SYDNEY WESTERN CITY PLANNING PANEL

COUNCIL ASSESSMENT REPORT

Panel Reference	PPS-2018WCI015
DA Number	DA-886/2018
LGA	Liverpool City Council
Proposed Development (as amended)	The proposal seeks consent for the following: • Construction of a 34-storey mixed-use development over four levels of basement car parking; • Three hundred twenty-one car parking spaces from Basement 4 up to Level 1; • Ground floor level incorporating building services, a cafe, separate foyers and lift lobbies servicing each of the commercial, hotel and residential levels above; • Public doman improvements including the construction of a shared pedestrian/vehicular laneway for hotel drop-off along the eastern boundary and a 8m wide service laneway to the rear boundary, landscape treatment to the laneways and street frontage to Elizabeth street; • Approximately 5,764m2 of commercial floor space from Levels 2 to 4; • Approximately 5,928m2 of hotel floor space from Level 1 and 5 to Level 8 (113 hotel apartments); • Approximately 15,855m2 of residential floor space from Level 9 to Level 33 (179 apartments); and • Residential amenity facility on Level 9 incorporating shaded outdoor terrace areas, indoor lap pool and lounge, gym and various activity rooms.
Street Address	22-26 Elizabeth Street Liverpool (Lot 1 in Deposited Plan 217460 and Lot 10 in Deposited Plan 621840)
Applicant/Owner	Amen Zoabi (Binah Developments)/Elizabeth Street Partnership Pty Ltd
Date of DA Lodgement	21/11/2018
Number of Submissions	Three (3)
Recommendation	Approval
Regional Development	The future proposal has a capital investment value of over $30 million, pursuant to Clause 2 of Schedule 7.

Criteria pursuant to Schedule 7 of the SEPP (State and Regional Development) 2011.	

List of All Relevant s4.15(1)(a) Matters	• *List all of the relevant environmental planning instruments: Section 4.15(1)(a)(i)*
	  ○ *Greater Metropolitan Regional Environmental Plan No. 2 – Georges River Catchment.*
	  ○ *State Environmental Planning Policy No.55 – Remediation of Land.*
	  ○ *State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004*
	  ○ *State Environmental Planning Policy No.65 – Design Quality of Residential Apartment Development*
	  ○ *Liverpool Local Environmental Plan 2008.*
	• *List any proposed instrument that is or has been the subject of public consultation under the Act and that has been notified to the consent authority: Section 4.15(1)(a)(ii)*
	  ○ *Nil*
	• *List any relevant development control plan: Section 4.15(1)(a)(iii)*
	  ○ *Liverpool Development Control Plan 2008.*
	  ○ *Part 1: General Controls for All Development.*
	  ○ *Part 4 – Development in the Liverpool City Centre.*
	• *List any relevant planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4: Section 4.15(1)(a)(iiia)*
	  ○ *No planning agreement relates to the site or proposed development.*
	• *List any relevant regulations: 4.15(1)(a)(iv)*
	  ○ *Consideration of the provisions of the National Construction Code of Australia.*

List all documents submitted with this report for the panel's consideration	1) Revised Architectural Plans 2) Recommended conditions of consent 3) Architectural Report 4) Original Statement of Environmental Effects 5) Response Report – Design Amendments 6) SEPP 65 Statements 7) Revised Landscape Plan

	8) Landscape Design Report 9) Public Artwork Opportunities Report 10) Hydraulic Civil Plans 11) Heritage Impact Statement 12) Traffic Report 13) Aboriginal and Historical Due Diligence Assessment 14) Access Report 15) Acoustic Report 16) Aviation Assessment Report 17) BCA Report 18) Building Services Report 19) Contamination Report 20) Detailed Site Investigation Report 21) Remedial Action Plan 22) Social Impact Assessment 23) Wind Assessment 24) Acid Sulfate Soil Assessment 25) Operational Waste Management Plan 26) DEP Minutes 27) RMS Letter
Clause 4.6 requests	N/A
Summary of key submissions	• Lack of consideration and documentation on acoustic impact, social impact, environmental heritage, public domain and wind. • The proposed building is awkward and absurd which is unsympathetic to surrounding heritage items. • The building will create a tunnelling effect and there will be overshadowing to Bigge Park and increased traffic to Westfield and hospital. • Overdevelopment of the site and increased traffic and parking congestion. A much lower density of development is suited for the site.
Report by	Emmanuel Torres
Report date	29 May 2020

Summary of Section 4.15 matters

Have all recommendations in relation to relevant Section 4.15 matters been summarised in the Executive Summary of the assessment report?	**Yes**

Legislative clauses requiring consent authority satisfaction

Have relevant clauses in all applicable environmental planning instruments where the consent authority must be satisfied about a particular matter been listed, and relevant recommendations summarized, in the Executive Summary of the assessment report? *e.g. Clause 7 of SEPP 55 - Remediation of Land, Clause 4.6(4) of the relevant LEP*	**Yes**

Clause 4.6 Exceptions to development standards

If a written request for a contravention to a development standard (clause 4.6 of the LEP) has been received, has it been attached to the assessment report?	**N/A**
Special Infrastructure Contributions	
Does the DA require Special Infrastructure Contributions conditions (S7.11)? *Note: Certain DAs in the Western Sydney Growth Areas Special Contributions Area may require specific Special Infrastructure Contributions (SIC) conditions*	**N/A**
Conditions	
Have draft conditions been provided to the applicant for comment? *Note: in order to reduce delays in determinations, the Panel prefer that draft conditions, notwithstanding Council's recommendation, be provided to the applicant to enable any comments to be considered as part of the assessment report*	**Yes**

1. EXECUTIVE SUMMARY

1.1 Reasons for the report

The Sydney Western City Planning Panel (SWCPP) is the determining authority as the Capital Investment Value of the development is over $30 million, pursuant to Clause 2 of Schedule 7 of the SEPP (State and Regional Development) 2011.

1.2 The proposal

The subject DA, as revised, specifically seeks consent for the construction of a thirty-four (34) level of mixed-use development over four (4) levels of basement car parking. Ground level consists of food & beverage area, hotel lobby and individual lift lobby for residential, hotel and roof top restaurant. Levels 2 to 4 consists of commercial spaces, Levels 1 and 5 to 8 are the hotel and levels 9 to 34 are the residential apartment units.

The (SWCPP) is the determining body as the Capital Investment Value of the development is over $30 million.

1.3 The site

The subject site is commonly known as 22 (and 24-26) Elizabeth Street, Liverpool. The site is legally described as Lot 1 in Deposited Plan 217460 and Lot 10 in Deposited Plan 621840.

1.4 The issues

The original development proposal has undergone several revisions to address various issues raised by the Council officers, external agencies, the SWCPP, DEP and public submissions and are discussed further in this report. The main issues raised include building height, ground floor level and public domain layout, Elizabeth Street access, landscaping and other items detailed in this report which have been resolved throughout the development application process and other matters including non-compliances on carparking provision are to be addressed as conditions of consent.

1.5 Exhibition of the proposal

The application that was lodged with Council on 21 November 2018. Advertisement followed between 14 December 2018 to 16 January 2019, in accordance with Liverpool Development Control Plan 2008 (LDCP 2008). There were 3 submissions received within the notification and advertising period. Discussion pertaining to the concerns raised in the submissions are provided further in this report. However, the matters raised are considered to be satisfactorily addressed by the applicant in the redesign.

1.6 Conclusion

The application has been assessed pursuant to the provisions of the Environmental Planning and Assessment Act (EP&A) 1979. Based on the assessment of the application and the amendments made to the original proposal by the applicant, it is recommended that the DA be determined by way of deferred commencement, subject to the imposition of conditions.

2. Site Description and locality

2.1 The site

The subject site is commonly known as 22 (and 24-26) Elizabeth Street, Liverpool. The site is legally described as Lot 1 in Deposited Plan 217460 and Lot 10 in Deposited Plan 621840.

The site is rectangular in shape and has a combined area of 3,082m2. The combined lot has a frontage of 50.92m to Elizabeth Street and 49.20m to the rear. The eastern and western property boundaries are 61.48m and 61.36m, respectively. A street view and aerial image of the subject site is provided in Figures 1 & 2.

Figure 1: View of site from Elizabeth Street frontage

Figure 2: Aerial photograph of the Site (nearmap)

2.2 Locality

The site is located in the heart of the Liverpool CBD which is positioned to be the Sydney's third CDB after Sydney and Parramatta. The area has recently experienced significant growth as evidenced by the proliferation of high-rise building construction hinged on the development of the Western Sydney Airport and recent changes in the Local Environmental Plan rezoning approximately 25 hectares of land in the CBD area.

The site is surrounded by a mixture of commercial, retail, educational, recreation and medical facilities and services as shown on Figure 3.

The northern boundary of the site fronts onto Elizabeth Street, directly opposite the All Saints Church and the All Saints' Catholic Girls College. North-west of the site is the Liverpool Westfield Shopping Centre and the new Western Sydney University - Liverpool Campus.

To the northeast is the medical precinct where medical services and facilities are co-located. At its core is the Liverpool Hospital and the South West Sydney Local health district offices. The Sydney Southwest Private Hospital, various medical clinics, medical specialist offices and clinics are located in and around the precinct.

To the east is the historic Bigge Park that features an amphitheatre, gazebo, playgrounds, exercise areas, tennis court, lawn bowling and other facilities that make it popular for sporting and community events.

To the south is the Police and Court House complex, Liverpool Library and Liverpool City Council administration building that incorporates the University of Wollongong - South Western Sydney Campus.

Within 300m of the site to the southeast is the TAFE campus, Liverpool train station and the main bus interchange that provides bus services to most of the Liverpool suburbs and major destinations with direct services to Parramatta, Campbelltown and Sydney CBD. Similarly, the train lines (T2, T3 & T5) through Liverpool station provide train services that cover the metropolitan Sydney network and intercity lines.

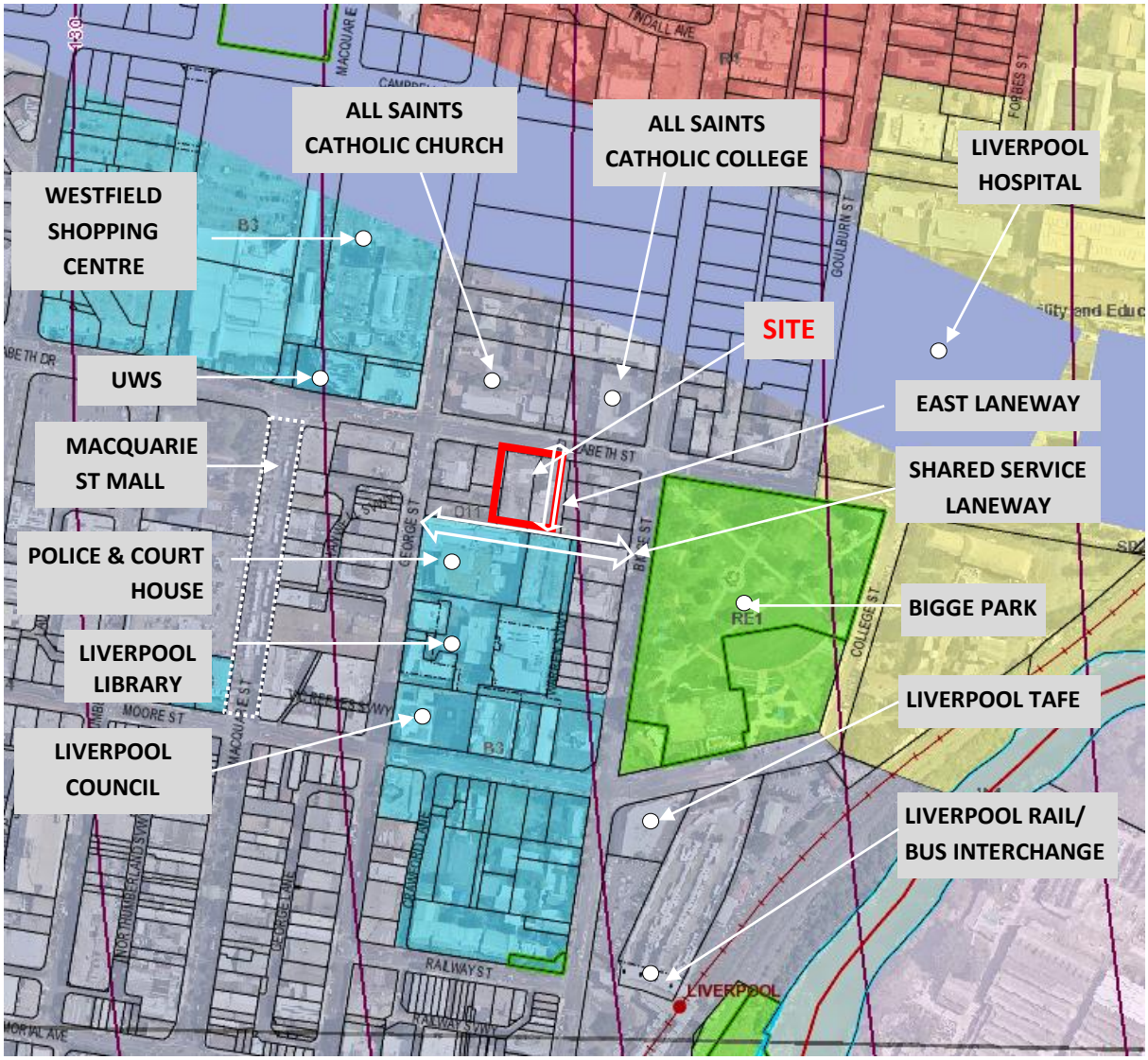


Figure 3: Development in the locality

2.3 Site affectations

The only constraint identified was low level contamination.

2.3.1 Contamination

A site investigation conducted by the applicant's consultant identified localised soil contamination that will require remediation. It was considered that the site can be remediated to render it suitable for the proposed development, subject to conditions.

2.3.2 Bankstown Airport Obstacle Height Limit

The maximum building height for the site is limited by the Obstacle Limitation Surface (OLS) and Procedures for Air Navigation Services – Aircraft Operations (PANS-OPS) from Bankstown Airport. The site is located 3.2 nautical miles west of Bankstown Airport. At this position, the height of the PANS-OPS is 135.9m AHD while the height of the OLS is between the 110m and 120m AHD contour.

3. Background of application

The site is the result of previous amalgamation of several lots and subsequent subdivision into its current form and property ownership. The following outlines the background of the site as it relates to the current application:

- On 28 September 2015, development consent (DA-369/2015) was issued for the subdivision of 10 lots into 3 lots and the creation of a right of way (ROW). Conditions of consent required that the final subdivision plan be supported by a S88B instrument for the creation of the ROW, provision of easement for existing stormwater and demolition of all existing buildings and structures (See Figure 4).

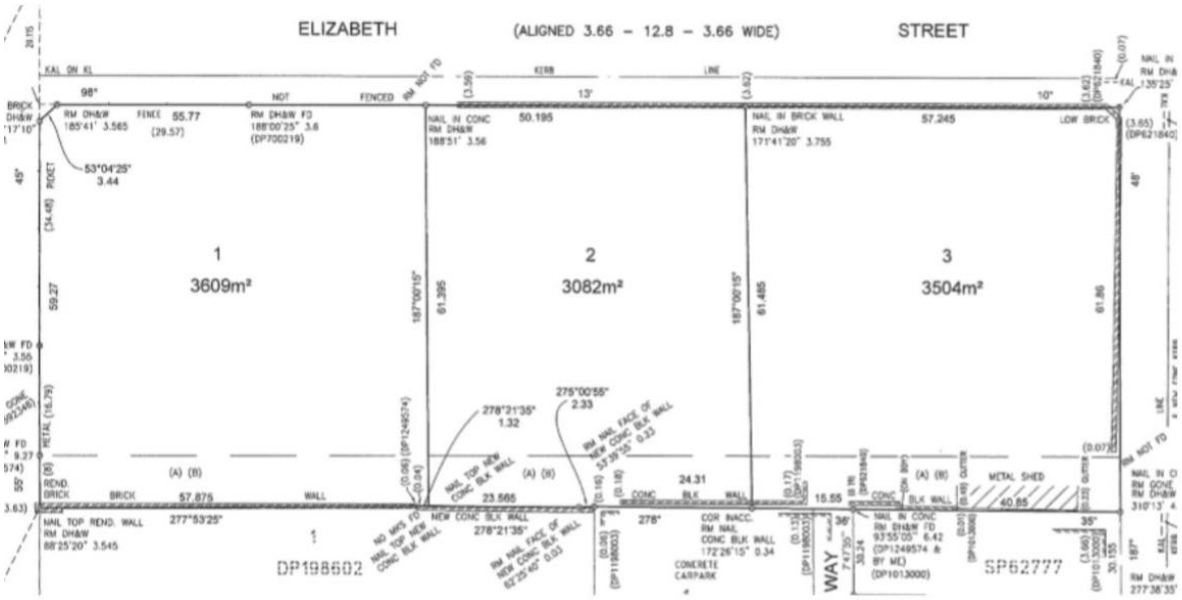


Figure 4: Approved subdivision (DA-369/2015)

- On 22 September 2016, a pre-lodgement meeting was conducted with the Liverpool Design Excellence Panel (PL-121/2016) for the development of the larger parcel that incorporated the subject site and the adjoining 2 properties (a combined area of approximately 1 hectare) with primary street frontage to Elizabeth Street and secondary frontages to Bigge and George Streets on the east and west boundaries, respectively. The proposal included a rear laneway access linking George and Bigge Streets.

The concept plan presented included the construction of 4 residential towers (37 storey, 31 storey, 29 storey and 19 storey) with podium level retail and office space and a hotel. The site was described as 24-26 Elizabeth Street and 28 Elizabeth Street, Liverpool (Figure 5).

Figure 5: Pre-lodgement (Source: Architectus)

- On 20 August 2018, Council was notified by the private certifier, that a complying development certificate (CD-711/2018) was issued for the demolition of existing factory/workshop on 22 & 24-26 Elizabeth Street. Demolition has been conducted and the site is now vacant.

- The current application (DA-886/2018) was lodged on 21 November 2018. The original description was to seek consent for the following:

  'Construction of a mixed use development, thirty-five (35) storey building at 22 Elizabeth St, Liverpool, comprising of:
  - *Ground level food & beverage area, hotel lobby and individual lift lobbies for residential, hotel and roof top restaurant;*
  - *Commercial spaces on Levels 2 to Level 4 comprising a total of 4804m2 of leasable area;*
  - *A Hotel on Levels 3 to 8 comprising of 113 hotel rooms (3,595m2);*
  - *Residential apartments on Levels 9 to 34 comprising 194 apartments (18,138m2);*
  - *Parking facilities comprising a total of 345 spaces from Level 2 (above ground) to 4 basements levels.*

  Other features include rooftop restaurant on level 35, a residents amenity with swimming pool, gym and activity rooms on Level 9 and a deep soil planting terrace on level 5.

  A round level shared pedestrian/vehicular zone and drop-off area is proposed along the eastern boundary from Elizabeth Street to a proposed service laneway to the rear which will provide access to Bigge and George Streets.'

- On 11 March 2019, the application was presented to the SWCPP. A summary of the panel's comments and applicant's subsequent responses are outlined in the table below:

SWCPP comments	Applicants response
SWCPP Comments of 11 March 2019 meeting	
Safety/desirability of the residential lobby entrance being off the side lane rather than the main street – Police and Design Excellence Review Panel advice needed.	*The laneway along the eastern boundary creates additional activity. The through site link connects Elizabeth street to the Warren Service Way and beyond. This will facilitate greater pedestrian movements in the space. The lobby space not only addresses the shared way link but Elizabeth Street through the integration of an open and visually permeable ground level. This would provide for quite high amounts of passive surveillance*
Segregation of different lifts, particularly residential lifts, from other users	*All individual users within the development are served by dedicated lifts.*
Height – protrusion into the OLS area; and the need to resolve the OPS breach during construction	*Height has been resolved as per detailed response by Thompson GCS and endorsement has been received from the Department of Infrastructure, Transport, Cities and Regional Development.*
Desirability/ provision of additional greenery on the façade	*The height and exposure of the main tower element result in a limited practical opportunity for external planting. Selected areas on the lower level facades incorporate provision for controlled and elegant planter areas*.
Traffic impacts need further assessment	*The applicant submitted an Amended Traffic Impact Statement for further assessment of the traffic and parking issues raised and responses. This report was reviewed by Council's Traffic Branch and concluded that the application is supported subject to conditions.*
Design Excellence Panel review / assessment	*The design of the commercial and residential facades has been developed as part of the engagement process with the DEP.*

- On 14 March 2019 the application was presented to the DEP for the first time. The panel raised a number of issues and decided not to support the proposal at that time. Instead, the DEP requested the applicant to return with all feedback incorporated or addressed.

  The following table outlines the comments from the first DEP review with the corresponding response the applicant has instituted to address these issues and reflected in the updated plans.

DEP comments	Applicants response
DEP Comments of 14 March meeting	
4.1 Context	
The panel recommends that modelling is completed for both adjoining sites, to enable better assessment of the impacts of the adjoining developments on the residential components of this development. This includes built form and solar affect studies, which details the shadowing effect on apartments & therefore ADG compliance.	The modelling reveals the proposed built form on the site has a lower building height compared to modelled compliant built forms on adjoining sites. Consequently, adjoining sites benefits from reduced overshadowing and good solar access benefits without affecting the amenity of the proposed development.
4.2. Built Form + Scale	
The building façade reads as very uniform, with a cohesive language. As a result, the different uses of the building cannot be differentiated by the building's appearance. The panel recommends exploration into further depth or articulation of the building form, to better reflect the different building uses.	The building façade has been redesigned to a create better distinction between the various uses proposed within the building. The east building façade shows clear delineation of uses with the addition of balconies and solar treatments to the residential apartments.
The building façade currently reads as an office building, despite the majority of the building being residential apartments. North-facing balconies could be introduced to the residential floors along the Elizabeth Street frontage.	The internal layout of the residential apartment levels has been amended to allow for greater depth. North facing balconies have not been provided to the residential apartments. However, alternative treatment has been proposed with slab extensions to the northern façade to provide varied design. Balconies have been proposed along the eastern and western elevations of the residential apartment levels to improve solar access, with the optional inclusion of louvres or screens to provide solar protection and to improve the delineation of the different uses proposed.

The oblique blade-shaped columns impact the internal building spaces. The rooms adjacent to these columns are going to be very visually contained, due to the form of the columns. The panel recommends exploring different solutions to improve this issue.	The integrated balconies with the wrap around design allows for external views from the living areas and master bedrooms.
4.4. Sustainability	
The proposed building has very long east and west facades, with no solar protection. The panel recommends including solar protection along these facades and double glazing to the north facing windows.	In response to the solar protection concerns raised by the Panel, the following improvements are proposed to the residential apartments: • Proposed installation of horizontal louvres on the eastern and western elevations of the residential apartment levels to allow for extra solar protection as well as to define levels for residential purposes. • The design for the northern façade seeks to extend the slab out to create the horizontal shading required to protect the glazing during the summer months.

The panel recommends including a high level of sustainability measures, in order to set a precedent for future buildings such as this within the Liverpool City Centre.	The design has been amended to incorporate a number of sustainable design improvements which includes: • The use of low water reliant and indigenous plant species • Allow better opportunities for natural light and ventilation into the hotel and residential corridors of the proposed development • The proposed refrigerators for the residential development will be energy efficient under BASIX commitments • The plumbing fixtures to be installed will be water efficient • A 10,000L water tank will be installed to collect water and reused for the watering of landscaping. • A high thermal mass for energy efficiency has been demonstrated in the NatHERs report. • The amended design provides for greater integration of planting into the overall design to allow for passive cooling.
4.5. Landscape	
The panel recommends activating the north-eastern corner of the ground floor. This could include the inclusion of a café that interacts with both the street frontage and internal building lobby/lounge area.	The amended plans show the reconfigured Ground Floor level with the hotel lobby being placed closest to Elizabeth Street entrance while maintaining access to the eastern laneway. The café is now located to the prominent northeast corner with maximised street frontage exposure.
The laneway located on the eastern side of the building should be more pedestrian than vehicle focused, with a singular surface and narrow section for vehicles, in order to slow down the speed of vehicles.	The proposed setbacks will allow for a narrow vehicle section for the passing of cars whilst allowing improved pedestrian mobility and control. Additional surface treatment, landscaping and other visual cues will encourage vehicles to slow down. The laneway is for exclusive use of hotel patrons and access will be controlled by a boom gate.

