



## DESIGN AND ACCESS STATEMENT

Harlech Court, Bute Terrace, Cardiff

New residential tower with commercial ground and first-floor uses and public square.

*This statement is compiled to comply with WA guidance for a 'Design and Access Statement' in terms of format and content described under TAN 12 (2016) 'Guidance on Design and Access Statements'.*

*It is to be read in conjunction with the other application material including all drawings and the reports relevant to the application*





*The proposal is contextualised by the Cineworld and the Admiral Building adjacent to Barrack Lane and down Mary Ann Street*

## SUMMARY OF THE PROPOSAL

The proposal is for the replacement of a 1970's office building, its associated ground and first-floor podium uses, second-floor podium car park and ramp structure, with a 30-storey residential tower with mixed use ground floor and associated external public realm and operational spaces.

Demolition consent of these structures has been sought separately to assist in matters of programme and site ground testing which cannot be comprehensively done with the current building still in place. The podium structure is continuous with the adjacent hotel and both properties share an access ramp to their second-floor shared podium parking. Both properties fall under one freehold with redevelopment rights in favour of the freeholder.

A legal agreement to demolish this shared structure and to re-provide parking at ground floor level for the retained hotel has been agreed to allow this demolition to happen. In effect then we are looking at a 'clean' site when describing this application.

We have described however, in this DAS the situation as it is prior to demolition because the change to the cityscape with the cleared land is only a very temporary visual insight. The real change is from Harlech Court and the hotel as it existed to the new proposal being implemented. This reflects in the site description and context sections of the document. This is the true effect on the city.



*The same view without the proposals in place*





*Harlech Court office block above the podium car park with former nightclub at ground floor*



*Harlech Court viewed from adjacent to the Admiral Building looking down Mary Ann Street from the city centre*



*Harlech Court with the Citrus Hotel to the left and the newly completed Grainger BTR development beyond the railway line*



*Harlech Court situated in the context of Zenith, Grainger and Altolusso*

## ANALYSIS

Harlech Court and the hotel are dated buildings in terms of Cardiff's built fabric and whilst the hotel building itself is not proposed here to be demolished, the new design will allow, in terms of how it addresses the wider site, for a new substantial proposal to come forward on the hotel site too. We are not therefore preventing further development on the hotel site by doing what we propose. We have carefully considered aspect, amenity, and the wider contextual appearance of the built environment in this respect.

The site is a brownfield renewal and will therefore be sustainable. There is a loss of employment (office) because of the demolition of Harlech Court, but this is justified in the annexed Justification Statement in the broad basis of ongoing lack of suitability, position, attractiveness, running costs, general dilapidation and now, the geographical moving of the 'commercial heart' of Cardiff to better, newly designed districts.

Moreover, current emergent directives to keep 'commercial' uses at street level for 'active frontage,' employment, amenity and the greater good of the street have been embraced in these proposals. Whilst this street is quite 'dead' from an active frontage perspective there is no real need to flog this particular dead horse and we set a benchmark here for things to get better for the street in the long run.



*View 2 with Harlech Court highlighted*





1



2



3



4



5

## TALL BUILDING GROUP

We are of course creating a vertical community here of up to 750 people so symbiotic lower floor uses which bring life to the base of the building are justifiably accommodated. In this instance, café, gymnasium, lounges, possibly small convenience store along with home-working type uses.

On this site, we are at the centre of Cardiff's biggest tall building group so clearly another addition here is pragmatic, especially as far as this current 'rotten tooth' could justifiably be replaced to visually compliment its new and new-ish neighbours.

This group when viewed from certain positions in the city is very prominent and comprises the Eastern end of Callaghan Square and the Western part of Capital Quarter then those buildings along Bute Terrace to the north, reaching back to Pellet Street in the east.

The area is dissected by railway lines, but these do not 'read' as dispersing the group when viewed from remote positions in the city.

1. Viewed from Mary Ann Street

2. Viewed from Ocean Way roundabout

3. Viewed from Dumball Road adjacent to the Huggard Centre

4. Viewed from Callaghan Square

5. Viewed from Cardiff Castle Keep

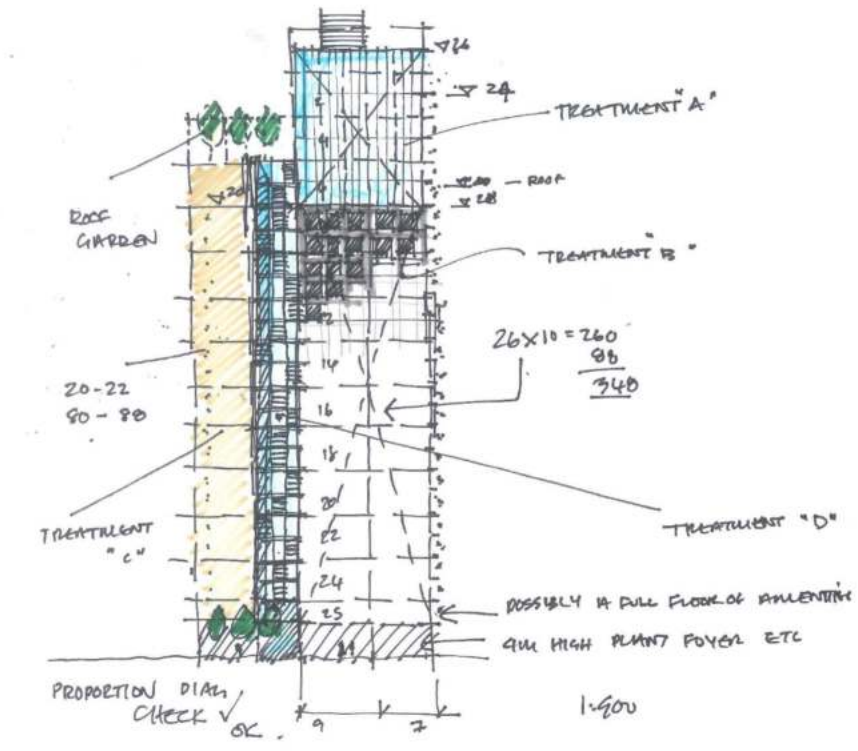




View from the castle for the 2018 design which was not feasible in then current residential Cardiff marketplace and remains undeliverable in 2024



Two options put forward in 2020 for a BTR development from Harris Architects for Grainger Development



Early sketch for this commision exploring the form looking down Mary Ann Street



Sketch site plan put forward in 2020

### BRIEF AND VISION

The practice was approached to look at this site several years ago and there have been a number of residential high-rise proposals put forward in the recent past, some of which the council have seen. Initial sounding with the council advocated that a very tall building could go here, and work was done to prove this was viable. Unfortunately, the Cardiff economic landscape would/will not support such a height (50 storeys ±) because of special construction costs vs residential values. Later then, a BTR proposal on behalf of Grainger was progressed to a certain point but stalled for a variety of reasons.

Now, and with this proposal, a robust financial framework backs the application, and work has been undertaken to develop the viability of the proposal on mix, gross to nett ratios, height vs cost, elevational treatment methodology, emergent legislation in terms of fire, and funding appetite for risk in the city of Cardiff. We therefore have a deliverable proposal.

Very much a part of the brief from the client group was to constantly health check against project fiscal viability as we progressed the design and project cost monitoring throughout the design process was a must. That said, the designers have pushed to create the best possible visual representation of the fiscal picture.



Detail of the development of the facade





## CONTEXTUAL ANALYSIS

Introducing the new building can act as a focal point for the tall building group when viewed from the City Centre by way of David Street and Mary Ann Street. If plans come forward for the relocation of the Utilita Arena adjacent, the proposal will heavily influence the immediate environment here.

The proposal is a singular tower of 340 units and internal and external amenity spaces by way of a square, lounges, roof gardens, gymnasium, café content, working and social spaces.

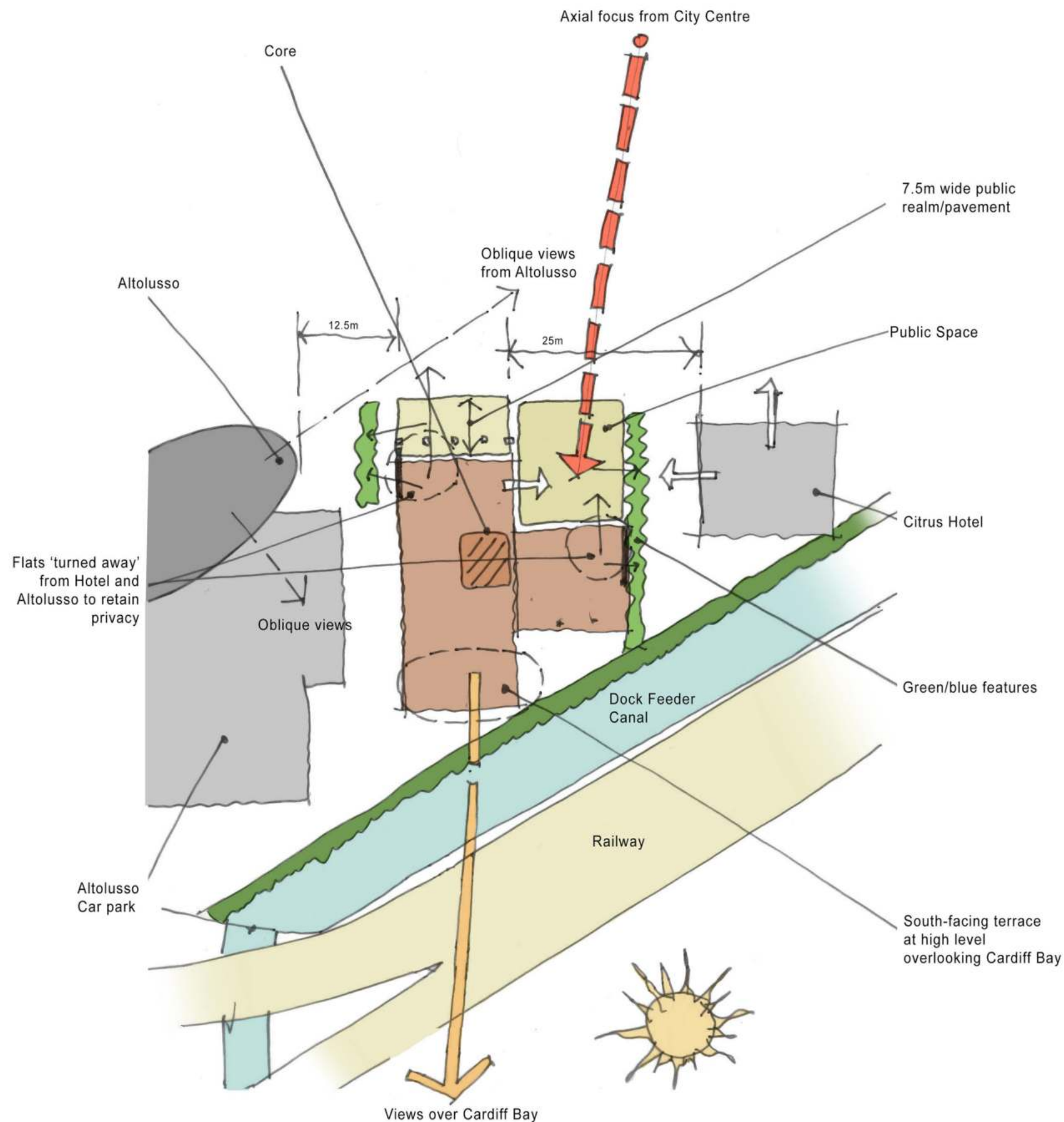
The proposal is a BTR (Build to Rent) scheme, but consent is sought under residential use class (C3).

The tower is designed with two 'wings,' one substantially lower than the other to create an interesting form. Consideration of the councils Tall Buildings SPG has been taken during the design process and the location of the proposal, quite apart from the appearance and form aspects, is thought to agree with the locational characteristics requested in that SPG.

This approach will provide good inroads into the council's residential number targets in a very sustainable location and embrace the councils 'European model' for city living and will complement the tall buildings group.

A portfolio of studies has been undertaken to inform the proposal and its final form and details. The council have been asked for a screening option in terms of an EIA and this has proved to be unnecessary.





## OPERATIONAL BRIEF AND NEEDS

In terms of an operational brief, our clients wished to deliver approximately 340 competitively sized flats suitable for the BTR (Build to Rent) market. There are many examples of these now in the city centre and unit sizes vary from operator to operator. Larger operators such as MODA and Grainger have set requirements which are similar, and it is to these parameters we have designed to allow operator flexibility both now and in the future.

The mix is predicted towards 1-bed units with less 2-bed units. Studios are not preferred especially with the emergence of the co-living market in Cardiff.

Particularly important in this now competitive market is the amount, location, and quality of amenity space for residents. In this instance, the client and therefore designers have provided the higher levels of amenity included by some BTR projects, but not necessarily illustrated by those in Cardiff.

Particular care was taken in locating this off-vertical circulation and entrance core to enable a sense of community when entering the building and this ability to witness common uses and 'life' immediately, then universally, equitably assemble areas off the common vertical circulation.

