

Supplementary Design Statement

Section 75W Report Mod 3

MP11_0044 Commercial Building C3

RSHP Australia Pty Limited

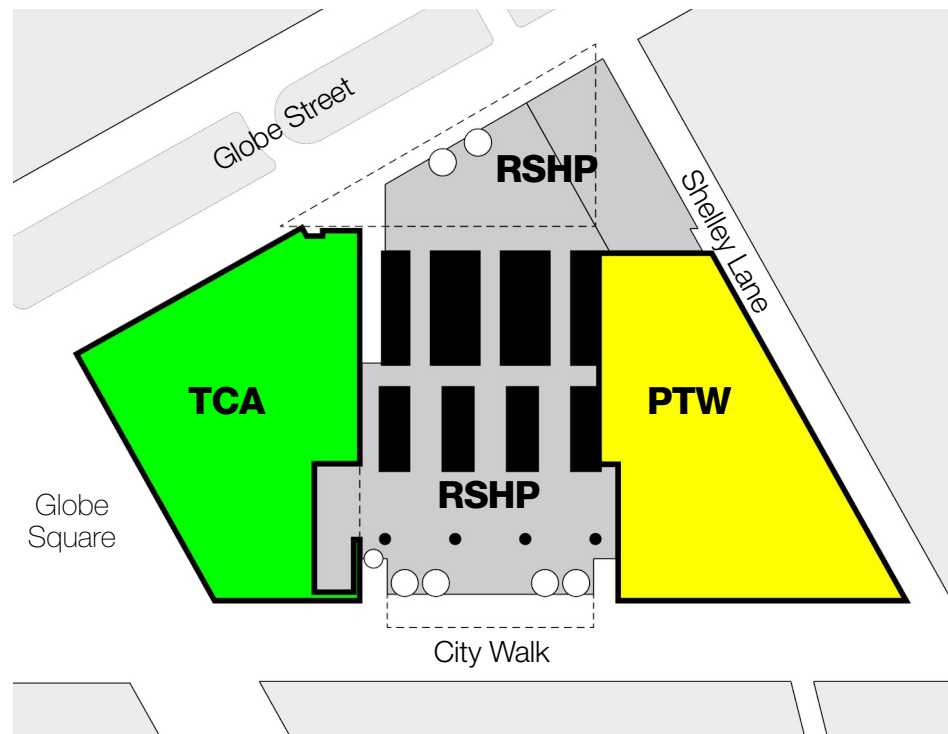
16th January 2015

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DESIGN REFINEMENTS : PODIUM + LOBBY

Podium + Lobby Design

Overview



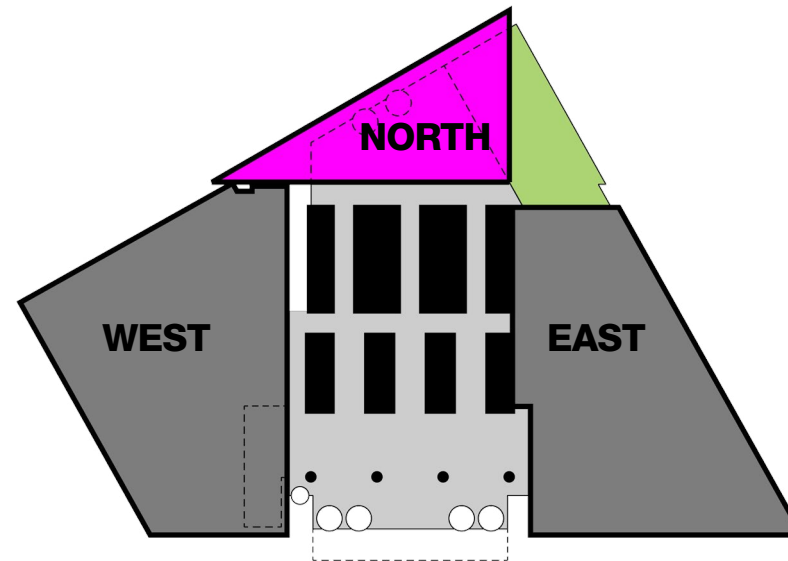
URBAN CONTEXT

The C3 podium buildings have developed in direct response to their urban context.

The site is bounded to the north by Globe Street - a grand boulevard which connects Hickson Road to Globe Square and the water beyond. This is the northern entry point, or end-marker, to the commercial towers and the Through Site Link which weaves between them. To the east is Shelley Lane - an active pedestrianised laneway to which the podium presents a series of intimately scaled retail opportunities. To the South, City walk - a pedestrianised city street - connects Hickson Road bridge link to Globe Square.

Design responsibility for the composition has been divided between Co-Architects in the following manner:-

- North Lobby - RSHP
- South Lobby - RSHP
- East Podium - PTW
- West Podium - Tony Caro Architects

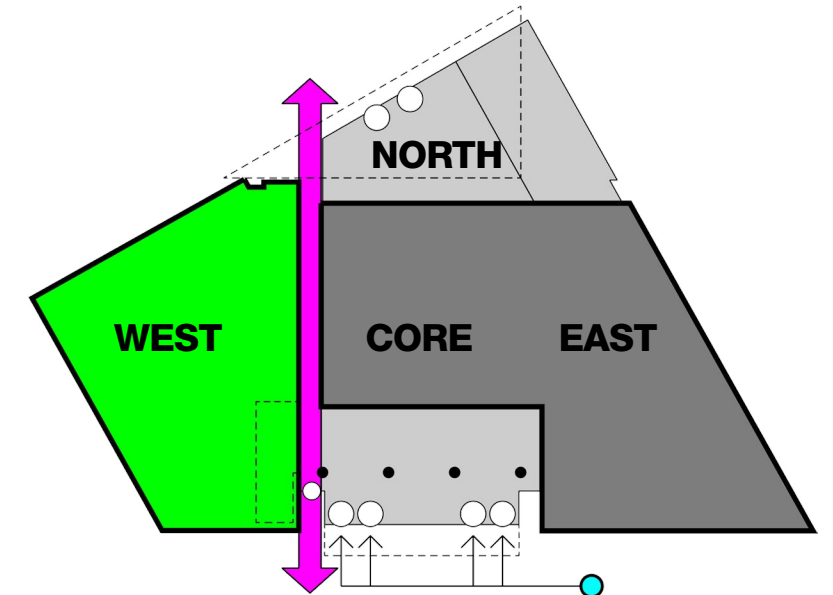


NORTHERN MARKER

The northern lobby plays a unique role in the Barangaroo South commercial precinct - it is the northern face of the commercial towers; a gateway to the precinct.

The Northern lobby responds to its context, unifying the geometries with a strong triangular grid. A grand roof, or marker, hovering above a series of functions. The materiality of the roof responds to the function below and its shading requirements - whether it be to enclose the lobby or provide shading and definition to the northern nodal entry point to the Through Site Link or shade to the elevated garden space above the ramp to the basement.

Beyond the roof the north core clearly continues to ground uninterrupted.



THROUGH SITE LINK + SOUTHERN FACADE

Unique to C3 is the position of the Through Site Link on the western side of the lobbies. Retail activity has been maximised along Shelley Lane to the east, resulting in back of house facilities being concentrated against the tower core.

The eastern podium building therefore becomes united with the tower core, whilst the western podium building is only connected to the rest of the podium by an upper level links to the core above the Through Site Link.

Wrapping the materiality and architectural language of the western podium building around in to the Through Site Link emphasises its separation.

The facade of the southern lobby is pushed out to the street, with reentrant corners to enable the podium buildings to turn the corner before they meet the lobby.

Lobby Design

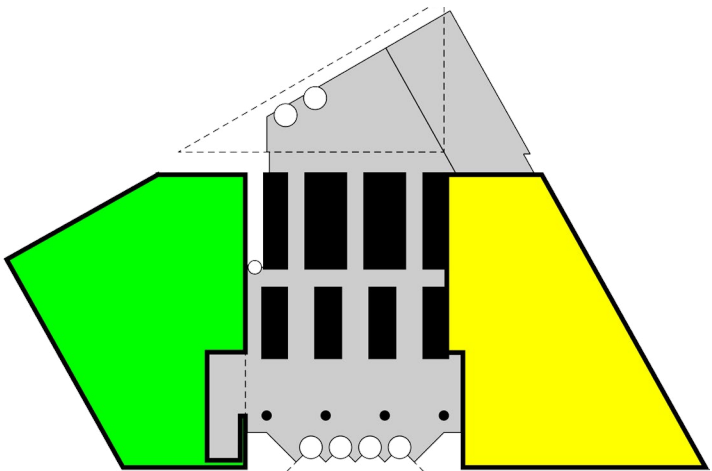
Overview

The proposed lobby is based on six key concepts:

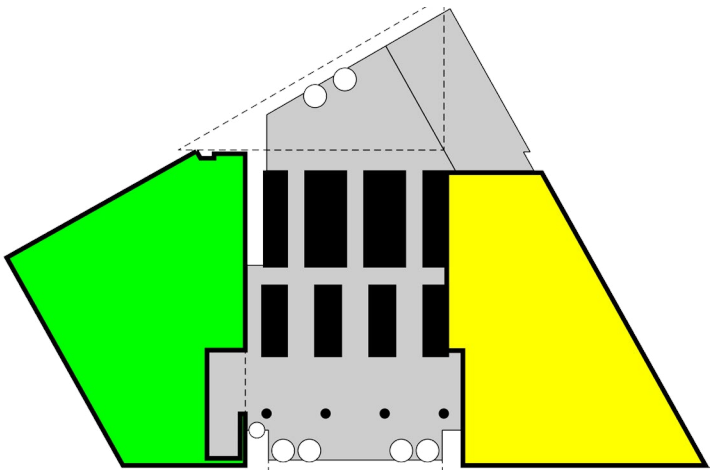
- **Address:** Providing address to both tower and precinct
- **Unification:** Acting as unifier of podium buildings
- **Expansion:** To the North announcing the Precinct
- **Unification:** To the south, linking the east podium and west podium with an ordered grid
- **Permeability:** One lobby with two entrances
- **Solar Response:** Utilising solid roofs to enable highly transparent facades

The south lobby utilises a series of external columns giving order to the more expressive podium facades to either side. These support a solid roof, which hugs the canopy and the upper to levels of the facade, which is tension cabled between the two podia, providing a highly transparent glass facade, blurring the boundaries between inside and out.

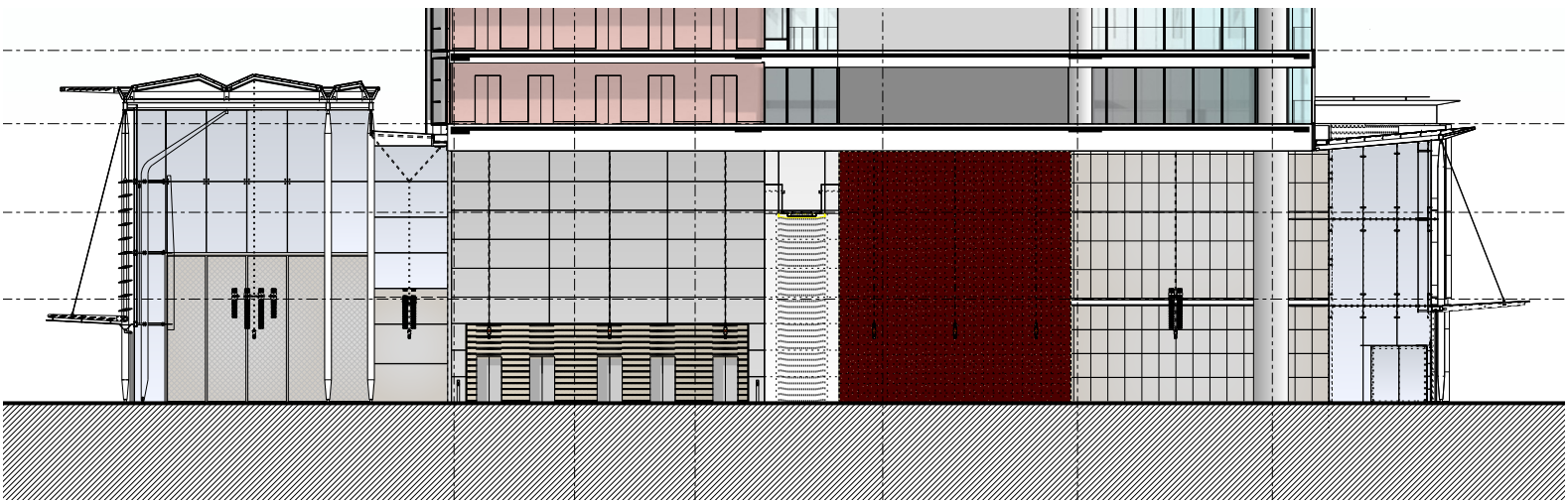
The northern lobby is defined by its geometric roof expanding over the public domain, formulating a clear marker and gateway, subduing the basement entry and signals the Through Site Link. Its height continues the podium datum and holds the street line. A pair of large scale picture windows signal an entry point to both lobby and precinct.



