





# 4.1 OPPORTUNITIES & CONSTRAINTS

#### 4.1.1 Existing Neighbouring Uses

Surrounding the application site there is a number of existing uses. There is a number of residential developments near the site, with the latest due to be constructed at The Keel. Planning approval was recently granted for The Keel 2, two residential blocks situated at the head of the Queens Graving Dock.

There are a number of hotels taking advantage of the areas cultural and tourism assets such as the ECHO Arena, BT Convention Centre and Exhibition Centre Liverpool.

#### Key

Existing Residential.

- 1. Wapping Quay
- 2. Royal Quay
- 3. The Block
- 4. The Keel (phase 1)

Proposed Residential.

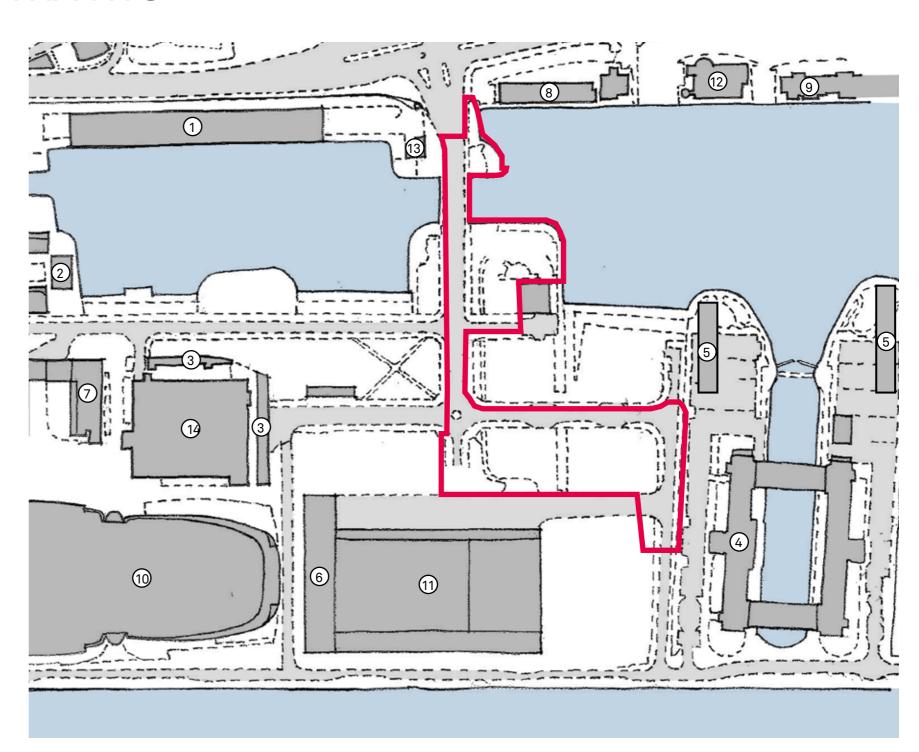
5. The Keel (phase 2 - approved)

#### Hotel.

- 6. Pullman Hotel
- 7. The Jurys Inn Hotel
- 8. Hotel Campanile
- 9. Dolby Hotel

Tourism & Leisure.

- 10. Echo Arena / BT Convention Centre
- 11. Exhibition Centre Liverpool
- 12. Casino
- 13. Hydraulic Tower and Gatekeepers Lodge
- 14. Multistorey Car Park







# 4.1 OPPORTUNITIES & CONSTRAINTS

#### 4.1.2 Views and Landmarks.

The sites proximity to the waterfront provides a great opportunity for the development to utilise the wonderful views of the city and the River Mersey. The orientation of the building provides optimum views towards the water.

We have identified two potential areas for landmark developments that will integrate with gathering points to promote activity. These areas are the land overlooking Queens Dock with two sides facing the water and the small low lying piece of land alongside the bridge over Queens Dock.

Enclosed views will play a strong role in the way in which the surround landmarks will be viewed and revealed when using the site. Vistas of the Anglican Cathedral are key views from the site and the proposal will seek to retain these view. Other potential locations for enclosed views have been identified which will look towards landmarks such as the Hydraulic Tower and Albert Dock.

