Attachment A22

RFI Response - 15 October 2021 - Part Two
757-763 George Street, Haymarket

757-763 George Street, Haymarket

Planning Proposal

On behalf of
Samprian Pty Ltd
October 2021

mecone

Project Director

Ben Hendriks – Managing Director

Revision	Revision Date	Status	Authorised	
			Name	Signature
REV 01	1 August 2020	Draft	AD/CM	-
REV 02	15 October	Final Draft	AD	BH
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* This document is for discussion purposes only unless signed and dated by the persons identified. This document has been reviewed by the Project Director.

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Under Separate Cover

Proposed Public Benefit Offer

Executive Summary

This Planning Proposal has been prepared by *Mecone NSW Pty Ltd* (Mecone) on behalf of Samprian Pty Ltd (Samprian) in relation to the land located at 757 – 759 and 761- 763 George Street, Haymarket (the site). The Planning Proposal satisfies the requirements of Section 3.33 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and has been prepared in accordance with the NSW Department of Planning, Industry and Environment's (DPIE's) *A Guide to Preparing Planning Proposals (2018)*.

Subject Site

The site is located on the south western fringe of Central Sydney and has an area of 1,030m^2. The site located at 757 – 759 is occupied by a four (4) storey mixed use building whilst the site located at 761 – 763 George Street contains a two storey heritage listed building identified as the Sutton Forest Meat Building (I843) under the *Sydney Local Environmental Plan 2012* (SLEP 2012). The building's heritage significant fabric is limited to its façades that front Valentine Street and George Street.

Overview of the Proposal

The Planning Proposal has been prepared under the guise of the Draft Central Sydney Planning Strategy (Draft CSPS) which proposes a suite of amendments to the SLEP 2012. This Planning Proposal therefore needs to be interpreted within the context of the future controls associated with the Draft CSPS.

The Planning Proposal seeks consent to introduce a site specific clause to Division 5 of the SLEP 2012 principally to permit a maximum:

- Building height of RL 117.87 (105.87m from ground level); and
- Floor Space Ratio (FSR) of 12:1.

A draft Site Specific Development Control Plan (DCP) also accompanies the Planning Proposal to provide certainty that a suitable development outcome is achievable at the detailed Development Application phase.

Project Vision

The Planning Proposal is accompanied by an indicative Preferred Scheme which reflects the Proponent's vision for the site as facilitated by the LEP amendments. It demonstrates that the Planning Proposal is capable of delivering a slender tower containing mid-range 3.5-star hotel accommodation and retail uses. The development facilitated by the proposal will provide complementary uses to cater to the growing tech industry as southern Central Sydney experiences a shift to higher-order employment uses.

The tower envisaged by this Planning Proposal will be integrated with the existing heritage building contained within the site. In light of this, the proposal seeks to adaptively reuse the heritage item to facilitate its repurposing for a contemporary use in a manner that continues to reinforce the local character of the area.

Strategic Merit

The appropriateness of the Planning Proposal needs to be understood in the context of the strategic planning framework and the future surrounding development that will emerge in response to this framework.

The site is located on the south western edge of the Harbour CBD which is designated by the *Greater Sydney Region Plan – A Metropolis of Three Cities* (the Greater Sydney Plan) as Australia's global gateway and financial capital. A key objective of the Greater Sydney Region Plan is to make the Harbour CBD stronger and more competitive. The diversification of the Harbour CBD's assets and uses is noted as being integral to promoting its economic strength and competitiveness. The proposal aligns with the objective in that it will assist in increasing the variety of uses in the Harbour CBD by providing high quality visitor accommodation and retail floor space.

Within the Harbour CBD, the site forms part of the emerging Innovation Corridor. The Innovation Corridor is earmarked to accommodate international innovation companies, universities and start-ups as well as complementary uses that together will provide the opportunity for agglomeration benefits. The Greater Sydney Plan notes that to support the emergence of the Innovation Corridor, a flexible approach to the application of the planning controls is required. This is particularly important in the context of a forecast shortfall of office floor space in the mid to long term. To address this shortfall, the Greater Sydney Region Plan notes there is a need to maximise vertical development opportunities, particularly within southern Central Sydney and along the Innovation Corridor. In light of this, the Planning Proposal optimises the opportunity to increase the site's capacity to support employment generating floor space and complementary retail and accommodation uses that will contribute to the growth of the Innovation Corridor.

The Draft CSPS locates the site within the Haymarket / Ultimo Tower Cluster Area which is earmarked for densification. The site is also located to the direct west of Central State Significant Precinct (SSP) (Central Precinct) which will support towers of unprecedented scales and will form the focal point of the emerging Sydney Innovation and Technology Precinct.

In this context, the Planning Proposal aligns with the strategic aspirations that apply to the locality in that it will contribute to the emergence of the Tower Cluster Area and will facilitate a suitably scaled tower that sits comfortably in the context of the future surrounding development.

In addition to being strategically positioned within a Tower Cluster Area, Council's Local Strategic Planning Statement, *The City Plan 2036 (LSPS)* situates the site within the Central Sydney South Precinct. This precinct is identified as a strategically important employment area designated to support the expansion of Sydney Central Business District's office market. The Planning Proposal aligns with the priorities for the precinct as it will increase the site's capacity to accommodate employment generating floor space.

The LSPS identifies that the demand for hotels in Central Sydney is anticipated to grow by 4.7% annually to 2020. In light of this, the Planning Proposal will address the

growing demand for hotel accommodation precipitated by the flux of corporate travelers associated with the growing office market in southern Central Sydney.

The Planning Proposal envisages mid-range hotel accommodation for the site. By providing mid-range hotel accommodation, the Planning Proposal will also address the growing demand identified by the LSPS for affordable mid-range hotel options in the context of there being an oversupply of high-end hotel accommodation concentrated in the Sydney CBD.

Site Specific Merit

The Preferred Scheme that accompanies the Planning Proposal is the outcome of iterative design testing and has been prepared to demonstrate the site specific merits of the Planning Proposal.

The Planning Proposal demonstrates site specific merit as it:

- Provides an improved amenity outcome for surrounding properties;
- Will deliver a contemporary built form sympathetic to the site's heritage fabric;
- Will capitalise on the site's excellent access to existing and planned transport infrastructure;
- Is capable of providing equivalent / improved pedestrian wind comfort and daylight access to the ground plane;
- Will protect and enhance the site's important heritage;
- Facilitates an envelope with capacity to support a tower at the Development Application stage that exhibits design excellence;
- Increases the site's capacity to accommodate employment generating floor space;
- Provides a bulk and scale commensurate with future surrounding developments;
- Will deliver a range of public and economic benefits, including:
    - A gross value added (GVA) contribution of $10 million per year;
    - increased investment associated with hotel guests' expenditure in nearby food, retail and services amounting to approximately $11.4 million per year;
    - 129 full-time operational jobs; and
- Will have acceptable environmental impacts as evidenced by supporting subconsultant reports.

In light of the above, the Planning Proposal will facilitate the achievement of a myriad of economic benefits. These benefits can be realised without giving rise to any adverse environmental social or economic impacts.

Conclusion

The proposal is consistent with the aims and objectives of the relevant strategic and statutory plans and policies. It is therefore considered that the proposal satisfies both the Strategic Merit Test and Site Specific Merit Test. It is therefore requested that Council forward this Planning Proposal to the Minister for Planning for Gateway Determination.


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1 Introduction

This Planning Proposal has been prepared by *Mecone NSW Pty Ltd* (Mecone) on behalf of Samprian in relation to the site located at 757 - 759 and 761 - 763 George Street, Haymarket.

The Planning Proposal seeks to introduce a site specific clause to Division 5 of the SLEP 2012 to increase the site's permissible:

- Height from 50m to RL 117.87 (105.87m from ground level); and
- FSR from 7.5:1 to 12:1.

The Planning Proposal is accompanied by a Site Specific DCP which proposes amendments to the Sydney DCP 2012 (SDCP 2012) to facilitate the achievement of the desired built form at the detailed Development Application phase.

The Planning Proposal has been prepared in accordance with:

- Section 3.33 of the EP&A Act; and
- The DPIE's - *A Guide to Preparing Planning Proposals (2018)*.

Specifically, the Planning Proposal includes the following information:

- Part 1 – Objectives and intended outcomes
- Part 2 – Explanation of provisions
- Part 3 – Justification for the proposed LEP amendments, including:
    - Need for the Planning Proposal
    - Relation to strategic planning framework
    - Environmental, social and economic impacts
    - State and Commonwealth interests
- Part 4 – Mapping
- Part 5 – Community Consultation

This Planning Proposal has been prepared with regard to the City of Sydney *Draft Central Sydney Planning Strategy* (Draft CSPS) and the associated LEP amendments as exhibited by Council from 1 May to 10 July 2020.

1.1 Proponent and Project Team

The Planning Proposal has been prepared on behalf of the Proponent, Samprian. The details of the project team are included in the table below.

Table 1 – Project Team

Specialist Report	Consultant
Urban Planning	Mecone NSW Pty Ltd
Survey Plan	Total Surveying Solutions
Architectural Plans	Grimshaw Architects
Public Domain / Landscape Concept Plans	Site Image Landscape Architects
Stormwater Concept Plan	Australian Consulting Engineers
Preliminary Geotechnical Investigation Report	EI Australia
Traffic Impact Assessment	Traffix
Daylight Analysis	LCI Consultants
Services Design Brief	LCI Consultants
Public Art Strategy	Site Image Public Art Consultants
Noise Impact Assessment	White Noise Acoustics
Heritage Impact Assessment	Weir Phillips
Historical Archeological Assessment	Austral Archeology
Wind Assessment	Wind Tech
Economic Impact Assessment	HillPDA Consulting
Supply and Demand Analysis	SMA Tourism
Flood Certification Assessment	Australian Consulting Engineers

1.2 Relevant Development Applications

On 23 October 2017, Council granted consent to a Development Application on behalf of Samprian.

The consent provides approval for the construction of a 15 storey hotel building reaching a compliant height of 50m that adaptively reuses the Sutton Forest Meat building through the demolition of all non-significant interior fabric and retention of the heritage significant façades. The development's approved use relates to a hotel containing 174 rooms.

The approval permits a zero metre setback to the northern boundary that interfaces with the residential flat building known as 'Capitol Terrace' apartments for the full height of the building. Above the street frontage, the tower provides a 10m setback to the southern boundary fronting Valentine Street; however, from Level 8 to 14 this setback reduces to 8m, permitting the tower element to cantilever over the heritage item.

The approved floor plans and setbacks are shown below from Figures 1 – 2.

Figure 1 Approved Setbacks Above the Street Frontage (Levels 3 - 4)
Source: Barker Kavanagh Architects

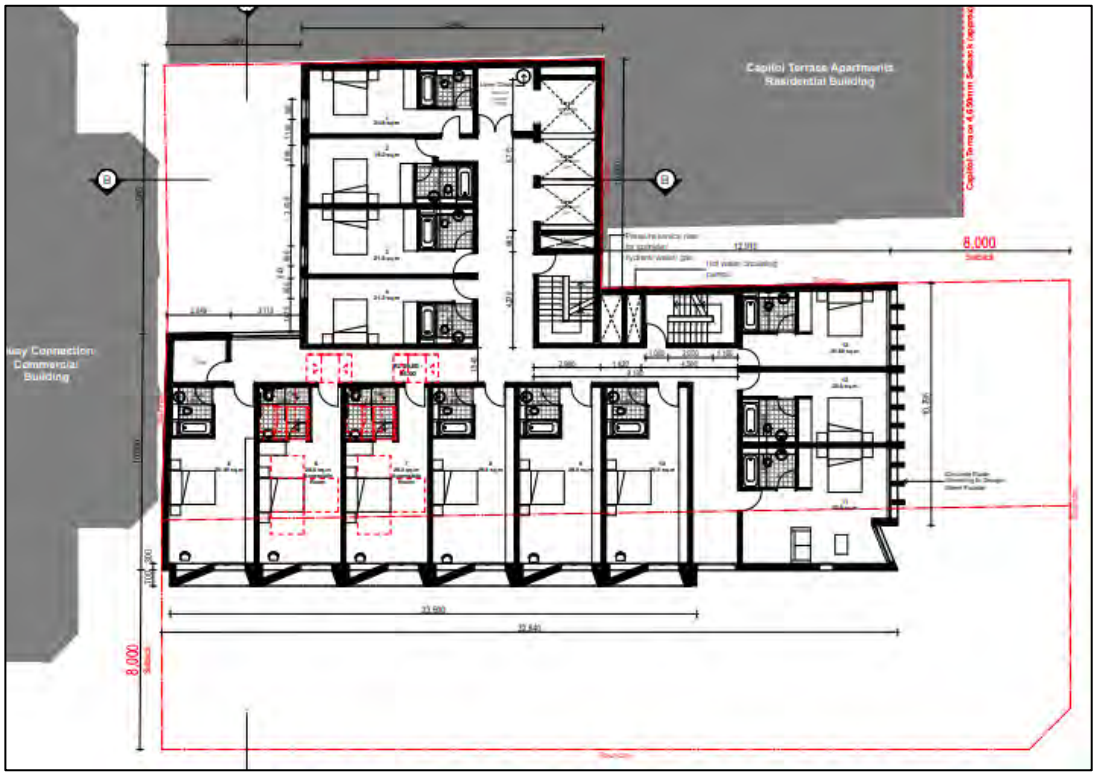

Figure 2 Approved Setbacks Above the Street Frontage (Levels 8 – 13)
Source: Barker Kavanagh Architects

2 Site Context and Description

2.1 Site Analysis

The site is located at 757 – 759 and 761 – 763 George Street, Haymarket within the City of Sydney Local Government Area (LGA).

The site is located on the south western fringe of Sydney Central Business District (CBD) on a corner block bounded by Valentine Street to the south and George Street to the east.

The site is positioned 300m to the north west of Central Station. Being located adjacent to a major transport interchange it is afforded ample access to public transport.

The site is strategically positioned within a locality earmarked to undergo significant transformation. Under the Draft CSPS, the site is positioned within a Tower Cluster Area where sites have the potential to achieve substantial increases in density.

The site is also located to the direct west of the Western Gateway Sub-precinct, which forms part of the broader Central Precinct. The Western Gateway Sub-precinct is earmarked to emerge as the focal point of Sydney's Innovation and Technology Precinct and will serve as a mixed-use innovation hub anchored by high-tech firms, educational institutions and startups.

The site's locational context in shown from Figures 3 – 4.

Figure 3 Context Map
Source: Mecone / Mosaic

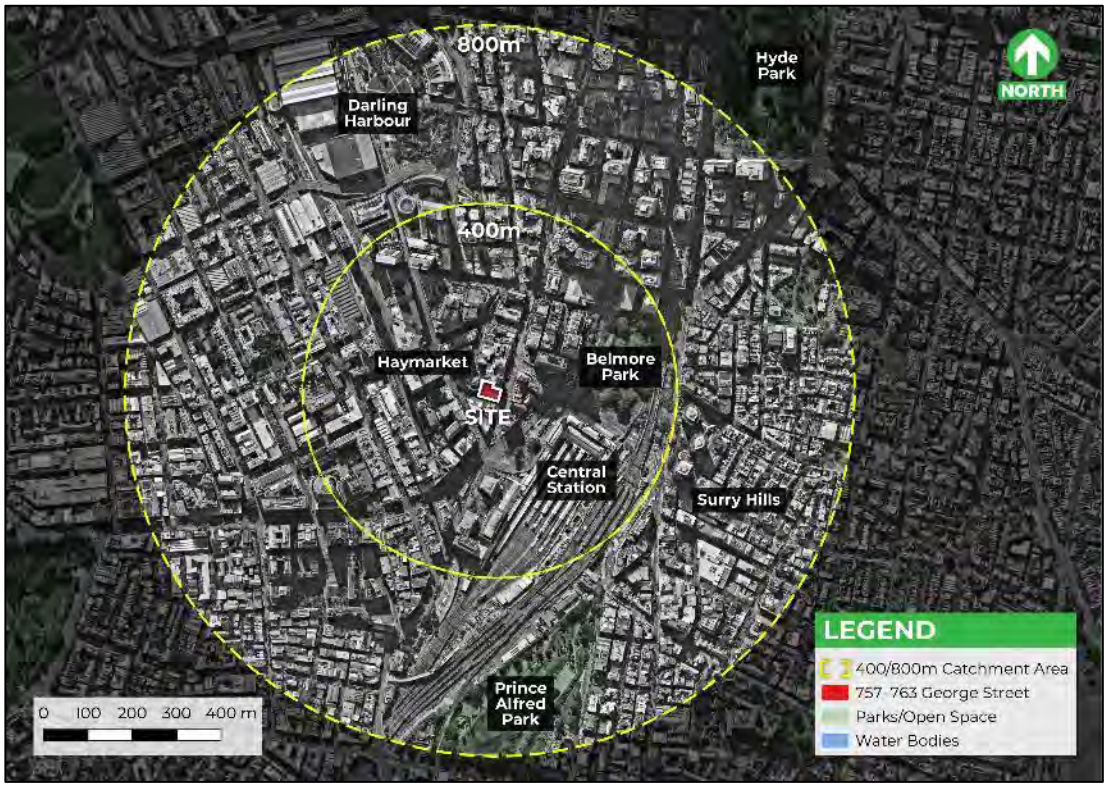

Figure 4 Context Aerial Site Map
Source: Mecone / Mosaic

2.2 Legal Description and Ownership

The site comprises two allotments which combined have an area of 1,030m^2.

The table below provides the address, legal description and existing development details of the site's allotments.

A Survey Plan is included at Appendix 1.

Table 2 – Property Description(s)

Address	Lot	DP	Owner	Site Description
757 – 759 George Street	11	70261	Samprian	Four (4) storey mid-century mixed use commercial building and open car park.
761 – 763 George Street	1	1031645	Samprian	Two (2) storey mixed use building known as the 'Sutton Forest Meat' Building, which occupies the whole lot and is a locally listed heritage item.

2.3 Site Description

The existing development contained within the site consists of two commercial buildings. The building located at 757 – 759 George Street reaches four (4) storeys in height. The upper storey is recessed from the building parapet to provide a three (3) storey appearance when viewed from street level. The building is subject to a fire order and consequently cannot be occupied.

The site's corner building located at 761 – 763 George Street accommodates a two (2) storey brick building with decorative elements.

The northern boundary of the site is subject to a shared easement associated with a right of carriage way for a vehicular access driveway which permits access to an open carpark at the north western boundary.

This building is also subject to a fire order which prevents the use and occupation of second storey above ground.

A site aerial map is shown at Figure 5. Photos of the existing development are shown from Figures 6 – 8.

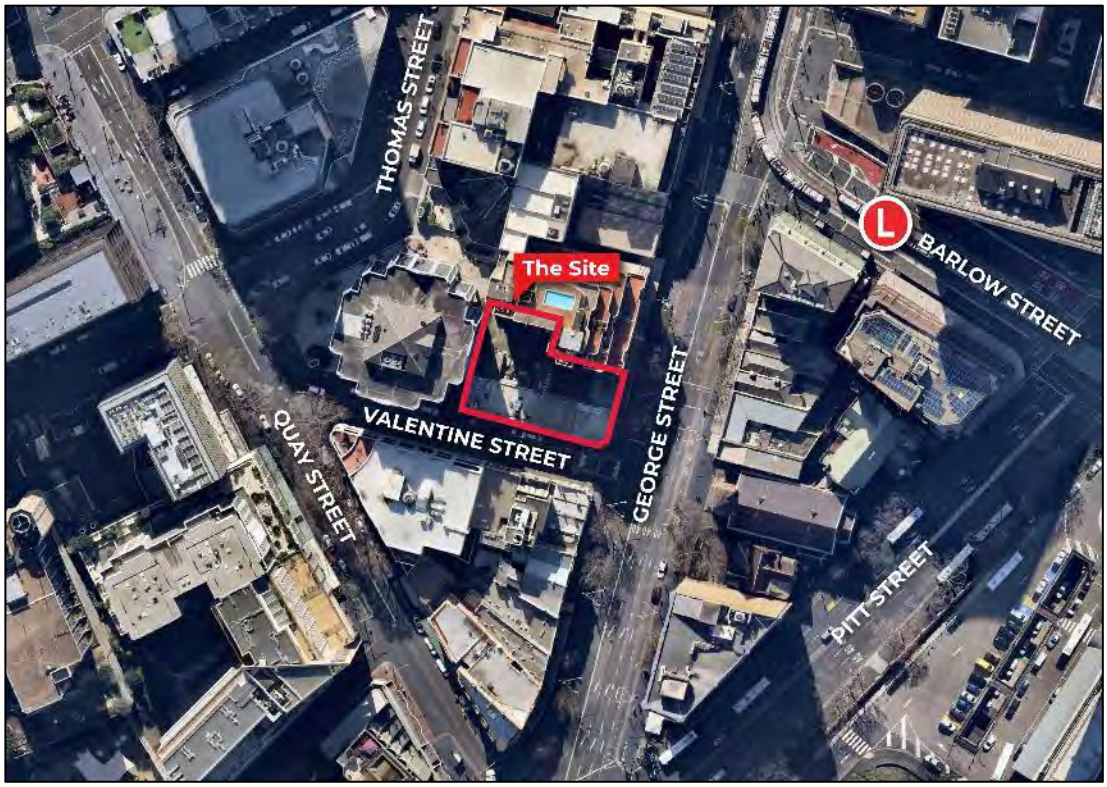

Figure 5 Site Aerial Map
Source: Mecone / Mosaic

Figure 6 Site Viewed Looking North West from George Street
Source: Mecone

Figure 7 Heritage Listed Building at 761 – 763 George Street Viewed Looking North
Source: Mecone

The table below provides a more detailed summary of the site and surrounding context.

Table 3 – Site Description	
Item	**Description**
Legal Description:	• Lot 1 in DP 1031645; and • Lot 11 in DP 7026
Total Area	1,030m^2
Site description and street frontage	19.11m to George Street (eastern frontage); and 38.70m to Valentine Street (southern frontage).
Site topography	The topography of the site falls from south to north 1.26m (RL12.28 – RL11.02) along the George Street frontage. The frontage along Valentine Street falls from west to east 0.5m (RL12.74 – RL12.28).
Access	Direct access to the buildings contained within the site is afforded from George Street via separate individual entrances.
Access to Public Transport	The site receives ample access to public transport. It is located 150m (2 min walk) south west of the Haymarket (Rawson Place) light rail stop which forms part of the CBD and South East Light Rail Network and provides connections to Circular Quay and Kingsford. It is positioned 300m to the west of Central Station Transport Interchange which provides a range of metro and regional train connections and will form part of the future Sydney Metro network. It is located 300m of Railway Square Interchange which supports a range of bus services that provide connections to Greater Sydney.

2.3.1 Heritage

The site is not located within a heritage conservation area but does contain a heritage item. The corner building located at 761 - 763 George Street is a locally listed heritage item (I843) known as the '*Former Sutton Forest Meat Building'*. It is significant for its historical associations and its rare aesthetic qualities.

Its facades fronting George and Valentine streets are the only structures of heritage significance. The remaining interiors have been subject to extensive fire damage, significantly altered and/or approved for removal under DA/2017/353.

As shown in Figure 8, the site is also located in the vicinity of a number of heritage items. Notable items in the immediate vicinity include:

- I844 - 767-769 George Street, Haymarket – '*Local heritage commercial building group';*
- I848 - 814 George Street Haymarket - *Local heritage item 'Former Lotteries Office*'; and

- I849 - 812B George Street, Haymarket and 505 Pitt Street, Haymarket - *State Heritage Item 'Christ Church St Laurence Group'*.

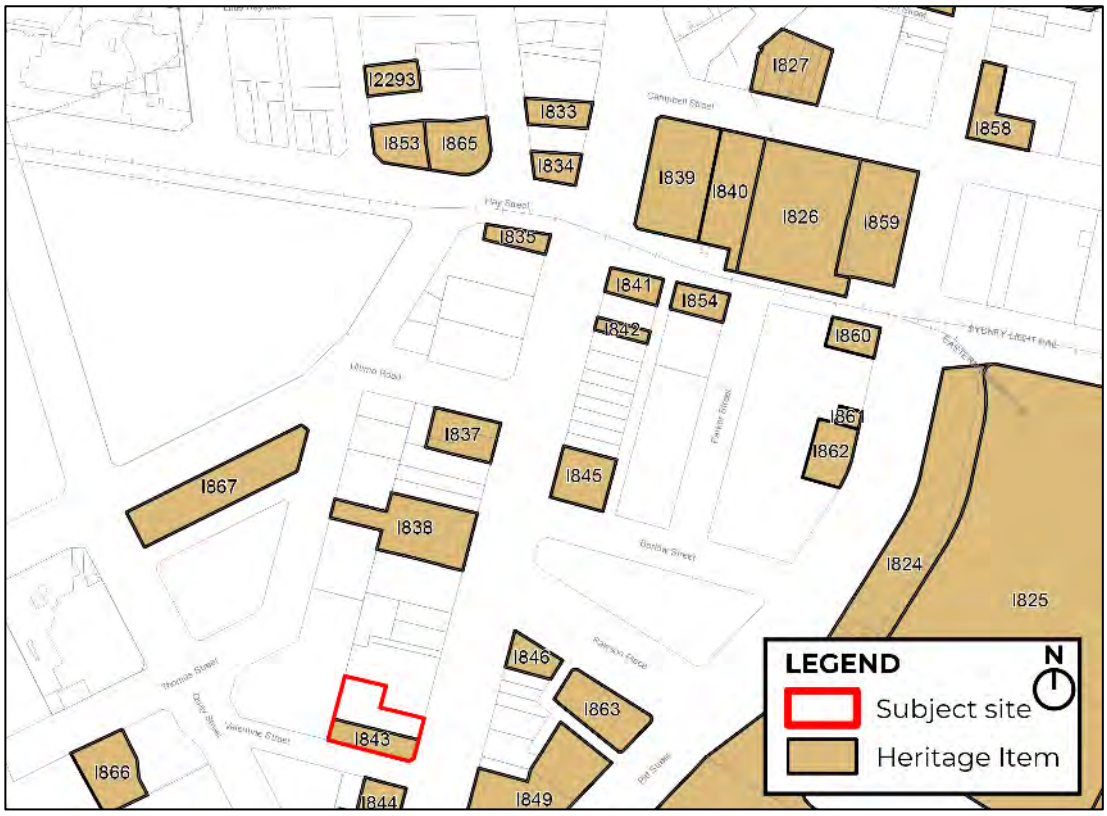

Figure 8 Site and Surrounding Heritage Items
Source: Mecone / SLEP 2012 – Sheet 15 Heritage Map

2.4 Surrounding Development

The site is located within the Haymarket/Chinatown Special Character Area under the SDCP 2012. The surrounding development consists of a mix of commercial, retail and educational uses.

The surrounding development consists of the following:

North

To the immediate north the site adjoins a 13 storey residential flat building known as 'Capitol Terrace' which is separated from the proposal by the site's vehicular access driveway. The western end of its southern elevation comprises a blank facade and is setback from the common boundary. The eastern portion of its southern elevation provides a nil setback to the common boundary and accommodates windows in limited locations.

South

The development to the immediate south on the opposite side of Valentine Street consists of fine-grained brick masonry buildings that range in height from two (2) to three (3) storeys.

East

To the immediate east the site is bounded by George Street which consists of a six (6) landed carriageway. Further eastward adjacent to the intersection of George and Valentine Street lies Christ Church St. Laurence located at 814A George Street which is a locally listed heritage item (I849). Adjoining this building to the south east is another locally listed heritage item known as the 'Former Lotteries Office' which comprises an eight (8) storey brick building.

Beyond this lies Central Station Transport Interchange and Railway Square Interchange. The Haymarket Light Rail Station is located 150m to the north east adjacent to Rawson Place.

West

The development to the direct west located at 187 – 189 reaches to storeys and accommodates two (2) levels of basement parking. The development is built to the eastern common boundary and directly interfaces with the site. Its eastern façade comprises a blank wall. The site is subject to a Planning Proposal to facilitate a 48 storey mixed use tower (refer to Section 2.5).

The surrounding development is illustrated from Figures 9 - 11.

Figure 9 View of Christ Church St. Laurence Looking East Down Valentine Street
Source: Mecone

Figure 10 Fine-Grained Retail Uses Along George Street Looking North East
Source: Mecone

Figure 11 High Rise Developments Viewed From Valentine Street Looking West
Source: Mecone

2.5 Future Development Context

2.5.1 Haymarket/Ultimo Tower Cluster Area

The Draft CSPS designates the site as forming part of the Ultimo/Haymarket Tower Cluster Area, as shown in the figure below. The Draft CSPS affords sites within the Tower Cluster Area the opportunity to unlock additional capacity for economic and employment growth.

Following the implementation of the CSPS, the future development context will undergo a process of transformation and will emerge to consist of large-scale towers reaching unprecedented heights.

Figure 12 Site's Location within the Haymarket / Ultimo Tower Cluster Area
Source: Grimshaw

2.5.2 187 Thomas Street Planning Proposal

A Planning Proposal for the adjoining property to the immediate west at 187 Thomas Street was recently supported by Council at the Ordinary Meeting held 21 September 2020 to progress to Gateway Determination.

The Planning Proposal requests amendments to the SLEP 2012 to facilitate the delivery of a preferred tower scheme within the parameters of a DCP Envelope that is shown in Figure 13. This DCP Envelope comprises:

- Permit a tower with a maximum building height of RL 226.80m;
- A maximum floor space ratio of 20:1, including design excellence comprising:
  - Mapped floor space of 7.5:1;
  - Accommodation floor space of 1.5:1;

- End of journey floor space of 0.3:1;
- Site specific floor space of 8.89:1;
- Additional floor space up to 10 per cent if the proposal demonstrates design excellence, to a maximum floor space ratio of 20:1.

- Non-compliant setbacks, including:
  - A nil northern setback from the podium to the property at 191 Thomas Street that increases to a maximum of 3m at the tower element;
  - A 4.8m setback to Thomas / Quay Streets at the ground plane that increases to 10m at the tower element;
  - A nil western setback to Thomas Street; and
  - A setback of 1m at the eastern boundary interfacing with the subject site which increase to 5m towards the north.

The setbacks are supported due to the scheme's compliance with the variation testing procedure set out in Procedure B, Schedule 11 of the Draft CSPS.

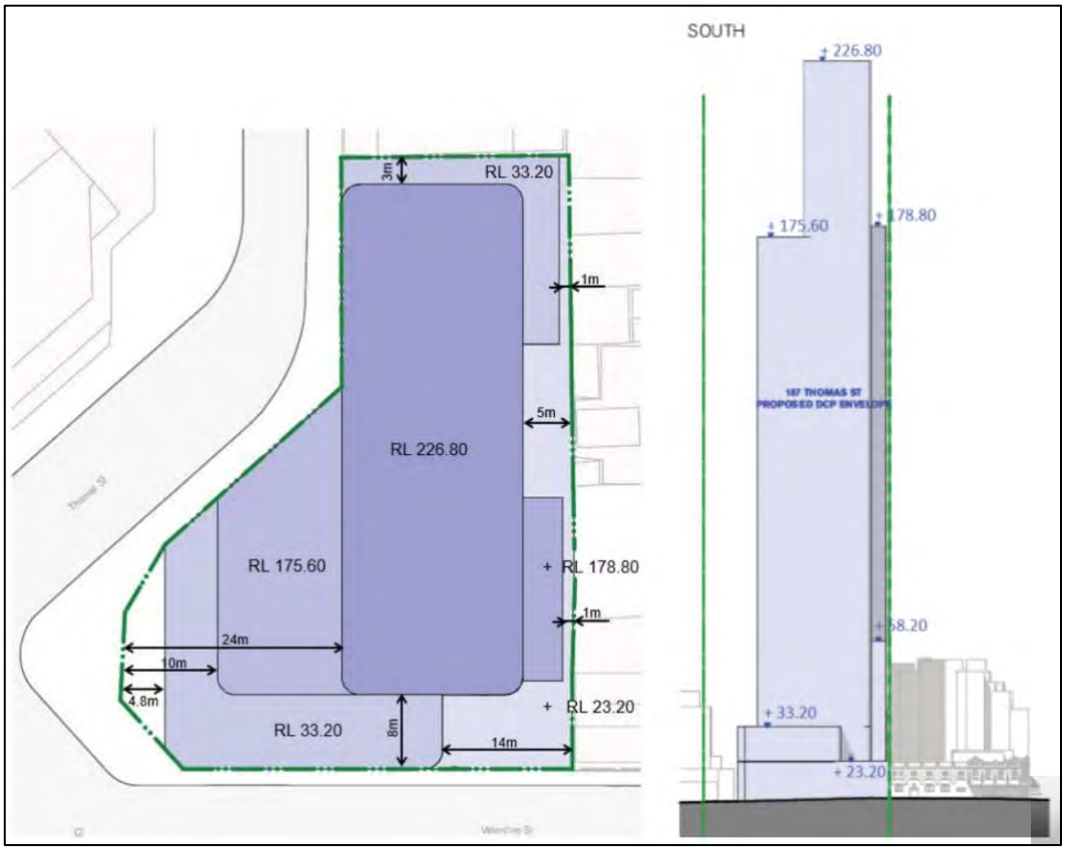

Figure 13 DCP Envelope for 187 Thomas Street
Source: fjmt (Council's Planning Proposal (Dated Sept 2020)

2.5.3 Central State Significant Precinct

To the east of this Tower Cluster Area, lies Central Precinct which covers 24 hectares of land and comprises a number of sub-precincts which are earmarked to be

redeveloped to support the emergence of the Sydney Innovation and Technology Precinct. The site is located a short 250m from the Western Gateway sub-precinct.

This sub-precinct was recently rezoned in August 2020 to permit tower developments of unprecedented heights. Specifically, the amended planning controls for the precinct permit the following:

- 14 – 30 Lee Street, Haymarket (Railway Square YHA Site) – A commercial tower with 70,000m^2 of GFA and a maximum height of RL 200.2.
- 8 – 10 Lee Street, Haymarket (Henry Dean office block) – Two commercial towers with 50,000m^2 and 40,000m^2 of GFA and a maximum height of RL 205.8m.

In addition to the above, the site at 2 – 6 Lee Street (Adina Hotel Site / Henry Deane Plaza) is also earmarked to support a tower development of a similar scale to those listed above and will be redeveloped under a separate planning and design process.

The indicative location of the towers and 187 Thomas Street is shown in Figure 15.

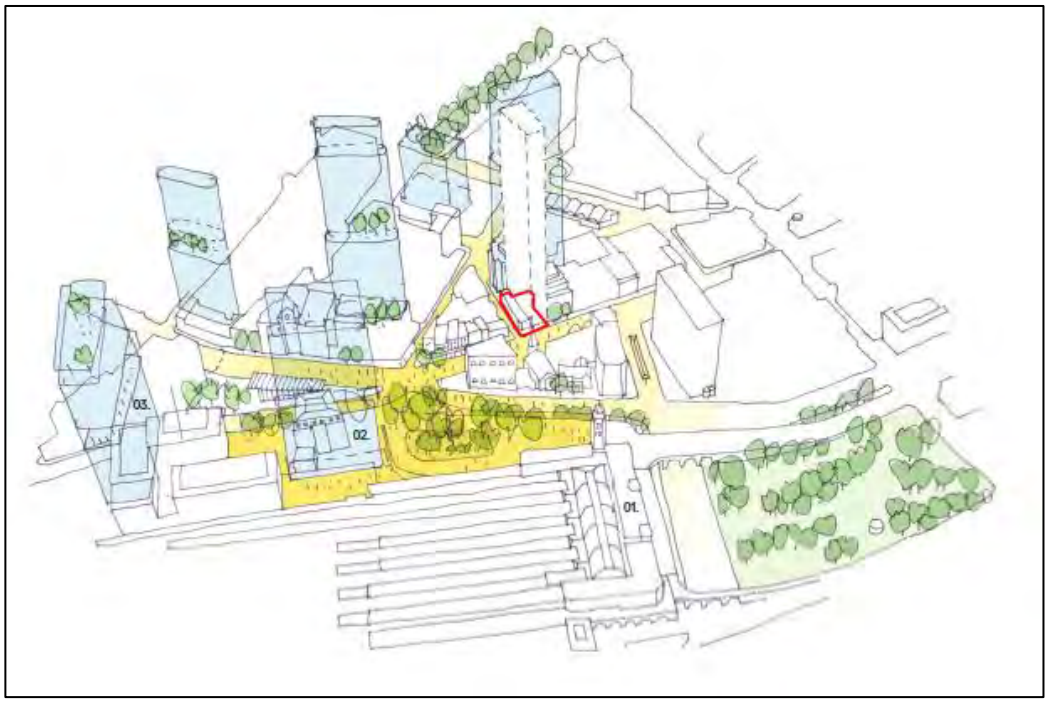

Figure 14 Indicative Location of Future Towers
Source: Grimshaw

2.6 Planning Context

The strategic planning framework situates the site within several strategically significant precincts, as shown in Figure 16. The planning priorities associated with these precincts identify the need to prioritise employment generating uses and foster the growth of target industry sectors, including the visitor economy, to ensure Sydney remains an attractive place for businesses and leisure visitors.

A detailed discussion of the applicable local and regional strategic planning policies is provided below.

Figure 15 The Site's Strategic Context
Source: Mecone / Mosaic

2.6.1 Regional Planning Context

The site is positioned on the south western edge of the Harbour CBD which is identified by the *Greater Sydney Region Plan – A Metropolis of Three Cities* (the Greater Sydney Region Plan) as Australia's global gateway and financial capital.

Within the Harbour CBD, the site forms part of the emerging Innovation Corridor. Extending from The Bays Precinct to Royal Prince Alfred Hospital, the Innovation Corridor is earmarked to accommodate international innovation companies, universities and start-ups.

The Greater Sydney Region Plan forecasts that there will be a shortage of office floor space. To support the continued emergence of the Innovation Corridor, it notes that a flexible approach to the application of the Planning Controls is required. To facilitate this, the Greater Sydney Region Plan identifies a need to maximise vertical development opportunities. Southern Central Sydney, particularly the portion encompassing the Innovation Corridor along the Redfern to Eveleigh corridor to which the site relates, is noted as being suitable for additional height and density.

The importance of the Innovation Corridor is recognised by the Eastern City District Plan (District Plan) which guides the implementation of the Greater Sydney Region Plan at a district level. The Plan notes that the Innovation Corridor should continue to support the growth of the economy through the contribution of jobs in creative, digital and business support services.

The growth of the workforce will produce a corresponding demand for visitor accommodation that is necessary to support the needs of the business community and leisure visitors. The District Plan identifies that the visitor economy contributed over $8.6 billion to its economy. In light of this, it nominates the Planning Priority to continue to enhance the tourism and visitor sector via a coordinated approach to accommodation, events and tourist related activities.

To deliver on the planning objectives for the Eastern District and to support the growth of the Innovation Corridor, the NSW Government in August 2018 announced its commitment to investing $48.2 million to establish a globally competitive technology precinct formally known as the Sydney Innovation and Technology Precinct. The site forms part of the Sydney Innovation and Technology Precinct, with this precinct also encompassing Central Precinct.

In December 2018, the NSW Government published the *Sydney Innovation and Technology Precinct Panel Report* which outline a number of recommendations to support the emergence of the Sydney Innovation and Technology Precinct. Specifically, it nominated a target of 250,000sqm of net lettable floorspace for technology and innovation companies. It also recommended that additional floor space also target the short term accommodation needs of the precinct and its companies, institutions and organisations.

In July 2019, the Central Precinct was declared Nominated SSP by the Minister for Planning and Public Spaces. The Western Gateway sub-precinct is one of 10 sub-precincts across Central Precinct to be subject to plans for redevelopment to facilitate the emergence of the Sydney Innovation and Technology Precinct. The recently gazetted LEP amendments for the precinct allow for the achievement of

unprecedented heights and once developed will be a drawcard for innovation companies and start-ups.

The site is strategically located approximately 250m to the west of the Western Gateway sub-precinct and as noted above is within the broader future Sydney Innovation and Technology Precinct. The site's strategic positioning provides the opportunity to deliver hotel accommodation that will support future businesses and foster agglomeration benefits.

2.6.2 Local Planning Context

The proposed LEP amendments have been prepared under the guise of the *Draft Central Sydney Planning Strategy* (Draft CSPS) and associated Draft DCP.

The Draft CSPS provides a 20 year growth strategy for Central Sydney. Its proposed controls are intended to unlock economic opportunities and increase the supply of employment generating floorspace by maximising development capacity and delivering 2.9 million sqm of new floor space. Under the Draft CSPS, growth is targeted in four new Tower Cluster Areas. The key mechanisms for encouraging growth in these areas are as follows:

- Permit towers with significantly greater heights determined with reference to the No Additional Overshadowing (NAO) controls, solar access planes and the airspace restrictions;
- Priorities mixed use development by limiting the supply of residential accommodation;
- Encourage innovative designs that priorities environmental sustainability and provide attractive spaces for prospective tenants; and
- Introduce a streamlined DA approval process pursuant to subclause 6.21(7A) of the SLEP 2012 for Tower Cluster Area sites.

The Draft CSPS situates the site within the Haymarket / Ultimo Tower Cluster Area. It is envisaged that growth in the Tower Cluster Area will align with the planned investment in physical infrastructure, including the planned Sydney Metro and upgrades to Central Station.

The Draft CSPS prescribes a range of objectives and actions which provide an impetus for the proposed LEP amendments. In particular, it nominates the need to provide an appropriate mix of land uses that will promote Central Sydney's visitor and night-time economies to maintain its role as a leading metropolitan centre. It also strengthens the incentive for hotel accommodation and removes the incentives for residential and serviced apartment floorspace.

The aspirations of the Draft CSPS are reflected in the *City Plan 2036 – Local Strategic Planning Statement* (the LSPS) which highlights the need for Sydney to remain a drawcard for tourists by unlocking new sites for a diverse range of hotel accommodation types. In light of this, the LSPS establishes that the demand for hotels is projected to grow by 4.7% annually to 2020. It notes that whilst there is a large supply of high-end hotel accommodation concentrated within Central Sydney, there is a growing need for mid-range accommodation that will assist in diversifying hotel accommodation types to cater to the needs of visitors in localities

that experience high levels of visitation. In light of this, the Draft CSPS identifies the need to unlock new sites for hotel accommodation using a place-based approach that respects local character and preserves Sydney's status as a premier tourist destination.

3 Key Current Planning Controls

3.1 Sydney Local Environmental Plan 2012

The SLEP 2012 is the principal local Environmental Planning Instrument (EPI) applying to the site. The provisions of the SLEP 2012 and the key development controls that apply to the site are outlined below.

3.1.1 Zoning

The land subject to the Planning Proposal is currently zoned *B8 Metropolitan Centre* under the SLEP2012 (refer to Figure 17). The proposed uses including commercial, retail and hotel are permissible with consent in this zone. The planning Proposal does not seek to change this land use zone.

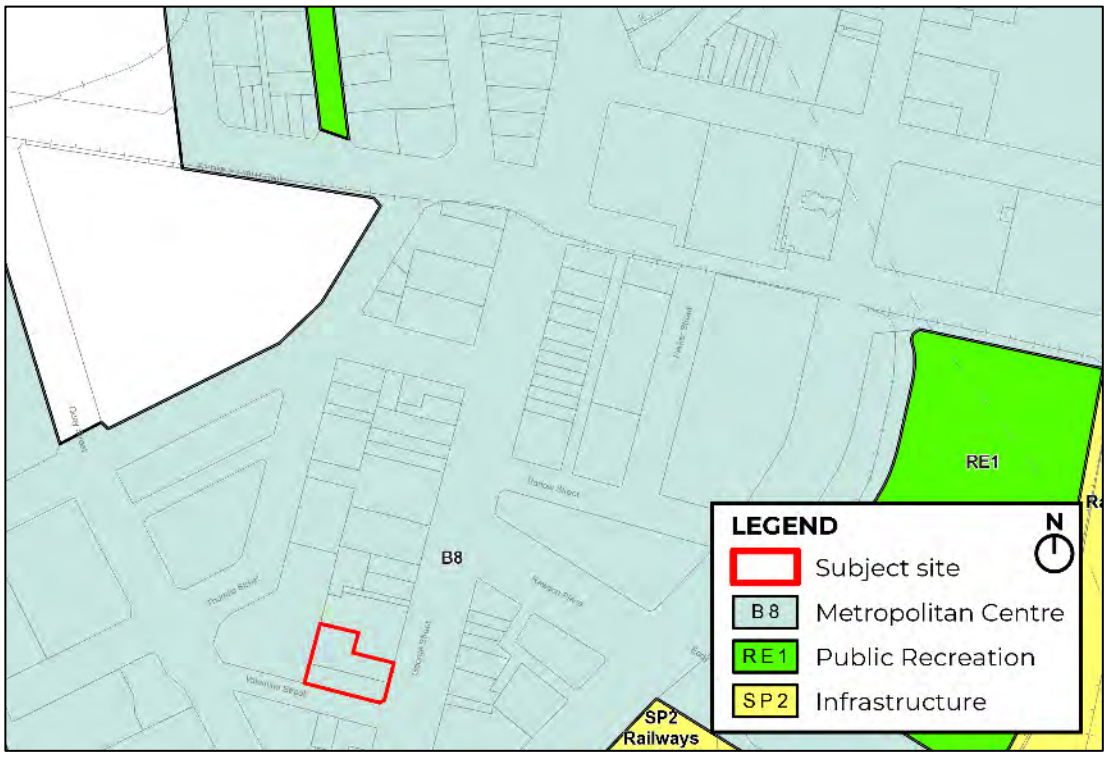

Figure 16 Land Zoning Map
Source: SLEP 2012 – Sheet 15 Land Zoning Map

3.1.2 Building Height

The applicable Maximum Height of Buildings Development Standard prescribed by the SLEP 2012 nominates a height limit of 50m for the site.

Figure 18 provides an extract from the Height of Buildings map showing the height controls for the site and those in the vicinity.

Pursuant to clause 6.21 of the SLEP 2012, the site is eligible for an additional 10% height (or FSR) bonus for design excellence.

Figure 17 Existing Height of Buildings Map
Source: Mecone / SLEP 2012.- Sheet 15 Height Map

3.1.3 Floor Space Ratio

The applicable FSR Development Standard prescribed by the SLEP 2012 nominates a maximum FSR of 7.5:1 for the site.

Pursuant to Clause 6.4 of the SLEP 2012, the site is located within Area 4 and is therefore eligible for a bonus FSR of 1.5:1 for residential accommodation, serviced apartments, hotel or motel accommodation, community facilities or centre-based child care facilities.

Pursuant to clause 6.21 of the SLEP 2012 the site is also eligible for an additional 10% FSR (or height) for design excellence.

In addition, an additional FSR up to 0.3:1 for *end of journey floor space* is also available pursuant to Clause 6.6 of the SLEP 2012.

Figure 19 provides an extract from the SLEP 2012 showing the FSR maximum for the site and those in the vicinity

Figure 18 Existing Floor Space Ratio Map
Source: Mecone / SLEP 2012.- Sheet 15 FSR Map

3.2 Sydney Development Control Plan 2012

The site is subject to the SDCP 2012 and its detailed built form provisions. The SDCP 2012 situates the site within the Haymarket / Chinatown Special Character Area.

The SDCP 2012 notes that the Haymarket / Chinatown Special Character Area is typified by a fine grained subdivision patter, narrow frontages, low street wall and generally low building heights. It prescribes a number of principles that are to inform the design of future developments. These include:

- *Development must achieve and satisfy the outcomes expressed in the character statement and supporting principles;*
- *Retail and enhance the urban character and scale of the Haymarket locality by requiring new buildings to:*
  - *Be built to the street alignment;*
  - *Have street frontage heights consistent with the prevailing form of heritage items in this Special Character Area; and*
  - *Have building setbacks above those street frontage heights;*
- *Maintain a high level of daylight access to the street by restricting building height and bulk;*

- *Recognise and enhance the diversity of uses in the area;*
- *Maintain and reinforce permeability within the area and the intricacy of the urban fabric by retaining the existing significant lanes, original street pattern, special corner treatment, small allotments and narrow frontages, and encourage through site links;*
- *Reinforce the distinct topography of the area by maintaining the layering of development when viewed from Darling Harbour and the City's higher buildings in the background;*
- *New development is to maintain and enhance vistas within the area to Darling Harbour;*
- *New development is to maintain and enhance vistas east along Valentine Street to Christ Church St. Laurence at 814A George Street, Haymarket;*
- *Maintain and enhance the existing vista to the Anglican Christ Church of St Laurence along Valentine Street; and*
- *Facilitate the activation of Douglass Street and Douglass Lane and Eagar Street & Eagar Lane for increased public use.*

In addition to the above principles, the SDCP 2012 applies a range of controls to govern the future built form.

Notable controls include the requirement for a 15m street frontage height or the height of the nearest heritage item on the same side of the street to achieve a consistent building alignment. Setback alignments, including rear, are to be consistent adjoining buildings. Setbacks above the street frontage for non-residential uses are to be included if adjacent buildings include upper level setbacks or if adjacent to a heritage item.

It is noted that many of the detailed built form controls nominated by the SDCP 2012 controls are to be superseded by the proposed Draft DCP.

4 Indicative Development Context

4.1 Overview of Preferred Scheme

The Planning Proposal is supported by a Preferred Scheme prepared by Grimshaw. The Preferred Scheme represents an indicative design concept that reflects the built form potential capable of being delivered within the parameters of the proposed amendments to the planning controls.

The Preferred Scheme comprises the following:

- Demolition of the existing building located at 757 – 759 George Street;
- Adaptive reuse of the heritage listed building located at 761 – 763 George Street and demolition of its non-significant fabric;
- Construction of a 30 storey mixed use hotel building (excluding plant) with a gross floor area of 12,146m^2 (FSR 11.8:1) comprising:
    - A tower element with a maximum height of RL 117.87 or 105.87m measured from ground level:
    - 280 hotel rooms of a 3.5-star grade;
    - A podium containing 324m^2 of retail floor space;
- Construction of a two (2) level basement accessible from Valentine Street, comprising:
    - Seven (7) valet vehicle spaces accessible from a car lift;
    - End-of-trip facilities;
    - BOH Facilities;
    - Services and plant;
    - Bike Storage; and
- Public domain upgrades.

Preferred Scheme is illustrated in the Architectural Design Report prepared by Grimshaw at Appendix 2 and in the figure below.

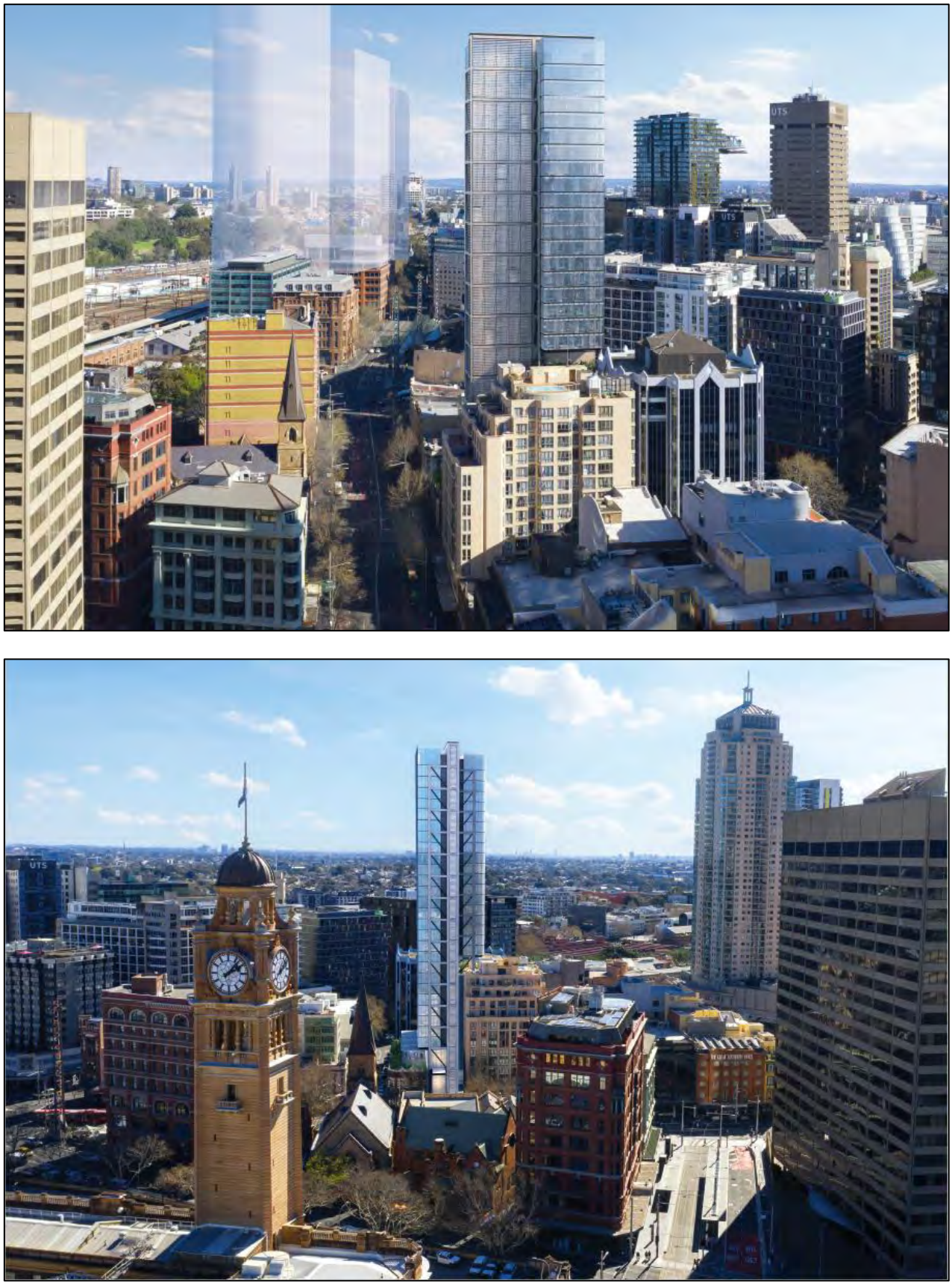

Figure 19 Preferred Scheme Viewed South (Above) and West (Below)
Source: Grimshaw

4.1.1 Urban Design

The following urban design considerations have informed the development of the Preferred Scheme:

- Heritage Revitalisation: The site is located within the Haymarket / Chinatown Special Character Area and the proposal has sought to conserve and enhance the character of the locality by adaptively reusing the Sutton Forest Meat Building contained within the site;
- Public Domain Upgrades: The proposal provides the opportunity to contribute the revitalisation of the ground plane, which will complement Council's envisaged public domain upgrades for the locality and wider Central Square;
- Activation: The proposal has sought to maximise the provision of active frontages along George and Valentine streets to reinvigorate the public domain in anticipation of their conversion to shareways;
- Protection of Public Places: In designing the proposal, due consideration has been given to ensuring the envelope provides improved or equivalent wind and solar impacts to public places and is suitably scaled to prevent overshadowing to significant places;
- View Corridors: The siting of the tower has sought to maintain and enhance vistas along Valentine and George streets to Christ Church Saint Laurence; and
- Environment Sustainability: The proposal has sought to facilitate an envelope capable of adopting best practice sustainability measures at the detailed design phase.

4.1.2 Tower Envelope and Massing

The Preferred Scheme has been developed through careful analysis of the existing historic character and future development opportunity facilitated by the strategic planning framework.

The Preferred Scheme as illustrated at Appendix 2 proposes a tower reaching 30 storeys in height (excluding roof plant / lift shaft). The tower has a maximum height of RL 117.87 or 105.87m when measured from ground level. The envelope transitions down to RL 115.50 towards the south to provide a varying height. The transition in height ensures the tower is the slimmest at its peak and presents as being a slender building in accordance with built form massing objectives established by the Draft DCP under Section 5.1.1.4.

The tower height has been determined in recognition of the site's relatively smaller area. It provides an intermediate scale compared to the proposed future tower to the east at 187 Thomas Street and the super towers proposed for Central Precinct which reach heights in excess of RL 200m.

The proposed tower envelope is shown in the figure below.

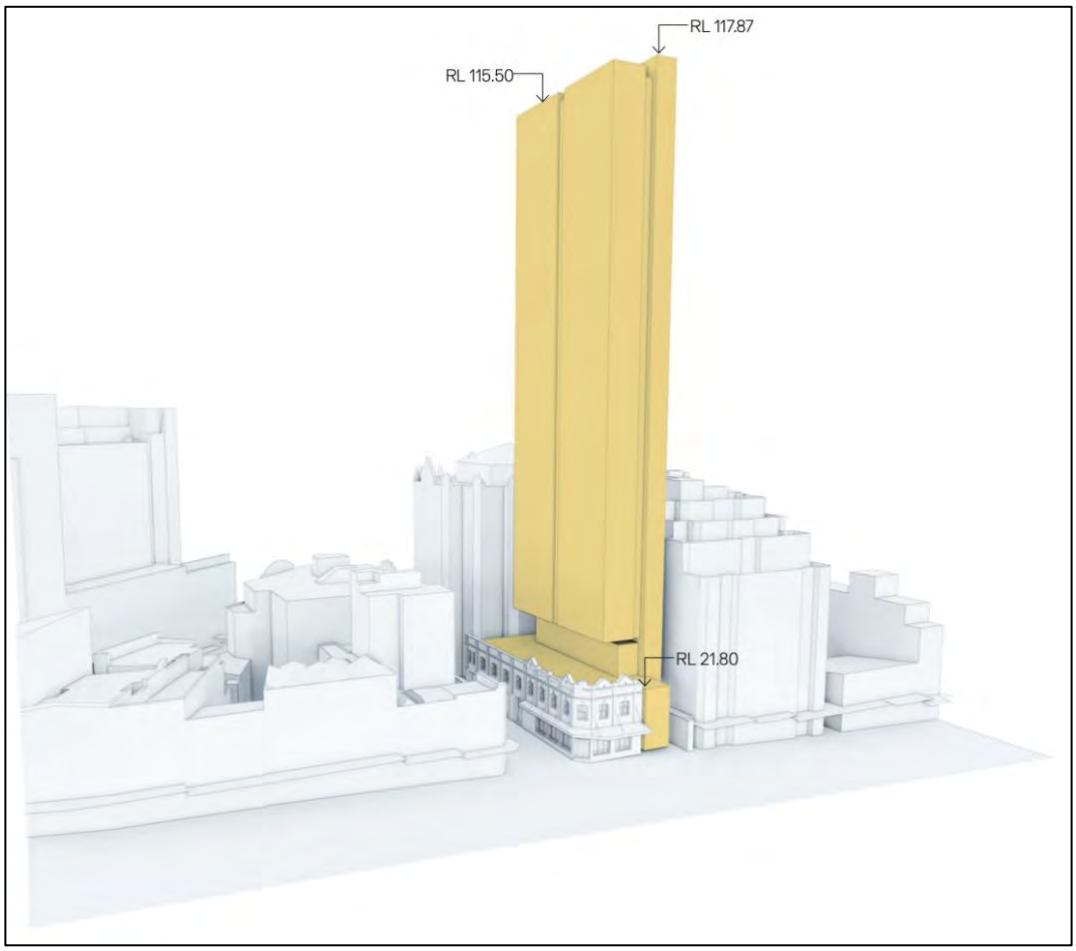

Figure 20 Preferred Scheme Envelope Configuration Viewed Looking North West
Source: Grimshaw

4.1.3 Podium and Street Frontage Height

The Preferred Scheme incorporates a small podium element that adjoins the heritage listed Sutton Forest Meat Building that occupies the full extent of Valentine Street and the majority of the George Street frontage.

The podium element is visible only from the George Street frontage and aligns with the height of the heritage listed building, as shown in Figure 22.

The podium and associated street wall height have been designed to comply with the objectives nominated under Section 5.1.1.2 of the Draft DCP for street frontage heights in Special Character Areas. Specifically, it has been configured so as to reflect the proportions of the heritage building to maintain this building's visual prominence in the streetscape.

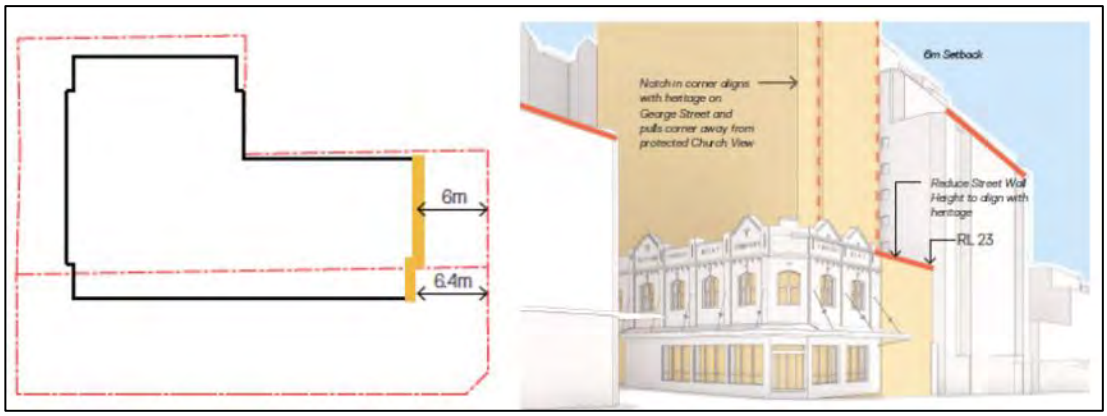

Figure 21 Preferred Scheme's Street Wall Height Viewed from George Street
Source: Grimshaw

4.1.4 Tower Setbacks

The proposed setbacks are illustrated in the figure below and reflect the setbacks for both the Preferred Scheme and DCP Envelope (refer to Section 4.2 for discussion on DCP Envelope).

The setbacks are proposed in response to the relevant objectives prescribed by the Draft DCP and the site's opportunities and constraints. In summary, the tower setbacks are as follows:

- North East (Capitol Terrace Apartments): 1.8m
- North West (Capitol Terrace Apartments): 3m
- South (Valentine Street): 8m
- West (187 Thomas Street): 3m – 3.2m
- East (George Street): 6m – 6.2m

The setbacks for the tower element and the rationale for their inclusion are addressed below.

4.1.4.1 Street Setbacks

The Draft DCP's street setbacks for Special Character Areas outlined in Section 5.1.1.2 are predicated on the need to protect the fabric of heritage items, preserve important view corridors, maintain adequate sunlight and ensure appropriate wind conditions to public places.

The proposal provides a setback of 8m to Valentine Street. The setback has been included to preserve view corridors along Valentine Street towards the heritage listed Christ Church of Saint Laurence and to minimise the amount of built form above the heritage item so as to ensure the cantilevered element is no greater in size than that approved for the site under DA/2017/353.

The proposal provides a setback ranging from 6m to 6.2m to George Street. The increased setback of 6.2m has been provided at the corner to enhance the

separation to the heritage item and to allow for its interpretation independent of the tower.

4.1.4.2 Side and Rear Setbacks

The Draft DCP requires that side and rear setbacks ensure sufficient light and air to surrounding public places; promote separation; and avoid the appearance of a contiguous wall of towers.

The proposed tower provides a setback ranging from 3m to 3.2m to the eastern boundary (refer to Figure 23). The 3.2m setback exceeds the minimum requirement. It is provided to enhance the proposal's separation to a future development to the east and to protect its redevelopment potential.

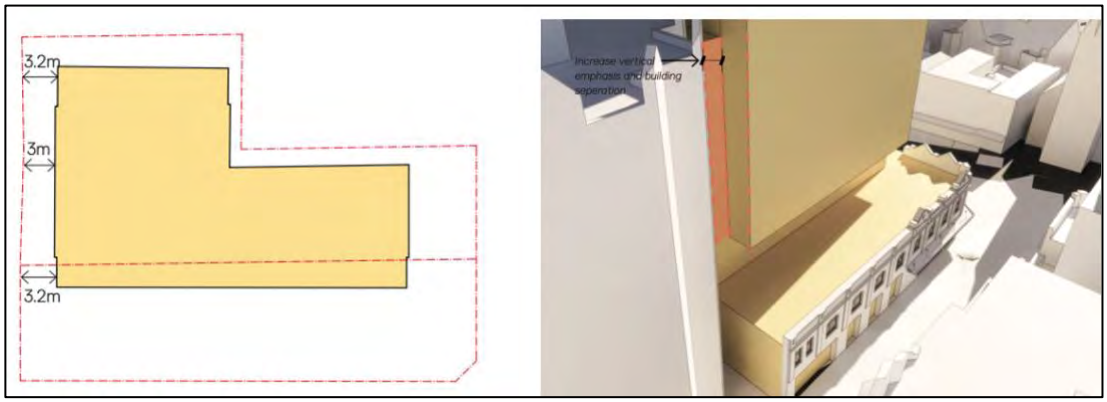

Figure 22 Preferred Scheme's Proposed Eastern Side Setbacks
Source: Grimshaw

The Preferred Scheme provides a maximum northern setback to the site's boundary of 3m, as shown in Figure 24. A setback of 1.6m is provided to the north western boundary. This setback represents an increase from the nil setback provided by the tower approved for the site (DA/2017/353). The setback is proposed to ensure a future development provides equivalent amenity impacts to the northern adjoining property relative to the site's approved tower (refer to Section 9.1.3.1).

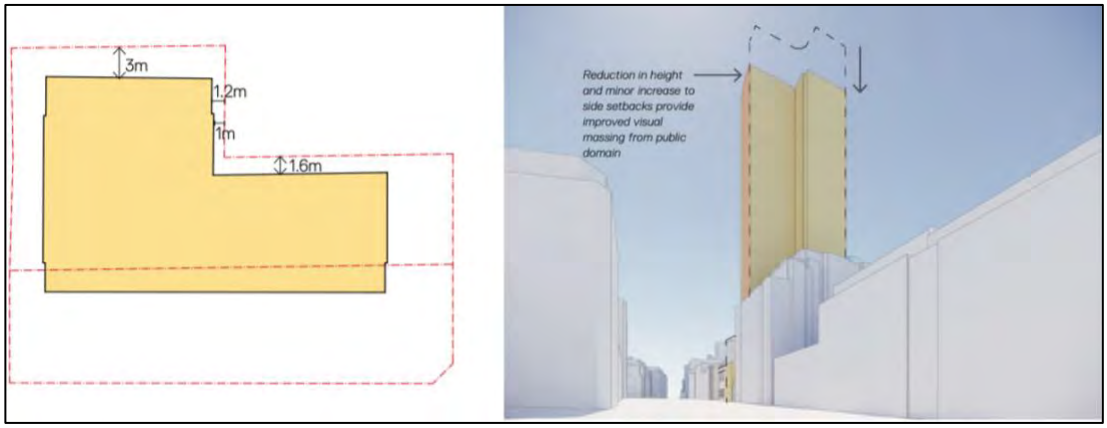

Figure 23 Preferred Scheme's Proposed Northern Setback
Source: Grimshaw

4.1.5 Public Domain and Landscaping

Site Image have prepared a Landscape Concept Design which is included at Appendix 3. The public domain treatments and landscaping associated with the Preferred Scheme consist of paving treatments and planters along the northern boundary.

The external terraces located at Level 3 and Level 10 are proposed to incorporate a range of landscape treatments, including perimeter planting with cascading plants and shade tolerate planting.

The proposed landscaping for the terrace areas is shown below.

Figure 24 Landscaping Within External Terrace Area (Level 3)
Source: Grimshaw

4.1.6 Uses and Gross Floor Area

The Preferred Scheme proposes a gross floor area (GFA) of 12,146m^2. With a site area of 1,030m^2, this amounts to an FSR of 11.8:1.

The proposal will accommodate retail uses within the podium which is proposed to incorporate and adaptively reuse the heritage item. The tower element is proposed to contain 3.5-star hotel accommodation floorspace with 280 hotel rooms and ancillary hotel amenity rooms.

The distribution of proposed uses is addressed in the table below.

Table 4 – Proposed Uses and Gross Floor Area		
Location	Use	GFAm^2
Basement 1	• BOH facilities	147
Podium Levels 1 – 2	• Retail • Hotel Lobby	1,389
Level 3 / Mezzanine	• Hotel Amenity Rooms	713
Level 4 – Level 11	• 3.5-Star Hotel Rooms • 8 Keys Per Level	3,264.9
Level 12 – 29	• 3.5-Star Hotel Rooms • 12 Keys Per Level	6,469.2
Level 30	• Hotel Amenity Rooms / Plant	161.6
Total GFA		12,146

4.1.6.1 Vehicular Access

The Preferred Scheme envisages vehicular access to the loading dock and basement from the western end of Valentine Street to allow for a continuous active frontage (refer to Figure 26). The vehicular access point has a width of 3.5m and has been designed in accordance with the SDCP 2012 (Figure 3.21, Section 3) and the relevant Australian Standards.

The vehicular entrance is accessible only to staff, service vehicles and hotel valet. It will facilitate direct access to the loading bay and an adjoining car lift. The car lift provides access to seven (7) valet parking spaces accommodated within the lower basement level.

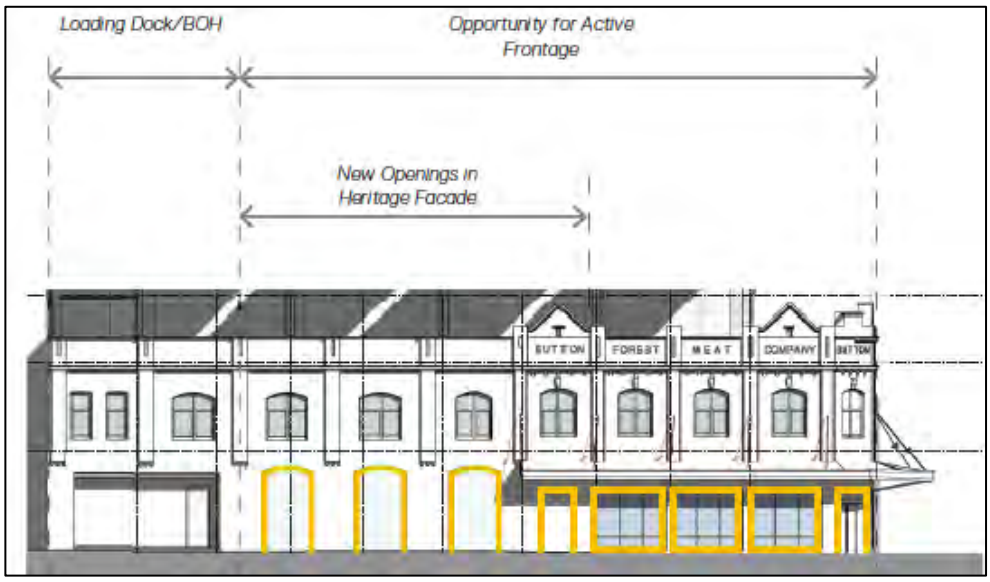

Figure 25 Vehicular Entrance off Valentine Street and Continuous Active Frontage
Source: Grimshaw

4.1.6.2 Pedestrian Access

Pedestrian access to the retail tenancies is permitted via separate entrance points from Valentine Street and the corner of Valentine and George streets.

Pedestrian access to the hotel is proposed via two entrance points, including a primary entrance from Valentine Street adjacent to a taxi drop off area and a secondary entrance from the northern end of George Street.

4.1.7 Public Domain Upgrades

The Preferred Scheme will provide a positive contribution to the public domain in the curtilage surrounding the site. The preferred scheme makes provision for active frontages along Valentine Street and George Street. There is also the opportunity for public domain upgrades to be delivered at the detailed DA phase. These public domain upgrades have the potential to complement and integrate with the Council lead upgrades proposed for George and Valentine streets which will facilitate the delivery of Central Square.

4.2 Proposed DCP Envelope

The proposed DCP Envelope establishes the maximum envelope for the site within the parameters of the proposed LEP amendments. It has a maximum height of RL 117.87 (105.87m from ground) and an FSR of 12:1. It makes provision for a 2.6m vertical separation to the heritage item as per the preferred scheme when measured from the heritage building's ridge line to the underside of the tower's canopy. This vertical separation increases to 5.4m when measured from the FFL of the heritage building.

The Preferred Scheme sits wholly within this DCP Envelope and optimises the maximum yield available taking into consideration the requirements of the hotel use and the heritage building, including adequate vertical separation to the tower's cantilevering element.

The DCP Envelope is shown in Figure 27 and at Appendix 2.

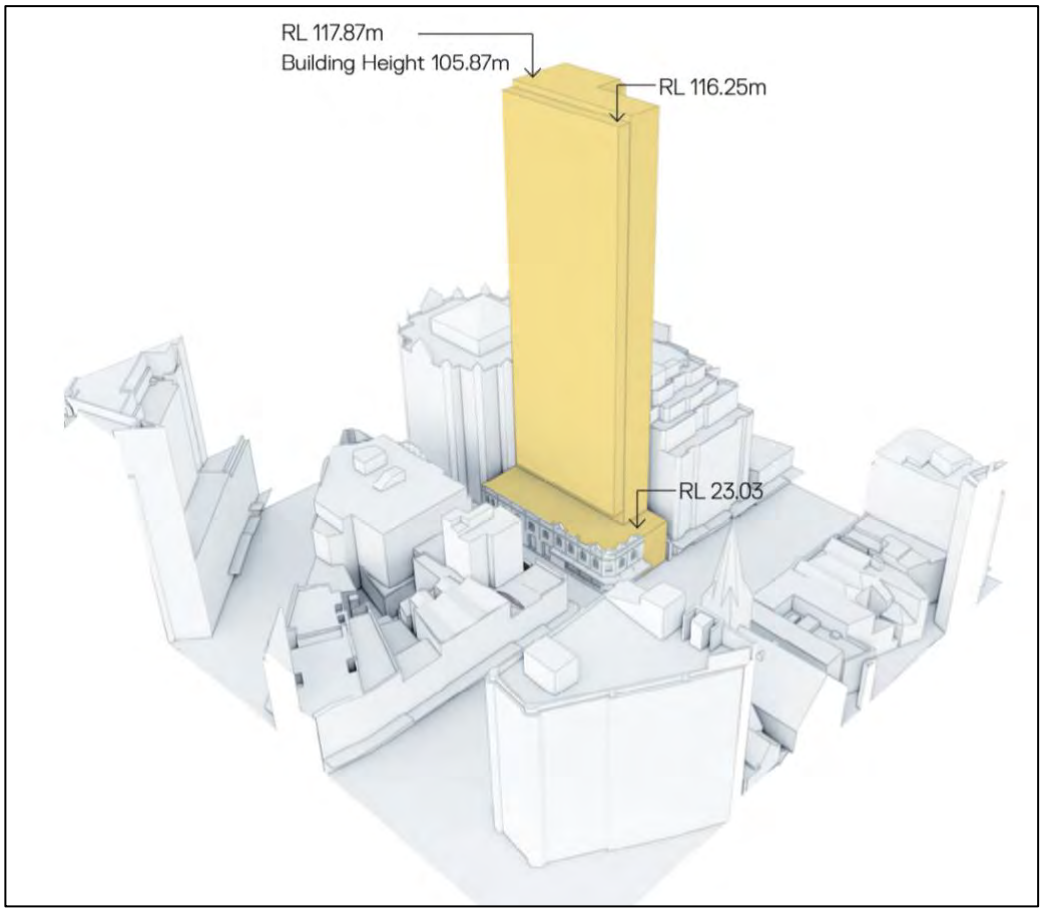

Figure 26 Proposed DCP Envelope
Source: Grimshaw

In designing the DCP Envelope, due consideration has been given to the design excellence requirements established by the Draft DCP's *Tower Cluster Area and Design Excellence Procedure Amendment*. Whilst these provisions are intended for larger sites that meet the minimum 2,000m site area threshold prescribed by the proposed subclause 6.21(7A), they have been addressed by the DCP Envelope to afford greater flexibility in the design of the scheme at the detailed design competition phase.

Informed by the *Tower Cluster Area and Design Excellence Procedure Amendment*, the DCP Envelope makes provision for the following:

- 15m architectural roof feature zone;
- 5m clear floor to floor for ground and first floors;
- 3.35m floor to floor for typical commercial floors;
- A full floor for every 20 occupied levels at a minimum 6m floor to floor with no floor space;
- 12.5% of the design envelope for architectural articulation;
- 200mm façade depth for an assumed closed cavity façade;

- 16% floor space exclusions allocated to the building core; and
- Vehicle access, servicing, services, balconies, voids and other areas are not to be counted as floorspace.

In addition to the above, the Draft DCP satisfies the equivalence testing requirements established by Schedule 11, Procedure B. Further discussion is provided in Section 9.4 and Appendix 2.

4.3 Design Excellence and Development Options

The Draft DCP's *Tower Cluster Area and Design Excellence Procedure Amendment* requires the development of at least three (3) different and realistic development options that may be explored at the design competition phase. In accordance with this requirement, Grimshaw have prepared alternative envelope options, which are shown below.

Each option is capable of providing a realistic development outcome that complies with the equivalence testing set out in Schedule 11, Procedure B. Further discussion is provided at *Appendix F* of the Architectural Design Report at Appendix 2.

5 Planning Proposal Overview

Section 3.33 of the EP&A Act establishes the required contents of a Planning Proposal. The DPIE's *A Guide to Preparing Planning Proposals* (2018) separates these requirements into six distinct parts. These parts are addressed in the proceeding chapters as follows:

- Chapter 6 addresses Part 1 – A statement of the objectives and intended outcomes of the proposed instrument;
- Chapter 7 addresses Part 2 – An explanation of the provisions that are to be included in the proposed instrument;
- Chapter 8 addresses Part 3 – The justification for those objectives, outcomes and process for their implementation:
- Chapter 10 addresses Part 4 – Maps, where relevant, to identify the intent of the Planning Proposal and the area to which it applies;
- Chapter 11 addresses Part 5 – Details of the community consultation that is to be undertaken; and
- Chapter 12 addresses Part 6 – Indicative timeline for the Planning Proposal.

6 Part 1 - Objectives and Intended Outcomes of the Planning Proposal

The Planning Proposal is a site specific amendment to the SLEP 2012 that seeks an alternative height and FSR for the site.

The objectives of the Planning Proposal are to:

- Facilitate the realisation of a mixed-use tower that is taller, slimmer and commensurate in scale with the future built form earmarked for the immediate surrounds and responds to the Draft CSPS's vision for the Haymarket / Ultimo Tower Cluster Area;
- Provide mid-range hotel accommodation to address the growing demand for hotel floor space in a locality anticipated to be redeveloped for large scale commercial towers and which will experience an increase of corporate travelers as a result of the emerging Sydney Innovation and Technology Precinct;
- Provide a mixed-use tower that will deliver on Council's aspiration to increase the supply of employment generating floorspace within Tower Cluster Areas;
- Provide a mix of employment generating uses that will strengthen the economic competitiveness of Central Sydney and provide job opportunities;
- Provide a slender building envelope with an intermediate scale suitable for the size of the site that provides an appropriate transition in scale;
- Provide a scheme with appropriate setbacks that prevent the emergence of a contiguous wall of towers and worsened daylight and pedestrian wind conditions at the ground plane;
- Facilitate upgrades at the ground plane that provide for an improved urban design outcome;
- Facilitate the activation of the surrounding streetscape that is envisaged by Council be converted to shareways by delivering high quality retail uses at street level;
- Optimise the development potential of the site in recognition of its strategic positioning within a Tower Cluster Area and the emerging Sydney Innovation Technology Precinct as well as proximity to Central Precinct;
- Repurpose and adaptively reuse the heritage building contained within the site as a means of protecting the site's heritage values concomitant with delivering a contemporary addition that is compatible with the surrounding future built form;
- Preserve the areas distinct local identify through the retention of the site's heritage significant facades and important view corridors;
- Introduce a contemporary tower element that is sympathetic to the heritage fabric and heritage items in the vicinity of the site;
- Deliver a building envelope that prevents amenity impacts to the adjoining residential property to the north; and

- Amend the applicable planning controls to provide the built form parameters for a future tower capable of exhibiting design excellence.

The intended outcomes of the Planning Proposal are to:

- Amend the existing controls that apply the site which are unduly restrictive, outdated and result in a significant truncation of the height;
- Provide revised planning controls that are appropriate for the site given the future surrounding built form and its location within a Tower Cluster Area;
- Facilitate revised planning controls that align with the objectives and actions proposed by the Draft CSPS and are commensurate with the future controls for surrounding sites;
- Establish a building envelope, along with realistic envelope options that will facilitate an architectural design competition prior to the submission of a detailed Development Application.
- Provide an equivalent residential amenity outcome for the property to the north commensurate with the approved development for the site; and
- Ensure a future detailed Development Application is capable of achieving a high standard of environmental sustainability.

The intended built form outcomes sought under this Planning Proposal are as follows:

Table 5 – Intended Built Form Outcomes

LEP Provision	Existing	Intended change
Land Use	B8 Metropolitan Centre	No Change
Height	Base LEP height limit of 50m	Increase to 105.87m (RL 117.87m)
FSR	Base LEP FSR limit of 7.5:1	Increase to 12:1

7 Part 2 - Explanation of Amending the LEP Provisions

7.1.1 Amendments to Sydney Local Environmental Plan 2012

The objectives and intended outcomes identified in Section 6.0 are to be achieved through an amendment to the SLEP 2012.

The amendment consists of the introduction of a site specific clause to Division 5 which establishes the maximum height, FSR and development parameters for the site.

The site specific clause will:

- Allow a maximum building height of RL 117.87m;
- Permit a maximum floor space ratio of 12:1, inclusive of design excellence and additional site specific floor space of 1.61:1;
- Permit a building that is not used for residential accommodation or serviced apartment uses; and
- Award additional floor space where the development demonstrates design excellence.

7.1.2 Proposed Site Specific Provision

The site specific clause sought by this Planning Proposal for insertion in Division 5 of the SLEP 2012 consists of the following:

6.XX 757 - 763 George Street, Haymarket

(1) The objective of this clause is to encourage:

(a) land uses other than residential accommodation and serviced apartments,

(b) the provision of retail activation and pedestrian connections.

(2) This clause applies to 757 – 763 George Street, Haymarket, being Lot 11 DP 70261 and Lot 1 DP 103165.

(3) Despite clause 4.3, development consent may be granted to the erection of a building with a maximum height of RL 117.87 metres.

(4) Despite any other provision of this Plan, a building on land to which this clause applies may have a maximum floor space ratio comprising:

(a) mapped floor space ratio under clause 4.4, and

(b) accommodation floor space ratio under clause 6.4, and

(c) end of journey floor space under clause 6.6, and

(d) an additional site specific floor space ratio of:

(i) 1.61:1 located in the above ground portion of the building, and

(ii) 2:1 for the purposes of hotel back of house facilities located in the below ground portion of the building as ancillary floor space to support related uses in the above ground portion of the building.

(e) an amount of additional floor space, to be determined by the consent authority, of up to 10% if the building demonstrates design excellence within the meaning of clause 6.21(7)(b).

(5) Clause 4.6 does not apply to development to which this clause applies.

(6) Development consent must not be granted under this clause unless the consent authority is satisfied that the development will –

(a) include business premises and retail premises at street level;

(b) provide a satisfactory distribution of built form and floor space, and

(c) will not be used for the purpose of residential accommodation or serviced apartments.

(7) Clause 6.21(7)(a) does not apply to development on land to which this clause applies.

(8) In this clause –

Hotel back of house means facilities that assist with the operation of the hotel, including office space and housekeeping and are not accessible to guests or the public.

7.1.3 Distribution of Floor Space Ratio

The Planning Proposal will increase the amount of employment generating floor space achievable on the site by permitting a maximum FSR of 12:1, inclusive of the design excellence bonus permitted by clause 6.21(7) of the SLEP 2012.

Specifically, this Planning Proposal provides for additional site specific floor space of 1.61:1 in addition to the base FSR of 7.5:1, accommodation floor space bonus of 1.5:1 and maximum permitted end of journey floor space of 0.3:1. Combined, this results in a proposed FSR of 10.91:1.

