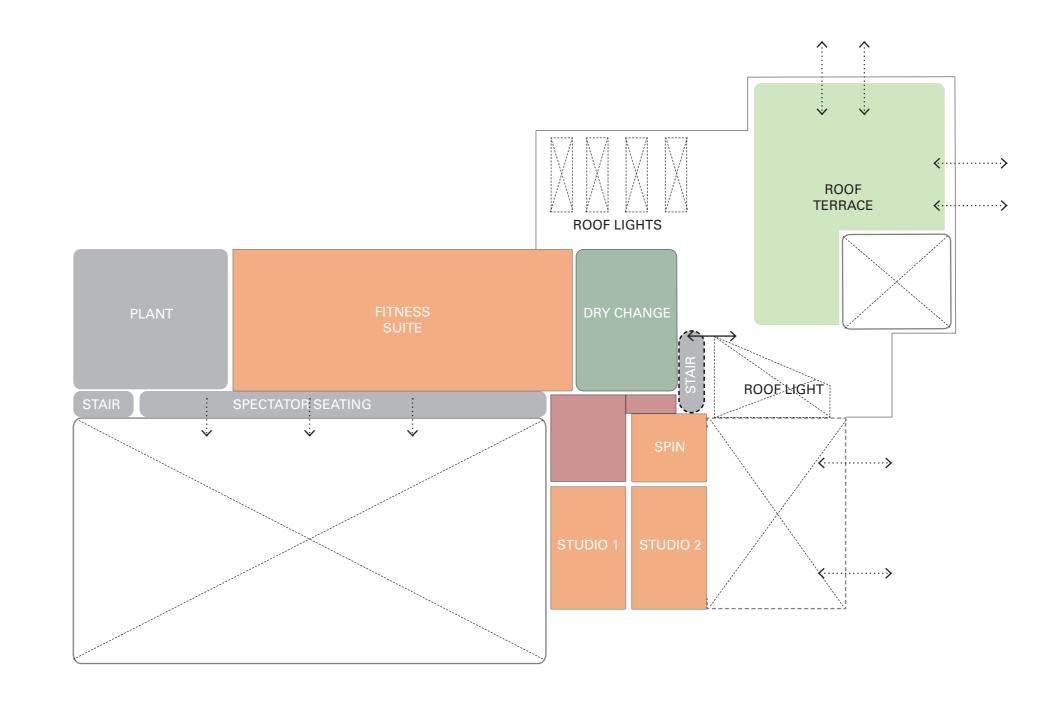




KEY:
Main Access
← Secondary Access
← Visual Connection



Leisure - First Floor Plan



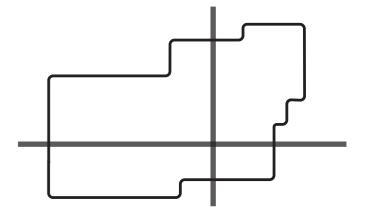
KEY:
Main Access
← Secondary Access
← Visual Connection

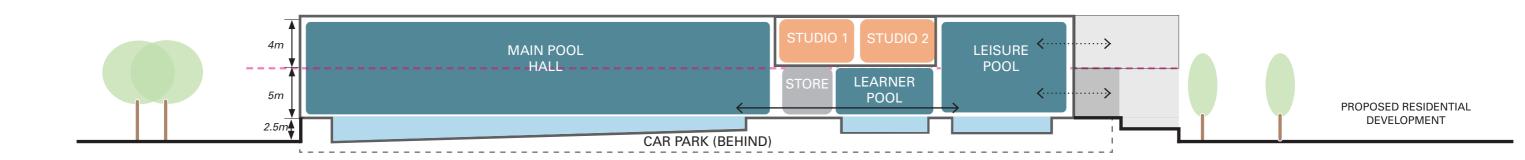


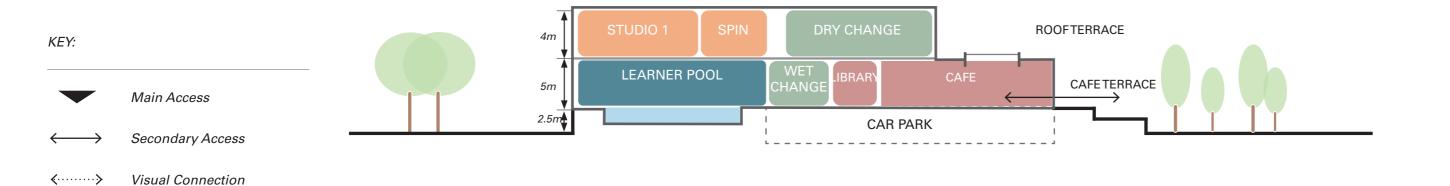




Leisure - Section











Leisure Location Opportunities and Constraints

- Creates a more integrated scheme with leisure on non-MOL land
- The building connects with the park and the new activity space will create further interest
- The leisure centre is located where it is currently, reducing the likelihood of local residents contesting its position on the site
- Pools face south maximising the solar gain from Passivhaus principles
- Sports hall, studios and fitness suite face north which are well positioned as cooled spaces
- Lively active frontage on arrival
- Good visual connection through the heart of the plan, connecting the park
- All stakeholder comments and lessons from the building visit have been incorporated
- Library position means that it can operate outside leisure hours if required
- Sports hall position on the north, provides the opportunity of bringing in high level glazing without effecting glare on the sports being played
- Plant room well positioned for deliveries (12m long vehicles)
- Good connection to private, external exercise space on the roof terrace (from the fitness and studios), connecting the park
- Car parking undercroft is more expensive and raises the building
- The café connects to the park, but creates a north aspect, meaning the terrace will be in shade. There is a possibility of moving the terrace to the south however
- Area of site has potential flood risk to deal with



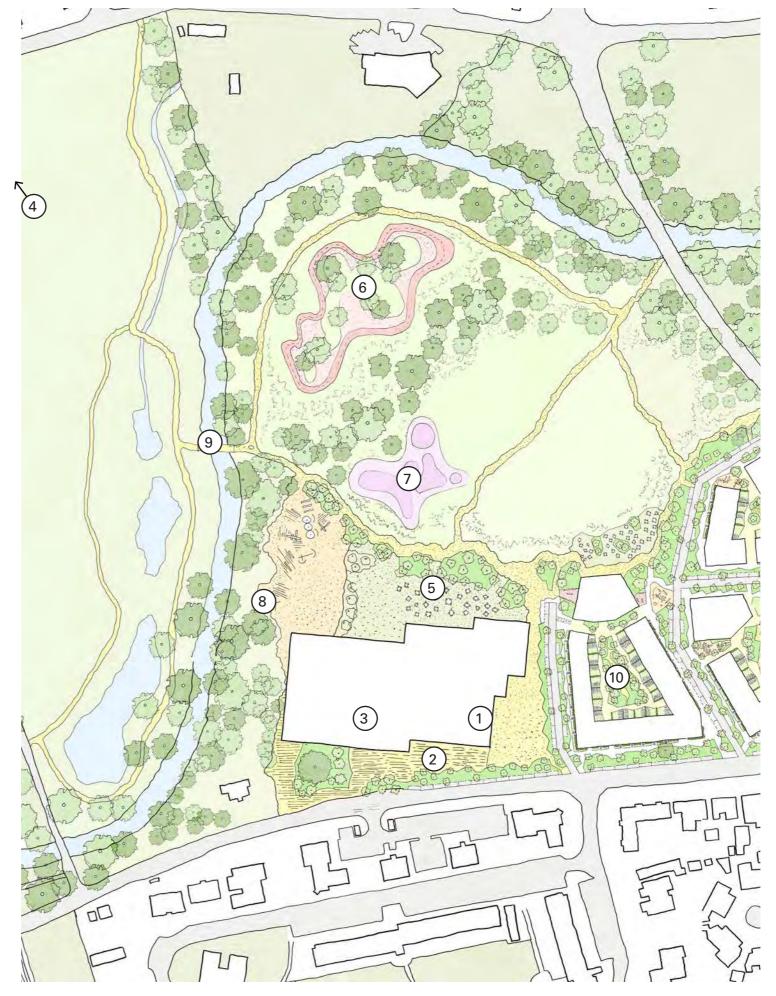






Leisure and Landscape

- Leisure entered from a south facing public square onto Ruislip Road East
- Swimming pool faces south to maximise solar gains, with visibility from the street to create an active and animated frontage, whilst maintaining privacy with existing mature trees
- (3) Car parking managed as basement or podium under leisure centre with coach drop off managed through public square.
- Offsite coach parking potentially accommodated to the north
- Cafe terrace spills out onto park and overlooks connected leisure uses. Park provides an aspect for the Spa and fitness suite rooms
- 6 Pump track is located in the wider parkland and draws uses further into the MOL
- Skatepark is located closer to cafe whilst also being connected to pump-track and far enough away to avoid noise to cafe
- 8 Woodland play and outdoor gym provide pockets of activity throughout the rivers edge and wider landscape.
- New bridge connects the site with the wider Gurnell to Greenford greenway
- Leisure uses tie into the grain of the neighbouring housing and provide animation at all times of day