#### Key

→ Maintain visual link to Anglican Cathedral

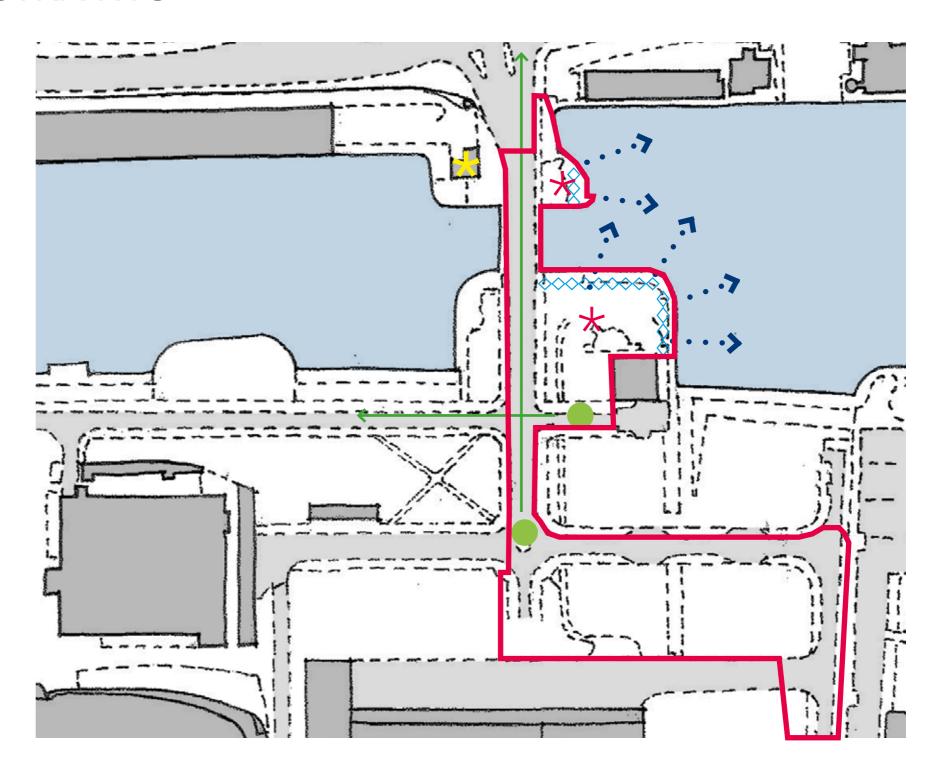
Enclosed views

\* Existing Landmarks

★ Potential Landmark / gathering point

>>> Potential for long distance views

· · • Views to the water







# 4.1 OPPORTUNITIES & CONSTRAINTS

#### 4.1.3 Existing Infrastructure.

The proposed site has an existing road infrastructure that has supported the previous uses at King's Dock. The proposal will seek to utilise the existing infrastructure to ensure access to the multi-storey carpark, ECL service yard and the ECHO Arena / BT Convention Centre remain unaffected.

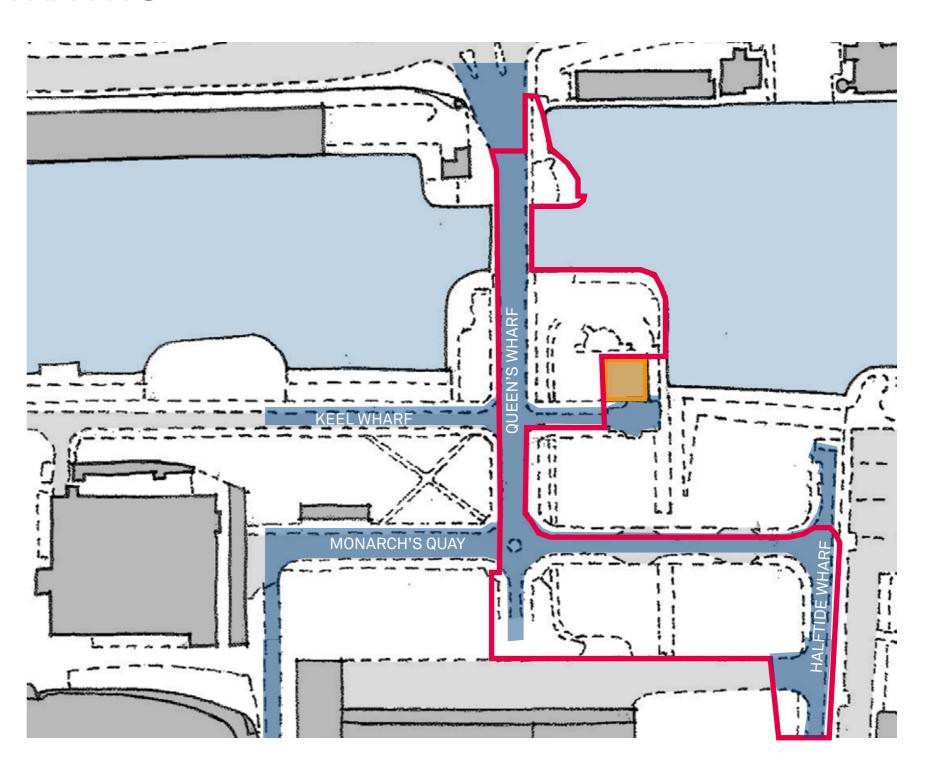
#### Key



Existing Road Network



Existing Substation







# 4.1 OPPORTUNITIES & CONSTRAINTS

#### 4.1.4 Access and Movement.

The site has a number of existing vehicular access points that must be retained to ensure the surrounding buildings can continue to be serviced. The proposed MSCP will require new access and will replace the vast amount of ground surface car parking at the site at current.

Improving pedestrian movement across the site will be key to the success of the masterplan and will help engage users with the water. The diagonal route connecting the ECHO Arena and Queen's Dock is important to help bring users to the waters edge. Additional connection to the water will be created at the Interpretation centre alongside the bridge over Queens Dock and along the edge of the Residential building.