The panel recommends incorporating public art into the laneway located on the eastern side of the building.	The applicant has proposed sculptural forms made from the landscape (growth & built works), bespoke street furniture and aesthetic public art wall that offers a light source and is sympathetic to the landscape.
The panel recommends including low maintenance trees and materials, including paving.	The amended proposal incorporates low maintenance trees and shrubs. It also shows the paving proposed to the street frontage and internal driveway compared to the rear laneway.
4.6. Amenity	
The panel recommends consolidating the lifts into a single lift shaft	The amended design and layout of the lifts has been amended and provides a better response to the proposed uses and functions and lobby redesign to suit.
The panel would like to see more resolution and information on the proposed commercial levels in order to provide assessment.	The commercial floor levels have been reviewed and amended to present a more practical floorplate that allows for better utilisation of the space.
The panel recommends redesigning the balcony layouts on the residential levels, to enable the interior spaces to wrap around the balconies, in order to capture more sunlight (i.e. into both the balconies and internal spaces).	The amended design allows for differentiation and expression of each use with articulation to the eastern and western facades The residential levels which are provided with the integrated wrap around balconies allow for better solar penetration.

The panel recommends improving the amenity of the long corridors if you are to retain them. This could be easily achieved with windows at the end of the corridor (i.e.: a window to the north & south external facades, or east & west, depending on the orientation of the corridor) to provide visual & psychological relief of natural light & the view. For the upper levels, which have a smaller footprint, the panel recommends replanning apartments in order to accommodate windows at the end of each hallway. These are high end (high value) apartments and this will increase natural light and cross-ventilation of the lobbies, not to mention likely increases in commercial attractiveness.	The main corridors have been connected to both the north and south elevation. A recess has been provided at the end of each hallway to allow lobby breaks in the external façade and improved daylighting and natural ventilation for the corridor space. Ten south oriented 1-bedroom units and south oriented 2-bedroom units have been redesigned to have living rooms oriented towards the north over the main balcony space. Entry to the unit is recessed to create privacy to the living rooms.
4.7. Safety	
The panel recommends compliance with CPTED principles, whilst still ensuring that the ground plane remains open and inviting for people.	An analysis of the CPTED principles has been undertaken. The proposed glazing will allow for views into the hotel lobby and reception will have visibility out onto the eastern laneway and Elizabeth Street.
4.9. Aesthetics	

The panel recommends exploring the nuances of how each building use is expressed, whilst still retaining the overall uniform building form (should this be desired) or explore how different parts of the building could look different and reflect the various building uses.	As discussed, in section 4.2 Built form and scale and 4.4 Sustainability above, the amended design has adequately responded to the Panel's request as follows: • The redesign allows for differentiation and expression of each use with articulation to the eastern and western facades of the residential levels with the integrated wrap around balconies and use of solar treatment options such as mesh screens or louvers to these levels to enhance the residential character of these floor levels. • Plants and green walls have been included on specific floor levels to depict the different uses on the various levels and improving the sustainable design measures of the development.
The panel recommends the use of materials in their unfinished and unpainted state where possible (e.g. brick, concrete, timber). Where materials are applied with a finish, ensure that the highest quality materials are used, and the lowest maintenance is required.	Concrete will be the primary material used for the proposed development due to the architectural design intent.

- On 18 March 2019, Council sent a request for additional information. The request outlined a comprehensive list of issues compiled from internal and external referrals received to date. Outstanding referrals relate to City Design and Public Domain, Engineering, DEP comments, Police, Sydney Water, Bankstown Airport, Careflight and Air Ambulance advice among others.

- On 10 April 2019, the applicant submitted a revised scheme for the consideration of which addressed each item raised by the DEP. A second DEP meeting was then scheduled and conducted on 9 May 2019. In that meeting the DEP review provided its final direction as follows:

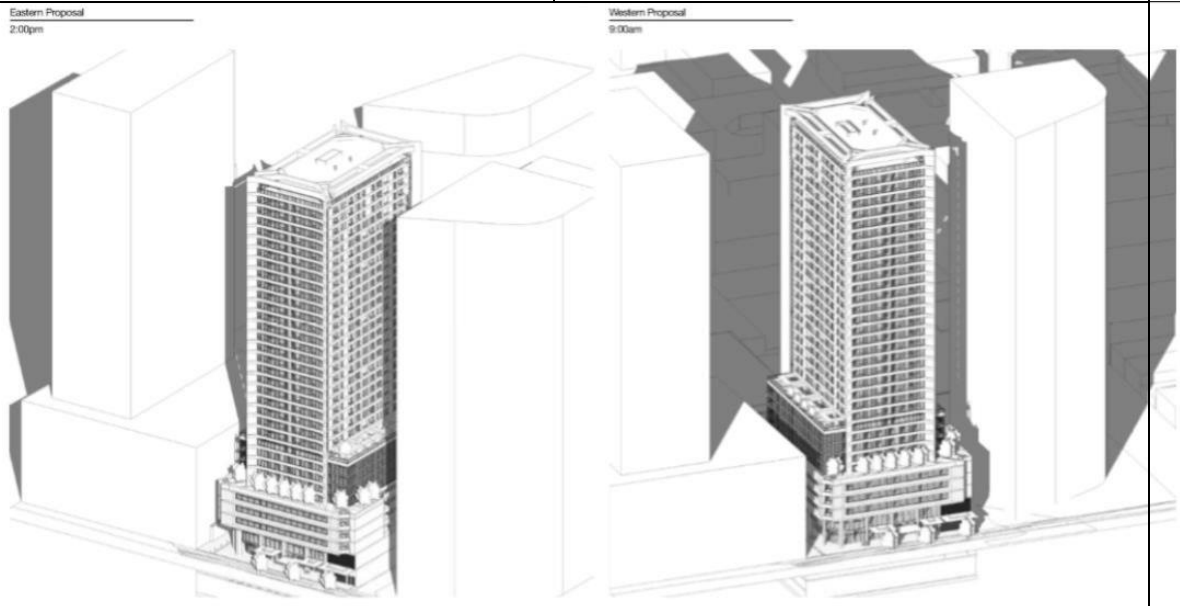
  "The project is supported with conditions. Incorporate the recommended design amendments, then the plans are to be reviewed/approved by Council in consultation remotely with the DEP; this is to enable the panel to comment, in particular on the public domain strategy for the block and ground plane detail for the subject site. A comparative

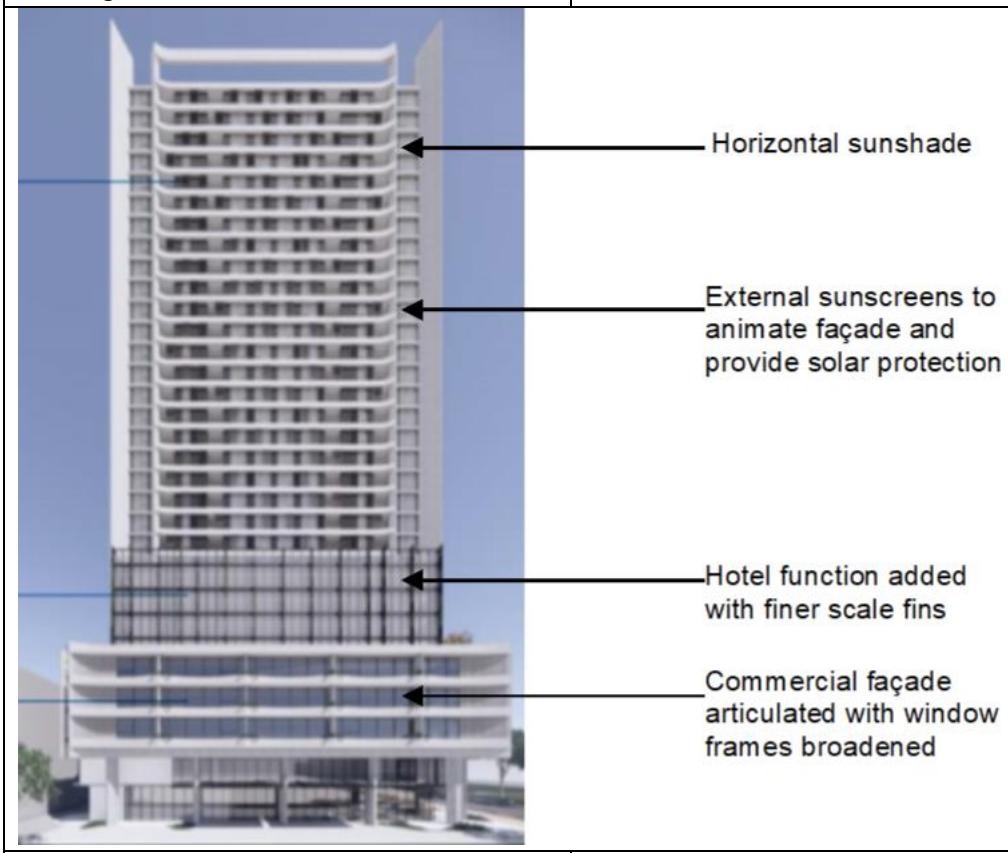
table is provided below which outlines issues raised and corresponding responses provided by the applicant."

The following table provides the 9 May 2019 DEP (second) meeting comments and response from the applicant as reflected in the revised plans.

DEP Comments	Response
DEP comments from 9 May meeting	
4.1. Context	
The site forms one third of a city block between Bigge and George Streets fronting Elizabeth St and bounded to the south by a proposed service lane. A coordinated approach at ground level is required across all 3 sites to ensure a high quality public domain and street interface across all 3 properties. Further, a uniform podium height and setback should be introduced to further integrate the three developments and enhance the results for the public realm. Council are urged to commission a basic, site specific public domain plan encompassing all four street frontages of the street block to guide all three projects as they progress. This will avoid current clashes evident in both plan and section between the subject proposal and the neighbour to the west and assist with the design of the property to the east.	In response to the DEP recommendations for Council to prepare a Site Specific Public Domain Plan in relation to DA - 886/2018 and PL-22/2019, Council staff from Development Assessment and City Design & Public Referral met on 20 June 2019 and agreed on the following design principles to be adopted in lieu of a site specific plan. The elements of the plan include the following: 1. Building footprint and design must comply with the minimum setback requirement of 6.0m along the Elizabeth Street frontage and along Bigge Street and George Street at 2.5m. 2. No permanent structure/ building element (i.e. columns, fire exit, booster pump, planters) is allowed within the setback zone with the exception of continuous weather protection structure (light weight awning separate from the main building elements and allow planting of trees), street furniture and tree planting /landscaping and traffic /parking signage. 3. Detailed Landscape (Public Domain) Plan to be prepared by a suitably qualified person. It should incorporate and feature among others: support pedestrian movements along Elizabeth Street; large shady trees; comfortable seating; pavement design of high quality stone and match Councils standards; upgrade street lighting system for the frontage of the development and service way; consideration for accessibility and mobility, safety, noise, solar exposure/shading, heat

DEP Comments	Response
	load, wind mitigation and the like. 4. The east-west service way shall be the primary vehicle access for the building. No vehicle access is permitted from/to Elizabeth Street. A consolidated driveway for each or between sites is preferred to access into the building(s), basement car parking and service access requirements along the service way interface. 5. The DCP provides for 2 north-south through site links between Elizabeth Street and the service laneway. The proposed link to the east will be retained with a predominantly pedestrian character and no vehicular access from Elizabeth Street. The other link, to the west can take the form of an arcade of retail and coffee shops shared between the 2 adjoining sites.
Discussion on the Site-Specific Public Domain Design Principles On 9 July 2019, in response to the DEP comment a meeting was held between representatives of the 3 adjoining lot owners to discuss the Site-Specific Public Domain Design Principles as agreed upon by Council officers. While the consensus in the meeting was that collaboration by all parties would enable the best development outcome, there was disagreement on various principles including a parallel north-south connection to the west of the site, a shared access and basement carparking between the 3 sites. Different timing in terms of implementation of development plans of each owner was another barrier in terms of achieving the intent of the Site-Specific Public Domain Design Principles. In the revised plans submitted, the applicant retained the proposed access to Elizabeth Street but controlled by a boom gate. The structural columns that are within the street level setback was also retained. Both issues were considered to be unacceptable in the forms proposed without further amendment. On the 4 and 11 May 2020, online meetings were conducted between the applicant and Council officers mainly to resolve the above issues wherein it was agreed that access to Elizabeth Street should be limited to hotel patrons only (if projected traffic counts are low) and the structural columns will be clear of the front setback. In lieu of the columns, a new colonnade will be introduced closer to the street boundary to support the continuous awning structure above the pedestrian footpath. Additional information of materiality and landscape irrigation system was also requested.	
Further exploration of possibilities for the	As mentioned above, the meeting between

DEP Comments	Response
through site laneway link to the east of the building is needed, particularly around opportunities to expand this space by cooperating with the eastern neighbour. Shared access to basements between neighbours should also be investigated to minimise disruption by driveways to the rear lane and facilitate maximum active frontage lengths.	representatives of landowners of the 3 adjoining lots conducted on 9 July 2019, failed to obtain agreement on all the Site-Specific Public Domain Design Principles. However, with this proposal having adopted some of the public domain principles, including among others, embellishments to the Elizabeth Street frontage, eastern shared laneway and rear service laneway, a benchmark will be established and future development applications on adjoining 2 lots will be required to incorporate these principles so as to provide for a sympathetic design.
To better understand the scale and context of the development, the panel requests 3D rendered images of the building, including ghost maximum building envelopes of the neighbouring buildings.	In response to a related comment by the DEP in the 11 March 2019 meeting, modelling that includes the adjoining properties, reveals that the proposed built form on the site has a lower building height compared to potential compliant built forms on the adjoining sites. See Figure below
	
4.2. Built Form + Scale	
The panel acknowledges that the DEP's previous feedback has been successfully incorporated, to achieve variations in the building form that read in-line with the building's various programs, whilst still	The building is considered to be designed in a manner that addresses the north-south laneway and Elizabeth Street. The development also provides casual surveillance of the laneway to the rear.

DEP Comments	Response
achieving a consistent exterior form and aesthetic. Removal of the second vertical blade has simplified the building's appearance and improved interior amenity. However, how the building addresses Elizabeth Street at the ground level is critical.	
	
Whilst the overall building form is elegant and the rectilinear blades that taper out on the upper levels are working well, the panel recommends further vertical articulation to the lower section of the building, to unify the façade across the various scales and programs.	To further articulate the northern façade of the residential tower, the end of the lobby space is recessed into the form. This has the effect of creating an additional layer to this façade and expresses to two separate apartments either side. In addition, the window framing composition has been developed to create a suite of window dimensions unique to each use – hotel, residential and commercial that creates a more legible difference between each use.
The building design is still diagrammatic at ground level. The panel recommends further development of the building form at ground level and on the lower podium	As shown on the figure below, further development of the ground level with the addition of a continuous awning covering the foreground of the towering structure

DEP Comments	Response
levels to unify the overall design and demonstrate clear and elegant expression of structure where the tower meets the ground plane.	provides human scale to the pedestrian space below. This is reinforced by the supporting colonnade arrayed along the footpath with trees, seating areas, a shareway and a corner café that will attract and encourage pedestrian activity and integrate the building into the urban fabric. As the building rises, the podiums define the various uses that make up the structure until it rises above the surrounding buildings and impose its elegant and dominating presence its context.
	
The setback podium may result in unacceptable winds deflecting down the front façade. The design must address any undesirable wind impacting the public domain, and this must be addressed in the wind study to accompany the DA submission.	A qualitative assessment of the impact of the proposed development on the wind environment surrounding the site was prepared. The Wind Assessment report considered that wind tunnel modelling is not necessary. Wind modelling would form part of the initial CC design phase to verify that the design, as proposed, will meet the required ground level wind criteria.

DEP Comments	Response
4.3. Density	
The panel acknowledges that the proposed development is compliant with Council's FSR controls.	Noted
4.4. Sustainability	
The solar access to east and west facades, and the inclusion of glazing and incorporation of screens to the hotel levels is supported. The natural ventilation to common areas is applauded and must be further developed to ensure it is effective and implementable upon occupation.	The western elevation has been amended to allow solar protection along the western facade and double glazing to the north-facing windows. Aluminium screens have been provided to units as shown clouded on the western elevation plans to offer an additional measure against the afternoon sun. Passive sustainability measures have been integrated into the design through the provision of shading devices, in addition to the requirements of the BASIX certification for the proposed development.
4.5. Landscape	
The proposed laneway is on the eastern side of the building. The panel recommends considering locating the laneway on the western side instead, given that the proposed development to the east is 100% commercial, and a laneway on the eastern side would receive more sunlight and would provide a better connection (i.e. closer in proximity) to Warren Serviceway, given that it would be located at approximately the centre of the block. The panel recommends considering including a linear coffee shop (or alike) in the laneway, to activate the laneway.	Since the current DA provides a north-south laneway on its eastern boundary, the obligation for a parallel connectivity should be on the adjoining development to the west in the future.
The panel recommends coordinating with the neighbouring property owners to ensure that footpaths are consistent, sufficient in width, sheltered and aligned	See discussion above on Site Specific Public Domain Design Principles.
The panel recommends detailed Landscape Architectural plans be prepared by an AILA Registered Landscape Architect and submitted to	A revised Landscape Plan prepared by Site Image Landscape Architects incorporates proposed 4 x Quercus palustris (Pin Oak) along Elizabeth Street. The proposed

DEP Comments	Response
Council, including the following in accordance with an agreed Public Domain plan for the street as described above: • Inclusion of street tree species Quercus palustris, Pin Oak. Elizabeth Street requires large spreading canopy trees; • The use of a deciduous species will allow winter solar access. The street trees must be 200L stock with 1.8m clear trunk. • Trees are to be planted with 'Stratacell' or similar structural root zones. • Liverpool City Centre 'Core' paving shall be installed (as per Council's standard details), reinstated or replaced along the entire street frontage for Elizabeth Street and proposed laneway. • Pedestrian seating is to be provided along Elizabeth Street and George Street. All landscape works on podium must meet the following MINIMUM requirements: • Each tree planted on podium must be provided with a soil depth of at least 1000mm plus mulch of 100mm and volume of at least 15m3 plus drainage material. • Shrubs on podium must be provided with a soil depth of at least 600mm plus mulch of 100mm plus drainage material. • Turf on podium must be laid with a	overall paving and seating along the Elizabeth Street frontage and the Greenwall along the eastern boundary were provided on the revised landscape plan. Council's City Design and Public Domain has imposed additional conditions regarding specifications for installation and maintenance of landscaping features as well as the operations and control of the shareway.

DEP Comments	Response
soil depth of at least 300mm plus drainage material.	
The panel recommends exploring opportunities to work with the local aboriginal community, to integrate indigenous public art into the development. The panel reiterated that a great public domain will contribute to a better commercial outcome	Noted
4.6. Amenity	
The panel commended the incorporation of recommendations from the previous DEP meeting, which has resulted in improved amenity. This includes the recessing of balconies, extra window glazing and consolidation of lifts, which has improved the commercial floor layouts	As part of the revision to the commercial and residential floor areas, the smaller floor plate of the commercial has been removed from the scheme, thereby allowing for the commercial lifts to be consolidated into the central lift core and access directly from the side laneway. This lift core was originally part of the rooftop restaurant that is now removed. Similarly, the hotel lifts have been adjusted to suit, and the retail extent facing Elizabeth Street extended to occupy the space initially filled with the office lift.
The panel requires sunlight diagrams (including for June and September) to clarify solar performance claims; views from the sun are ideal.	Point of view solar access studies were conducted on an hourly basis from 9am to 3pm on winter solstice that demonstrate external façade and floor areas meet the minimum solar access from the ADG. All apartments receiving solar access are also labelled on the Solar Access drawing which demonstrates 74.3% achieve the ADG standard.
Given that the façade includes a high ratio of glass, the panel recommends engaging an ESD consultant to provide assessment on the performance of the proposed glazing and façade systems, to determine impacts both internally and on the public domain through glare and heat reflectivity.	Basix and Nathers certificates are provided in this submission.
4.7. Safety	

DEP Comments	Response
All street frontages should incorporate CPTED principles in their design from the early planning stage; The panel recommends including retail usage on the corner of the proposed laneway, for increased surveillance. This could include a bicycle repair shop, to encourage cycling in the Liverpool CBD and surroundings.	The ground plane design seeks to provide a high level of activation for the site's perimeter. The longer hours of activation from the hotel use will provide passive surveillance for a significant proportion of the street elevation. A building managers office is also located towards the southern end of the shared way, with the opportunity for immediate connection to the lane. Finally, the security office is located adjacent to the main carpark entry and loading dock to assist with active and passive surveillance.
4.8. Housing Diversity + Social Interaction	
The diversity of uses and accommodation is deemed appropriate for a mixed use building in the City Centre, and will bring more pedestrian and commercial activity to the vicinity.	The DEP has supported the diversified mix of uses proposed as part of this proposal and encourage future developments to try and adopt a similar approach if Liverpool is to become a bustling and thriving city centre offering mixed offerings to residents, workers and visitors
4.9. Aesthetics	
Overall, the proposed building exhibits a high standard of architectural design and is considered likely to have a positive impact on the built environment within the Liverpool City Centre.	Noted
The panel recommends including 1:20 façade sections and 1:5 key façade junction sections in the DA, and a larger scale section from the top of the podium to the ground level, indicating the materials and tectonic expression. This is intended to ensure design integrity is retained through the documentation and construction phases	Noted
The spandrels will determine the performance of the building both environmentally and aesthetically. The panel recommends including typical east-west and north-south sections to understand how the spandrels will work.	Noted

Council has reviewed the design amendments made in response to the above DEP comments in consultation with Council's Urban Design and Public Domain Team. It is considered that the amendments are satisfactory.

- Between February and March 2020, following reviews from Council, the SWCPP, DEP and external referrals bodies including the RMS, Bankstown and Camden Airports Limited, Endeavour Energy, Careflight, Air Ambulance, NSW Police and Sydney Water, submissions from the public, a completed package in the form of an additional information report was received by Council. The proposed development is amended as follows:

    - Reduction of Building Height: from 123m to 113.59m with the removal of Level 35 (restaurant and bar with kitchen and outdoor dining spaces) and one level of residential apartments to allow cranes and other machinery during the construction phase of the development to meet the prescribed Obstacle Limitation Surface (OLS) levels without affecting the flight operations of Liverpool Hospital;
    - Reduction of residential flat building units from 194 to 179 with a loss of 15 apartments to achieve compliance with the OLS and PAN-Ops requirements of the Airports Act 1996;
    - Reconfiguration of the ground level foyer to allow for improved functionality of the lifts, hotel reception and provide an active use on this level;
    - Removal of one level of car parking spaces on the podium levels and increased commercial floor plates within the podium levels of the development;
    - Minor alterations to the internal layout of the residential floors to improve solar access and functionality of the foyer and internal areas;
    - Enhancing the public domain with greater setbacks and embellishments such as street furniture, landscaping and provision of a laneway providing site through links;
    - Demolition of existing structures removed from the proposal as existing structures on the site have been demolished under a separate Complying Development Certificate following the lodgement of the application approved in August 2018.