When applying the 10% design excellence bonus, the Planning Proposal seeks consent for a maximum floor space ratio of 12:1.

A detailed summary of the FSR distribution is provided in the table below.

Table 6 – Application of the Various Floor Space Provisions Under the SLEP 2012		
LEP Clause	Applicable Floor Space	Floor Space Ratio
cl. 4.4	Mapped floor space ratio	7.5:1
cl. 4.6	Accommodation floor space	1.5:1
cl. 6.6	End of journey floor space	0.3:1
TBA	Site-specific floor space	1.61:1
Total		*10.91:1*
cl. 6.21(7)(b)	Additional floor space – design excellcence	10% amounting to 1.09:1
Total Above Ground		*12:1*

7.2 Amendments to the SDCP 2012

A draft Site Specific DCP has been prepared to give effect to the proposed LEP amendments and provide certainty that the future redevelopment of the site will result in an appropriate built form outcome. The proposed draft Site Specific DCP amendment is provided at Appendix 4.

8 Justification

8.1 Section A - Need for the Planning Proposal

Q1. Is the planning proposal a result of an endorsed local strategic planning statement, strategic study or report?

The amendments sought by the Planning Proposal and the associated indicative Preferred Scheme are the outcome of extensive design testing undertaken in accordance with the requirements of Procedure B, Schedule 11 of the Draft CSPS and a detailed analysis of the site's opportunities and constraints.

The Planning Proposal has been prepared to facilitate the delivery of a building envelope that is appropriate in the context of the future transformative developments in the immediate surrounds (refer to Section 2.5). Additionally, it capitalises on the opportunity to deliver on the strategic objectives nominated by the Draft CSPS by proposing employment generating floorspace and a density commensurate with the site's positioning within a Tower Cluster Area and proximity to existing and planned infrastructure.

Q2. Is the Planning Proposal the best means of achieving the objectives and outcomes, or is there a better way?

Yes, it is considered that the Planning Proposal represents the best means of achieving the objectives and outcomes for the site and realising additional height and employment generating floor space within south Central Sydney.

The proposal has been selected as the Preferred Scheme following a consideration of various design options.

- Option 1: Do nothing;
- Option 2: Pursue the current scheme approved for the site under DA/2017/353; and
- Option 3: Prepare a Planning Proposal to amend the maximum height and FSR development standards to facilitate a tower of a greater height.

Option 1: Do Nothing

Option 1 entails maintaining the site in its existing underdeveloped state. It is noted that both buildings contained within the site are subject to a fire order which sterilises the use and occupation of both buildings to their maximum potential. In light of this, leaving the site in its current undeveloped state represents a missed opportunity to realise its development potential and deliver on the aspirations of the prevailing strategic planning framework.

As discussed in Section 2.5, the locality is earmarked to support substantial increases in density and towers reaching unprecedented heights. In particular, the site to the immediate west at 187 Thomas Street is subject to a Planning Proposal to permit heights up to RL 226.80 (216.4m from ground level) whilst surrounding sites in the Tower Cluster Area have the potential to reach heights restricted by the air space controls (in excess of RL 200). When viewed in the context of the surrounding future development, the existing development being only a maximum of 50m (15 storeys) would present as being at odds with the scale of the surrounding built form.

The existing developments contained within the site contribute minimal employment generating floor space. The Economic Impact Assessment prepared by HillPDA Consulting confirms that the existing developments support no more than nine (9) full-time jobs (refer to Appendix 5). Further, with the exception of the street facades associated with the corner site, the remaining fabric is not of heritage significance. In light of this, there is little value in retaining the existing built form.

Amendments to the maximum height and FSR are required to facilitate the provision of additional employment generating floor space in alignment with the strategic planning directions for the site. The amendments will facilitate the realisation of a development that adaptively reuses the site's heritage significant fabric, revitalises the site and optimises its development potential to increase employment opportunities for the locality.

Option 2: Pursue the Approved Scheme for the Site

Option 2 entails redeveloping the site in accordance with the existing approval granted under DA/2017/353. The approval provides for the adaptive re-use of the heritage building and the construction of a 15 storey hotel building.

The development of the approved scheme preceded Council's decision to formally exhibit the Draft CSPS. With greater certainty surrounding the status of the Draft CSPS and the future controls for the site and surrounding area, the approved scheme fails to optimise the site's full development potential. Further, being limited to only 15 storeys, it misses the opportunity to maximise the delivery of employment generating floor space within a designated Tower Cluster Area.

Option 3: Planning Proposal for Seeking Additional Height

Option 3 involves the preparation of a Planning Proposal for a tower with a greater height. This option was explored in the preliminary stages of the Planning Proposal's development. The Preferred Scheme's envelope massing comprised a tower with a maximum height in excess of RL 200. The scheme accommodated a mix of 3.5-star and 5-star hotel rooms and sought to vary the setbacks. The rationale for the proposed height was to provide a tower commensurate in scale with proposed developments in the immediate surrounds, including the proposed tower to the immediate west.

A Base Case Envelope associated with this scheme provided a nil non-compliant setback to the northern boundary, as per the approved tower for the site. Based on initial feedback from Council, Option 3 was discounted due to the non-compliances with the base case requirements established by the Draft DCP's Schedule 11. It was determined that a scheme with a reduced height and revised based case would instead be pursued.

8.2 Section B - Relationship to Strategic Planning Framework

Q3. Will the planning proposal give effect to the objectives and actions of the applicable regional, or district plan or strategy (including any exhibited draft plans or strategies)?

a) Does the proposal have strategic merit? Will it:

- *Give effect to the relevant region plan outside of the Greater Sydney Region plan outside of the Greater Sydney Region, the relevant district plan within the*

Greater Sydney Region, or corridor/precinct plans applying to the site, including any draft regional, district or corridor/precinct plans released for public comment; or

- *Give effect to a relevant local strategic planning statement or strategy that has been endorsed by the Department or required as part of a regional or district plan or local strategic planning statement; or*
- *Responding to a change in circumstances, such as the investment in new infrastructure or changing demographic trends that have not been recognised by existing strategic plans.*

In summary, the Proposal as reflected by the Preferred Scheme and DCP Envelope satisfies the aforementioned requirements and demonstrates strategic merit as it will:

- Support the economic competitiveness of the Harbour CBD and its continued growth;
- Adaptively reuse the site's heritage item to foster the preservation of the locality's heritage and character;
- Encourage investment and jobs growth in the Innovation Corridor;
- Deliver complementary short-term accommodation in proximity to commercial uses, higher education and health related uses accommodated within the Camperdown-Ultimo Heath and Education precinct and within the emerging technology and innovation precinct;
- Provide high quality short-term accommodation that will foster links between business and leisure visits;
- Address the demand for mid-range hotel accommodation in the context of there being an oversupply of high end 5-star hotels;
- Support the productivity objectives nominated by the strategic planning framework by retaining and enhancing the site's commercial activities;
- Respond to a change in circumstances, such as new investment in Sydney's Innovation and Technology Precinct and the need to provide supportive tourism accommodation;
- Encourage investment in the Harbour CBD's visitor economy; and
- Provide no adverse environmental, social or economic impacts.

A detailed discussion regarding the Planning Proposal's consistency with the relevant strategic plans is provided in the sections below.

8.2.1 A Metropolis of Three Cities – The Greater Sydney Region Plan

The Greater Sydney Region Plan was formally adopted by the Greater Sydney Commission in March 2018. It establishes a 40-year vision (to 2056) for Greater Sydney and establishes a 20-year plan to manage growth and change. It aligns land use, transport and infrastructure planning to facilitate Greater Sydney's emergence as a metropolis of three very distinct but connected cities.

The Greater Sydney Region Plan situates the site within the Harbour CBD. It notes that future office supply in the Harbour CBD is limited to approximately 19 years. In consequence, there is a need to maximise vertical development opportunities and the expansion of the CBD, particularly southward along the Central to Eveleigh Corridor. Consistent with the Greater Sydney Region Plan's aspirations, the Planning Proposal provides the opportunity to achieve additional density on the site and contribute to the southward expansion of the CBD.

To achieve the Greater Sydney Regions Plan's overarching vision, it provides a framework consisting of 10 directions and supporting objectives centred around the themes of:

- Infrastructure;
- Liveability;
- Productivity; and
- Sustainability.

The future development facilitated by the Planning Proposal will deliver on the Greater Sydney Region Plan's directions and associated objectives for the reasons set out below:

Specifically, it will:

- *Infrastructure* – The proposal will facilitate jobs growth on the site which will in turn increase patronage of recently delivered and planned transport upgrades, including the Sydney CBD and South East Light Rail, Sydney Metro, Central Walk and the planned upgrades to Central Station.
- *Liveability* – The proposal incorporates active retail use at street level and public domain upgrades at the detailed DA phase which will improve the permeability of south Central Sydney. Further, the proposal relates to the provision of a building envelope with the capacity to accommodate a high quality built form outcome that will positively contribute to the visual amenity of the streetscape. It will foster a socially connected community by delivering needed services such as hotel accommodation and retail uses in walking distance of transport. These uses will address the demands of the growing workforce in southern Central Sydney which is earmarked for economic and employment intensification.
- *Productivity* – Relative the existing development contained within the site, the proposal will increase the supply of employment generating floor space in proximity to existing and planned transport infrastructure, which will contribute to the expansion of the Sydney CBD.
- *Sustainability* – The development facilitated by the Planning Proposal has the capacity to adopt best practice sustainability outcomes at the detailed design phase.

8.2.2 Eastern City District Plan

The Eastern City District Plan (the District Plan) was released by the Greater Sydney Commission in March 2018. It provides a 20-year vision to manage the growth of the Eastern District to achieve the 40-year vision set out by the Greater Sydney Region

Plan. It builds upon the directions and objectives prescribed by the Metropolitan Plan by nominating more detailed planning priorities.

The District Plan identifies that the site occupies a strategically significant location. In particular it forms part of:

- *Harbour CBD* – The District's metropolitan centre which accommodates the largest office market in the region. It is also identified to contain some of the District's most important tourism and major event destinations. The District Plan identifies the need to support the growth of the visitor economy and adopt a coordinated approach to aligning tourism activities, business, events and accommodation.
- *The Innovation Corridor* – The corridor is earmarked by the District Plan to support significant economic growth along with important industries including knowledge intensive, creative and start-up industries as well as health, education and research services.
- *The Southern CBD Precinct* – The precinct is identified as having the most development potential to support the needed expansion of the Sydney CBD's footprint. With the expansion of the CBD and its office market, the District Plan notes that there is a need to promote links between business and leisure visits.
- *Camperdown-Ultimo Health and Education Precinct* – The precinct is identified by the District Plan as integral to supporting changing technologies, knowledge-intensive jobs and is instrumental to delivering on the aspiration to achieve a 30-minute city.

The site's strategic positioning makes it ideally suited to accommodate a mixed-use hotel development. It provides the opportunity to contribute to the expansion of Sydney CBD's footprint by redeveloping an underutilised site and increasing its capacity to contribute employment generating floor space to locality earmarked by the District Plan to support significant economic and jobs growth.

The provision of hotel accommodation will support the growing office market in the surrounds by providing its transient workforce with high quality mid-range hotel accommodation.

By virtue of the site's strategic positioning and its intended uses, the proposal aligns with the detailed Planning Priorities nominated by the District Plan. Further discussion is provided in the table below.

Table 7 – Consistency with the Planning Priorities of the Eastern City District Plan

Planning Priority		Comment
Planning Priority E6	Creating and renewing great places and local centres and respecting the District's heritage.	The proposed amendments will faciltiate the realisation of a built form outcome that exhibits design excellence and contributes to the renewal of the area. The adaptive reuse of the heritage item will protect the character of the area. It will also preserve a heritage item that has important

Table 7 – Consistency with the Planning Priorities of the Eastern City District Plan		
		historical associations and positively contributes to the visual amenity and character of the area.
Planning Priority E7	Growing a stronger and more competitive Harbour CBD	By delivering hotel accommodation, the proposal will provide a use that is complementary to the growing office market and emerging innovation and technology precinct.
Planning Priority E8	Growing and investing in health and education precincts and the Innovation Corridor	Relative to the existing development contained within the site, the proposal will substantially increase the supply of employment generating floor space. In turn, it will foster job creation within the Innovation Corridor which is earmarked for economic growth. The site forms part of the Camperdown-Ultimo Health and Education Precinct. The proposal will faciltiate job creation and business opportunities within this precinct. Consequently it will support its growth and the diversity of the activites contained within.
Planning Priority E13	Supporting growth of targeted industry sectors.	The Plan identifies tourism is a key economic sector for the Harbour CBD's economy. It identifies the need for continued growth across all of the sector's facets including business and leisure. In accordance with the objective, the proposal will contribute mid-range hotel accomodation in the context of a growing office market for both business and leisure purposes. The Plan also identifies that '*planning controls need to be flexible to allow for the needs of the innovation economy*'. The site is within the Innovation Corridor and located in proximity to the Sydney Innovation and Technology Precinct. The Planning Proposal seeks to increase the amount of employment generating floor space on the site to support the growing innovation economy and the associated demand for temporary accommodation.
Planning Priority E14	Protecting and improving the health and enjoyment of	The proposal provides an intermediate height relative to the scale of the surrounding futrue developments (i.e. 187 Thomas Street and 8 – 10 Lee Street). In this

Table 7 – Consistency with the Planning Priorities of the Eastern City District Plan		
	Sydney Harbour and the District's waterways.	context, it will not obscure significant views of Sydney's waterways. Futher, being positioned inland, the proposal will have no impact on views of the District's waterways.
Planning Priority E19	Reducing carbon emissions and managing energy, water and waste efficiently.	The proposal has the capacity to adopt best practice sustainability measures at the detailed design phase.

8.2.3 Camperdown-Ultimo Place Strategy

The *Camperdown-Ultimo Collaboration Area* is a Place Strategy (the Place Strategy) that was adopted by the Greater Sydney Commission in 2017. The Camperdown-Ultimo Collaboration Area stretches from Camperdown to Ultimo and encompasses the site as well as the wider Haymarket area and surrounding surburbs. Collaboration Areas are defined as areas of metropolitan significance that have the potential to emerge as nodes of activity that foster productivity and innovation.

The collaboration area supports three 'activity nodes' that occupy Haymarket, Camperdown and Eveleigh. The site forms part of the Haymarket Activity Node which is characterised by significant employment, educational, knowledge and skill contributors and will benefit from the *Central Station Urban Renewal Program*.

The Place Strategy identifies the aspiration for the area to emerge as Australia's innovation and technology capital. It provides an analysis of its opportunities, noting that due to the anticipated proliferation of tech start-ups, creative industries, and health education and research institutions within activity nodes such as Haymarket, that there will be a greater demand for ancillary and complementary uses including retail and visitor accommodation.

The Place Strategy nominates a range of priorities and actions to facilitate the achievement of its overarching vision. The table below demonstrates that the proposal is entirely consistent with the relevant actions.

Table 8 – Consistency with Camperdown-Ultimo Place Strategy		
Action		Comment
Action 16	Encourage active street frontages and priorities pedestrians and cyclists.	At least 70% of the street frontage is proposed to be activated by the retail uses facilitated by the LEP amendments. The proposed retail activation combined with the public domain upgrades will encourage the pedestrianisation of the area. The proposal seeks to provide vehicular access off Valentine Street which is envisaged by Council to serve as a shareway in the near future. The location of the proposed

Table 8 – Consistency with Camperdown-Ultimo Place Strategy		
		driveway access point is consistent with the existing approval (DA/2017/353). As the proposal only seeks to provide 7 valet parking spaces, minimum traffic movements will result from the proposal. In turn, pedestrian movements will be prioritised.
Action 18	Foster vibrant places by activating nigh-time precincts, activating ground floor areas and developing and promoting meeting places and cultural assets.	The development facilitated by the Planning Proposal retains and adaptively reuses the heritage item.
Action 22	Action 22 nominates the following: • reinforce and strengthen the local identity of Haymarket, Camperdown and Eveleigh activity nodes; • Attracts investment and drives jobs growth; • Improves the destination experience and grows the collaboration Area's global economic prosperity; and • Supports convergence, attracts tech start-ups, encourages research and innovation clusters, and supports scaleups to reach commercial aspirations.	The proposal will increase the amount of employment generating floor space on the site. It will provide retail and hotel floor space that will support the growing office market and the tourism sector. In this regard the propsoal will support the economic competitiveness of the collaboration area.
Action 26	Retain and manage commercial and business activities by safeguarding business zoned land from conversation to residential development.	The Planning Proposal seeks to facilitate the redevelopment of the site for commercial and retail floorspace, which will increase its amount of employment generating floor space.

8.2.4 The Central to Eveleigh Urban Transformation Strategy

The *Central to Eveleigh Urban Transformation Strategy* (C2E Strategy) establishes a vision for the transformation and redevelopment of the Central to Eveleigh corridor. Although not located within the study area and associated precincts that form part of the corridor, the site has the capacity to contribute to meeting the objectives established by the C2E Strategy. The objectives are articulated under a range of 'key moves'.

Relevant key moves include:

- *Key Move 6* – Create centres of activity around stations;
- *Key Move 8* – Strengthen arts, culture and heritage; and
- *Key Move 9* – Integrate new high-density mixed-use buildings with existing neighbourhoods and places.

The site is located adjacent to Central Precinct. The proposal aligns with the C2E Strategy in that it will foster increased activity around a transport node by concentrating needed visitor accommodation, retail activation and employment opportunities in proximity to Central Station. By adaptively reusing the site's heritage item, the proposal will preserve the locality's unique character, strengthening the area's heritage whilst it undergoes a process of transformation facilitated by the Draft CSPS.

8.2.5 NSW State Infrastructure Strategy 2018 – 2036

The *NSW State Infrastructure Strategy 2018 – 2036* (the Strategy) sets out the NSW Government's vision for infrastructure across the State over the next 20 years and aligns with the Greater Sydney Region Plan – *A Metropolis of Three Cities*.

The Strategy identifies that a key challenge for the Eastern Harbour City is to drive and accommodate growth and density alongside investment in infrastructure. It outlines a number of key infrastructure responses, including the need to invest in improvements in cultural infrastructure and tourism, and support the population with social infrastructure investment.

The Planning Proposal will deliver on the objectives of the Strategy in that it will:

- Support transport patronage associated with the existing and planned transport upgrades by increasing the supply of employment generating floor space in proximity to a major transport node;
- Support the visitor economy by providing accommodation floor space in proximity to transport infrastructure and the growing office market in Central Sydney South Precinct, thereby fostering links between business, tourism and accommodation; and
- Encourage public transport patronage by providing minimal on-site parking and end-of-trip facilities.

8.2.6 Future Transport Strategy 2056

The Future Transport Strategy 2056 (the Strategy) prepared by Transport for NSW (TfNSW) was adopted in March 2018 and outlines a long-term plan for the three cities of Greater Sydney as well as Regional NSW. It establishes the overarching vision for transport to function as an enabler of economic and society activity in order to contribute to long term economic, social and environmental outcomes. To assist in achieving this vision, the Strategy provides a framework for guiding planning and investment in transport infrastructure. This framework is supported by the following objectives:

- Encouraging active travel (walking and cycling) and using public transport;
- Connecting people to jobs, goods and services in our cities and regions; and
- Supporting more environmentally sustainable travel.

The Planning Proposal will deliver on the above objectives by increasing employment opportunities on a site in walking distance of a major transport node and future metro stations. It consequently will foster active transport and will assist in connecting people to jobs, services and sustainable transport options.

Q3b – Does the proposal have site specific merit?

Having regard to the following:

- *The natural environment (including known significant environmental values, resources or hazards; and*
- *The existing uses, approved uses, and likely future uses of land in the vicinity of the proposal; and*
- *The services and infrastructure that are or will be available to meet the demands arising from the proposal and any proposed financial arrangements for infrastructure provision.*

With respect to the above, the Planning Proposal demonstrates site specific merit for the following reasons:

- It will increase the amount of employment generating floor space accommodated on the site and within a Tower Cluster Area, therefore supporting jobs growth in accordance with the Draft CSPS;
- It will benefit from recently delivered and planned transport upgrades which will ensure that the infrastructure in the locality has the capacity to support the density proposed for the site as well as the density to be realised in the broader surrounds following the implementation of the CSPS;
- It will deliver a tall slender tower that provides equivalent amenity impacts (i.e. solar access) to the adjoining property to the north, improved daylight conditions and the potential for equivalent wind conditions to the surrounding public domain;
- It will address the demand for ancillary retail and visitor accommodation uses necessary to support the growing workforce associated with the additional commercial floor space to be delivered under the revised planning controls prescribed by the Draft CSPS;
- It will support agglomeration benefits between the visitor economy and the expanding office market in south Central Sydney by delivering visitor accommodation within a Tower Cluster Area designated to support substantial increases in commercial floor space;
- It will facilitate improvements to the public domain which will enhance the permeability of the locality;
- It will reinforce Haymarket's local character by preserving and adaptively reusing the site's heritage item;
- It will provide a hotel development in a highly accessible location in proximity to a range of tourism and major event destinations located within the broader Harbour CBD;

- It provides a mix of uses that are permissible on the site within the B8 Metropolitan Centre Zone;
- It will introduce a contemporary tower that will facilitate the realisation the density envisaged for the Tower Cluster Area under the CSPS;
- It will result in an appropriately scaled tower that sits comfortably in the skyline that is earmarked to consist of towers reaching unprecedented heights;
- It will support the visitor economy by providing mid-range hotel accommodation that will address the demand for accommodation at more affordable price points in the context of there being an oversupply of 5-star hotels; and
- It will provide acceptable environmental impacts as evidenced by the accompanying subconsultant reports and the environmental assessment provided in Section 9.0.

In light of the merits of the proposal, it is considered that failing to redevelop the site in accordance with the vision set out in this Planning Proposal represents a missed opportunity. The likely outcomes of not redeveloping the site for the requested density are as follows:

- The site's existing building stock would remain in its current underutilised state. In consequence, a substantial portion of the floor space accommodated on the site would remain sterilised its current fire orders. Therefore, the retention of the existing built form would prevent any increase to the site's employment capacity which is contrary to the strategic intent of a Tower Cluster Area.
- Alternatively, the site could be redeveloped in accordance with the existing Development Application approval. However, the resultant outcome would be a development with a substantially reduced density comprising a tower reaching no more than 50m with a base FSR of 7.5:1 (excluding bonus FSR). This option forgoes the opportunity to deliver an increased amount of employment generating floorspace and a suitably scaled tower that sits comfortably in the context of the super towers earmarked for the locality.

Summary

For the reasons addressed above, this Planning Proposal is consistent with the Strategic Merit Test and Site Specific Merit Test established by *A Guide to Preparing Planning Proposals*.

Q4. Will the **planning proposal give effect to a council's endorsed local strategic** planning statement, or another endorsed local strategy or strategic plan?

The Planning Proposal is entirely consistent with Council's endorsed local strategies and plans. A detailed discussion regarding the proposal's compliance with the strategies and plans of relevance to the application is provided below.

8.2.7 Central Sydney Planning Strategy

The Draft *CSPS* is a 20-year growth strategy that delivers on Council's Sustainable Sydney 2030 program. As noted previously, it encompasses a suite of documentation that proposes amendments to the planning controls for the Central Sydney Planning Area.

The Draft CSPS situates the site within the Haymarket / Ultimo Tower Cluster Area (refer to Figure 28). The Tower Cluster Area is earmarked for employment growth and densification. Sites within Tower Cluster Areas are eligible for additional height and Strategic Floor Space to facilitate employment growth.

The Draft CSPS defines Strategic Floor Space as comprising floor space related to the following uses: *office premises, business premises, retail premises, hotel accommodation and community and cultural facilities*. The development facilitated by the Planning Proposal relates to retail and hotel accommodation, and therefore aligns with the requirements for Strategic Floor Space.

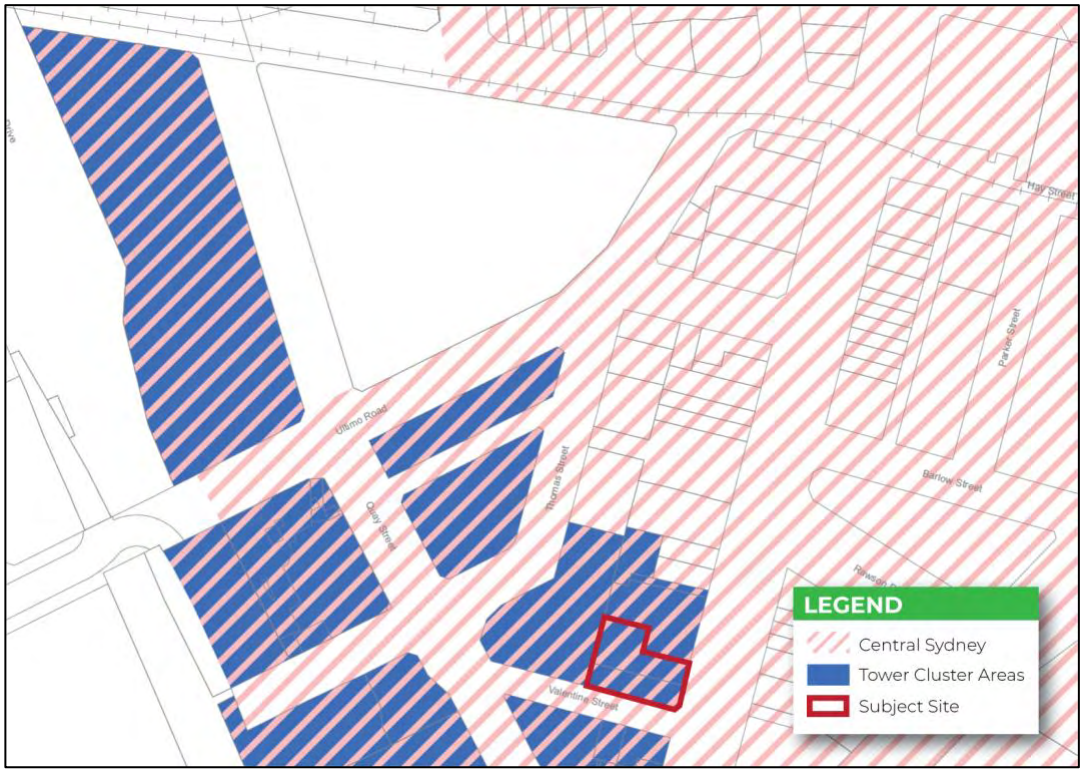

Figure 27 Site's Location within the Haymarket / Ultimo Tower Cluster Area
Source*: CSPS Planning Proposal prepared by City of Sydney*

The Draft CSPS provides a framework of 10 'key moves' which aim to drive the continued growth and economic success of Sydney and its expansion. The Planning Proposal is entirely consistent with the relevant key moves for the reasons set out in the table below.

Table 9 – Consistency with the Key Moves of the CSPS

Key Move	Comment / Compliance	
1) *Prioritise employment growth and increase employment capacity.*	The proposal seeks consent for employment generating uses comprising visitor accommodation and retail floor space. It will therefore assist in unlocking development capacity in a Tower Cluster Area. The proposal will increase the quantum of employment floor space achievable on the site to assist in meeting the target of an additional 2.9 million square metres of floor space. As outlined in the Economic Impact Assessment at Appendix 5, the proposal will contribute 127 jobs and $8.5 million of indirect investment and therefore will enhance Central Sydney's productivity and employment growth. Whilst not subject to subclause 6.21(7A), the development sought by this Planning Proposal demonstrates that the site is capable of accommodating a tower of the proposed density and contributing employment generating floor space without giving rise to unreasonable environmental impacts. Further discussion regarding environmental impacts is provided in Section 9.0.	✓
2) *Ensure development responds to context.*	The Strategy aims to promote flexible planning controls for tall buildings to ensure developments better respond to their context. This Planning Proposal seeks to amend the controls to provide a greater level of flexibility to facilitate the delivery of a tower that: • Provides adequate setbacks and separation; • Preserves and is sympathetic to the site's heritage building and protects the area's local character;	✓

Table 9 – Consistency with the Key Moves of the CSPS		
	• Provides acceptable wind impacts; • Facilitates improved daylight to surrounding public places; and • Achieves a high standard of amenity and exhibits design excellence. Further discussion regarding the appropriateness of the proposed tower's built form is provided in Section 9.1.	
3) *Consolidate and simplify planning controls.*	In an effort to conslidate and simplify planning controls, the Draft CSPS seeks to expand its geographical boundaries to southern Central Sydney to include Ultimo and Central Railway to maximise opportunities for growth. The site forms part of the Southern Central Sydney Precinct. The proposal faciltiated by the Planning Proposal prepared under the guise of the Draft CSPS planning controls will contribute to the expansion of Central Sydney.	✓
4) *Provide for employment growth in new tower clusters.*	The site forms part of the Haymarket / Ultimo Tower Cluster Area. Being located in a Tower Cluster Area and close to other planned super towers as well as in proximity to transport infrastructure, the site is ideally suited to support a taller building with an intermediate scale relative to nearby planned developments. The development envisaged by the Planning Proposal will accommodate employment generating uses that deliver on the objectives of the Draft CSPS as well as other related Council policies which identify the need for mid-range hotel accommodation and active retail uses.	✓
5) *Ensure infrastructure keeps pace with growth*	The site receives ample access to existing and planned light and heavy public transport infrastructure. The Planning Proposal therefore capitalises on the existing and planned heavy infrastructure in the surrounds.	✓

Table 9 – Consistency with the Key Moves of the CSPS		
6) *Move towards a more sustainable city*	The proposal will adopt best practice sustainabiltiy measures as outlined in the ESD Report included at Appendix 6.	✓
7) *Protect, enhance and expand Central Sydney's heritage and public places.*	The proposal seeks to retain and adaptively reuse the heritage listed building contained in the site. The proposal is therefore consistent with the objective as it will protect and ehnance Central Sydney's historic heritage.	✓
8) *Move people more easily by prioritising street for walking and cycling and expanding the pedestrian open space network.*	The development faciltiated by the Planning Proposal will prioritise pedestrian movements by contributing public domain upgrades;; maximising active frontages; and providing upgrades at the ground plane.	✓
9) *Reaffirm commitment to design excellence*	The development as envisaged by the Indicative Concept Scheme along with the draft Site Specific DCP demonstrates that the proposed LEP amendments are capable of supporting a tower that exhibits design excellence at the detailed Development Application phase.	✓
10) *Monitor outcomes and respond to issues that arise to ensure the Strategy's ongoing success.*	Not Applicable	NA

8.2.8 Sustainable Sydney 2030

The City of Sydney's *Sustainable Sydney 2030* – Community Strategic Plan (the Plan) establishes the vision and strategic plan for the City of Sydney for the next 25 years. It aims to guide Council to deliver outcomes in line with the community's expectations.

The Plan sets out 10 Strategic Directions to guide the implementation of the Plan. The proposal's consistency with the relevant Strategic Directions is addressed below.

Strategic Direction 1 – A globally and competitive city

The proposal will improve diversity in the economy by increasing the supply of mid-range hotel accommodation. It will provide high quality hotel accommodation that will contribute to enhancing Sydney's global status as a destination for investment, culture and business. By providing accommodation in proximity to Sydney's primary office market and tourism destinations, it will support links between domestic and international businesses as well as leisure visitors. It will also encourage job creation and contribute to the achievement of Council's target of 465,000 jobs by 2030.

Strategic Direction 2 – A leading environmental performer

This Planning Proposal will support the delivery of a development that adopts best practice sustainability measures as addressed in the ESD Report at Appendix 6.

Strategic Direction 3 – Integrated transport for a connected city

The site is located within walking distance of a range of range of transport options, including Central Station, the CBD and South East Light Rail network, bus services and the future Sydney Metro. By providing jobs and services it will foster the use of sustainable modes of transport.

Strategic Direction 4 – A city for walking and cycling

The Planning Proposal provides the opportunity for active retail frontages and the potential for additional public domain upgrades that will encourage the pedestrianisation of the area and will improve permeability.

Strategic Direction 5 – A lively and engaging city centre

The future development as facilitated by the Planning Proposal will provide fine-grain retail uses at ground level that will contribute to the revitalisation of the locality. The retail premises have the potential to support the night-time economy and contribute to an active streetscape both during the day and at night.

Strategic Direction 6 – Resilient and inclusive local communities

The development envisaged by the Planning Proposal will contribute to the creation of a unique place by adaptively reusing the site's heritage item and consequently preserving the locality's local character. It will provide employment opportunities, high quality mid-range tourist accommodation, and retail activation for both local residents and visitors.

Strategic Direction 7 – A cultural and creative city

The proposal provides the opportunity for the inclusion of public art at the detailed design phase. Any future public art will ensure creativity is a visible feature of the public domain and will enhance the distinctive identity of the Haymarket locality.

Strategic Direction 9 – Sustainable development, renewal and design

This Planning proposal will facilitate the delivery of a future development that adopts a high standard of ESD practices and meets a range of ESD targets (refer to Appendix 6). By virtue of being located in walking distance of public transport, the proposal will encourage the use of sustainable modes of transport and reduce the reliance on private motor vehicles.

Strategic Direction 10 – Implementation through effective governance and partnerships

The Planning Proposal will support the implementation of *Sustainable Sydney 2030*. Should the proposal progress to public exhibition, the community will be provided with an opportunity to comment on the proposal.

8.2.9 City Plan 2035 – Local Strategic Planning Statement

The *City Plan 2035 – Local Strategic Planning Statement* (LSPS) provides a 20-year land use planning vision for the Sydney LGA. It connects the Greater Sydney Region Plan: A Metropolis of Three Cities, the Eastern City District Plan, Sustainable Sydney 2030: Community Strategic Plan with Council's existing and proposed planning controls.

Strategic Planning Opportunity

The objectives established by the LSPS align with the strategic aspirations of the subject Planning Proposal, which aims to redevelop the site for a 3.5-star hotel with ancillary retail uses that respond to the growth of Central Sydney.

The LSPS recognises that Sydney's visitor economy is instrumental to fostering links between international and national businesses, with more than one third of Sydney's visitors travel to Sydney for business reasons. For this reason, the LSPS identifies that supporting the viability of the visitor economy is a key priority for improving the competitiveness of the local economy.

The LSPS notes that a diversity of hotel accommodation types that respond to different market segments need to be delivered in suitable locations. More diverse hotel options have the potential to connect the growing international and transient workforce with the expanding office market in the south Central Sydney and to foster agglomeration benefits. However, the LSPS identifies a number of preventative barriers to the delivery of varying grades of hotel accommodation. In particular, high-land values and the financial gains associated with residential accommodation disincentivise the redevelopment of sites for mid-range and budget accommodation.

In light of this, the LSPS establishes that the demand for hotels is projected to grow by 4.7% annually to 2020, with demand projected to be stronger for mid-range accommodation. To ensure Sydney remains a drawcard for visitors, the LSPS identifies that future hotel developments should aim to deliver place-led and people focused outcomes.

The LSPS situates the site in the Central Sydney South Precinct, which is designated to be a strategically important employment area due to the planning infrastructure investments at Central and the emerging Sydney Technology and Innovation Precinct. The area is anticipated to experience significant transformation due to the expected shift towards high-order employment uses. This shift will precipitate a demand for ancillary and complementary uses, including retail and hotel uses.

In light of the above, the Planning Proposal aligns with the strategic planning opportunities and priorities identified by the LSPS. Specifically, it:

- Will provide mid-range accommodation floor space in the form of a 3.5-star hotel that will address the projected demand for more affordable tourist and visitor accommodation options;
- Will address the demand for temporary hotel accommodation emanating from the growing workforce in Central Sydney South Precinct which will experience higher levels of visitation as a consequence of the shift towards high-order employment uses and the emergence of the Sydney Technology and Innovation Precinct;
- Adopts a place-based based approach to redeveloping the site by adaptively reusing its heritage item to deliver a place-led outcome that is sympathetic to Haymarket's local identity and character;
- Seeks to redevelop a site capable of accommodating a viable floor plate with minimal environmental impacts; and

- Retains and intensifies the site's use for employment generating purposes in lieu of facilitating its conversion to a residential use.

Consistency with Relevant LSPS Priorities

The development facilitated by the Planning Proposal will give effect to a range of priorities nominated by the LSPS. The proposal's consistency with the relevant priorities is addressed in the table below.

Table 10 – Consistency with the Relevant LSPS Priorities

Priority		Consistency
Infrastructure		
I1	Movement for walkable neighbourhoods and a connected city.	The proposal provides the opportunity for public domain upgrades at the ground plane. It will therefore improve connectivity to the surrounds and contribute to a more walkable neighbourhood.
I2	Align development and growth with supporting infrastructure.	The density proposed by the site capitalises on existing and planned transport infrastructure, including the recently delivered light rail and future Sydney Metro. Both projects will provide significant additional public transport capacity.
Liveability		
L1	A creative and socially connected city	The proposal will improve access to services and uses to meet people's changing needs. Specifically, it will provide mid-range hotel accommodation floor space that will address the growing demand for short-term accommodation in south Sydney's expanding office market. The proposal will foster a healthy, creative and culturally rich community by retaining and revitalising the site's heritage building to allow it to positively contribute to the unique character of the locality.
L5	Creating Great Places	The proposal will provide high quality retail uses that will contribute to the activation of the streetscape. The retained heritage building will contribute to the local character of the area. The proposed uses comprising hotel and retail/commercial floor space will cater to the daily needs of the local community and its growing workforce.

Table 10 – Consistency with the Relevant LSPS Priorities		
		The development facilitated by the Planning Proposal provides the opportunity for additional public domain upgrades at the detailed DA phase which will foster walkability.
Productivity		
P7	Growing a stronger, more competitive Central Sydney	The Planning Proposal will support the productivity of Central Sydney by enhancing the site's capacity to support employment generating floor space.
P8	Developing innovative and diverse business clusters in City Fringe	The LSPS identifies that the City Fringe is a drawcard for investment and is known for its knowledge intensive clusters and character. The Planning Proposal will increase the diversity of uses within the City Fringe by providing ancillary hotel accommodation and retail floor space that will complement and support growth of its knowledge-intensive clusters and the tech sector in the nearby Western Gateway Precinct.
Sustainability		
S11	Creating better buildings and places to reduce emissions and water and use water efficiently	The development facilitated by the Planning Proposal will adopt best practice sustainability measures and will be designed to meet ambitious sustainability targets.

Principles for Growth

The LSPS sets out a series of 'principles for growth' which represent a local merits test to guide Council in their consideration of Planning Proposals. The 'principles for growth' supplement the Strategic Merit Test and Site Specific Merit Test established by the DPIE's *Guide to Preparing Planning Proposals*. An assessment against the principles is provided in the table below.

Table 11 – LSPS's Strategic and Site Specific Principles for Growth		
Principle	Comment / Compliance	
Strategic Principles for Growth		
Proposals must be consistent with the Greater Sydney Region Plan and Eastern City District Plan	The proposal is consistent the Greater Sydney Region Plan and the District Plan for the reasons addressed above in Section 8.2.1.	✓
Proposal's for sites in the Harbour CBD, Innovation Corridor (including Camperdown-Ultimo Health and Education Precinct) must be consistent with the objectives for these areas in the Eastern City District Plan.	The proposal is consistent with the District Plan for the reasons set out above in Section 8.2.2 and Section 8.2.3.	✓
Proposals must be consistent with the directions, objectives and actions of Sustainable Sydney 2030 and Sustainable Sydney 2050 in the future.	The proposal is consistent with Sustainable Sydney 2030 for the reasons addressed in Section 8.2.8.	✓
Proposals must be consistent with the relevant livability, productivity, infrastructure and sustainability priorities, objectives and actions in this LSPS.	The proposal is entirely consistent with the objectives and actions in the LSPS for the reasons set out in Section 8.2.9.	✓
Proposals must be consistent with the relevant priorities, objectives and actions of the Local Housing Strategy.	The proposal relates to a site in a Tower Cluster Area and does not seek consent for residential accommodation. Accordingly, the provisions do not apply.	✓
Proposals must support the strategic objectives in the City's adopted strategies and action plans.	As demonstrated by the assessment provided in Section 8.2.7 to Section 8.2.12 the proposal is entirely consistent with Council's strategies and action.	✓
Proposal's must not compromise non-residential development need to meet employment targets for strategic centres.	The proposal relates to an employment generating use. It has the potential to facilitate the creation of 127 jobs during the operational phase and will therefore contribute to meeting Council's employment targets.	✓
Proposals which seek to respond to a significant investment in infrastructure must be considered in a wider strategic context with other sites.	The site receives ample access to existing and planned public transport. Specifically, the proposal is located in walking proximity of Central Station and a number of light rail stations and planned metro stations. In consequence, there is sufficient transport	✓

Table 11 – LSPS's Strategic and Site Specific Principles for Growth		
	infrastructure in the locality to support the density sought by the Planning Proposal.	
Proposals must give consideration to strategically valuable land uses that are under-provided by the market, such as but not limited to hotels, cultural space (including performance and production space), and having regard to the appropriateness of the use for the context.	The proposal seeks consent for a 3.5-star hotel use. As addressed above, the proposal responds to the growing demand for mid-range accommodation that is appropriate for the context given the anticipated growth of the local workforce following the implementation of the Draft CSPS controls.	✓
The Site Specific Principles for Growth		
Proposals must locate development within reasonable walking distance of public transport that has capacity and is frequent and reliable.	The proposal is located within walking distance of a range of transport options. In particular, it is located 250m from Central Station, 270m from Capitol Square Light Rail Station, 140m of Haymarket Light Rail Station. The site will also benefit from the planned Sydney Metro and the upgrades to Central Station.	✓
Proposals must meet high sustainability standards and mitigate negative externalities.	The proposal is capable of incorporating best practice sustainability measures at the design competition and detailed Development Application phases.	✓
Proposals must include an amount and type of non-residential floor space appropriate to the site's strategic location and proximity to or location with a centre or activity street.	The site is located within the Haymarket/Ultimo Tower Cluster Area. It seeks to provide employment generating floor space consisting of retail and hotel accommodation. The proposed uses are ancillary and complementary to the growing office market in south Central Sydney and are therefore appropriate.	✓
Proposals must create public benefit.	The proposal will provide public domain upgrades that will improve the visual amenity of the area and its permeability. Additional public benefits will be provided under a future Voluntary Planning Agreement. A Public Benefit Offer is included under Separate Cover. Further discussion is provided in Section 9.15 and Section 9.16.	✓
Proposals must be supported by an infrastructure assessment and demonstrate any demand for infrastructure it generates can be	The site is located adjacent to Sydney's largest public transport interchange with this being Central Station. It is also located in proximity to a number of light rail stations	✓

Table 11 – LSPS's Strategic and Site Specific Principles for Growth		
satisfied, assuming existing development capacity in the area will be delivered.	and bus services, and will benefit from the planned Sydney Metro network. Accordingly, the existing and future transport infrastructure in the immediate vicinity of the site has ample capacity to support the demand for infrastructure associated with the proposal.	
Proposals must make a positive contribution to the built environment and result in an overall better urban design outcome than existing planning controls.	The indicative Preferred Scheme demonstrates that a building that exhibits design excellence and provides floor plates appropriately sized for the proposed use is capable of being delivered within the parameters of the LEP amendments. Relative to a complying scheme permitted to reach no more than 50m, the proposal will generate a superior design outcome by responding to developments in the surrounds. Specifically, it will provide a better transition in height from the surrounding built form which being located in a Tower Cluster Area is permitted to reach heights in excess of RL 200. In particular, relative to the existing approval, the proposal will provide a more gradual transition in height from the tower at 187 Thomas Street (if approved) which proposes a DCP Envelope reaching 216.4m. As such, relative to a complying scheme, the proposal will provide a slender tower that complements and better integrates with planned and potential permissible developments in the surrounds. Further discussion is provided in Section 9.1.	✓
Proposals must result in high amenity for occupants.	The LEP amendments will facilitate the provision of floor plates suitable for accommodating a 3.5-star hotel. As demonstrated by the indicative Preferred Scheme the rooms are adequately sized for the proposed grade of hotel and are generally oriented towards the south to maximise access to view corridors and are identified by supporting subconsultant findings as capable of receiving adequate solar. Occupants will also have access to amenity hotel rooms.	✓

Table 11 – LSPS's Strategic and Site Specific Principles for Growth		
Proposals must optimism the provision and improvement of public space and public connections.	The proposal has the opportunity to deliver public domain upgrades and retail activation at the ground plane.	✓

8.2.10 Visitor Accommodation Action Plan

T*he Visitor Accommodation Action Plan (Hotels and Serviced Apartments)* (the Plan) was released in 2015 and builds upon *Sustainable Sydney 2030*. It identifies the challenges impacting the hotel accommodation sector and nominates a range of actions to increase investment in the sector.

The Plan notes that a key challenge affecting the sector is the oversupply of 5-star hotels, which encourages lower occupancy rates and drives down hotel rates. This is exacerbated by the development pipeline for visitor accommodation which predominantly consists of 4 and 5-star hotels.

In the context of there being an oversupply of 5-star accommodation, there is a growing demand for mid-range accommodation, particularly in the 3.5-star segment. However, the pressure for hotel and commercial uses to be converted to residential represents an impediment to the delivery of mid-range hotels that provide more affordable accommodation options.

The Plan identifies that there is a correlation between the demand for hotel accommodation and office markets due to the flux of corporate travelers that require temporary accommodation. Given this, it can reasonably be anticipated that the emerging Sydney Innovation and Technology Precinct along with the growing office market associated with the Central/Haymarket Tower Cluster Area will increase the demand for accommodation for corporate travelers.

In addition, the Plan recognises that there is a growing demand for a greater diversity of hotel types, with leisure visitors demonstrating a strong preference for standard grade hotels. It anticipates that future demand will exhibit a stronger preference for mid-range accommodation at more affordable rates.

The Plan nominates a range of actions to assist in meeting future demand and to encourage greater investment in the development of hotel accommodation. Of relevance to this Planning Proposal are the following actions:

> *d) The City will consider visitor accommodation and encourage proponents to investigate visitor accommodation, when proposing planning controls for strategic or major development sites.*
>
> *e) Investigate encouraging 3-star hotels in the western, southern and core precincts of Central Sydney by reducing development costs including development contributions and heritage floor space.*

The proposal is entirely consistent with the Plan and its relevant actions. Specifically, it relates to a site that is strategically significant due to its positioning within a Tower Cluster Area, the Innovation Corridor and proximity to the emerging Sydney

Innovation and Technology Precinct. Consistent with the Plan, it will increase the supply of mid-range hotel accommodation in the Southern Central Sydney Precinct.

8.2.11 Retail Action Plan

The City of Sydney's *Retail Action Plan* (the Action Plan) buildings upon Sustainable Sydney 2030 and provides a more detailed framework for the retail sector which is identified as one of Sydney's priority sectors. The Action Plan prescribes a number of actions that seek to foster the maintenance and growth of retailers, particularly those with an on-street presence.

The Action Plan is focused on five key areas, these being:

- *Create great experiences;*
- *Building capacity and resilience;*
- *Remove barriers; and*
- *Engage with the sector.*

These focus areas are supported by a number of major projects. Relevant projects include:

- The activation of laneways and fine-grained retail spaces to encourage their take-up by diverse and bespoke businesses;
- The development and implementation of a legible way-finding systems for Central Sydney; and
- Advocating for improvements to transport and access in the City.

The development facilitated by the Planning Proposal is entirely consistent with the aspirations of the Action Plan. By providing fine-grained retail uses at street level it will attract diverse and bespoke business to the locality. These future retail businesses will benefit from the site's proximity to public transport and the growth of the office sector in the South Central Sydney Precinct. It will also facilitate public domain upgrades at the ground plane. These improvements will enhance pedestrian movements and wayfinding, which will improve the legibility of the proposed retail uses.

8.2.12 Tourism Action Plan

The *Tourism Action Plan* was adopted in December 2013 and establishes a range of actions to support the viability of Sydney's tourism sector. It identifies that hotels are a critical part of the built infrastructure that service the tourism sector.

The Tourism Action Plan focuses on three core areas, including:

- *Destination Development* – Encouraging the development of product and infrastructure;
- *Destination Management* – Enhancing the quality of the visitor experience; and
- *Destination Marketing* – Strengthening partnerships to maximise visitation potential.

With respect to these three core areas, the *Tourism Action Plan* prescribes a range of key actions. To encourage the delivery of destination development, it nominates the following actions:

- Investigate through the Central Sydney Planning Review how planning controls can facilitate greater hotel development in Central Sydney;
- Work with partners to encourage appropriate conservation and adaptive re-use of heritage buildings within the city for visitor accommodation and other tourism related uses where it is consistent with the heritage significance of the building;
- Encourage the rejuvenation of obsolescent buildings in key destination precincts; and
- Continue to activate underutilised laneways and support fine grained retail spaces through public domain improvements.

The Planning Proposal will deliver on the actions set out in the *Tourism Action Plan.* Specifically, it will capitalise on the opportunity to deliver a hotel development under the future CSPS controls in a Tower Cluster Area that incentivises hotel accommodation floor space and is earmarked for significant employment growth.

Consistent with the Plan's actions, it will enhance the quality of the visitor experience by adaptively reusing and rejuvenating a heritage building for visitor accommodation alongside the provision of fine-grained retail spaces and public domain improvements.

8.2.13 A Change in Context and Circumstances

The Planning Proposal has been prepared in direct response to the changing economic landscape facilitate by investment in infrastructure and anticipated changes to the planning controls for Central Sydney.

Central Sydney is the focal point of Australia's economic activity. It is due to benefit from unprecedent levels of investment in public transport infrastructure, including the Sydney Metro, the upgrades to Central Station and has also benefited from the recently delivered CBD and South East Light Rail. It is projected that these transport upgrades combined with all other existing modes of travel will provide capacity for approximately 470,000 jobs by 2051.

These projects lead by the NSW Government represent the largest investment in transport infrastructure since the 1980s and will precipitate a demand for employment floor space and the expansion of Central Sydney geographic boundaries.

Concomitant with the investment in heavy and metro infrastructure, the Draft CSPS provides a framework for amending the existing planning controls to unlock additional 2.9 million square metres of additional floor space capacity for economic and employment growth. A large portion of this floor space is to be realised in designated Tower Cluster Areas, including the Haymarket / Ultimo Tower Cluster Area to which the site is located and will facilitate the expansion of Central Sydney's office market footprint further southward.

The Planning Proposal will increase the supply of high quality retail and tourism accommodation floor space that responds to market needs. This floor space will cater to the visitor economy as well as corporate travelers, and in turn will introduce ancillary and complementary uses that will support the expansion of Central Sydney and the growth of the Haymarket / Ultimo Tower Cluster Area.

8.2.14 Economic Justification and Prevailing Market Conditions

A Supply and Demand Analysis has been prepared by SMA Tourism to address the current and projected future demand for visitor accommodation in Central Sydney (refer to Appendix 7). The analysis has been prepared in recognition that the data prepared by JLL used to inform Council's *Visitor Accommodation Action Plan* was commissioned in 2014 and is therefore not a reflection of current market trends. The analysis also addresses the implications of COVT – 19, noting that the pandemic will result in short term impacts only.

Demand Analysis

The Demand Analysis indicates that there is a strong demand for mid-range accommodation. Whilst occupancy rates for mid-range accommodation have been susceptible to fluctuations, they reached a peak of 90% during the period from 2012 to 2019 and room rates gradually trended upwards from $130 to $152. More recently, between 2018 and 2019, occupancy rates for mid-range accommodation averaged 84.3%. By contrast, the occupancy rates across all grades of accommodation averaged only 82.5%

Supply Analysis

The Supply Analysis prepared by SMA Tourism addresses the existing and future pipeline for hotel developments across Central Sydney. In terms of the existing hotel stock, 84% comprises 4 or 5-star hotels. By comparison, only 16% consist of 3.5-star or less. Only two hotels in the vicinity of the site relate to 3.5-star accommodation with these being the APX World Square Sydney and 1831 Boutique Hotel. These hotels are located 530 and 850m from the site respectively and are therefore not in the immediate surrounds.

With respect to future supply, there are currently six hotel developments under construction with another two planned. By 2023, these developments will deliver an additional 2,511 hotel rooms. All are approved to deliver 4.5-star, 5-star and 6-star accommodation and therefore do not address the demand for more affordable mid-range accommodation comprising 3.5 stars or less. Further, the majority of these developments will be delivered in the CBD and will not address the expected demand for hotel accommodation in southern Central Sydney resulting from its growing office market.

Short Term Market Fluctuations

SMA Tourism note that the COVID-19 pandemic has impacted the demand for visitor accommodation. Nonetheless, these impacts are anticipated to be short term and will reverse following the removal of travel restrictions. Due to Australia's isolation from Countries that have been more adversely impacted by the pandemic, it is likely to benefit from increased levels of inbound tourism during the post recovery phase.

Relative to competing tourism sectors interstate, Sydney's tourism sector benefits from higher than average levels of non-holiday travelers such as corporate visitors. Further, Sydney's tourism sector is less reliant on travelers over 55-years of age who have been more adversely impacted by the pandemic. For these reasons, Sydney's tourism sector is expected to experience greater growth in the post-pandemic

phase. As a corollary, there will be a resurgence in the demand for visitor accommodation.

Q5. Is the planning proposal consistent with applicable State Environmental Planning Policies?

The proposal would address and/or be consistent with all relevant Environmental Planning Policies (SEPPs). The following outlines the intent of the relevant SEPPs and consistency of the Planning Proposal.

Table 12 – Consistency with State Environmental Planning Policies

SEPP	Consistent	Comments
SEPP No. 52 – Farm Dams and Other Works in Land and Water Management Plan Areas	N/A	Not relevant to proposed LEP amendment.
SEPP No. 55 - Remediation of Land	✓	*State Environmental Planning Policy No. 55 – Remediation of Land* aims to promote the remediation of contaminated land. The Remediation Action Plan included at Appendix 8 confirms that the proposal can be made suitable for the intended use.
SEPP No. 64 – Advertising and Signage	NA	Not relevant to proposed LEP amendment. May apply to a future development at the detailed design phase.
SEPP No. 65 – Design Quality of Residential Flat Development	✓	*State Environmental Planning Policy No. 65 – Design Quality of Residential Apartment Development* and the associated Apartment Design Guide (ADG) establishes the design standards for apartment development. The development facilitated by the LEP amendment provides visitor accommodation and therefore the provision of the SEPP do not strictly apply. However, as the proposal interfaces with a residential flat building to the north, consideration has been given to key provisions where relevant to demonstrate the acceptability of the proposal (refer to Section 9.1.3.1).
SEPP (Affordable Rental Housing) 2009	NA	Not relevant to proposed LEP amendment.
SEPP (Building Sustainability Index: BASIX) 2004	NA	Residential development is not proposed and accordingly the SEPP does not apply.

Table 12 – Consistency with State Environmental Planning Policies		
SEPP (Exempt and Complying Development Codes) 2008	NA	Not relevant to the proposed LEP amendment. May be relevant to a future DA.
SEPP (Infrastructure) 2007	✓	*State Environmental Planning Policy (Infrastructure) 2007* aims to facilitate the effective delivery of infrastructure. The LEP amendments facilitate a type of commercial development with a GFA of 11,919.99m^2. Accordingly, any future DA application will require referral to Roads and maritime Services. It is noted that the site is not located in the immediate vicinity of a rail or metro corridor.
SREP (Sydney Harbour Catchment) 2005	✓	The site falls within the Sydney Harbour Catchment. The proposal is consistent with the relevant Planning Principles in that it will have no impact on the health of the catchment or give rise to any environmental impacts. The proposal is located a significant distance from Sydney Harbour's foreshore. It is also located within a Tower Cluster Area earmarked to accommodate large scale towers. Future proposals in the area are designated to reach unprecedented heights of approximately RL 200. The proposed tower is relatively smaller in scale. In this context, it will have no impact on the scenic quality of the catchment for the following reasons: • In the context of the larger scale developments in the surrounds, it will not be visible from the Sydney Harbour waterway and therefore will have no impact on important vantage points. • It will not impact publicly accessible vantage points for viewing Sydney Harbour; and • It will not impact the scenic quality of the foreshore.

Q6. Is the planning proposal consistent with applicable Ministerial Directions (s.9.1 directions)?

Table 13 – Section 9.1 Ministerial Directions

Clause	Direction	Consistent	Comments
1 Employment and Resources			
1.1	Business and Industrial Zones	✓	The proposal is consistent with the direction as it will encourage employment growth by increasing the supply of employment generating floor space in a designated Tower Cluster Area as defined by Council's strategic planning framework.
1.2	Rural Zones	N/A	
1.3	Mining, Petroleum Production and Extractive Industries	N/A	
1.4	Oyster Aquaculture	N/A	
1.5	Rural Lands	N/A	
2 Environment and Heritage			
2.1	Environmental Protection Zones	N/A	The proposal does not relate to environmentally sensitive land.
2.2	Coastal Protection	N/A	
2.3	Heritage Conservation	✓	The Planning Proposal is consistent with the direction as it will facilitate the conservation of the site's heritage significant fabric. Further discussion is provided in Section 9.8.
2.4	Recreation Vehicle Areas	N/A	
2.5	Application of E2 and E3 Zones and Environmental Overlays in Far North Coast LEPs	N/A	
2.6	Remediation of Contaminated Land	N/A	The site is not a designated investigation area within the meaning prescribed by the

Table 13 – Section 9.1 Ministerial Directions			
			Contaminated Management Act 1997.
3 Housing, Infrastructure and Urban Development			
3.1	Residential Zones	N/A	
3.2	Caravan Parks and Manufactured Home Estates	N/A	
3.3	Home Occupations	N/A	
3.4	Integrated Land Use and Transport	✓	The Planning Proposal is consistent with the relevant objectives in that it will increase jobs in walking distance to public transport. It provides limited opportunities for on-site parking and therefore will foster the use of public transport and reduce the reliance on private vehicles.
3.5	Development Near Regulated Airports and Defence Airfields	N/A	The Planning Proposal facilitates a development with a height of 105.87m (RL 117.87) which will not penetrate the Obstacle Limitation Surface (OLS), which is 156m in Central Sydney.
3.6	Shooting Ranges	N/A	
3.7	Reduction in non-hosted short term rental accommodation period	N/A	
4 Hazard and Risk			
4.1	Acid Sulfate Soils	✓	The SLEP 2012 classifies the site as containing class 5 Acid Sulfate Soils. The Preliminary Geotechnical Investigation Report at Appendix 17 confirms that the future works associate with the proposal will not trigger the need for an acid sulfate assessment.
4.2	Mine subsidence and Unstable Land	N/A	

Table 13 – Section 9.1 Ministerial Directions			
4.3	Flood Prone Land	✓	The SLEP 2012 and the associated Darling Harbour Catchment Flood Study does not identify the site as being flood prone. Further discussion is provided in the Flood Certification Statement at Appendix 9.
4.4	Planning for Bushfire Protection	N/A	
5 Regional Planning			
5.1	Implementation of Regional Strategies	N/A	The Planning Proposal is consistent with the Regional strategic planning framework. Further discussion is provided in Section 8.2.
5.2	Sydney Drinking Water Catchments	N/A	
5.3	Farmland of State and Regional Significance on the NSW Far North Coast	N/A	
5.4	Commercial and Retail development along the Pacific Highway, North Coast	N/A	
5.5	Development in the vicinity of Ellalong, Paxton and Millfield (Cessnock LGA) (Revoked 18 June 2010)	N/A	
5.6	Sydney to Canberra Corridor (Revoked 10 July 2008. See Amended Directions 5.1)	N/A	
5.7	Central Coast (Revoked 10 July 2008. See amended Directions 5.1)	N/A	
5.8	Second Sydney Airport: Badgerys Creek	N/A	
5.9	North West Rail Link Corridor Strategy	N/A	

Table 13 – Section 9.1 Ministerial Directions			
5.10	Implementation of Regional Plans	N/A	The Planning Proposal is consistent with the Regional and District Plan. Further discussion is provided in Section 8.2.
5.11	Development of Aboriginal Council Land	N/A	
6 Local Plan Making			
6.1	Approval and Referral Requirements	N/A	No new concurrence provisions are required.
6.2	Reserving Land for Public Purposes	N/A	The Planning Proposal will not create, alter or reduce existing zonings or reservations of land for public purposes.
6.3	Site Specific Provisions	✓	The Planning Proposal will not result in any unnecessarily restrictive site specific planning controls. The proposed site specific provision is intended to facilitate the orderly development of the site.
7 Metropolitan Planning			
7.1	Implementation of A Plan for Growing Sydney	✓	The Planning Proposal is entirely consistent with the provisions of the Greater Sydney Region Plan and therefore will facilitate its implementation. Further discussion is provided in Section 8.2.1.
7.2	Implementation of Greater Macarthur Land Release Investigation	N/A	
7.3	Parramatta Road Corridor Urban Transformation Strategy	N/A	
7.4	Implementation of North West Priority Growth Area Land Use and Infrastructure Implementation Plan	N/A	
7.5	Implementation of Greater Parramatta Priority Growth	N/A	

Table 13 – Section 9.1 Ministerial Directions			
	Area Interim Land Use and Infrastructure Implementation Plan		
7.6	Implementation of Wilton Priority Growth Area Interim Land Use and Infrastructure Implementation Plan	N/A	
7.7	Implementation of Glenfield to Macarthur Urban Renewal Corridor	N/A	
7.8	Implementation of Western Sydney Aerotropolis Interim Land Use and Infrastructure Implementation Plan.	N/A	
7.9	Implementation of Bayside West Precincts 2036 Plan	N/A	
7.10	Implementation of Planning Principles for the Cooks Cove Precinct	N/A	

8.3 Section C - Environmental, Social and Economic Impact

Q7. Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?

There are no critical habitat or threatened species, populations or ecological communities, or their habitats on or around the site that will be affected by this Planning Proposal.

Q8. Are there any other likely environmental effects as a result of the planning proposal and how are they proposed to be managed?

The Planning Proposal seeks amendments to the maximum building height and floor space ratio to facilitate the orderly redevelopment of the site.

As evidenced by the discussion in Section 9.0 and supporting subconsultant reports, the proposed amendments to the LEP development standards will not result in adverse environmental impacts. Potential impacts, such as those during the construction phase, are capable of being managed using appropriate mitigation measures.

Q9. Has the planning proposal adequately addressed any social and economic effects?

The planning proposal will create a number of positive social and economic outcomes which are discussed in detail in Section 9.16.

In summary, the proposal will:

- Provide 12,318m^2 of retail and commercial floor space which will facilitate job creation and contribute to and strengthen Sydney's role as a globally competitive City;
- Contribute to the creation of 129 jobs in the operational phase;
- Contribute to 787 indirect and direct 'construction jobs years' when accounting for multiplier effects;
- Contribute 8.5 million worth of indirect investment in the economy associated with expenditure from hotel guests;
- Increase accessibility and activation; and
- Improve safety and amenity of the surrounding public domain.

8.4 Section D - State and Commonwealth Interests

Q10. Is there adequate public infrastructure for the planning proposal?

As the site is located within Central Sydney, the existing infrastructure is capable of being augmented to support a future development facilitated by the Planning Proposal.

The site is located within walking distance of Central Station Transport Interchange, a number of light rail stations and the future Sydney Metro network. It therefore receives ample access to public transport. By increasing the supply of jobs on the site, the proposal will encourage public transport patronage and use of the surrounding transport network.

The planned upgrades to Central Station along with the delivery of Sydney Metro network and the recent construction of the light rail represent an unprecedented investment in public transport which will support the expansion of Central Sydney. In light of this, the Planning Proposal represents one of the first applications for the Haymarket / Ultimo Tower Cluster Area under the Draft CSPS controls. With the existing and planning transport upgrades, the infrastructure in the locality has the capacity to support the proposal and envisaged density.

Q11. What are the views of state and Commonwealth public authorities consulted in accordance with the Gateway determination?

The views of State and Commonwealth public authorities will be known once consultation has occurred at the Gateway Determination phase.

Should a Development Application be prepared following the implementation of the LEP amendments, the application would require referral to Roads and Maritime Services as the likely proposed commercial GFA would exceed the threshold prescribed under Clause 104 of the Infrastructure SEPP (2007) associated with traffic generating development.

9 Environmental Assessment

This section provides a further assessment of the Planning Proposal's site specific merits and addresses the key planning issues associated with the proposal.

To demonstrate the appropriateness of the proposed LEP amendments, Grimshaw have prepared an indicative Preferred Scheme. The Preferred Scheme demonstrates how a future development may be facilitated by the proposal within the parameters of the proposed LEP amendments.

For the reasons set out below, the Preferred Scheme confirms that the proposed LEP amendments are capable of supporting a development that achieves an improved built form outcome relative to a complying scheme and results in acceptable environmental impacts.

9.1 Built form and Urban Design

9.1.1 Podium

The podium facilitated by the Planning Proposal complies with the requirements of the Draft DCP. Under the Draft DCP the site forms part of the Haymarket / Chinatown Special Character Area. The Draft DCP nominates a maximum street wall height of 20m and a minimum street wall of 14m to align with the heritage building contained within the site.

To comply with the Draft DCP, the podium adopts the minimum street wall height to align with the site's heritage building and reflect its proportions (refer to Figures 29 – 30).

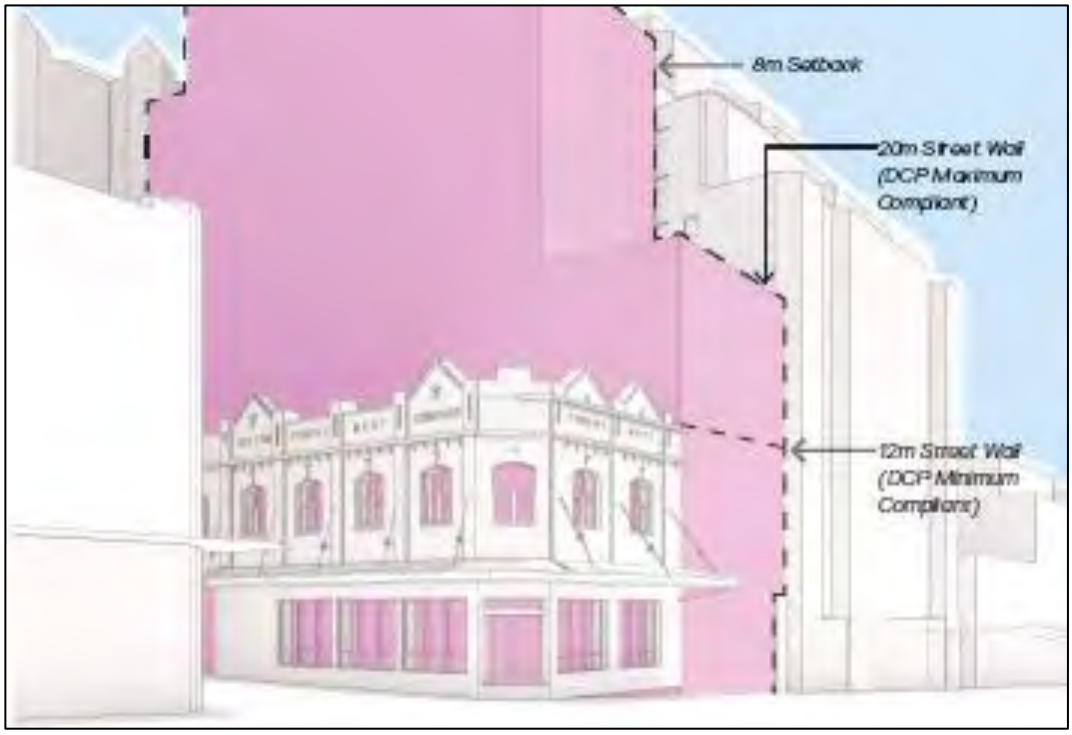

Figure 28 Compliant Eastern Setback and Street Wall of 20m
Source: Grimshaw

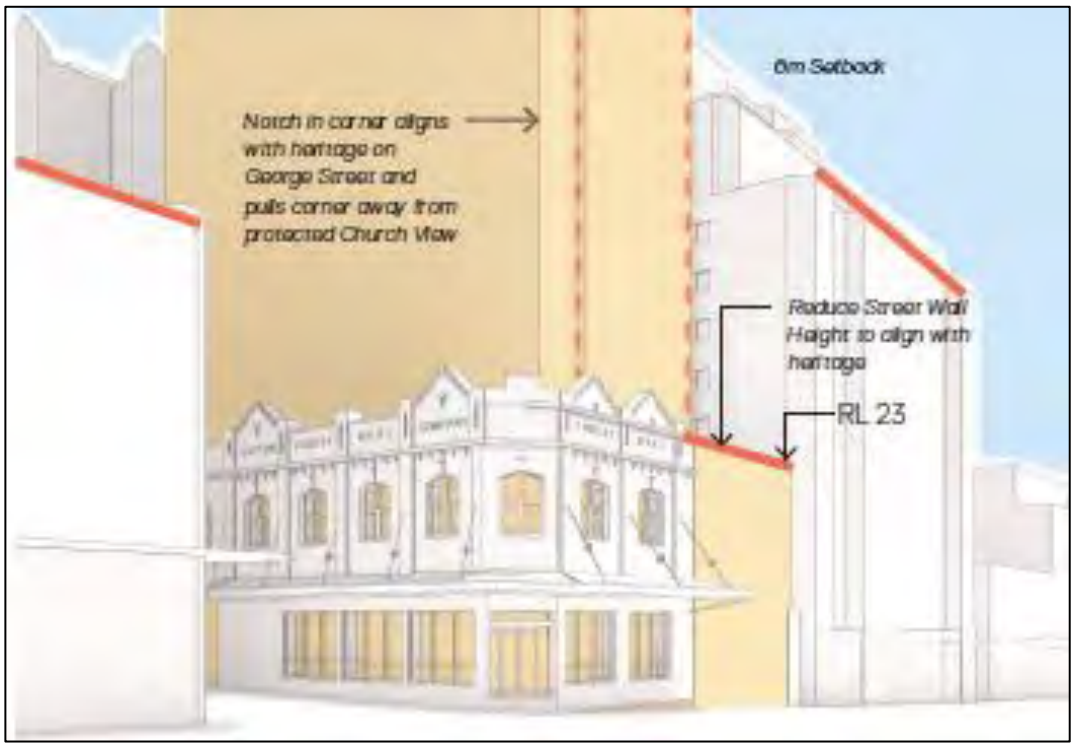

Figure 29 Proposed Setback and Street Wall Height
Source: Grimshaw

9.1.2 Tower Element

The Draft CSPS situates the site within a Tower Cluster Area which permits towers to reach heights up to the airspace restrictions. Likewise, recently introduced controls for the adjacent Western Gateway sub-precinct permit towers in excess of RL 200. In consequence, the locality immediately surrounding the site is earmarked to undergo significant transformation and will accommodate towers of unprecedented heights (refer to Figure 31).

The proposed envelope provides for an intermediate scheme scale that is comparatively smaller in size relative to surrounding planned and future development permitted by the Draft CSPS controls.

The scale of the tower is appropriately proportionate for the site's size and facilitates the achievement of the relevant objectives prescribed under Sections 5.1.1 and 5.1.1.4 of the Draft DCP which include:

- *Ensure that tall buildings are slender and do not appear as walls or as overly massive from any direction.*
- *Heritage items create space between tall buildings that allow more sunlight, daylight and air circulation to the street.*
- *A tall building that is set back from its site boundaries that sits on a building podium creates space around it that provides light and air into the street.*

The scale of the Preferred Scheme in the context of the surrounding existing and future built form is illustrated in the Figure 31.

The site occupies a corner position and the tower element is setback from the southern street frontage and massed towards the side and rear boundaries. As the tower is substantially setback, it will have minimum visibility when viewed from the ground plane and the heritage façade will form the focal point of surrounding vistas (refer to Section 9.3). Consistent with the objectives, the positioning of the tower and its narrow floorplate provides for a tall and slender appearance (refer to Figure 32).

The tower element as envisaged by the Indicative Concept Scheme provides a compliant eastern side setback. The compliant setback combined with the site's corner location will facilitate light and air to the street, and will prevent the emergence of a wall of towers along both frontages should the surrounding sites be redeveloped.

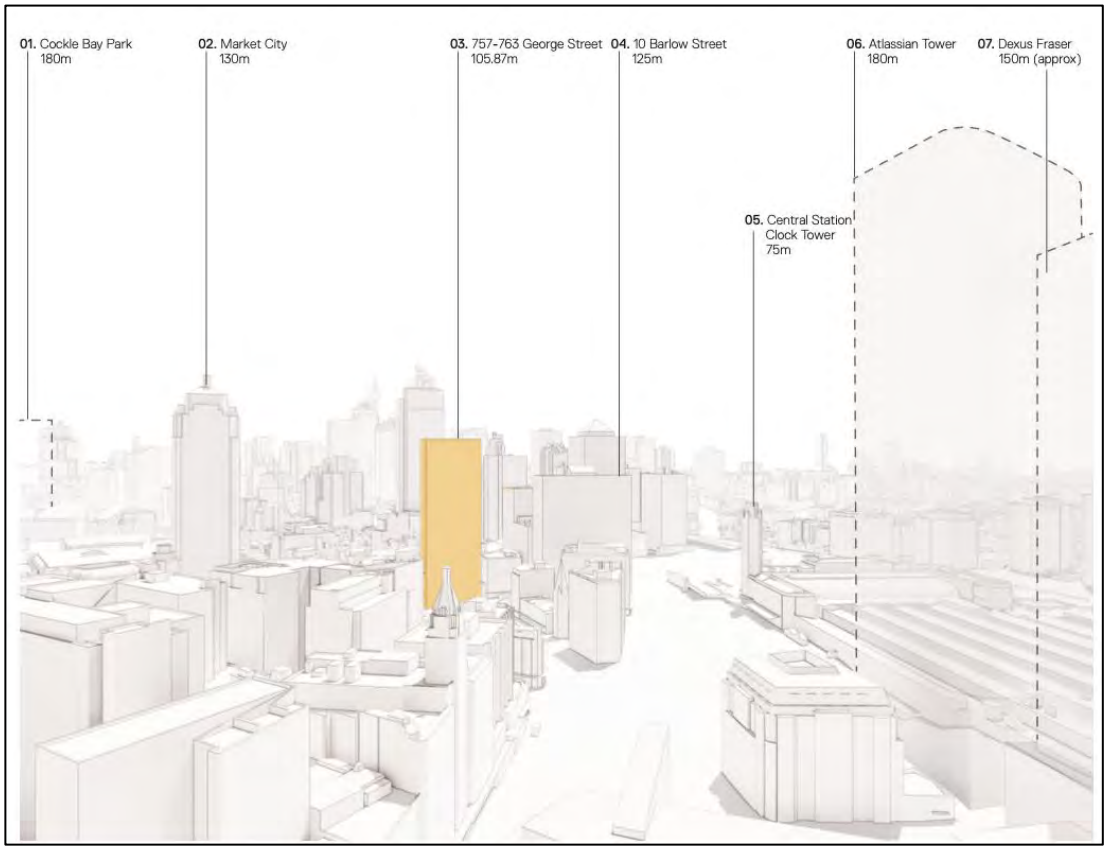

Figure 30 Proposal and Existing and Planning Towers Viewed Looking North
Source: Grimshaw

Figure 31 Proposal and Surrounding Further Developments Viewed Looking West
Source: Grimshaw

9.1.3 Tower Separation and Setbacks

The proposed setbacks have been prepared to comply with the requirements of the Draft DCP and to limit impacts to the adjoining properties and surrounding view corridors.

For a building of the proposed height (105.87m) located in the Haymarket / Chinatown Special Character Area, the Draft DCP prescribe the following setbacks which are to be applied consistently for the full height of the tower:

- Eastern Setback (George Street): 8m
- Northern Setback (Side/Rear): 4m
- Western Setback (Side/Rear): 4m
- Southern Setback (Valentine Street): Unspecified by the special character area mapping but is taken to be 10m as the site relates to a heritage item.

The Preferred Envelope provides tower setbacks generally in accordance with the Draft DCP (refer to Figure 33). Where non-compliances are proposed, they do not give rise to additional wind impacts or reduced daylight to the surrounding public domain. This is demonstrated by the Preferred Envelope's compliance with the equivalence tests prescribed by Procedure B of Schedule 11 (refer to Section 9.4).

In addition to complying with the equivalence tests, the sections below confirm that the proposed non-compliant setbacks provide acceptable amenity impacts.

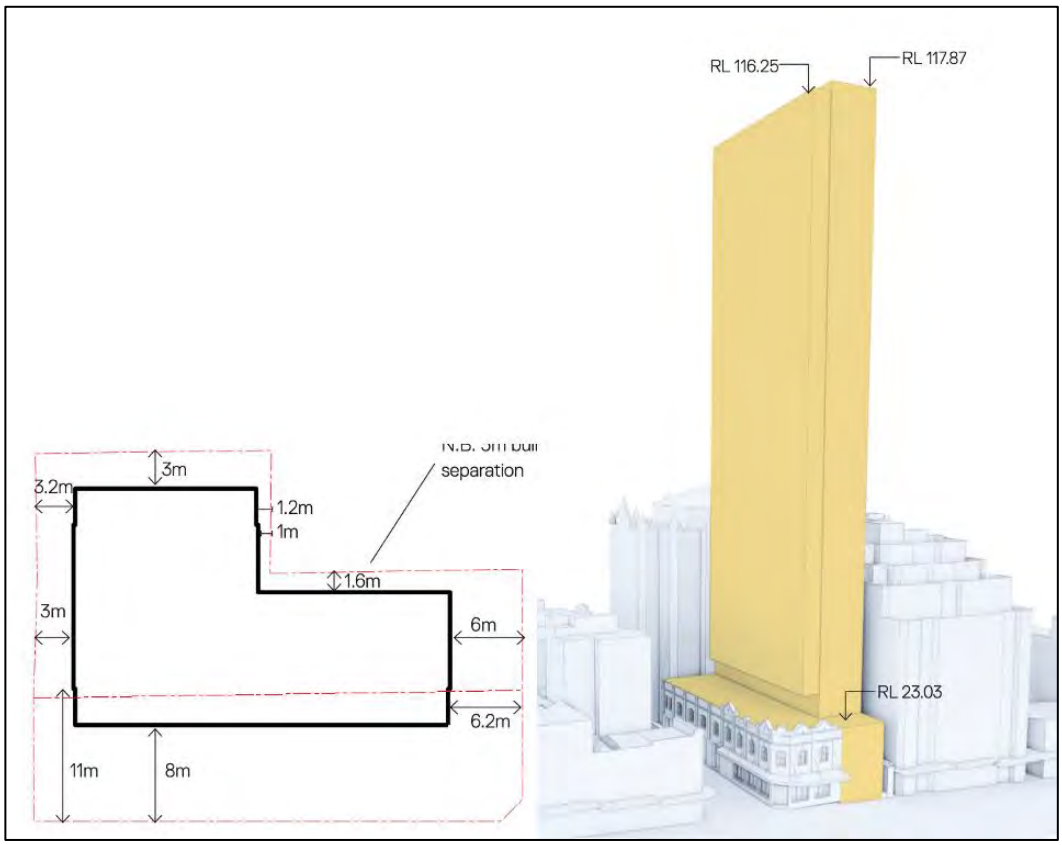

Figure 32 Proposed Massing and Tower Setbacks
Source: Grimshaw

9.1.3.1 Northern Setback

Due consideration has been given to the design of the northern tower setback to prevent amenity impacts to the residential flat building to the north known as 'Capitol Terrace'.

The preferred envelope proposes a minimum 0.4 – 1.8m setback to the northern boundary, representing a non-compliance with the 4m minimum setback requirement prescribed by the Draft DCP (refer to Figure 33). Notwithstanding, it should be noted that this setback is increased by the driveway along the northern boundary.

Characterisation of the Interface

At the northern interface the southern elevation of the adjoining property incorporates a limited number of windows. These windows are illustrated below and primarily relate to secondary habitable spaces, including bedrooms and bathrooms (refer to Figures 34 – 35). A limited number of living spaces are affected; however, many of these spaces benefit from a dual aspect and are therefore provided with additional windows that orientate towards the west away from the subject site.

Figure 33 Typical Floor Plan of the 'Capitol Terrace' and Location of Windows
Source: Grimshaw

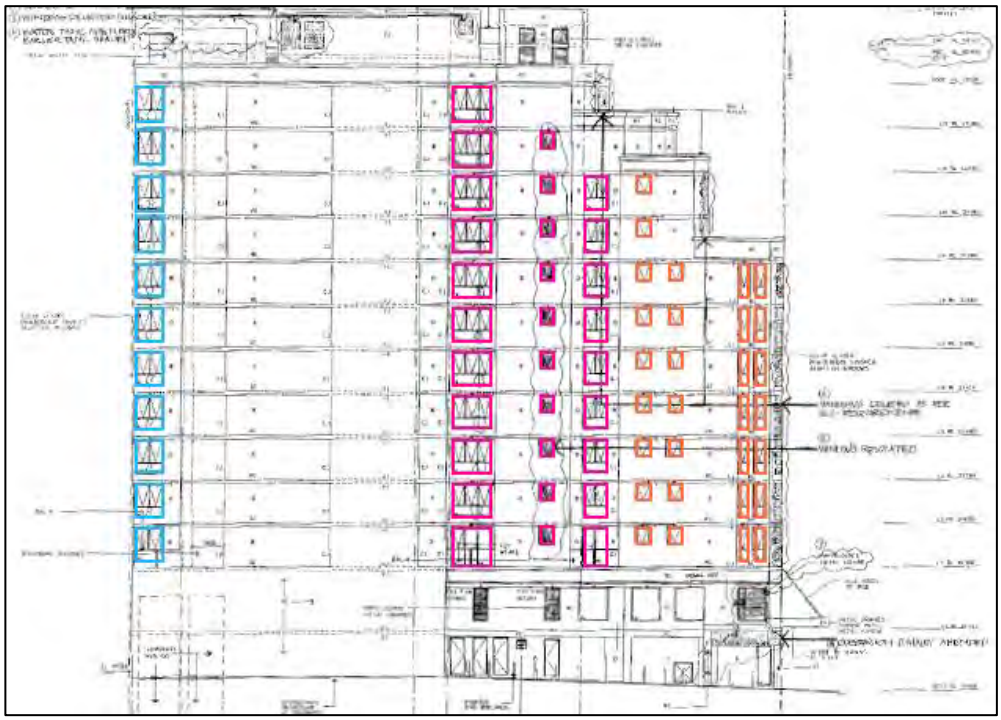

Figure 34 Location of Northern Building's Southern Facing Windows
Source: Grimshaw

Visual Privacy Impacts

As demonstrated by the indicative Preferred Scheme, there is the potential to locate the lift core along the northern elevation where the envelope directly interfaces with the adjoining properties windows. The provision of a lift core in the proposed location precludes the opportunity for windows and balconies. In consequence, the reduced setback will not permit onlooking and give rise to visual privacy impacts.

As the northern property relates to a residential flat building, consideration needs to be given to *State Environmental Planning Policy No 65 – Design Quality of Residential Apartment Development* (SEPP 65) and the associated Apartment Design Guide (ADG). Section 3F of the ADG specifies that building separation is not required where an elevation is devoid of windows and balconies. Accordingly, the proposed setback and façade treatment is considered to be acceptable from a compliance perspective.

Private View Impacts

The proposed northern setback will not produce additional private view impacts beyond that of a complying scheme and the approved scheme. The extent of the view loss impacts associated with the proposed and complaint setbacks will be commensurate given that the affected view corridors under both scenarios will experience change and consist entirely of a tower element.

It is noted that the existing approval for the site (D/2017/353) permits a tower envelope with a nil setback to the northern property boundary. Relative to this approved envelope, the proposal represents an improvement as it provides greater building separation. In turn, it will not give rise to greater view loss impacts beyond that of the approved scheme.