#### Key

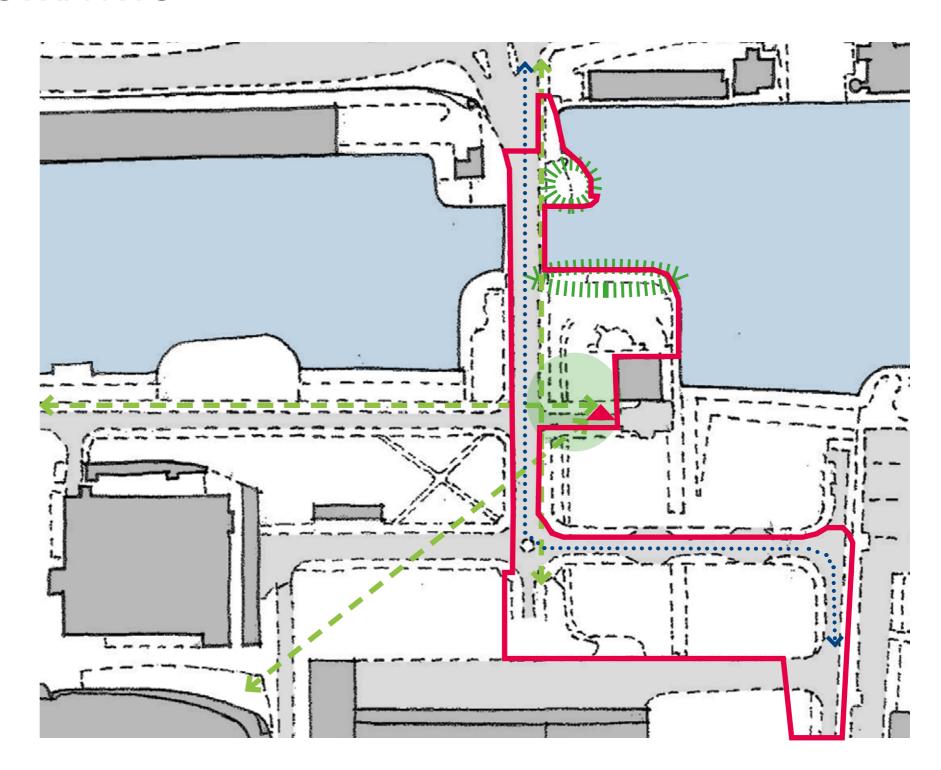
Primary Vehicular Movement



← → Primary Pedestrian Movement

Potential Public Space

Potential Key Connection Space







# 4.1 OPPORTUNITIES & CONSTRAINTS

#### 4.1.5 Open Space and Public Realm.

The proposed scheme will seek to knit into the existing green spaces and public realm whilst creating new and exciting spaces that will enhance the waterfront.

The proposal wants to bring activity on the water into the scheme and key to achieving this is creating pedestrian links to both the Wapping and Queen's Dock. Our analysis has identified a key route from the ECHO Arena / ECL to the Queens Dock running through a potential green zone at the centre of the King's Dock.

There is also a desire to connect into the existing promenade cycle route and pedestrian route via Monarch's Quay and Halftide Wharf.

#### Key



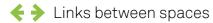
Proposed Green Spaces

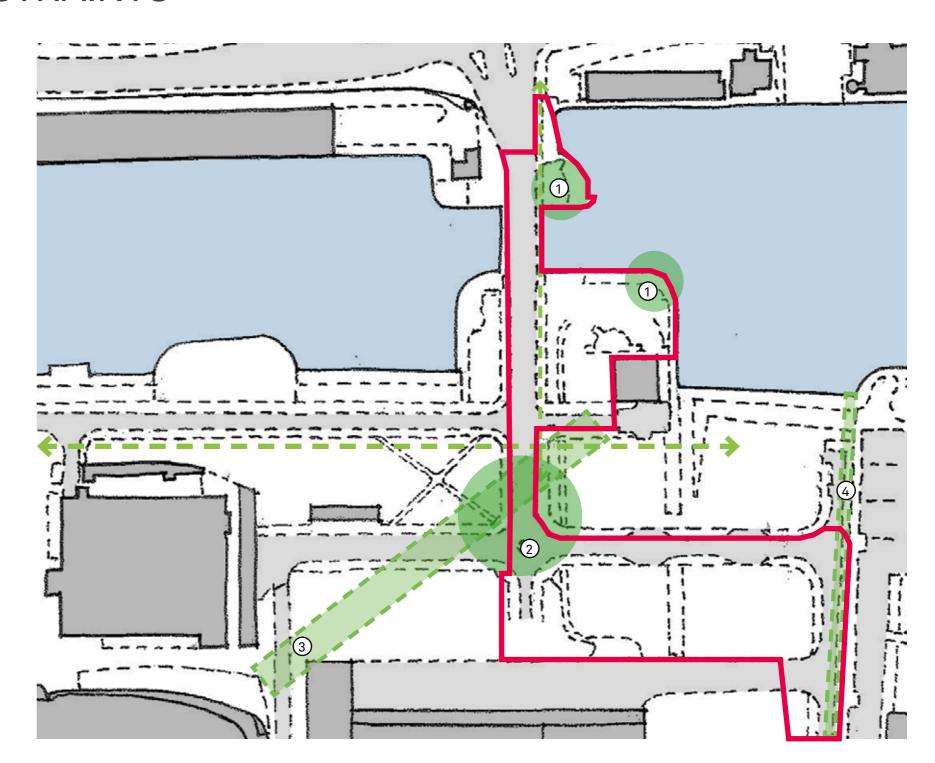
- 1. Queen's Dock -Water interaction.
- 2. Central green zone.



Proposed Green Corridor

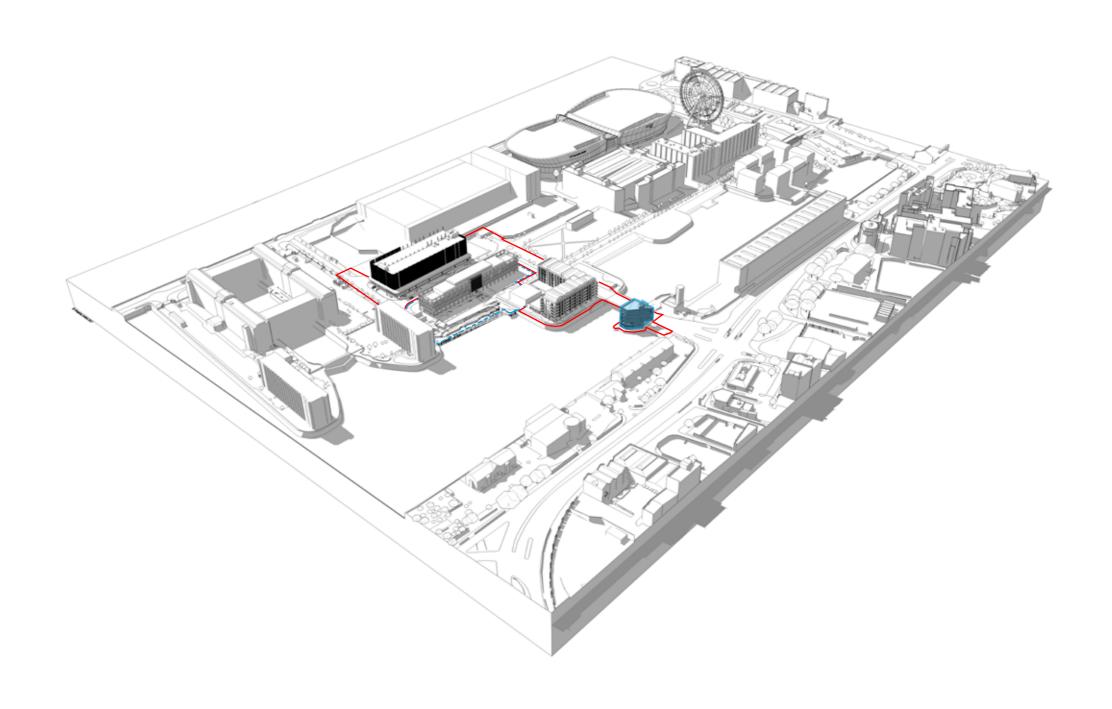
- 3. Diagonal green avenue linking the ECHO Arena and Queen's Dock waters edge.
- 4. Green link to the waterfront promenade.