Further meetings were conducted on 4 and 11 May 2020 between Council officers and applicant representatives to resolve the outstanding urban design issues including the east laneway access into Elizabeth Street, structural columns along the street frontage and landscaping. A resolution to control access to the laneway to hotel patrons, shifting of the structural columns to the inside of the building and the provision of a continuous awning along the Elizabeth Street frontage was reached.

4. DETAILS OF THE PROPOSAL

The proposed development seeks consent for the construction of a 34-storey mixed-use development over 4 levels of basement carparking levels comprising 3 levels of commercial offices, 4 levels of hotel accommodation and 24 levels of residential apartments (Figure 6).

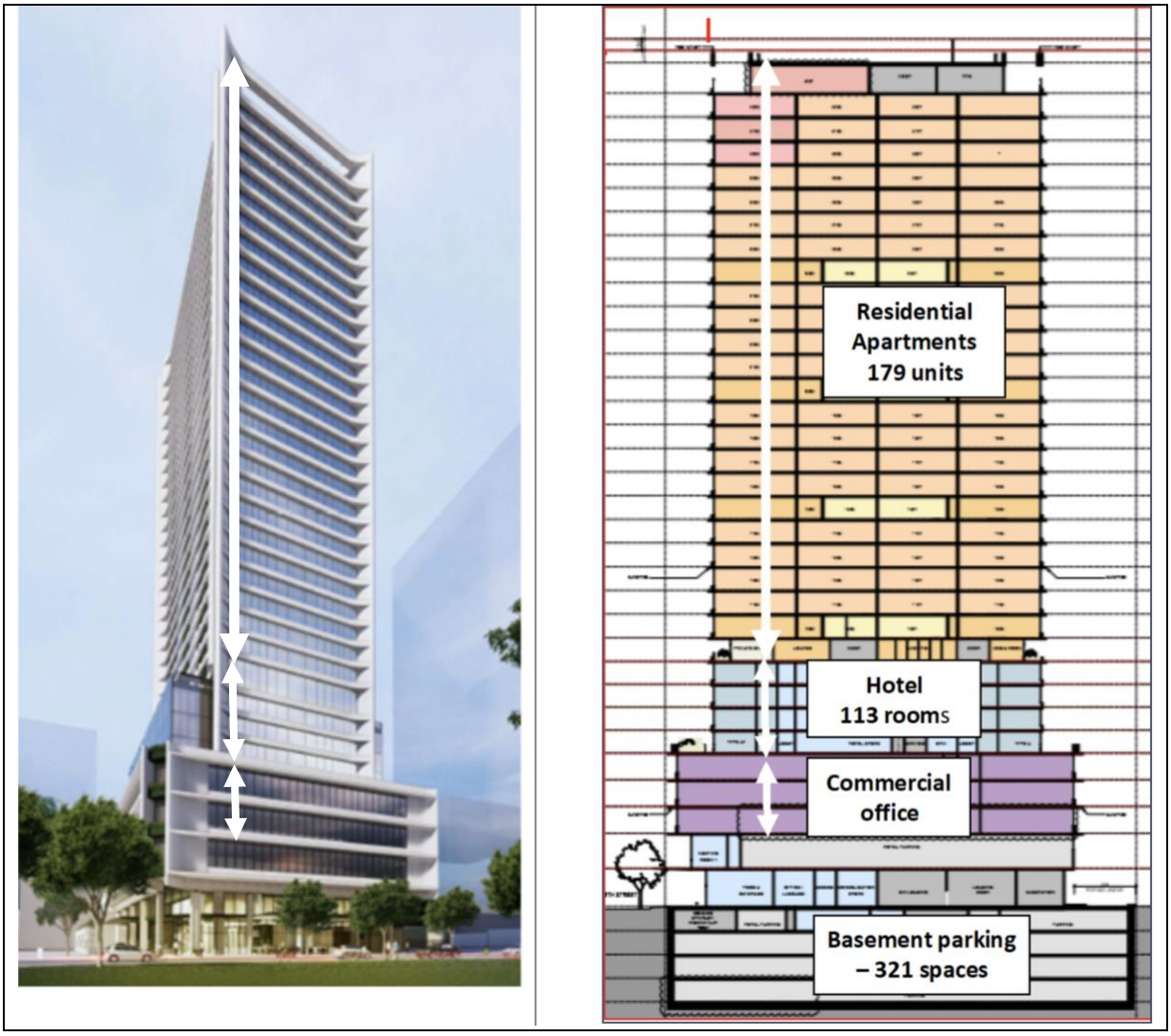


Figure 6: Proposed mixed-use development (Source: rothelowman)

A detailed description are as follows:

Ground Floor Level

The ground level consists mainly of functions that provide street level connection and access to the various building uses. The level comprises three separate lobby entrances with corresponding lift access to the upper levels for each building use (Figure 7).

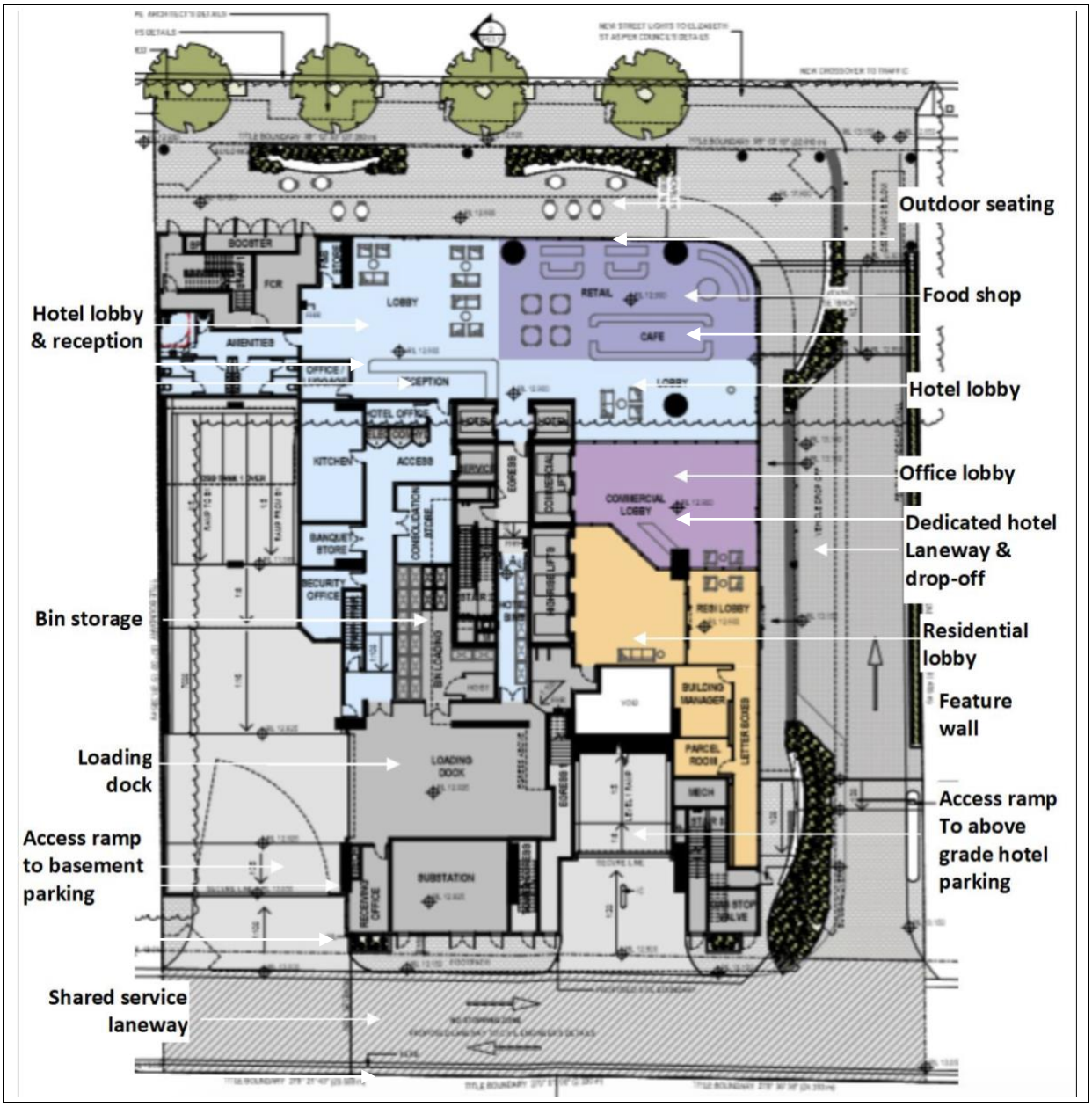


Figure 7: Proposed Ground Floor plan (Source: rothelowman)

The hotel lobby/lounge occupies most of north section adjoining the Elizabeth Street frontage and wraps around to the dedicated laneway and drop-off point to the east. It includes a reception area and a food and beverage shop incorporating indoor and outdoor seating area oriented and located to the street frontage.

The office and residential components have separate lobbies that are oriented and can only be accessed from the east laneway. Vehicular movement on the laneway is limited to the hotel functions and incorporates a drop-off area, a standing slot to disembark disabled persons and a feature landscape wall opposite the building along the property boundary.

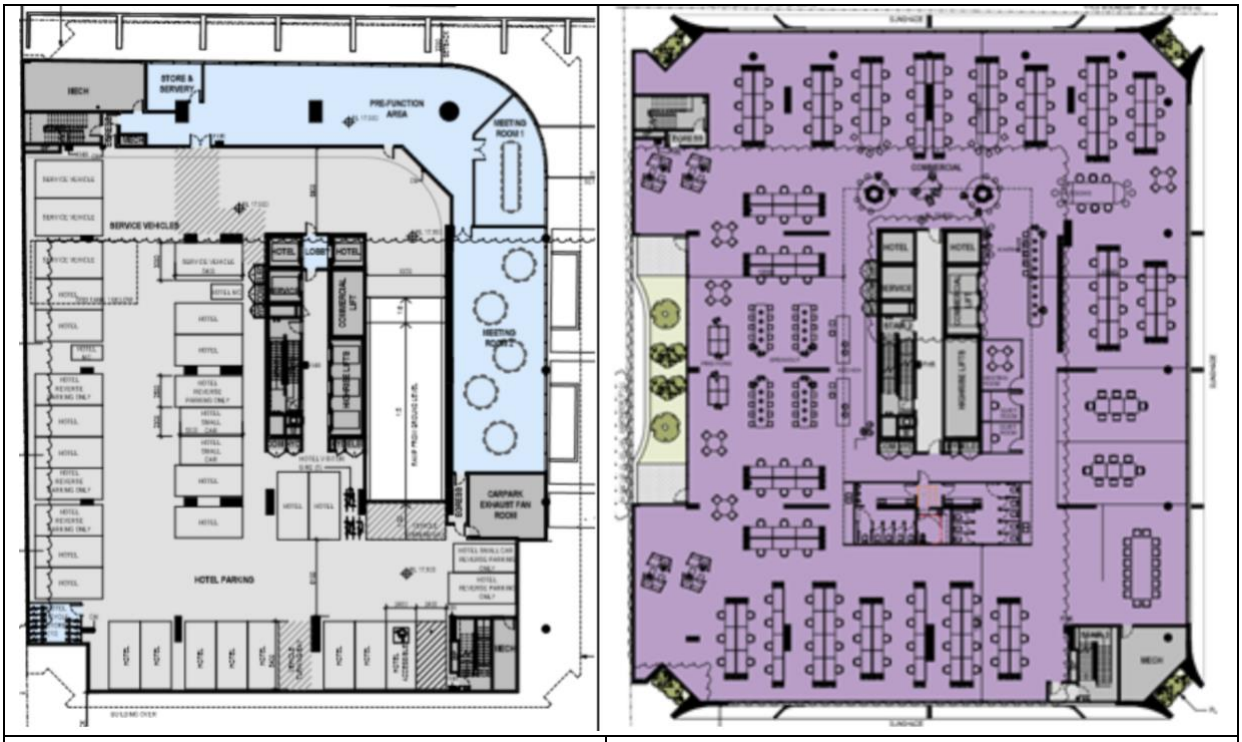
Only exit to Elizabeth Street is allowed and entry from the southern end is controlled by a boom gate.

The main vehicular access into the building will rely on the proposed 8m wide service laneway to the rear parallel to Elizabeth Street that will provide an additional link between Bigge and George Streets. The applicant proposes to construct the entire length of the rear service laneway from its junction from George Street to Bigge Street.

Building occupants will have access to the basement and above ground parking levels as well as service vehicles including garbage trucks and delivery vans from this service laneway. Adjoining properties to the east and west will likewise benefit from the laneway.

Level 1

Level 1 comprise predominantly of above ground hotel car parking and meeting rooms along the Elizabeth Street and side laneway frontages where the building façade requires aesthetic and functional design consistency (Figure 8a).



a. Level 1- Hotel Parking & meeting rooms	b. Levels 2, 3 & 4 - Typical Office spaces

Figure 8: Proposed Level 1 & Levels 2,3 & 4

Levels 2, 3 & 4

Levels 2, 3 & 4 are designated for commercial office spaces (Figure 8b) with a combined total GFA of 5,764m². Together with level 1, these levels comprise the podium on which the entire structure is set. The commercial office use is expressed in the external façade by the

deep horizontal shading of slim concrete parapets between tinted glazing and overall reads as a street wall that blends into the scale and design of surrounding buildings.

Levels 5, 6, 7 & 8

Levels 5, 6, 7 and 8 (Figure 9a) comprise the 133-room hotel. Starting from Level 5, these levels are indented from the podium and clearly defines its distinct function from the commercial and residential blocks. Expressed as a singular form, its stands as a transition between the different uses. The increased building setback provides opportunity to provide planting around the periphery of level 5 where planter boxes, for mature tree planting are provided.

a. Levels 5, 6,7 & 8 - Typical Hotel | b. Level - 9 - Residential – recreation area

Figure 9: Typical Levels 5,6, 7 & 8 (Hotel) and Level 9 (Residential apartments)

Levels 9 to 34

Levels 9 to 34 comprise the residential apartment component of the building. The same architectural treatment employed in the lower podiums is repeated. Level 9, the bottom level of the residential block is setback further from the boundary line and defines a sleek tower rising 24 storeys above the hotel podium.

At Level 9, the visual and functional transition is achieved as it provides communal facilities incorporating a 14x3.5m lap pool, pool side lounge, residents lounge, private dining room, media room, gym and terraces on the east and west side provided with canopy and seating areas surrounded by generous landscaping to the enjoyment of the residents (Figure 9b).

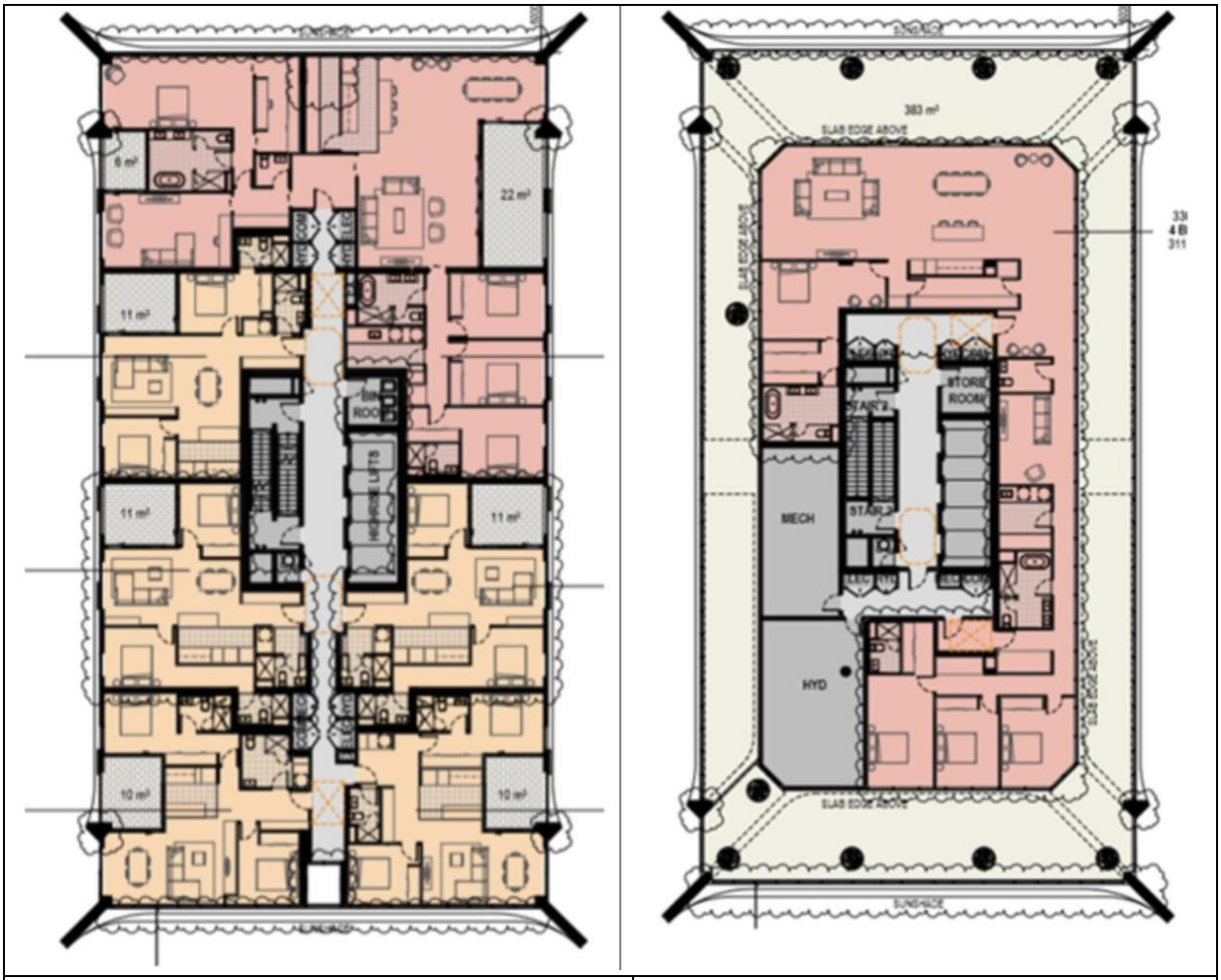
The development consists of 4 different apartment unit combinations at various floor levels and are summarised in the table below and illustrated in Figures 10 & 11. As shown, a total of 179 apartment units are proposed with a breakdown of 16x 1 bedrooms (9%),143 x 2 bedrooms (80%), 16 x 3 bedrooms (9%) and 4 x 4 bedrooms (3%).

Levels	No of floors	1 br	2br	3br	4br
Level 10,15,20 & 25	4	4	0	4	0
Levels 11-14,16-19, 21-24,26-29	16	0	8	0	0
Level 30-32	3	0	5	0	1
Level 33	1	0	0	0	1
Totals	24	16	143	16	4

The applicant claims that the notable predominance of 2-bedroom apartments is a direct response to the existing and projected demographic characteristic of a younger population and smaller households in the Liverpool LGA.

a. Typical Levels 10, 15, 20 & 25 | b. Levels 11-14,16-19, 21-24 and 26-29

Figure 10: Typical plans from Levels 10 to 29 (Residential Apartments)



a. Levels 30-32	b. Level 33

Figure 11: Typical plans from Levels 30-33 (Residential Apartments)

Basement Levels 1 to 4

Basement level 1 incorporates parking spaces for residential visitors, commercial and hotel guest as well as areas for hotel service facilities including administration offices (i.e. HR, IT), uniform room, staff amenities, lounge/canteen, storeroom housekeeping room, maintenance workshop and laundry.

Basement levels 2 to 4 are occupied mainly by parking spaces for the unit residents and visitors as well as individual storage areas and a service/car wash bay. A total of 322 car parking spaces are provided in the development allocated as follows; 189 spaces for the residential units, 12 spaces for visitors, 58 spaces for the commercial offices and 60 spaces for the hotel guests and staff. In addition, 153 bicycle spaces and 19 motorcycle spaces are provided within the basement levels.

The proposed rear lane will provide two-way vehicular entry from Bigge and George Streets and will function as an exclusive service laneway to the site and its adjoining neighbours.

The ramps leading to the basement parking for commercial and residential uses and to level 1 and 2 will be feed into this laneway.

5. STATUTORY CONSIDERATIONS

5.1 Relevant matters for consideration

The following Environmental Planning Instruments, Development Control Plans and Codes or Policies are relevant to this application:

Environmental Planning Instruments (EPI's)

- State Environmental Planning Policy No.65 – Design Quality of Residential Flat Development.
- State Environmental Planning Policy No.55 – Remediation of Land.
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004.
- Greater Metropolitan Regional Environmental Plan No. 2 – Georges River Catchment;
- Liverpool Local Environmental Plan 2008;

Other Plans and Policies

- Apartment Design Guide;

Development Control Plans

- *Liverpool Development Control Plan 2008;*
    - Part 1 – Controls to all development;
    - Part 4 – Development in Liverpool City Centre and

Contributions Plans

- Liverpool Contributions Plan 2018 (Liverpool City Centre) applies to the development.

5.2 Zoning

The site is located in Zone B4 Mixed Use pursuant to LLEP 2008 as depicted in Figure 12.

Figure 12. Extract of LLEP 2008 zoning map

5.3 Permissibility

The proposed development is identified as a '*Mixed used development*' and is defined under the LLEP 2008 as a *'building or place comprising of 2 or more different land uses.'*

The proposed development incorporates *commercial premises*, *hotel or motel accommodation*, *residential flat building, food and drink premises* and *recreation facility (indoor).* The definition of each use is as follows:

> ***Commercial premises*** is defined under the LLEP 2008 as:
> *(a) Business premises;*
> *(b) Office premises; or*
> *(c) Retail premises*.
>
> ***Hotel or motel accommodation*** is defined under the LLEP 2008 as: *"A building or place that provides temporary or short-term accommodation on a commercial basis and that:*
> *(a) Comprises rooms or self-contained suites, and*
> *(b) May provide meals to guests or the general public and facilities for the parking of guests' vehicles.*
>
> ***Residential flat buildings*** is defined under the LLEP 2008 as: *A building containing*

3 or more dwellings, but does not include an attached dwelling or multi dwelling housing.

Food and drink premises is defined under the LLEP 2008 as: *means premises that are used for the preparation and retail sale of food or drink (or both) for immediate consumption on or off the premises, and includes any of the following—*
(a) Restaurant or Café,
(b) take away food and drink premises,
(c) a pub,
(d) a small bar

Recreation facility (indoor) is defined under the LLEP 2008 as '*a building or place used predominantly for indoor recreation, whether or not operated for the purposes of gain, including a squash court, indoor swimming pool, gymnasium, table tennis centre, health studio, bowling alley, ice rink or any other building or place of a like character used for indoor recreation, but does not include an entertainment facility, a recreation facility (major) or a registered club.*

The proposed land uses are permissible with consent in the B4 – Mixed Use zone under LLEP 2008.

6. ASSESSMENT

The development application has been assessed in accordance with the relevant matters of consideration prescribed by Section 4.15 of the *Environmental Planning and Assessment Act 1979* and the *Environmental Planning and Assessment Regulation 2000* as follows:

6.1 Section 4.15(1)(a)(1) – Any Environmental Planning Instrument

(a) State Environmental Planning Policy No. 65 – Design Quality of Residential Apartment Development; and the Apartment Design Guide

The proposal has been evaluated against the provisions of SEPP 65 which aims to improve the design quality of residential apartment development. SEPP 65 does not contain numerical standards, but requires Council to consider the development against 9 key design quality principles and against the guidelines of the associated ADG. The ADG provides additional detail and guidance for applying the design quality principles outlined in SEPP 65.

Following is a table summarising the nine design quality principles outlined in SEPP 65, and compliance with such.