*Closer contextual analysis illustrates things which influenced the design, shape and aspect*





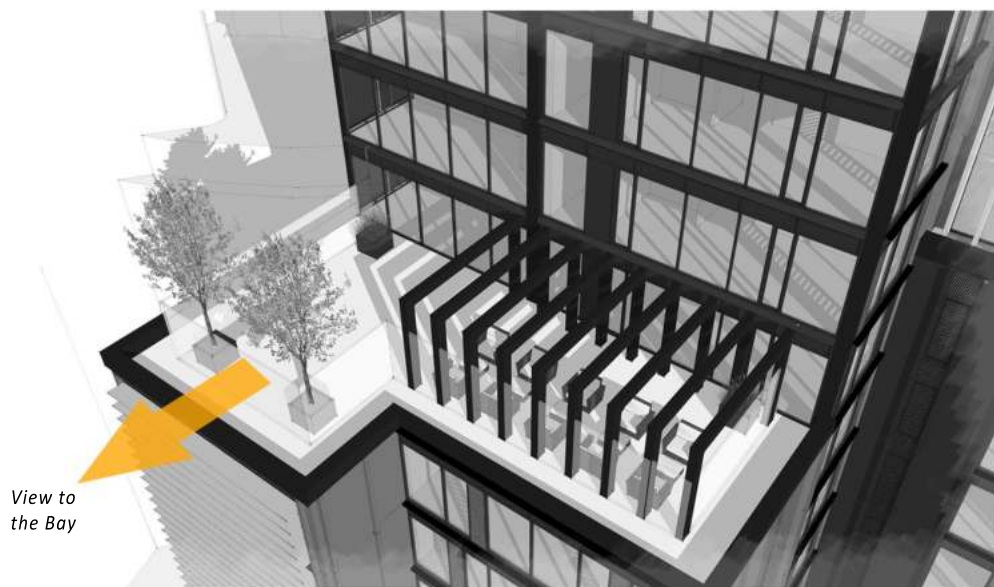
*The proposal will be prominent from the castle, so there will be connected views between the lower and higher levels. Sensibly, these views should be from lounges and terraces. Terrace highlighted in red*

## ASPIRATION FOR ROOF TERRACE GARDENS

Of course, being a tall structure with open aspects to the city and equally Cardiff Bay, the designers were keen to exploit views from nearer the top of the building, looking both ways and taking advantage of the sun. Here, substantial roof terraces are created.

It was agreed that more than one terrace (2) would be created of different characters, but both must have allocated internal common space to make them more flexible in use to all and not just those situated near to them. This makes them more sustainable as gardens and more likely to be used if the weather is unpredictable. They are more opportunistic, and the common spaces associated have an 'inside/outside' aspect to them.

The client and designers felt that having the terraces located against taller building elements rather than 'on the roof' made them feel more engaging and less threatening to use. Of course, in this instance, aspect, prevailing wind, and shade had to be considered.



*View to the Bay*

*Terrace which addresses the south and Cardiff Bay*



*View to the castle*

*Terrace which addresses the castle and the city*





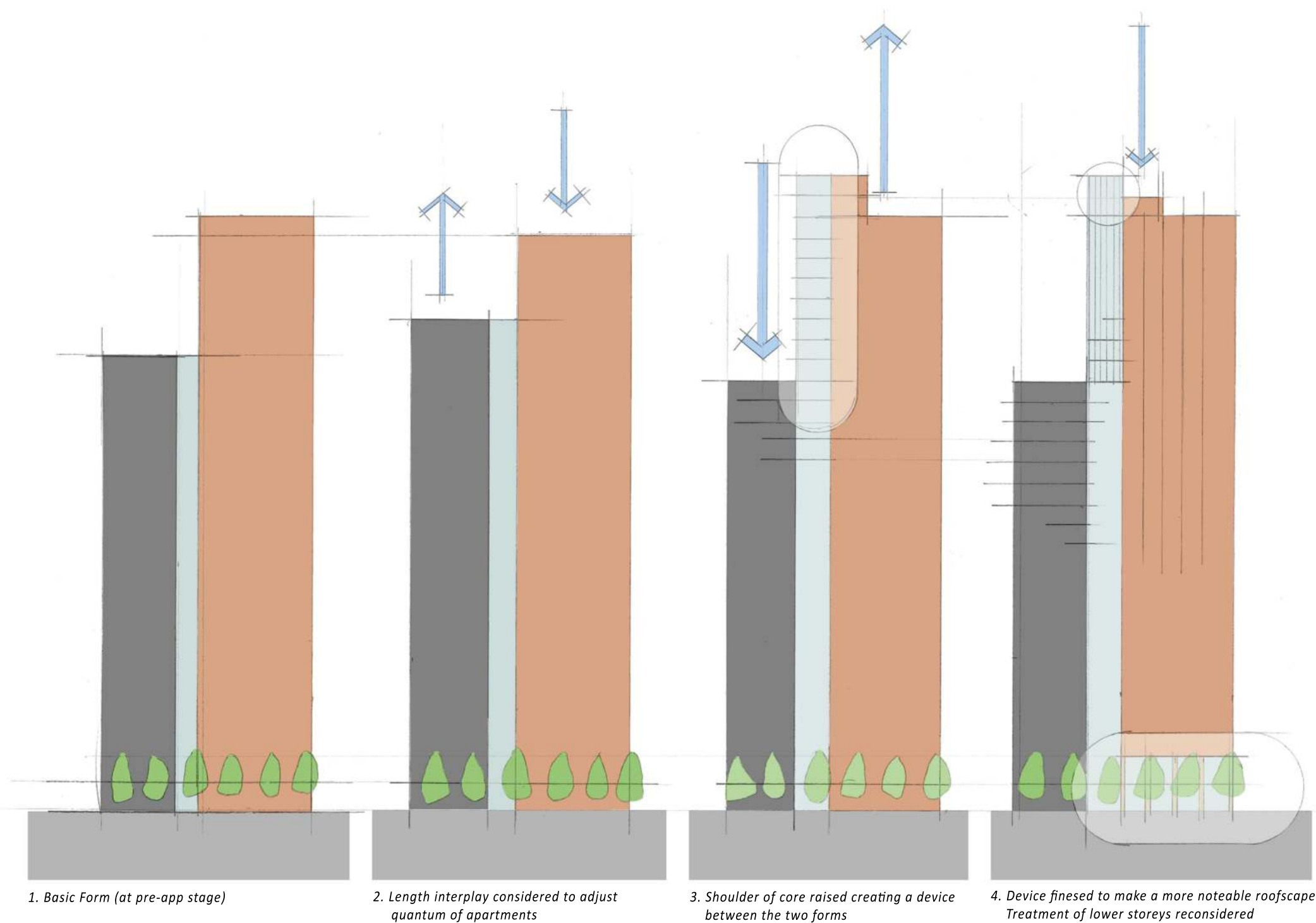
## OPERATIONAL NEEDS

In terms of other operational spaces, the client requested;

- Refuse collection by a private waste contractor
- Ample cycle parking (1 space per flat)
- A small service ayrd for services and deliveries
- A sustainable quantum of commercial space on the ground floor to help build community
- A safe, legible, and sheltered entrance off a reasonably sized external, pedestrian predicated approach space

Ground floor plan showing the operational uses and relationships





*After optioneering, the basic building shape of the chosen overall preferred volumetrics were finessed to find the best visual solution*

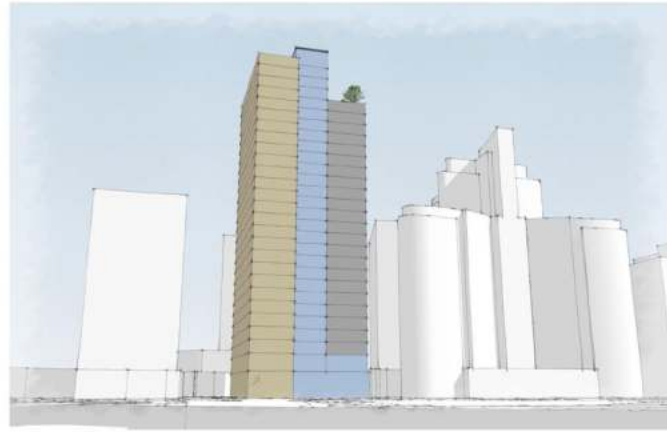
## ASPIRATIONS TO HELP FORM OUR VISION

A substantial amount of time was spent at the briefing stage testing out what the client wanted out of the design visually and emotionally. Of course, Cardiff has seen much high-rise development over the last 5 years, and we could then discuss what they felt worked, liked, did not like, and would like to see from their own perspective. We discussed buildings of a similar scale nationally and internationally and what they thought about those.

At the end of the day, there is/was a certain amount of personal opinion mixed with practicality, achievability, and longevity. Cardiff has no particular high-rise aesthetic, and it was appreciated that this building would sit within a diverse tall building group. In the round, the following was agreed;

- The building should be heavily glazed
- The building should not be monolithic
- The appearance should be made to feel slender even though it was naturally much taller than its perceived elevational width
- The building should be a series of diverse, interlocking forms
- The forms should be of different heights
- The design should engage with the street and have a definable entrance
- The design should have a 'setting' and not sit immediately on the street edge
- The design should have a human scale at street level
- A full masonry building was not preferred for fiscal and programme reasons
- The design must address the Mary Ann Street axis successfully and terminate the view from the city centre
- Singular balconies were not preferred but Juliette was okay. The reason for this was that larger communal external spaces were more visible and sociable, additionally less likely to attract maintenance issues and propensity for visual clutter
- The client should embrace low-carbon technologies
- The building should have visual longevity

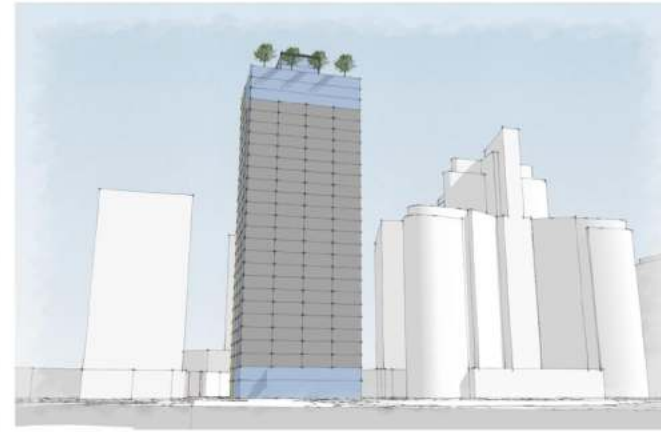




Option 1



Option 2 (Preferred)



Option 3

Form analysis submitted under the December pre-application enquiry to the council



Sketchup views of the design as submitted at pre-app stage. Subsequently, the 'main tower' was made higher and the 'shoulder' dropped to make the form more dramatic. The 'knuckle' was also amended.



Post pre-app development with taller 'main tower' and lower 'shoulder'

## VISION

The vision is the amalgamation of the client's operational needs and visual aspirations married to the designers' own thoughts and respect for the surroundings and in the instance of a tall building such as this, the wider cityscape which will be a witness to the outcome.

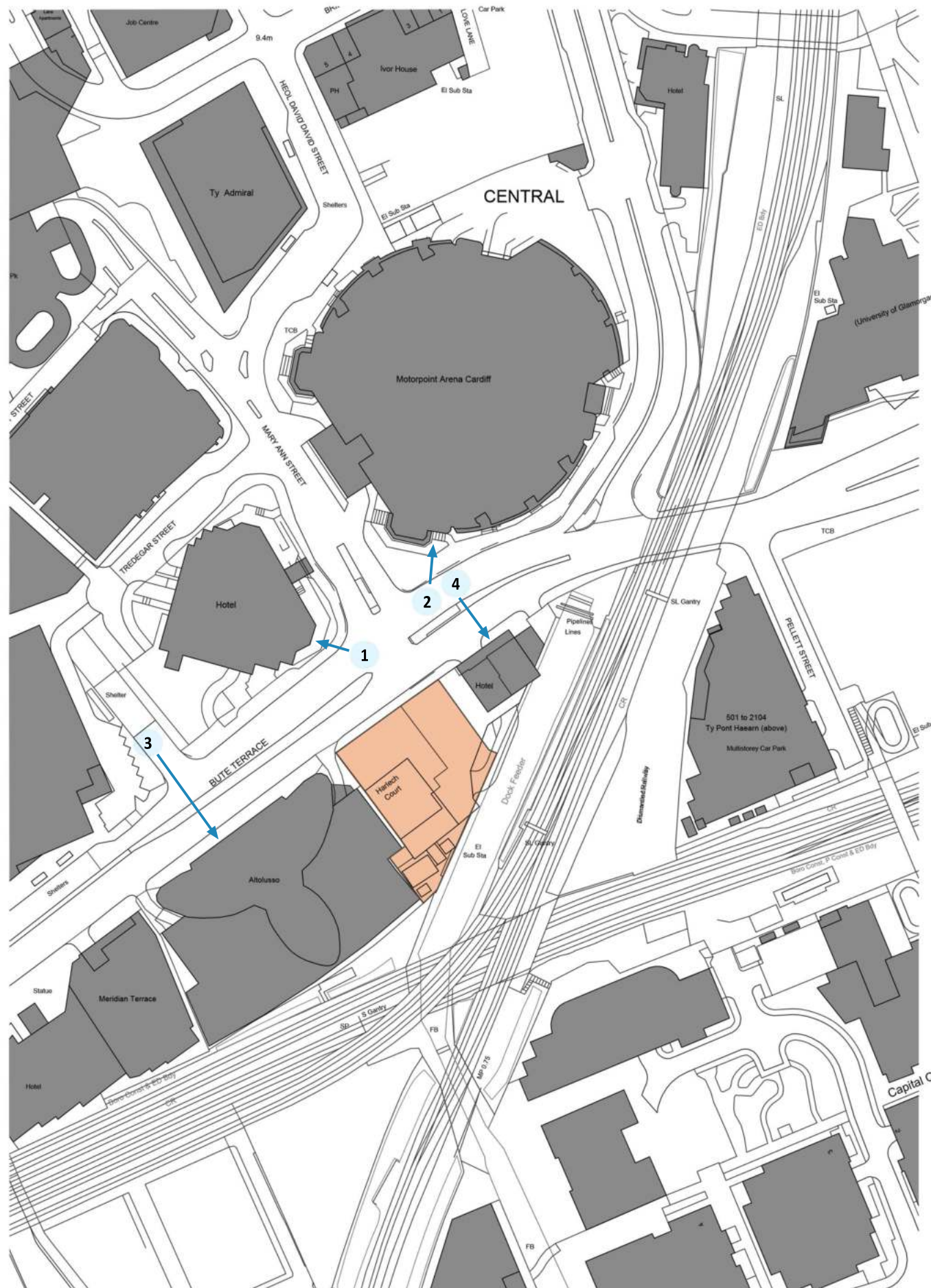
Initially, we have listed our aims to help with the vision statement. These are:

