

MIKHAIL
RICHES



Tibbalds

gleeds



Feasibility Plus

January 2023



What are we moving forwards with?

Introduction

Mikhail Riches were appointed by the London Borough of Ealing in Spring 2022. The associated team includes specialists in delivering sustainable, financially viable Leisure Centres around the UK, as well as experts in delivering sustainable affordable housing. It includes Mikhail Riches, GT3 Architects, Gleeds, FMG Consulting, Tibbalds, Expedition Engineers, ITP Transport, and Aspinall Verdi.

The team undertook a Feasibility Study which looked at alternative approaches to re-providing the leisure centre and associated enabling housing following the previously refused planning application in 2019.

As part of that study the team developed a revised Leisure brief and approached the masterplan from base principles to provide two key options;

Option 1 looked at providing housing and leisure on Ruislip Road within the previously developed land. The scale of this at 500 homes was significant and therefore only advisable if a lower number of homes could be viable - circa 300 homes.

Option 2 proposed an alternative location of the Leisure Centre, which would provide the required 500 homes enabling development to be achieved in a way which was low rise and sensitive to the MOL setting.

Following the completion of the Feasibility report in October 2022, LB Ealing have advised that the preferred route forward is:

- The preferred option is Option 1 (both housing and Leisure on Ruislip Road)
- Optimised 1 Leisure brief as a baseline assumption.
- Housing is to be maximised on the residual site whilst still maintaining a planning compliant scale and massing given the MOL context - no minimum requirement

The purpose of this Feasibility Plus report is to revisit the masterplan on the basis of the above recommendations to provide a definitive vision and brief for the next stages.

This report looks afresh at the assumption and considerations around key elements of the masterplan to agree the fundamental principles of the scheme.

These elements are then worked into a refreshed masterplan that provides a high level framework for the future development of the scheme whilst also setting out the aspirational vision of the masterplan that is in line with the original brief to develop an *"exemplary masterplan that promotes sustainable development"*

Alongside this, working with the wider team, the report provides a high level update on cost, procurement, programme and next steps



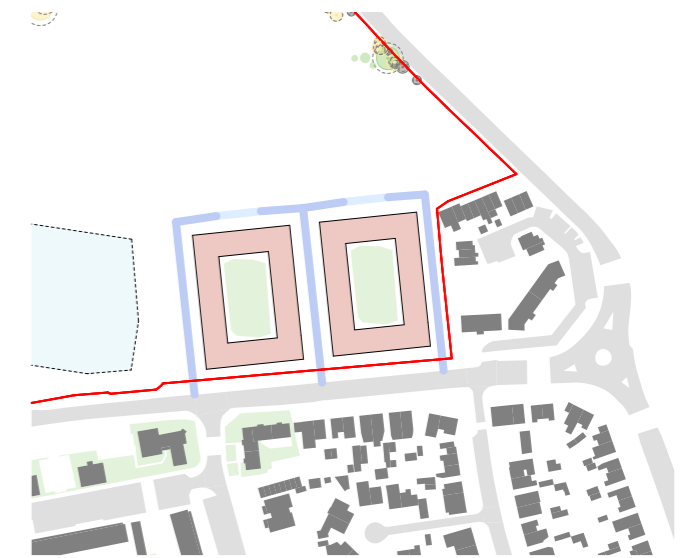
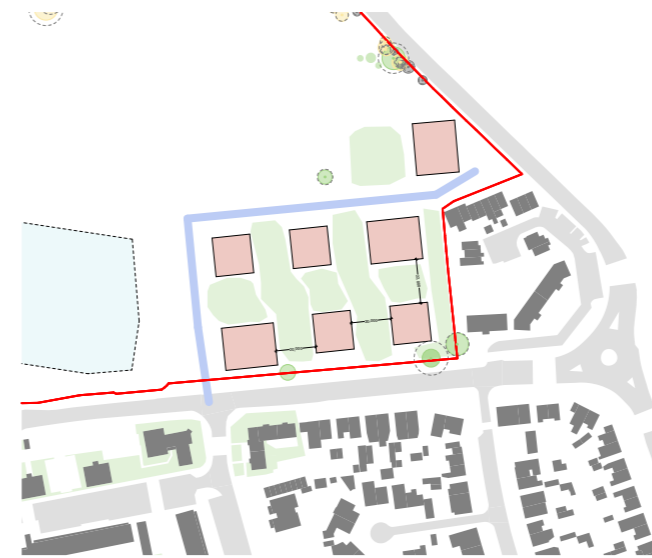
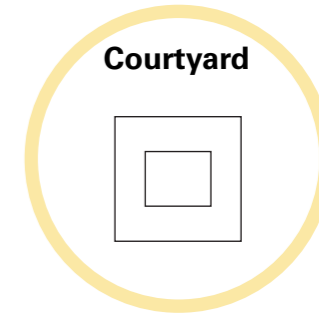
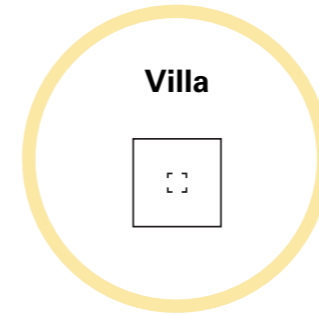
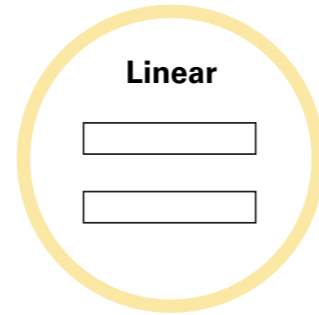
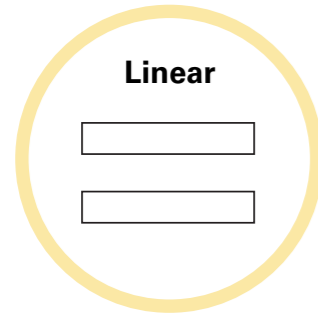
Masterplan Elements

Revisiting key decisions

Masterplan Elements

Housing Typologies

Relooking at previous decisions about site strategy and orientation and potential opportunities by exploring a lower density



- ✓ Good orientation for passivhaus
- ✓ Building depth works for different typologies
- ✓ Mostly dual aspect depending typology
- ✓ Creates streets - front along Ruislip Rd + park
- ✓ Good relationship to Peal Gardens
- ✗ Grain of street goes against connection to park
- ✗ Building typologies more suited to low rise
- ✗ Extends into MOL to achieve fronts onto the park

- ✓ Building depth works for different typologies
- ✓ Mostly dual aspect depending typology
- ✓ Creates streets which connect to open space
- ✓ Good relationship to Peal Gardens
- ✓ Building orientation difficult for Passivhaus
- ✗ Gable ends to Ruislip Rd need activation
- ✗ Building typologies more suited to low rise
- ✗ Difficult to fit three streets

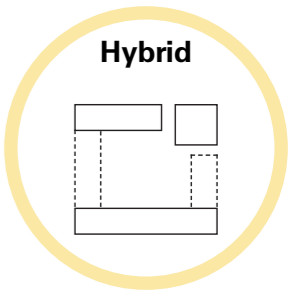
- ✓ Villa typologies gives flexibility in unit mix
- ✓ Height of buildings can be varied easily
- ✓ Mostly dual aspect homes
- ✓ Potential for good connection to open space
- ✗ Fronts and backs need careful definition
- ✗ Public/private amenity needs careful definition
- ✗ Potentially tricky relationship to Peal Gardens

- ✓ Building depth works for different typologies
- ✓ Mostly dual aspect depending typology
- ✓ Creates streets which connect to open space
- ✓ Good relationship to Peal Gardens/Ruislip Rd E
- ✓ Potential for reduced building heights
- ✗ Building orientation difficult for Passivhaus
- ✗ Potentially limited sense of 'openness'
- ✗ Building massing needs considering to avoid overshadowing of communal amenity

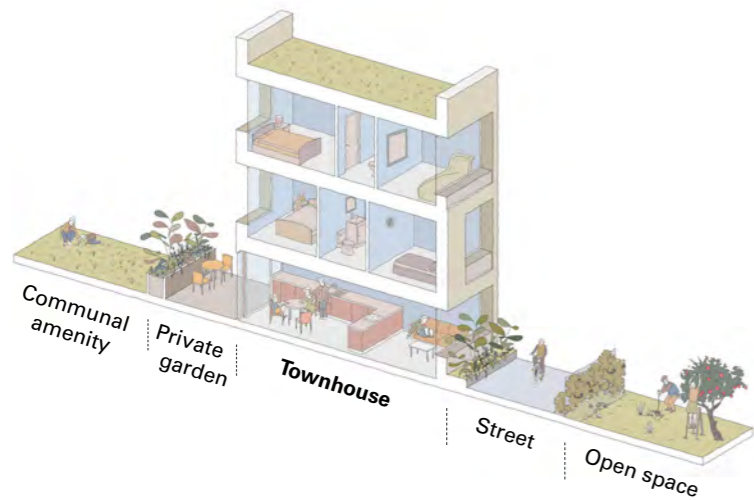
Masterplan Elements

Flexible Range of Typologies

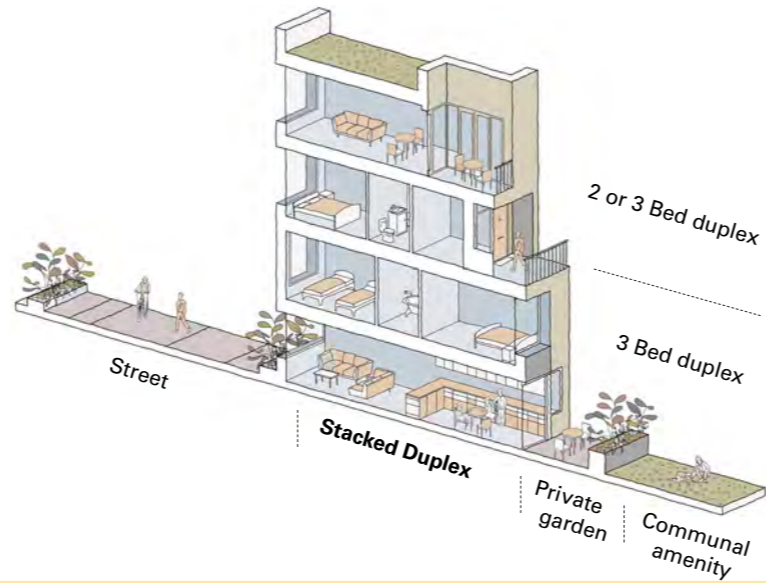
The courtyard is a flexible model that allows for a range of typologies to suit local needs and policy without changing the site strategy