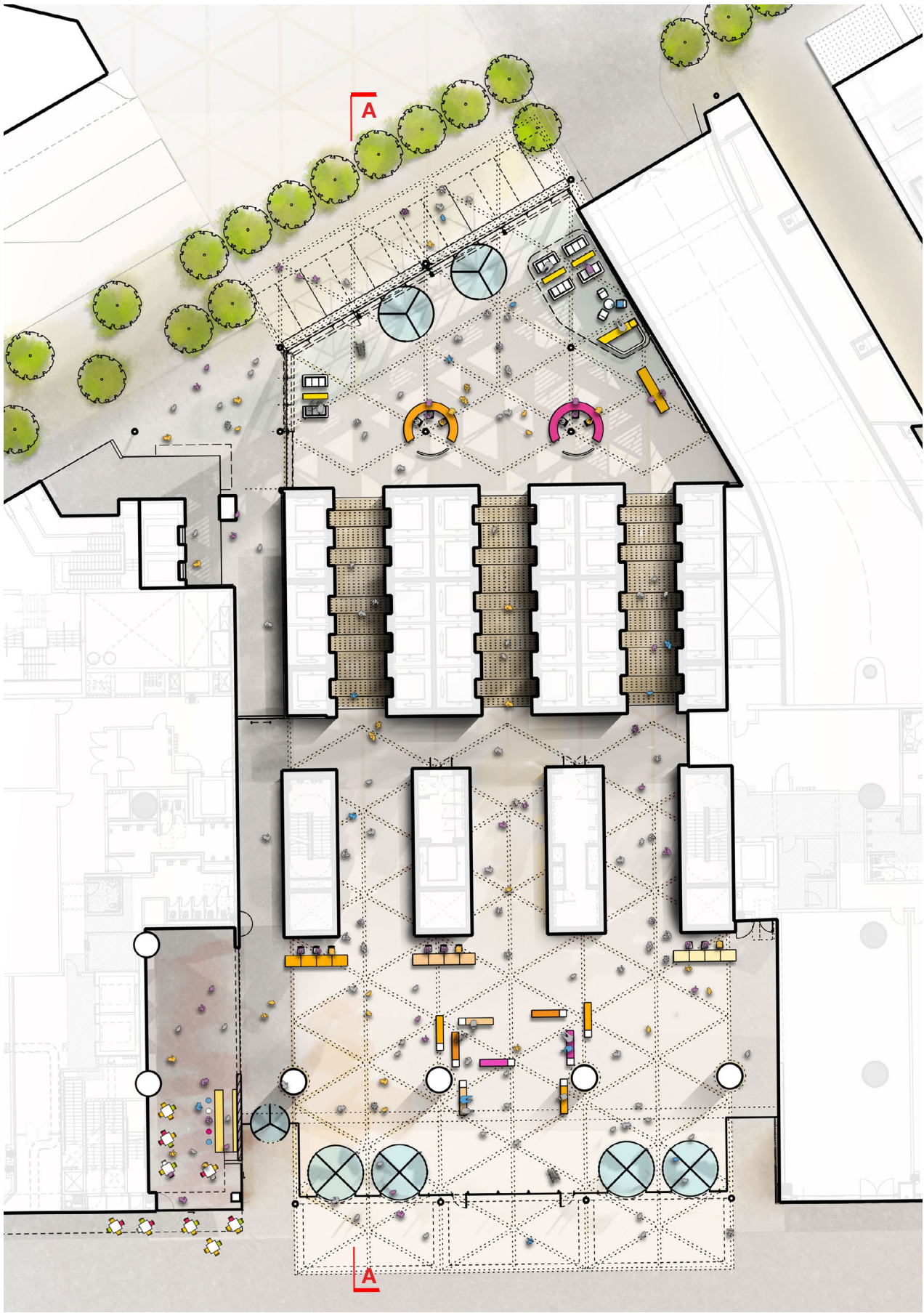
SECTION 75W MOD 2 (APPROVED)



SECTION 75W MOD 3 (PROPOSED)



Section through the lobbies



Ground Floor Plan of the Tower Lobby

Lobby Design

North Lobby

The northern lobby is defined by the geometry of its surrounding context and is a gateway to the Commercial Towers.

A pair of 15m high picture windows form the northern elevation, above which a triangulated roof perches on a series of slender columns. Whilst providing enclosure to the lobby for the commercial tower, this hovering structure also extends to cover a nodal point, a convergence of the Through Site Link, the retail lifts, the commercial lobby or axis points of the the park or water nearby as well as covering the elevated garden space located above the basement entry ramp.

Providing a breathing space at the end of Shelley Lane (a counterpoint to Hickson Place at the southern end) this elevated garden is also an external landscaped amenity space for Tower C3, and a visual amenity for the lobby - an informal splash of green under the geometrical roof.

A lightweight transparent margin connects the northern lobby to the tower with the northern face of the north core extending to ground behind with this 'gap'. This rationalises the dual geometry of the lobby with that of the tower and visually separates the two.

As the north of TCA's podium building aligns with the tower core, it enables the lobby to have a face to the waterbody.

NORTH WEST ELEVATION



Section 75W Mod 2 (Approved)

NORTH EAST ELEVATION



Section 75W Mod 2 (Approved)



Section 75W Mod 3 (Proposed)

NB: Visualisation depicts horizontal shading to the west facade (internal on ground level, external on levels 1 & 2) in the retracted position to indicate appearance of north lobby for the great majority of the day. Shading to the west facade is only required to be in the lowered position for two to three hours a day.



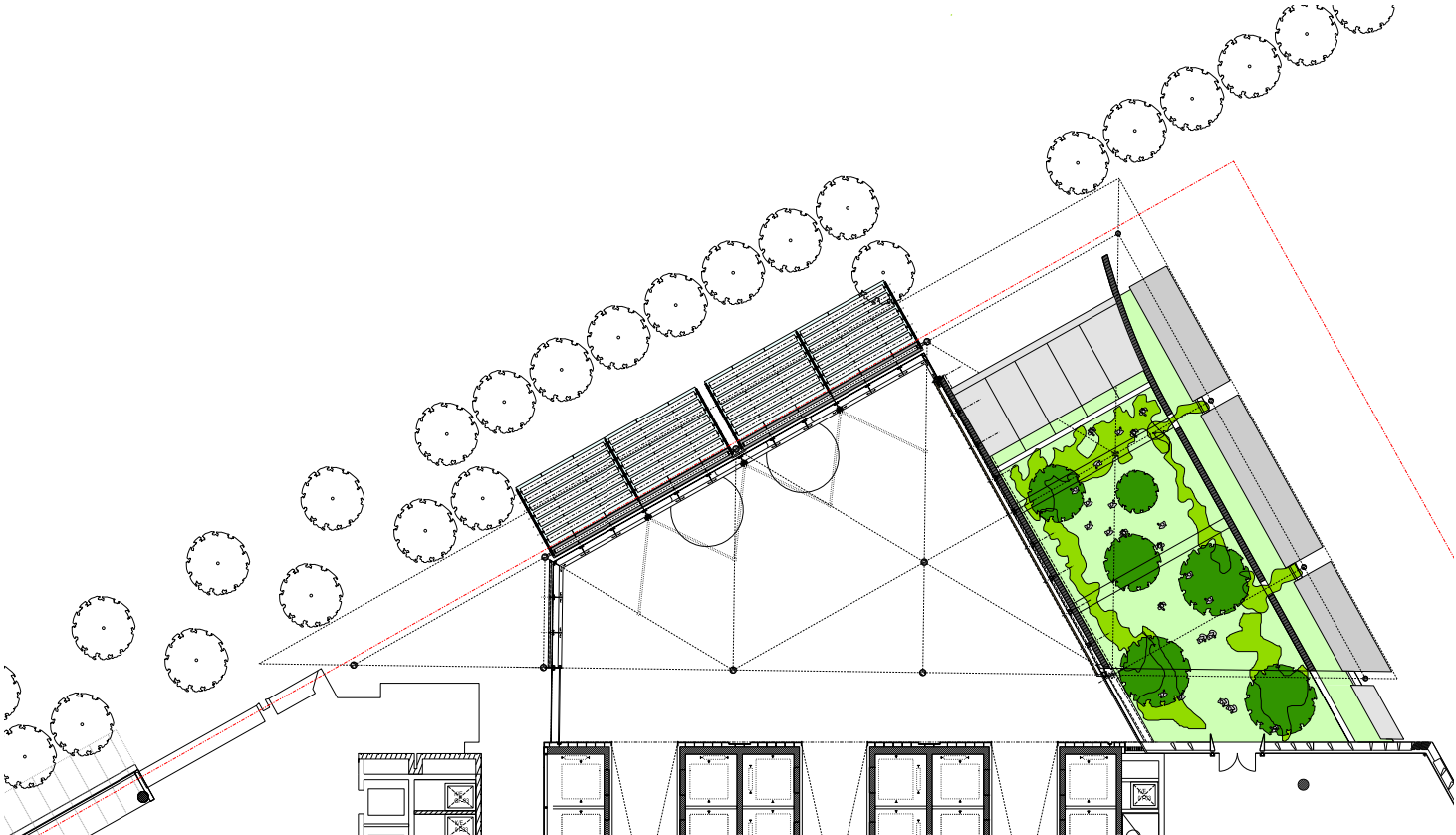
Section 75W Mod 3 (Proposed)