- Create a tall building which will encompass the clients' operational needs and their visual and emotional responses to their operational needs
- Create a unique piece of architecture which will encompass the clients' key points listed in the briefing process
- Use our own site and wider context analysis to influence what we design and an interpretation of the client group needs
- Use key pieces of site analysis to influence the design
- Be cognisant of the ongoing visual relevance to the city of what we do and not fall into following current trends without serious thought for what might change
- Ensure we design so that the building will endure visually both in terms of style and degradation of fabric

We can then say that our vision will be:

To create a piece of tall architecture that reacts well to its surroundings and engages the street in a human way. In so doing, will endure visually and sustainably in use and contribute to the existing tall buildings group in a positive way. Articulate the operational needs in a visually striking way and create a new icon on the Cardiff cityscape, which will raise the architectural bar for tall buildings generally.





1. Park Inn Hotel



2. Utilita Arena



3. Altolusso



4. Citrus Hotel

## PHYSICAL CONTEXT

The site is situated in between Bute Terrace to the north and a railway branch line to the south. Parallel to the branch line is a dock feeder canal set at a lower level. The railway is slightly elevated. At the southwestern corner of the site, the branch line crosses over the main Swansea to London railway line at an acute angle.

To the northeast of the site is the Citrus Hotel, a curtain-walled glass box of 1970's appearance set atop a 2-storey concrete podium with entrance at street level.

A curtain wall-clad office block sits at the centre of the site, again atop a 2-storey concrete framed podium which is clad in pennant stone with faux Victorian warehouse window openings. At street level this was once a nightclub but is now empty.

The podium is larger than the footprint of the office block so its 'roof' acts as a car park with a ramp ascending from the edge of the hotel. A small parapet semi hides vehicles parked here from the street.

To the west of the site is Altolusso, a trifoil-shaped tower faced in grey render. This addresses the street via a stone frontage and rises to 23 storeys above street level. This is predominantly a residential purpose-built apartment building with views over the city and Cardiff Bay. It has a large ground floor level car park under and close to the building covered with a podium. The access is at the western edge of the application site.





*The Grainger BTR scheme south of the railway presents a bulky monolith form to the city centre when viewed from the Admiral Building. Zenith to the right is more slender (from here) but challenging to the west view.*



*From County Hall car park the proposal will be hidden by the Grainger development*



*Similarly hidden from view along Schooner Way*

## PHYSICAL CONTEXT CONTINUED

In short context, the site is in a group of recent and older tall buildings. Some are to the south of the railway line around John Street and the western end of Callaghan Square and West. We have Altolusso, the Radisson Blu Hotel, and the Pellet Street student accommodation on Bute Terrace itself. Together these form a tall building group of between 11 and 23 storeys. The forms are different, the most recent is Zenith BTR Grainger scheme on Capital Quarter South of the railway line. This is arguably the best of these buildings architecturally but is bulky when viewed from the city core.

Looking back towards the city centre (north) from the site we are on the box junction of Mary Ann Street, this has an axial view from the site to the corner of the Admiral Insurance Building and is an important visual link to the city centre. Whilst Mary Ann Street at the moment is somewhat lacklustre, possible redevelopment of the Utilita Arena may change this and we have to consider it will become more important.

It follows then that there could be an argument to make a terminal statement in anything we do here following the axis of this street.





*Any design will be highly visible from the public realm adjacent to the Admiral Building and setting the building back from the street edge will allow a public realm to be established as a pre-amble to the development itself*



*Views from Callaghan Square and Ocean Way illustrate the building as part of the tall building group*



Concerning the dock feeder, there is an ecological consideration here with the body of water itself and the green corridors at its edge. This is a G.I consideration when we look at any design. The green edge is beyond the legal site boundary.

Parallel to this and oblique to it the elevated rail lines will be a noise source to residents on lower floors so we must consider this at the design stage. The natural gap of development forced by the rail line mitigates shadowing effects from Zenith and the taller buildings on Capital Quarter, although Altolusso to the southwest will shadow some flats from sunlight, depending on design, in the afternoon and evening in summer when the sun will traverse through its largest arc in the sky.

Altolusso will be the biggest visual block to the design as it is seen within the context of the cityscape, so the building will be more apparent from the east, south and north. Any building will be hard to witness from close proximity from the south and east because of the elevated railways.

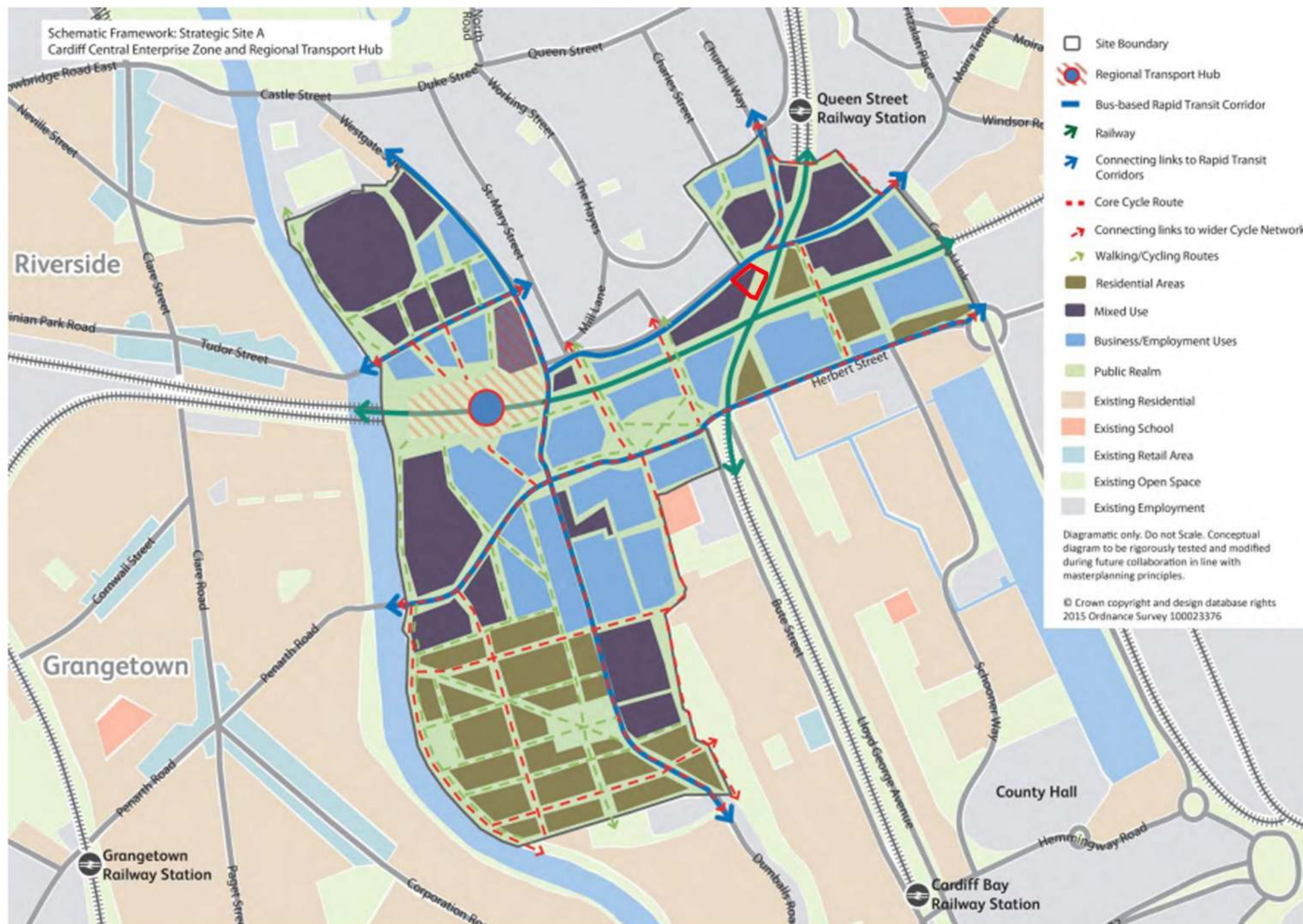
Longer views of the site from Callaghan Square will be blocked by development on John Street (depending on height). But at present, the building will be seen.

Any building will be very apparent to national rail uses in eastern and western directions.

There will be intervisibility between the keep of Cardiff Castle and the site where it is higher than the St Davids Theatre and the Hayes apartments. Here, viewed as higher than Altolusso to the left and Admiral to the right, it will be apparent.

Since the tall building group is seen from here anyway and the intervisibility has been accepted as recently as Zenith in this group and Vita Student Living on Park Pace, this is considered to be acceptable by previous precedent. Of course, design has a role to play here, and it would be a good thing if any residential lounge at a higher level had a visual relationship with the castle, and if the building has an 'icon' on the top it would be advantageous if viewed from the castle.





Harlech Court is situated within the Cardiff Central Enterprise Zone (outlined in red) It is allocated as 'mixed use'

## POLICY CONTEXT

### Planning Policy Wales (PPW)

Looking at PPW Wales which guides local policy which is concerned with MACRO issues of economic environmental and social issues this design is considered compliant because of the tie back to TAN policies and the LDP being guided by PPW.

#### Keynote TAN Policies:

- TAN 2 Affordable housing
- TAN 11 Noise
- TAN 12 Design
- TAN 15 Flooding

### Local Development Plan (LDP)

The overarching policy for this application is the Cardiff City Council Adopted Plan (January 2016). This document is current until 2026 so is wholly relevant to this application. A review process is now in place for this plan but it is envisaged that key policy will remain unchanged, certainly in respect of this area.

#### Enshrined policy in the LDP relevant to this application are:-

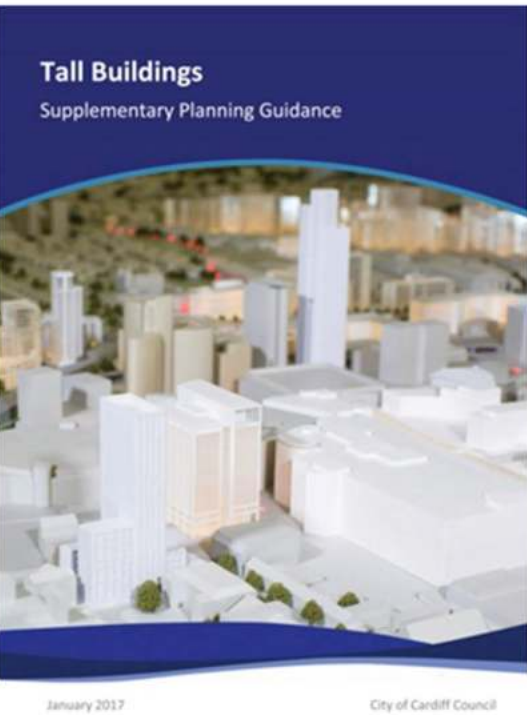
- KP1 Growth
- KP2 Strategic site (S)
- KP2a Enterprise zone and Transport Hub
- KP4 Masterplanning approach
- KP5 Flooding
- KP7 Planning obligations
- KP8 Sustainable transport
- KP10 Central and Bay Business Areas
- KP13 Evidencing social needs
- H3 Affordable housing
- EC1 Existing employment land
- EN12 Renewable energy
- EN14 Flood risk
- T1 Walking and cycling
- T4 Regional transport hub
- R7 Retail provision
- C3 Community safety/create safe environments

#### Review Against Key Policy

It can plainly be seen that the proposals satisfy a great deal of the strategies and key policies put forward by the LDP.

Primarily, as a major contributor to housing need under "H" policies it also strikes at "K" policies (key policies) be it level of growth, good quality design and strategic sites. There is also consideration of the project against EC1, EN 12, EN 14 most of the "T" policies, C 3 and W 2.





