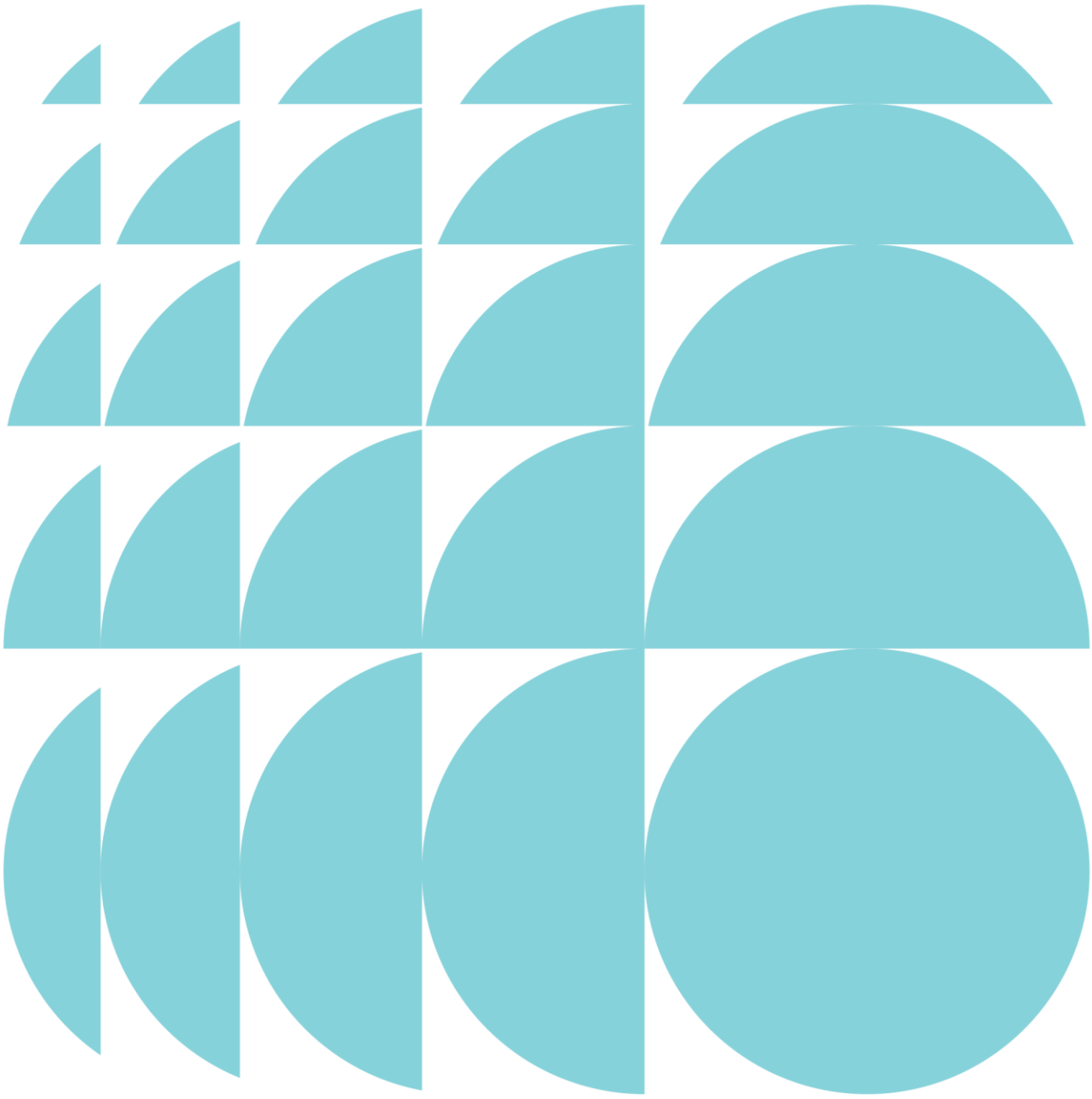
ETHOS URBAN

Site 2 Australia Avenue, Sydney Olympic Park
Architectural Design Competition Report

Submitted to Sydney Olympic Park Authority
On behalf of Ecove Group

10 September 2018 | 218132



Contents

This Architectural Design Competition Report has been reviewed and endorsed by the Competition Jury, which comprises:

Lee Hillam (Jury Chair)

Date: 10 September 2018

Matthew Pullinger

Date: 10 September 2018

Chris Procter

Date: 10 September 2018

Caroline Pidcock

Date: 10 September 2018

Michael Harrison

Date: 10 September 2018

Contents

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Contents

Figures

Tables

Contents

Appendices

1.0 Introduction

The Architectural Design Competition Report has been prepared by Ethos Urban on behalf of Ecove Group (the Proponent) for the architectural design competition undertaken in advance of the development of Site 2, Australia Avenue, Sydney Olympic Park (the site). This report summarises: the competition process; the four competition schemes; and the Jury's deliberations, decision and recommendation.

The site is owned by the Sydney Olympic Park Authority (the Authority) and the design competition is a requirement of the Sydney Olympic Park Masterplan 2030 (2018 Review). The Proponent executed a Project Delivery Agreement with the Authority on 22 May 2018. Ecove Group has undertaken a number of projects within Sydney Olympic Park including Australia Towers (Site 3), Opal Tower (Site 68) and Boomerang Tower (Site 9). Ecove's goal through the design competition is to bring its quality workmanship and practical designs to create high quality spaces for future tenants, guests and visitors.

The Proponent's vision for Site 2 is to establish a high-quality hotel, serviced apartments, commercial and retail precinct that supports the evolution of Sydney Olympic Park as a major, world-class, event destination and as a significant employment and residential precinct within the Sydney metropolitan area.

Site 2 is a highly prominent site on the eastern side of Australia Avenue in Sydney Olympic Park and is located between Murray Rose Avenue (bounding the site to the north) and Parkview Drive (bounding the site to the south) – see **Figure 1**. The site is within the Parkview Precinct of Sydney Olympic Park. Jacaranda Square is located directly opposite the site on the western side of Australia Avenue with Sydney Olympic Park Station located approximately 150m west of the site. The site is currently used as an at-grade car park known as P6d.

Figure 1 Aerial photo of site

Source: Near Maps and Ethos Urban

2.0 Design Competition Process

2.1 Process Guidelines

The design competition process was developed having regard to:

- The Sydney Olympic Park Authority Draft Competition Brief and Guidelines: Sites 2A and 2B Sydney Olympic Park Design Competition Brief prepared by the Authority (July 2014);
- The SOP Master Plan (2018 Review) – Requirements for Design Competition Processes;
- SOPA's Design Excellence Policy (July 2017); and
- Model Conditions for an Architectural Competition (February 2016) prepared by the Australian Institute of Architects (AIA).

2.2 Competitor Shortlisting

The Proponent established the following criteria for the selection of a long list of 10 architectural firms:

- demonstrated recent experience in the design and delivery of projects of a similar scale and typology;
- specific experience in the design and construction of hotels and short stay accommodation;
- internal resources to commence immediately and deliver DA and CC documentation within the required timeframe;
- strong design appreciation of urban context and public domain;
- an appreciation and understanding of the Olympic Park market;
- brand consistency with the Ecove brand and positioning; and
- willingness and capacity to undertake the design competition.

The following four (4) competitors were interviewed and invited to participate in the competition as the Proponent considered them to best meet the provided criteria and as capable of delivering a project that meets the design excellence requirements.

- Bates Smart
- Fitzpatrick + Partners
- WMK
- Woods Bagot

The four firms accepted the Proponent's invitation to participate in the Design Competition and the conditions set out in the Design Competition Brief. Each firm selected its own landscape architect to partner with.

- Bates Smart partnered with Turf Studios
- Fitzpatrick + Partners partnered with Arcadia Landscape Architecture
- WMK partnered with Aspect Studios
- Woods Bagot partnered with 360°

2.3 The Competition Brief

The architectural design competition was undertaken in accordance with the Design Competition Brief prepared by Ethos Urban on 2 July 2018 endorsed by the Sydney Olympic Park Authority 2 July 2018. A copy of the brief is attached at **Appendix A**.

2.4 Competition Jury

The Jury comprises of five individuals representative of the public interest with recognised expertise in design and construction with equal representation of the Proponent and the Sydney Olympic Park Authority (SOPA). The Chair of the Jury is the Government Architect or his nominee. The Jury comprises the following individuals:

- Lee Hillam, Principal Design Advisor GANSW + Co-Director, Dunn & Hillam Architects (GANSW appointed Chair of the jury);
- Caroline Pidcock, Director, PIDCOCK – Architecture + Sustainability (SOPA nominated juror);
- Michael Harrison, Urban Design and Planning Director, Architectus (SOPA nominated juror);
- Matthew Pullinger, Matthew Pullinger Architect (Proponent nominated juror); and
- Chris Procter, Director of Design, Ethos Urban (Proponent nominated juror).

The Jury was subject to the obligations as outlined in Section 4.4.1 of the Design Brief.

2.5 Competition Convenor and Administration

Ethos Urban was the Competition Convenor and used its propriety online tool (www.designcomp.com.au) to manage the competition process in a fair and transparent manner.

2.6 Technical Advisors

The technical advisors were:

- Ethos Urban – Planning
- Van der Meer Consulting – Structural
- RLB – Quantity Surveyors

The Proponent also sought the views of the prospective hotel operator - Intercontinental Hotel Group (IHG).

2.7 Observers

The Department of Planning & Environment is the consent authority for the proposed development and the Sydney Olympic Park Authority is the land owner. While members of these organisations were not able to participate in the Jury or its deliberations, they were invited as observers to oversee the competition. The observers were as follows:

- David Glasgow, Town Planner (DPE)
- Ben Woods, Director, Property Development (SOPA)
- Sally Hamilton, Director, Planning (SOPA)
- Alix Carpenter, Senior Manager, Planning (SOPA)
- Catherine Modini, Development Manager (SOPA)
- Dylan Sargent, Urban Planner (SOPA)

2.8 Competition Chronology

The timeframe for the competition process is outlined in **Table 1** below.

Table 1 Competition Timeline

Week	Key dates	Title	Key Actions
0	2 July 2018	Issue of Competition Brief	Competition Brief circulated to competitors
1	9 July 2018	Site visit and initial briefing	Briefing session and site visit
3	23 July 2018	Mid-point check-in	Competitors had the opportunity to meet competition convenor and ask questions/receive clarifications
4	31 July 2018	Structural engineering session	Competitors had the opportunity to meet with the Structural Engineers and ask questions/receive clarifications
5	6 August 2018	Final submissions due	Competitors submitted final scheme to competition convenor in accordance with competition brief
6	15 August 2018	Presentation material due	Competitors submitted their presentation material for review
6	17 August 2018	Feedback provided about presentation material	Competition Convenor provided feedback on the presentation material
7	20 August 2018	Presentation of final schemes	Competitors to present with Jury deliberation

3.0 Overview of the Four Schemes

3.1 Bates Smart (with Turf Studios)

The scheme sought to create three towers with an urban plaza which retains the current levels around the existing fig tree.

Site 2A comprises a connected pair of symmetrical tower buildings with a 29-storey northern building and a 25-storey southern building. The northern building accommodates a hotel and the southern building accommodates commercial offices. A centrally located amenities deck with a large viewing portal through to the sky, includes the pool, gym and bar associated with the hotel functions but potentially available to the office inhabitants.

Site 2B comprises a 28-storey tower with an 8-storey podium containing commercial office with serviced apartments above. The Bates Smart scheme proposes the creation of an urban plaza with the retention of the fig tree at its existing level to the north of the site and a higher level public domain with a small commercial pavilion to the south part of the site.

The extension of Dawn Fraser Avenue is proposed as being a connected vehicular accessible street.

Figure 2 Bates Smart Ground Plane

Figure 3 Bates Smart Scheme

3.2 Fitzpatrick + Partners (with Arcadia Landscape Architecture)

The scheme sought to create a single taller tower on Site 2A and a lower commercial building on Site 2B with an at grade urban plaza dependent on raising the fig tree to street level.

Site 2A is comprised of a 37-storey circular tower accommodating a hotel and serviced apartments.

Site 2B comprises of a 13-storey entirely commercial building spanning across the existing railway corridor. The ground floor of the commercial building on Site 2B proposes an at-grade 'market hall' for retail and dining integrated with the urban plaza. The proposed at-grade urban plaza relies on raising the existing fig tree to street level.

An extension of Dawn Fraser Avenue capable of accommodating vehicle movement is not proposed.

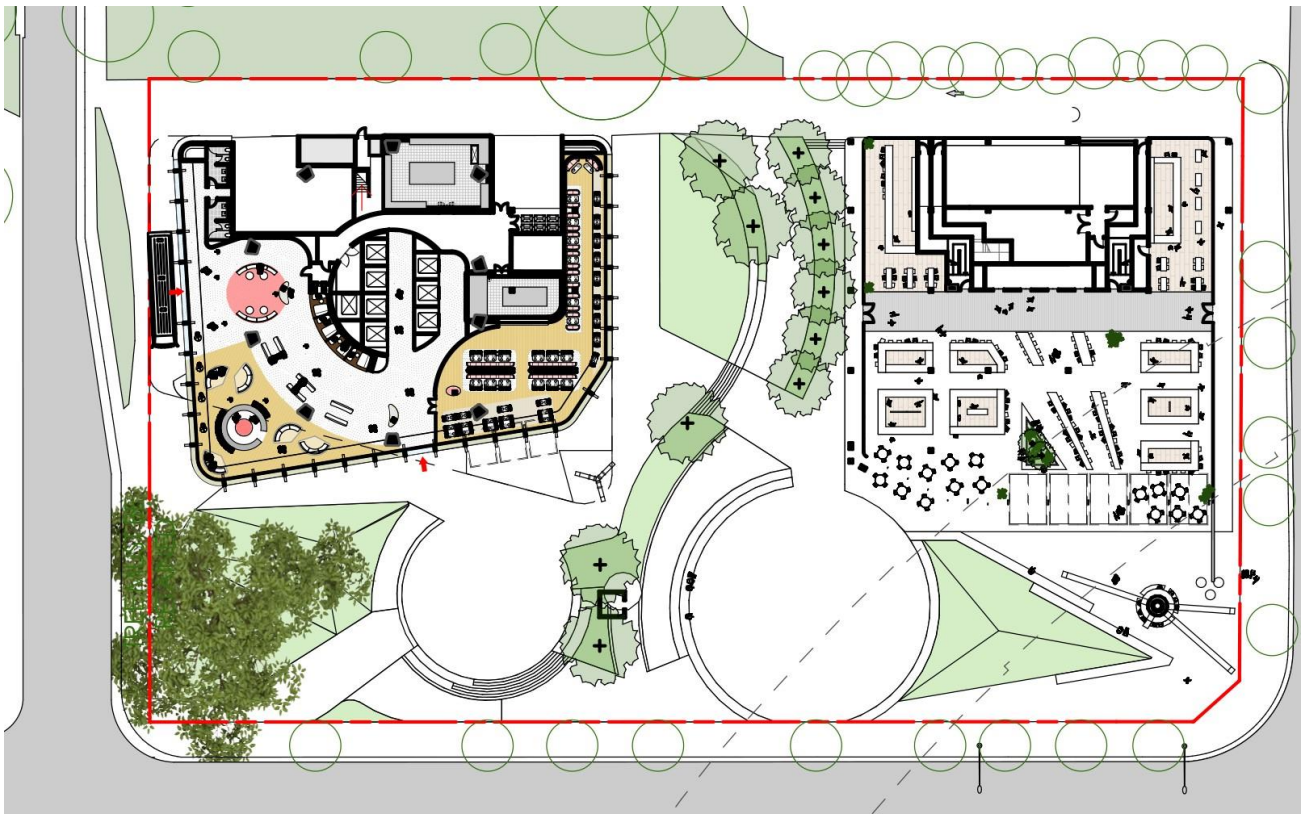

Figure 4 Fitzpatrick + Partners Ground Plane

Figure 5 Fitzpatrick + Partners Scheme

3.3 WMK (with Aspect Studios)

The scheme sought to create a hotel/serviced apartment tower on Site 2A and an entirely commercial building on Site 2B, with an at-grade urban plaza and shared street extension of Dawn Fraser Avenue, which retains the fig tree at its existing level.

Site 2A comprises of a 31-storey tower accommodating a hotel and serviced apartments.

Site 2B comprises of a 17-storey entirely commercial building.

Figure 6 WMK Ground Plane

Figure 7 WMK Scheme

3.4 Woods Bagot (with 360º)

The scheme sought to create a hotel/serviced apartment tower on Site 2A and an entirely commercial building on Site 2B and extension of Dawn Fraser Avenue as a shared street. The proposed at grade urban plaza relies on raising the existing fig tree to street level.

Site 2A comprises a 36 storey tower accommodating a hotel and serviced apartments.

Site 2B comprises a 21 storey entirely commercial building.

Figure 8 Woods Bagot Ground Plane

Figure 9 Woods Bagot Scheme

4.0 Jury Assessment and Deliberation

4.1 Technical Assessments

The Jury had the benefit of the following technical assessments:

4.1.1 Town Planning

In accordance with Section 4.7 Technical Advisors and Observers of the Brief, Ethos Urban provided a high level technical planning assessment for each of the final submissions (**Appendix B**).

The key issues with the schemes in relation to the State Environmental Planning Policy (State Significant Precincts) 2005 include:

- **Height:** The maximum building height for the site is 102m. The proposed towers on Site 2A in the Fitzpatrick + Partners, WMK and Woods Bagot schemes each exceed the maximum building height development standard, whilst all schemes comply with the 102m maximum building height on Site 2B.
- **Floor Space Ratio**: The maximum FSR is 5.5:1 plus a 10% bonus for design excellence, resulting in a total FSR of 6.05:1. All schemes comply with the FSR maximum (plus 10% bonus) apart from the Fitzpatrick + Partners scheme which provided a minor variation to FSR at 6.09:1.

The key issues with the schemes in relation to the Master Plan (2018 Review):

- **Height (tower):** The maximum storey height control is 30 storeys. The Fitzpatrick + Partners, WMK and Woods Bagot schemes each exceeded 30 storeys on Site 2A. All of the schemes comply with the 30 storeys on Site 2B.
- **Height (podium)**: The podium height control is a 5-8 storey block edge podium. All of the schemes for Site 2A and 2B are non-compliant with the podium height control with the exception of the podium in the Bates Smart scheme for Site 2B.
- **Tower Setback**: The tower is required to be setback 2m above 6 storeys. All of the schemes are non-compliant with the tower setback control noting that most of the schemes do not provide podiums.
- **Public Domain**: A double height active frontage with a minimum height of 8m is required. The only entirely compliant scheme is Woods Bagot, the remainder of the schemes provided a range between single and double height storey active frontages.
- **Building Zones:** The building zones are provided in Figure 4.42 of the Master Plan (2018 Review), noting the location of the railway corridor. All of the schemes comply with the building zone of Site 2A and Fitzpatrick + Partners is non-compliant with the 2B building zone with the building spanning across the existing railway line easement to the southern corner of the site. WMK is also non-compliant with building of Site 2B encroaching into the air space above the building footprint.
- **Tower Footprints**: The control for the maximum tower footprints is 900m^2. The schemes provide the following:
    - Bates Smart: Site 2A (North tower) 464m^2- (South tower) 470m^2; Site 2B 777m^2-839m^2
    - Fitzpatrick + Partners: Site 2A 400m^2-758m^2; Site 2B* 1,127m^2-1,631m^2
    - WMK: Site 2A 450m^2-1,112m^2; Site 2B 645m^2-1,115m^2
    - Woods Bagot: Site 2A 560m^2-1,109m^2; Site 2B 694m^2-795m^2

* Given building is only 13 storeys in height may not be considered a “tower”

4.1.2 Structural Engineering

In accordance with Section 4.7 Technical Advisors and Observers of the Brief, Van der Meer Consulting provided a high level structural engineering assessment for each of the final submissions (**Appendix C**). The Fitzpatrick + Partners scheme presented the most resolved scheme in terms of structural engineering, whilst the remaining schemes required further resolution of transfer zones and structural stability.

4.1.3 Functional Brief

In accordance with Section 4.7 Technical Advisors and Observers of the Brief, the Proponent in consultation with Intercontinental Hotel Group provided a high level assessment for each of the final submissions in accordance with the functional brief (**Appendix D**).

4.1.4 Quantity Surveying

In accordance with Section 5.2.5 of the Brief, Rider Levett Bucknall provided cost estimates for each of the final submissions (**Appendix E**). No scheme in the form presented in its final submission met the construction budget of $216 million as prescribed in Section 5.2.5 of the Brief.

4.2 Jury Deliberation

4.2.1 Key considerations

The Jury's assessment was based on the written material supplied by the competitors (including drawings and models), as well as presentations provided to the Jury on 20 August 2018. Consideration was given to the various objectives of the competition brief i.e. - planning, urban response, commercial, sustainability, innovation, social amenity and access, as well as the specific requirements of the functional brief such as cost, buildability and operational efficiency. In general, the Objectives of Better Placed: An integrated design policy for the built environment of New South Wales are key considerations.

The Better Placed Objectives are:

- Better Fit: contextual, local and of its place;
- Better Performance: sustainable, adaptable and durable;
- Better for Community; inclusive, connected and diverse;
- Better for People: safe, comfortable and liveable;
- Better working; functional, efficient and for for purpose;
- Better Value: creating and adding value; and
- Better Look and Feel; engaging, inviting and attractive.

Specific areas for consideration by the Jury were:

- built form and urban context, specifically the relationship of the tower on Site 2A with the key axis along Dawn Fraser Avenue;
- the design and functionality of the public domain;
- environmental sustainability, especially the strong preference for natural ventilation within the hotel and serviced apartments;
- ability of the hotel to achieve a minimum 4-star rating and commercial office is to achieve a minimum 5-star rating in accordance with the Green Star – Design & As Built Submission Guidelines document development by the Green Building Code of Australia;
- the treatment of the existing fig tree at the corner of Australia Avenue and Murray Avenue; and

- the functionality, operation, efficiency and arrangement of the various components of the required land use program.

The Jury noted that all the schemes (with the exception of WMK Site 2B building) indicated the ability for the hotel to achieve a minimum 4-star rating and the commercial office to achieve a minimum 5-star rating in accordance with the Green Star – Design & As Built Submission Guidelines document development by the Green Building Code of Australia.

Key components of each scheme and a summary of the Jury's assessment of the schemes is provided below.

Bates Smart

The Jury noted that the scheme is consistent with the maximum floor space ratio and building height development standards applying to the site and upholds the building usage demonstrated by the reference scheme. The proposal has incorporated the extension of Dawn Fraser Avenue as a vehicular accessible street with on-street parking, being consistent with the Sydney Olympic Park Master Plan (2018 Review). The Jury noted that extension of Dawn Fraser Avenue has the ability to be amended to be configured as a shared way.

It was further noted by the Jury that the hotel floor plates could result in potential operational inefficiencies. Also, the location of the hotel porte cochere and entrance from the Service Lane may not be optimal, given the Service Lane is a secondary road frontage.

The Jury noted the interesting rationale of the urban plaza retaining the fig tree at the existing level and commended the design response to such a configuration. In addition, the design of the urban plaza for Site 2A has respected the curtilage of the fig tree by retaining the fig tree at its existing level, creating some intimacy in the context of Sydney Olympic Park, which is much more open and grand in scale. However, the Jury made general comment about the separation of this low level garden in this location, given the relationship to Jacaranda Park and lack of visibility from the train station and surrounding streets. In general, the Jury commended the landscape approach which proposed a number of interesting strategies for dealing with a complex site condition.

The Jury noted the clear axial relationship between the paired towers and Olympic Park station, but also noted that the decision to split the tower created significant operational and cost penalties for relatively little public and urban design benefit due to a less clear approach to that split at ground level.

The Jury noted that construction cost could be refined in the detailed design phase and reduced to be consistent with the estimate construction cost.

The Jury queried the hotel uses located on the hotel amenities deck given the potential for turbulent wind conditions. In addition, the Jury noted that the pair of symmetrical tower buildings on Site 2A creates façades with a significant surface area.

This scheme aligns with the arrangement of functions outlined in reference scheme and is compliant on FSR and height. However, the proposal to create a break through the built form along the axis from the train station was not well resolved at the ground plane and the costs associated with the extra façades required by having three towers were seen as problematic. The decision to keep the Site 2B tower equal in height to the Site 2A tower missed an opportunity to deal with the different context of each site. The landscape proposal was thought to be of a high standard and containing many interesting ideas.

Fitzpatrick + Partners

The Jury commended the circular tower form and the outstanding commercial building with the 'market hall' on ground floor being integrated with the urban plaza. The Jury noted that the circular tower form reduces the façade area and minimises the extent of overshadowing.

The Jury noted the urban response of a taller, slim, circular tower was particularly appropriate to the immediate context of the established built form along Murray Rose Avenue and Dawn Fraser Avenue, defining Jacaranda Square, and the axial relationship to Olympic Park Station.

The Jury noted that the proposed integration of the hotel and the serviced apartments could result in operational efficiencies and was a logical combination of uses. The lobby will need further refinement to effectively address each entity. The Jury commented on the layouts of a number of the serviced apartments which will need to be

resolved. The configuration and aspect of the roof level and potential for its orientation should be modified to maximise views from the pool and bar. The Jury queried the tower facade and discussed the opportunities to further refine the facade and to improve environmental performance to the rooms - solar shading, glare and natural ventilation. The Jury noted that the architect proposed relatively clear glazing (compared to adjacent buildings) and this should be preserved in the evolution of the design.

The location of the porte cochere design fronting Murray Rose Avenue was supported by the Jury however the levels and presentation to the street would require further refinement.

The Jury commended the design of the commercial building in particular the ground floor spanning over the railway corridor creating a 'market hall' which integrates well with the urban plaza. The Jury noted that the ground floor has the ability to be used for multiple purposes including a unique destination for residential, visitors and workers. In particular the jury noted that the 'market hall' will be an attractive destination within close proximity to the future Metro station. The Jury commented on the proposed built form of the commercial building on Site 2B reducing impacts including overshadowing on the adjoining buildings and increasing separation between the adjoining residential building at 9 to 11 Australia Avenue.

The Jury commended use of cross laminated timber (CLT) for the commercial building to achieve a positive environmental outcome.

The Jury raised concern that the landscape design response did not appear to respond to the architectural proposal or the existing urban context of the Sydney Olympic Park. The proposed urban plaza and public domain does not provide a connected vehicular-accessible extension of Dawn Fraser Avenue. The Jury queried the lack of provision of trees within the urban plaza. The landscape shade structure was recognised, however the location of the shade structure within the envisaged extension of Dawn Fraser Avenue was queried.

The Jury noted that it was unclear whether the raising of the fig tree would be feasible and were concerned that raising the tree presents a risk to the life and health of the tree. The Jury noted that landscape design could be adapted to retain the tree at its existing level.

The Jury concluded that overall scheme would positively contribute to the urban context of Sydney Olympic Park and proposed the clearest urban design response. Providing an innovative circular landmark tower at an appropriate location and an outstanding commercial response with the creation of a ground floor 'market hall' which integrates well with the urban plaza. Please see Section 4.3 for further detail.

WMK

The Jury commended the overall detail and layout of the hotel and serviced apartments which showed clear expertise in hotel design. Furthermore, the hotel rooms of the tower were superior in design, layout and configuration. In addition, the public realm design of the urban plaza was commended, in particular the response to retaining the fig tree at its existing level by creating a 'journey' with the use of the spiral walkway between the existing street and the base of the tree.

The Jury noted the proposed integration of the hotel and the serviced apartments could result in operational efficiencies and was a logical combination of uses. The Jury queried the retail fronting the Service Lane and the future development to the east which may affect the success of retail in this location.

The Jury queried the highly modelled and varied facade treatments and 'aggregated' nature of the built form evident in the 2A tower, and advised that the tower could be viewed as being less consistent with the prevailing urban form of this part of Sydney Olympic Park.

The Jury commented on the innovative stepping design of the commercial building above the railway corridor that results in incremental increases in the floor plates and a visually interesting facade. The Jury noted however, that the environmental performance and general design of the commercial building is unresolved and would require substantial refinement.

The Jury noted that the proposed shared way is a positive response for the extension of Dawn Fraser Avenue.

This proposal demonstrated a high level of sophistication and understanding in the operation of a hotel however, it was discussed that the composition of the buildings and the resolution of the commercial building generally were less well resolved. The Jury further noted that the landscape response design by Aspect Studios was the most successfully resolved landscape design of all four entries, providing a superior urban plaza and public realm solution for the site.

Woods Bagot

The Jury commented on the proposed chamfering of the built form for both buildings in that it was an innovative response to reduce bulk and scale and protect solar access to public domain areas. The Jury noted that the proposed integration of the hotel and the serviced apartments could result in operational efficiencies and was a logical combination of uses.

The Jury noted that the facade design would need significant ongoing refinement and resolution to convincingly translate the design intent conveyed in the photomontages to an economic and efficient construction system. Furthermore, the Jury noted the facade design of the tower proposes many ledges and shelves and therefore could create ongoing maintenance issues.

The Jury considered that the overall architectural similarity and 'paired language' of the two proposed buildings was a less compelling urban design response for the site and within the context of Sydney Olympic Park.

The Jury noted that the location and configuration of the porte cochere with the creation of isolated piece of land to the north is unusual and unresolved. The lobby is unresolved with a single reception area.

The Jury commended the design of the landscape and public domain and advised that the design of the urban plaza is positive by restoring the street by raising the level. The Jury noted that should the raising of the tree not be feasible, the design can be adapted to retain the tree at its existing level. The design of the public domain proposes to configure Dawn Fraser as a vehicular street and has the ability to be designed as a shared way to be incorporated into the urban plaza.