Lobby Design

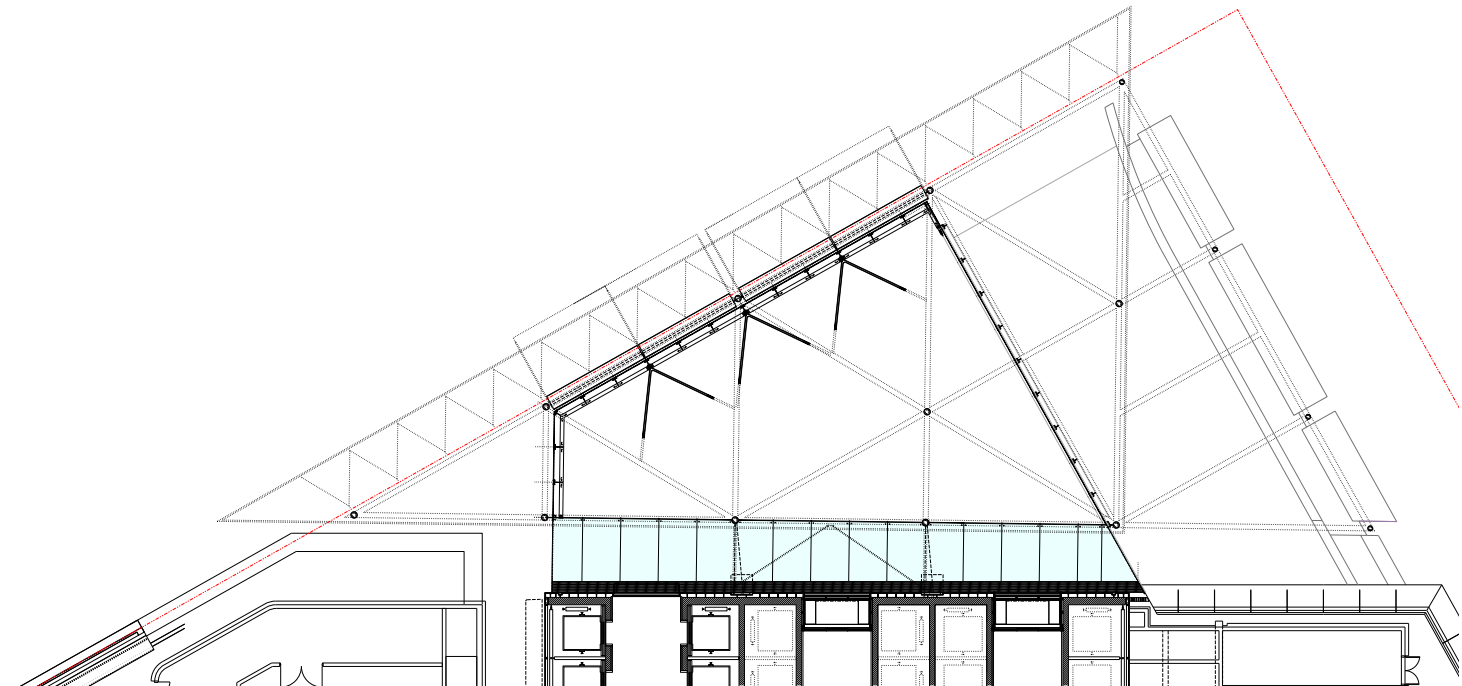
North Lobby



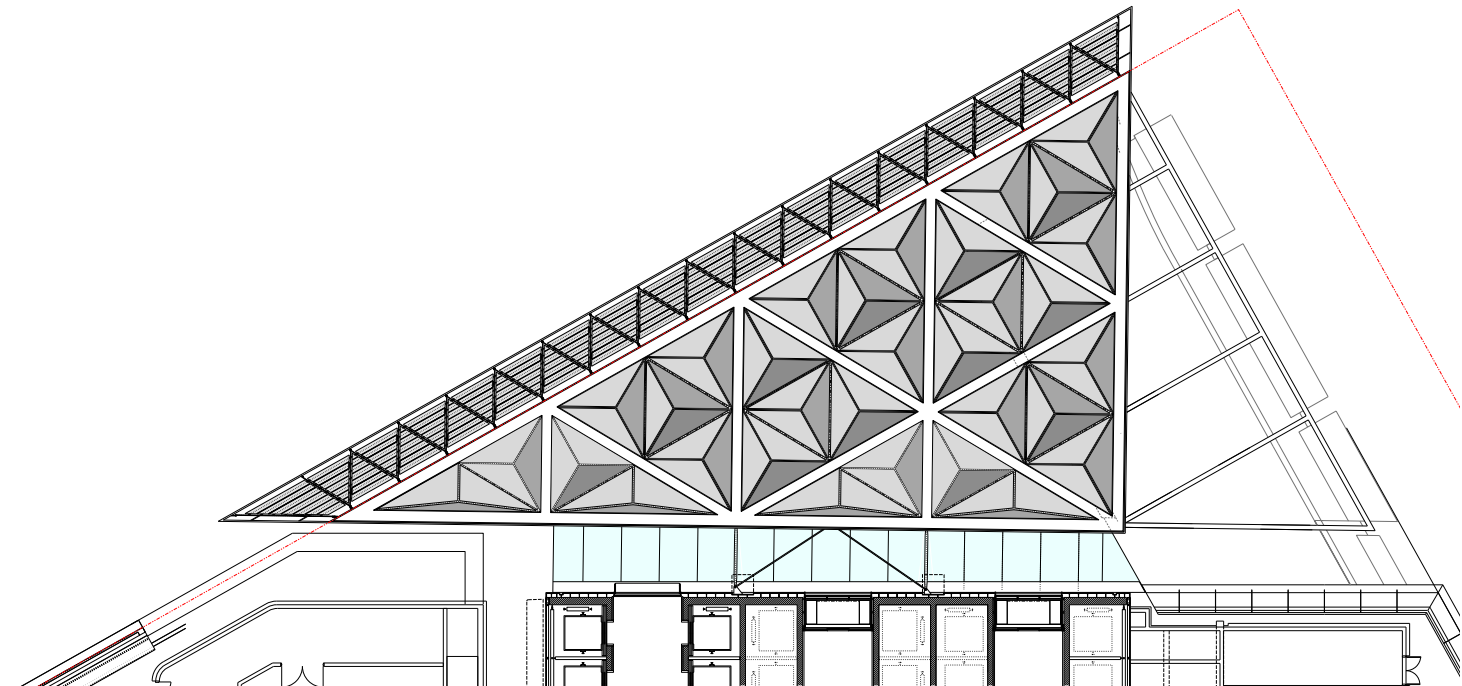
North Lobby - Ground Floor Plan



North Lobby - First Floor Plan



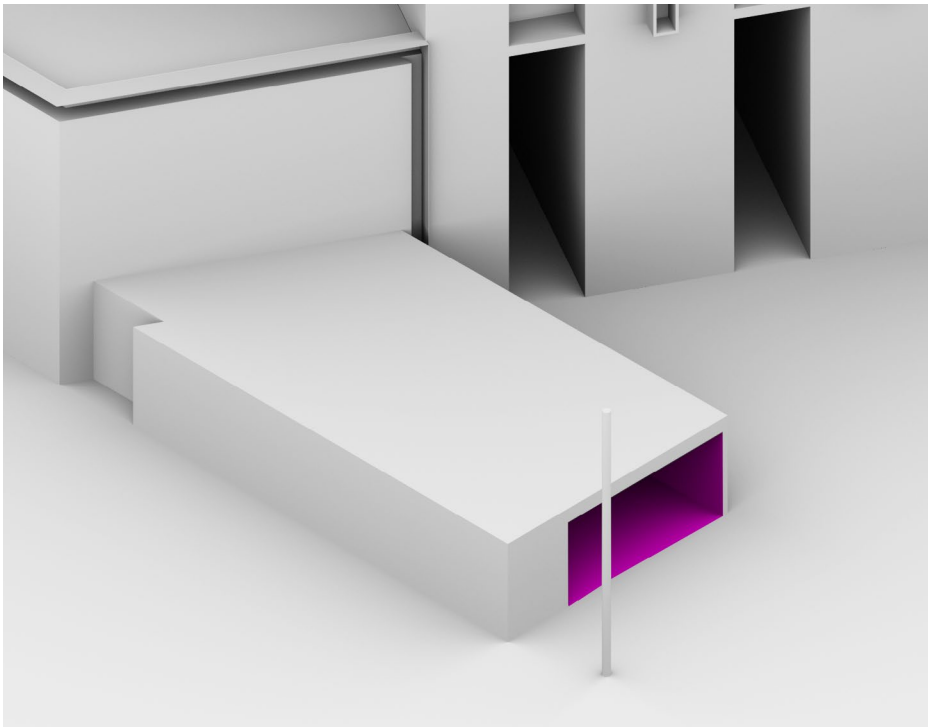
North Lobby - Second Floor Plan



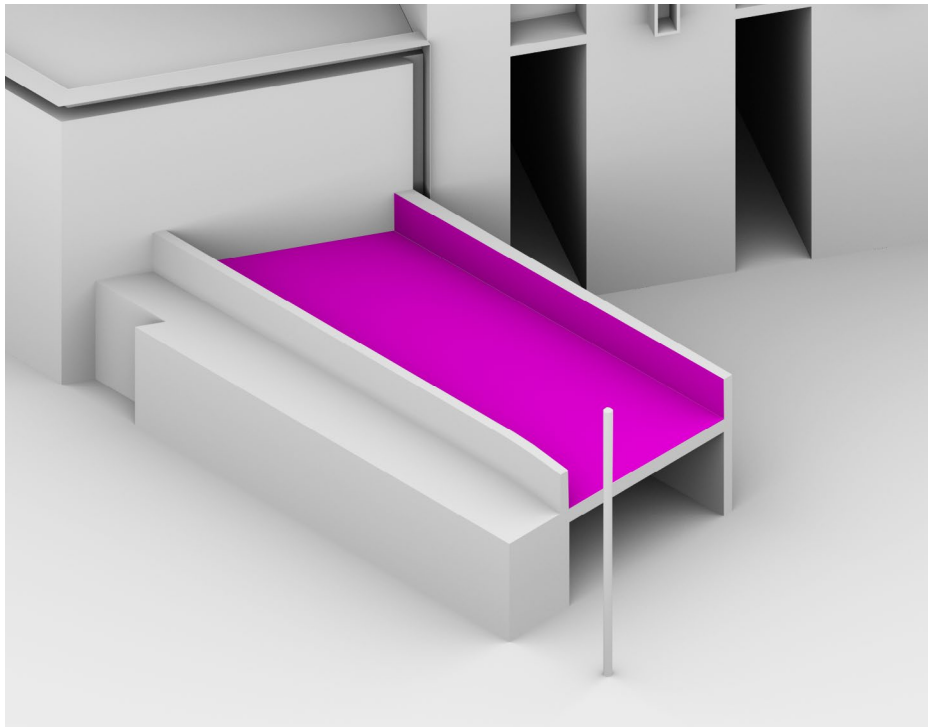
North Lobby - Roof Plan

Lobby Design

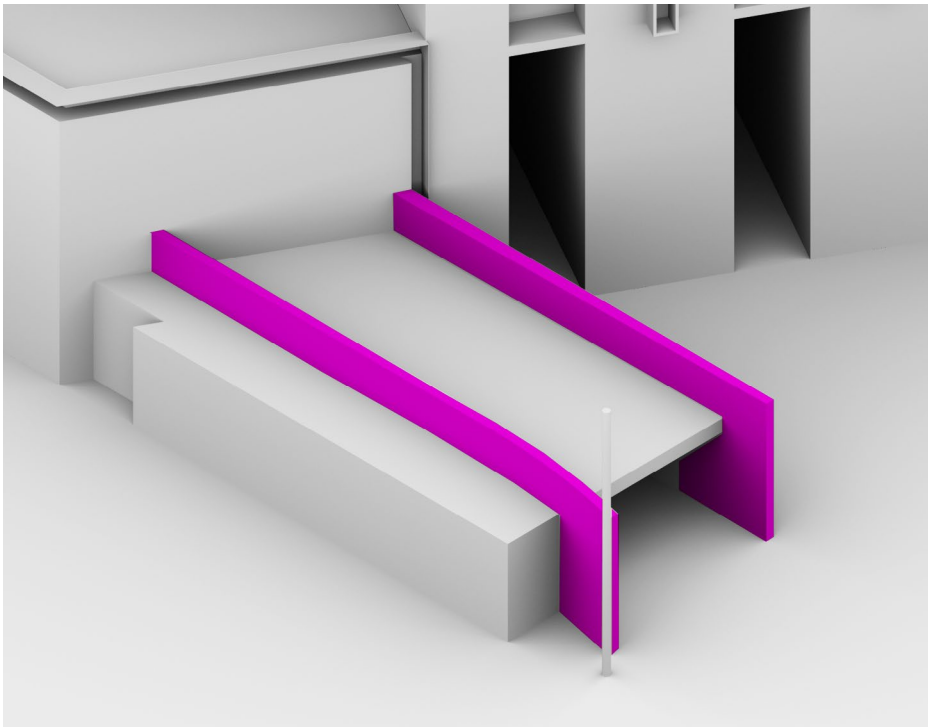
North Lobby Ramp + Retail



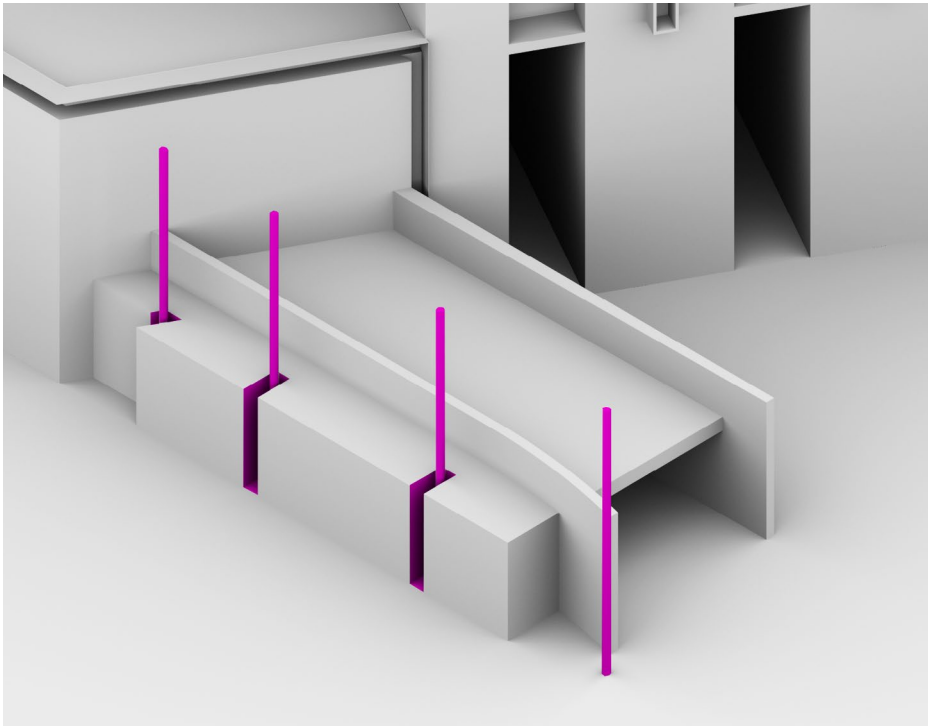
1. focus on basement entry



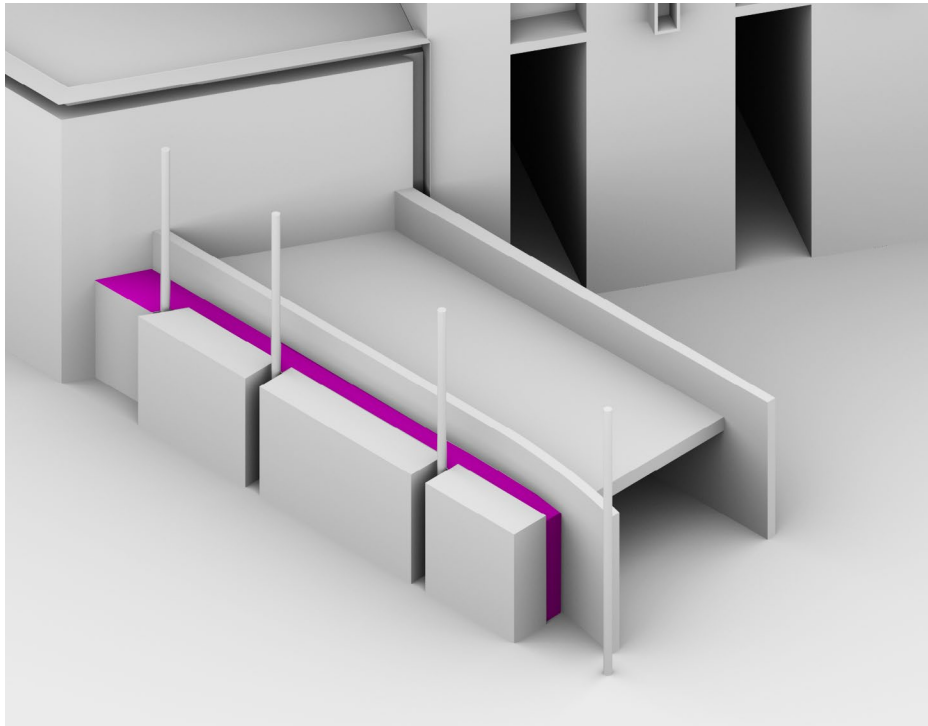
2. blade walls frame terrace



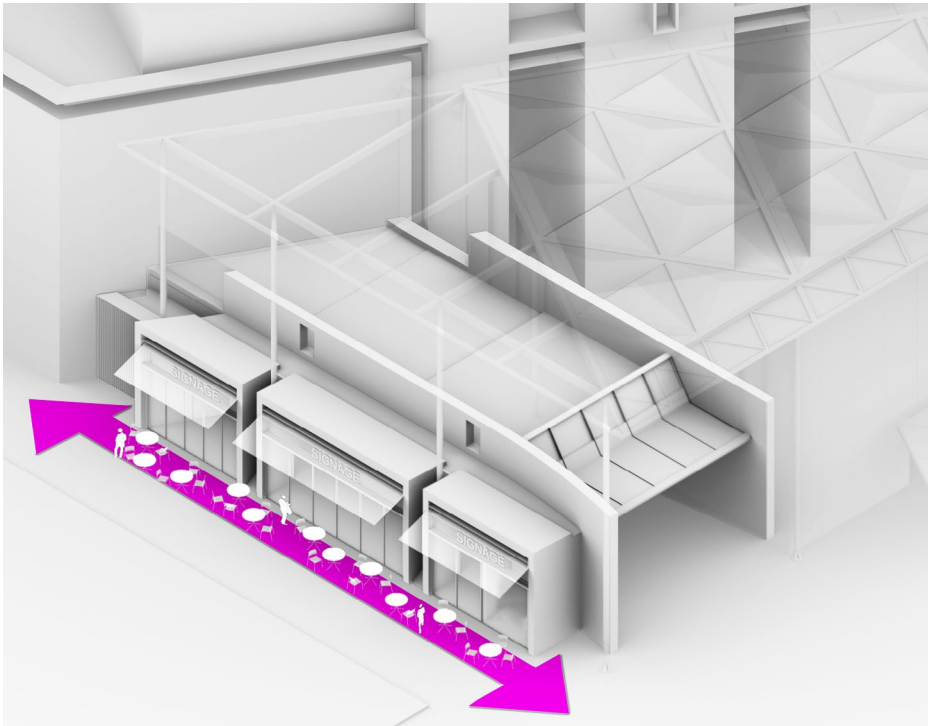
3. blade walls extend north



4. roof and columns extend to shelley lane



5. spine curves out retail



6. street activity extends to north

Lobby Design

North Lobby Terrace

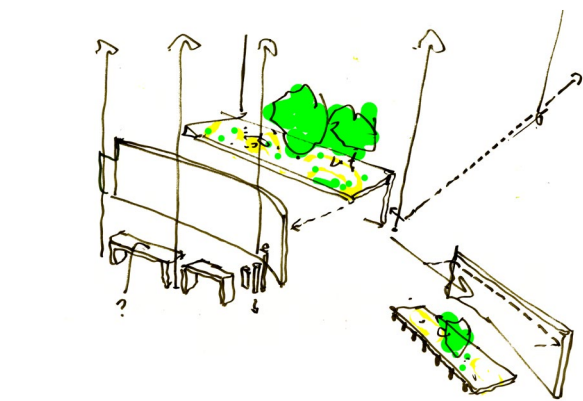
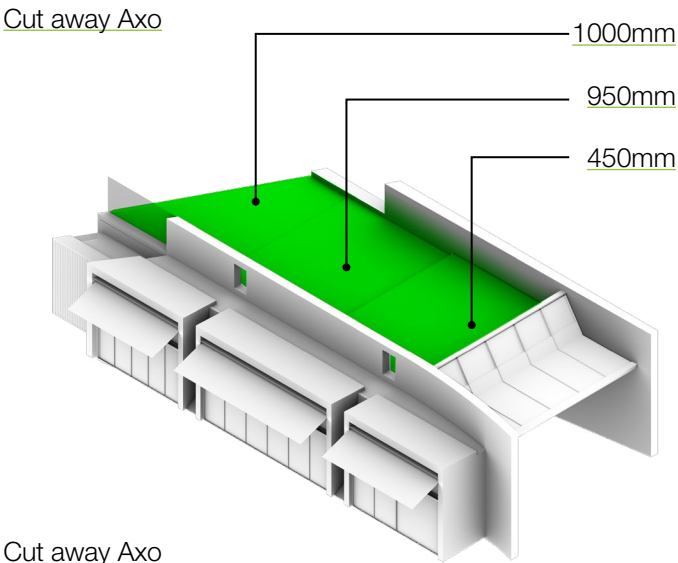
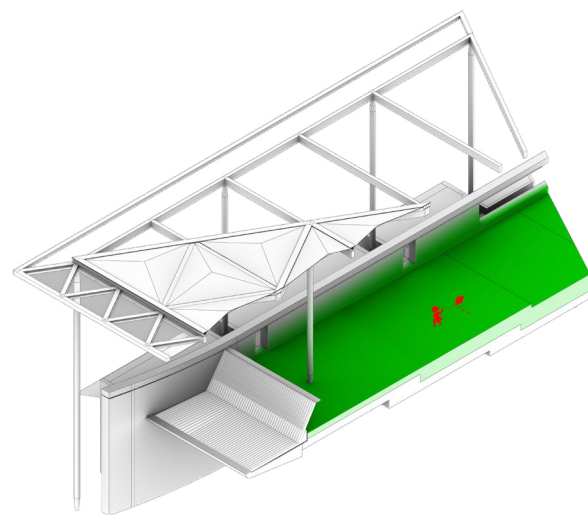
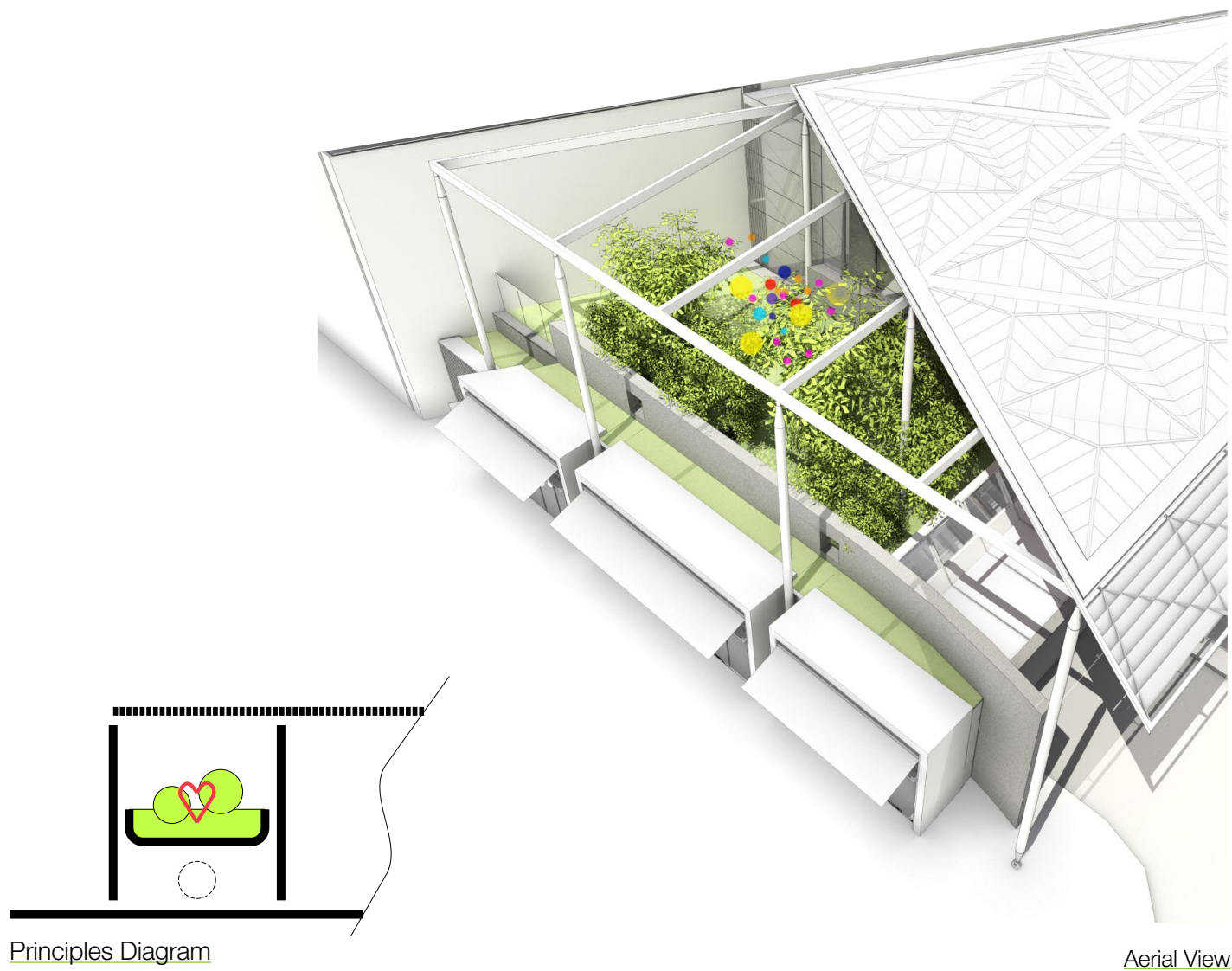


Diagram - The Elements



Principles Diagram

The terrace offers a unique opportunity to provide amenity to tenant and public alike whilst serving to obfuscate the entry to the basement which otherwise would dominate the northern composition.

The raised ramp walls frame the terrace, giving depth to the available planting zones and cradling the activities within. It is this cradling of space through architectural and landscape means which elevates focus away from the ramp below and has potential to deliver a space of layered depth and enchantment appropriate for the demands of a potential childcare centre and sympathetic to the eye from the public domain.

The structure of the ramp lid and walls are strong enough to allow mature planting throughout. The slab steps up towards the nose so planting may change from deep based mature planting at the south, to shallow planting and raised beds to the north where the oversailing roof can offer additional shading and protection as required. Landscape should be concentrated against the ramp walls creating a safe, sheltered and active environment within, with hard landscaping filtering through the centre. The strong geometries of the roof can be responded to but opportunity for a more informal interplay should not be missed.

Refer to Landscape Design Statement by Aspect and Oculus for further information.