Gramercy, Curran Road



Anchor Works, Dumballs Road



Former BJM Site, Dumballs Road

Above are build-to-rent projects that CWA have been involved with that have also invoked the Tall Buildings SPG

In essence the development will deliver good quality design in a position with strong public transport links and good operational/environmental credentials.

#### SPG Policy

The development considers many of the 28 adopted Cardiff SPG policies. The main ones are:-

#### Residential Design Guide

This SPG is relevant but focus is mainly on housing and small scale buildings within a masterplan led approach. However, there is some guidance on creating places, privacy, outlook and day and sunlight. Additionally using sites with good (public/active) transport links and in these instances, capitalising on density.

#### Tall Building Design Guide

In this project we invoke the guidance of this SPG.

What we propose is higher than 25m and past the 8 storeys benchmark so we make the SPG relevant to the application.

Policy considers location as key criteria for the acceptance of tall structures. This development location is well connected to transport links and Cardiff city centre making it suitable for building tall and the proposal seeks to provide a non-invasive contribution to the skyline.

The guidance offers advice on materials, legibility, scale, massing, quality and form amongst others. These are all discussed in the design section of this document but it suffices to say here that we are policy compliant.

#### Other relevant SPG

There are numerous other “technical” SPG guidance which the design has to address. These include:-

- Green Infrastructure
- Ecology and Biodiversity (TAN)
- Trees and Development (TAN)
- Safeguarding Business and Industrial Land Premises
- Public Open Space (TAN)
- Managing Transport Impacts (parking) SPG
- Planning Obligations (especially regarding section 106 contributions) SPG
- Waste Collection and Storage Facilities SPG

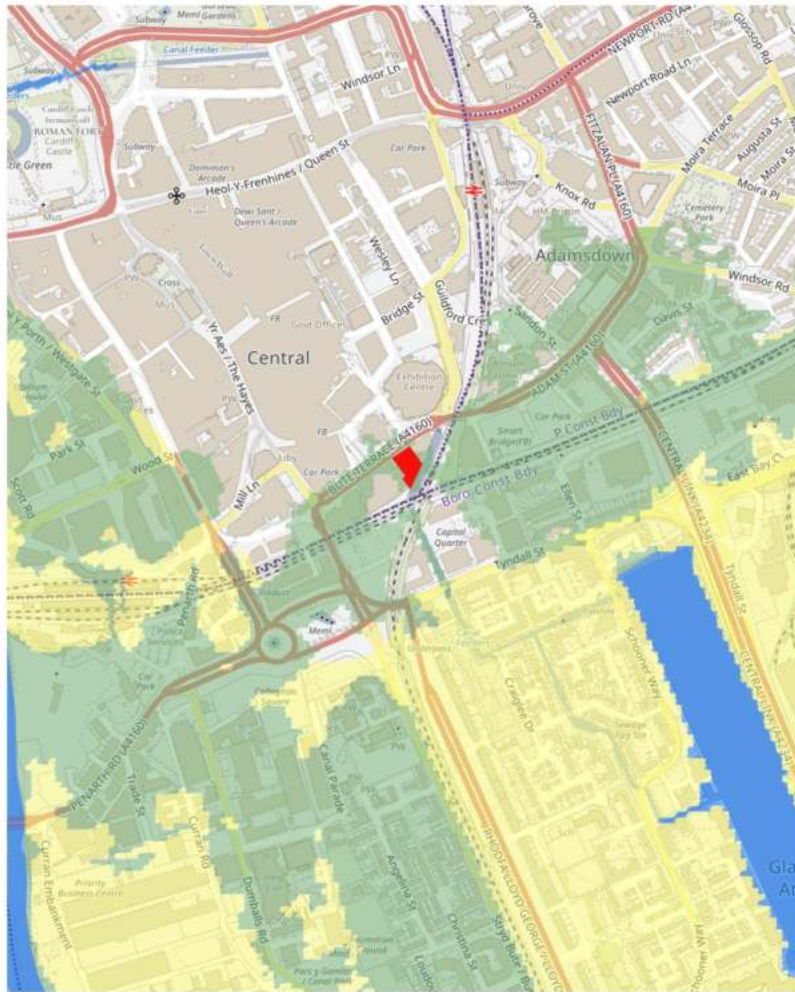
#### Conclusion

The design is fully policy compliant over the three platforms of testing being:

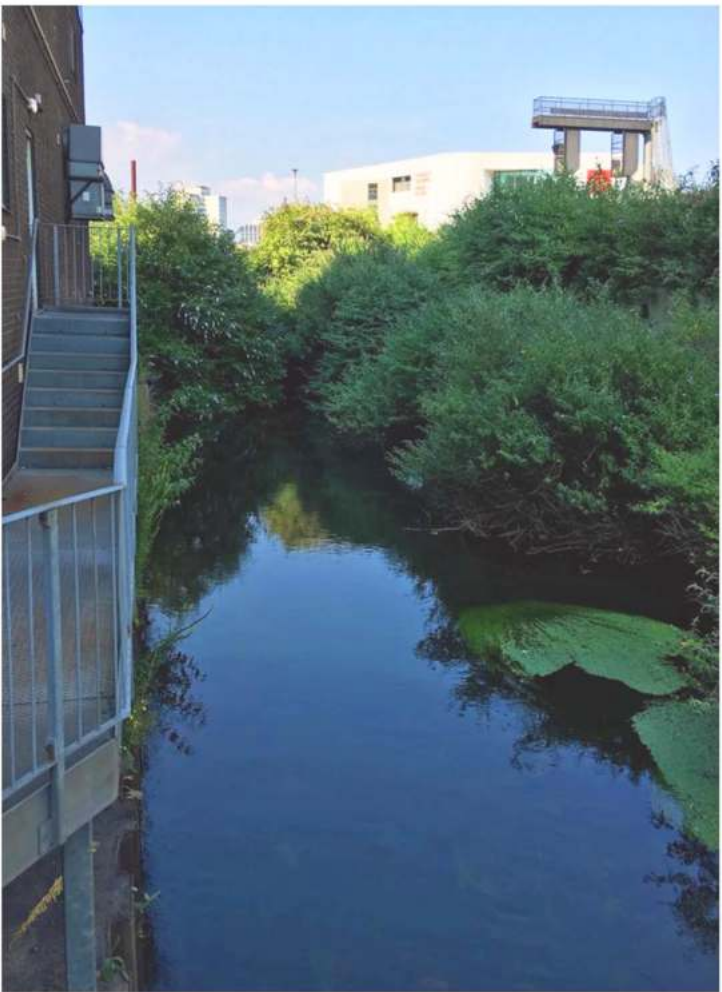
- Locational (spatial plan and land use)
- Design (Tall building and residential design guides)
- Operational (mainly but not exclusively traffic and refuse)







Development Advice Map showing wider context flood risk



View of Dock Feeder Canal from rear of hotel



Map of Bus Stops within Cardiff City Centre  
(site shown in red)



Development Advice Map showing closer context flood risk

## FLOODING

In terms of TAN15, part of the site is categorised as C1 under the DAM classification. So, this application contains a TAN-compliant FCA statement. The area is served by significant flood protection infrastructure.

## TRANSPORT

There are bus stops serving east and west on Bute Terrace which in turn, go to Cardiff Transport Interchange on Wood Street serving various onward locations. These are within 100m of the site. Stops on the Hayes and Canal Street also serve local destinations. Cardiff Central Station is within 400m of the site and Cardiff Queen Street (regional lines) is within 500m. The annexed transport statement more fully narrates the sustainable transport options available here.

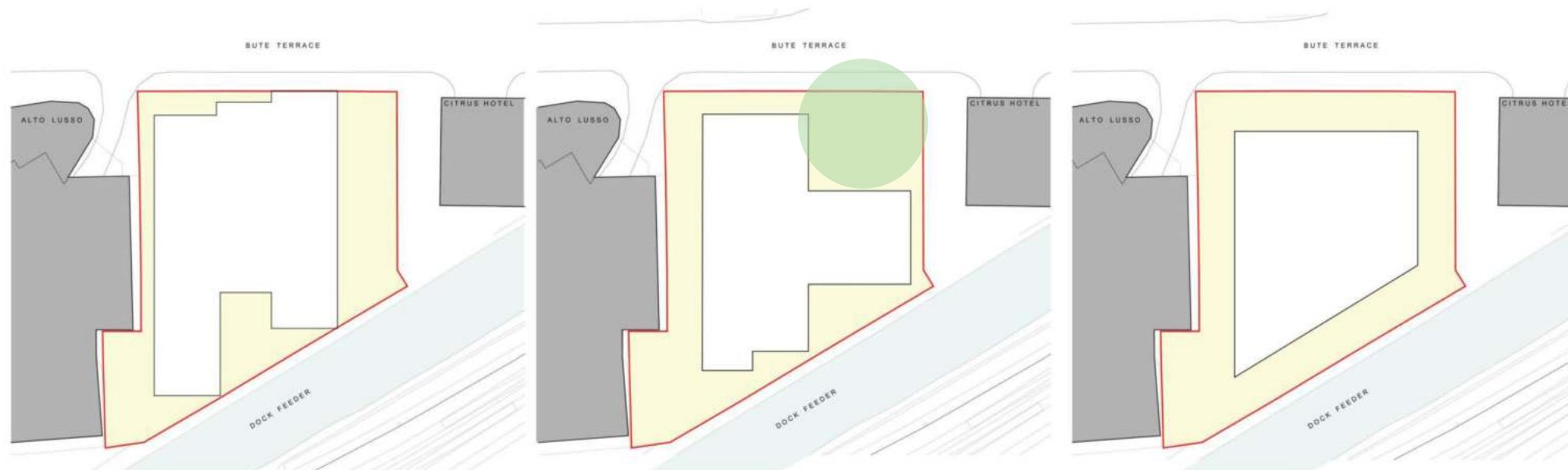
The site is well served by road infrastructure for emergency vehicles on Bute Terrace. This site currently has a small vehicle crossover to serve a small service yard.

In terms of active transport, Cardiff city centre is within 100m. Bute Terrace has eastbound and westbound dedicated cycle lanes.

## ECOLOGY AND ARBORICULTURE

There are no trees or shrubs on the site. An ecological/bat roost assessment has been undertaken as part of this application and is annexed to the application documents. The reports confirm there are no critical species on the site.





Three shape options to accommodate the brief explored during the design process

Chosen design direction



Manifestation of the three forms in 3 dimensions during design development

Chosen design direction



Manifestation of the three forms in 3 dimensions during design development

Chosen design direction

## INTERPRETATION OF THE CONTEXT

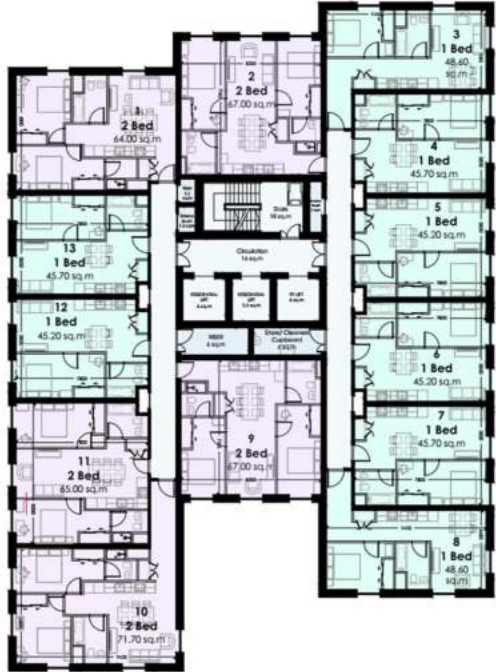
Given the information and analysis shown above, we broadly have;

- A semi-triangular city centre site within an existing tall building group
- Open aspects to the City and The Bay but a 'closed' side towards Altolusso
- An axial visual connection to Mary Ann Street which should affect the design and possibly future plans for the Utilita arena.
- Little eco/arbo capital to influence our design
- Given the orientation, little issue of overshadowing adjacent existing uses
- A hotel which will stay in the short to medium term, but will provide eventually a future redevelopment opportunity that we must be careful not to spoil
- An open brief as far as the architectural approach is concerned given the context
- Ability within the realms of the brief to create some external spaces focused on existing design generators
- An eye to Cardiff Castle and its intervisibility and the constraints and opportunities that this presents
- Dynamic and fixed noise sources which are unlikely to change over time
- A recently developed tall building group which is unlikely to change in the medium to long term (apart from the hotel)





Initial sketch scheme for a very tall building on the site which proved financially unviable



Initial models from the second BTR scheme by Harris Architects illustrating harsh frontage and little urban space (Grainger)



The Proposals - Illustrations of the urban space created at street level

## DESIGN - DEVELOPMENT

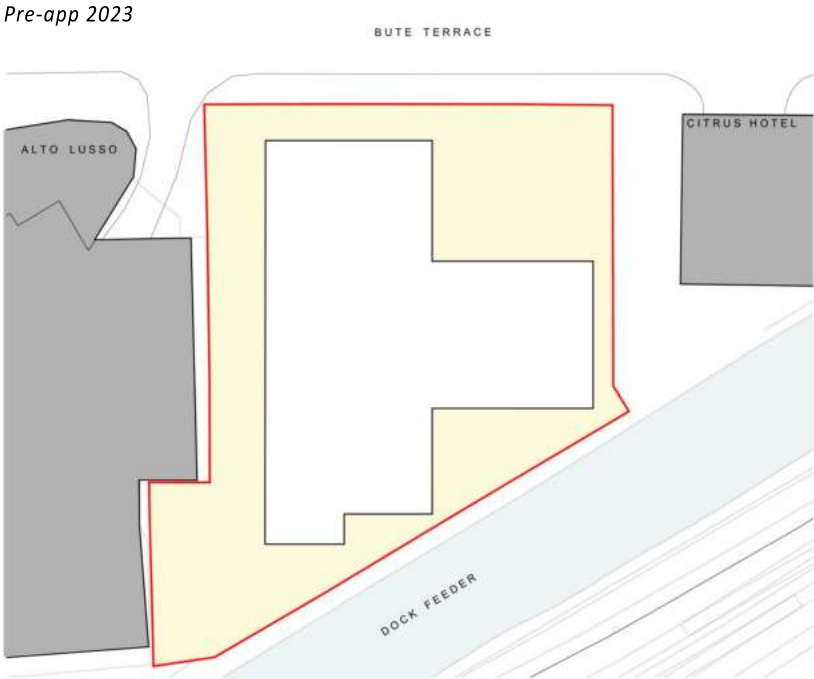
We initially reviewed what development proposals had been put forward on the site to date. Initially the site was considered for a very tall development (the tallest in Cardiff). A sketch scheme was done for this and there was some engagement with the council. At this point, the wider contextual considerations were shaped, these considerations have been taken into the design process for this application (The initial design was for a residential use).

