

### APARTMENT DESIGN GUIDE COMPLIANCE TABLE

**DA24/0196 - demolition of existing structures and construction of shop-top housing comprising three levels of basement carparking, ground floor retail premises and 72 units, pool and associated vegetation removal (NRPP) at Lot 1 DP 807977; No. 3 River Terrace TWEED HEADS; Lot 2 DP 807977; No. 5 River Terrace TWEED HEADS; Lot 5 DP 9056; No. 7 River Terrace TWEED HEADS**

	1	2	3	4	5	6	
<b>3A Site analysis</b>	✓						<b>Complies</b>
<b>3B Orientation</b>	✓	✓*					* Sufficiently complies – 100-104 Wharf Street does not retain required solar access due to opposite development (3 hours between 9-3 at mid-winter). This notwithstanding, the development successfully minimises overshadowing of neighbouring properties in mid-winter (3B-2).
<b>3C Public domain interface</b>	✓*	✓					* Complies – subject to a condition requiring a detailed lighting design prior to issue of a construction certificate to ensure opportunities for concealment are minimised.
<b>3D Communal and public open space</b>	✓*	✓	✓	✓			* Generally complies – subject to:  - condition requiring physical measures to restrict access to the roof grassed area above Level 13.  - a variation to the numerical communal open space from 25% required to 21% proposed. Variation is recommended as significant area is put forward for public open space which

						contributes to landscaping, amenity and the opportunity for social interaction.
3E Deep soil zones	✓*					<p>* Does not comply but variation supported – subject to a variation to the numerical deep soil zone from 7% required to 0% proposed. Variation is recommended as soil on slab area adjacent to River Terrace (3.95% of site) serves similar purpose to DSZ and significant other landscape areas are proposed on the key landmark site.</p>
3F Visual privacy	✓*	✓**				<p>* Does not comply but variation supported – with variation to minimum building separation –</p> <p>Required to 9 River Terrace: 6.0m (up to 4 storeys), 9.0m (5-8 storeys), 12.0m (9+ storeys).</p> <p>Proposed 0.0m (up to 4 storeys), 6.0m (5-8 storeys), 8.0m (9+ storeys).</p> <p>Noting the desired future context and absence of visual privacy impacts (both to the existing dwelling and to future adjacent development from minimal and narrow windows), the variation is acceptable.</p> <p><b>**Complies- subject to:</b></p> <ul style="list-style-type: none"> <li>- A condition requiring designated robes and utility spaces to be addressed by treatment at a height lower than 1.8m to certifiers satisfaction.</li> <li>- Large sliding door openings on Level 02 to dining/living areas are 40% filmed. Condition recommended to confirm visual privacy treatment to Council satisfaction.</li> </ul>



							<ul style="list-style-type: none"><li>- A similar condition is recommended for the Level 05 window to the utility room.</li><li>- A further condition is recommended requiring opaque screening the communal terrace facing apartment 402's balcony (designed to address lack of SCN4 detail).</li></ul>
3G Pedestrian access and entries	✓	✓*	✓**				<p>* Complies – subject to:</p> <ul style="list-style-type: none"><li>- A condition requiring way-finding maps to assist visitors and residents.</li><li>- A further condition requiring electronic access and audio/visual intercom to manage access.</li></ul> <p>** Complies – subject to:</p> <ul style="list-style-type: none"><li>- A condition requiring a detailed lighting design ensuring well-lit pedestrian linkages.</li><li>- A further condition requiring planter boxes outside Wharf Street entrance to lobby be maintained to avoid restricting visibility.</li></ul>
3H Vehicle access	✓*						<p>* Complies – subject to:</p> <ul style="list-style-type: none"><li>- A condition requiring service vehicles to enter and exit in a forward moving direction.</li><li>- A condition requiring a rubber speed cushion and internal speed hump for traffic calming.</li><li>- A further condition requiring MRV or smaller service vehicles only.</li></ul>
3J Bicycle and car parking	✓*	✓	✓**	✓	✓	✓	<p>* Complies – subject to a condition restricting Retail 1 to a use with equivalent car parking generation</p>

							<b>** Complies – subject to:</b>  <b>- A condition requiring a detailed lighting design addressing access to common circulation areas and car parking</b>  <b>- A further condition requiring clearly defined circulation areas in the basement including but not limited to colours, line marking and/or bollards in accordance with AS2890</b>
<b>Amenity</b>							
<b>4A Solar and daylight access</b>	✓	✓	✓				<b>Complies</b>
<b>4B Natural ventilation</b>	✓*	✓	✓				<b>* Generally complies – subject to a condition requiring windows to courtyards of Typical 1 and 2 Bed apartments be openable</b>
<b>4C Ceiling heights</b>	✓	✓	✓*				<b>* Generally complies – subject to a variation to the requirement for lower-level apartments to be capable of conversion to a non-residential use</b>
<b>4D Apartment size and layout</b>	✓	✓*	✓*				<b>* Generally complies – subject to a variation to the maximum habitable room depths for open plan layouts for 0.6m exceedances (103, 203, 303, 403, 503, 603, 703, 803, 903, 1003, 1103, 1203) and 1.5m exceedances (505, 605, 705, 805 and 905).</b>  <b>* Complies – subject to a condition requiring main wardrobes be a minimum 2.1m high</b>
<b>4E Private open space and balconies</b>	✓*	✓	✓	✓			<b>* Generally complies – subject to a variation to the minimum balcony depths due to irregular shaped balconies for 101, 201, 205, 206, 301,</b>