### 5.1 DESIGN INTRODUCTION.

#### 5.1.1 Introduction.

Building 2 of the master plan is a building conceived of as a facility that changes functions throughout the lifetime of the construction period once the development is completed.

The interpretation centre is conceived as a place where the overall masterplan can be interpreted to the local community, stake holders and end users.

During construction it will also provide a functional space for the onsite construction team.

It will also once the masterplan is complete, be the main administration centre and office space for the management team.

The building is conceived as a modern office building with various unique meeting spaces including balcony spaces waterside garden spaces, roof top garden spaces, and casual breakout spaces within the circulation space.

#### 5.1.2 Schedule of Accommodation.

The building provides approximately the following accommodation over 5 floors:

Lower ground floor - 65m2 meeting and interpretation space 85m2 circulation and ancillary space

Upper ground floor -65m2 meeting and interpretation space 85m2 circulation and ancillary space

First floor -175m2 office space 85m2 circulation and ancillary space

Second floor -175m2 office space 85m2 circulation and ancillary space

Third floor -175m2 office space 85m2 circulation and ancillary space

Roof garden -260m2 breakout space / garden meeting space





# 5.2 DESIGN DEVELOPMENT.

#### 5.2.1 The Site - Architectural Response.

The site is set out over two levels, upper road level and lower water side level. The site also forms part

of the entrance to the over all master plan forming a gateway experience with the Wapping hydraulic tower.

The site is set apart from the rest of the master plans plots, and back from the Wapping apartments.

This gives it almost a pavilion feel but within the contextual sphere of influence of the Wapping apartments.

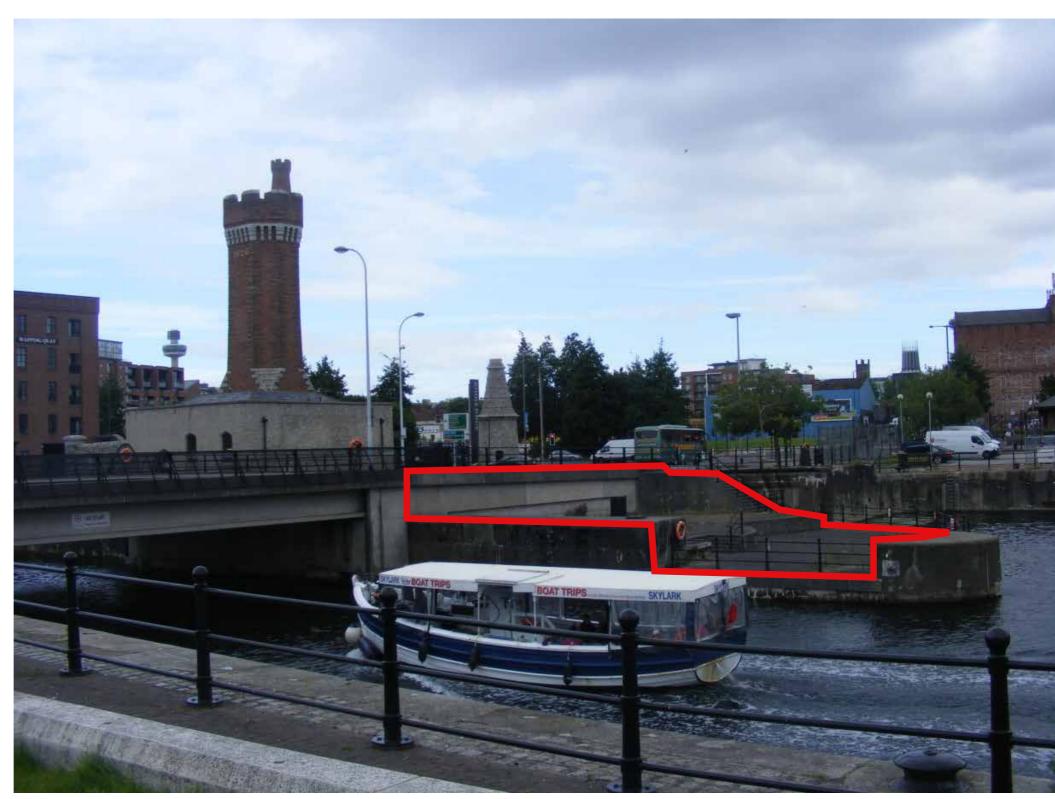
The site also contains a pivot, which is the last memory of a swing bridge once located here.

The design response contains three design leads.

- 1- To partner with the hydraulic tower in forming a strong and respectful gateway to the master plan.
- 2- To respect the sites history and interpret it with an architecturally modern approach.
- 3- To reflect and enhance the masterplan's guiding narrative of `connecting back to the water`.