Public square setting



Pool facing onto the street



Cafe overlooking parkland



Skate and BMX in parkland

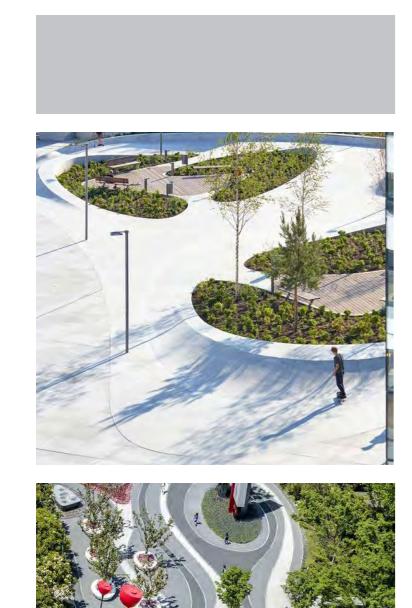


Play on the edge of parkland





Landscape Precedents - Urban Setting









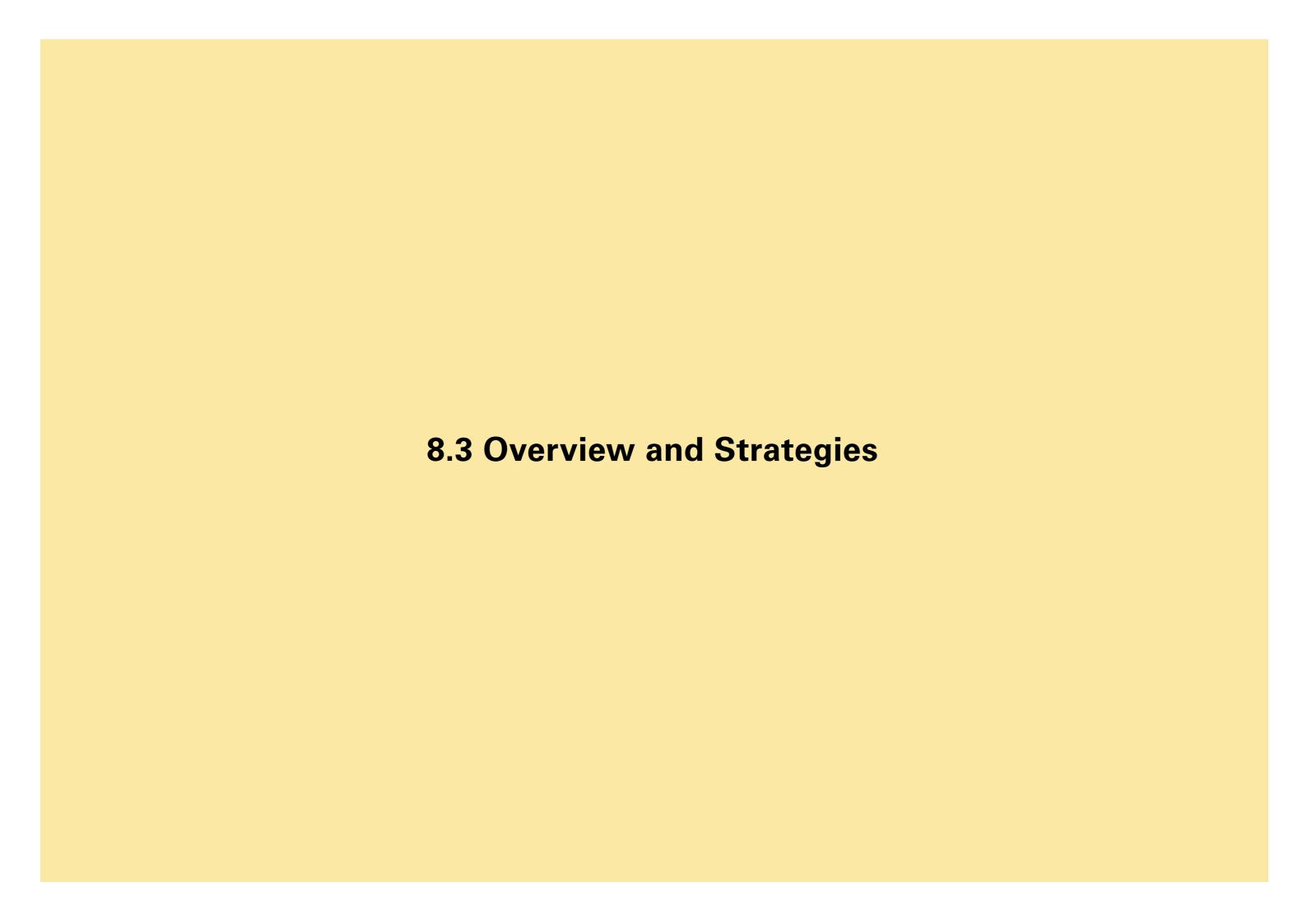


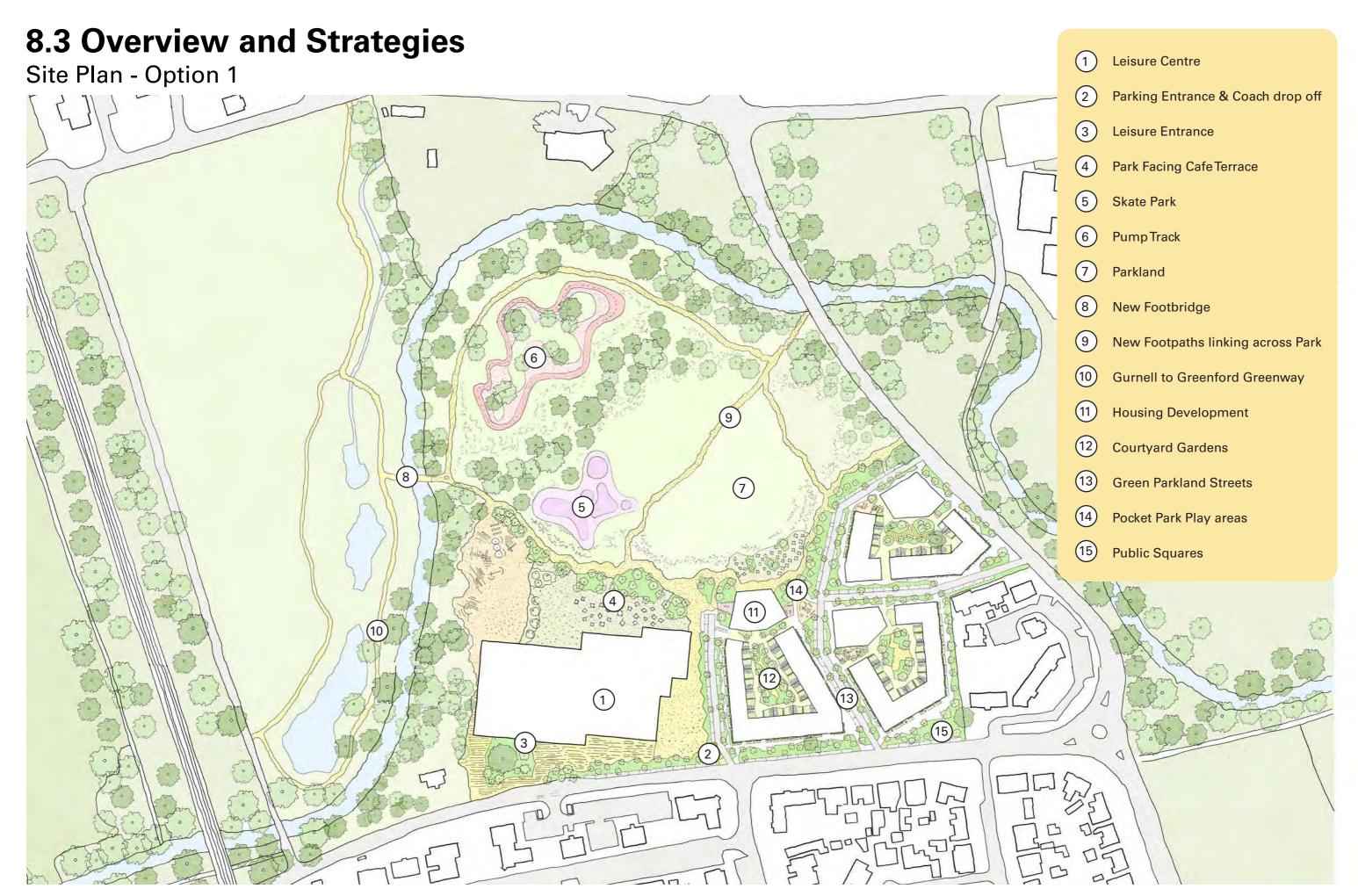
















Housing Typologies

A Range of Typologies

The proposal creates a series of courtyards around which a mix of different typologies create variety of heights. The range of massing heights respond to orientation, allowing daylight into the courtyards and creating a varied and human scale streetscape.

1. Townhouses

3 storey homes with front doors onto the street with roof terraces and private gardens onto the courtyard.

2. Stacked Duplexes

4 storey block with communal cores for the upper units. 3 bed duplexes with front doors onto the street and private gardens onto the courtyard. 2 bed duplexes at upper level accessed from gallery access with generous roof terraces above

3. Duplex Sandwich

6 storey block with communal cores. Duplexes at ground floor with front doors onto the street and private gardens onto the courtyard. Duplexes on the top two floors with generous roof terraces. 2 floors of flats in the middle which increase the number of smaller units on the scheme.

4. Villas

A generous floorplate with 7 units per floor - 5 no. 1 beds and 2 no. 2 bed. This can be configured in a number of different ways to suit the housing need. The units maximise frontage onto the park with balconies overlooking the open space.







A Flexible Housing Strategy

Flexibility

The courtyard strategy is very flexible to respond to housing type and tenure as the optimum mix is developed. For example;

- The Stacked Duplexes and Duplex Sandwich are the same block depth, so can be interchanged.
- The Duplex Sandwich can add or lose floors in the middle so that it can range from 4-7 storeys.
- The townhouse flanks can easily be adapted to 4 storey town house or down to 2 storeys
- The villas can vary the most, with the ability to range in height to suit the overall unit numbers, down to 6 storeys with the upper end limited by technical and planning constraints. The recommendation is for approx. 8 storeys.
- The villas can also vary in their floorplate configuration to accommodate 3 no. 3B units per floor or a smaller floorplate used in some locations for maximum 4 units per core.

The blocks could easily be distributed by tenure/ housing typology by core, flank or even whole courtyards. This also allows the overall character of the development to remain cohesive whilst allowing the flexibility for different housing, developers and even phases throughout the site.

Supported Living as a typology could be applied either by whole courtyards or a single villa as seen at PegasusLife Hortsley by RCKa Architects.

Community Land Trusts are another alternative tenure (e.g. London CLT) that could develop a whole courtyard or just a villa or flank.

Ground Floor Uses

A range of different commercial uses could be incorporated at ground floor and would be best located onto the Ruislip Road East frontage where there are public squares. This could be food shop, office space, cafe or other community run use.





Integrated Sustainable Transport Masterplan

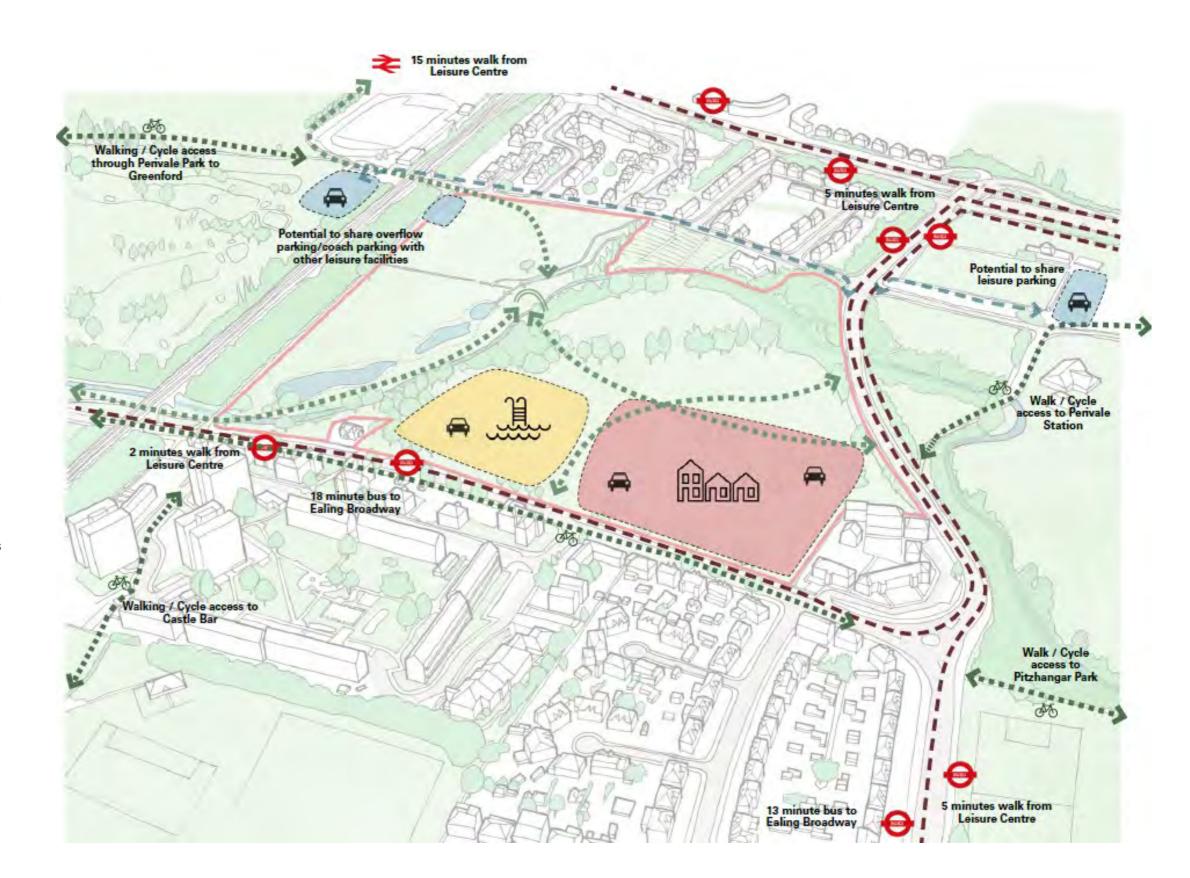
Transport and Accessibility

Akin to the existing arrangement, a new leisure centre in this location can draw upon the local active travel network and adjacent bus stops to encourage sustainable travel to the facilities. Ways in which this existing network could be enhanced are discussed later in this chapter.