A) Townhouse



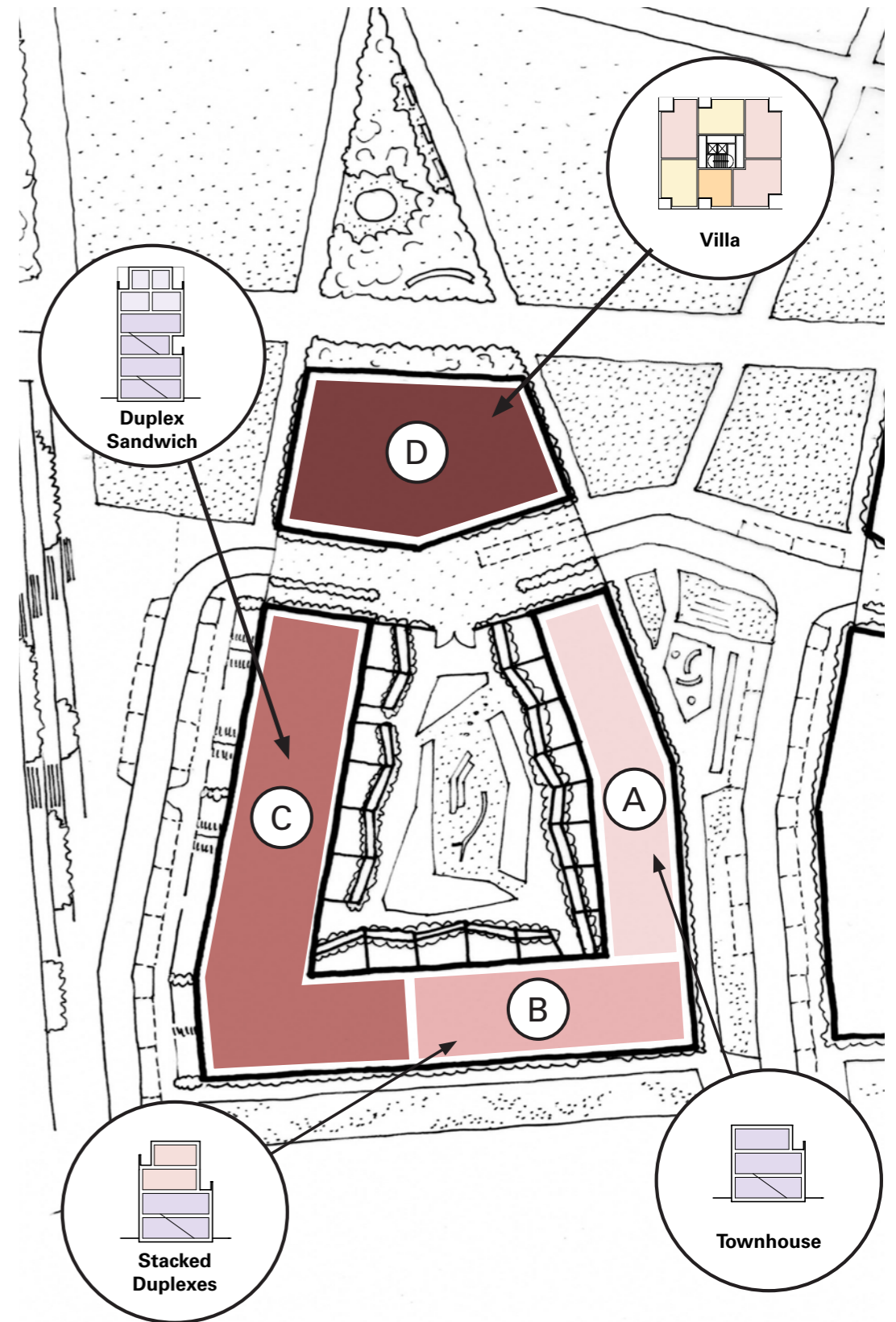
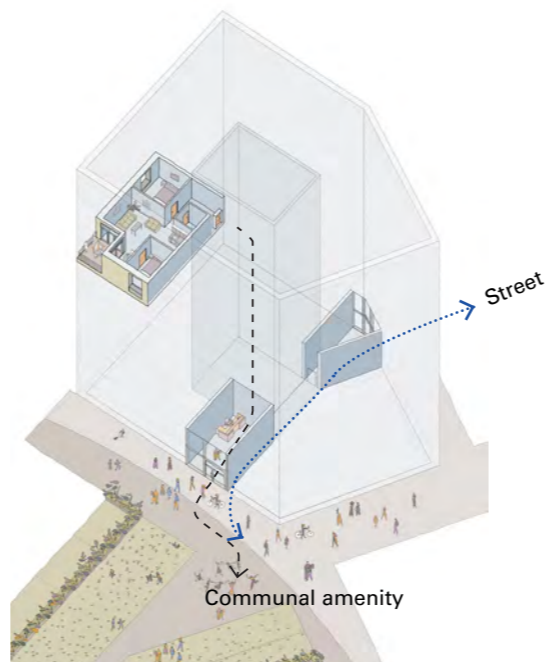
B) Stacked Duplex



C) Duplex Sandwich



D) Villa

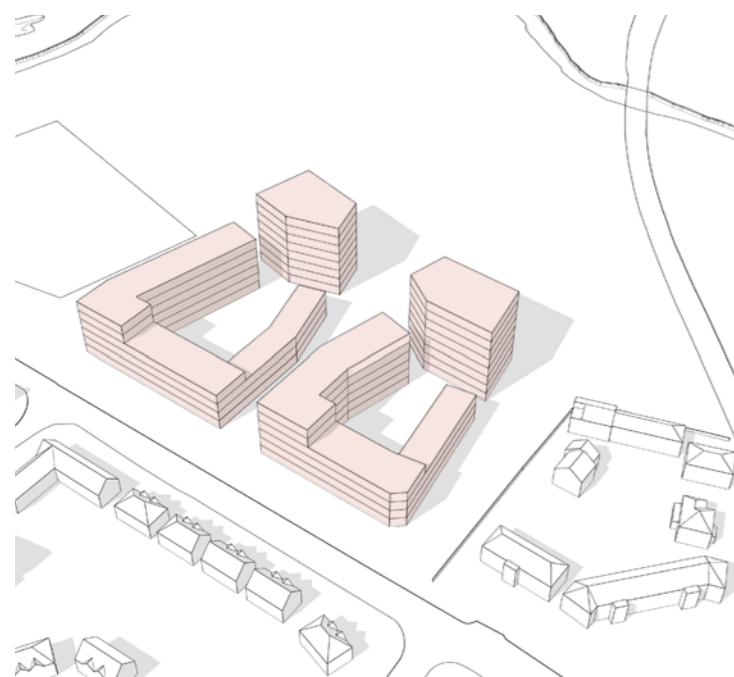


Masterplan Elements

Quantum of Housing

Baseline assumption of a planning appropriate scale and within the previously developed land

| | 1b1p | 1p2p | 2b4p | 3b5p | 3b6p | TOTAL |
|--------------|------|------|------|------|------|------------|
| Total | 2 | 90 | 55 | 42 | 11 | 200 |
| % | 1% | 45% | 28% | 21% | 5% | |
| % | 46% | | 28% | 26% | | |



Number of stories

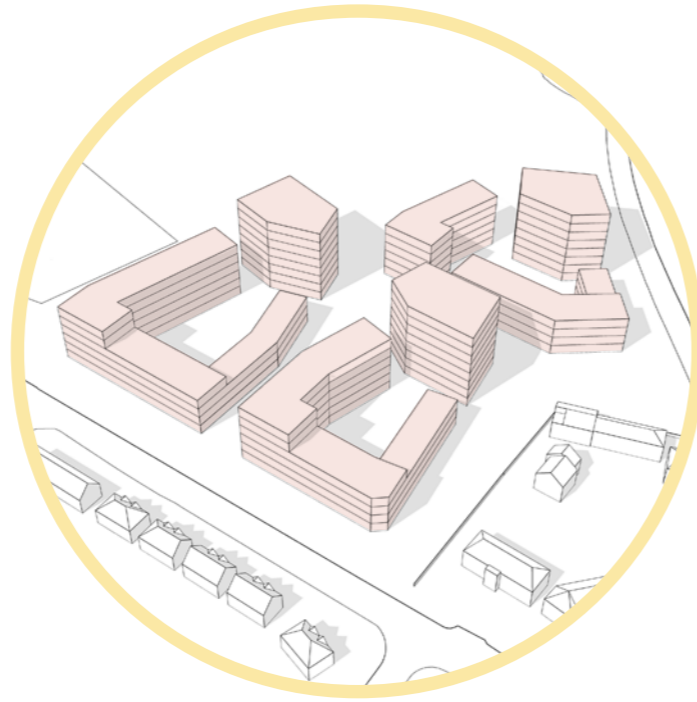
Masterplan Elements

Quantum of Housing Variations

Variations for potential opportunities to increase the number of homes or reduce the scale

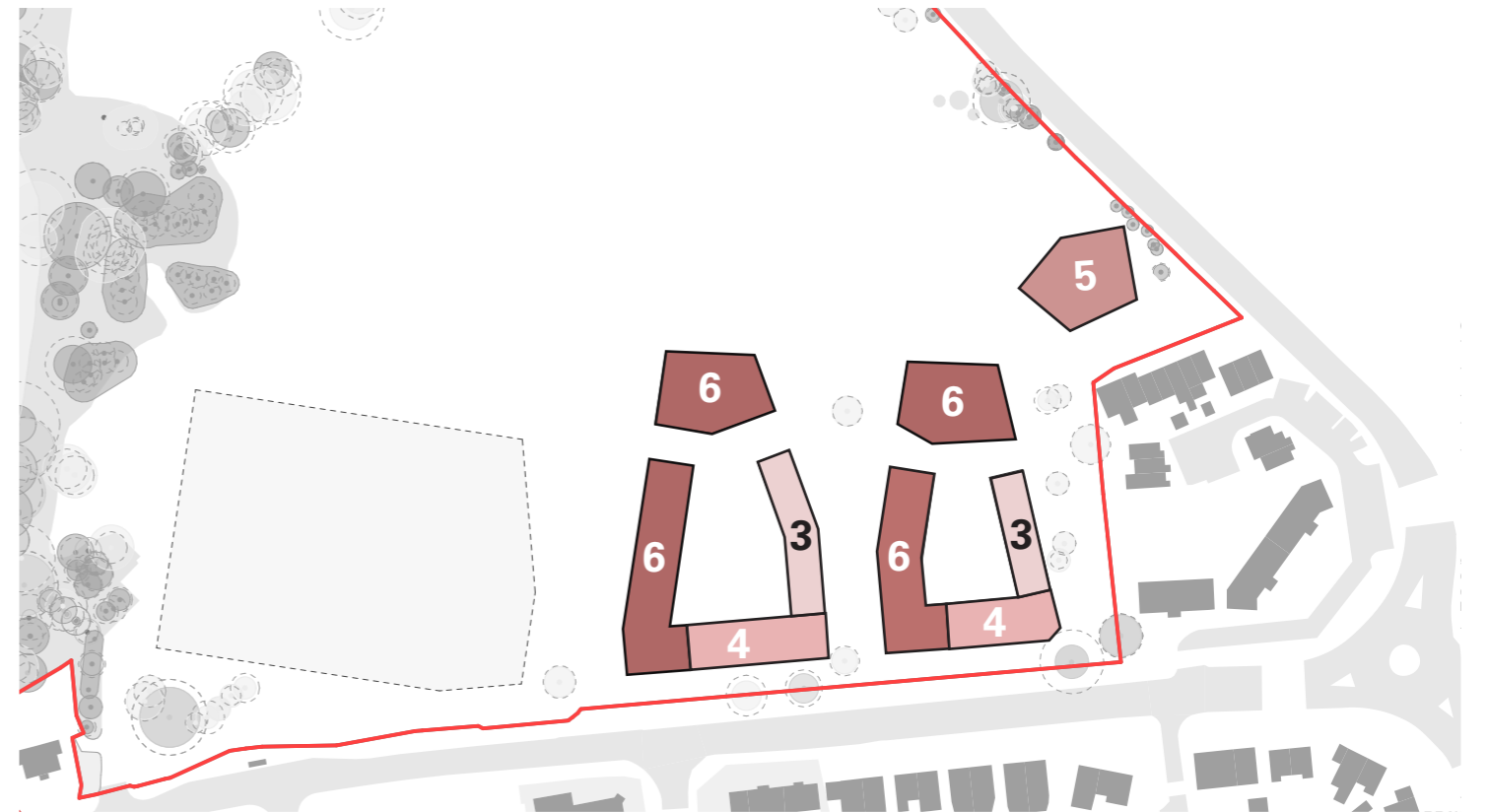
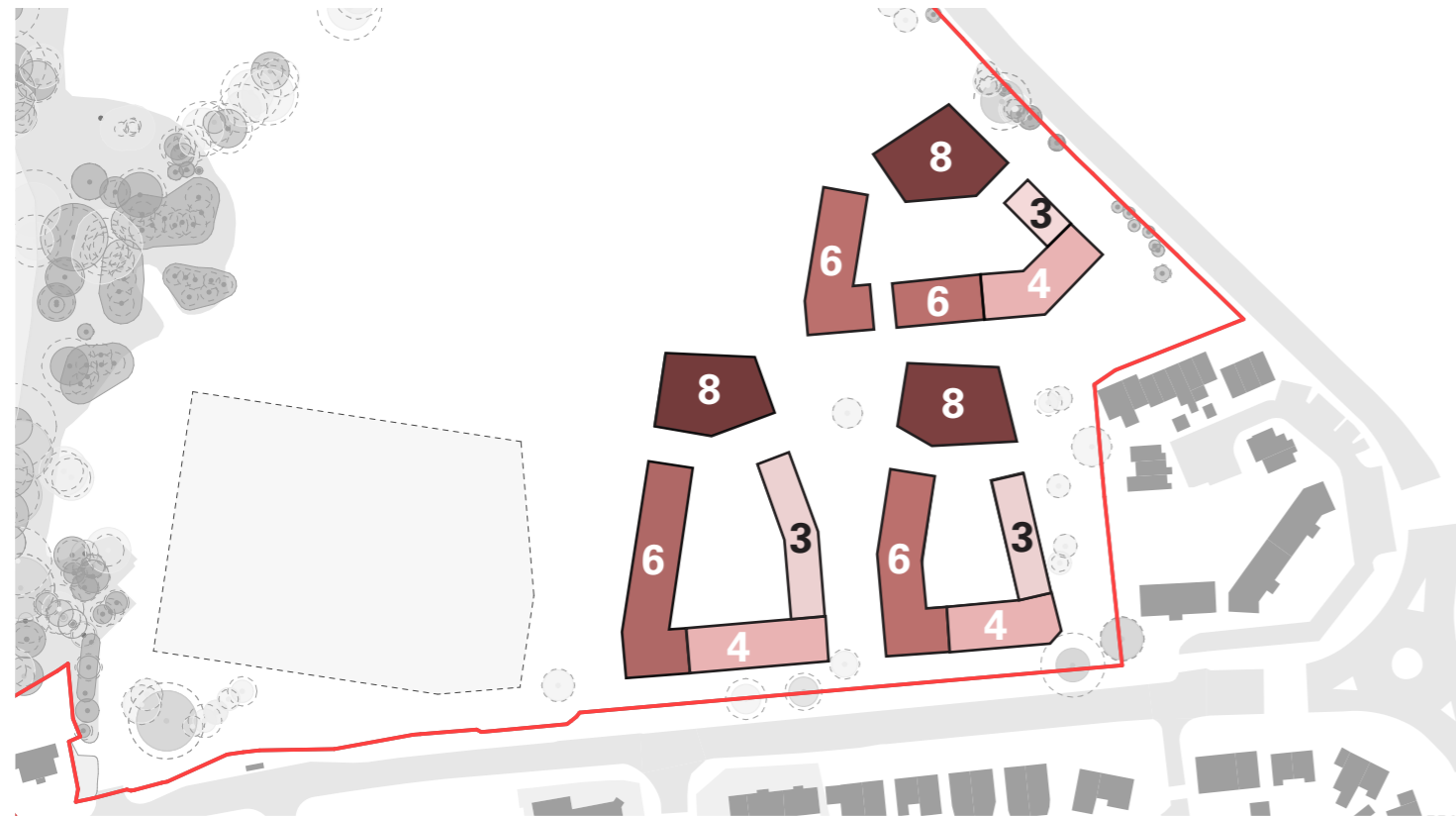
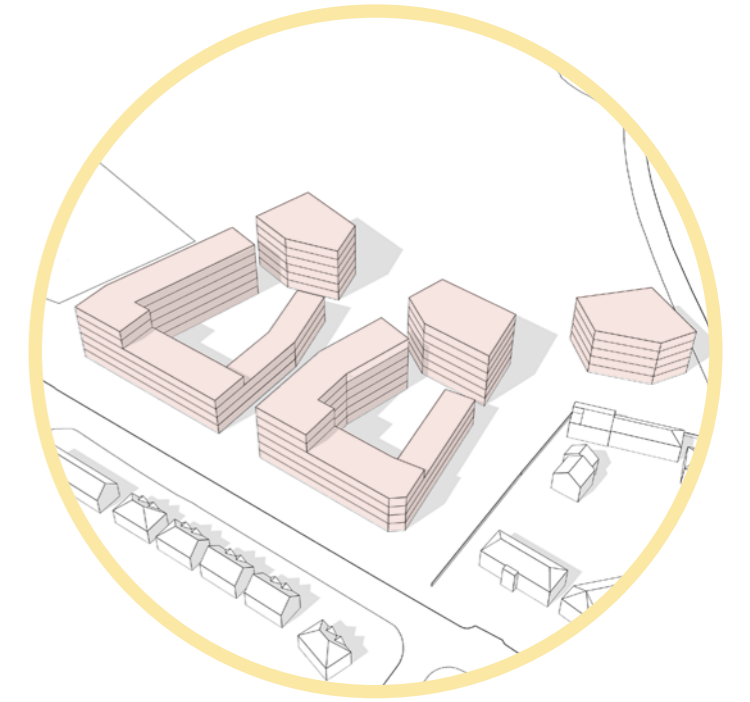
Three Courtyards