Design Quality Principle	Comment
Principle One – Context and Neighbourhood Character	
Good design responds and contributes to its context. Context is the key natural and	The Architect's SEPP 65 statement identifies the site as: "*The site is located on the northern edge of the new mixed-use zone, recently implemented in the amendment to the*

Design Quality Principle	Comment
built features of an area, their relationship and the character they create when combined. It also includes social, economic, health and environmental conditions. Responding to context involves identifying the desirable elements of an area's existing or future character. Well-designed buildings respond to and enhance the qualities and identity of the area including the adjacent sites, streetscape and neighbourhood. Consideration of local context is important for all sites, including sites in established areas, those undergoing change or identified for change.	*LEP. It is the middle of three similarly sized sites that are zoned for development, which will share a service laneway connecting Bigge St on the east to George Street on the west. The site is located on the fringe of the vibrant commercial centre of Liverpool, marked by the pedestrian mall to the south, and Westfield and the new Western Sydney University campus to the north.* *The proposed development responds to the future context and aims to create a link between the existing public amenity to the east and west of the site. The scheme recognises that the locality is undergoing a transition towards higher densities and heights, as enabled by the planning controls which have been developed to encourage development and promote itself as the third CBD of Sydney.* *The new building will contribute to the identity of the area with incorporation of ground level retail and street front activation, provision of substantial commercial tenancies and a 113 key hotel. The articulated built form is designed as a landmark building in the new Liverpool CBD which sets a benchmark for future development."* It is considered that the site, along with the adjoining similarly sized lots is located at the geographic centre of the Liverpool CBD. The block is located in the middle of significant sites and precincts that define the city centre. To the west is the retail precinct centred around Westfield Shopping Centre and the Macquarie Mall, to the east is the health precinct anchored around the Liverpool Hospital and Sydney Southwest Private Hospital and Bigge Street Park. To the south of the site are government services including the courts, police and local council offices. The University of Westem Sydney and University of Wollongong - Liverpool campuses are also in close proximity to the site. The proposed development responds to its context by providing physical links to integrate the surrounding precincts and enhance permeability and walkability of the centre. The incorporation of ground level retail and street front activation, commercial tenancies, hotel, and residential apartments add to the mixture and diversity of activities and experience on offer. Visually, the proposal provides an iconic central place

Design Quality Principle	Comment
	definition of the city centre as it will contribute to its identity and will set a benchmark for future developments.
Design Principle 2 – Built form and scale	
Good design achieves a scale, bulk and height appropriate to the existing or desired future character of the street and surrounding buildings. Good design also achieves an appropriate built form for a site and the building's purpose in terms of building alignments, proportions, building type, articulation and the manipulation of building elements. Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.	The applicants architect considers that "*the built form of the proposed development is appropriate in the future context of Elizabeth Street and achieves the objectives of the relevant built form controls. The addition of a pedestrian and vehicular laneway along the eastern boundary creates opportunity for increased frontage and activation to the ground and offers a break in the built form that will front Elizabeth Street with future development.* *The different forms within the podium articulate the different uses, and the terraced form minimises the visual impact of the taller forms at street level. The scheme responds to desired future character of slender, tall towers at the northern edge of the CBD. The tower element is an elegant response to the floor space and setback controls, with the orientation maximising view potentials and solar access. The tower and podium components will sit within the future high-density developments in the immediate neighbourhood*. *The building facades have been articulated and setback to provide an appropriate level of visual bulk when viewed from surrounding areas, and will create visual interest and a new sculptural element at the macro city scale."* It is considered that the proposed development achieves a scale, bulk and height appropriate to the existing or desired future character of the street block and surrounding buildings. It aligns with the FSR allowed under Clause 4.4 of the LLEP 2008. The proposed development achieves an appropriate built form for the site and is generally consistent with the applicable standards under the Apartment Design Guide (ADG). The proposed development has been reviewed by Council's Design Excellence Panel (DEP) on two occasions and is considered to be satisfactory.
Design Principle 3 – Density	
Good design achieves a high level of amenity for residents and each apartment, resulting	The Architect's SEPP 65 Statement provides that "*the proposed development density is appropriate for the site and existing urban context. The maximum FSR is 1:10*

Design Quality Principle	Comment
in a density appropriate to the site and its context. Appropriate densities are consistent with the area's existing or projected population. Appropriate densities can be sustained by existing or proposed infrastructure, public transport, access to jobs, community facilities and the environment.	*which represents the highest density appropriation within the CBD.* *The site is located 600m from Liverpool rail station and the adjoining major bus interchange that provide services to various suburbs within the LGA and to other regional centres as Parramatta and Campbelltown. services. The site's strategic location within the CBD is well suited to support high density living."* The proposal contains a mix of 1, 2, 3 and 4 bedroom units which is considered appropriate for the location and proximity to the City Centre. The proposed density of 10:1 for the site and adjoining lots is achieved. This density responds to the demands of the market and is consistent with the availability of infrastructure, public transport, community facilities and environmental quality.
Design Principle 4 – Sustainability	
Good design combines positive environmental, social and economic outcomes. Good sustainable design includes use of natural cross ventilation and sunlight for the amenity and liveability of residents and passive thermal design for ventilation, heating and cooling reducing reliance on technology and operation costs. Other elements include recycling and reuse of materials and waste, use of sustainable materials and deep soil zones for groundwater recharge and vegetation	The Architect's SEPP 65 Statement provides that *"the design makes efficient use of natural resources, energy and water throughout its full life cycle, including construction.* *An energy efficient building response is developed through passive design and sun control elements on the facade design. The building design is characterised by deep horizontal facade elements and vertical window forms to the east and west, which provide shading and control the heat load on the building. Natural light and air flow have been optimised to achieve high personal comfort and low energy consumption.* *The living areas of the apartments have been orientated to maximise sunlight, daylight and natural ventilation. The majority of units achieve a minimum of two hours sunlight to living rooms in the middle of winter, and half of the units benefit from a broad, dual aspect frontage. Overall the project has 74.3% (133) residential apartments with 2 hours' solar access between 9.00am and 3.00 pm.* *Apartments greater that 10 storeys are deemed to be cross ventilated if any enclosure of the balconies allows adequate natural air flow. All the units have been designed to maximise natural ventilation, through the provision of*

Design Quality Principle	Comment
	dual aspect units addressing balconies and kitchens within 8 metres of windows. *The development will not be reliant upon automatic climate control to provide appropriate amenity for residents.* *The carbon footprint is further reduced by high efficiency air conditioning; energy efficient appliances; fittings and services such as water reduction showerheads; dual flush toilets; gas cook tops; microwave ovens; and energy efficient hot water systems.* *The development will incorporate rooftop solar panels to add to the renewable power for the building.* *Waste minimisation and recycling strategies have been also been incorporated into the development."* The development provides opportunities in this regard, as reflected within the submitted BASIX Certificate. Energy efficiency is also aided by the use of water/energy efficient fittings, appliances and lighting.
Design Principle 5 – Landscape	
Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in attractive developments with good amenity. A positive image and contextual fit of well-designed developments is achieved by contributing to the landscape character of the streetscape and neighbourhood. Good landscape design enhances the development's environmental performance by retaining positive natural features which contribute to the local context, co-ordinating water and soil management, solar access, micro-climate,	The Architect's SEPP 65 Statement provides that "*the site's location within the highly built up CBD area means opportunities for landscape will rely on the structure. However, at ground level a number of proposals enhance the overall landscape amenity of the public domain including the provision of shared pedestrian and vehicular laneway to the east which is embellished with a feature wall, planting and other landscape elements. The street frontage to Elizabeth Street that is provided with generous setback create quality, shaded hardscape spaces for use by the public and building occupants. Feature landscaping on the ground plane helps soften the pedestrian experience and will contribute to the enjoyment of these areas.* *The proposed development provides landscaped spaces in Levels 3, 5 and 9 in the form of planter boxes that can accommodate deep soil planting to promote healthy growth of larger trees* *The proposed development provides a significant formal*

Design Quality Principle	Comment
tree canopy, habitat values and preserving green networks. Good landscape design optimises useability, privacy and opportunities for social interaction, equitable access, respect for neighbours' amenity and provides for practical establishment and long-term management.	*communal landscaped area on level 9. This external space is designed in conjunction with the adjoining communal open space area. A total area of 257m2 of deep soil planter boxes promoting healthy growth of large tress are provided on level 9, and additional large planting areas of 214m2 are provide on level 5 and 3 to assist with shading and providing shelter to the exposed areas within the commercial development.* It is considered that the proposal is well designed in terms of employing landscape elements into the building from the street level enhancing the urban design to the commercial and residential levels.
Design Principle 6 – Amenity	
Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living environments and resident wellbeing. Good amenity combines appropriate room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas and ease of access for all age groups and degrees of mobility.	The Architect's SEPP 65 Statement provides that the "*architectural design provides enhanced amenity through the physical, spatial and environmental qualities of the development. The development comprises 179 residential apartments with a mix of 16 x 1 beds (9%), 143 x 2 beds (80%), 16x 3 beds (9%) and 4 x 4 beds (3%). This includes 19 apartments that are capable of being adapted to accessible units (10%) and a further 16 apartments that meet silver Liveable Housing Australia standard (8%). The hotel provides a total of 113 rooms with a mix of sizes and amenity and includes 6 accessible rooms and 4 self-contained units.* *The apartments have been designed to achieve solar access, visual and acoustic privacy, storage, indoor and outdoor open space, diverse layouts, service areas, outlook and ease of access and mobility for all ages."* The design is considered to be satisfactory by optimising views and internal amenity through appropriate room sizes, access to natural light and ventilation, visual and acoustic privacy, provision of storage spaces, indoor and outdoor spaces. A mixture of bedroom configurations and proposed adaptable units offer a variety of housing choice to the broader community.
Design Principle 7 – Safety	
Good design optimises safety and security within the development and the public domain. It provides for quality	The Architect's SEPP 65 Statement provides that *"the design of the development optimises safety and security, both internal to the development and to the public domain. Safety and security has also been considered in*

Design Quality Principle	Comment
public and private spaces that are clearly defined and fit for the intended purpose. Opportunities to maximise passive surveillance of public and communal areas promote safety. A positive relationship between public and private spaces is achieved through clearly defined secure access points and well-lit and visible areas that are easily maintained and appropriate to the location and purpose.	*accordance with CPTED principles of surveillance, access, territorial reinforcement and space management.* *The pedestrian entry point is highly visible from the public domain and benefits from adjacency to the hotel lobby, which will allow safe access and egress from and to the building. The mixed-use nature of the ground plane encourages passive surveillance over the building entries and surrounding area. The development has been designed to avoid hidden corners or concealment points.* *Controlled vehicular access to the building is provided by secure car park access from the rear laneway, with direct and separate access from the basement car park to the lift lobbies for residents, commercial users and hotel guests. Hotel guests can be dropped off on the eastern laneway which has a controlled boom gate at the southern entry to restrict access and maintain pedestrian dominance of the laneway.* *The audio intercom system at the main entry lobby and car park entry allows visitors to communicate with residents and hotel reception to gain access into the carpark and appropriate floors within the building."* It is considered that the proposal maximises the potential for passive surveillance with controlled vehicular entry with automated roller shutters and a boom gate.
Design Principle 8 – Housing Diversity and Social Interaction	
Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets. Well-designed apartment developments respond to social context by providing housing and facilities to suit the existing and future social mix. Good design involves practical and flexible features, including	The Architect's SEPP 65 Statement provides that "*all residential units, communal areas and basement parking areas are accessible by lift and close regard has been made in the design to ensure that an appropriate number of units could be adapted to suit the needs of people with disabilities or the elderly. The residential housing stock offers a variety of 1, 2, 3 and 4 bed apartments, distributed evenly throughout the building.* *The design of the floor plates allows for future adaption to alternative mixes, both pre and post construction.* *The generous communal open space on Level 9 provides unparalleled amenity to residents and offers a diverse range of internal and external spaces. The spaces are*

Design Quality Principle	Comment
different types of communal spaces for a broad range of people and providing opportunities for social interaction among residents.	*varied in size and use allow active and passive recreation for private or communal activities."* It is considered that the design responds to the demographics, social needs and preferences of the existing and emerging housing market catering to diverse cultural background, lifestyles, affordability and mobility.
Design Principle 9 – Aesthetics	
Good design achieves a built form that has good proportions and a balanced composition of elements, reflecting the internal layout and structure. Good design uses a variety of materials, colours and textures. The visual appearance of a well-designed apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape.	The Architect's SEPP 65 Statement provides that "*an appropriate composition of building elements, material textures and colours have been utilised to provide a positive contribution to the existing neighbourhood. The form of the building provides articulation in response to the planning controls and allows each use to be expressed within the massing and facade.* *The development has been designed to promote visual interest and avoid blank unarticulated walls. The facades are composed to be viewed around and provide a cohesive expression of the architectural language at any standpoint.* *The three key design elements, white masonry ribbed structure, charcoal window elements, and light framed structure, are composed within the facade to respond to internal program and orientation. The singular nature of the tower element is amplified through the fine elements that address each elevation, creating an iconic form as required by a tall tower. The podium responds to the fine scale surrounds through additional articulation.* *The development will set an aesthetic benchmark for the desired future character of the CBD. The design responds well to the present and future character of the surrounding area through the use of rich but simple material selections, proportions and singular, legible building forms."* The proposal is considered responsive to the environment in terms of composition and use of materials, responding to the streetscape and existing heritage items within the vicinity of the site. The overall aesthetics is considered to be a suitable response to the evolving character of the area and envisaged future development outcomes within the area

Further to the above design quality principles, Clause 30(2) of SEPP 65 also requires residential apartment development to be designed in accordance with the Apartment Design Guide (ADG). The following table provides an assessment of the development against the relevant provisions of the ADG.

The RFB component of the building comprise all floors from Level 9 to Level 33 comprising 24 levels in total.

<table>
<tr><th>Provisions</th><th>Proposed</th><th>Complies</th></tr>
<tr><td colspan="2">2E Building depth</td><td></td></tr>
<tr><td>Suggested maximum of 12-18m</td><td>The proposed depth is of the RFB component (Levels 9 – 33) is approximately 23m.</td><td>Yes by merit</td></tr>
<tr><td colspan="3">Discussion on Building depth:
The aim of this clause is to ensure that the bulk of the development relates to the scale of the desired future context. The proposed depth is proportional to the length which provides a slender but visually solid and stable structure. Any leaner will convey instability.

The other aim is to support apartment layouts that meet the objectives, design criteria and design guidance within the ADG. As shown in the succeeding analysis, the proposed indented balconies allows for increased solar penetration into most of the apartment units and overcomes any adverse impact as a result.</td></tr>
<tr><td colspan="2">2F Building separation</td><td></td></tr>
<tr><td>Nine storeys and above (over 25m):
24m between habitable rooms/balconies
18m between habitable and non-habitable rooms
12m between non-habitable rooms
Note: It is generally applicable that half the building separation distance is provided, as adjoining development would provide the other half of the separation distance to ensure compliance.</td><td>These separation distances apply from Level 10-33, the minimum building separation = 12m (24m/2)
Provided:<table><tr><th>Level</th><th>South (rear)</th><th>West (side)</th><th>East (side)</th></tr><tr><td>Level 10-33</td><td>12m</td><td>12m</td><td>15m</td></tr></table></td><td>Yes</td></tr>
<tr><td colspan="2">3A Site analysis</td><td></td></tr>
<tr><td>Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the</td><td>See design quality principles No. 1 above</td><td>Yes</td></tr>
</table>

Provisions	Proposed	Complies
surrounding context		
3B Orientation		
3B-1 Building types and layouts respond to the streetscape and site while optimising solar access within the development	The proposed building is aligned to the street grid which also orients the primary building form on a north-south axis. This north-south axis maximises equitable solar access to the apartments. Because most buildings are double-loaded, most apartments receive two hours solar access via either the east or west. The podium form addresses the streetscape by scaling to the appropriate height that minimises impact at the pedestrian scale.	Yes
3B-2 Overshadowing of neighbouring properties is minimised during mid-winter	The site adjoins two properties to the east and west with similar development controls. Due to the ideal northern orientation of all three sites, it is likely the neighbouring sites will result in buildings with a primary north-south axis, which creates significant building separation and affords direct solar access to the east and west facades of all three buildings. The buildings to the south of the site are civic, commercial and retail buildings that are predominantly oriented to Bigge Street to the east and George Street to the west. The orientation, and current and future use of these buildings minimises the overshadowing impact of the proposed development. Shadow studies demonstrate that the narrow northern frontage of the building means overshadowing to any adjoining building is limited to 3 hours in mid-winter.	Yes
3C Public Domain Interface		
3C-1 Transition between private and public domain is achieved without compromising safety and security transition between private and public domain is	Access from the public street to the building entries are straight, clear and legible, providing safe access to the proposed development.	Yes

<table>
<tr><th>Provisions</th><th>Proposed</th><th>Complies</th></tr>
<tr><td>achieved without compromising safety and security</td><td>The hotel lobby fronting Elizabeth St creates an opportunity for increased activation and interaction with the public domain, and the proposed pedestrian and vehicle laneway to the east of the site increases active frontage to the site. This laneway benefits from passive surveillance from the three lobbies along this length and allows potential future cross block connections to the south.</td><td></td></tr>
<tr><td>3C-2 Amenity of the public domain is retained and enhanced</td><td>The public domain of Elizabeth Street is enhanced with active commercial frontages that incorporate landscape planting and an expanded footpath zone. The building entries are legible and all services, loading and car parking are serviced through a new rear laneway. Minimal servicing infrastructure is located on the primary street frontage.</td><td>Yes</td></tr>
<tr><td colspan="2">3D Communal and public open space</td><td></td></tr>
<tr><td>Objective 3D-1 An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping.
1. Communal open space has a minimum area equal to 25% of the site.
2. Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid winter)</td><td>The minimum communal open space of 25% of the site is 770m2. The proposal exceeds the requirement as the entire Level 9 is earmarked as the communal open space with the following breakdown:

<table><tr><td>Space</td><td>COS Area m2</td></tr><tr><td>Internal</td><td>441</td></tr><tr><td>Outdoor</td><td>654</td></tr><tr><td>Total COS</td><td>1,095</td></tr><tr><td>Site area</td><td>3,082</td></tr><tr><td>Solar Access</td><td>57.3%</td></tr></table>
It includes 2 areas of outdoor spaces with varied seating to cater for various groups and generous spaces for various activities surrounded by significant planting and sheltered by a canopy.
Located on the eastern and western side of the building, these areas achieve a minimum of 50% direct sunlight for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid-winter).</td><td>Yes</td></tr>
</table>

Provisions	Proposed	Complies
	Indoor facilities incorporate private dining area, resident's lounge, swimming pool, pool lounge, gym, media room and amenities that cater to a range of active and passive recreational activities for the residents.	
Objective 3D-2 Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting	Communal open spaces provide a selection of sub-spaces with varying uses, and significant indoor amenity is provided to allow for simultaneous use by multiple groups. The proposal nominates Level 9 as the COS which provides for communal facilities incorporating a 14x3.5m lap pool, pool side lounge, residents lounge, private dining room, media room, gym and terraces on the east and west side provided with canopy and seating areas surrounded by generous landscaping to the enjoyment of the residents.	Yes
Objective 3D-3 Communal open space is designed to maximise safety	The communal open space is located on top of the podium and will be accessible only to residents. The external spaces are all overlooked from the internal areas to promote passive surveillance.	Yes
Objective 3D-4 Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood	A public vehicular and pedestrian laneway is provided to the south of the site, with future developments of the neighbouring sites this will become a cross block link connecting George Street to Bigge Street. An additional north-south laneway is provided along the eastern boundary, creating an opportunity for future connection to laneways to the south. This is also designed to enable future connection of the site to the east, whereby the boundary landscape feature could be removed to create a larger shared space across both sites, offering increased frontage and amenity to the public and adjoining uses. An increased setback to Elizabeth St provides a larger pedestrian zone and potential for enhanced street planting and footpath dining.	Yes

<table>
<tr><th>Provisions</th><th>Proposed</th><th>Complies</th></tr>
<tr><td colspan="2">3E Deep soil zones</td><td></td></tr>
<tr><td>Deep soil zones are to meet the following minimum requirements:

<table>
<tr><th>Site Area</th><th>Minimum Dimensions</th><th>Deep Soil Zone (% of site area)</th></tr>
<tr><td>Less than 650m2</td><td>-</td><td rowspan="4">7%</td></tr>
<tr><td>650m2 to 1500 m2</td><td>3m</td></tr>
<tr><td>Greater than 1500 m2</td><td>6m</td></tr>
<tr><td>Greater than 1500 m2 with significant tree cover</td><td>6m</td></tr>
</table>
</td><td>The proposed deep soil zones are located in Levels 2, 5 and 9 in the form of planter boxes that vary in depth from 800mm to 1000mm to host appropriately scaled trees and plant species that respond to the climate and wind conditions on the structure. Provision of deep soil zones is as follows:

<table>
<tr><th>Level</th><th>Planter box areas (m2)</th><th>Deep (m)</th></tr>
<tr><td>2</td><td>47</td><td>0.8</td></tr>
<tr><td>5</td><td>42, 38, 13 (x2), 77</td><td>0.8</td></tr>
<tr><td>9</td><td>97, 161, 19(4), 3, 4</td><td>0.8 -1.0</td></tr>
<tr><td>Total</td><td>515m2</td><td></td></tr>
</table>

Additional planting is provided on the ground level plane to soften the pedestrian experience and create a buffer to the wind. The total deep soil zone, discounting less than 6m width planter boxes is 515m2 or 16.7% (515/3,082m2) which is more than twice the minimum of 7%.</td><td>Yes</td></tr>
<tr><td colspan="2">3F Visual Privacy</td><td></td></tr>
</table>

<table>
<tr><th>Provisions</th><th>Proposed</th><th>Complies</th></tr>
<tr><td>Objective 3F-1 Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy

Minimum separation distances from buildings to the side and rear boundaries are as follows:

<table><tr><th>Building Height</th><th>Habitable Rooms and Balconies</th><th>Non Habitable Rooms</th></tr><tr><td>Up to 12m (4 storeys)</td><td>6m</td><td>3m</td></tr><tr><td>12m to 25m (5-8 storeys)</td><td>9m</td><td>4.5m</td></tr><tr><td>Over 25m (9+ storeys)</td><td>12m</td><td>6m</td></tr></table></td><td>The RFB component starts from Level 9 (COS) but residential apartment units start from Level 10 to 33. Minimum setbacks of 12m to the residential component have been provided to the side and rear boundaries to comply with the requirement.</td><td>Yes</td></tr>
<tr><td>Objective 3F-2 Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space</td><td>The comprehensive solar and view analysis has allowed for building to be oriented to take advantage of keys views and solar access. The simple, rectangular form and recessed balconies means there is no overlooking issues between units on a single level.</td><td>Yes</td></tr>
<tr><td colspan="2">3G Pedestrian Access and Entries</td><td></td></tr>
<tr><td>Objective 3G-1 Building entries and pedestrian access connects to and addresses the public domain.</td><td>The apartment lobby addresses the publicly accessible laneway on the eastern edge of the site. Care has been taken to create legible and permeable access for pedestrians throughout the development.</td><td>Yes</td></tr>
<tr><td>Objective 3G-2 Access, entries and pathways are accessible</td><td>The architecture of the podium expresses the entry points to each use through</td><td>Yes</td></tr>
</table>

Provisions	Proposed	Complies
and easy to identify	double height entry volumes and signage. The entries along the laneway are visible from Elizabeth Street and safe pedestrian access is provided within the column line.	
Objective 3G-3 Large sites provide pedestrian links for access to streets and connection to destinations	The fundamental design principle for the site has been to create a north-south link to increase the active frontage and provide potential for future connections through the centre of the block, linking Elizabeth Street into the laneways within the block. Great care has been taken to ensure excellent pedestrian permeability and legibility through the site.	Yes
3H Vehicle Access		
Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes	Car park and loading access points are consolidated on the rear laneway to minimise interruption to street frontage. The vehicle access points are clear and legible and are located away from all pedestrian entries.	Yes
3J Bicycle and Car Parking		
Objective 3J-1 Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas For development in the following locations: • on sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area; or • on land zoned, and sites within 400 metres of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre The minimum car parking requirement for residents and visitors is set out in the Guide to Traffic Generating	Car parking for the RFB has been provided in accordance with the Liverpool DCP and is located on basement levels 4, 3 and 2, with direct lift access.	Yes

<table>
<tr><th>Provisions</th><th>Proposed</th><th>Complies</th></tr>
<tr><td>Developments, or the car parking requirement prescribed by the relevant council, whichever is less. The car parking needs for a development must be provided off street</td><td></td><td></td></tr>
<tr><td>Objective 3J-2 Parking and facilities are provided for other modes of transport</td><td>Secure bicycle parking is provided in the basements and podium to meet Councils' requirements. Each level also provides opportunities for motorcycle parking. The urban design encourages easy pedestrian movement throughout the site.