Leisure parking in this Site Approach option is constrained with a integrated basement/podium solution likely to be required to accommodate car parking. Further exploration of potential for shared parking facilities between local leisure uses can be explored in the next stages.

The primary strategy for residential parking focusses car parking on-street integrated into a landscape-led public realm. This would enable approximately 0.13 spaces per dwelling to be achieved. The cost/benefit of additional residential car parking spaces can be explored in the next stages and would seek to integrate parking into podium structures at the base of residential buildings.

With the higher density of development the streets are likely to be more urban in scale with a need to focus strongly on enabling walking and cycling as primary modes of transport, linking with public transport networks beyond the site boundary.









Cross-Park Linkage

Sustainable transport interventions can cater for new and existing users alike. Providing a highquality interchange is viable within a high density setting with the high levels of patronage.

The introduction of modal filters and parking restrictions can protect existing residents in the surrounding area from increased demand for the existing road network.









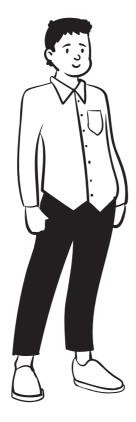






User Stories

The transport stategy must cater for the varied needs of the future users to the leisure centre, Brent River Park and housing development. The following are examples of possible needs and experiences:



Adam, a young professional and resident of the new housing development, works in the City but does not own a car. Encouraged by the new segregated cycle paths, he uses a mix of rented **e-bikes** and **scooters** to get from his apartment to Perivale station, switching seamlessly to the **Underground**.

Amelia enjoys using the leisure centre facilities, particularly the gym, to unwind after work. Stepping straight off the **train**, she gets the **bus** from West Ealing right to the front door. She can **walk** straight home to her apartment using the wide footways and traffic-calmed streets.





Muhammad and his family love the greenery and wildlife surrounding Gurnell leisure centre. Improvements to the streets in and around the development have made it easier to **drive** to the park with reserved parking bays with less through traffic. They love that everything is in one place so they don't have to make multiple journeys.



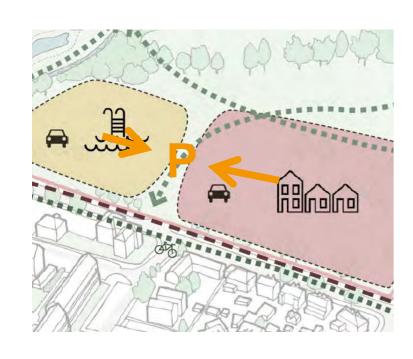


Car Parking

With the residential and leisure uses next to each other, combined parking provision will mean the most efficient use of land, but will come at a significant cost. Managing down parking demand and exploring options for off-site parking will therefore be important to ensure viability.

There are many examples across the UK and internationally where centralised parking is provided within undercroft or multistorey car parks, which offer the greatest flexibility to suit a range of user profiles.

Since periods of peak demand are staggered between the different uses, i.e. residential and leisure, it is possible for any given space to fulfil multiple roles, reducing the overall number of parking spaces required.















Variations Housing Numbers / Mix

Variations

The masterplan and housing strategy remains flexible and can adapt to reflect the different housing numbers required for the key funding routes.

The two options for housing numbers that have been tested are summarised here, along with an indication of their massing (therefore visual impact) in each case.

There are many variables on unit numbers, unit mix, typologies, tenures etc.. that will be developed in more detail at the next stage and these are very indicative massings at this point.