| | 1b1p | 1p2p | 2b4p | 3b5p | 3b6p | TOTAL |
|--------------|------|------|------|------|------|------------|
| Total | 18 | 119 | 99 | 57 | 13 | 306 |
| % | 6% | 39% | 32% | 19% | 4% | |
| % | 45% | | 32% | 25% | | |



Additional Villa

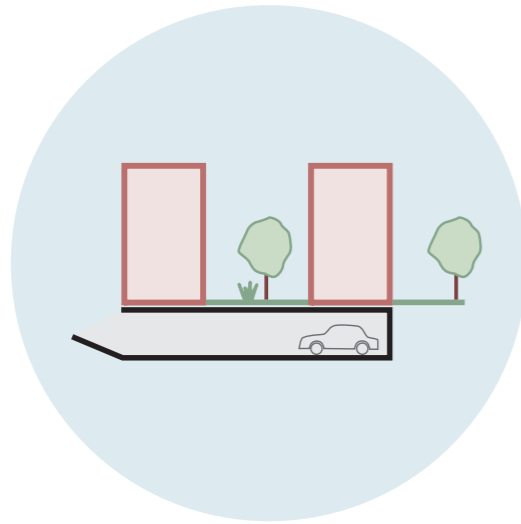
| | 1b1p | 1p2p | 2b4p | 3b5p | 3b6p | TOTAL |
|--------------|------|------|------|------|------|------------|
| Total | 13 | 69 | 62 | 42 | 9 | 195 |
| % | 7% | 35% | 32% | 22% | 4% | |
| % | 42% | | 32% | 26% | | |



Masterplan Elements

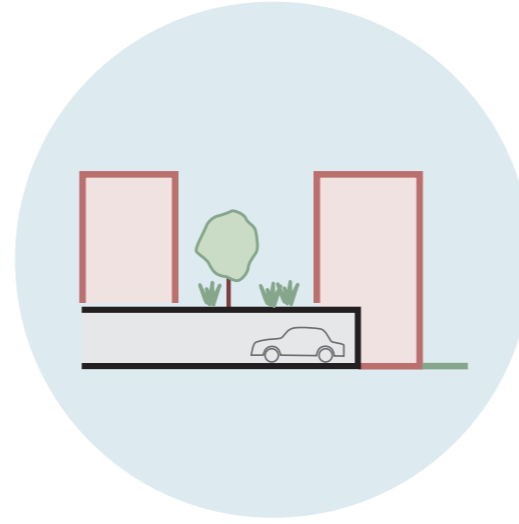
Types of Residential Parking

Considering the type of parking has a significant impact on site layout, cost and levels of parking provision.



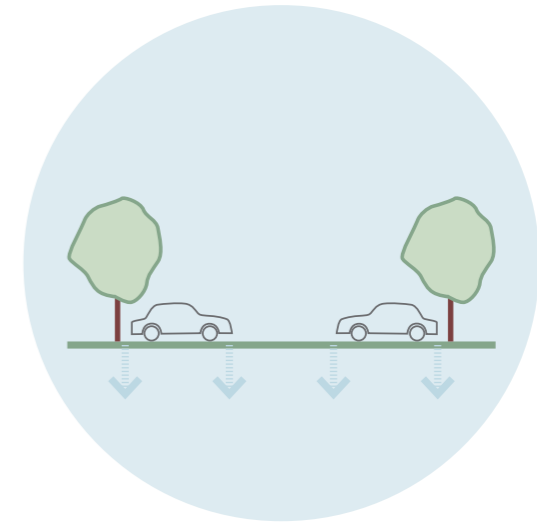
Basement Parking

- ✗ Costly - Not Viable
- ✓ Higher parking numbers
- ✓ On-street parking reduced in order to create green, social streets
- ✗ Separated from front doors
- ✓ Retains large units at ground floor
- ✓ Retains courtyard at ground level - allows continuity of play and social spaces



Podium Parking

- ✓ Reduced Cost
- ✓ Higher parking numbers
- ✓ On-street parking reduced in order to create green, social streets
- ✗ Separated from front doors
- ✗ Smaller units required at ground floor to accommodate podium
- ✗ Raises courtyard - isolated landscape reduces continuity of play and social spaces



Ground Level Parking

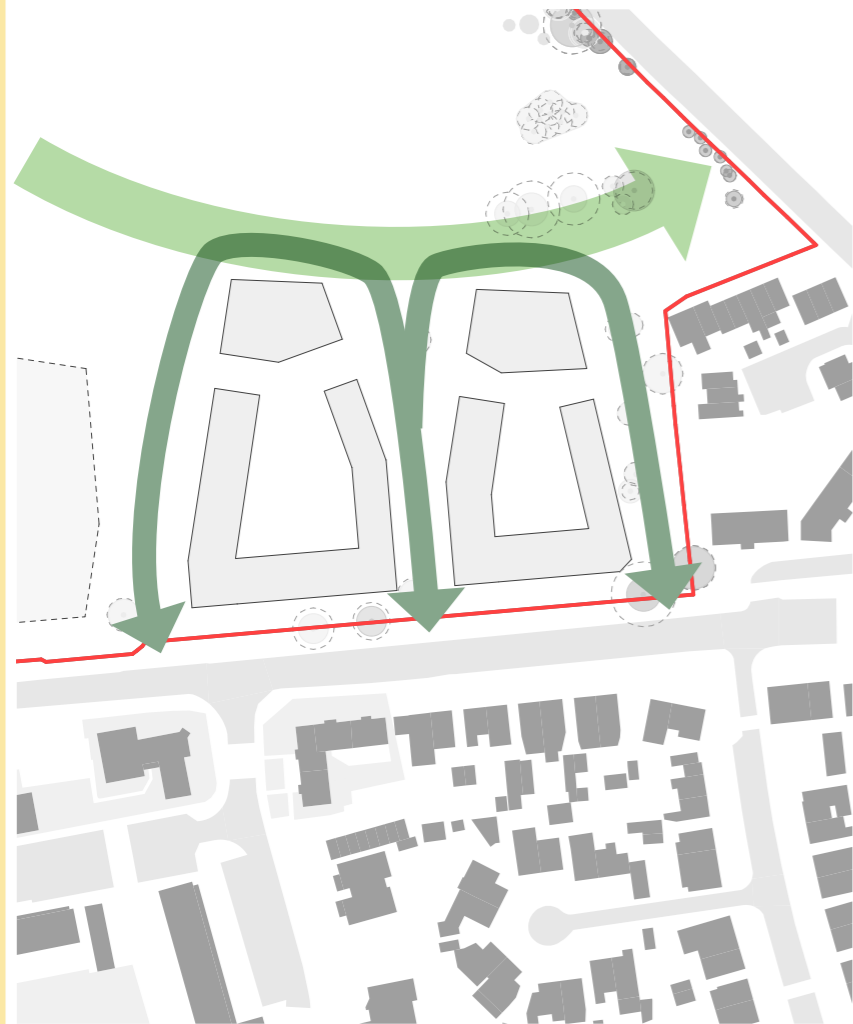
- ✓ Minimal cost
- ✗ Parking numbers limited in order to create green, social streets
- ✓ Good accessibility to front doors
- ✓ Retains large units at ground floor
- ✓ Retains courtyard at ground level - allows continuity of play and social spaces

Masterplan Elements

Residential Access Roads

How traffic is managed through the site affects the character of both the residential and the MOL edge