This proposal demonstrates an interesting and sculptural approach to the facades and a sensitive proposal to solar access to the public domain. In general this was a good submission with many positive attributes however by comparison with the winning scheme lacked the innovation and contextual response of the winning scheme.

Commonalities

The Jury agreed that combining the hotel and the serviced apartments within one building, as proposed by the Fitzpatrick + Partners, WMK and Woods Bagot schemes led to significant operational efficiencies.

The jury discussed the non-compliance (to varying degrees) with the maximum building height control for Site 2A, as proposed in the Fitzpatrick + Partners, WMK and Woods Bagot schemes. The Jury unanimously concluded that a taller building on Site 2A paired with a shorter building on Site 2B presented opportunities for a far superior urban design outcome than two, more equivalent, buildings of the same or similar height. The schemes then presented a tower on Site 2A that breached the height while the building on Site 2B was significantly shorter than the maximum building height. This urban planning design decision has benefits with respect to reduced overshadowing impacts to the adjoining residential building, aligning the height if the Site 2B building with existing buildings on Murray Rose Avenue and Australia Avenue, promoting Site 2A as the most suitable for a landmark building and creating a superior building separation.

4.3 The Winning Scheme

The Jury selected the Fitzpatrick + Partners' scheme as the Competition Winner, subject to several required refinements. The Jury was unanimous in its decision for the following reasons:

- The innovative slender circular tower form on Site 2A was the superior urban design response, and along with the interesting tessellated façade design will create a landmark building for this important axial site;
- The integration of the hotel and serviced apartments into the tower results in operational efficiencies;

- The creation of an innovative commercial building providing cross laminated timber construction that spans over the railway corridor provides larger floor plates and therefore a lower building height. Whilst also providing a unique destination 'market hall' on ground floor that integrates well with the urban plaza;
- The inclusion of cross laminated timber technology in the commercial building and the innovative approach to the façade both contribute to the ability of this development to be a successful sustainable development.
- The distribution of building height and a slender tower form together with a lower commercial building provides a superior building separation outcome with reduced overshadowing impacts; and
- The scheme indicated the ability to achieve a minimum 4-star rating and commercial office and to achieve a minimum 5-star rating in accordance with the Green Star – Design & As Built Submission Guidelines document development by the Green Building Code of Australia.

These attributes of the scheme should be retained and if possible enhanced and improved through the design development process. The loss of any of these attributes without the justification to and the approval of the Design Review Panel would be damaging to the status of this project as the winning scheme.

The Jury identified a range of matters that will need to be resolved during the design development phase of the project to ensure the design adequately responds to the principles of design excellence, whilst maintaining the original design intent. These matters are outlined below.

Facade

Given the strong, singular cylindrical form provided by the tower, the success of the proposal will rely on the quality and refinement of the facade modules. The regular facade modules should be developed to better acknowledge and respond to the various compass points and the changing environmental conditions experienced in each orientation. Detailed 1:50 facade drawings should be submitted showing the details of the facade treatment. The glass for the facades for both buildings should be as transparent as possible.

Hotel and Serviced Apartments

The room layouts require improvement, noting there should be no snorkel rooms proposed in the serviced apartments. A 'key-hole' exterior window for each level should be provided to ensure orientation and views from the corridor to the outside. The lobbies and entry to the hotel and serviced apartments requires some level of resolution to allow the functions to operate separately if necessary. Investigate opportunities for the introduction of balconies for the serviced apartments and natural ventilation/openable windows for the hotel rooms and serviced apartments.

Extension of Dawn Fraser Avenue

The design of the public realm must allow for the extension of Dawn Fraser Avenue in an appropriate form, better suited to the precinct, the site and definition of the urban plaza. Further detail for the accommodation of the street is required. The Jury does not support the current configuration of the public realm in this part of the site.

Landscape Design and Public Domain

The Jury has significant concerns regarding the current proposed landscape design and public domain plan, which should be substantially revised. The Jury are concerned that raising the tree presents a risk to the life or general robustness and health of the fig tree and therefore it must be shown that the result of raising the tree is markedly better than anything that could be achieved by leaving it in place.

Roof

Through the development of the design the Jury can see potential for improvements to solar access and views from the pool and bar.

Porte Cochere

The levels of the porte cochere should be further investigated and refined to improve street presentation and access.

Solar Access

The impacts of off site overshadowing should be investigated, particularly in relation to the adjoining residential building to the south and Jacaranda Park. A comparison should also be made as to the shadowing impacts created by the building envelopes defined in the SOPA Master Plan (Review 2018).

Floor Space Ratio

With respect to the resolution of all issues listed above, the proposed design could achieve design excellence and as such the full floor space bonus of 10% can be expected to be awarded subject to assessment by the NSW Department of Planning and Environment as part of a State Significant Development application.

It is noted that the scheme has a minor non-compliance with the maximum floor space ratio of 6.05:1 inclusive of the 10% design excellent bonus representing less than a 1% variation. The non-compliance can be reviewed and resolved to comply in the detailed design phase.

Environmental Sustainability

The scheme states the ability for it to achieve a minimum 4-star rating for the hotel and a minimum 5-star rating for the commercial office in accordance with the Green Star – Design & As Built Submission Guidelines document development by the Green Building Code of Australia. The Jury would encourage the proponent of the scheme to be ambitious with the environmental performance especially given the suitability of the proposal to achieve a high standard, and the improved user amenity that can be associated with natural ventilation and light.

Height

The proposed building height of the tower on Site 2A is considered acceptable in this instance by the Jury on account of its prominent location within Sydney Olympic Park that supports a landmark tower. It is assumed by the Jury that the additional height is created by the reduction of the footprint of the tower as the FSR is proposed as only a very small amount over the maximum. The height has a 25 metre or 24% non-compliance, being 25m over the maximum building height. The decision to adopt a slender profile will have benefits to the overshadowing impacts on the surrounding sites. Furthermore, the urban design and amenity benefits of a significantly lower building on Site 2B that offsets the increased building height of the Site 2A tower was commended and supported by the Jury.

The Jury noted that the proposed Site 2A tower building height would require a variation to the 102m maximum building height development standard applying to the site as part of a State Significant Development application. This would therefore be subject to the assessment and approval by the NSW Department of Planning and Environment.

Recommendation to Progress

Subject to the following matters being resolved by the winning competitor, the proposed design is considered to achieve design excellence.

1. The development of the façade to respond to the constraints and opportunities presented by different aspects of the northern, eastern, western and southern aspects.
2. Inclusion of an outlook to the outside from the lift foyer on each floor.
3. Development of the individual room layouts for the hotel rooms demonstrating good light and preferably the ability to have natural ventilation to all habitable spaces.
4. Development of the landscape and public domain to consider:
    - The extension of Dawn Fraser Avenue;
    - Logical articulation of landscape design strategies, a clear contextual response and an increase in the proposed tree coverage; and
    - An alternative design resolution for the public domain, should it prove unfeasible or undesirable to raise the existing fig tree.

5. The non-compliance on FSR should be amended through the design development. The Jury do not support the non-compliance on FSR given that the proposal is also significantly non-compliant on height.

6. The non-compliance on height should be analysed in terms of the shadowing impact of the extra height. It is understood that to achieve the allowable FSR the designers might otherwise adopt a less slender building, and that this is not supported by the Jury. Therefore, the shadow analysis is to show that the extra 'reach' of the proposed building shadow does not impact adversely on surrounding public domain or the ability for residential buildings to achieve minimum solar access compliance under the ADG. The issue of height should be resolved by the SOPA Design Review Panel prior to submission of the State Significant Development application to DPE.

The revised scheme shall be presented to the Sydney Olympic Park Authority Design Review Panel until such time as the matters above have been satisfactorily resolved. The Design Review Panel should contain at least one member of the competition Jury.

4.4 Summary

The four detailed and comprehensive architectural schemes were considered by the Jury in the process of the design competition. Each individual scheme provided a unique and compelling response to the Competition Brief provided by the Proponent, with each competitor providing a high-quality written submission and presentation.

This design competition has been carried out in a professional and thorough manner in accordance with the Brief. This Architectural Design Competition Report provides an overview of the design alternatives presented and confirm the Jury's recommendation of Fitzpatrick + Partners as the successful architect. The Jury considers that subject to the recommendations outlined in this report and further design development the Fitzpatrick + Partners scheme is capable of demonstrating design excellence.

Overall, the significant efforts made by all competitors are recognised and the Jury, SOPA and the Proponent wishes to thank Bates Smart, Fitzpatrick + Partners, WMK and Woods Bagot for their participation.

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APPENDIX A

Site 2 Australia Avenue, Sydney Olympic Park Architectural Design Competition Brief

Ecove Group

Site 2 Australia Avenue, Sydney Olympic Park
Architectural Design Competition
Brief and Conditions

Prepared by Ethos Urban on behalf of Ecove Group
4 July 2018 | Version 8.0

Contents

Contents

Figures

Appendices

1.0 Introduction

1.1 Overview

Ecove Group (Ecove) are facilitating an architectural design competition as a precursor to the development of the Site 2A and Site 2B Australia Avenue, Sydney Olympic Park (the site). The design competition is being undertaken to demonstrate ***design excellence*** in accordance with *State Environmental Planning Policy (State Significant Precincts) 2005*. Should the winning proposal be deemed to exhibit design excellence through this process, the relevant planning controls allow for a 10% bonus in the maximum floorspace ratio for the site.

This competition is 'invitation' only and participation is limited to four (4) participants who have been selected by Ecove in consultation with the SOPA Design Review Panel. A letter outlining the architect selection process, dated 4 June 2018 has been provided to SOPA. The letter was accompanied by the capability statements of the four (4) architecture firms that are being invited to participate in the design competition for consideration and endorsement by the SOPA Design Review Panel.

The competition has also been commissioned as required in Figure 4.6 Design Competition Sites Plan in Section 4.0 General Controls and Guidelines in accordance with the requirements of the Sydney Olympic Park Master Plan 2030 (2018 Review).

This competition brief has been endorsed by SOPA's Director, Environment and Planning based on:

- the *Sydney Olympic Park Authority Draft Competition Brief and Guidelines: Sites 2A and 2B Sydney Olympic Park Design Competition Brief* prepared by the Authority (July 2014);
- the SOP Master Plan (2018 Review) – Requirements for Design Competition Processes;
- SOPA's Design Excellence Policy (July 2017); and
- Model Conditions for an Architectural Competition (February 2016) prepared by the Australian Institute of Architects (AIA).

1.2 The Project Opportunity

The vision for the site is to establish a 46,652m² (inclusive of the 10% design excellence floor space ratio bonus) high-quality hotel, serviced apartments, commercial and retail precinct that supports the evolution of Sydney Olympic Park as a major, world-class, event destination and as a significant employment and residential precinct within the Sydney metropolitan area. The breakdown of the proposed land uses and gross floor area (inclusive of the design excellence bonus) is provided below.

Site	Proposed Land Uses	Proposed Gross Floor Area (including break down of design excellence bonus)
2A	Mixed Commercial comprising of a hotel and office area (strata suites) and 150 space public carpark dedicated to SOPA	Permissible GFA: 22,665.5m^2 (FSR 5.5:1) 10% Design Excellence GFA: 2,266.5m^2 Total: 24,932m^2 (FSR 6.05:1 inclusive of 10% Design Excellence FSR)
2B	Mixed Commercial comprising of retail floor space, offices, a child care centre and serviced apartments	Permissible GFA: 19,745m^2 10% Design Excellence GFA: 1,975m^2 Total:21,720m^2 (FSR 6.05:1 inclusive of 10% Design Excellence FSR)

The proposed development will also provide the extension of the Dawn Fraser Avenue east of Australia Avenue to dissect the site and connect with a new service street also to be constructed. This will create a large, activated plaza within the frontage to Australia Avenue.

1.3 Sydney Olympic Park Authority

The Sydney Olympic Park Authority is responsible for managing and developing the 640 hectares that comprise Sydney Olympic Park and maintain it as a lasting legacy for the people of New South Wales. The legislative and

statutory regime related to the future of Sydney Olympic Park seeks to create a new town with the following principal roles, namely: as a premium destination for cultural, entertainment, recreation and sporting events; and as an active and vibrant town centre within metropolitan Sydney.

In this context, the vision is for Sydney Olympic Park to become an internationally recognised example of intelligent place-making, a dynamic and diverse township for living, working, learning, and recreation, and a place for all people, set within a world class built and natural environment.

1.4 The Proponent

The Proponent for the competition, Ecove, executed a Project Delivery Agreement (PDA) with the Authority on 22 May 2018. Ecove has undertaken a number of projects within Sydney Olympic Park including Australia Towers (Site 3), the soon to be completed Opal Tower (Site 68) and Boomerang Tower (Site 9) which is currently under construction. Ecove's goal through the design competition is to bring its quality workmanship and practical designs to create high quality spaces for future tenants, guests and visitors.

The Proponent is Ecove:
Ecove Group Pty Ltd
Level 1, 3 Australia Avenue
Sydney Olympic Park NSW 2127

2.0 The Site

2.1 Site Location and Context

This significant and highly prominent site is located on the eastern side of Australia Avenue in Sydney Olympic Park and is located between Murray Rose Avenue (bounding the site to the north) and Parkview Drive (bounding the site to the south), as shown in **Figures 1** and **2**. The site is in the eastern portion of Sydney Olympic Park, within the Parkview Precinct and on the border of the Central Precinct. Jacaranda Square is located directly opposite the site on the western side of Australia Avenue with Sydney Olympic Park Station located approximately 150m west of the site. Sydney Showgrounds is located diagonally adjacent to the site to the north west.

The site is currently used as an at grade car park known as P6d. Vehicle access is currently provided from Murray Rose Drive and Parkview Drive and pedestrian access is provided from all three street frontages. Initially an industrial and commercial area, it is characterised by its proximity and views to the brick pit to the north and Bennelong Parkway to the east. The precinct is being progressively transformed into a high density mixed use neighbourhood with commercial offices, retail and residential uses.

Surrounding the site is a range of commercial, residential, retail and car parking uses of varying ages and architectural styles. Immediately surrounding the site are the following developments:

- To the north: Murray Rose Avenue separates the site from the P6 at grade car park;
- To the west: Australia Avenue separates the site from public open space and eight storey commercial buildings with ground floor retail;
- To the south: Parkview Drive separates the site from a high rise residential tower; and
- To the east: directly adjoining the site is a single storey commercial building with an associated at grade car park.

Bus services also run along Australia Avenue. Australia Avenue and Dawn Fraser Avenue is the preferred route for the future Parramatta Light Rail project. The site will also be within walking distance of a future metro rail station envisaged as part of the Sydney Metro West project.

It is noted that there are no current approvals on the immediately adjacent sites known as Site 61A, Site 61B or Site 66A at this time. However, in the concept design of Site 2 consideration must be given to the future development in form of future building envelopes of sites 61A and 61B for redevelopment for commercial towers (FSR 4.5:1 and height of 33metres) and 66A for redevelopment of residential (FSR 2.2:1 and height of 30metres).

Figure 1 Parkview Precinct Site Boundaries Plan (site is shown in the blue dashed line)

Source: SOPA

Figure 2 Aerial photo of site

Source: Near Maps and Ethos Urban

2.2 Site Conditions

Site boundaries, Topography and Services and Utilities

A site survey plan, existing services plan and contour survey plan (pdf and dwg) are included at **Appendix A**. The combined site (Site 2A and 2B) is rectangular in shape, is legally described as Lot 71 DP 1134933 and is 7,711m² in area. The envisaged subdivision of the site is illustrated at **Figure 3**. Site 2A will be approximately 4,121m^2 and Site 2B approximately 3,590m^2. The site slopes moderately on various angles to the east, with the north eastern corner of the site located significantly below street level. All services are available to the site from surrounding streets, subject to the standard augmentation. No major utility diversions are required.

Contamination

The site does not contain any known contamination. Further investigation of contamination will be undertaken in accordance with State Environmental Planning Policy – 55 Remediation of Land and will form part of the State Significant Development Application.

Flooding

No flooding constraints have been identified for this site.

Vegetation

A Reference Design has been prepared in **Appendix C** showing that vegetation is generally sparse on the site with the at-grade car park accommodating most of the site. The site contains low level planting within the front setback of the Parkview Drive, Australia Avenue and Murray Rose Drive and a significant Moreton Bay Fig tree on the north western corner of the site.

- Trees to be retained:
  - Moreton Bay Fig at the north-western corner of site 2A; and
  - Moreton Bay Fig adjacent to the south-eastern corner of the site.

Heritage

The site is not identified as a heritage item or being within a heritage conservation area.

Rail Corridor

A below ground rail corridor affects the south western corner of the site. Site 2A is not impacted by the rail tunnel and Site 2B is significantly impacted by the rail tunnel. The tunnel specifications for Site 2B (pdf and dwg) are included in **Appendix B**. The details of the rail corridor (including the exclusion zone) are provided in the plans of the corridor (pdf and dwg) and in the Reference Design included at **Appendix B**. Competitors should have regard to the electromagnetic and vibration impacts given the proximity to the rail line.

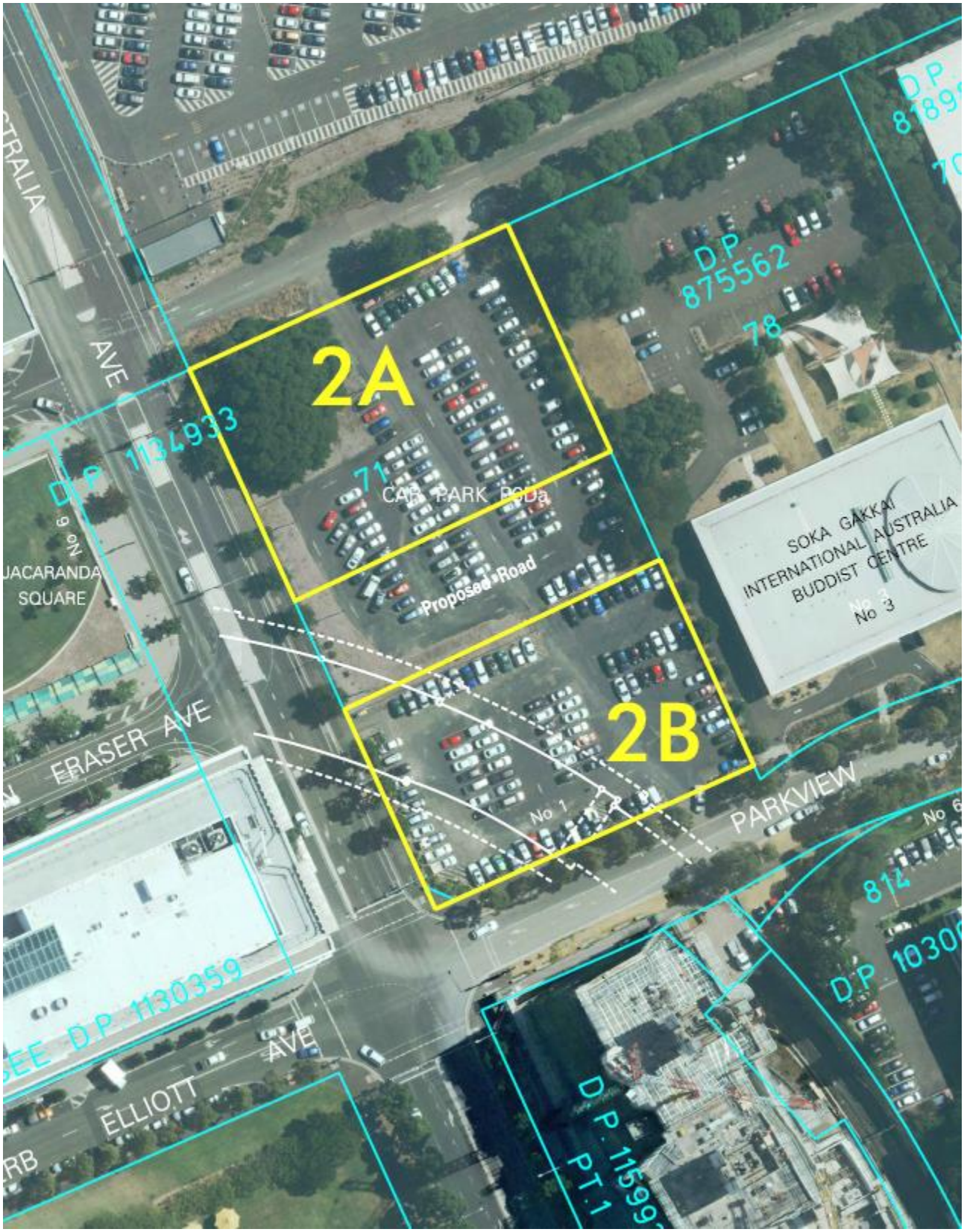


Figure 3 Aerial photo of site showing future site boundaries

Source: SOPA

2.3 Planning Framework

The site is located within Sydney Olympic Park, which is identified under Schedule 2 of SEPP (State and Regional Development) 2011. The project will have a capital investment value in excess of $10 million, therefore it is a State Significant Development (SSD) for the purposes of the *Environmental Planning and Assessment Act 1979* (the Act). Based on the development being SSD, the consent authority is the Minister for Planning.

Schedule 3 of SEPP (State Significant Precincts) 2005 identifies Sydney Olympic Park as a State Significant Precinct and establishes the statutory land use controls for the site. The proposal is for retail, commercial office, hotel, serviced apartments and a child minding service which are permitted uses with consent in the B4 Mixed Use Zone under SEPP (State Significant Precincts) 2005.

The review of Master Plan 2030 (2018 Review), proposes changes to building height and floor space ratios which have been reflected in proposed amendments to SEPP (State Significant Precincts) 2005. These are as follows:

Zoning:	B4 Mixed Use
Building height:	102 metres
Floor space ratio:	5.5:1

Schedule 3 Part 23 of SEPP (State Significant Precincts) 2005 provides the controls applying to the site including the building height.

Figure 4.6 in Master Plan 2030 (2018 Review) identifies Site 2A and 2B as a design competition site (**Figure 4**). If the consent authority is satisfied that the proposed development exhibits design excellence and is based upon the preferred scheme selected through a design competition process, a bonus floor space ratio allocation of up to 10% may be permitted. Therefore, competitors should prepare designs that utilise the full 10% floor space bonus, with the bonus being subject to the design being considered by the jury as achieving design excellence. See below:

Site area*:	7,711m²
GFA (5.5:1):	42,410m²
GFA plus 10%:	**46,652m²**

* Under Master Plan 2030 (2016 Review) new streets that are located on existing sites are included as part of the site area.

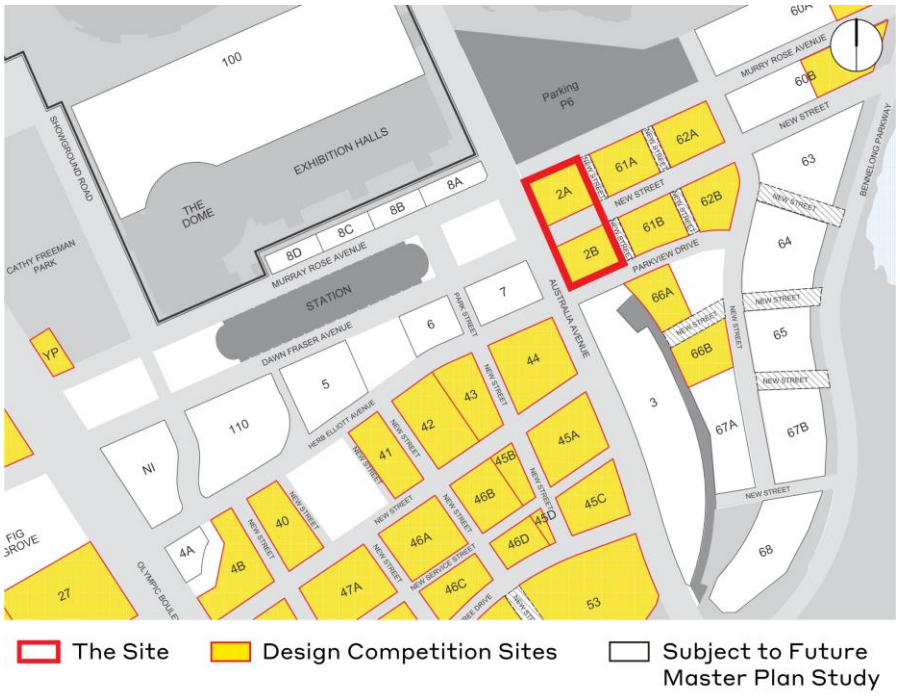


Figure 4 Design Competition Site Plan

Source: SOPA and Ethos Urban

Sydney Olympic Park Master Plan 2030 (2018 Review)

The scheme for Site 2 will be designed using the provisions and standards of the Master Plan 2030 (2018 Review). Site 2 is located within the Parkview Precinct which immediately adjoins the Central Precinct on its eastern side. The description of the precinct is as follows:

> *"Parkview Precinct adjoins Central Precinct. It is defined by Australia Avenue, Bennelong Parkway, the parklands to the east and the Brick pit to the north. Its existing industrial and commercial uses will progressively give way to higher densities and a mix of uses to create a compact urban neighbourhood with a vibrant and leafy street character, with views and outlook over Bicentennial Park and the Brickpit. A network of new streets will transform the precinct into a walkable neighbourhood with good connections to the parklands and Central Precinct. A new north-south street will form the main central spine for Parkview Precinct linking pocket parks and side streets to Brick pit Park at the northern end of the precinct.*
>
> *A new pocket park will be located at the heart of the neighbourhood and, with the landscape setting around developments along the parkland edge, the precinct will have a green, leafy character. A compact area of commercial and hotel uses will occupy the blocks bounded by Australia Avenue, Dawn Fraser Avenue and Murray Rose Avenue, creating a transition to residential uses along the new streets further to the south, a buffer to noise from the showground venues and a link from Central Precinct to the parklands. The area will be characterised by a transition in scale from high rise buildings along Australia Avenue to lower buildings along Bennelong Parkway."*

The key planning controls in the Master Plan 2030 (2018 Review) as they relate to the site are provided at **Appendix D** and also detailed in a planning controls table at **Appendix E**. A brief summary of key design parameters is provided with a diagram at **Figure 5** (also provided in **Appendix A**) indicating ground level requirements. **Figure 5** outlines the key design parameters - if there are any inconsistencies between the Master Plan 2030 (2018 Review) and **Figure 5** (also provided in **Appendix A**), **Figure 5** should prevail.

Any departure from the Master Plan 2030 (2018 Review), **Figure 5** and **Appendix A** should be adequately justified. The detailed design and concept designs should not exceed the Master Plan 2030 (2018 Review) floor space ratio of 6.05:1 equivalent to a gross floor area of 46,652m^2 (5.5:1 inclusive of the 10% design excellence bonus) and building height of 102 metres. We note floor space ratio and building height are development standards contained in SEPP (State Significant Precincts) 2005, thereby any variation would require a Schedule 3 Part 23 clause 22 exemption justification under SEPP (State Significant Precincts) 2005 (ie similar to clause 4.6 of LEPs) during the subsequent SSD application process – which carries inherent risk of not being supported.

Figure 5 Key Design Parameters (ground level)

Source: SOPA

3.0 The Competition Brief

3.1 Objectives

Competition Objectives

- To select a winning architectural design and team for the site through a fair and equitable design excellence competition process.
- To achieve optimum planning, design, social, financial and environmental outcomes, with building development that is balanced with public open space.
- To fulfil the 'Design Excellence' provisions of Master Plan 2030 (2018 Review), which identifies the site as one of the key sites that are to be the subject of a competitive design process, and thus take advantage of the bonus floor space. The Project Delivery Agreement signed between SOPA and Ecove Group does not require the proposed development to achieve compliance with the 6 Star Green – Design & As Built Submission Guidelines in order to achieve design excellence and thus the possible 10% floor space ratio bonus.
- To follow the procedural requirements for design excellence competitions of SOPA's Design Excellence Policy.

Design Objectives

- To positively respond to and address the key design considerations outlined at **Section 3.2**.
- To contribute to the public domain of Sydney Olympic Park with a new vibrant urban plaza and street network.
- To create a premier large activated publicly accessible urban plaza (approximately 4,500m^2) located in the frontage area between the proposed buildings and Australia Avenue which provides a connection to the public transport hub and town centre.
- To retain the existing Moreton Bay Fig tree on the north western corner of the site.
- To maximise opportunities for ecologically sustainable design.

Commercial Objectives

- To produce a commercially viable and iconic accommodation, commercial and retail precinct.
- To achieve the mandatory functional spatial requirements of the future hotel operator (see **Section 3.4** and **Appendix F**.
- To produce a design that meets the construction cost and efficiency targets. As a guide the construction budget for the two towers including demolition and excavation, construction and fit-out (excluding loose furniture) is approximately $216 million (**Appendix G**).
- To optimise construction efficiencies to minimise unforeseen cost and construction delays where possible.

Planning Objectives

- To achieve the bonus floor space and height allowances under the provisions of the Master Plan 2030 (2018 Review).
- To comply with SEPP (State Significant Precincts) 2005 (SEPP SSP 2005), the vision and objectives outlined in Master Plan 2030 (2018 Review) the key controls for which are outlined in **Appendix E.**
- To comply with (or provide satisfactory justification of any non-compliance with) all the relevant planning controls, as identified in **Appendices E** and **F**.
- To ensure consistency with other planning policies and design guidelines such as State Environmental Planning Policy (Infrastructure) 2007 and 'Development near Rail Corridors and Busy Roads – Interim Guideline' (**Appendix B**).