#### Key

Site boundary



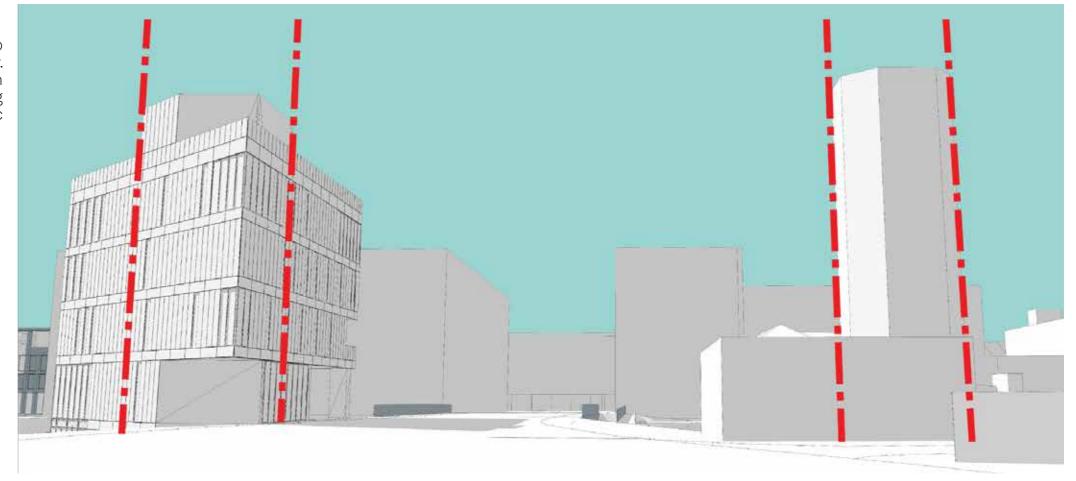




# 5.2 DESIGN DEVELOPMENT.

#### 5.2.2 Forming a Gateway.

The interpretation centre has the opportunity to form a gateway along with the hydraulic tower. The sharp leading edge of the interpretation centre adds a vertical emphasis to the building that compliments the verticality of the hydraulic tower creating a sense of two entrance pillars.







### 5.2 DESIGN DEVELOPMENT.

#### 5.2.3 Forming a Gateway.

Due to the interpretation centres location away from the main masterplan and sat back from but still within the context of the Wapping apartments and hydraulic tower, a massing study is shown using an accurate 3D model used by the entire design team.

This gives a true reflection of scale as experienced in reality as opposed to architectural flat elevations.

Image 1- is the view from the platform opposite the Wapping apartments looking toward the gateway.

Image 2- is the view from the bottom of Blundell Street, showing how from right to left the heights drop from the Wapping apartments to the Hydraulic tower to the interpretation centre.

Image 3- is the view south along Wapping again showing the decrease in heights.

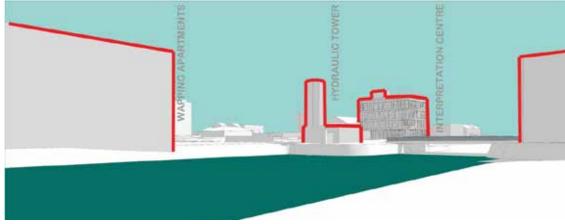


Image 1.

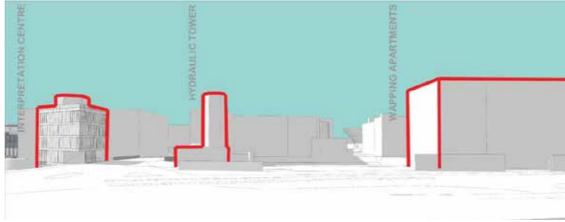


Image 2.

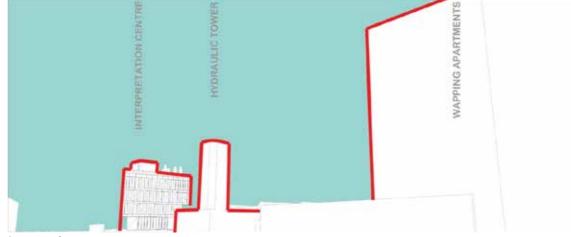


Image 3.





# 5.3 DESIGN PROPOSAL.

#### 5.3.1 Responding to the Site History.

One of the guiding principles of the buildings layout is the pivot from the old swing bridge between Wapping Dock and Queens Dock.

The building offers a two storey void and wraps itself around creating a sheltered water side garden, the building doesn't covet this jealously but rather up opens up to allow the public to see it from the bridge, from the new apartment building opposite and the boats offering tours to visitors.

#### 5.3.2 Materiality.

The primary material is corten cladding, the rusted steel alludes to the entropy of the maritime setting, `rusting and decaying boats and machinery` even the decaying maritime industry itself in this part of the dock system.

Also reflects the warm rich red hue of the Wapping Dock and hydraulic towers brickwork.











# 5.3 DESIGN PROPOSAL.

#### 5.3.3 Connection to the Water.

Due to the nature and shape of the site it lends itself to an almost triangular shape that can be interpreted as a bow of a ship.

This narrative was further explored by grounding the building almost entirely with glazing reinforcing the notion of the corten ship bow floating.

The glazing allows views from the bridge through the building to the dock water. Allowing the internal layout to `drip` down the tiered site and connect the buildings users to the dock.