1) Loop Road around Courtyards



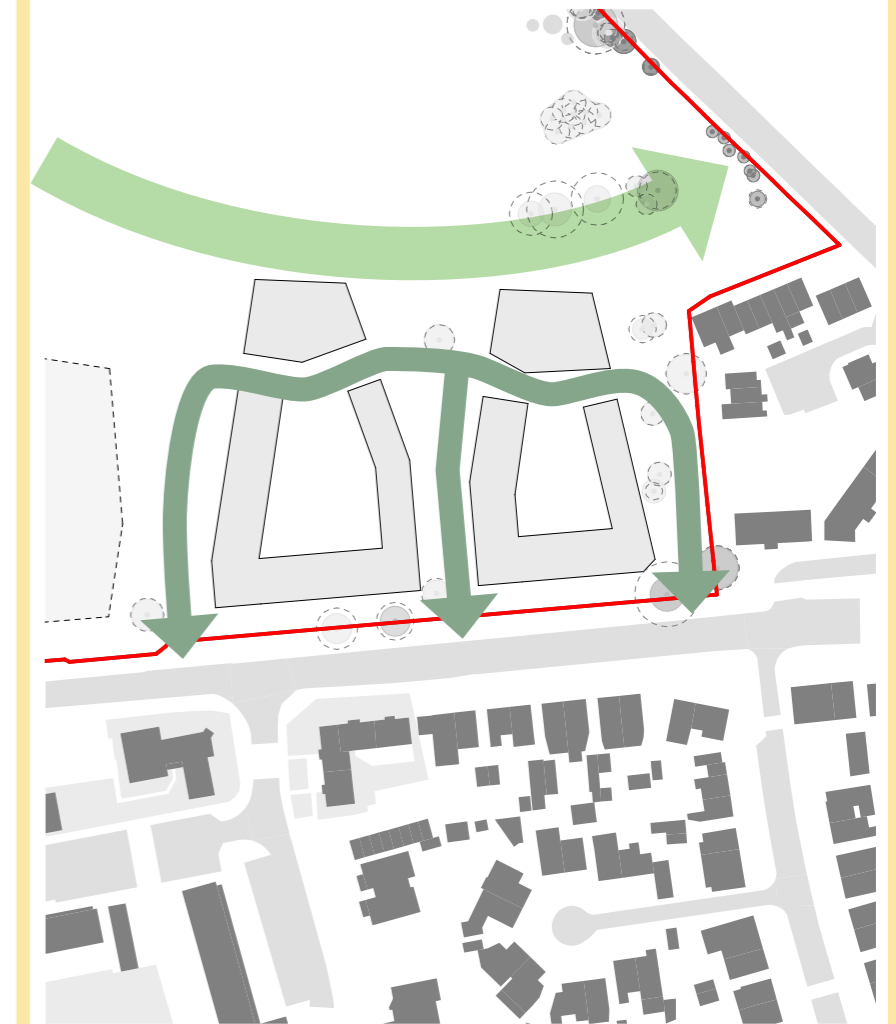
- ✗ Long stretch of road along park edge
- ✓ Avoids turning heads
- ✓ Increased length of road for on-street parking

2) Disconnected Roads



- ✓ Reduction of traffic along park edge
- ✗ Turning head increases hard landscaping and creates complex level change
- ✗ Turning head conflicts with leisure entrance
- ✗ Reduced length of road for on-street parking

3) Distancing Road from Park Edge



- ✓ Park edge is free of traffic
- ✓ Avoids turning heads
- ✓ Parkland landscape drawn into residential site
- ✗ Traffic enters the pedestrian focussed courtyards

Masterplan Elements

Leisure Location - Opportunities and Constraints

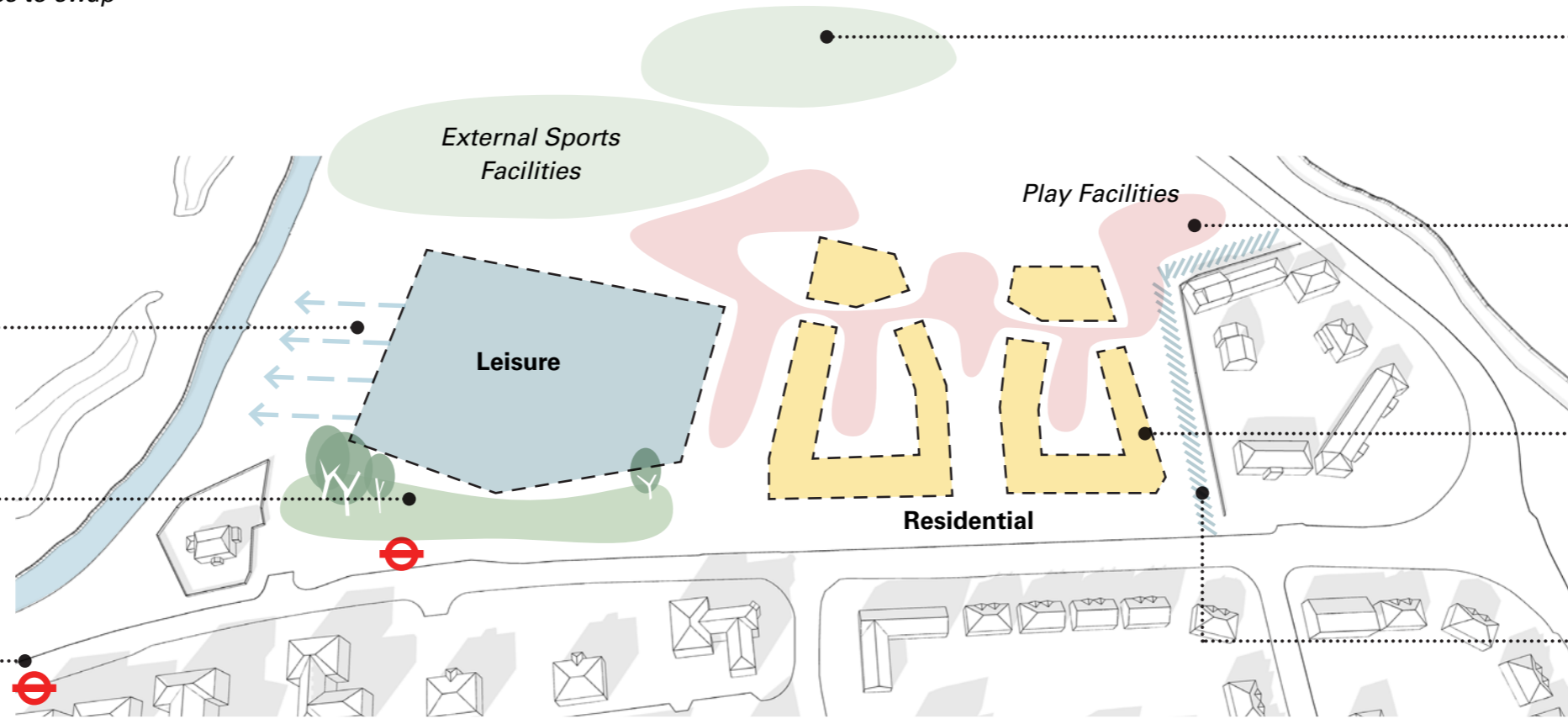
Retesting the assumptions of the Leisure on the West of the site or possible opportunities to swap over to the East by Peel Gardens

Existing leisure centre location - i.e less change and use of existing access

Riverside outlook and privacy for swimming pool and leisure facilities

Mature, high-quality trees can be used to screen leisure centre and increase privacy to swimming halls

Leisure facilities closer to existing public transport



Increased distance between noisier external sports facilities and existing housing

Residents of Peel Gardens can benefit for shared residential amenity i.e. play and social spaces

Residential massing can be reduced to better relate to Peel Gardens and semi-detached homes on Ruislip Rd E

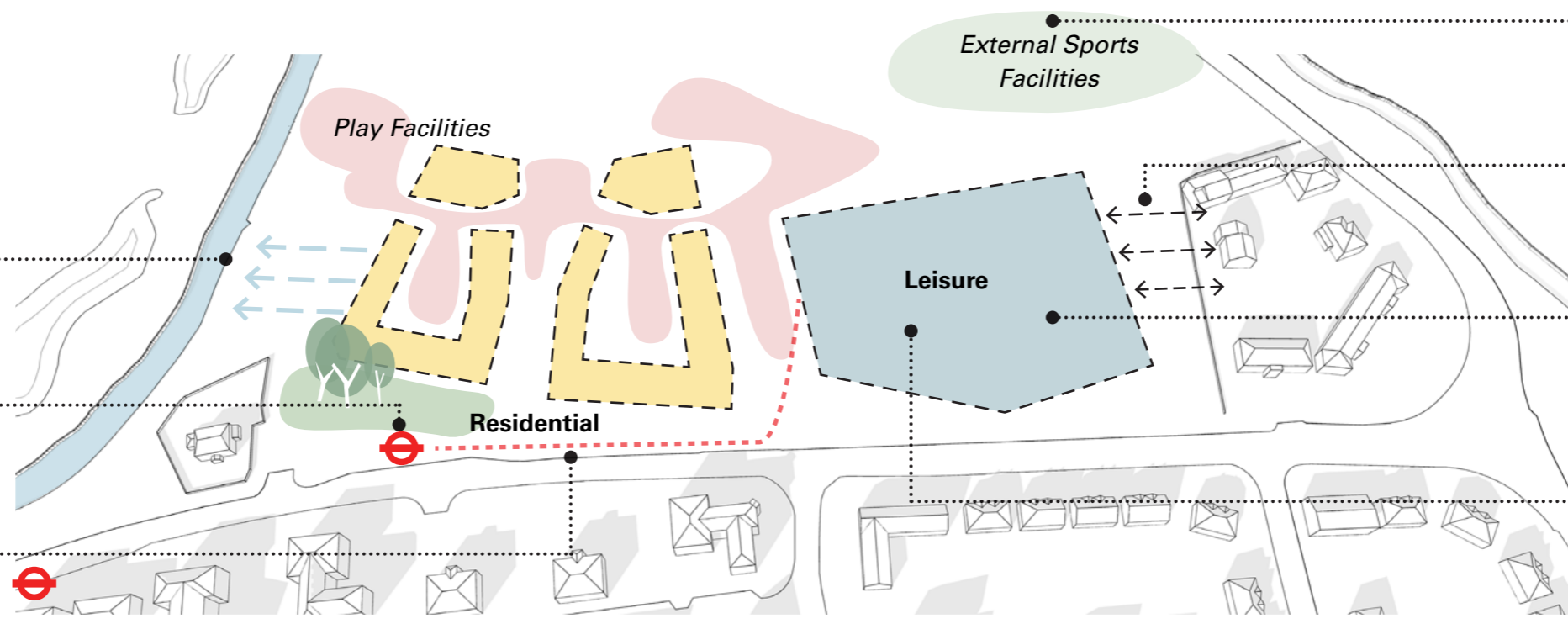
Opportunity to create a residential street integrating with Peel Gardens

Change of location may be contentious with public

Riverside outlook from housing

Housing closer to existing public transport

Footfall between bus stop and leisure centre



Proximity of external sports facilities to Peel Gardens needs consideration

Lack of privacy

Larger footprint has difficult relationship to Peel Gardens and semi-detached homes on Ruislip Rd E

Massing and height bulky in comparison to Peel Gardens

Masterplan Elements

Leisure Brief - Optimised 1

This brief is the outcome of extensive consultation as part of the Feasibility study.