The proposal should be designed to be capable of achieving compliance with the Water Sensitive Urban Design Policy (Available on https://www.sopa.nsw.gov.au/Resource-Centre) , Access Guidelines (Available on https://www.sopa.nsw.gov.au/Resource-Centre) and Urban Element Design Manual (**Appendix B**) as part of the State Significant Development Application.

Sustainability Objectives

- The Project Delivery Agreement signed between SOPA and Ecove Group specifies that the proposed development does not require compliance with the 6 Star Green – Design & As Built Submission Guidelines to achieve design excellence and thus the possible 10% floor space ratio bonus.
- The Project Delivery Agreement specifies that the hotel is to achieve a minimum 4-star rating in accordance with the current version of the Green Star – Design & As Built Submission Guidelines document developed by the Green Building Council of Australia.
- The Project Delivery Agreement specifies that the commercial office is to achieve a minimum 5-star rating in accordance with the current version of the Green Star – Design & As Built Submission Guidelines document developed by the Green Building Council of Australia.

Innovation Objectives

- To create an imaginative, iconic, recognisable and activated architecture and urban design for the site.

Social Amenity Objectives

- To create a premier urban plaza for use by the public and future occupants of the hotel, office, retail and serviced apartments that makes a significant positive contribution to Sydney Olympic Park.

Access Objectives

- To prioritise pedestrians by providing wide footpaths access to transport hubs and major events.
- Provide an integrated public plaza with the ground level plane of the proposed development that achieves the principles of connectivity and placemaking.

3.2 Key Design Considerations

Design Excellence

- Sydney Olympic Park has a legacy of award winning architecture, urban design and landscape architecture established for the Sydney 2000 Olympic Games. They provide a benchmark that the Authority wishes to promote and continue.
- The proposal should consider the design excellence criteria outlined in the brief, including the seven objectives of GANSW's Better Placed, an integrated design policy for the built environment of NSW.

Urban Context

- Strategic location: The site is located on Australia Avenue which is one of the major entry roads into Sydney Olympic Park. While the site sits within the Parkview Precinct, it marks the eastern edge of the Central Precinct – a high density mixed use area at the core of the town centre.
- Master Plan 2030 (2018 Review) envisages a well-defined frontage to Australia Ave. Together with Olympic Boulevard, the eastern frontage of Australia Avenue is best suited for taller development, with slender towers on a continuous street-defining podium.
- The site is also strategically placed along one of the organising axes around which the Town Centre is structured.

The site is at the interface of two distinctive urban conditions, each of which should inform the urban form strategy:

- The 'community axis' – Site 2A will need to respond to and balance the distinctive scale and profile of the railway station as well as creating the fourth frontage to Jacaranda Square. The height and volumes should be balanced against the commercial developments on the Murray Rose and Dawn Fraser frontages.

- The Australia Avenue corridor – which establishes a language of podium and tower forms to define the alignment of this major avenue for both Site 2A and 2B.

Olympic Legacies

- The 'organising axes' – Sites 2A and 2B are bracketed between Dawn Fraser and Murray Rose Avenues which form the major east-west axis connecting parklands to the north east with the Carter Street precinct to the south west. This is a major cross axis to Olympic Boulevard, the grand ceremonial and event axis which forms the main organising spine of the Town Centre. Dawn Fraser and Murray Rose Avenues define a civic spine, with the Railway Station, the Yulang and Jacaranda Square as existing features along this axis with active retail frontages to either side. Dawn Fraser and Murray Rose frontages are scaled to frame these features.
- Sydney Olympic Park Railway Station – The railway station structure, generously scaled to accommodate high volume crowd movements, is one of the striking features of Olympic Park. Its distinctive vaulted profile is at the core of the Town Centre and is directly opposite site 2A. The design response will need to address this relationship, and particularly consider how the development will be framed by and seen from the station.

Industrial legacies (Fig Tree plantings)

- In association with the State Abattoirs which occupied much of Homebush Bay between 1907 and 1988, a grid of fig tree plantings was established in holding paddocks. Many of these figs remain as significant mature trees that shape the landscape character of Sydney Olympic Park. Complementing their significant landscape value is their heritage value which has been widely documented and recognised.
- One fig tree remains on site (at the corner of Australia Avenue and Murray Rose Avenue). Consistent with the above, this must be retained and protected. The design strategy will need to demonstrate and ensure that its health and longevity will not be affected as a result of the development, including factors such as altered drainage regimes, changes in available soil volume or through the construction of underground structures such as car parks.

Public Domain

- Jacaranda Square (opposite side of Australia Avenue) is based on a competition winning design by Aspect Studios and McGregor Westlake Architecture. Jacaranda Square is a well-defined civic space, partially paved with recycled bricks as a reference to the former State Brickworks which were located nearby. Most of the time it provides a passive recreation area for Sydney Olympic Park's working and residential community, but at other times can transform into a Live Site for major events etc.
- Creation of a large, activated outdoor urban plaza located in the frontage area between the proposed buildings and Australia Avenue. The indicative area for the outdoor urban plaza equates to approximately 4,500m^2 however is flexible and subject to design considerations.
- An extension of Dawn Fraser Avenue east of Australia Avenue to dissect the site is to be delivered as per specifications outlined in Master Plan 2030 (Review 2018).
- A new service street along the north eastern boundary of the site (that connects Murray Rose Avenue to Parkview Drive) is to be delivered (50% to be constructed on the site).
- Active street frontages to Dawn Fraser extension, Murray Rose Avenue and Parkview Drive where possible.
- Creation of a high quality outdoor space for use by future occupants of the site and the public by incorporating seating, lawn areas and interesting features.
- Focus of pedestrian priority and provisions of pathways with widths to provide for large influxes of pedestrians and creation of a link between the town centre and the transport.

Landform – Interface Resolution

- There is considerable fall across the site in both a north-south and an east-west direction. Design schemes are to clearly demonstrate how these level changes can be resolved. This will include provision of level and equal access into buildings from surrounding streets, identification of appropriate ground floor and finished floor levels, maintaining an active street frontage on all sides with maximum passive surveillance of surrounding streets, and provision of vehicular access.

Landscape Character

- The landscape design should incorporate the design principles in **Appendix C**. Designs must propose strategies for accommodating tree planting within the site(s). These may include deep soil zones or structural design of basement car parks to provide sufficient structural support and soil depth to support long-term healthy tree growth. This is critical for both existing and new tree planting. Consistent with this, designs are to prepare landscape schemes that will result in a high quality landscape character on the site, consistent with the desired landscape character and values of Sydney Olympic Park (**Appendix C**).
- Designs must include trees around the periphery of the plaza, along the streets and avenues, with the trees to frame and create an enclosure from the surrounding roads (**Appendix C**).
- The planting design should incorporate a contemporary form in the public domain, creating a green civic plaza with the use of planting to define spaces (**Appendix C**).

Operational Considerations

- The development should minimise conflict with events held at Sydney Olympic Park (refer to the Exhibited Materials Relevant Reports – Sydney Olympic Park Events Plan of Management) (Available on https://www.sopa.nsw.gov.au/Resource-Centre).

3.3 Level Use Configuration

The overall target GFA (assuming the 10% design excellence floor space bonus) is 46,652m^2 GFA. The preferred target breakdown target is provided in the Functional Brief in **Appendix F**.

3.4 Program Design Parameters

Site 2A Hotel

- A 4-star standard hotel with approximately 270 rooms.
- Refer to **Appendix F** for detailed Functional Brief.
- To achieve a minimum 4-star rating in accordance with the current version of the Green Star – Design & As Built Submission Guidelines document developed by the Green Building Council of Australia.
- Incorporate a destination style, roof top pool and bar above the hotel.

Site 2B Serviced apartments

- To be located on Site 2B.
- Refer to **Appendix F** for detailed Functional Brief.
- To achieve a minimum 4-star rating in accordance with the current version of the Green Star – Design & As Built Submission Guidelines document developed by the Green Building Council of Australia.
- Convenience and speciality retail at ground floor of Site 2B.

Site 2B Commercial Office

- Floor plates to be capable of division in to strata suites – suites typically ranging between 50m^2 to 100m^2 (refer to **Appendix F** for the Functional Brief).
- To achieve a minimum 5-star rating in accordance with the current version of the Green Star – Design & As Built Submission Guidelines document developed by the Green Building Council of Australia.
- A child minding for the hotel guests, serviced apartment residents and commercial office for provision of up to 40 children should be provided with potential for the outdoor play area to be provided where the building transitions from a podium to a tower form. As best practice the design of the child minding for up to 40 children should refer to the childcare guidelines and legislation (Refer to **Appendix B** for the SEPP Educational Establishments and Child Care Facilities) 2017 (car parking and drop off requirements excluded). Refer to **Appendix F** for detailed Functional Brief.

3.5 Alternative Design Concept

In addition to the detailed design scheme and at the discretion of the competitor, alternative concept scheme/s can be submitted as part of the final submission. Consideration of the scheme/s will be subject to the discretion of the jury. Any alternative concept scheme/s are not required to be consistent with the Key Design Parameters (**Appendix A** and **Figure 5**) and the Master Plan (2018 Review). However, are required to be consistent with the Functional Brief (**Appendix F**).

3.6 Sustainability Strategies – ESD

- The Project Delivery Agreement signed between SOPA and Ecove Group specifies that the proposed development does not require compliance with the 6 Star Green – Design & As Built Submission Guidelines to achieve design excellence and thus the possible 10% floor space ratio bonus.
- The Project Delivery Agreement specifies that the hotel is to achieve a minimum 4-star rating in accordance with the current version of the Green Star – Design & As Built Submission Guidelines document developed by the Green Building Council of Australia.
- The Project Delivery Agreement specifies that the commercial office is to achieve a minimum 5-star rating in accordance with the current version of the Green Star – Design & As Built Submission Guidelines document developed by the Green Building Council of Australia.

3.7 Access and Parking Requirements

- Extend Dawn Fraser Avenue as per specifications outlined in Master Plan 2030 (2018 Review).
- A new service street along the north eastern boundary of the site (that connects Murray Rose Avenue to Parkview Drive) is to be delivered (50% to be constructed on the site).
- Maximum of four levels of basement carparking spanning across Site 2A and Site 2B (including under Dawn Fraser Avenue extension).
- Minimise impact of parking on the rail corridor and the Moreton Bay Fig Tree.
- Parking provision, including bicycle parking, is to be in accordance with the Master Plan 2030 (2018 Review).

4.0 Competition Procedures

4.1 Competition Program

Key dates for this design competition are as follows:

Week	Key dates	Title	Key actions
0	2 July 2018	Issue of competition brief	• Issue competition brief
1	9 July 2018	Initial briefing	• Briefing session and site visit
3-4	23-30 July 2018	Mid-point check-in	• Competitors have opportunity to meet competition convenor and ask any questions/clarifications
5	6 August 2018	Final submissions due	• Competitors submit final scheme to competition convenor in accordance with this brief
6	15 August 2018	Presentation material is due	• Competitors to submit their presentation material for review
6	17 August 2018	Feedback provided about presentation material	• The Competition Convenor will provide feedback on the presentation material
7	20 August 2018	Presentation of final schemes	• Competitors to present to the Assessment Jury • Jury day to deliberate
9	6 September 2018	Design Competition Report	• Design Report to be completed

Any changes to this program will be confirmed in writing by the competition convenor.

4.2 Competition Fee

A competition fee of AUD $60,000 excluding GST (including any internal and interstate travel costs) shall be paid to each competitor for participating in this competition. Payment to competitors will be made on invoice following the submission of the competition entry and presentation to the jury.

4.3 Competition Convenor

The proponent has appointed Ethos Urban as competition convenor of this design competition. The competition convenor is:

Daniel West – Associate Director
173 Sussex Street, Sydney NSW 2000
dwest@ethosurban.com

The competition convenor will establish the Design Competition Microsite (DCM) through which the competition will be managed. This will ensure transparency and allow for an accurate record of the competition upon completion. The DCM is the portal for all information pertinent to the design competition, including the brief and accompanying reference material, background information, announcements, clarifications and uploading final submissions. The DCM will have the following pages:

- Home – Summary of the competitive process;
- Brief – Access to all competitive process documents;
- Forum – All announcements made by the competition convenor;
- Your Questions – Location to submit questions; and
- Submit Your Entry – Final submissions must be made through the form on this page.

All participants in the competition (competitors (three logins per team and can be increased if necessary), jury, competition convenor and observers) will be provided with a unique log-in for the DCM at the commencement of the competition.

The website address for this DCM is: http://site2sop.designcomp.com.au/

4.4 Competition Jury and Chair

The competition Jury will comprise of five members. The jury will comprise of:

- A chair – Government Architect or it's nominee;
- Two appropriately qualified design experts to be nominated by the competition sponsor (proponent); and
- Two appropriately qualified design experts to be nominated by SOPA.

If one of the above members of the Jury has to withdraw prior to the completion of the competition process, SOPA reserves the right to appoint another member. Each member of the selection jury will have one (1) vote. The consent authority will not form part of the judging process.

The consent authority being the NSW Department of Planning and Environment will not form part of the judging process, however will be invited to attend the jury day as an observer.

4.4.1 Jury's Obligations

In accepting a position on the selection jury, selection jury members agree to:

- Have no contact with any of the competitors or proponent (representative excluded) in relation to the site and the design competition from their appointment until the completion of the process other than during presentation of the submissions;
- Attend the initial briefing and final presentation day and evaluate entries promptly in accordance with the design competition timetable;
- Abide by the requirements of the brief;

- Consider any clarification on compliance matters provided by the consent authority;
- Refrain from introducing irrelevant considerations in addition to, or contrary to the statutory framework and to those described in the brief;
- Make every effort to arrive at a consensus in the selection of a winner;
- Submit a report explaining their decisions;
- Sign a statement confirming they have read and understood the Jury member's obligations and agree to respect those obligations for the duration of the Competitive Architectural Design Process;
- Not have a pecuniary interest in the development proposal;
- Not be an owner, shareholder or manager associated with the Applicant or Applicant's companies;
- Not be a Board or staff member of Sydney Olympic Park Authority;
- Convening for the review of the competition submissions as soon as possible following the close of the competition;
- Attend subsequent meeting as required for the panel to complete its deliberations. These should be as early as possible within 14 days; and
- Consideration of any alternative scheme/s is at the discretion of the jury.

4.5 Proponent Obligations

- The Proponent is responsible for the administration and organisation of the design competition process from initiation of the competition and preparation of the brief, through to the provisions of support for the jury of judges, competition report and award of the commission.
- The design competition is to be fully funded by the Proponent including, but not limited to, all aspects of preparation, marketing and remuneration of entrants and jurors.
- The Proponent (exc. representative) agrees to have no direct contact with the selected jury members or competitors in relation to the site and the design competition from their time of appointment until the completion of the process.
- Any clarifications required by the competitors from the proponent shall be undertaken through the competition convenor via the DCM (refer to **Section 4.6**).
- If the Consent Authority is informed by a selection jury member that they have been contacted by the developer or a competitor in relation to the site or the design competition, then the process may be terminated.
- The Proponent is not to provide any additional requirements from the midpoint check in onwards.

4.6 Communications and Questions

All correspondence and information associated with the competition will be circulated via the DCM. Competitors will receive a notification email to their nominated account when any announcement is made or when a response to a question is provided. Each competitor's privacy is protected. Competitors' questions will be vetted by the competition convenor and addressed publicly or privately according to their nature. Public responses will not disclose the identity of the competitor asking the questions.

Competitors should not communicate verbally regarding clarification of any design competition details with the proponent, technical advisors, the Authority or other competitors. All queries are to be made through the DCM.

The deadline for receipt by the Proponent's representative of questions from competitors is fourteen (14) working days prior to close of the design competition. Answers to these questions (where they do not reveal the specifics of any Competitor's scheme) will be compiled and sent to all Competitors without revealing the source of the questions.

4.7 Technical Advisors and Observers

The following technical advisors will provide a review of competition entries and advice to the Jury on the final submissions:

- Ethos Urban – Planning;
- RLB – Quantity Surveyors;
- Van der Meer Consulting – Structural; and
- Intercontinental Hotel Group – Hotel Operator.

Technical Advisors

The following technical advisors will provide a review of competition mid-point submissions and provide expertise in response to queries as required through the DCM managed by the competition convenor to competitors:

- Ethos Urban – Planning;
- RLB – Quantity Surveyors;
- Van der Meer Consulting – Structural; and
- Intercontinental Hotel Group – Hotel Operator.

Correspondence with Technical Advisors must be in accordance with this Brief.

Technical Advisor Obligations

The Proponent shall engage Technical Advisors to review each of the Competitor's submission and provide assistance to the Jury.

All Technical Advisors with the exception of the Quantity Surveyors shall attend the mid point check in accordance with the design competition timetable.

Advice provided by the Technical Advisors to Competitors and the Jury will be strictly limited to independent technical and compliance matters pertaining to their professional discipline only. Technical Advisors shall refrain from providing advice on matters outside of their remit. Following the submission of the proposals each technical advisor is required to provide a brief and succinct report assessing compliance.

All Technical Advisors are bound by the confidentiality requirements set out at **Section 4.19** of the Brief and will be required to sign a confidentiality agreement with the Proponent to keep the content and intellectual property of each scheme confidential. All Competitor and Technical Advisor communications (inclusive of technical expertise in response to Competitor queries sent via the DCM) are to be carried out in accordance with communications protocols detailed in **Section 4.6**.

Note: It is emphasised that the role of Proponent appointed Technical Advisors are not to design certain elements of the development, rather their purpose and role is to review and provide clarification on each Competitor's scheme in confidence.

Observers Obligations

The observers can only oversee the competition and will be invited to attend the jury day as an observer.

4.8 Lodgement of Submissions

Competitors shall lodge their submissions online via the DCM and in hard copy in a sealed package with the fee proposal for the scope of works for a future SSD (in a separate sealed envelope) to the following address:

Site 2 Australia Avenue, Sydney Olympic Park, Architectural Design Competition

For the attention of:

The Competition Convenor (Site 2 Australia Avenue, Sydney Olympic Park)
Daniel West, Associate Director
Ethos Urban
173 Sussex Street
SYDNEY NSW 2000

Final submissions are to be lodged by 2pm on 6 August 2018. No exceptions shall be made. It is the competitor's sole responsibility to ensure actual delivery of their submission to the proponent's representative by the deadline. Any submissions received after the deadline will be deemed non-conforming. Unless formally requested by the competition convenor for the sole purpose of clarification, the selection jury will not take into consideration any new materials submitted by competitors following lodgement of the final submission. The Authority's observer may be present when the submissions are opened.

4.9 Final Presentation Material

Competitors must submit to the competition convenor any presentation material in accordance with the key dates at **Section 4.1**. The presentation must not include any additional or enhanced material that was not included in the final submission. Competitors can provide the presentation material in either pdf format or Powerpoint format. The competition convenor will review the presentation material to ensure that no additional information has been added. The competition convenor will notify any competitor to remove any additional material at least 24 hours prior to the presentation day.

4.10 Disqualification

Applicants may be disqualified in the following circumstances:

- If an entry is received after the nominated closing time and date;
- If a competitor discloses their identity, or inappropriately tries to influence the jury's decision; or
- If the design is found to not be the original work of the declared competitor.

In other circumstances, for example where competitors do not meet other submission requirements, disqualification may also be considered but is not encouraged. Recommendations will come from a probity adviser.

The jury must review any recommendation for disqualification but may choose not to support it. The decision rests with the jury.

4.11 Managing Disputes

In the event that;

- The jury does not reach a decision;
- The Proponent is not satisfied with the nomination;
- The Proponent wishes to make a substantive modification;
- The consent authority considers the project submitted for approval (or as subsequently modified) to be substantially different; or
- The consent authority indicates it will not grant consent to the design nominated.

Either the Proponent or the consent authority may request that the jury reconvene and make a recommendation as to what further competitive process or requirements would be necessary to permit an alternative or revised design to satisfy the design excellence provisions.

The cost of the review will be borne by the Proponent.

4.12 Probity

To ensure probity, the consent authority may require the competition process and procedures to be audited by an independent person or body.

4.13 Jury Assessment and Decision

A minimum of three competitive submissions must be considered as part of this competitive design alternatives process. A copy of all submissions will be provided to the jury at least one week prior to the presentation day. Technical advisors to the jury may provide a summary of compliance of each entry to the jury.

The competitors must present their entry to the jury in person. The presentation must be no longer than 30 minutes followed by 20 minutes of questions from the jury.

The jury must give reasons for the grading and ranking of each submission. They may recommend that none of the entries win and exhibit design excellence and thus end the competition. The jury also has the ability to recommend a winning proposal that achieves design excellence and is eligible for the 10% bonus floor space or a winning proposal can be selected and not achieve design excellence and is therefore not eligible for the full or entire 10% bonus floor space.

In assessing whether a proposed development exhibits design excellence, the jury must consider the merits of the design evaluated against the design excellence criteria outlined in the brief, including the seven objectives of GANSW's Better Placed, an integrated design policy for the built environment of NSW. The Jury will select the winner based on the Jury's agreed selection criteria.

Technical advisers may be called upon during the competition process to provide specialist advice. A technical adviser would be a known expert in the field of discipline relevant to the project.

Where the advice is being provided to the jury, advisers may attend the competition as an observer, but may not be invited to judge the competition.

If, in the jury's opinion, a better design could be attained by the top two entrants, then the Jury can list the design issues of the schemes and request that entrants redesign their entry. Competitors must re-present the entry within 21 days of the initial presentation. Upon completion of the second presentation to the jury, the jury will rank the competition submissions (first and second). The Jury is expected to reach a decision on whether to request a redesign by the Jury decision day.

The jury's decision will be via a majority vote. Unanimous agreement is not required.

The decision of the jury will not fetter the discretion of the consent authority in its determination of any subsequent development application associated with the development site that is the subject of the competitive design alternatives process.

The jury's decisions are to be made in align with the key dates in **Section 4.1**.

4.14 Appointment of Winning Architect

The Applicant has the sole discretion to decide whether or not to proceed with the winning entry. The Applicant must advise the Authority in writing within 10 days of its intention to appoint the architect of the winning entry as selected by the jury. Full design and documentation of the winning proposal should then occur, subject to agreement between the Proponent and the architect on the Consultancy Agreement and its acceptance.

To ensure that design continuity and design excellence of the winning submission is maintained throughout the development process, the architectural commission is to include as a minimum:

- Preparation of a SSD Application based on the winning entry;
- Preparation of the design drawings for a construction certificate;
- Preparation of the design drawings for the contract documentation; and
- Continuity during the construction phases through to the completion of the project.

The Winning Architect is expected to be appointed within 21 days of the Decision Date.

The Winning Architect may work in collaboration with other architectural practices but must retain control and a leadership role over design decisions throughout the life of the project.

In the event that, the Proponent decides not to proceed with the Winning Architect, or the Proponents limits the architectural commission outlined above, the Proponent will be required to consult with the consent authority as to a process to achieve design excellence.

Note: Winning Architect refers to the complete competition team of the successful entry as selected by the jury.

4.15 Announcement

The Proponent will advise competitors in writing of the decision 21 days from the appointment of the winning architect.

4.16 Care of Material and Insurance

It is each competitor's responsibility to wrap, ship, mail or deliver by other means, their submission, ensuring timely and intact arrival. The Proponent and Competition Convenor disclaims any responsibility for any loss or damage during transit.

No liability shall be attached to the Proponent regarding the submissions, whilst in the possession of the developer. All reasonable care shall be taken to maintain the submissions in good condition, but a limited amount of 'wear and tear' is inevitable. Competitors are advised to make copies of their submissions, so as to retain a copy of their work.

Responsibility for insuring submissions rests solely with competitors.

4.17 Return of Documents

The proponent retains the right to hold submissions for a period of up to six (6) months from the closing date of the competition. The proponent shall retain the winning submission(s). Other submissions shall be returned to the owner(s). Competitors shall be notified by letter of the date on which submissions will become available for collection.

4.18 Copyright

The Project Delivery Agreement between Ecove and SOPA requires that each applicant must consent to the Developer and SOPA to exercise any rights in relation to the copyright works, without identifying any person as the individual responsible for creating any particular material comprising the copyright works, have the copyright works bear the name of Site 2 or such other address of that property, or bear the name of the Developer, SOPA or any other person associated with the development of that property, and modify, alter, adapt, distort or otherwise change any of the copyright works as it sees fit in its absolute discretion, including by adapting or translating those copyright works into other dimensions, format or media and by changing, relocating, demolishing or destroying any two or three dimensional reproduction of those copyright works without notice to, or consultation with, the Author.

4.19 Confidentiality

Competitors shall observe complete confidentiality at all times in relation to their submission, including plans, information whether verbal or written, documentation or any advice until the decision date. The same strict rules of confidentiality are to apply to any consultants or other persons or entities from which the competitors' may seek advice. This brief and the documents comprising the competitor's submission are confidential until the design decision is announced and made public.

4.20 Design Competition Report

Following its determination, the jury is required to prepare a report (to be referred to as the Architectural Design Competition Report). The Architectural Design Report must:

- Summarise the competition process and include a copy of the competition brief;
- Provide an overview of the assessment and design merits of each of the entries;
- Include the jury's final decision and recommendations, including the rationale for selection of the preferred design, and if applicable, description of the key design elements that support the achievement of design excellence and justification for how design excellence has, or can be achieved;
- Resolve if the bonus floor space can be recommended; and
- Justify and provide reasons if none of the entries can be supported.

The jury must provide a final decision and recommendations by the Jury decision date and the competition report must be made available to all entrants within 28 days of competition close.

The Design Competition Report is prepared by the Competition Convenor on behalf of the Jury. Each jury member is required to acknowledge the final competition report and the competition Chair is required to sign the final report before being distributed to the competition entrants.

4.21 Endorsement and Amendment of the Competition Brief

This brief was endorsed by the Director, Environment and Planning in accordance with SOPA's Design Excellence Policy on 2 July 2018.

No amendment to the brief is permitted without the written approval of the Director, Environment and Planning. Any change to the program is considered an amendment to the brief. In the event that a change in program is sought by the proponent or competitors, the competition convenor must notify all competitors in writing of the proposed change. All competitors are required to provide written acceptance of the proposed change, prior to the Authority granting approval. On the Authority's approval, the competition convenor will provide written notification to all competitors of the agreed change in program.

Minor housekeeping amendments to the brief were endorsed by the Director, Environment and Planning in accordance with SOPA's Design Excellence Policy on 4 July 2018.

5.0 Competition Submission Requirements

5.1 General

The submissions will include the following elements:

- Electronic submission of competition entry submitted via the DCM (See **Section 4.8**);
- Physical submission:
  - Seven (7) physical copies of electronic submission documents (A3 format);
  - One (1) USB with complete copy of electronic submission; and
  - Maximum of 3 x A1 panels.
- The maximum number of pages for the Design Report is 25 pages (excluding the architectural and landscape plans, floor space calculations and yielding);
- A fee proposal for the scope of works for a future SSD (in a separate envelope).

All submissions must be received in accordance with this Brief.

Note: A minimum of one (1) detailed scheme is to be provided. Any additional concept scheme/s can be submitted, however can be conceptual in nature.

5.2 Electronic Submission

The electronic submission must be:

- A single file with a maximum file size of 50MB
- Provided in .pdf format (zipped .pdf is acceptable)
- The electronic submission is limited to 30 pages (excluding plans and shadow analysis)
- An additional copy of .dwg drawing files
- File name must include Site 2_Australia_Avenue_Competition_Entry_TEAM NAME.pdf
- All submissions must include all of the requirements set out in detail below.

5.2.1 Drawings and Graphics

The details and specifications of the panels is provided in **Section 5.3.2**.

5.2.2 Statement of Intent

In addition to the above, each entry should include a design statement addressing the proposal's approach, the response to the objectives of this Brief and the manner in which design excellence is achieved. It must include a schedule showing the uses, percentage and numbers of each use, the indicative FSR, gross floor area and construction methodology.

5.2.3 Team Structure and Collaboration

Competitors are to define and describe the proposed design team structure and working methodology to facilitate collaboration and ensure coordination between each project component for a cohesive and integrated design response. The design team must include a qualified landscape architect for the design and integration of the landscaping including the public plaza and podium with the built form.

5.2.4 Statement

A brief written statement should be provided addressing:

- Site planning and design intent and analysis that informs the approach and response to the brief;

- Principles of internal planning, spatial organisation;
- Proposed design character;
- How the Design Objectives and matters raised in **Section 3.0 h**ave been addressed;
- Schedule of areas;
- Compliance with envelope controls and any variations to the competition objectives as set in **Section 3.0.**

5.2.5 Construction Cost

Each submission is to include a statement confirming that the design is capable of being constructed within the $216 million cost estimate provided by Ecove (**Appendix G**).

5.2.6 ESD

Each submission is to include a summary of sustainability initiatives to achieve the ESD objectives set out at **Section 3.6** together with a description of any broader sustainability initiatives associated with the entry.

5.3 Physical Submission

5.3.1 Physical Copy

All competitors must provide seven (7) physical copies of the above electronic submission, printed and bound at A3 format. An additional USB copy of the electronic submission must be provided with the physical copies.

5.3.2 Panels

The physical submissions are to include a maximum of three (3) printed presentation panels in A1 size and should include the following as a minimum:

- Concept Sketch, including:
  - Site Plan @ 1:500 scale, showing adjacent civic spaces and existing buildings;
  - Basement, ground and typical floor plans @1:200 scale; and
  - Typical sections @ 1:200 scale.
- Building elevations (including suggested materials)
- Concept landscape plan and public domain plan strategy for the public plaza and development itself.
- 3D images or perspectives (in a Daytime setting) should include views from:
  - Northern eastern entry Sydney Olympic Park Railway Station
  - Australia Avenue, looking south from between Site 45A and Site 3
  - Elevated views looing to the North East towards the Brick pit.