Solar Impacts to Northern Property

Grimshaw have prepared a solar analysis to determine if the preferred envelope will provide increased solar impacts to the northern property relative to the existing building and the envelope approved under D/2017/353 (refer to Appendix 2).

The analysis confirms that the preferred scheme will result in equivalent solar impacts. As such, the adjacent northern property will continue to receive the same level of solar access irrespective of whether the site is developed in accordance with the approval or the preferred envelope.

9.1.3.2 Southern Setback

The Preferred Envelope proposes an 8m southern tower setback to Valentine Street which resultantly provides a 2m cantilevering element over the heritage item. The heritage fabric affected by the cantilevered element is non-significant, with only the facades fronting Valentine and George Street being of heritage value (refer to Section 9.8).

This tower setback is the outcome of extensive iterative design testing and is considered to best facilitate the achievement of the objectives/principles applicable to heritage items prescribed under Section *5.1.1.1 Street Frontage Height and Street Setbacks* and the *2.1.3 Haymarket/Chinatown Character Area Statement*.

The relevant objectives and principles include:

- *Heritage items create space between tall buildings that allow more sunlight, daylight and air circulation to the street.*
- *New development is to maintain and enhance vistas along Valentine Street and George Street to Christ Church Saint Laurence at 814A George Street and maintain vistas towards the clock tower of Central Station.*

The heritage item occupies a corner position and therefore generous circulation and space is provided around the building at street level. The proposed setback will not impact the provision of sunlight/daylight at the street level as evidenced by the Preferred Envelope's compliance with the equivalence tests.

The setback will preserve views and vistas along Valentine Street towards Christ Church Saint Laurence at 814A George Street. A view analysis of the Preferred Envelope from Valentine Street demonstrates the appropriateness of the proposed setback (refer to Appendix 2).

9.1.3.3 Eastern Setback

The proposal is required to provide an 8m tower setback to the George Street in accordance with the Draft DCP's Special Character Area mapping. The proposal provides a setback ranging from 6m - 6.4m. The setback is considered appropriate given the site occupies a corner location. Accordingly, there is no requirement to provide building separation.

As noted previously, the tower element is massed along the northern boundary. In consequence, the tower's massing where it interfaces with George Street presents as being a narrow tower form that is separated from the tower element. As a result, the heritage item stands in isolation of the proposed tower and forms the focal point of surrounding view corridors.

The proposed eastern setback does not cause the tower element to extend beyond the alignment of the Capitol Terrace apartments to the immediate north. Accordingly, the non-compliance will not obscure view corridors down George Street.

The eastern setback needs to be understood in the context of the proposed street wall height shown in Figure 30. As shown, the setback in conjunction with the proposed street wall height reduces the perceived massing of the Preferred Scheme at the prominent corner location, provides ample curtilage around the heritage item and enhances daylight to the ground plane.

9.1.3.4 Cantilevering Element

The tower element of the Preferred Scheme cantilevers over the heritage item. A vertical separation of 2.6m measured from the ridge line of the heritage item to the underside of the tower canopy is proposed. This separation increases to 5.4m when measured from the FFL.

The proposed 2m encroachment over the heritage item is considered to be minor in that it extends over the heritage item's building footprint by no more than 16%.

In addition, its width is less than that permitted by the approval (DA/2017/353) which permits a 2.7m cantilevered element (including articulation) with a corresponding reduced southern setback of 7.3m.

As confirmed by the findings of the Heritage Impact Statement addressed in Section 9.8, the building fabric proposed to be cantilevered over is not of heritage significance, with the only significant fabric being the facades fronting Valentine and George streets.

The existing towers in the surrounds already compromise the setting of the item, with its facades only capable of being interpreted from the immediate streetscape as opposed to the distant surrounds. Being located in a Tower Cluster Area, it can be reasonably concluded that the item's setting will be further altered by future buildings developed under the Draft CSPS, including the potential tower to the immediate west at 187 Thomas Street that is currently the subject of a Planning Proposal. In turn, the heritage item and the tower associated with the Preferred Scheme will not be interpreted together in the round.

The cantilevered element is positioned a sufficient distance above the heritage item and provides an appropriate curtilage. It will not produce additional environmental impacts in that it:

- Will not provide additional material impacts to the fabric, including overshadowing, beyond that of a complying scheme;
- Will not restrict public views and vistas towards the heritage item;
- Is of minimal width and positioned a sufficient height above the heritage item to allow for its ongoing appreciation when viewed from the surrounding streetscape; and
- Is of minimal width and maintains sufficient airspace above to prevent any impact to the item's setting or create the perceived impression that the tower encloses and overwhelms the item.

The cantilevered element is in keeping with the approval for the site and integral to achieving a viable floorplate. Due to the massing of the tower in the northern portion of the site, the heritage item will continue to register as a standalone building. The generous airspace above the item will provide visual relief and will enhance the visual prominence of the item.

9.2 Overshadowing

Grimshaw have prepared an Overshadowing Analysis which is included at *Appendix K* of their Architectural Design Report (refer to Appendix 2). The analysis addresses the proposal's compliance with the applicable Sun Access Plane (SAP) provisions that aim to protect sunlight to nearby public places.

Of relevance to the proposal is the SAP for Belmore Park prescribed by the Draft DCP which is intended to protect sunlight to this important public space between 10am to 2pm at all times of the year. The DCP Envelope and Preferred Scheme will not intersect with the Belmore Park SAPs and therefore will not overshadow this public place.

Whilst not identified in the Draft DCP, consideration has also been given to the SAP for Railway Square which is addressed in *Appendix M* of the Draft CSPS. The SAP is intended to protect sunlight to Railway Square between 9am to 2pm mid summer and 11am to 12pm mid winter.

The analysis prepared by Grimshaw demonstrates that the DCP Envelope and Preferred Scheme will not intersect the Railway Square SAP (refer to Figure 36). Accordingly, the proposal will provide no additional overshadowing to Railway Square between 11am to 12pm during the Winter Solstice, which represents the worst case scenario.

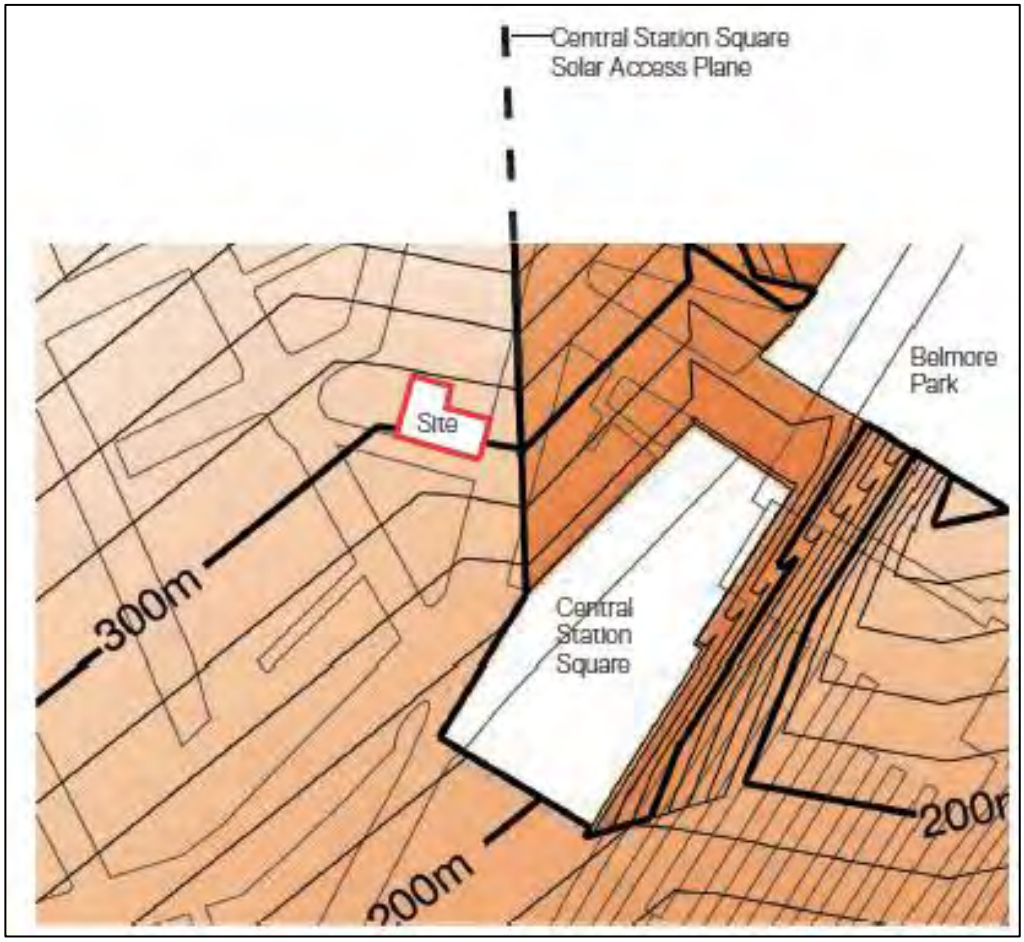

Figure 35 Railway Square Solar Access Plan in Relation to the Site
Source: Grimshaw / Draft CSPS

9.3 Visual Impact

Grimshaw have prepared photomontages of the Preferred Scheme in the streetscape to facilitate a Visual Impact Analysis of the proposal (refer to Appendix 2). The analysis illustrates the Preferred Envelope when viewed from significant public vantage points, including those in the immediate streetscape and distant surrounds. The analysis has also accounted for future tower developments that will be visible in the background and will redefine the Preferred Scheme's visual setting.

Immediate Surrounds

The site is located within the Haymarket/Chinatown Special Character Area. The Special Character Area Statement identifies that the locality is typified by its fine-grained subdivision pattern, low street walls and the absence of tower forms. In light of this, the Principles for the Special Character Area require the following:

- *Retain and enhance the urban character and scale of the Haymarket Locality by having street frontage heights consistent with the prevailing form of heritage items and providing setbacks above those street frontage heights; and*
- *Maintain and enhance vistas along Valentine Street and George Street to Christ Church Saint Laurence.*

As shown in the figures below, the contemporary additions proposed by the Preferred Scheme have minimal visibility when viewed from the immediate streetscape.

The tower element is recessed behind the street wall height by a generous upper setback. Consequently, it has minimal visibility when viewed looking east down Valentine Street frontage, allowing the fine-grained podiums dominant the vistas available at street level (refer to Figure 37).

Where the tower element is visible, it presents as being a continuation of the upper street wall height and does not encroach on views of Christ Church Saint Laurence. As shown in Figure 38, the tower is well separated from the Christ Church Saint Laurence, allowing for large expanses of sky to surround the historically significant Church. In turn, the proposal will have no impact on the Church's visual setting.

The retention of the heritage item combined with the setting back of the tower element preserves the existing urban character and scale of the Haymarket locality, and therefore satisfies the requirements of the Draft DCP. This is evidenced by the figure below, which demonstrates that when viewed looking east down Valentine Street, the site's heritage building presents as being the most visually prominent element.

When viewed from the George Street frontage, the proposed podium element aligns with the street wall height of the heritage building (refer to Figure 39). By virtue of the tower's narrow floorplate and its massing along the northern boundary away from the heritage building, the tower element reflects a slender form and does not dominant the view nor does it provide a sense of enclosure that would detract from the heritage building.

Figure 36 View Down Valentine Street Towards Christ Church St Laurence
Source: Grimshaw

Figure 37 View from Thomas and Quay Streets Looking East
Source: Grimshaw

Figure 38 View from the George Street Frontage Looking South West
Source: Grimshaw

Distant Surrounds

The Draft DCP nominates a range of significant public views that require protection. As shown in Figure 40, the proposal is situated a considerable distance from Central Station Clock Tower and will have no impact on the associated view corridor that aims to ensure the landmark will remain visible against the sky.

Figure 39 Public Views Protection Map / Central Station Clock Tower View Corridor
Source: Draft CSPS

The Draft DCP requires that consideration be given to additional significant views not mapped in Figure 40. To address this requirement, Grimshaw have prepared an analysis of the Preferred Scheme's visual impacts when viewed from the distant surrounds.

As shown in Figure 41, the proposal will sit comfortably within the skyline when viewed in the context of surrounding future developments of a greater height. The Preferred Scheme provides a slender form that will assist in preserving sky views, maintaining sightlines between towers and providing an intermediate scale that complements the surrounding future built forms. Being within a Tower Cluster Area, it can reasonably be expected that additional future tower developments of a commensurate or larger scale will occupy the skyline. In this context, the proposal will not dominate the skyline.

Figure 40 View of Preferred Envelope from Railway Square Looking West
Source: Grimshaw

9.4 Equivalence Testing

The proposal varies the setback provisions prescribed by the Draft DCP. Setback variations are permitted for the site in accordance with the Draft DCP Special Character Area mapping set out in the Draft DCP.

To demonstrate the acceptability of the proposed setback variations, the DCP Envelope / Preferred Scheme and associated envelope options developed for the design competition phase have been subject to the equivalence testing procedure established by Procedure B, Schedule 11 of the Draft DCP.

The equivalence testing procedure requires that proposals provide equal or improved pedestrian wind comfort and daylight levels at the ground plane notwithstanding the proposed non-compliances with the setback provisions. To

demonstrate this, the daylight and wind impacts are required to be compared against a Base Case Envelope that complies with the massing controls established under Procedure B.

The results of the equivilance testing demonstrate that the setback variations will result in equivalent pedestrian wind impacts and improved daylight at the ground plane. A detailed discussion is provided below and *Appendices D – E* of the Architectural Design Report at Appendix 2.

9.4.1 Daylight Analysis

Sky View Factor (SVF) is a proxy used for measuring daylight levels and the extent of sky observable at the ground plane. The SVF has been calculated using a 1m grid and a test radius from the site of 250m, which encompasses the future Railway Square. The SVF results for the Base Case Envelope have been compared against those associated with the proposed DCP Envelope and alternative envelope options (refer to Appendix 2). As the Preferred Scheme fits within the DCP envelope, the results are applicable to the Preferred Scheme.

The results for the DCP Envelope and alternative envelope options demonstrate an improvement from the Base Case Envelope. With respect to the DCP Envelope / Preferred Scheme, the findings confirm that when averaged there is an overall difference of 0.000008% in the SVF within proximity of the site.

In light of the above, the Preferred Scheme and envelope options will maintain an acceptable level of daylight access to the public domain.

9.4.2 Pedestrian Wind Comfort and Safety

Windtech have prepared a Pedestrian Wind Environment Study which is included at Appendix 10. The study has been prepared to address if the proposal is capable of achieving equivalent or improved wind safety and comfort. The study assesses the wind conditions associated with the following:

- The DCP Envelope / Preferred Scheme;
- The Base Case Envelope;
- Alternative envelope options developed for the design competition phase; and
- The site's existing built form.

The results confirm that all envelope variants listed above comply with the requirements of the equivalence testing prescribed by Schedule 11 of the Draft DCP subject to the adoption of the two recommendations included within the study.

The first recommendation relates to the provision of an impermeable awning along the northern and eastern aspects of the building, with a small return along the south aspect.

The second recommendation requires that the level of the podium that meets the base of the tower in the site's north-western corner be configured to minimise north-east winds and direct winds around the affected corner. It is envisaged that the configuration could potentially consist of the inclusion of an increased western setback or a podium cut out in the suggested location. However, the exact

configuration would need to be determined with regard to further wind testing at the detailed Development Application phase. Notwithstanding, any necessary reconfiguration can readily be accommodated within the proposed DCP Envelope.

9.5 Design Excellence

The future development facilitated by this Planning Proposal will be subject to an architectural design competition in accordance with the requirements of clause 6.21 of the SLEP 2012.

The Planning Proposal is accompanied by a Design Excellence Strategy included at Appendix 11. The Design Excellence Strategy has been prepared in accordance with the *City of Sydney Competitive Design Policy*, the *Draft Amendment to Competitive Design Policy* and the *Tower Cluster Areas and Design Excellence Procedure Amendment*.

It is noted that Tower Cluster Area sites subject to subclause 6.21(7A) of the SLEP 2012 (as proposed under the CSPS) are required to comply with the requirements of the *Tower Cluster Areas and Design Excellence Procedure Amendment* and the *City of Sydney Competitive Design Policy as* amended by the *Draft Amendment to Competitive Design Policy,* which necessitate the undertaking of an invited architectural design competition with a minimum of six (6) consortiums.

The proposal has not been prepared pursuant to subclause 6.21(7A) of the SLEP 2012 due to the site's area being less than 2,000m^2. Notwithstanding, the proposal includes a commitment to undertaking an invited architectural design competition to satisfy the design excellence requirements that apply to applications prepared pursuant to subclause 6.21(7A).

The invited architectural design competition will consist of a minimum of six (6) consortiums and a competition jury comprising a minimum of six (6) members. The composition of the consortiums and jury will be in accordance with the requirements set out in Appendix 11.

The accompanying draft Site Specific DCP at Appendix 4 nominates design excellence provisions for the future design competition. It identifies that the LEP amendments sought by this Planning Proposal assume that the 10% design excellence bonus will be accommodated in the DCP Envelope. This envelope therefore reflects the maximum density attainable for the site.

9.6 Solar Access

LCI Consultants have prepared a Daylight Analysis to assess the level of daylight penetration achieved across the hotel suites (refer to Appendix 12). A minimum daylight factor of 2% is identified to be the target. To facilitate the assessment, the daylight levels and lux levels were identified within each hotel suite.

The modelling confirms that dual aspect suites are capable of receiving adequate solar access. Single aspect apartments receive less solar; however, only the rear of the suites receive low levels of daylight. These areas will likely accommodate bathrooms and consequently do not require solar.

The report concludes that subject to the adoption of the glazing recommendations outlined in the report which facilitate greater light penetration, each hotel suite within the Preferred Scheme is capable of meeting the minimum daylight factor target of 2%.

9.7 Noise Impacts

White Noise Acoustics have prepared a Noise Impact Assessment for the Preferred Scheme which is included at Appendix 13. The assessment demonstrates that a future hotel development for the site will not be affected by unacceptable noise intrusion nor will it provide unacceptable noise emissions to surrounding receivers.

Internal Noise Assessment

The Noise Impact Assessment has evaluated the noise impacts likely to affect the proposal and whether it is capable of incorporating suitable acoustic treatments to prevent unacceptable noise intrusion.

The calculation of the internal noise levels accounts for environmental noise levels in the surrounds, including traffic and aircraft background noise, along with the Preferred Scheme's design. The report confirms that the proposal is capable of meeting the internal noise levels nominated by the SDCP 2012 (Section 4.2.11.1) subject to incorporating the recommended glazing constructions detailed in the report.

External Noise Assessment

The Noise Impact Assessment evaluates the external noise emissions that may emanate from the future building and affect nearby receives, including surrounding commercial uses and the residential building to the immediate north.

The assessment is based on a noise level survey conducted on the site. This survey has been conducted to evaluate the proposal against the intrusive and amenity noise level criteria prescribed by the NSW Environmental Projection Authority's (EPA) *Noise Policy for Industry* and Council's *General Noise Emissions Criteria*. The assessment identifies that mechanical plant associated with the future building will be the primary source of noise emissions.

The Noise Impact Assessment concludes that with the adoption of the recommendations, including appropriate glazing and acoustically treated mechanically services, the proposal is capable of achieving the relevant noise criteria. As such, the proposal will not provide unacceptable noise impacts to future occupants or surrounding properties.

9.8 Heritage

Weir Phillips have prepared a Heritage Impact Statement that is included at Appendix 14. The report provides an assessment of potential impacts to the locally listed heritage listed building contained within the site and the heritage items in the surrounds.

Weir Philips have determined that the interiors of the Sutton Forest Meat Building are not of heritage significance due to previous fire damaged and alterations to facilitate the fitout and use of the site.

The Heritage Impact Assessment identifies that the proposal will have no impact on the heritage item. A summary of Weir Phillip's findings are as follows:

- The tower element is adequately separated and distanced from the item which ensures it retains its corner prominence;
- The architectural expression of the Preferred Scheme is sympathetic to the heritage item in that the podium relates to the composition of the building and maintains the lower scale streetscape rhythm;
- The existing height and surrounding built form provide a high rise setting to which the additional height will not have a perceptible impact when viewed from street level;
- The development facilitated by the proposal will retain and restore the original features of the building and will enhance its contribution to the streetscape;
- The proposed works will have no material or structural impact on the heritage building; and
- The proposal will have no impact on the significance of the building's interiors which have already been substantially altered and damaged.

The Heritage Impact Statement notes that a future development will include a detailed scope of works for the conservation of the retained fabric to ensure that it is appropriately treated and to prevent impacts to its fabric. It is anticipated that a façade retention strategy addressing stabilisation and demolition works will be provided as part of the detailed Development Application.

Surrounding Heritage Items

The Heritage Impact Statement identifies that the development facilitated by the Planning Proposal will have no adverse impact on the heritage items in the surrounds. Specifically, the assessment notes that the proposal will have no impact on significant view corridors to heritage items including Central Station Clock Tower, the Sydney Terminal and Central Railway Station Group and Christ Church Staint Laurence. This conclusion is drawn on the basis that the proposed tower is sited and massed in the northern portion of the site above the none heritage listed building. In consequence, the tower addition largely independent of the heritage item, allowing it to sit in isolation and to be interpreted in isolation of the proposed tower.

Archeology

Austral Archeology have prepared a Historical Archaeological Assessment Report which is included at Appendix 15. The findings of the assessment confirm that the site has the potential to contain archeological remains consisting of structures, yard surfaces and outbuildings associated with mid to late 19th century residential and commercial structures of historical and social significance.

The report recommends that a permit required under Section 139 of the *NSW Heritage Act 1977* be obtained prior to any construction works. It also recommends that a State of Heritage Impact be prepared to address any mitigation measures to prevent potential impacts to archeological remains.

9.9 Transport, Traffic and Parking

A Traffic Impact Assessment has been prepared by Traffix and is included at Appendix 16. The report provides a statutory parking assessment; an assessment of the traffic generation associated with the preferred scheme; and a review of the access arrangements and internal basement design.

9.9.1 Statutory Parking Assessment

Traffix have prepared a statutory parking assessment. The findings are discussed in the sections below.

Car Parking

The SLEP 2012 prescribes the maximum parking provisions for the site. Based on a total of 280 hotel rooms and 324m^2 of retail GFA, the proposal is permitted to provide a maximum quantity of 62 vehicle spaces. The proposal provides a total of seven (7) vehicular spaces for valet parking that are proposed to be accommodated within the basement. The proposal therefore does not exceed the maximum parking rate that applies to the site and complies with the SLEP 2012.

The Preferred Scheme provides a reduced quantity of parking to capitalise on its proximity to public transport and to limit traffic generation in the surrounding road network.

Bicycle Parking and EOT Facilities

The SDCP 2012 nominates minimum bicycle parking and end-of-trip (EOT) rates. Traffix confirm that the internal basement layout is capable of accommodating the minimum bicycle and EOT requirements at the detailed DA phase.

Motorcycle Parking

The SDCP 2012 requires the provision of motorcycle parking at a rate of 1 space per 12 car parking spaces. Based on the proposed seven (7) car parking spaces, the proposal is required to provide one (1) motorcycle space. Traffix confirm that the required motorcycle parking is capable of inclusion within the basement level at the detailed DA phase.

Servicing

Based on the proposed mix of uses, the SDCP 2012 requires the provision of nine (9) loading bays. The proposal provides one (1) loading bay which represents a non-compliance with the control.

Traffix have provided a detailed justification for the variation, noting that the servicing rates prescribed by Council assume that the land uses will be provided independently. The DCP therefore does not account for the possibility of a managed approach, with shared use of the loading bay at various times of the day. It is anticipated that the loading bay will be used up to four (4) times any given day and service vehicles entering and leaving the site can be adequately be managed using a Loading Dock Management Plan (LDMP).

9.9.2 Traffic Generation

Traffix have assessed the traffic generation associated with the Preferred Scheme. It is estimated that the Preferred Scheme will generate:

- 28 vehicle trips per hour during the morning peak period; and
- 35 vehicles per house during the evening peak period.

When accounting for the current traffic generation associated with the site's existing buildings, the proposal will generate a *net* traffic generation of:

- 11 vehicle trips per hour during the morning peak period; and
- 18 vehicles per house during the evening peak period.

The report confirms that the anticipated traffic generation can readily be accommodated within the surrounding road network without the need for road upgrades.

9.9.3 Access Arrangements

Traffix have assessed the access arrangements of the Preferred Scheme. Their assessment confirms that the proposed driveway entrance from Valentine Street, car lift system and internal layout comply with the relevant Australian Standards. A Swept Path Analysis accompanies the report and demonstrates that vehicles can satisfactorily maneuver in and out of the site.

9.10 Geotechnical

A Preliminary Geotechnical Report has been prepared by EI Australia and is included at Appendix 17. The report identifies that the site's subsurface conditions comprise the following:

- Fill comprising brick, concrete, shale and sandstone;
- Residual soil; and
- Weathered sandstone.

EI Australia specify that excavation to a depth of 9.5m below existing ground level is required to facilitate the construction of the basement. The report recommends that whilst groundwater seepage was not encountered during the drilling of boreholes used to assess the soil profiles, further monitoring should be carried out during bulk excavation phase to monitor possible seepage.

In addition to the above, the Preliminary Geotechnical Report details a range of other recommendations relating to footings, anchors, retention walls and underfloor drainage which are to be adopted during the construction phase. In particular, it is noted that as the proposed basement extends up to the site's boundary an engineered shoring wall is required to facilitate the excavation process.

The report concludes that with the adoption of the recommendations, the site is capable of being redeveloped without impacting adjoining properties.

9.11 Contamination

A Remediation Action Plan (the RAP) has been prepared by EI Australia and is included at Appendix 8. The RAP identifies the measures required to remediate the site and make it suitable for the proposed development.

EI Australia note that the primary sources of contamination relate to remaining in-situ underground petroleum storage systems and groundwater contaminated by heavy metals such as nickel and zinc. The RAP consists of the following:

- Hazardous materials assessment;
- Site demolition to allow further assessment, particularly in the site southern portion;
- Removal of sources of contamination by decommissioning and appropriate off-site disposal; and
- Classification and bulk excavation of soils, appropriate off-site disposal and remediation of impacted soils.

The RAP notes that the site's groundwater may require further assessment and remediation at a later stage. Overall, the report confirms that with the adoption of the proposed remediation strategy, the site can be made suitable for the proposal.

9.12 Stormwater

Stormwater Concept Plans have been prepared by Australian Consulting Engineers and are included at Appendix 18.

The plans confirm that appropriate stormwater measures are capable of adoption at the detailed design phase. The stormwater measures consist of a pump out system, with a pump-out storage tank proposed below the lower level basement carpark. Preliminary MUSIC modelling confirms that the proposed stormwater measures can achieve adequate water quality.

9.13 Public Art

Site Image Public Art Consultants have prepared a Preliminary Public Art Plan (the Plan) which is included at Appendix 19. The Plan has been prepared to identify opportunities for public art associated with the Preferred Scheme and to confirm that the proposal is capable of complying with Council's Interim *Guidelines – Public Art in Private Developments*. The Plan identifies three (3) opportunities for public art, including:

1) Elevated artwork above the laneway presenting to George Street;
2) Ceiling to tower lobby; and
3) Tower soffit / canopies over Level 3 terrace.

The corresponding location of each option identified above is shown in Figure 42.

Figure 41 Location 1 – Opportunity for Elevated Artwork in Laneway
Source: Site Image Public Art Consultants

Figure 42 Location 2 – Ceiling of the Lift Lobby
Source: Site Image Public Art Consultants

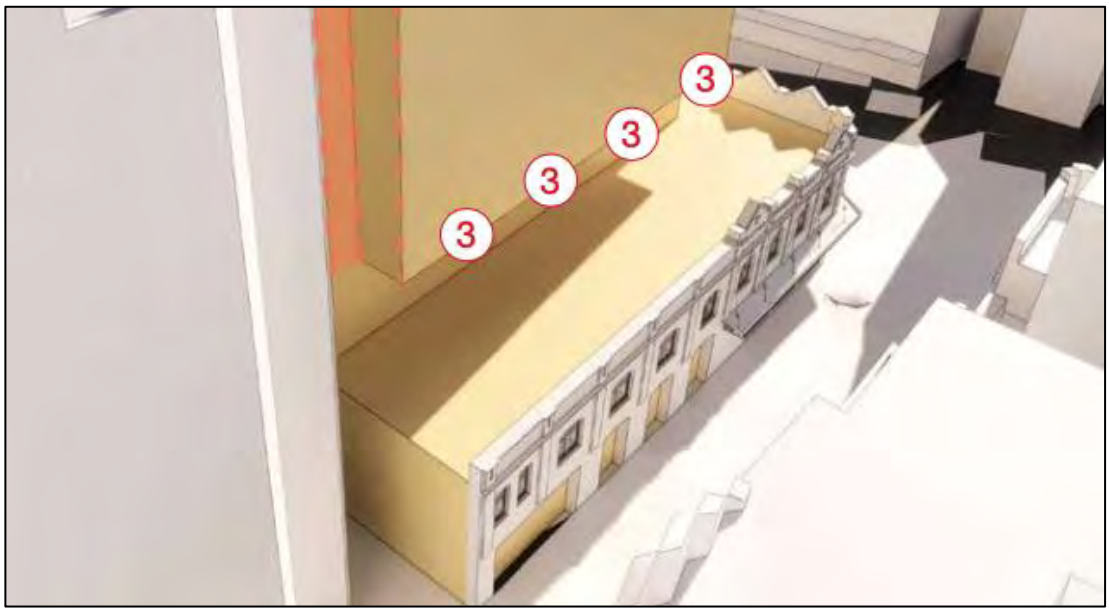

Figure 43 Location 3 – The Southern Façade Tower Soffitt over Level 3 Terrace
Source: Site Image Public Art Consultants

As set out in the Plan, it is envisaged that any future public art for the site will be prepared and curated by a public artist selected in accordance with Council's guidelines.

9.14 Sustainability

It is intended that the future development for the site will adopt best practice sustainability measures. The ecologically sustainable benchmark commitments include:

- A 5 Star Green Design and As-Built v1.3 rating; and
- A 5 Star NABERS Energy Hotel Whole Building rating.

The ecologically sustainable strategies include:

- Passive heating and cooling techniques;
- Water sensitive urban design measures;
- High efficient fixtures and fittings;
- A photovoltaic system;
- Provision of energy efficient lighting and mechanical services to meet NABERs requirements; and
- Low embodied energy efficient materials.

Further details pertaining to the ESD Strategy for the Preferred Scheme are included in the ESD Report prepared by LCI Consultants at Appendix 6.

9.15 Voluntary Planning Agreement

In accordance with Section 7.4 of the EP&A Act, the Proponent is committed to entering into a Voluntary Planning Agreement (VPA) with Council. The VPA will make

provision for public benefits in accordance with Council's relevant contributions plan and *Planning Agreements Policy* (2016). A Public Benefit Offer is provided under Separate Cover.

9.16 Social and Economic Benefits

The proposal will provide the following social and economic benefits:

- Provision of 12,318m^2 employment generating floor space;
- Employment generation including 127 operational jobs;
- Support to the growth of Sydney's visitor economy by providing a high quality hotel within a growing tech precinct that will experience an influx of corporate travelers and leisure visitors;
- Indirect economic benefits including an estimated $8.5m of investment in the local economy by 2025 due to expenditure from hotel visitors;
- Retail activation at the ground plane that will complement Council's vision for the Central Square and the pedestrianisation of the area;
- Public domain improvements that will enhance the amenity of the streetscape and improve legibility;
- Additional hotel floor space that will contribute to meeting the growing demand for mid-range hotel accommodation;
- Opportunities for the integration of public art;
- Retail activation that will contribute to the revitalisation of the area;
- Adaptive reuse of the heritage item to protect the unique character of the Haymarket / Chinatown Special Character Area; and
- A hotel that adopts best practice sustainability measures.

10 Mapping

The proposed amendments do not necessitate changes to the mapping accompanies the SLEP 2012.

11 Community Consultation

The Planning Proposal will be placed on public exhibition in accordance with the Gateway Determination, should the Department of Planning and Environment support the proposal.

A comprehensive engagement strategy will be prepared by Council which would include the following mechanisms:

4) Advertisement in a local newspaper which is circulated within the local government area;
5) Notification letters to relevant State Agencies and other authorities nominated by the DPIE;
6) Notification (via letter) to land holders of properties within and adjoining the Precinct;
7) Advertise and exhibit the Planning Proposal on Council's website and at the Customer Service Centre; and
8) Undertake any other consultation methods appropriate for the proposal.

12 Indicative Project Timeline

The project timeline has been provided to assist with monitoring the progress of the Planning Proposal through the plan making process and assist with resourcing to reduce potential delays.

Table 14 – Project Timeline

Milestone	Date
Submission of the Planning Proposal	October 2020
Planning Proposal Reported to Council	December 2021
Referral to Minister for Gateway Determination	December 2021
Anticipated commencement date (date of Gateway determination)	January / February 2022
Commencement and completion dates for public exhibition period	February / March 2022
Timeframe for government agency consultation (pre and post exhibition as required by Gateway determination)	June – July 2022
Timeframe for consideration of submissions	July / August 2022
Timeframe for consideration of a proposal post exhibition	August / September 2022
Consideration of PP by Council (Council Meeting)	September / October 2022
Date of submission to the DPIE to finalise the LEP	November 2022
Anticipated date RPA will make the plan (if delegated) or Anticipated date RPA will forward to the department for notification	December 2022
Anticipated date for publishing of the plan	December / January 2023

13 Conclusion

This report has been prepared by Mecone to support a Planning Proposal to Council. It has been prepared in accordance with Section 3.33 of the EP&A Act and addresses the requirements set out in the DPIE's '*A Guide to Preparing Planning Proposals*' (2016).

The Planning Proposal provides a justification for the proposed amendments to the SLEP 2012 with respect to the site at 757 – 763 George Street, Sydney. The proposed amendments include the introduction of a site specific clause to Division 5 of the SLEP 2012 to establish a maximum:

- Building height of RL 117.87 (105.87m from ground level); and
- FSR of 12:1.

The Planning Proposal will support a high quality commercial tower containing mid-range hotel accommodation that will achieve a number of positive outcome and satisfies the strategic and site specific merit tests.

It is considered that the Proposal will:

- Increase the capacity for the site to accommodate employment generating floor space conducive to facilitating job creation;
- Provide a development that responds to the site site's context by delivering a tower with an intermediate scale relative to the super towers in the surrounds and will facilitate a gradual transition in scale;
- Prioritise a pedestrian focused environment by activating Valentine and George Street;
- Deliver mid-range accommodation that will address the demand for affordable tourist accommodation options in the context of there being an oversupply of high-range hotels;
- Demonstrates strategic merit as it aligns with the applicable regional and local strategic plans;
- Will adaptively reuse the heritage item contained within the site by conserving its significant fabric whilst delivering a contemporary tower addition;
- Demonstrates site specific merit in that it will not result in unacceptable environmental impacts as demonstrated by the assessment above; and
- Provides public domain improvements at the ground plane that will complement the upgrades envisaged for Haymarket under the Central Square Structuring Principles.

As demonstrated by the above assessment, the proposal satisfies the Site Specific Merit Test and Strategic Merit Test. It also responds to a change in circumstances, with this being the growth of the office market associated with the Haymarket / Ultimo Tower Cluster Area and the Sydney Innovation and Technology Precinct, and the associated demand for accommodation floorspace.

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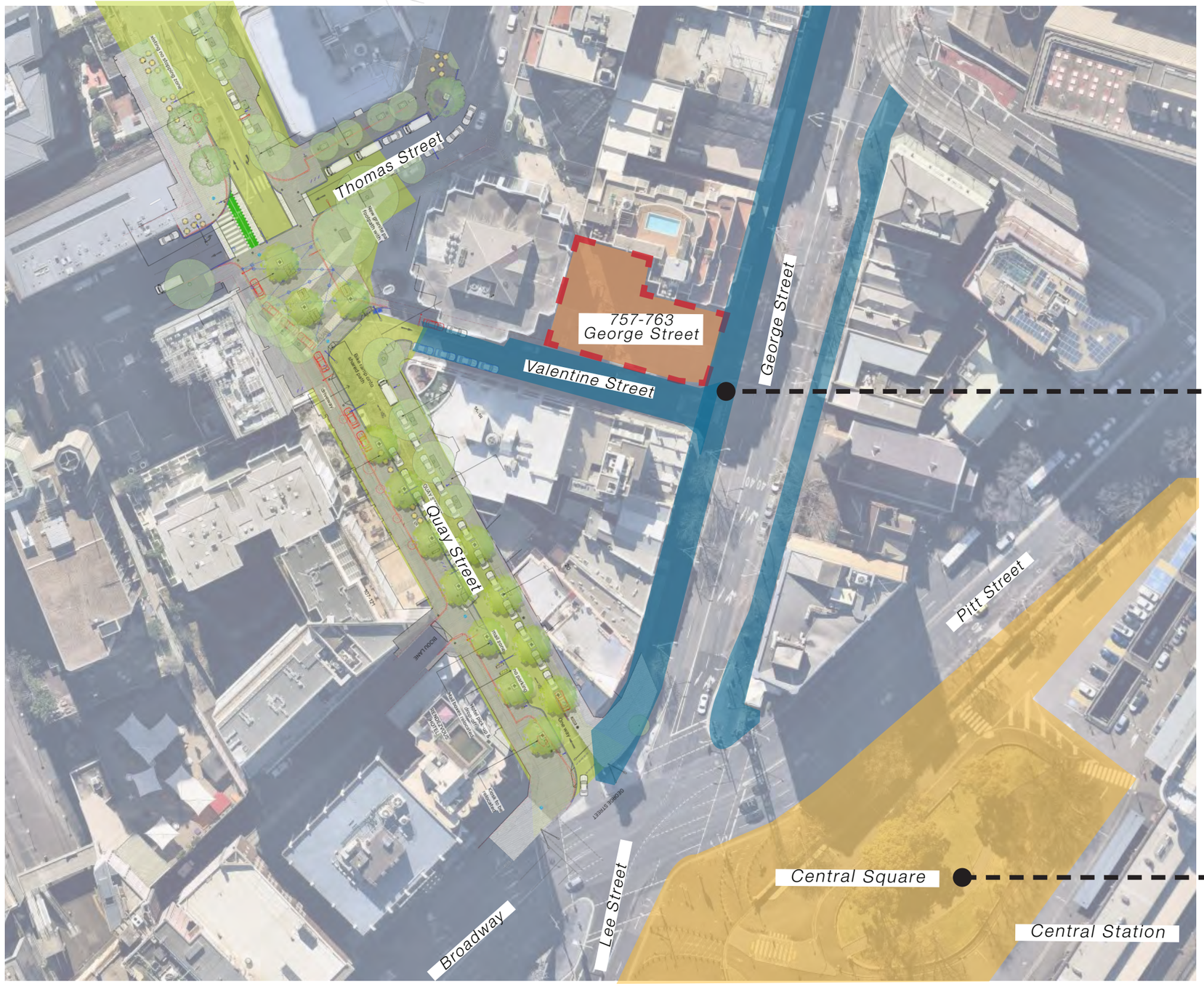
757-763 George Street Haymarket
Landscape Planning Proposal
October 2021

SITE IMAGE
Landscape Architects

Haymarket Future Upgrades to Surrounding Public Domain



Quay Street Future Upgrades. Refer to following page for further detail

Future Pedestrianisation of George Street and Valentine Street. refer to following page for furher detail.

Future third Square at Central Station. Key Priorities for public domain upgardes to Central Square include:

- *Clear and generous path leading at grade between the Station and a wide pedestrian crossing at George Street,*
- *increased footpath widths on the east and west sides of Broadway*
- *installment of copses of trees to provide shade and a cool green urban setting to lift amenity along widened footpaths and pedestrian ways*

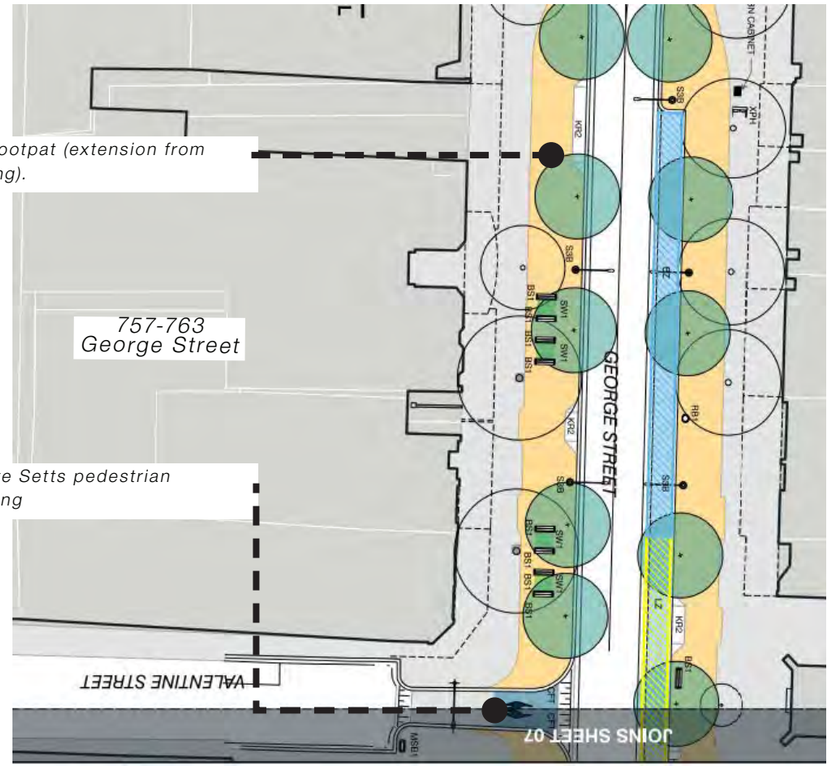
Image showing pedestiranisation of George and Valentine Street by Virtual Ideas based on a deisgn by city of Sydney

Access to Central Walk West looking north east from Railway Square - Image from Transport, Heritage and Planning Committee

Haymarket Future Upgrades to Surrounding Public Domain

Upgardes to George Street:

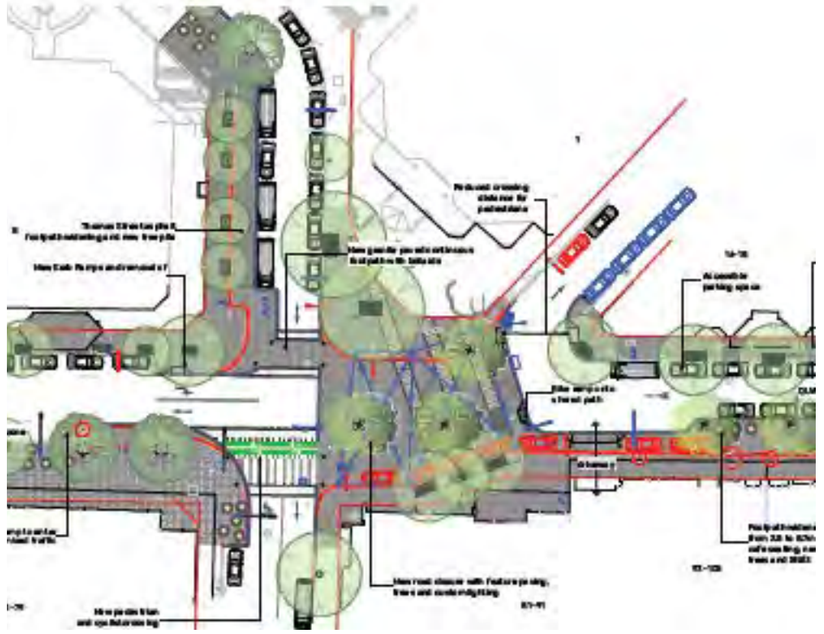
- *Extended pedestrianised zones at the southern end of George Street between Bathurst Street and Rawson Place*
- *Open space improvements on George Street between Rawson Place and Pitt Street, Ultimo Road, Thomas Street and Hay Street*
- *More than 9,000m2 of new space for walking*
- *Granite footpaths to replace car lanes*
- *New street trees, seating and lighting*



Excerpt taken from Light Rail Road Closures and Pedestrianisation Concept Design - City of Sydney

Upgardes to Quay Street Street:

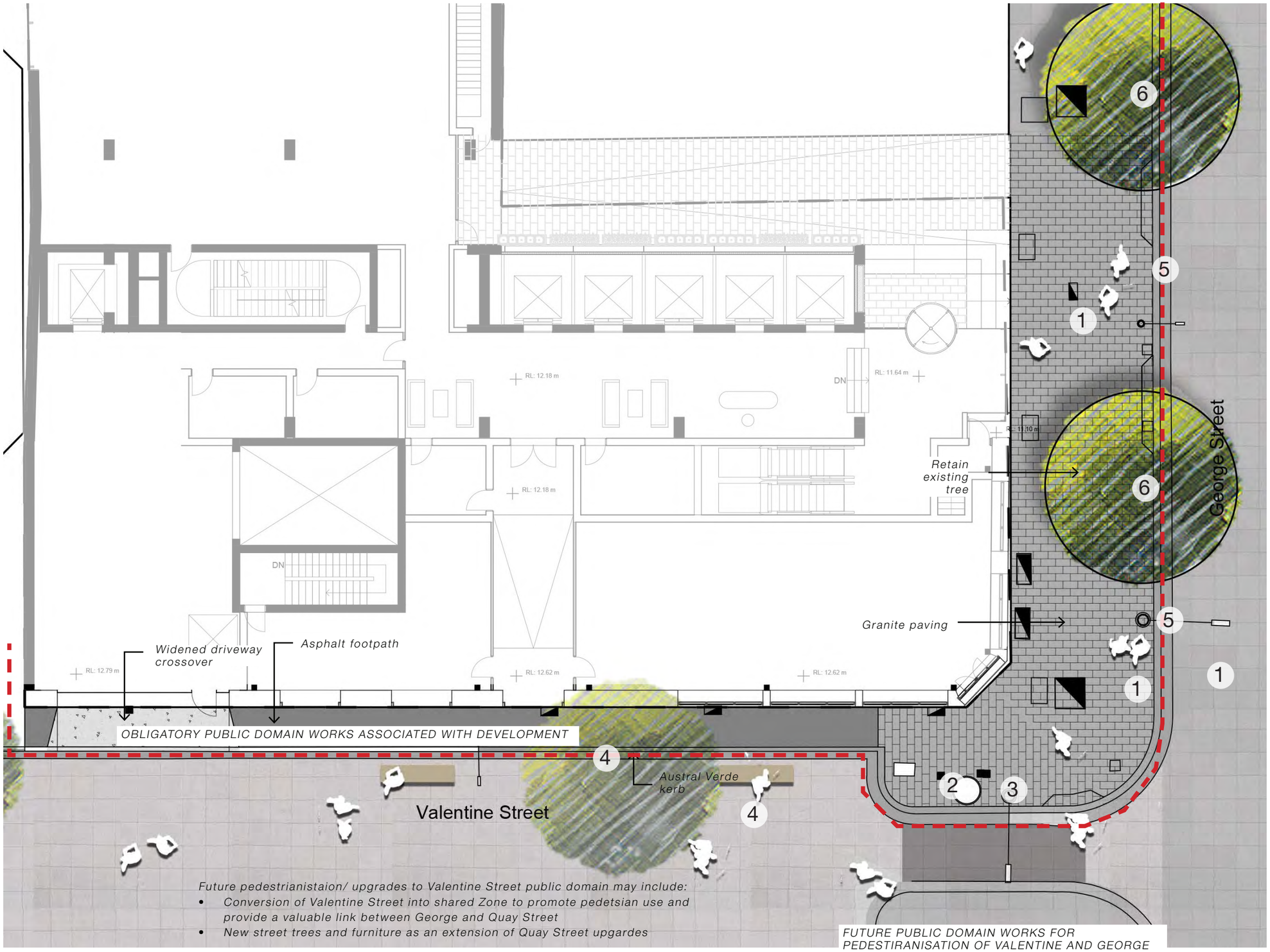
- *Wider footpath on western side of Quay Street to improve safety between George St and Chinatown*
- *Closing Quay St at Valentine Street to create a new public plaza with street trees, lighting and furniture*
- *New shared path pm western side of George Street to Ultimo Rd. creating a safe bike connection to support growth in number of people riding*
- *New Bike lanterns on George Street and Lee Streets to create a bike connection to Central Station .*



Excerpt taken from Quay Street Concept Design - City of Sydney

Client	Ceerose	Drawing Number	003
Architect	Grimshaw	Issue	D
Site Image Job Number	SS20-4382	Date	08.10.2021

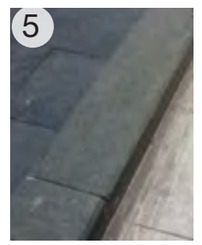
Public Domain Plan - George Street & Valentine Street



Granite Paving

Retain existing bin

Retain existing S/P



Austral Verde Kerb + Asphalt

Trachyte Kerb

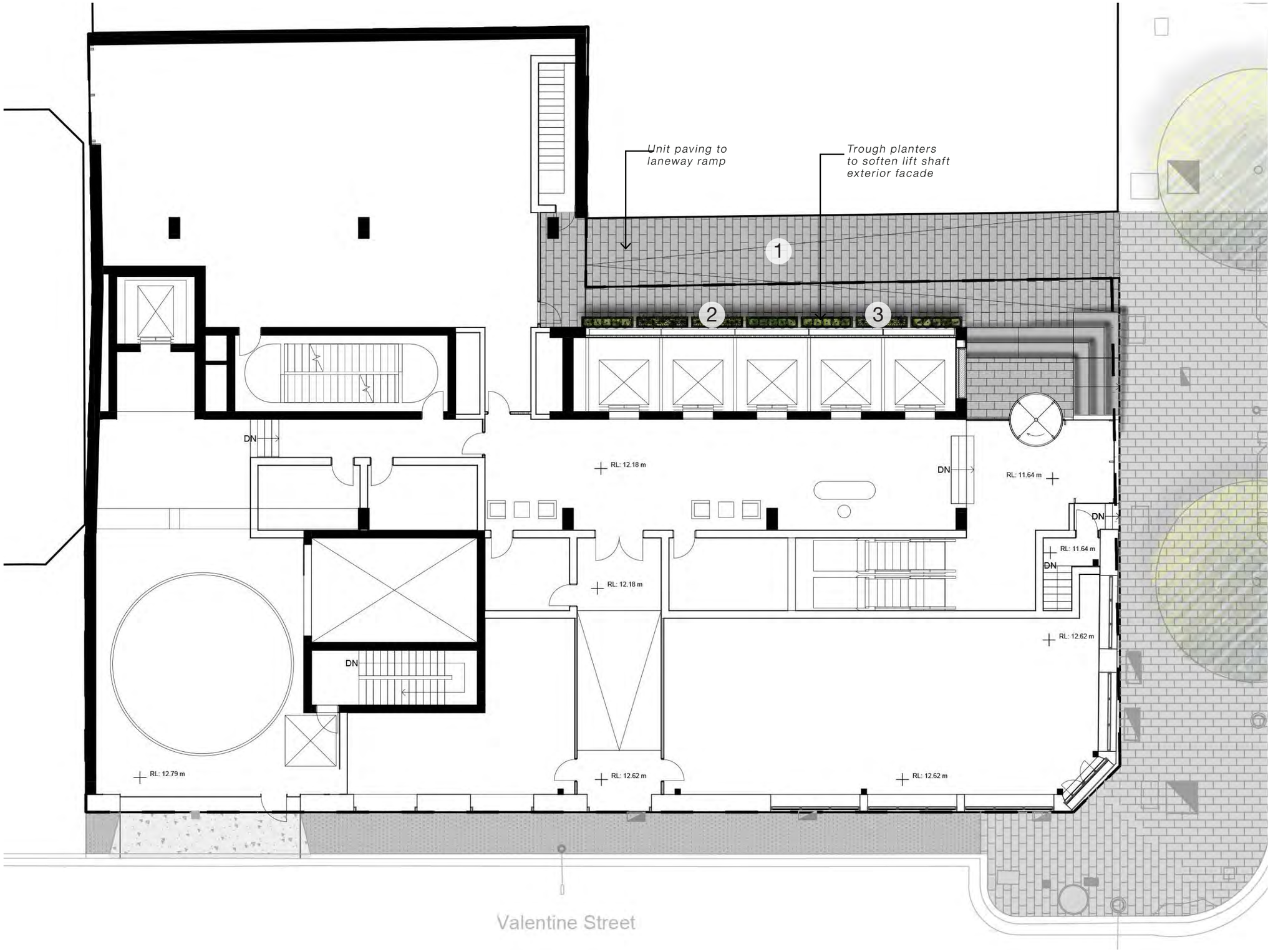
Retain existing tree

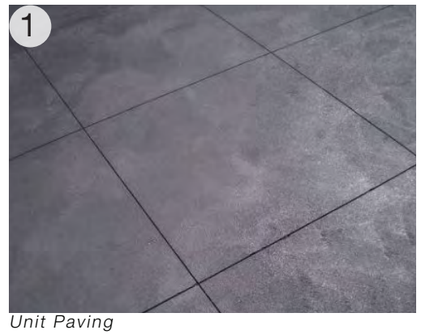
SITE IMAGE
Landscape Architects

757-763 George Street Haymarket | Planning Proposal

Client	Ceerose	Drawing Number	004
Architect	Grimshaw	Issue	D
Site Image Job Number	SS20-4382	Date	08.10.2021

Ground Floor





Unit Paving

Shade tolerant planting palette

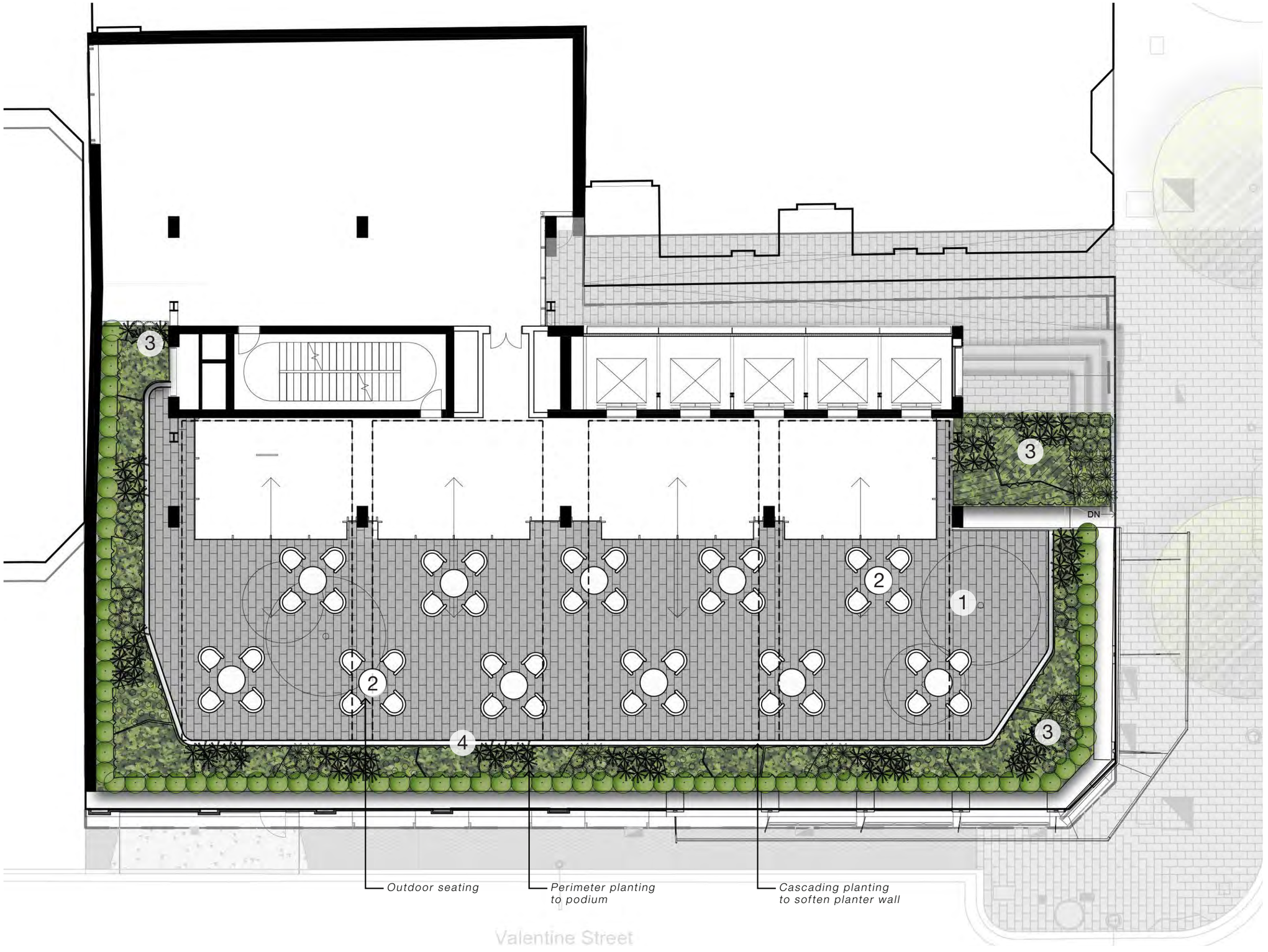
Trough planters

SITE IMAGE
Landscape Architects

757-763 George Street Haymarket | Planning Proposal

Client	Ceerose	Drawing Number	005
Architect	Grimshaw	Issue	C
Site Image Job Number	SS20-4382	Date	08.10.2021

Level 3



Unit paving

Outdoor seating

Shade tolerant planting palette

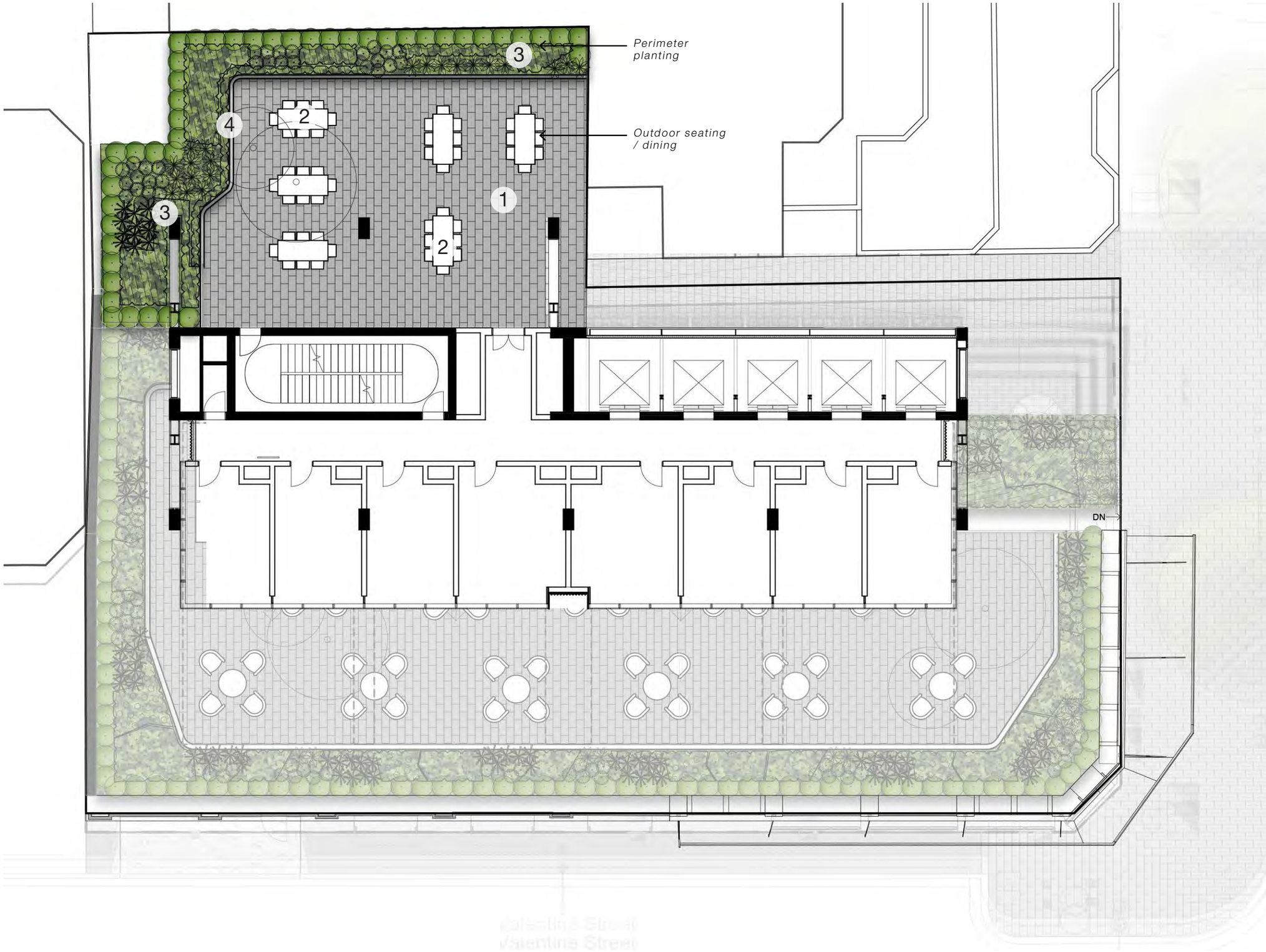
Cascading planting

SITE IMAGE
Landscape Architects

757-763 George Street Haymarket | Planning Proposal

Client	Ceerose	Drawing Number	006
Architect	Grimshaw	Issue	C
Site Image Job Number	SS20-4382	Date	08.10.2021

Level 10




1

Unit paving


2

Outdoor seating


3

Textural planting palette


4

Cascading planting

SITE IMAGE
Landscape Architects

757-763 George Street Haymarket | Planning Proposal

Client	Ceerose	Drawing Number	007
Architect	Grimshaw	Issue	C
Site Image Job Number	SS20-4382	Date	08.10.2021

Indicative Plant Species

Ground

Aspidistra elatior

4. Philodendron ‘Xanadu’

4. Rhapis excelsa

Level 3 / Level 10

Liriope muscari

Raphiolepsis indica ‘Snow Maiden

Zamia furfuracea

Philodendron ‘Xanadu’

Blechnum ‘Silver Lady’

Viola hederacea

Alpinia caerulea

SITE IMAGE
Landscape Architects

757-763 George Street Haymarket | Planning Proposal

Client	Ceerose	Drawing Number	008
Architect	Grimshaw	Issue	C
Site Image Job Number	SS20-4382	Date	08.10.2021

WINDTECH

PEDESTRIAN WIND ENVIRONMENT STUDY

757-763 GEORGE STREET, HAYMARKET

WD154-14F02(REV0)- WE REPORT

SEPTEMBER 6, 2021

Prepared for:

Ceerose Pty Ltd

447-451 Parramatta Road, Leichardt NSW 2040

DOCUMENT CONTROL

Date	Revision History	Issued Revision	Prepared By (initials)	Instructed By (initials)	Reviewed & Authorised by (initials)
September 6, 2021	Initial.	0	NR	SWR	JG

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EXECUTIVE SUMMARY

This report presents the results of a detailed investigation into the wind environment impact of the 757-763 George Street, located in Haymarket, Sydney. Testing was performed at Windtech's boundary layer wind tunnel facility. The wind tunnel has a 3.0m wide working section and a fetch length of 14m, and measurements were taken from 16 wind directions at 22.5 degree increments. Testing was carried out using a 1:300 detailed scale model of the development. The effects of nearby buildings and land topography have been accounted for through the use of a proximity model which represents an area with a radius of 375m.

Testing was performed for two massing variations of the development, as well as for the existing site conditions, which are denoted by the following scenarios:

- With the existing surrounding buildings and the inclusion of the Base Case Massing. In this report, this test case is referred to as the "Base Case".
- With the existing surrounding buildings and the inclusion of the Proposed Case Massing. In this report, this test case is referred to as the "Proposed Case".
- With the existing surrounding buildings and the existing building on the subject development site. In this report, this test case is referred to as the "Existing Site".

Peak gust and mean wind speeds were measured at selected critical outdoor trafficable locations within and around the subject development. Wind velocity coefficients representing the local wind speeds are derived from the wind tunnel and are combined with a statistical model of the regional wind climate (which accounts for the directional strength and frequency of occurrence of the prevailing regional winds) to provide the equivalent full-scale wind speeds at the site. The wind speed measurements are compared with criteria for pedestrian comfort and safety, based on Gust-Equivalent Mean (GEM) and annual maximum gust winds, respectively.

The model was tested in the wind tunnel without the effect of any forms of wind ameliorating devices such as screens, balustrades, etc., which are not already shown in the architectural drawings. The effect of vegetation was also excluded from the testing. The existing site conditions were also tested, for comparison.

The results of the study indicate that wind conditions for the majority of trafficable outdoor locations within and around the development will be suitable for their intended uses. However, some areas will experience strong winds which will exceed the relevant criteria for comfort and/or safety. In the areas where the wind conditions of the Proposed Envelope exceed the wind conditions of the Existing Scenario, these concerns will be addressed with wind tunnel testing during the detailed design stage and recommendations of mitigation measures. Given the assessment is currently limited to a sheer massing envelope, the detailed design is also expected to introduce building elements that may further improve the wind conditions within and around the site.

CONTENTS

1 INTRODUCTION

A wind tunnel study has been undertaken to assess wind speeds at selected critical outdoor trafficable areas within and around the subject development. The test procedures followed for this wind tunnel study were based on the guidelines set out in the Australasian Wind Engineering Society Quality Assurance Manual (AWES-QAM-1-2019), ASCE 7-16 (Chapter C31), and CTBUH (2013).

A scale model of the development was prepared, including the surrounding buildings and land topography. Testing was performed at Windtech's boundary layer wind tunnel facility. The wind tunnel has a 3.0m wide working section and a fetch length of 14m, and measurements were taken from 16 wind directions at 22.5 degree increments. The wind tunnel was configured to the appropriate boundary layer wind profile for each wind direction. Wind speeds were measured using either Dantec hot-wire probe anemometers or pressure-based wind speed sensors, positioned to monitor wind conditions at critical outdoor trafficable areas of the development.

The model was tested in the wind tunnel without the effect of any forms of wind ameliorating devices such as screens, balustrades, etc., which are not already shown in the architectural drawings. The effect of vegetation was also excluded from the testing. The wind speeds measured during testing were combined with a statistical model of the regional wind climate to provide the equivalent full-scale wind speeds at the site. The measured wind speeds were compared against appropriate criteria for pedestrian comfort and safety. These treatments could be in the form of retaining vegetation that is already proposed for the site, or including additional vegetation, screens, awnings, etc. Note however that, in accordance with the AWES Guidelines (2014), only architectural elements or modifications are used to treat winds which represent an exceedance of the existing wind conditions and exceed the safety limit.

2 WIND TUNNEL MODEL

Wind tunnel testing was carried out using a 1:300 scale model of the development and surroundings. The study model incorporates all necessary architectural features on the façade of the development to ensure an accurate wind flow is achieved around the model, and was constructed using a Computer Aided Manufacturing (CAM) process to ensure that a high level of detail and accuracy is achieved. The effect of nearby buildings and land topography has been accounted for through the use of a proximity model, which represents a radius of 375m from the development site. Photographs of the wind tunnel model are presented in Figures 1. A plan of the proximity model is provided in Figure 2.

Testing was performed for two massing variations of the development, as well as for the existing site conditions, which are denoted by the following scenarios:

- With the existing surrounding buildings and the inclusion of the Base Case Massing. In this report, this test case is referred to as the "Base Case".
- With the existing surrounding buildings and the inclusion of the Proposed Case Massing. In this report, this test case is referred to as the "Proposed Case".
- With the existing surrounding buildings and the existing building on the subject development site. In this report, this test case is referred to as the "Existing Site".

Figure 1a: Photograph of the Wind Tunnel Model (Base Case, view from the south-east)

Figure 1b: Photograph of the Wind Tunnel Model
(Base Case, view from the north-east)

Figure 1c: Photograph of the Wind Tunnel Model
(Base Case, view from the north-west)

Figure 1d: Photograph of the Wind Tunnel Model
(Base Case, view from the south-east)

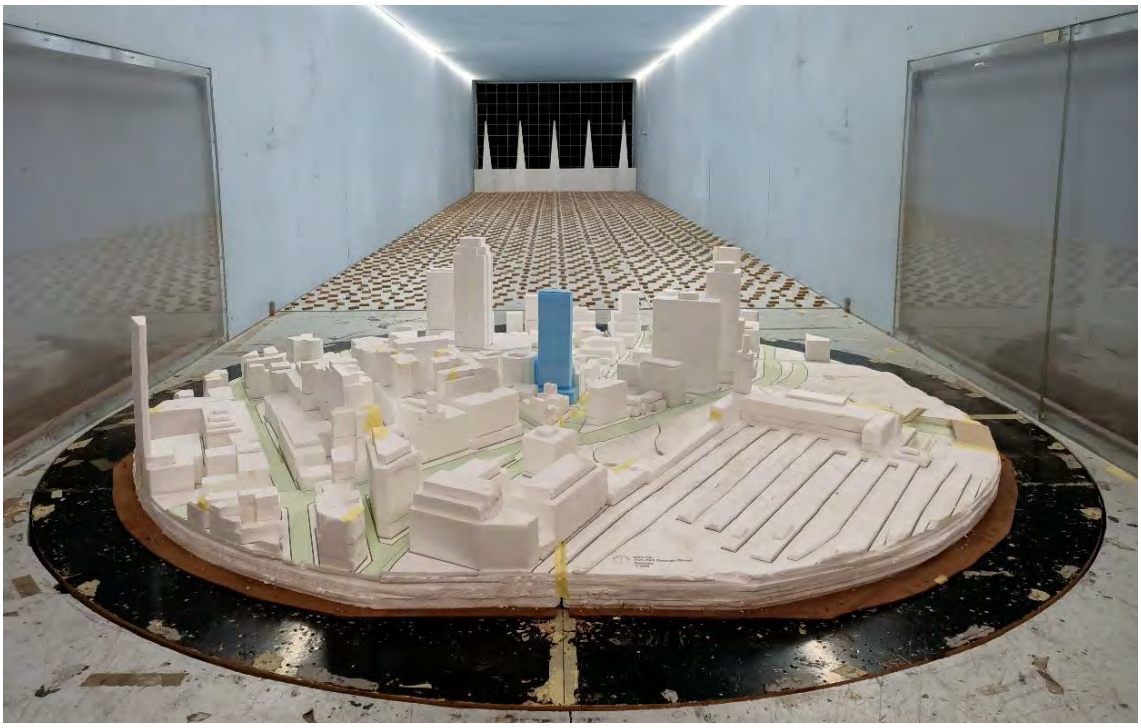


Figure 1e: Photograph of the Wind Tunnel Model
(Proposed Case, view from the south)

Figure 1f: Photograph of the Wind Tunnel Model
(Proposed Case, view from the west)

Figure 1g: Photograph of the Wind Tunnel Model
(Proposed Case view from the north)

Figure 1h: Photograph of the Wind Tunnel Model
(Proposed Case, view from the east)

Figure 1i: Photograph of the Wind Tunnel Model
(Proposed Case, view from the south-east)

Figure 1j: Photograph of the Wind Tunnel Model
(Existing Site, view from the north-west)

Figure 1k: Photograph of the Wind Tunnel Model
(Existing Site, view from the south-west)

Figure 2: Proximity Model Plan (Proposed Case)

3 BOUNDARY LAYER WIND PROFILES AT THE SITE

The roughness of the surface of the earth has the effect of slowing down the wind near the ground. This effect is observed up to the boundary layer height, which can range between 500m to 3km above the earth's surface depending on the roughness of the surface (ie: oceans, open farmland, etc). Within this range the prevailing wind forms a boundary layer wind profile.

Various wind codes and standards and other publications classify various types of boundary layer wind flows depending on the surface roughness z_0. Descriptions of typical boundary layer wind profiles, based on D.M. Deaves and R.I. Harris (1978), are summarised as follows:

- Flat terrain (0.002m < z_0 < 0.003m). Examples include inland water bodies such as lakes, dams, rivers, etc, and the open ocean.
- Semi-open terrain (0.006m < z_0 < 0.01m). Examples include flat deserts and plains.
- Open terrain (0.02m < z_0 < 0.03m). Examples include grassy fields, semi-flat plains, and open farmland (without buildings or trees).
- Semi-suburban/semi-forest terrain (0.06m < z_0 < 0.1m). Examples include farmland with scattered trees and buildings and very low-density suburban areas.
- Suburban/forest terrain (0.2m < z_0 < 0.3m). Examples include suburban areas of towns and areas with dense vegetation such as forests, bushland, etc.
- Semi-urban terrain (0.6m < z_0 < 1.0m). Examples include centres of small cities, industrial parks, etc.
- Urban terrain (2.0m < z_0 < 3.0m). Examples include centres of large cities with many high-rise towers, and also areas with many closely-spaced mid-rise buildings.

The boundary layer wind profile does not change instantly due to changes in the terrain roughness. It can take many kilometres (at least 100km) of a constant surface roughness for the boundary layer wind profile to achieve a state of equilibrium. Hence an analysis of the effect of changes in the upwind terrain roughness is necessary to determine an accurate boundary layer wind profile at the development site location.

The proximity model accounts for the effect of the near field topographic effects as well as the influence of the local built forms. To account for further afield effects, an assessment of the upwind terrain roughness has been undertaken based on the method given in AS/NZS1170.2:2011, using a fetch ranging from 20 to 60 times the study reference height (as per the recommendation by AS/NZS1170.2:2011). An aerial image showing the surrounding terrain is presented in Figure 3 for a range of 3.6km from the edge of the proximity model used for the wind tunnel study. The resulting mean and gust terrain and height multipliers at the site location are presented in Table 1, referenced to the study reference height (which is approximately half the height of the subject development since typically we are most interested in the wind effects at the ground plane). Details of the boundary layer wind profiles at the site are combined with the regional wind model (see Section 4) to determine the site wind speeds.

Table 1: Approaching Boundary Layer Wind Profile Analysis Summary (at the study reference height)

Wind Sector (degrees)	Terrain and Height Multiplier			Turbulence Intensity	Equivalent Terrain Category (AS/NZS1170.2:2011 naming convention)
	$k_{tr,T=1hr}$ (hourly)	$k_{tr,T=10min}$ (10min)	$k_{tr,T=3s}$ (3sec)	I_v	
0	0.77	0.80	1.18	0.180	2.7
30	0.83	0.86	1.21	0.157	2.3
60	0.75	0.78	1.17	0.189	2.8
90	0.71	0.75	1.14	0.204	3.0
120	0.79	0.83	1.19	0.169	2.5
150	0.75	0.79	1.17	0.187	2.8
180	0.61	0.65	1.08	0.256	3.5
210	0.71	0.75	1.15	0.202	3.0
240	0.71	0.75	1.15	0.202	3.0
270	0.71	0.75	1.15	0.202	3.0
300	0.76	0.80	1.17	0.182	2.7
330	0.78	0.82	1.18	0.175	2.6

NOTE: These terrain and height multipliers are to be applied to a basic regional wind speed averaged over 3-seconds. Divide these values by 1.10 for a basic wind speed averaged over 0.2-seconds, 0.69 for a basic wind speed averaged over 10-minutes, or 0.66 for a basic wind speed averaged over 1-hour.

For each of the 16 wind directions tested in this study, the approaching boundary layer wind profiles modelled in the wind tunnel closely matched the profiles listed in Table 1. Plots of the boundary layer wind profiles used for the wind tunnel testing are presented in Appendix D of this report.

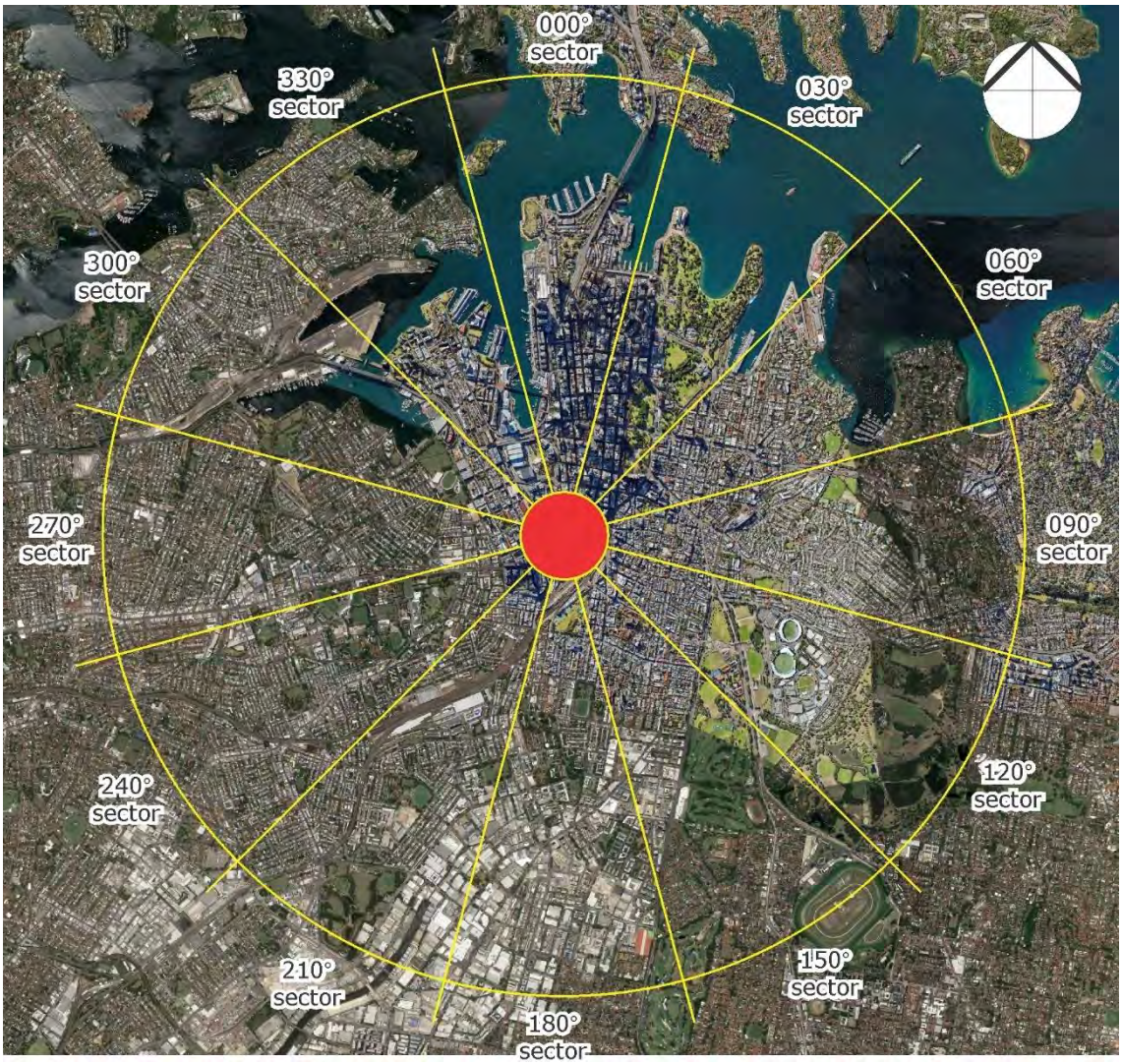


Figure 3: Aerial Image of the Surrounding Terrain (radius of 3.6km from the edge of the proximity model)

4 REGIONAL WIND MODEL

The regional wind model used in this study was determined from an analysis of measured directional mean wind speeds obtained at the meteorological recording station located at Kingsford Smith Airport (Sydney Airport). Data was collected from 1995 to 2016 and corrected so that it represents winds over standard open terrain at a height of 10m above ground for each wind direction. From this analysis, directional probabilities of exceedance and directional wind speeds for the region are determined. The directional wind speeds are summarised in Table 2. The directional wind speeds and corresponding directional frequencies of occurrence are presented in Figure 4.

The data indicates that the southerly winds are by far the most frequent winds for the Sydney region, and are also the strongest. The westerly winds occur most frequently during the winter season for the Sydney region, and although they are typically not as strong as the southerly winds, they are usually a cold wind and hence can be a cause for discomfort for outdoor areas. North-easterly winds occur most frequently occur during the warmer months of the year for the Sydney region, and hence are usually welcomed within outdoor areas since they are typically not as strong as the southerly or westerly winds.

The recurrence intervals examined in this study are for exceedances of 5% (per 90 degree sector) of the pedestrian comfort criteria using Gust-Equivalent Mean (GEM) wind speeds, and annual maximum wind speeds (per 22.5 degree sector) for the pedestrian safety criterion. Note that the 5% probability wind speeds presented in Table 2 are only used for the directional plot presented in Figure 4 and are not used for the integration of the probabilities.

Table 2: Regional Directional Wind Speeds (hourly means, at 10m height in standard open terrain) (m/s)

Wind Direction	5% Exceedance	Annual Maximum
N	5.9	9.9
NNE	9.9	12.9
NE	9.7	12.3
ENE	7.5	10.0
E	6.3	9.3
ESE	6.2	9.1
SE	7.0	10.1
SSE	8.5	12.2
S	10.3	13.9
SSW	10.0	14.1
SW	6.9	11.9
WSW	9.3	13.6
W	9.8	14.4
WNW	8.8	14.3
NW	6.7	12.6
NNW	5.5	10.7

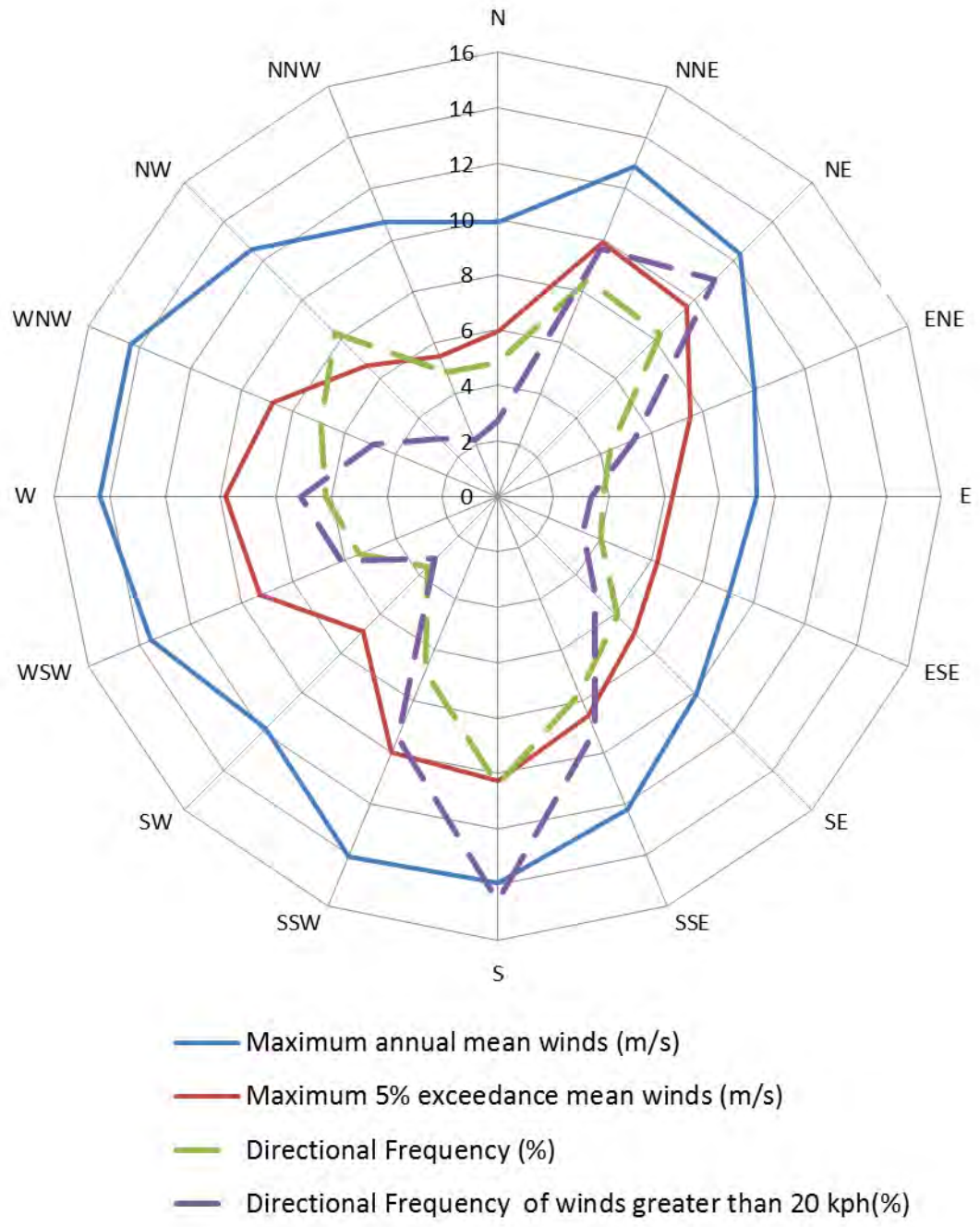


Figure 4: Annual and 5% Exceedance Hourly Mean Wind Speeds, and Frequencies of Occurrence, for the Sydney Region (at 10m height in standard open terrain)

5 PEDESTRIAN WIND COMFORT AND SAFETY

The acceptability of wind conditions for an area is determined by comparing the measured wind speeds against an appropriate criteria. This section outlines how the measured wind speeds were obtained, the criteria considered for the development, as well as the critical trafficable areas that were assessed and their corresponding criteria designation.