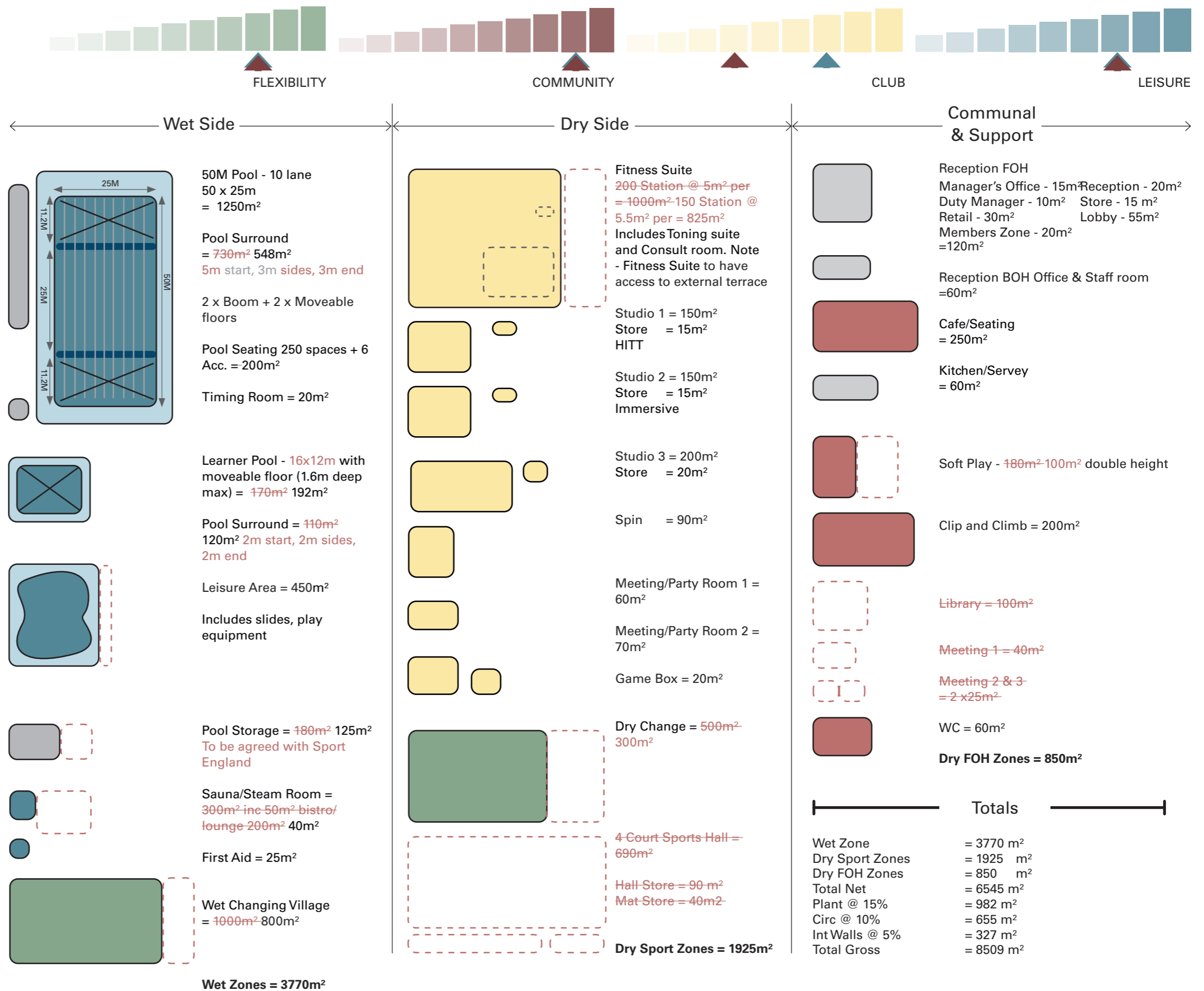
The facility mix opposite is based on the 'Optimised 01' option.

Optimised 01 reduces both wet and dry sides. Changes to the wet side include, reducing the 10 lane pool to an 8 lane pool, reducing the leisure pool and spa. The reduction in area has also reduced the area requirement for the wet change facility.

Changes to the dry side include reducing the fitness suite from 200 stations to 150. The reduction in area has therefore reduced the area requirement for the dry change.

▲ Dry Side ▲ Wet Leisure

| | | Optimised 1 |
|-------------------|-----|--------------|
| Area (sqm) | | 8509 |
| Construction Cost | | £39.4m |
| Revenue (gross) | | £4,918,233 |
| Revenue (net) | | £888,258 |
| Impact | | |
| Club | Wet | Good |
| | Dry | Satisfactory |
| Community | Wet | Good |
| | Dry | Good |
| Leisure | Wet | Good |
| | Dry | Good |
| Flexibility | Wet | Good |
| | Dry | Good |



Masterplan Elements

Leisure Parking Provision

The leisure parking quantum is key to site strategy and based on the size of the Leisure Centre. This figure is a baseline and will be developed further.



Improved walking and cycling connections to public transport links



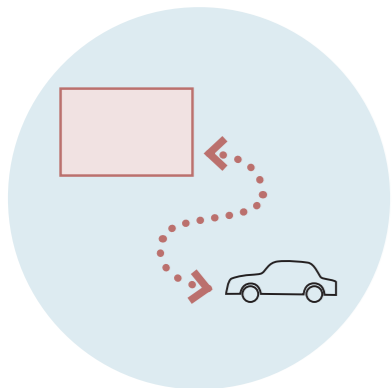
Covered cycle parking for leisure centre to meet demand



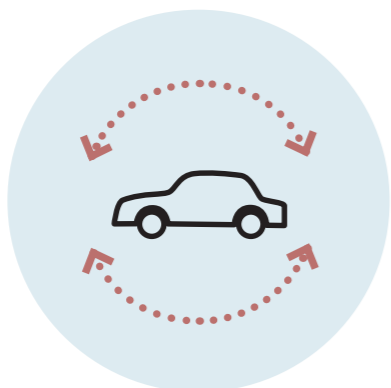
Multi-model transport improvements to existing junctions



Real time bus information at stops nearest the leisure centre

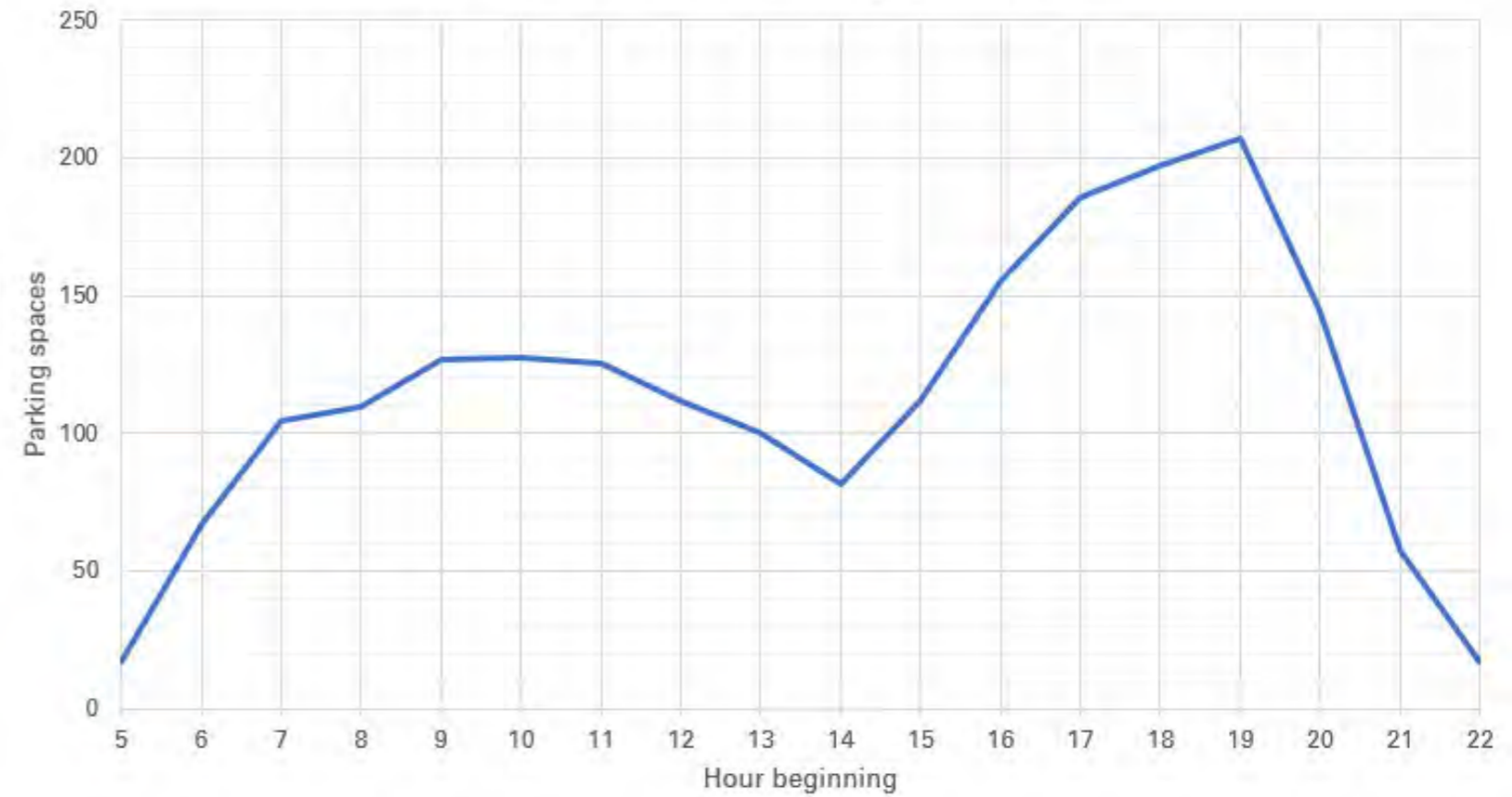


Off-site parking for peak times i.e. galas



Overlap parking with other uses i.e. shared between leisure and residential

Car Park Demand - 8,500 sqm - weekday



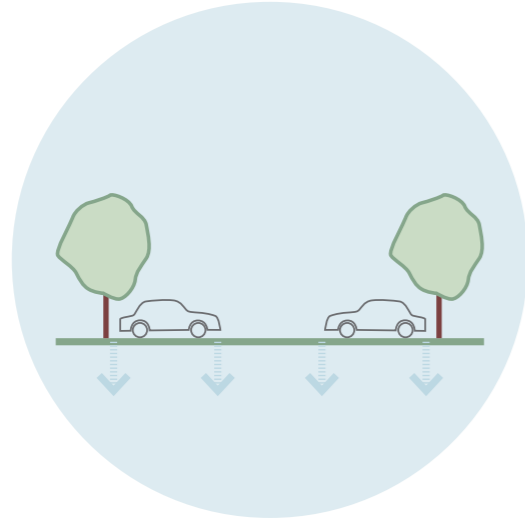
CONCLUSION

Leisure parking assumes circa 150-175 spaces with the potential to drive this down further with sustainable travel interventions, overlap with residential and off-site provision for peak demand times

Masterplan Elements

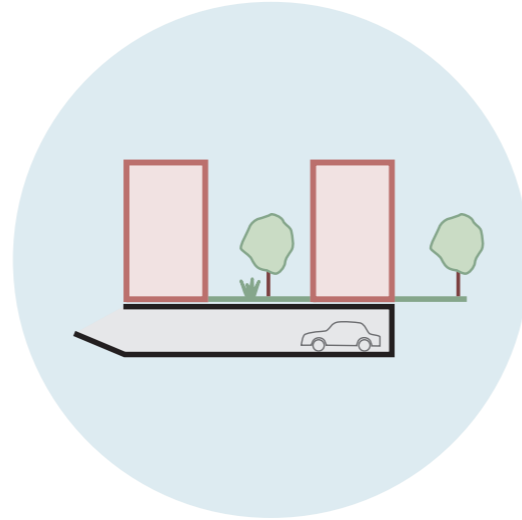
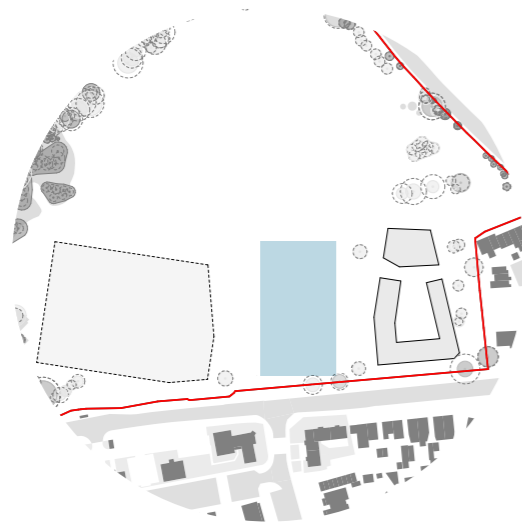
Leisure Parking Strategy