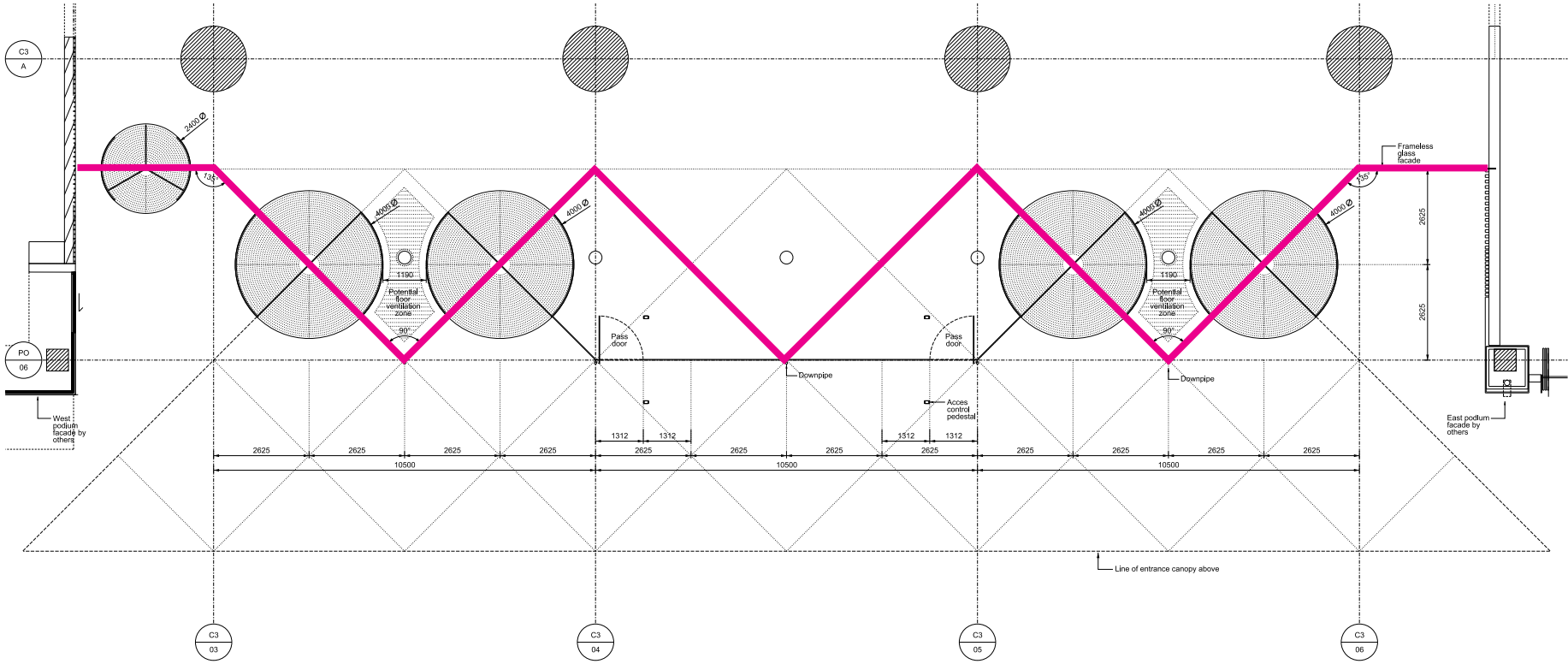
Lobby Design

South Lobby

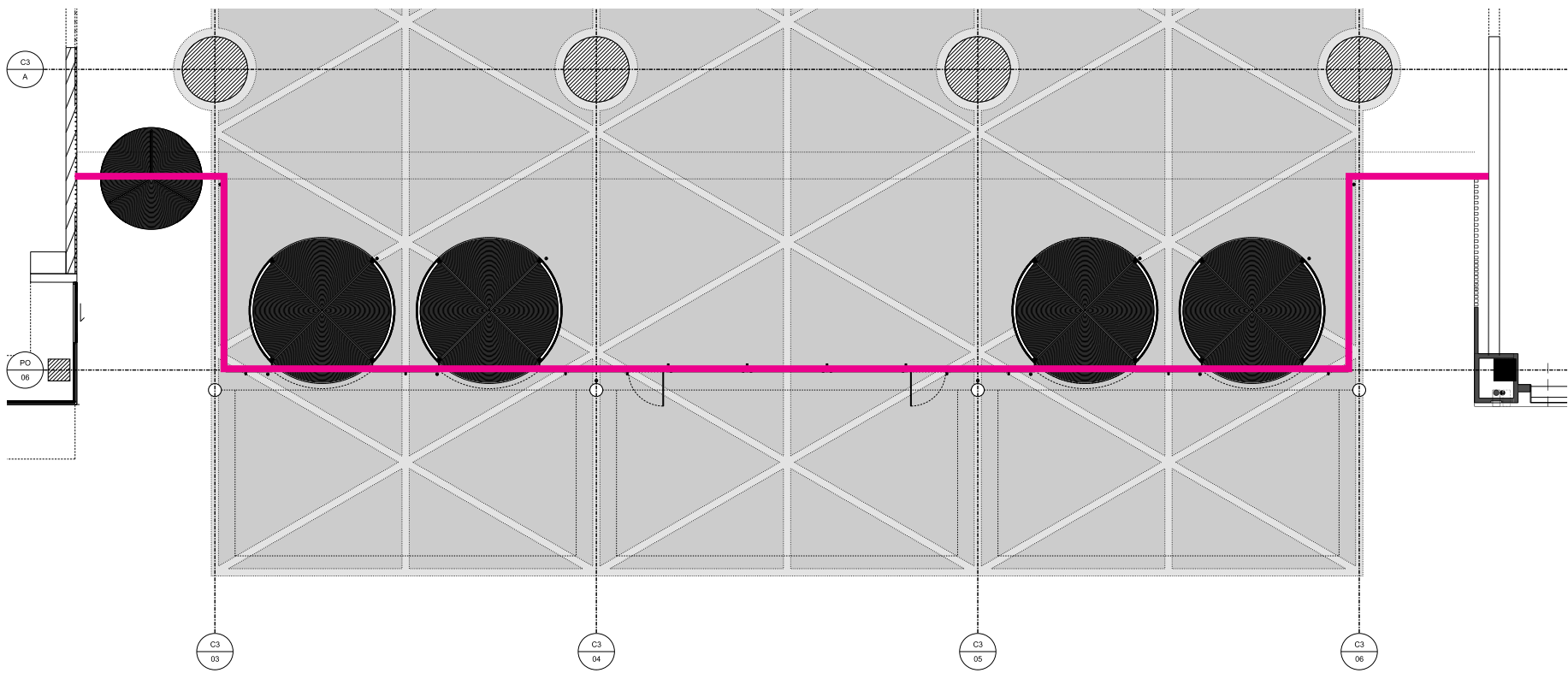
The south lobby facade has been developed to provide a clear presence that is highly transparent and light. It has been developed to clearly identify the main entrance to the tower through a strong geometric order, which has similarities to the north lobby, thereby creating a common language for the two main entrances to the tower.

The south lobby structure has a series of slender external columns set in three bays, giving a simple order to the more expressive podium facades to either side. These support a solid roof, which hugs the canopy and the upper two level of the facade.

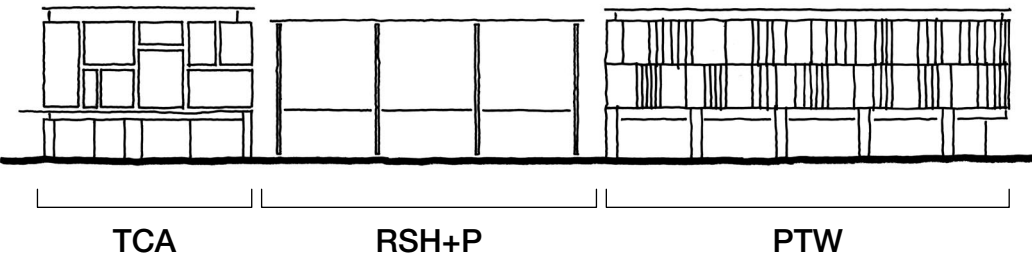
The facade is subtly set back from the street, with deeper recesses on either side to allow the street to broaden out and extend into the lobby, while providing a clear visual delineation between the lobby and the adjacent podia. The upper levels of the facade are tension cabled between the two podia providing a highly transparent glass facade, blurring the boundaries between inside and out to provide a sense of arrival.



Ground Level Plan - S75W Mod 2 (Approved)



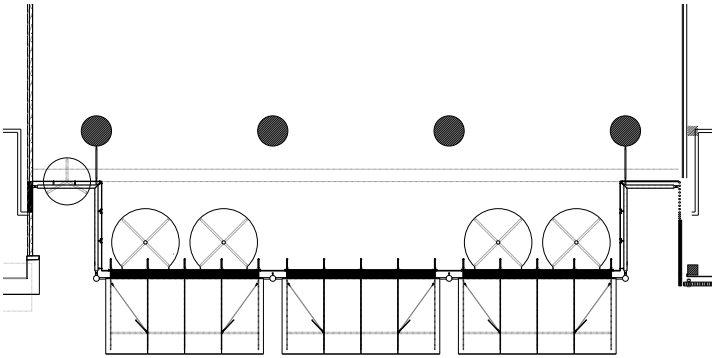
Ground Level Plan - S75W Mod 3 (Proposed)



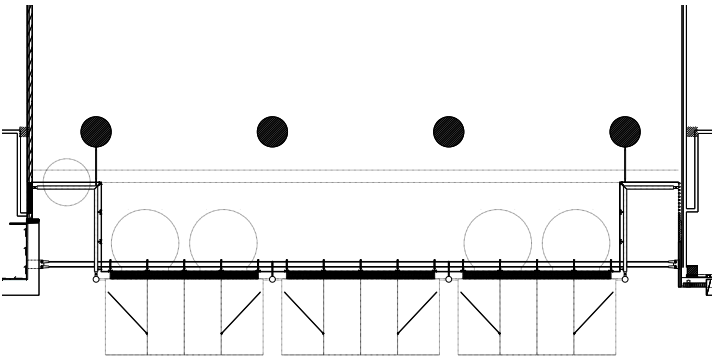
Context

Lobby Design

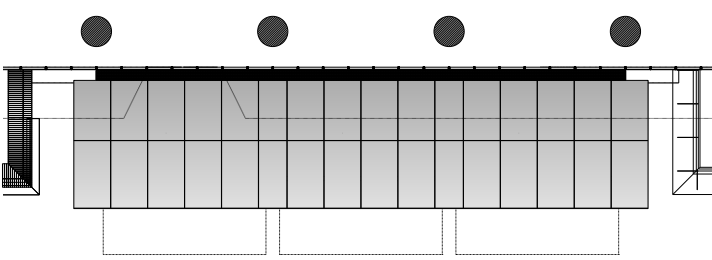
South Lobby



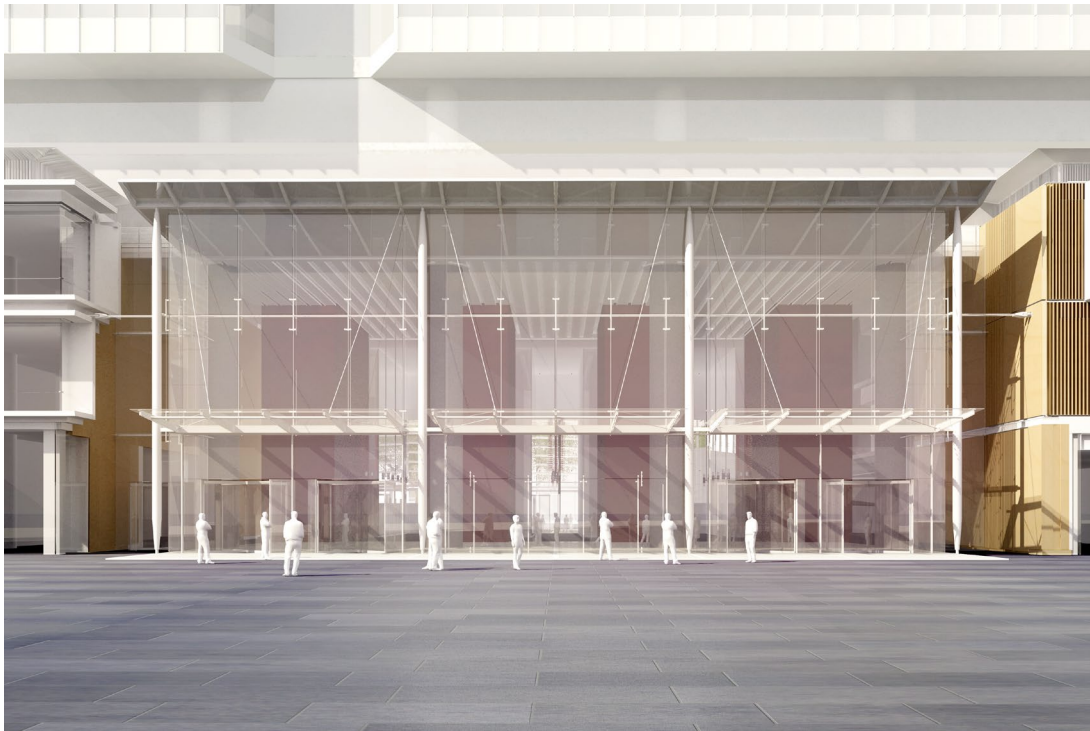
Level 01 Plan



Level 02 Plan



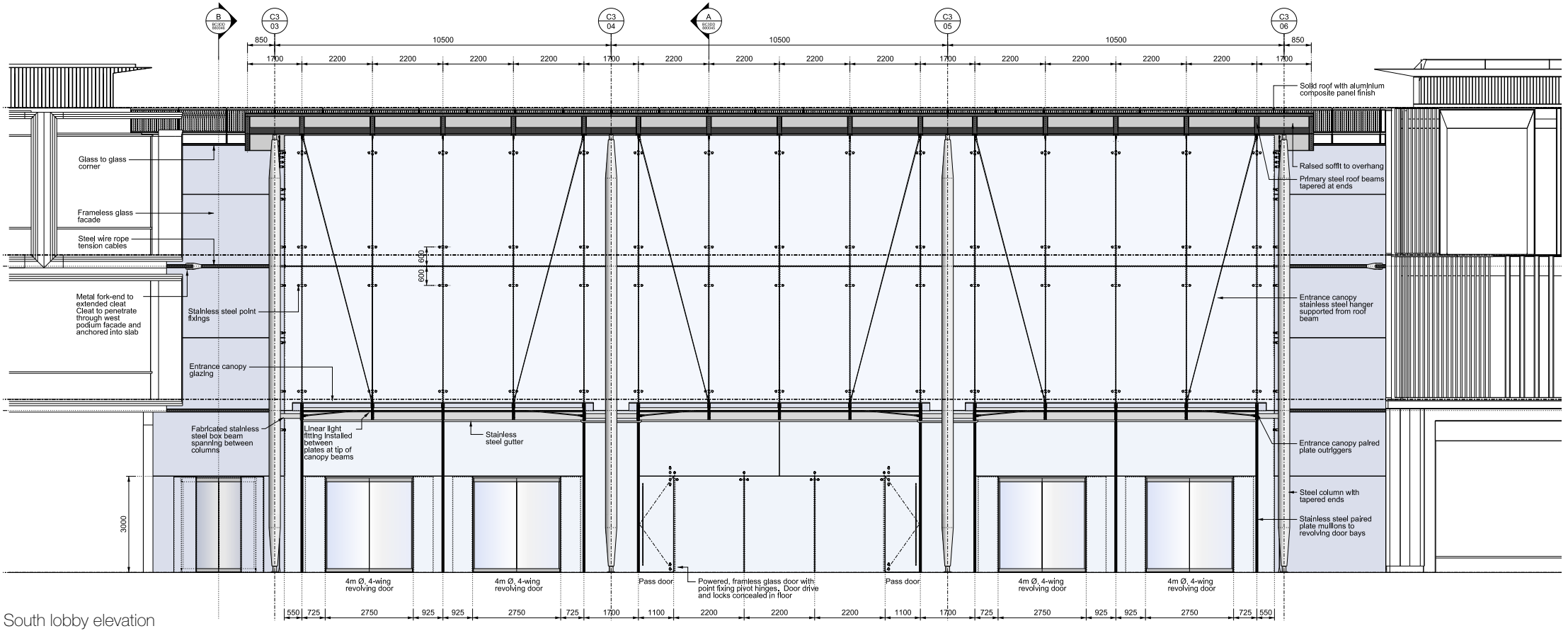
Level 03 Roof Plan



South lobby street view



South lobby TSL entry view



South lobby elevation

Podium and Lobbies

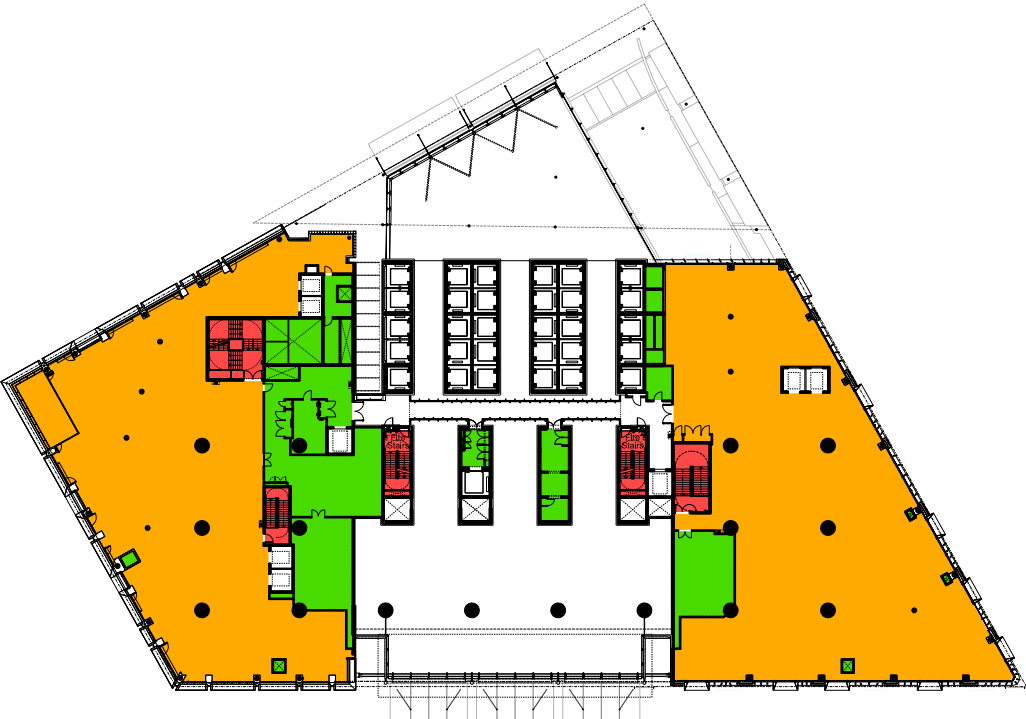
Internal Planning

Design development of the internal lobby planning has resulted in the following design changes:

- To rationalise pedestrian flow, an opening in the east flanking wall of the south lobby – which previously provided access between the lobby and podium retail – has been removed and is now a solid wall.
- Level 1 lobby bridge has been removed to improve the lobby space; Level 2 bridge is retained.
- The north through site link door has changed from revolving to sliding to achieve a better DDA outcome and potimise pedestrian flows.



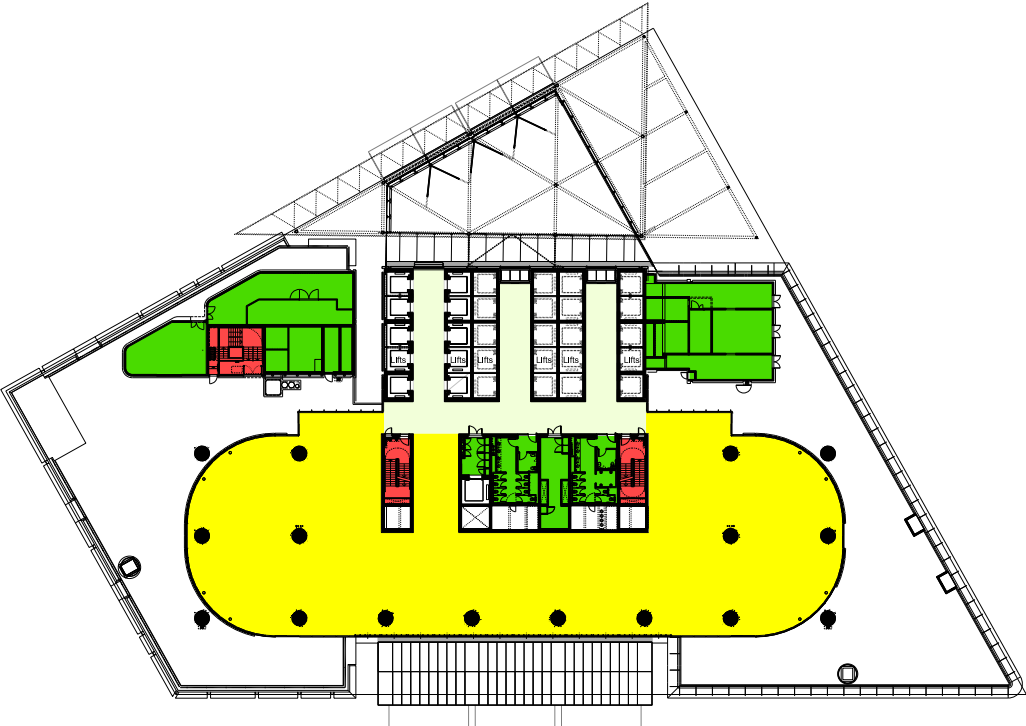
Ground floor plan



Second floor plan



First floor plan



Third floor plan (podium roof)

- Key
- Retail / Childcare
 - Lobbies
 - Plant + BOH
 - Office / Indoor recreational
 - Egress

Podium Plantrooms

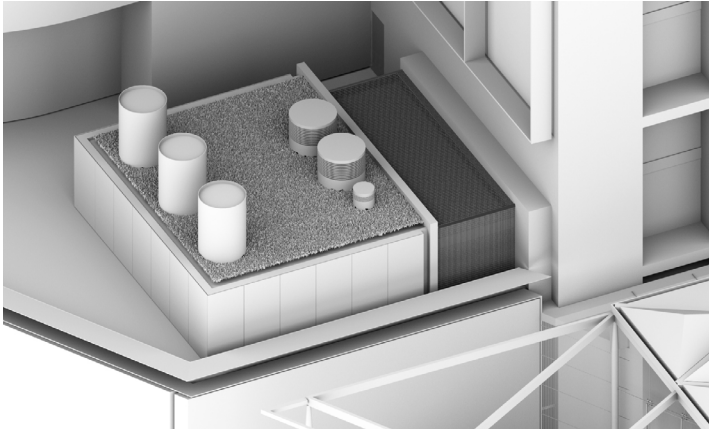
The podium plant of C3 has been modified, rationalising its form through review of its planning efficiency, and its functional logic.

Key Considerations:

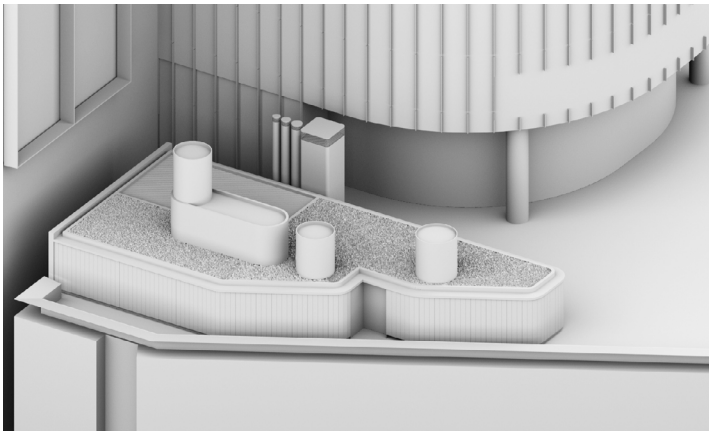
- Services and plant functionality
- Massing (scale, form and organisation)
- BMU tower drop zones

These considerations have been reviewed holistically, with the plant manifesting itself as an efficient compact based system with glazed plant boxes, spine walls, planting and louvered elements. The subsequent reduction in size and greater clarity of the elements has created a better harmony with its surroundings in scale mass and form.