5.1 Measured Wind Speeds

Wind speeds were measured using either Dantec hot-wire probe anemometers or pressure-based wind speed sensors, positioned to monitor wind conditions at critical outdoor trafficable areas of the development. The reference mean free-stream wind speed measured in the wind tunnel, which is at a full-scale height of 200m and measured 3m upstream of the study model.

Measurements were acquired for 16 wind directions at 22.5 degree increments using a sample rate of 1,024Hz. The full methodology of determining the wind speed measurements at the site from either the Dantec Hot-wire probe anemometers or pressure-based wind speed sensors is provided in Appendix B. Based on the results of the analysis of the boundary layer wind profiles at the site (see Section 3), and incorporating the regional wind model (see Section 4), the data sampling length of the wind tunnel test for each wind direction corresponds to a full-scale sample length ranging between 30 minutes and 1 hour. Research by A.W. Rofail and K.C.S. Kwok (1991) has shown that, in addition to the mean and standard deviation of the wind being stable for sample lengths of 15 minutes or more (full-scale), the peak value determined using the upcrossing method is stable for sample lengths of 30 minutes or more.

5.2 Wind Speed Criteria Used for This Study

For this study, the measured wind conditions for the various critical outdoor trafficable areas around the subject development are compared against the criteria presented in the Draft Sydney Development Control Plan 2012 - Central Sydney Planning Review Amendment, which supersedes the criteria detailed in the City of Sydney Development Control Plan 2012 (SDCP2012).

For pedestrian comfort, the Draft Sydney DCP 2012 requires that the hourly mean wind speed, or Gust-Equivalent Mean (GEM) wind speed (whichever is greater for each wind direction), must not exceed 8m/s for walking, 6m/s for standing, and 4m/s for sitting. These are based on a 5% probability of exceedance.

For pedestrian safety, the Draft Sydney DCP 2012 defines a safety limit criterion of 24m/s, based on an annual maximum 0.5 second gust wind speed, which applies to all areas.

Furthermore, in accordance with the provisions of the Draft Sydney DCP 2012, the existing conditions for the pedestrian footpaths around the site are also analysed as part of this study to determine the impact of the subject development. If it is found that the existing conditions exceed the relevant criteria, then the target wind speed for that area with the inclusion of the proposed development is to at least match the existing site conditions.

In accordance with the provisions of the Draft Sydney DCP 2012, the wind speed assessment is undertaken for winds occurring between 6am and 10pm (AEST).

A more detailed comparison of published criteria for pedestrian wind comfort and safety is provided in Appendix A.

For this study the measured wind conditions of the selected critical outdoor trafficable areas are compared against two sets of criteria; one for pedestrian safety, and one for pedestrian comfort. The safety criterion is applied to the annual maximum gust winds, and the comfort criteria is applied to Gust Equivalent Mean (GEM) winds. In accordance with ASCE (2003), the GEM wind speed is defined as follows:

$$GEM = max\left(\bar{V}, \frac{\hat{V}}{1.85}\right) \tag{5.1}$$

where:

$\bar{V}$ is the mean wind speed.

$\hat{V}$ is the gust wind speed.

The criteria considered in this study are summarised in Tables 3 and 4 for pedestrian comfort and safety, respectively. The results of the wind tunnel study are presented in the form of directional plots attached in Appendix C of this report. For each study point there is a plot of the GEM wind speeds using the comfort criteria, and a plot for the annual maximum gust wind speeds using the safety criterion.

Table 3: Pedestrian Comfort Criteria (Draft Sydney DCP 2012)

Classification	Description	Maximum 5% Exceedance GEM Wind Speed (m/s)
Sitting	Outdoor areas that involve seating such as parks, dining areas in restaurants, amphitheatres, etc.	4
Standing	Short duration stationary activities (generally less than 1 hour), including window shopping, waiting areas, etc.	6
Walking	For pedestrian thoroughfares, private swimming pools, most communal areas, private balconies and terraces, etc.	8

Table 4: Pedestrian Safety Criterion (Draft Sydney DCP 2012)

Classification	Description	Annual Maximum Gust Wind Speed (m/s)
Safety	Safety criterion applies to all trafficable areas.	24

5.3 Layout of Study Points

For this study, a total of 18 study point locations on the Ground Level along the pedestrian footpaths along George Street and Valentine Street around the proposed development site were selected for analysis in the wind tunnel.

The locations of the various study points tested for this study, as well as the target wind speed criteria for the various outdoor trafficable areas of the development, are presented in Figures 5 in the form of marked-up plans. It should be noted that only the most critical outdoor locations of the development have been selected for analysis.

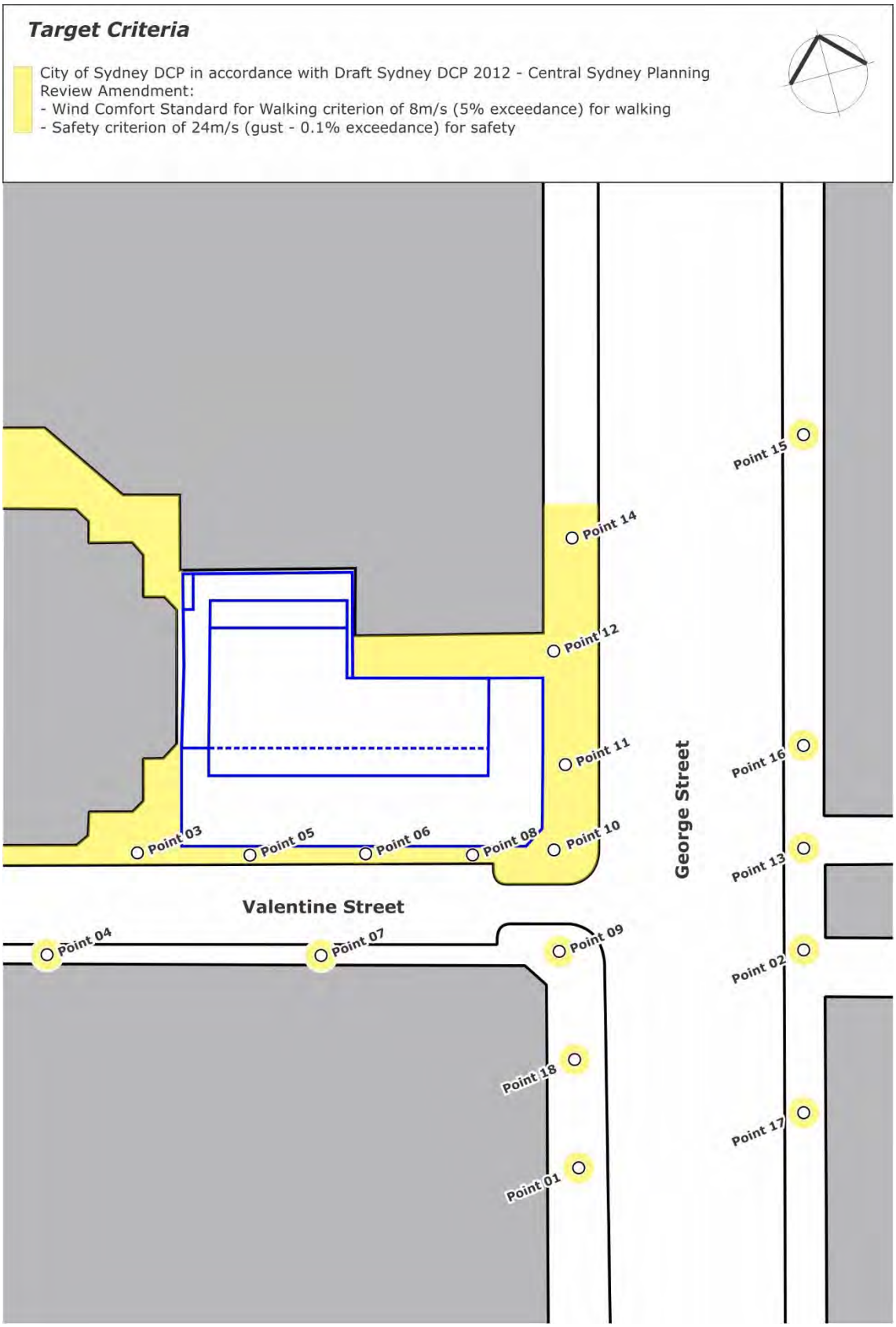


Figure 5: Study Point Locations and Target Wind Speed Criteria – Base Case Ground Floor Plan

6 RESULTS AND DISCUSSION

The results of the wind tunnel study are presented in the form of directional plots in Appendix C for all study points locations, summarised in Table 9, and shown on marked-up plans in Figures 6.

Testing was performed for two massing variations of the development, as well as for the existing site conditions, which are denoted by the following scenarios:

- With the existing surrounding buildings and the inclusion of the Base Case Massing. In this report, this test case is referred to as the "Base Case".
- With the existing surrounding buildings and the inclusion of the Proposed Case Massing. In this report, this test case is referred to as the "Proposed Case".
- With the existing surrounding buildings and the existing building on the subject development site. In this report, this test case is referred to as the "Existing Site".

The wind speed criteria that the wind conditions should achieve are also listed in Tables 5 to 10 for each study point location, as well as in Figures 5.

The results of the study demonstrate that the Proposed Case exhibits comfortable wind conditions relative to the Base Case, utilising a comparison of the average wind speed of the equivalent 5% exceedance wind speeds listed in Table 6 for each scenario.

The results of the study indicate that wind conditions for the majority of trafficable outdoor locations within and around the development will be suitable for their intended uses. However, some areas will experience strong winds which will exceed the relevant criteria for comfort and/or safety. In the areas where the wind conditions of the Proposed Envelope exceed the wind conditions of the Existing Scenario, these concerns will be addressed with wind tunnel testing during the detailed design stage and recommendations of mitigation measures. Given the assessment is currently limited to a sheer massing envelope, the detailed design is also expected to introduce building elements that may further improve the wind conditions within and around the site. As a general note, the use of loose glass-tops and light-weight sheets or covers (including loose BBQ lids) is not appropriate on high-rise outdoor terraces and balconies. Furthermore, lightweight furniture is not recommended unless it is securely attached to the balcony or terrace floor slab.

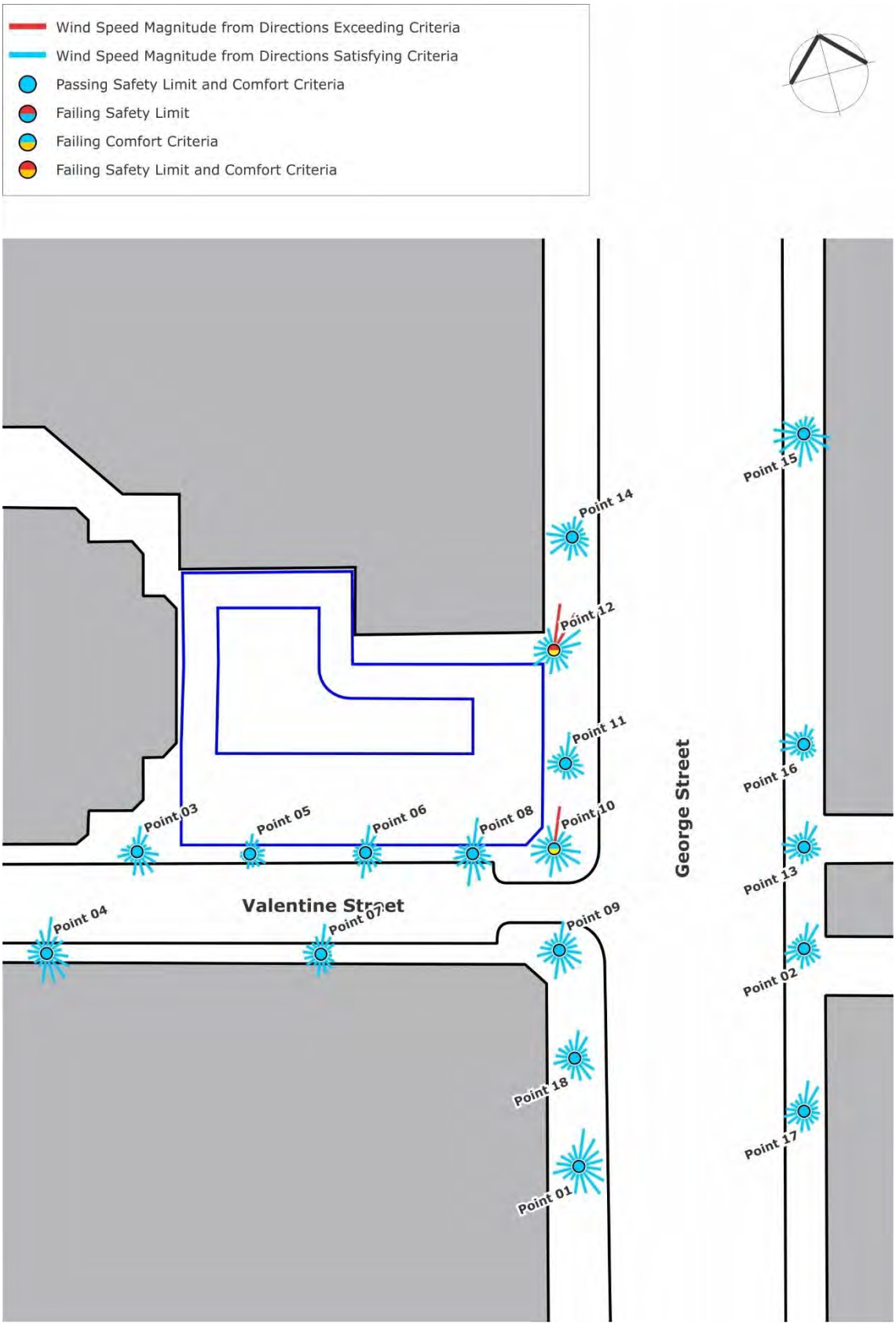


Figure 6a: Wind Tunnel Results – Base Case
(results shown without treatments applied)

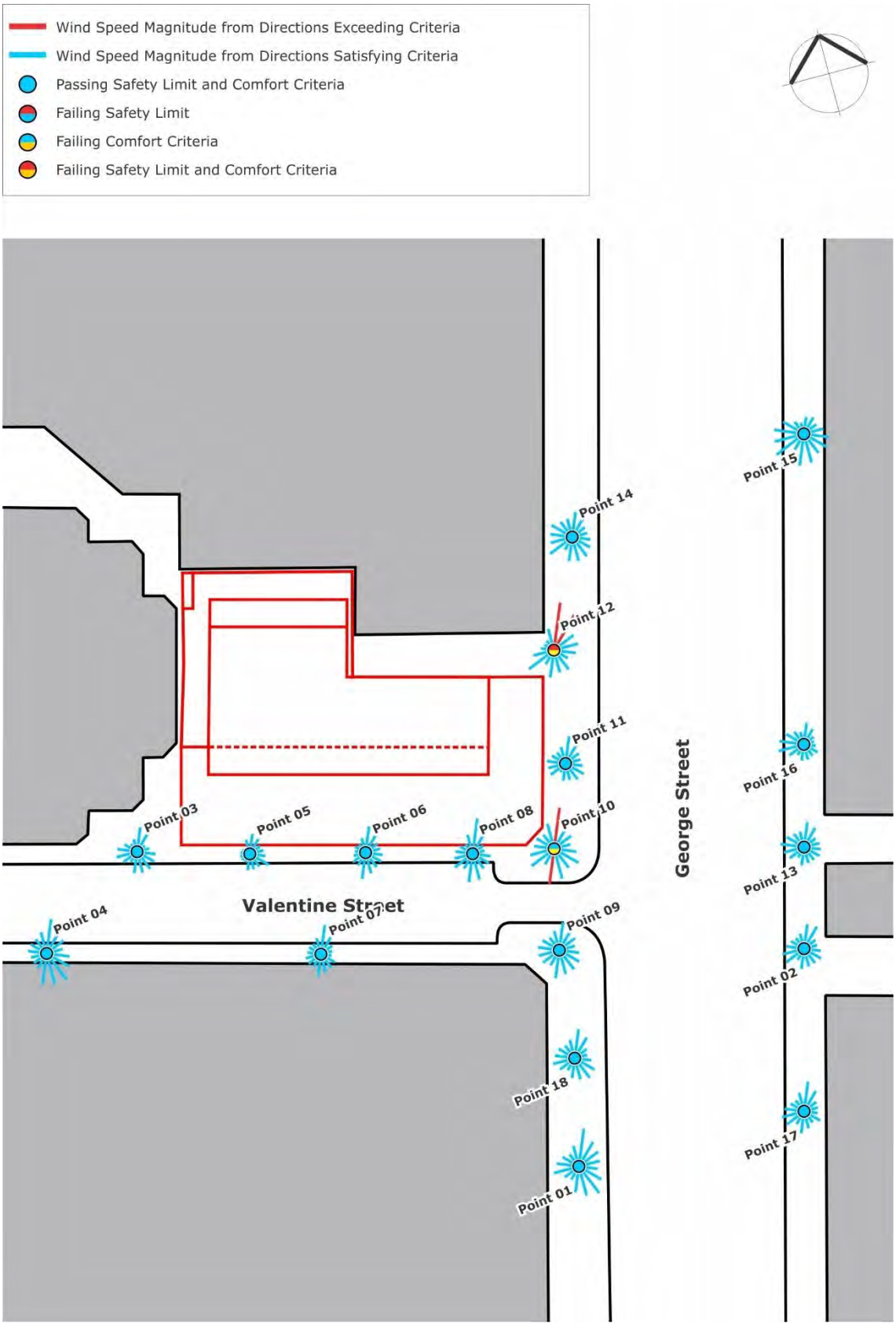


Figure 6b: Wind Tunnel Results – Proposed Case
(results shown without treatments applied)

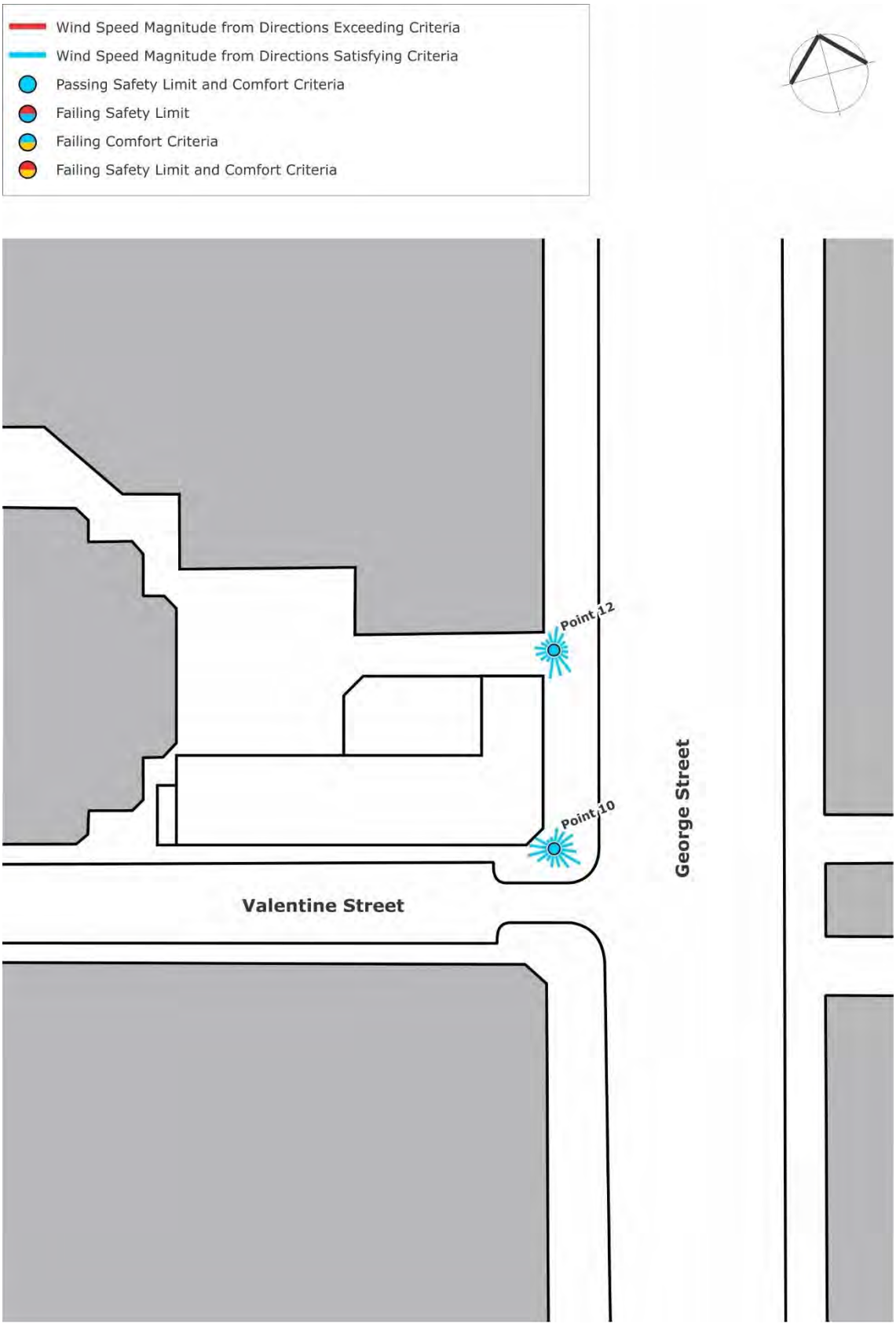


Figure 6c: Wind Tunnel Results – Existing Case
(results shown without treatments applied)

Table 5: Target Wind Speed Comfort Criteria

Legend	
Comfort Criteria	Wind Speed range (m/s)
Pedestrian Sitting	2 - 4
Pedestrian Standing	4 - 6
Pedestrian Walking	6 - 8
Uncomfortable	> 8

Table 6: Equivalent 5% Exceedance Wind Speeds and Target Criteria

Equivalent 5% exceedance wind speeds (m/s)			
Test Location	Criteria	Proposed Envelope Scenario	Base Case
P01	6 - 8	7.7	7.9
P02	6 - 8	5.5	5.7
P03	6 - 8	5.3	5.8
P04	6 - 8	7.6	7.4
P05	6 - 8	4.3	4.0
P06	6 - 8	5.4	5.5
P07	6 - 8	5.4	5.7
P08	6 - 8	6.8	7.1
P09	6 - 8	6.4	6.5
P10	6 - 8	8.3	8.2
P11	6 - 8	5.4	6.1
P12	6 - 8	9.1	9.1
P13	6 - 8	5.4	5.4
P14	6 - 8	6.2	6.0
P15	6 - 8	7.4	7.5
P16	6 - 8	5.2	5.1
P17	6 - 8	5.9	6.1
P18	6 - 8	6.0	6.1
Average		6.3	6.4

Table 7: Target Wind Speed Safety Criteria

Legend	
Safety Criteria (m/s)	Result
<24	Pass
≥24	Fail

Table 8: Annual Gust Wind Speed and Safety Criteria

Safety - Annual Gust Speed (m/s)			
Test Location	Criteria	Proposed Envelope Scenario	Base Case
P01	24	22	22
P02	24	15	16
P03	24	14	15
P04	24	21	22
P05	24	13	12
P06	24	17	16
P07	24	17	18
P08	24	21	21
P09	24	18	19
P10	24	24	24
P11	24	16	18
P12	24	28	28
P13	24	17	16
P14	24	18	18
P15	24	22	22
P16	24	18	18
P17	24	18	18
P18	24	17	16
Average		19	19

Table 9: Wind Tunnel Results Summary – Base Case

Study Point	GEM (5% exceedance)			Annual Gust			Final Result	Description of Treatment
	Criterion (m/s)	Results (%)	Grade	Criterion (m/s)	Results (m/s)	Grade		
Point 01	8.0	5%	Pass	24	22	Pass	Pass	
Point 02	8.0	< 1%	Pass	24	16	Pass	Pass	
Point 03	8.0	< 1%	Pass	24	15	Pass	Pass	
Point 04	8.0	3%	Pass	24	22	Pass	Pass	
Point 05	8.0	< 1%	Pass	24	12	Pass	Pass	
Point 06	8.0	< 1%	Pass	24	16	Pass	Pass	
Point 07	8.0	< 1%	Pass	24	18	Pass	Pass	
Point 08	8.0	2%	Pass	24	21	Pass	Pass	
Point 09	8.0	1%	Pass	24	19	Pass	Pass	
Point 10	8.0	6%	Fail	24	24	Pass	Fail	To be addressed during detail design stage
Existing		1%	Pass		18	Pass	Pass	
Point 11	8.0	1%	Pass	24	18	Pass	Pass	
Point 12	8.0	11%	Fail	24	28	Fail	Fail	
Existing		1%	Pass		18	Pass	Pass	
Point 13	8.0	< 1%	Pass	24	16	Pass	Pass	
Point 14	8.0	1%	Pass	24	18	Pass	Pass	
Point 15	8.0	4%	Pass	24	22	Pass	Pass	
Point 16	8.0	< 1%	Pass	24	18	Pass	Pass	
Point 17	8.0	1%	Pass	24	18	Pass	Pass	
Point 18	8.0	1%	Pass	24	16	Pass	Pass	

Note that, for any study points listed in Table 9 with two rows of results data, the second row is for the existing site conditions. The test results shown in Table 9 are without any treatments applied. If treatment is required, the treatment is described in Table 9.

Table 10: Wind Tunnel Results Summary – Proposed Case

Study Point	GEM (5% exceedance)			Annual Gust			Final Result	Description of Treatment
	Criterion (m/s)	Results (%)	Grade	Criterion (m/s)	Results (m/s)	Grade		
Point 01	8.0	4%	Pass	24	22	Pass	Pass	
Point 02	8.0	< 1%	Pass	24	15	Pass	Pass	
Point 03	8.0	< 1%	Pass	24	14	Pass	Pass	
Point 04	8.0	4%	Pass	24	21	Pass	Pass	
Point 05	8.0	< 1%	Pass	24	13	Pass	Pass	
Point 06	8.0	< 1%	Pass	24	17	Pass	Pass	
Point 07	8.0	< 1%	Pass	24	17	Pass	Pass	
Point 08	8.0	2%	Pass	24	21	Pass	Pass	
Point 09	8.0	1%	Pass	24	18	Pass	Pass	
Point 10	8.0	7%	Fail	24	24	Pass	Fail	To be addressed during detail design stage
Existing		1%	Pass		18	Pass	Pass	
Point 11	8.0	< 1%	Pass	24	16	Pass	Pass	
Point 12	8.0	10%	Fail	24	28	Fail	Fail	
Existing		1%	Pass		18	Pass	Pass	
Point 13	8.0	< 1%	Pass	24	17	Pass	Pass	
Point 14	8.0	1%	Pass	24	18	Pass	Pass	
Point 15	8.0	4%	Pass	24	22	Pass	Pass	
Point 16	8.0	1%	Pass	24	18	Pass	Pass	
Point 17	8.0	1%	Pass	24	18	Pass	Pass	
Point 18	8.0	1%	Pass	24	17	Pass	Pass	

Note that, for any study points listed in Table 9 with two rows of results data, the second row is for the existing site conditions. The test results shown in Table 9 are without any treatments applied. If treatment is required, the treatment is described in Table 9.

7 REFERENCES

American Society of Civil Engineers (ASCE), 2003, "Outdoor Human Comfort and its Assessment – State of the Art".

American Society of Civil Engineers (ASCE), ASCE-7-16, 2016, "Minimum Design Loads for Buildings and Other Structures".

Australasian Wind Engineering Society, QAM-1, 2019, "Quality Assurance Manual: Wind Engineering Studies of Buildings", edited by Rofail A.W., et al.

Australasian Wind Engineering Society (AWES), 2014, "Guidelines for Pedestrian Wind Effects Criteria".

Council on Tall Buildings and Urban Habitat (CTBUH), 2013, "Wind tunnel testing of high-rise buildings", CTBUH Technical Guides.

Davenport, A.G., 1972, "An approach to human comfort criteria for environmental conditions". Colloquium on Building Climatology, Stockholm.

Deaves, D.M. and Harris, R.I., 1978, "A mathematical model of the structure of strong winds." Construction Industry and Research Association (U.K), Report 76.

Engineering Science Data Unit, 1982, London, ESDU82026, "Strong Winds in the Atmospheric Boundary Layer, Part 1: Hourly Mean Wind Speeds", with Amendments A to E (issued in 2002).

Melbourne, W.H., 1978, "Criteria for Environmental Wind Conditions". Journal of Wind Engineering and Industrial Aerodynamics, vol. 3, pp241-249.

Rofail, A.W., and Kwok, K.C.S., 1991, "A Reliability Study of Wind Tunnel Results of Cladding Pressures". Proceedings of the 8th International Conference on Wind Engineering, Canada.

Rofail, A.W., 2007, "Comparison of Wind Environment Criteria against Field Observations". 12th International Conference of Wind Engineering, Cairns, Australia.

Standards Australia and Standards New Zealand, AS/NZS 1170.2, 2011, "SAA Wind Loading Standard, Part 2: Wind Actions".

APPENDIX A PUBLISHED ENVIRONMENTAL CRITERIA

A.1 Wind Effects on People

The acceptability of wind in an area is dependent upon the use of the area. For example, people walking or window-shopping will tolerate higher wind speeds than those seated at an outdoor restaurant. Quantifying wind comfort has been the subject of much research and many researchers, such as A.G. Davenport, T.V. Lawson, W.H. Melbourne, and A.D. Penwarden, have published criteria for pedestrian comfort for pedestrians in outdoor spaces for various types of activities. This section discusses and compares the various published criteria.

A.2 A.D. Penwarden (1973) Criteria for Mean Wind Speeds

A.D. Penwarden (1973) developed a modified version of the Beaufort scale which describes the effects of various wind intensities on people. Table A.1 presents the modified Beaufort scale. Note that the effects listed in this table refers to wind conditions occurring frequently over the averaging time (a probability of occurrence exceeding 5%). Higher ranges of wind speeds can be tolerated for rarer events.

Table A.1: Summary of Wind Effects on People (A.D. Penwarden, 1973)

Type of Winds	Beaufort Number	Hourly Mean Wind Speed (m/s)	Effects
Calm	0	0 - 0.3	
Calm, light air	1	0.3 - 1.6	No noticeable wind
Light breeze	2	1.6 - 3.4	Wind felt on face
Gentle breeze	3	3.4 - 5.5	Hair is disturbed, clothing flaps, newspapers difficult to read
Moderate breeze	4	5.5 – 8.0	Raises dust, dry soil and loose paper, hair disarranged
Fresh breeze	5	8.0 – 10.8	Force of wind felt on body, danger of stumbling
Strong breeze	6	10.8 – 13.9	Umbrellas used with difficulty, hair blown straight, difficult to walk steadily, wind noise on ears unpleasant
Near gale	7	13.9 – 17.2	Inconvenience felt when walking
Gale	8	17.2 - 20.8	Generally impedes progress, difficulty balancing in gusts
Strong gale	9	20.8 – 24.5	People blown over

A.3 A.G. Davenport (1972) Criteria for Mean Wind Speeds

A.G. Davenport (1972) also determined a set of criteria in terms of the Beaufort scale and for various return periods. Table A.2 presents a summary of the criteria based on a probability of exceedance of 5%.

Table A.2: Criteria by A.G. Davenport (1972)

Classification	Activities	5% exceedance Mean Wind Speed (m/s)
Walking Fast	Acceptable for walking, main public accessways.	7.5 - 10.0
Strolling, Skating	Slow walking, etc.	5.5 - 7.5
Short Exposure Activities	Generally acceptable for walking & short duration stationary activities such as window-shopping, standing or sitting in plazas.	3.5 - 5.5
Long Exposure Activities	Generally acceptable for long duration stationary activities such as in outdoor restaurants & theatres and in parks.	0 - 3.5

A.4 T.V. Lawson (1975) Criteria for Mean Wind Speeds

In 1973, T.V. Lawson, while referring to the Beaufort wind speeds of A.D. Penwarden (1973) (as listed in Table A.1), quoted that a Beaufort 4 wind speed would be acceptable if it is not exceeded for more than 4% of the time, and that a Beaufort 6 wind speed would be unacceptable if it is exceeded more than 2% of the time. Later, in 1975, T.V. Lawson presented a set of criteria very similar to those presented in A.G. Davenport (1972) (as listed in Table A.2). These criteria are presented in Table A.3 and Table A.4 for safety and comfort respectively.

Table A.3: Safety Criteria by T.V. Lawson (1975)

Classification	Activities	Annual Mean Wind Speed (m/s)
Safety (all weather areas)	Accessible by the general public.	0 – 15
Safety (fair weather areas)	Private areas, balconies/terraces, etc.	0 – 20

Table A.4: Comfort Criteria by T.V. Lawson (1975)

Classification	Activities	5% exceedance Mean Wind Speed (m/s)
Business Walking	Objective Walking from A to B.	8 - 10
Pedestrian Walking	Slow walking, etc.	6 - 8
Short Exposure Activities	Pedestrian standing or sitting for short times.	4 – 6
Long Exposure Activities	Pedestrian sitting for a long duration.	0 - 4

A.5 W.H. Melbourne (1978) Criteria for Gust Wind Speeds

W.H. Melbourne (1978) introduced a set of criteria for the assessment of environmental wind conditions that were developed for a temperature range of 10°C to 30°C and for people suitably dressed for outdoor conditions. These criteria are presented in Table A.5, and are based on maximum gust wind speeds with a probability of exceedance of once per year.

Table A.5: Criteria by W.H. Melbourne (1978)

Classification	Activities	Annual Gust Wind Speed (m/s)
Limit for Safety	Completely unacceptable: people likely to get blown over.	23
Marginal	Unacceptable as main public accessways.	16 - 23
Comfortable Walking	Acceptable for walking, main public accessways	13 - 16
Short Exposure Activities	Generally acceptable for walking & short duration stationary activities such as window-shopping, standing or sitting in plazas.	10 - 13
Long Exposure Activities	Generally acceptable for long duration stationary activities such as in outdoor restaurants & theatres and in parks.	0 - 10

A.6 Comparison of the Published Wind Speed Criteria

W.H. Melbourne (1978) presented a comparison of the criteria of various researchers on a probabilistic basis. Figure A.1 presents the results of this comparison, and indicates that the criteria of W.H. Melbourne (1978) are comparatively quite conservative. This conclusion was also observed by A.W. Rofail (2007) when undertaking on-site remedial studies. The results of A.W. Rofail (2007) concluded that the criteria by W.H. Melbourne (1978) generally overstates the wind effects in a typical urban setting due to the assumption of a fixed 15% turbulence intensity for all areas. It was observed in A.W. Rofail (2007) that the 15% turbulence intensity assumption is not real and that the turbulence intensities at 1.5m above ground is at least 20% and in a suburban or urban setting is generally in the range of 30% to 60%.

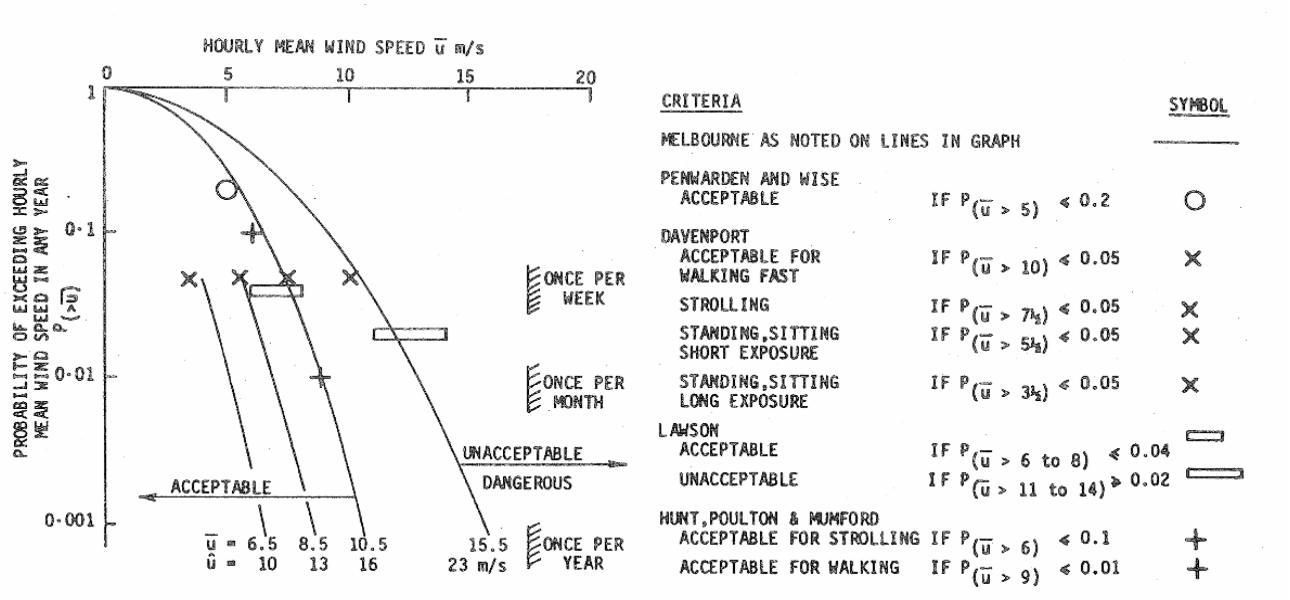


Figure A.1: Comparison of Various Mean and Gust Wind Environment Criteria, assuming 15% turbulence and a Gust Factor of 1.5 (W.H. Melbourne, 1978)

A.7 References relating to Pedestrian Comfort Criteria

Davenport, A.G., 1972, "An approach to human comfort criteria for environmental conditions". Colloquium on Building Climatology, Stockholm.

Davenport, A.G., 1977, "The prediction of risk under wind loading", 2nd International Conference on Structural Safety and Reliability, Munich, Germany, pp511-538.

Lawson, T.V., 1973, "The wind environment of buildings: a logical approach to the establishment of criteria". Bristol University, Department of Aeronautical Engineering.

Lawson, T.V., 1975, "The determination of the wind environment of a building complex before construction". Bristol University, Department of Aeronautical Engineering.

Melbourne, W.H., 1978, "Criteria for Environmental Wind Conditions". Journal of Wind Engineering and Industrial Aerodynamics, vol. 3, pp241-249.

Penwarden, A.D. (1973). "Acceptable Wind Speeds in Towns", Building Science, vol. 8: pp259–267.

Penwarden, A.D., Wise A.F.E., 1975, "Wind Environment Around Buildings". Building Research Establishment Report, London.

Rofail, A.W., 2007, "Comparison of Wind Environment Criteria against Field Observations". 12th International Conference of Wind Engineering, Cairns, Australia.

APPENDIX B DATA ACQUISITION

The wind tunnel testing procedures utilised for this study were based on the guidelines set out in the Australasian Wind Engineering Society Quality Assurance Manual (AWES-QAM-1-2019), ASCE 7-16 (Chapter C31), and CTBUH (2013). The wind speed measurements for the wind tunnel study were determined as coefficients using data acquired by either Dantec hot-wire probe anemometers or pressure-based wind speed sensors and converted to full-scale wind speeds using details of the regional wind climate obtained from an analysis of directional wind speed recordings from the local meteorological recording station(s).

B.1 Measurement of the Velocity Coefficients

The study model and proximity model were setup within the wind tunnel which was configured to the appropriate boundary layer profile, and the wind velocity measurements were monitored using either Dantec hot-wire probe anemometers or pressure-based wind speed sensors at selected critical outdoor locations. The wind velocity results presented in this study for each study point are representative of wind at a full-scale height of approximately 1.5m above ground/slab level. In the case of the Dantec hot-wire probe anemometers, the support of the probe is mounted such that the probe wire is vertical as much as possible to ensure that the measured wind speeds are independent of wind direction along the horizontal plane. In addition, care was taken in the alignment of the hot-wire probe wire and in avoiding wall-heating effects.

Wind speed measurements were made in the wind tunnel for 16 wind directions, at 22.5° increments. Data was acquired for each wind direction using a sample rate of 1024Hz. The sample length was determined to produce a full-scale sample time that is sufficient for this type of study. In the case of the pressure-based wind speed sensors, the phase lag between the various channels where data is acquired simultaneously is within 10% of a typical pressure cycle, and the signal is low-pass filtered at 500Hz and then digital filtering is applied over this range to provide an unbiased response from the pressure measurement system (A.W. Rofail, 2004).

The mean, gust and standard deviation velocity coefficients were determined from the data acquired in the wind tunnel. The gust velocity coefficients were also derived for each wind direction from by the following relation:

$$\hat{C}_V = \bar{C}_V + g \cdot \sigma_{C_V} \qquad \text{B.1}$$

where:

$\hat{C}_V$ is the gust velocity coefficient.

$\bar{C}_V$ is the mean velocity coefficient.

g is the peak factor, taken as 3.0 for a 3-sec gust and 3.4 for a 0.5-sec gust.

σ_{C_V} is the standard deviation of the velocity coefficient measurement.

In the case of a Dantec hot-wire probe anemometer, the velocity coefficient is obtained as follows:

$$C_V = \frac{C_{V,study}}{C_{V,200m}} \quad \text{B.2}$$

where:

$C_{V,study}$ is the velocity coefficient measurement obtained from the Dantec hot-wire probe anemometer at the study point location.

$C_{V,200m}$ is the velocity coefficient measurement obtained from the Dantec hot-wire probe anemometer at the free-stream reference location at 200m height upwind of the model in the wind tunnel.

However, in the case of the pressure-based wind speed sensors, these are determined from the measured differential mean, standard deviation and maximum pressure coefficients obtained from the wind speed sensor. For this analysis all calculations are performed on the square root of the differential pressure measurements. The velocity coefficient at the pressure-based wind speed sensor location is then calculated as follows:

$$C_V = \frac{\alpha + \beta\sqrt{\Delta p}}{V_{200m}} \quad \text{B.3}$$

where:

C_V is the velocity coefficient measurement at the study point location.

α is a calibration coefficient for the pressure-based wind speed sensor.

β is a calibration coefficient for the pressure-based wind speed sensor.

Δp is the differential pressure obtained from the pressure-based wind speed sensor at the study point location.

V_{200m} is the wind speed at the free-stream reference location of 200m height (full-scale) in the wind tunnel, which is determined directly in the wind tunnel using a pitot static probe.

B.2 Calculation of the Full-Scale Results

The full-scale results determine if the wind conditions at a study location satisfy the designated criteria of that location. More specifically, the full-scale results need to determine the probability of exceedance of a given wind speed at a study location. To determine the probability of exceedance, the measured velocity coefficients were combined with a statistical model of the local wind climate that relates wind speed to a probability of exceedance. Details of the wind climate model are outlined in Section 4 of the main report.

The statistical model of the wind climate includes the impact of wind directionality as any local variations in wind speed or frequency with wind direction. This is important as the wind directions that produce the highest wind speed events for a region may not coincide with the most wind exposed direction at the site.

The methodology adopted for the derivation of the full-scale results for the maximum gust and the GEM wind speeds are outlined in the following sub-sections.

B.3 Maximum Gust Wind Speeds

The full-scale maximum gust wind speed at each study point location is derived from the measured coefficient using the following relationship:

$$V_{study} = V_{ref,RH}\left(\frac{k_{200m,tr,T=1hr}}{k_{RH,tr,T=1hr}}\right)C_V \qquad \text{B.4}$$

where:

V_{study} is the full-scale wind speed at the study point location.

$V_{ref,RH}$ is the full-scale reference wind speed at the study reference height. This value is determined by combining the directional wind speed data for the region (detailed in Section 4) and the upwind terrain and height multipliers for the site (detailed in Section 3).

$k_{200m,tr,T=1hr}$ is the hourly mean terrain and height multiplier at the free-stream reference location of 200m height.

$k_{RH,tr,T=1hr}$ is the hourly mean terrain and height multiplier at the study reference height (Section 3).

C_V is the velocity coefficient, obtained from either Equation B.2 (in the case of Dantec hot-wire probe anemometers) or Equation B.3 (in the case of pressure-based wind speed sensors).

The value of $V_{ref,RH}$ varies with each prevailing wind direction. Wind directions where there is a high probability that a strong wind will occur have a higher directional wind speed than other directions. To determine the directional wind speeds, a probability level must be assigned for each wind direction. These probability levels are set following the approach used in AS/NZS1170.2:2011, which assumes that the major contributions to the combined probability of exceedance of a typical load effect comes from only two 45 degree sectors.

B.4 Maximum Gust-Equivalent Mean Wind Speeds

The contribution to the probability of exceedance of a specified wind speed (ie: the desired wind speed for pedestrian comfort, as per the criteria) was calculated for each wind direction. These contributions are then combined over all wind directions to calculate the total probability of exceedance of the specified wind speed. To calculate the probability of exceedance for a specified wind speed a statistical wind climate model was used to describe the relationship between directional wind speeds and the probability of exceedance. A detailed description of the methodology is given by T.V. Lawson (1980).

The criteria used in this study is referenced to a probability of exceedance of 5% of a specified wind speed.

B.5 References relating to Data Acquisition

American Society of Civil Engineers (ASCE), ASCE-7-16, 2016, "Minimum Design Loads for Buildings and Other Structures".

Australasian Wind Engineering Society, QAM-1, 2019, "Quality Assurance Manual: Wind Engineering Studies of Buildings", edited by Rofail A.W., et al.

Council on Tall Buildings and Urban Habitat (CTBUH), 2013, "Wind tunnel testing of high-rise buildings", CTBUH Technical Guides.

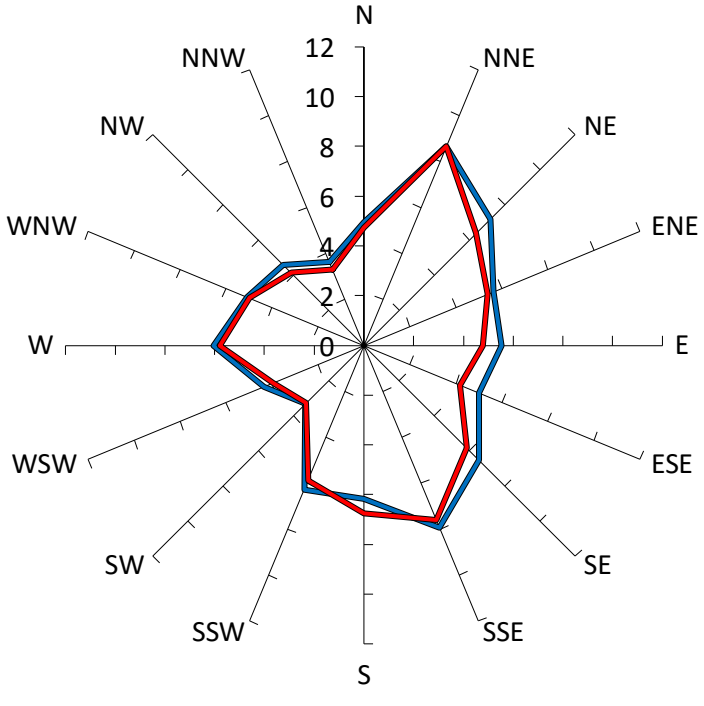
Lawson, T.V., 1980, "Wind Effects on Buildings - Volume 1, Design Applications". Applied Science Publishers Ltd, Ripple Road, Barking, Essex, England.

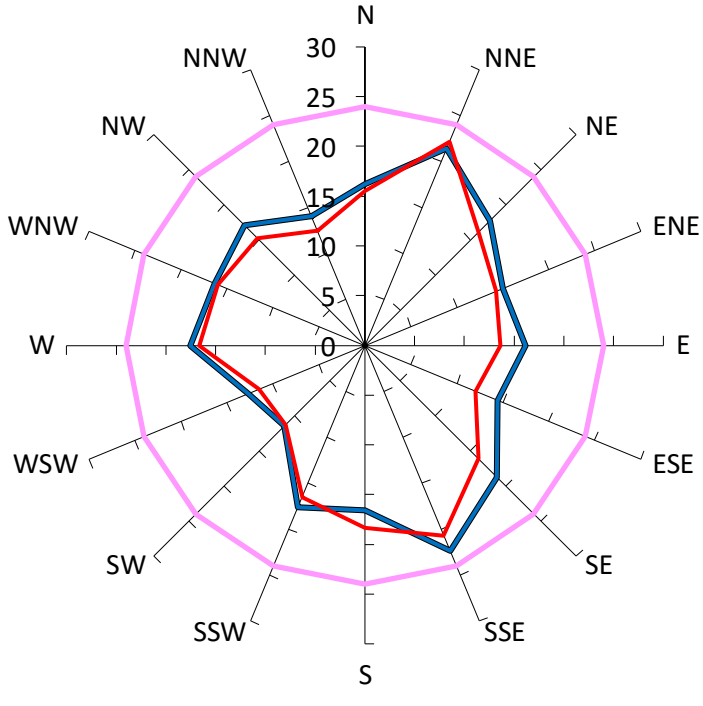
Rofail A.W., Tonin, R., and Hanafi, D., 2004, "Sensitivity of frequency response to type of tubing", Australasian Wind Engineering Workshop, Darwin.

Standards Australia and Standards New Zealand, AS/NZS 1170.2, 2011, "SAA Wind Loading Standard, Part 2: Wind Actions".

Results for Point 01

Gust Equivalent Mean (m/s)	Maximum Gust (m/s)





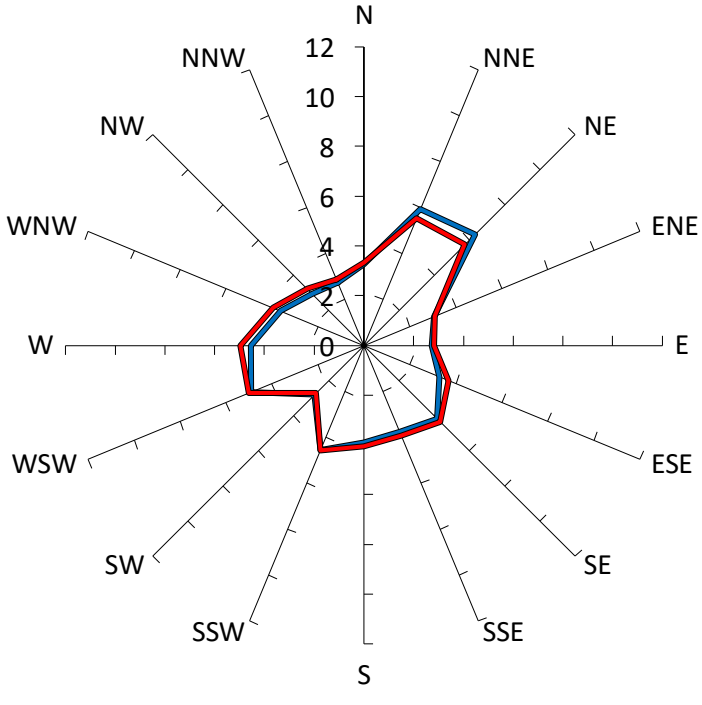
Comfort Criteria: 8m/s with 5% probability of exceedence

Safety Limit: 24m/s

	Description	GEM Prob of Exceed %	Peak Gust m/s
	Criterion: Wind Comfort Standard for Walking Criterion (8m/s). Safety Limit (24m/s).	5%	24
	Base Case, no vegetation or other treatments.	5%	22
	Proposed Case, no vegetation or other treatments.	4%	22

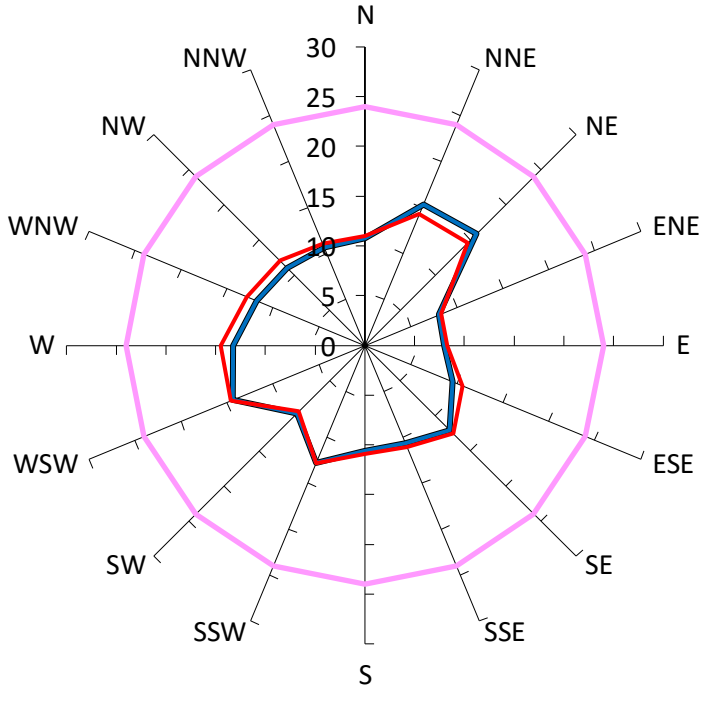
Results for Point 02

Gust Equivalent Mean (m/s)



Comfort Criteria: 8m/s with 5% probability of exceedence

Maximum Gust (m/s)

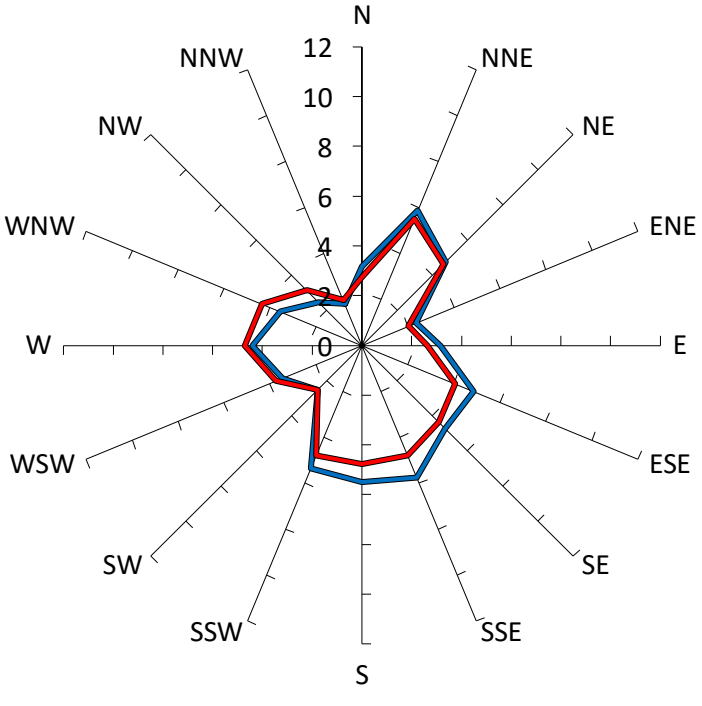


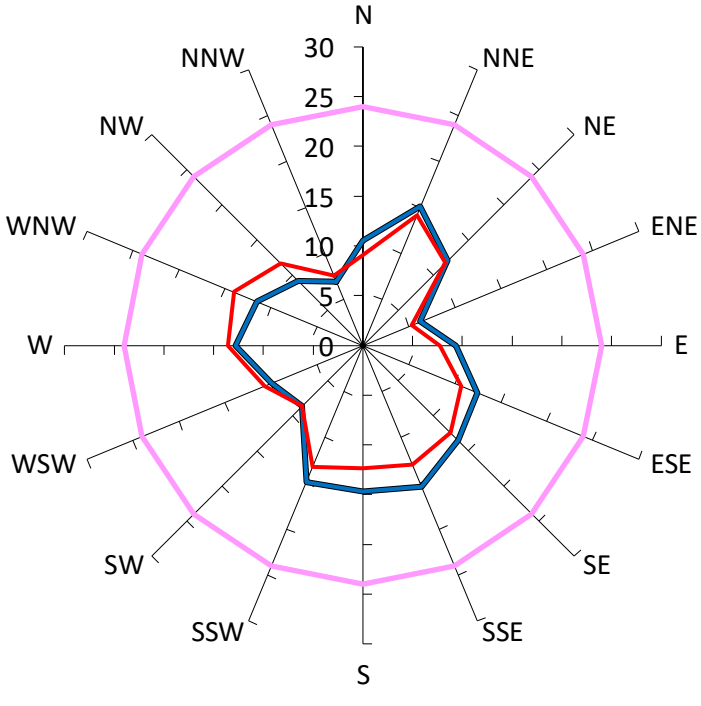
Safety Limit: 24m/s

Description	GEM Prob of Exceed %	Peak Gust m/s
Criterion: Wind Comfort Standard for Walking Criterion (8m/s). Safety Limit (24m/s).	5%	24
Base Case, no vegetation or other treatments.	< 1%	16
Proposed Case, no vegetation or other treatments.	< 1%	15

Results for Point 03

Gust Equivalent Mean (m/s)	Maximum Gust (m/s)





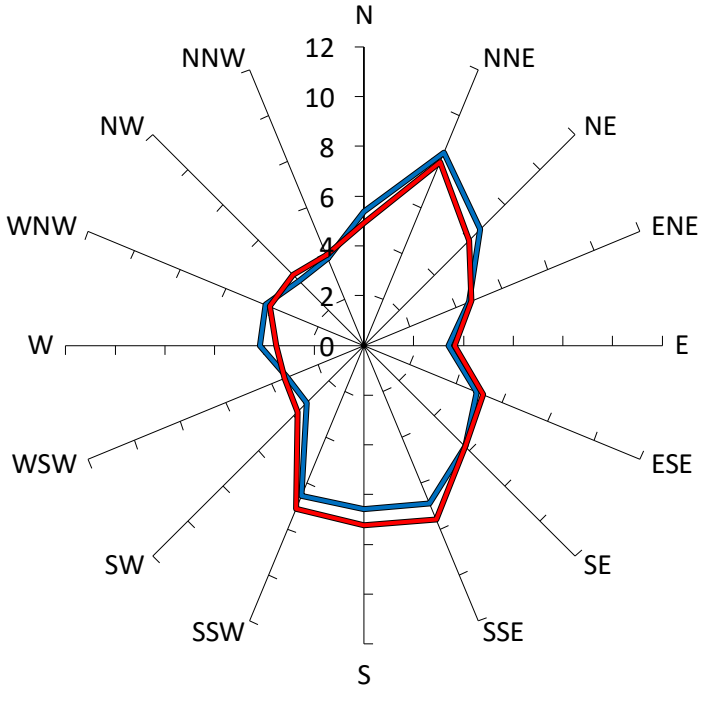
Comfort Criteria: 8m/s with 5% probability of exceedence

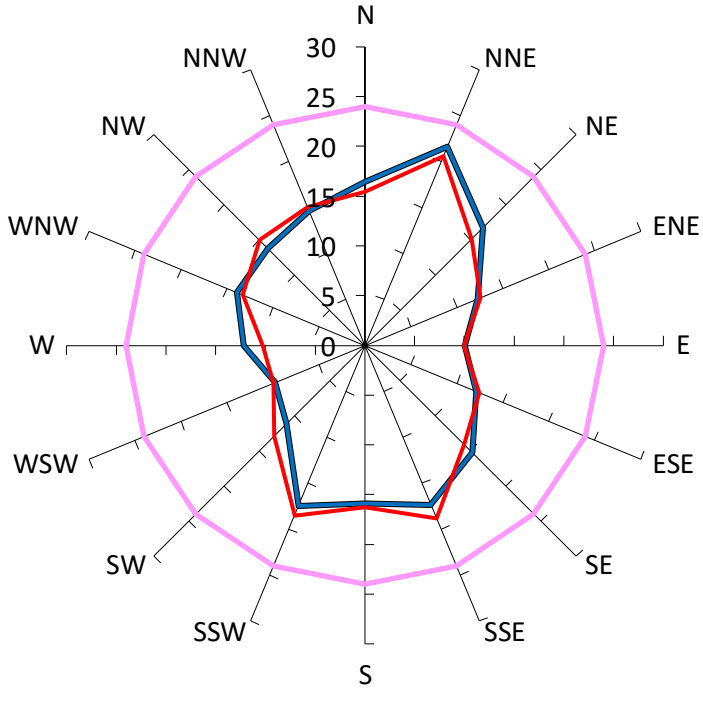
Safety Limit: 24m/s

	Description	GEM Prob of Exceed %	Peak Gust m/s
	Criterion: Wind Comfort Standard for Walking Criterion (8m/s). Safety Limit (24m/s).	5%	24
	Base Case, no vegetation or other treatments.	< 1%	15
	Proposed Case, no vegetation or other treatments.	< 1%	14

Results for Point 04

Gust Equivalent Mean (m/s)	Maximum Gust (m/s)





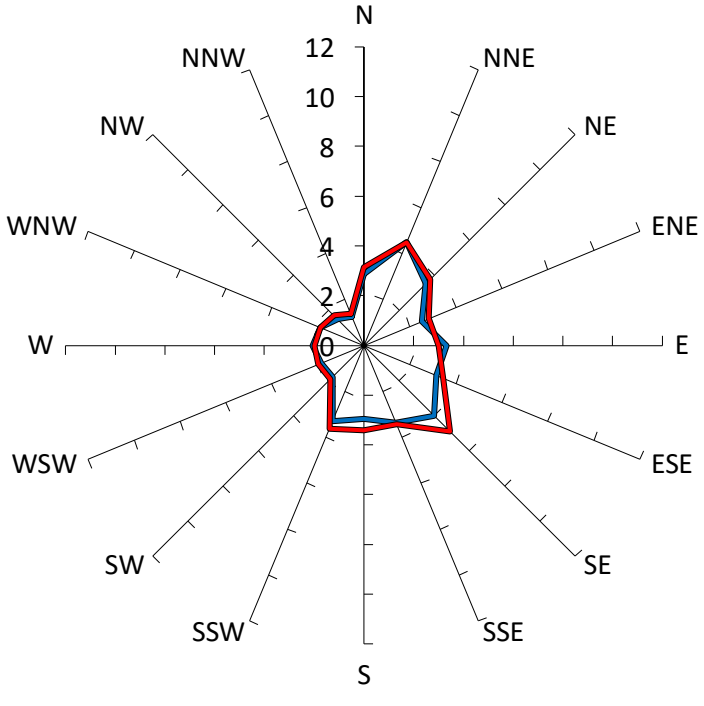
Comfort Criteria: 8m/s with 5% probability of exceedence

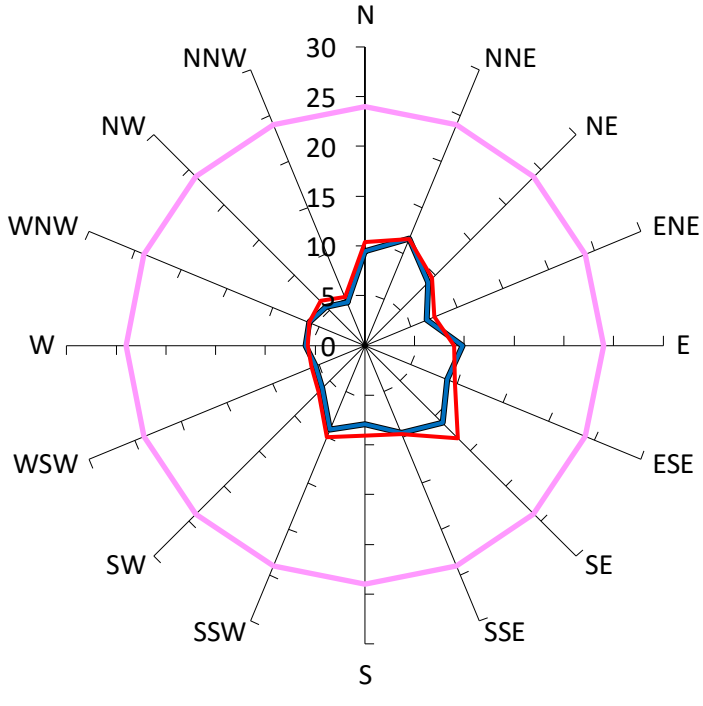
Safety Limit: 24m/s

	Description	GEM Prob of Exceed %	Peak Gust m/s
	Criterion: Wind Comfort Standard for Walking Criterion (8m/s). Safety Limit (24m/s).	5%	24
	Base Case, no vegetation or other treatments.	3%	22
	Proposed Case, no vegetation or other treatments.	4%	21

Results for Point 05

Gust Equivalent Mean (m/s)	Maximum Gust (m/s)





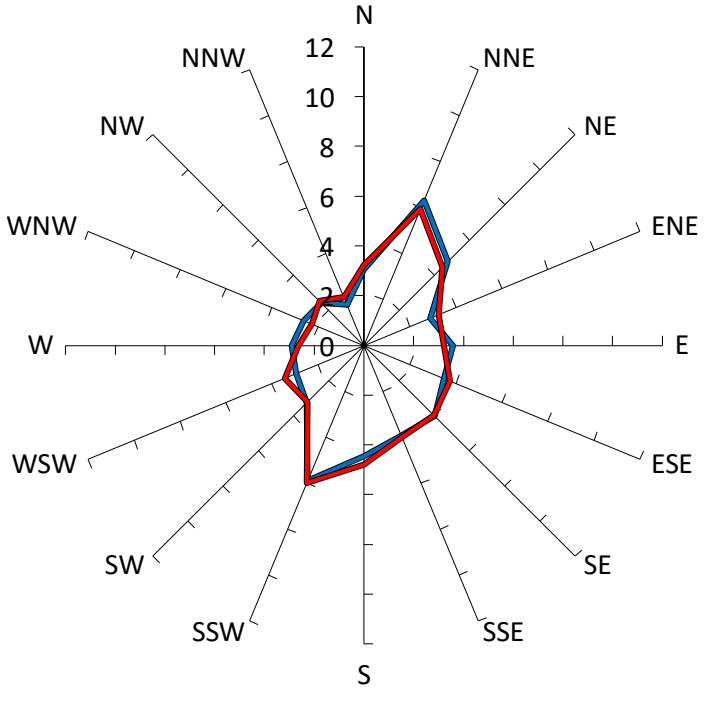
Comfort Criteria: 8m/s with 5% probability of exceedence

Safety Limit: 24m/s

	Description	GEM Prob of Exceed %	Peak Gust m/s
	Criterion: Wind Comfort Standard for Walking Criterion (8m/s). Safety Limit (24m/s).	5%	24
	Base Case, no vegetation or other treatments.	< 1%	12
	Proposed Case, no vegetation or other treatments.	< 1%	13

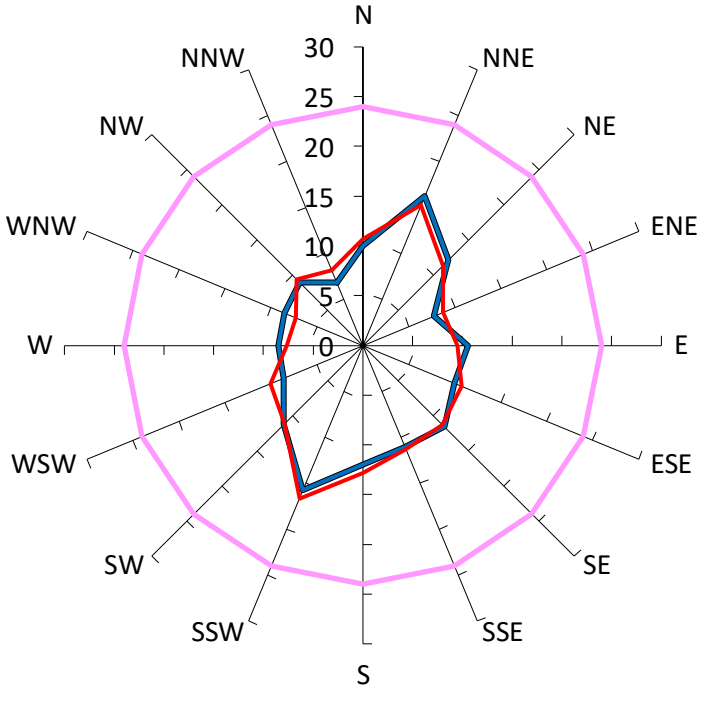
Results for Point 06

Gust Equivalent Mean (m/s)



Comfort Criteria: 8m/s with 5% probability of exceedence

Maximum Gust (m/s)

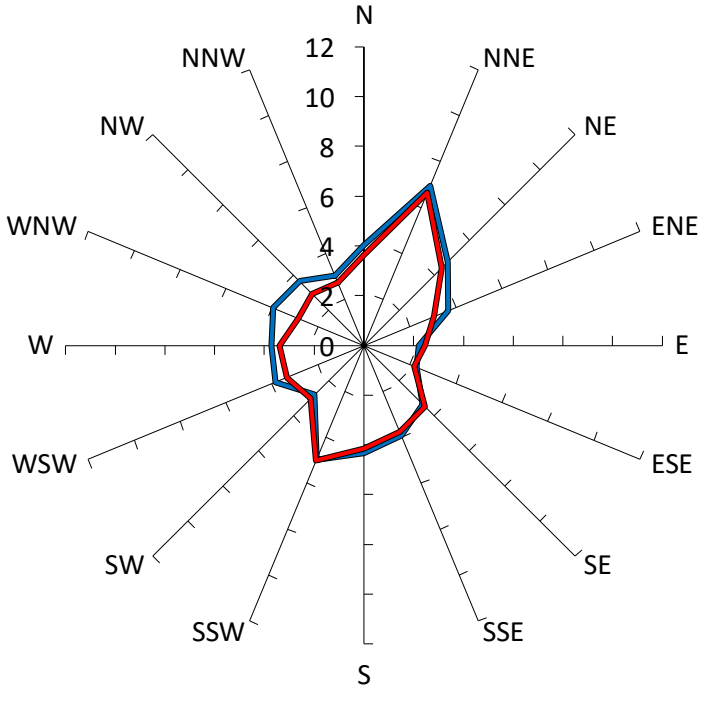


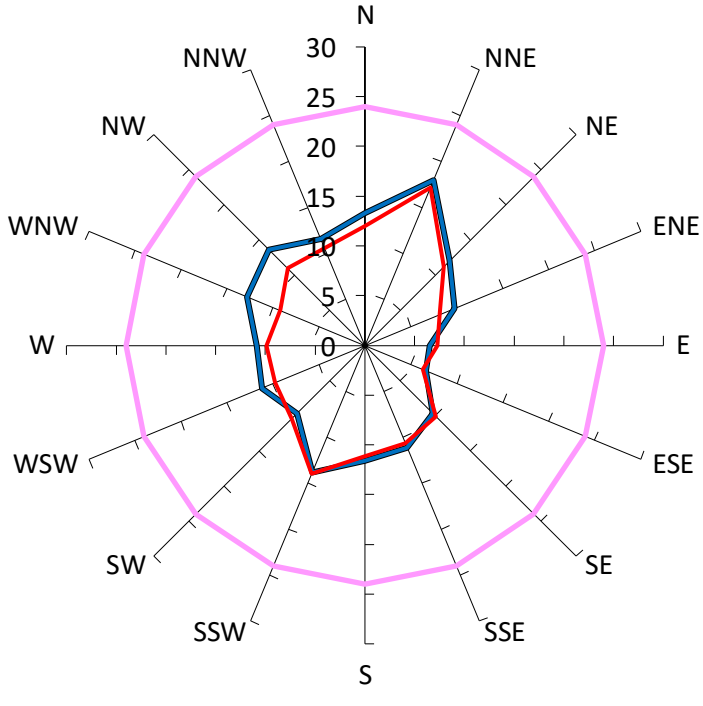
Safety Limit: 24m/s

Description	GEM Prob of Exceed %	Peak Gust m/s
Criterion: Wind Comfort Standard for Walking Criterion (8m/s). Safety Limit (24m/s).	5%	24
Base Case, no vegetation or other treatments.	< 1%	16
Proposed Case, no vegetation or other treatments.	< 1%	17

Results for Point 07

Gust Equivalent Mean (m/s)	Maximum Gust (m/s)





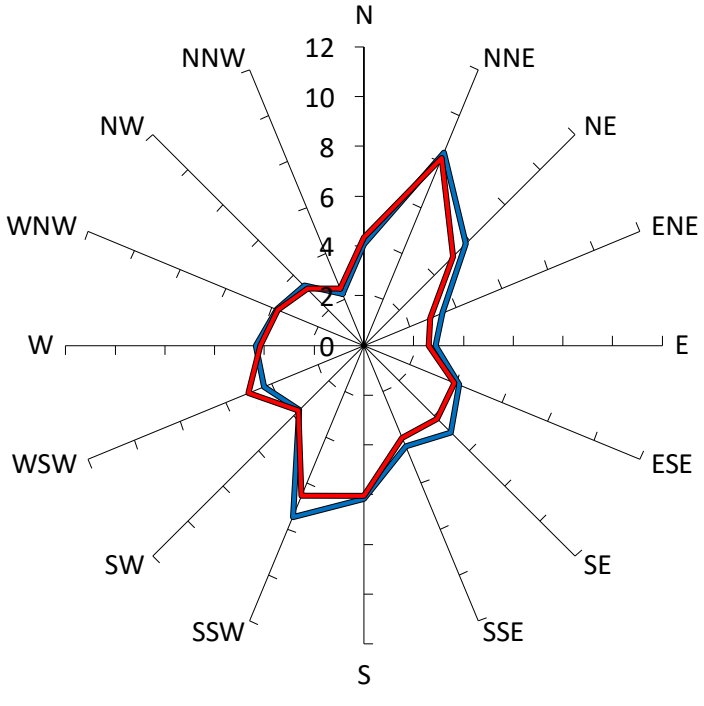
Comfort Criteria: 8m/s with 5% probability of exceedence

Safety Limit: 24m/s

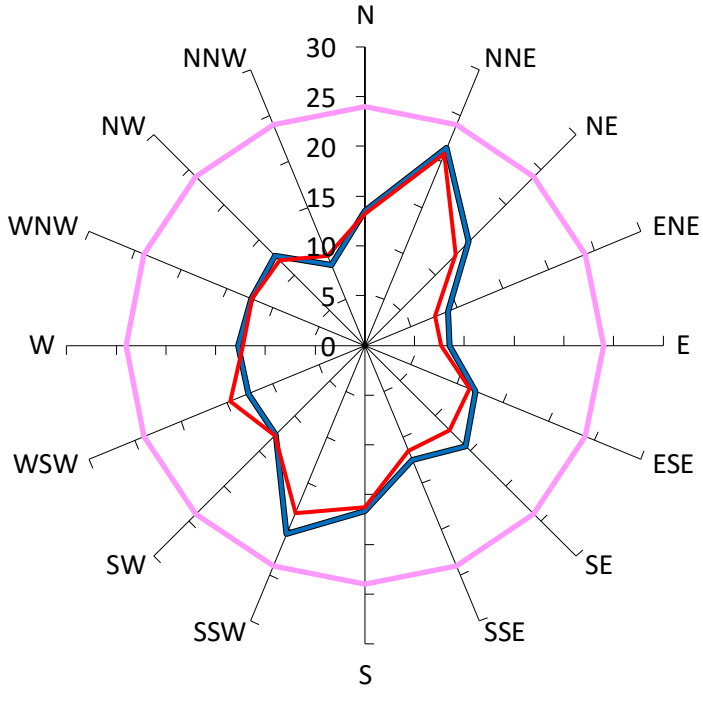
	Description	GEM Prob of Exceed %	Peak Gust m/s
	Criterion: Wind Comfort Standard for Walking Criterion (8m/s). Safety Limit (24m/s).	5%	24
	Base Case, no vegetation or other treatments.	< 1%	18
	Proposed Case, no vegetation or other treatments.	< 1%	17

Results for Point 08

Gust Equivalent Mean (m/s)	Maximum Gust (m/s)



Comfort Criteria: 8m/s with 5% probability of exceedence

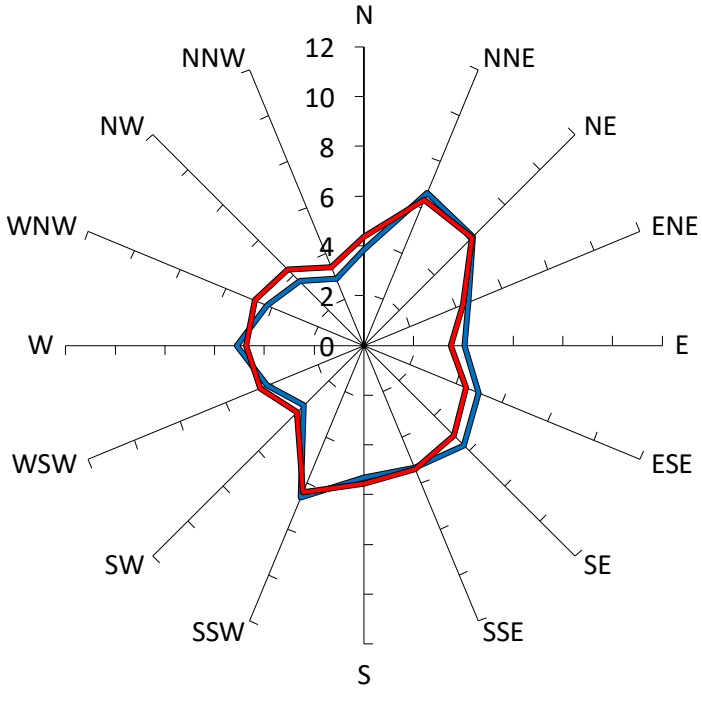


Safety Limit: 24m/s

	Description	GEM Prob of Exceed %	Peak Gust m/s
	Criterion: Wind Comfort Standard for Walking Criterion (8m/s). Safety Limit (24m/s).	5%	24
	Base Case, no vegetation or other treatments.	2%	21
	Proposed Case, no vegetation or other treatments.	2%	21

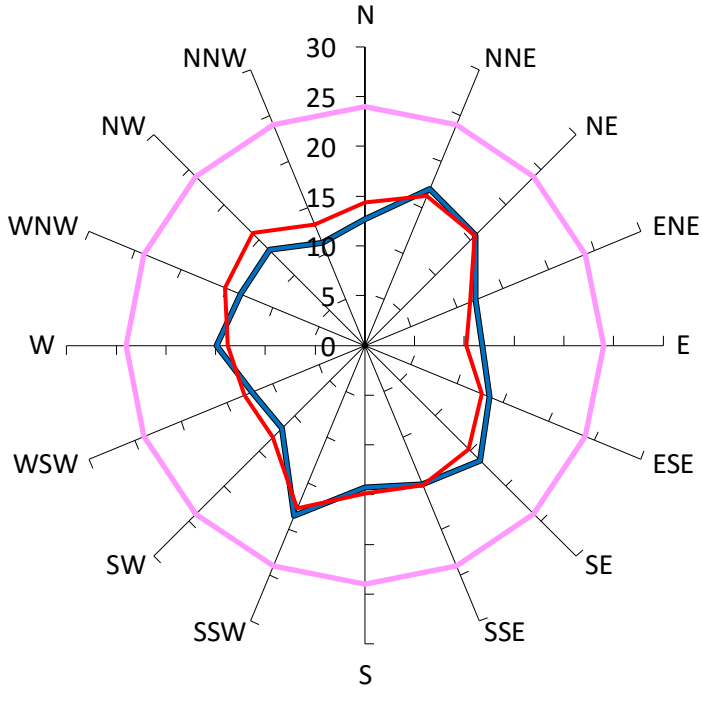
Results for Point 09

Gust Equivalent Mean (m/s)



Comfort Criteria: 8m/s with 5% probability of exceedence

Maximum Gust (m/s)

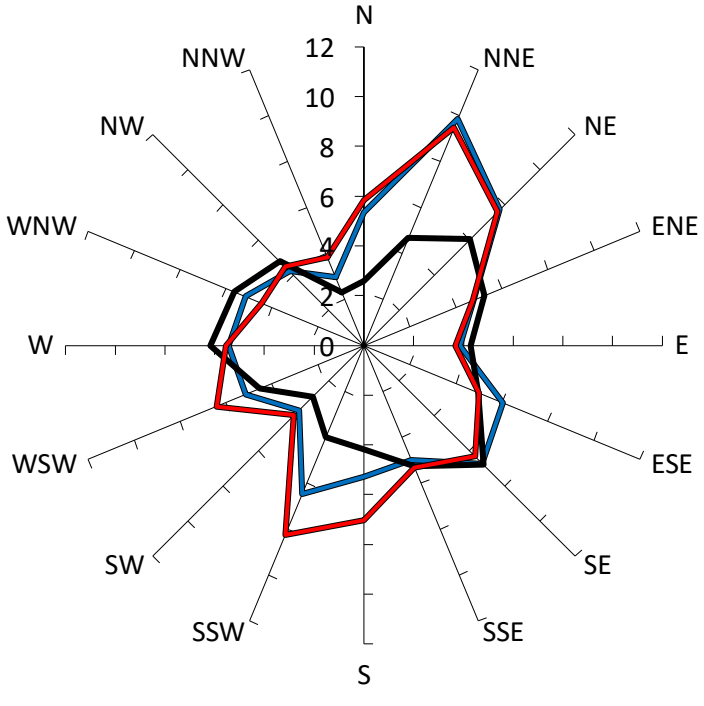


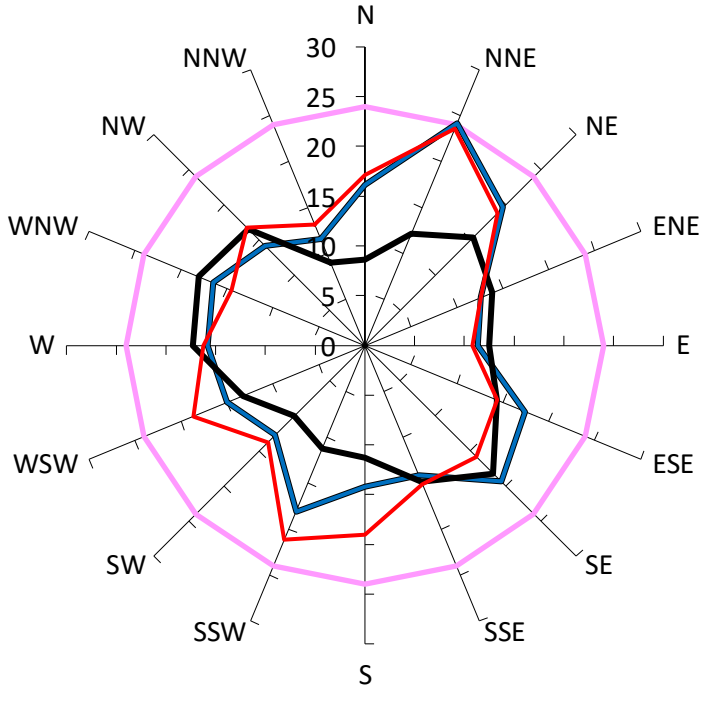
Safety Limit: 24m/s

Description	GEM Prob of Exceed %	Peak Gust m/s
Criterion: Wind Comfort Standard for Walking Criterion (8m/s). Safety Limit (24m/s).	5%	24
Base Case, no vegetation or other treatments.	1%	19
Proposed Case, no vegetation or other treatments.	1%	18