							305, 306, 401, 405, 406, 501, 601, 701, 801, 901, 1001, 1101, 1201, 1301
4F Common circulation and spaces	✓*	✓**					<p>* Generally complies – subject to a variation to the maximum number of apartments off a circulation core from 8 apartments maximum (as per Design Criteria) to 11 proposed in compliance with the design guidance</p> <p>** Generally complies – subject to:</p> <ul style="list-style-type: none"> <li>- A condition requiring a detailed lighting design addressing circulation spaces</li> <li>- A further condition requiring legible signage for apartment numbers, common areas and general wayfinding</li> </ul>
4G Storage	✓*	✓					* Generally complies – subject to a condition requiring all apartments be allocated clearly signed storage unit in the basement and that 211 be allocated one of the larger storage units
4H Acoustic privacy	✓*	✓					* Generally complies – subject to conditions relating to noise
4J Noise and pollution	✓*						* Generally Complies – subject to conditions relating to noise
<b>Configuration</b>							
4K Apartment mix	✓	✓					Complies
4L Ground floor apartments	N/A	N/A					Complies
4M Facades	✓						Complies

4N Roof design	✓	✓*	✓				* Generally complies subject to a condition requiring physical measures restricting access to the rooftop above Level 13
4O Landscape design	✓*	✓*					<p>* Generally complies subject to a condition requiring irrigation and maintenance consistent with Landscape Plan Revision B</p> <p>* Generally complies subject to a condition requiring a Detailed Plan of Landscaping that demonstrates a minimum 80% local species</p>
4P Planting on structures	✓*	✓**	✓*				<p>*Generally complies subject to a condition requiring revised soil depths and planting for the 'feature tree' on Level 02 with Table 5 of 4P to Council's satisfaction</p> <p>** Generally complies subject to a condition requiring irrigation be provided for the whole of the landscaped development to Council's satisfaction</p>
4Q Universal design	✓	✓	✓				Complies
4R Adaptive reuse	✓	✓					Complies
4S Mixed use	✓	✓					Complies
4T Awnings and signage	✓	✓					Complies
<b>Performance</b>							
4U Energy efficiency	✓	✓	✓				Complies
4V Water management and conservation	✓*	✓	✓				* Generally complies subject to conditions
4W Waste management	✓*						* Generally complies subject to conditions
4X Building maintenance	✓	✓	✓				Complies

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**Assessing Officer**

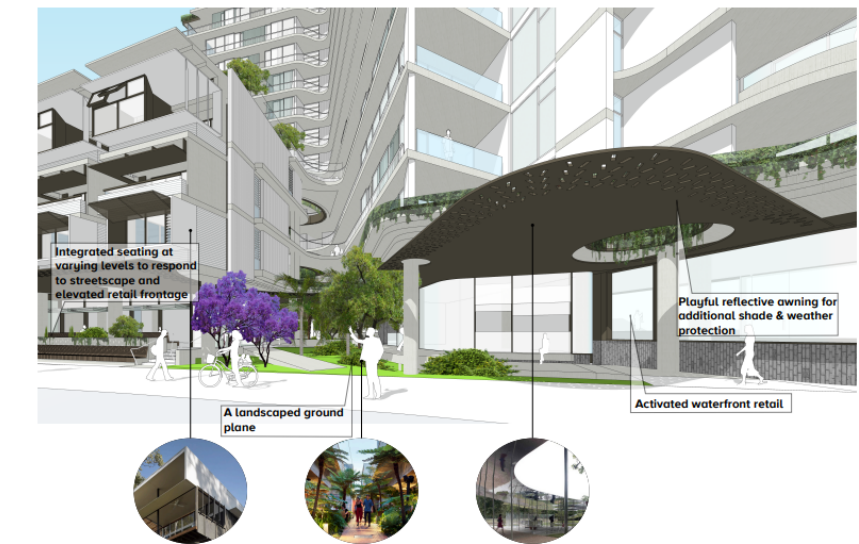
Paul Weaver

**Date:** 27 May 2025

<b>SITE ANALYSIS</b>		
<b>Objective 3A-1</b>		
Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context	Location Plans, Site Analysis Plan, Site Plan and 3D views have been provided in the Architectural Package. A further analysis has been provided in the Architectural Design Report ("Report") that accompanied the proposal. The Report provides a detailed analysis of the exploration and decision-making processes for the proposal. It considers such matters as overshadowing, wind directions, topography, the public domain (including the characteristics of the river, main street and residential frontages), setbacks (to the adjacent neighbour and street activation), north-south orientation (including primary views to the water (north) and Razorback (south), the building footprint, tree removal, deep soil zones and other landscaping, communal open space, entries and pedestrian permeability, and car park footprint.  No concerns arise.	✓
<b>Design guidance</b>		
Each element in the Site Analysis Checklist should be addressed (see Appendix 1)	The proposal has submitted the required information in Appendix 1.	✓
<b>ORIENTATION</b>		
<b>Objective 3B-1</b>		
Building types and layouts respond to the streetscape and site while optimising solar access within the development	The proposal responds to the desired future streetscape and site and utilises east and west facing units. Each streetscape is identified as unique and is addressed in a similar manner.	✓
<b>Design guidance</b>		
Buildings along the street frontage define the street, by facing it and incorporating	The building has street frontage to River Terrace (East), Wharf Street (West) and Monastery Lane (South).	✓