----- End of Brief ------

218132

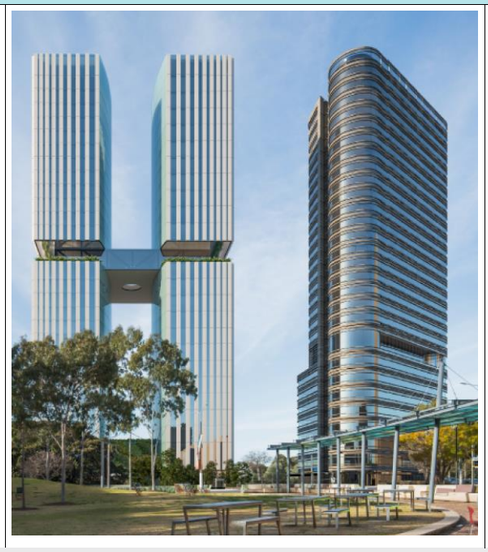
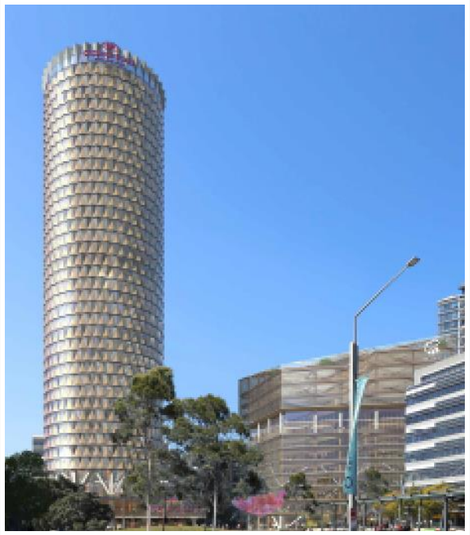
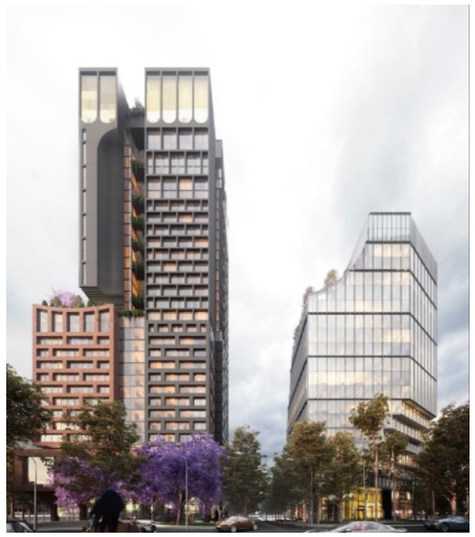
APPENDIX B

Town Planning Technical Assessment

Ethos Urban

Technical Planning Assessment

Black indicates compliant
Red indicates non-compliant

Controls	Competitor 1 – Bates Smart	Competitor 2 – Fitzpatrick + Partners	Competitor 3 – WMK	Competitor 4 – Woods Bagot
Perspectives				
State Environment Planning Policy (State Significant Precincts) 2005				
Clause 7 Land Use Zones B4 Mixed Use	2A: Hotel and Commercial Office 2B: Serviced Apartments, Retail and Commercial Office	2A: Hotel and Serviced Apartments 2B: Commercial Office and Retail	2A: Hotel and Serviced Apartments 2B: Commercial Office and Retail	2A: Hotel and Serviced Apartments 2B: Commercial Office and Retail
Clause 18 Height 102m maximum – *from existing ground level excluding plant and lift overruns, communication devices, antennae, satellite dishes, masts, flagpoles, chimneys, flues and the like.* **Note: Less 5m nominal height of plant/lift overrun allowance on roof (hotel buildings with swimming pool on roof)*	2A: 98.8m, 8.1m, -6.8% 2B: 99.68m, 2.3m, -2.3% Combined Total: 198.6m, 5.4m, -2.6%	2A: 127.0m (122.0m*), +25.0m (+20.0*), +24.5% (+19.6%*) 2B: 58.6m, -43.4m, -42.5% Combined Total: 185.6m, -18.4m, -9.0%	2A: 116.45m (111.45m*), +14.45m (+9.45m*), +14.2% (+9.3%*) 2B: 70.2m, -31.8m, -31.2% Combined Total: 186.65m, -17.35m, -8.5%	2A: 115.75m (110.75m*), +13.75m (+8.75m*), +13.4% (+8.6%*) 2B: 82.4m, -19.6m, -19.2% Combined Total: 198.15m, -5.85m, -2.9%
Clause 19 Floor Space Ratio 5.5:1 + 10% design excellence bonus FSR = 6.05:1 GFA = 46,652m² **Note: The minor variation for Competitor 2 to the 6.05:1 floor space ratio maximum represents less than a 1% variation. This minor variation could be brought into compliance during the detailed design stage.*	Hotel: 14,333m², - Commercial Office: 17,108m², - Serviced Apartments: 14,864m², - Retail: 349m², - **Total: 46 654m², 6.05:1** Compliance: Yes, Yes	Hotel: 15,576m², - Commercial Office: 18,242m², - Serviced Apartments: 12,427m², - Retail: 681m², - **Total: 46,926m², 6.09:1** Compliance: No*, No*	Hotel: 12644m², - Commercial Office: 18579m², - Serviced Apartments: 13344m², - Retail: 2085m², - **Total: 46,652m², 6.05:1** Compliance: Yes, Yes	Hotel: 15526 m², - Commercial Office: 15085m², - Serviced Apartments: 15408m², - Retail: 633 m², - **Total: 46,652m², 6.05:1** Compliance: Yes, Yes

Controls	Competitor 1 – Bates Smart	Competitor 2 – Fitzpatrick + Partners	Competitor 3 – WMK	Competitor 4 – Woods Bagot
Master Plan (2018 Review) Part 4, 5 and Appendix C				
Section 5.6.5 Building Height 30 storeys maximum in height **Note: The detailed design stage could place plant level on roof and therefore the number of storeys be reduced.*	2A North Tower: 29 storeys No floor levels that are entirely plant are proposed. 2A: South Tower: 25 storeys No floor levels that are entirely plant are proposed. 2B: 28 storeys (including the floors that are entirely plant) No floor levels that are entirely plant are proposed. (excluding floor levels that are entirely plant)	2A: 37 storeys (36 storeys excluding floor level that is entirely plant)* 2B: 13 storeys	2A: 31 storeys No floor levels that are entirely plant are proposed. 2B: 17 storeys	2A: 36 storeys No floor levels that are entirely plant are proposed. 2B: 21 storeys
Including 5-8 storey block edge podium	2A: No podium 2B: 8 storey podium	2A: 2 storey podium 2B: No podium	2A: 2 storey podium 2B: No podium	2A: 2 storey podium 2B: No podium
Section 4.6.3 Building Depth Controls Basement Parking Arrangement	Car park is located wholly underground.	Car park is located wholly underground.	Car park is located wholly underground.	Car park is located wholly underground.
Section 4.7.1 Vehicle Access and Servicing Car Parking (maximum parking generation rates) **Note: The proposed 5th basement level for Competitor 2 has an RL-0.25.*	Total = 473 spaces total	Total = 523 spaces total *Optional 5th basement level takes total spaces to 677.	Total = 605 spaces total	Total = 440 spaces total
Section 4.2 Sustainability* Commercial Office Green Star Design & As Built 4 Star Rating Hotel & Serviced Apartments Green Star Design & As Built 5 Star Rating **consistent with Master Plan (2016 Review) and Project Delivery Agreement*	Complies Complies	Complies Complies	Complies Non-Compliant	Complies Complies
Section 4.3 Public Domain Double height active frontage for the ground floor. *Double height of 8m is measured based on the ground floor minimum floor to floor of 4.0m for active uses.*	Site 2A: Floor to floor of 5.25m. Site 2B: Floor to floor of 5.0m.	Site 2A: Floor to floor of 5.5m. Site 2B: Floor to floor of 5.5m.	Site 2A: Floor to floor of 9m. Site 2B: Floor to floor of 9m.	Site 2A: Floor to floor of 6m. Site 2B: Floor to floor of 4.5m.
Section 4.6.8 Tower Building Controls Murray Rose Street Setback - 2.5m for podium	2A: Complies - 2.5m	2A: Complies – 9m	2A: Non-Compliant – <1.0m	2A: Complies - 2.5m
5.6.6 Building Zone and Setback Controls Retention of Existing Figtree	Figtree being retained in the current location at the existing level.	Figtree being retained and replanted at a higher level to align with the level of the urban plaza.	Figtree being retained in the current location at the existing level.	Figtree being retained and replanted at a higher level to align with the level of the urban plaza.

Controls	Competitor 1 – Bates Smart	Competitor 2 – Fitzpatrick + Partners	Competitor 3 – WMK	Competitor 4 – Woods Bagot
5.6.6 Building Zone and Setback Controls Building Zone	Location of building footprints consistent with Figure 4.42.	Location of tower 2A is within the building footprint in Figure 4.42. Tower 2B spans across the existing railway line easement to the southern corner of the site beyond the building footprint.	Location of building footprints consistent with Figure 4.42. Note: Building on Site 2B encroaches into the air space above the existing railway easement.	Location of building footprints consistent with Figure 4.42.
Section 4.6.6 Building Separation Controls Building Separation A minimum separation of 24m is required between commercial buildings and facing habitable rooms in residential buildings opposite.	Between 2A and adjoining sites, not required noting there are no existing towers on adjoining sites. Between Site 2B and 9-11 Australia Avenue: 25.3m	Between 2A and adjoining sites, not required noting there are no existing towers on adjoining sites. Between Site 2B and 9-11 Australia Avenue: 25.3m	Between 2A and adjoining sites, not required noting there are no existing towers on adjoining sites. Between Site 2B and 9-11 Australia Avenue: 35.115m	Between 2A and adjoining sites, not required noting there are no existing towers on adjoining sites. Between Site 2B and 9-11 Australia Avenue: 24.3m
Section 4.6.8 Tower Building Controls Tower Footprints – maximum of 900m^2	2A: Northern Tower: GFA Hotel – 464m^2 Southern Tower GFA Office – 470m^2 2B: Tower has a GFA footprint of between 777m^2-839m^2.	2A: Tower has a GFA footprint of between 400m^2-758m^2. 2B: Tower has a GFA footprint of between 1,127m^2-1,631m^2. Note: Should 2B be considered a tower then this control would apply, however it is possible this building is not considered a tower given it is only 13 storeys in height.	2A: Tower has a GFA footprint of between 450m^2-1,112m^2. 2B: Tower has a GFA footprint of between 645m^2-1115m^2.	2A: Tower has a GFA footprint of between 560m^2-1,109m^2. 2B: Tower has a GFA footprint of between 694m^2-795m^2.
Section 4.6.8 Tower Building Controls Tower Setback 2m above 6 storeys	2A: No podium proposed. 2B: Complies 7m from Service Lane and non-compliant on the Parkview Drive and the extension of Dawn Fraser	2A: No podium to 6 storeys. 2B: No podium to 6 storeys.	2A: No podium to 6 storeys. 2B: No podium to 6 storeys.	2A: No podium to 6 storeys. 2B: No podium to 6 storeys.
Appendix C Street Plans and Sections Extension of Dawn Fraser 23m between the active frontages Site 2A and Site 2B Service Lane 12m in total 6m	Extension of Dawn Fraser Extension provided with 26.2m between Site 2A building façade and 2B building façade Service Street 12m provided to accommodate whole service lane.	Extension of Dawn Fraser Not provided, however capable of compliance with 26.5m separation within urban plaza. Service Street • 6m provided to accommodate half of the service lane.	Extension of Dawn Fraser Not provided, however capable of compliance with 23.72m separation within urban plaza. Service Street • 6m provided to accommodate half of the service lane.	Extension of Dawn Fraser Not provided, however capable of compliance in detailed design stage with 22.65m separation within urban plaza. Service Street • 6m provided to accommodate half of the service lane.

218132

APPENDIX C

Structural Engineering Technical Assessment

Van Der Meer Consulting

Site 2 Architectural Design Competition – Structural Review

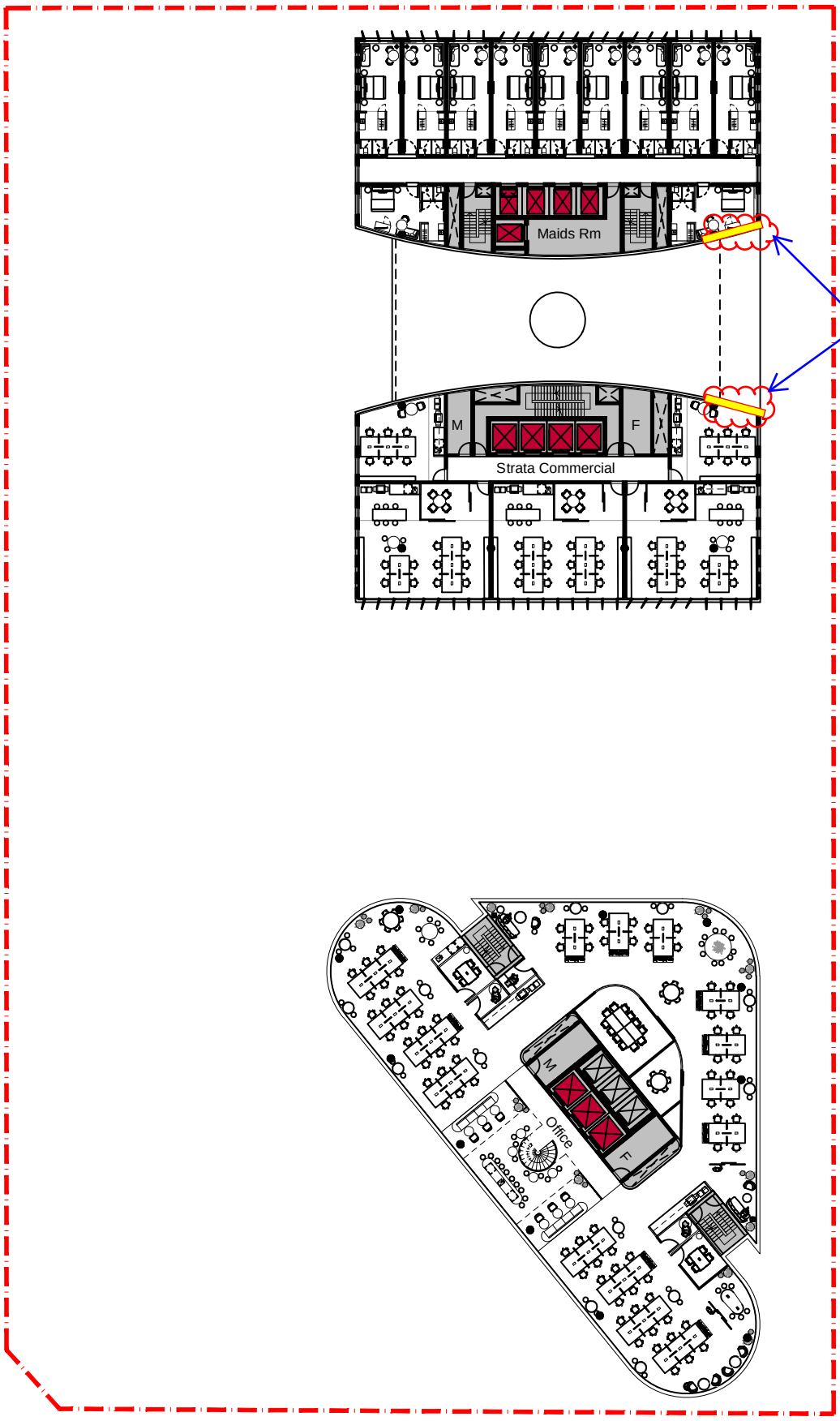
Note:

- Red text has been used to identify an unresolved structural item
- Black text has been used to show compliances

	Competitor 1 *Bates Smart*		Competitor 2 *Fitzpatrick and Partners*		Competitor 3 *WMK*		Competitor 4 *Woods Bagot*	
Building 2A								
Building structural Stability	Lateral stability provided by an eccentric lift/stair core and seems a bit small considering the cores eccentricity to each of the buildings. The steel truss tie at either end of the building I don't believe would be stiff enough to provide any benefit laterally particularly as its not tied through the core.		Lateral stability provided by central lift/stair core and is of satisfactory size for the building height. It should be noted that the core needs to continue into the carpark and not partly terminate at ground floor as lateral load cannot be translated onto the tunnel through the soil in this zone.		Lateral stability provided by central lift/stair core and is of satisfactory size for the building height. It should be noted that the core needs to continue into the carpark and not partly terminate at ground floor as lateral load cannot be translated onto the tunnel through the soil in this zone. (Refer SK20,21)		Lateral stability provided by central lift/stair core and is of satisfactory size for the building height noting that header beams will need to extend across the central corridor to pick up the central walls running along grid 2.3 and grid 3. The core and these corridor walls have been continued into the carpark to the bottom of basement B4 and the carpark planned around the cores.	
Vertical elements	Consist of a mix of blade walls and columns that generally stack through the building. Offset columns through three floors utilised to eliminate transfers over the ballroom at which transfers occur as noted below.		Consist of blade walls typical through both hotel and serviced apartment floors these walls are on a radiating grid and stacked from level 4 to roof note: some adjustment of the 2 bed serviced apartment layout will be required. (Refer SK7) level 4 to 2 are supported on a crown structure of vertical and racking columns then from level 2 to basement 4 are supported on mega columns		Consist of a mix of blade walls and columns that generally stack through each of the usage zones at which transfers occur as noted below.		Consist of a mix of blade walls and columns that generally stack through each of the hotel and serviced apartment zones and right through to Basement 4. Some transfer of the pool support structure is required transitioning between the hotel and serviced apartment zones and again through the ground floor on grid 1/E	
Floor Plates	1 way banded slabs have been used to cantilever out past the column line. Bands in the hotel tower with 3.1 f/f will make service reticulation very difficult. (Refer SK3A) 3.6m floor to floor in the serviced apartments would be ok		Generally ok and grid will work for a 200 typical flat plate.		Generally ok and grid will work for a 200 typical flat plate. Some large cantilever spans that will require columns to be added on the façade to reduce multiple transfer zones.		Generally ok and grid will work for a 200 typical flat plate.	
Transfer Zones	Level 2 over ballroom	Appears unresolved. From documentation provided but would suggest it can be resolved in a similar manner with a 3 storey transfer wall but will be blocking out a lot of light to the rooms that it runs through. (Refer SK1 to SK3A)	level 2 over/adjacent to ballroom	resolved	Level 14	Unresolved 3100mm floor/ floor to work in (Refer SK13 to SK16)	Level 2 over ballroom	Unresolved. will require re work of typical serviced apartment floor over to transfer loads over the ballroom
					Level 2 over ballroom	Unresolved. will require re work of typical serviced apartment floor over to transfer loads over the ballroom (Refer SK12 to SK18)		
					Level 1	Resolved once load gets there through the ballroom space.		

	Competitor 1 *Bates Smart*		Competitor 2 *Fitzpatrick and Partners*		Competitor 3 *WMK*		Competitor 4 *Woods Bagot*	
					Ground/podium	Sufficient depth to resolve over driveway aisle which tapered columns land in the middle of these		
podium	No building transfers		No building transfers		Podium slab used as a transfer column zone between towers and car parking below . The tree zone has remained in place and built around.		No building transfers	
Car parking	Columns and cores have been taken down from the towers above through to basement B4 columns are not in compliant car parking locations and spaces will be lost. (Refer SK4)		The main tower columns have been taken down to basement 4. Isle ways and car parking have been designed around these positions. Additional support for the core structure is required which may result in the loss of potentially 4 car parking spots. Columns are not in compliant car parking locations and spaces will be lost. (Refer SK8 to SK10)		Spaces will be lost through the basement to allow for the core structure to be supported for the full depth of the basement. Several areas insufficient column sizes have been allowed for to transfer columns to basement 4. (Refer SK21 to SK22)		The core and these corridor walls have been continue into the carpark to the bottom of basement B4 and the carpark planned around the cores. columns are not in compliant car parking locations and spaces will be lost. (Refer SK24)	
Railway exclusion zone	Remained outside of Zone		Remained outside of Zone		Remained outside of Zone		Remained outside of Zone	
pool	No supporting structure for the pool has been shown but would be 10+m from core to core in 1 direction and is unresolved. (Refer SK3A to SK6)		There is sufficient amount of walls to support the pool these will need to be carried back into the core across the corridor to eliminate the need for another line of support back down through the building.		Sufficient support has been allowed for the pool structure and enough head height to allow maintenance of pool springs.		Sufficient support has been allowed for the pool structure. Some transfer of the pool support structure is required transitioning between the hotel and serviced apartment zones and again through the ground floor on grid 1/E (Refer SK23)	
Façade	Façade elements connected off a straight edge form		Resolution of concrete edge zigzag formwork or façade element to create triangular floor element		Brickwork elements very expensive to construct and creating arched brickwork is very time consuming being constructed on a form		Façade elements connected off a straight edge form	
<u>Building 2B</u>								
Building structural Stability	Lateral stability is provided by central lift/stair core and is of satisfactory size for the building height.		Lateral stability is provided partly by the concrete core, but is eccentric to the centre of mass of the building. Additional bracing along the western façade down to the podium level is required. (Refer SK11).The building being of steel framing and CLT (Cross laminated Timber) floor construction is light weight and can readily be braced with the steel framing.		Lateral stability is provided by central lift/stair core and is of satisfactory size for the building height. The core will be working additionally hard for the structure to take out the eccentric loads from the stepping out floors towards the easement. This will result in some more significant wall thicknesses to resist this with the other lateral loads imposed on the building. It should be noted that the core needs to continue into the carpark and not partly terminate at ground floor as lateral load cannot be translated onto the tunnel through the soil in this zone. (Refer SK21,SK22)		Lateral stability is provided partly by the concrete core, but is eccentric to the centre of mass of the building. Additional bracing along grid Q and or grid B01/P-Q would resolve this or pushing the core further to the south to help minimise the eccentric load on the core. (Refer SK25)	

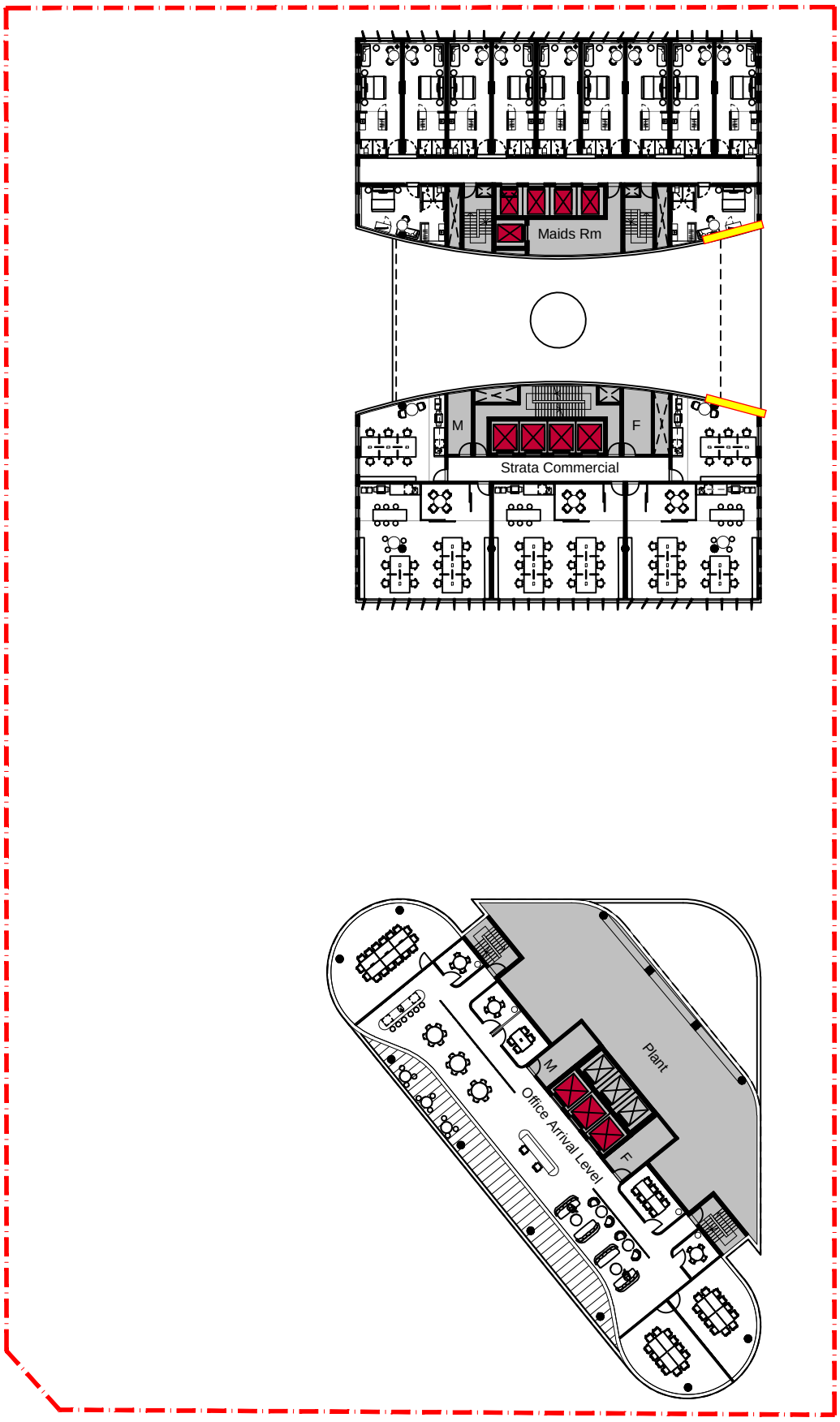
	Competitor 1 *Bates Smart*		Competitor 2 *Fitzpatrick and Partners*	Competitor 3 *WMK*		Competitor 4 *Woods Bagot*
Vertical elements	Square columns on a regular grid and core walls		Steel/timber columns. Note timber elements should be kept in the internal environment only and not used externally.	Circular columns to the building perimeter with a central core. An additional row of column is required to the east of the building where spans are currently 13m.		Square columns on a regular grid and core walls Columns are missing on the typical floors on Grid B01/M and N.A sloping column may be utilized to resolve column transfers or long slab cantilevers at grid B04/M-N similar at grid Q/B02. (Refer SK25,SK26)
Floor Plates	Floor plates for the commercial building will be a banded 1 way system		CLT timber supported on steel trusses and beams	Floor plates for the commercial building will be a banded 1 way system radiating out from the core with typical spans at about 9.5m an additional row of column are required to the east of the building where spans are currently 13m.		A flat plate with drop panel floor system can be utilized in this building providing a more flexible fitout space for services with no band beams to deal with
Transfer Zones	Transfer structure at level 8	steel transfer truss (Refer SK3A)	No building transfers	Ground floor	Sufficient depth to resolve over driveway aisle which tapered columns land in the middle of these.	No building transfers
Car parking	Columns and cores have been taken down from the towers above through to basement B4 columns are not in compliant car parking locations and spaces will be lost.		Additional support for the core structure is required but will not affect car parking spots.	Spaces will be lost through the basement to allow for the core structure to be supported for the full depth of the basement. Several areas insufficient column sizes have been allowed for to transfer columns to basement 4.		Columns are located in door opening zones and may affect numbers of car spots. In addition there is a column from the commercial building landing in the centre of the driveway ramps at grid O/B03 that will need resolution. (Refer SK24)
Railway exclusion zone	Perimeter columns of building sitting on the existing tunnel shoring wall(Refer SK4)		The building is being constructed over the air space of the tunnel using steel trusses and CLT flooring. With no loads being exerted on the exclusion zone	Remained outside of the Zone		Remained outside of the Zone



BATESSMART™

SK1

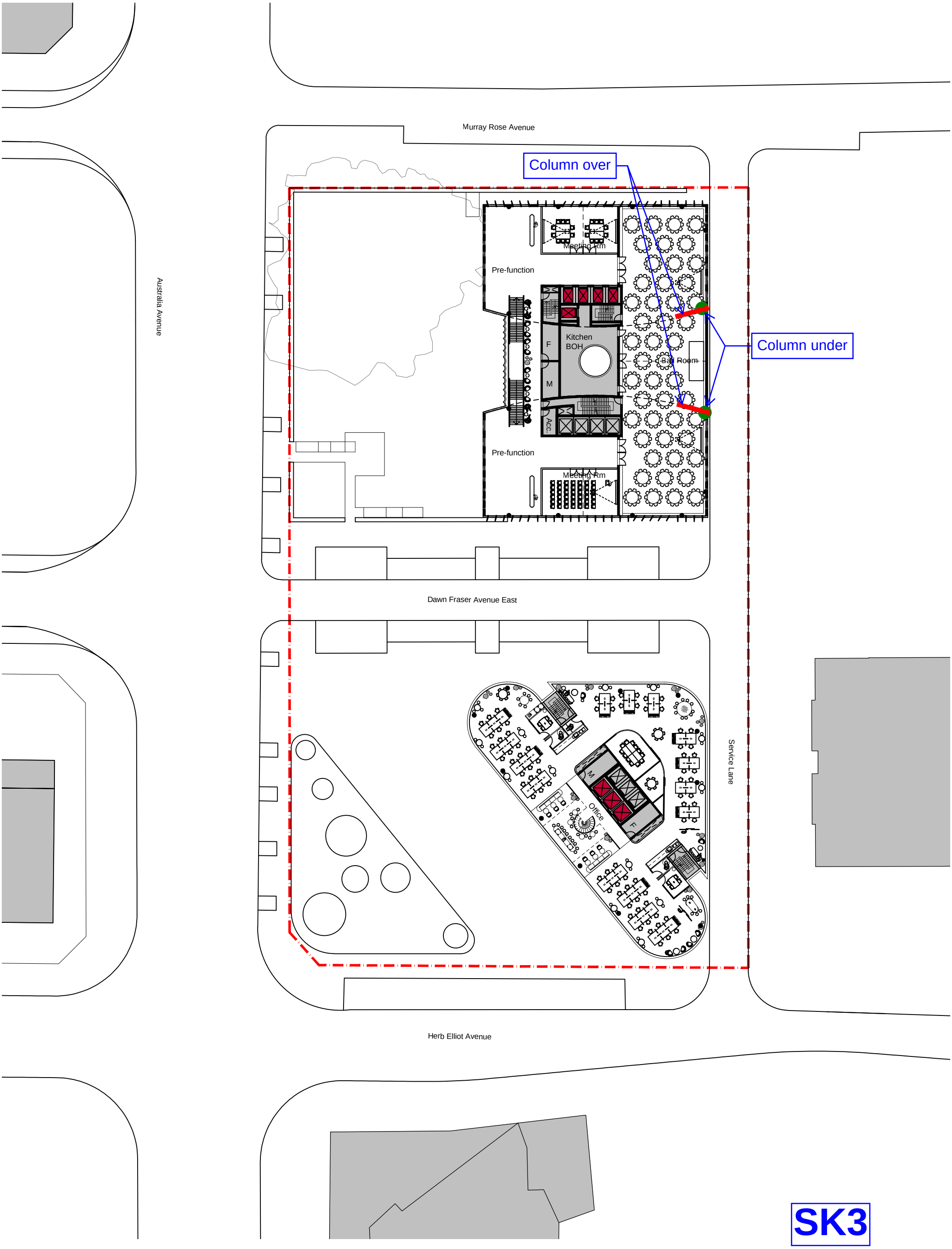
Site 2 Australia St SOP Sydney
S12221
Scale 1:500 @ A3
Level 03 ~ 07 - Typical Lower