Results for Point 10

Gust Equivalent Mean (m/s)	Maximum Gust (m/s)





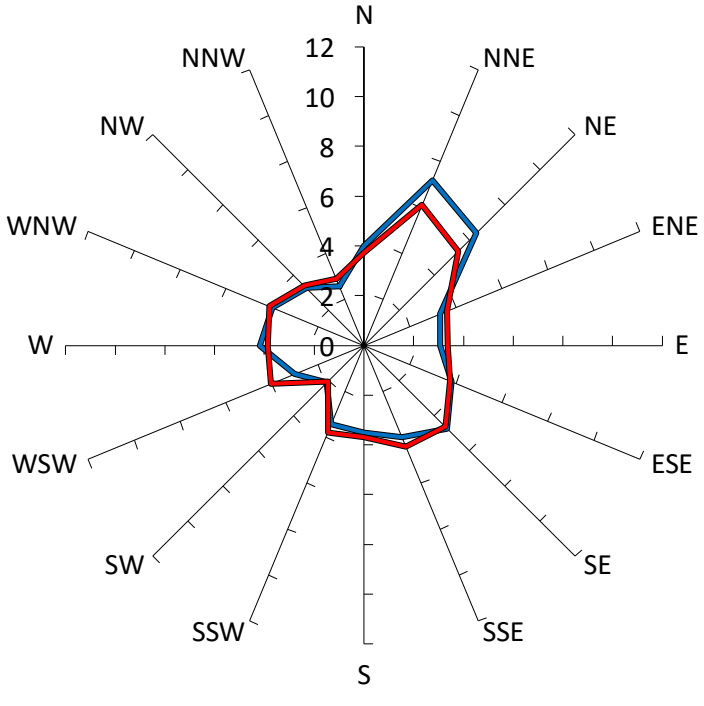
Comfort Criteria: 8m/s with 5% probability of exceedence

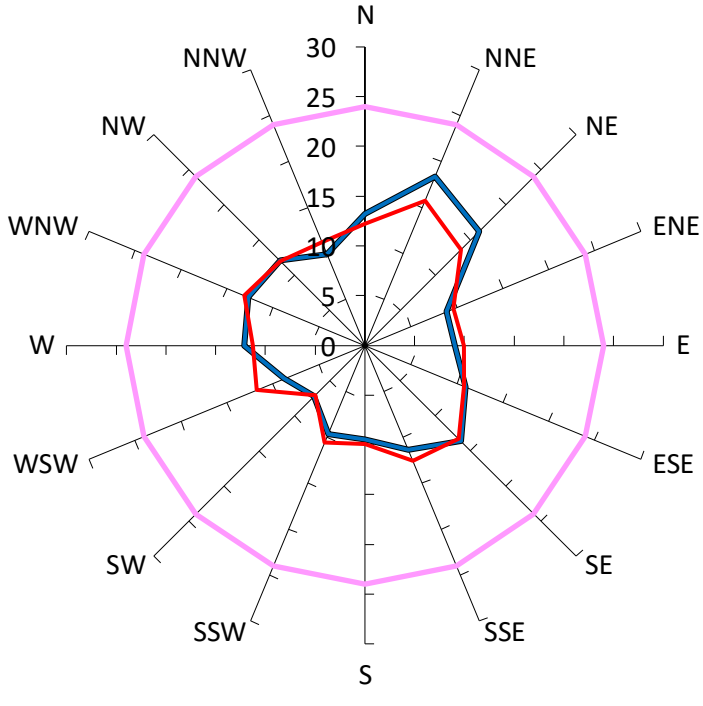
Safety Limit: 24m/s

Description	GEM Prob of Exceed %	Peak Gust m/s
Criterion: Wind Comfort Standard for Walking Criterion (8m/s). Safety Limit (24m/s).	5%	24
Base Case, no vegetation or other treatments.	6%	24
Existing Site, no vegetation or other treatments.	1%	18
Proposed Case, no vegetation or other treatments.	7%	24

Results for Point 11

Gust Equivalent Mean (m/s)	Maximum Gust (m/s)





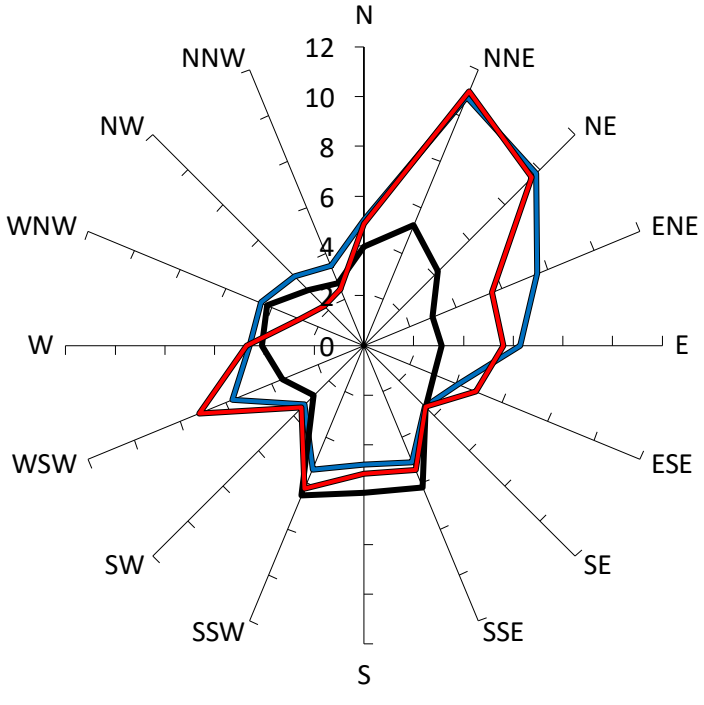
Comfort Criteria: 8m/s with 5% probability of exceedence

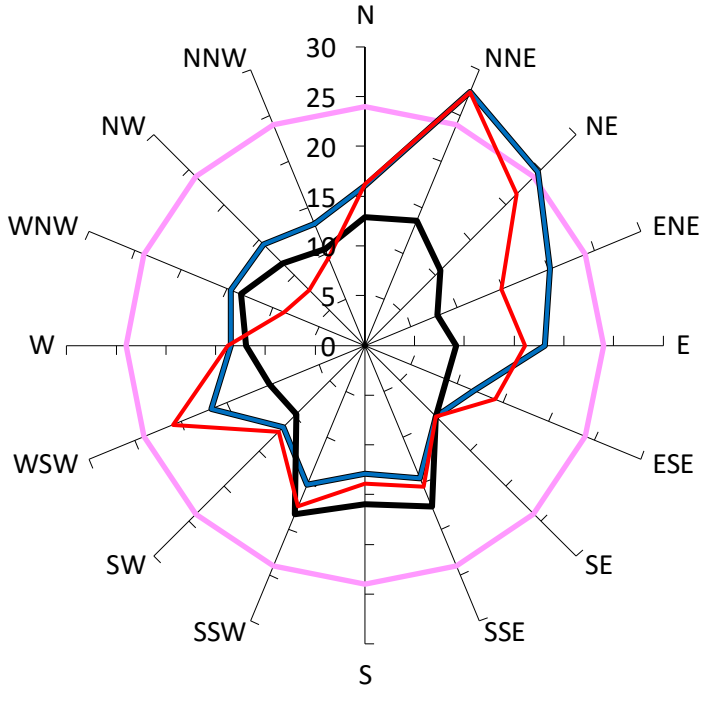
Safety Limit: 24m/s

	Description	GEM Prob of Exceed %	Peak Gust m/s
	Criterion: Wind Comfort Standard for Walking Criterion (8m/s). Safety Limit (24m/s).	5%	24
	Base Case, no vegetation or other treatments.	1%	18
	Proposed Case, no vegetation or other treatments.	< 1%	16

Results for Point 12

Gust Equivalent Mean (m/s)	Maximum Gust (m/s)





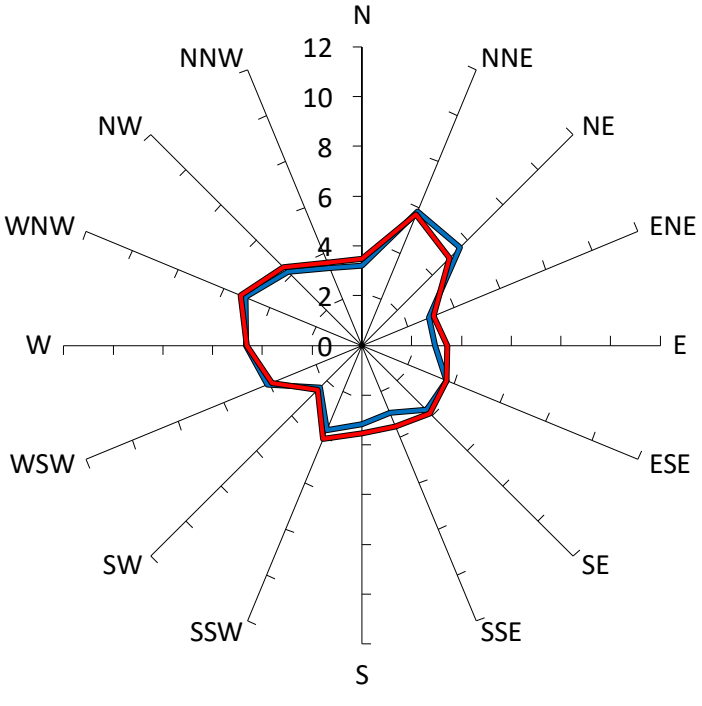
Comfort Criteria: 8m/s with 5% probability of exceedence

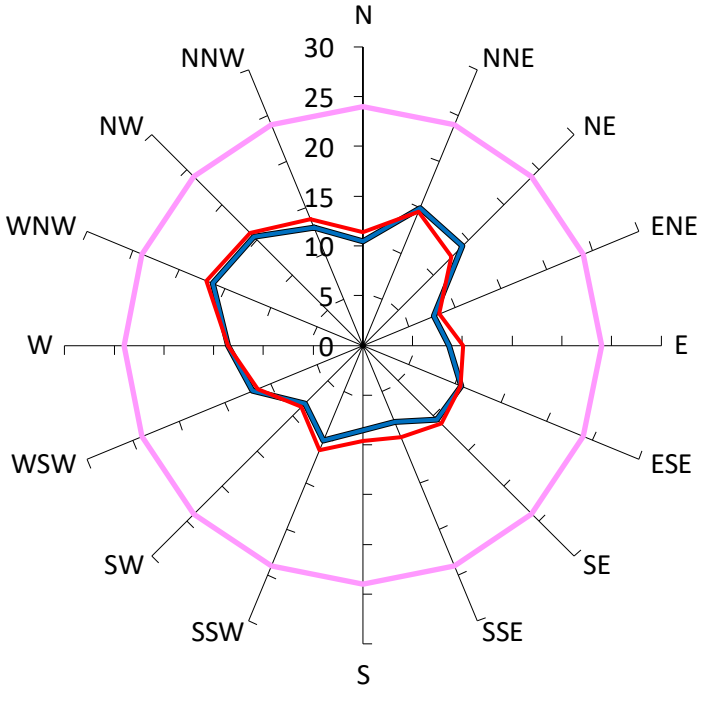
Safety Limit: 24m/s

Description	GEM Prob of Exceed %	Peak Gust m/s
Criterion: Wind Comfort Standard for Walking Criterion (8m/s). Safety Limit (24m/s).	5%	24
Base Case, no vegetation or other treatments.	11%	28
Existing Site, no vegetation or other treatments.	1%	18
Proposed Case, no vegetation or other treatments.	10%	28

Results for Point 13

Gust Equivalent Mean (m/s)	Maximum Gust (m/s)





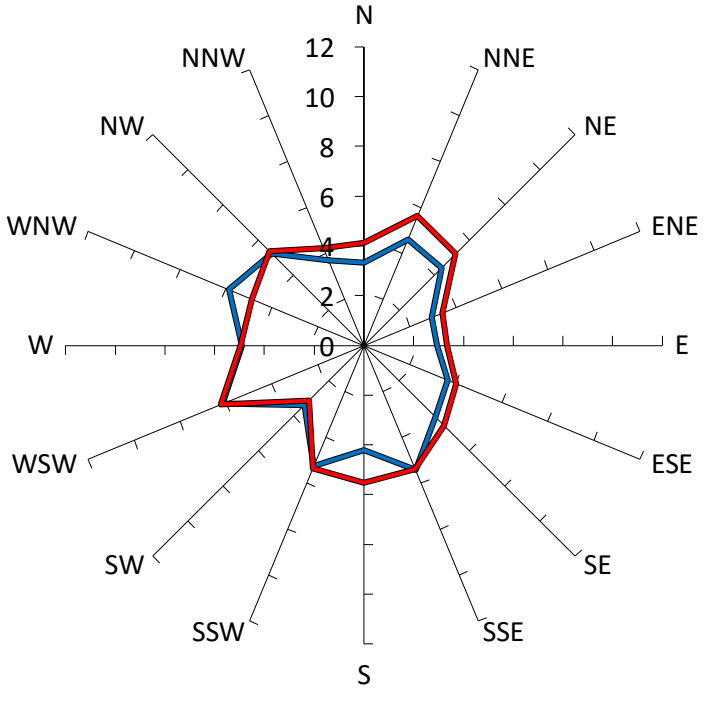
Comfort Criteria: 8m/s with 5% probability of exceedence

Safety Limit: 24m/s

	Description	GEM Prob of Exceed %	Peak Gust m/s
	Criterion: Wind Comfort Standard for Walking Criterion (8m/s). Safety Limit (24m/s).	5%	24
	Base Case, no vegetation or other treatments.	< 1%	16
	Proposed Case, no vegetation or other treatments.	< 1%	17

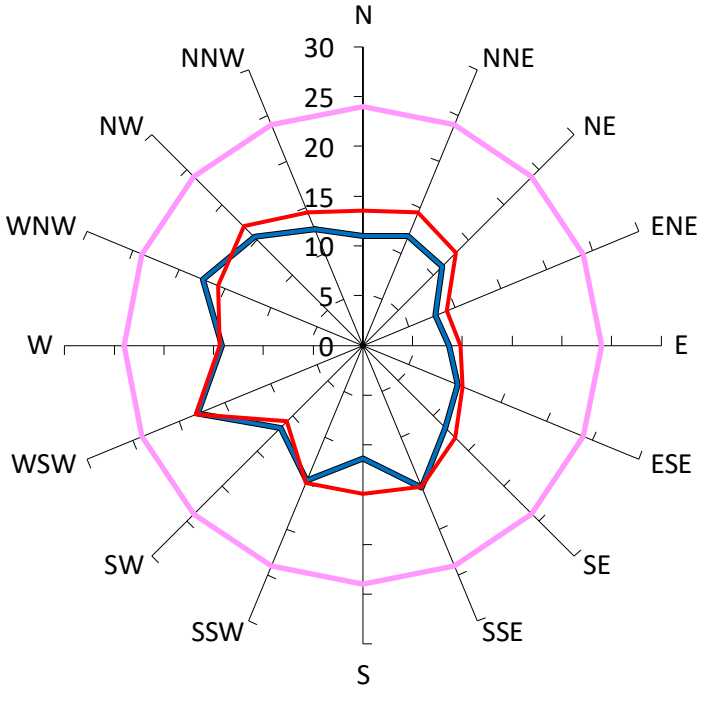
Results for Point 14

Gust Equivalent Mean (m/s)



Comfort Criteria: 8m/s with 5% probability of exceedence

Maximum Gust (m/s)

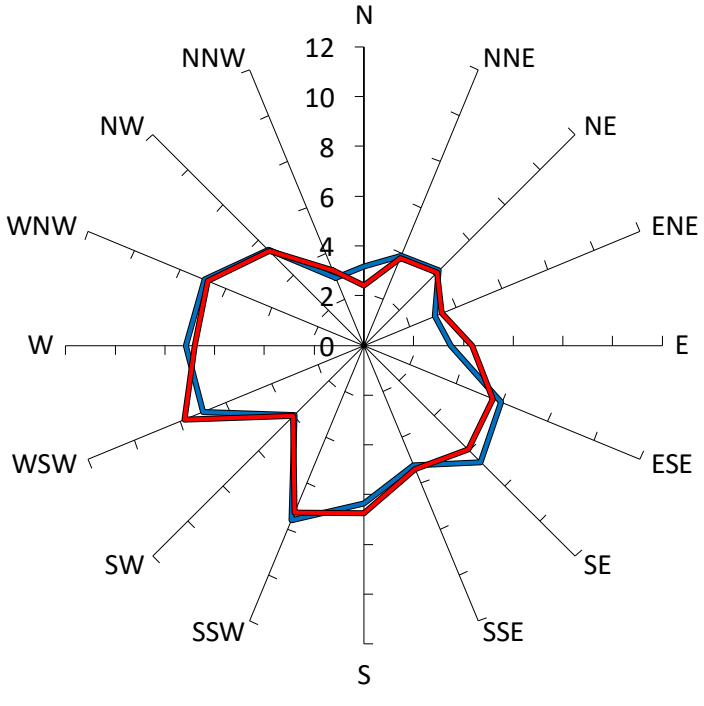


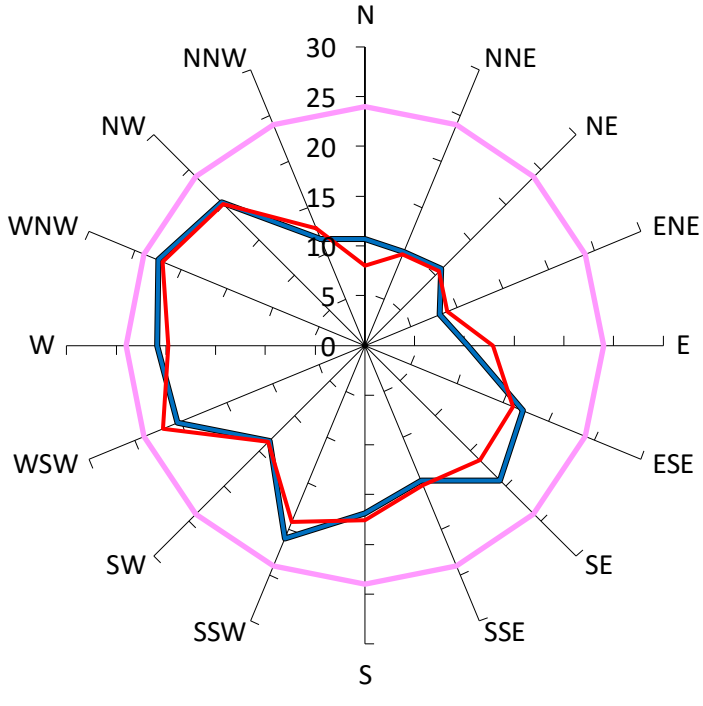
Safety Limit: 24m/s

Description	GEM Prob of Exceed %	Peak Gust m/s
Criterion: Wind Comfort Standard for Walking Criterion (8m/s). Safety Limit (24m/s).	5%	24
Base Case, no vegetation or other treatments.	1%	18
Proposed Case, no vegetation or other treatments.	1%	18

Results for Point 15

Gust Equivalent Mean (m/s)	Maximum Gust (m/s)





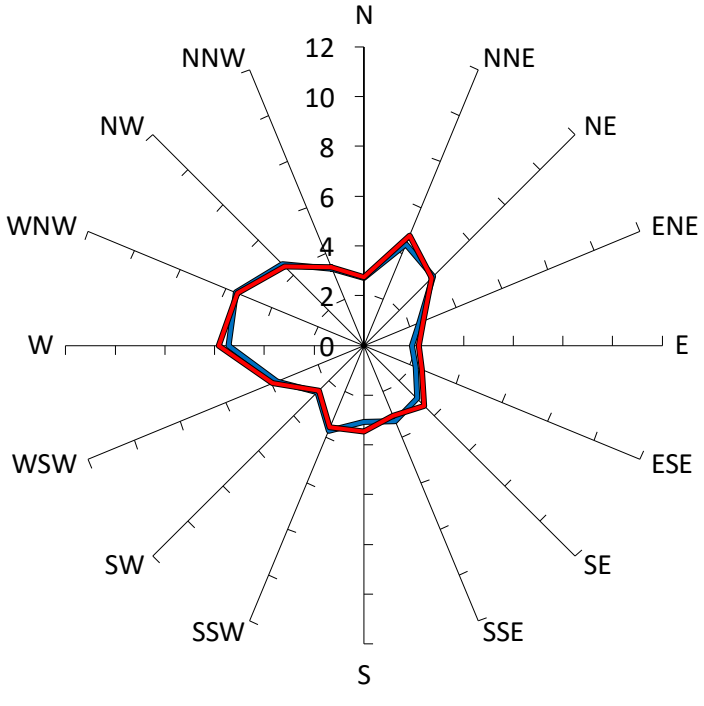
Comfort Criteria: 8m/s with 5% probability of exceedence

Safety Limit: 24m/s

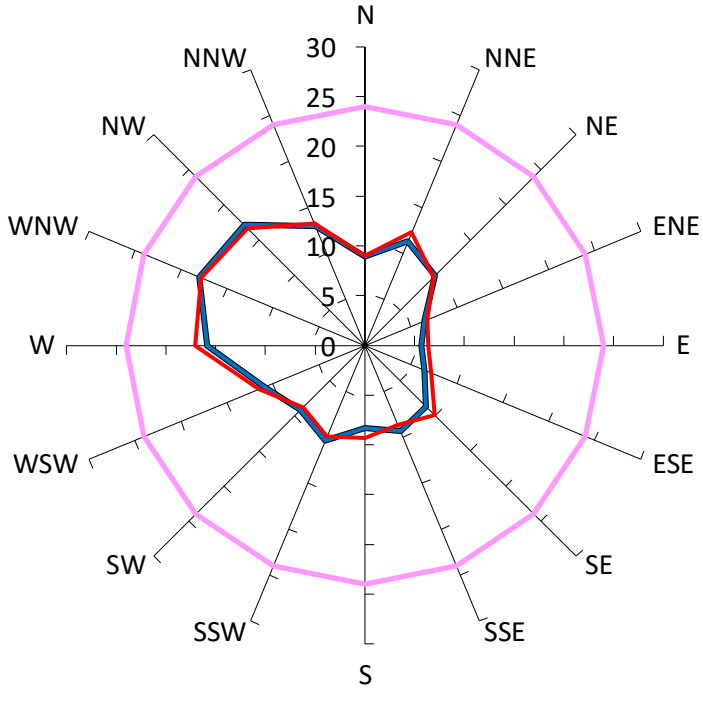
	Description	GEM Prob of Exceed %	Peak Gust m/s
	Criterion: Wind Comfort Standard for Walking Criterion (8m/s). Safety Limit (24m/s).	5%	24
	Base Case, no vegetation or other treatments.	4%	22
	Proposed Case, no vegetation or other treatments.	4%	22

Results for Point 16

Gust Equivalent Mean (m/s)	Maximum Gust (m/s)



Comfort Criteria: 8m/s with 5% probability of exceedence

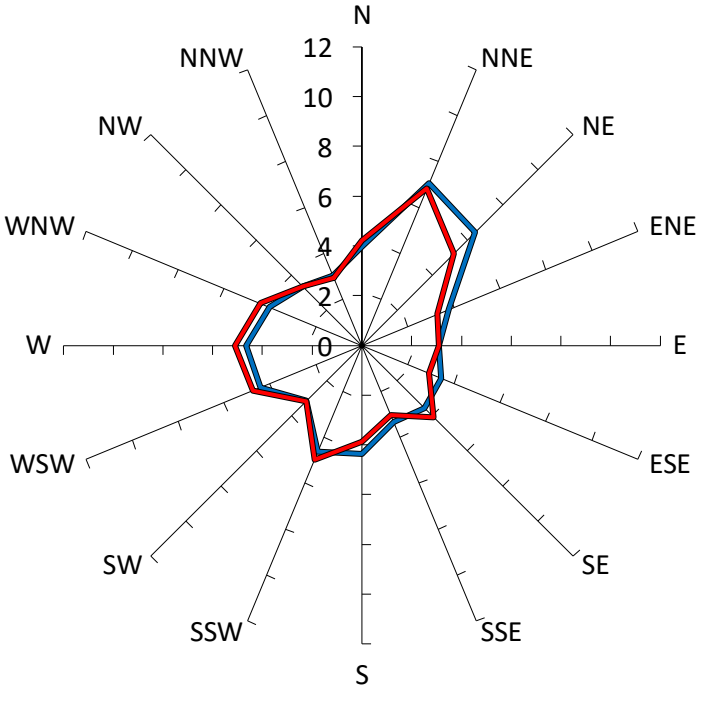


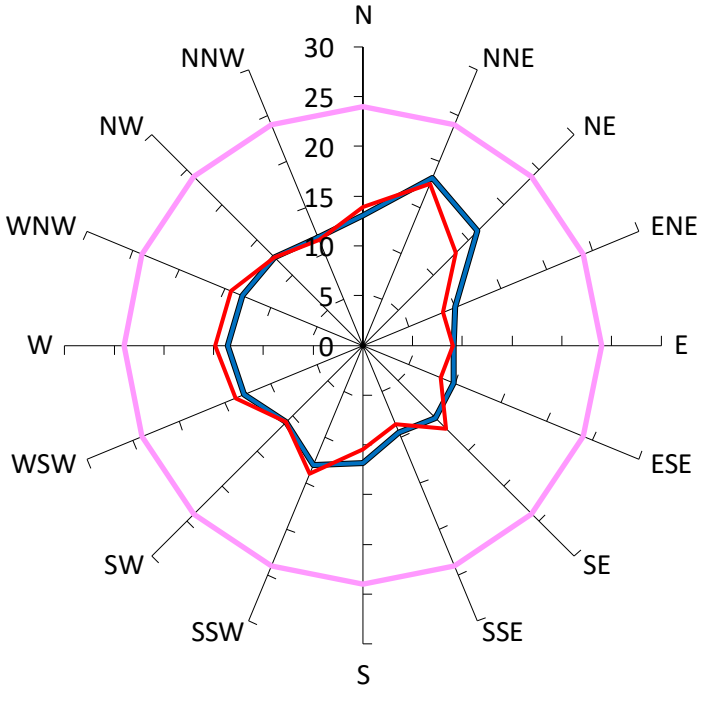
Safety Limit: 24m/s

	Description	GEM Prob of Exceed %	Peak Gust m/s
	Criterion: Wind Comfort Standard for Walking Criterion (8m/s). Safety Limit (24m/s).	5%	24
	Base Case, no vegetation or other treatments.	< 1%	18
	Proposed Case, no vegetation or other treatments.	1%	18

Results for Point 17

Gust Equivalent Mean (m/s)	Maximum Gust (m/s)





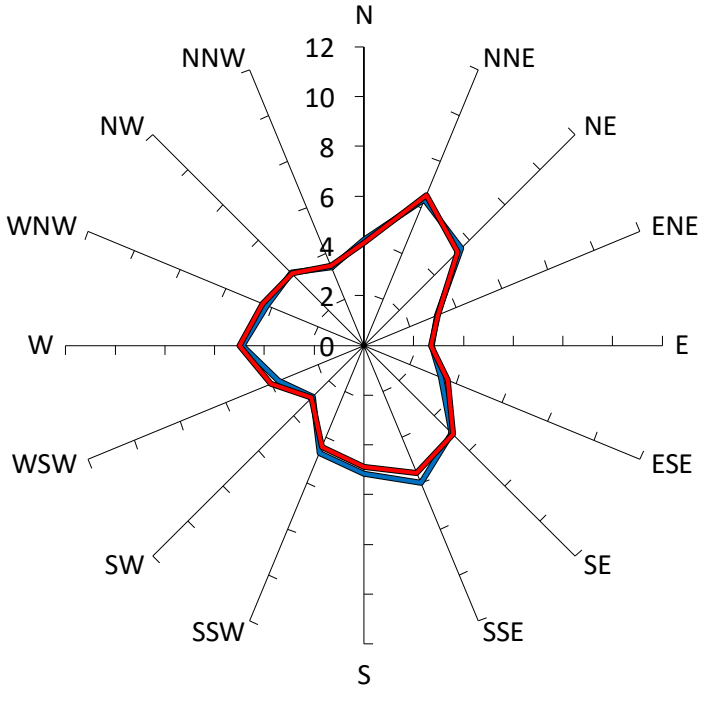
Comfort Criteria: 8m/s with 5% probability of exceedence

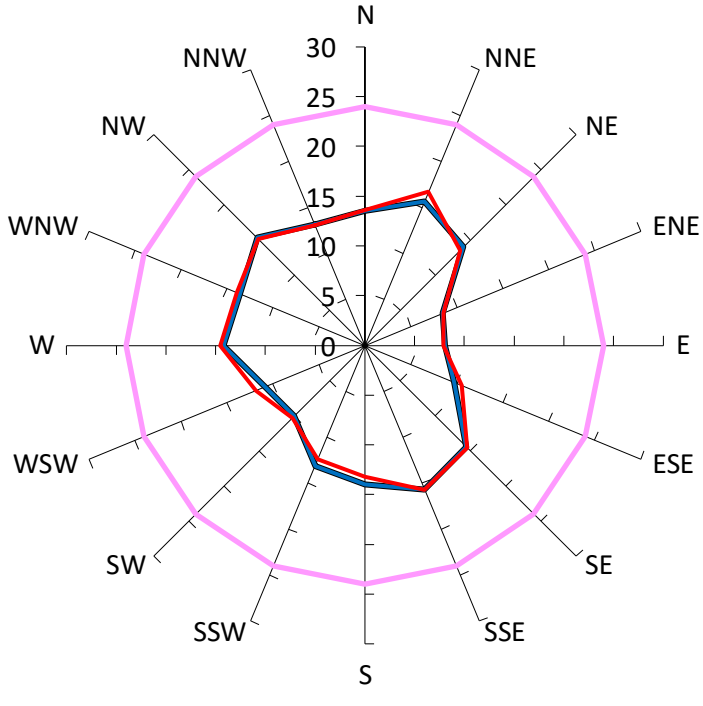
Safety Limit: 24m/s

	Description	GEM Prob of Exceed %	Peak Gust m/s
	Criterion: Wind Comfort Standard for Walking Criterion (8m/s). Safety Limit (24m/s).	5%	24
	Base Case, no vegetation or other treatments.	1%	18
	Proposed Case, no vegetation or other treatments.	1%	18

Results for Point 18

Gust Equivalent Mean (m/s)	Maximum Gust (m/s)

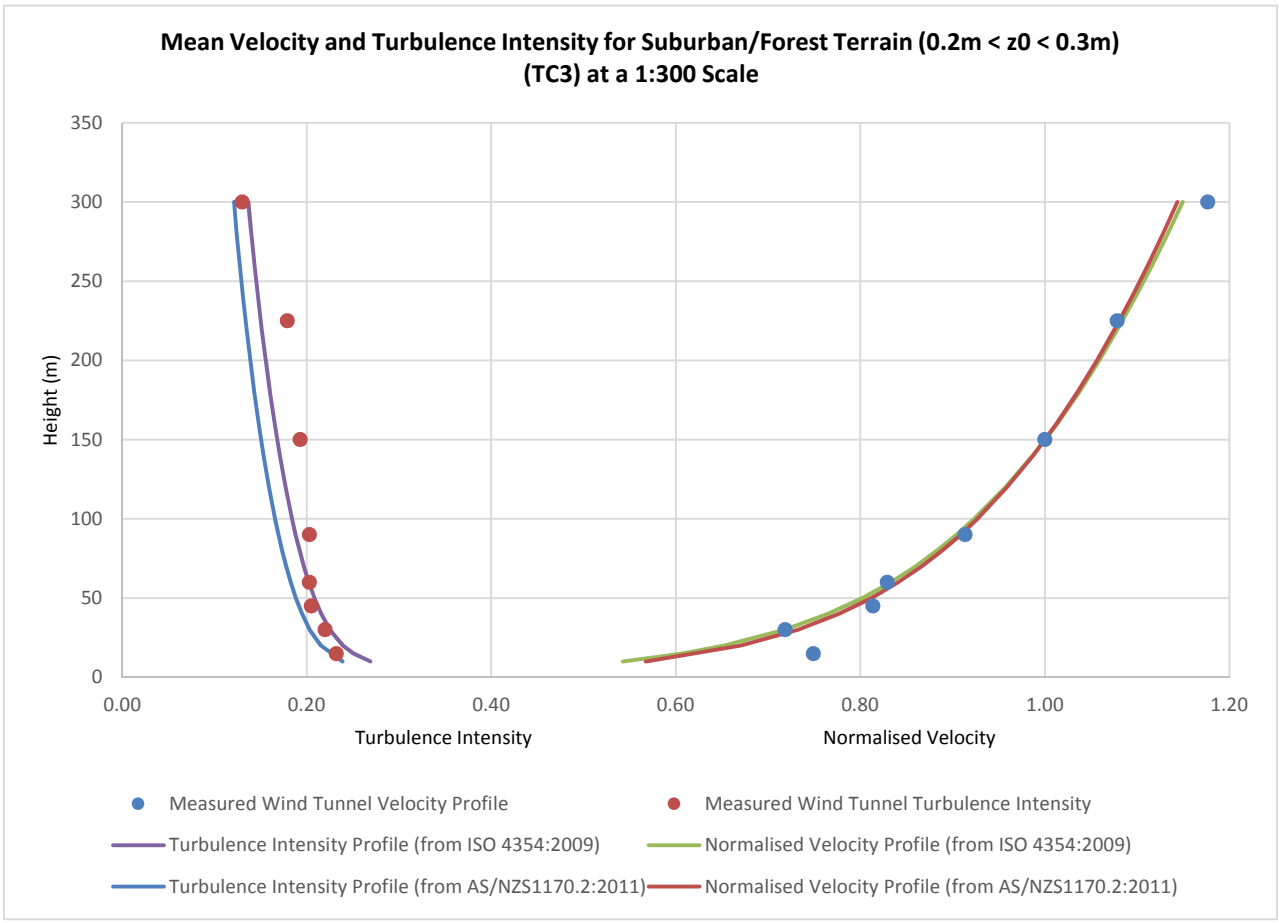


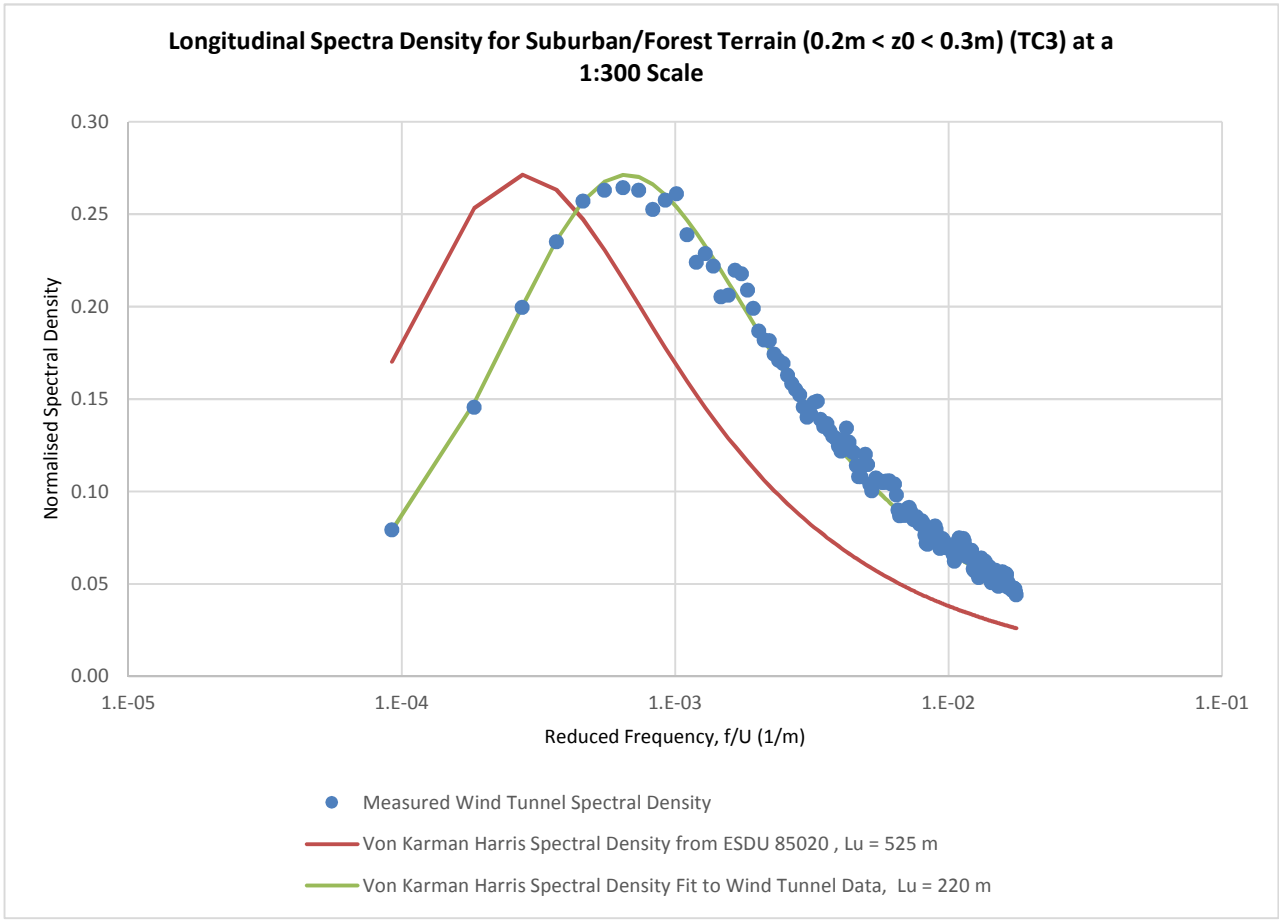


Comfort Criteria: 8m/s with 5% probability of exceedence

Safety Limit: 24m/s

	Description	GEM Prob of Exceed %	Peak Gust m/s
	Criterion: Wind Comfort Standard for Walking Criterion (8m/s). Safety Limit (24m/s).	5%	24
	Base Case, no vegetation or other treatments.	1%	16
	Proposed Case, no vegetation or other treatments.	1%	17


Mean Velocity and Turbulence Intensity for Suburban/Forest Terrain (0.2m < z0 < 0.3m) (TC3) at a 1:300 Scale
Height (m)
350
300
250
200
150
100
50
0
0.00
0.20
0.40
0.60
0.80
1.00
1.20
Turbulence Intensity
Normalised Velocity
Measured Wind Tunnel Velocity Profile
Measured Wind Tunnel Turbulence Intensity
Turbulence Intensity Profile (from ISO 4354:2009)
Normalised Velocity Profile (from ISO 4354:2009)
Turbulence Intensity Profile (from AS/NZS1170.2:2011)
Normalised Velocity Profile (from AS/NZS1170.2:2011)


Longitudinal Spectra Density for Suburban/Forest Terrain (0.2m < z0 < 0.3m) (TC3) at a 1:300 Scale
Normalised Spectral Density
0.30
0.25
0.20
0.15
0.10
0.05
0.00
1.E-05
1.E-04
1.E-03
1.E-02
1.E-01
Reduced Frequency, f/U (1/m)
Measured Wind Tunnel Spectral Density
Von Karman Harris Spectral Density from ESDU 85020 , Lu = 525 m
Von Karman Harris Spectral Density Fit to Wind Tunnel Data, Lu = 220 m

757-763 George Street, Haymarket

Preliminary Public Art Plan (Planning Proposal)

Prepared by: Site Image Public Art Consultants

For: Samprian Pty Ltd

21 September 2021

SITE IMAGE
Public Art Consultants

Sydney | Melbourne

Site Image (NSW) Pty Ltd ABN 44 801 262 380 as agent for Site Image NSW Partnership
Level 1, 3-5 Baptist Street Surry Hills NSW 2010 Australia | T +61 2 8332 5600

Grimshaw Architects Perspective looking north to George Street from the proposed updated Central Square.

INTRODUCTION

This Preliminary Public Art Plan has been prepared by Site Image Public Art Consultants in support of Planning Proposals for the development at 757-763 George Street, Haymarket. This Plan is to be prepared to demonstrate the opportunities of public art, consistent with the City of Sydney Council's DCP and 'Interim Guidelines - Public Art in Private Developments'. Consistent with the requirements of these Guidelines, this report include an analysis of the precinct, planning requirements and studies pertinent to the public art objectives. It identifies public art opportunities; proposes a methodology for the selection and commissioning of artists; and provides an estimated budget and program for the inclusion of artists. Preparation of this report has included collaboration with the Architect and Landscape Architect, and included specific research of the site and local themes, history and features, and initial artwork opportunities investigation.

THE PROJECT

The subject site at Nos. 757 – 763 George Street is located at the north-west corner of George Street and Valentine Street, being an L shaped area with an extended arm to the north at the western half of the site. Currently occupying the site are two built structures fronting George Street, being the former Sutton Forest Meat Company Building on the corner site and a mid-20th century concrete framed building with a driveway access along a right-of-way to the rear. which is currently used for parking. A right-of-way benefitting the site extends along the northern boundary for 20.9 metres.

The Planning Proposals scope includes: retention of the Sutton Forest Meat Company Building on the corner and demolition of building at 757-759 George Street; excavation and construction of a 107m high tower. The tower proposals espond to the emerging built form context in the immediate surrounds. The tower proposals include:

- Two basement levels, accessible at south western corner from Valentine Street.
- A podium and entry off George Street.
- A 2m deep cantilever over the proposed terrace roof of the heritage item.
- A tower element containing 3.5 star hotel accommodation.
- Associated public domain works.

The proposals are to accomodate retail floor space at ground level and 3.5 star hotel accommodation floor space above. including to retain and adaptively reuse the existing heritage building. Given its close proximity to Sydney's Central Station & having been identified within the "Haymarket Activity Node' the site has the potential for high foot traffic as well as for those using the retail & hotel amenities of the development itself.

Grimshaw Architects Perspective looking north to the ormer Sutton Forest Meat Company Building with tower behind.

REPORT UPDATED IN RESPONSE TO COUNCIL COMMENTS

Council provided feedback to the PP Preliminary Public Art Plan (PPAP) dated September 2020, and recommendations have been taken into account in this amended PPAP. The report has considered developed Architectural drawings and updating of Public Domain proposals, amended in response to Council feedback on 22 February 2021. We note the related comments regarding public domain and Through-site link, and that these are accomodated in the adjusted proposals, and considered in Public Art responses.

Public Art comments addressed in this adjusted report:

1. The public art opportunities outlined in the Preliminary Public Art Plan prepared by Site Image Public Art Consultants are centred around the proposed laneway from George Street the majority of which falls outside the subject site. The plan nominates a canopy element over the laneway, for which the building separation above the first floor is 1.6 metres and does not provide sufficient clearance to be considered a suitable location.
2. An alternative proposal is to be considered.
3. The Preliminary Public Art Plan is to include a budget that is commensurate with the scale and nature of the development.
4. It is recommended that the Preliminary Public Art Plan is updated to reflect the above feedback and amended to identify alternative opportunities located on the subject site, noting that the City's Guidelines for Public Art in Private Developments requires artworks to be located in areas that are accessible to, or highly visible from the public domain.

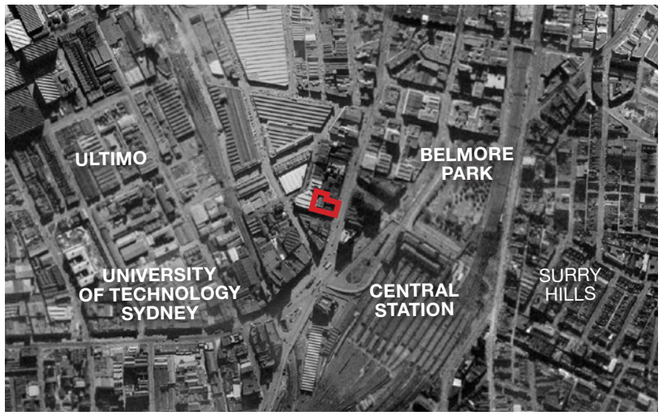
It is understood this amended report has suitably addressed each of these items.

ANALYSIS OF THE PRECINCT

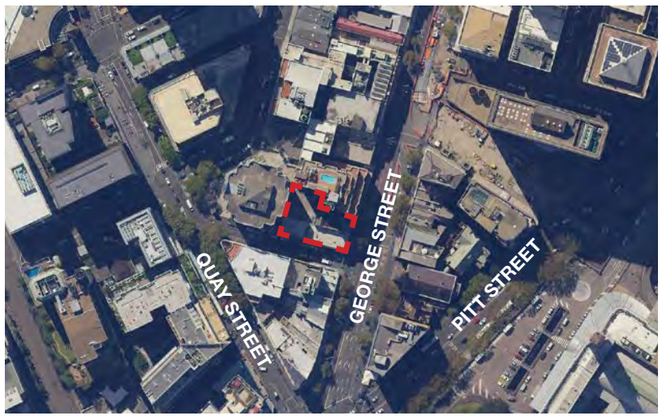
The proposed development at 757-763 George Street is 300m from Central station, identified by the Central Sydney Planning Strategy as within the “Haymarket Activity Node’. At the base of the multi-storey proposal is a heritage item of local significance under the Sydney LEP 2012. The former Sutton Forest Meat Company building is a two-story structure which dates back to 1897. The site is located within the urban context of active civic precincts of Ultimo, Central Station, UTS as well as being in close to Belmore Park.

Set out below is a summary of relevant Urban Design analysis of the precinct, planning requirements and any studies pertinent to the public art objectives. We reference the Grimshaw PP Urban Design report; the Heritage Impact Statement by Weir Phillips Heritage; and the Public Domain strategy by Site Image Landscape Architects. The extensive reference in these to Council planning controls and precinct objectives and studies for this State Significant Precinct including ‘Central Square - Structuring Principles’ and the CoS ‘Quay Street Concept Design’ that is relevant as a linking space for the future pedestrianisation of Valentine Street.

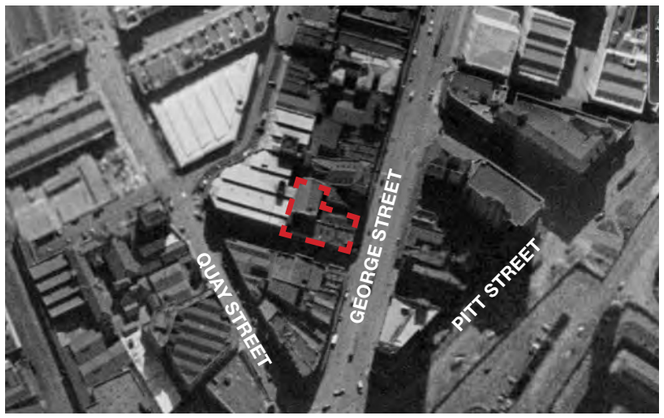
Aerial showing local context - Sixmaps 2017



Aerial showing local context - Sixmaps 1943



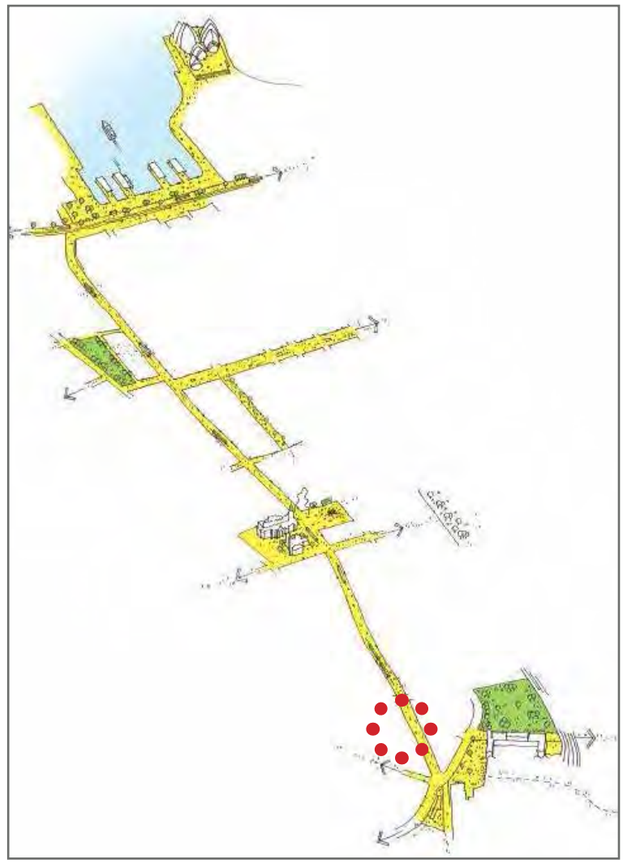
Aerial showing the project site context - Sixmaps 2017



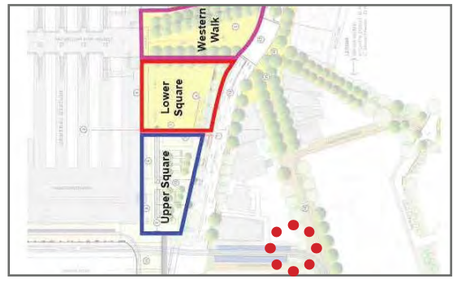
Aerial showing the project site context - Sixmaps 1943


Street view along George Street- Google maps

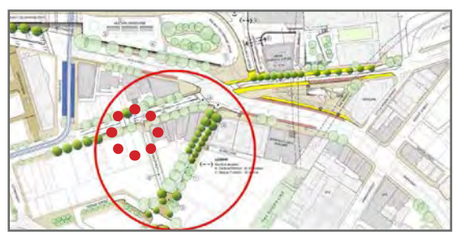

Pedestrian footpath from George Street with existing lane


Central Square - Structuring Principles CoS 09.2020


Central Square - Collection of Spaces

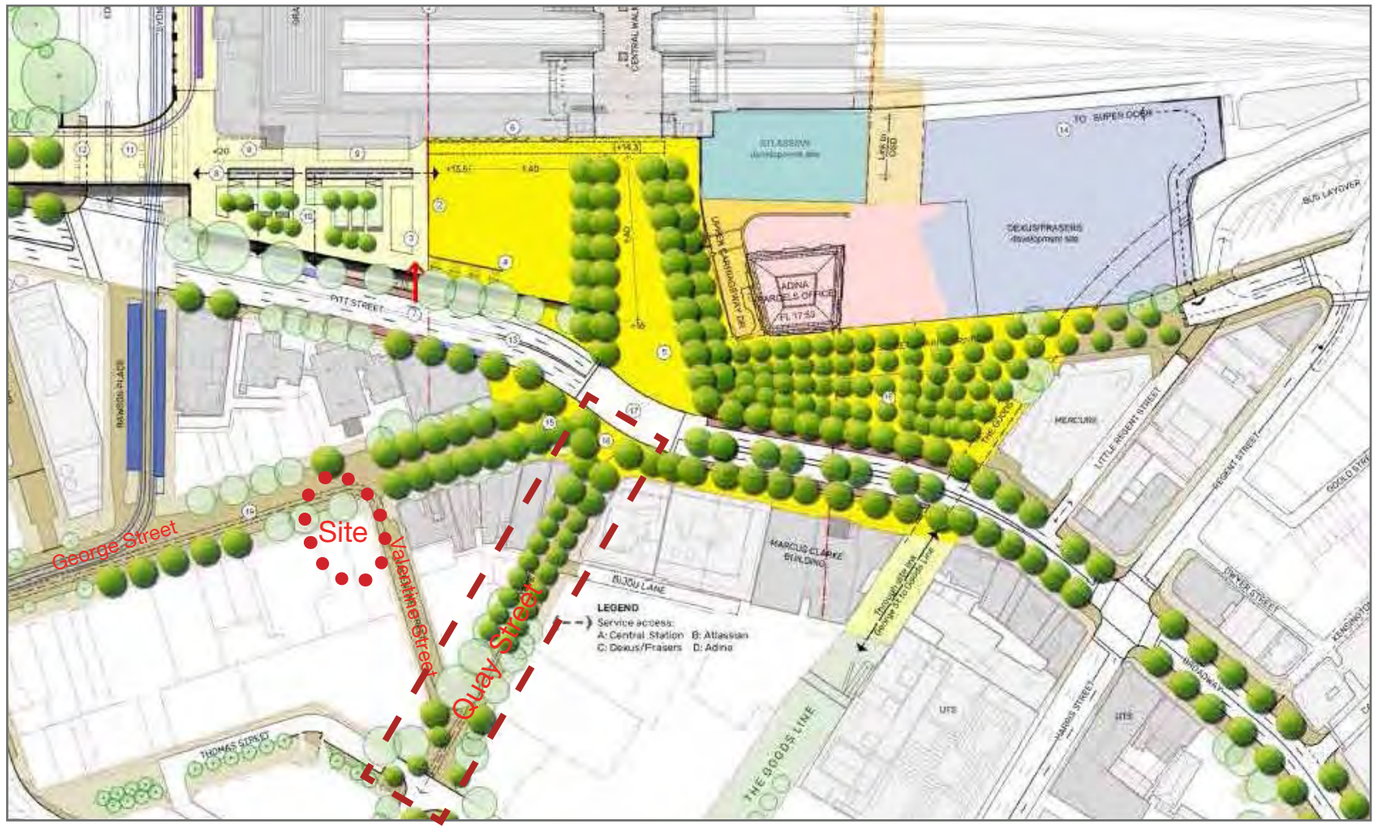


Central Square - Site relative to Central Square

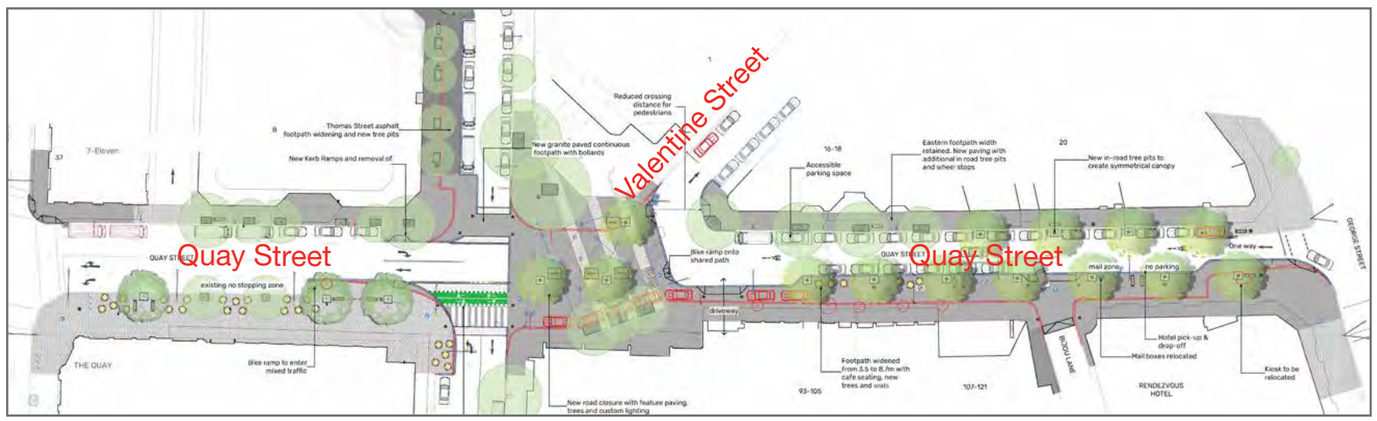

Site and reference to improved pedestrian links

ANALYSIS OF THE PRECINCT - continued

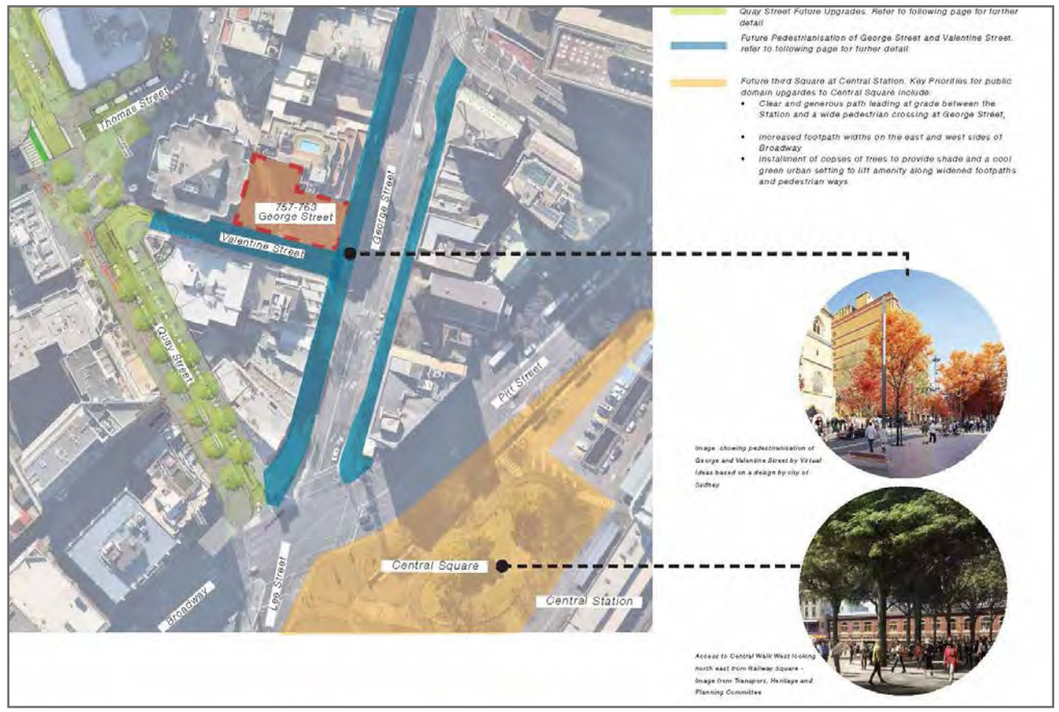
757-763 George Street Haymarket has a significant George Street frontage, with it's heritage building corner identity providing a gateway marker for pedestrians to access the future pedestrianised Valentine Street along the southern frontage of the site. Valentine Street is secondary to the broader pedestrianised Quay Street proposals, but important as a key journey linking George Street towards the northern portion of Quay Street. The laneway type dimensions and character provide an intimate linking space with stronger activation potential commencing with the subject site. In terms of context with the Central Square, the subject site can be said to be more allied to the fine grain street level frontages of the southern portion of George Street, with the completion of George Street being suitably marked by the proposed tower form rising above the streetscape. Moving south from the subject site, the plan adjacent shows an increased landscape treatment with an avenue of trees creating a green gateway announcing arrival into the Central Square precinct. The location at the end of George Street, and the edge of both Central Square and Haymarket areas will require the public art to consider the context of each of these precincts in formulating final proposals.



Central Square Structuring Principles - Plan of the completed precinct strategy



CoS proposals for Quay Street, showing the intersection with Valentine Street.

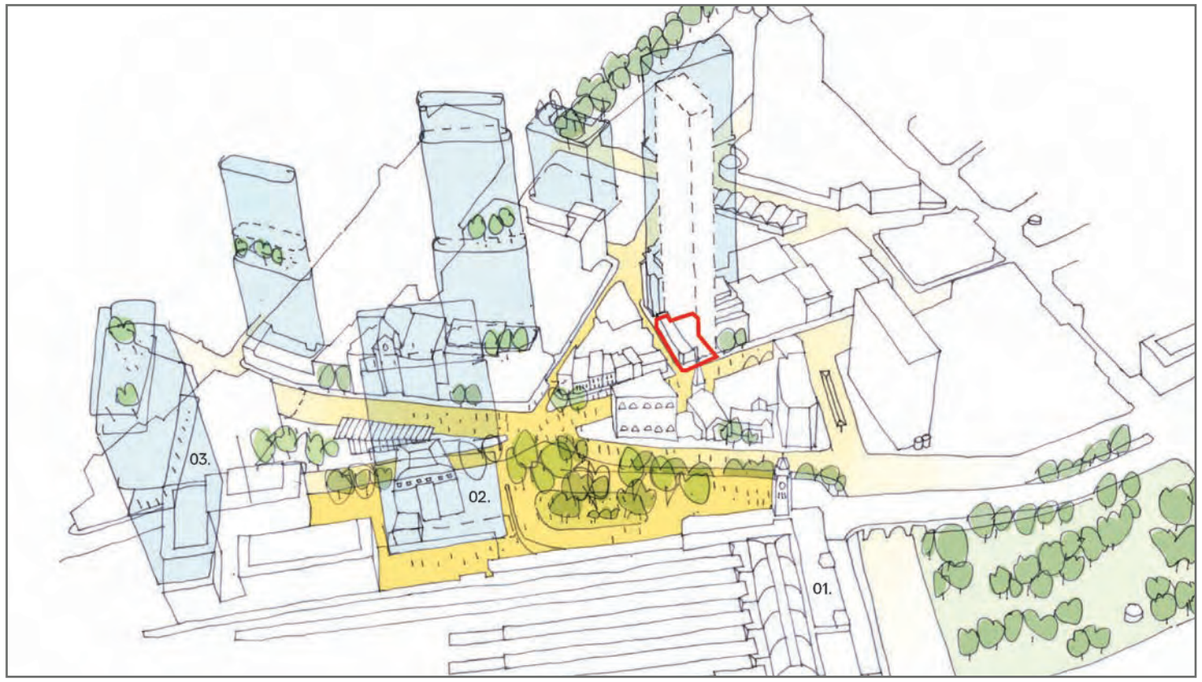


Haymarket Future Upgrades to Surrounding Public Domain

DIAGRAMS FROM GRIMSHAW URBAN DESIGN REPORT

ANALYSIS OF THE PRECINCT - continued

Heritage context: 1. Central Station; 2. Site; 3. Church of St Lawrence; 4. Marcus Clarke Tower; 5. Flat Iron Building; 6. Adina Hotel.



Haymarket Activity Node context: 01 Central Station Redevelopment; 02 Altassian tower; 03 Dexus tower; Railway Square Redevelopment

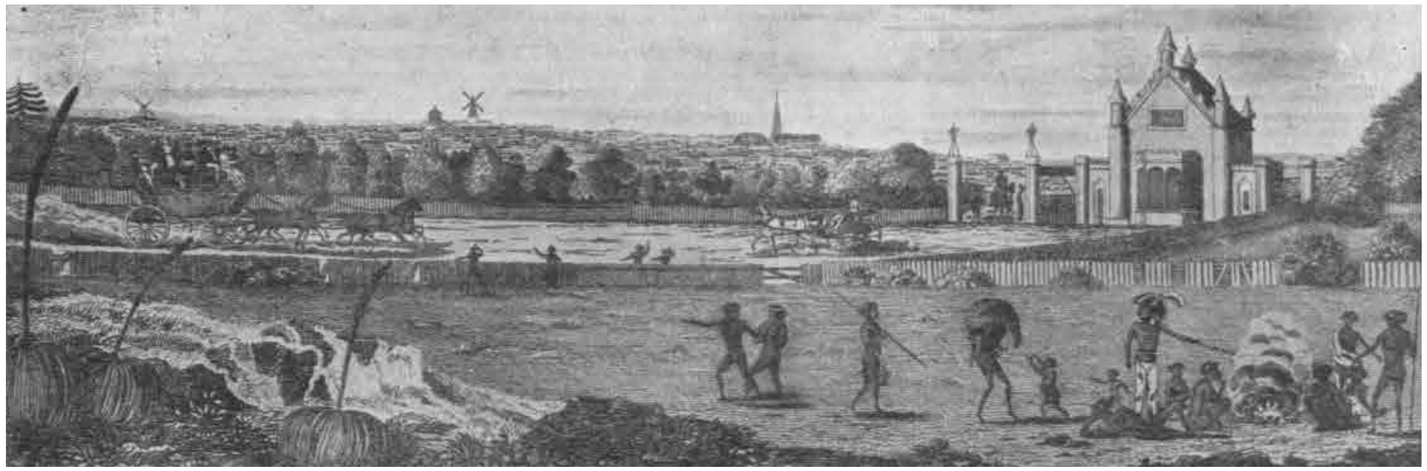
Perspective view of building in context,looking north towards the site

Key vista along Valentine Street, across George Street to Christ Church St. Laurence featuring it's spire

1792, noted as a small settlement & brickworks

1802, with stream to Cockle Bay to the north

1822. George Street Toll Bar. Green = view below



The George Street Toll Bar in 1829, looking northwards. From 1830 to 1900 subdvision and occupation of this area changed it to an urban form.

1854, showing houses along Valentine Street

1910, middle house later removed for road

1910, access lane in approx. location of proposed cross site link

SUBJECT SITE HERITAGE CONTEXT

The following brief synopsis of history and heritage for the site is provided as a guide to Artists, with photos and keynote summary text extracted from the report of project heritage, significance and impacts of proposed development by consultant Weir Phillips Heritage and Planning. Suitable full referencing of image sources and full context and content of site heritage is contained in that report. This summary is to indicate to invited Artists the extent of resource material available to assist their formulation of proposed artwork theme and format.

The study area lies within the region belonging to the Gadigal people, who spoke a dialect of the Darug Language. Prior to the arrival of Europeans, the land would have consisted of timbered slopes lined with Blackbutt, Red Bloodwood, Sydney Peppermint and Smooth-Barked Apple trees. The abundant estuarine and terrestrial resources of the area combined with a mild annual climate to provide an ideal environment for the Aboriginal people who lived and hunted on the land prior to European settlement. Fish and molluscs would have been easily harvested from the various creeks and swamps feeding into the Parramatta River, while the forests would have provided larger game to hunt and various plants, seeds and tubers to harvest.

T he First Fleet arrived in 1788 carrying 1,200 people to feed and accommodate,,and the subsequent significant growth of the colony, and removal of the existing vegetation and envinronment resulted in competition for land, food and resources. There was considerable conflict, and the physical and social impacts on the Aboriginal people were dramatic, and interaction and impacts resulted in substantial loss of cultural knowledge.

The area of the site was slow to be occupied, with the presence of clay suitable for brick building instigating the building of a brickworks, and low quality irregularly built brick residences. Subsequent land grants led to creation of a road grid, and on the main George Street link route a roadway and Toll building at the junction with Pitt Street. The creek to Cockle Bay remained prominent until presumably piped with intensiification of road and building construction, with retail / commercial buildings dominant along George Street. Cross-streets such as Quay Street and Valentine Lane , and access lanes to courtyards created an irregular grid extending away from George Street. Houses in Valentine Lane were later removed for road widening in 1910. Land on this site was consolidated as part of this process, and sold, and the Sutton Forest Meat Building built, with the meat wholesale activitiy being common to the area.

The Sutton Forest Meat Building is significant for its long association with the wholesale meat trade and is a rare example of this practice in the city. It is part of the major development of primary produce markets at Haymarket at the turn of the century. It also reflects the period of major redevelopment in the city during the later decades of the nineteenth century The former Sutton Forest Meat building's aesthetic significance is derived from the qualities of the simple lines of the building form, and the more complex and repetitive rhythm of its Arts and Crafts inspired brick structure, and the primitive application of ceramic tile patterns and decorative panels. Such extensive external detailing is rare in the Sydney area.

SUBJECT SITE HERITAGE CONTEXT

Although the date on the parapet indicates establishment in 1875, the earliest documented association of Suttons Meat Co. with this site dates from the early 1890s. In 1895 the company occupied premises at 761. In 1897 the business was expanded to encompass both 761 and 763. The building reflects the period of great redevelopment of the city during the later years of the nineteenth century. Its original function is also indicative of the principal functions served by this part of the city.

The association of the shop with the meat industry ceased in the 1960s. Several tenants have used the building since that time including a fish shop and coffee house. A restaurant was opened in 763 during the early 1970s and this remains its primary function, although 761 continued to house a variety of shops and offices until the 1980s. Changes to the building since the 1960s have included the introduction of more partitions, the upgrade of services, and the construction of a store room. In 1985 the restaurant was extended to include 761 George Street. In the same year the building was damaged by fire, and the interiors were subsequently refurbished. Since then the building has remained largely unchanged to the present day.

Pre 1910 widening, showing houses along Valentine Street

1911 Land parcels reconfigured for widening

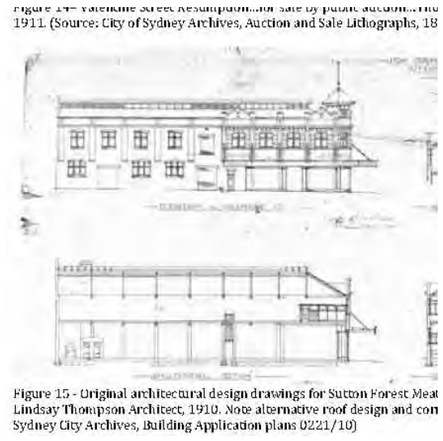


Figure 15 - Original architectural design drawings for Sutton Forest Meat
Lindsay Thompson Architect, 1910. Note alternative roof design and con
Sydney City Archives, Building Application plans 0221/10)

1910 Architects drawings for subject site

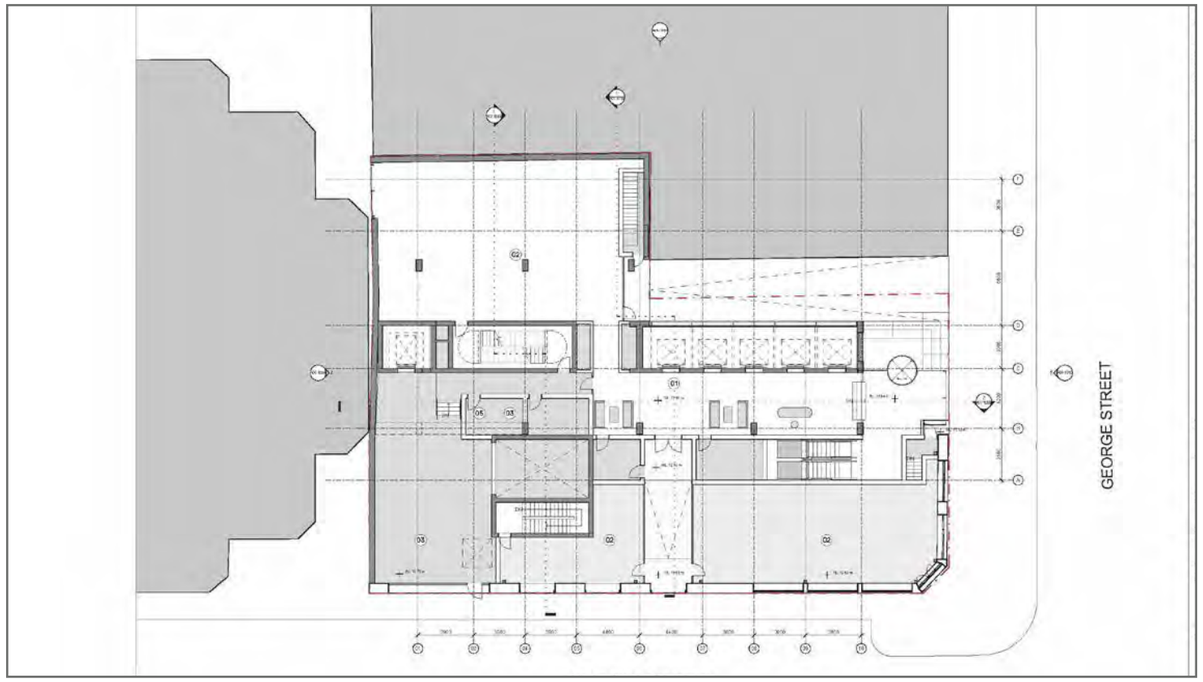
1979 - facade remains substantially in tact despite 1985 fire

1946 Aerial photograph of site

Current imagery of glazed facade tiles, and feature inset artwrok tiles of cows, sheep and pigs.

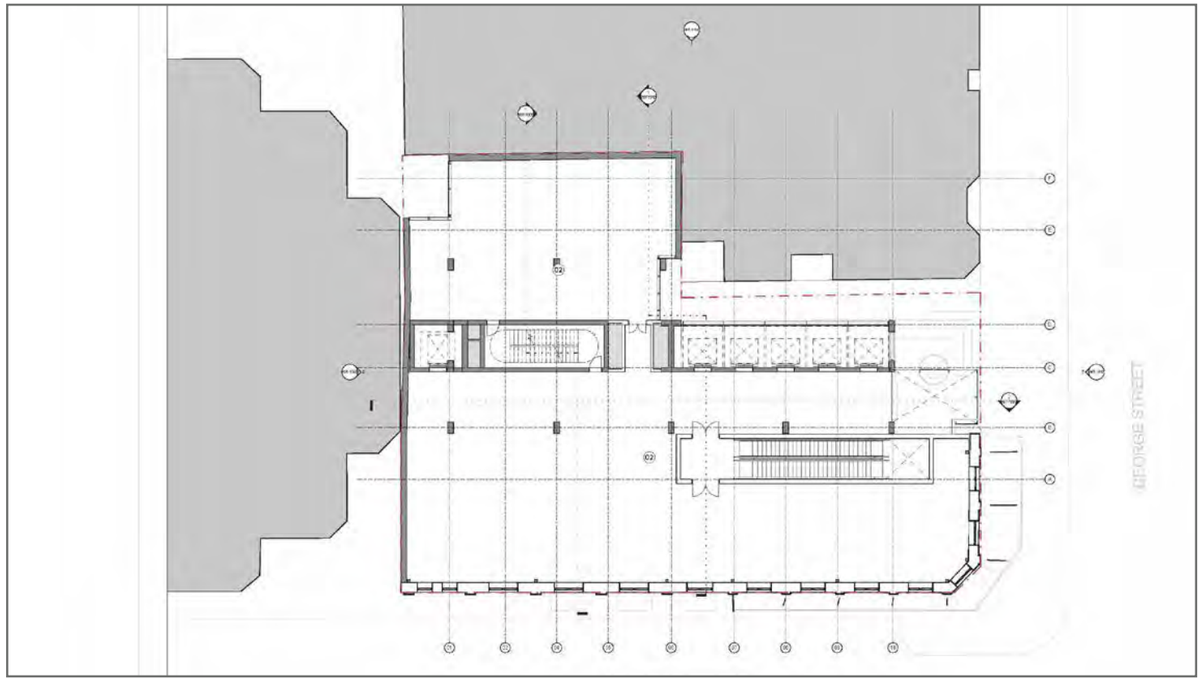
DIAGRAMS FROM GRIMSHAW URBAN DESIGN REPORT

GRIMSHAW ARCHITECTS ARCHITECTURAL PROPOSALS



Ground Floor Proposed Plan

Perspective view to west of proposed tower across Central Station Clocktower, and St Laurence Church, aligning on Valentine Street

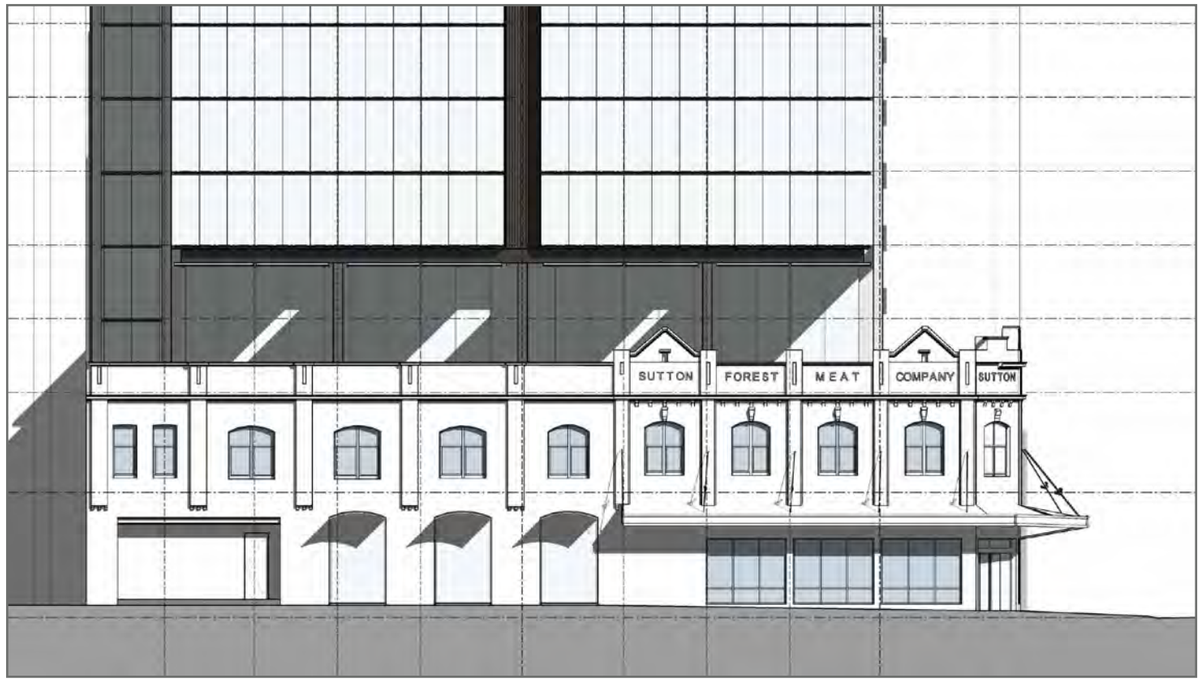


Mezzanine Proposed Plan

George Street modelling of retained corner heritage building and new ground floor access lane and lobby entry

DIAGRAMS FROM GRIMSHAW URBAN DESIGN REPORT

GRIMSHAW ARCHITECTS ARCHITECTURAL PROPOSALS



Southern Elevation facing Valentine Street

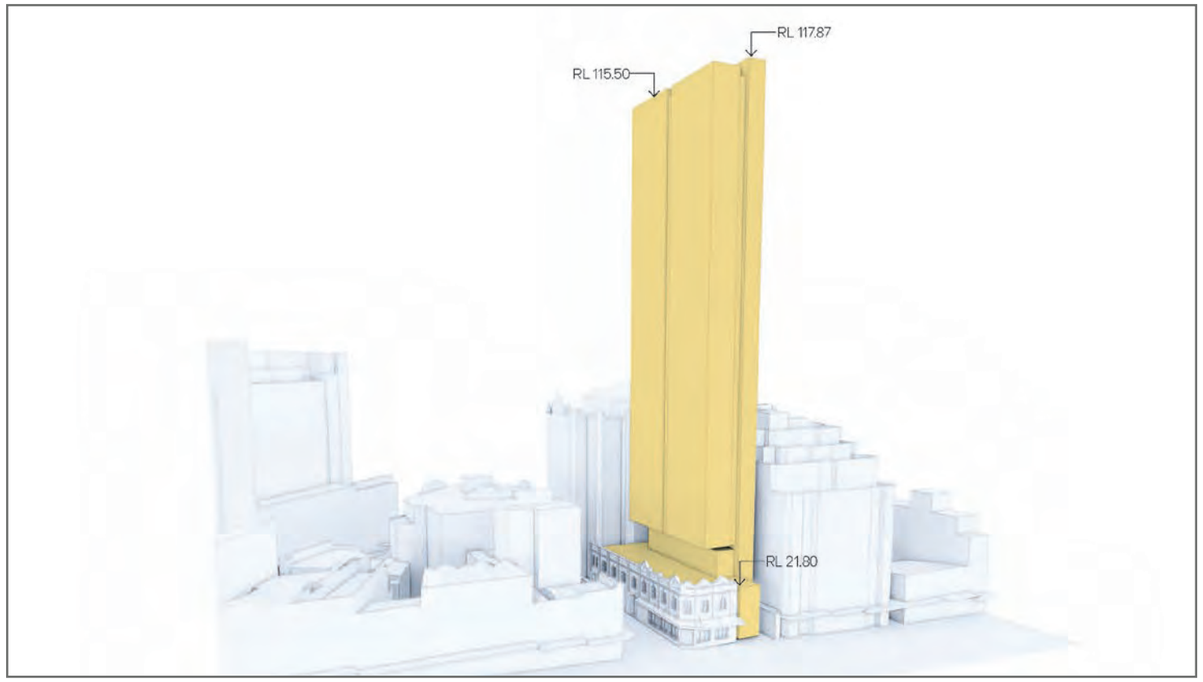
Eastern Elevation facing George Street

View up proposed tower facade from George Street

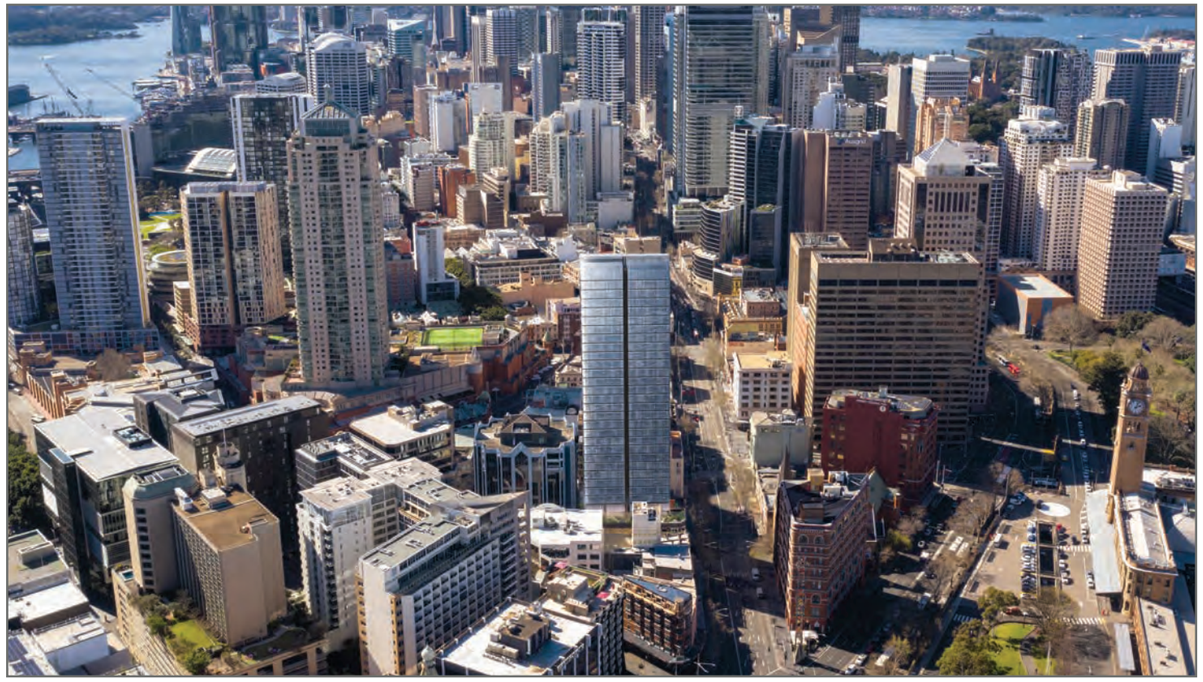
View to east along Valentine Street, across George Street to St Laurence Church

DIAGRAMS FROM GRIMSHAW URBAN DESIGN REPORT

GRIMSHAW ARCHITECTS ARCHITECTURAL PROPOSALS



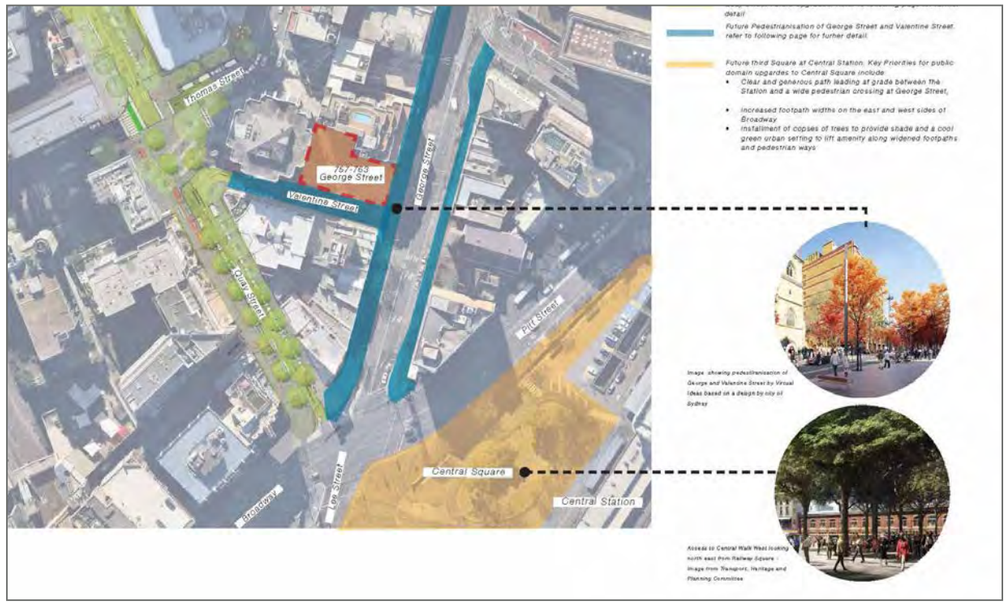
Grimshaw Architects - George Street Elevation



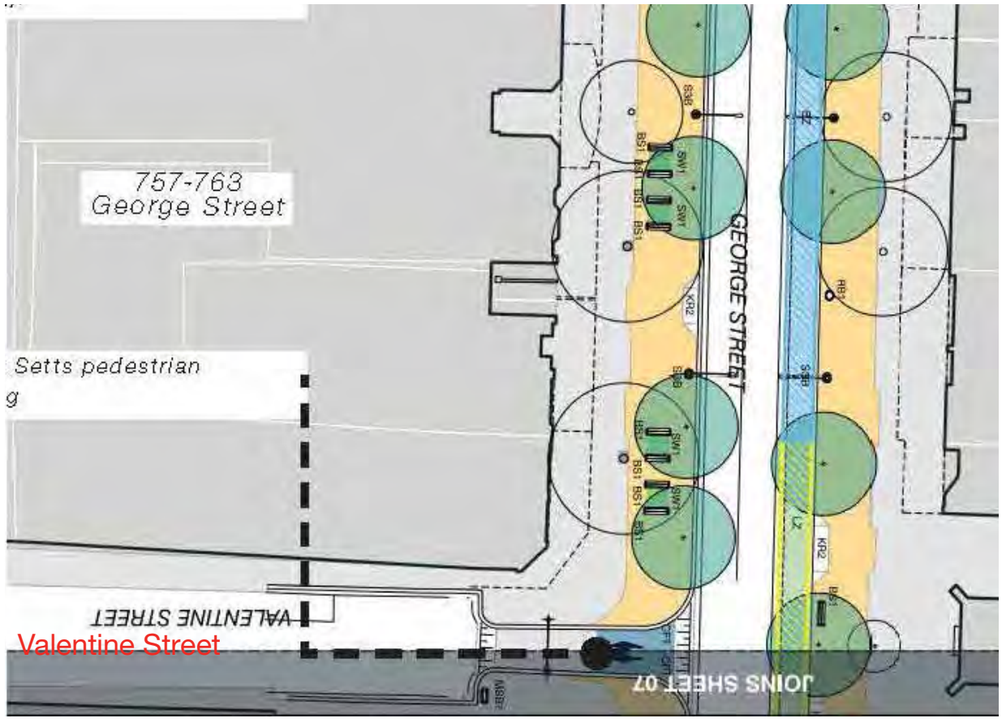
Grimshaw Architects - Perspective view of building in context,looking north towards the site

Grimshaw Architects - NE Building Elevation. The

DIAGRAMS FROM SITE IMAGE LANDSCAPE PLANNING PROPOSAL REPORT



Summary diagram of COS proposals for Haymarket Future Upgrades to Surrounding Public Domain



Excerpt taken from Light Rail Road Closures and Pedestrianisation Concept Design - City of Sydney

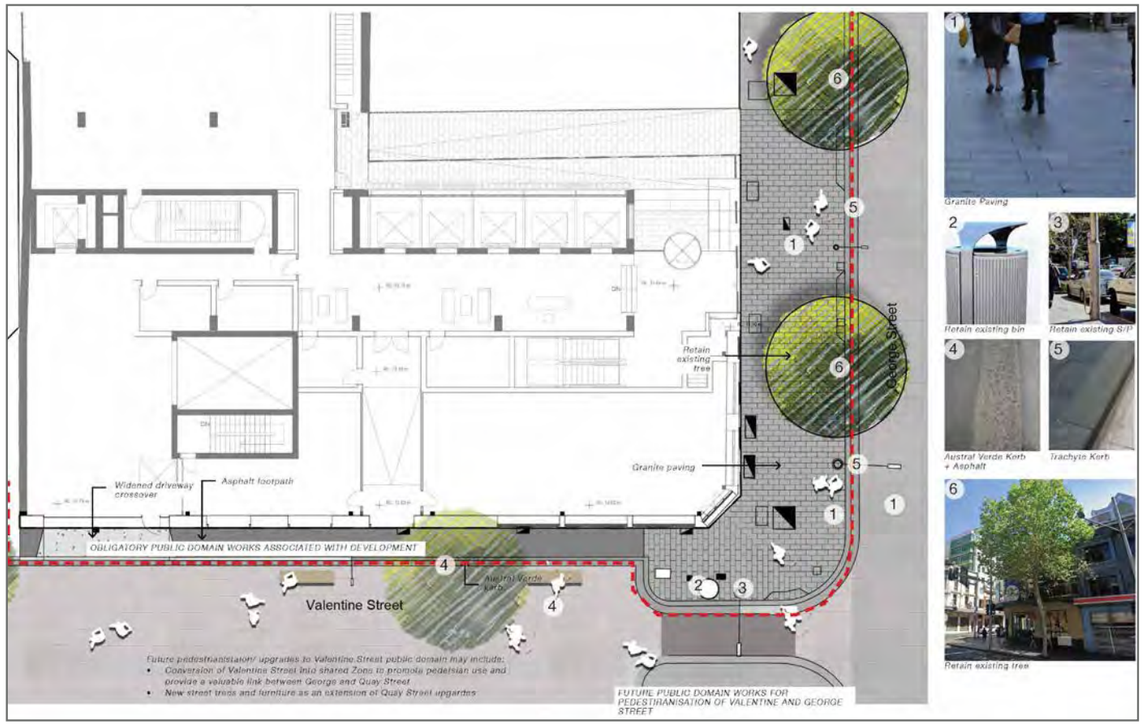
PUBLIC DOMAIN AND LANDSCAPE CONTEXT

757-763 George Street Haymarket has a significant George Street frontage, with it's heritage building identity providing a gateway marker for pedestrians to access the future pedestrianised Valentine Street along the southern frontage of the site. George Street is the principal connective avenue of Sydney CBD, and further upgrading of this precinct is envisaged with Central Square upgrading of a series of civic spaces, and the most southern portion of George Street, notionally commencing just south of this site.