<p>direct access from the street (see figure 3B.1)</p> <p>Where the street frontage is to the east or west, rear buildings should be orientated to the north</p> <p>Where the street frontage is to the north or south, overshadowing to the south should be minimised and buildings behind the street frontage should be orientated to the east and west (see figure 3B.2 )</p>	<p>The desired pedestrian activation relates predominantly to the River Terrace road and river frontage. Wharf Street is also a key frontage acting as the main frontage experienced by Wharf Street travellers and arrival for the bus stop and potential light rail connection (unconfirmed). The building addresses both key areas with a retail corner, awning with cascading landscaping and common landscaping leading to a food and drink premises on the river frontage at the rear of the development at the boundary to River Terrace. Direct access is facilitated by way of outdoor dining (to the food and drink premises), communal landscaped areas (north of the food and drink premises towards the retail corner) and directly from the street to the retail corner on the Wharf Street/River Terrace corner. Access to the tower itself is via a lobby in the interior of the development, accessed via a signed entrance. The floor plan overall provides a permeable access between Wharf Street and River Terrace.</p> <p><b>2.83 RIVER TERRACE</b></p>  <p><i>Above: River Terrace/Wharf Street and Retail 1 concept.</i></p>	
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2.83 THE COMMONS



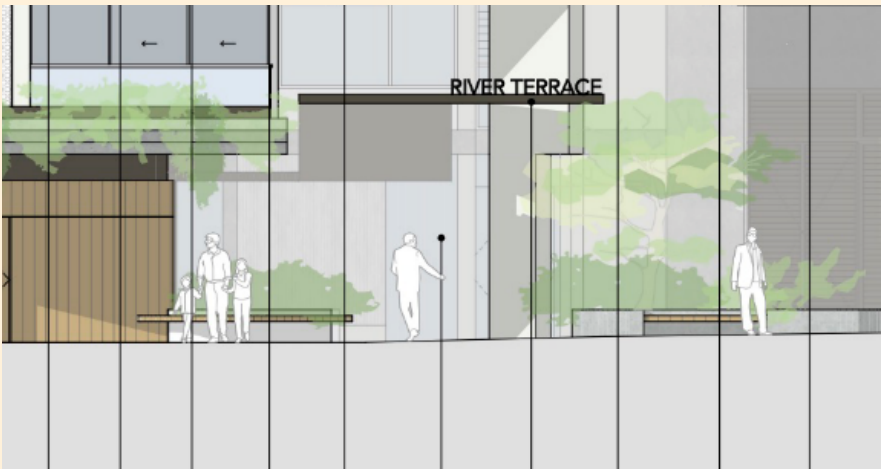
Above: River Terrace concept.