BATESSMART™

SK2

Site 2 Australia St SOP Sydney
S12221
Scale 1:500 @ A3
Level 08 - 2B Client Floor

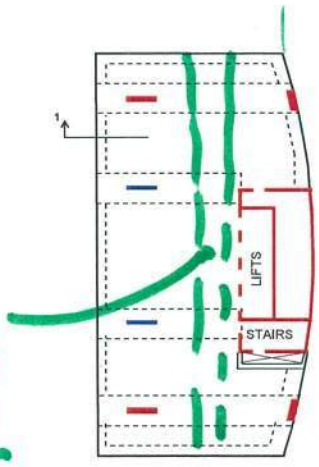


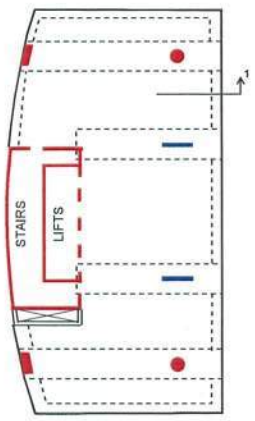
BATESSMART™

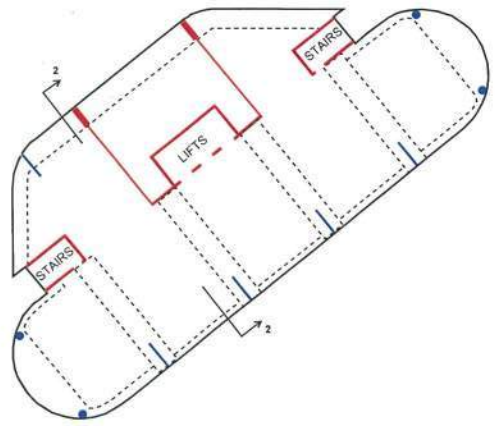
Site 2 Australia St SOP Sydney
S12221
Scale 1:500 @ A3
Level 01

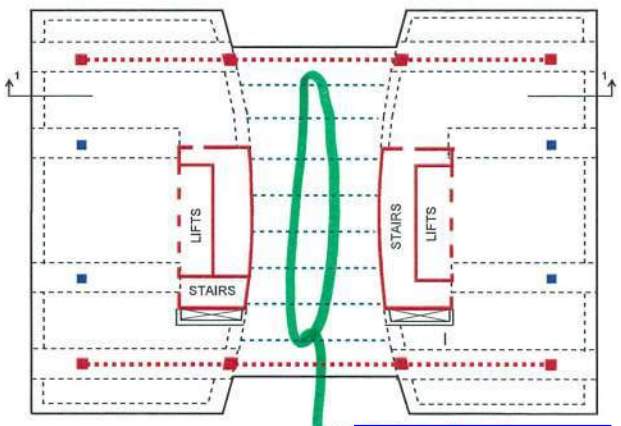
SK3

9.0 STRUCTURE

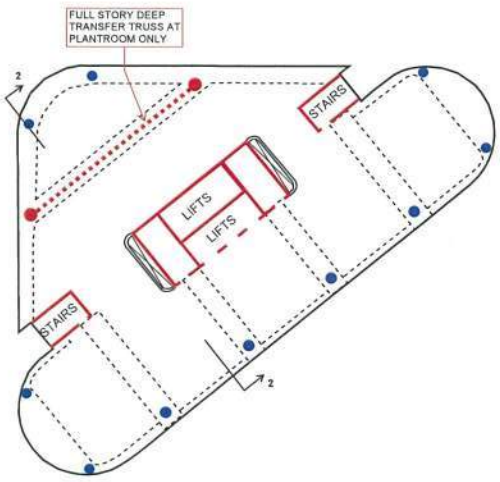








Pool Support



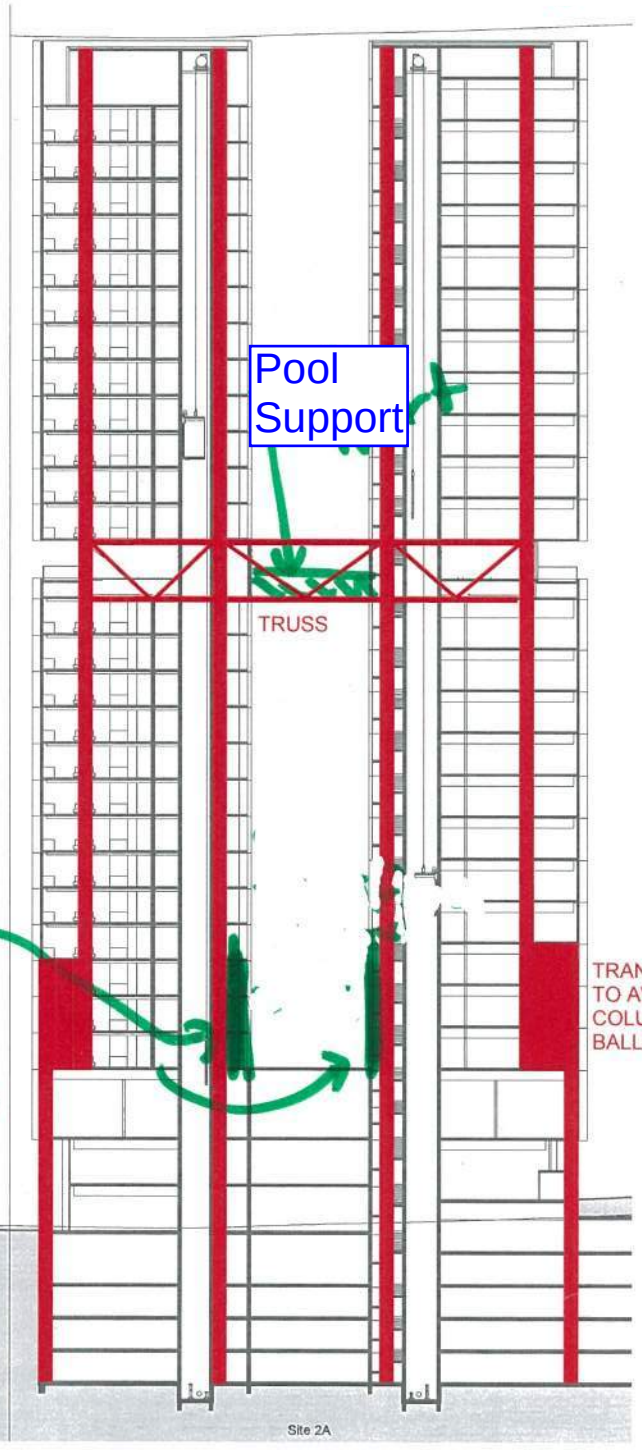
Both buildings are proposed with reinforced concrete frame structures. Floors are proposed as thin slabs with 350mm band beams to minimise the number of columns and provide an economical cantilever at the amenities level.

In order to provide a column free ballroom, tower columns are stepped towards the perimeter within party walls over three levels.

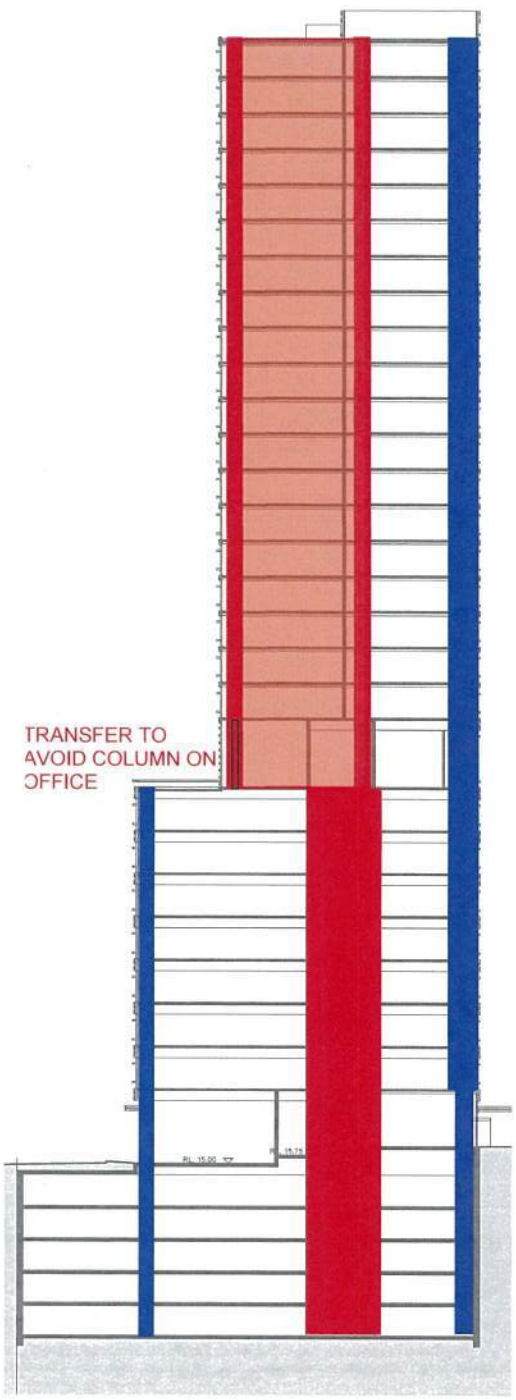
The pool deck suspended between the two towers of Building 2A will be built in steel framed construction.

LEGEND

- DENOTES WALL / COLUMN FOR LATERAL STABILITY OF THE BUILDING
- DENOTES WALL / COLUMN
- DENOTES FULL STORY DEEP TRUSS
- DENOTES STEEL BEAM
- DENOTES 350mm DEEP BAND BEAM
- DENOTES EXTENT OF FLOOR PLATE

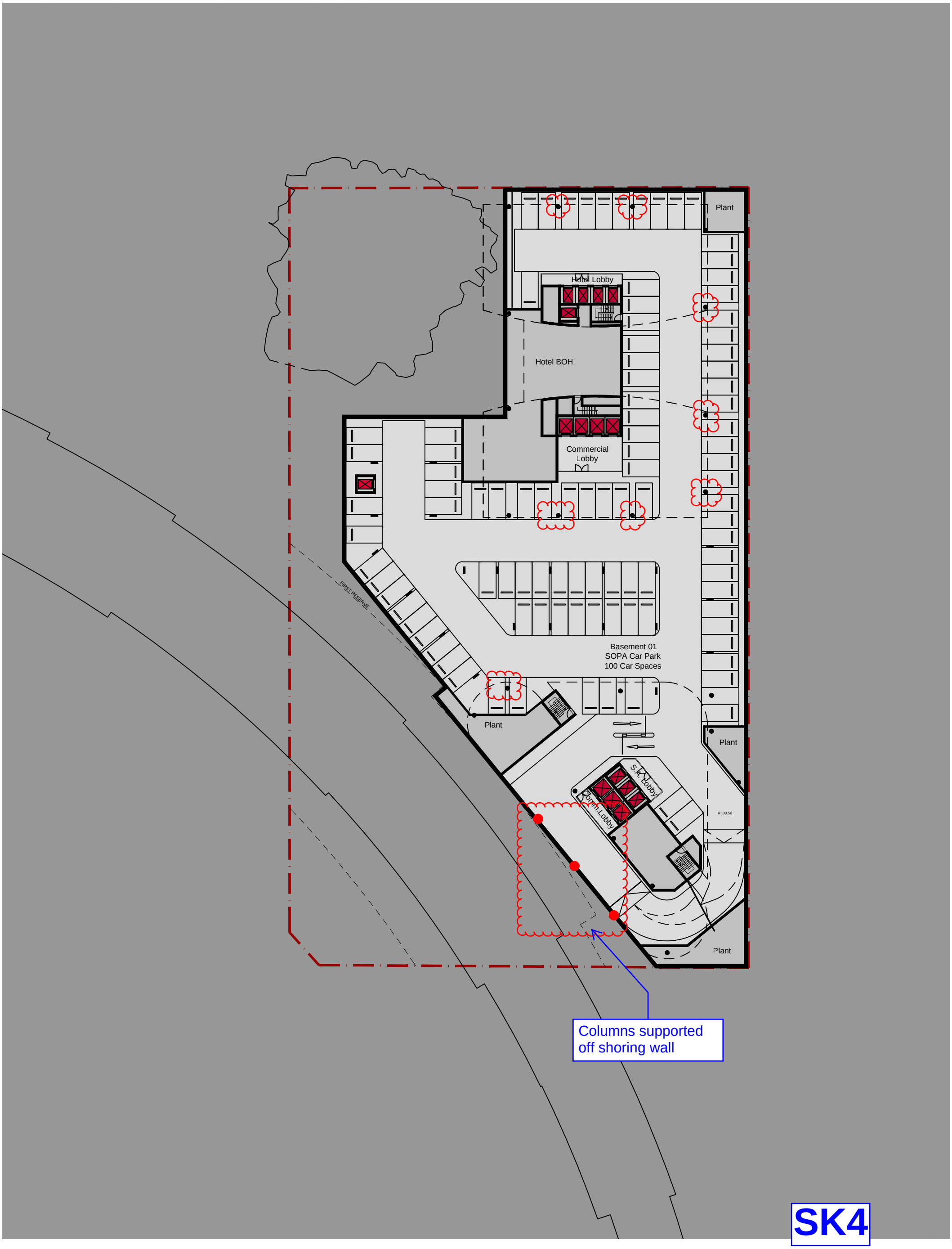


Column transfer beyond over ballroom



BATESSMART. + enstruct

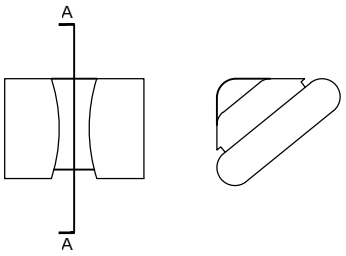
SK3A

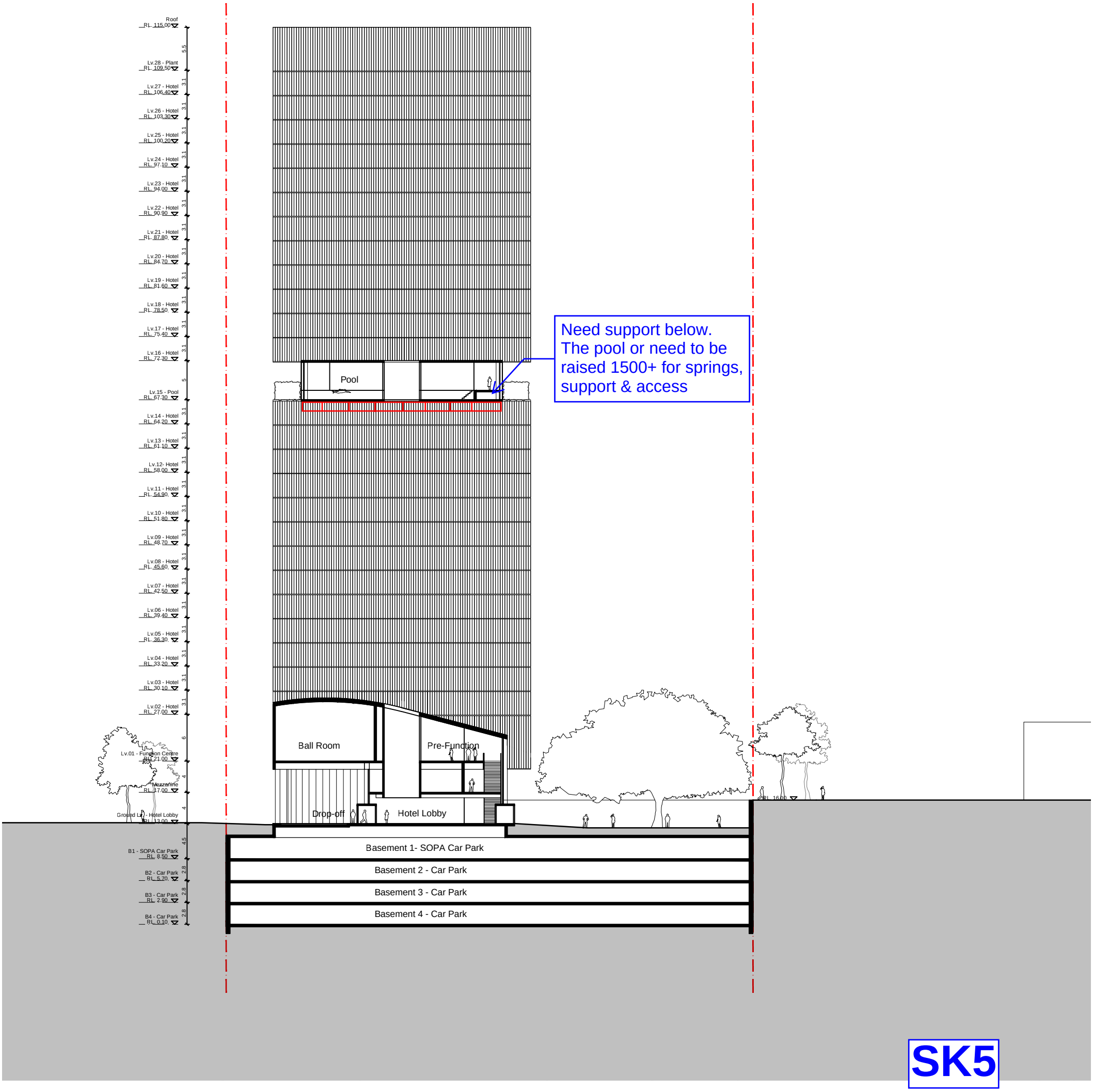


SK4

BATESSMART™

Site 2 Australia St SOP Sydney
S12221
Scale 1:500 @ A3
B01 - Basement 01

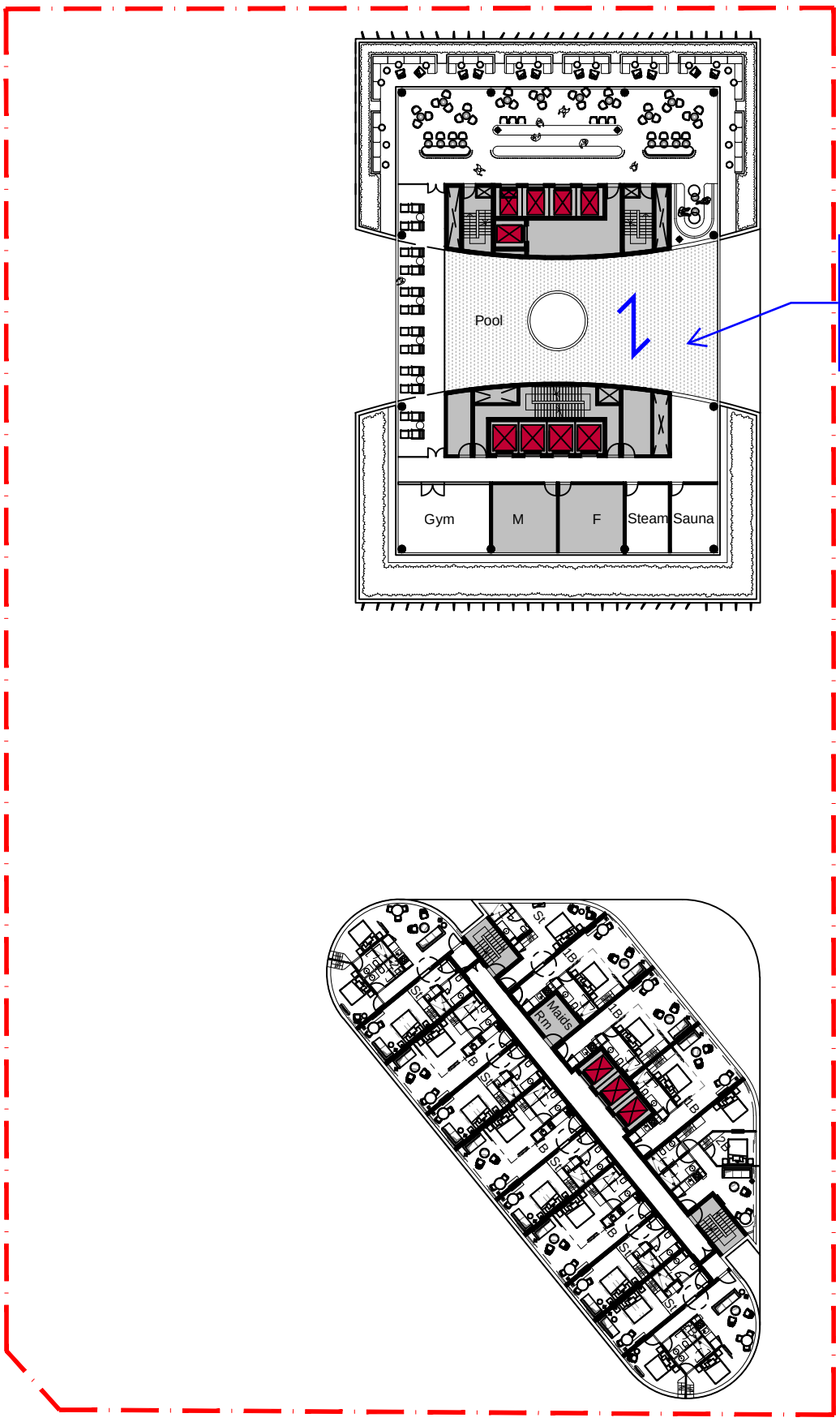




SK5

BATESSMART™

Site 2 Australia St SOP Sydney
S12221
Scale 1:500 @ A3
Section AA



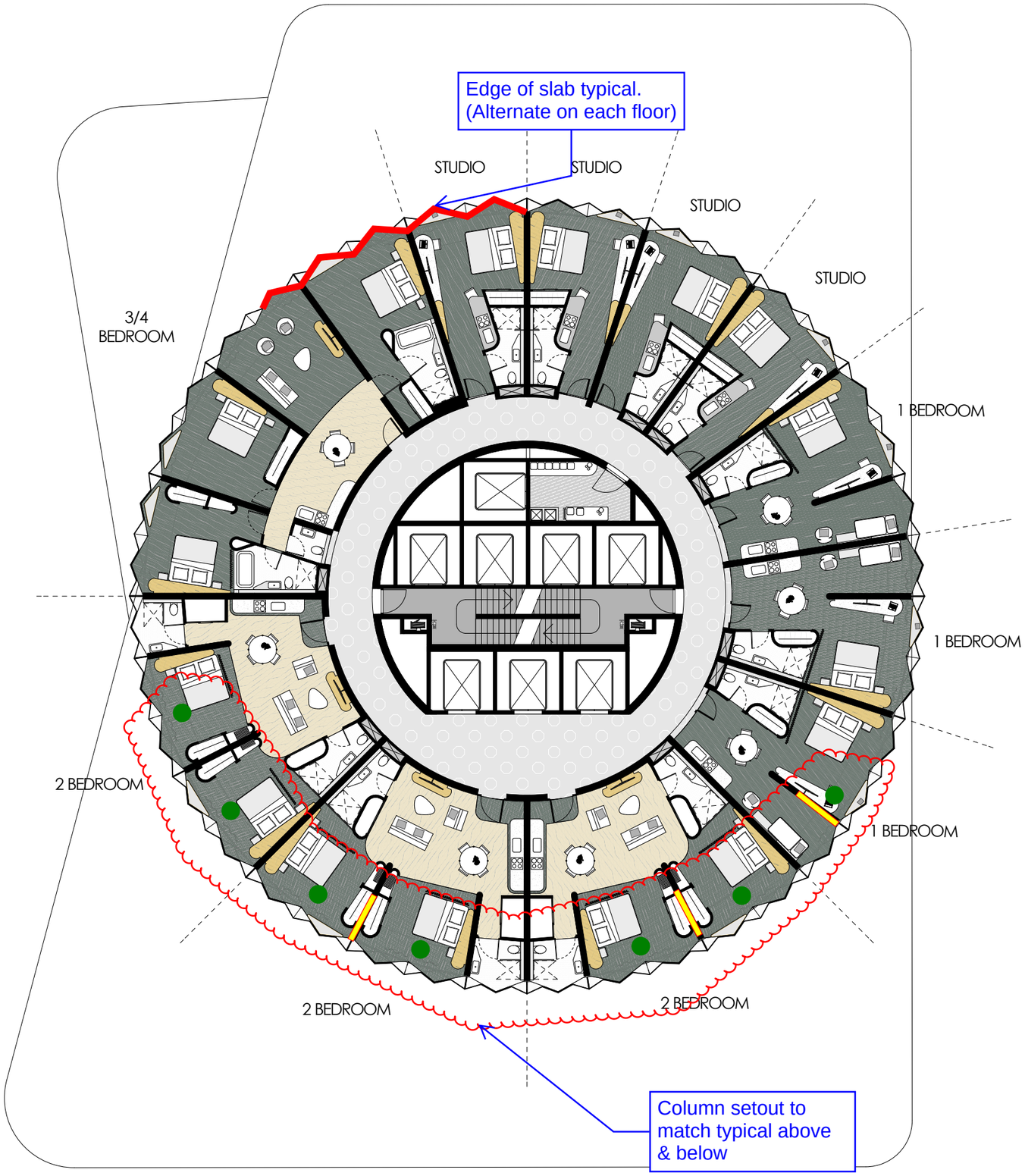
Pool has to span 10.5m min span.
(Need support below the pool)