Circa. 500 Homes

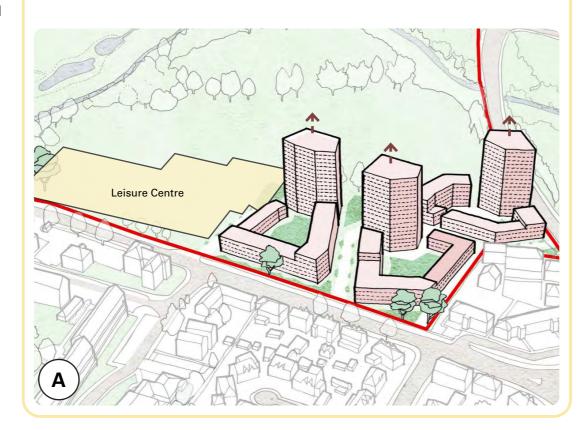
Housing Site Area: 1.8 ha

Dwellings: 515

Density: 286 dw/ha

Building Heights: 3-18 storeys

Car Parking: 0.13 spaces/dw



Circa. 300 Homes

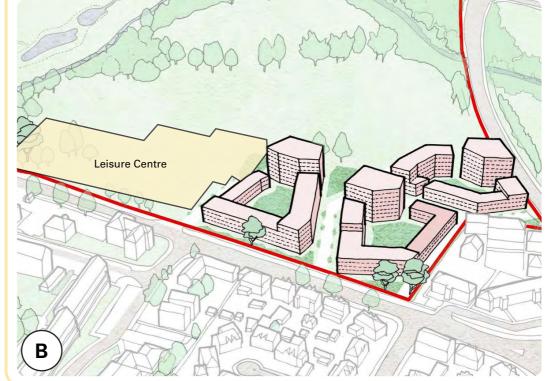
Housing Site Area: 1.8 ha

Dwellings: 306

Density: 170 dw/ha

Building Heights: 3-8 storeys

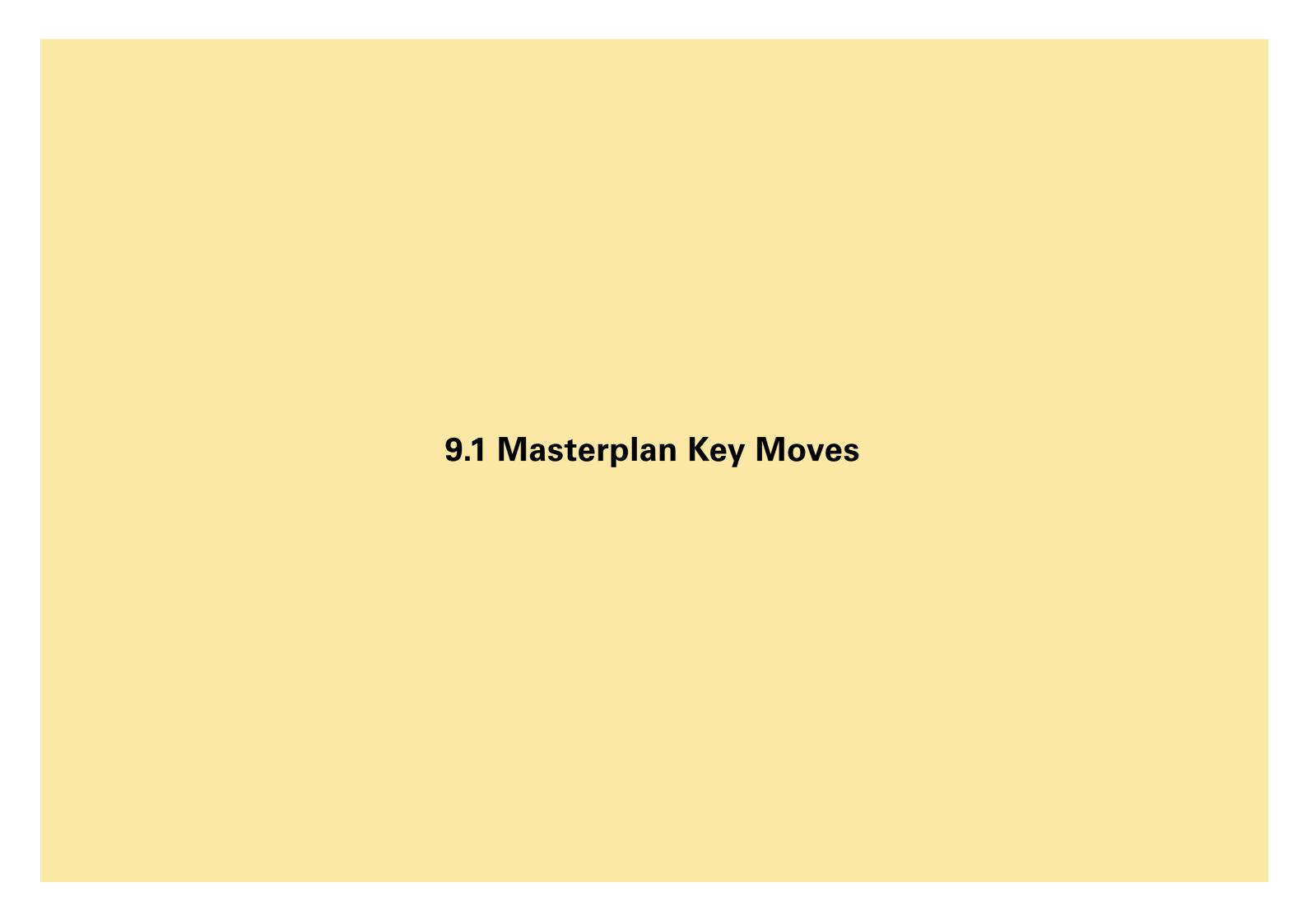
Car Parking: 0.2 spaces/dw



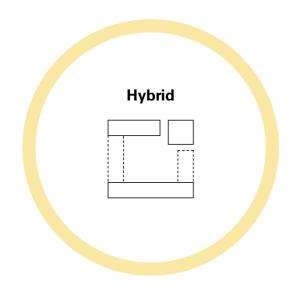




9.0 Site Option 02



Testing Typologies on site

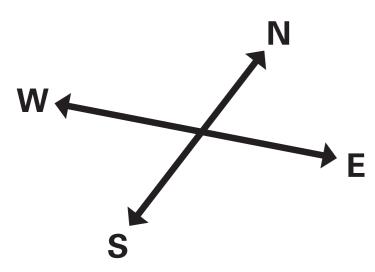


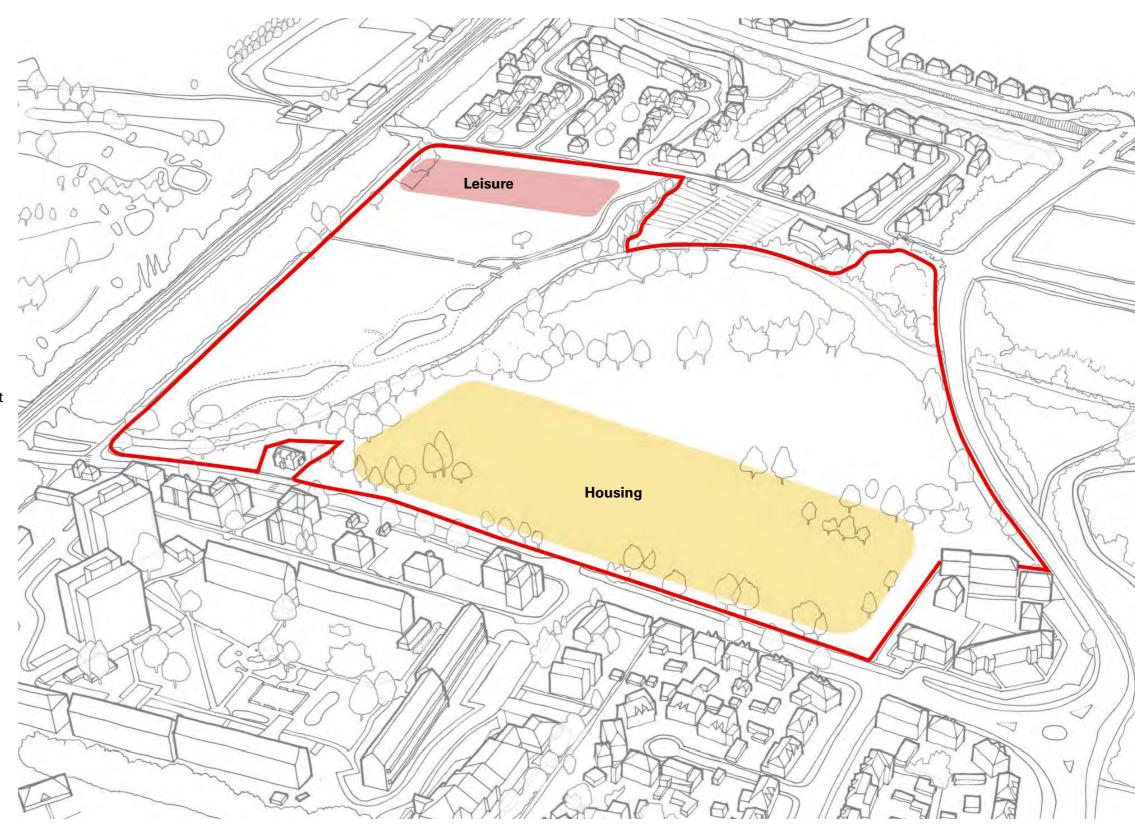
Learning from Capacity Studies

Having tested typologies on site, a hybrid approach may offer a solution which takes the advantages of each and combines them on site to make a coherent neighbourhood.

Site Orientation

A hybrid approach can take advantage of orientation to prioritise a passive solar scheme, helping to create a sustainable neighbourhood.









Masterplan Key Moves

Green Streets and Views

Green streets running perpendicular to Ruislip Road East frame views of the MOL parkland and the wooded landscape beyond. Street trees and naturalistic planting extend the parkland character.





Masterplan Key Moves

Routes and Connections

The placement of buildings on site maintains a sense of openness and connection to the green spaces throughout the site. Streets create links through to the park whilst also providing the framework for access to the new homes with front doors along these.

A series of secondary routes enhances experience of the landscape spaces with new routes connecting to both the wider leisure landscape and the more intimate courtyard green and play spaces.

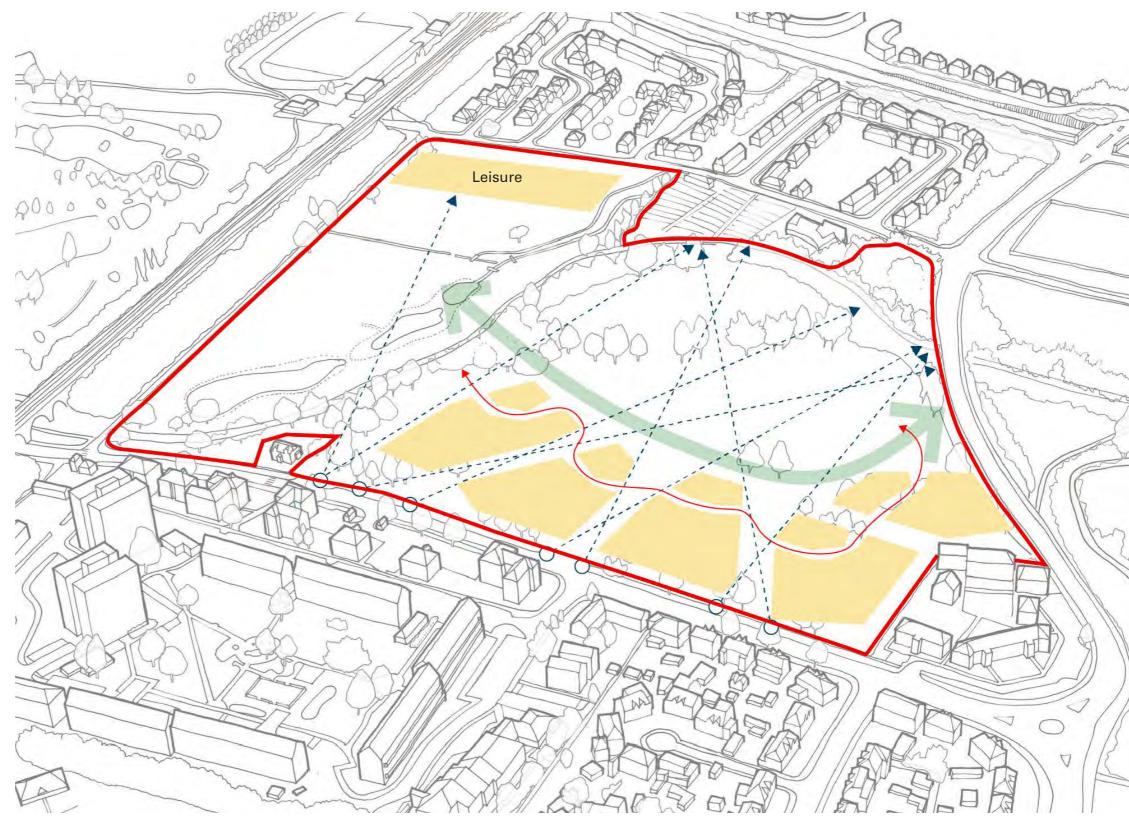
KEY:

O--→ Views through to MOL

← Play Route

MOL Route









Masterplan Key Moves

A Range of Scales of Landscape Spaces

There is an opportunity for a range of landscape spaces across the site which each knit into and enhance the existing context.

Streets create green fingers through the site, whilst a series of pocket parks each with a distinct character provide places for a neighbourhood to play and enjoy outdoors.

The residential buildings are arranged into loose courtyard forms, allowing for central green spaces to be enjoyed communally by residents.

KEY:

Courtyards

Streets

Pocket Parks

Sport Landscape

Parkland





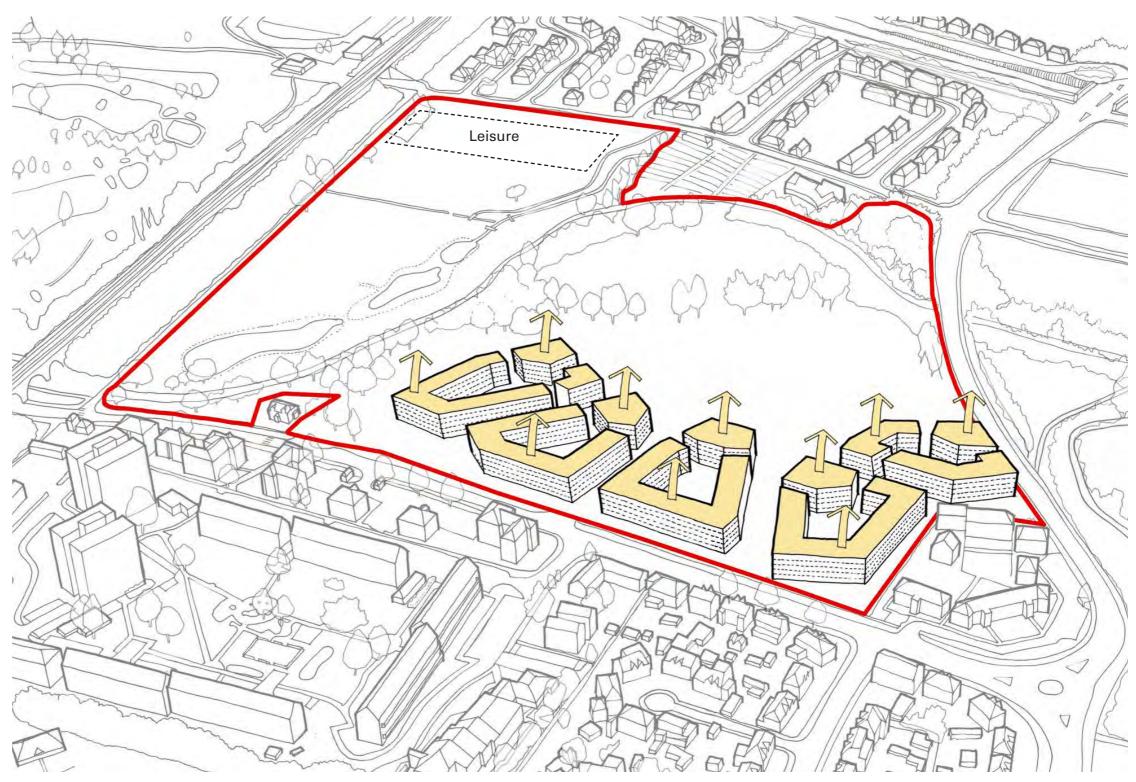




Masterplan Key Moves

Average Height of 5 Storeys

Using a range of typologies, and arranging building footprints efficiently on site, an average building height can be established as a first step to start developing a more nuanced building massing.





Masterplan Key Moves

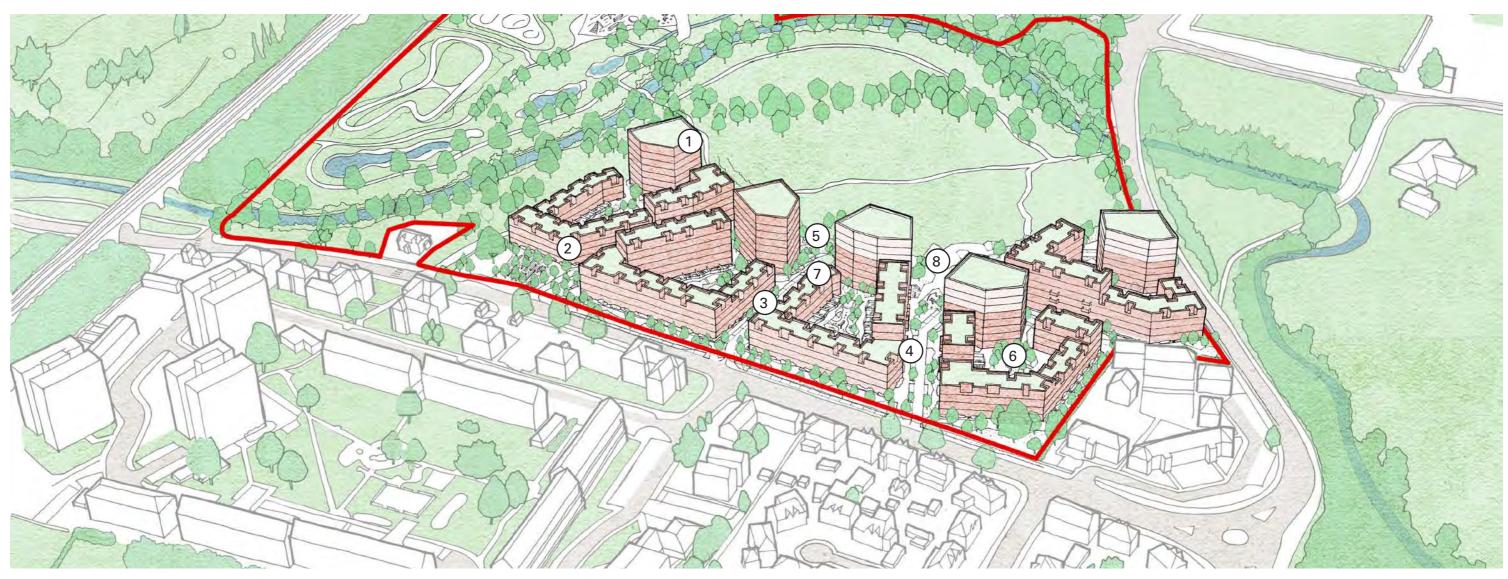
Building Heights Developed

The development of the massing strategy across the site is informed by a series of parameters and opportunities. Lower heights to the south help to ensure adequate daylight and sunlight conditions both internally and externally. There is an opportunity for buildings to be higher to the north where they do not overshadow communal amenity space, and where dwellings can take advantage of good views over the park.