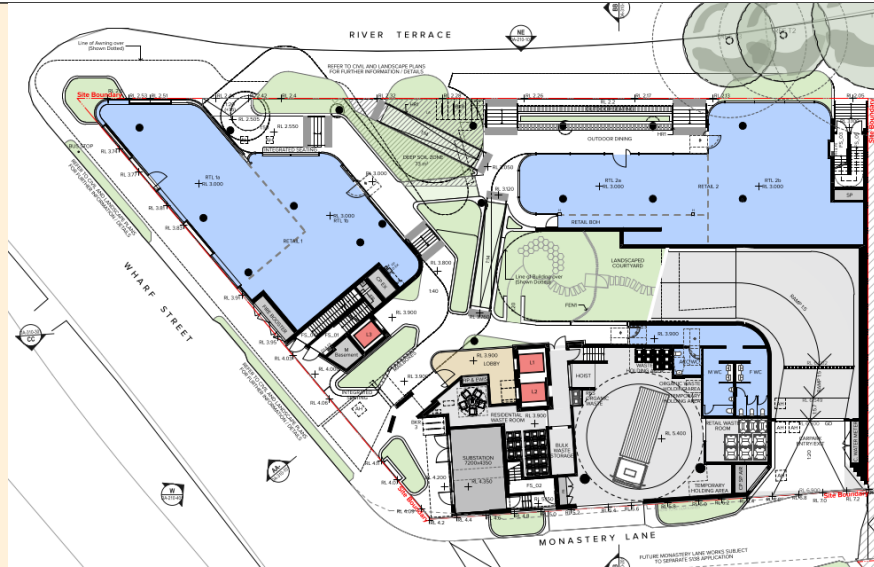
**2.83 RIVER TERRACE TOWNHOUSES**



*Above: River Terrace Townhouses and Retail 2 concept.*



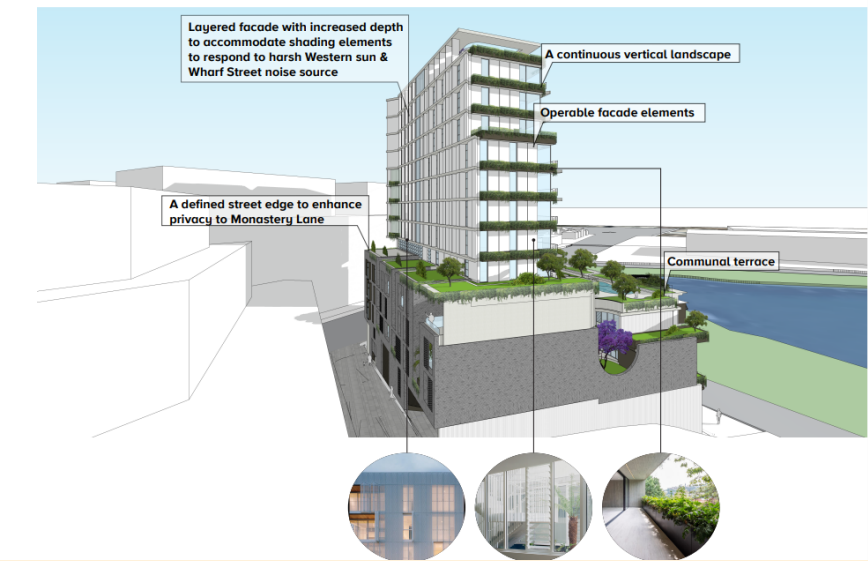
*Above: Wharf Street Elevation showing pedestrian link to River Terrace with signage.*



*Above: Ground Floor Plan excerpt.*

The Monastery Lane frontage contains a defined street edge to boundary with increased depth above the initial façade leading back to the tower units. Amenity to the residential use of Monastery Lane is managed by both passive (opening design) and active measures (screens). As per Section B2 of the DCP, Monastery Lane is proposed as the main loading and parking access and works are proposed to address that use.

2.83 MONASTERY LANE STREET EDGE

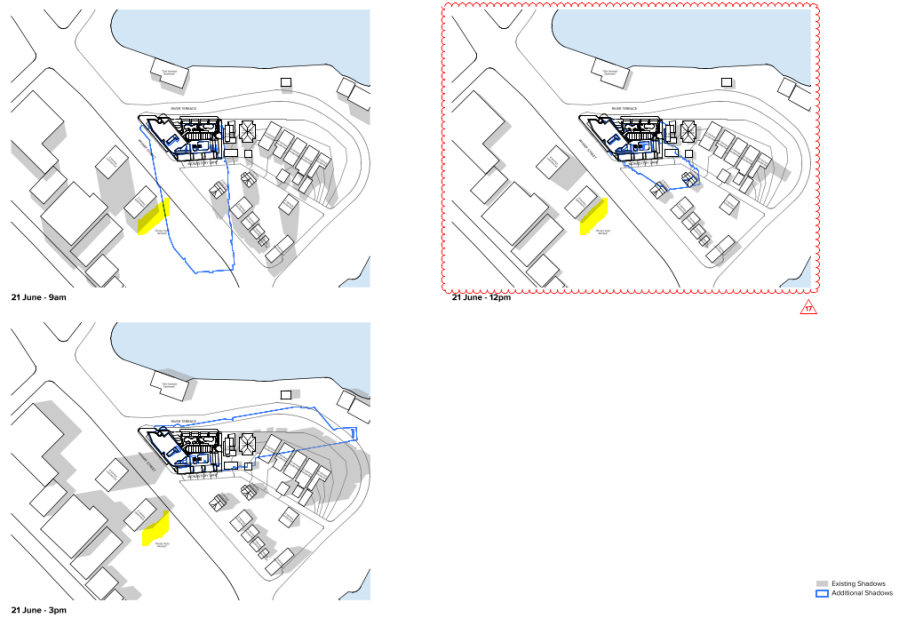


Above: Monastery Lane and interface wall concept.

	<p><b>2.83 LOCAL</b></p>  <p><i>Above: Monastery Lane concept.</i></p>	
<p><b>Objective 3B-2</b></p>		
<p>Overshadowing of neighbouring properties is minimised during mid winter</p> <p>Residential requirement = 3 hours of direct sunlight between 9am-3pm</p> <p>Revised shadow diagram received DA-790-003</p>	<p>The surrounding properties are dwellings (Monastery Hill) and dwellings/commercial buildings (west side of Wharf Street). A shop top housing development with 34 units and 2 commercial tenancies on the ground floor has also been approved (awaiting construction) at the time of this assessment (DA23/0314 – 151 Wharf Street, Tweed Heads).</p> <p><b>151 Wharf Street – Shop-top housing</b></p> <p>The shop top housing development was approved after lodgement of this application and is therefore not accurately shown in the shadow diagrams. The shadow diagrams do, however, show the site of “Andy’s Auto Rentals” which currently occupies 151 Wharf Street. At 9am in mid-winter, the proposed tower’s shadow cuts across the north-eastern corner of the 151 Wharf Street before moving away for the remainder of the day. Accordingly, it is considered solar access will not be significantly reduced.</p>	<p>Generally complies subject to a variation for 100-104 Wharf Street solar access</p>