BATESSMART™

SK6

Site 2 Australia St SOP Sydney
S12221
Scale 1:500 @ A3
Level 15 - Pool

fitzpatrick + partners

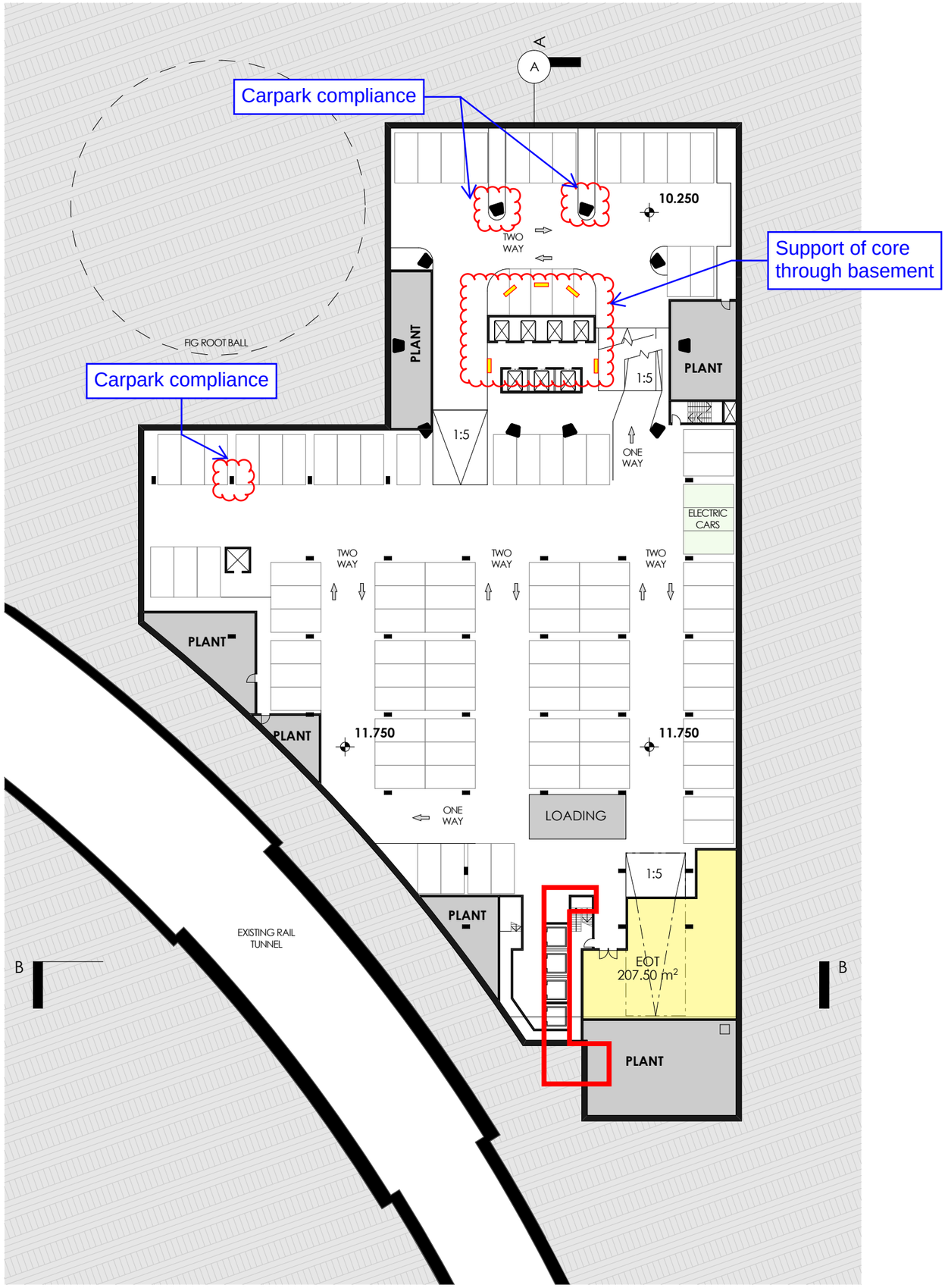


SERVICED APARTMENTS TYPICAL FLOOR |

1:200 @ A3

SK7

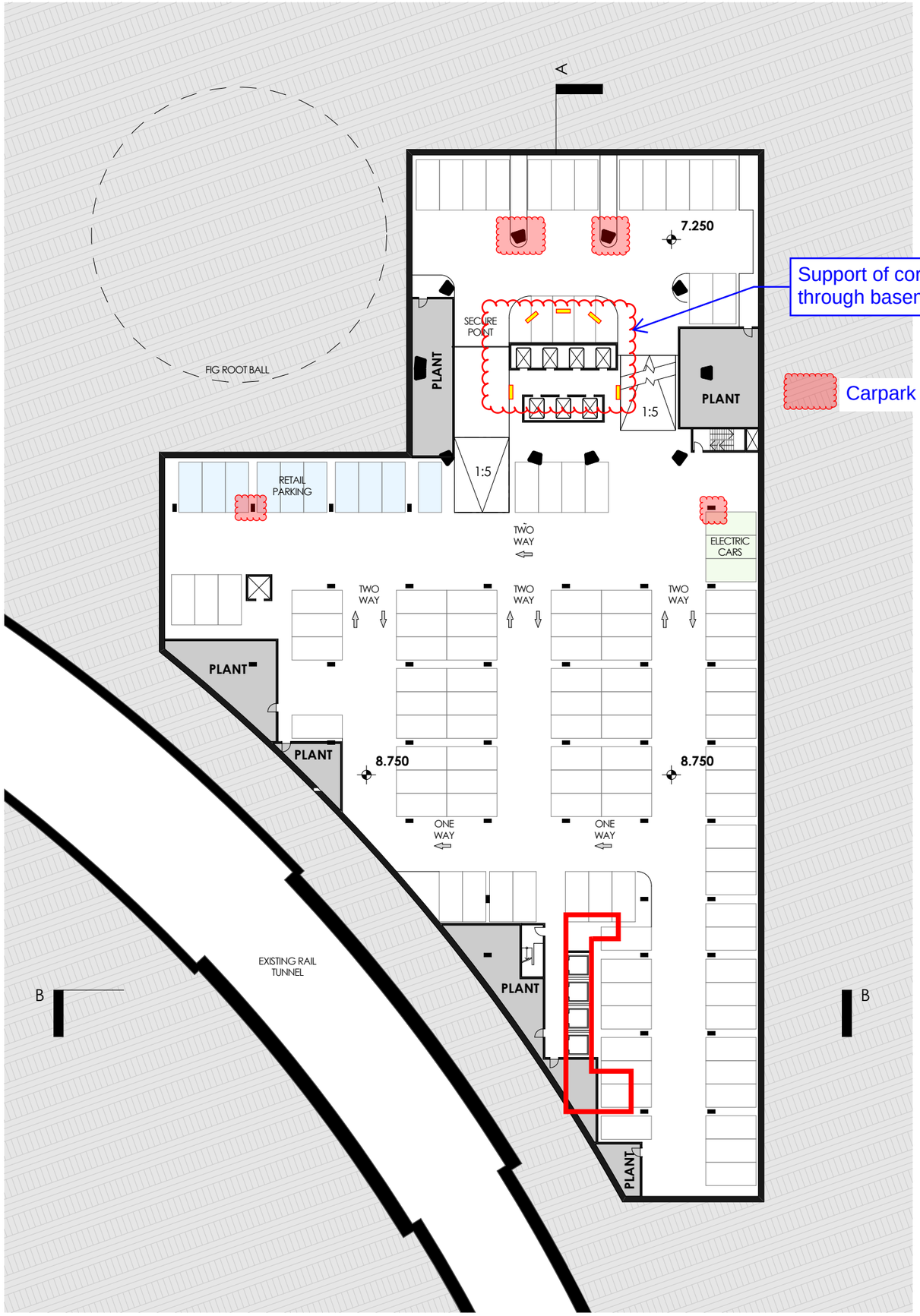
fitzpatrick + partners



PLAN B1 |
1:500 @ A3

SK8

fitzpatrick + partners



Support of core through basement

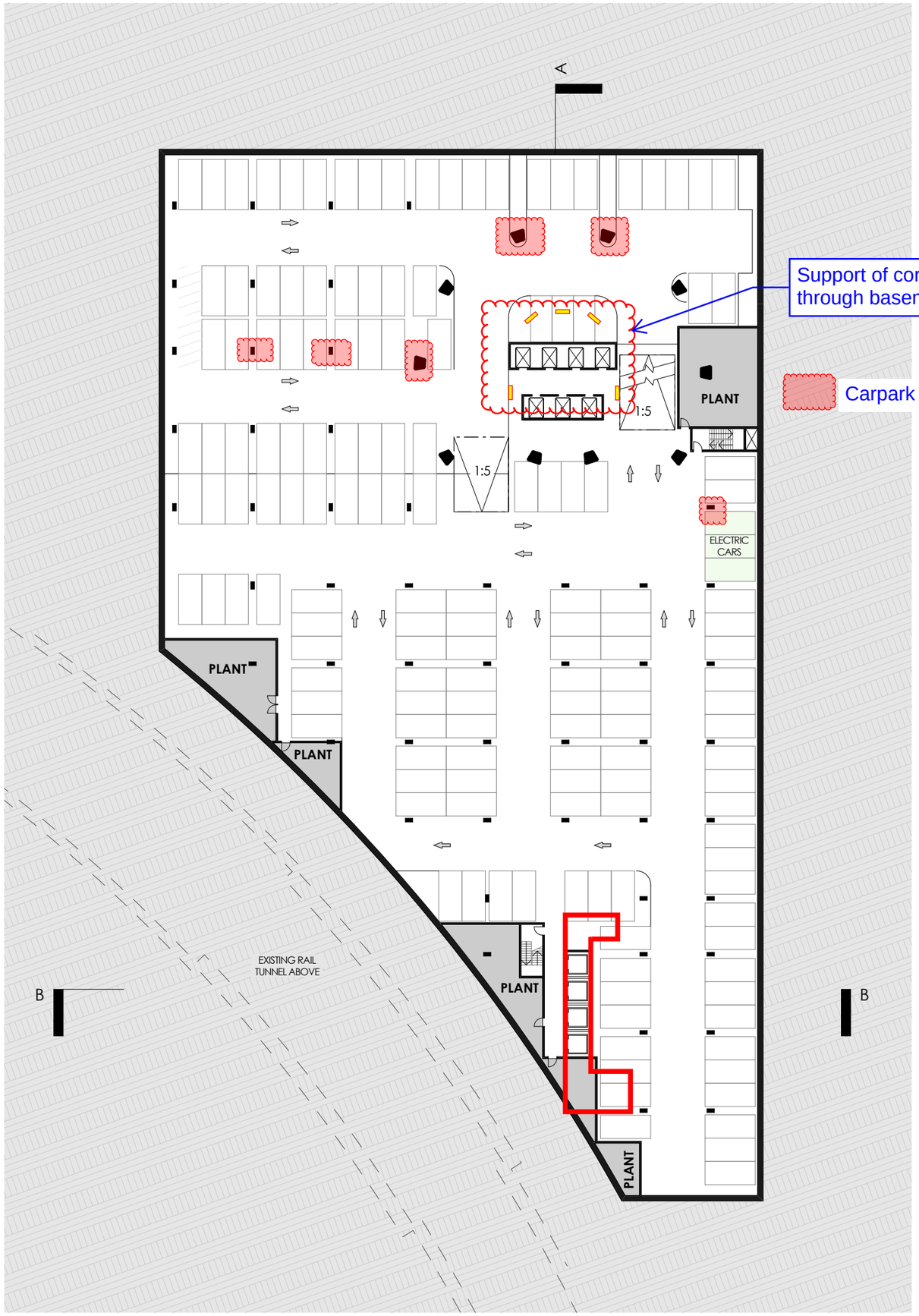
Carpark compliance

PLAN B2 |

1:500 @ A3

SK9

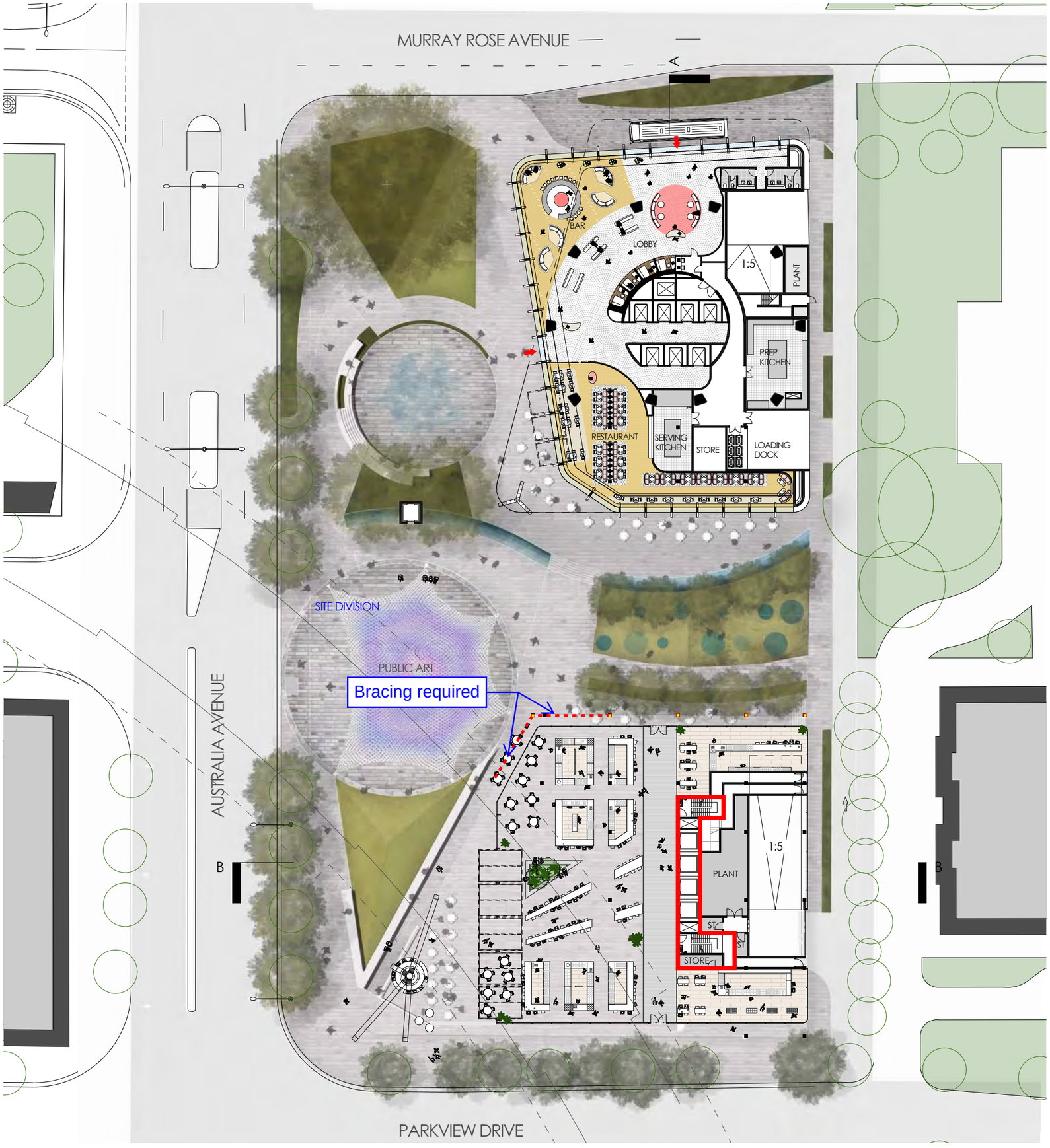
fitzpatrick + partners



PLAN B4+3 |
1:500 @ A3

SK10

fitzpatrick + partners

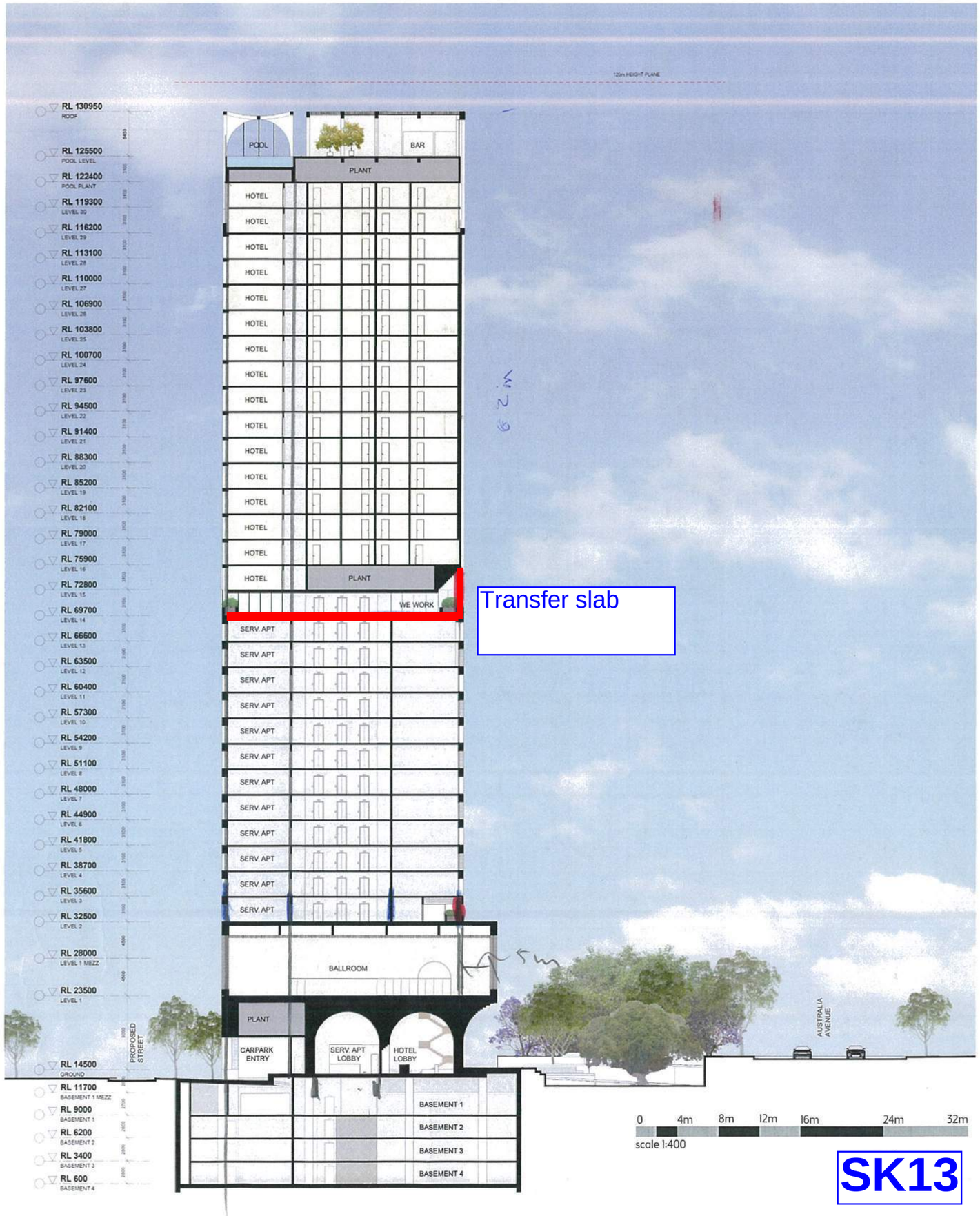


PLAN GROUND |
1:500 @ A3

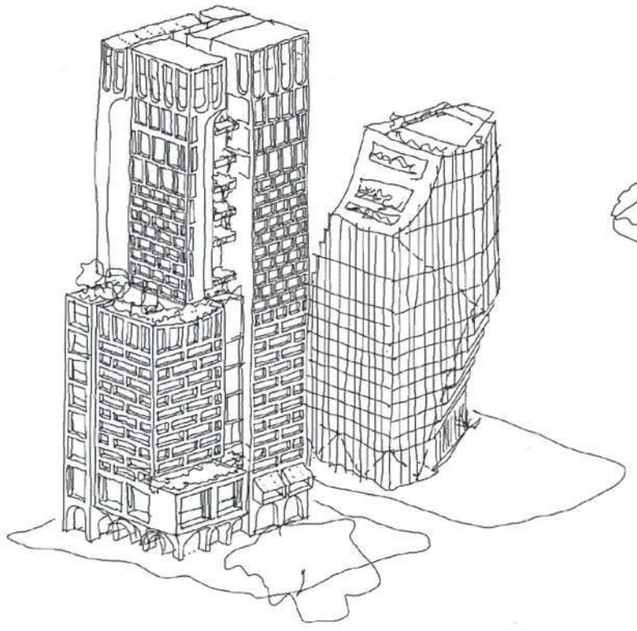
SK11

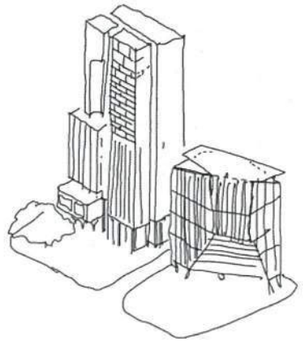
Architecture | Australia Avenue

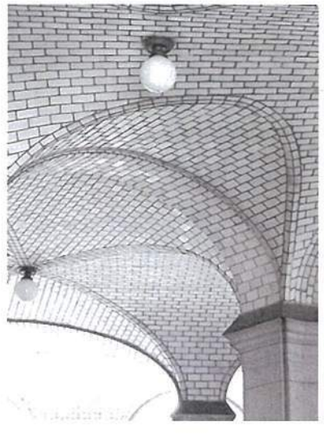
Architecture | Section A

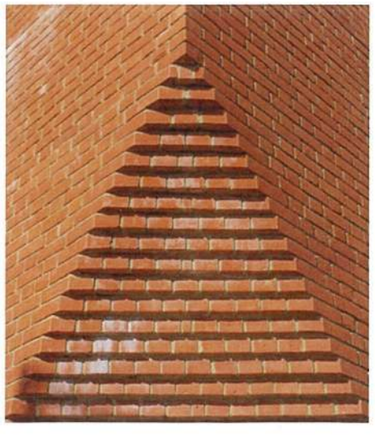


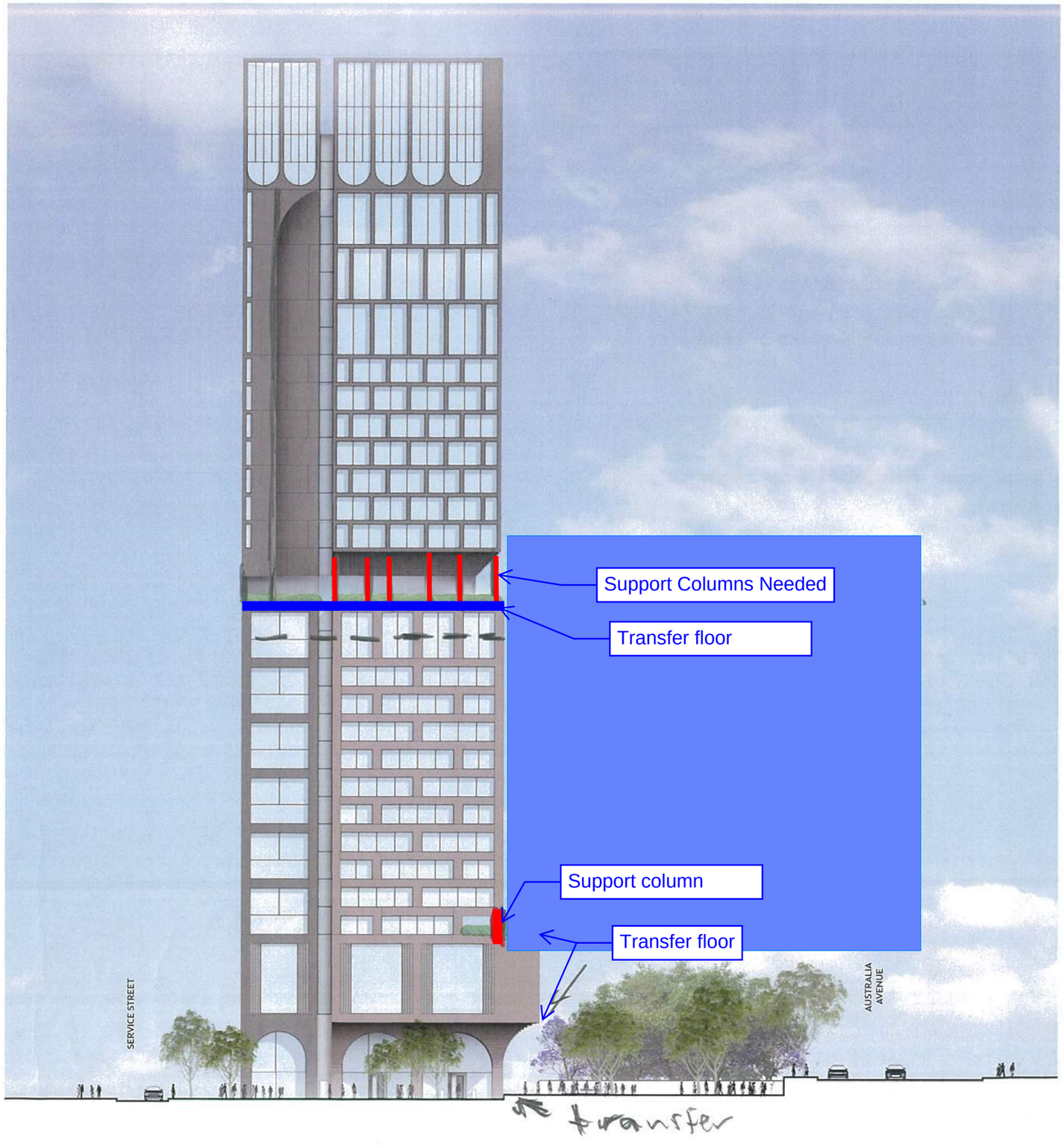
Elevation | North-West | 1:500





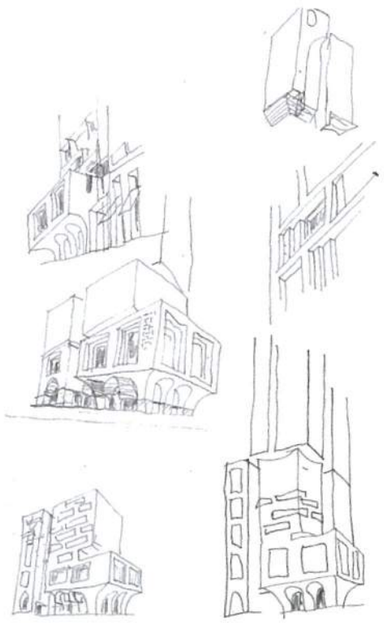


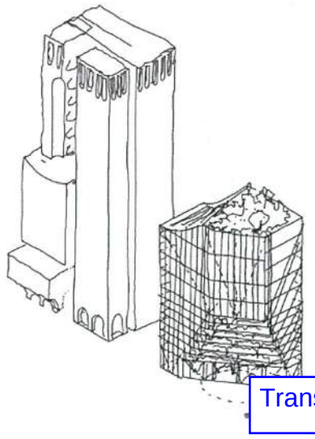


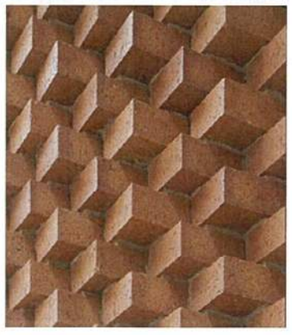


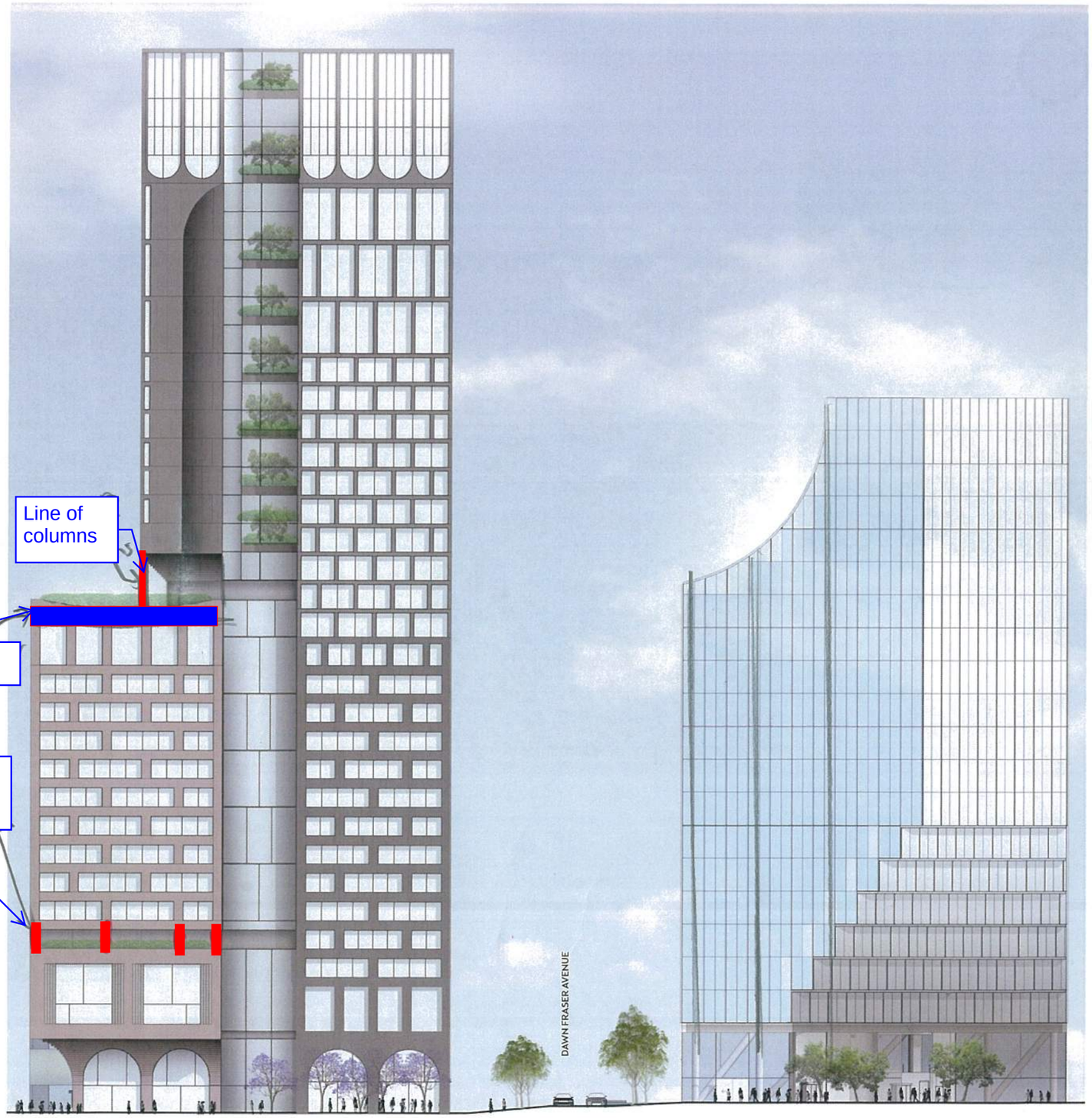
SK14

Elevation | North-East | 1:500









0 8m 16m 24m 32m 48m 64m

scale 1:200

SK15

13*13 grid = 170m2
Core size OK.
incl. toilets

Architecture | 2A Collaboration Work Floor Plan | 1:200

No resolution of structure through garden terrace (Level 14)