A second iteration was a BTR type scheme which was taken to sketch scheme stage as recently as 2022 which ran up to 28 storeys. This iteration was situated closer to the pavement and closer to the Altolusso boundary than the current proposals. Prior to this application, various massing options were undertaken along with an analysis of the previous sketch design.

Whilst all various options were looked at had some merit the option of a single monolithic block illustrated to the client that this was not a direction they wanted to take. Additionally, this presented a rather 'fat' silhouette from all directions and made the building ponderous.

The designers re-worked the Grainger sketch scheme and finessed it somewhat, but felt it again in silhouette was lumpy, had insufficient height difference between the 'wings' and lead to a distinct view hierarchy from the flats which was unequitable. Additionally, it was predicated on being too close to Altolusso and presented a very uncompromising façade to the existing hotel.





Option 2 block plan from pre-app document



Option 2 block model from pre-app document  
Elevated view from above the Utilita Arena



Site Plan from pre-app meeting



Elevated view from above Utilitia Arena prior to amends after initial 2023 December pre-app meeting

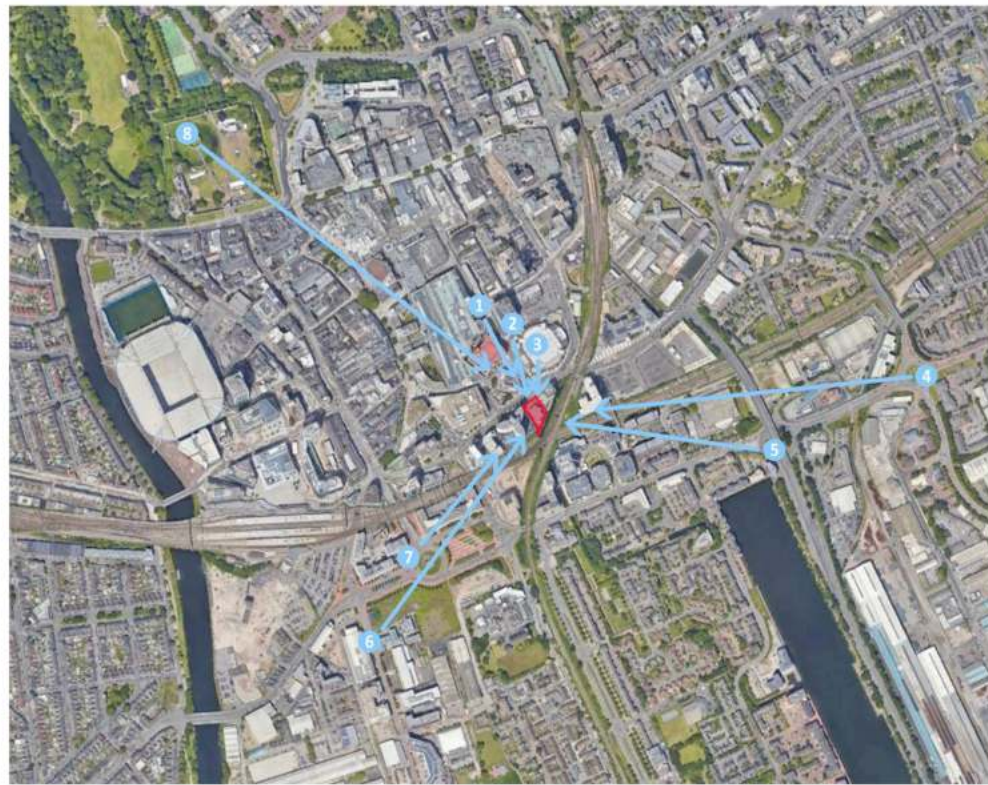
After a design workshop, it was decided to pursue option 2 which was a 'T' shaped block. This instance allowed the designers to create interlocking forms as desired by the client and in doing so allows them to be treated differently. The forms were of different heights to a marked amount in a way that was not tokenistic.

The advantages with the 'T' shape were to allow the subservient wing to be set back, releasing views to the side of the hotel, and ultimately allowing more future development opportunities for this site, and maintaining the existing southwest aspect. Furthermore, a square could be created on the axis of Mary Ann Street to terminate this view with a meaningful thing i.e. a green space. This square could then act as a focus for further redevelopment of the hotel site.

All options presented similarly when viewed obliquely from John Lewis down Bute Terrace, but a sketch proved all options to be too close to the street. In this case, the chosen option (option 2) was moved back to release frontage space more and create a wider pavement for trees and activity, and to allow space for devices to mitigate wind effect.

This was important because of previous experience of the wind effect of tall structures on the street and having a space in which physical devices such as trees, canopies and arcades could be used to roughen low level downswept wind were advantageous.





- |                         |   |
|-------------------------|---|
| 1. Mary Ann Street      | 5. Tyndall Street                                 |
| 2. Ty Admiral           | 6. Dumballs Road (adjacent to the Huggard Centre) |
| 3. Uffitta Arena        | 7. Collaghan Square                               |
| 4. Ocean Way roundabout | 8. Castle Keep at Cardiff Castle                  |

*Influence of the form on long range spaces in the city*



- |                |                |
|----------------|----------------|
| Relationship 1 | Relationship 3 |
| Relationship 2 | Relationship 4 |

*Influence of the form on short range spaces in the city*



*Street elevation showing Harlech Court locally with other tall building forms. Also the connecting knuckle highlighted which subsequently modified after the re-assessment from long and short range views*

Testing the proposed height of 30± storeys in the wider cityscape especially in the tall buildings group proved that this would be a very strong icon in the group but also proved that the breaking of the form was the correct thing to do to form a scalar relationship with the building blocks surrounding it. This reinforced our belief that option 2 was the correct direction of travel.

Option 2 was then developed into a working architectural solution and the 'skin' of the blocks considered in how to dramatize the effect of the two blocks of different heights. In this instance, a strong horizontal detail of glazing in the smaller block allowed it to feel lower and a strong vertical emphasis of the glazing on the taller block made it feel taller. This released the full visual potential of the differences in height.

During this process, it became apparent that a connecting high-level knuckle (essentially a spire) would be good. This was especially apparent when viewing the base form from approaching under the railway bridge by Pellet Street. The designers then tested how this should present and how it would relate to the internal plan, form, and core.

At pre-application stage, this manifestation was not shown but the during the pre-application period it was decided to further dramatize the difference between the blocks and add a storey on the taller one and take one off the shorter. This results in a very dramatic difference in forms.

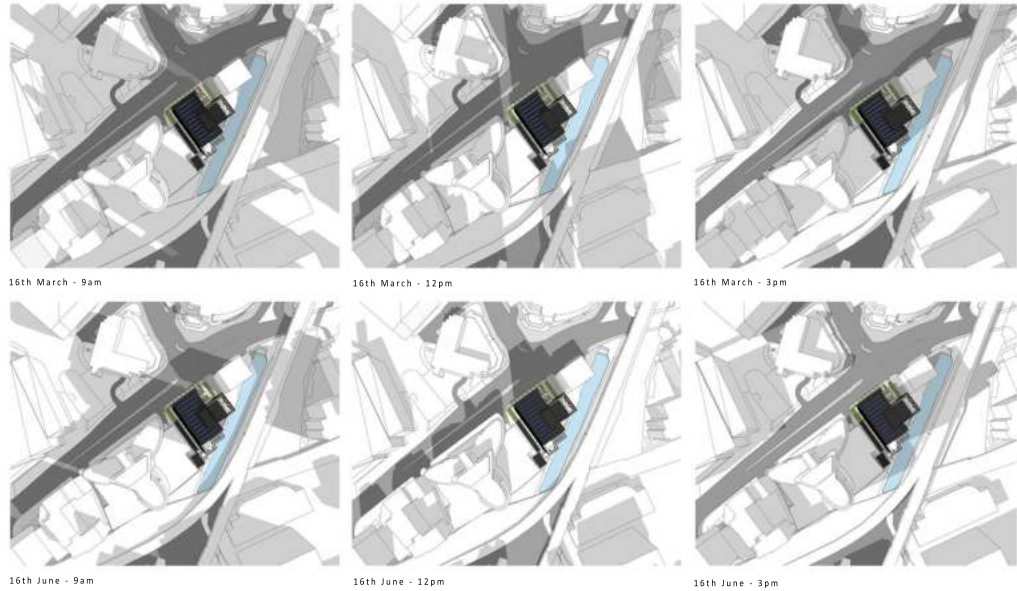




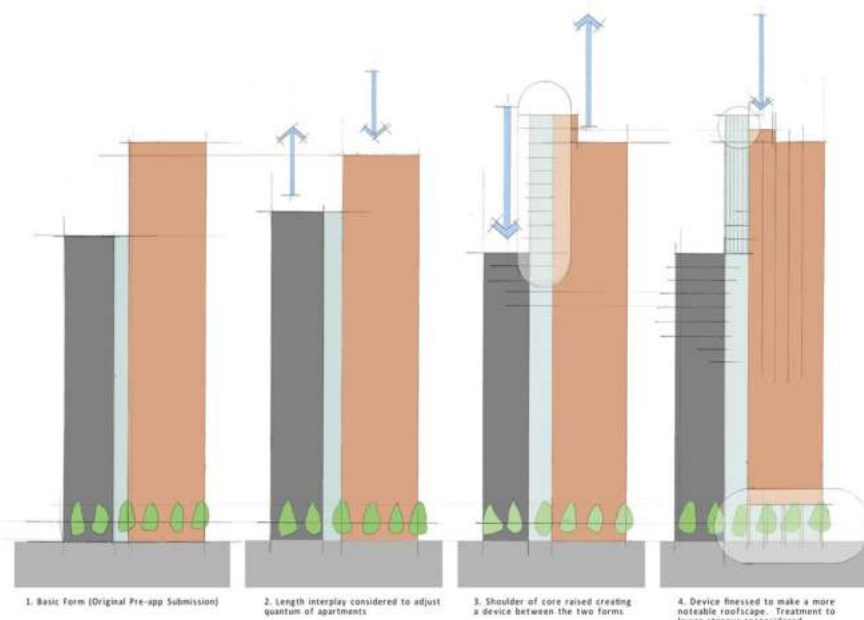
*The south facing sky garden overlooking Cardiff Bay (sketch) resulting from chamfering the form looking south*



*Perspective of spaces created at street level improved and appended*



*A page from the shadow cast analysis modelled throughout the year*



*Adjustment in heights of form from the original iteration to conclusion*



*The form shown from the castle keep contextualised against other tall forms*



*Influence of the "louvres" on flat occupiers in the transition piece*

A further development of the 'T' shaped form was to chamfer the back of the longer leg as it faces south over the bay to make an interstitial south facing terrace and lounge. This released some of the aspect of the existing Altolusso building and bled away some of the blockiness of the elevation facing Altolusso.

Further development of this final form involved options on the glazing, cladding arrangements and how to treat the building as it addressed the street at low level. An arcade was also introduced at the base of the tall block as it approached the street. This was a sheltering mechanism for down draught on the A3 unit's external environment and to instigate further differences between the two blocks. This also humanises the scale of the architecture as the building connects to the street and makes the pavement appear even wider.

A tangential canopy and hoop arrangement were also introduced as a precursor to the residential entrance to make it more legible. The square space and its hard and soft landscaping, form and formality were also developed.

After further pre-app meetings, further small design changes were agreed with the council, and these have been incorporated into the final design.