<table><tr><th>Level</th><th>Bicycle</th><th>Motorbike</th></tr><tr><td>Basement 4</td><td>33</td><td>6</td></tr><tr><td>Basement 3</td><td>43</td><td>4</td></tr><tr><td>Basement 2</td><td>27</td><td>3</td></tr><tr><td>Basement 1</td><td>35</td><td>4</td></tr><tr><td>Level 1</td><td>15</td><td>2</td></tr><tr><td>Totals</td><td>153</td><td>19</td></tr></table></td><td>Yes</td></tr>
<tr><td>Objective 3J-3 Car park design and access is safe and secure</td><td>The car parks are secured with electronic, automated doors triggered by residents, with intercom points required for visitor access. The aisles are clear and unobstructed with clear lines of site to fire stairs and to lift entrances.</td><td>Yes</td></tr>
<tr><td>Objective 3J-4 Visual and environmental impacts of underground car parking are minimised</td><td>The car park layout is efficient with double loaded aisles and stacked ramping. No part of the basement protrudes above the ground plane.</td><td>Yes</td></tr>
<tr><td>Objective 3J-6 Visual and environmental impacts of above ground enclosed car parking are minimised</td><td>The majority of car parking is located within basements. Above ground car parking is limited to 21% of the total provision. Commercial tenancies wrap the podium car park to the north and east to provide active uses to the facade and screen the car park. The commercial facade treatment continues around the southern facade to conceal car parking on the facade. To the west is a zero setback</td><td>Yes</td></tr>
</table>

Provisions	Proposed	Complies
	to match future development.	
4A Solar and Daylight Access		
Objective 4A-1 To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space 1. Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid-winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas	Atleast 78.4% of the residential apartments achieve two hours of solar access between 9am and 3pm in midwinter.	Yes
2. A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid-winter	All apartments in the building receive direct sunlight between 9am and 3pm in mid-winter as demonstrated in the solar point of view studies.	Yes
Objective 4A-3 Design incorporates shading and glare control, particularly for warmer months	The articulated facades are designed for summer shading. The east and west facades have a vertical orientation to provide protection from the low, summer sun. The northern facade has horizontal projections to shade from the sun through the middle of the day in summer, but allow for sunlight projection in winter.	Yes
4B Natural Ventilation		
Objective 4B-1 All habitable rooms are naturally ventilated.	Openable windows are proposed for all habitable rooms	Yes
Objective 4B-2 The layout and design of single aspect apartments maximises natural ventilation	Openable windows are proposed for all habitable rooms and living spaces wrap around balconies to provide openable windows to two sides.	Yes
Objective 4B-3 The number of apartments with natural cross ventilation is maximised 1. At least 60% of apartments are naturally cross ventilated in the first nine storeys of the	The residential apartments start on level 10 of the building and have open balconies and are deemed to be naturally ventilated.	Yes

<table>
<tr><th>Provisions</th><th>Proposed</th><th>Complies</th></tr>
<tr><td>building. Apartments at ten storeys or greater are deemed to be cross ventilated only if any enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed</td><td></td><td></td></tr>
<tr><td colspan="2">4C Ceiling Heights</td><td></td></tr>
<tr><td>Objective 4C-1 Ceiling height achieves sufficient natural ventilation and daylight access

1. Measured from finished floor level to finished ceiling level, minimum ceiling heights are:

<table><tr><td colspan="2">Minimum ceiling height</td></tr><tr><td>Habitable rooms</td><td>2.7m</td></tr><tr><td>Non-habitable</td><td>2.4m</td></tr><tr><td>For 2 storey apartments</td><td>2.7m for main living area floor
2.4m for second floor, where its area does not exceed 50% of the apartment area</td></tr><tr><td>Attic spaces</td><td>1.8m at edge of room with a 30 degree minimum ceiling slope</td></tr><tr><td>If located in mixed use areas</td><td>3.3m from ground and first floor to promote future</td></tr></table></td><td>The floor-to-floor heights of 3.1m on Levels 10-33 will allow 2.7m ceilings to all living areas and bedrooms</td><td>Yes</td></tr>
</table>

<table>
<tr><th>Provisions</th><th>Proposed</th><th>Complies</th></tr>
<tr><td>flexibility of use</td><td></td><td></td></tr>
<tr><td>Objective 4C-2 Ceiling height increases the sense of space in apartments and provides for well proportioned room</td><td>Bulkheads are to be minimised as much as possible with flat ceilings in living areas and bedrooms</td><td>Yes</td></tr>
<tr><td>Objective 4C-3 Ceiling heights contribute to the flexibility of building use over the life of the building.</td><td>Commercial tenancies at the base of the building have 3.5m and residential apartments have 3.1m floor to floor heights and should provide for flexibility.</td><td>Yes</td></tr>
<tr><td>4D Apartment Size and Layout</td><td></td><td></td></tr>
<tr><td>Objective 4D-1 The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity
1. Apartments are required to have the following minimum internal areas:

<table><tr><td>Apartment Type</td><td>Minimum Internal</td></tr><tr><td>Studio</td><td>35m2</td></tr><tr><td>1 bedroom</td><td>50m2</td></tr><tr><td>2 bedroom</td><td>70m2</td></tr><tr><td>3 bedroom</td><td>90m2</td></tr></table>
The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m2 each. A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m2 each</td><td>As shown on the table below, all units are above the minimum requirement for each bedroom type.

<table><tr><td rowspan="2">Typical Levels</td><td colspan="4">Unit Area by Bedroom Types (m2)</td></tr><tr><td>1br</td><td>2br</td><td>3br</td><td>4br</td></tr><tr><td>10,15, 20 & 25</td><td>50, 52</td><td>N/A</td><td>104, 108</td><td>N/A</td></tr><tr><td>11-14,16-19, 21-24 and 26-29</td><td>N/A</td><td>82, 78, 77, 82, 85</td><td>N/A</td><td></td></tr><tr><td>30-32</td><td>N/A</td><td>77, 78, 82,84</td><td>N/A</td><td>266</td></tr><tr><td>33</td><td>N/A</td><td>N/A</td><td>311</td><td></td></tr></table></td><td>Yes</td></tr>
<tr><td>2. Every habitable room must have a window in an external wall with a total minimum glass area of not less than 10% of the floor area of the room. Daylight and air may not be borrowed from other</td><td>All habitable rooms are provided with windows.</td><td>Yes</td></tr>
</table>

<table>
<tr><th>Provisions</th><th>Proposed</th><th>Complies</th></tr>
<tr><td>rooms</td><td></td><td></td></tr>
<tr><td>Objective 4D-2 Environmental performance of the apartment is maximised
1. Habitable room depths are limited to a maximum of 2.5 x the ceiling height.</td><td>Living rooms, dining rooms and bedrooms are a maximum of 6.7m from the facade.</td><td>Yes</td></tr>
<tr><td>2. In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window</td><td>Rear walls of any kitchen are no more than 8m from the facade line</td><td>Yes</td></tr>
<tr><td>Objective 4D-3 Apartment layouts are designed to accommodate a variety of household activities and needs
1. Master bedrooms have a minimum area of 10m2 and other bedrooms 9m2 (excluding wardrobe space)</td><td>As shown on the architectural plans, all master bedrooms have a minimum area of 10m2 and all other bedrooms are atleast 9m2</td><td>Yes</td></tr>
<tr><td>2. Bedrooms have a minimum dimension of 3m (excluding wardrobe space)</td><td>As shown on the architectural plans, all bedrooms have a minimum dimension of 3m.</td><td>Yes</td></tr>
<tr><td>3. Living rooms or combined living/dining rooms have a minimum width of:
- 3.6m for studio and 1 bedroom apartments
- 4m for 2 and 3 bedroom apartments</td><td>As shown on the architectural plans, all living/dining rooms have a minimum width of 3.6m for 1 bedroom and 4m for 2 and 3 bedroom units.</td><td>Yes</td></tr>
<tr><td colspan="2">4E Private Open Space and Balconies</td><td></td></tr>
<tr><td>Objective 4E-1 Apartments provide appropriately sized private open space and balconies to enhance residential amenity
1. All apartments are required to have primary balconies as follows:

<table><tr><td>Dwelling</td><td>Minimum Area</td><td>Minimum</td></tr></table></td><td>As shown on the architectural plans balconies are provided as follows:

<table><tr><td rowspan="2">Typical Levels</td><td colspan="4">POS area by Bedroom Types (m2)</td></tr><tr><td>1br</td><td>2br</td><td>3br</td><td>4br</td></tr><tr><td>10,15, 20 & 25</td><td>8 & 9</td><td>N/A</td><td>12</td><td>N/A</td></tr></table></td><td>Yes, by merit</td></tr>
</table>

<table>
<tr><th>Provisions</th><th>Proposed</th><th>Complies</th></tr>
<tr>
<td>
<table>
<tr><td>Type</td><td></td><td>Depth</td></tr>
<tr><td>Studio</td><td>4m2</td><td>-</td></tr>
<tr><td>1 br</td><td>8m2</td><td>2m</td></tr>
<tr><td>2 br</td><td>10m2</td><td>2m</td></tr>
<tr><td>3 br</td><td>12m2</td><td>2.4</td></tr>
</table>

The minimum balcony depth to be counted as contributing to the balcony area is 1m
</td>
<td>
<table>
<tr><td>11-14,16-19, 21-24 and 26-29</td><td>N/A</td><td>10 & 11</td><td>N/A</td><td>N/A</td></tr>
<tr><td>30-32</td><td>N/A</td><td>10,11 & 22</td><td>N/A</td><td>22</td></tr>
<tr><td>33</td><td>N/A</td><td>N/A</td><td>N/A</td><td>0</td></tr>
</table>

All balcony widths comply with the minimum depths of 2m and 2.4m

The 4 bedroom penthouse unit on Level 33 does not nominate an balcony. Given that the units has sweeping views and unencumbered access to light and air, the requirement for a balcony may not be as necessary as the typical apartment dwelling. All other apartments are provided with compliant balconies.
</td>
<td></td>
</tr>
<tr><td>2. For apartments at ground level or on a podium or similar structure, a private open space is provided instead of a balcony. It must have a minimum area of 15m2 and a minimum depth of 3m</td><td>N/A</td><td>N/A</td></tr>
<tr><td>Objective 4E-2 Primary private open space and balconies are appropriately located to enhance liveability for residents
1. Primary open space and balconies should be located adjacent to the living room, dining room or kitchen to extend the living space</td><td>All primary balconies and terraces are located adjacent to a living space.</td><td>Yes</td></tr>
<tr><td>Objective 4E-3 Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building</td><td>The balconies form an integral part of the building design.</td><td>Yes</td></tr>
</table>

Provisions	Proposed	Complies
Objective 4E-4 Private open space and balcony design maximises safety	All balconies meet the minimum safety provisions	Yes
4F Common Circulation and Spaces		
Objective 4F-1 Common circulation spaces achieve good amenity and properly service the number of apartments 1. The maximum number of apartments off a circulation core on a single level is eight.	There is a maximum of 8 units per floor.	Yes
2. For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40.	There are 3 lifts allocated to 179 residential apartments or a ratio of 59 apartments per lift. An accompanying vertical transport engineering report prepared by Schindler supports the use of three high speed lifts to service the apartments. In its analysis it found that the three lifts with a rated speed of 3.0m/s and a rated load of (2 x 1350 Kg's and 1 x 1600 Kg's) provides an acceptable level of performance for the residential building.	Yes by merit.
Objective 4F-2 Common circulation spaces promote safety and provide for social interaction between residents	The ground floor lobbies have been designed to allow a direct, clear and legible access from the street. The lobby area has additional space for residents to meet, along with the communal floor. Each residential lobby is naturally lit and ventilated.	Yes
4G Storage		
Objective 4G-1 Adequate, well designed storage is provided in each apartment. 1. In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:	All apartment storage meets or exceeds the minimum standard. All units have more than 50% of the storage internal to the unit as shown on the architectural drawings and summarised on the table below:	Yes

<table>
<tr><th>Provisions</th><th>Proposed</th><th>Complies</th></tr>
<tr><td>
<table>
<tr><th>Dwelling Type</th><th>Storage Size Volu</th></tr>
<tr><td>Studio</td><td>4m3</td></tr>
<tr><td>1 bedroom</td><td>6m3</td></tr>
<tr><td>2 bedroom</td><td>8m3</td></tr>
<tr><td>3 bedroom</td><td>10m3</td></tr>
</table>

At least 50% of the required storage is to be located within the apartment.
</td><td>
<table>
<tr><th rowspan="2">Typical Levels</th><th colspan="4">Storage area by Bedroom Types (m3)</th></tr>
<tr><th>1br</th><th>2br</th><th>3br</th><th>4br</th></tr>
<tr><td>10,15, 20 & 25</td><td>3 & 4</td><td>N/A</td><td>5 & 6</td><td>N/A</td></tr>
<tr><td>11-14,16-19, 21-24 and 26-29</td><td>N/A</td><td>4,5 & 7</td><td>N/A</td><td>N/A</td></tr>
<tr><td>30-32</td><td>N/A</td><td>4,5,7 & 8</td><td>N/A</td><td>16</td></tr>
<tr><td>33</td><td>N/A</td><td>N/A</td><td>N/A</td><td>14</td></tr>
</table>

In addition, each apartment is provided with storage cage on the podium or basement levels.
</td><td></td></tr>
<tr><td>Objective 4G-2 Additional storage is conveniently located, accessible and nominated for individual apartments</td><td>Secure basement storage is clearly and accessibly located in the secure residential car parks on the basement levels.</td><td>Yes</td></tr>
<tr><td colspan="2">4H Acoustic Privacy</td><td></td></tr>
<tr><td>Objective 4H-1 Noise transfer is minimised through the siting of buildings and building layout.</td><td>Care has been taken to avoid major acoustic clashes through apartment layouts. The deeply recessed balconies on all apartments mitigate environmental noise.
The loading docks are fully enclosed within the building to minimise noise transfer. These are located below, several floors away from residential uses.</td><td>Yes</td></tr>
<tr><td>Objective 4H-2 Noise impacts are mitigated within apartments through layout and acoustic treatments</td><td>Care has been taken to co-locate similar room types where possible and to use buffers, such as wardrobes, between different spaces.</td><td>Yes</td></tr>
<tr><td colspan="2">4J Noise and Pollution</td><td></td></tr>
<tr><td>Objective 4J-1 In noisy or hostile environments the impacts of external noise and pollution are minimised through the careful siting and layout of buildings</td><td>No significant noise sources have been identified in the acoustic engineering report.</td><td>Yes</td></tr>
<tr><td>Objective 4J-2 Appropriate noise shielding or attenuation techniques for the building</td><td>This item will be addressed in Construction Certificate stage.</td><td>Yes</td></tr>
</table>

Provisions	Proposed	Complies
design, construction and choice of materials are used to mitigate noise transmission		
4K Apartment Mix		
Objective 4K-1 A range of apartment types and sizes is provided to cater for different household types now and into the future.	The building provides a mix of 1, 2, 3 and 4 bedroom apartments to meet market needs and provide a diversity of product.	Yes
Objective 4K-2 The apartment mix is distributed to suitable locations within the building	Apartment types are mixed throughout the building's height and offer a range of orientations.	Yes
4M Facades		
Objective 4M-1 Building facades provide visual interest along the street while respecting the character of the local area.	Care has been taken to ensure a proportionally-balanced building which fits within the surrounding future context. The scale of the facade components has been carefully considered to address proximity to the pedestrian plane, with finer grain detailing in the lower podium and grander gestures within the tower.	Yes
Objective 4M-2 Building functions are expressed by the facade	A diverse mix of facade typologies has been developed for this project to give each use within the building a unique presence. The three components are consistent in colour and materiality, and are deployed in different ways across the commercial, hotel and residential facades	Yes
4N Roof Design		
Objective 4N-1 Roof treatments are integrated into the building design and positively respond to the street	The podium roof top open spaces each integrate with the facade from below, and the roof top treatment provides a crown to the expressed frame of the tower. Services are contained within the form where possible, and set back from the edge of the building to minimise visual impact	Yes
Objective 4N-2 Opportunities to use roof space for residential accommodation and open space are maximised	The main podium space is given over to communal open space for residents.	Yes
Objective 4N-3 Roof design incorporates sustainability features	Roof areas will be intensively thermally insulated to maximise passive thermal comfort in the upper-most apartments	Yes

Provisions	Proposed	Complies
4O Landscape Design		
Objective 4O-1 Landscape design is viable and sustainable	The landscape design has a focus on amenity with the inclusion of key place making elements such as seating and dining. Simple design elements, high quality materiality of hardscaping along with an appropriate mix of native and introduced plant species will be a long lasting, easy to maintain landscape which can be adapted to suit a variety of uses over time.	Yes
Objective 4O-2 Landscape design contributes to the streetscape and amenity	The landscape design maximises the amenity of the communal open space by balancing planted areas with areas for residents to relax or interact. The streetscape landscape design provides key planting elements to create visual interest and provide wind breaks to the pedestrian zone.	Yes
4P Planting on Structures		
Objective 4P-1 Appropriate soil profiles are provided	The landscape has been designed with tree planting on structure alongside lower planting zones and shrubs in appropriately sized bases.	Yes
Objective 4P-2 Plant growth is optimised with appropriate selection and maintenance	The landscape has been designed with a diverse range of native and exotic species appropriate to the various areas and planting opportunities.	Yes
Objective 4P-3 Planting on structures contributes to the quality and amenity of communal and public open spaces	Landscape design includes a variety of plantings to soften the communal open space areas.	Yes
4Q Universal Design		
Objective 4Q-1 Universal design features are included in apartment design to promote flexible housing for all community members	At least 20% of apartments are capable of achieving the Liveable Housing Guidelines silver level. Please refer to a perunit schedule of LHDG compliance in the architectural drawings	Yes
Objective 4Q-2 A variety of apartments with adaptable designs are provided	10% of the units are adaptable with accessible car space. Please refer to a per-unit schedule of adaptable compliance	Yes

Provisions	Proposed	Complies
	in the architectural drawings.	
Objective 4Q-3 Apartment layouts are flexible and accommodate a range of lifestyle needs	The design offers a diverse range of apartment types, with a series of alternative layouts within some apartment types.	Yes
4S Mixed Use		
Objective 4S-1 Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement	Active frontages are maximised through the introduction of the north-south pedestrian and vehicular laneway. Great care has been taken to ensure that commercial uses activate the ground plane, while offering a strong identity to the residential component.	Yes
Objective 4S-2 Residential levels of the building are integrated within the development, and safety and amenity is maximised for residents	Each land use has a separate entrance & lift lobby. The residential entry is visually integrated within the overall ground plane design and fit within the commercial and retail ground floor lobbies. Residential apartments above take on a more domestic character in their architecture	Yes
4T Awnings and Signage		
Objective 4T-1 Awnings are well located and complement and integrate with the building design	An awning is provided over the footpath in accordance with the Liverpool DCP for the majority of the site width. The podium form and ground floor setbacks create significant shaded and sheltered spaces under the line of the building.	Yes
Objective 4T-2 Signage responds to the context and desired streetscape character	Building identification signage will be located at the building entry on Elizabeth Street and from the rear lane. Each of the lobbies will have dedicated signage demarcating their entries integrated into the shopfront design.	Yes
4U Energy Efficiency		
Objective 4U-1 Development incorporates passive environmental design	Passive environmental design features are provided including large tree planting and significant shading in the landscape for reduction of temperature	Yes
Objective 4U-2 Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer	The general orientation of buildings in a north-south axis assists with solar access and shading for the majority of apartments. The articulated building facade and deep balconies to each apartment that provide	Yes

Provisions	Proposed	Complies
	for shading in summer and solar access in winter.	
Objective 4U-3 Adequate natural ventilation minimises the need for mechanical ventilation	Refer to BASIX assessment	Yes
4V Water Management and Conservation		
Objective 4V-1 Potable water use is minimised	Refer to BASIX assessment	Yes
Objective 4V-2 Urban stormwater is treated on site before being discharged to receiving waters	Application referred to Council's Development Engineering Team who raised no objections to the proposed method of stormwater discharge, subject to conditions.	Yes
Objective 4V-3 Flood management systems are integrated into site design	The site is not flood affected.	Yes
4W Waste Management		
Objective 4W-1 Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents	Waste management is handled entirely within the building envelope and screened from external view.	Yes
Objective 4W-2 Domestic waste is minimised by providing safe and convenient source separation and recycling	Separate recycling facilities and rooms for each apartment are provided. Refer to Waste Management Report	Yes
4X Building Maintenance		
Objective 4X-1 Building design detail provides protection from weathering	Robust finishes have been selected for maintenance and high durability	Yes
Objective 4X-2 Systems and access enable ease of maintenance	Stair access is provided to rooftop plant and equipment. Other services areas are located within the podium or basements of each building.	Yes
Objective 4X-3 Material selection reduces ongoing maintenance costs	Where possible, high- durability, pre-finished, untreated or natural-finish materials are proposed for building facades. Refer to materials palette within the design report.	Yes

(b) State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55)

The objectives of SEPP 55 are:

- *to provide for a state-wide planning approach to the remediation of contaminated land.*
- *to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment.*

Pursuant to the above SEPP, Council must consider:

- whether the land is contaminated.
- if the land is contaminated, whether it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the proposed use.

The applicant provided a Remediation Action Plan dated 9 November 2018 prepared by El Australia, Report No: E23796.E06_Rev1. The report concluded that localised soil contamination was observed and will require remediation that render the site suitable for its intended development.

Council's Environmental Health Branch has reviewed the documentation provided by the applicant and supports the application, subject to conditions.

Based on the above assessment, the proposal is considered to satisfy the relevant objectives and provisions of SEPP 55, therefore, it is considered that the subject site is suitable for the proposed development.

(c) Greater Metropolitan Regional Environmental Plan No. 2 – Georges River Catchment (deemed SEPP).

The Greater Metropolitan Regional Environmental Plan No. 2 – Georges River Catchment generally aims to maintain and improve the water quality and river flows of the Georges River and its tributaries.

When a consent authority determines a development application planning principle are to be applied (Clause 7(2)). Accordingly, a table summarising the matters for consideration in determining development application (Clause 8 and Clause 9), and compliance with such is provided below.