Consistent with the COS Public Domain Guidelines and Details Manual, existing granite footpath paving will be adjusted to incorporate new building entires and fronages, and future improvements will include:

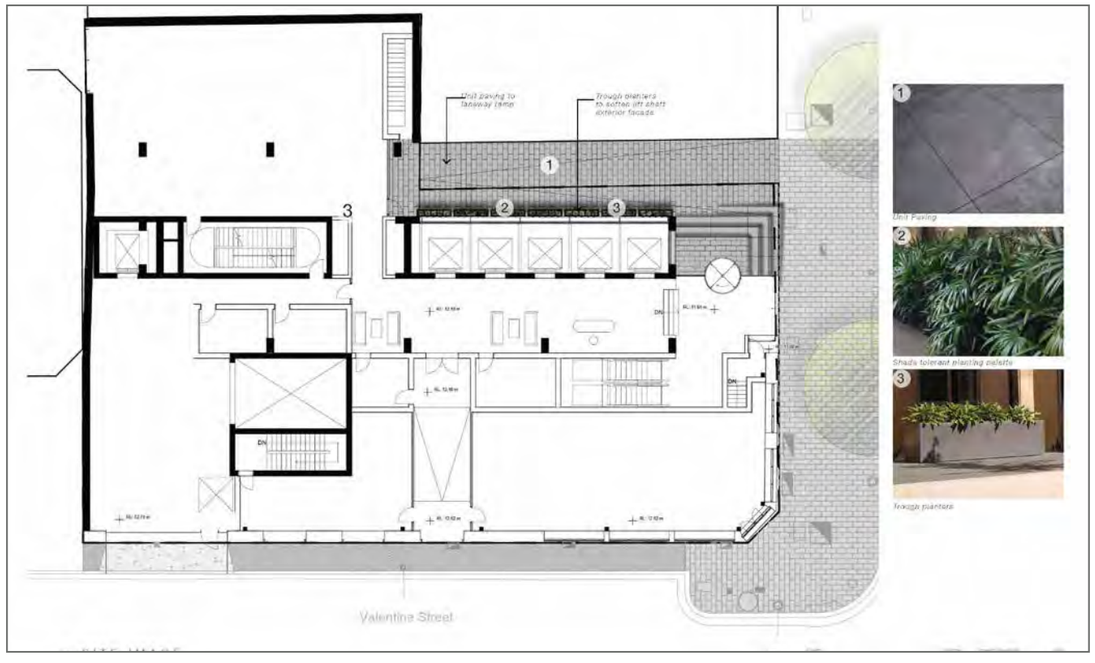
- Extended pedestrianised zones at the southern end of George Street between Bathurst Street and Rawson Place
- Open space improvements on George Street between Rawson Place and Pitt Street, Ultimo Road, Thomas Street and Hay Street
- More than 9,000m2 of new space for walking
- Granite footpaths to replace car lanes
- New street trees, seating and lighting

Valentine Street is secondary to the broader pedestrianised Quay Street proposals, but important as a key journey linking George Street towards the northern portion of Quay Street. The laneway type dimensions and character provide an intimate linking space with stronger activation potential commencing with the subject site. The plan and illustrations below outlines indicative public domain proposals.



Public Domain indicative proposals

DIAGRAMS FROM SITE IMAGE LANDSCAPE PLANNING PROPOSAL REPORT



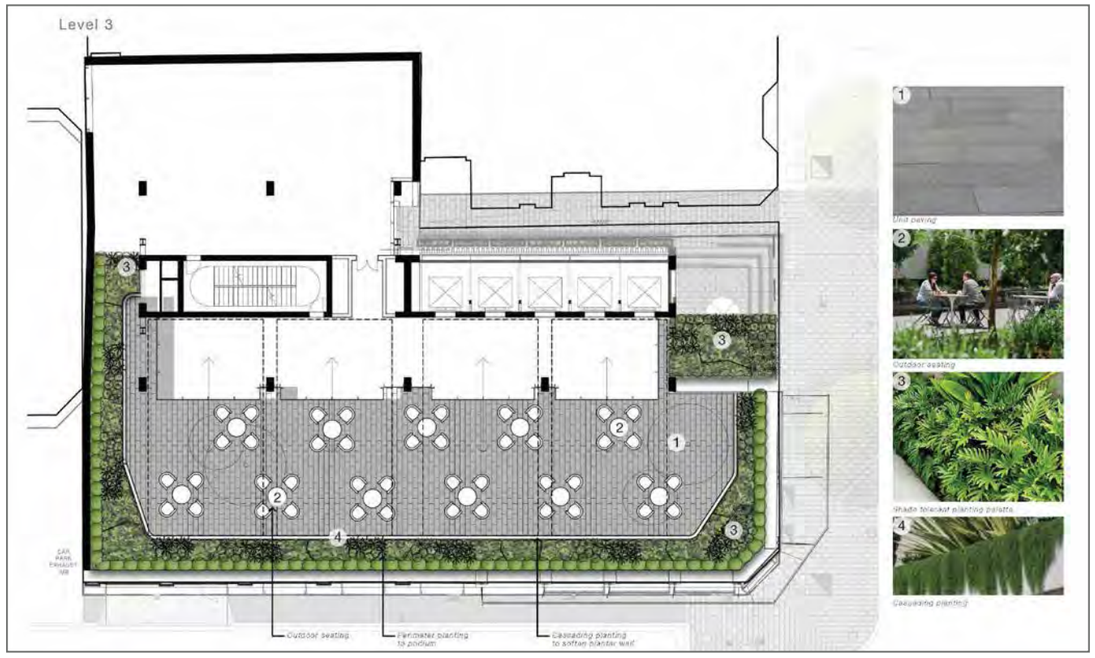
Ground Floor / Public Domain interface, showing sloping laneway / lift lobby, and retail activation of Valentine Street

PUBLIC DOMAIN AND LANDSCAPE CONTEXT

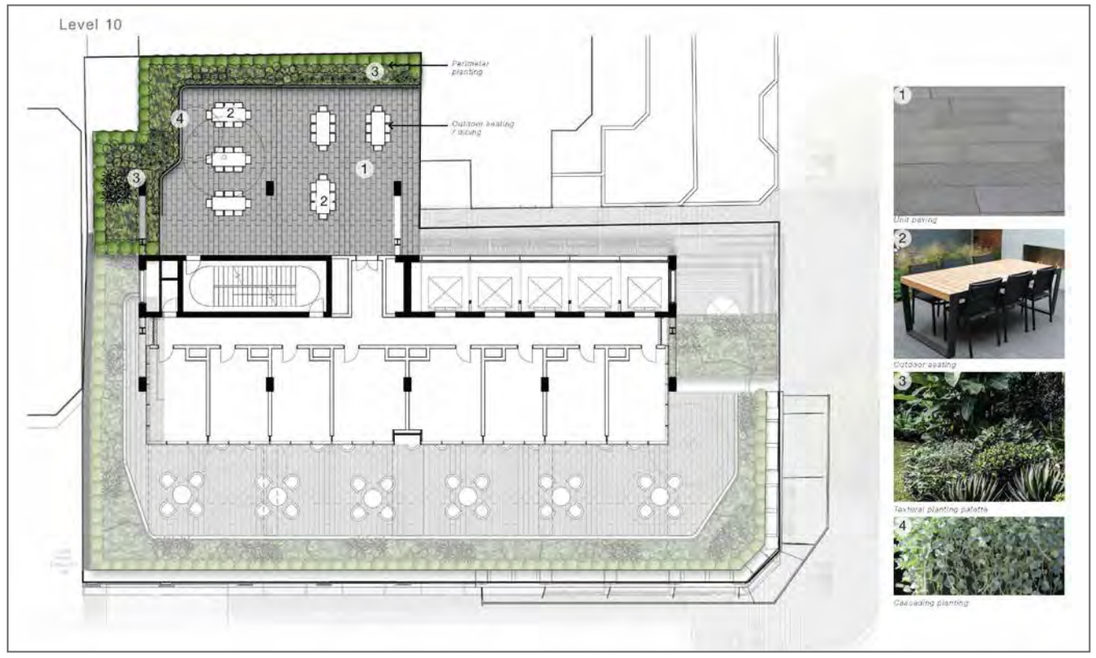
Within the building, the public domain granite paving continues along the sloping lane as publically accessible private open space, extending to the retail tenancy to the western portion of the ground floor. This reflects the existing right-of-way benefitting the site extends along the northern boundary for 20.9 metres. The planter troughs proposed along the southern wall to green this wall to the rear of the lift has strong potential for public art treatment, as does the upper portion of the two-storey space above the lane. There is presumption of cooperation with the adjoining site to provide retail frontages to this space to reinforce activation of this laneway. Subject to coordination with the adjoining development proposals by Greaton at 187 Thomas Street, there is to be pedestrian connectivity and through site link.

On Level 3 the rooftop of the upgraded Sutton Forest Meat Company building is proposed to have an outdoor terrace with landscape edge. This terrace is partly covered by the tower above, with significant angled soffit to the building creating a bold canopy type ceiling above the space. This soffit has strong potential for public art treatment, being prominent in views from the street below, and relating strongly to the heritage building below.

A further landscape terrace is proposed to Level 10 as indicated below.



Level 3 indicative landscape proposals for a terrace to the roof of the upgraded Sutton Forest Meat Company building.

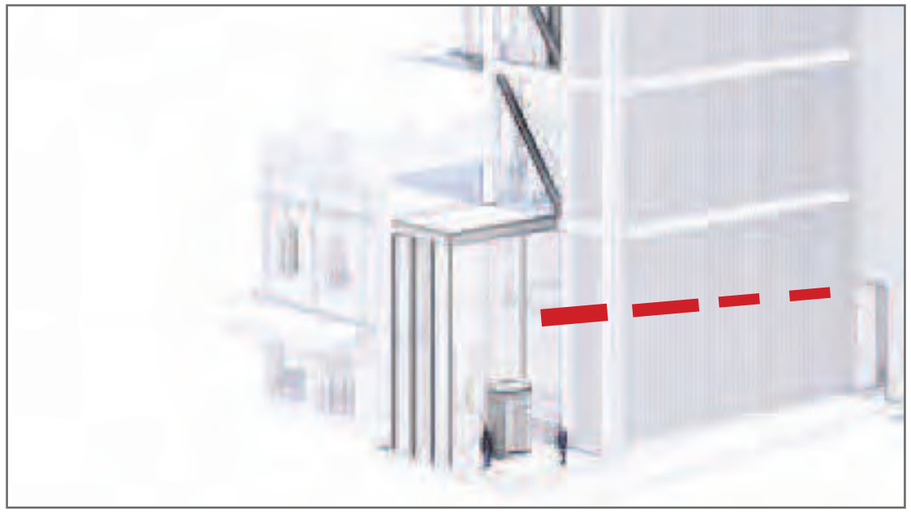


Level 10 indicative landscape proposals

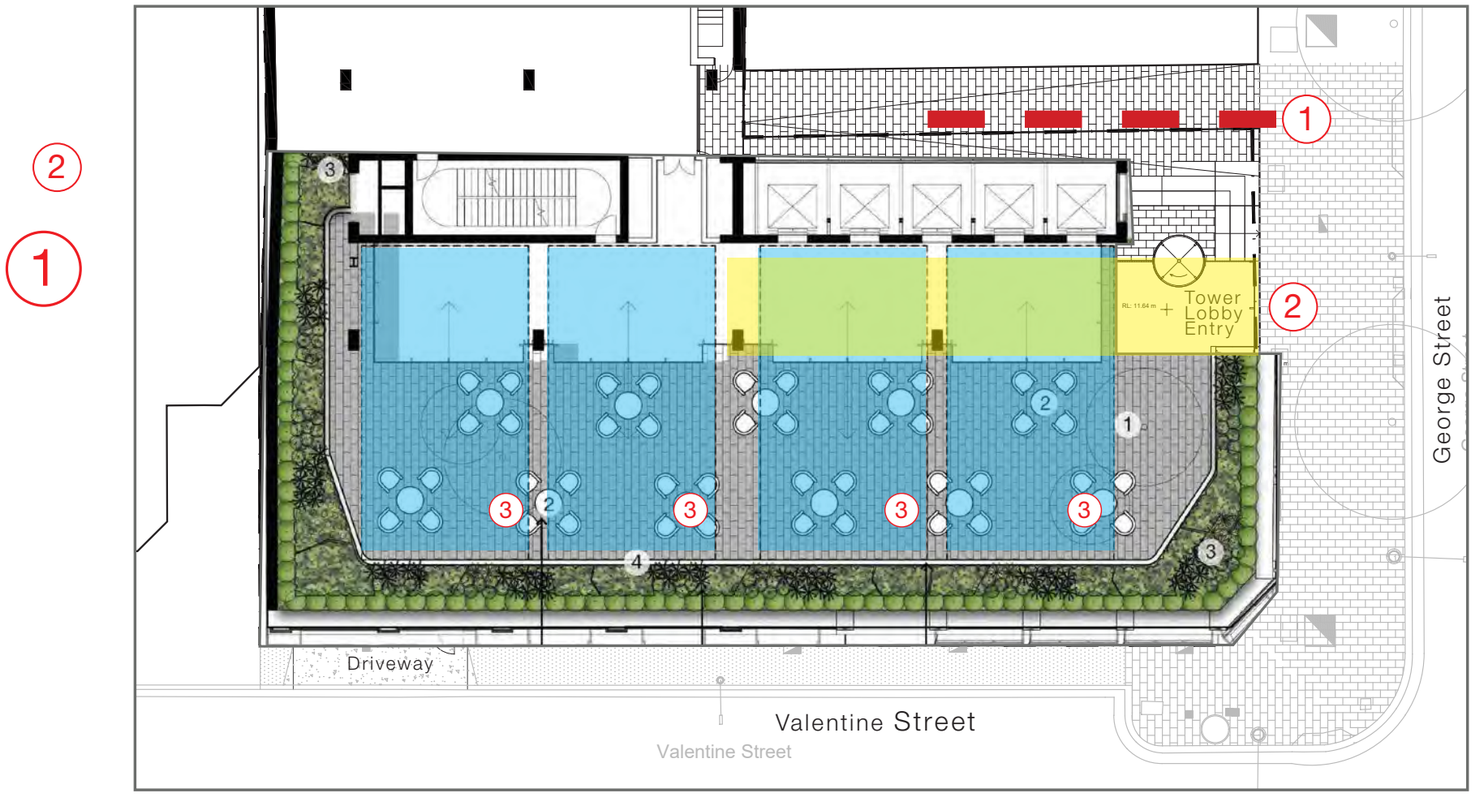
PUBLIC ART OPPORTUNITIES

The principal opportunities for public art are identified as:

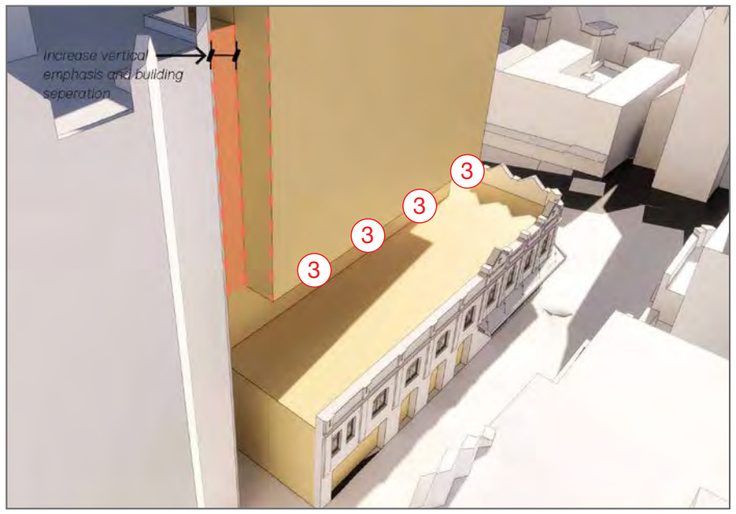
1. Elevated artwork above the Laneway (formed 1910) presenting to George Street
2. Ceiling to the Tower Lobby, with space just below the ceiling
3. Tower Soffit / Canopies over Level 3 Terrace



1. Space above the sloping laneway, potentially a hanging horzontal element that engages with the streetscape.



2. Ceiling of the Lift Lobby space, or the in the space below the ceiling.



2. On the west facade of the SF Meat Co. Building, with 14m setback adjacent.
3. The tower form soffit above the Level 3 terrace is prominent from the street

Opportunities for Public Art: 1. On the west facade where 14m setback is provided adjacent. 2.The soffit of the building tower presents in views from the street below.

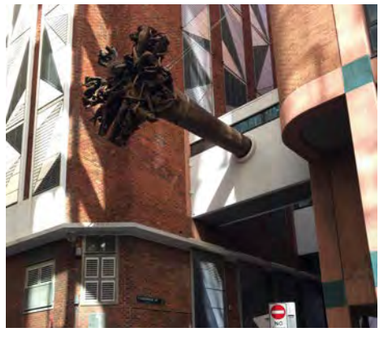
PUBLIC ART OPPORTUNITIES

As shown on the plan on the previous page, three potential opportunities for public art integral with the building and public domain have been identified. The discussion and illustrations below are intended to provided starting points and guidance only for the selected artist to develop and refine into a final public artwork.

1. ELEVATED LANEWAY PRECEDENTS

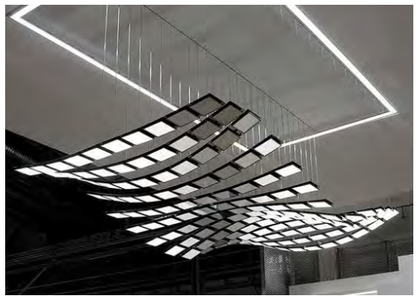
For the selected artist to investigate locality and site specific themes that hang in the space above the laneway, with potential to reference ATSI site heritage and original landscape, or to create a strong dialogue with the streetscape, and potentially relate to the spires of the church and Railway Square towers aligned opposite the site.

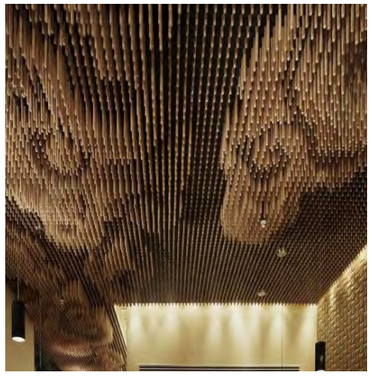





2. LIFT LOBBY CEILING PRECEDENTS

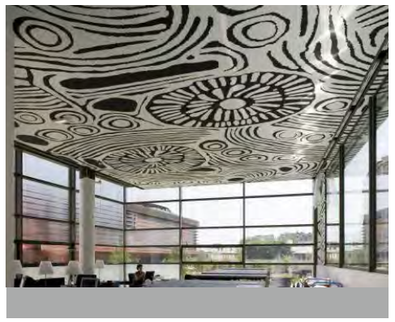
For the selected artist to investigate potential for art to complement and respond to the view up from the streetscape to the tower form, and the prominent tall glazed lift lobby space, whose ceiling and space below can provide a foreground to the tower rising above.

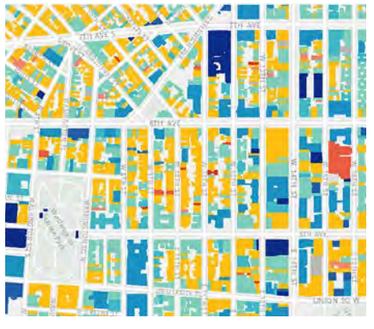




3. BUILDING CANOPY PRECEDENTS

The dramatic scale of the building soffit / canopy elements above the level 4 terrace suggest a range of potentially striking treatments, from Aboriginal artwork, to reflective / dynamic mirror or lighting elements. A video screen artwork might act as periscope type vista of Cockle Bay / Harbour views, with interpetive content.





CALL FOR ARTISTS EOI / SHORTLIST AND SELECTION PROCESS

The ‘City Art’ and ‘Public Art in Private Developments’ documents set out a range of suitable processes for short-listing and selection of a preferred Public Artist. Given the relatively limited scope for public art, after consultation with the Architect and Interior Designer the team is to decide the preferred location for public art (ie laneway wall or pavement, or entry canopy). Based on the specific opportunity a short list of artists is to assembled based on relevant experience, and an call for Expression of Interest sent. The indicative sequence below highlights the proposed methodology for calling of selected Artist EOI, indicative artist application requirements, shortlisting, selection and engagement through to implementation.

1. Artist Selection Process:
Appoint a suitable Curator with relevant experience with the City of Sydney and comparable Public Art projects
Curator to assemble a range of different artists, with specific experience relevant to the different opportunities
Curator to assemble a panel of 3 artists that are considered suitable for the project, based on previous experience
Shortlisted Panel of 3 artists submitted to Council for approval, and following input finalise shortlist.
EOI invitation sent to Shortlisted Artists, requesting relevant practice details including:
a. Artistic Practice Details: provide a summary of artistic focus and professional career, especially outlining how the artists’ background relates specifically to this opportunity;
b. Images of Previous Work and referees relating to public art projects experience
c. Confirmation of suitability of proposed form of contract / terms and conditions;
d. Brief comment on understanding of the project and approach to creating an artwork for the project.
Artist Selection Panel to be formed (Client, Architect, Public Art Consultant, and Council member if requested) and meeting convened to decide artist selection.
Winning Artist formal engagement, and unsuccessful candidates notified

2. On-going process from selected Artist engagement to completion:
Artwork development in consultation with Curator / Project Team
Coordination with project team to integrate the work with site / architectural and interior elements
Final artwork client approval, and coordinate detailed shop drawings, in conjunction with specialist public art fabricator
Submit Shop Drawings to Council to gain CC stage approval
Commence artwork pre-production / fabrication
Commencement of siteworks / provisions and installation / final completion
Handover including completing contract requirements / warranty and maintenance

TIMING

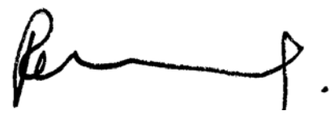
Public Art invited competition is to be completed prior to DA lodgement, and refinement of proposals to a DA level Preliminary Public Art Plan is to be submitted for approval. As part of this process, Council consultation is to occur to gain interim and final feedback prior to lodgement of the DA. Following DA approval, a Detailed Public Art Strategy (DPAS) is to be prepared, supported by ‘Detailed Public Art Plans’ as shop drawing type documentation of the proposed artwork. This will be considered by Council and resubmitted until approved prior to CC for above ground construction to proceed.

BUDGET GUIDANCE

We note the City of Sydney’s benchmark guideline of public art to be 0.5- 1 % of total project value, but also note the budget is to be determined based on specific opportunity to provide for a suitable premium quality public artwork integral with the architecture. Based on this %, and review of the public art opportunities for the project, an all inclusive public art budget for the project is proposed as a guide at $400,000. One of the three indicative artwork opportunities is proposed to proceed, and determination of which location will be determined through the public art competition process (and consultation with the Council, Client, Architect, and Public Art Curator specifically appointed to oversee the process) with invited artists able to propose artworks for one or both of the locations as they decide. The artwork budget will include related costs such as:
- Seeking fabricator budget feedback to the early stages so that the artist vision is within the cost plan;
- constructive dialogue with the artist providing feedback on proposals against ‘budget’ if required;
- Ongoing PM monitoring of the progress of artwork shop-drawings, tendering, fabrication and delivery.

CONCLUSION

This Preliminary Public Art Plan has been developed in support of Architectural Planning Proposals for 757-763 George Street, Haymarket. We believe this Public Art Plan satisfies the public art requirements set out in Council’s guidelines and policies, and it is hoped sets out suitable locations and potential themes, and sets out a suitable process for artist selection, artwork development through to delivery of a final artwork that will provide a significant contribution to the project and surrounding area. We welcome dialogue with Council to discuss the artwork approach.



Ross Shepherd MArt (COFA, UNSW), BLArch (UNSW), Registered Landscape Architect No. 449
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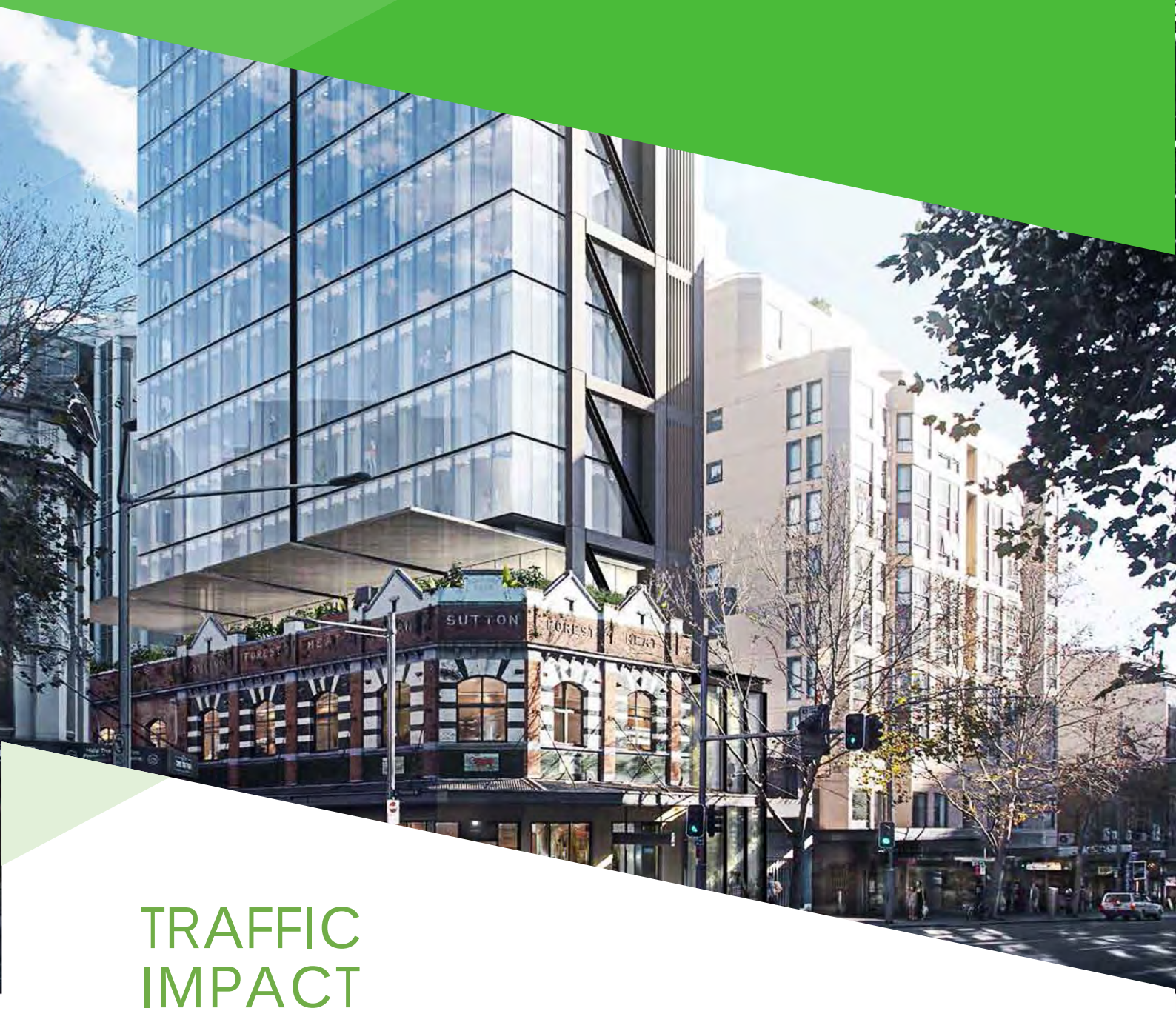

TRAFFIC IMPACT ASSESSMENT

Proposed Mixed-Use Development
757 – 763 George Street, Haymarket

Reference: 20.037r01v07
Date: October 2021

TRAFFIX
TRAFFIC & TRANSPORT PLANNERS

Suite 2.08, 50 Holt St
Surry Hills, NSW 2010

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DOCUMENT VERIFICATION

Job Number	20.037			
Project	757 – 763 George Street, Haymarket			
Client	Samprian Pty Ltd			
Revision	Date	Prepared By	Checked By	Signed
v07	15/10/2021	Hayden Dimitrovski	Vince Doan	

CONTENTS

Appendices

1. INTRODUCTION

TRAFFIX has been commissioned by Samprian Pty Ltd to undertake a traffic impact assessment (TIA) to accompany a Planning Proposal for the site at 757 – 763 George Street, Haymarket. Approval is sought to vary the floor space ratio and building height controls under the City of Sydney Local Environmental Plan (2012).

An indicative reference scheme has been prepared by Grimshaw Pty Ltd, comprising a mixed-use development with of 280 hotel rooms, hotel amenity gross floor area (GFA) and 324m^2 of retail space GFA. This report assesses the traffic impacts and parking requirements arising from this scheme, which is considered to be representative of the site being developed to its full potential when incorporating the proposed planning controls.

This report documents the findings of our investigations and should be read in the context of the Planning Proposal Justification Report, prepared separately. The future mixed-use development is considered to be a size or scale that would require referral to Transport for NSW (TfNSW), formerly Roads and Maritime Services (RMS), under the provisions of the State Environmental Planning Policy (SEPP) (Infrastructure) 2007.

The report is structured as follows:

- Section 2: Describes the site and its location
- Section 3: Documents existing road conditions
- Section 4: Documents existing public transport services
- Section 5: Describes the proposed development
- Section 6: Assesses the parking requirements
- Section 7: Assesses traffic impacts
- Section 8: Discusses access and internal design aspects
- Section 9: Presents the overall study conclusions

2. LOCATION AND SITE

The subject site is known as 757 – 763 George Street, Haymarket and is located on the western side of George Street and the northern side of Valentine Street. It is also located approximately 250 metres north-west of Central Railway Station.

The site has a total site area of approximately 1,030m^2 and consists of a two-storey heritage building and a three-storey retail development. The site has an irregular configuration with an eastern frontage of 23 metres to George Street, a southern boundary of 40 metres to Valentine Street, an eastern boundary of 30 metres and a northern boundary of 48 metres both to neighbouring commercial developments.

The site is currently zoned as B8 – Metropolitan Centre with a building height control of 50 metres and a base floor space ratio (FSR) of 9.9:1 (7.5:1 + 1.5:1 accommodation bonus + 10% design excellence bonus). 'This report has been prepared in support of a Planning Proposal which seeks to change the height and FSR.

Vehicular access to the site is currently provided via George Street at the north-eastern end of the site and a secondary service vehicle access from Valentine Street. The previously approved development (DA/2017/353) included a new vehicular access along the site's western boundary with 187 Thomas Street, Haymarket.

A Location Plan is presented in Figure 1, with a Site Plan presented in Figure 2. Reference should also be made to the Photographic Record presented in Appendix A which provides an appreciation of the general character of roads and other key attributes in proximity to the site.

Figure 1: Location Plan

Figure 2: Site Plan

3. EXISTING ROAD CONDITIONS

3.1 Road Network

The road hierarchy in the vicinity of the site is shown in Figure 3 with the following roads of particular interest:

- George Street: Part of an RMS Highway (HW5) west of the intersection of Quay Street and an unclassified Regional Road (RR 7300) between Park Street and Quay Street. George Street generally runs in a north-south direction between the Cross City Tunnel in the north-east and Harris Street in the south-west. Within the vicinity of the site, George Street is subject to a speed zoning of 40km/h. George Street generally caters for the light rail with traffic lanes varying.
- Valentine Street: a local road that generally traverses in an east-west direction between George Street in the east and Quay Street in the west. It is subject to a 40km/h speed zoning and carries a single lane of traffic in each direction within a 7.75m wide carriageway. Valentine Street predominantly permits ticketed kerbside parallel parking along the northern side with limited parking spaces available along the southern side of the street. The eastern end of the street is restricted to one lane with only left turns onto George Street permitted.
- Quay Street: a local road that generally traverses in a north-south direction between the intersection of George Street in the south and Hay Street in the north. It is subject to a speed zoning of 40km/h and carries a single lane of traffic in each direction within a 12.5m wide carriageway. The southern end of Quay Street at the intersection of George Street only allows for entry into Quay Street. Ticketed kerbside parking is permitted along both sides of the road.
- Thomas Street: a local road that traverses in an east-west direction between Thomas Lane in the north-east and forming a cul-de-sac in the west. Thomas Street between Quay Street and Thomas Lane allows for a single lane of traffic in a south-west direction within a 12.5m wide carriageway. Thomas Street is a high pedestrian area, subject to a speed zoning of 40km/h and permits limited time restricted parking in addition to several loading zones located along the street.

The subject site is located within close proximity of George Street, an arterial road servicing the area, allowing traffic to be distributed to the wider network.

Figure 3: Road Hierarchy

3.2 Proposed Changes to Road Conditions

A number of significant changes are proposed in the vicinity of the site to improve pedestrian and cyclist connections with the aim of also improving connectivity between Central Station and Darling Quarter. It is noted that the proposed changes are subject to approval by the TfNSW. The proposed changes include the following:

- A new shared path along the western side of Quay Street between George Street and Ultimo Road;
- Closure of Quay Street between Thomas Street and Valentine Street to create a new public plaza area with a continuous footpath treatment envisaged for the intersection of Quay Street and Thomas Street; and
- Valentine Street, which allows for two-way flow of traffic under existing conditions is proposed to be converted to a one-way street with traffic flowing in an easterly direction. Additional parking will also be introduced along the southern side of Valentine Street.

A concept plan prepared by the City of Sydney is provided in Appendix B for reference.

3.3 Walking and Cycling

3.3.1 Walking Facilities

The site is ideally placed with several pedestrian facilities available in the locality. There are existing pedestrian footpaths surrounding the site, with footpaths provided along both sides of Thomas Street, Quay Street and Valentine Street. The signalised intersections of Quay Street and George Street and Ultimo Road and Quay Street provide signalised pedestrian crossings at all legs, providing pedestrians safe and efficient connections to the wider footpath network. It is also noteworthy that a through site link is provided between Thomas Street and George Street.

3.3.2 Cycling Infrastructure

The site is also located within proximity to separated bicycle lanes, off-road shared paths and bicycle friendly roads available throughout the area. These cycleways can be used concurrently with other bicycle routes to provide connections to various areas around Sydney. The existing cycling facilities are presented in Figure 4, with the cycleways summarised as follows:

- **Separated Bicycle Lanes** — Sections of Darling Drive and Castlereagh Street accommodate off-road shared paths for bicycles. These routes provide access to areas towards Pyrmont, Darling Harbour and Sydney CBD.
- **Low Traffic On-road Routes** — Quay Street, Hay Street and George Street accommodate low-traffic on-road routes. These routes provide access to areas such as Ultimo and Sydney CBD.
- **Off-Road Shared Paths** — Sections of Harbour Street, Belmore Park and Tumbalong Park accommodate off-road shared paths for bicycles. These routes provide access to areas towards Pyrmont and Darling Harbour.
- **Wayfinding Signage Routes** — Ultimo Road, Hay Street, Castlereagh Street and MaryAnn Street accommodate routes with wayfinding signage. These routes provide access to areas such as Ultimo and the Sydney CBD.

It can be seen from Figure 4 that the site is conveniently located with respect to the various cycle infrastructure serving the locality. As such, the site is considered highly accessible via the existing cycling network.

Figure 4: Existing Cycleways in the Locality

3.4 Existing Parking On-Street/Off-Street

3.4.1 Off-Street Parking

The existing site accommodates a carpark/serving area at the rear of the two development with a narrow lane accessed from George Street.

3.4.2 On-Street parking

Valentine Street provide an opportunity for on-street parking close to the site including timed parking, ticketed parking and time restricted loading zones. Parking adjacent to the site is discussed in detail below:

- Valentine Street: 20 metres of time restricted, ticketed parking '1P Ticket 8am-6pm Monday to Friday, 4P Ticket 6pm-10pm and 8am-10pm Saturday to Sunday and Public Holidays' in two separate sections.

  6m for an Authorised Car Share space.

  11 metres of time restricted, ticketed Loading Zone from 7am-6pm Monday to Friday and 7am- 10am Saturday and parking '4P 6pm-10pm Monday to Friday, 10am -10pm Saturdays and 8am-10pm Sunday and Public Holdiays'.

4. EXISTING PUBLIC TRANSPORT SERVICES

4.1 Bus Services

The site is located within 400 metres walking distance of bus stops on Eddy Avenue, George Street, Harris Street, Railway Square and Campbell Street which are serviced by the following routes and are presented in Table 1 and Figure 5.

Table 1: Bus Routes Servicing the Area

Route Number	Route Name	Route Number	Route Name
308	Marrickville Metro to Central Eddy Ave	431	Glebe Point to City Martin Place
309	Banksmeadow to Central Railway Square	438	Abbotsford to City Martin Place
310X	Banksmeadow to Central Railway Square	439	Mortlake to City Martin Place
X93	Little Bay to Central Railway Square	461	Burwood to City Domain
309X	Port Botany to Central Railway Square	470	Lilyfield to City Martin Place
311	Millers Point to Central Railway Square	L23	Kingsgrove to City Martin Place
338	Clovelly to Central Railway Square	L28	Canterbury to City Martin Place
376	Maroubra Beach to Central Railway Square	L38	Abbotsford to City Martin Place
391	La Perouse to Central Railway Square	L39	Mortlake to City Martin Place
339	Clovelly to City Gresham Street	M30	Sydenham to Taronga Zoo
374	Coogee to City Circular Quay	422	Kogarah to Central Pitt St
372	Coogee to Central Railway Square	433	Balmain Gladstone Park to Central Pitt Street
393	Little Bay to Central Railway Square	436	Rodd Point and Chiswick to Central Pitt Street
395	Maroubra Beach to Central Railway Square	480	Strathfield to Central Pitt Street
412	Campsie to City Martin Place	483	Strathfield to Central Pitt Street
413	Campsie to City Martin Place	440	Bondi Junction to Rozelle
423	Kingsgrove to City Martin Place	501	West Ryde to Central Pitt Street
426	Dulwich Hill to City Martin Place	891	Central Eddy Avenue to UNSW High Street

Route Number	Route Name	Route Number	Route Name
428	Canterbury to City Martin Place	M10	Maroubra Junction to Leichhardt

Figure 5: Bus Services in the Locality

It can be seen from Figure 5 that there are several bus services operating in the locality, which provide regular and accessible routes throughout the Sydney region. As such, the site is conveniently placed and highly accessible through the bus network.

4.2 Railway Services

4.2.1 Sydney Trains

The site is located approximately 250 metres northwest of Central Railway Station. The services operating at this station are summarised in Table 2.

Table 2: Central Railway Station Existing Services and Routes

Train Line	Routes	Train Line	Routes
CCN	Central Coast and Newcastle Line	BMT	Blue Mountains Line
SHL	Southern Highlands Line	T1	North Shore, Northern and Western Line
SCO	South Coast Line	T2	Inner West and Leppington Line
Regional NSW	North Coast NSW	T3	Bankstown Line
	North West NSW	T4	Eastern Suburbs and Illawarra Line
	Southern NSW	T7	Olympic Park Line
	Western NSW	T8	Airport and South Line

4.2.2 Sydney Metro

Central Railway Station will also provide services across the future Metro Line between Tallawong Station in Rouse Hill in the north and Bankstown Station in the south.

4.3 Light Rail Services

Further to this, the site is located within 400 metres of several light rail stations along the Inner West and Sydney CBD light rail lines. The Inner West Line provides services to 23 stations along the L1 line between Central and Dulwich Hill. The existing stations located close to the site are outlined below:

- Central Station
- Capitol Square
- Paddy's Market

The Sydney CBD and South East lines provides access to the L2 and L3 services between Circular Quay, Randwick and Kingsford. The stations located within walking distance of the site are outlined below:

- Haymarket
- Chinatown

It is therefore evident the site benefits from excellent connections to a multitude of public transportation options as presented in Figure 6. The site is located approximately 250 metres northwest of Central Railway Station and within very close proximity of numerous bus stops and light rail stations in the area which provide an extensive number of services that service the Sydney Metropolitan area, notwithstanding the site is within walking distance of the Sydney CBD.

Figure 6: Railway and Light Rail Stations in the Locality

4.4 Car Share Services

The subject site is situated within 400 metres of 8 GoGet car pods. Car share services are able to cater for short-term car related trips. These GoGet pods are presented in Figure 7, with the locations summarised as follows:

- Valentine Street, approximately 24 metres west of George Street
- Quay Street, approximately 60 metres northwest of Broadway
- Thomas Street near Quay Street, approximately 13 metres west of Quay Street
- Ultimo Road, approximately 18 metres east of Thomas Street
- Quay Street near Ultimo Road, approximately 57 metres north of Ultimo Road
- Parker Street, approximately 30 metres south of Hay Street
- Mary Ann Street at the intersection with Omnibus Lane
- Sussex Street near Little Hay Street, approximately 9 metres north of Little Hay Street

It should be noted that additional GoGet pods can also be requested closer to and / or within the site, subject only to any future additional demonstrated demand.

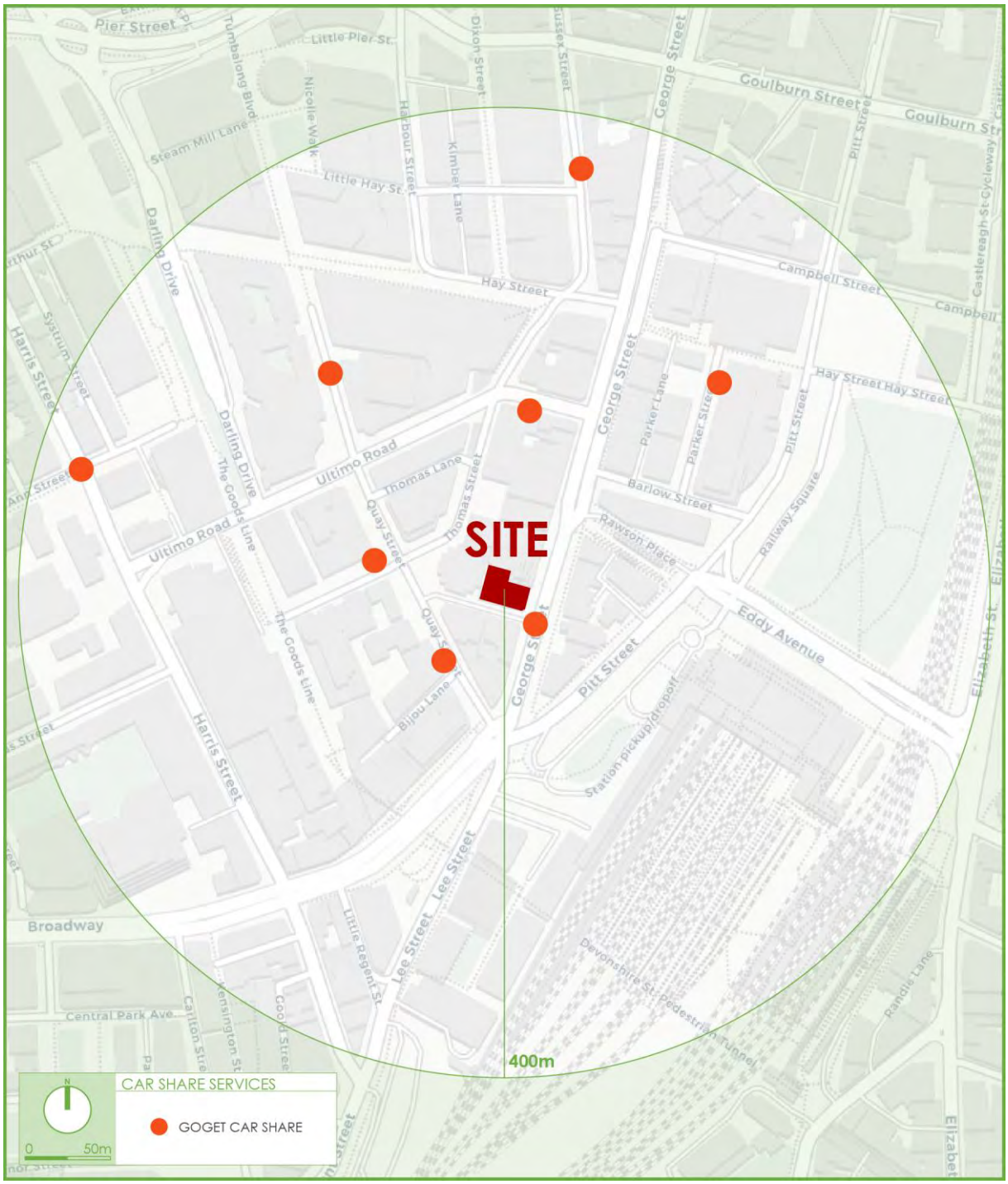


Figure 7: GoGet Pod Locations in the Locality

5. DESCRIPTION OF PROPOSED DEVELOPMENT

A detailed description of the proposed development is provided in the Urban Design and Planning Justification Reports prepared separately. In summary, the development for which approval is now sought is a 30-storey mixed use development comprising of the following components:

- Demolition of the building located at 757-759 George Street and retention of the existing heritage item at 761-763 George Street.
- Adaptive reuse of the existing heritage building and construction of 30 storey tower containing the following:
  - A 280 room hotel;
  - Guest amenity which could include food, beverage or lounge areas; and,
  - Two ground floor retail tenancies units with a total GFA of 324m^2.
- A basement car park providing parking for seven (7) vehicles accessed via a car lift from the loading dock for hotel valet parking only.
- A loading dock providing a single loading bay for a small rigid vehicle on the ground floor accessed from Valentine Street.

The parking and traffic impacts arising from the development are discussed in Section 5 and Section 6. Reference should be made to the plans submitted separately to Council which are presented at reduced scale in Appendix C.

6. PARKING REQUIREMENTS

6.1 Council Assessment

6.1.1 Council Controls

The City of Sydney Local Environmental Plan 2012 (LEP) specifies parking provisions for the various components of the development based on the land category of the development, as defined in the LEP. The land categories applicable to the site are as follows:

- Category A Land Use and Transport Integration Map
- Category D Public Transport Accessibility Level Map

The maximum car parking provisions for the various components of the development are outlined as follows.

6.1.2 Retail

The City of Sydney LEP specifies parking provisions for retail developments according to the relevant category as shown on the Public Transport Accessibility Level Map. Noting that the site falls under Category D and the floor to space ratio of the retail component is more than 3.5:1, the formula below applies to the development.

M (Maximum Number of Spaces) = G (Retail GFA) x A (Site Area) / T (Total GFA) X 50

Therefore, with the development providing a retail gross floor area of 324m^2, a site area of 1,031m^2 and a total GFA of 12,145m^2, the development has a maximum parking requirement of one (1) car parking space.

6.1.3 Hotel

The City of Sydney LEP also specifies maximum parking provisions for hotel accommodation. A maximum of 1 space for every 4 bedrooms up to 100 bedrooms and 1 space for every 5 bedrooms more than 100 bedrooms is permitted under these controls.

Application of this rate to the envisages 280 rooms results in a maximum parking allowance for 61 hotel parking spaces.

6.1.4 Overall Parking Provisions

Table 3: Council Parking Rates and Provision

Type	GFA / Rooms[1]	LEP Maximum Car Parking Rate	Permissible Parking[2]
Retail			
Ground Floor Retail	324	M = G x A / T x 50	1
Hotel			
Hotel Rooms	100 rooms	1 space for every 4 bedrooms (up to 100 bedrooms)	61
	180 rooms	1 space for every 5 bedrooms (more than 100 bedrooms)	
		Total	62

1 – Yields are indicative and are subject to change at a later DA stage

2- Parking calculations are rounded to the nearest whole number.

It can be seen from Table 3 that the proposal is permitted to have a maximum car parking provision for 62 spaces. In response, the proposal provides a total of seven (7) parking spaces within the basement level. The site contains a heritage item and is constrained in the ability to provide basement. As a result, the proposed provision is considered the maximum provision available on the site. The nature and location of the proposed development suggests that the majority of guests and staff will either walk or travel via alternative modes of transport to and from the site. In addition, it is anticipated that the hotel operator will ensure guests are aware (at the time of booking) of the valet only arrangement, limited parking availability on site and that booking a space is essential. For those who wish to drive but do not have onsite parking, the hotel operator will provide the location of nearby public parking for guests. Therefore, the proposed provision is considered acceptable and supportable based on Council's maximum parking requirement, constrains of the site and the management strategies proposed to minimise parking demand.

6.2 Accessible Parking

The City of Sydney Development Control Plan (DCP) Schedule 7 requires one accessible space for every 20 car parking spaces or part thereof is to be allocated as accessible visitor parking. As the development provides only valet parking and no visitor parking, accessible parking is therefore not required. In response, the development does not provide any accessible parking complying with Council's DCP.

6.3 Bicycle Parking

The City of Sydney DCP outlines the bicycle parking provision for the various components of the development. These minimum rates are summarised as follows, noting that the requirements and proposed provision will be addressed at a later DA stage.

6.3.1 Retail

The City of Sydney DCP provides the parking provision for the shop, restaurant or café (retail) component of the development with the following rates:

- 1 space per 250m² GFA (Staff)
- 2 spaces plus 1 space per 100m² over 100m² GFA (Customers)

6.3.2 Hotel

The City of Sydney DCP provides the parking provision for the hotel component of the development with the following rates:

- 1 space per 4 staff (Staff)
- 1 space per 20 rooms (Customers)

6.3.3 End of Trip Facilities

The City of Sydney DCP provides the End of Trip (EOT) provision for the non-residential components of the development. However, as the bicycle parking provision has not been designated for each component, the EOT parking spaces will be assessed at a later DA stage. Nevertheless, the EOT facilities for the development will be assessed in accordance with the City of Sydney DCP, which outlines the following recommended EOT rates:

- 1 personal locker for each space
- 1 shower and change cubicle (up to 10 spaces)
- 2 shower and change cubicles (between 11 to 20 spaces)
- 2 additional showers and cubicles (each additional 20 spaces or part thereof)

6.4 Motorcycle Parking

In accordance with the City of Sydney DCP Schedule 7, motorcycle parking is to be provided at the rate of 1 space per 12 car parking spaces. Application of this rate to the proposed total of seven (7) car parking spaces, results in the requirement for one motorcycle space.

Due to the conceptual nature of a Planning Proposal, the above motorcycle parking requirement will be provided within the basement car park at a later DA stage.

6.5 Car Share

The City of Sydney DCP provides the *minimum* car share parking provision for the various components of the development with the following rates:

- 1 space per 30 car spaces provided (Category D – Commercial and Retail)

Application of the above rates to seven (7) Category D spaces results in no requirement for car share spaces. In response, the development does not propose any car share spaces.

6.6 Passenger Pick-Up and Set-Down

6.6.1 Cars/Taxis/Ride-Share

The City of Sydney DCP Schedule 7, outlines the passenger pick-up and set-down provision for the hotel component of the development, being a requirement for two (2) car spaces. In response, the development proposes to utilise the existing 22 metres of 'No Parking' restriction on the southern side of Valentine Street and 13m of 'No Parking' on the eastern kerbside of George Street. The use of existing on-street parking restrictions for passenger pick-up and set-down areas is considered acceptable in this circumstance, noting that taxis/car share/ride-share etc. will not have access to the basement car parking level.

6.6.2 Buses and Coaches

The City of Sydney DCP Schedule 7 also requires hotels to provide coach/bus parking at a rate of 1 bus or coach space per 100 rooms. Application of the above rate to the 280 hotel rooms, results in the requirement for three (3) bus or coach spaces for passenger pick-up and set-down. It is expected that the majority of buses picking up/dropping off hotel guests will be small airport shuttle buses. In response, the development proposes to utilise the various on-

street loading zones located in the vicinity of the site. In this regard, NSW Road Rules 2014, Rule 179 states the following regarding stopping in a Loading Zone:

(1) A driver must not stop in a loading zone unless the driver is driving:

(a) a public bus that is dropping off, or picking up, passengers, or

(b) a truck that is dropping off, or picking up, goods, or

(c) any of the following vehicles:

(i) a vehicle that a person is getting into or out of or getting on or off,

(ii) a station wagon or a motor bike that has 3 wheels and is constructed principally for the conveyance of good,

(iii) a motor vehicle constructed principally for the conveyance of goods (other than a vehicle referred to in subparagraph (ii)).

It is noted that the term "public bus" means coach, which is defined in the Act to mean a motor vehicle that is:

(a) constructed principally to carry persons, and

(b) equipped to seat more than 8 adult persons, and

(c) used to convey passengers for hire or reward or in the course of trade or business.

Under the definition of a "coach", the expected buses meets all three (3) requirements of the above definition, and as such are permitted to utilise nearby loading zones to drop-off or pick-up passengers (hotel guests). Furthermore. loading zones within proximity of the site are summarised as follows:

- Valentine Street — the southern side of Thomas Street with the following restrictions:

  11m long 'Loading Zone Ticket 6am-6pm Mon-Fri, 6am-10am Sat'; and

  '4P Ticket 6pm-12am Mon-Fri, 10am-10pm Sat, 8am-10pm Sun and public holidays.'

The use of the abovementioned 'loading zones' for bus/coach pick-up/set-down spaces is considered appropriate given the expected limited frequency of such services and having regard for the site constraints, whereby use of the valuable ground floor space to accommodate minimal pick-up/set-down facilities would deliver a compromised planning

outcome, noting that a typical coach is a minimum 12.0 metres in length. There are also precedents throughout the LGA for this approach for comparable developments.

For larger coaches, it is proposed that coach parking areas are utilised in the following locations:

- Thomas Street — 19m long coach parking with a 15-minute limit along the southern side of Ultimo Road between Quay Street and Thomas Street.
- George Street — 25m long coach parking with a 15-minute limit along the eastern side of George Street between Rawson Place and Broadway.
- George Street — 24m long coach parking with a 15-minute limit along the eastern side of George Street between Valentine Street and Broadway.

6.7 Refuse Collection and Servicing

The City of Sydney DCP Schedule 7, states the following regarding the parking provision for service vehicles within a mixed-use development:

> *"The total number of service vehicle spaces for mixed-use developments are to be calculated on a pro-rata basis of spaces required for the relative proportions of different uses within the building."*

In this regard, the service vehicle requirement for different components is calculated are outlined below:

6.7.1 Retail

The City of Sydney DCP Schedule 7, states the following minimum rates for the shops and shopping centres:

- 1 space per 350m^2 GFA, or part thereof, up to 2,000m^2; then
- 1 space per 8,000m^2 GFA thereafter.

Application of the above rates to the proposed 324m^2 of retail GFA results in the minimum parking requirement for one (1) service vehicle space.

6.7.2 Hotel

The City of Sydney DCP Schedule 7, states the following minimum rates for the hotel component:

- 1 space per 50 hotel bedrooms, or part thereof, up to 100 bedrooms; then
- 1 space per 100 hotel bedrooms; plus
- 1 space per 400m^2 of reception, lounge, bar and restaurant area GFA, or part thereof, for the first 2,000m^2; then
- 1 space per 8000m^2 of reception, lounge, bar and restaurant area GFA thereafter.

Application of the above rates to the proposed 280 rooms, results in the minimum parking requirement for four (4) service vehicle spaces.

6.7.3 Overall Service Vehicle Parking Provision

In summary, the overall service vehicle parking provision for the entire development is outlined in Table 4 below.

Table 4: Service Vehicle Requirements

Use	GFA / Rooms	Service Vehicle Rate	Service Vehicle Parking Requirement
Retail			
Ground Floor Retail	219m^2	1 space for every 350m^2 GFA	1
Hotel			
Hotel Rooms	100 rooms	1 space for every 50 bedrooms (up to 100 bedrooms)	3
	134 rooms	1 space for every 100 bedrooms (more than 100 bedrooms)	
Amenity	Up to 2,000m^2	1 space for every 400m^2 of reception, bar lounge and restaurant GFA (Up to 2,000m^2)	5
		Total	9

1 – Parking calculations are rounded to the nearest whole number.

The above requirement assumes independent provision for each land use component (a cumulative assessment) and therefore takes no account of a 'managed' approach, with shared loading arrangements subject to a loading dock management plan. The proposed loading bay, accommodating 6.4m long small rigid vehicles (SRV) is considered an acceptable

provision in the circumstances having regard for the constrained site with a heritage item, which cannot allow for any additional servicing provisions.

Whilst detailed information regarding the servicing requirements for the proposed hotel, retail and commercial developments are unknown at this stage of the project, the following service frequencies are estimated based on similar mixed-use developments:

- Hotel deliveries – 7 times per week
- Retail/hotel waste – 5 times per week
- Retail/hotel recycling – 3 times per week
- Retail deliveries – 5 times per week

As can be seen from the above preliminary servicing demands, the proposed loading bay will be utilised up to four (4) times per day.

To further satisfy Council's concerns, a future DA condition of consent could require a Loading Dock Management Plan (LDMP) is invited, requiring approval prior to the release of an occupation certificate, if deemed necessary by Council. The LDMP would outline the requirements of the site in relation of deliveries and servicing activities, anticipated vehicle sizes and frequencies, noting that this detailed information will be available in the later stages of the project, once tenants are acquired. The LDMP could include the following information:

- Details of all delivery and serving activities to be carried out for all uses on-site;
- Details of how waste services will be accommodated to meet service requirements;
- Details of vehicle types required to conduct expected activities;
- Details of the frequency of visits per day and/or week of vehicles accessing the dock; and
- Details of how activities and vehicles will be managed to optimise use of the onsite loading bay and minimise use of public streets for loading, parking or circulation.

In addition, with on-street Loading Zones on George Street, Valentine Street and Quay Street, the site can be serviced adequately by using these zones where necessary for short servicing dwell times, such as mail and courier deliveries.

In summary, the proposed loading bay is expected to accommodate the servicing requirements of the mixed-use development and should operate satisfactorily. In addition, a

LDMP could be prepared to prior to the release of an occupation certificate if required by Council.

6.8 Parking & Traffic Demand Management

6.8.1 Green Travel Plan

Section 3.11.1 of the DCP provides the following threshold above which a non-residential development (outside Green Square) is required to have a site-specific Green Travel Plan prepared:

- 100 vehicles per hour for non-residential development;

With reference to the traffic generation analysis presented in Section 7, it is evident that the peak hour traffic demand forecasts for the development are not sufficient to warrant the preparation of a Green Travel Plan for the proposed development.

6.8.2 Travel Access Guide

Section 3.11.1 of the DCP requires a site-specific Transport Access Guide to be prepared for developments, with the following relevant exceptions:

- Developments having a floor area of less than 1,000m^2 gross floor area.
- Businesses employing less than 10 staff.

Based on these thresholds, it is expected that a Travel Access Guide will need to be prepared for the proposed development. It is anticipated that this could be in response to a future approval by Council incorporating an appropriate condition of consent prior to issue of an Occupation Certificate.

7. TRAFFIC AND TRANSPORT IMPACTS

7.1 Existing Site Generation

The subject site is currently unoccupied however the heritage building used to contain a restaurant and the neighbouring building a travel agent. However, the previously approved development application for the site generated the following traffic generation

- 17 vehicles per hour during the morning (AM) peak period (8 in, 9 out); and
- 17 vehicles per hour during the evening (PM) peak period (8 in, 9 out); and

This has been assumed as the existing traffic generation for the site.

7.2 Development Trip Generation

The impacts of the proposed development on the external road network have been assessed having regard for the indicative yield scenarios as summarised in Section 5 above. This assessment has been undertaken in accordance with the requirements of the RMS Guideline to Traffic Generating Developments (RMS GTGD) (2002) and the RMS Technical Direction TDT 2013/04a and as such, the traffic generation rates published in the RMS Guide have been adopted for each individual land use. The result of this assessment is summarised below.

7.2.1 Retail

The RMS GTGD provides a trip generation rate for retail uses. The ground floor retail space is categorised as Speciality Retail and has a trip generation rate of 4.6 trips per 100m^2 GFA in the Thursday evening peak.

Due to the site's proximity to an abundance of public transport and walking infrastructure, a 50% reduction factor has been applied to the Thursday peak hour rate which gives a rate of 2.3 trips per100m^2 GFA. It is assumed that trip generation in the morning peak hour (associated with staff arrivals) is zero with no retail parking spaces provided on-site and staff assumed to use public transportation.

Application of the above trip rates to the 324m^2 GFA of retail space results in the following traffic generation:

- 0 vehicles per hour during the morning (AM) peak period (0 in, 0 out); and
- 7 vehicles per hour during the evening (PM) peak period (4 in, 3 out).

7.2.2 Hotel

The RMS GTGD and TDT 2013/04a do not accurately reflect the anticipated trip generation for hotel developments of this nature. Therefore, in order to undertake an assessment a peak hour trip generation rate of 1 trip per 10 rooms has been adopted based on similar developments within the City of Sydney. This trip generation rate covers vehicle trips, private cars and taxis. Application of the above rate to the proposal for 280 hotel rooms and adopting a 50/50 directional split results in the following traffic generation:

- 28 vehicles per hour during the AM peak period (14 in, 14 out); and
- 28 vehicles per hour during the PM peak period (14 in, 14 out); and

7.2.3 Combined Generation

The combined generation of the retail and hotel components can be summarised as follows:

- 28 veh/hr (14 in, 14 out) during the morning peak hour; and
- 35 veh/hr (18 in, 17 out) during the evening peak hour.

7.3 Net Traffic Impacts

The combined generation of the retail and hotel components can be summarised as follows:

- 11 veh/hr (6 in, 5 out) during the morning peak hour; and
- 18 veh/hr (10 in, 8 out) during the evening peak hour.

As can be seen from the traffic generation above, the development is expected to generate 11-18 vehicles per an hour on top of the currently approved traffic generation of the site. It is noted that the critical evening peak period will experience roughly one (1) additional vehicle trip every four (4) minutes. Accordingly, the increases in traffic volumes at the intersections in the vicinity of the site during the peak periods are expected to be minor.

In summary, the traffic impacts for the development are considered acceptable and can be readily accommodated by the network with no external improvements considered necessary.

8. ACCESS AND INTERNAL DESIGN ASPECTS

8.1 Site Vehicular Access

8.1.1 Vehicular Access

The development proposes a total of seven (7) hotel valet parking spaces with access to Valentine Street, a local road. It will therefore require a Category 1 driveway under AS2890.1 (2004), being a combined entry and exit width of 3.0 to 5.5 metres. In response, a 3.5 metre driveway in accordance with AS 2890.1 and the design principles of Figure 3.21 of Council's DCP. The position of the access is in line with the previously approved development (DA/2017/353) for the site and is considered acceptable. The access also accommodates the SRV entering the loading dock by turning in from Valentine Street, using the turntable to reverse into the loading bay clear of vehicles using the car lift and exiting in a forward direction. Therefore, all vehicles will enter and exit the development in a forward direction and as all car movements will be managed by valet and all servicing movement by the loading dock the potential for any conflicts will be minimised.

8.1.2 Car Lift

A car lift system is proposed to provide access to the seven (7) car parking spaces on Level B2. A queueing analysis has been performed to assess the suitability of the car lift without a waiting bay. As the development provides a maximum of seven (7) valet parking spaces, it has been assumed that three (3) vehicle arrivals within a single hour, which is considered a reasonable assumption based on the low parking provision and that it is valet only. The results indicate the 98th percentile queue shall be contained with no vehicle waiting on street. The full assessment can be viewed in Appendix D.

A swept path analysis of all design vehicles entering and exiting the proposed development, including the service vehicle, has been included in Appendix E, demonstrating satisfactory operation of the proposed Valentine Street access.

8.2 Internal Design

The internal car park complies with the requirements of AS 2890.1 (2004), AS 2890.2 (2018), AS 2890.3 (2015) and AS 2890.6 (2009), and the following characteristics are noteworthy:

8.2.1 Parking Modules

- All standard car parking spaces have been designed in accordance with User Class 1A being for valet parking. These spaces are provided with a minimum space length of 5.4m, a minimum width of 2.4m and a minimum aisle width of 5.8m.
- Three parallel car parking spaces are provided with a minimum space length of 6.2m, a minimum width of 2.1m and a minimum aisle of 3.6m.
- All spaces located adjacent to obstructions of greater than 150mm in height are provided with an additional width of 300mm.
- Dead-end aisles are provided with the required 1.0m aisle extension in accordance with Figure 2.3 of AS2890.1 (2004).

8.2.2 Clear Head Heights

- A minimum clear head height of 2.2m is provided for all areas within the basement car park as required by AS 2890.1 (2004).
- Minimum clear head height of 3.5m is to be provided for all trafficable areas for the maximum sized service vehicle (6.4m long SRV), in accordance with AS 2890.2 (2018).

8.2.3 Service Bays

- Service bay dimensions has been designed in accordance with AS 2890.2 (2018) with a minimum 3.5m wide loading bay.
- Swept path analysis of a 6.4m long SRV entering and exiting the service bay is presented in Appendix E.

8.3 Summary

In summary, the internal configuration of the loading dock and car park is to be designed in accordance with AS 2890.1 (2004) and AS 2890.2 (2018). It is however envisaged that a condition of consent would be imposed requiring compliance with these standards and as such any minor amendments considered necessary (if any) can be dealt with prior to the release of a Construction Certificate.

9. CONCLUSIONS

The following matters are noteworthy:

- Approval is sought to amend the LEP to increase the permitted height to AHD 119m. An indicative reference scheme for a 30 storey mixed use development is envisaged, containing 324m^2 GFA of retail space, a 280 room hotel, hotel amenity and a single basement level of car parking accommodating seven (7) parking spaces.
- The subject site is well connected to several forms of sustainable transport with reliable access to regular bus, light rail and train services. In addition to this, the existing pedestrian and cycleways, ensure the site is ideally situated for the proposed commercial and hotel components of the development.
- The proposed design provides seven (7) parking spaces for the hotel. However, The City of Sydney LEP stipulates a maximum parking rate with consideration of the proximity of the site to public transport. In addition, the parking will be valet only managed by the hotel staff.
- The proposed development is envisaged to provide bicycle parking and end of trip facilities in accordance with Council's DCP, subject to site and design constraints and will be accessed further at a later DA stage.
- The increase in traffic generation arising from the development has been assessed and results in the following:
  - +11 vehicles per hour during the AM peak period (+6 in, +5 out); and
  - +15 vehicles per hour during the PM peak period (+8 in, +7 out).

  The traffic impacts for the development are considered acceptable and can be readily accommodated by the network with no external improvements considered necessary.
- The queueing analysis demonstrated that with three (3) vehicles arriving within one hour, the development will only have no queueing on-street, which is considered acceptable and supportable.
- Waste collection for the site and servicing for retail, commercial and hotel uses is to be undertaken onsite via the provision of a single 6.4m long SRV spaces on the Ground Floor.
- The loading dock and basement car park has been designed to comply with the requirements of AS 2890.1 (2004) and AS 2890.2 (2018), thereby ensuring safe and efficient operation.

This traffic impact assessment therefore demonstrates that the subject application is supportable on traffic planning grounds. TRAFFIX anticipates an ongoing involvement during the development approval process.

View looking east along Valentine Street at the site.

View looking west across George Street at the site.

View looking south along George Street at the site.

View looking west along existing George Street vehicular access.

View looking north across Valentine Street at existing vehicular access.

View looking west along Valentine Street along the site frontage.

Quay Street

The City is upgrading several streets and public spaces in Haymarket, Chinatown to improve walking and cycling in the city centre.

Quay Street is a popular walking connection between Central and Darling Quarter.

Proposed improvements include:

1.
Wider footpath on the western side of Quay Street to improve safety between George Street and Chinatown.

2.
Closing Quay Street at Valentine Street to create a new public plaza with street trees, lighting and furniture.

3.
A new shared path on the western side of George Street to Ultimo Road, creating a safe bike connection for the growing number of people riding.

4.
Extended footpath and new pedestrian crossing on Thomas Street to improve safety and prioritise walking journeys.

5.
New bike lanterns on George and Lee Streets to create a bike connection to Central Station. (with Approval from The Roads and Maritime Services)

paving pattern

paving pattern with tree pit

outdoor cafe seating

Cobblestone paving to encourage slow and safe riding

Traffic changes:

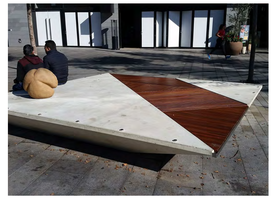
- New one-way loop George Street via Quay Street and Valentine Street
- Thomas Street road closure
- Removing the existing pedestrian crossing on Quay Street

Parking changes:

- All loading zones retained
- Removing seven ticketed parking spaces on Quay Street
- Removing one ticketed parking space on Valentine Street
- Four new ticketed parking spaces on the southern side of Valentine Street
- Total net parking loss of four ticketed parking spaces

Concept design

Project / City South: Quay Street & Connecting Streets, Chinatown



Seating platforms in Darling Quarter

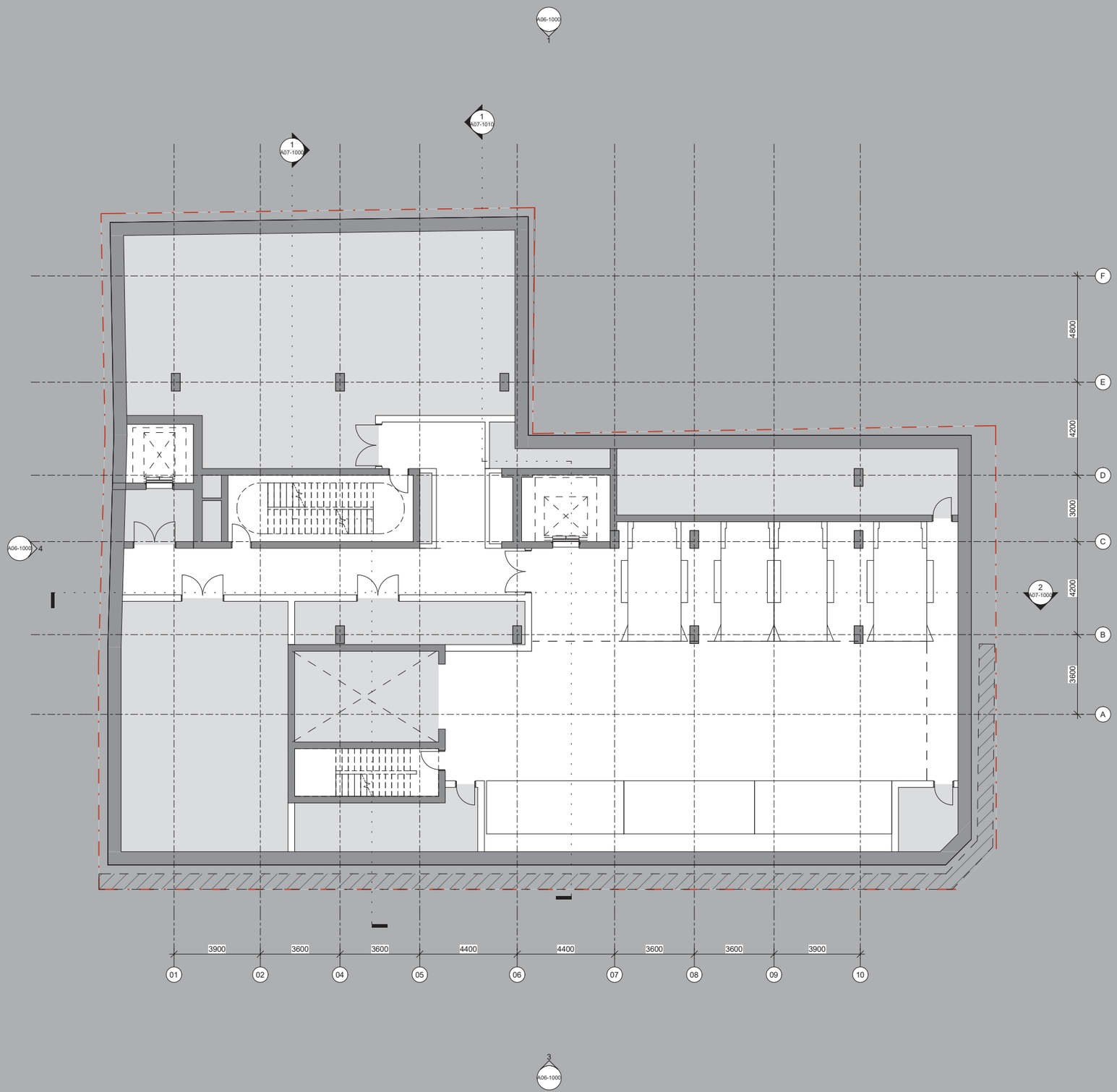
pedestrian crossing with adjacent bike crossing

catenary lighting

catenary lighting and outdoor dining

city of villages

CITYOFSYDNEY



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DRAWING NOTICES

Do not scale - all dimensions to be checked on site. Grimshaw drawings to be read in conjunction with grimshaw and specialist specifications. Drawings to be read in conjunction with m&e, structural, fire and acoustic information.