Housing - A New Community in the Park





Dual Aspect Villas overlooking MOL



Typologies create family homes with front doors



Front Gardens animate the street frontage



Human scale streets



Green Street characters link through to MOL



Courtyards with private and communal gardens



Townhouse scale respond to context and daylighting



Scales of play throughout the landscape







Housing - Summary of Proposals

- Generous streets and landscape zones provide green links that connect Ruislip Road East to the parkland beyond
- Public squares around existing mature trees provide generosity to Ruislip Road East whilst creating gathering places near commercial spaces
- Courtyard gardens provide both private and communal spaces to create a sense of community between neighbours
- Variation in building heights create human scale streets with front doors and kitchen windows overlooking the street
- Pocket parks provide play close to home and communal gathering space that spill out into the wider parkland
- Pedestrian route along park edge links courtyards with villas and front doors animating the edge and creating a green link between homes and park
- Wider parkland connected with paths linking existing desire line from Argyle Road down through the new homes
- New bridge over the river Brent connects leisure with housing and knits into the wider pedestrian network
- Villas form sculpted punctuations overlooking the park, maximising views from flats with balconies providing surveillance over the park
- New street provides frontage for Peel Gardens and ties it into the new neighbourhood





Pubic squares onto Ruislip Rd E Courtyard Gardens





Human scale streetscape



Pocket parks and play



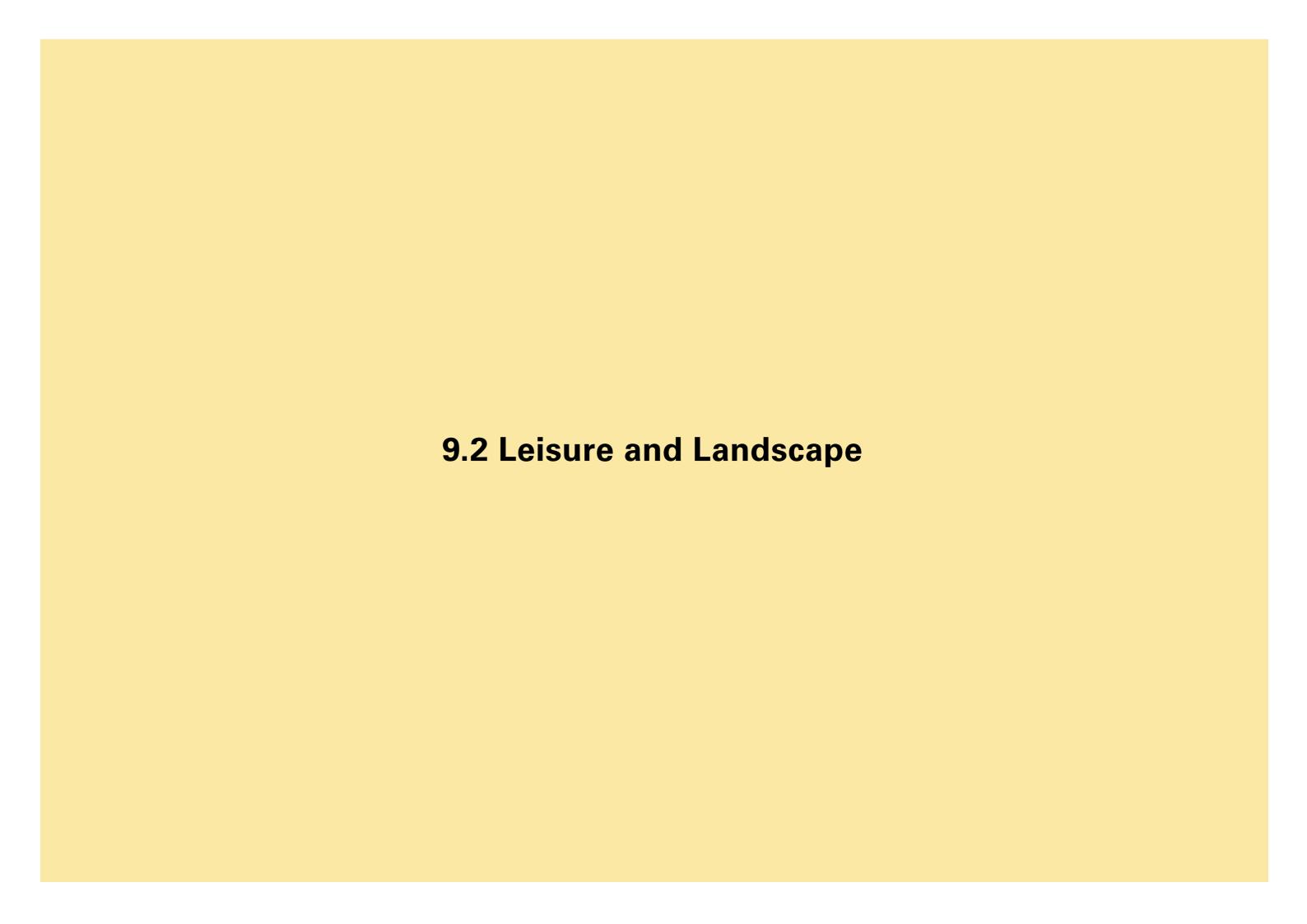
Pedestrian parkland edge



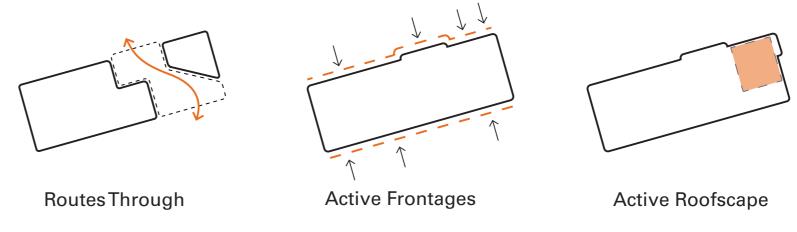


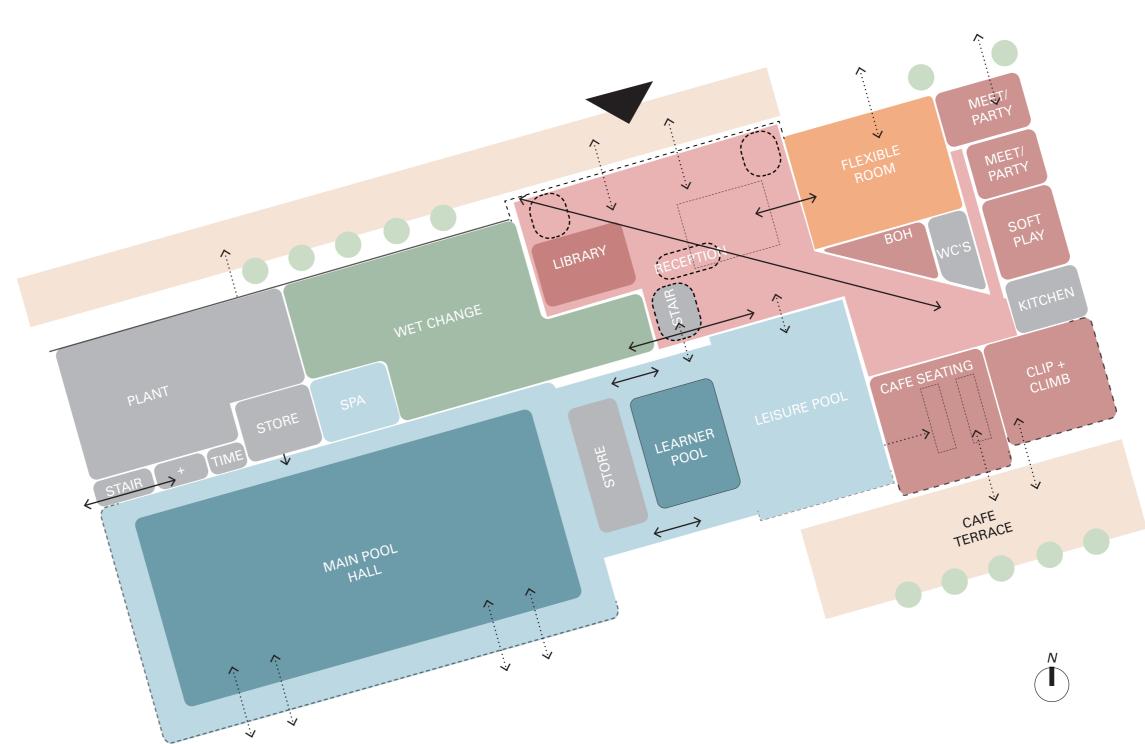






Leisure - Ground Floor Plan









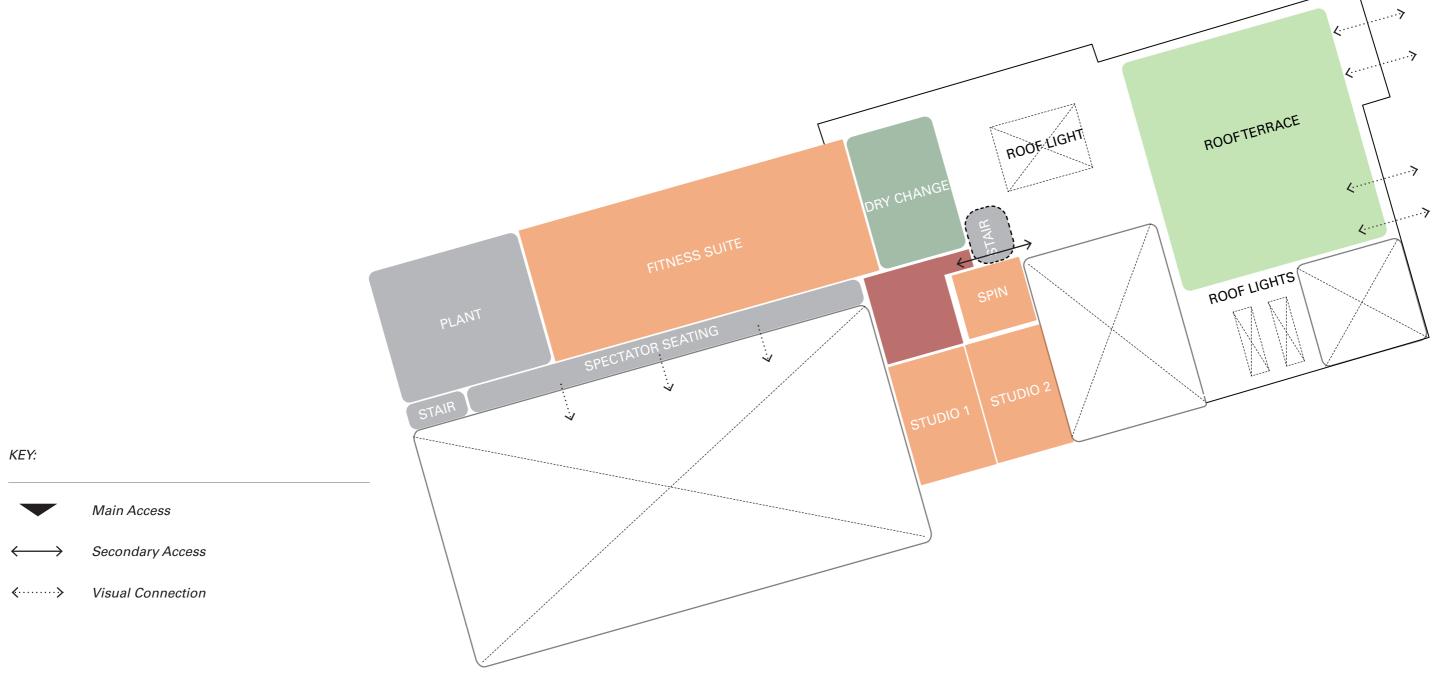
Main Access

Secondary Access

Visual Connection

KEY:

Leisure - First Floor Plan

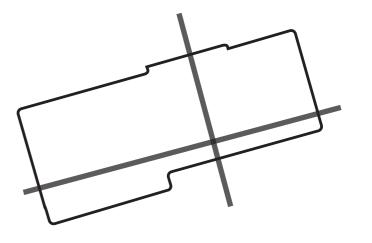


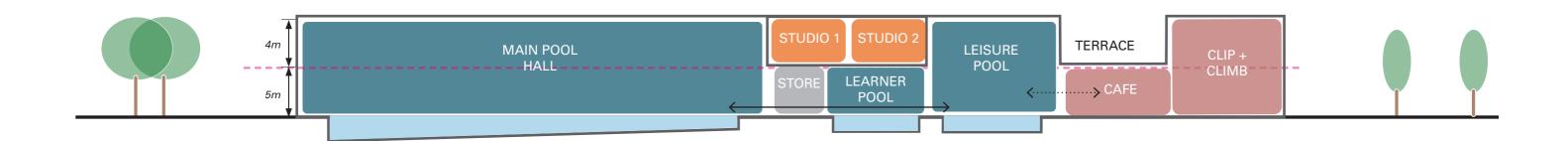


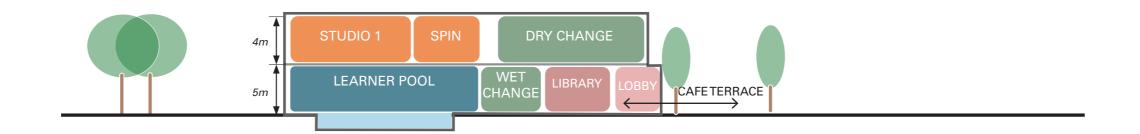




Leisure - Section









Leisure Location Opportunities and Constraints

- Car parking can be located at ground level rather than undercroft
- The building connects with the park and the river bank
- The building is in close proximity to the golf course, athletics track and cricket pitch, creating a sports hub.
- Pools face south maximising the solar gain from Passivhaus principles
- Sports hall, studios and fitness suite face north which are well positioned as cooled spaces
- Lively active frontage on arrival
- Good visual connection through the heart of the plan, connecting the park
- All stakeholder comments and lessons from the building visit have been incorporated
- Library position means that it can operate outside leisure hours if required
- Café responds well to the park, with a pleasant southern aspect, leading to external terrace space
- Good connection to private, external exercise space on the roof terrace (from the fitness and studios), connecting the park
- Leisure Centre not connected to main road and could be seen as pushed into a corner.
- Potential impact on Stock Dove Way residents from traffic.
- Close proximity to the rail line (acoustics, especially on the outdoor terrace space)
- Car parking is a distance from the main entrance of the facility and users have to walk under the rail bridge









Leisure and Landscape

- Existing mature tree lined avenue creates a sense of arrival and connects pedestrians with bus stops on Ruislip Road East over existing bridge.
- Pathways weave through landscape and connect existing greenway with new southern entrance to the Leisure centre
- Way creates a dual face Leisure Centre with entrance from the Road for those arriving by car. Associated upgrades to the public realm creates a well lit, active sense of arrival
- Swimming pools all face south to maximise solar gains, with views out over the park and wetlands. Potential for a lido or wild swimming, connecting inside and out
- South facing terrace connects to the cafe and provides a 'green arrival' backdrop to the parkside entrance
- 6 Sculpted parkland provides a setting for picnics and gathering alongside the river edge leading to the new bridge
- Pump track animates pedestrian routes through parkland
- Skatepark is located close to cafe whilst also being connected to pump-track and far enough away to avoid noise to cafe
- Woodland play and outdoor gym provide pockets of activity throughout the rivers edge and wider landscape
- Permeable car park with extensive tree planting sits lightly on the MOL and can be reduced over time to reflect increasing levels of sustainable travel

Character of landscape ties into the Gurnell to Greenford Greenway and potential wider works to re-wild the Golf Course





Tree lined avenue approach



Pool linking to nature beyond



Opportunities for outdoor swimming or lido



Skate and BMX in woodland



Woodland play and trim trail





Leisure Building Precedents - Pavilion in the Park



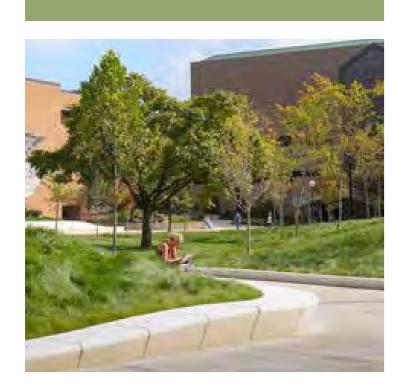






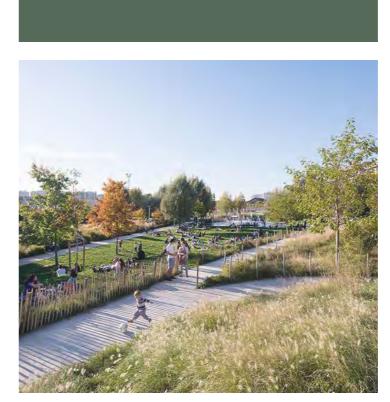


Landscape Precedents - Option 3b Park Setting























Site Plan - Option 3





Leisure Centre

Housing Typologies

A Range of Typologies

The proposal creates a series of courtyards around which a mix of different typologies create variety of heights. The range of massing heights respond to orientation, allowing daylight into the courtyards and creating a varied and human scale streetscape.

1. Townhouses

3 storey homes with front doors onto the street with roof terraces and private gardens onto the courtyard.

2. Stacked Duplexes

4 storey block with communal cores for the upper units. 3 bed duplexes with front doors onto the street and private gardens onto the courtyard. 2 bed duplexes at upper level accessed from gallery access with generous roof terraces above

3. Duplex Sandwich

6 storey block with communal cores. Duplexes at ground floor with front doors onto the street and private gardens onto the courtyard. Duplexes on the top two floors with generous roof terraces. 2 floors of flats in the middle which increase the number of smaller units on the scheme.

4. Villas

A generous floorplate with 7 units per floor - 5 no. 1 beds and 2 no. 2 bed. This can be configured in a number of different ways to suit the housing need. The units maximise frontage onto the park with balconies overlooking the open space.







A Flexible Housing Strategy

Flexibility

The courtyard strategy is very flexible to respond to housing type and tenure as the optimum mix is developed. For example;

- The Stacked Duplexes and Duplex Sandwich are the same block depth, so can be interchanged.
- The Duplex Sandwich can add or lose floors in the middle so that it can range from 4-7 storeys.
- The townhouse flanks can easily be adapted to 4 storey town house or down to 2 storeys
- The villas can vary the most, with the ability to range in height to suit the overall unit numbers, down to 6 storeys with the upper end limited by technical and planning constraints. The recommendation is for approx. 8 storeys.
- The villas can also vary in their floorplate configuration to accommodate 3 no. 3B units per floor or a smaller floorplate used in some locations for maximum 4 units per core.

The blocks could easily be distributed by tenure/ housing typology by core, flank or even whole courtyards. This also allows the overall character of the development to remain cohesive whilst allowing the flexibility for different housing, developers and even phases throughout the site.

Supported Living as a typology could be applied either by whole courtyards or a single villa as seen at PegasusLife Hortsley by RCKa Architects.

Community Land Trusts are another alternative tenure (e.g. London CLT) that could develop a whole courtyard or just a villa or flank.

Ground Floor Uses

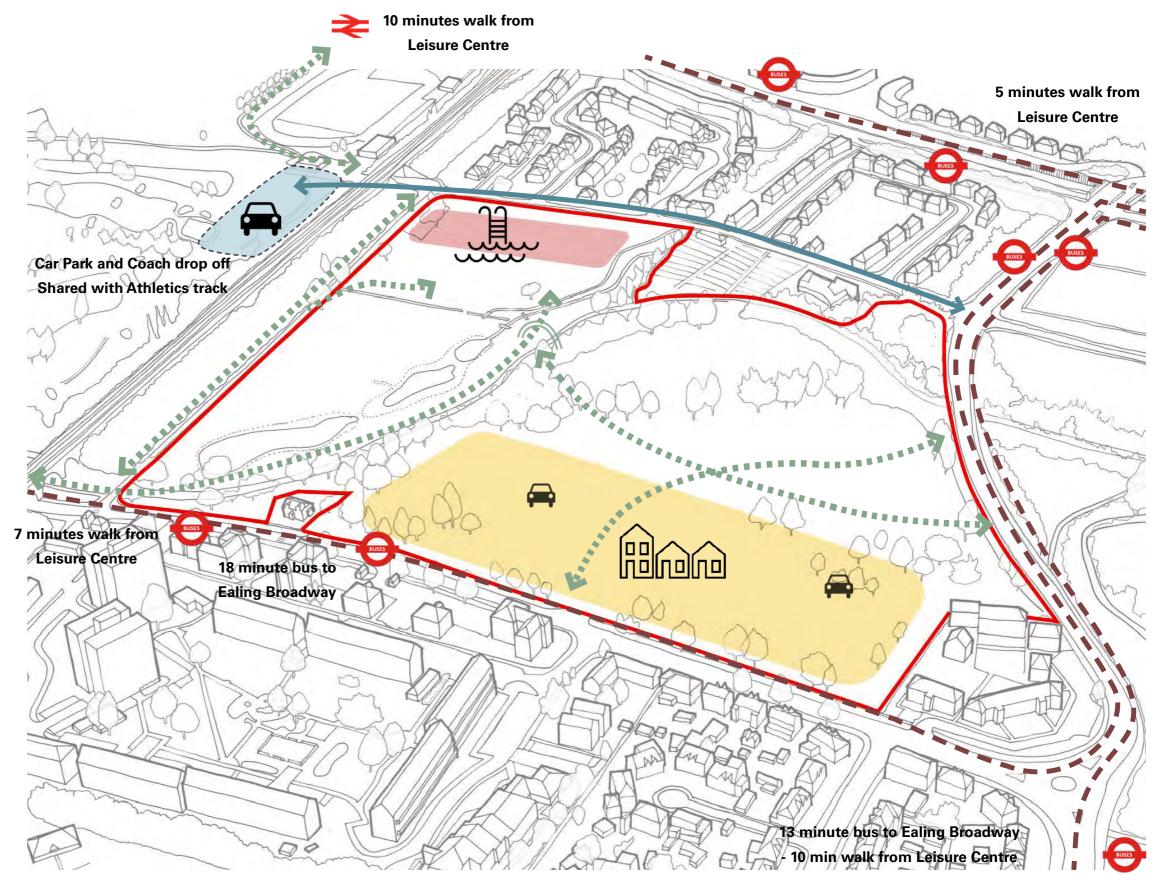
A range of different commercial uses could be incorporated at ground floor and would be best located onto the Ruislip Road East frontage where there are public squares. This could be food shop, office space, cafe or other community run use.