Clause 8 General Principles	Comment
When this Part applies the following must be taken into account:	Planning principles are to be applied when a consent authority determines a development application
(a) the aims, objectives and planning principles of this plan	The plan aims generally to maintain and improve the water quality and river

	flows of the Georges River and its tributaries.
(b) the likely effect of the proposed plan, development or activity on adjacent or downstream local government areas	The proposal provides soil and erosion control measures.
(c) the cumulative impact of the proposed development or activity on the Georges River or its tributaries	The proposal provides a stormwater management system that will connect to the existing system. A Stormwater concept plan also outlines proposed sediment and erosion control measures.
d) any relevant plans of management including any River and Water Management Plans approved by the Minister for Environment and the Minister for Land and Water Conservation and best practice guidelines approved by the Department of Urban Affairs and Planning (all of which are available from the respective offices of those Departments)	The site is located within an area covered by the Liverpool District Stormwater Management Plan, as outlined within Liverpool City Council Water Strategy 2004.
(e) the *Georges River Catchment Regional Planning Strategy* (prepared by, and available from the offices of, the Department of Urban Affairs and Planning)	The proposal includes a Stormwater Concept plan. There is no evidence that with imposition of mitigation measures, the proposed development would affect the diversity of the catchment.`
(f) all relevant State Government policies, manuals and guidelines of which the council, consent authority, public authority or person has notice	All relevant State Government Agencies were notified of the proposal and all relevant State Government Policies, manuals and guidelines were considered as part of the proposal.
(g) whether there are any feasible alternatives to the development or other proposal concerned	The site is located in an area nominated for mixed use development and provides for a development that is consistent with the objectives of the applicable zoning and is consistent with the desired future character of the surrounding locality.

Clause 9 Specific Principles	**Comment**
(1) Acid sulfate soils	The site is not affected by acid sulphate soils.
(2) Bank disturbance	No disturbance of the bank or foreshore along the Georges

	River and its tributaries is proposed.
(3) Flooding	The site is not affected by flooding.
(4) Industrial discharges	Not applicable. The site has been used for commercial purposes previously.
(5) Land degradation	An erosion and sediment control plan aims to manage salinity and minimise erosion and sediment loss.
(6) On-site sewage management	Not applicable.
(7) River-related uses	Not applicable.
(8) Sewer overflows	Not applicable.
(9) Urban/stormwater runoff	A Stormwater Concept Plan proposes connection to existing services.
(10) Urban development areas	The site is not identified as being located within the South West Growth Centre within the Metropolitan Strategy. The site is not identified as being an Urban Release Area under LLEP 2008.
(11) Vegetated buffer areas	Not applicable.
(12) Water quality and river flows	A drainage plan proposes stormwater connection to existing services.
(13) Wetlands	Not applicable.

It is considered that the proposal appropriately satisfies the provisions of the GMREP No.2 to the extent considered appropriate in this instance.

(d) Liverpool Local Environmental Plan 2008

(i) Permissibility

The development application incorporates a number of uses all of which are permissible within the B4 Mixed Use zoning. These uses have been detailed previously in this report.

(ii) Objectives of the zone

The objectives of the B4-Mixed Use zone are prescribed as follows:

- *To provide a mixture of compatible land uses.*
- *To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.*
- *To allow for residential and other accommodation in the Liverpool city centre, while maintaining active retail, business or other non-residential uses at street level.*
- *To facilitate a high standard of urban design, convenient urban living and exceptional public amenity.*

The proposed mixed-use development is consistent with the above objectives as:

- The proposal incorporates commercial, residential and hotel accommodation in a single building;
- The proposal promotes street level activation and permeability as it provides a mid-block vehicular and pedestrian thoroughfare. The site is at the core of major activity generators surrounded by the health, recreation, retail and community services precincts. It functions as a spoke that connects these uses and provides a convenient, safe and sheltered walking experience in the east-west and north-south direction connections;
- Walking and cycling will be promoted through the proximity of the site to the retail and commercial centres, public transport routes and railway station (via Bigge Street) and high availability of bicycle and scooter parking spaces within the development;
- The proposal is in keeping with the desired future character for Liverpool CBD and represents a further step in the evolution of Liverpool into a major City Centre in the South West; and
- The development promotes the highest standard of urban design and architecture as demonstrated in the submitted plans.

(iii) Principal Development Standards

The LLEP 2008 contains a number of principal development standards which are relevant to the proposal. Assessment of the application against the relevant standards is provided below.

Clause	Required	Provided	Complies
Clause 2.7 Demolition Requires Development Consent	The demolition of a building or work may be carried out only with development consent.	A CDC for demolition has been obtained by the applicant from a private certifier.	N/A
Clause 4.3 Height of Buildings	The subject site is not affected by a maximum building	N/A	N/A

<table>
<tr><td></td><td>height.</td><td></td><td></td></tr>
<tr><td>Clause 4.4 Floor Space Ratio</td><td>Maximum FSR = 10:1 LLEP 2008 (Floor Space ration map – sheet FSR-011

Based on the site area of 3,082m2, the maximum GFA = 30,820m2.</td><td>The proposed GFA is summarised as follows:

<table><tr><th>Land Use</th><th>GFA (m2)</th></tr><tr><td>Commercial</td><td>5,676</td></tr><tr><td>Hotel</td><td>6,112</td></tr><tr><td>Residential</td><td>18,118</td></tr><tr><td>Total</td><td>29,906</td></tr></table>Calculation sheet is provided with the application and demonstrates compliance with the accepted methodology.</td><td>Yes</td></tr>
<tr><td>Clause 5.10 Heritage Conservation</td><td>Development proposed within the vicinity of a heritage item must be accompanied by a heritage management document to assess the impact of the heritage significance of the heritage item.</td><td>The site is not identified as a heritage item or located within a heritage conservation area. However, it is in the vicinity of a Heritage Conservation Area and individually listed heritage items. A Heritage Impact Statement prepared by GBA Heritage was submitted with this DA.</td><td>Yes</td></tr>
<tr><td colspan="4">Discussion on Heritage

The site is not listed as a heritage item in any statutory instrument and is not within any Heritage Conservation Area (HCA). However, it is in the vicinity of several listed heritage items, the closest and most relevant being:

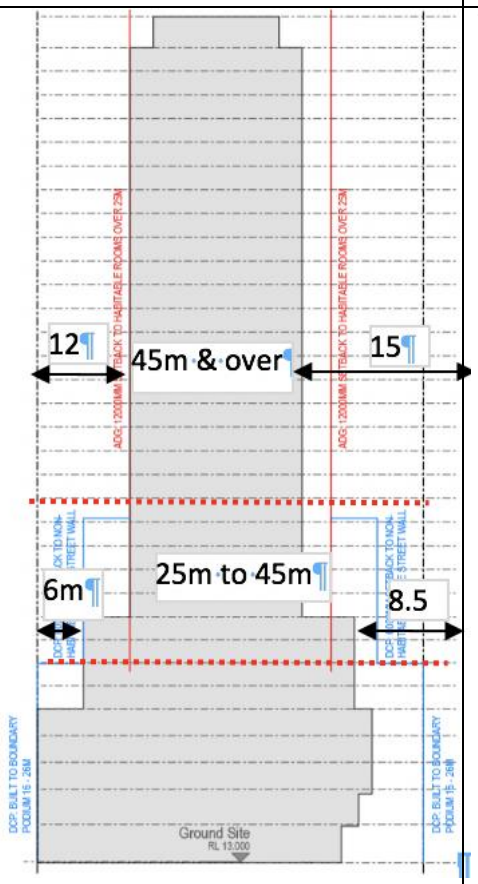
• All Saints Roman Catholic Church, cnr Elizabeth and George Streets (item 85 in Schedule 5 of the Liverpool LEP 2008);
• St Luke’s Anglican Church Group, cnr Elizabeth and Northumberland Streets (item 84 in LEP; listing no. 00086 in State Heritage Register);
• Bigge Park, cnr Elizabeth and Bigge Streets (item 82 in LEP);
• Bigge Park Conservation Area (LEP); and
• Hoddle street grid including Elizabeth Street (item 89 in LEP).

A Statement of Heritage Impact was submitted with this application. The report concludes that the site is separated from All Saints Church, St Luke’s Church and Bigge Park by roadways, distance and/ or other development so that no physical impact on any item will result from the proposed development. In addition, the Hoddle grid will remain unaffected by any construction on the site, or by the creation of a new laneway connecting George and</td></tr>
</table>

Bigge Streets, which supports the purpose of the grid as a framework for urban growth. The St Luke's Anglican Church Group opposite the site is separated by considerable distance so that no significant views to All Saints Church will be obstructed by the proposed development. No change is proposed within the Bigge Park Conservation Area and the proposed building will be sympathetic to the contemporary forms of the buildings within the Conservation area along the west side of Bigge Street. The report concludes that overall there will be no adverse impact on any heritage items in the vicinity and the proposed development is consistent with the heritage requirements and guidelines of the Liverpool LEP 2008, the Liverpool DCP 2008 and the criteria established by the NSW Heritage Office, (now Heritage NSW in the Department of Premier and Cabinet).			
7.1 Objectives for Development in Liverpool City Centre	Before granting consent for development on land in the Liverpool city centre, the consent authority must be satisfied that the proposed development is consistent with such of the following objectives for the redevelopment of the city centre as are relevant to that development. (a) to preserve the existing street layout and reinforce the street character through consistent building alignments, (b) to allow sunlight to reach buildings and areas of high pedestrian activity, (c) to reduce the	The applicant has provided the following statements with regards to the objective of the Liverpool City Centre: *The proposed mixed-use development addresses the existing grid pattern and will enhance the character of the existing Elizabeth Street precinct.* *Allows sunlight access to neighbouring buildings and areas of high pedestrian activity* *The development will help to improve the quality of public spaces with the proposed public art in the City Centre and public domain spaces on the street level.* *The site's proximity to Liverpool Railway Station and availability of public transport will help to support the transportation needs of the hotel and residential users and including employees of the commercial tenancies.* *The lane way to be provided at the rear of the site will help to create more direct, convenient and safe*	Yes

	potential for pedestrian and traffic conflicts on the Hume Highway, (d) to improve the quality of public spaces in the city centre, (e) to reinforce Liverpool railway station and interchange as a major passenger transport facility, including by the visual enhancement of the surrounding environment and the development of a public plaza at the station entry, (f) to enhance the natural river foreshore and places of heritage significance, (g) to provide direct, convenient and safe pedestrian links between the city centre (west of the rail line) and the Georges River foreshore.	*pedestrian links throughout the City Centre.* It is considered that the proposal satisfies the objectives of clause 7.1.	
7.2 Sun access in Liverpool City Centre	Development on land to which this clause applies is prohibited if the development	The subject site is not affected by this control. However, the applicant prepared supplementary shadow diagrams to show overshadowing impact of the development on	Yes

	results in any part of a building on land specified in Column 1 of the Table to this clause projecting above the height specified opposite that land in Column 2 of the Table	Bigge Park. The diagrams indicate that for most part of the day, Bigge Park is not impacted by the proposed building and only starts to be overshadowed from 1pm onwards. The impact is considered to be acceptable.	
7.3 Car Parking in the Liverpool City Centre	Development consent must not be granted to development on land in the Liverpool city centre that is in Zone B3 Commercial Core or B4 Mixed Use that involves the erection of a new building or an alteration to an existing building that increases the gross floor area of the building unless: • At least one car parking space is provided for every 200m² of new ground floor GFA; • At least one car parking space is provided for every 100m² of new retail premises GFA; and • At least one car	With the exception of residential development, which is catered for within Council's DCP, the proposal generates a demand of 58 car parking spaces for commercial component and 60 spaces for the hotel component of the proposal. Therefore, a total of 118 carparking spaces are required based on the LEP rate. The development proposes 118 car parking spaces.	Yes

	parking space is provided for every 150m² of new GFA to be used for any other purpose.		
Clause 7.4 Building Separation in Liverpool City Centre	Development consent must not be granted to development for the purposes of a building on land in Liverpool city centre unless the separation distance from neighbouring buildings and between separate towers, or other separate raised parts, of the same building is at least: • 12m for parts of buildings between 25 and 45 metres above ground level (finished) on land in Zone B3 Commercial Core or B4 Mixed Use, and • 28m for parts of buildings 45 metres or more above ground level (finished) on land in Zone B3 Commercial Core or B4 Mixed Use	 As shown on the figure above, a building separation of 12m for parts of the building between 25 and 45m (Levels 7 to 14) can be achieved as the applicant proposes atlest 6 metres setback from the side boundaries. However, this is not the case above 45m (Levels 14 to 34) where the western façade does not cannot achieve the 28m separation as the applicant only proposes 12m setback rather than 14m. It should be noted that the	Yes

		proposed development does not contravene the development standard as there are no buildings greater than 45 metres in the vicinity of the site. Furthermore, the proposed building setback is complaint with the ADG requirmeents for building seperation. As such, were adjoining properties to be developed with similair setbacks, it is noted that the building seperation provided would be satisfactiry.	
Clause 7.5 Design Excellence in Liverpool City Centre	(a) whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved,	The applicant architect has provided the following comments: *An appropriate composition of building/elements, material textures and colours have been utilised to provide a positive contribution to the existing City Centre.* *The form of the building provides articulation in response to the planning controls and allows each use to be expressed discreetly through the building form, massing and façade treatment.* *The development has been designed to promote visual interest and avoid blank unarticulated walls. The facades are engaging and provide a cohesive expression of the architectural language.* *The three key design elements include the white masonry ribbed structure, charcoal window elements and light framing which provide a unique and centre orientation from each perspective.*	Yes

		The singular attractive nature of the tower is amplified through the fine elements that address each elevation creating an iconic form of the tower. The podium responds to the fine scale of its surrounds through articulation and massing. It is considered that the proposal offers a high standard of architectural design that express each use housed within into the external façade. The ground level and 3 levels of commercial floors provide a solid base to the structure. As it rises, the podium recedes into a smaller floor plate comprising of hotel functions. From thereon, the tower of residential units springs up to impose its presence and dominance into the skyline. This well crafted composition is embellished with materials that convey design rationale by using honest materials of natural concrete, and appropriate climatic devices to create mass, void, solid and light into the building composition.	
	(b) whether the form and external appearance of the proposed development will improve the quality and amenity of the public domain,	The applicant architect has provided the following comments: *The mixed-use nature of the development calls for a high performing ground plane that offers a unique address to each use whilst integrating an efficient servicing and back of house operation. The form of the development creates a prominent central element of the three key sites. It has a distinctive frontage with greater public spaces and landscaping to afford the necessary frontage to encourage*	Yes

		active street uses and servicing of the site. *Introducing a shared pedestrian link along the site's eastern boundary effectively extends the active frontage of the site and offers a high level of amenity and public domain to the residential occupants and hotel users. The new link provides individual entries to the residential apartments, and hotel, and a sheltered drop-off zone for pedestrians and deliveries.* *The new link will also offer an opportunity to connect into the existing laneway network within the City. Future connections can be made into the Warren Serviceway offering quick and easy pedestrian access through the block.* It is considered that the proposal will improve the quality of the public domain as an iconic building that will dominate and define the Liverpool City Centre. On the ground level, the urban design features will contribute to the functionality, permeability, walkability and overall human experience of the public domain.	
	(c) whether the proposed development detrimentally impacts on view corridors,	The subject site and adjoining sites have vantage points in all directions due to the central location. The proposed development will not detrimentally impact on significant view corridors or limit any views of existing development.	Yes
	(d) whether the proposed development	The shadow diagrams demonstrate that the proposed development is of appropriate form	Yes

	detrimentally overshadows Bigge Park, Liverpool Pioneers' Memorial Park, Apex Park, St Luke's Church Grounds and Macquarie Street Mall (between Elizabeth Street and Memorial Avenue),	and scale and will not detrimentally affect the listed existing public open spaces or active pedestrian streets within proximity of the subject site.	
	(e) any relevant requirements of applicable development control plans,	A detailed assessment of compliance with the LDCP 2008 is undertaken further in this report. It is considered that the proposed development is consistent with the requirements of the LDCP 2008.	Yes
	(f) how the proposed development addresses the following matters (i) the suitability of the site for development, (ii) existing and proposed uses and use mix, (iii) heritage issues and streetscape constraints, (iv) the location of any tower proposed, having regard to the need to achieve an acceptable relationship with other towers	(i) The NSW Government and Liverpool City Council have implemented changes to the LLEP 2008 which will aim to revitalise the Liverpool City Centre. The proposed development will contribute to the delivery of the updated plans. (ii) The proposal is a mixed use development combining residential, commercial and hotel uses (iii) The site is not listed as a heritage item in any statutory instrument and is not within any Heritage Conservation Area (HCA). However, it is in the vicinity of several listed heritage items, which will not be adversely impacted as a result of the proposal. (iv) The site has been designed in conjunction with future	Yes

	(existing or proposed) on the same site or on neighbouring sites in terms of separation, setbacks, amenity and urban form, (v) bulk, massing and modulation of buildings, (vi) street frontage heights, (vii) environmental impacts such as sustainable design, overshadowing, wind and reflectivity, (viii) the achievement of the principles of ecologically sustainable development, (ix) pedestrian, cycle, vehicular and service access, circulation and requirements, (x) the impact on, and any proposed improvements to, the public domain.	development of adjoining lots. (v) The proposed building has been designed using different forms within the podium to articulate the different uses, and the terraced form minimised the visual impact of the taller forms at street level. The scheme responds to the desired future character of slender, tall towers at the northern edge of the CBD. The tower element is an elegant response to the floor space and setback controls, with the orientation maximising view potentials and solar access. (vi) The LLEP 2008 does not set street height controls for the subject site. (vii) Specialists reports have been prepared that appropriately addresses the matters relating to sustainable design, overshadowing, wind and reflectivity. The outcome of each is that the proposed development is considered to be consistent with and able to achieve all relevant standards and requirements for development. (viii)The design makes efficient use of natural resources, energy and water throughout its full life cycle including construction methods. An energy efficient building response is developed through passive design and sun control elements on the façade design. The building design is characterised by deep horizontal	

		façade elements and vertical window forms to the east and west, which provide shading and control the headload on the building. Natural light and air flow have been optimised to achieve high personal comfort and low-energy consumption. (ix) A Traffic Impact Assessment has been prepared by PTC and has been assessed against the various traffic, parking and access requirements for the site and proposed development. The report has found that the proposed development is compliant with Council's requirements. Additionally, the creation of a rear laneway will also provide adequate access through the site providing local and service connection between George and Bigge Streets. (x) No public domain works have been identified by Council to be undertaken along Elizabeth Street. Notwithstanding, the proposal will seek to enhance the streetscape and frontage along Elizabeth Street.	
Clause 7.7 Acid Sulfate Soils	Ensure that development does not disturb, expose or drain acid sulfate soils and cause environmental damage	The subject site is affected by Class 5 - acid sulfate soils. A separate report has been prepared by EI Australia addressing the impact of ASS/PASS on the proposed development as unlikely to be present at the site.	Yes
Clause 7.14 Minimum	At least one street frontage to public	The proposed development has a public street frontage to Elizabeth	Yes

Building Street Frontage	street of at least 24 metres for any building on land zoned B4 Mixed Use.	Street and has a frontage greater than 24 metres	
Clause 7.16 Ground floor development in Zones B1, B2 and B4	Development consent must not be granted for development for the purposes of a building on land to which this clause applies unless the consent authority is satisfied that the ground floor of the building: (a) will not be used for the purposes of residential accommodation, and (b) will have at least one entrance and at least one other door or window on the front of the building facing a street other than a service lane.	a) Residential accommodation is not proposed on the ground floor. b) The ground floor uses will have primary entrance from Elizabeth Street and from the vehicle drop off area in the laneway on the eastern part of the site.	Yes
Clause 7.17 Airspace Operations	The consent authority must not grant development consent to development that is a controlled activity within the meaning of Division 4 of Part 12 of the *Airports Act 1996* of the	The application was reviewed by the Department of Infrastructure, Cities and Regional Development. Approval was given under the Airports (Protection of Airspace) Regulations 1996 for the 'controlled activity' with a number of conditions including a maximum height of 126.49AHD.	Yes

	Commonwealth unless the applicant has obtained approval for the controlled activity under regulations made for the purposes of that Division.		
Clause 7.31 – Earthworks	Earthworks must not have a detrimental impact on environmental functions and processes, neighbouring uses, cultural or heritage items or features on surrounding land	Excavations to a depth of approximately 13m will be required for the basement. Proposed earthworks will be undertaken in accordance with the Waste Management Plan, Remedial Action Plan, Geotechnical Report, silt sediment and erosion controls and DA conditions of consent.	Yes
Clause 7.37 (3) Floor space ratio of buildings on certain land at Bigge, Elizabeth and George Streets	Despite any other provision of this Plan, development consent must not be granted to the erection of a building on land at 26–28 Elizabeth Street, Liverpool (being Lot 1, DP 217460 and Lot 10, DP 621840) or 133 Bigge Street, Liverpool (being Lots A, B, C and D, DP 337604) unless the consent authority is satisfied that the gross floor area of that part of the building that is to be used for non-residential purposes is at	A total of 5,764m$_2$ is proposed for commercial uses and an additional 5,928 m2 is proposed for hotel use resulting in a total of 11,692 m$_2$. The site area is 3,082m$_2$ and equates to 3.8 times the site area provided. This provision has been satisfied.	Yes

	least 1.5 times the site area.		

6.2 Section 4.15(1)(a)(ii) - Any Draft Environmental Planning Instrument

No draft Environmental Planning Instruments applies to the site

6.3 Section 4.15(1)(a)(iii) - Provisions of any Development Control Plan

The application has been assessed against the controls of the LDCP 2008, particularly Part 1: *General Controls for all Development*; and Part 4 - *Development in The Liverpool City Centre*.

The tables below provides an assessment of the proposal against the relevant controls of the LDCP 2008.

LDCP 2008 Part 1: General Controls for All Development

Development Control	Required	Provided	Complies
Section 2. Tree Preservation	Controls relating to the preservation of trees	The site does not contain any vegetation requiring removal.	N/A
Section 3. Landscaping and Incorporation of Existing Trees	Controls relating to landscaping and the incorporation of existing trees.	The proposal provides a detailed landscape plan.	Yes
Section 4 Bushland and Fauna Habitat Preservation	Controls relating to bushland and fauna habitat preservation	The development site is not identified as containing any native flora and fauna.	N/A
Section 5. Bush Fire Risk	Controls relating to development on bushfire prone land	The development site is not identified as being bushfire prone land.	N/A

Section 6. Water Cycle Management	Stormwater runoff shall be connected to Council's drainage system by gravity means. A stormwater drainage concept plan is to be submitted.	The concept drainage design proposes to connect the new drainage systems to Council's existing drainage systems located along Elizabeth Street at the front of the development. The design event flow is contained within the proposed drainage system and drainage outflow are restricted to pre development flows, using and OSD (on site detention) with controlled discharge The proposed development will not impact the overland flow path from the rear of the property The site is able to be developed without adversely impacting on the existing drainage of the site or the surrounding area.	Yes
Section 7. Development Near a Watercourse	If any works are proposed near a water course, the Water Management Act 2000 may apply, and you may be required to seek controlled activity approval from the NSW Office of Water.	The development site is not within close proximity to a water course.	N/A
Section 8. Erosion and Sediment Control	Erosion and sediment control plan to be submitted.	A Sediment & Erosion Control Plan prepared by EWFW dated 14.08.18 was submitted with the DA.	Yes
Section 9. Flooding Risk	Provisions relating to development on flood prone land.	The development site is not identified as flood prone land.	N/A

Section 10. Contaminated Land Risk	Provisions relating to development on contaminated land.	A phase one site investigation conducted by the applicants consultant (EI) identified that no respirable fibres were detected in all soil samples, however asbestos was found at the site. A Remediation Action Plan (RAP) has been prepared to guide the significant removal of soil at the site to prepare the land for the subject development. In summary, EI concluded that the site will be made suitable for the proposed development.	Yes
Section 11. Salinity Risk	Provisions relating to development on saline land.	The development site is identified as containing a low salinity potential. Therefore, a salinity management response plan is not required.	N/A
Section 12. Acid Sulphate Soils	Any acid sulfate soils analysis, assessments and management plans shall be undertaken or prepared by an appropriately qualified professional with experience in acid sulfate soils analysis and assessments as well as the preparation of acid sulphate soils management plans. Council may require monitoring reports on the implementation of an acid sulfate soils ma	The acid sulfate soil assessment completed by the applicants consultant (EI) found that the site did not demonstrate indicators for the presence of ASS/PASS, and that it is unlikely to be present at the site. In this regard a management plan is not required.	Yes
Section 13. Weeds	Provisions relating to sites containing noxious weeds.	The site is not identified as containing noxious weeds.	N/A

Section 14. Demolition of Existing Development	Provisions relating to demolition works	The existing structures on the site have been demolished under a separate Complying Development Certificate following the lodgement of the application approved in August 2018.	N/A
Section 15. On Site Sewage Disposal	Provisions relating to OSMS.	OSMS is not proposed.	N/A
Section 16. Aboriginal Archaeology	An initial investigation must be carried out to determine if the proposed development or activity occurs on land potentially containing an item of aboriginal archaeology.	Based on the history of the site this investigation was not conducted.	N/A
Section 17. Heritage and Archaeological Sites	Provisions relating to heritage sites.	The proposals impact on the surrounding heritage items is considered to be acceptable.	Yes
Section 18. Notification of Applications	Provisions relating to the notification of applications.	The application that was lodged with Council on 21 November 2018. Advertisement followed between 14 December 2018 to 16 January 2019, in accordance with Liverpool Development Control Plan 2008 (LDCP 2008). There were 3 submissions received during the period. Issues raised are discussed further into this report.	Yes
Section 19. Used Clothing Bins	Provisions relating to used clothing bins.	The DA does not propose used clothing bins.	N/A

<table>
<tr>
<td>20 – Car Parking and Access</td>
<td>Car parking rates in Liverpool City Centre is as follows:
• 1 Bedroom = 1 space per unit
• 2 Bedroom = 1 spaces per unit
• 3+ Bedroom = 1.5 spaces per dwelling
• Visitors = 1 space per 10 unit

Motorcycle
• 1 per 20 car spaces

Bicycle
• 1/200m2 of leasable area

Disabled Parking
• 2% of total demand</td>
<td>The total carparking provision is as follows:
<table><tr><td></td><td>Required</td></tr><tr><td colspan="2">Residential</td></tr><tr><td>1br</td><td>16</td></tr><tr><td>2br</td><td>143</td></tr><tr><td>3br +</td><td>30</td></tr><tr><td>Visitors</td><td>19</td></tr><tr><td>Total</td><td>208</td></tr><tr><td>Provided</td><td>201</td></tr></table>
<u>The total motorcycle & bicycle provision is as follows:</u>

The proposal generated the requirement for 17 motorbike spaces and provides 19 spaces.