# 5.0 INTERPRETATION CENTRE PROPOSAL. 5.4 VISUALISATION.





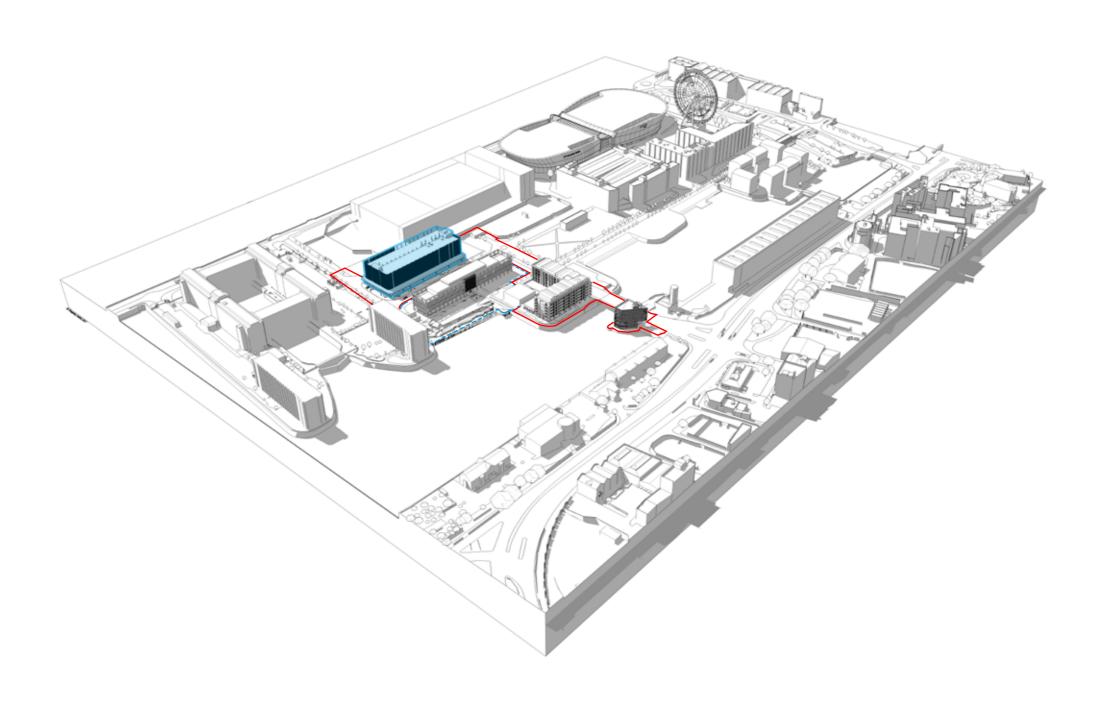


# 5.4 VISUALISATION.













# 6.0 MSCP PROPOSAL.6.1 KEY CONSIDERATIONS.

#### 6.1.1 Introduction.

The brief from YPG Developments to Potter Church and Holmes Architects was to design a mixed used development on Plot 3 for retail and car parking for the general public in an efficient layout as part of the first phase for the leisure part of the overall masterplan vision. Key decisions taken which have informed the design approach to the building are summarised in bullet points below supported either by photographs or diagrams under 3 sub headings: logistics, context and place.

#### 6.1.2 Key Decisions taken LOGISTICS.

Logistics include all aspects which relate to the way people and traffic flow and use the building. So we have considered:

- 1. Minimising traffic impact.
- 2. The safety and security of pedestrian movement.
- 3. Keeping the car park naturally ventilated to omit mechanical plant.
- 4. How to minimise internal structural obstructions which hinder vehicle maneuvering.
- 5. The ease of access for all end users

#### Key.



Cycle route



Pedestrian route



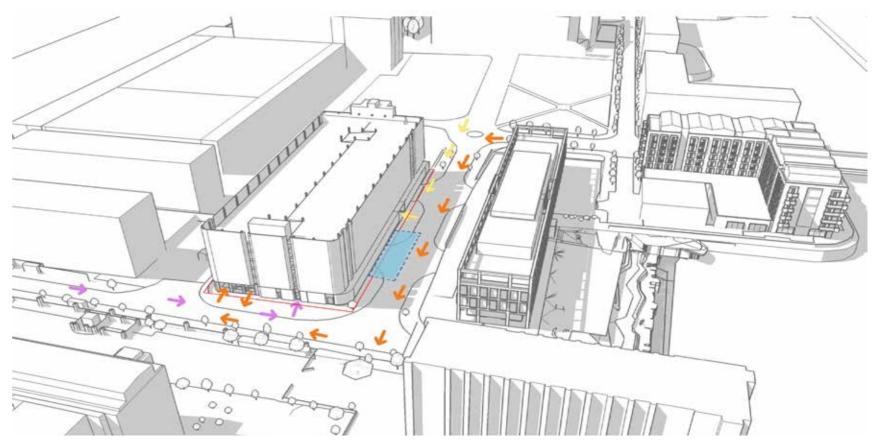
Vehicle route



Service vehicles



Red line boundary to MSCP site



1. Diagram to show how vehicles, pedestrians and cyclists flow around the building at ground level



4. An example of a lightweight steel structure with few columns





# 6.1 KEY CONSIDERATIONS.

#### 6.1.3 Key Decisions taken - CONTEXT.

We also considered what context the building would be a part of in terms of:

- 1. The scale of the building context and heights of adjacent buildings and the next phase development
- 2. The dynamic water landscape of the River Mersey.
- 3. Taking inspiration from architectonic elements of existing maritime buildings

#### Key.

MSCP and Retail dev plot 3

Building 1

Building 4

River and dock

Red line boundary to MSCP site



1. Heights and distance of adjoining buildings in a series of phased developments.



3a Metallic facades and glass frontage



2a. Rough and churning water



2b. Calm and reflective water



3b .Vertical window elements





# 6.1 KEY CONSIDERATIONS.

#### 6.1.4 Key Decisions taken - PLACE.

And what sort of place would we be creating? Our decisions would need to include:

- 1. creating an active edge and designing for future development
- 2. Creating a place memorable to those arriving for the first time
- 3. Demarcating and softening appropriate boundaries
- 4. Creating a building to be open (naturally ventilated) and yet closed (to respect privacy) at the same time