VISUALISATIONS - MOD 3 PROPOSED

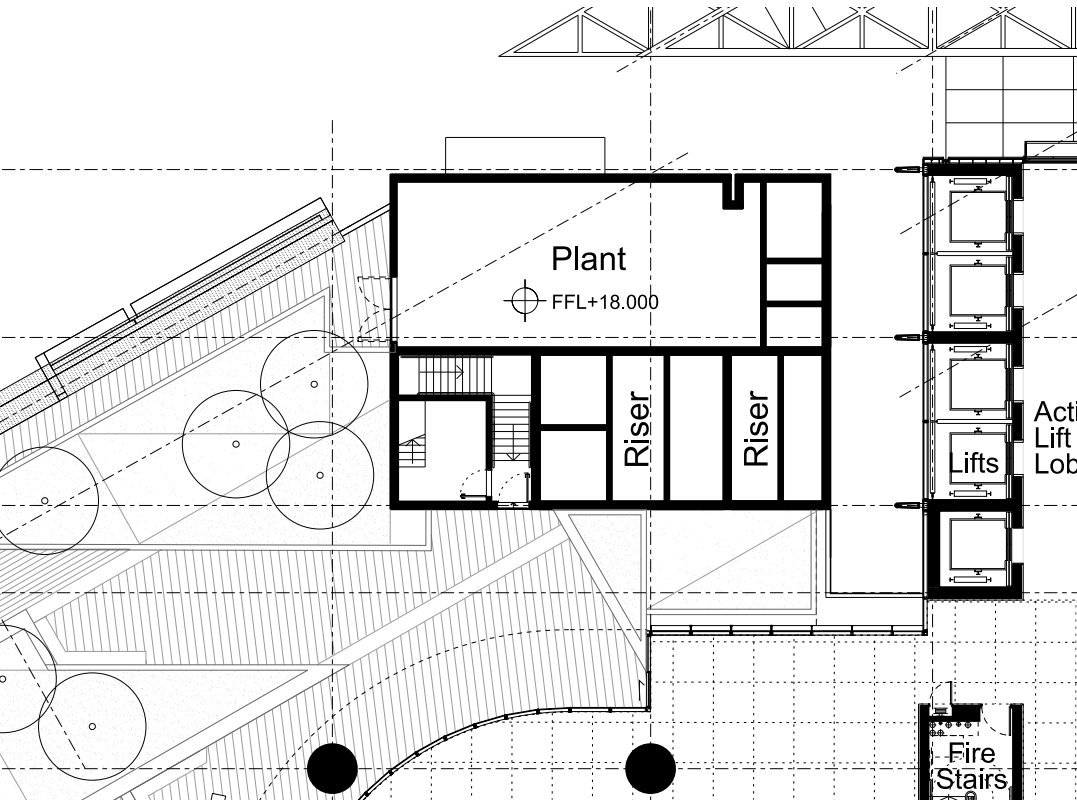


East Plantroom

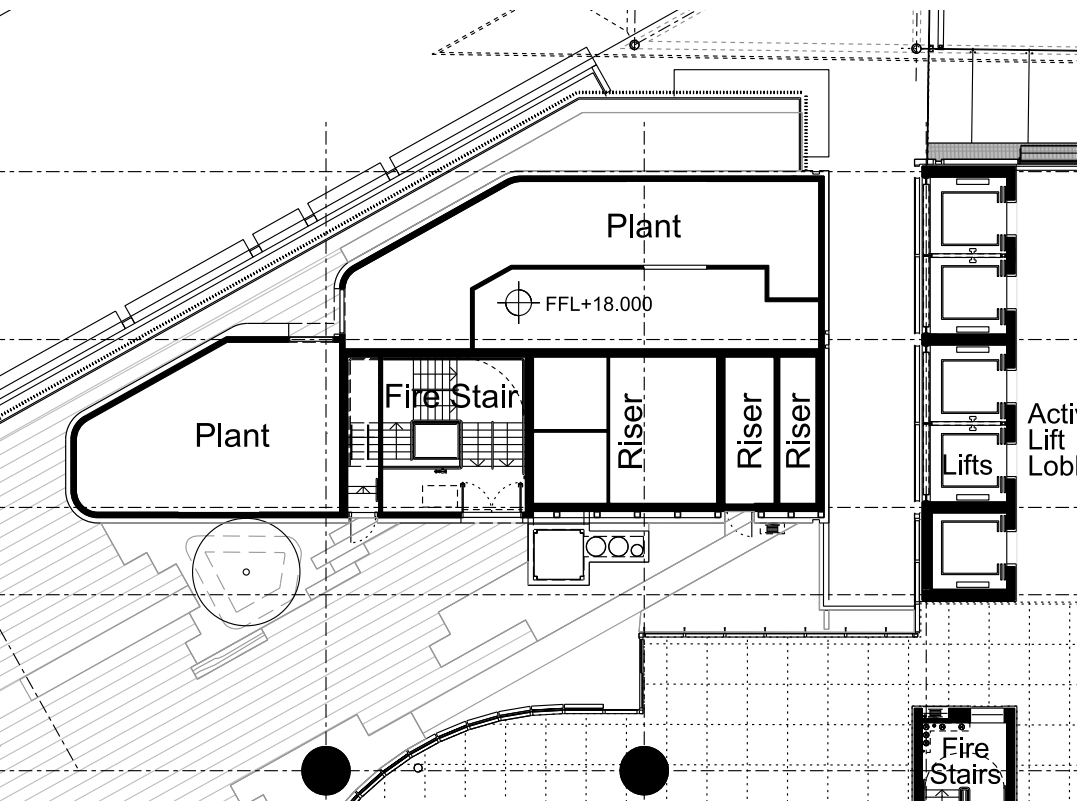


West Plantroom

WEST PLANTROOM

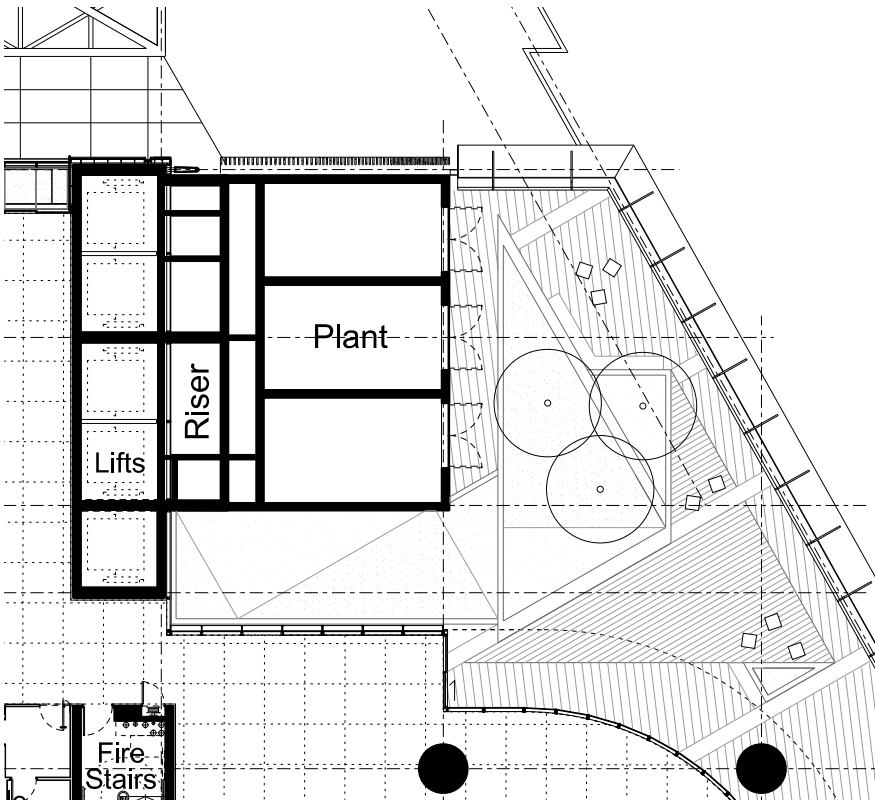


Mod 2 Approved

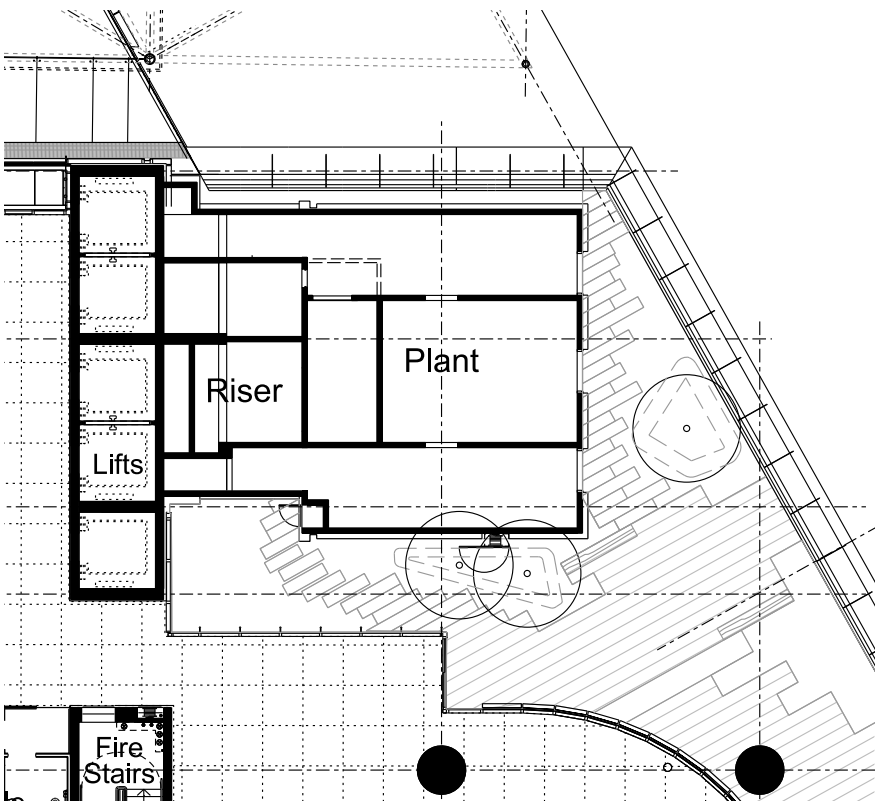


Mod 3 Proposed

EAST PLANTROOM



Mod 2 Approved



Mod 3 Proposed

2

DESIGN REFINEMENTS : TOWER

Tower Design

Overview

Building C3 is considered as a part of an ensemble of three sibling buildings, that dialogue with each other whilst having their own individual identity.

C3 has a unique orientation and architectural expression and acts as the primary north elevation to Barangaroo South. The design refinements proposed in this section 75W report strengthens C3's identity on the city scale and building scale, to reinforce the design principles set out in the Planning Application.

- Shading fin refinement
- Removal of the stability brace
- Evolution of the rooftop
- Addition of the rooftop crane

Section 75W Mod 2 (Approved)



Section 75W Mod 3 (Proposed)



Facade

Shading Fin Development

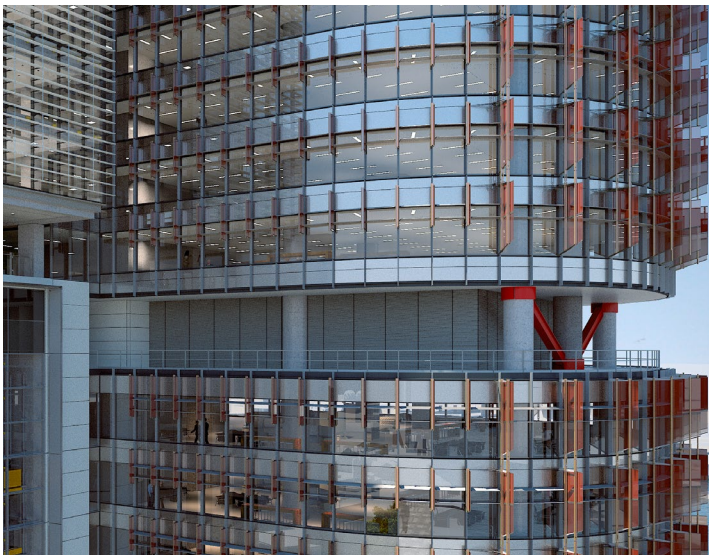
The concept for the design of the floorplate shading fins remains unchanged, however the detailing has been refined to reinforce the vertical reading of the tower and continue the theme of legibility of component parts.

The shading fins to east and west facades sit on a 3m module and are framed by continuous vertical structural members. This framing provides a vertical reading at building scale whilst floor by floor glass infill's help to break this reading down to a human scale.

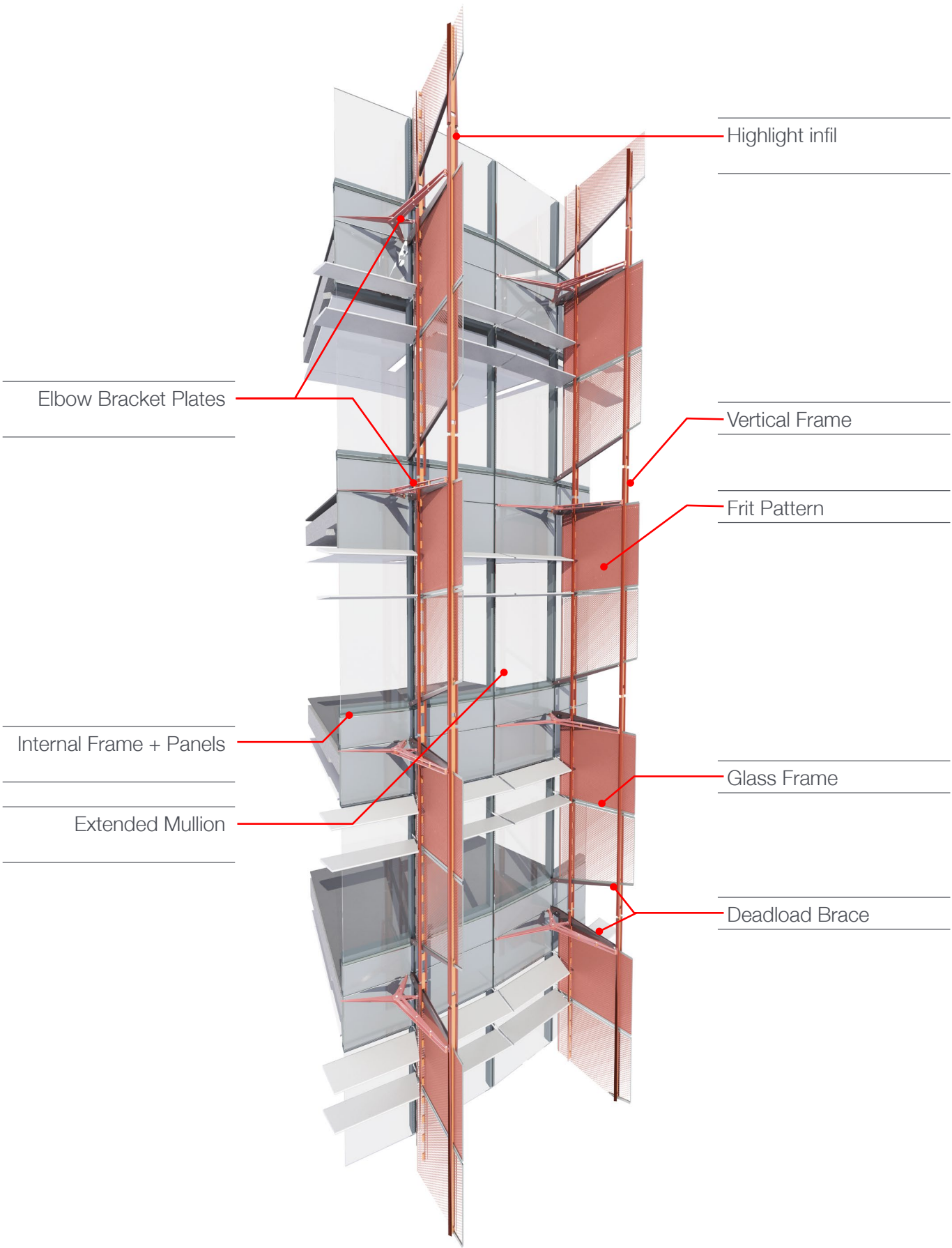
Ceramic frits and interlayers of varying opacity have been developed in a manner that offers a more sophisticated response and creates a softer edge to the building. The upper panel utilises a solid ceramic frit, whilst the lower panel utilises a dot pattern gradient ceramic frit, providing connectivity to the outside from the floor plate.

The verticality of the tower is primarily emphasised by these large and small vertical fins, and where additional shading is required, smaller horizontal shading elements are added to the system.

The refined colour strategy for the shading fins enhances the elemental design of the fins by highlighting the details of the component parts of the assembly.



S75W Mod 2 (Approved)



Mod 3 Proposed Components

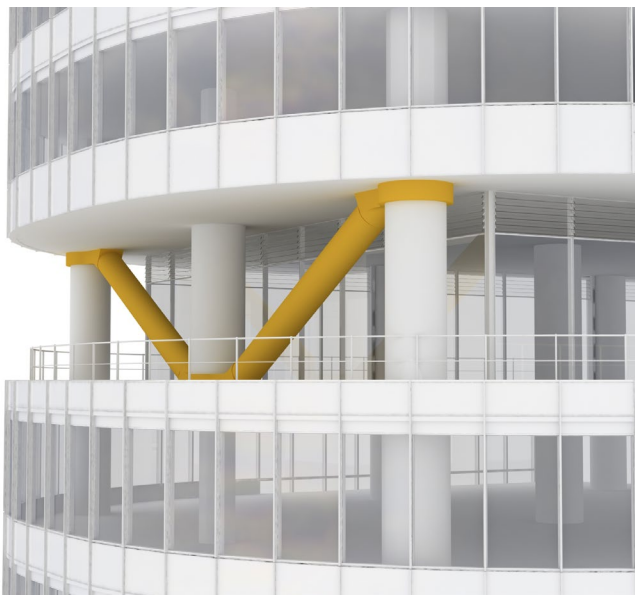


Major Mock Up

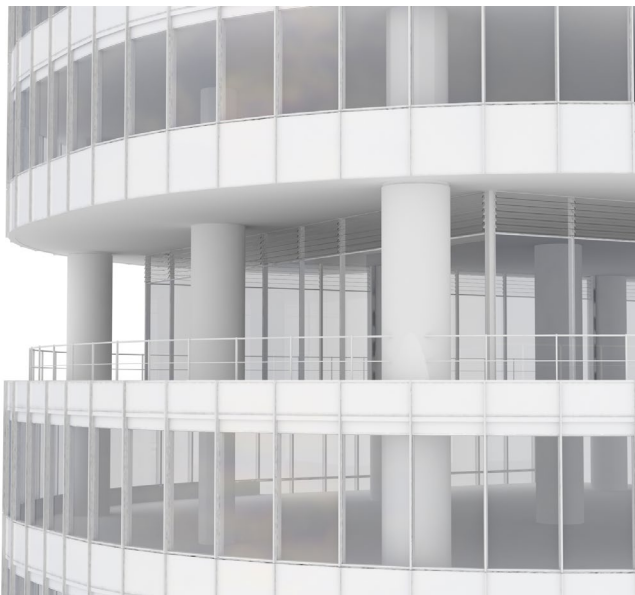
Plant Floors - Low + Mid Rise

Evolution of the Stability Brace

The structural brace was introduced to contribute to the structure of the commercial tower; through technical development its contribution has proved to be negligible and it has ended up as a purely decorative element. In pursuit of structural logic, and an honest expression, the redundant brace has been removed and has been further refined to manifest and express itself in a clear, legible and honest manner.