N

0 8m 16m 24m 32m 48m 64m

scale 1:200

SK16

Architecture | 2A Typical Serviced Apartment Plan | 1:200

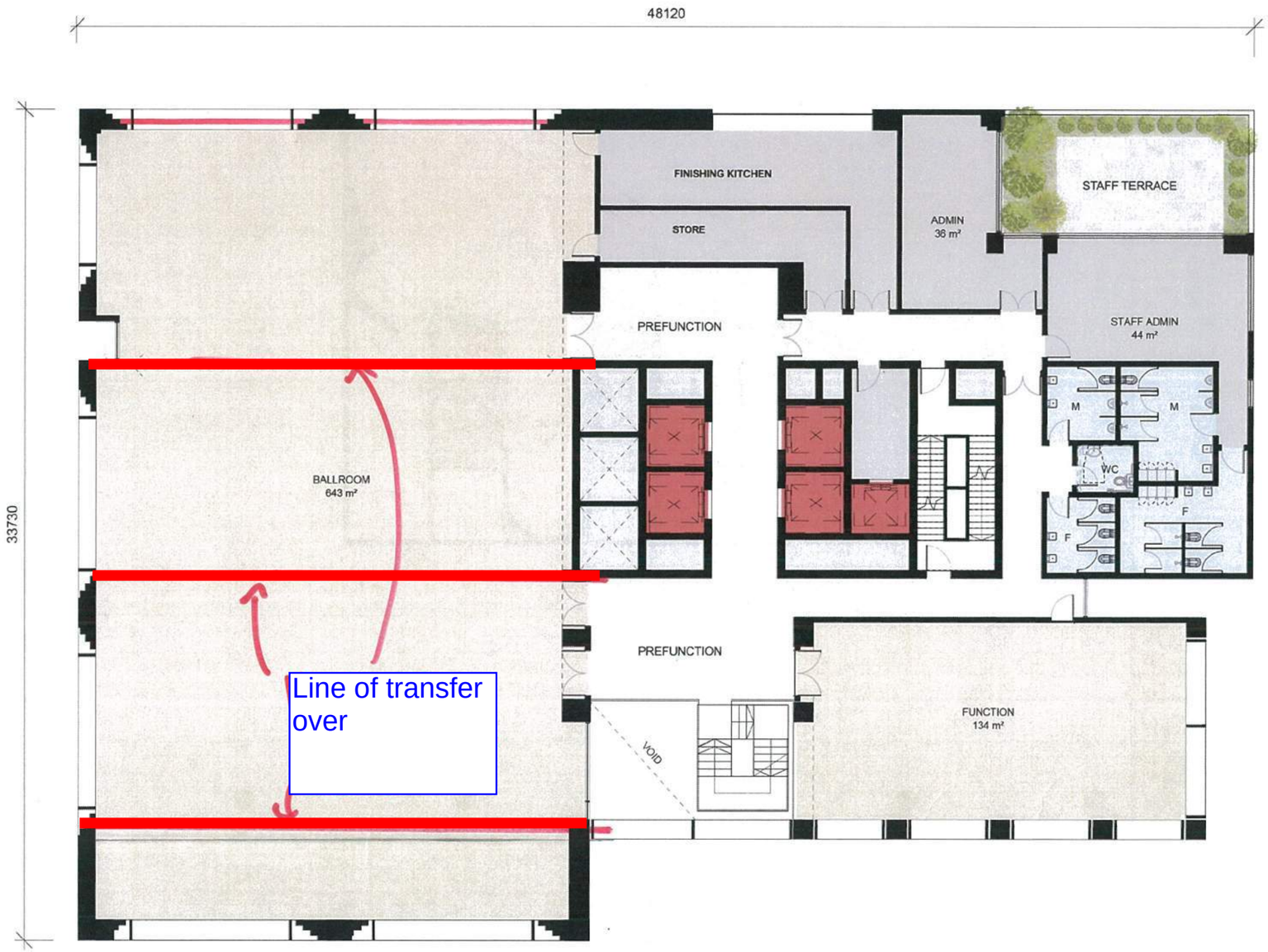
N

0 8m 16m 24m 32m 48m 64m

scale 1:200

SK17

Architecture | 2A Function Floor Plan | 1:200



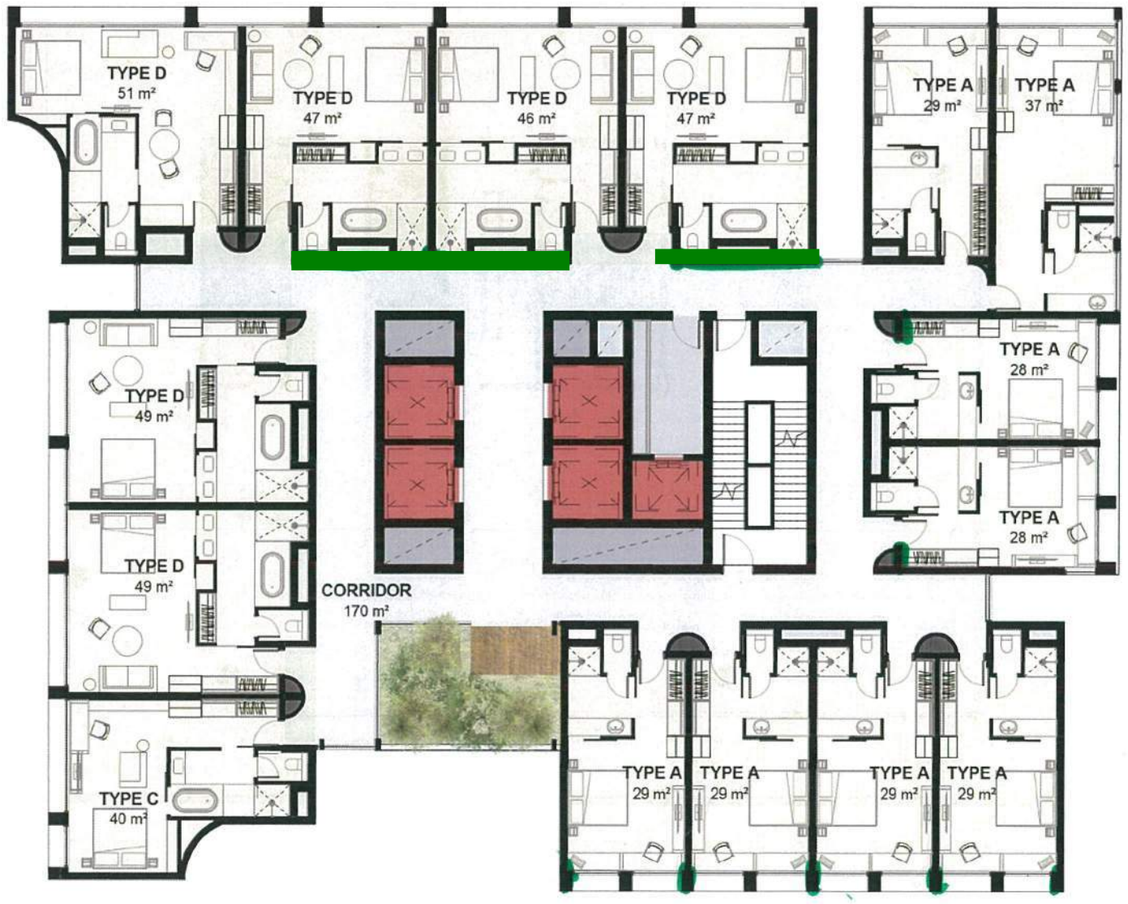
N

0 8m 16m 24m 32m 48m 64m

scale 1:200

SK18

Architecture | 2A Hotel Suite Floor Plan | 1:200



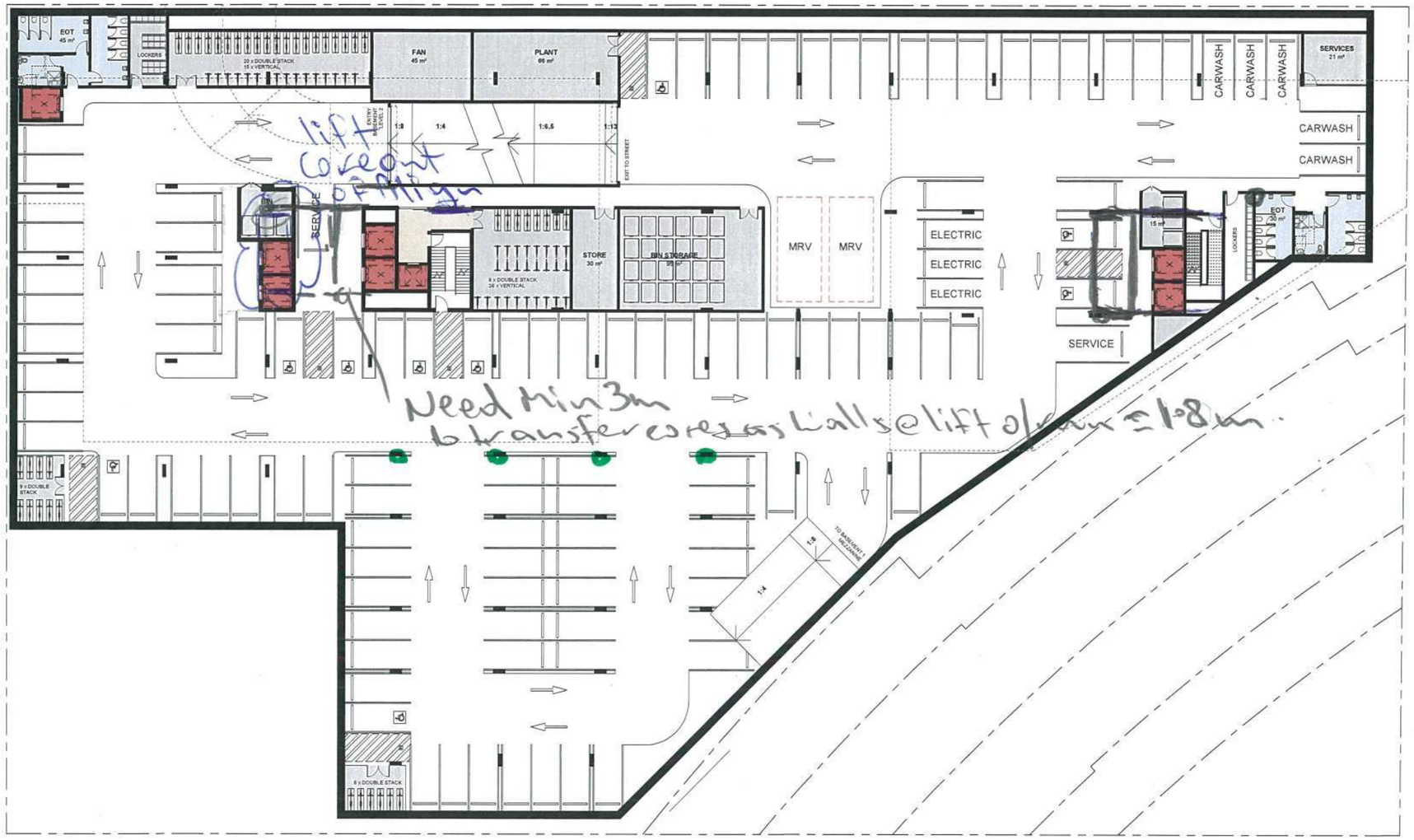
N

0 8m 16m 24m 32m 48m 64m

scale 1:200

SK19

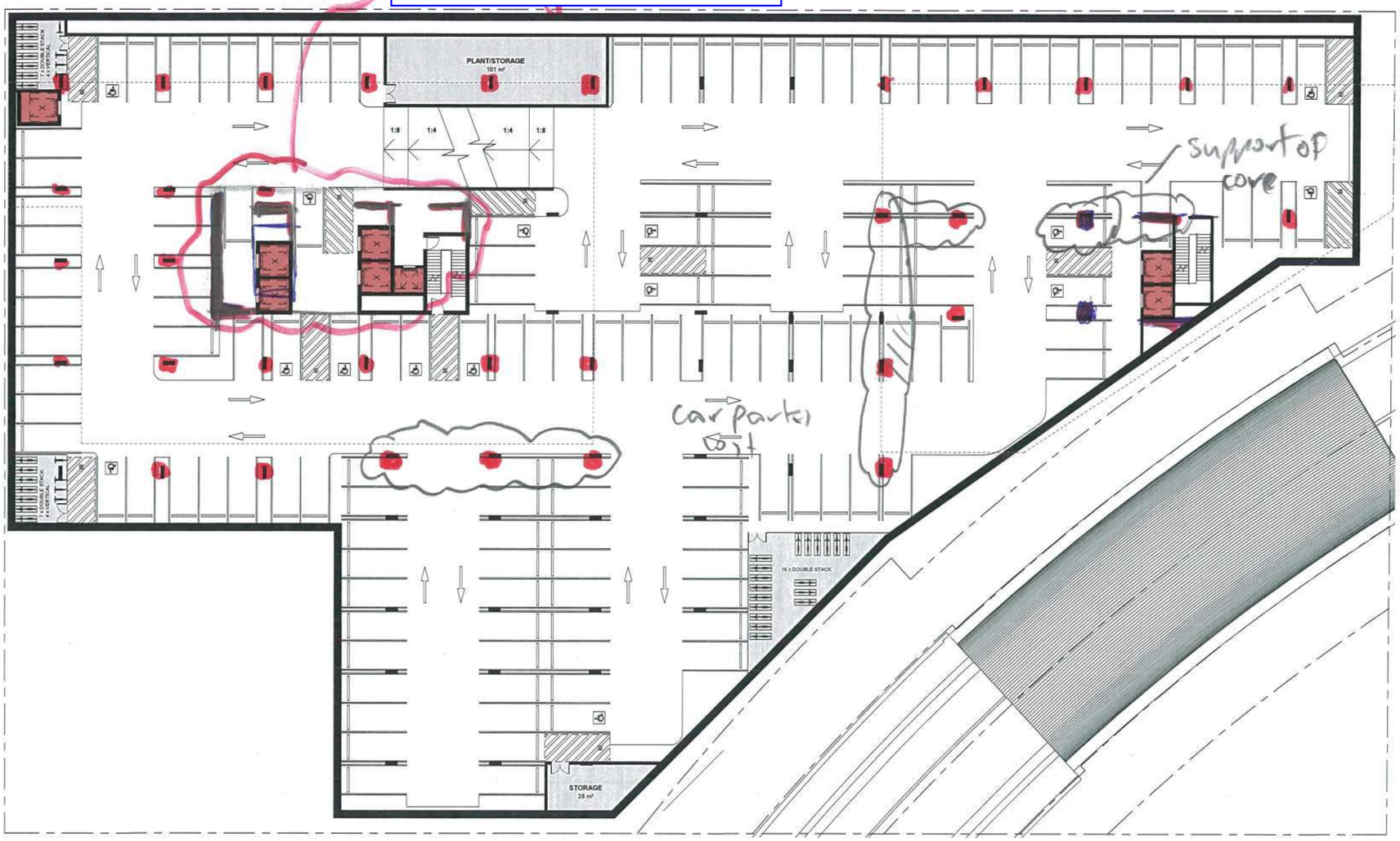
Architecture | Basement 1 Plan | 1:400



SK20

Architecture | Basement Typical Plan | 1:400

Support of core through basement

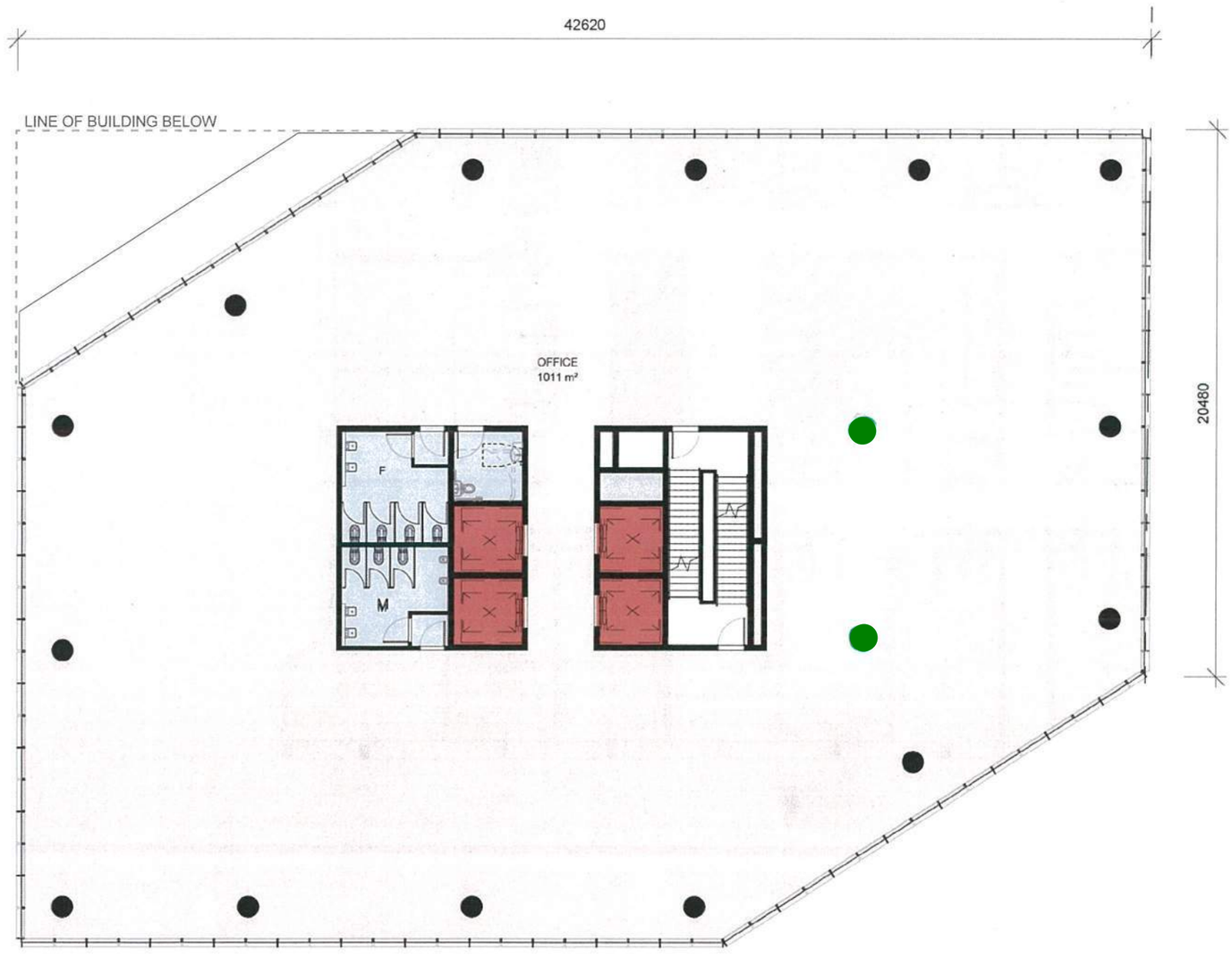


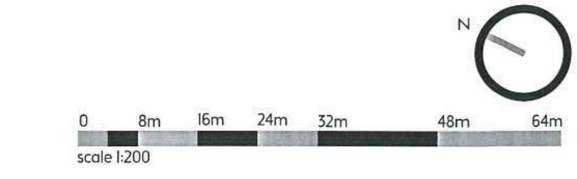
N

0 4m 8m 12m 16m 24m 32m

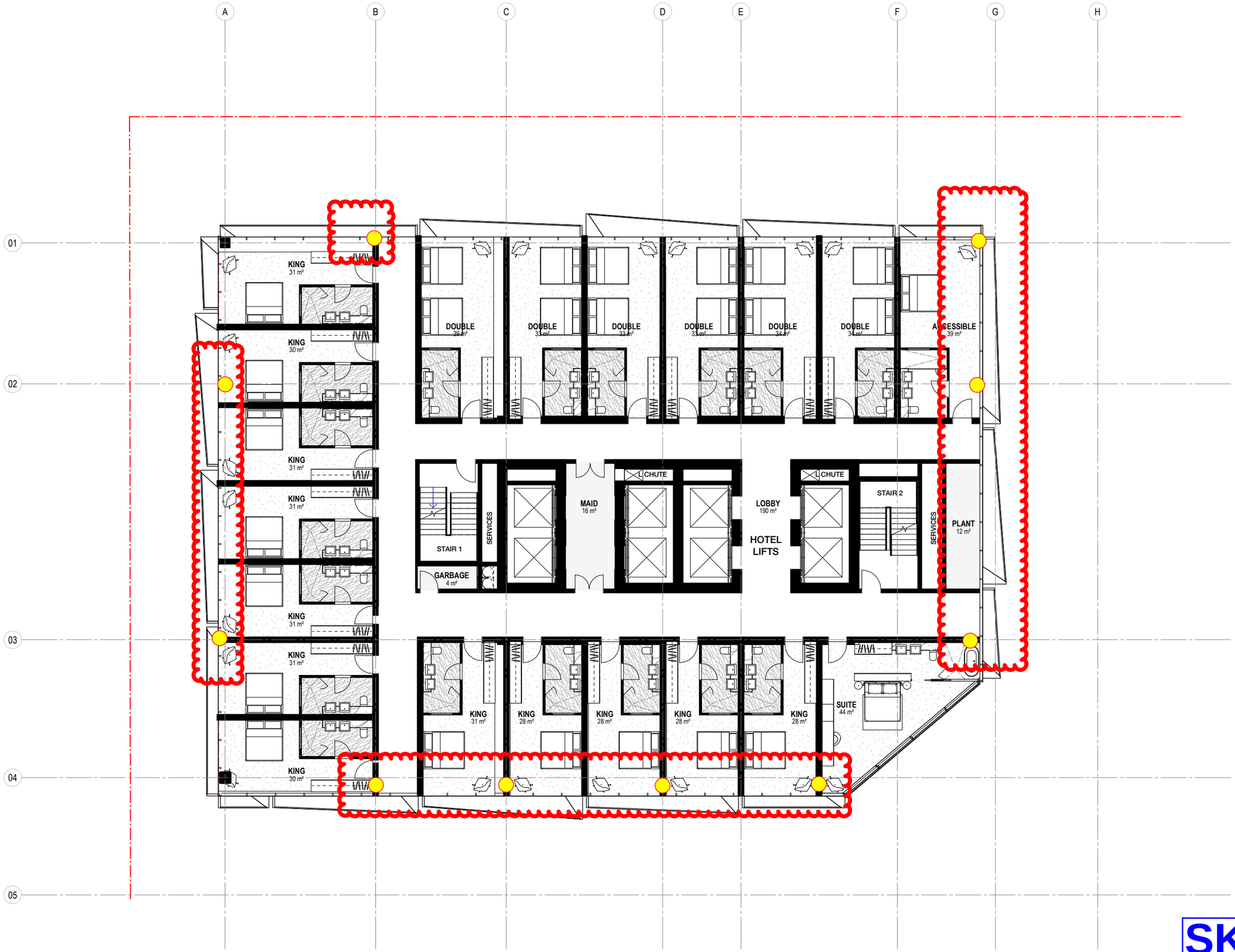
scale 1:400

SK21


42620
LINE OF BUILDING BELOW
OFFICE
1011 m²
F
M
20480


N
0
8m
16m
24m
32m
48m
64m
scale 1:200

SK22



SK23

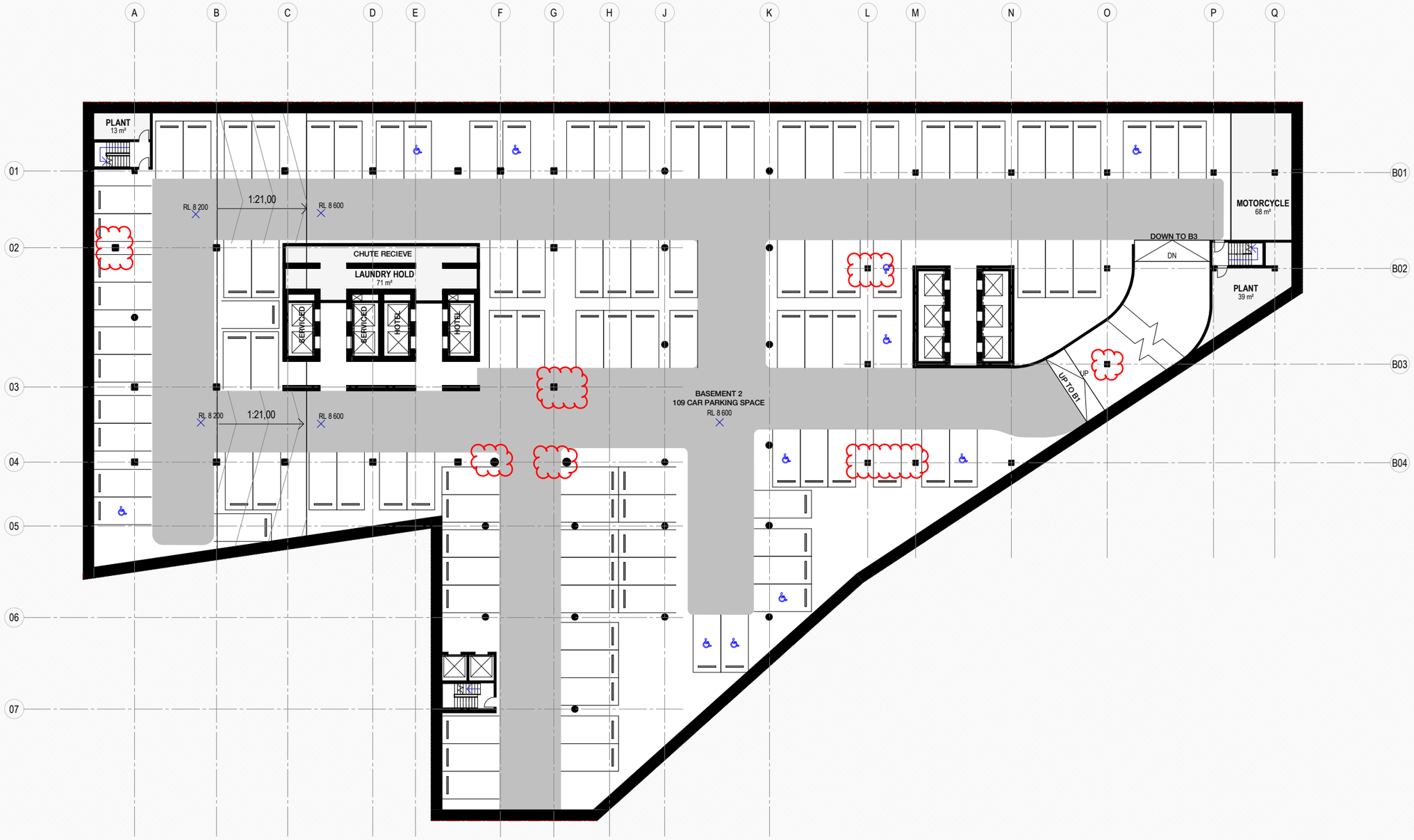
WOODS BAGOT™

Client
ECOVE

Project
SITE 2 AUSTRALIA AVENUE

Sheet title
SITE 2A- TYPICAL HOTEL LEVEL

Project number	Scale	Sheet size	© Woods Bagot
121225	**1 : 100**	**A1**	
Sheet number	Revision	Date	
A- 2A2203	**A**	**06.08.2018**	



SK24

WOODS BAGOT™

Client
ECOVE

Project
SITE 2 AUSTRALIA AVENUE

Sheet title
BASEMENT 2

Project number
121225

Scale
1 : 200

Sheet size
A1

Sheet number
A-2002

Revision
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Date
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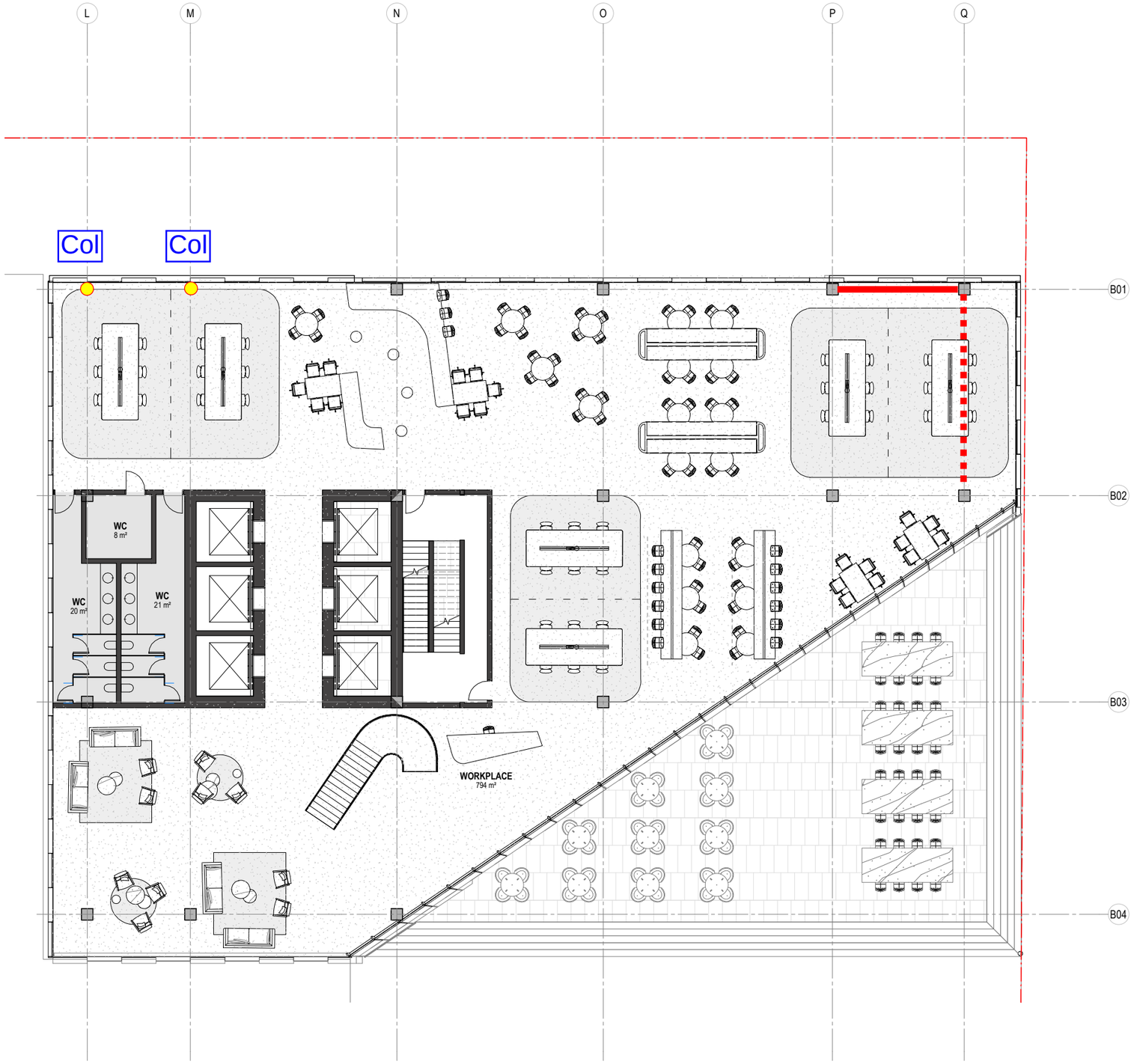