An Integrated Sustainable Masterplan





Integrated Sustainable Transport Masterplan

Transport and Accessibility

A new leisure centre at the north of the site can also draw upon the local active travel network and adjacent bus stops to enable access to the facilities. In particular, a clear link with Greenford rail station could be established and ways in which this existing network could be enhanced are discussed later in this chapter.

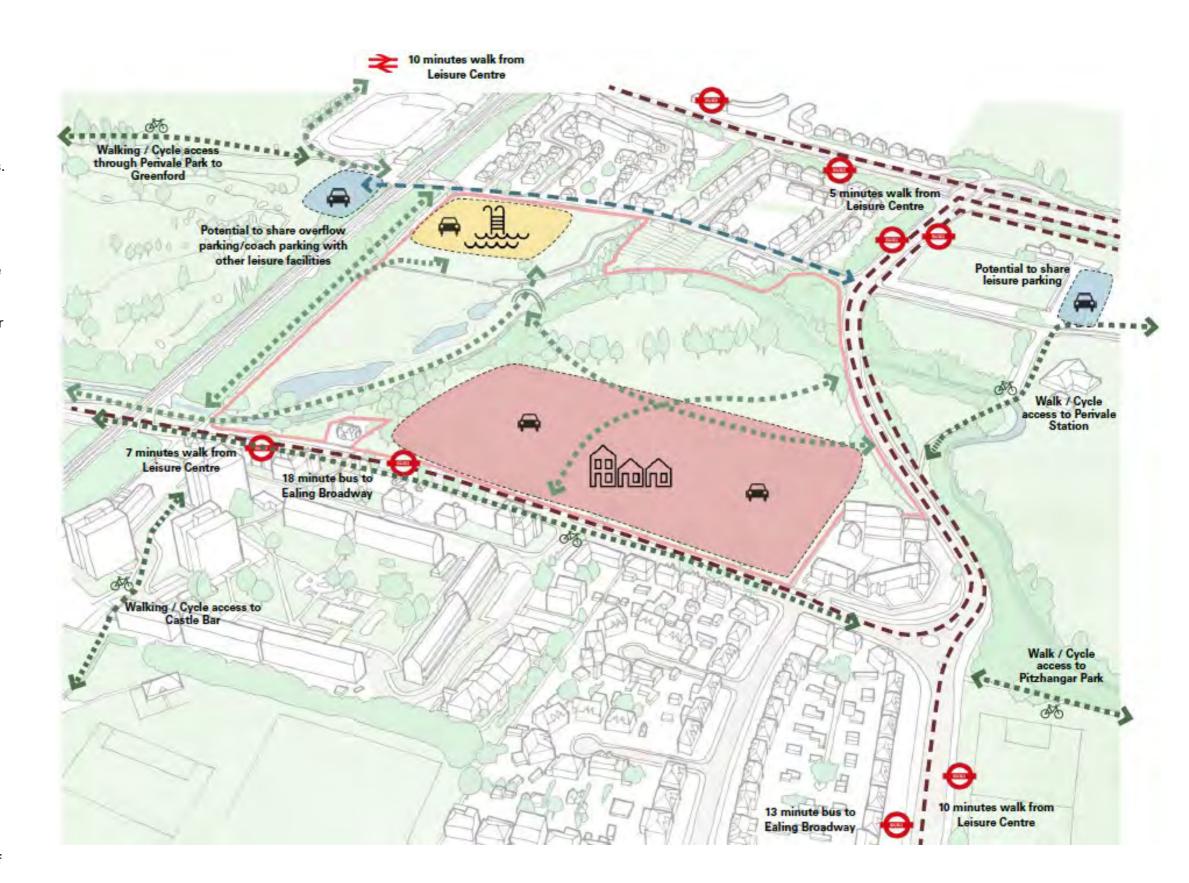
Leisure parking in this Site Approach option can be accommodated adjacent to the site as part of an extension to the existing athletics and golf course parking. This shared approach to leisure parking for athletics and leisure centre can offer efficiencies in overlapping demand as well as aiding the creation of a shared identity for a leisure landscape in this area.

The primary strategy for residential parking focusses car parking on-street integrated into a landscape-led public realm. This would enable approximately 0.2 spaces per dwelling to be achieved. The cost/benefit of additional residential car parking spaces can be explored in the next stages and would seek to integrate parking into podium structures at the base of residential buildings.

The introduction of sustainable intervention alongside some level of parking restraint can reduce the influence of the private car and instead promote and enhance the use of existing sustainable infrastructure, ultimately reducing impacts on the local highway network.

Potential intervention to target the cycling and walking network on and around the A40 include step-free access, dedicated cycling infrastructure and enhancements to the local environment.

These interventions also provide improvement to public transport connectivity, particularly towards bus routes serving the A40 and both National Rail and Underground stations to make these modes of travel more of a realistic option.









Cross-Park Linkage

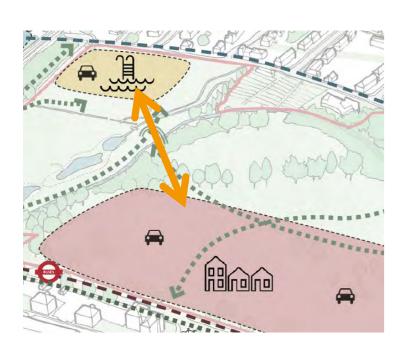
Locating the residential and leisure uses at opposite sides of the open space invites the opportunity to create a high-quality traffic-free link that complements and extends the current greenway.

The short walk or cycle between the two distinct areas can become an attraction in its own right, similar to how the Queen Elizabeth Olympic Park provides an attractive setting to the Olympics legacy developments in Stratford.

The introduction of the new footbridge across the River Brent directly facilitates this connection and can be aligned to enable strong sightlines from one destination to the other.







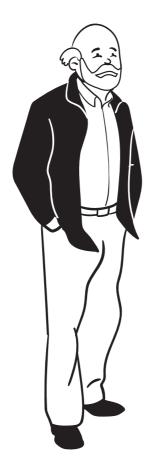




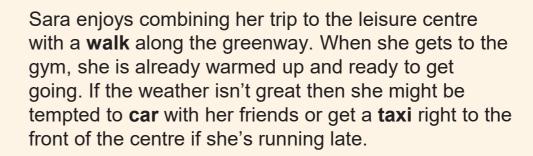


User Stories

The transport stategy must cater for the varied needs of the future users to the leisure centre, Brent River Park and housing development. The following are examples of possible needs and experiences:



Frank runs classes at the library and regularly has to carry books and equipment with him. He uses the drop-off bay at the leisure centre to unload and then parks his **car** out of the way in the car park. He is thinking of getting a **cargo bike** now that the cycle routes from his house have been improved.





Katy works at the Town Hall and gets the **bus** to work every day. She loves how she can step straight out of her front door to the bus stop. With the buses so frequent she never has to wait very long but the shelter and seating is useful when its raining. The real-time information screen provides a reassuring countdown to the next bus.







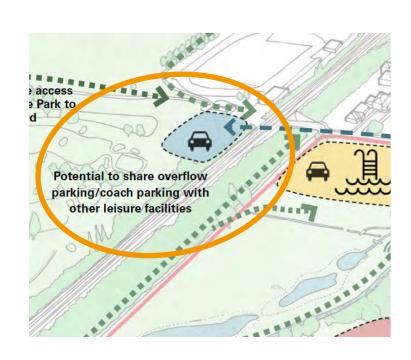


Car Parking

With a lower density development, it is more likely that sufficient car parking can be accommodated at surface. This significantly reduces the upfront cost and ensures that assets remain flexible to change.

The location of the leisure centre, close to the existing athletics track, still means there are opportunities to make best use of the spaces provided. At times when demand is lower, a sensitive choice of materials can reflect the green setting.

Coach drop-off and parking areas can be provided within the car park, ensuring that the leisure centre is attractive to school groups and similar. There may be an opportunity to utilise the site as a mini park and ride for special events, with nearby links to South Greenford station.













Variations Housing Numbers / Mix

Variations

The masterplan and housing strategy remains flexible and can adapt to reflect the different housing numbers required for the key funding routes.

The two options for housing numbers that have been tested are summarised here, along with an indication of their massing (therefore visual impact) in each case.

There are many variables on unit numbers, unit mix, typologies, tenures etc.. that will be developed in more detail at the next stage and these are very indicative massings at this point.

Circa. 500 Homes

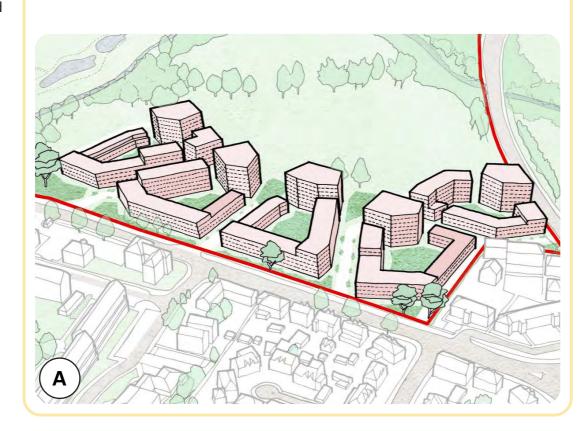
Housing Site Area: 3.4 ha

Dwellings: 515

Density: 151 dw/ha

Building Heights: 3-8 storeys

Car Parking: 0.2 spaces/dw



Circa. 300 Homes

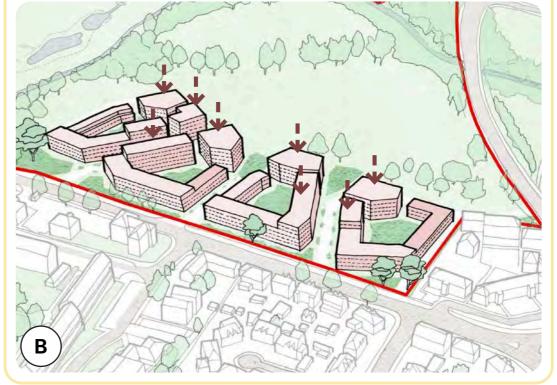
Housing Site Area: 2.7 ha

Dwellings: 306

Density: 113 dw/ha

Building Heights: 3-5 storeys

Car Parking: 0.3 spaces/dw







10.0 Summary of Proposals

10.0 Summary of Proposals

Street View



Illustrative street view looking down landscaped street towards park







10.0 Summary of Proposals Leisure Centre Site Plan - Option 1 Parking Entrance & Coach drop off Leisure Entrance Park Facing CafeTerrace 5 Skate Park Pump Track 7 Parkland New Footbridge New Footpaths linking across Park Gurnell to Greenford Greenway Housing Development Courtyard Gardens **Green Parkland Streets** 7 (5)14 Pocket Park Play areas 15 Public Squares 0





10.0 Summary of Proposals

Site Plan - Option 2





Leisure Centre



MOL Exceptions Tests

1.0 MOL Exceptions Tests

- 1.1 The two potential options being advanced as part of the feasibility exercise contain the following:
- New, replacement leisure centre
- Housing (up to 500 units)
- Ancillary retail, commercial and other social community uses
- Open space enhancements
- 1.2 Paragraphs 147, 149 and 150 of the NPPF state:

147. Inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special circumstances.

149. A local planning authority should regard the construction of new buildings as inappropriate in the Green Belt. Exceptions to this are:

- a) buildings for agriculture and forestry;
- b) the provision of appropriate facilities (in connection with the existing use of land or a change of use) for outdoor sport, outdoor recreation, cemeteries and burial grounds and allotments; as long as the facilities preserve the openness of the Green Belt and do not conflict with the purposes of including land within it;
- the extension or alteration of a building provided that it does not result in disproportionate additions over and above the size of the original building;
- d) the replacement of a building, provided the new building is in the same use and not materially larger than the one it replaces;
- e) limited infilling in villages;
- f) limited affordable housing for local community needs under policies set out in the

- development plan (including policies for rural exception sites); and
- g) limited infilling or the partial or complete redevelopment of previously developed land, whether redundant or in continuing use (excluding temporary buildings), which would:
- not have a greater impact on the openness of the Green Belt than the existing development;
- not cause substantial harm to the openness of the Green Belt, where the development would re-use previously developed land and contribute to meeting an identified affordable housing need within the area of the local planning authority.