Changes made after the pre-app meeting and correspondence after the initial pre-app submission included:

1. Moderation of heights between forms
2. Re-examination of social spaces and street setting
3. Examination of the form in respect of historical assets
4. Shadow cast analysis
5. Examination of glazing form and its influence in internal spaces





*View from the vehicular entrance to Altolusso looking north-east along Bute Terrace*



*View from the existing Park Inn Hotel on the opposite side of Bute Terrace*



*The approach to the building from the existing pavement along Bute Terrace*



*By setting back the 'shoulder' of the form creates a square and a focal point from the city centre*



*View through the arcade which provides a visual setting and forms a distinct 'bottom' to the tall form*



*Creating a wider pavement for trees and activity, and allowing space for devices to mitigate wind effect, such as trees, canopies and arcades*

### GENERAL CHARACTER

The character of the proposal is a fractioned tall building form in an existing tall building environment. This particular group of tall buildings are typified by not being singular 'block' forms. In this group, we consider Pellet Street, Altolusso, The Radison, Meridian Court, Zenith, and the emergent Grainger building in Capital Quarter. The group is also characterised by being close together as a series of forms. The setting for these buildings is either modest or immediately on the street edge. The Grainger development at Capital Quarter has a green foreground but this is not a location that engages the current historical city grain.

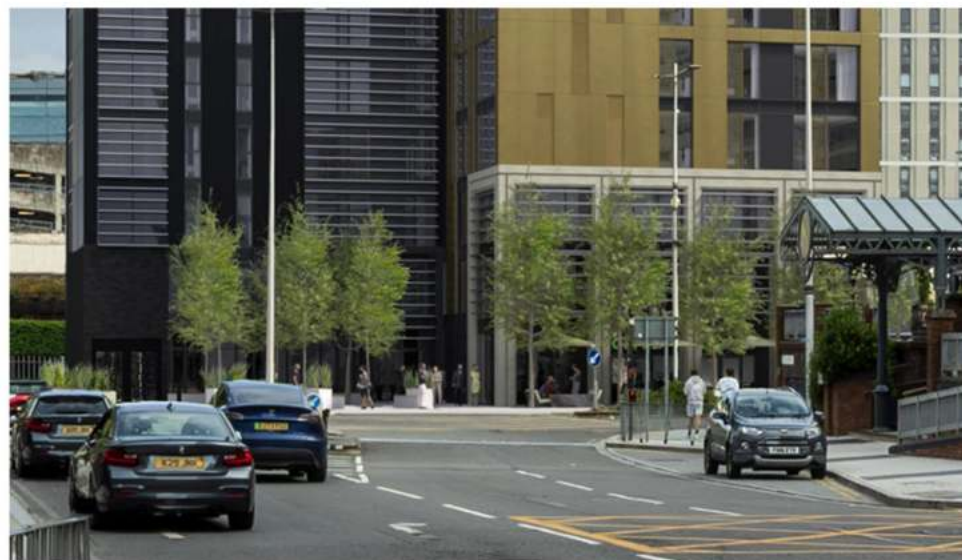
Whilst the close grain approach is something we wish to emulate here to keep the grouping consistency, but we also understand that the street scene in Bute Terrace is poor and hence the character aspect if setting is improved. In this instance with an open square on the axis of Mary Ann Street here of 17.5 by 18.2 metres and we have pushed the buildings edge back from the pavement edge by 6.2 metres.

The effect of this is to create a better setting and in so doing, allowing an improvement in surface roughness by planting and street furniture to mitigate the effects of the wind created by the tall building. The wind survey annexed to the application narrates how the setting and its context, along with the edge treatment of the building at low level affects the environment local to the proposal at street level, which is enhanced further by a 3-metre-wide arcade.





*A semi-elevated view of the square centred on the axis of Mary Ann Street*



*Close-up view of the square's commercial unit and main entrance engaging with Bute Terrace at pavement level (day time)*



*The square at dusk*

The square, its contents, and the setback, along with the arcade work to provide a visual setting and context as well as mitigating climate effects exasperated by the proposal. Importantly the design has to engage with the city at pavement level and therefore the architecture is changed at the lower storeys to form a distinct 'bottom' to the tall form. The characteristics of this are more human in its scale of elements. The materials used are more tactile and reminiscent of materials traditionally used at street level in Cardiff.





Conversely, at the top of the building we have further fractures of the form to give a legible 'top' to the building. Here the approach is lighter in terms of glazing and the design is thinner. We therefore have, in line with SPG guidance, a distinct bottom, middle and top of the proposal.

As previously narrated, the interlocking tall and shorter forms are treated differently in terms of vertical and horizontal rhythm. This generated a strong diverse overall form treated in different ways to emphasise the building blocks from which it is made.

Consideration of the wider context especially views from key points in the city and heritage assets such as Cardiff Castle (Keep) have influenced the texture and shape of the design and how it sits in the tall building group when viewed from here.



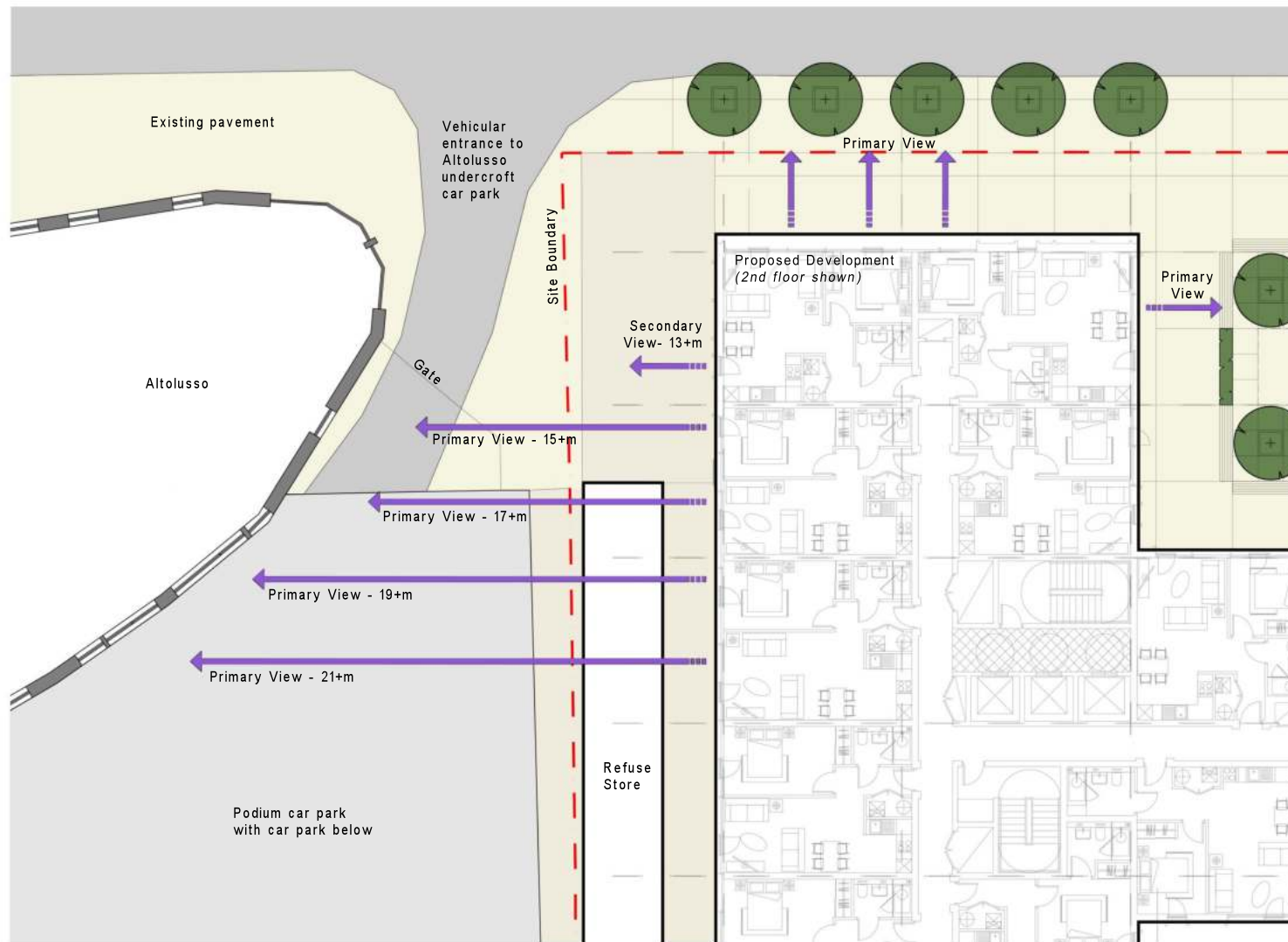


Illustration of how the form relates to the “petals” of the Altolusso building



Views of the nearest Altolusso ‘petal’ - taken from the existing Harlech Court building

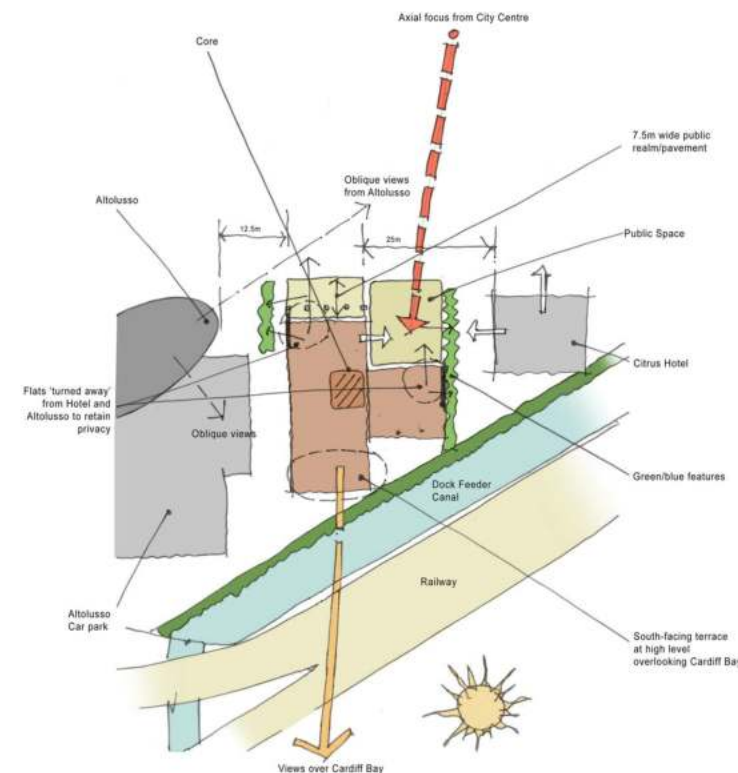
The shape of the proposal responds to the setting and immediate site in a positive way. It fronts the street parallel to the pavement but sits back slightly to create opportunity for green assets. It also sits back significantly on the axis of Mary Ann Street to form a terminal square. The shape is parallel to the Altolusso boundary but sits back some 7 metres. This dimension is to the edge of the Altolusso podium car park. This distance to the closest part of the closest north-eastern ‘petal’ is approximately 12.5 metres, but this increases very aggressively because the ‘petal’ axis is set at approximately 45° to the site boundary.

Here we have turned the first flat away from the western boundary to provide privacy between the two closest flats. Further into the plan of the Altolusso, the petal migrates away from the boundary giving the requisite statutory separation distances.

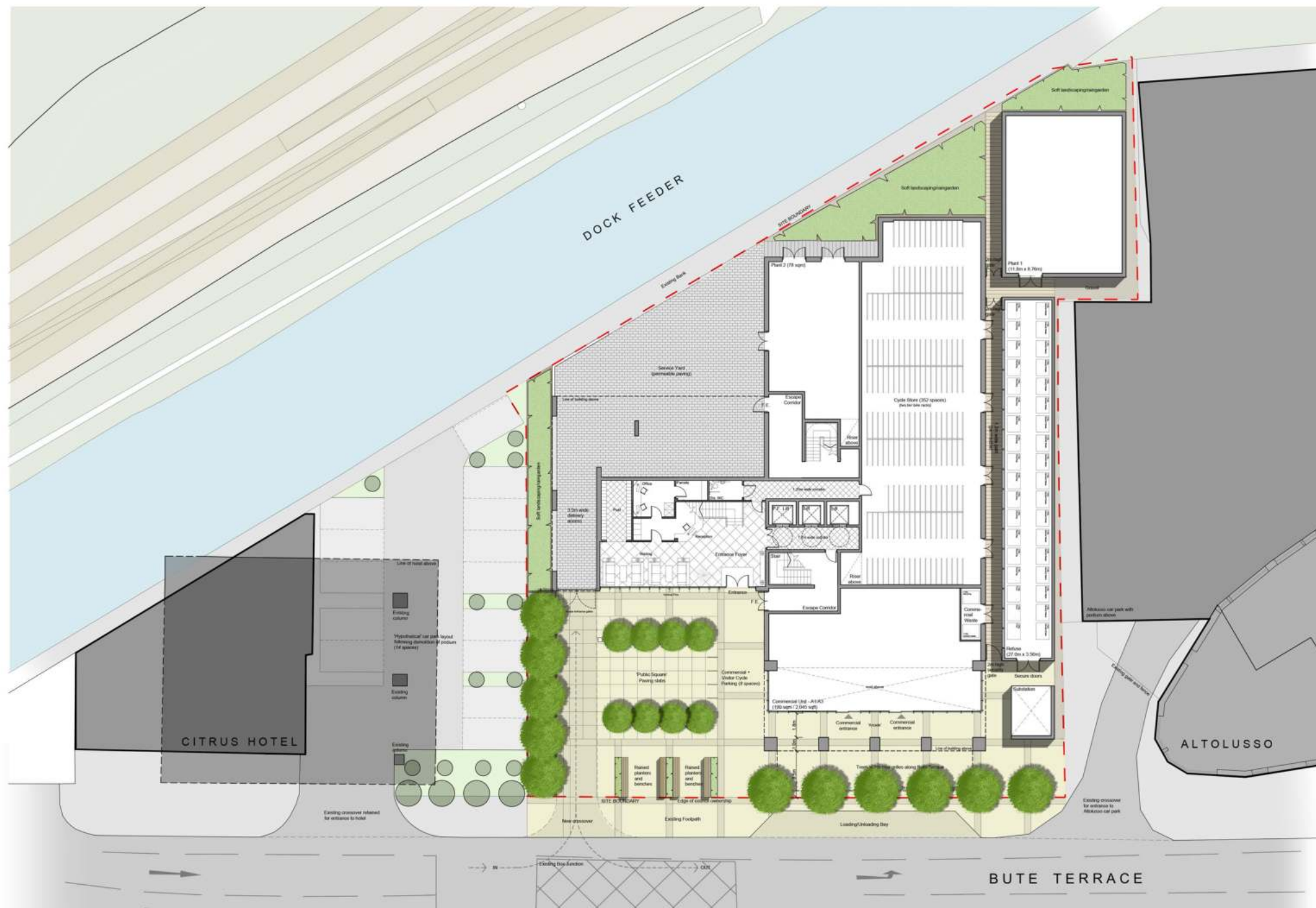
The southeast facing boundary of the site is driven by the path of the dock feeder canal and railway line. Here, rather than addressing the boundary in a parallel manner, the proposal is two south facing blocks to address Cardiff Bay. This will maximise advantage of the view, sunlight, and privacy from new and existing users. It also serves to break the form from the bay when contextualised amongst the other tall buildings. This assimilates it into the tall building group in a way that responds to the elevational widths that the other surrounding buildings illustrate.