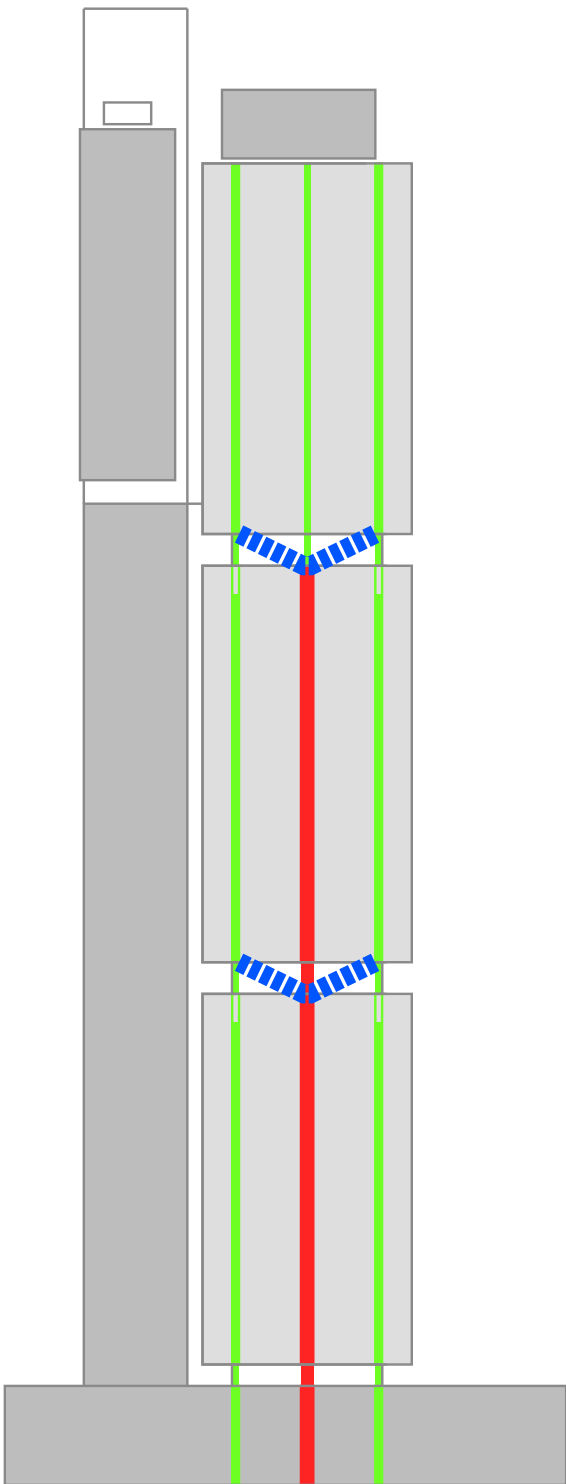
V Brace (Mod 2 Approved)



Removed brace (Mod 3 Proposed)

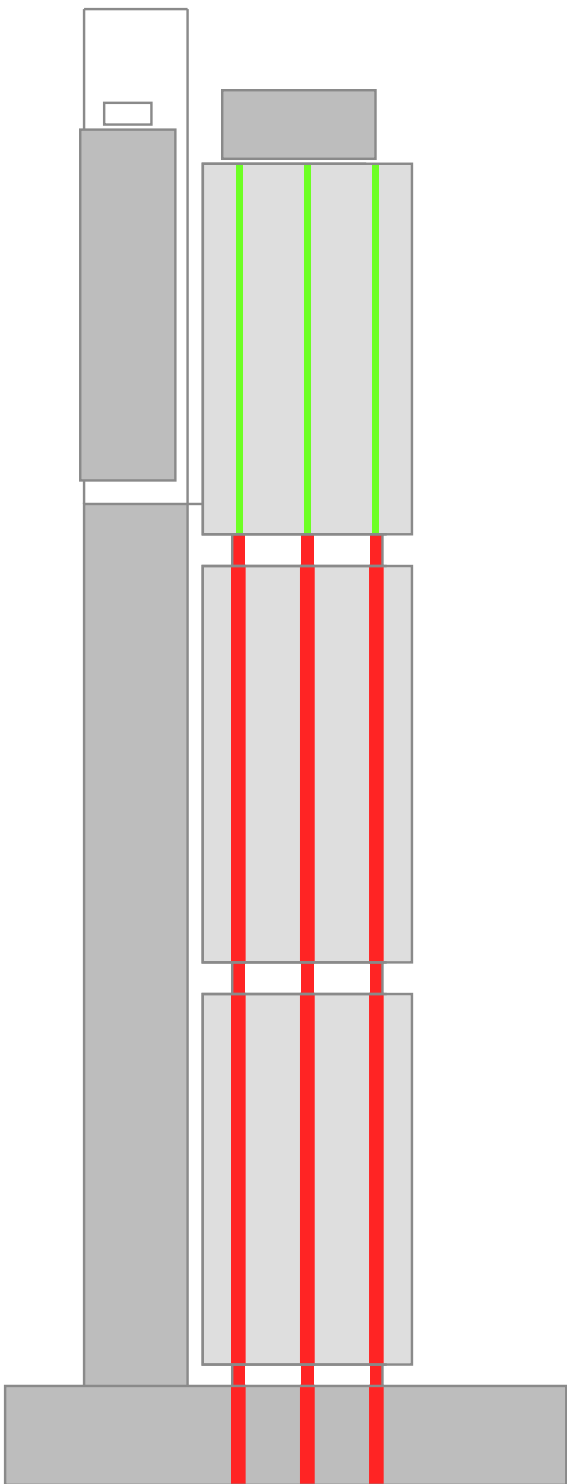
Section 75W September 2013 (Approved Mod 2)

Elevation Diagram



Proposed Mod 3 showing no brace

Elevation Diagram



Rooftop

Evolution of the rooftop

The top of the north core is the termination point of the building. Its proportion and composition has been refined, enhancing its legibility

Key Roofscape Considerations:

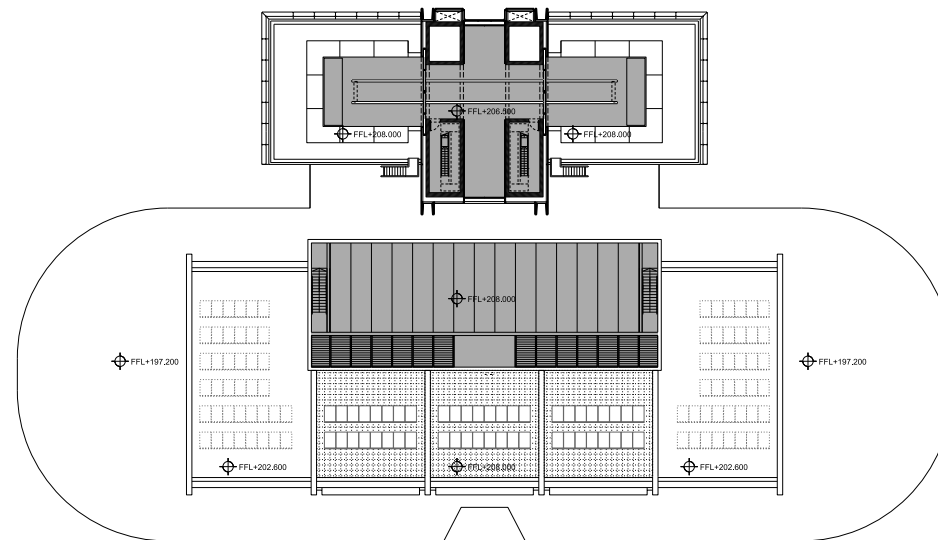
- Services and plant functionality
- Massing (scale, form and organisation)
- PV Opportunities (to main floor plate, north core signage boxes and high rise core)
- BMU rationalisation (expression of operation of building)

These considerations have been reviewed holistically, with the intent of:

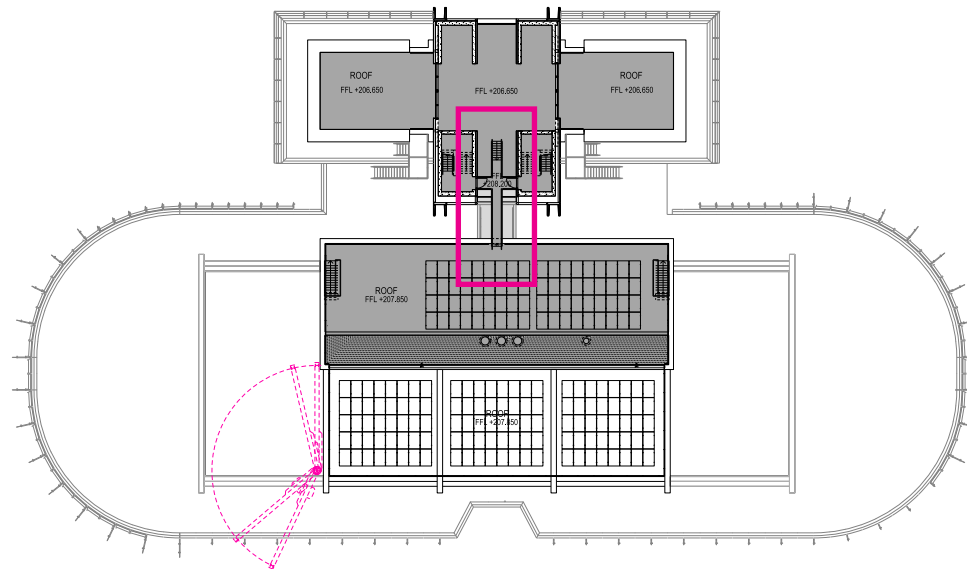
- Creating an efficient plant room with the minimum building volume.
- Maximising the usable area for photovoltaic cells.
- Providing roof termination appropriate to the tallest of the sibling towers

ROOFTOP CRANE

The need for plant removal from the upper level plant box has led to the requirement for an additional rooftop crane. The team have reviewed numerous scenarios and opportunities with the key consideration of retaining the rooftop PV's, minimizing the podium landscape disruptions, simplifying the removal from podium to street level, whilst retaining the clarity of the rooftop component and rooftop termination. The conclusion is a high level crane affixed to the plant sheer wall that lowers to city walk via the southern pod.



S75W (Mod 2 Approved)



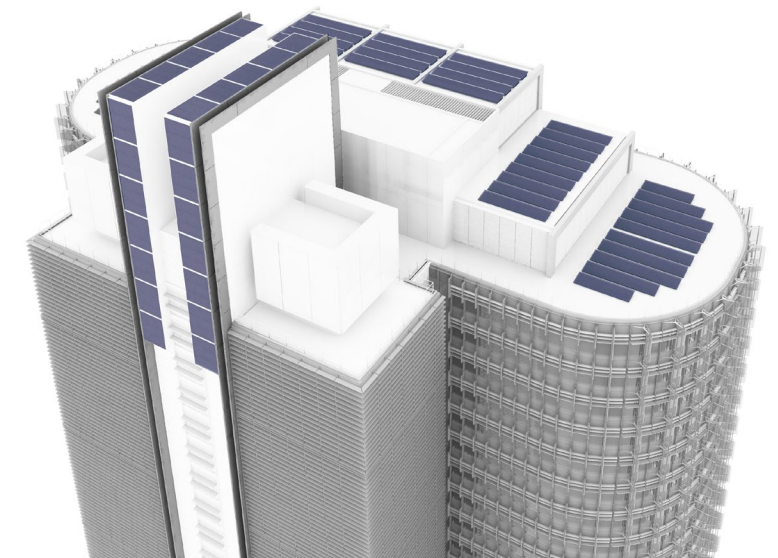
S75W (Mod 3 Proposed) with proposed bridge links and rooftop crane highlighted

ROOFTOP BRIDGES

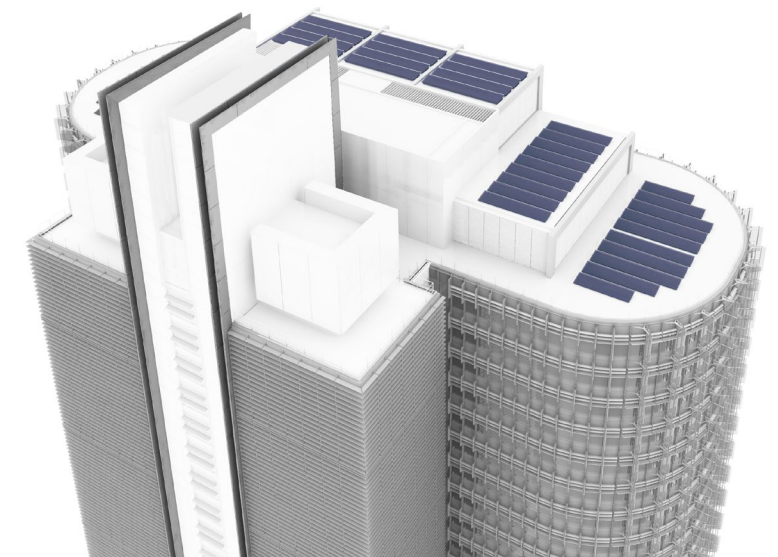
The introduction of a rooftop bridge has simplified the maintenance and fire exit strategies related to the north core plant, whilst retaining the clarity of the self-contained north core, and the served servant reading.

PHOTOVOLTAIC CELLS

The quantity of directly integrated PV's has been revised and the removal of the PV's on the north core will assist to enhance the tuning forks and vertical village plant rooms



S75W (Mod 2 Approved)



S75W (Mod 3 Proposed)