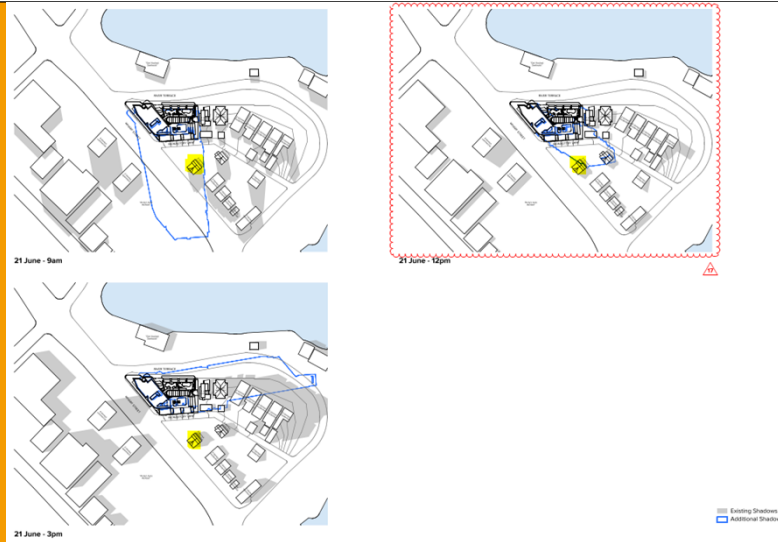


Above: 151 Wharf Street (left) and subject sites (right).

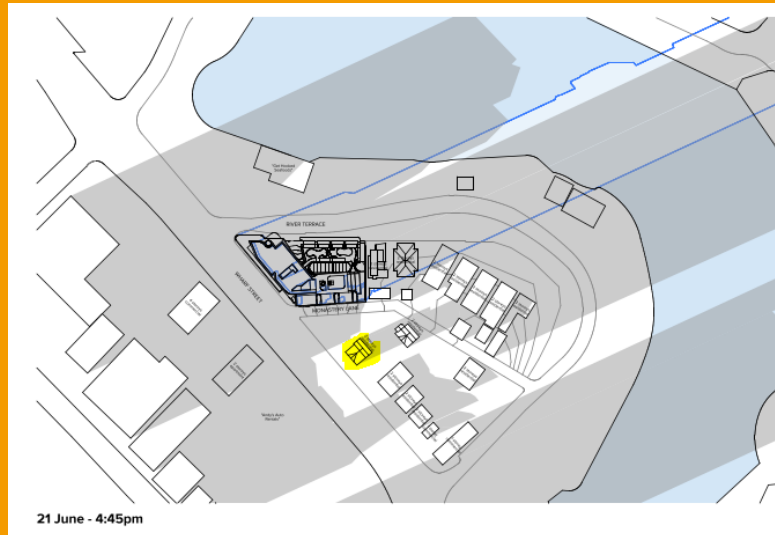
<p>The most significant overshadowing is experienced by:</p> <ul style="list-style-type: none"><li>- 100-104 Wharf Street (south of subject development and south-west of 151 Wharf Street shop-top housing development –</li></ul>	<div data-bbox="568 156 1462 783"></div> <p>Above: Overshadowing diagrams with 151 Wharf Street highlighted.</p> <p><b>153 Wharf Street – car sales</b></p> <p>No solar access concerns arise noting the current commercial use.</p> <p><b>100-104 Wharf Street – dwelling/professional consulting room</b></p> <p>The site is occupied by a dwelling and holds an approval for professional consulting rooms. The site is rated residential. Solar access has been assessed against a dwelling’s requirements.</p> <p>The dwelling will be fully overshadowed at 9am until approximately 12.00pm. Solar access is available to the dwelling from approximately 12.00pm. Note, the application submits 4.45pm overshadowing diagrams showing 100-104 Wharf Street receiving sunlight at that hour. This is not an accurate representation as sunlight will be restricted from 3pm by the shop-top housing development in DA23/0314 from 151 Wharf Street. The site is currently substantially screened to Wharf Street and vegetated to the north. It is considered the site will receive <b>approximately 2.5 hours</b></p>	
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<p>retains sunlight only 12pm-2.30pm (approx))</p>	<p>of sunlight from approximately 12.00pm–2.30pm. Noting the intervening approval of DA23/0314 and the substantial compliance with solar access for the remaining neighbouring sites, it is considered the solar access received by 100-104 Wharf Street is acceptable.</p> <div data-bbox="566 319 1176 1137"></div> <p>Above: 100-104 Wharf Street (left) and subject sites (right).</p>	
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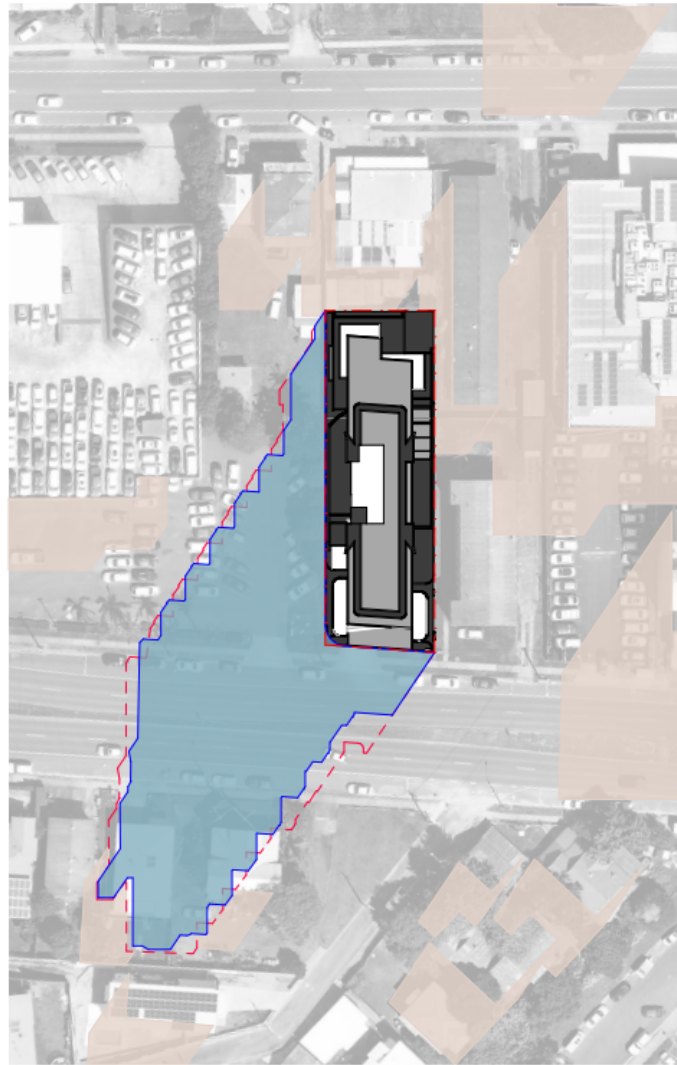