Considering the options for parking strategy that best suit the site, cost and MOL impact



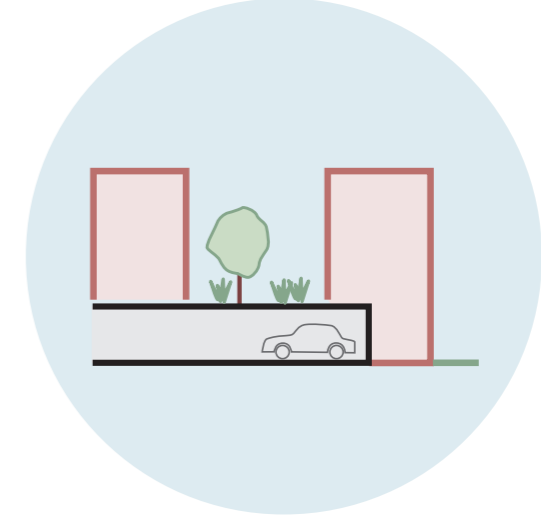
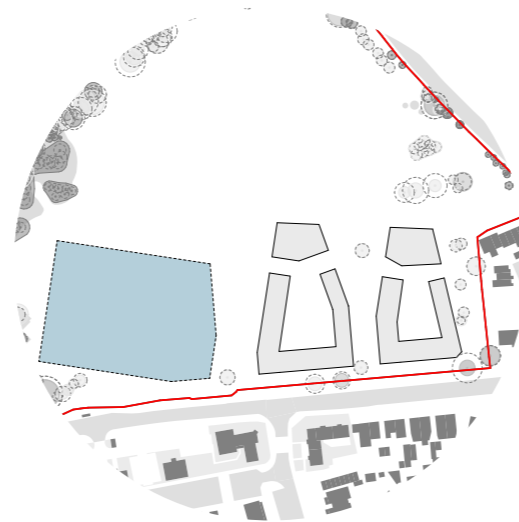
Ground Level Parking

- ✓ Minimal cost
- ✗ Large car park leaves little space for housing
- ✗ Large car park unattractive from park and surroundings
- ✓ Potential to share leisure and residential spaces, reducing total requirement



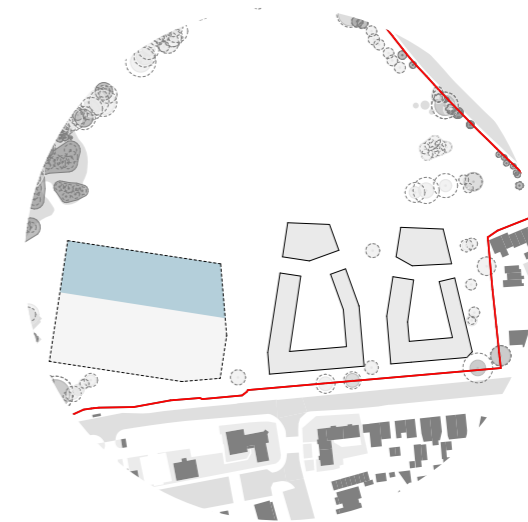
Basement Parking

- ✗ Costly - not viable
- ✓ Higher parking numbers
- ✓ Car parking hidden from view
- ✓ More space for housing and parkland



Podium Parking

- ✗ More Costly
- ✓ Higher parking numbers
- ✓ Car parking hidden from view
- ✓ More space for housing and parkland
- ✓ Opportunity to integrate with landscape and external sports facilities



Masterplan Elements

Leisure Adjacencies - Option A












Assessing the best adjacencies for the site and the facilities

Leisure facility on a raised plinth at 2.5m above datum.

Pool hall located to North, Dry facilities to the South East and BOH/Plant/Parking Entrance located to the South West.

- ✓ Main entrance announces the building to Ruislip Road and provide an active frontage
- ✓ Good connection between leisure and residential zones
- ✓ Strong visual connections between Pools and wider park setting to North & West
- ✓ Distinct separation between pedestrian/cycle users and leisure car routes
- ✓ Simple discreet route to car parking Delivery/Refuse and Pool Chemical location in single location off Ruislip Rd
- ✓ No traffic near to the riverside
- ✗ Pools do not benefit from passive heat gain which will increase running costs considerably
- ✗ Fitness areas will require additional cooling due to overheating on southern aspect
- ✗ Fitness views are over Ruislip Road and residential areas which has privacy issues
- ✗ Less opportunity to draw users into centre of site - doesnt activate the wider MOL
- ✗ Entrance located further from outdoor activities - disconnected

KEY:

- | | | | | | |
|---|--|---|-------------------|---|---|
|  | Wet leisure |  | Key connection |  | Passive solar gain to high temperature areas |
|  | Entrance / Cafe / Communal / Dry Leisure |  | Key views out |  | Key connective route |
|  | Support |  | Active frontage |  | Leisure users vehicle route to undercroft parking |
| | |  | Inactive frontage |  | Riverside walk |



Masterplan Elements












Leisure Adjacencies - Option B

Leisure facility on a raised plinth at 2.5m above datum.

Pool hall located to North, Dry facilities to the South West and BOH/Plant/Parking Entrance located to the South East.

- ✓ Main entrance announces the building to Ruislip Road and provide an active frontage
- ✓ Visual connection to riverside park to west from Pool hall and entrance
- ✓ Strong visual connections between Pools and wider park setting to North & West
- ✓ Distinct separation between pedestrian/cycle users and leisure car routes
- ✓ Simple discreet route to car parking Delivery/Refuse and Pool Chemical location in single location off Ruislip Rd
- ✗ Moving entrance to West provides two distinct zones. Leisure and Residential rather than a holistic development
- ✗ Pools do not benefit from passive heat gain which will increase running costs considerably
- ✗ Fitness areas will require additional cooling due to overheating on southern aspect
- ✗ Fitness views are over Ruislip Road and residential areas which has privacy issues
- ✗ Less opportunity to draw users into centre of site
- ✗ Distinct separation between entrance and outdoor activities
- ✗ Inactive frontage at centre of development

KEY:

- | | | | | | |
|---|--|---|-------------------|---|---|
|  | Wet leisure |  | Key connection |  | Passive solar gain to high temperature areas |
|  | Entrance / Cafe / Communal / Dry Leisure |  | Key views out |  | Key connective route |
|  | Support |  | Active frontage |  | Leisure users vehicle route to undercroft parking |
| | |  | Inactive frontage |  | Riverside walk |



Masterplan Elements












Leisure Adjacencies - Option C

Leisure facility on a raised plinth at 2.5m above datum.

Pool hall located to South, Dry facilities to the North West and BOH/Plant/Parking Entrance located to the North East.

- ✓ Pools to South maximise passive heat gain
- ✓ Fitness area to North to minimise cooling load
- ✓ Privacy to pools via set back from Ruislip Rd and raised plinth
- ✓ Visual connection to riverside park to west from Pool hall and entrance
- ✓ Strong visual connections between fitness suite and wider park setting
- ✓ Entrance/Reception separated and distinct setting adjacent to riverside walk
- ✓ Distinct separation between pedestrian/cycle users and leisure car routes
- ✗ Moving entrance to West provides two distinct zones. Leisure and Residential rather than a holistic development
- ✗ Entrance located further from outdoor activities
- ✗ Pools do not benefit from views to park
- ✗ Distance of entrance from Ruislip rd
- ✗ Requirement for road to West for Cafe deliveries and refuse or route through building.
- ✗ Inactive facade to centre of site

KEY:

- | | | | | | |
|---|--|---|-------------------|---|---|
|  | Wet leisure |  | Key connection |  | Passive solar gain to high temperature areas |
|  | Entrance / Cafe / Communal / Dry Leisure |  | Key views out |  | Key connective route |
|  | Support |  | Active frontage |  | Leisure users vehicle route to undercroft parking |
| | |  | Inactive frontage |  | Riverside walk |



Masterplan Elements












Leisure Adjacencies - Option D (Preferred)

Leisure facility on a raised plinth at 2.5m above datum.

Pool hall located to South, Dry facilities to the North East and BOH/Plant/Parking Entrance located to the North West.

- ✓ Pools to South maximise passive heat gain
- ✓ Fitness area to North to minimise cooling load
- ✓ Good connection between leisure and residential zones
- ✓ Privacy to pools via set back from Ruislip Rd and raised plinth
- ✓ Visual connection to riverside park to west from Pool hall
- ✓ Strong visual connections between fitness suite and wider park setting
- ✓ Entrance/Reception located to draw users into site, to connect to external activities and adjacent residential development
- ✓ Maximise opportunity for active visual facades
Leisure water provides active frontage to Ruislip Rd
- ✓ Distinct separation between pedestrian/cycle users and leisure car routes
- ✗ Proximity of route to carpark to riverside walk and Pool Chemical deliveries to West
- ✗ Pools do not benefit from views to park on one elevation
- ✗ Entrance is set away from Ruislip Road
- ✗ Delivery and refuse requirement to main entrance location to be managed

KEY:




- | | | | | | |
|---|--|---|-------------------|---|---|
|  | Wet leisure |  | Key connection |  | Passive solar gain to high temperature areas |
|  | Entrance / Cafe / Communal / Dry Leisure |  | Key views out |  | Key connective route |
|  | Support |  | Active frontage |  | Leisure users vehicle route to undercroft parking |
| | |  | Inactive frontage |  | Riverside walk |



Site Strategy

Indicative Leisure Entrance Sequence

KEY:

-  Main gathering nodes
-  Main pedestrian routes
-  Pedestrian routes



Site Strategy

Emerging Leisure Ground Floor Active Frontage

KEY:






-  Wet leisure
-  Dry leisure
-  Communal
-  Support
-  Active facade
-  Opportunity for views in and out
-  Inactive facade
-  Servicing access / deliveries



Site Strategy

Emerging Leisure First Floor Active Frontage

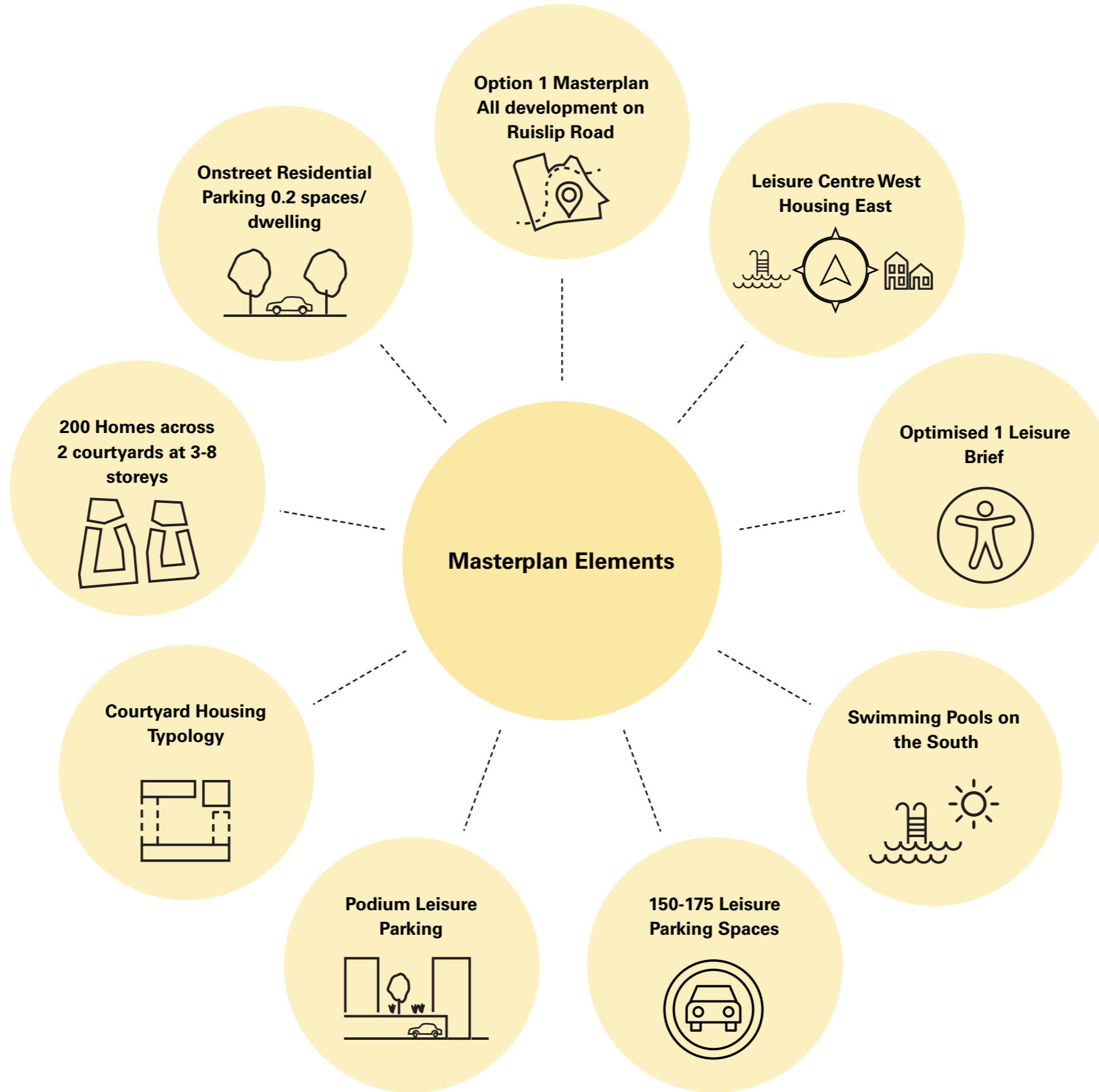
KEY:

-  Dry leisure
-  External Terrace
-  Support
-  Active facade
-  Opportunity for views in and out
-  Inactive facade
-  Servicing access / deliveries



Masterplan Elements

Summary of Elements



Site Strategy










Revisiting the Masterplan

Site Strategy

Routes and Edges

The edges of the site are very important as there are no clear 'backs' with the MOL being as important as the road edges.

KEY:

-  Parkland Promenade
-  Riverside Walk
-  River Frontage
-  Active frontages
-  Parkland Frontage
-  Green buffer
-  High quality existing trees
-  Openness from Ruislip Rd E
-  Bus Stop



Site Strategy

Refreshed Masterplan

- ① Leisure Centre
- ② Coach drop off / Muster space
- ③ Stepped/Ramped Leisure entrance
- ④ Leisure Entrance
- ⑤ Leisure Terrace overlooking park
- ⑥ Riverside Walk
- ⑦ Skate Park
- ⑧ Pump Track
- ⑨ Sports Pitch
- ⑩ New Footbridge
- ⑪ New Footpaths linking across Park
- ⑫ Gurnell to Greenford Greenway
- ⑬ Residential Streets
- ⑭ Housing Courtyard Gardens
- ⑮ Outdoor Leisure activities
- ⑯ Pocket Park Play areas
- ⑰ Peel Gardens Frontage



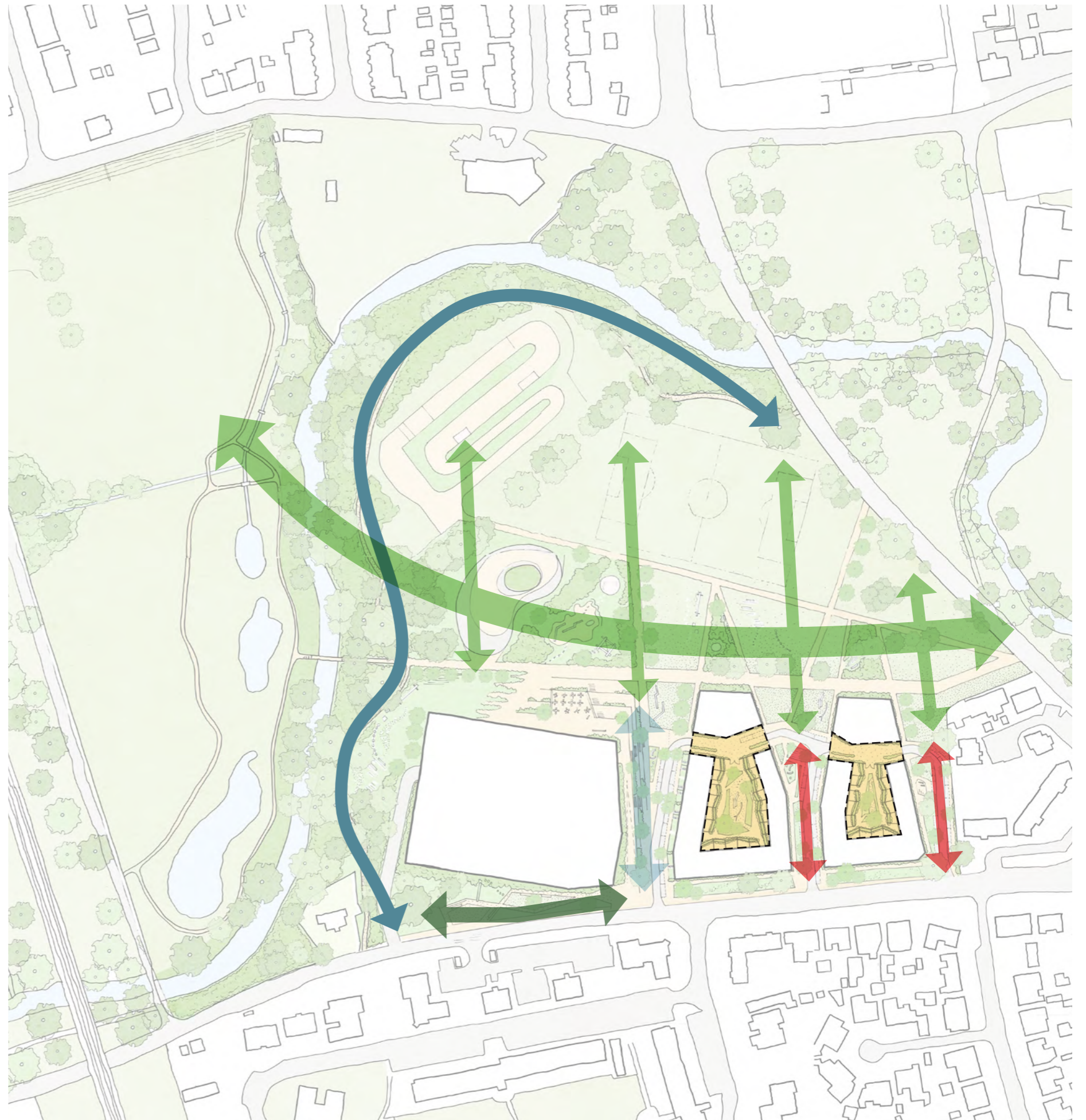
Site Strategy

Character Areas

The refreshed masterplan can be characterised by specific zones which each have their own specific characters and relationships

KEY:

-  River Edge
-  Linear Leisure Landscape
-  Leisure and Residential Route
-  Ruislip Road Arrival
-  Residential Streets
-  Residential Courtyards



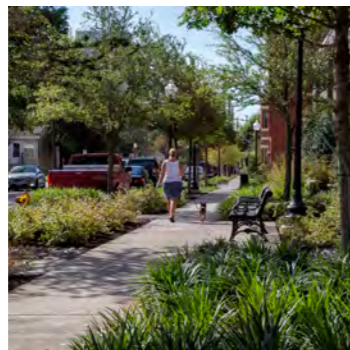
Character Areas

Character Areas

Residential Streets



Pockets of play and seating amongst planting



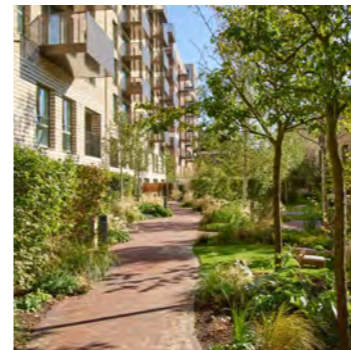
Generous linear park and buffer planting



Doorstep play integrated into the landscape



Front doors animate street and balconies provide overlooking



SUDS and biodiversity through linear park in residential streets



Street feels open as it shifts in direction towards the park



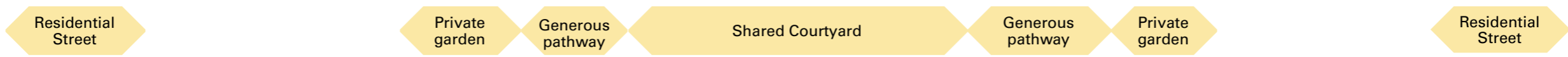
Paired front doors and buffer planting



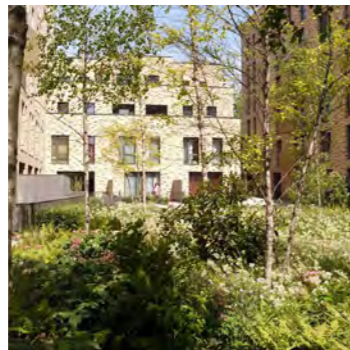
Parallel parking marked by planting and paving

Character Areas

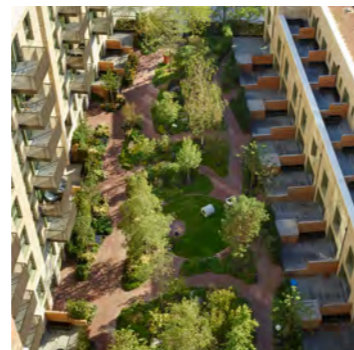
Residential Courtyards



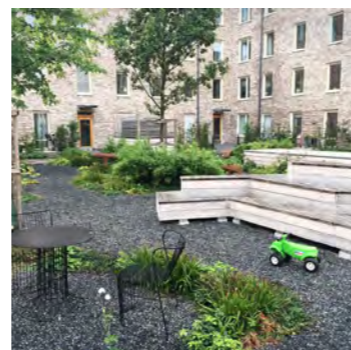
Communal growing gardens to encourage sense of community



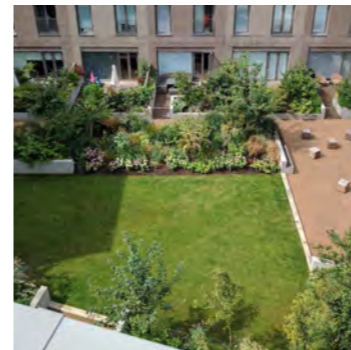
Private oasis away from wider parkland setting



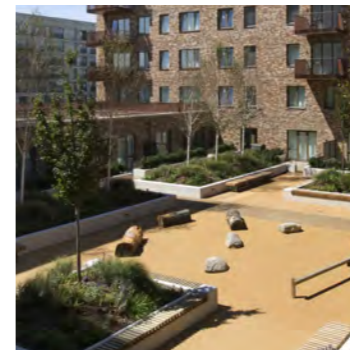
Direct access provided from back gardens into courtyard