CLIENT
Samprian Pty Ltd

CONSULTANTS

PROJECT NAME
757-763 GEORGE ST

PROJECT NO.
19287

ADDRESS
757-763 GEORGE ST, SYDNEY, NSW, AUSTRALIA

REV	BY	DATE	DESCRIPTION
1		16.10.20	Issue for Information
2		12.02.21	Issue for Information
3		11.06.21	Draft Issue
4		20.08.21	Draft Issue
5		05.10.21	Draft Issue
6		13.10.21	Planning Proposal Issue

KEY PLAN

NORTH

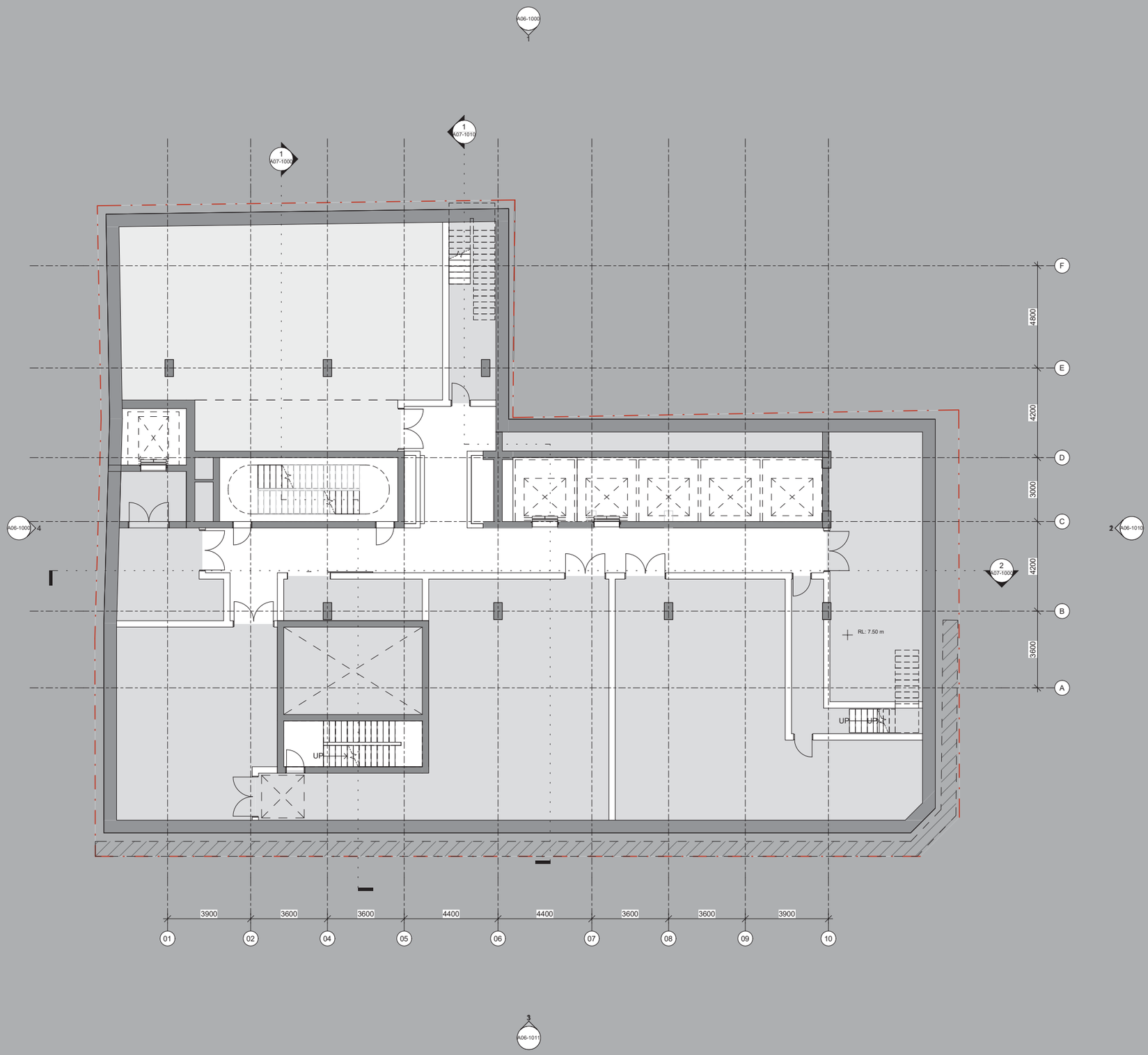
DRAWING TITLE
GA PLAN - LEVEL B2 - BASEMENT 02

SCALE
1 : 100 @ A1

STATUS
For Information

DRW	CH	APPR	DRW DATE	REV
FD	GAS	GAS	13.10.21	6

DRAWING NO.
A03-1000



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6		13.10.21	Planning Proposal Issue

KEY PLAN

NORTH

DRAWING TITLE
GA PLAN - LEVEL B1 - BASEMENT 01

SCALE
1 : 100 @ A1

STATUS
For Information

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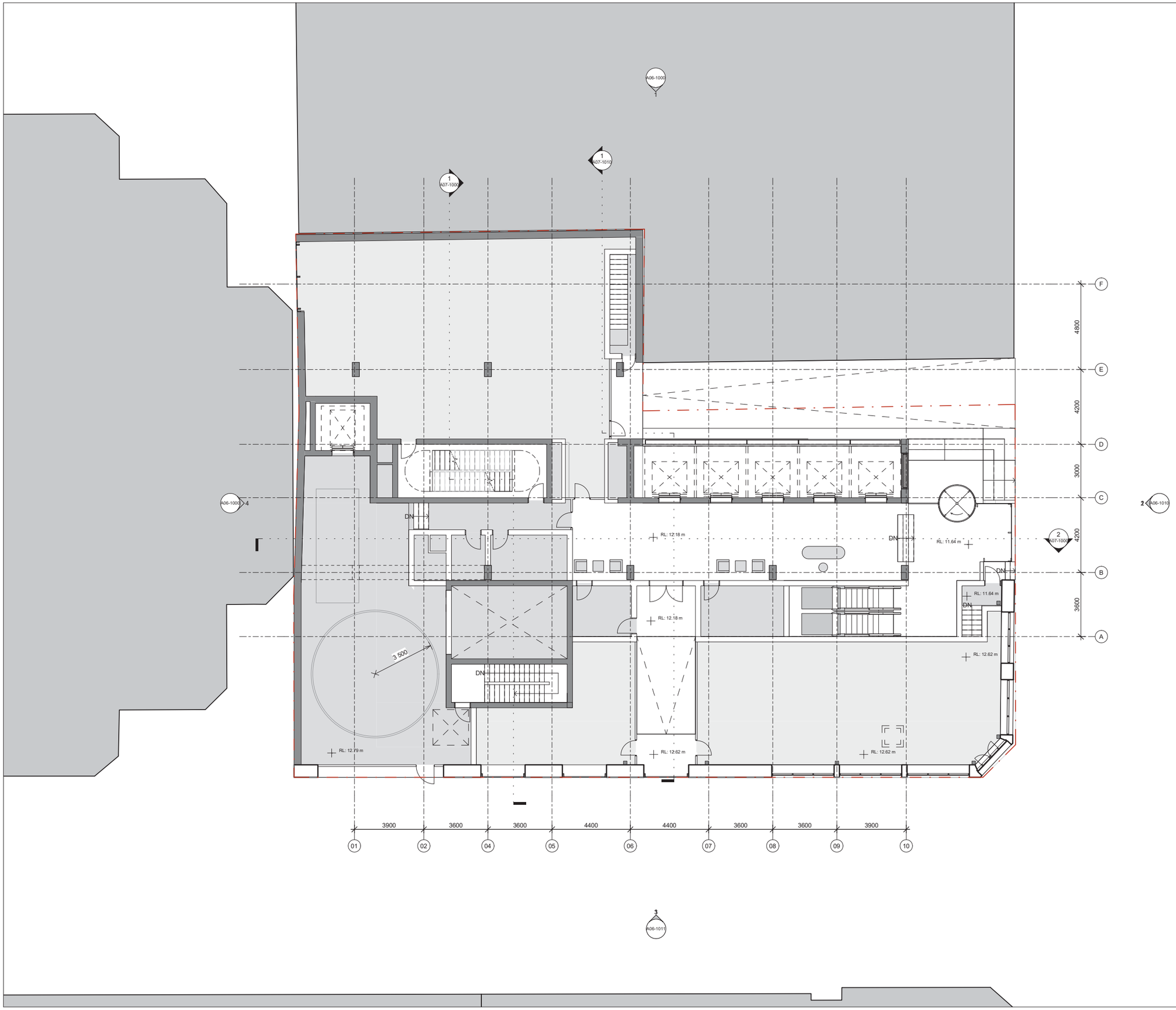
DRAWING NO.
A03-1001



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5		13.10.21	Planning Proposal Issue

KEY PLAN

NORTH

DRAWING TITLE
GA PLAN - LEVEL 01 - GROUND

SCALE
1 : 100 @ A1

STATUS
For Information

DRW	CH	APPR	DRW DATE	REV
FD	GAS	GAS	13.10.21	5

DRAWING NO.
A03-1002

20.037 - 757-763 George Street, Haymarket - Queuing Calculations

Average Travel Distance			
Basement Level	No Cars/ Motorcycles	Assumed Vert Distance from G (m)	Weighted Distance Factor
G	0	0	
B2	8	9	72
Total	8		72
		Average	9

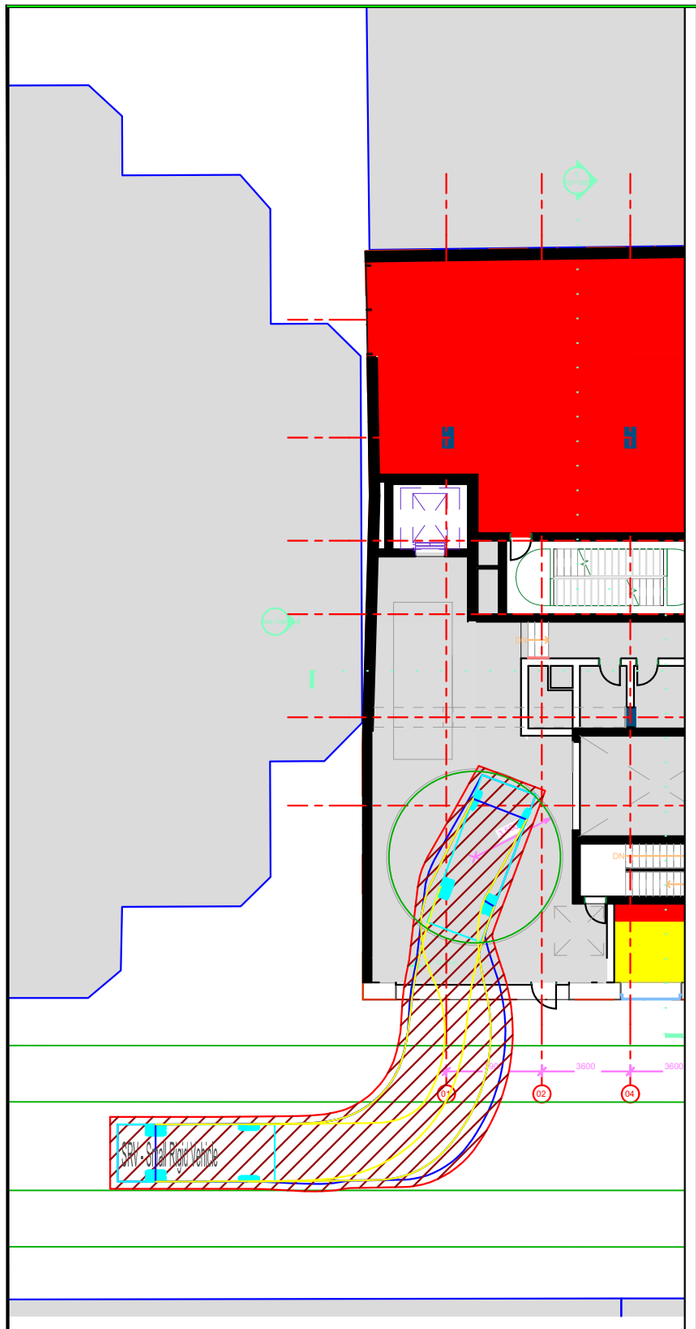
Vehicle Arrivals (veh/hr)	3
Travel Speed (m/sec)	0.15
Load & Exit Time (sec) (assumed)	10
Door Opening Time (sec) (assumed)	10
Average Travel Time (sec)	60
Total Average Time (sec)	160

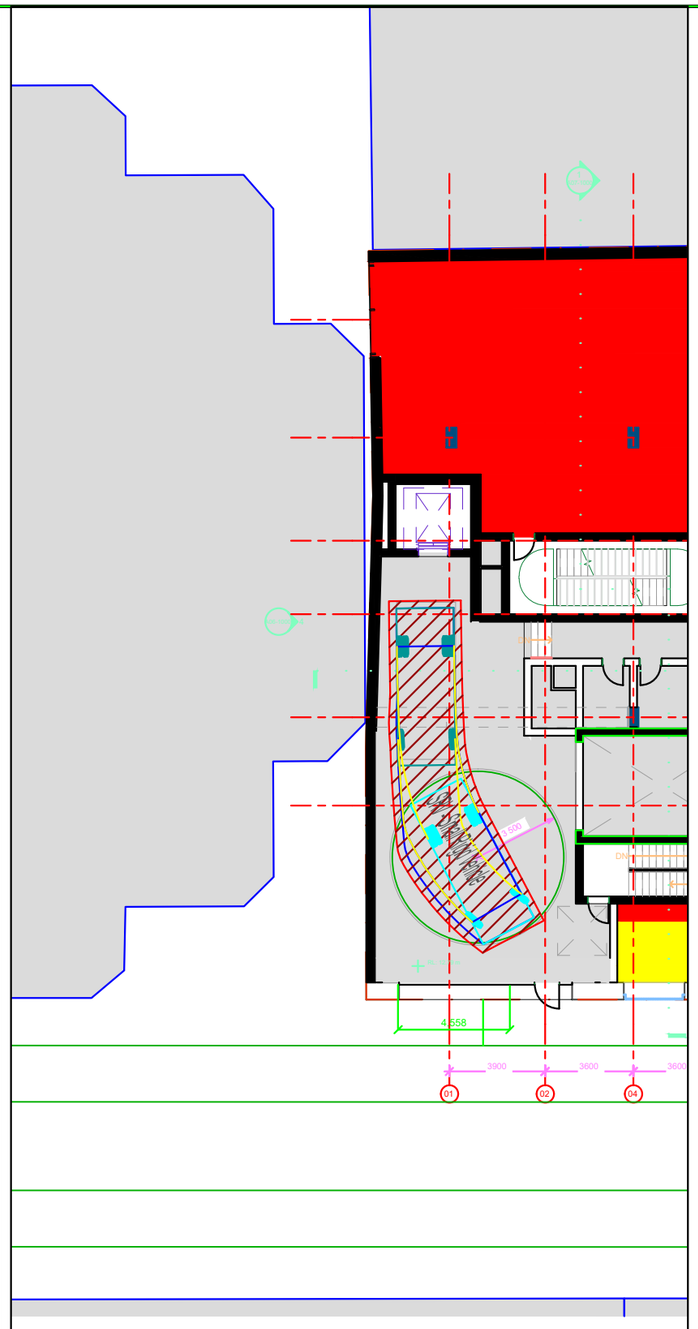
Queuing Theory Factors		
average arrival rate (r)	3.00	*r=(veh/hr)
average service rate (s)	22.50	*s=3600/(Total Average Time)
utilisation factor (p)	0.13333	*p=r/s
mean queue (E(m))	0.02051	*E(m)=(p/(1-p))-p

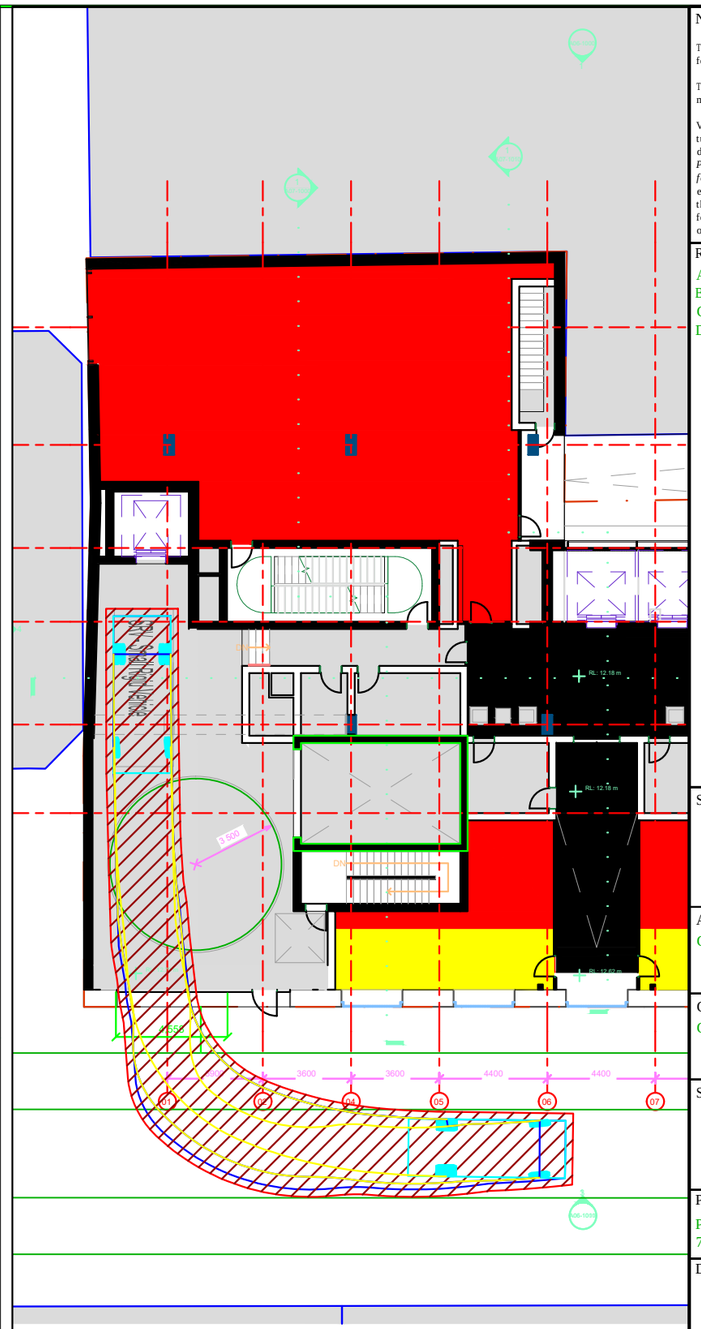
Probability of Vehicles in System (P(n))		*P(n)=(1-p)p^n
No. Vehicles in System (n)	Probability (%)	Percentile Queue (Require min. 98% under AS2890.1)
0	86.7%	86.7%
1	11.6%	98.2%
2	1.5%	99.8%
3	0.2%	100.0%
4	0.0%	100.0%

Vehicle Arrivals: TRAFFIX Traffic Impact Assessment (ref: 20.037r01v01) states the total traffic generation of the development will be 28 veh/hr during peak periods
However, the basement has only seven (7) parking spaces. Therefore, the maximum number of vehicles entering the basement within an hour would be seven vehicles per hour.

Results: The results of the queuing analysis demonstrates that with a single basement level of car parking (incl. 7 spaces) the development is required to accommodate a total of 1 vehicles in the system (1 in the lift & 0 vehicle queuing) assuming three (3) vehicle arrivals within an hour in order to accommodate the 98th percentile queue, as required under Clause 3.5 of AS 2890.1 (2004).
Hence, the development requires a minimum of 1 waiting bay to be provided at the access driveway







Notes:

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TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others.

Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (*AS/NZS 2890.1:2004 Parking facilities - Off-street car parking*, and/or *AS2890.2:2002 Parking facilities - Off-street commercial vehicle facilities*). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.

Rev.	Revision Note	By.	Date
A	Swept Path Analysis	HD	14-09-20
B	Updated Plans	HD	14-09-21
C	Updated Plans	HD	7-10-21
D	Updated Plans	HD	14-10-21

Swept Path Legend

- Wheel Path
- Vehicle Body Envelope
- Clearance Envelope (300mm)

Architect

GRIMSHAW

Client

Ceerose

Scale / Plan Orientation

0 2 4 6 8m

1:200 @ A3

Project Description

Proposed Mixed Use Development
757-761 George Street Haymarket

Drawing Prepared By

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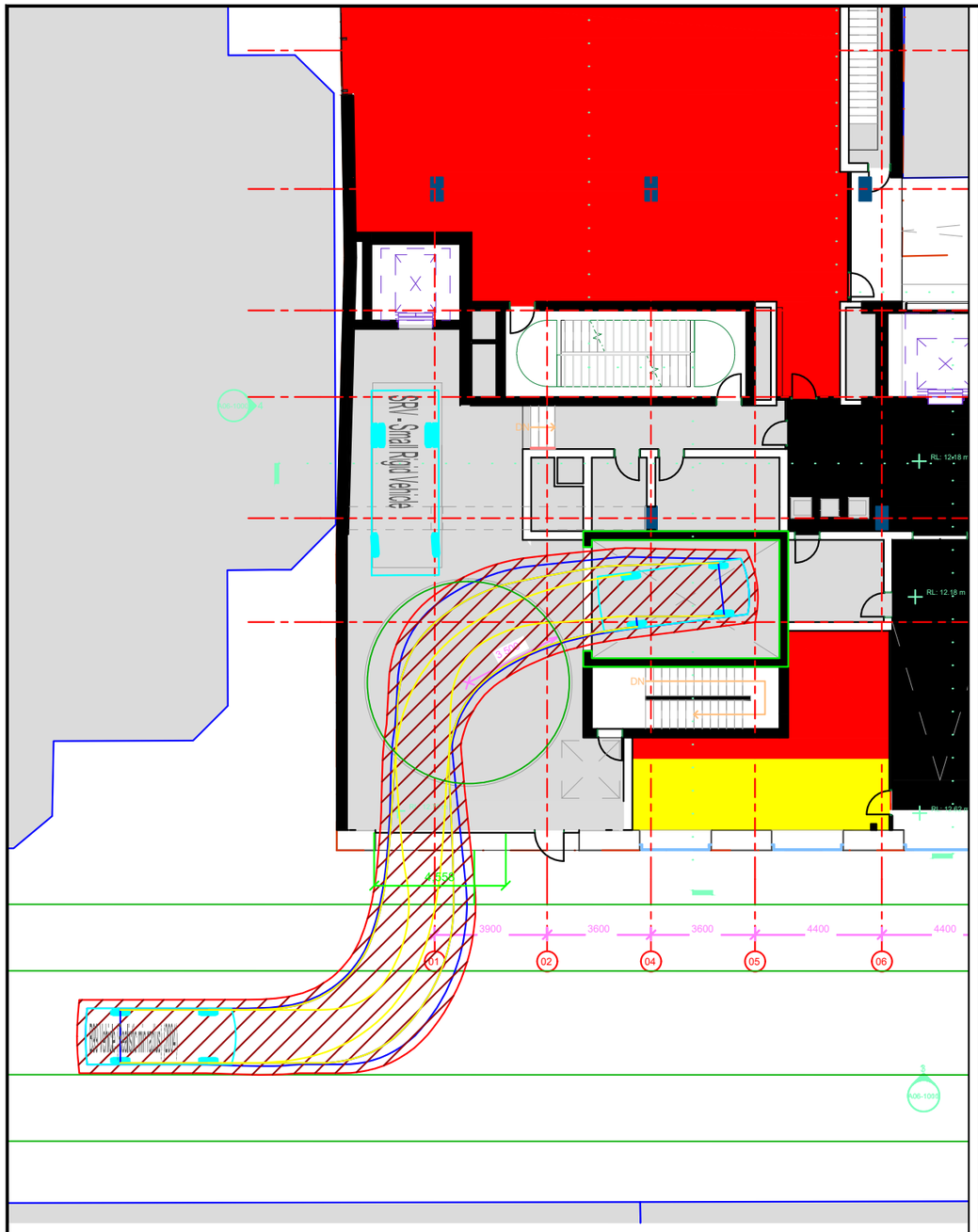
Drawing Title

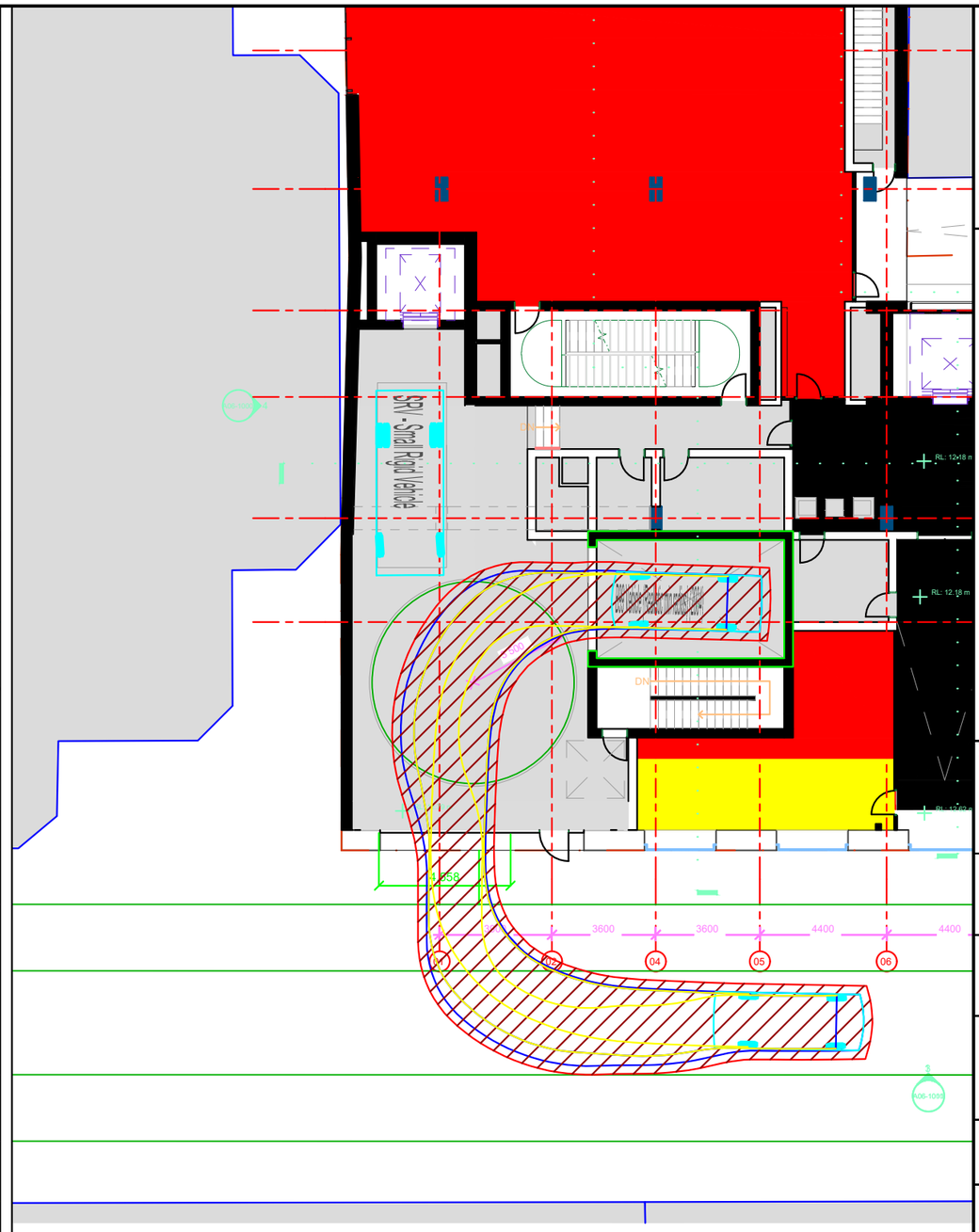
Desgin Review
6.4m SRV Swept Path Analysis
Ground Floor Loading Bay
Left: Entry Movement Centre: Reverse Movement
Right: Exit Movement

Drawn:	Checked:	Date:
HD	VD	14-09-20

20.037d10v01TRAFFIX [211014 Plans] Design Review.dwg

Project No.	Drawing Phase	Drawing No.	Rev.
20.037	DA	TX.01	D





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B	Swept Path Analysis	HD	14-09-21
C	Swept Path Analysis	HD	07-10-21
D	Swept Path Analysis	HD	14-10-21

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- Wheel Path
- Vehicle Body Envelope
- Clearance Envelope (300mm)

Architect
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Client
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Scale / Plan Orientation

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Project Description
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757-761 George Street Haymarket

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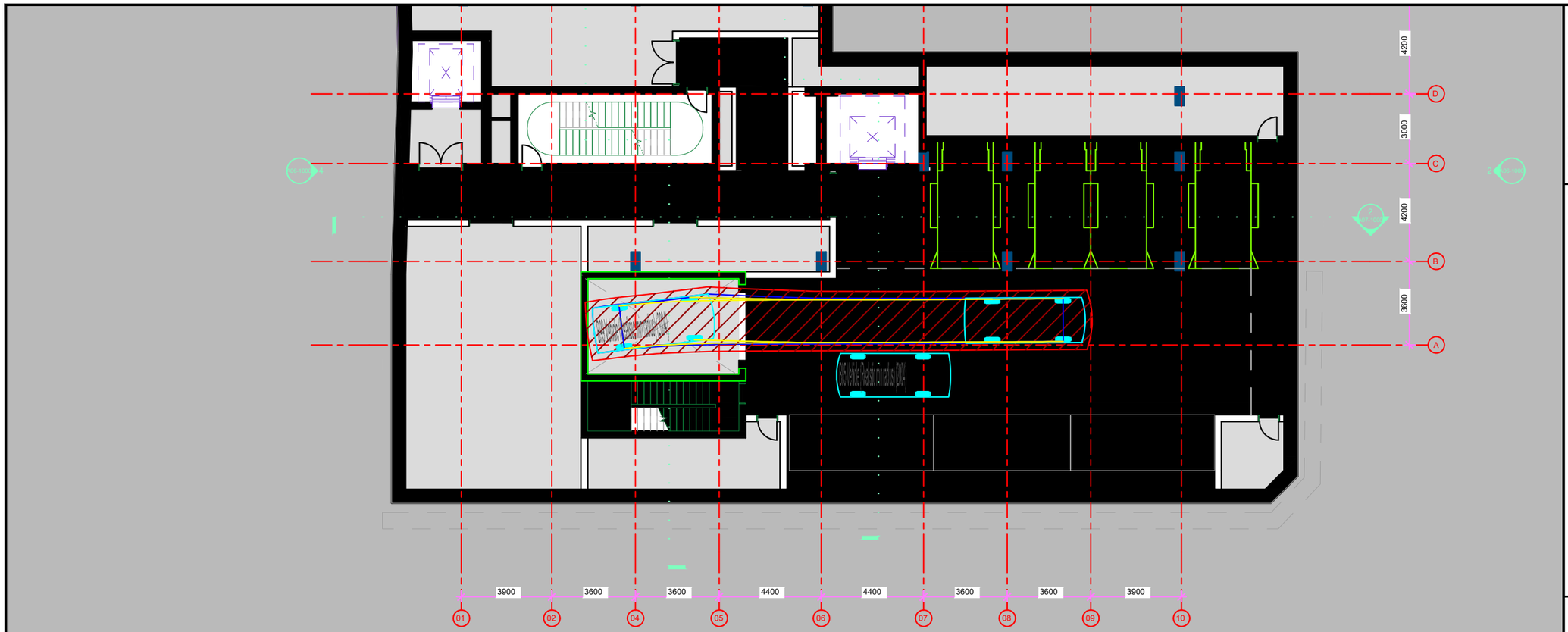
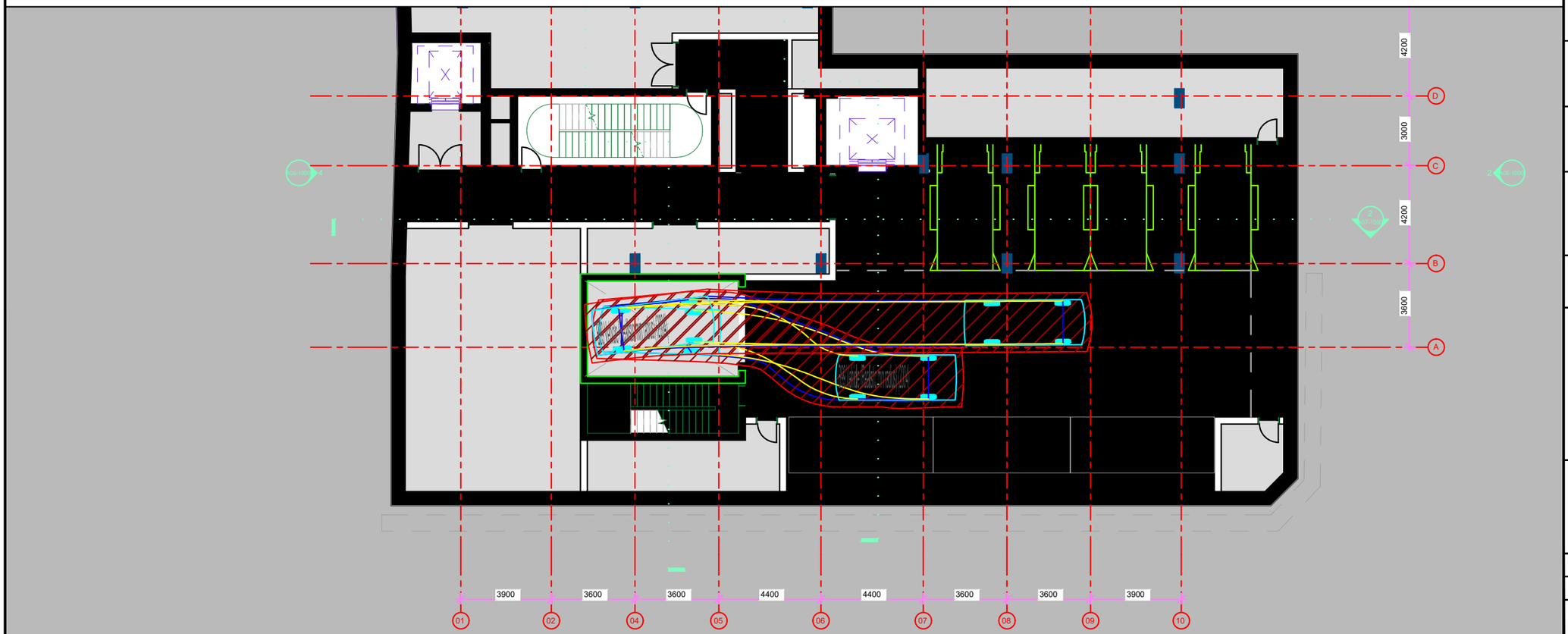
Drawing Title
Design Review
B99 Vehicle Swept Path Analysis
Ground Floor Car Lift Option 2
Left: Entry Movement Right: Exit Movement

Drawn:	Checked:	Date:
HD	VD	14-09-20

20.037d10v01TRAFFIX [211014 Plans] Design Review.dwg

Project No.	Drawing Phase	Drawing No.	Rev.
20.037	DA	TX.02	D





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TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others.

Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (*AS/NZS 2890.1:2004 Parking facilities - Off-street car parking*, and/or *AS2890.2:2002 Parking facilities - Off-street commercial vehicle facilities*). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.

Rev.	Revision Note	By.	Date
A	Swept Path Analysis	HD	14-09-20
B	Updated Plans	HD	14-09-21

Swept Path Legend

- Wheel Path
- Vehicle Body Envelope
- Clearance Envelope (300mm)

Architect
GRIMSHAW

Client
Ceerose

Scale / Plan Orientation

0 2 4 6 8m

1:200 @ A3

Project Description
Proposed Mixed Use Development
757-761 George Street Haymarket

Drawing Prepared By

TRAFFIX
TRAFFIC & TRANSPORT PLANNERS

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Drawing Title
Design Review
B99 Vehicle Swept Path Analysis
Basement 2
Top: Entry Movement Bottom: Exit Movement

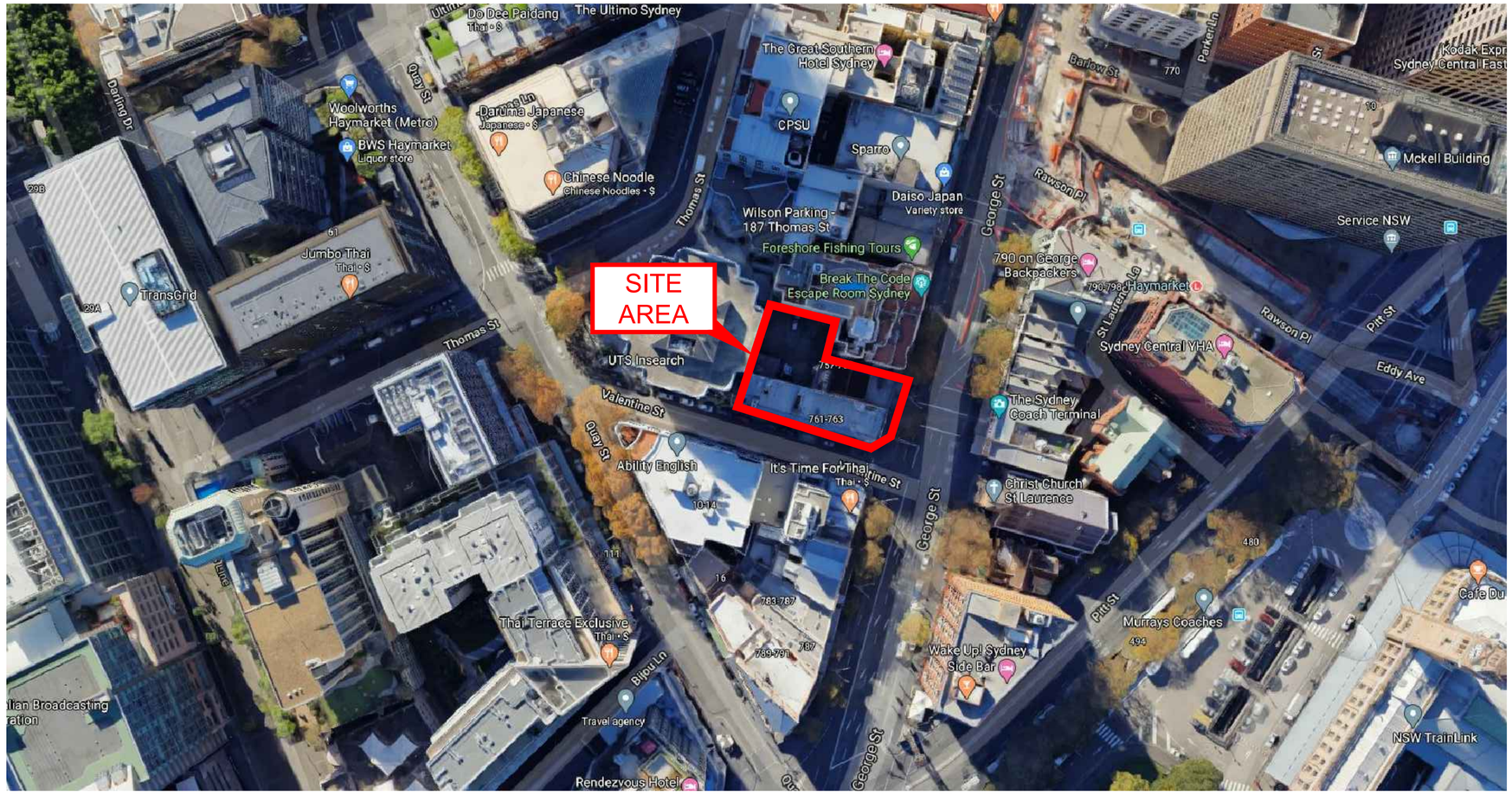
Drawn:	Checked:	Date:
HD	VD	14-09-20

20.037d10v01TRAFFIX [211014 Plans] Design Review.dwg

Project No.	Drawing Phase	Drawing No.	Rev.
20.037	DA	TX.03	B

757-763 GEORGE STREET, HAYMARKET
PROPOSED MIXED-USE DEVELOPMENT

STORMWATER CONCEPT PLANS



LOCALITY PLAN

N.T.S

DRAWING INDEX

Drawing No.	DESCRIPTION
000	COVER SHEET PLAN
101	STORMWATER CONCEPT PLAN BASEMENT LEVEL 2 SHEET 1 OF 2
102	STORMWATER CONCEPT PLAN BASEMENT LEVEL 2 SHEET 2 OF 2
103	STORMWATER CONCEPT PLAN BASEMENT LEVEL 1
104	STORMWATER CONCEPT PLAN GROUND LEVEL
105	STORMWATER CONCEPT PLAN ROOF PLAN
106	WSUD DETAILS AND CALCULATION SHEETS
107	MISCELLANEOUS DETAILS SHEET

NOT FOR CONSTRUCTION

Issue	Description	Date	Design	Checked
C	COUNCIL COMMENTS	08/10/2021	AGA	JSF
B	COUNCIL COMMENTS	30/08/2021	AGN	JSF
A	ISSUE FOR PLANNING PROPOSAL	29/09/2020	AGN	JSF

0 1cm at full size 10cm 20cm

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Scale

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Project
757-763 GEORGE STREET, HAYMARKET
PROPOSED MIXED-USE DEVELOPMENT
STORMWATER CONCEPT PLANS
PLANNING PROPOSAL

Drawing Title
COVER SHEET PLAN

Scale	Project No.	Dwg. No.	Issue
A1 N.T.S.	2021189	000	C

LEGEND

- PROPOSED STORMWATER
- SURFACE FLOW ARROWS
- SUBSOIL DRAINAGE
- CLEANING EYE (OR INSPECTION EYE)
- PROPOSED STORAGE AREA
- × RL 27.56 — FINISHED SURFACE LEVEL
- FG — FLOOR GRATE

STANDARD PUMP OUT DESIGN NOTES

THE PUMP OUT SYSTEM SHALL BE DESIGN TO BE OPERATED IN THE FOLLOWING MANNER:

1 - THE PUMP SHALL BE PROGRAMMED TO WORK ALTERNATELY TO ALLOW BOTH PUMPS TO HAVE AN EQUAL OPERATION LOAD AND PUMP LIFE.

2 - A FLOAT SHALL BE PROVIDED TO ENSURE OF THE MINIMUM REQUIRED WATER LEVEL IS MAINTAINED WITHIN THE SUMP AREA OF THE BELOW GROUND TANK. IN THIS REGARD THIS FLOAT WILL FUNCTION AS AN OFF SWITCH FOR THE PUMPS AT THE MINIMUM WATER LEVEL. THE SAME FLOAT SHALL BE SET TO TURN ONE OF THE PUMPS ON UPON THE WATER LEVEL IN THE TANK RISING TO APPROXIMATELY 300mm ABOVE THE MINIMUM WATER LEVEL. THE PUMP SHALL OPERATE UNTIL THE TANK IS DRAINED TO THE MINIMUM WATER LEVEL.

3 - A SECOND FLOAT SHALL BE PROVIDE AT A HIGH LEVEL, WHICH IS APPROXIMATELY THE ROOF LEVEL OF THE BELOW GROUND TANK. THIS FLOAT SHALL START THE OTHER PUMP THAT IS NOT OPERATING AND ACTIVATE THE ALARM.

4 - AN ALARM SYSTEM SHALL BE PROVIDE WITH A FLASHING STROBE LIGHT AND A PUMP FAILURE WARNING SIGN WHICH ARE TO BE LOCATED AT THE DRIVEWAY ENTRANCE TO THE BASEMENT LEVEL THE ALARM SYSTEM SHALL BE PROVIDED WITH A BATTERY BACK-UP IN CASE OF POWER FAILURE.

5 - A CONFINED SPACE DANGER SIGN SHALL BE PROVIDED AT ALL ACCESS POINT TO THE PUMP-OUT STORAGE TANK IN ACCORDANCE WITH THE UPPER PARRAMATA RIVER CATCHMENT TRUST OSD HANDBOOK.

DANGER

WHEN EXCAVATING WITHIN ANY SITE, FOOTPATH AND ROADWAY, ALL SERVICES SHALL BE LOCATED PRIOR TO COMMENCEMENT OF THE EXCAVATION WORKS.

CONTACT "DIAL BEFORE YOU DIG" ON PHONE No. 1100 OR GO TO THE WEB SITE

"www.1100.com.au"

WARNING

PUMP OUT SYSTEM FAILURE IN BASEMENT WHEN LIGHT IS FLASHING AND SIREN SOUNDING

BASEMENT PUMP OUT FAILURE WARNING SIGN

SIGN SHALL BE PLACED IN A CLEAR AND VISIBLE LOCATION WHERE VEHICLES ENTER THE BASEMENT

COLOURS:
"WARNING" = RED
BORDER AND OTHER LETTERING = BLACK

DANGER

CONFINED SPACE
NO ENTRY WITHOUT CONFINED SPACE TRAINING

CONFINED SPACE DANGER SIGN

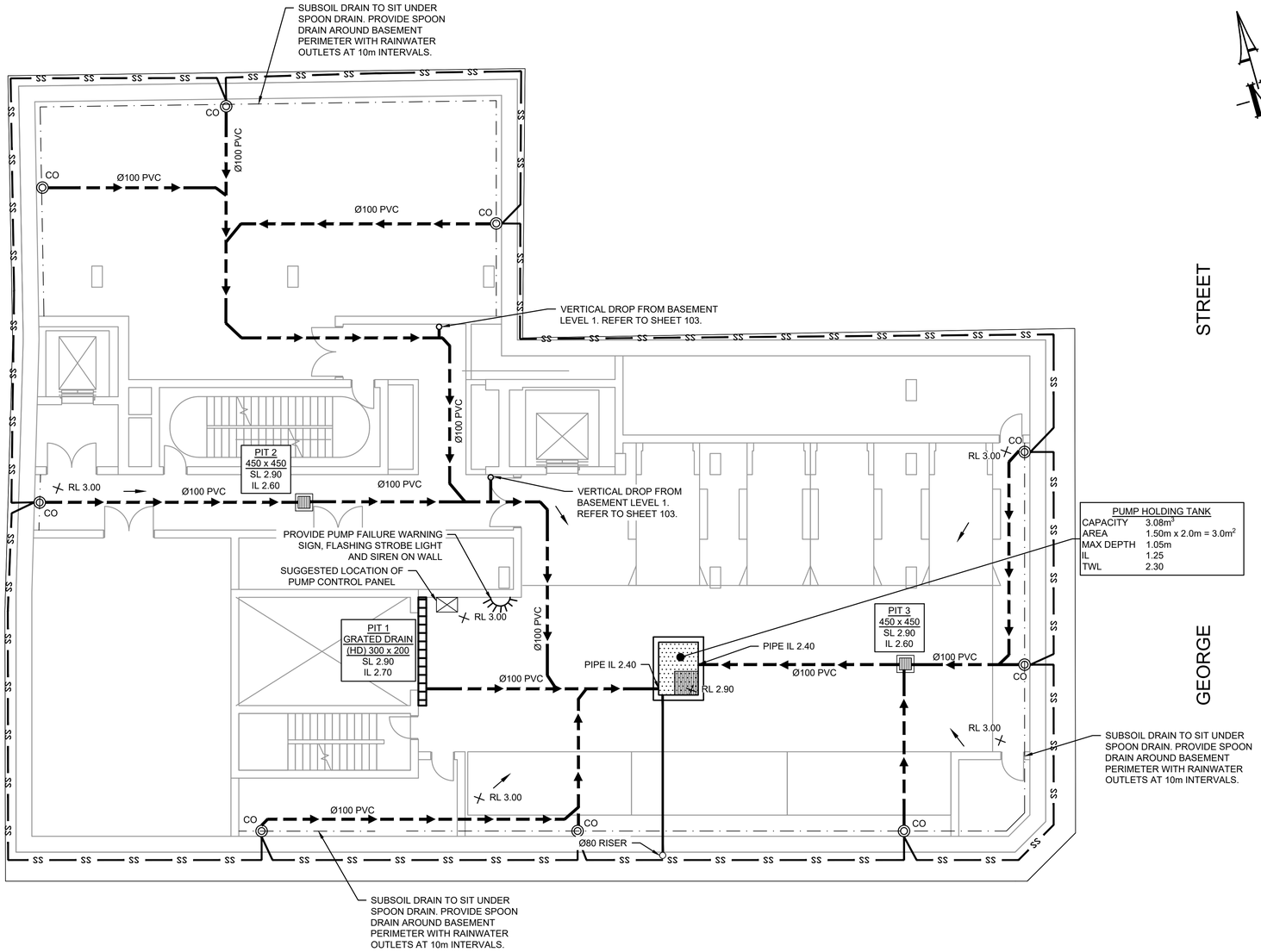
A) A CONFINED SPACE DANGER SIGN SHALL BE POSITIONED IN A LOCATION AT ALL ACCESS POINTS, SUCH THAT IT IS CLEARLY VISIBLE TO PERSONS PROPOSING TO ENTER THE BELOW GROUND TANK/S CONFINED SPACE.

B) MINIMUM DIMENSIONS OF THE SIGN - 300mm x 450mm (LARGE ENTRIES, SUCH AS DOORS) -250mm x 180mm (SMALL ENTRIES SUCH AS GRATES & MANHOLES)

C) THE SIGN SHALL BE MANUFACTURED FROM COLOUR BONDED ALUMINUM OR POLYPROPYLENE

D) SIGN SHALL BE AFFIXED USING SCREWS AT EACH CORNER OF THE SIGN

COLOURS:
"DANGER" & BACKGROUND = WHITE
ELLIPTICAL AREA = RED
RECTANGLE CONTAINING ELLIPSE = BLACK
BORDER AND OTHER LETTERING = BLACK



BASEMENT 2 PLAN

SCALE 1:100

NOT FOR CONSTRUCTION

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C	COUNCIL COMMENTS	08/10/2021	AGA	JSF
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Council
City of Sydney Council

Scale
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SCALE 1:100 @ A1

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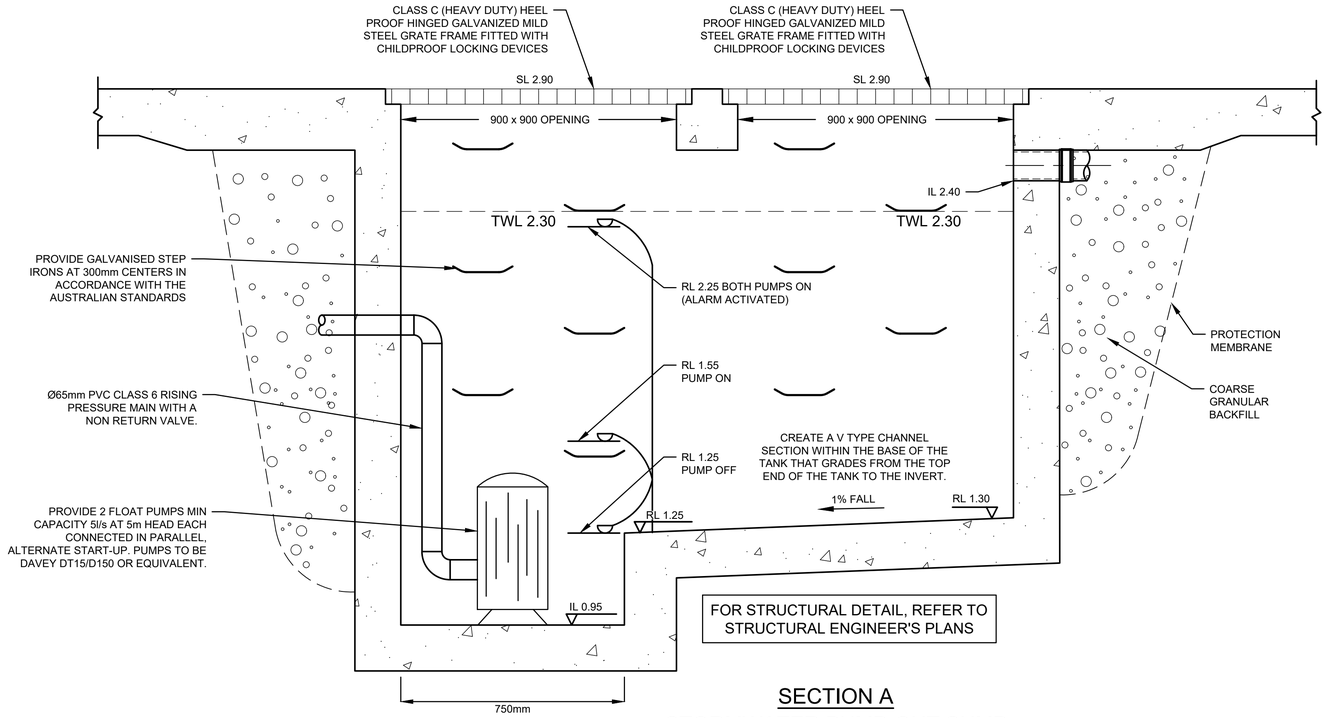
Project
757-763 GEORGE STREET, HAYMARKET
PROPOSED MIXED-USE DEVELOPMENT
STORMWATER CONCEPT PLANS
PLANNING PROPOSAL

Drawing Title
STORMWATER CONCEPT PLAN
BASEMENT LEVEL 2
SHEET 1 OF 2

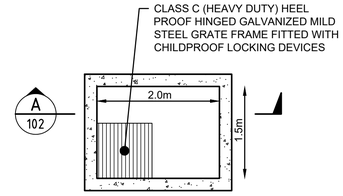
Scale A1	Project No.	Dwg. No.	Issue
1:100	2021189	101	C

PUMP-OUT SUMP:	
MAX TANK DEPTH (UPSTREAM)	1.0m
MAX TANK DEPTH (DOWNSTREAM)	1.05m
WIDTH	2.0m
LENGTH	4.0m
VOLUME PROVIDED	8.20m^3



FOR STRUCTURAL DETAIL, REFER TO STRUCTURAL ENGINEER'S PLANS

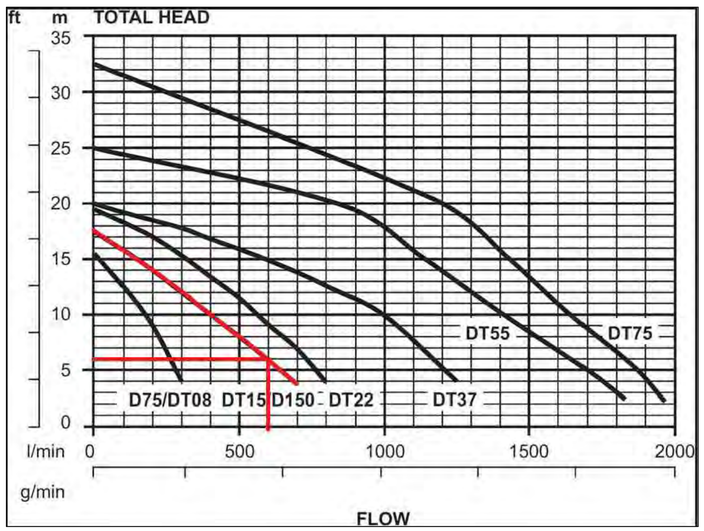
SECTION A
STORMWATER PUMP-OUT SUMP
SCALE 1:10



NOTE:
1- FOR ALL THE STRUCTURAL DETAILS, REFER TO STRUCTURAL ENGINEER'S PLAN.
2- ALL THE AG LINES BEHIND BASEMENT WALLS TO BE CONNECTED TO PUMP-OUT SUMP.

PUMP-OUT SUMP DETAIL
PLAN VIEW
SCALE 1:50

SINCE THE ROOF OCCUPIES THE MAIN ENTRANCE TO THE BASEMENT, NO FLOWS ARE ASSUMED TO ENTER THE BASEMENT. IN THE UNLIKELY CASE OF EMERGENCY, A 3.0m^3 PUMP OUT TANK IS PROVIDED.



PUMP CALCULATIONS

Project Address: 757-763 George Street, Haymarket

HL=(3.35x10e6xQ/(d^2.63xC))^1.852
HL(m/100m), Q(L/s(, d(mm)

h1=kv^2/2g
k(cum), v(m/s), g=9.8(m

H(total head)=Hf+h1+Elevation Head(static head)

v(m/s)= 0.00
d(mm)= 80
Bend Losses, Kb= 3.06
Valve Losses, Kv= 2.13
Entry/Exit Losses, Ke= 5.00
Cum Losses, K= 10.19

Elevation Head(m)= 10
Pipe Length(m)= 10

Hazen - Williams C= 145

Hazen-Williams Constant
125-140 Commercial steel pipe
135-140 Bitumen Lined Cast iron pipe
140-145 Copper Tube
145-150 PVC

Start Flow=	0
Increment=	1

Q(L/s)		0	1	2	3	4	5	6	7	8	9	10
HL(m/100m)		0.00	0.06	0.23	0.50	0.85	1.28	1.79	2.38	3.05	3.80	4.61
Hf(m)	HL x pipe Length/100	0.00	0.01	0.02	0.05	0.08	0.13	0.18	0.24	0.31	0.38	0.46
v(m/s)	Q(L/s) / area of pipe crossing section	0.00	0.20	0.40	0.60	0.80	0.99	1.19	1.39	1.59	1.79	1.99
h1(m)	k(cum) x v(m/s)^2/2xg	0.00	0.02	0.08	0.19	0.33	0.51	0.74	1.01	1.32	1.67	2.06
H(m)	=Hf+H1+Elevation Head	10.00	10.03	10.11	10.23	10.41	10.64	10.92	11.25	11.62	12.05	12.52

UNDERGROUND PUMP - OUT SUMP
STAGED STORAGE CALCULATIONS

DEPTH (mm)	AREA (m^2)	CUMULATIVE VOLUME (m^3)
0	3.00	0
100	3.00	0.225
200	3.00	0.525
300	3.00	0.825
400	3.00	1.125
500	3.00	1.425
600	3.00	1.725
700	3.00	2.025
800	3.00	2.325
900	3.00	2.625
1000	3.00	2.925
1050	3.00	3.075

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Client
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Council
City of Sydney Council

Scale
0 200 400 600mm
SCALE 1:10 @ A1
0 1 2 3 m
SCALE 1:50 @ A1

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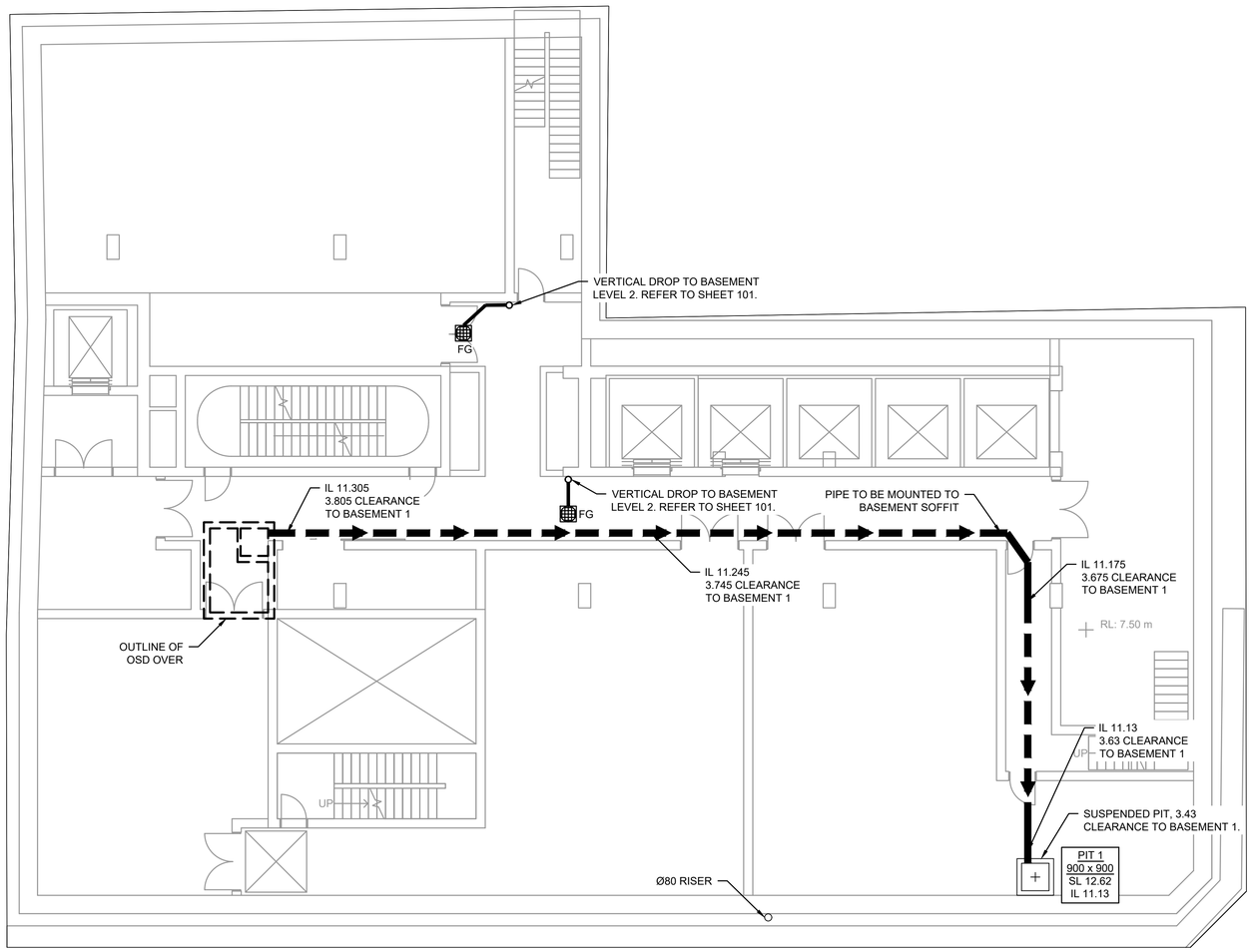
Project
757-763 GEORGE STREET, HAYMARKET
PROPOSED MIXED-USE DEVELOPMENT
STORMWATER CONCEPT PLANS
PLANNING PROPOSAL

Drawing Title
STORMWATER CONCEPT PLAN
BASEMENT LEVEL 2
SHEET 2 OF 2

Scale	Project No.	Dwg. No.	Issue
A1 As Shown	2021189	102	C



STREET

GEORGE

VALENTINE

STREET

BASEMENT 1 PLAN

SCALE 1:100

NOT FOR CONSTRUCTION

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Drawing Title
STORMWATER CONCEPT PLAN
BASEMENT LEVEL 1
SHEET 1 OF 2

Scale	A1	Project No.	Dwg. No.	Issue
1:100		2021189	103	C

LEGEND

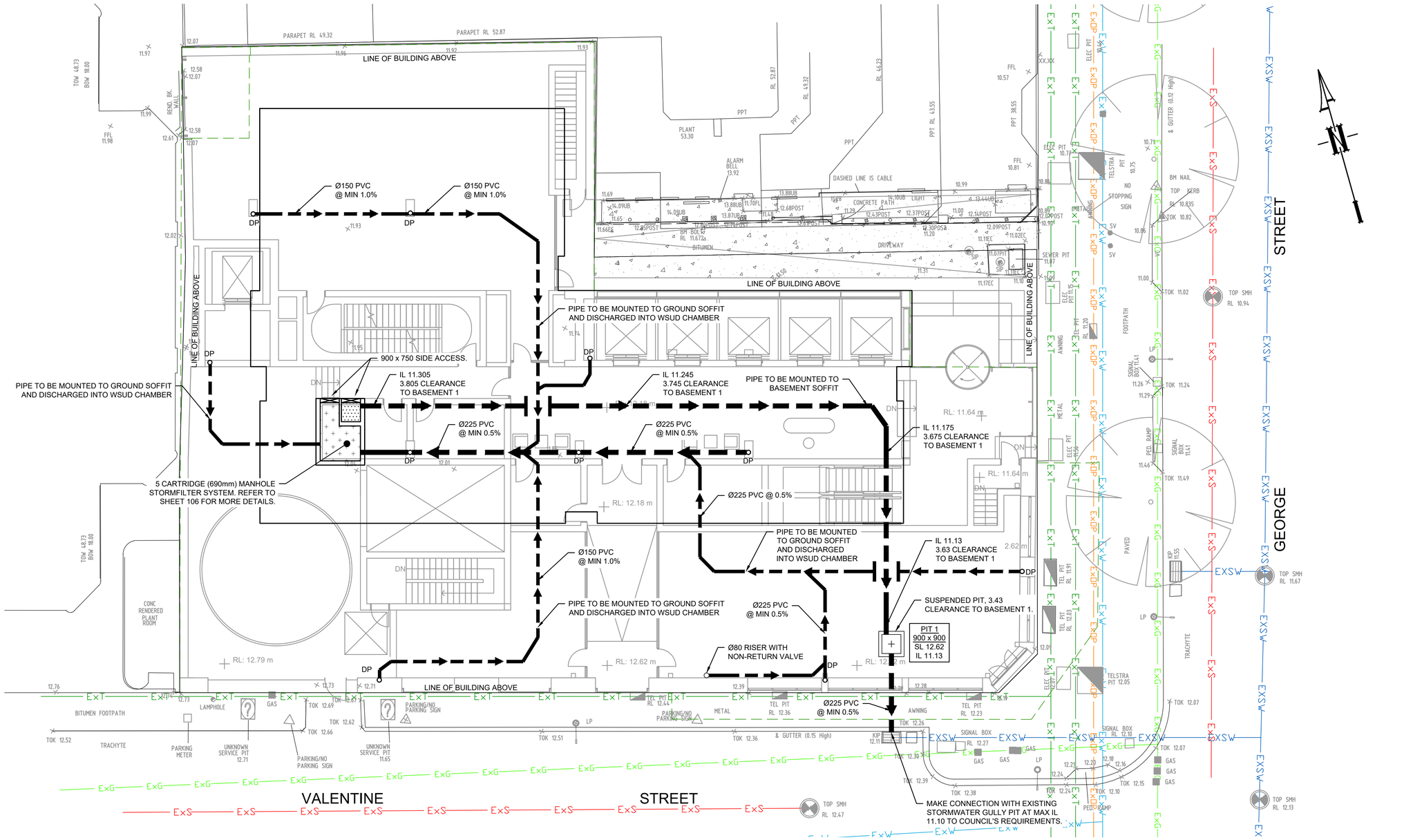
- PROPOSED STORMWATER
- PIPE OVERCROSSING MINIMUM 150mm CLEARANCE
- ExS — EXISTING SEWER MAIN (FROM RECORDS)
- ExW — EXISTING WATER (FROM RECORDS)
- ExE — EXISTING POWER (FROM RECORDS)
- ExG — EXISTING GAS (FROM RECORDS)
- ExT — EXISTING TELSTRA (FROM RECORDS)
- DP — DOWNPIPE
- 65 — Ø65 STORMWATER DRAINAGE PIPE CAST IN SLAB
- RWO — RAINWATER OUTLET
- NS 26.45 — EXISTING SURFACE LEVEL
- IL 47.00 — INVERT LEVEL OF PIPE JUNCTION
- PROPOSED WSUD AREA
- TILED AREA
- TREES TO BE RETAINED
- TREES TO BE REMOVED

PIPES NOTE:

Ø65 PVC @ MIN 1.0%
Ø90 PVC @ MIN 1.0%
Ø100 PVC @ MIN 1.0%
Ø150 PVC @ MIN 1.0%
Ø225 PVC @ MIN 0.5%
Ø300 PVC @ MIN 0.4%
UNLESS NOTED OTHERWISE

ROOF NOTE:

IT IS CONTRACTOR'S RESPONSABILITY TO ENSURE MINIMUM 30 TO 40mm OF PONDING IS ACHIEVED OVER THE FLOOR WASTES BY GRADING CATCHMENT'S SURFACES AT MINIMUM 1% FALL.



GENERAL NOTES

1. ALL THE CLEANING EYES (OR INSPECTION EYES) FOR THE UNDERGROUND PIPES HAVE TO BE TAKEN UP TO THE FINISHED GROUND LEVEL FOR EASY IDENTIFICATION AND MAINTENANCE PURPOSES
2. ALL LEVELS SHALL RELATE TO THE ESTABLISHED BENCH MARK.
3. THE BUILDER SHALL ENSURE THAT THE STORMWATER ENGINEERS DRAWINGS CORRESPOND TO THE ARCHITECTURAL, STRUCTURAL AND LANDSCAPING DRAWINGS. IF THERE EXISTS AND DISCREPANCIES BETWEEN THE DRAWINGS, THE BUILDER SHALL REPORT THE DISCREPANCIES TO THE ENGINEER PRIOR TO COMMENCEMENT OF ANY WORKS
4. ALL MULCHING TO BE USED WITHIN THE AREA DESIGNATED AS ONS-SITE DETENTION STORAGE SHALL BE OF A NON-FLOTABLE MATERIAL SUCH AS DECORATIVE RIVER GRAVEL. PINE BARK MULCHING SHALL NOT BE USED WITHIN THE DETENTION STORAGE AREA.
5. ALL RETAINING WALLS SHALL BE CONSTRUCTED COMPLETELY WITHIN THE PROPERTY BOUNDARY LIMITS TO DETAILS PREPARED BY THE STRUCTURAL ENGINEER. WALLS FORMING THE ON-SITE DETENTION SYSTEM SHALL BE OF MASONARY/BRICK CONSTRUCTION AND WATER TIGHT.
6. ALL SUB-SOIL DRAINAGE SHALL BE A MINIMUM OF 65MM DIA AND SHALL BE PROVIDED WITH A FILTER SOCK. THE SUBSOIL DRAINAGE SHALL BE INSTALLED IN ACCORDANCE WITH DETAILS TO BE PROVIDED BY THE LANDSCAPE ARCHITECT.
7. PRIOR TO COMMENCING ANY WORKS, THE BUILDER SHALL ENSURE THAT THE INVERT LEVELS OF WHERE THE SITE STORMWATER SYSTEM CONNECTS INTO THE COUNCILS KERB/DRAINAGE SYSTEM MATCHED THE DESIGN LEVELS. ANY DISCREPANCIES SHALL BE REPORTED TO THE DESIGN ENGINEER IMMEDIATELY.
8. ALL LINES ARE TO BE Ø90 uPVC 1.0% GRADE UNLESS NOTED OTHERWISE. CHARGED LINES TO BE SEWERGRADE & SEALED.
9. EXISTING SERVICES LOCATIONS SHOWN INDICATIVE ONLY.
10. IT IS THE CONTRACTORS RESPONSIBILITY TO LOCATE & LEVEL ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY EARTHWORKS.
11. ALL PIPES TO HAVE MIN 150mm COVER IF LOCATED WITHIN PROPERTY.
12. ALL PITS IN DRIVEWAYS TO BE 450x450 CONCRETE AND ALL PITS IN LANDSCAPED AREAS TO BE 450x450PLASTIC.
13. PITS LESS THAN 450 DEEP MAY BE BRICK, PRECAST OR CONCRETE.
14. ALL BALCONIES AND ROOFS TO BE DRAINED AND TO HAVE SAFETY OVERFLOWS IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS.
15. ALL EXTERNAL SLABS TO BE WATERPROOFED.
16. ALL GRATES TO HAVE CHILD PROOF LOCKS.
17. ALL DRAINAGE WORKS TO AVOID TREE ROOTS.
18. ALL DP'S TO HAVE LEAF GUARDS.
19. ALL EXISTING LEVELS TO BE CONFIRMED BY BUILDER PRIOR TO CONSTRUCTION.
20. ALL WORK WITHIN COUNCIL RESERVE TO BE INSPECTED BY COUNCIL PRIOR TO CONSTRUCTION.
21. COUNCIL'S ISSUED FOOTWAY DESIGN LEVELS TO BE INCORPORATED INTO THE FINISHED LEVELS ONCE ISSUED BY COUNCIL.
22. ALL WORK SHALL BE IN ACCORDANCE WITH B.C.A. AND A.S.3500.3.
23. REFER TO LANDSCAPE ARCHITECT'S DRAWINGS FOR LANDSCAPING.
24. ALL WALLS FORMING THE DETENTION BASINS SHALL BE CONSTRUCTED WHOLLY WITHIN THE PROPERTY BOUNDARIES OF THE SITE BEING DEVELOPED.
25. OSD WARNING SIGN AND SAFETY FENCING SHALL BE PROVIDED TO ABOVE GROUND OSD STORAGE AREA IN ACCORDANCE WITH COUNCIL'S REQUIREMENTS.
26. ENSURE THAT NON FLOATABLE MULCH IS USED IN DETENTION BASINS, ie, USE DECORATIVE ROCK MULCH OR EQUIVALENT.
27. THE OSD BASIN / TANK IS TO BE BUILT TO THE CORRECT LEVELS & SIZE AS PER THIS DESIGN. ANY VARIATIONS ARE TO BE DONE UNDER CONSULTATION FROM OUR OFFICE ONLY. ANY AMENDMENTS WITHOUT OUR APPROVAL WOULD RESULT IN ADDITIONAL FEES FOR REDESIGN AT OC STAGE OR IF A SOLUTION CANNOT BE FOUND, RECONSTRUCTION IS REQUIRED UNDER THE CONTRACTOR'S EXPENSES
28. ALL PIPES IN BALCONIES TO BE Ø65 uPVC IN CONCRETE SLAB. CONTRACTOR TO PROVIDE A BREAK / OPEN VOID IN RAIL / BALLUSTRADE FOR STORMWATER EMERGENCY OVERFLOW. ALL ENCLOSED AREAS / PLANTER BOXES TO BE FITTED WITH FLOOR WASTES & DRAINED TO OSD. DOWNPIPES TO BE CHECKED BY ARCHITECT & PLUMBER PRIOR TO CONSTRUCTION.

NOT FOR CONSTRUCTION

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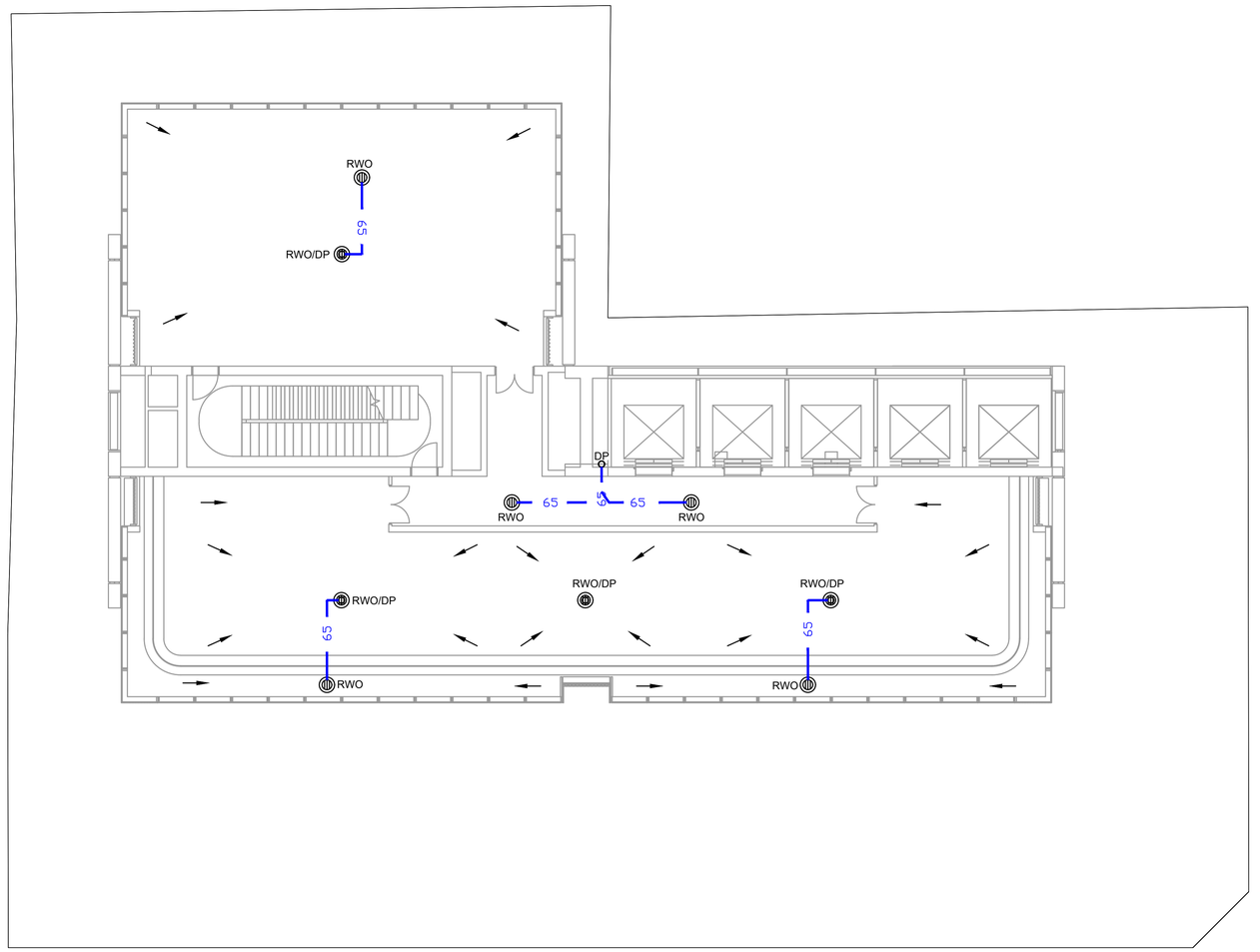
STORMWATER CONCEPT PLANS
PLANNING PROPOSAL

Drawing Title: STORMWATER CONCEPT PLAN GROUND LEVEL

Scale	Project No.	Dwg. No.	Issue
1:100 A1	2021189	104	C



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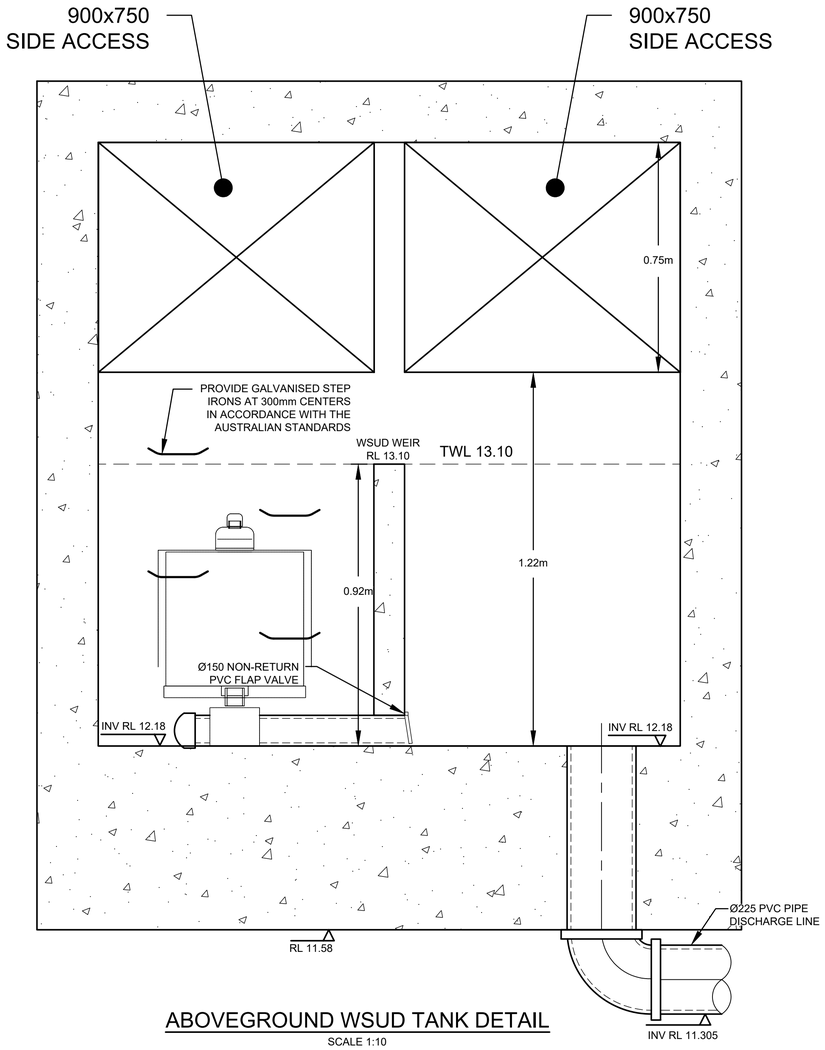
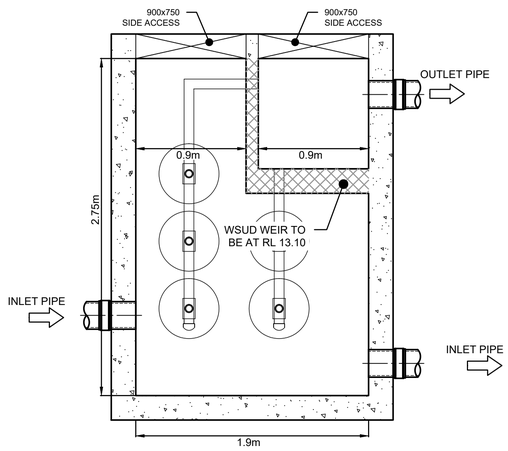
Drawing Title
STORMWATER CONCEPT PLAN
ROOF PLAN

Scale	A1	Project No.	Dwg. No.	Issue
1:100		2021189	105	C



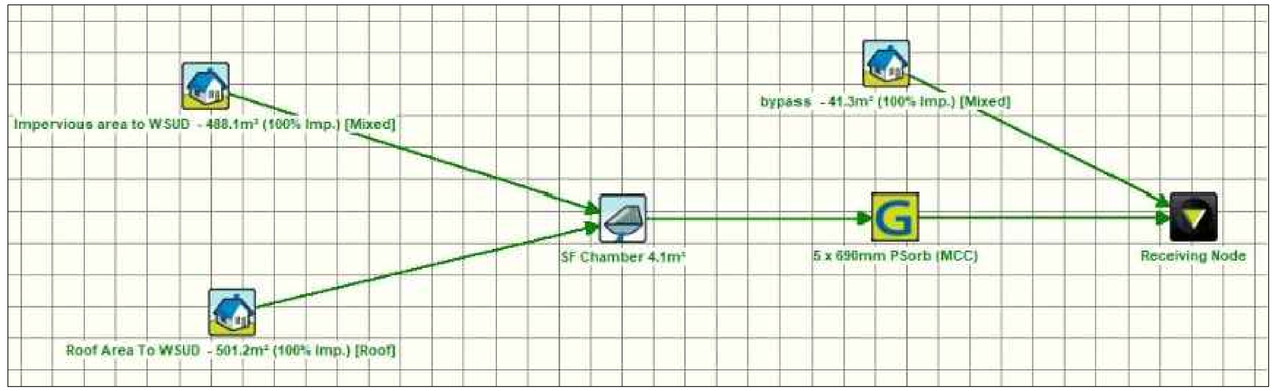
ABOVEGROUND WSUD TANK DETAIL

SCALE 1:10



UNDERGROUND OSD/WSUD TANK DETAIL
PLAN VIEW

SCALE 1:25



WSUD MUSIC MODEL

Treatment Train Effectiveness - Receiving Node

	Sources	Residual Load	% Reduction
Flow (ML/yr)	1.19	1.19	0
Total Suspended Solids (kg/yr)	127	18.6	85.4
Total Phosphorus (kg/yr)	0.27	0.0553	79.5
Total Nitrogen (kg/yr)	2.61	1.25	52
Gross Pollutants (kg/yr)	28.5	1.12	96.1

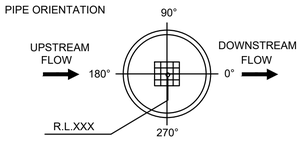
WSUD MUSIC RESULT

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID	1
WATER QUALITY FLOW RATE (L/S)	-
PEAK FLOW RATE (L/S)	-
RETURN PERIOD OF PEAK FLOW (yrs)	-
# OF CARTRIDGES REQUIRED (8-22)	5
CARTRIDGE HEIGHT (310, 460 or 690mm)	690
MEDIA TYPE (PERLITE, PERLITE/ZEOLITE OR ZPG)	ZPG
PRECAST VAULT WEIGHT	- kg
PRECAST LID WEIGHT	- kg

PIPE DATA:	I.L.	MATERIAL	DIAMETER
INLET PIPE #1	N/A	PVC	N/A
INLET PIPE #2	N/A	N/A	N/A
OUTLET PIPE	N/A	PVC	N/A

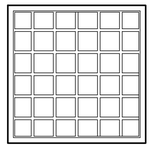
PIPE ORIENTATION



LADDER		YES/NO
ANTI-FLOTATION BALLAST	N/A	N/A
	N/A	N/A

STORMFILTER TABLE

N.T.S.



900 x 900 ACCESS COVER

STORMFILTER DESIGN TABLE

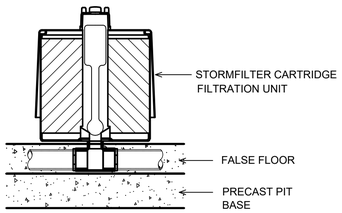
- STORMFILTER TREATMENT CAPACITY VARIES BY NUMBER OF FILTER CARTRIDGES INSTALLED AND BY REGION SPECIFIC INTERNAL FLOW CONTROLS. CONVEYANCE CAPACITY IS RATED AT 80L/S.
- ALL PARTS PROVIDED AND INTERNAL ASSEMBLY BY STORMWATER360 AUSTRALIA UNLESS OTHERWISE NOTED.

CARTRIDGE HEIGHT	690		460		310	
SYSTEM HYDRAULIC DROP (H - REQ'D. MIN.)	930		700		550	
TREATMENT BY MEDIA SURFACE AREA L/S/m2	1.4	0.7	1.4	0.7	1.4	0.7
CARTRIDGE FLOW RATE (L/s)	1.42	0.71	0.95	0.47	0.63	0.32

GENERAL NOTES

1. INLET AND OUTLET PIPING SHALL BE SPECIFIED BY SITE CIVIL ENGINEER (SEE PLANS) AND PROVIDED BY CONTRACTOR. STORMFILTER IS PROVIDED WITH OPENINGS AT INLET AND OUTLET LOCATIONS.
2. IF THE PEAK FLOW RATE, AS DETERMINED BY THE SITE CIVIL ENGINEER, EXCEEDS THE PEAK HYDRAULIC CAPACITY OF THE PRODUCT, AN UPSTREAM BYPASS STRUCTURE IS REQUIRED. PLEASE CONTACT STORMWATER360 FOR OPTIONS.
3. THE FILTER CARTRIDGE(S) ARE SIPHON-ACTUATED AND SELF-CLEANING. THE STANDARD DETAIL DRAWING SHOWS THE MAXIMUM NUMBER OF CARTRIDGES. THE ACTUAL NUMBER SHALL BE SPECIFIED BY THE SITE CIVIL ENGINEER ON SITE PLANS OR IN DATA TABLE BELOW. PRECAST STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH AS3600.
4. FOR SHALLOW, LOW DROP OR SPECIAL DESIGN CONSTRAINTS, CONTACT STORMWATER360 FOR DESIGN OPTIONS.
5. ALL WATER QUALITY PRODUCTS REQUIRE PERIODIC MAINTENANCE AS OUTLINED IN THE O&M GUIDELINES. PROVIDE MINIMUM CLEARANCE FOR MAINTENANCE ACCESS.
6. STRUCTURE AND ACCESS COVERS DESIGNED TO MEET AUSTROADS T44 LOAD RATING WITH 0-2m FILL MAXIMUM.
7. THE STRUCTURE THICKNESSES SHOWN ARE FOR REPRESENTATIONAL PURPOSES AND VARY REGIONALLY.
8. ANY BACKFILL DEPTH, SUB-BASE, AND OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY SITE CIVIL ENGINEER.
9. STORMFILTER BY STORMWATER360:
   SYDNEY (AU) PHONE: (02) 9525 5833,
   BRISBANE (AU) PHONE: (07) 3272 1872.