*Above: Overshadowing diagrams with 100-104 Wharf Street highlighted.*



*Above: 4:45pm overshadowing diagram with 100-104 Wharf Street highlighted.*





**JUN 22 - 3pm**

*Above: Overshadowing diagram submitted with approved DA23/0314 showing overshadowing of 100-104 Monastery Lane from 3pm.*

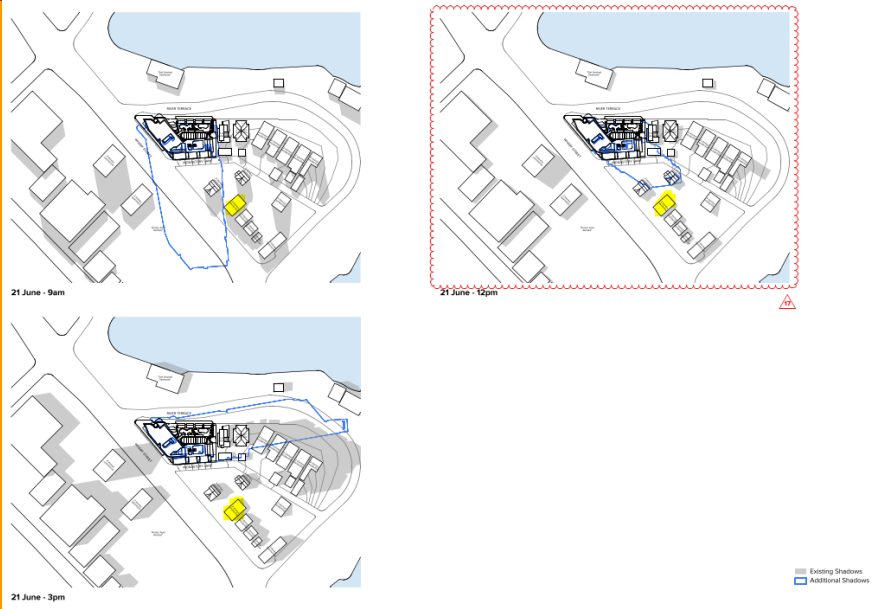
**106 Wharf Street – dwelling**

The site is occupied by a dwelling and charged residential rates. Solar access has been assessed against a dwelling's requirements.

The dwelling will receive morning sun at and prior to 9am. The dwelling will then be partially overshadowed until approximately 12pm where solar access is restored. 106 Wharf Street receives sufficient direct sunlight to comply.



Above: 106 Wharf Street (left) and subject sites (right).



*Above: Overshadowing diagrams with 106 Wharf Street highlighted.*

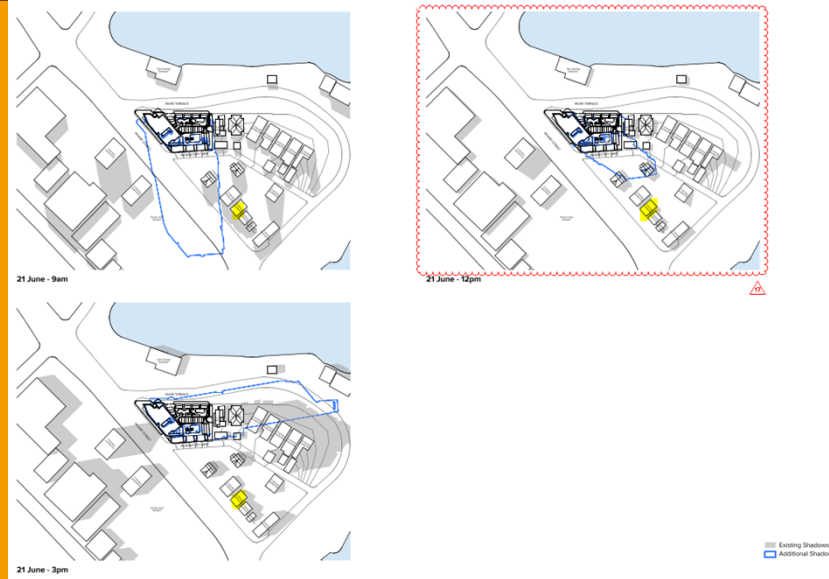
**108 Wharf Street – dwelling**

The site is occupied by a dwelling and charged residential rates. Solar access has been assessed against a dwelling's requirements.