- Relationship 1
- Relationship 2
- Relationship 3
- Relationship 4







## LANDSCAPE CHARACTER

The site as it stands is devoid of any sort of green infrastructure assets. There is an important linear green infrastructure asset on the southeast boundary which is the dock feeder canal and its bank. The design respects this and now is situated further back that the existing structures which over sail the dock feeder with a cantilevered vehicular route.

A substantial square is created in the northeastern corner of the site which presents the opportunity for mixed tree and shrub plants which will increase biodiversity substantially. Areas are also set aside on the eastern and western boundaries for substantial shrub planting (over 3 metres wide and up to 35 metres long). These can assist in the SUD's function of the project without narrowing arboriculture species choice in the square itself.

The taller block to the east is set back some 7.5 metres from the pavement edge to facilitate street tree planting in a practical way that adds further to green assets. While the square is situated north of the building it still benefits from both rising and setting positions to a greater or lesser extent depending on the time of year. Here light threads through between the proposal and Citrus Hotel in the morning and down Bute Terrace in the evenings.

Roof gardens face south and enjoy maximum sun and views. These will have a different landscape character to the street level spaces. These landscape elements connect to existing local GI assets. The main public space on the site presents ample opportunity for landscaping to be substantive and mitigate tall building wind effect.

Final proposed site plan





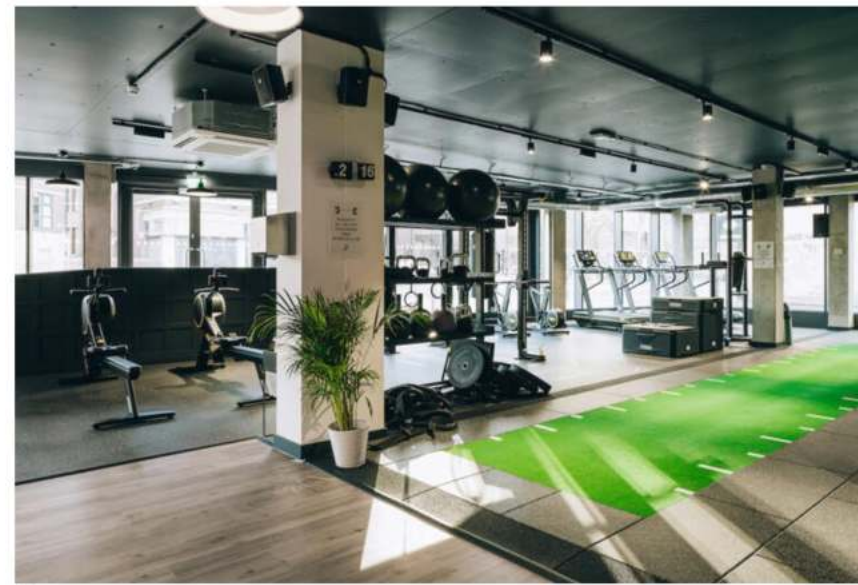
3-D perspective of the main roof garden connected to a double height 'sky lounge'



Proposed south facing roof garden and internal lounge overlooking Cardiff Bay



A typical example of a shared amenity space in a BTR development



Gym



An example of a co-working/lounge area that will feature at first floor in our proposals



A double height 'sky lounge' example comprising communal lounge/dining room

## SOCIAL AMENITY CHARACTER

Importantly in BTR developments a level of user amenity should be provided. This is generally associated with strong links to entrance places and key points of the vertical circulation of the design. In this instance we have provided amenity at the entrance level, which has a visual connection link via a void to the first-floor amenity spaces. Then, off the main vertical core are rooftop lounges on the shoulder of the tall block and the roof of the lower block which leads directly to roof gardens. This is the correct operational relationship when aiming to foster a sense of community in the building. They are visually apparent off the circulation routes and entrance and link together via the vertical core.

In terms of amount (excluding any retail space) we have 1.45 square metres per flat. By comparison, similar schemes in Cardiff have:

- Anchorworks 1.29m<sup>2</sup> per flat
- BJM (Platform Living) 0.3m<sup>2</sup> per flat
- Gramercy Tower 1.5m<sup>2</sup> per flat
- Tyndall Street 1.46m<sup>2</sup> per flat
- Wood Street House 1.95m<sup>2</sup> per flat
- MODA Living 2.5m<sup>2</sup> per flat

We can therefore state that current provision is commensurate with most BTR examples. In terms of external amenity areas, we deliver 3.16 square metres per flat with the roof terraces and square.

Schemes on Dumballs Road, where the grain is looser and buildings are lower deliver more external amenity, but these are not city centre locations. However, Tyndall Street, Wood Street House and MODA deliver no on-site external amenity space. They have civic spaces adjacent, but nothing private.





3-D perspective from the top floor amenity space looking south towards Cardiff Bay and beyond



Novotel, Canary Wharf, London



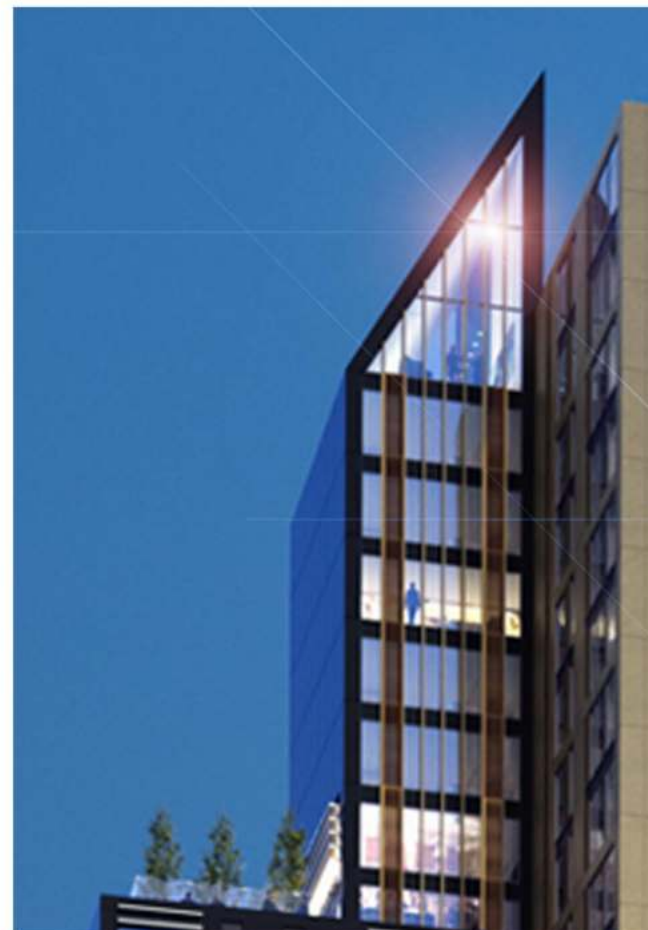
Horizon 22, London



The Shard, London



Sky Gardens at Landmark Pinnacle, Canary Wharf, London



The proposed top floor amenity space at dusk

## SOCIAL AMENITY CHARACTER

As well as amenity spaces on the 1st, 20th and 21st floors, there is also a residents lounge proposed on the 28th floor, located within the 'crown'.

As part of the initial pre-app response, where the 'top' of the building was questioned, in respect of character and detail, the amount and quality of amenity space was also questioned.

The designers went through several iterations of the 'crown' before adopting a form that was considered to have a positive effect on the skyline in this tall building group, as well as providing a terminating landmark. The 'crown's' sloping roof also helps to accentuate the difference at the top of the building.

Internally, although the space is smaller than the amenity spaces on the lower floors, there is sufficient space for small groups to gather and relax to experience sweeping panoramic views across Cardiff Bay to the south and beyond the city centre to the north, something unique to the city.

As well as the space being double aspect, it is also triple height, allowing for plenty of light from both sides, making it feel larger than it actually is. Furthermore, the sloping roof gives it the dramatic look, and almost ecclesiastical feel.

At night, the space within the 'crown' will be lit, a 'beacon', showing life within and helping pedestrians find their way around the local vicinity.





*The approach to the building from the existing pavement along Bute Terrace*



*View through the arcade which provides a visual setting and forms a distinct 'bottom' to the tall form*

## ACCESS

The site benefits from immediate road frontage with an existing vehicle crossover serving a car park for approximately 50 cars. This proposal will see this reduced to just service vehicles in line with green transport initiatives in this sustainable location. This small level of servicing to the rear helps create a better visual urban environment to the front.

Under the demolition agreement of the podium serving the hotel, 14 spaces will be handed back to the hotel at street level, outside the scope of this application. These are outside the application site boundary.

Provision has been made for emergency vehicles to access the site and turn. Cycle parking facilities have been provided in a secure, covered and conveniently well-lit location. The ratio of cycles is one per flat.

Refuse provision is in accordance with relevant SPG's and is situated with immediate access to the street for collection. Collection will be a via private contractor.

The main A4160 road (Bute Terrace) has multiple public transport options for local bus services as well as regional and national train services being within 500 and 600 metres, respectively.

Vehicle and pedestrian access points are kept separate and most of the site environment is predicated towards pedestrian and cyclists.

There is a cycle route east and west incorporated in the existing infrastructure of Bute Terrace.

Pedestrian access to the site is via the existing footpath network and a light-controlled crossing from the city centre, across Bute Terrace is immediately outside the site.