150. Certain other forms of development are also not inappropriate in the Green Belt provided they preserve its openness and do not conflict with the purposes of including land within it. These are:

- a) mineral extraction;
- b) engineering operations;
- Local transport infrastructure which can demonstrate requirement for a Green Belt location
- d) the re-use of buildings provided that the buildings are of permanent and substantial construction;
- e) material changes in the use of land (such as changes of use for outdoor sport or recreation, or for cemeteries and burial grounds); and
- f) development, including buildings, brought forward under a Community Right to Build Order or Neighbourhood Development Order.
- 1.3 Based on these identified 'exceptions' and the proposed uses the table below evaluates the proposed land uses against the various exception criteria.

	Leisure Centre	Housing	Ancillary Uses	Open Space Enhancements
Buildings for Agriculture	No	No	No	No
Appropriate facilities for outdoor sport/ recreation as long as openness is preserved	No. But part of the overall proposal will deliver new outdoor leisure facilities	No	No	No
Extension of an existing building provided that it does not result in disproportionate additions	No	No	No	No
Replacement of a building, provided the new building is in the same use and not materially larger.	No. If the replacement leisure centre ends up being materially larger	No	No	No
Limited infilling in villages.	No	No	No	No
Limited affordable housing for local community needs	No	Any proposal moving forward will deliver 50% affordable housing	No	No
Redevelopment of previously developed land which would either; not have a greater than current impact on openness; or would not cause substantial openness harm, contributing towards an identified affordable housing need.	No	Any proposal moving forward will deliver 50% affordable housing & this housing will be delivered on PDL	No	No
Mineral extraction, where openness is preserved	No	No	No	No
Engineering operations, where openness is preserved.	No	No	No	No
Local Transport infrastructure.	No	No	No	No
Re-use of permanent buildings.	No	No	No	No
Material changes in the use of land for outdoor sport.	No	No	No	No
Development under a Community Right to Build / Neighbourhood Development Order.	No	No	No	No







MOL Very Special Circumstances

1.4 Based on the above:

- The replacement of the existing leisure centre with a new leisure centre of a similar size to the existing would meet the exception test set out by national policy. The replacement leisure centre building, which has evolved out of the feasibility exercise comprises 8348sqm compared with the existing leisure building that comprises 5350 sqm and hence would be considered "inappropriate" development in the MOL.
- Provision of affordable housing would meet the exception test. Provision of private housing would, however, be deemed inappropriate.
- The ancillary retail, commercial, community uses aimed at serving new and existing residential would be deemed inappropriate.
- Any outdoor sport and leisure facilities (informal and formal) would be deemed appropriate, if the openness is preserved.
- Any open space, ecological enhancements, flood mitigation works, changes in site level, recontouring of land and provision of new pedestrian and cycle bridges would be deemed appropriate and the proposed uses would be viewed as MOL compatible.
- 1.5 Given the above the proposed replacement leisure centre, by virtue of its increased size and massing, any 'enabling' private residential and ancillary uses would constitute inappropriate development on MOL, as they would fail to meet the exceptions set out above.

- 1.6 Given this position and in accordance with NPPF 2021 para. 148, to be acceptable in principle, the development must meet the VERY SPECIAL CIRCUMSTANCES (VSC).
- 1.7 As a prelude to dealing with the VSC, however it must first be demonstrated that:
 - The scale, type and quantum of the "inappropriate development" is the minimum necessary, thereby ensuring that any harm caused by the proposal is as minimised as far as possible consistent with facilitating development principles; and
 - That there are no suitable alternative sites for this development that would be preferable in planning terms.

2.0 Minimum level of development

2.1 In relation to point 1 above:

Leisure Centre.

The feasibility work has demonstrated that the existing building has reached the end of its design life and that the most sustainable option would be to demolish the existing building and to build a new state of the art leisure facility, which adopts current best practice in terms of energy efficient building design.

The feasibility study advanced a design proposition, which meets the brief set in terms of accommodating user group needs, the projections in terms of demand and best practice in terms of leisure centre design.

In the context of MOL policy, however, the Sounding Board has rightly asked the question as to whether the leisure centre proposals generated through the feasibility exercise have been optimised in terms of size of facility and cost.

In response additional feasibility work has been undertaken to seek to optimise the proposed new leisure centre building in terms of its size, facility provision and cost. As a result of this work the leisure centre brief has been reduced from 11,505 sqm to 8348 sqm.

Quantum of enabling residential

In the context of MOL policy the Sounding Board has also asked whether the amount of 'enabling' residential development is A. necessary and B. if it is necessary and all other sources of potential funding have been exhausted whether the amount of enabling residential is the minimum amount necessary to address any potential funding gap.

Whilst alternative funding avenues (e.g. Sports England) will continue to be explored, they are not likely to yield significant contributions to the cost of the Leisure Centre. As such enabling development will be necessary to fund the Leisure Centre.

Various funding routes have been explored and there are two strategic routes that are being developed; Developer led (circa 500 units) and Contingent Guarantee (circa 300 units). The funding route requires further consideration so to that end, both options are being developed at this stage.



MOL Very Special Circumstances

3.0 Alternative sites

- 3.1 In relation to point 2, alternative sites, the previous planning application was supported by a robust Alternative Site Assessment (ASA), which confirmed the previous application site as the genuine site of last resort.
- 3.2 This ASA was accepted by both the GLA and the LPA. This will be revisited in detail at the next stage, however it is currently considered that there are no suitable alternative sites for either housing or Leisure and as such, this is considered to be the genuine site of last resort.
- 3.3 In summary the work undertaken as part of the feasibility exercise confirms that:
- The demolition of the existing leisure centre and its replacement with a new leisure centre represents the most sustainable long-term option in terms of meeting need and demand for a new facility.
- The optimised new leisure centre design is currently larger in scale and footprint than the existing leisure centre and hence will be regarded as 'inappropriate development' on MOL;
- Private 'enabling' residential development is regarded as 'inappropriate development' on MOI:
- Any ancillary retail, commercial and other social / community uses will be regarded as 'inappropriate development' on MOL;

- The leisure centre's design has been optimized to meet the borough's sporting needs. This work is ongoing and as the design moves through the various RIBA stages it is envisaged that further savings will be made in terms of space utilisation and cost.
- The cost and funding options have been fully explored and as a result it is concluded that private residential is needed to facilitate the development. At the present time and based on the cost and value assumptions that underpin the financial model it is estimated that between 300-500 units of private enabling residential development is required to help bridge the identified funding gap.
- The Council owned land focussed on the existing Gurnell Leisure Centre Site represents the 'genuine site of last resort' on which the new leisure centre and enabling residential units could be delivered.







Appraisal of Options

4.0 Option generation and appraisal

- 4.1 Having refined the conclusions reached in the feasibility exercise in relation to the optimum size of leisure facility, the minimum amount of enabling residential required to bridge the funding gap and having confirmed that the GLC site and its environs remains the site of last resort the next question to ask is how these land uses might be best configured on the Site in order to minimise potential harm and impact on the openness of the MOL. And how any potential harm identified might be mitigated
- 4.2 In this regard and given the commentary in relation to the previous application proposals the opportunity has been taken as part of this feasibility exercise to:
 - a) Think wider than the previous scheme red line.
 - b) Explore whether there are alternative sites to accommodate the leisure centre, which create the opportunity to deliver other benefits in terms of accessibility, colocation of sport and leisure facilities, colocation of parking, wider environmental benefits, wider townscape/ urban design benefits, wider ecological benefits.
 - c) Revisit and explore the question of 'openness'.
 - d) Explore different residential typologies and densities.

4.3 The conclusion to this option appraisal exercise has identified two potential leisure locations (Site 1 and Site 2) and based on these two locations, a series of sub options for the accommodation of differential densities of residential accommodation have been explored, as follows:

Option 1

Residential 1A: 300 units Residential 1B: 500 units

Option 2

Residential 2A: 300 units Residential 2B: 500 units

4.4 Each one of these options will be evaluated against the baseline condition and previous application, using the following criteria:

Further detail will be interrogated as part of the next stage and any planning submission.

Other Potential Harm		
(I) Impact on trees - tree loss		
(J) Loss of existing habitat		
(K) Biodiversity net gain		
(L) Urban Greening Factor		
(M) Traffic Generation		
(N) Traffic Distribution		
(O) Parking		
(P) Air Quality		
(Q) Walking and cycling connectivity		
(R) Linking to other sporting and leisure facilities		







Metropolitan Open Land

Appraisal of Options

- 4.5 Other potential benefits that will be delivered as a result of the proposals, which will balanced against the harms identified above include:
- Improvements to MOL quality, usability and accessibility.
- Improved connectivity.
- Flood mitigation measures
- Biodiversity Net Gains
- Enhanced formal and informal sport and recreation facilities
- Greening of PDL.
- State of the art leisure facilities
- A sustainable, efficient and long-term funding model for the new leisure centre.
- Health and well-being benefits of improving access to formal sport and informal recreation.
- Generation of funding to bridge the funding gap and facilitate delivery of the leisure centre.
- 50% affordable.
- Job creation.
- 4.6 As the proposals develop and as part of any future planning submission all of these gains will be quantified and balanced against the preferred spatial option and any harm caused and as previously VSC will exist if both the 'potential harm to the MOL by reason of inappropriateness, and any harm resulting from the proposal are clearly outweighed by other considerations'.
- 4.7 This planning balance will need to be weighed up by any future decision maker and discussed as part of any future planning application process.







11.0 Delivery

11.0 Delivery

Variables to Test

Variables

There are many variables that go into considering the overall scope of these proposals and how they meet the aims and ambitions of the brief.

There are several overriding objectives throughout that have drive the current direction;

- 1. **Programme**: The priority is to get Gurnell Leisure open as soon as possible
- 2. Leisure Brief: The leisure facility mix and brief has been the primary ambition of the scheme and the housing and delivery solutions are strongly related to that. The leisure facility is still significantly larger than that of the old Gurnell Leisure Centre and so is a key part of the high amount of enabling development potentially required to deliver it.

The scope of this report captures a high level summary of the impacts of varying many of these components, and as a team, recommendations for the way forward have been made. However it is for LB Ealing to advise on the relative priorities of these various parts to arrive at the final brief for the way forward of this scheme, the funding route being the pivotal one.

Leisure Income

Once the direction of travel is agreed, the design proposals contained within this feasibility form a framework and starting point for the much more detailed process of engagement, development and design.



Housing Values





11.0 Delivery

Indicative Programme