The dwelling will receive morning sun at and prior to 9am. The dwelling will then be overshadowed until approximately 11am. The dwelling contains a private balcony to the north which receives the above solar access. Overshadowing to <50% of the rear yard occurs at approximately 12.30pm.



Above: 108 Wharf Street (left) and subject sites (right).

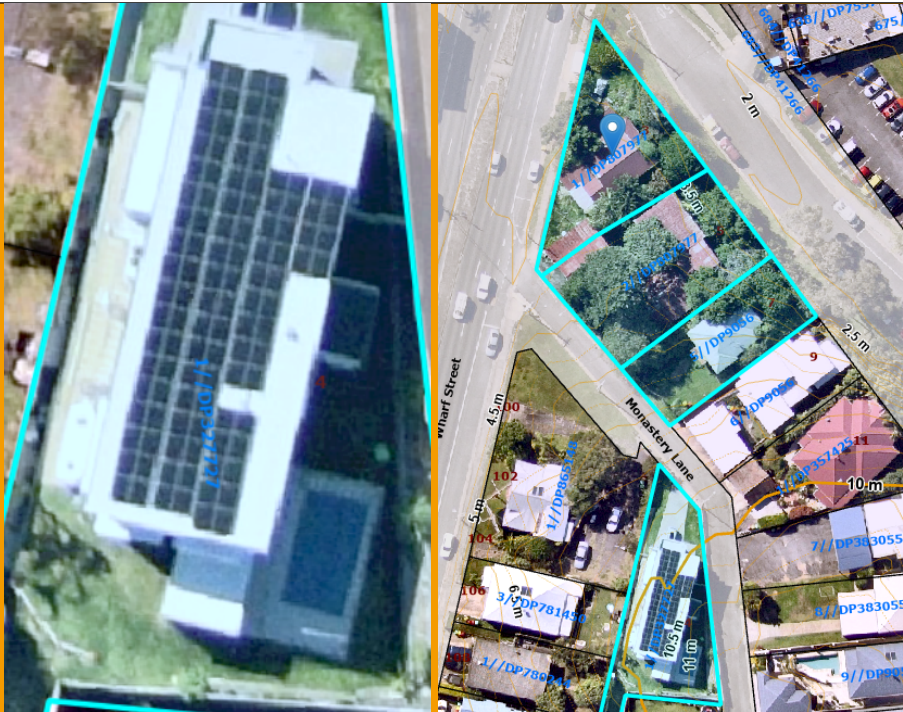


*Above: Overshadowing diagrams with 108 Wharf Street highlighted.*

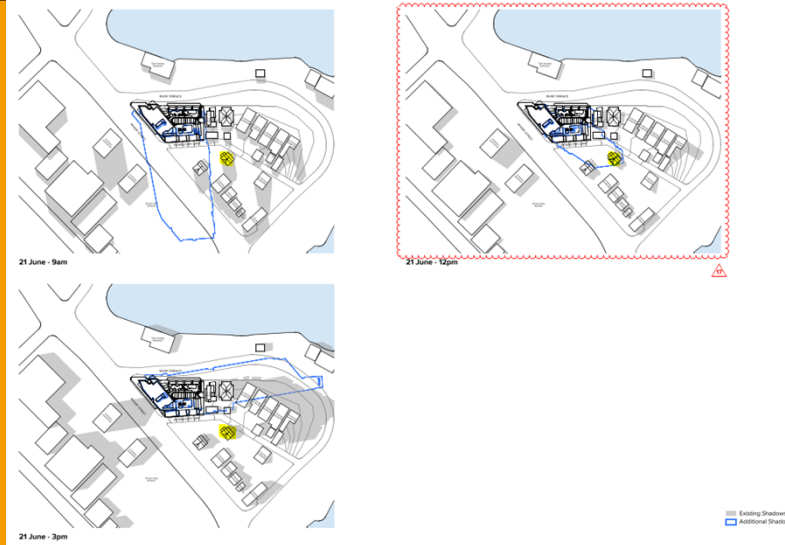
#### **4 Monastery Lane – dwelling with substantial solar panels**

The site is occupied by a dwelling that was approved in DA21/0037 (as amended). For the below plans, the garage and master suite are oriented north. A pool and open space are to the east of the site and are substantially overshadowed by the existing house from approximately 12.30pm on 21 June. The dwelling will be overshadowed by the tower from approximately 11.30pm to 1.30pm but retain solar access for the remainder of the day. A minimum of 4 hours solar access to solar panels is retained as per the Design Guidance.





Above: Left: Close up of 4 Monastery Lane. Right: 4 Monastery Lane (bottom) and subject sites (top).