#### Key.

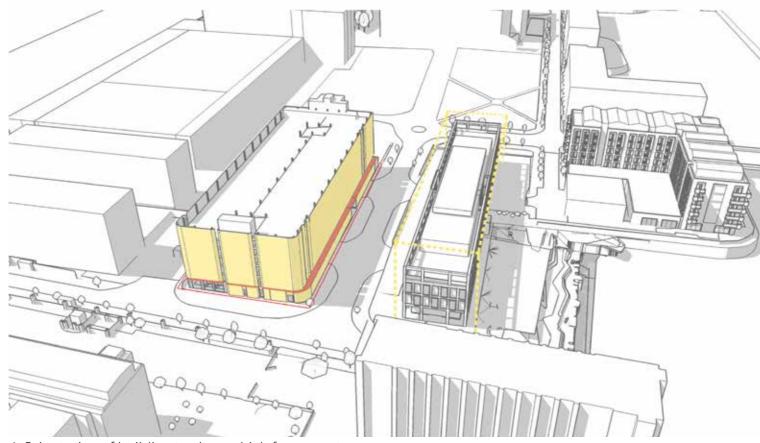
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Legible frontage



Uplighting at night

- Building 1 active frontage
- Red line boundary to MSCP site



1. Orientation of building to show which faces are to have an active frontage.



2. A memorable place



3. Rounded corners (inspiration from the Liverpool maritime heritage buildings



4. Naturally ventilated facade in lightweight opaque material





# 6.2 DESIGN PROPOSAL.

#### 6.2.1 Land Use and Quantum of Build.

The proposed design is in keeping with the broad vision of the Liverpool Core Strategy and Policy. The proposal seeks to maximise density outputs in locations with a better public access. The quantum of development is set out in detail in the Schedule below. The site area totals 9244 sqm equivalent to .924 hectares which includes the public realm area at level 0 leading towards the entrance.

The tables below show the comparison between the existing parking provision comparing the distribution of cars, disabled, parent and child, electric, motorcycle and cycle parking spaces. The proposed technical data shows the vital statistics for the layout of the car park.

#### 6.2.2 Technical Data for Car Park.

Technical Data	As proposed				
Length of building footprint	102 metres				
Width of building footprint	38 metres				
Height of overall building	26m				
Typical clear level height	2300				
No. of split levels	12				
Size of typical parking bay	4.8m x 2.5m				
Size of disabled parking bay	4.8m x 3.7m				
Size of Parent and Child Bay	4.8m x 3.3m				
Width of 2 way Traffic lanes	6.95m				
Width of 2 way vehicle deck ramps	8m				
Width of pedestrian footway	1.2m				
Decking slope	1:60				
Entrance Ramp slope	1:9				
Number of staircases	2				
Number of passenger lifts	2				

#### 7.2.3 site areas as existing.

Level location	site area sqm as Existing	GIA as existing	Land use class	Standard parking spaces as existing	Motor cycles spaces as existing	Disabled parking as existing	Parent and Child parking spaces as existing	Cycle parking as existing	Electric charging bays as existing	Total (excl MC bays)
Level 0 Ground	4160sqm		surface car parking	119	0	4	0	0	0	123
Level 1 & 2			0							
Level 3 & 4			0							
Level 5 & 6			0							
Level 7 & 8			0							
Level 9 & 10			0							
Level 11 & 12			0							
Total				119		4				

#### 7.2.4 site areas as PROPOSED.

Level location	GEA sqm as Proposed	GIA as proposed	Land use class as proposed	Standard parking spaces as proposed excl EV	Motor cycles spaces as proposed	Disabled parking as proposed	Parent and Child parking spaces as proposed	Disabled/Parent & Child Shared bay	Cycle parking as proposed	(EV)Electric charging standard bays	(EV) Electric charging disabled bays	Total(excl MC bays)
Level 0 Ground	3609 sqm		A1/B1	0	0	0	0	0	192	0	0	192
Level 1 & 2	3472 sqm	2697 sqm	car parking	53	23	0	1	10	0	2	2	68
Level 3 & 4	3472 sqm	3270 sqm	car parking	114	0	2	2	4	0	4	0	126
Level 5 & 6	3472 sqm	3270 sqm	car parking	114	0	2	2	4	0	4	0	126
Level 7 & 8	3472 sqm	3270 sqm	car parking	114	0	2	2	4	0	4	0	126
Level 9 & 10	3472 sqm	3270 sqm	car parking	114	0	2	2	4	0	4	0	126
Level 11 & 12	3472 sqm	3270 sqm	car parking	117	0	2	2	4	0	4	0	129
Total				793	23	10	11	30	192	22	2	





# 6.2 DESIGN PROPOSAL.

#### 6.2.5 Ground Floor PLAN.

The whole building will sit on a level site built up within the existing dry dock.