The proposal generates the requirement for 153 bicycle spaces and provides 153 spaces.

The proposal generated the requirement for 8 service bays and provides 7 bays.

Council’s Traffic and Parking Unit has reviewed the application and has no objection, subject to conditions.</td>
<td>Yes, by merit</td>
</tr>
<tr>
<td>Section 22. and Section 23 Water Conservation and Energy Conservation</td>
<td>New dwellings are to demonstrate compliance with State Environmental Planning Policy – Building Sustainability Index (BASIX).</td>
<td>A Basix Certificate was lodged with the application</td>
<td>Yes</td>
</tr>
</table>

Section 25. Waste Disposal and Re-use Facilities	Provisions relating to waste management during construction and on-going waste.	An Operational Waste Management Plan was submitted with the application. This was reviewed by Councils Waste Management Section who raised no objections to the proposal, subject to conditions.	Yes
Section 26 Outdoor Advertising and Signage	Provisions relating to signage.	The DA does not propose any signage.	N/A
27 – Social Impact Assessment	Social Impact Comment required for residential flat buildings greater than 20 units, but less than 250 units.	A Social Impact Comment is provided.	Yes

LDCP 2008 Part 4: Development in the Liverpool City Centre:

It is important to note that this development application (DA-886/2018) was lodged on 21 November 2018. While amendments to the LLEP 2008 which made significant planning changes to the city centre was gazetted on 5 September 2018, this part of the LDCP was made operational on 6 May 2020.

This development application was therefore prepared from the previous version of Part 4 – Development in the Liverpool City Centre. Consideration of the current document has been taken into account.

Development Controls	Required	Provided	Complies
4.2 Controls for Building Form			
4.2.1 Building Form	Relevant Controls: As shown on Figure 4.2 Precincts in the LDCP 2008, the site is to be built as Tower on podium or detached building typology for standalone sites.	The proposed building form is a tower on a podium.	Yes
4.2.2 Building Envelopes	Street Frontage: • Ground to 21m = 0, additional step back above 21m is	Proposed setbacks: Street Frontage:	Yes

	optional. Side Boundary • Ground to 21m = 0; above 21m =12m Rear Boundary • Ground to 14m = 0; above 14m but below 21m = 6m; above 21m additional step back is optional.	• Ground Level = 6m • Levels 1 to 5 (20m) = 0 • Level 6 to 33 = 6m Side Boundary (West) • Ground to Level 5 (20m) = 0 • Level 6 to 9 = 6m • Level 10 to 33 = 12m Side Boundary (East) • Ground Level = 10m • Level 1 to 5 (20m) = 8m • Level 6 to 33 = 15m Rear Setback • Ground Level = 1.2m • Level 1 – 5 (20m) = 0 • Level 6 to 33 =12m	
4.2.6 Building Floor Plates	Relevant Controls: 2. Provide a maximum GFA of 700m2 per level for residential towers with maximum length of elevation of 45m. 3. Comply with ADG standards for building depth and number of apartments. 4. Provide a maximum GFA of 1,000m2 per level for commercial towers with	The proposed GFA per level of the RFB component (Levels 10-33) range from 627m2 to 665m2 and building depth of approximately 43m. The ADG standard of 18m is exceeded. As discussed in that section (2E – Building depth), any leaner will be a significant departure from the architectural design intent.	Yes Yes, by merit.

	maximum length of elevation of 45m. Where sites are greater than 2,000m² a proportionally larger GFA per floor may be considered.for building depth and number of apartments.	The site area is 3,082m2 and the regular shape of the site presents a design challenge including increased floor plate and multiple podiums to achieve the desired built form and character.	Yes, by merit
4.2.7 Street Alignments and Street Setbacks	1. Buildings are to comply with the front setbacks as set out in Figures 4-12 (this refers to Figure 4-10 – Street Setbacks). 2. Upper level frontages to a lane/serviceway must be setback 6 metres from the centre line of the lane/ serviceway. 3. Construct perimeter block buildings and podiums, which comply with the building envelope requirement, to the street and side boundaries (0m setback). 4. N/A. 5. Buildings on the southern	1. Required setback for Elizabeth Street as shown on Figure 4-10 is 6m. Provided setback is 6m. 2. Upper level frontages: <u>Rear Laneway:</u> Provided setback from centre line of laneway starting from Level 1 to Level 4 = 3.8m (36.6% variation) and from Level 5 to 34 = 9m <u>East side laneway:</u> Provided setback from the centre line of the shared pedestrian laneway from Level 1 to Level 4 = 5.5m (8.3% variation). 3. Proposed podium is built hard to the adjoining property (0m) to the west starting from the Ground Level	Yes Yes, by merit Yes

	side of streets identified in Figure 4-10 have minimum front setbacks as follows, in order to maximise solar access: a. Elizabeth Street between Bathurst Street and George Street - 6m. 6. Pave the land in the set-back zone to match the paving in the public street so that it provides a seamless and level ground plane. 7. Ensure that no columns, blade walls or other building elements encroach the ground level of the front setback. 8. N/A 9. Ensure that minor projections into front building lines and setbacks above ground level are designed for sun shading, entry protection or building articulation and enhance the amenity of the public domain.	to Level 4 (podium). 5a. A 6m front setback from Elizabeth Street is provided. 6. To be conditioned 7. While no structural columns are located on the front setback, a series of smaller columns are required to support the continuous pedestrian awning across the length of the building. Pedestrian flow is not obstructed and at the same time protection from the weather elements is provided 9. Sun shading devices are proposed to be installed along the outer sides of the building, primarily on floors where residential uses are proposed. Projections to the front of the building facing Elizabeth street consists of concrete sunshade, feature structural blade columns and planter	Yes Yes Yes, by merit Yes

	10. Allow enclosures or screening of balconies only if they are moveable and aid the amenity of the apartments.	boxes. 10. No balconies are proposed for RFB units facing Elizabeth Street. Street.	 Yes
4.2.8 Side and Rear Boundary Setbacks	1. All residential and commercial buildings must comply with the separation distances in SEPP 65 and the ADG unless otherwise agreed with Council in an approved concept development application. 2. 3.4.= N/A 5. Construct buildings across the site facing the street and the rear boundaries rather than facing side boundaries.	1. The proposed development complies with ADG building separation. 5. The proposed building faces 3 sides: Elizabeth Street Shared side laneway & Rear service laneway.	Yes Yes
4.2.9 Minimum Floor to Ceiling Heights	The minimum floor to ceiling heights are: 1. Ground floor: 3.6m. 2. Above ground level: a) Commercial office 3.3m. b) Capable of adaptation to commercial uses 3.3m. c) Residential 2.7m. d) Active public uses, such as retail and restaurants 3.6m. 3. Car Parks: Sufficient to cater to the needs of all vehicles that will access the car park and, if aboveground, adaptable to	The proposed ceiling heights is at least 3.6 on ground floor, 3.3m for commercial uses above ground, 2.7m for hotel and residential. Car parks have sufficient vertical clearance.	Yes

	another use, as above.		
4.2.10 Housing Choice and Mix	Controls 1. In addition to the provisions for dwelling mix in the ADG, residential apartment buildings and shop-top housing must comply with the following apartment mix and size: • Studio and one bedroom units must not be less than 10% of the total mix of units within each development; • Three or more bedroom units must not be less than 10% of the total mix of units within each development; • A minimum of 10% of all dwellings (or at least one dwelling – whichever is greater) to be capable of adaptation for disabled or elderly residents. 2. Adaptable dwellings must be designed in accordance with the Australian Adaptable Housing Standard (AS 4299-1995). 3. Provide certification from an Accredited Access Consultant confirming that the adaptable dwellings are capable of being modified, when required by the occupant, to comply with the Australian Adaptable Housing Standard (AS 4299-1995).	1. The following unit mix is provided: • 16 x 1 bedrooms (9%), • 143 x 2 bedrooms (80%), • 16 x 3 bedrooms (9%) and • 4 x 4 bedrooms (2%). • Total of 179 units There is a shortfall of 1 x1 bedroom and 1 x 3 bedroom unit which is considered insignificant in comparison to the scale of the proposed development. See below on provision of adaptable and LHA units. 2. Proposed Adaptable = 19 units (20%) in additional are 16 (9%) LHA units. 3. An Access Report prepared by I Access Consultants dated 9 November 2018 was provided with certification for all components of the entire building. 4. As above, carparking was included in the design review ad	Yes, by merit

		certification.	
4.2.11 Deep Soil Zones and Site Cover	Controls 1. The maximum permitted site coverage for development is specified in Table 4-2. Table 4-2 Site coverage: • Existing Mixed Use = 75% 2. Include a deep soil zone as per Section 3E of the ADG in all developments with a residential component in all areas other than the Fine Grain Precinct and Midrise Precinct, or where perimeter block buildings are developed.	1. Compliance with this control is not possible given the context of the site and the mix of land uses proposed. 2. Deep Soil is provided on the structure on the following floor levels: • Level 3 = 35m_2 • Level 5 =179m_2 • Level 9 = 257m_2 The total landscaped area proposed = 471 m_2.	Yes, by merit Yes
4.2.12 Public Open Space and Communal Open Space	Controls Existing Public Open Space 1. Ensure that at least 70% of Bigge Park, Apex Park, Pioneer Park and any other public open space in the city centre has a minimum of 3 hours of sunlight between 10am and 3pm on 21 June (Winter Solstice). 2. N/A 3. Developments with a residential component in all zones must comply with the sections 3D Communal Public Open Space and 4F Common Circulation and Spaces, of the ADG. Consistent with the requirements of the ADG, communal open space is to be collocated with areas of deep soil, where possible. 4. The roof space of	1. The submitted solar access diagrams indicate that for most part of the day, Bigge Park is not impacted by the proposed building and only starts to be overshadowed from 1pm onwards. The impact is considered to be acceptable. 3. Please refer to discussion in 3D Communal Public Open Space and 4F Common Circulation and Space of the ADG table above. 4. The podium on Level 9 is dedicated to the residents of the RFB as the Communal open space incorporating a 14x3.5m lap pool, pool	Yes Yes Yes

	residential flat buildings (RFBs) and mixed-use development (including shop-top housing) is to be developed for the purposes of communal open space that incorporate shade structures and amenity facilities (barbecue and rooftop garden) that complement the development.	side lounge, residents lounge, private dining room, media room, gym and terraces on the east and west side provided with canopy and seating areas surrounded by generous landscaping for the enjoyment of the residents	
4.2.13 Landscape Design	Controls 1. Submit a landscape plan prepared by a registered landscape architect that demonstrates consistency with the above objectives and section 4V, water management and conservation, of the ADG.	A Landscape Plan dated 18.3.20202 prepared by Site Image was submitted by the applicant	Yes
4.2.14 Planting on Structures	Controls 1. Comply with the Section 4P, planting on structures in the ADG in all developments with a residential component and/or communal open space.	The proposed landscaped areas will be irrigated with recycled water. The landscape plan identifies the required conditions for plants and trees growth including and not limited to drainage requirements, soil depth, soil volume and soil area appropriate to the size and of plants to be established.	Yes
4.3. Pedestrian Amenity			
4.3.1 Pedestrian Permeability	General Controls 1. Design through-site links to have direct sight lines. 2. Locate through-site links as shown in Figure 4-12.	1. The proposed shared laneway to the east has direct sight line from the entry off the rear service laneway to Elizabeth Street. 2. The proposed	Yes Yes

		shared laneway is located as per LDCP 2008	
	8. Locate active uses on through site links where possible.	8. The shared laneway is activated by the Café, Hotel, Office and Residential lobbies.	Yes
	9. Nominate sites for through-site links, shared zones etc. that may be acquired by Council or may be dedicated to Council at no cost as part of a concept development application.	9. The rear service laneway will be dedicated to Council.	Yes
	10. Vehicular access shall be provided from secondary streets or laneways only. Vehicular access will not be allowed from the primary street.	10. The primary vehicular access to the building is from the rear service laneway. However, exit to Elizabeth Street is proposed.	Yes
	Specific Controls for Different Link Typologies 1. Shareway | Pedestrians and Cars (Public) Through Site Links must: a) Be a minimum width of 6m and clear of all obstructions. b) Be open to the sky and to be publicly accessible at all times. c) Display signage at street entries indicating public accessibility and the street to which the through site link connects.	1. The proposed 10m wide east laneway is a shareway between pedestrians and cars incorporating a driveway, footpath and vehicle drop-off and landscaping. A boom gate ensures limited vehicular access to hotel patrons. It is open to the sky. Signage indicating public accessibility	Yes

		will be provided and be conditioned in the consent.	
4.3.3 Active Street Frontages	Controls 1. Locate active street frontages on the ground level of all commercial or mixed-use buildings, including adjacent through-site links. 2. Locate active street frontages in the Mixed Use, Commercial Core, Enterprise Corridor and Neighbourhood zones (as identified in Figure 4-2), on ground level. This does not preclude servicing activities particularly in the serviceways. 3. N/A 4. Locate street fronts at the same level as the footpath and with direct access from the street. 5. Use only open grill or transparent security (at least 50% visually transparent) shutters to retail frontages.	1. Entry points for the commercial, hotel and residential uses are located on the ground level at the Elizabeth Street frontage and another on the shared laneway. 2. As above 4. The street fronts have the same level as the footpath. 5. Rear service entry driveways will be installed with transparent security doors.	Yes
4.3.4 Street Address	Controls 1. Provide a clear street address and direct pedestrian access off the primary street frontage in mixed use and residential developments. 2. Provide multiple entrances to large developments on all street frontages. 3. Provide direct 'front door' and/or garden access to the street in ground floor residential units.	1. As above. 2. As above. 3. Landscaping is provided on both frontages.	Yes
4.3.5 Street and Building Interface	Controls 1. Design the area between	1. The development	Yes

	the building and the public footpath so that it: a) provides visibility to and from the street (if non-residential use); b) provides privacy if residential uses are on the ground floor; c) introduces paving and/or landscaping between the street and the building; and/or d) screens any above ground car parking. 2. Use front fences that: a) do not present a solid edge to the public domain greater than 1.2 m above the footpath / public domain level; and b) are not constructed of sheet metal or opaque glass.	proposed the following: a. The building facades have been articulated and allow for street address and visual interest. b. No residential uses are located on the ground floor. c. Paving and landscaping are provided on the street frontages. d. Level 1 parking is oriented to the rear service laneway. A high wall is provided to screen the carpark. 2. No front fencing is proposed.	
4.3.6 Lane / Serviceways and Building Interface	Controls 1. Set back all levels above ground of buildings 6m from the centre line of the lane/serviceway so that residential uses can be accommodated on opposite sides of the serviceway, as described in Figure 4-11. 2. Provide active uses and/or entries at ground level where possible. 3. Screen or sleeve above ground car parking with green walls or other screening devices. 4. Electricity substations (where required) shall be situated within the building or its basement. 5. Vehicular entry points must be of high quality design.	1. Proposed setback from the centre line of the service laneway is 3.9m. However, the adjoining site to the rear is Zone B3 – Commercial Core where RFB is not permitted and unlikely to be built. 2. Vehicular entries to the shared laneway, driveway to Level 1 and to the basement parking will provide continuous activity of the service laneway. 3. A high wall on Level 1 facing the service laneway will provide	Yes

	The impact of vehicular entry points on pedestrians must be minimised. 6. Garbage collection points, fire services and other service requirements are to be integrated into the design of the building.	screening. 4. The sub-station is integrated into the building and is located to the rear fronting the rear laneway 5. Vehicular entry points are of high quality design. 6. Garbage collection and other services are located on the Ground floor to the rear and on Basement 1.	
4.3.7 Awnings	Controls 1. Provide street frontage awnings for all new developments on streets identified in Figure 4-13. 2. Awnings must be: a) horizontal in form; b) minimum 2.4m deep (dependent on footpath width); c) minimum soffit height of 3.2m and maximum of 4m; d) stepped to accommodate sloping streets; e) integral with the building design; f) slim vertical faciae or eaves (generally not to exceed 300mm height); and g) setback 1.2m from kerb to allow for clearance of street furniture, trees, and other public amenity elements. 3. Match awning design to building facades, so that they maintain continuity and are complementary to those of adjoining buildings. 4. Include appropriate sun	1. The site is identified as requiring continuous awnings along Elizabeth Street 2. The proposed awning will cover the entire setback width and length. Details will be provided and conditions to comply with LDCP 2008 requirements.	Yes

	shading device for the outer edge of awnings along east-west streets if required. These blinds must not carry advertising or signage. 5. Provide lighting recessed into the soffit of the awning to facilitate night use and to improve public safety. 6. Maintain a minimum clearance of 2.8m from the level of the pavement to the underside of awning signage. 7. Provide all residential buildings in areas not identified for continuous awnings in Figure 413 with awnings or other weather protection at their main entrance area.		
4.3.8 Building Design and Public Domain Interface	Controls 1. Design new buildings that adjoin existing buildings, particularly heritage buildings and those of architectural merit so that they consider: a) the street 'wall' alignment and building envelope; b) the 'depth' within the façade; c) facade proportions; and d) the response to the corners at street intersections. 2. Provide balconies and terraces appropriately orientated where buildings face public spaces. 3. Articulate façades to address the street, proportion the building, provide 'depth' in the street wall when viewed obliquely along the street and add visual interest. 4. Use high quality robust finishes and avoid finishes with high maintenance costs, and	1. There is currently no adjoining building to the site. a. The design follows the prescribed setbacks to maintain the future desired street wall alignment b. As above c. The façade is well proportioned and articulated. d. The site is not in a street corner although the intersection of the shared laneway and Elizabeth Street is accorded its due prominence. 2. Balconies are provided to the various apartments and allowing	Yes

	those susceptible to degradation due to a corrosive environment. Large expanses of rented concrete finish is discouraged. 5. Select lighter-coloured materials for external finishes including roofs and avoid the use of darker-coloured materials (e.g. black, charcoal) to reduce the urban heat island effect. 6. Maximise glazing in the facades for retail uses. 7. For residential components of buildings, do not use highly reflective finishes and curtain wall glazing above ground floor level. 8. Construct only minor projections up to 600mm from building walls into the public space. These must not add to the GFA and must provide a benefit, such as: a) expressed cornice lines that assist in enhancing the definition of the street; or b) projections such as entry canopies that add visual interest and amenity. 9. Do not locate communication towers such as mobile phone towers, but excluding satellite dishes, on residential buildings or mixed use buildings with a residential component. 10. Incorporate roof top structures, such as air conditioning and lift motor rooms, into the architectural design of the building. 11. Screen air conditioning units on balconies. 12. No clothes drying facilities to be allowed on	opportunities to overlook public spaces. 3. Facades have been articulated and allow for street address and visual interest. The design clearly allows for differentiation between the base (street frontage height), middle and top. 4. The finishes proposed do not attract high maintenance costs or are subject to degradation or will diminish in its appearance in the future. 5. Various materials and delineation through design is provided to create visual interest. A sample board has been provided by Rothelowman as part of their design scheme. 6. The Café located to the strategic corner is proposed to be fitted with shopfront external glazing. 7. The RFB component use predominantly precast concrete. 8. No projection is proposed that would trigger the need for	

	balconies.	it be considered as GFA 9. The services have been designed into the architecture of the building to avoid detracting views of such structures and facilities. 10. Rooftop services are proposed to be screen and not impact on the visual presentation of the structure. 11. Individual air-conditioning installation to the RFB will be addressed in the conditions. 12. To be addressed in conditions of consent	
4.3.10 Public Artworks	Controls 1. Design public art to respond to the particular site of the development as well as the city as a whole. 2. Provide well designed and visually interesting public art created by artists or organisations that are competent in the selected field and committed to best practice. 3. Construct Public Art of materials that are durable, resistant to vandalism, safe for the public and constructed to ensure minimal maintenance. 4. Develop clear and concise agreements with artists/organisations in relation to expectations and deaccession (the process used to	A Feature Landscape Wall is proposed on the shared east laneway.	Yes

	permanently remove an object, artwork or assemblage).		
4.4 Traffic and Access			
4.4.1 Vehicular Access and Manoeuvring Areas	Controls 1. Vehicular access shall be restricted to the secondary street (other than along a High Pedestrian Priority Area) where possible. 2. Design of vehicle entry points must be of high quality and relate to the architecture of the building, including being constructed of high quality materials and finishes. 3. All weather access: a) Locate and design porte cochere (for hotels only) to address urban design, streetscape, heritage and pedestrian amenity considerations. b) Design porte cochere to be internal to the building, where practical, with one combined vehicle entry and exit point, or one entry and one exit point on two different frontages of the development. c) In exceptional circumstances for buildings with one street frontage only, an indented porte cochere with separate entry and exit points across the footpath may be permitted, as long as it is	Vehicular access is to be provided via a newly created rear laneway. Additional access is to be provided via an internal driveway along the eastern side of the site, which will primarily be used to access Elizabeth Street and for a pickup/drop-off location for residents, commercial visitors and hotel guests. The design of vehicle entry is considered to be suitable.	Yes, by merit

	constructed entirely at the footpath level and provides an active frontage at its perimeter.		
4.4.2 On Site Parking	Controls 1. All required car parking is to be provided on site in an underground (basement) carpark except to the extent provided below: a) On Fine Grain and Midrise sites, a maximum of one level of surface (at grade) parking may be provided where it is fully integrated into the building design; and b) On sites requiring the lodgement of a concept DA, a maximum of one level of surface (at grade) and one additional level of above ground parking may be provided where it is fully integrated into the building design. 2. Provide car parking for buildings developed on land in the R4 - High Density Residential zone as follows: a) 1 space per two studio apartments. b) 1 space per one bedroom or two bedroom apartments. c) 1.5 spaces per three or more bedroom apartments. 3. Provide car parking for buildings developed on land in other zones (B1 — Neighbourhood Centre and B6 — Enterprise Corridor) as follows: a) 1 space per 100 m^2 of floor area 4. Service and visitor parking is to be provided for all development within the city centre. For sites zoned B3 —	1. All on-site parking is provided across four basement levels and up to level 1 of the building, where it is integrated into the various uses, reducing any appearance of above ground parking. The provision of car, bicycle and motorbike parking onsite for the residential component has been calculated in accordance with the minimum requirements of Table 3 in the Liverpool City Centre DCP.	Yes

	Commercial Core or B4 — Mixed Use, service and visitor parking is to be provided as part of the parking required according to clause 7.3 of LLEP 2008, Car parking in Liverpool city centre. For all other sites, service and visitor parking requirements are additional to that specified in controls 2 and 3 above. Service and visitor parking is to be provided In accordance with the following formula: Residential (including residential components of mixed-use or other developments) - 1 space per 10 apartments or part thereof, for visitors; and - 1 space per 40 apartments for service vehicles (including removalist vans and car washing bays) up to a maximum of 4 spaces per building All other development 5. Sufficient service and delivery vehicle parking adequate to provide for the needs of the development. Provision is to be made for motorcycle parking at the rate of 1 motorcycle space per 20 car spaces. 6. No less than 2% of the total parking demand generated by development shall be accessible parking spaces, designed and appropriately signposted for use by persons with a disability		
4.5 Environmental Management			
4.5.1 Wind Mitigation	Controls 1. Design all new buildings	A Wind Report prepared by Cermak	Yes

	to meet the following maximum wind criteria : a) 10m/second in retail streets; b) 13m/second along major pedestrian streets, parks and public places; and c) 16m/second in all other streets. 2. Submit a Wind Effects Report with the DA for all buildings greater than 35m in height. 3. Submit results of a Wind Tunnel Testing report for buildings over 48m in height.	Peterka Petersen concluded that "being taller than most surrounding buildings, the proposed development is exposed to prevailing winds in the area, however due to the orientation and tower setbacks the proposed building is not expected to have a significant impact on the existing wind conditions from a pedestrian comfort and safety perspective". It should be noted that the adjoining sites when developed will reduce wind conditions	
4.5.2 Noise	Controls 1. Design development on sites adjacent to road and rail noise sources identified in Figure 4-16, in a manner that shields any residential development from the noise source through the location and orientation of built form on the site, supported by an appropriate acoustic report as required by the State Environmental Planning Policy (Infrastructure) 2007. 2. Provide an 8m setback from the primary street frontage to any residential component of development located along Terminus Street and the Hume Highway.	1. An Acoustic report has been prepared by Sebastian Giglio which considered any acoustic implications of the proposed development. The overall findings from the report was that the project can comply with established acoustic criteria for noise. 2. Setback of RFB units facing front Elizabeth Street is 6m. Double glazing for these units will be conditioned.	Yes

	All residential apartments and / or serviced apartments within a mixed use development should be designed and constructed with double-glazed windows and / or laminated windows, solid walls, sealing of air gaps around doors and windows as well as appropriate insulating building elements for doors, walls, roofs and ceilings etc; to provide satisfactory acoustic privacy and amenity levels for occupants within the residential and / or serviced apartment(s). Figure 4-16 Noise		

6.4 Section 4.15(1)(a)(iiia) - Any Planning Agreement or any Draft Planning Agreement

No planning agreement relates to the site or proposed development.