SYSTEM HYDRAULIC DROP
CARTRIDGE FLOW RATE



NOT FOR CONSTRUCTION

Issue	Description	Date	Design	Checked
C	COUNCIL COMMENTS	08/10/2021	AGA	JSF
B	COUNCIL COMMENTS	30/08/2021	AGN	JSF
A	ISSUE FOR PLANNING PROPOSAL	29/09/2020	AGN	JSF

0 1cm at full size 10cm 20cm

Certification By Dr. Michel Chaaya in affiliation with Joe Bacha (formerly Australian Consulting Engineers):

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Grimshaw
Level 2
333 George Street
Sydney, NSW 2000, AUS
PHONE : +612 9253 0200
Email : Fergus.Dinwiddie@grimshaw.global
WEB : www.grimshaw.global

Client
Samprian Pty Ltd

Council
City of Sydney Council

Scale
0 200 400 600mm
SCALE 1:10 @ A1
0 0.2 0.4 0.6 0.8 1.0 1.2m
SCALE 1:25 @ A1

TELFORD CIVIL
DESIGN & CONSTRUCTION EXCELLENCE
Level 4, 470 Church Street, Parramatta NSW 2150
PO BOX 3579 Parramatta 2124
Email : info@telfordcivil.com.au
PHONE : 02 7809 4931

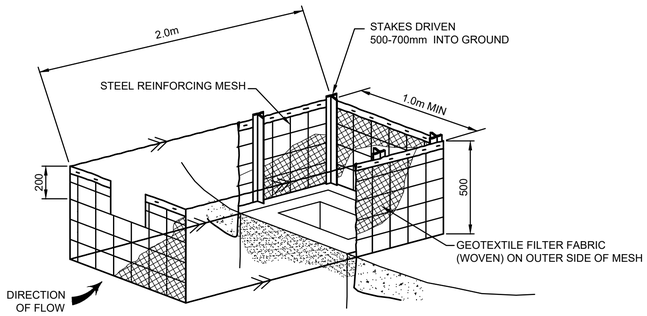
Project
757-763 GEORGE STREET, HAYMARKET
PROPOSED MIXED-USE DEVELOPMENT
STORMWATER CONCEPT PLANS
PLANNING PROPOSAL

Drawing Title
WSUD DETAILS
AND CALCULATION SHEETS

Scale	Project No.	Dwg. No.	Issue
A1 As Shown	2021189	106	C

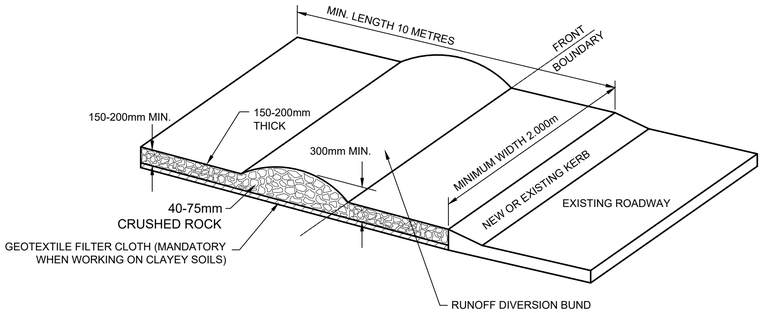
SEDIMENT & EROSION NOTES

1. IMMEDIATELY FOLLOWING SETTING OUT OF THE WORKS, BUT PRIOR TO COMMENCEMENT OF ANY CLEARING OR EARTHWORKS, THE CONTRACTOR AND SUPERINTENDENT SHALL WALK THE SITE TO NOMINATE THE LOCATIONS AND TYPES OF SEDIMENT AND EROSION CONTROL MEASURES TO BE ADOPTED. THESE MEASURES SHALL BE IMPLEMENTED PRIOR TO ANY CLEARING OR EARTHWORKS AND MAINTAINED UNTIL THE WORKS ARE COMPLETED AND NO LONGER POSE AN EROSION HAZARD, UNLESS OTHERWISE APPROVED BY THE SUPERINTENDENT.
2. IMMEDIATELY FOLLOWING SETTING OUT OF THE WORKS, BUT PRIOR TO COMMENCEMENT OF ANY CLEARING OR EARTHWORKS, THE CONTRACTOR AND SUPERINTENDENT SHALL WALK THE SITE TO IDENTIFY AND MARK TREES WHICH ARE TO BE PRESERVED. NOTWITHSTANDING THE ABOVE,THE CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS TO MINIMISE DISTURBANCE TO EXISTING VEGETATION AND GROUND COVER OUTSIDE THE MINIMUM AREAS REQUIRED TO COMPLETE THE WORKS AND SHALL BE RESPONSIBLE FOR RECTIFICATION, AT ITS OWN COST, OF ANY DISTURBANCE BEYOND THOSE AREAS.
3. PROVIDE GULLY GRATE INLET SEDIMENT TRAPS AT ALL GULLY PITS.
4. PROVIDE SILT FENCING ALONG PROPERTY LINE AS DIRECTED BY SUPERINTENDENT.
5. ADDITIONAL CONTROL DEVICES TO BE PLACED WHERE DIRECTED BY THE PRINCIPLE.
6. ALTERNATIVE DESIGNS TO BE APPROVED BY SUPERINTENDENT PRIOR TO CONSTRUCTION.
7. WASH DOWN/RUMBLE AREA TO BE CONSTRUCTED WITH PROVISIONS RESTRICTING ALL SILT AND TRAFFICKED DEBRIS FROM ENTERING THE STORMWATER SYSTEM.
8. NO WORK OR STOCKPILING OF MATERIALS TO BE PLACED OUTSIDE OF SITE WORK BOUNDARY.
9. APPROPRIATE EROSION AND SEDIMENT CONTROLS TO BE USED TO PROTECT STOCKPILES AND MAINTAINED THROUGH OUT CONSTRUCTION.
10. IT IS THE CONTRACTORS RESPONSIBILITY TO TAKE DUE CARE OF NATURAL VEGETATION. NO CLEARING IS TO BE UNDERTAKEN WITHOUT PRIOR APPROVAL FROM THE SUPERINTENDENT.
11. TO AVOID DISTURBANCE TO EXISTING TREES, EARTHWORKS WILL BE MODIFIED AS DIRECTED ON-SITE BY THE SUPERINTENDENT.
12. THE LOCATION OF EROSION AND SEDIMENTATION CONTROLS WILL BE DETERMINED ON SITE BY THE SUPERINTENDENT.
13. ACCESS TRACKS THROUGH THE SITE WILL BE LIMITED TO THOSE DETERMINED BY THE SUPERINTENDENT AND THE CONTRACTOR PRIOR TO ANY WORK COMMENCING.
14. ALL SETTING OUT IS THE RESPONSIBILITY OF THE CONTRACTOR PRIOR TO WORKS COMMENCING ON SITE. THE SUPERINTENDENT'S SURVEYOR SHALL PEG ALL ALLOTMENT BOUNDARIES, PROVIDE COORDINATE INFORMATION TO THESE PEGS AND PLACE BENCH MARKS. THE CONTRACTOR SHALL SET OUT THE WORKS FROM AND MAINTAIN THESE PEGS.
15. PLANS ARE MINIMUM REQUIREMENTS AND ARE TO BE USED AS A GUIDE ONLY. EXACT MEASURES USED SHALL BE DETERMINED ON SITE IN CONJUNCTION WITH PROGRAM OF CONTRACTORS WORKS etc.



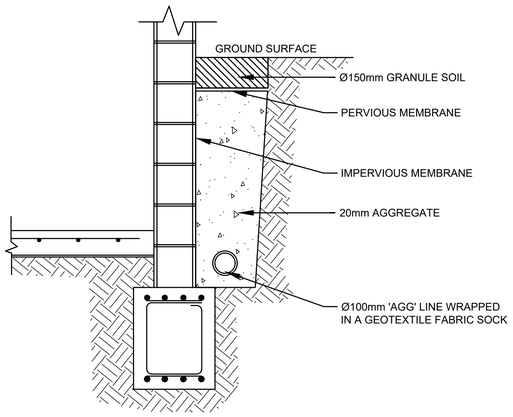
FIELD INLET SEDIMENT TRAP

N.T.S.



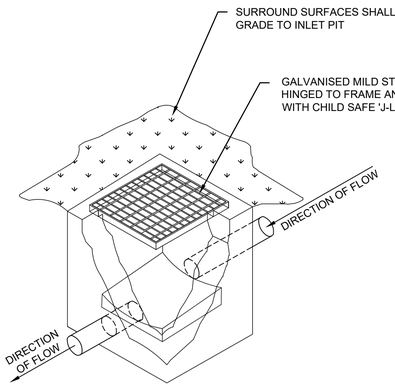
SHAKEDOWN DEVICE

N.T.S.



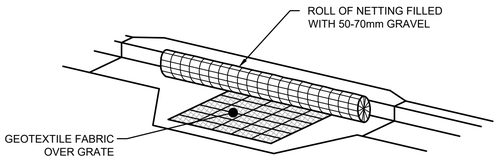
TYPICAL SUBSOIL DRAIN

N.T.S



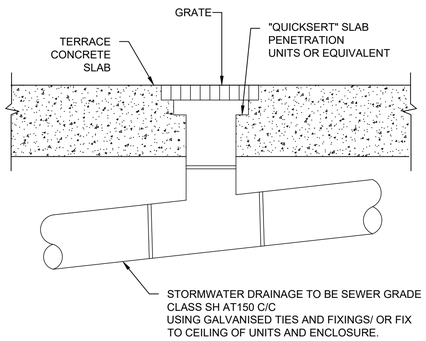
TYPICAL GRATED INLET PIT DETAIL

N.T.S.



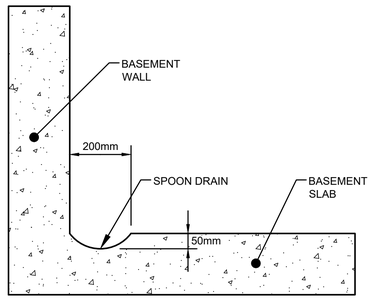
KERB INLET PROTECTION SAG GULLIES

N.T.S.



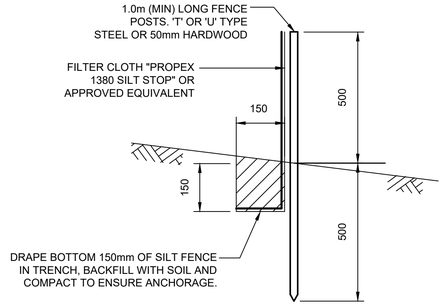
RAINWATER OUTLET DETAIL

N.T.S.



SPOON DRAIN SECTION DETAIL

SCALE 1:10



SILT FENCE DETAIL

N.T.S

SILT FENCE NOTES:

1. FILTER CLOTH TO BE FASTENED SECURELY TO POSTS WITH GALVANISED WIRE TIES, STAPLES OR ATTACHMENT BELTS.
2. POSTS SHOULD NOT BE SPACED MORE THAN 3.0m APART.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 150mm AND FOLDED.
4. FOR EXTRA STRENGTH TO SILT FENCE, WOVEN WIRE (14mm GAUGE, 150mm MESH SPACING) TO BE FASTENED SECURELY BETWEEN FILTER CLOTH AND POSTS BY WIRE TIES OR STAPLES
5. INSPECTIONS SHALL BE PROVIDED ON A REGULAR BASIS, ESPECIALLY AFTER RAINFALL AND EXCESSIVE SILT DEPOSITS REMOVED WHEN "BULGES" DEVELOP IN SILT FENCE
6. SEDIMENT FENCES SHALL BE CONSTRUCTED WITH SEDIMENT TRAPS AND EMERGENCY SPILLWAYS AT SPACINGS NO GREATER THAN 40m ON FLAT TERRAIN DECREASING TO 20m SPACINGS ON STEEP TERRAIN.

NOT FOR CONSTRUCTION

Issue	Description	Date	Design	Checked
C	COUNCIL COMMENTS	08/10/2021	AGA	JSF
B	COUNCIL COMMENTS	30/08/2021	AGN	JSF
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0 1cm at full size 10cm 20cm

Certification By Dr. Michel Chaaya in affiliation with Joe Bacha (formerly Australian Consulting Engineers):

Architect
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Level 2
333 George Street
Sydney, NSW 2000, AUS
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Email : Fergus.Dinwiddie@grimshaw.global
WEB : www.grimshaw.global

Client
Samprian Pty Ltd

Council
City of Sydney Council

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DESIGN & CONSTRUCTION EXCELLENCE
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PO BOX 3579 Parramatta 2124
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PHONE : 02 7809 4931

Scale

Project
757-763 GEORGE STREET, HAYMARKET
PROPOSED MIXED-USE DEVELOPMENT
STORMWATER CONCEPT PLANS
PLANNING PROPOSAL

Drawing Title
MISCELLANEOUS DETAILS SHEET

Scale	Project No.	Dwg. No.	Issue
A1 N.T.S.	2021189	107	C

TELFORD CIVIL
DESIGN & CONSTRUCTION EXCELLENCE

P: 02 7809 4931
A: Level 4, 470 Church St
Parramatta NSW 2150
info@telfordcivil.com.au
www.telfordcivil.com.au

Date: 6th October 2021

Our reference: TEL2021189 - 757-763 George Street, Haymarket – Flood Certification.RevA

Re: Proposed Mixed Use Development at 757-763 George Street, Haymarket

To whomever it may concern,

The above subject site is proposed to consist of a proposed mixed used development to replace the existing 2 storey brick building **(Refer to Appendix 1)**.

The Civil Engineering and flood design relating to the above development has been designed in accordance with industry engineering practice and have been coordinated with Council Development Control Plans and Complying Development Plans.

The proposed development **(Appendix 2)** is not located impacted by flooding as per the Darling Harbour Catchment Flood Study undertaken by BMT WBM and confirmation by council. As per Council policy, the minimum floor level is to be a minimum of 300mm above the invert level.

I, Dr. Michel Chaaya hereby would like to request that the proposed development at 757-763 George Street, Haymarket is compliant with City of Sydney Council's requirements and relevant Council DCP.

Sincerely Yours,

Dr. Michel Chaaya
B.E., M.E. (Res), Ph.D., F.I.E. Aust., CPEng., NER
Civil/Structural Engineer (EA ID: 612963)

LEGEND

BENCH MARK	▲
TELSTRA PIT	TEL
ELECTRIC LIGHT POLE	LP
POWER POLE	PP
SIGN POST	SP
SEWER INSPECTION PIT	SIP
SEWER VENT	SEWER
MANHOLE	MH
SEWER MANHOLE	SMH
STOP VALVE	SV
WATER HYDRANT	HYD
WATER METER	WM
GAS METER	G
STATE SURVEY MARK	SSM

NOTE:

NO BOUNDARY SURVEY HAS BEEN UNDERTAKEN. BEARINGS, DIMENSIONS AND AREAS ARE FROM TITLE ONLY AND ARE SUBJECT TO CONFIRMATION BY BOUNDARY SURVEY.

SERVICES SHOWN ARE INDICATIVE ONLY. POSITIONS ARE BASED ON SURFACE INDICATOR(S) LOCATED DURING FIELD SURVEY. CONFIRMATION OF THE EXACT POSITION SHOULD BE MADE PRIOR TO ANY EXCAVATION WORK. OTHER SERVICES MAY EXIST WHICH ARE NOT SHOWN.

LEVELS ARE BASED ON AUSTRALIAN HEIGHT DATUM (AHD) USING THE BENCHMARKS PROVIDED BY YOU THE CLIENT IN THE DETAIL NAMED 149237-DETL-001A.

AZIMUTH HAS BEEN OBTAINED USING THE BENCHMARKS PROVIDED BY YOU THE CLIENT IN THE DETAIL NAMED 149237-DETL-001A.

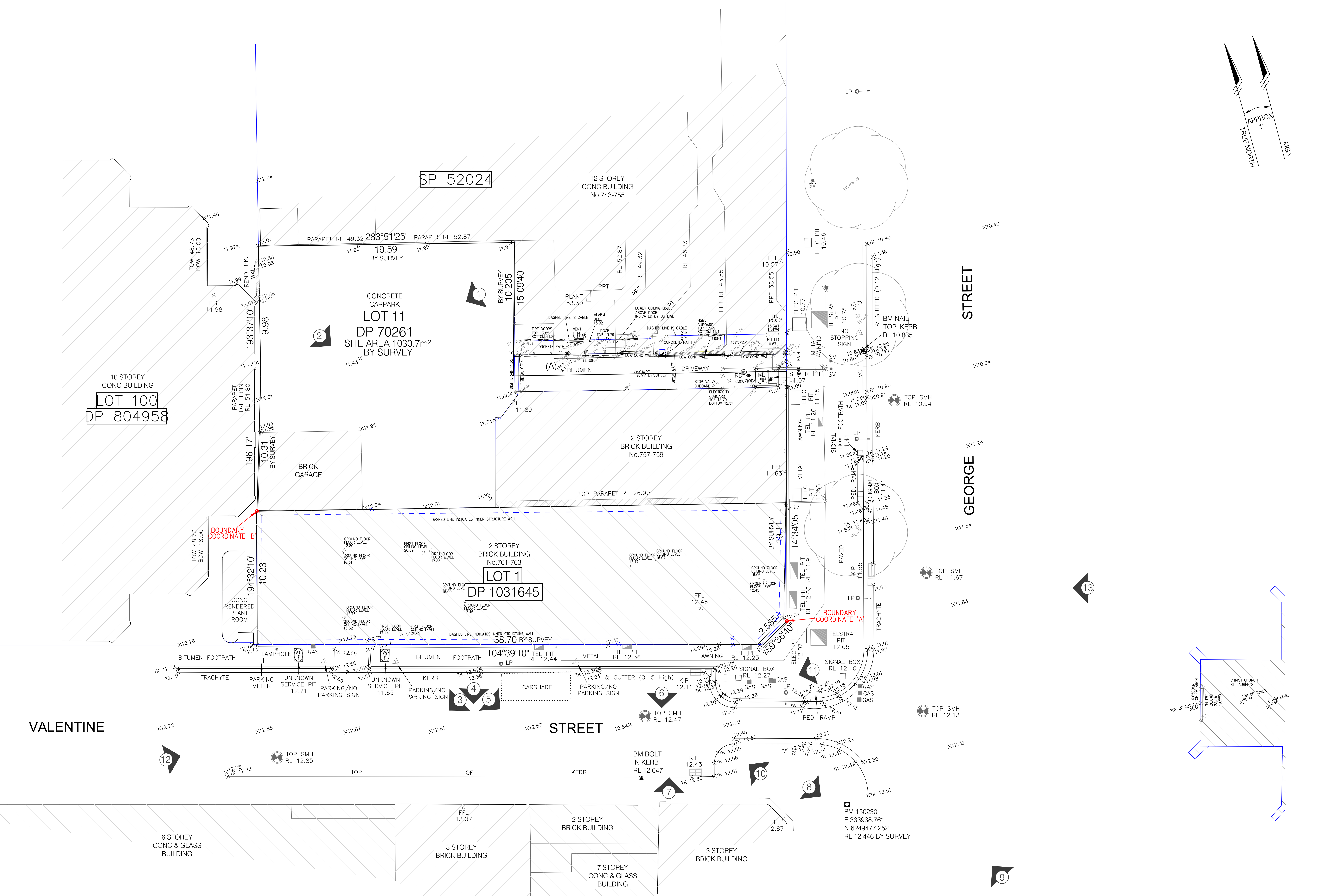
RIDGE & GUTTER HEIGHTS HAVE BEEN OBTAINED BY INDIRECT METHOD AND ARE ACCURATE TO ± 0.05m.

CONTOURS ARE AN INDICATION OF LANDFORM AND SHOULD NOT BE TAKEN IN PREFERENCE TO SPOT LEVELS SHOWN.

CONTOUR INTERVAL 0.25m.

IT HAS BEEN ASSUMED THAT THE INSIDE WALLS OF No.761-763 CONTINUE VERTICALLY FROM THE GROUND FLOOR TO THE FIRST FLOOR. NO OBSERVATIONS TO THE STRUCTURAL WALLS WERE TAKEN ON THE FIRST FLOOR.

BOUNDARY COORDINATES HAVE BEEN ADDED BASED ON A BOUNDARY SURVEY PROVIDED BY CEEROSE AND UNDERTAKEN BY LAWRENCE GROUP TITLED 142937-DETL-001A



LEGEND

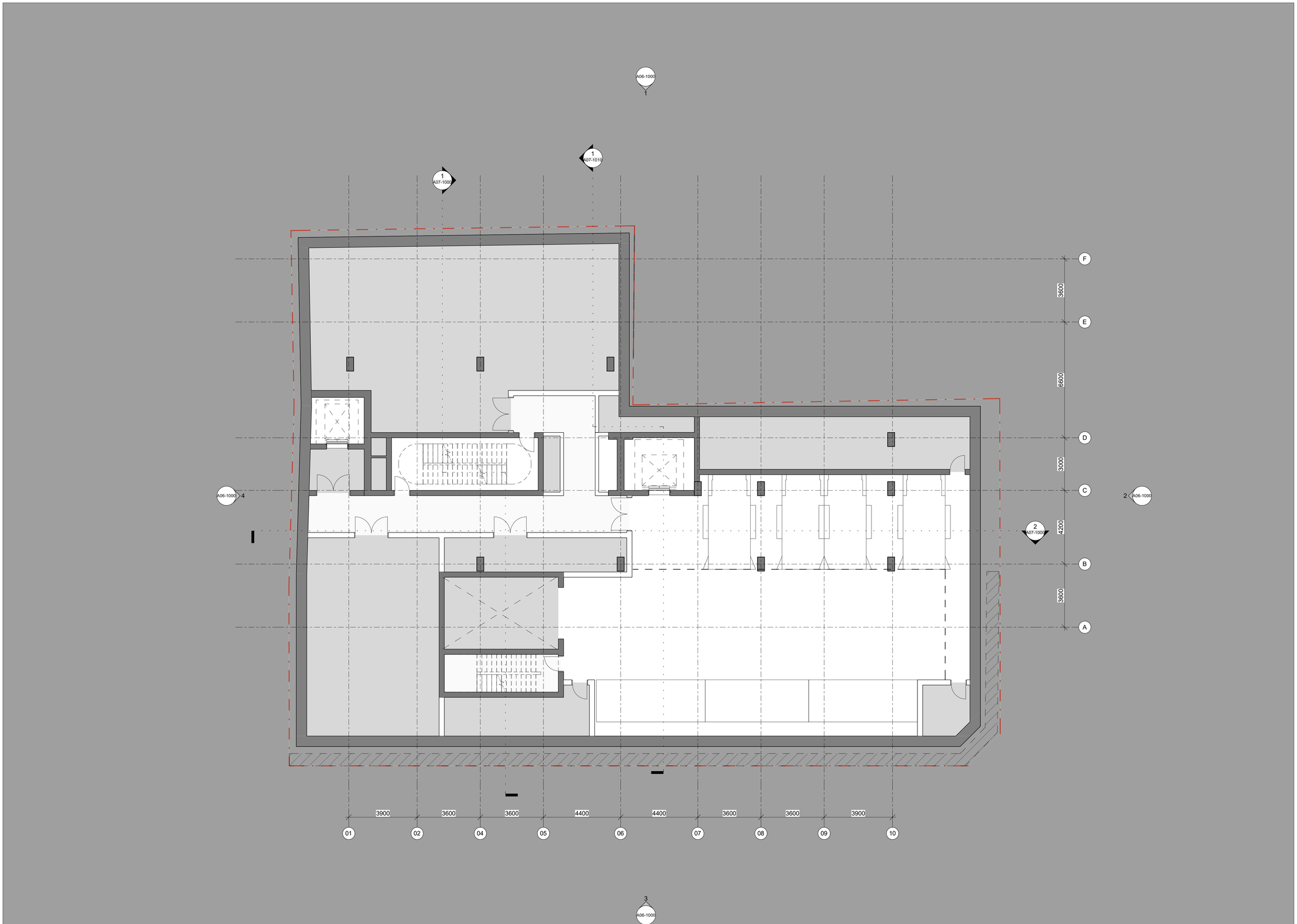
EB - EDGE OF BITUMEN
TB - TOP OF BANK
BB - BOTTOM OF BANK
WT - TOP OF WINDOW
WB - BOTTOM OF WINDOW
TG - TOP OF GUTTER
RR - ROOF RIDGE
FL - FLOOR LEVEL
TEL - TELSTRA PIT
INV - INVERT LEVEL
WM - WATER METER
SV - STOP VALVE
SIP - SEWER INSPECTION PIT
ELEC - ELECTRICAL PIT
PP - POWER POLE
BM - BENCHMARK
Ø.4/S10/H16 - DIAMETER/SPREAD/HEIGHT
HSBV - HYDRANT SPRINKLER BOOSTER VALVES
UB - UNDERSIDE OF BEAM/STRUCTURE

TABLE OF BOUNDARY COORDINATES

POINT ID	EASTING	NORTHING
A	333937.86	6249491.98
B	333900.75	6249510.36

TOTAL SURVEYING SOLUTIONS
SUITE 5 / 21 ELIZABETH STREET, CAMDEN NSW 2570
Ph. (02) 4655 4035 Fax. (02) 46 55 7094 Email: tss@totalsurveying.com.au

DRAWING: PLAN SHOWING DETAIL & LEVELS OVER DP 70261 & DP1031645	JOB No.: 151191	LGA: CITY OF SYDNEY	REVISION No.	REVISION DATE:	COMMENT:
	PLAN No.: 151191_C	DATUM: AHD			
CLIENT: CEEROSE PTY LTD	DATE: 09.12.2015	SCALE: 1:100@A0	B	25.11.2015	RESTORED FULL OPACITY TO UNDERLYING SURVEY DONE BY LAWRENCE GROUP.
PROJECT: HAYMARKET	DRAWN: RA	CONT. INTERVAL: 0.25m	C	09.12.2015	ADDED BOUNDARY MARK COORDINATES
ADDRESS: CORNER OF GEORGE STREET & VALENTINE STREET, HAYMARKET	CHK: CD	SHEET 1 OF 1			



ARCHITECT

GRIMSHAW

GRIMSHAW ARCHITECTS LLP

T +61 2 9253 0200
www.grimshaw.global

Level 2, 333 George Street,
Sydney, NSW 2000, AUS

DRAWING NOTICES

Do not scale - all dimensions to be checked on site. Grimshaw drawings to be read in conjunction with grimshaw and specialist specifications. Drawings to be read in conjunction with m&e, structural, fire and acoustic information.

CLIENT
Samprian Pty Ltd

CONSULTANTS

PROJECT NAME
757-763 GEORGE ST

PROJECT NO.
19287

ADDRESS
757-763 GEORGE ST, SYDNEY, NSW, AUSTRALIA

REV	BY	DATE	DESCRIPTION
1		16.10.20	Issue for Information
2		12.02.21	Issue for Information
3		11.06.21	Draft Issue
4		20.08.21	Draft Issue
5		05.10.21	Draft Issue

KEY PLAN

NORTH

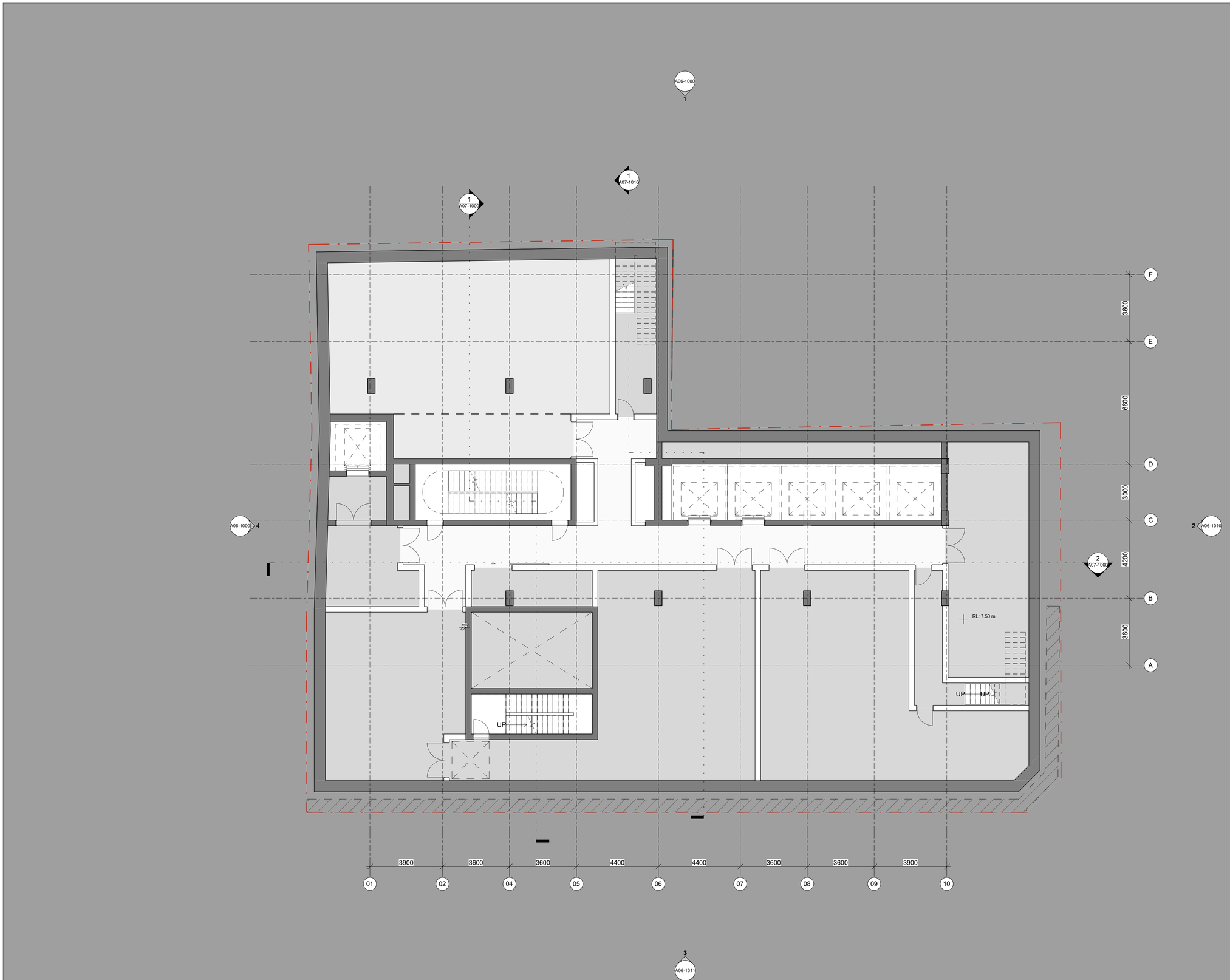
DRAWING TITLE
GA PLAN - LEVEL B2 - BASEMENT 02

SCALE
1 : 100 @ A1

STATUS
For Information

DRW	CH	APPR	DRW DATE	REV
FD	GAS	GAS	05.10.21	5

DRAWING NO.
A03-1000



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3		11.06.21	Draft Issue
4		20.08.21	Draft Issue
5		05.10.21	Draft Issue

KEY PLAN

NORTH

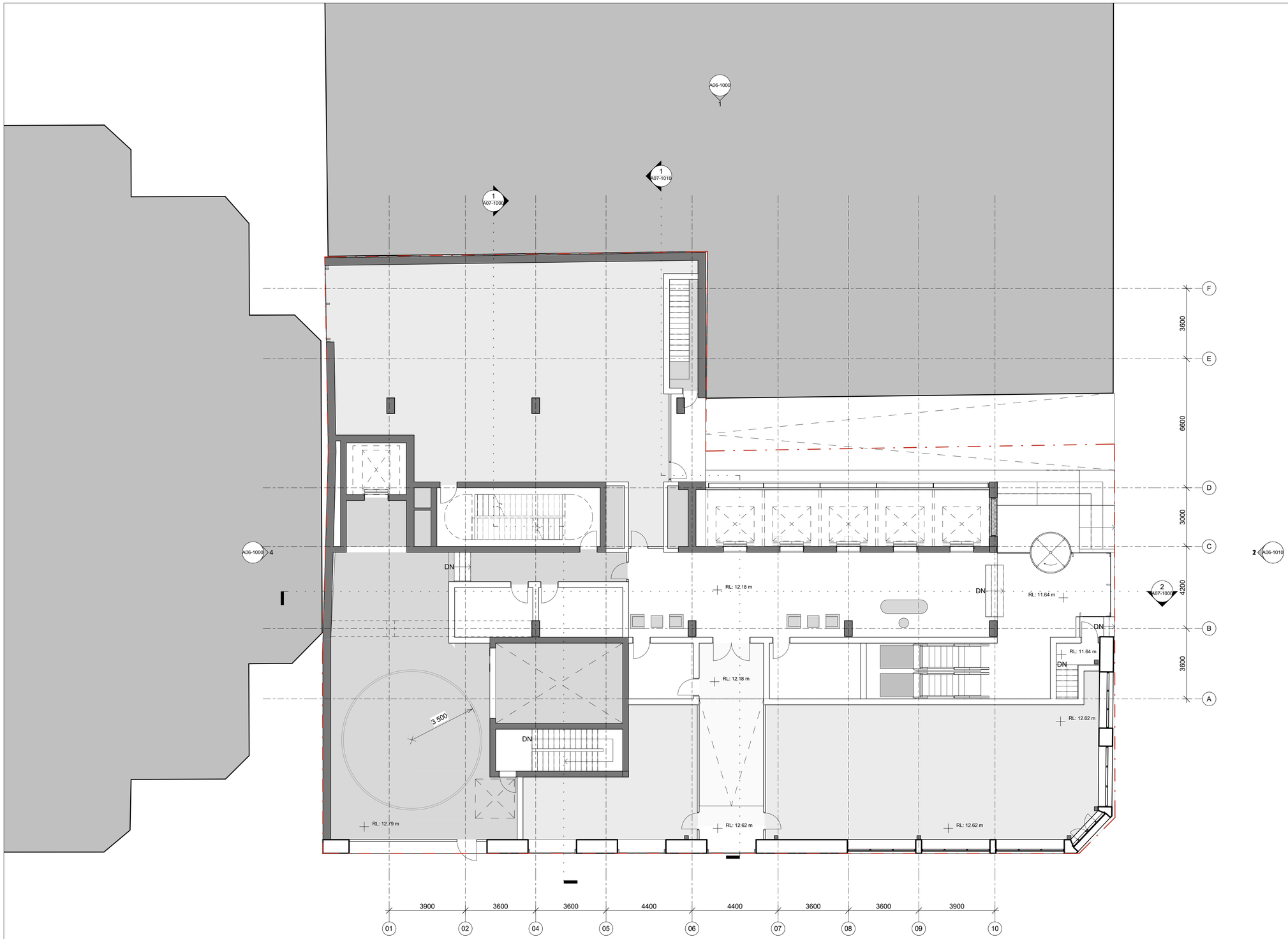
DRAWING TITLE
GA PLAN - LEVEL B1 - BASEMENT 01

SCALE
1 : 100 @ A1

STATUS
For Information

DRW	CH	APPR	DRW DATE	REV
FD	GAS	GAS	05.10.21	5

DRAWING NO.
A03-1001



ARCHITECT

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CLIENT
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757-763 GEORGE ST

PROJECT NO.
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ADDRESS
757-763 GEORGE ST, SYDNEY, NSW, AUSTRALIA

REV	BY	DATE	DESCRIPTION
1		16.10.20	Issue for Information
2		12.02.21	Issue for Information
3		20.08.21	Draft Issue
4		05.10.21	Draft Issue

KEY PLAN

NORTH

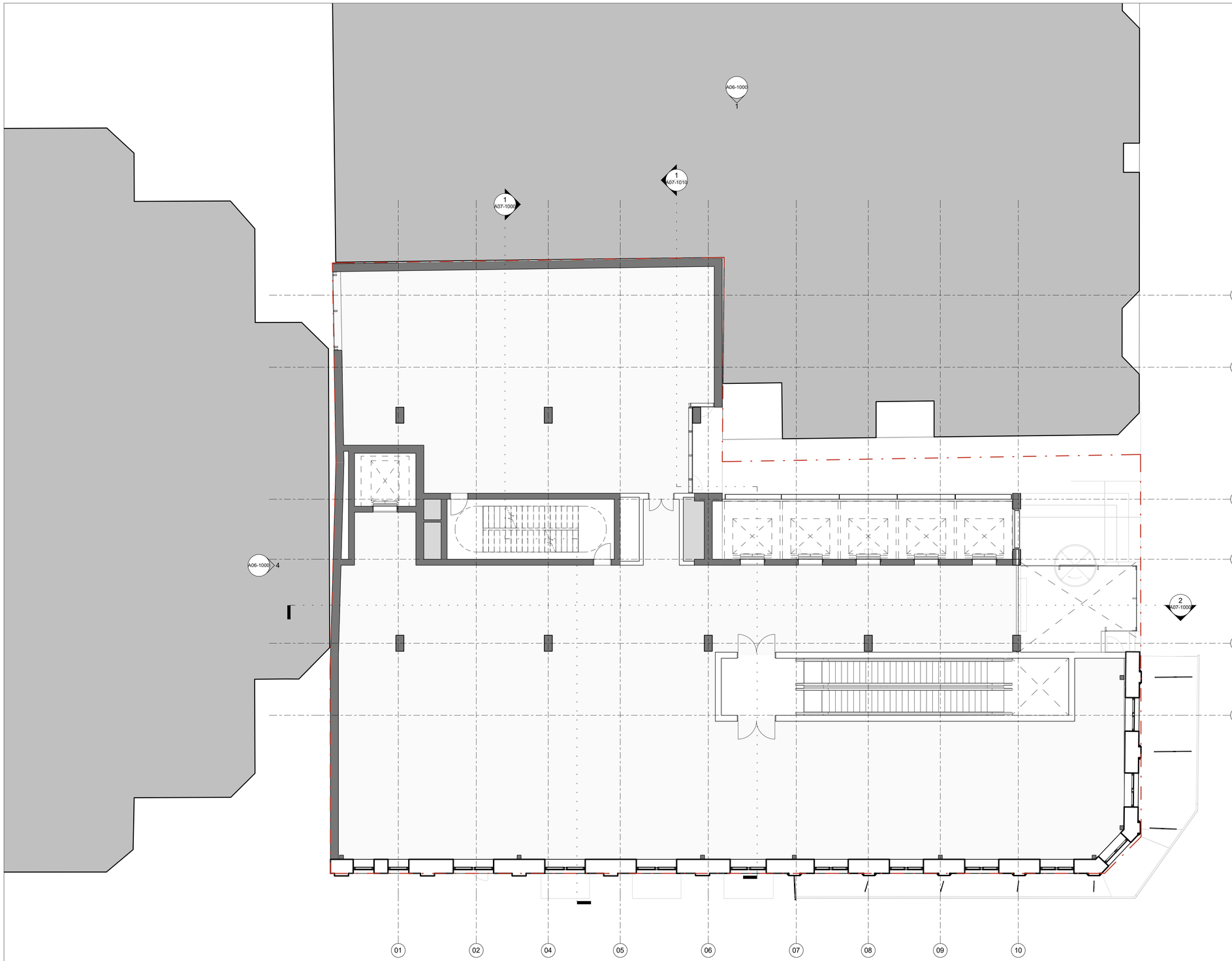
DRAWING TITLE
GA PLAN - LEVEL 01 - GROUND

SCALE
1 : 100 @ A1

STATUS
For Information

DRW	CH	APPR	DRW DATE	REV
FD	GAS	GAS	05.10.21	4

DRAWING NO.
A03-1002



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DRAWING NOTICES

Do not scale - all dimensions to be checked on site. Grimshaw drawings to be read in conjunction with grimshaw and specialist specifications. Drawings to be read in conjunction with m&e, structural, fire and acoustic information.

CLIENT
Samprian Pty Ltd

CONSULTANTS

PROJECT NAME
757-763 GEORGE ST

PROJECT NO.
19287

ADDRESS
757-763 GEORGE ST, SYDNEY, NSW, AUSTRALIA

REV	BY	DATE	DESCRIPTION
1		16.10.20	Issue for Information
2		12.02.21	Issue for Information
3		11.06.21	Draft Issue
4		20.08.21	Draft Issue
5		05.10.21	Draft Issue

KEY PLAN

NORTH

DRAWING TITLE
GA PLAN - LEVEL 02 - MEZZANINE

SCALE
1 : 100 @ A1

STATUS
For Information

DRW	CH	APPR	DRW DATE	REV
GM	GAS	GAS	05.10.21	5

DRAWING NO.
A03-1003

SYDNEY DEVELOPMENT CONTROL PLAN 2012
757 – 763 George Street, Haymarket

1. The Purpose of this Development Control Plan

The purpose of this plan is to amend Sydney Development Control Plan 2012 to provide objectives and provisions to inform future development on 757 – 763 George Street, Haymarket.

This Plan is to be read in conjunction with draft Planning Proposal: 757 – 763 George Street, Haymarket.

2. Citation

This plan may be referred to as the 757 – 763 George Street, Haymarket Amendment.

3. Land covered by this plan

This plan applies to land identified as 757 – 759 and 761 – 763 George Street, Haymarket – which is legally described as Lot 11 in DP 70261 and Lot 1 in DP 1031645, respectively.

4. Relationship of this plan to Sydney Development Control Plan 2012

This plan amends Sydney Development Control Plan 2012 in the manner set out below.

Amendment to Sydney Development Control Plan 2012

[1] Figure 6.1

Amend Figure 6.1: Specific Sites Map to include 757 – 763 George Street, Haymarket.

[2] Section 6.3 Specific site controls prepared as part of a Planning Proposal

6.3.# 757 – 763 George Street, Haymarket

The following objectives and provisions apply to 757 – 763 George Street, Haymarket – as shown in Figure 6.1 Specific Sites map, where the provisions of the *Sydney Local Environmental Plan 2012* – 757 – 763 George Street are implemented.

Objectives

(a) To define a building massing envelope which will provide sufficient flexibility within its volume for a building to achieve design excellence and to achieve a high standard of environmental sustainability;

(b) Deliver a high quality built form that:

(i) Is of appropriate bulk and scale for its location;

(ii) Provides an appropriate height transition between adjacent taller buildings along Valentine Street;

(iii) Retains and is sympathetic to the heritage significant fabric of the Sutton Forests Meat Building (at 757 – 759 George Street) with this being its facades fronting Valentine and George Street;

(iv) Protect view corridors towards Christ Church St Laurence Sydney;

(v) Maintains daylight and sunlight in streets, lanes and public spaces;

(vi) Manages wind impacts of development on streets, lanes and other public spaces so that they are safe and comfortable for people;

(vii) Ensures the podium responds to the scale of the Sutton Forest Meat Building at 757 – 763 George Street and responds to the prevailing street wall alignment;

(viii) Ensures the surrounding public domain is fronted with active uses;

(c) Identifies the location of pedestrian and service vehicle entries;

(d) To ensure the location, size and design of vehicle access point minimise pedestrian and vehicle conflicts to facilitate the pedestrianisation of Valentine and Quay Streets; and

(e) To provide mid-range hotel accommodation that caters to the growing office market and complementary retail and commercial uses that facilitate activation.

Provisions

6.3. x 1 Building Envelope (Built Form)

(1) Building massing, height, footprint and setbacks are to be consistent with Figures 6.xx – 6.xx for 757 – 763 George Street, Haymarket.
(2) The maximum height building height is to be RL 117.87 (105.87m above ground) to the highest point on the building including any plant and rooftop architectural features.
(3) Setbacks are to be consistent with Figure 6.# - xx 757 – 763 George Street, Haymarket.
(4) The envelope described by Figures 6.xx – 6.xx is the maximum permissible extent of the built form, and the final building design must be appropriately massed within this envelope.
(5) Building setbacks are to maintain views from the public domain to Christ Church St Lawrence from Valentine Street.

6.3 x 2 Podium Design

(1) The podium component from Level 1 to Level 2 is to provide setbacks in accordance with Figure 6.xx, including a setback to the northern boundary of at least 3m in accordance with the figure.
(2) The podium component above the heritage item from Level 3 to Level 10 is to provide setbacks in accordance with Figure 6.xx.
(3) Vehicular entry is to be located to the south off Valentine Street.
(4) The hotel drop off area is located on Valentine Street.
(5) All street frontages are to be activated by retail, entries and/or other active uses.

6.3. x 3 Street Wall Height

(1) The maximum street wall height facing George Street must not exceed RL 23.03 as per Figure 6.xx to align with the Sutton Forest Meat Building at 757 – 763 George Street.

6.3. x 4 Tower Design

(1) The maximum height of the tower component is not to exceed RL 117.85, including any additional height allowance for design excellence.
(2) The setbacks of the tower component from Level 11 onwards are to be consistent with Figure 6.XX, including a minimum 8m southern boundary setback to provide an 8m cantilever over the heritage building.

6.3. x 5 Heritage

(1) The development is to conserve the heritage listed corner building located at 757 – 763 George Street known as the Sutton Forest Meat Building.
(2) The facades fronting Valentine and George streets of the heritage listed Sutton Forest Meat Building are to be retained.
(3) The vertical setback between the parapet of the heritage listed Sutton Forest Meat Building and the tower component is required and should be provided in accordance with an endorsed Heritage Conservation Management Plan for the site.

6.3. x 6 Haymarket Special Character Area

(1) The podium element at street level is to provide a fine-grained articulation that is sympathetic to the heritage building.
(2) The development is to provide an intermittent scale that facilitates an appropriate transition in height to the surrounding towers in the Ultimo / Haymarket Tower Cluster Area.
(3) The development is to respect the character of the Haymarket Special Character Area by providing an appropriate architectural expression with suitable materials, colours and textures.

6.3. x 7 Parking and Vehicular Access

(1) Parking on site is to be limited to hotel valet parking spaces to maximise sustainable modes of transport.
(2) Vehicular access to the proposal is to be via Valentine Streets.
(3) Delivering and servicing needs are not to impact the use of any footpath.

6.3. x 8 Wind

(4) A qualitative wind effects report is to be submitted with a detailed development application for the subject site.
(5) The quantitative wind effects report is to demonstrate that the proposed development complies with the requirements set out in Section 5.1.9 of the *Sydney Development Control Plan 2012 – Central Sydney Planning Review Amendment* which prevails over Section 3.2.6 of the Sydney DCP 2012.

6.3. x 9 Design Excellence Strategy

(1) An invited architectural design competition is to be undertaken in accordance with clause 6.21 of *Sydney Local Environmental Plan 2012* and the City of Sydney Competitive Design Policy (and Draft Amendment to Competitive Design Policy (February 2020)) for the entire site.
(2) The competition is to involve no less than six competitors from a range of emerging and emerged architects with a majority of local architects as design lead.

(3) Any additional floor space pursued for a building demonstrating design excellence under clause 6.21(7)(b) is to be accommodated within the building envelope shown in Figure 6.x Indicative Envelope Massing.

6.3. x 10 Sustainability

(1) The development is to be designed to meet a 5 Star Green Star Design and As-Built v.13 rating for the whole development.
(2) A 5 Star NABERS Energy Hotel rating for the whole development.

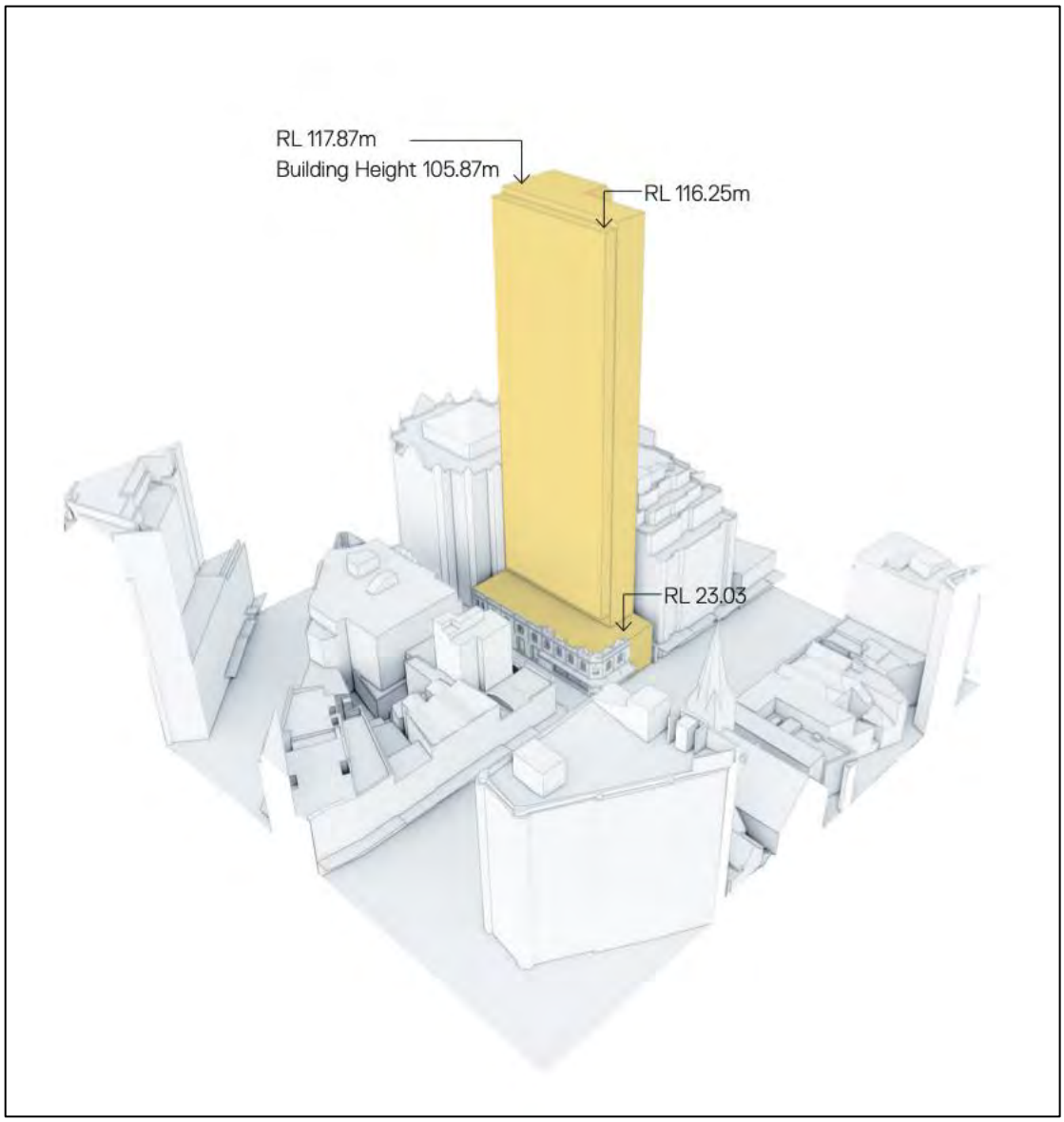

Figure 6. X Indicative Envelope Massing - Axonometric 1 (Source: Grimshaw October 2021)

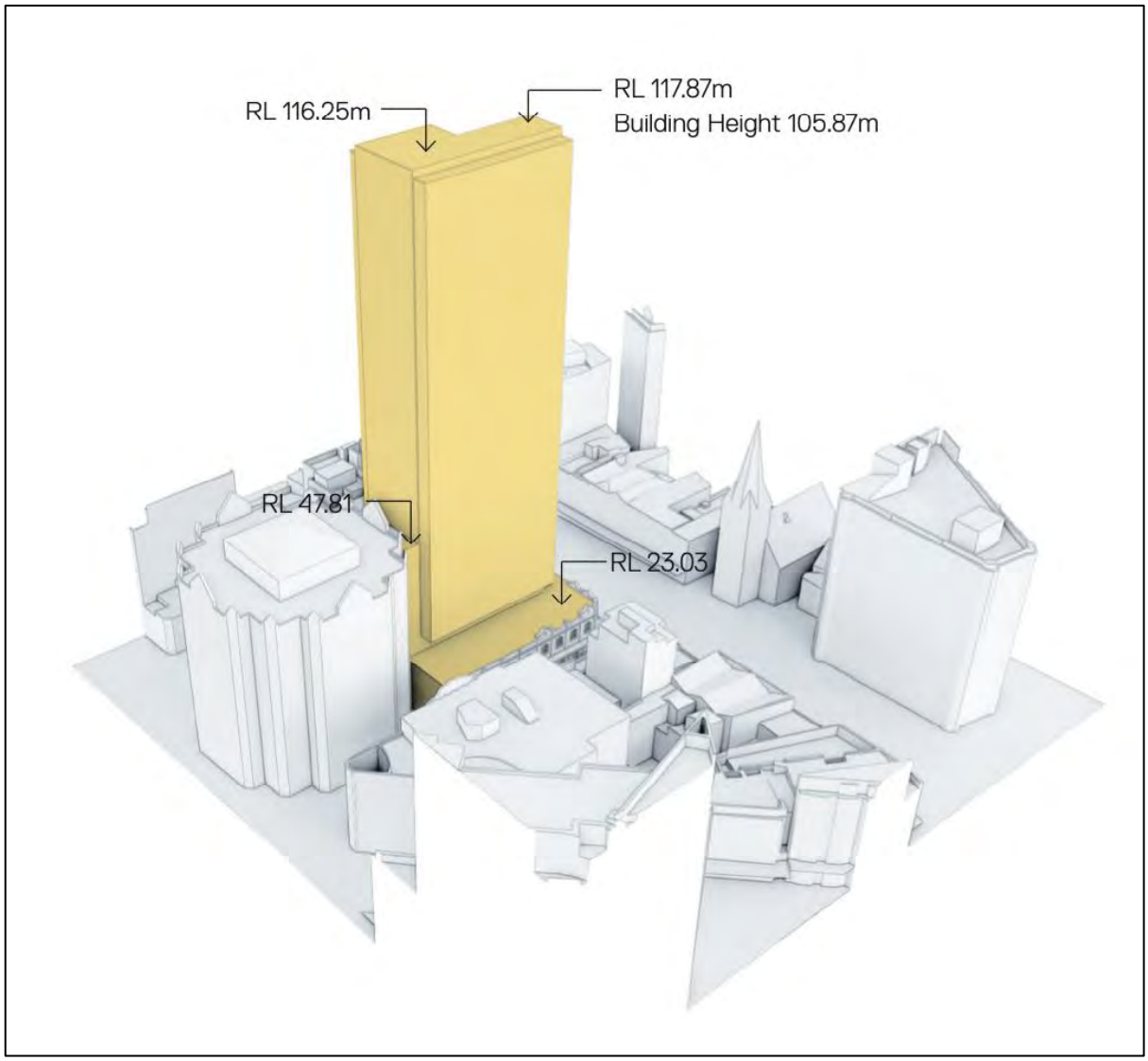

Figure 6. X Indicative Envelope Massing - Axonometric 2 (Source: Grimshaw October 2021)

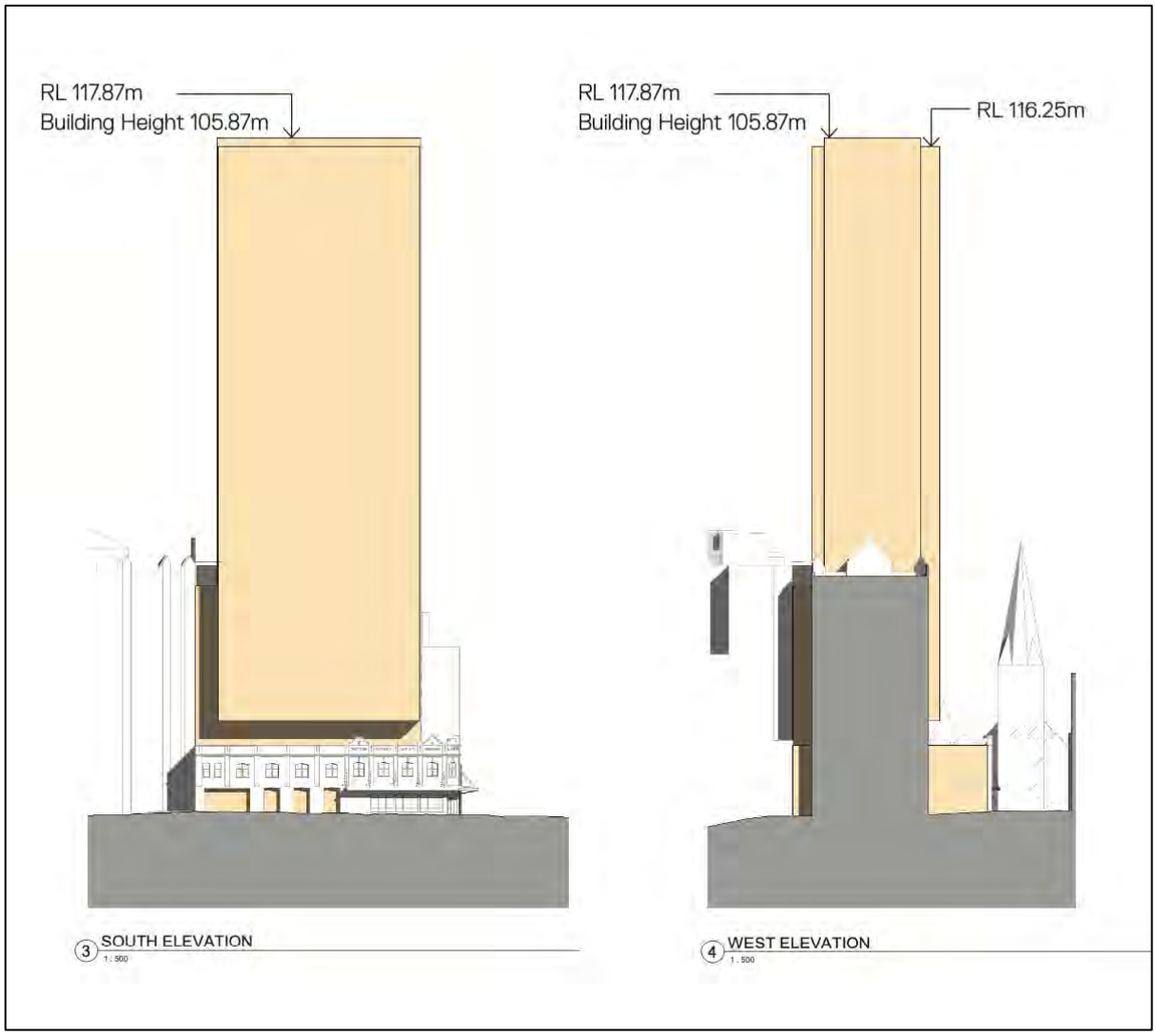

Figure 6. X South and West DCP Envelope Elevations (Source: Grimshaw October 2021)

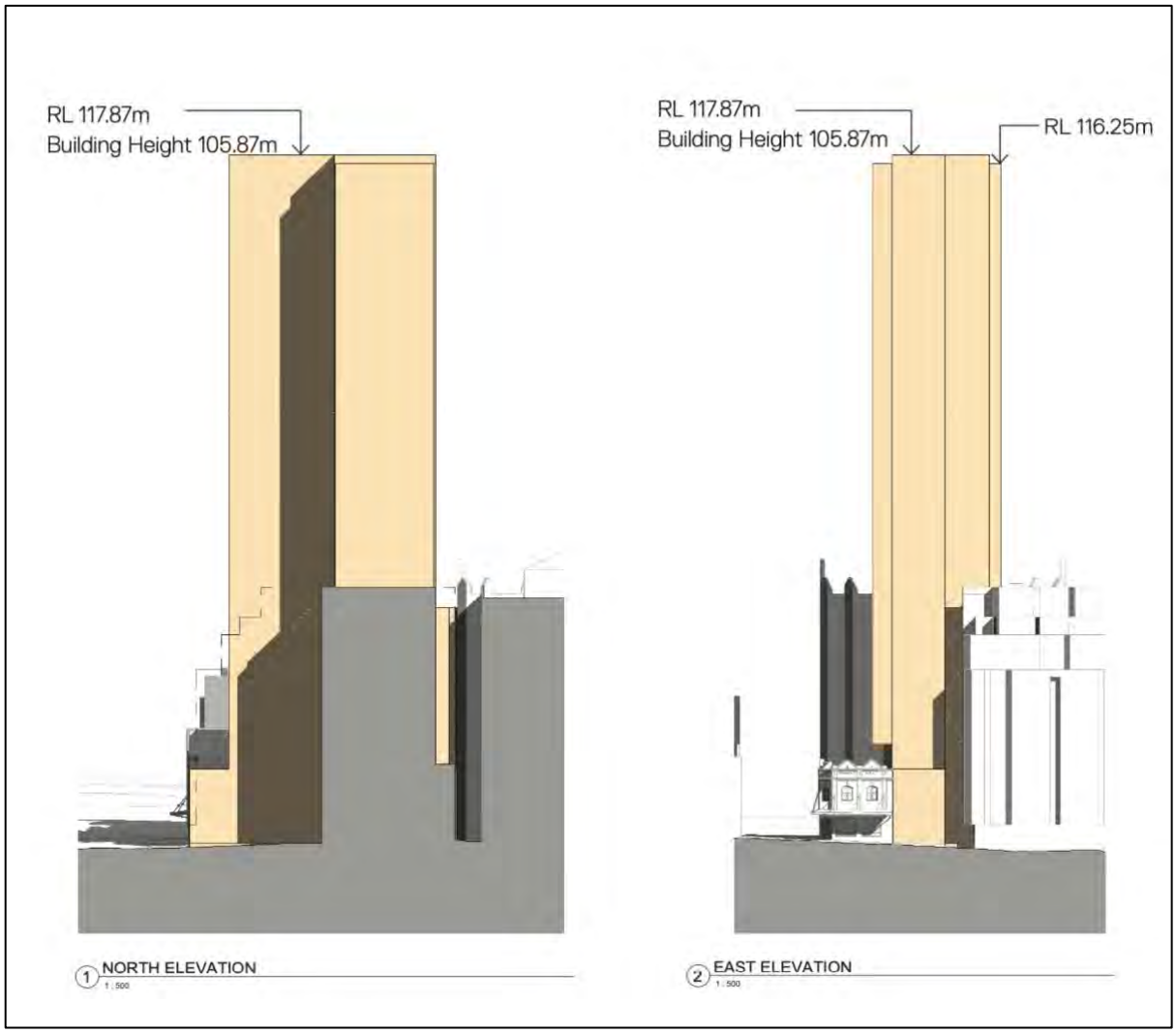

Figure 6. X North and East DCP Envelope Elevations (Source: Grimshaw October 2021)

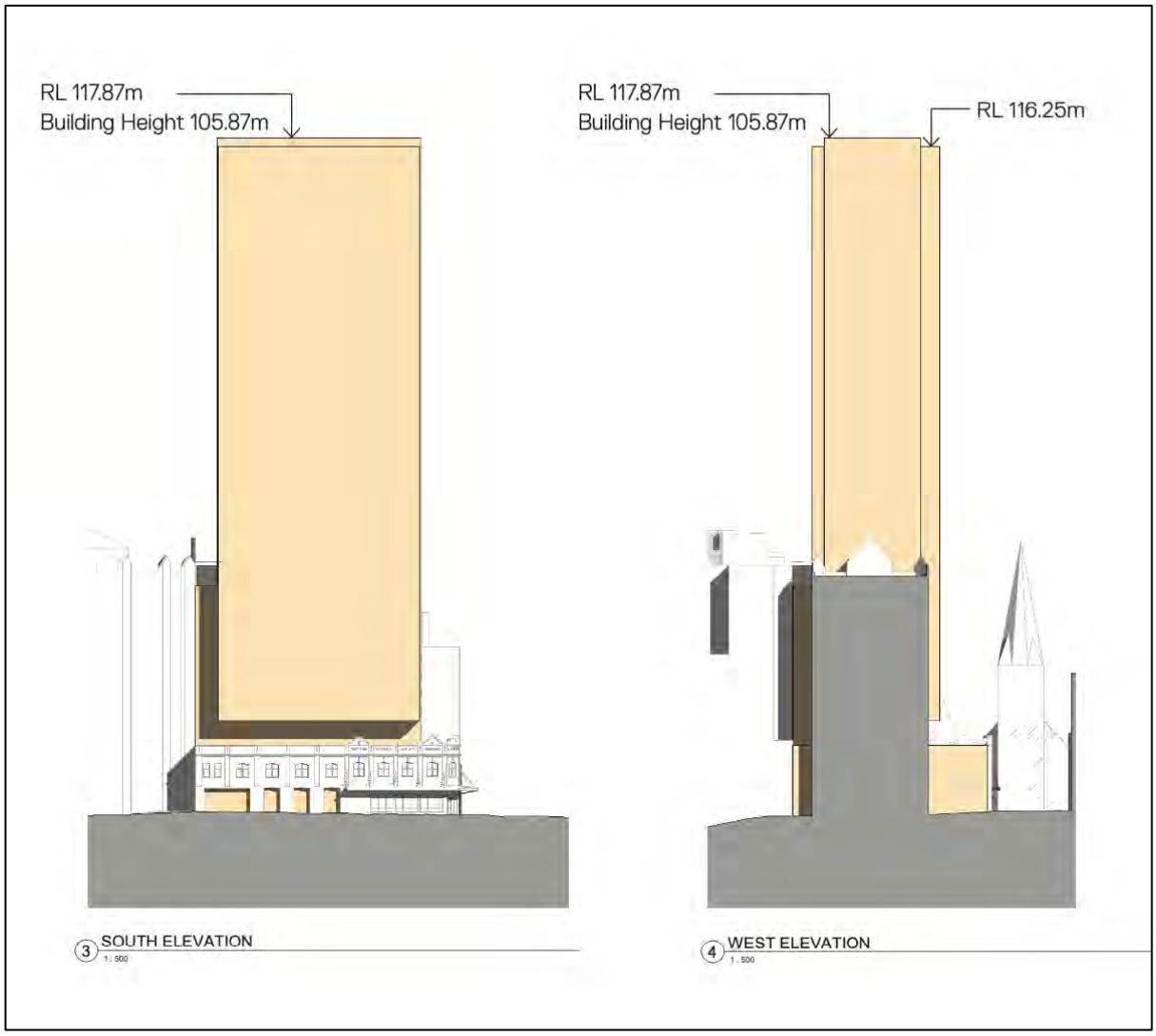

Figure 6. X South and West DCP Envelope Elevations (Source: Grimshaw October 2021)

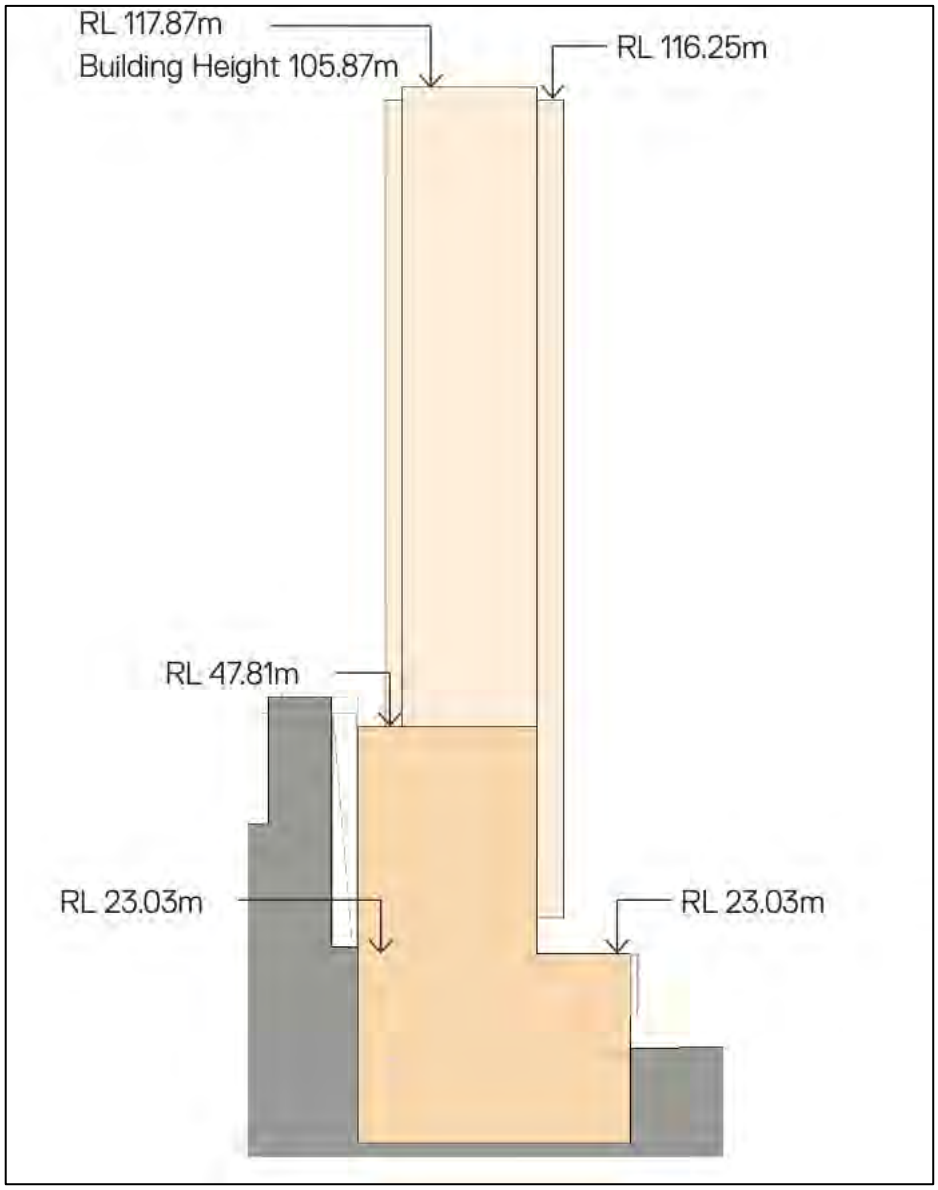

Figure 6. X North - South DCP Envelope Section (Source: Grimshaw October 2021)

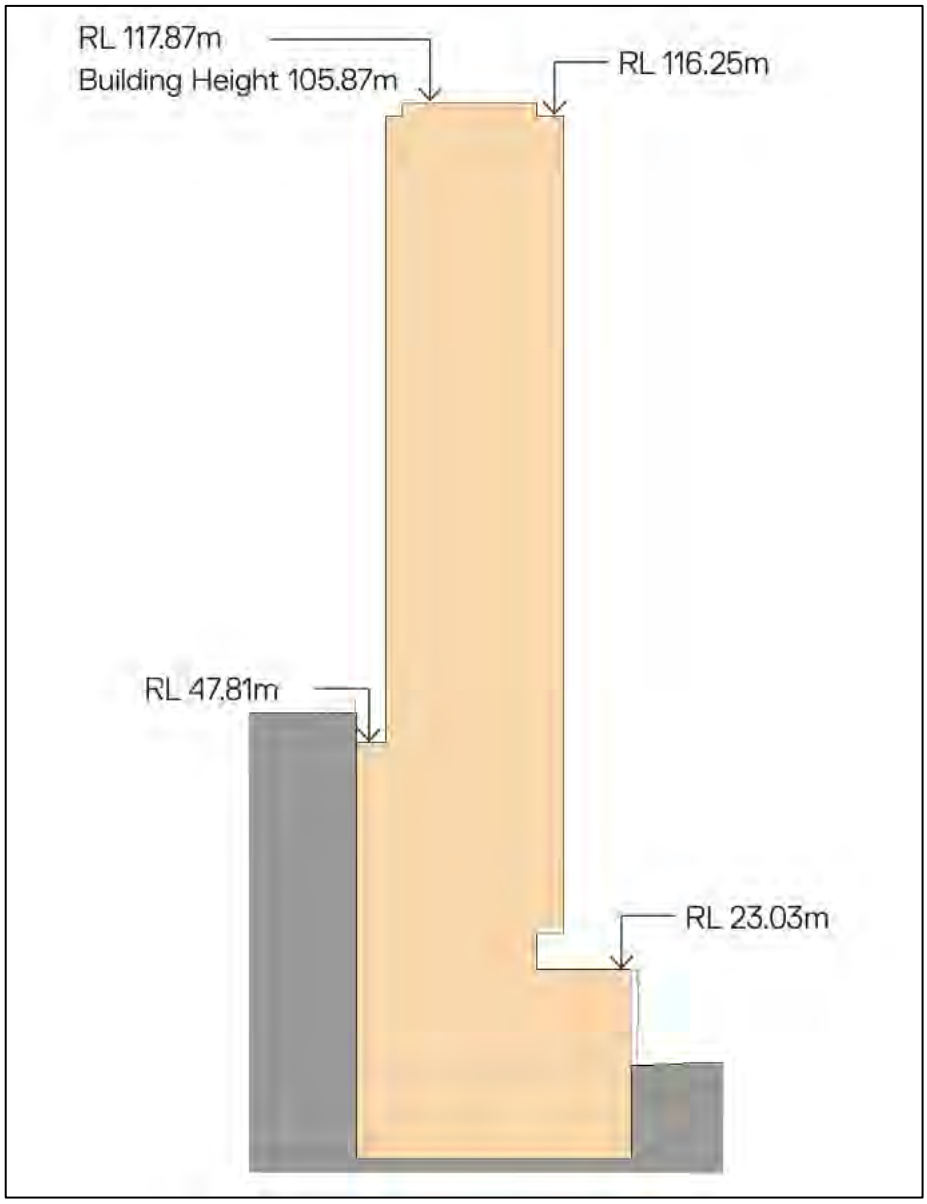

Figure 6. X East – West DCP Envelope Section (Source: Grimshaw October 2021)

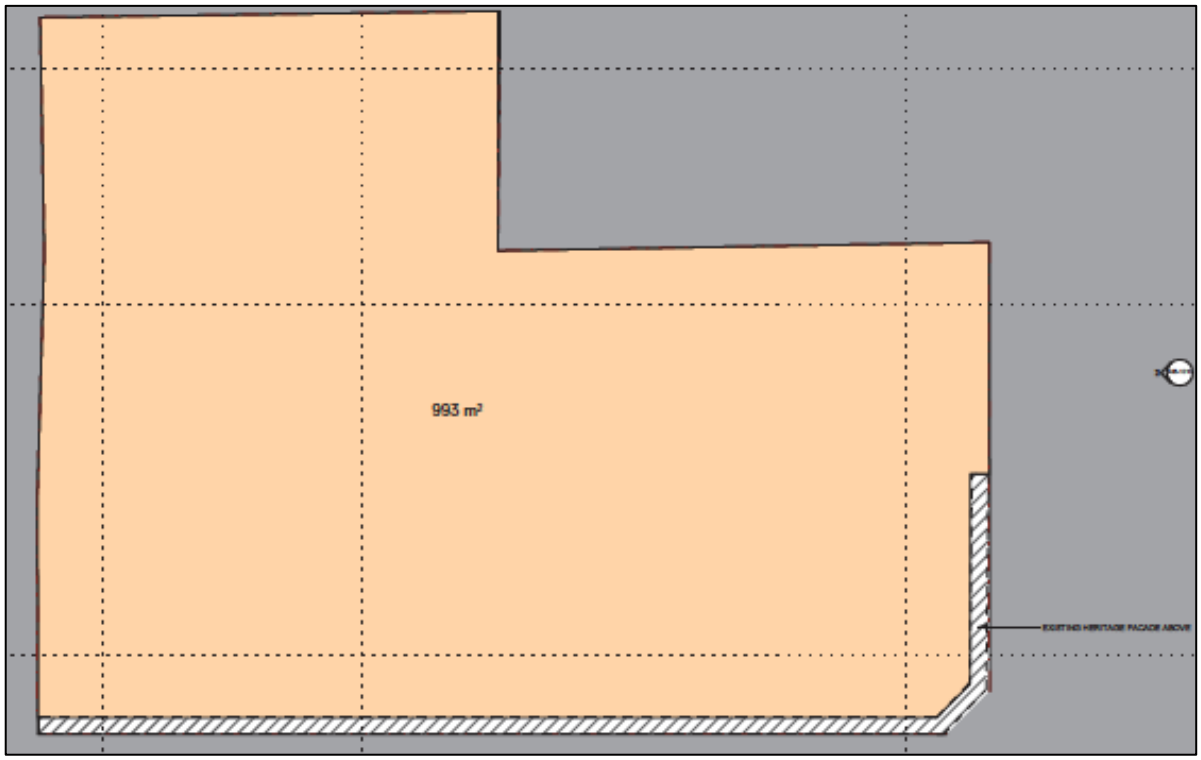

Figure 6. X Basement Envelope (Source: Grimshaw October 2021)

Figure 6. X Level 1 - Ground Floor DCP Envelope (Source: Grimshaw October 2021)

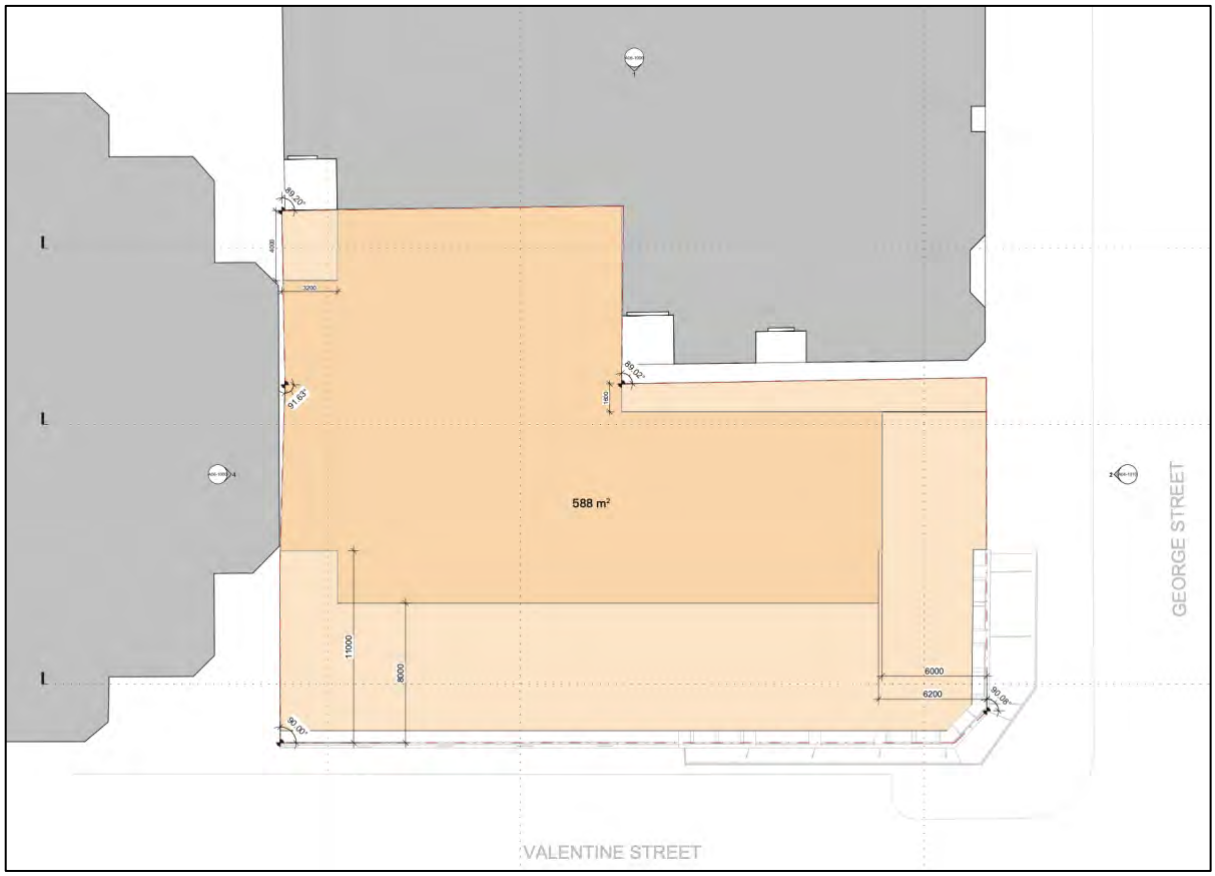

Figure 6. X Level 5 – Hotel Podium DCP Envelope (Source: Grimshaw October 2021)

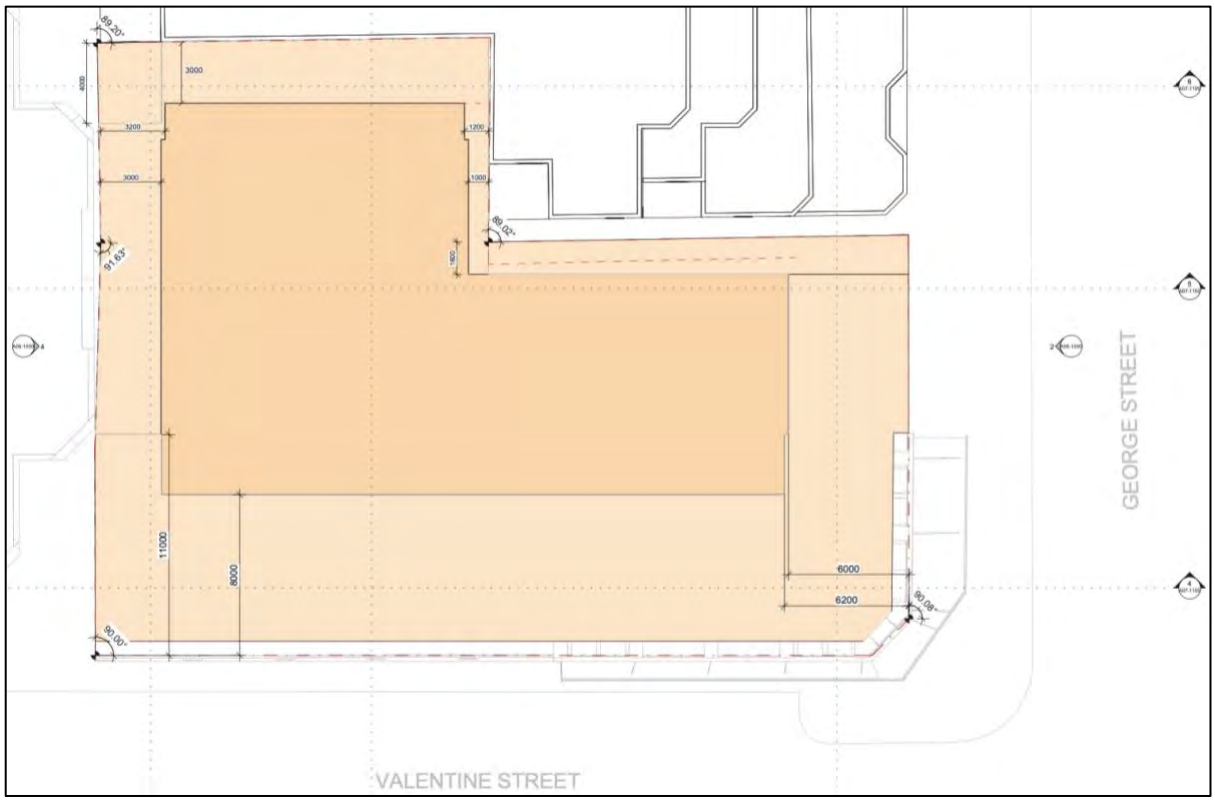

Figure 6. X Tower DCP Envelope (Source: Grimshaw October 2021)