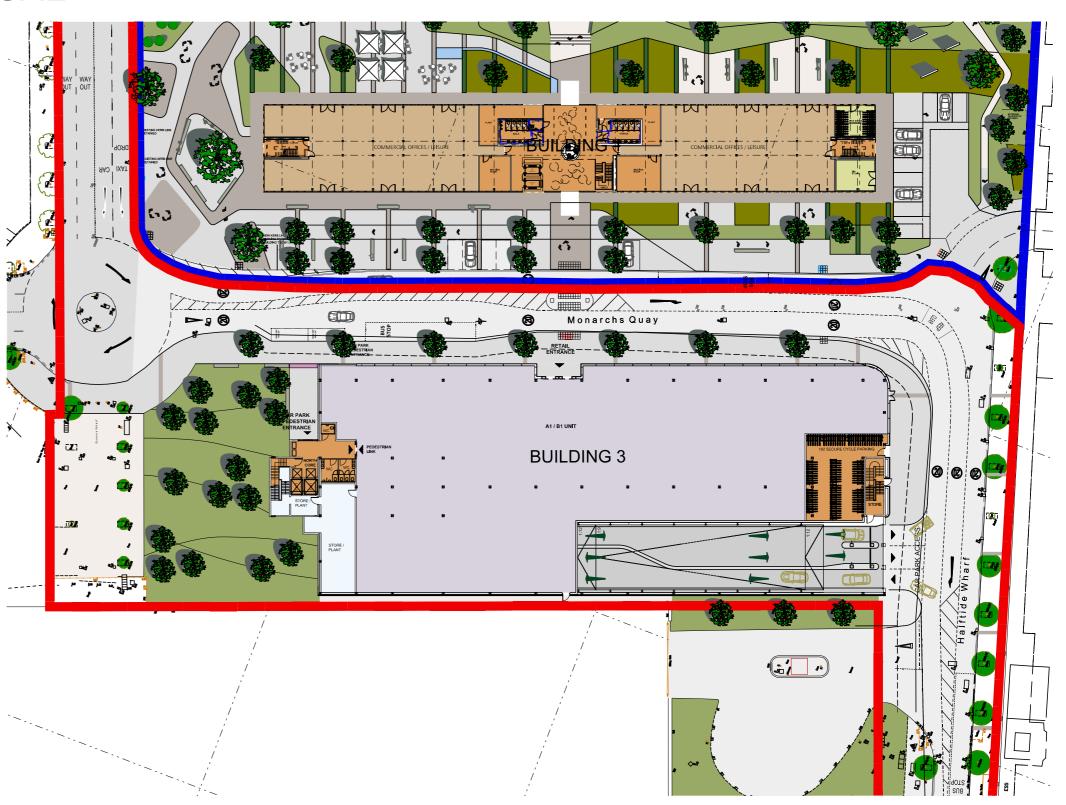
The height of the building is circa 22.24 metres above ground level on the East side reducing to circa 20.47 metres on the west side. The lift cores are both 26 metres above ground level.

The ground floor will accommodate a retail and/or commercial unit which will have a street frontage and main entrance facing Monarch's Quay.

Public toilets, plant and storage rooms occupy areas around the core 1 vertical circulation which is accessed from Monarch's Quay.

The public entrance defined by Core 1 on the northern boundary is set back from Monarch's Quay to allow for future development. Entering through sliding doors, customers can pay on foot for parking with A secure and enclosed cycle store is located behind the South core escape stair off Half Tide Wharf accommodating 192 cycles on double stacking racks.

Vehicles enter and exit off Half Tide Wharf adjacent to the South core escape stair on a two way traffic managed system.







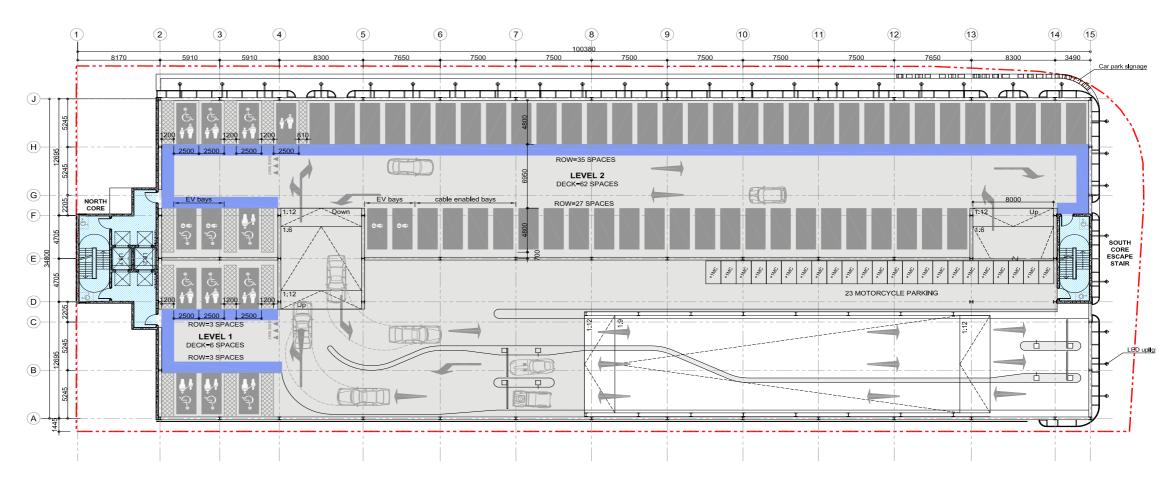
# 6.2 DESIGN PROPOSAL.

#### 6.2.6 Levels One and Two.

The top of the ramp on Level 1 divides vehicles into two lanes for the ticket barriers with one exit lane which descends via the same ramp with exit barriers at the foot of the ramp.

Once through the ticket barriers, vehicles continue circulating to the upper levels via two way ramps.

All 23 motorcycle parking bays are located on Level one.







### 6.2 DESIGN PROPOSAL.

#### 6.2.7 Typical Upper Floor Plan.

Electric charging bays are indicated as cable ready and as dedicated spaces.

Disabled and Parent Child bays are located next to the lift core.

Pedestrians follow defined routes marked in blue on the plans. Core 2 Escape Stairs is accessible only in an emergency otherwise customers circulate vertically up and down Core 1.

Cars circulate up and down internal ramps between 5 staggered levels.

It is anticipated the MSCP will be constructed using a prefabricated steel frame system supported by a concrete frame and substructure upto first floor level. The advantage of the pre fabricated system build is the flexibility of adjusting parking bay sizes and maintaining an obstruction free, clear span interior. This project will feature 2.5m x 5.0m parking bays.

All floors are designed with a 2% fall towards the outside which will ensure surfaces remain free from standing water. Ramps are designed with transitions at top and bottom so that vehicles can be safely manoeuvred between individual levels. Likewise all columns at top and bottom of ramps are set back by 300mm from the driving aisle to omit the risk of vehicles touching the steel superstructure.







# 6.2 DESIGN PROPOSAL.

#### 6.2.8 Roof Deck Plans.

The top deck is open with the exception of the cores.

Pole lighting illuminates these levels and placed along the central spine, they minimise any adverse impact created by potential light spillage. Vertical access is directed towards the north lift core 1.