6.5 Section 4.15(1)(a)(iv) – The Regulations

The Environmental Planning and Assessment Regulations 2000 requires the consent authority to consider the provisions of the National Construction Code (NCC). If approved, appropriate conditions of consent will be imposed requiring compliance with the NCC.

6.6 Section 4.15(1)(a (v) – Any coastal zone management plan (within the meaning of the Coastal Protection Act 1979), that apply to the land to which the development application relates

There are no Coastal Zones applicable to the subject site.

6.7 Section 4.15(1)(b) – The Likely Impacts of the Development

(a) Natural and Built Environment

Built Environment

The proposed development is considered to have an overall positive impact on the surrounding built environment. The proposal has been designed to take into account the unique site location and has provided a design that is of an appropriate bulk and scale and consistent with the desired future character of the area.

Natural Environment

The proposed development is not considered to have a detrimental impact on the existing natural environment. The development proposal is located within a mixed-use zone that is well developed.

(b) Social Impacts and Economic Impacts

The development is considered to result in a positive social impact by facilitating a feasible and well-balanced mixed-use development that will consist of a range of potential commercial uses in close proximity to a major transport hub which will generate and encourage employment generating activities for the Liverpool CBD.

The development will result in a positive economic impact, through the provision of the commercial and hotel premises which will provide employment opportunities for the community. Additionally, employment opportunities will also be generated through the construction of the development and the on-going maintenance of the building.

6.8 Section 4.15(1)(c) – The Suitability of the Site for the Development

The land is zoned for mixed use development. The proposed development is in keeping with the zones objectives and is compatible with the anticipated future character within the Liverpool City Centre.

There are no significant natural or environmental constraints that would hinder the proposed development. The proposal effectively responds to its surroundings. Accordingly, the site is considered suitable for the proposed development.

6.9 Section 4.15(1)(d) – Any submissions made in relation to the Development

(a) Internal Referrals

The following comments have been received from Council's Internal Departments:

Comment	Response
Internal Department Referrals	
City Economy generally supports the proposal especially in the provision of A-grade office space in the CBD and medi-hotel.	
Heritage generally supports the application subject to conditions	
Environmental Health generally supports the application subject to conditions:	
Traffic generally supports the application subject to conditions.	
Waste Management generally supports the application subject to the conditions.	
City Design and Public Domain generally support the proposed development, subject to conditions.	
Engineering has identified deficiencies with the submitted stormwater concept plans and DRAINS modelling, including the design and location of the OSD, inconsistencies with submitted documentation, the scope of the DRAINS model and detailed design of the proposed north-south laneway. These matters are required to be addressed before an operative consent can be issued to the development. It is considered that these matters can be imposed as deferred commencement conditions.	
Community Planning provides feedback and recommendations which have been addressed in the submitted Social Impact Assessment for the proposed development.	

(b) External Referrals

The following comments have been received from External agencies:

Comment	Applicant's Response
Roads and Maritime Service (RMS) provides comments for Council's consideration in the determination of the application:	
Traffic generation in the planning proposal for the Draft LLEP 2008 was 200-220 vehicle trips per hour (two way) during peak times. Submitted Traffic report indicates 116 vph in the PM peak (with 20% discount applied to the proposed hotel and commercial areas and no vehicle movements calculated for the restaurant). The proposed development will result in a greater traffic generation than originally estimated for in the planning proposal. Council should be satisfied that the proposed development will not have a detrimental impact on the surrounding road network.	The restaurant has been removed from the development proposal. Notwithstanding this, it is noted that Council's Traffic Branch are satisfied that the proposed development will not have a detrimental impact on the surrounding road network.

Comment	Applicant's Response
Need to identify the impact of the development on the adjacent classified road network	The SIDRA model has been updated to include the potential traffic generated by the expansion of Westfield Liverpool Shopping Centre and the redevelopment of Liverpool Hospital.
Vehicular access from proposed ROW to Bigge Street should be left-in/left-out being in close proximity to traffic signals. A central median may be required which means traffic assessment and modelling need to be updated	Council's Traffic Branch recommends a separation kerb is installed to restrict any right-turn movements in and out of the proposed ROW and Bigge Street. A separation kerb will mitigate the need for any road realignment or widening, whilst achieving the objective of enforcing a left-in, left-out arrangement.
SIDRA electronic files should be submitted	SIDRA modelling accompanies the supplementary documentation.
Network capacity at the Bigge St/Elizabeth St and George St/Elizabeth St intersections are already constrained and requires additional uplift will further reduce capacity and level of service. RMS requires further information regarding vehicle and pedestrian cycle phasing arrangements and intersection lane layouts used in the SIDRA traffic modelling	SIDRA model has been submitted separately.
RMS advises that set cycle times at Bigge St are 120 seconds and the cycle times within the Liverpool CBD at 100 seconds. Clarification is requested why a 60 second 'network practical' cycle time was used in the traffic modelling	The SIDRA model has been updated to include a set cycle time of 120 seconds for intersections on Bigge Street and 100 seconds for intersections within Liverpool CBD.
Bankstown and Camden Airports Limited advises that **t**he following steps will need to be undertaken prior to any support being provided:	
A full review of the development's Aviation Assessment by both Air Services (air traffic control) and the Civil Aviation Safety Authority (CASA) who is the airspace regulator	In accordance with regulation 14, approval has been granted from Department of Infrastructure, Transport, Cities and Regional Development for the intrusion of the tower crane and building on the site into airspace prescribed for Bankstown Airport. The crane has been approved to a maximum height of 134.5 metres AHD and the building has been approved to a maximum height of 126.49 metres AHD.

Comment	Applicant's Response
A letter of approval must then be sort from the Department of Infrastructure Regional Developments and Cities (DIRDC	A letter of approval from the *Department of Infrastructure, Transport, Cities and Regional Development* for the proposed development has been is submitted. This approval has been issued to both the Civil Aviation Safety Authority, Air services Australia, Bankstown Airport Limited and Council
Information must also be sort from the Emergency Helicopter operators. I note that this has not been provided at this time	Consent for the controlled activity for the intrusion of airspace under the Airport Act 1996 has been in the documents referred to above. In addition, the site is not impacted by the helicopter fly path.
Endeavour Energy provides comments for Council's consideration in the determination of the application:	
The preliminary desktop assessment ahead of receiving a load application for this development via Network Connections Branch indicates that based on the proposed floor space and estimated the building load to be approximately 1.6 Mega Volt Amps (MVA) to 1.8 MVA. Therefore the applicant should ensure the proposed indoor substation is able to accommodate a minimum of 2 x 1500 kilovolt amperes (kVA) transformers (the highest capacity for a distribution substation in Endeavour Energy's network). However, 2 x 1000 kVA transformers may only be installed depending on the actual load application. If in the event that the building load is greater than 2500 kVA, then a 3 x 1500 kVA transformer chamber should be provided in accordance with Endeavour Energy Standards.	Based on the latest provided Architectural drawings, the calculated maximum demand can be supplied via 2x1500kVA transformers. The chamber substation room shown on the electrical conceptual drawings located on the ground floor is sized for 3 x 1500kVA transformers in the event that building load exceeds a 2500kVA.
An additional room for a HUB Switching Station to maintain the reliability of supply in accordance with Endeavour Energy Standards & Policy may also be required in the building design. The HUB Switching Station will allow for both planned or unplanned switching events, e.g. to provide to back-up feeders in case of failure	The HUB switching station will be located within the same chamber substation room subject to ASP/3 engineer confirmation.

Comment	Applicant's Response
As there are currently no existing 11 kilovolts (kV) high voltage feeders required to supply the substation in the proximity of the site, they will need to be extended/augmented. As mentioned in the previous advice to Council regarding Development Application DA-926/2018 at Westfields Shopping Centre, 25 George Street, Liverpool NSW 2170, the existing feeders in the locality currently have some spare capacity, but with others being at full capacity they cannot accommodate any additional load	To be confirmed by ASP/3 engineer as part of the CC stage. It is recommended that a condition of consent be imposed as part of the CC stage of any consent granted.
A proper load assessment by the customer's Level 3 Accredited Services Provider (ASP) or Consultant Engineer and Endeavour Energy's Capacity Planner will be needed to determine the best method of connection and any reconfigurations and upgrades. The customer is urged to engage with an Electrical Consultant prior to finalising plans to Liverpool City Council to assess and incorporate the appropriate indoor substation	To be confirmed by ASP/3 engineer as part of the CC stage. It is recommended that a condition of consent be imposed as part of the CC stage of any consent granted.
Careflight Health Emergency – Air Ambulance	
Consideration of flight paths and impact on the emergency services – Air Ambulance.	Consent has been granted by the Department of Infrastructure, Transport, Cities and Regional Development for a controlled activity for the intrusion of the hammerhead tower crane during construction. Consent has also been granted by the Department of Infrastructure, Transport, Cities and Regional Development for a controlled activity allowing for the intrusion of the proposed building of 126.49metres exceeding the penetration of prescribed airspace by 15.49 metres. The assessment of these two activities have taken into account the city centre, existing uses and in particular the Liverpool Hospital and its operations.
NSW Police generally supports the application with the appropriate crime prevention and safety measures for the following:	

Comment	Applicant's Response
• Theft of the construction equipment & hot water systems during construction stages; • Trespassers into construction areas after hours; • Theft of mail from mailboxes; • Theft from motor vehicles/underground carparks; • Lighting to deter anti-social behaviour at public areas/walkways; • Restrict unauthorised access via to lifts to different floors (if buildings and floors can only be accessible by swipe cards, supply Liverpool Police with a master card; • Register the CCTV cameras with the free NSW Police CCTV register at http://polices.nsw.gov.au/services/register my business CCTV details.	The comments and recommendations made by the NSW Police following their review of the original proposal have been considered and the following design changes have been made: • During construction: Hoarding shall be installed around the site to avoid any access to the construction zone and prevent theft of equipment and other related items and building materials. It is recommended that a condition of consent be provided to address this issue in any consent granted. The hoarding will not permit entry to trespassers into the site. • Monitoring and surveillance: Once the development has been completed, it is proposed that the foyers, public domain spaces, including the underground car parks, will be monitored by CCTV cameras. It is recommended that a condition of consent be provided to address ongoing monitoring and surveillance in the consent, subject to approval. • Lighting: It is proposed that illumination of the street and laneways surrounding the site will be provided as part of the development. The plans prepared by Rothelowman indicate the proposed locations of the lighting which will be compliant with AS 4282- 1997. It is recommended that a condition of consent be provided to address lighting of external areas as part of the consent, subject to approval.
Sydney Water have provided a letter containing a number of items to be addressed as follows:	
• The developer should lodge a feasibility application with Sydney Water via a Water Servicing Coordinator (WSC) detailing concept water and wastewater servicing options.	Conditions to be imposed in the consent.

Comment	Applicant's Response
• Requirements for Sydney Water's stormwater assets (for certain types of development) may apply to this site. The proponent should ensure that satisfactory steps/measures been taken to protect existing stormwater assets, such as avoiding building over and/or adjacent to stormwater assets and building bridges over stormwater assets. • The proponent should consider taking measures to minimise or eliminate potential flooding, degradation of water quality, and avoid adverse impacts on any heritage items, and create pipeline easements where required.	

(c) Community Consultation

The application that was lodged with Council on 21 November 2018. Advertisement followed between 14 December 2018 to 16 January 2019, in accordance with Liverpool Development Control Plan 2008 (LDCP 2008). Three objections were received.

The issues raised in the submissions, and a response to each, are summarised as follows:

Comment	Applicant's Response
Submission 1	
Acoustic Impact - The report did not consider noise from the rooftop restaurant outdoor dining or ground floor retail. Consideration to sensitive receivers such as the adjoining school and place of worship as they relate to noise has not been investigated. More comprehensive noise assessment is required.	The application has been amended to remove the restaurant from the proposal.
Social Impact Assessment - The SEE did not address social impacts on the adjoining schools, place of worship, Liverpool Court house, Bigge Park and Liverpool Hospital. More information of the impact to the above given that hotel/restaurant and bar uses are proposed	A Social Impact Assessment has been prepared by Urbis. Impacts to adjoining schools, places of worship, Liverpool Court House, Bigge Park and Liverpool Hospital have been addressed. The report concludes the following: • The proposal will generate additional access to housing, commercial, retail

Comment	Applicant's Response
	and hotel uses, improve the public domain and community ownership of the site and generate employment opportunities during construction and operations of these businesses. • In addition, it will increase users of the parks, increase enrolment to adjoining schools and potentially increase church parishioners to the nearby church and other places of worship around the CBD. • The proposed restaurant has been removed from the proposal. • The proposed hotel will cater to the accommodation requirements of hospital patients that otherwise may not be eligible or require admission into the hospital for their treatment. • Liverpool CBD is currently undergoing significant development and therefore there is potential for local residents to experience construction fatigue and a change in community identity as a result of the proposal contributing to cumulative development in Liverpool. However, the longer term benefits mentioned above will outweigh the temporary impact. Besides, the site has been rezoned and earmarked for increased density, particularly of the mixed use type. Overall, it is considered that the proposal is aligned with the growth vision for Liverpool CBD and will deliver a positive impact long-term. The short-term negative impacts can be managed.
Environmental Heritage - Impact on Bigge Park conservation area (in addition to those mentioned above).	A detailed shadow study has been undertaken which demonstrates impact of the proposed development on Bigge Park is not significant. Further, the DEP has confirmed they are satisfied with the level of overshadowing to Bigge Park.

Comment	Applicant's Response
Public Domain - Commends the east-west link through the site but notes the lack of north-south pedestrian linkage which is crucial to a connected and pedestrian-friendly CBD	This is not the case. The proposal incorporates an additional north/south shared pedestrian way through the site that extends active frontages and facilitates a link to the Warren Serviceway (along the new lane)
Wind - Wind tunnel modelling is requested to study potential impact on the quality of the street environment	A revised Wind Assessment has also been prepared. Based on the assessment findings, wind tunnel modelling is not considered necessary. It is considered that wind modelling would form part of the initial CC design phase to verify that the design, as proposed, will meet the required ground level wind criteria.
Inadequate documents including basement plans, ground floor, mezzanine, level 1, 6-8, 15-34, all sections, deep soil planting and communal open space	Amended architectural drawings incorporate these plans/documents.
Submission 2	
A huge edifice towering over Liverpool will look awkward and absurd. A tower is unnecessary. A tower is totally unsympathetic to heritage items All Saints Church and Bigge Park. The development will inevitably have no set-back creating a tunnelling effect.	The building is setback from the street and articulated in accordance with Council's existing DCP and advice received from the DEP. The existing planning controls applicable to the site, specifically height and FSR, anticipate a development of this scale. The scheme integrates significant setbacks on all four site boundaries. A Heritage Impact Report was submitted and concludes that the development will not impact on the value of heritage sites. A detailed wind study accompanies the application that demonstrates appropriate wind conditions at ground level.
The streets of the so called 'Hoddle Grid' plan, actually the 1819 Meahan grid plan, is totally unsuited to high-rise development. The streets are too narrow to sustain developments of this scale	The proposal recognises the significance of the Hoddle grid street pattern and seeks to lay the foundations for future development. The introduction of a through-site link reinforces the underlying principles of the Hoddle Grid which is to provide for a permeable and legible city environment.

Comment	Applicant's Response
The tower will shadow over the heritage item Bigge Park, and crucially over Bigge Park at the colder times of the year when light and warmth is crucial. It may also shadow over heritage item All Saints church and its stain glass windows, darkening the inside of the church at certain times of the year	A detailed shadow study has been undertaken which demonstrates impact of the proposed development on Bigge Park is not significant. Furthermore, the all Saints church is located north of the site and will not be overshadowed by this development.
Increase to traffic/Lack of parking. The parking spots made available will be insufficient for residents, let alone shoppers and diners. Traffic heading to Westfield at peak periods is chaotic and the car park full or near full at peak periods. Competing with parking at Westfield, the Hospital	Traffic modelling has been conducted and found to have minimum and acceptable impact. Parking is provided in Level 1 and 4 levels of basement. Council's Traffic section has reviewed the proposal and offers no objection subject to conditions of consent.
Submission 3	
What should be approved for the site is a much lower unit development (4-5 storeys), or a multistorey car park. There are continual complaints about lack of parking in Liverpool, so Council could at least approve a car park for the site, or a development that blends in with surrounding buildings	The current FSR controls that apply on the subject site anticipate a much denser development than that which would be achieved through a 4-5 storey development. The proposed development contains sufficient parking to suit the proposed uses
I believe approving this DA in the current form would be another example of too much over development in the Liverpool area. Local road, services and infrastructure are already congested during the daytime. There is a lack of parking and infrastructure to cope with the population increase. There are not enough jobs in the Liverpool area to justify the approval of even more high rise residential units.	The current FSR controls that apply to the subject site anticipated a density and intensity of development that matches the proposal.
If you want to buy some fresh bread at Coles or Woolworths in Westfield, they are already sold out by most afternoons. Bringing in more people, just makes it harder for existing residents to maintain their own standards of living, as they are in competition with others just to get basic items such as food and clothing	The number of residential apartments has been reduced from 194 to 179 which would have minimal if any impact on the retail demand in Liverpool CBD.
There is no late-night entertainment in the Liverpool CBD, to justify having a large scale development at the site. There are no beaches or anywhere to take young children.	The site has been rezoned and earmarked for increased density, particularly of the mixed use type. This is consistent with the future vision of Liverpool City Centre as Sydney's Third

Comment	Applicant's Response
There is no need for ugly unit developments 35 storeys high in the centre of Liverpool, when there is vacant land between Glenfield and Macarthur along the railway line that could be further developed for residential and commercial purposes	CBD.
My parents left their homeland to live in Australia with some open space and fresh air. They did not come to live cheek-by-jowl in boxes. While unit style living is good for some type of situations, it should not become the norm. Council need to stabilize the population and promote sensible development. Just bringing more and more people to the City Centre is a recipe for more overcrowding, congestion and pollution. This DA should be rejected by Council.	

6.7 Section 4.15(1)(e) – The Public Interest

The proposed development is consistent with the zoning of the land and would represent a high-quality development for Liverpool. The development provides additional commercial and residential opportunities within close proximity to public transport.

In addition to the social and economic benefit of the proposed development, it is considered to be in the public interest.

7 SECTION 7.12 CONTRIBUTIONS

Liverpool Contributions Plan 2018 (Liverpool City Centre) applies to the development. The applicable contribution amount for the subject proposal is **$3,221,117**.

8 CONCLUSION

In conclusion, the following is noted:

- The subject Development Application has been assessed having regard to the matters of consideration pursuant to Sections 4.15 of the Environmental Planning and Assessment Act 1979 and is considered satisfactory.
- The proposal is consistent with the intended desired future character of the area, particularly when having regard to recent amendments to the LLEP 2008 and LDCP 2008 relating to the CBD.
- The proposal is consistent with the objectives of the B4 – Mixed Use zone that is applicable to the site under the LLEP 2008.

- The proposal provides an appropriate response to the site's context and satisfies the SEPP 65 design principles and the requirements of the Apartment Design Guide.
- The proposal has undergone an extensive design review process and has satisfied the applicable objectives and provisions of Liverpool LEP 2008 including the provisions of Clause 7.5 relating to design excellence.
- The development will be well located in relation to transport, employment, shopping, business and community services, as well as recreation facilities. It will deliver an efficient use of the site with well-designed high amenity dwellings and facilities.

It is for these reasons that the proposed development application is considered to be satisfactory and, the subject application is recommended to be determined by way of deferred commencement, subject to conditions.

9 ATTACHMENTS

1 Revised Architectural Plans
2 Recommended conditions of consent
3 Architectural Report
4 Original Statement of Environmental Effects
5 Response Report – Design Amendments
6 SEPP 65 Statements
7 Revised Landscape Plan
8 Landscape Design Report
9 Public Artwork Opportunities Report
10 Hydraulic Civil Plans
11 Heritage Impact Statement
12 Traffic Report
13 Aboriginal and Historical Due Diligence Assessment
14 Access Report
15 Acoustic Report
16 Aviation Assessment Report
17 BCA Report
18 Building Services Report
19 Contamination Report
20 Detailed Site Investigation Report
21 Remedial Action Plan
22 Social Impact Assessment
23 Wind Assessment
24 Acid Sulfate Soil Assessment
25 Operational Waste Management Plan
26 DEP minutes
27 RMS Letter