Seating and structures for informal gathering and play



Generous pathways and planting create defensible space



Play provision is overlooked by seating and framed by planting



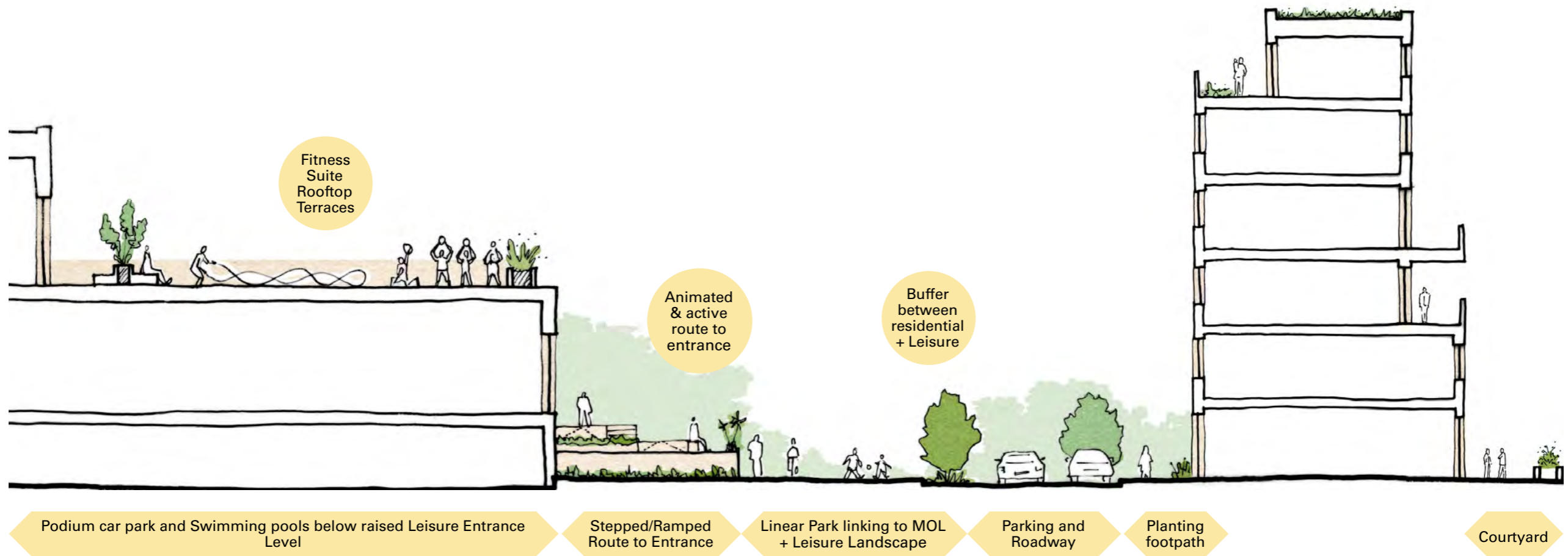
Playable routes away from traffic overlooked by homes



Stacked duplex typology with stepped roofscape

Character Areas

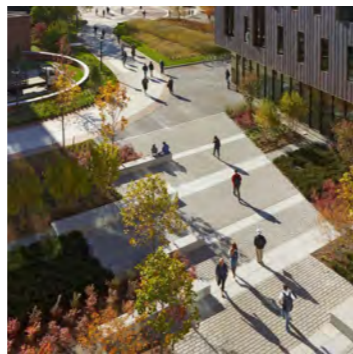
Leisure and Residential Route



Balconies overlooking entrance route and park activities



Planting and ramps soften approach



Drawing people through to the MOL activating the whole park



Generous steps form informal amphitheatre/gathering spaces



Mixture of paving and planting brings the park to Ruislip Road



Seating and planting forming part of ramped route to entrance



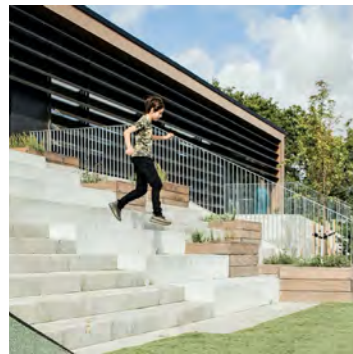
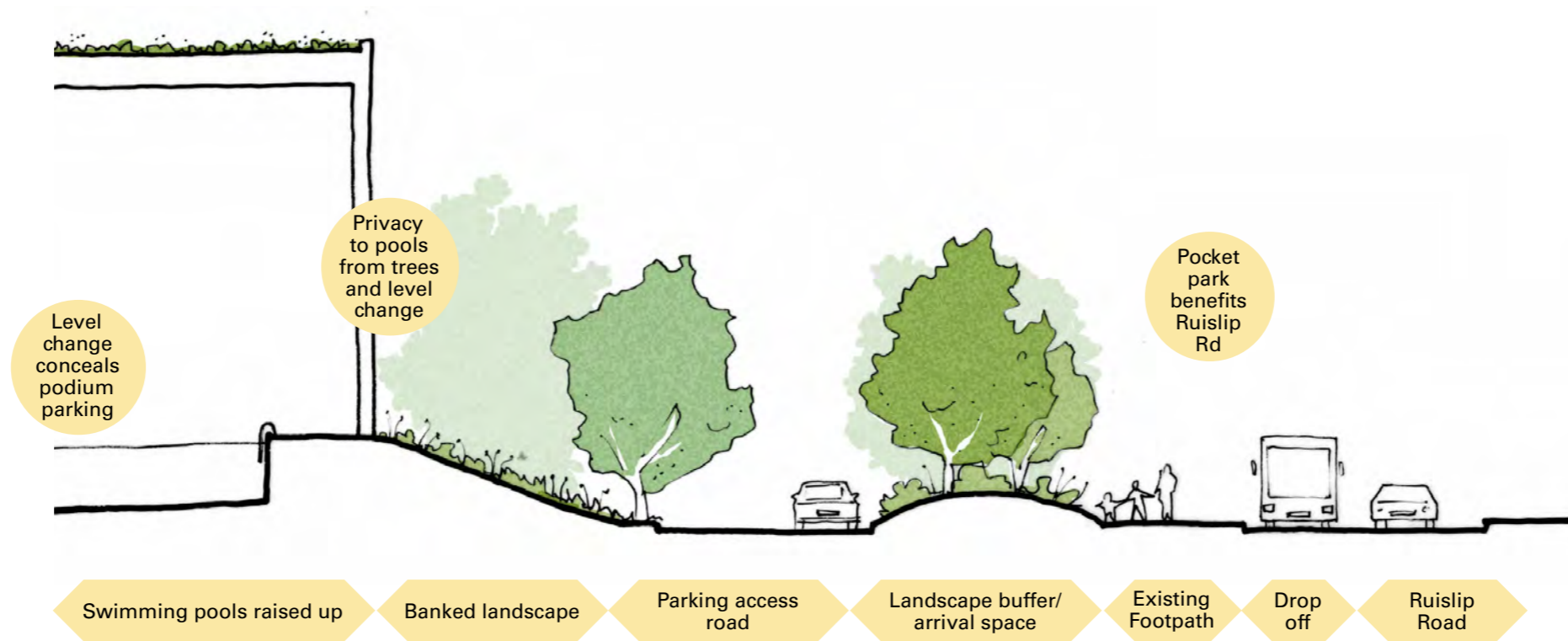
Generous pedestrian route buffered from residential cars



Front gardens provide defensible space

Character Areas

Ruislip Road Arrival



Stepped and playable landscape



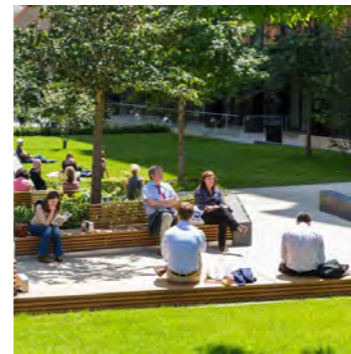
Naturalistic play integrated into sloping landscape



Arrival and gathering space facing south onto Ruislip Road



Pocket park provides amenity for existing Ruislip Road residents



Seating and musterspace for coach drop offs



Linking between riverwalk and approach to leisure entrance



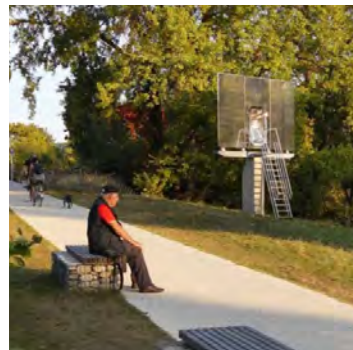
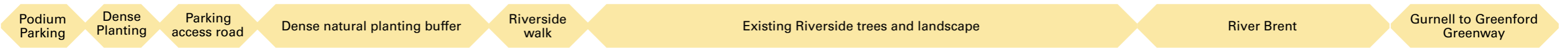
Trees providing screening and privacy from Ruislip Road



Swimming pool is raised up and looks out into tree canopy

Character Areas

River Edge



Seating and resting places along river edge



Low speed vehicle access set within landscape



Natural Play in soft landscape



Informal footpaths winding between mature trees



Riverside walk alongside naturalistic play



Play relating to riverside nature of the site



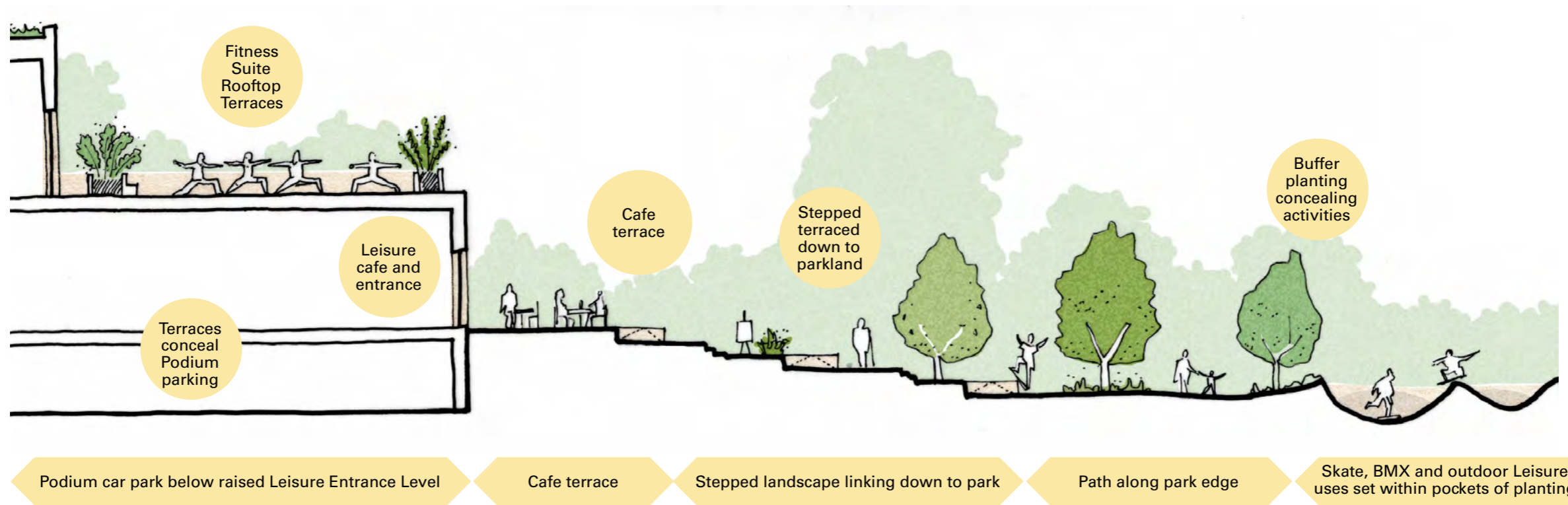
Woodland play



Existing site photo

Character Areas

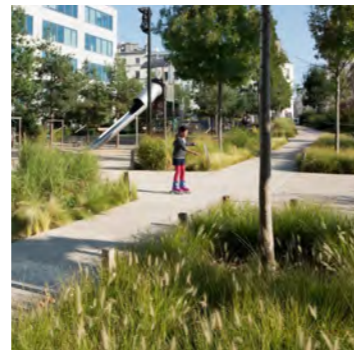
Terraced Park Edge



Play and public space integrated into slope



Rooftop terraces for yoga and fitness overlooking the park



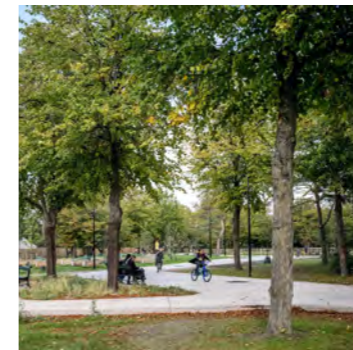
Pockets of activity alongside public route animating MOL



Cafe overlooking the park and Leisure facilities



Diverse play space integrated into the landscape near housing



Park boulevard route linking east west across the MOL



BMX and pump track integrated into the parkland



Skate landscape framed by trees

Character Areas

Linear Leisure Landscape

Play



Park Routes



Outdoor Leisure



Outdoor Leisure Uses

Playground - 30x40m = 1200m²

Skatepark - 30x50m = 1500m²

BMX - 50x100m = 5000m²

Outdoor Gym - 30x25m = 750m²

Trim Trail