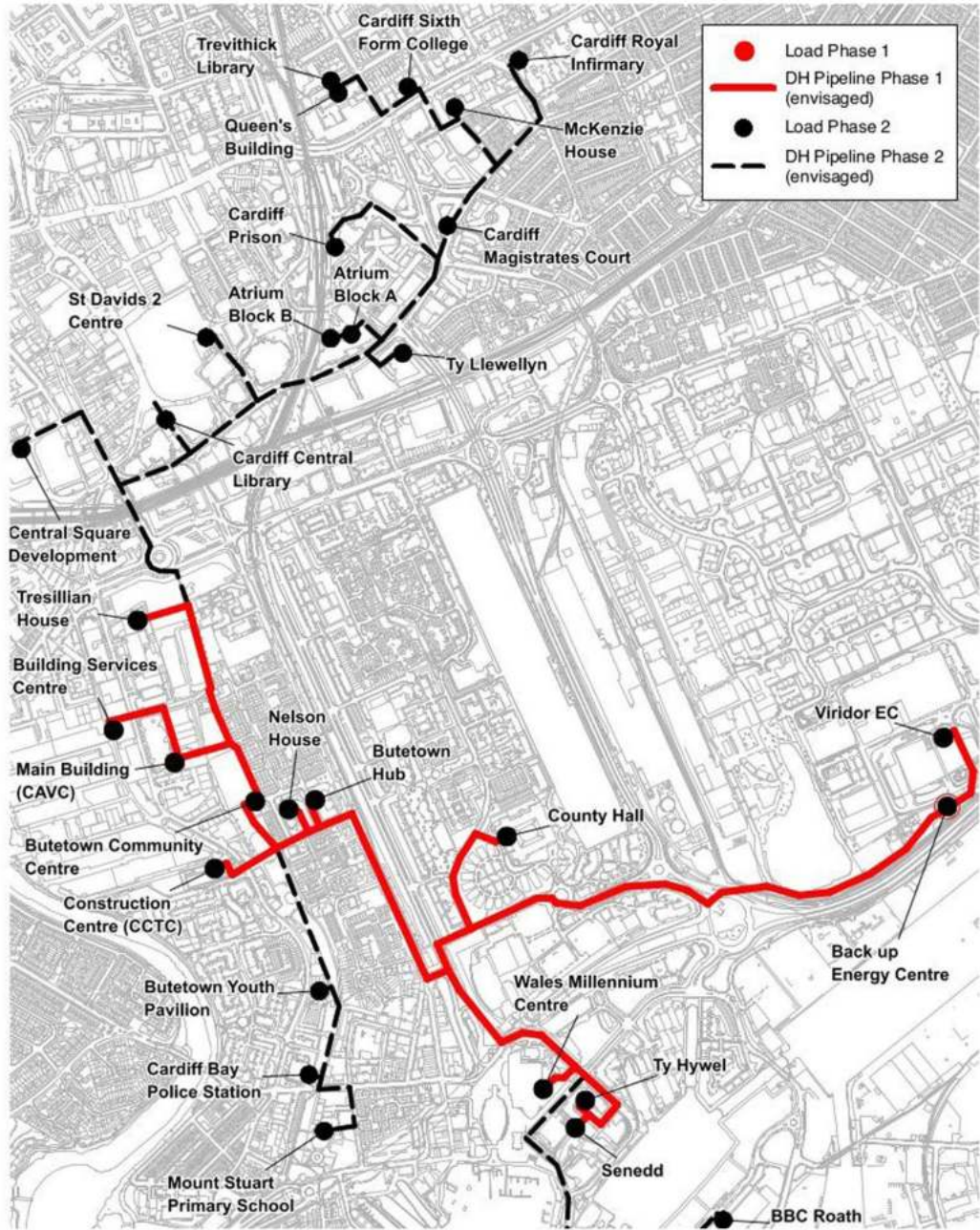




Cardiff Bus



Cardiff Central Train Station



Cardiff's proposed 'District Heating Network' map



PV panels



Unvented air source heat pump hot water cylinder

### SUSTAINABILITY

This is a redevelopment of a brownfield site which, in itself, is sustainable. It is also situated in a very connected urban environment which is well served by several public and active transport (travel) modes and is within walking distance of all key amenities and public infrastructure.

In terms of planning advocated efficient use of land the design shows excellent site coverage. The building is designed as a frame so can be adapted in the future to make bigger or smaller units.

The contractor for the project will be appointed under the considerate contractor's scheme for waste management.

The design allows for ample landscaping and increasing nett biodiversity on the site by way of different planting which will attract diverse animal insect and bird species.

External spaces are specifically designed and located to incorporate SUD's features without compromising the overall landscape feel.

The development will use renewable energy sources and collect heat from the air and sunlight.

The fabric will be heavily insulated, airtight and use MVHR systems to ensure heat is not wasted. Windows will be opening to allow natural ventilation and fresh air. A system of heating hot water from ASHP technology will be used to further improve the carbon footprint.

Cardiff's district heating network (phase 1) does not reach the site, but phase 2 (- unknown) will pass the site at some point. In this instance the plant spaces designed have been sized to adapt to this energy medium if it happens.

Appliances in the flats will be A-rated.

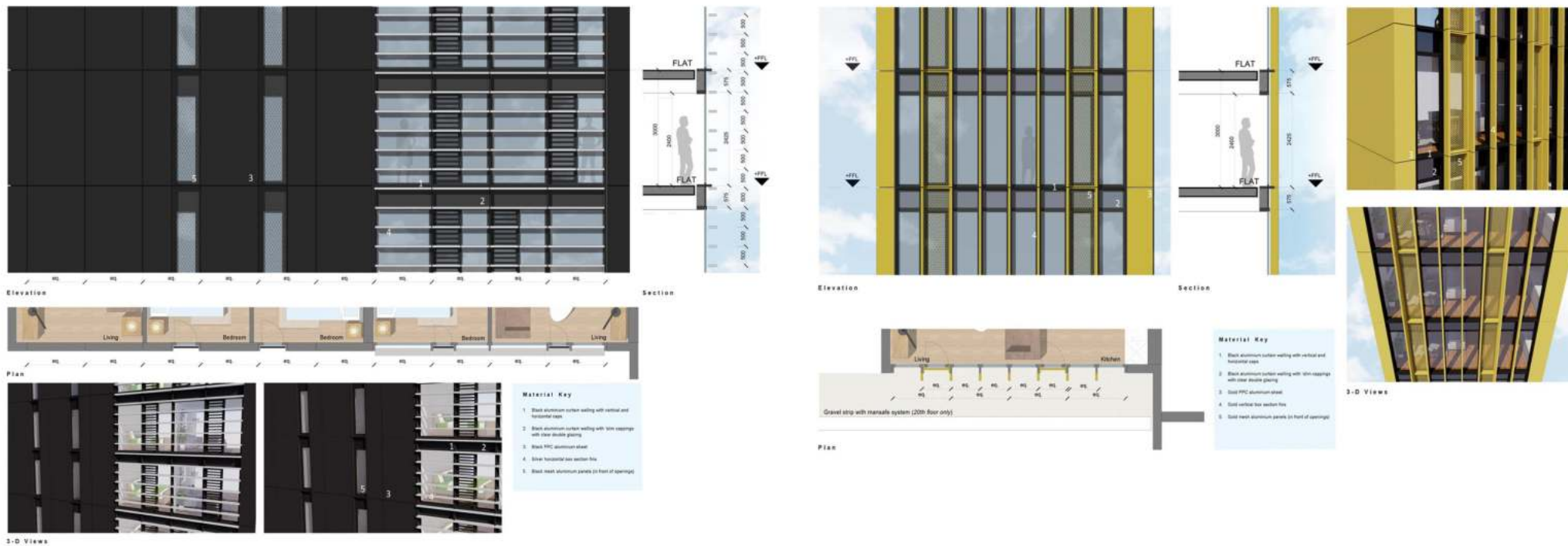
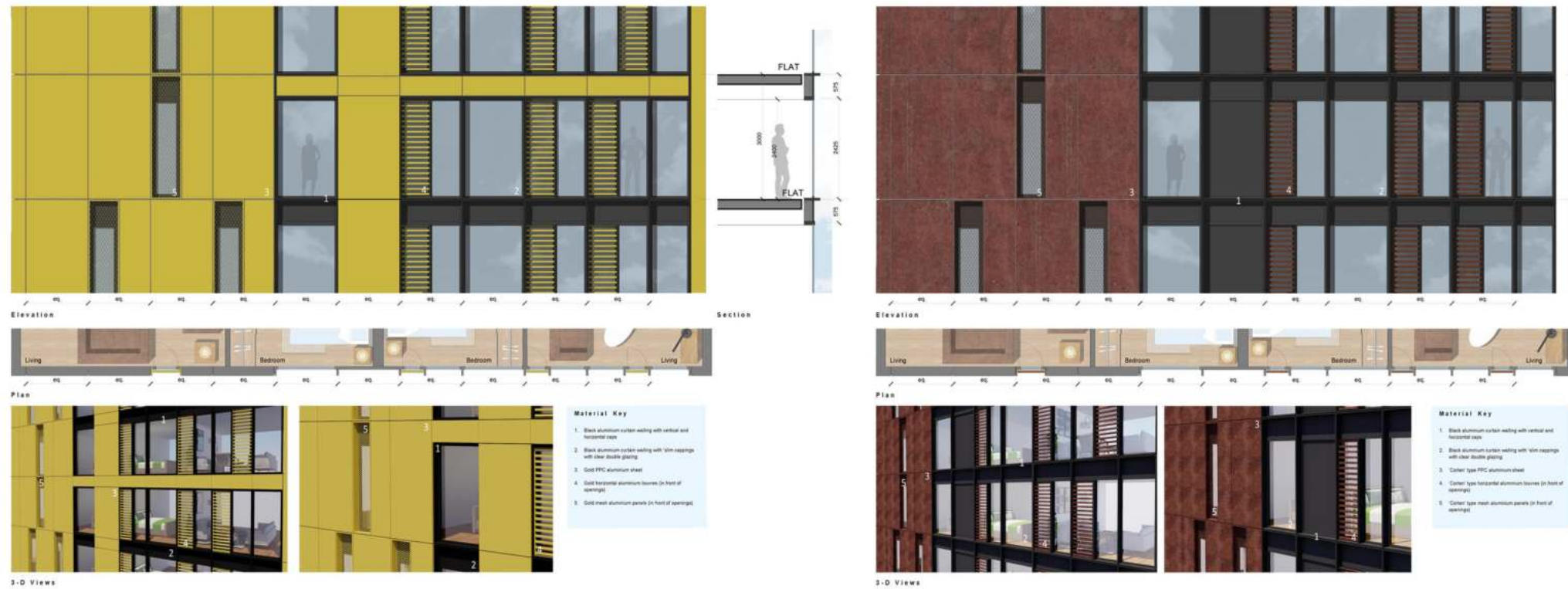
Building materials have been chosen to be physically and visually long lasting. In addition, a façade decay strategy has been incorporated with the design to ensure its visual influence on the city is not to the detriment of the urban fabric.

The effect on the design on the human environment at street level has been investigated and the landscape designed with this in mind.

We therefore have green assets functioning in a multidisciplinary way across visual, carbon, wind ecology and drainage functions.







Facade bay studies of the skin of the buildings after planner comments and prior to final design finesse

## MOVEMENT

There will be change to the way vehicles move within and around the site. At present, there is a single vehicular crossover on site which serves the hotel and Harlech Court premises.

A legal agreement has been made to maintain this access point to maintain a modicum of parking for the hotel. The planning status and consent for this new hotel crossover and car park fully beyond the realms of this application. Demolition of the existing common ramp structure is also sought separately.

In the remit of this application, a new access is sought in a different crossover position, leading to a small drop off area and car park to provide building servicing. This falls beyond the traffic lights on the box junction heading west.

The pavement facing the front of Bute Terrace will be kept and there will be less vehicle movements across to serve the development, be it the residual hotel parking or parking for the new development. The number of spaces over the two sites will be reduced from over 70 to 14.

The pavement will also be wider and updated to modern standards in terms of tactile surfaces and wheelchair compliant kerbs.

Within the site itself, pedestrians and cyclists will be separated from vehicular traffic and a structured hierarchy of safe spaces and places are designed to keep different users separated.

While there is widescale redevelopment of the site envisaged, the proposals will see a reduced vehicular use of the site and the infrastructure and traffic light sequencing of Bute Terrace is not affected.

Use of the site by pedestrian, cycles, emergency vehicles, service vehicles and links to sustainable and active transport modes are narrated in the access part of this document.





*Dusk shot taken from the entrance of Ty Admiral of the existing Harlech Court*



*Final perspective of the proposed building at dusk from the same vantage point*

## COMMUNITY SAFETY

There is no downside to this development in terms of community safety. The development will result in less vehicular traffic to the site and the dilapidated, partially used building will be demolished. The undercroft of the building is currently fostering antisocial behaviour because it is sheltered and it has open access to the dock feeder and its steep banks, which are unsafe.

Wind shades of the new building form have resulted in modification and certain aspects of the landscaping being changed to ensure that it creates a safe pedestrian environment.

The demolition phase and its related safety aspects are dealt with under a separate application.

The building is designed to give a safe and considerable public realm against the street and the site enjoys an existing light-controlled crossing route from the main city centre area. Pavements around are well lit and level.

The design allows natural surveillance of the small car park and removes the threat of danger of the dock feeder by fencing. The design has undergone a full fire audit as mandated by the new planning act rules.

The development of residential homes here is in a safe and central part of the city with its well-lit and well used infrastructure is commensurate with pedestrian safety. The area is well used at evening time because of the existing residential development of Meridian Gate and Altolusso

The designers here have engaged with Network Rail during the design process to alleviate their concerns in respect of the construction phase of the development, and then thereafter, its life in use and maintenance regime.

A safe and considered method of façade cleaning is embedded in the design.

Glass selected will be free of nickel sulphide inclusions and will be heat soaked to prevent breakages because of solar gain. The glass can also be changed from the inside of the building so avoiding unnecessary temporary work, for façade repairs.

The roof terraces have been subjected to environmental assessments to ensure they are safe to use at all times.





View taken from the entrance of Ty Admiral of the existing Harlech Court

## CONCLUSION

The initial vision of the client group was to deliver a proposal within the established tall building group that contributes to the city's housing need but it needed to be fiscally deliverable.

The proposed design integrates into its surroundings and acts as a focal point for the tall building group. The design also needed to encompass the clients' operational needs.

The design contributes to the city centre's housing supply targets in a very sustainable location, whilst embracing the council's 'European model' for city living.

Visually, the design uses tried and tested materials, which are durable and long lasting. Cardiff has no particular high-rise aesthetic but the finishes and colours proposed will weather well and the building will have visual longevity.

The proposals within this statement reflect the client's and the designer's vision and aims...

*'To create a piece of tall architecture that reacts well to its surroundings and engages the street in a human way. In doing so, will endure visually and sustainably in use and contribute to the existing tall buildings group in a positive way. Articulate the operational needs in a visually striking way and create a new icon on the Cardiff cityscape, which will raise the architectural bar for tall buildings generally'*