SK25

WOODS BAGOT™

Client
ECOVE

Project
SITE 2 AUSTRALIA AVENUE

Sheet title
LEVEL 01

Project number
121225

Scale
1 : 100

Sheet size
A1

Sheet number
A- 2B2201

Revision
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Date
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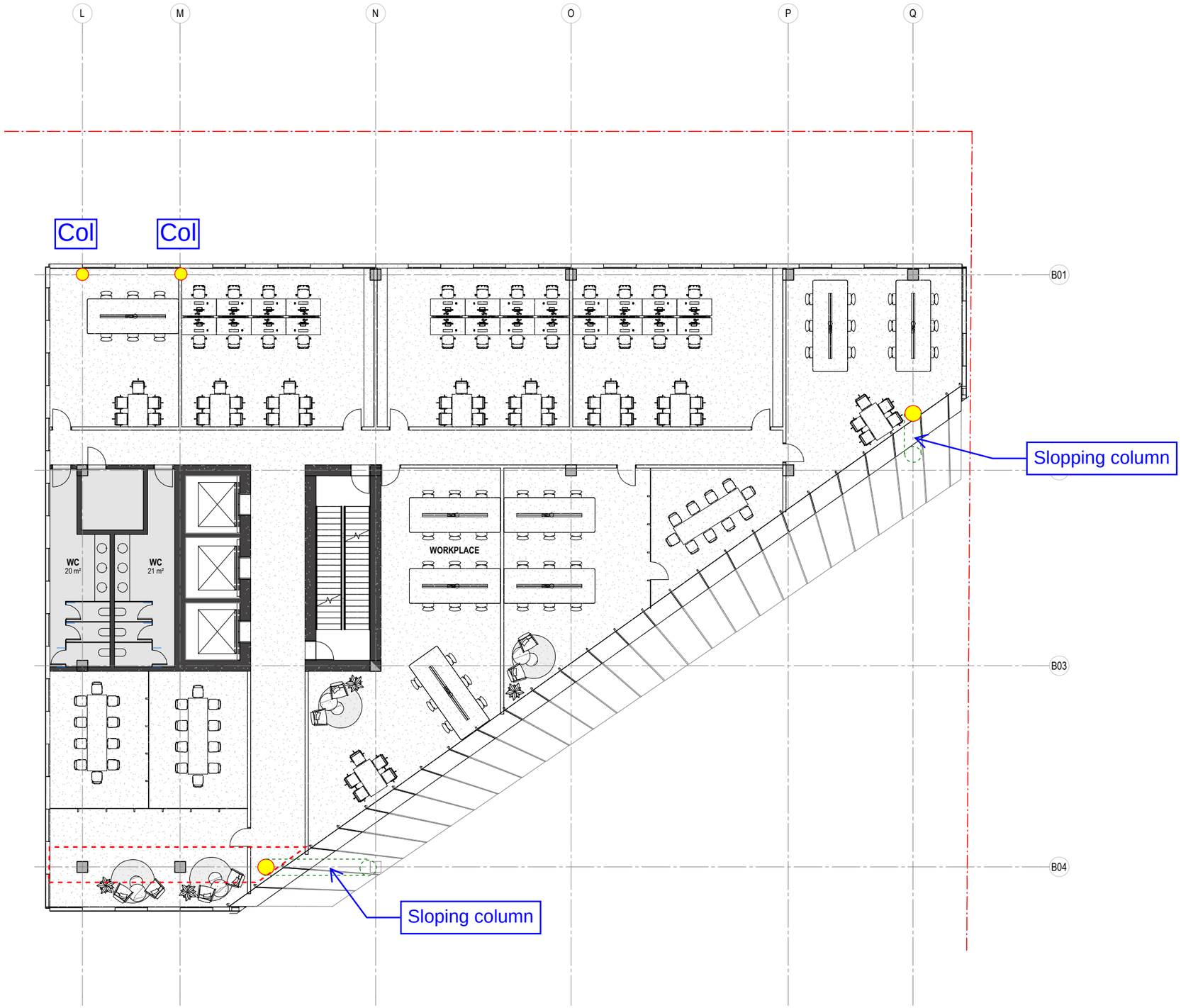

SK26

WOODS BAGOT™

Client
ECOVE

Project
SITE 2 AUSTRALIA AVENUE

Sheet title
LEVEL 15

Project number	Scale	Sheet size	© Woods Bagot
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Sheet number	Revision	Date	
A- 2B2215	**A**	**06.08.2018**	

218132

APPENDIX D

Functional Brief Assessment

Ecove Group and
Intercontinental Group

Functional Brief Assessment

Requirements	Competitor 1 – Bates Smart	Competitor 2 – Fitzpatrick + Partners	Competitor 3 - WMK	Competitor 4 – Woods Bagot
Preferred Tower Configuration				
Tower 2A				
• Hotel • Commercial Strata Suites	Issue: ▪ Hotel has been designed to spread over 25 levels with only 10 hotel rooms per floor	Comment: ▪ Commercial has all been shifted to 2B as a standalone commercial building resulting in a positive operating efficiency.	Comment: ▪ Commercial has all been shifted to 2B as a standalone commercial building resulting in a positive operating efficiency.	Comment: ▪ Commercial has all been shifted to 2B as a standalone commercial building resulting in a positive operating efficiency.
	Issue: ▪ Commercial suites have been designed to spread over 22 levels with only 5 suites per floor	Capable of complying.	Capable of complying.	Capable of complying.
Tower 2B				
• Retail, Commercial • Serviced Apartments	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
Commercial Space				
1. Tower 2A				
a. Commercial floor space to be built within the podium building and have its own dedicated ground floor entry lobby. The lobby can be interlinked to the hotel lobby.	Issue: ▪ Commercial not contained within podium resulting in 22 levels of suites	Capable of complying.	Capable of complying.	Capable of complying.
b. Commercial suites to be designed to be split into separate commercial strata suites ranging in size between approx. 50sqm to 100sqm	Capable of complying.	Comment: ▪ Well thought out planning of commercial strata suites	Capable of complying.	Capable of complying.
c. Bathrooms to be a shared facility on each floor	▪ The office suites spread over 22 levels creates operational inefficiency for lift cost and movement plus 22 sets of bathrooms (brief called for offices within podium only).	Capable of complying.	Capable of complying.	Capable of complying.
d. The expected commercial floor space is approx. 8,000sqm. If there is surplus GFA in the tower then this can be increased.	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
2. Tower 2B				
a. In addition to the above requirements, Tower 2B is to have a commercial floor space area of no less than 6,000sqm	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
b. The location of the commercial floor space is to be within the podium building (levels 1 and up)	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
Retail				
1. Retail to be located on ground floor of Site 2B	Issue: ▪ Very little retail offering predominately facing the laneway	Capable of complying.	Capable of complying.	Issue: ▪ Very little retail offering predominately facing the laneway
2. Retail area to be flexible in design to allow for either a single tenancy or a “market style” mixture of micro tenancies.	Issue: ▪ Not addressed. Only a handful of traditional shopfronts provided	Comment: ▪ Positive interface between public domain and market hall	Capable of complying.	Issue: ▪ Not addressed. Only a handful of traditional shopfronts provided
Site 2A Hotel				
1. 270 Hotel Rooms comprising of:	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.

Requirements	Competitor 1 – Bates Smart	Competitor 2 – Fitzpatrick + Partners	Competitor 3 - WMK	Competitor 4 – Woods Bagot
• 164 King beds • 81 Double/Double • 10 Accessible • 15 Suites	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
2. Minimum and maximum room sizes for each room type • King bed: 28sqm – 30sqm • Double/Double: 30sqm – 32sqm • Accessible: 28sqm – 30sqm • Suites: i. Junior Suite: 40sqm (8 rooms) ii. Deluxe Suite: 52sqm (7 rooms)	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
3. If GFA permits a VIP/Penthouse suite is required to cater for key precinct events. The VIP/Penthouse suite should be flexible in its design to allow the room to be split and booked separately when no VIP guests are using the facility.	Capable of complying.	Comment: ▪ This can be provided as design offers 10 extra over rooms due to floor plan layout.	Capable of complying.	Capable of complying.
4. A centrally located housekeeping room, with direct access to the service lift is required on each floor. Access to the service lift should not be via the guest corridor.	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
5. Function Space • Ballroom Pillarless – minimum 500 seats (divisible into two separate areas) • Function Room 200sqm. If floor plate allows, this can be included within the above. • Meeting Rooms 2 x 75sqm • The Banquet operation is to be serviced through the Central Kitchen with a finishing kitchen near the banquet facilities with all main cooking works carried out in the Central Kitchen • Provision for some back of house storage and staging area, of approx. 60-100sqm.	Minor Issue: ▪ Appears to only have 480 seat allowance	Minor Issue: ▪ Appears to only have 480 seat allowance	Capable of complying.	Capable of complying.
	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
6. Hotel Restaurant - All day dining requirements • To be located on the ground floor of Building 2A • Minimum 100 seats with a preferred seating of 160 seats • The functional relationship to kitchens, loading docks and other back of house areas are important for this area. Given the traffic flow, it is important to plan out the access pathway of back of house /Kitchens to ensure there is no required pathways encroaching into guest areas. Additionally, the access pathway for the food should also be considered to ensure the path to the	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
	Issue ▪ Dining has been split from the Ground floor Bar. It only appears to cater for 68 seats (short by at least 32 seats)	Capable of complying.	Capable of complying.	Capable of complying.
	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.

Requirements	Competitor 1 – Bates Smart	Competitor 2 – Fitzpatrick + Partners	Competitor 3 - WMK	Competitor 4 – Woods Bagot
scullery doesn't mix with the food outflow path. • All day dining requirements to be flexible to also allow for a lobby bar area of approx. 80 seats				
7. Sky Bar • Bar to be adjacent to the pool deck • The sky bar can be part of the pool area but should be separated strategically by the deck and perhaps some event space to create different zones, especially one that separates external guests and hotel guests, whilst still giving pool guests access to the bar. • The sky bar will serve food and have a small finishing kitchen space available whilst being serviced by the Central Kitchen.	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
	Issue ▪ No finishing kitchen provision on this floor	Capable of complying.	Capable of complying.	Capable of complying.
8. Pool • A single pool to service both the hotel and service apartment components. • The minimum pool size is 20m x 10m • The maximum pool size is 25m x 12m • The pool location must be strategically designed to be an iconic building feature and also to capture key prominent views such as the CBD backdrop • The pool design should also consider the strong wind conditions that are prevalent in the precinct to maximise the usage all year round.	Capable of complying.	Issue: ▪ Glass roof needs further design development to consider structural issues, cost and potential chlorine smells being trapped indoors	Capable of complying.	Capable of complying.
	Capable of complying.	Issue: ▪ Pool appears to fall short of required dimensions however this could be resolved during design development	Capable of complying.	Capable of complying.
	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
	Issue: ▪ Pool location may be severely impacted by cross winds between the two tower forms ▪ Pool could remain in shadow for large portions of the day due to northern tower wall covering any potential sunlight	Capable of complying.	Capable of complying.	Capable of complying.
9. Gym • Minimum size: 120 sqm. This area is sufficient for both hotel and serviced apartments. • Preferred location: in order to provide synergies with the pool area, the preference is for the gym to be located on the pool floor (so that change facilities can be shared).	Issue: ▪ Gym size appears to be significantly short of the required area (no measurement provided)	Capable of complying.	Capable of complying.	Capable of complying.
	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
10. Porte-cochère/drop off zone • Due to the location and likelihood of sporting teams using the hotel, a bus drop off is essential. Minimum space required is for 4 cars + 1 Bus • The location of the drop off zone should consider: i. Ensuring it is designed to allow for an efficient hotel operation; and	Issue: ▪ Hotel lobby entrance is from the laneway and is not a very positive experience for guests.	Capable of complying.	Capable of complying.	Capable of complying.
	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.

Requirements	Competitor 1 – Bates Smart	Competitor 2 – Fitzpatrick + Partners	Competitor 3 - WMK	Competitor 4 – Woods Bagot
ii. iii. Be considered in context of the overall SOPA Reference Design (Attachment C).				
12. Other Facilities • Business Centre Integrated into the Lobby Design • Make adequate provision for Administration, Back of House & Laundry facilities				
Serviced Apartments				
1. Approximate breakup by percentage of: a. Studios 30% b. 1 Bed 35% c. 2 Bed 25% d. 3/4 Bed 10% (3-bedroom) e. Dual key layouts should also be considered that could be separated into a mix of the above. e.g. a combination of studio + 1B dual keyed apartment converting into a 2B apartment, 2B + Studio to provide 3B, etc)	Issue: ▪ No balconies or wintergardens provided	Issue: ▪ No balconies or wintergardens provided ▪ Layouts need considerable replanning	Issue: ▪ No balconies or wintergardens provided to most units	Capable of complying.
	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
2. Minimum and maximum apartment sizes for each type a. Studios (1 Bathroom) 30sqm – 35sqm b. 1 Bed (1 Bathroom) 45sqm – 50sqm c. 2 Bed (2 Bathrooms) 60sqm – 70sqm d. 3 Bed (2.5 Bathrooms) 95sqm – 110sqm e. 4 Bed (3 Bathrooms) 100sqm – 140sqm	No details provided on unit sizes.	No details provided on unit sizes.	Capable of complying.	Capable of complying.
	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
3. The serviced apartments component should make an allowance for linen rooms on every level for servicing. Additionally, a housekeeping office, linen room and engineering office in the back of house areas. Total area of approx. 150sqm for the non-guestroom floor components.	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
4. Chutes a. A linen chute is required. The linen shoot is to be located within the linen room on each guest floor with the chute ending being placed in a holding area close to the loading dock b. An allowance for a garbage chute is also required.	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
5. Porte-cochère/drop off zone a. A small drop off zone is required. The location, where possible, should be consistent with any SOP Master Plan 2030 (2018 Review) requirements or constraints. Any departure from the SOP Master Plan 2030 (2018 Review) should be adequately justified.	Issue: ▪ No drop off zone for serviced apartments	Capable of complying.	Capable of complying.	Capable of complying.
6. Create services connection between the hotel core and the serviced apartments core via the basement to facilitate housekeeping and	Issue: ▪ No loading dock on ground floor	Capable of complying.	Capable of complying.	Capable of complying.

Requirements	Competitor 1 – Bates Smart	Competitor 2 – Fitzpatrick + Partners	Competitor 3 - WMK	Competitor 4 – Woods Bagot
room service functions. This should also link to the hotel loading dock.				
SOPA Car Park				
1. A Public Car Park (dedicated to SOPA) is to be designed for 150 short term parking spaces.	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
2. Whilst basement ramps may be shared across multiple parking uses, the SOPA carpark must be capable of operating independently of the remaining carpark.	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
3. The carpark must be designed to allow an efficient entry and exit system due to the short term parking nature of this facility.	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
4. The SOPA can have its own dedicated lifts for access to the carpark if required, either integrated into the buildings or as a standalone feature within the plaza space. The preferred access to the basement is from the north eastern corner of site 2A from the corner of Murray Rose Avenue and the newly created road which can be shared with the private car park.	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
Parking				
1. In addition to the 150 SOPA car spaces, the following approx. carparking is required: a. Hotel 100 spaces b. Commercial 170 spaces c. Serviced Apartments 190 spaces d. Retail 10 spaces	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
2. Allowance required for carwash bay area (potentially operated by third party business)	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
3. Allowance for electric car charging bays.	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
4. The extent of the basement can be built under the proposed Dawn Fraser Ave extension and under the rear service street.	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
5. Limitations and setback requirements exist adjacent to the rail corridor and fig tree which need to be considered.	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
6. The carpark is to be limited to a maximum of four (4) basements.	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
7. The preferred access to the basement is from the north eastern corner of Site 2A from the corner of Murray Rose Avenue and the newly created road which can be shared with the public car park.	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
8. Provision for safety and access measures required to limit the access between the public car park and the car park for the hotel, serviced apartments, retail and offices.	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
9. It is noted that the car parking spaces in the SOP Master Plan 2030 (2018 Review) are maximum rates not minimum rates, as such the	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.

Requirements	Competitor 1 – Bates Smart	Competitor 2 – Fitzpatrick + Partners	Competitor 3 - WMK	Competitor 4 – Woods Bagot
car parking figures above do not reach the maximum rate for each use.				
Landscaping				
1. The landscaped design should encourage activation and interface between Sites 2A and 2B.	Issue: ▪ The ground floor public domain has been sunken by approx. 3m below Australia Ave removing all visual connection between the hotel lobby and Australia Ave ▪ Potential issues in building proposed pavilion structure over train corridor	Capable of complying.	Capable of complying.	Capable of complying.
2. Where possible outdoor workstation/meeting areas should be encouraged.	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
3. The landscaping should consider destination creating design that delivers a space that will draw users to the area, particularly to active the retail and public spaces.	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
4. The proposal should have regard to the reference to the SOPA Reference Design (Appendix C).	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
Façade				
1. The façade should consider a reduced amount of glazing through either stone cladding or equivalent material to improve thermal performance.	Capable of complying.	Capable of complying.	Capable of complying.	Issues: ▪ Façade appears to be all glass
2. The provision of solid façade elements also assists in the hotel room planning.	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
Signage				
1. The proposed hotel and serviced apartment operators are likely to be Crowne Plaza and Crowne Plaza Residences.	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
2.The building and landscape design should consider and identify key landmark signage points including: a. Hotel Branding on top of the tower b. Serviced Apartment Branding on top of the tower c. Key ground plane identifiers at strategic locations for ease of navigation for pedestrians and vehicles	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.
3. A Signage strategy will form part of a separate development application.	Capable of complying.	Capable of complying.	Capable of complying.	Capable of complying.

218132

APPENDIX E

Quantity Surveyor Cost Estimates

Rider Levett Bucknall

RLB | Rider Levett Bucknall

SITES 2A & 2B, SYDNEY OLYMPIC PARK

DESIGN COMPETITION SUBMISSION

QUANTITY SURVEYOR'S ASSESSMENT OF THE DESIGN PROPOSALS

SUBMITTED BY:

BATES SMART

FITZPATRICK + PARTNERS

WMK ARCHITECTURE

WOODS BAGOT

Prepared By:
Rider Levett Bucknall NSW Pty Ltd
L19, 141 Walker Street
North Sydney 2060

Tel: 02 9922 2277
Rlb.com

SITES 2A & 2B, SYDNEY OLYMPIC PARK

SCHEDULE OF ACCOMMODATION, ANALYSES AND SUMMARY OF COSTS

	Reference Scheme	BATES SMART	FITZPATRICK + PARTNERS	WMK ARCHITECTURE	WOODS BAGOT
Demolition & Site Preparation					
Total Cost ($)	350,000	350,000	350,000	350,000	350,000
Car Parking					
No of Levels	Four	Five	Four	Five	Four
Total Area (m2)	20,960	22,642	18,334	24,385	19,325
No of Cars (No)	648	473	451	603	440
Efficiency (m2/car)	32	48	41	40	44
Cost per Car ($/car)	38,956	53,979	52,466	44,682	52,979
Total Cost ($)	25,243,725	25,532,050	23,662,250	26,943,075	23,310,750
Commercial Office					
Total Area (m2)	9,380	21,584	22,643	18,634	19,614
Total Cost ($)	25,900,000	77,252,060	70,198,200	62,058,000	66,602,060
Serviced Apartments					
No. of Apartments overall	261	229	187	191	230
Average cost per apartment ($/apt)	313,352	300,622	313,831	339,834	342,235
Total GFA (m2)	24,740	16,426	15,354	15,617	18,539
Total Cost ($)	81,785,000	68,842,500	58,686,400	64,908,200	78,713,980
Hotel					
No. of Hotel Rooms overall	270	270	280	270	280
Average cost per hotel room ($/room)	292,131	326,377	294,346	315,074	310,042
Total GFA (m2)	18,825	17,804	19,844	18,487	20,087
Total Cost ($)	78,875,500	88,121,800	82,416,750	85,070,000	86,811,810
External Works					
Total cost ($)	3,845,775	4,000,000	4,000,000	4,000,000	4,000,000
Total $ (excl. GST)	**216,000,000**	**264,098,410**	**239,313,600**	**243,329,275**	**259,788,600**
Difference		**22%**	**11%**	**13%**	**20%**

NOTES:

Reference is made to individual reports for more detailed information and comments

The above costs exclude design contingencies, design fees, development costs other than construction, lessee fitout, FF&E and GST

The estimated costs are based on very preliminary design information provided as part of the design competition and broad $/m² GFA estimates. As such, they should be regarded as very indicative and used for broad cost comparison purposes only. For feasibility purposes, it is recommended that further more detailed estimates be prepared based on developed design information.

As a general guide, costs within 10% of the Reference Scheme can be "value managed" to the Reference Scheme budget without significant impact on the design; above this amount, necessary scope changes to achieve budget will have a design effect.

RLB | Rider Levett Bucknall

SITES 2A & 2B, SYDNEY OLYMPIC PARK

BATES SMART SUBMISSION	GFA m^2	$Cost/$m^2$	Total Cost $	Reference Scheme Total Cost $
ESTIMATED COST SUMMARY				
1 Demolition & Site Preparation			350,000	350,000
2 Car Parking	22,642	1,128	25,532,050	25,243,725
3 Commercial Office	21,584	3,579	77,252,060	25,900,000
4 Serviced Apartments	16,426	4,191	68,842,500	81,785,000
5 Hotel	17,804	4,950	88,121,800	78,875,500
6 External Works & Infrastructure			4,000,000	3,845,775
Total $ (excl. GST)	**78,456**	**$3,366**	**$264,098,410**	**$216,000,000**

PARTICULAR NOTES RELATING TO THE DESIGN SUBMISSION

1 Basement - The basement area is significant at 22,642 m2, and the small number of car spaces (473 no.) result in $48m2/ car space, which is considered to be high. It is suggested that design development will improve on this efficiency.

2 Site 2A & 2B - The average façade cost including blades and terracotta bands results in a high cost/m2 which will be difficult to value manage.

3 Site 2A - The small floor plates result in a high external wall: floor area ratio resulting in a relatively high $/m2 GFA. This is exacerbated by (2) above

4 Site 2A - The connecting bridge at the mid-point of the towers is a significant architectural feature with a significant cost impact. Buildability issues will be considerable, but not insurmountable.

5 Site 2A - The overall cost effect of the above features makes the Bates Smart proposal the most expensive of the four schemes submitted.

6 Site 2B - The elevations indicate curved glass facades with curved terracotta bands. This may be difficult to achieve satisfactorily

GENERAL NOTES RELATING TO THE DESIGN SUBMISSION

1 No allowance is included for graphics to hoardings, contamination removal, abnormal ground conditions, etc

2 Similarly, no allowance is included for works beyond the Lot boundary other than immediate footpaths. Infrastructure upgrades, etc have been excluded

3 Groundwork's/Retaining methodology has been assumed similar to the budget

4 All retail assumes cold shell.

5 The hotel and serviced apartment internal specification is based on Sydney standard specification as well as budget allowances

6 The estimates assume that both sites will be constructed concurrently under one lump sum form of contract

7 For ease of comparison, and in anticipation of design development, a consistent lump sum amount has been applied for the external works and services.

8 Reference is made to *As Structural Engineers Report* for information regarding structure

RLB | Rider Levett Bucknall

SITES 2A & 2B, SYDNEY OLYMPIC PARK

FITZPATRICK + PARTNERS SUBMISSION	GFA m^2	$Cost/$m^2$	Total Cost $	Reference Scheme Total Cost $
ESTIMATED COST SUMMARY				
1 Demolition & Site Preparation			350,000	350,000
2 Car Parking	18,334	1,291	23,662,250	25,243,725
3 Commercial Office	22,643	3,100	70,198,200	25,900,000
4 Serviced Apartments	15,354	3,822	58,686,400	81,785,000
5 Hotel	19,844	4,153	82,416,750	78,875,500
6 External Works & Infrastructure			4,000,000	3,845,775
Total $ (excl. GST)	**76,175**	**$3,142**	**$239,313,600**	**$216,000,000**

PARTICULAR NOTES RELATING TO THE DESIGN SUBMISSION

1 Basement - The design submission shows B3 and B4 extending below the fig-tree, which is considered to be impractical and has been excluded from the estimate

2 Basement - The number of cars has been reduced to 451No as a consequence of (1) above. At 41m2/space, design development should improve on the total number.

3 Site 2A - The circular tower is the most efficient from an external wall : floor area ratio for a certain floor plate.

4 Site 2A - The estimate assumes considerable repetition in the façade using a unitised curtain wall system. Further development of the design is required to better understand the relationship with slab edge.

5 Site 2A - Allowances have been included in the estimate to achieve the 'Crown' effect, and off site fabrication is envisaged.

6 Site 2B - Allowances have been included for the structural works required to span the railway easement.

7 Site 2B - The estimate takes into consideration the CLT and the glulam design proposed for this building. This option may necessitate a different builder from site 2A, resulting in additional contractual complexity.

8 Overall, the designs proposed are the most inexpensive.

GENERAL NOTES RELATING TO THE DESIGN SUBMISSION

1 No allowance is included for graphics to hoardings, contamination removal, abnormal ground conditions, etc

2 Similarly, no allowance is included for works beyond the Lot boundary other than immediate footpaths. Infrastructure upgrades, etc have been excluded

3 Groundwork's/Retaining methodology has been assumed similar to the budget

4 All retail assumes cold shell.

5 The hotel and serviced apartment internal specification is based on Sydney standard specification as well as budget allowances

6 The estimates assume that both sites will be constructed concurrently under one lump sum form of contract

7 For ease of comparison, and in anticipation of design development, a consistent lump sum amount has been applied for the external works and services.

8 Reference is made to *As Structural Engineers Report* for information regarding structure

RLB | Rider Levett Bucknall

SITES 2A & 2B, SYDNEY OLYMPIC PARK

WMK ARCHITECTURE SUBMISSION	GFA m^2	$Cost/$m^2$	Total Cost $	Reference Scheme Total Cost $
ESTIMATED COST SUMMARY				
1 Demolition & Site Preparation			350,000	350,000
2 Car Parking	24,385	1,105	26,943,075	25,243,725
3 Commercial Office	18,634	3,330	62,058,000	25,900,000
4 Serviced Apartments	15,617	4,156	64,908,200	81,785,000
5 Hotel	18,487	4,602	85,070,000	78,875,500
6 External Works & Infrastructure			4,000,000	3,845,775
Total $ (excl. GST)	**77,123**	**$3,155**	**$243,329,275**	**$216,000,000**

PARTICULAR NOTES RELATING TO THE DESIGN SUBMISSION

1 Basement - The design proposes a mezzanine slab (as per Bates Smart)

2 Basement - WMK are proposing the largest basement with 603No cars at 40m2/car.

3 Site 2A - The proposed façade utilises a significant amount of facing brick and associated scaffolding. Brick features, arches, etc. will require specialist brick layers, who are in short supply in Australia at this time. The proposal could result in programme delays (refer engineers report).

4 Site 2A - The storey heights proposed for ground floor and level 1 are significant

5 Site 2A - The current design envisages three transfer levels in the tower (refer engineers report)

6 Site 2B - The raking façade will impact on construction techniques and the ongoing ease of cleaning the façade.

GENERAL NOTES RELATING TO THE DESIGN SUBMISSION

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RLB | Rider Levett Bucknall

SITES 2A & 2B, SYDNEY OLYMPIC PARK

WOODS BAGOT SUBMISSION	GFA m^2	$Cost/$m^2$	Total Cost $	Reference Scheme Total Cost $
ESTIMATED COST SUMMARY				
1 Demolition & Site Preparation			350,000	350,000
2 Car Parking	19,325	1,206	23,310,750	25,243,725
3 Commercial Office	19,614	3,396	66,602,060	25,900,000
4 Serviced Apartments	18,539	4,246	78,713,980	81,785,000
5 Hotel	20,087	4,322	86,811,810	78,875,500
6 External Works & Infrastructure			4,000,000	3,845,775
Total $ (excl. GST)	**77,565**	**$3,349**	**$259,788,600**	**$216,000,000**

PARTICULAR NOTES RELATING TO THE DESIGN SUBMISSION

1 Basement - The design proposes 440No car spaces at an inefficient rate of 44m2/car. It is envisaged that design development would improve on the number of cars provided for this area

2 Sites 2A and 2B - The geometric form of the buildings are reasonably efficient

3 Site 2A - the façade arrangement comprising a unitised curtain wall with stone infill is quite complex in its detail.

4 Sites 2A and 2B - Allowances for roof gardens have been included for both sites

GENERAL NOTES RELATING TO THE DESIGN SUBMISSION

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