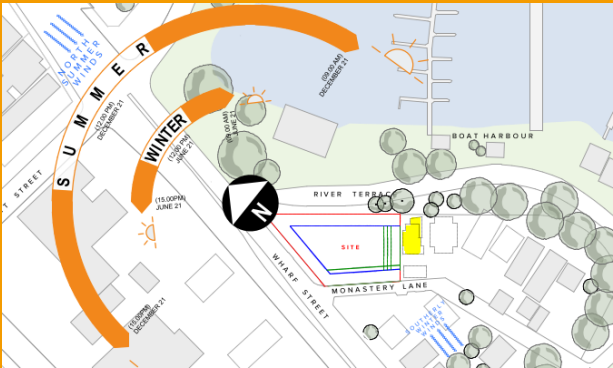
*Above: Overshadowing diagrams with 4 Monastery Lane highlighted.*

### **9 River Terrace - dwelling**

The site is occupied by a dwelling approved in 0837/2000DA and altered in DA13/0662.

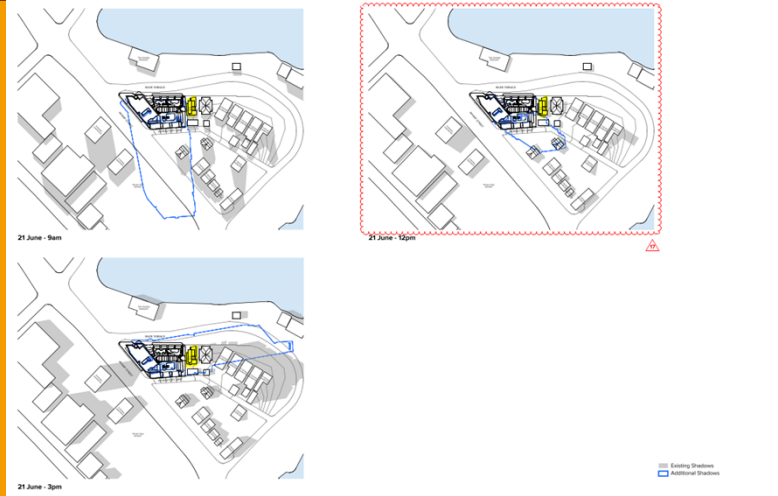


Above: Subject sites (left 3) and 9 River Terrace (right).



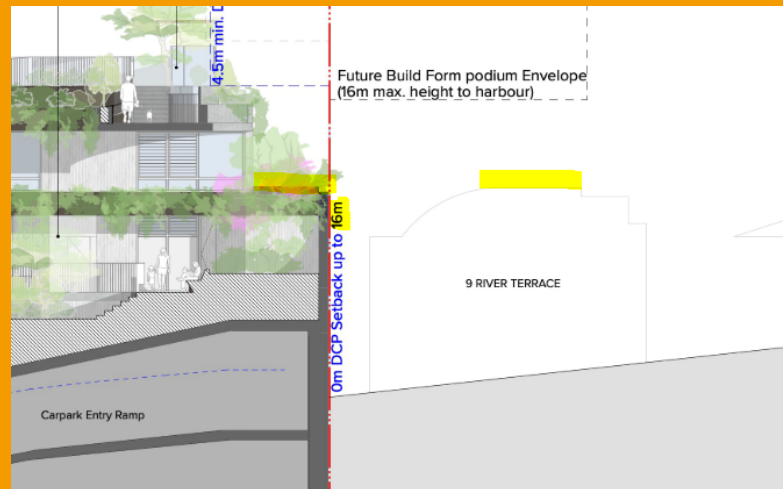
Above: Excerpt of Site Analysis Plan submitted with this application. 9 River Terrace highlighted.





*Above: Overshadowing diagrams with 9 River Terrace highlighted.*

9 River Terrace directly adjoins the subject sites and will face a zero metre setback podium boundary wall approximately 1.9m from the subject dwelling.



*Above: Excerpt of Section showing the boundary wall and 9 River Terrace.*

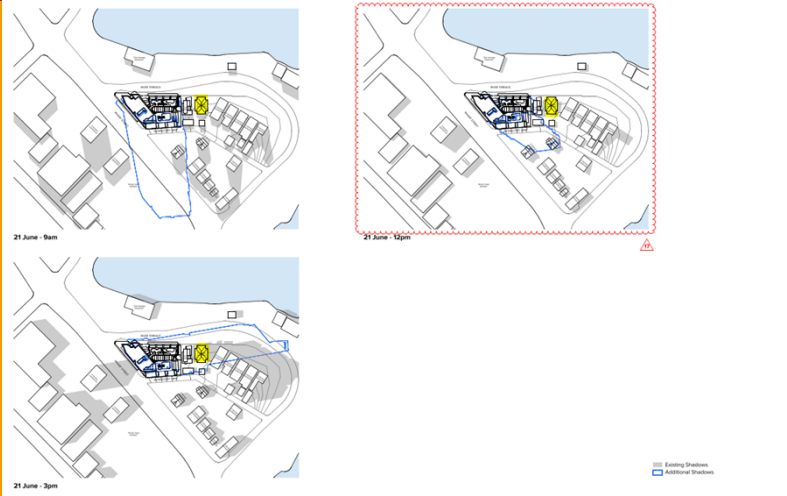
The 9 River Terrace dwelling has solar access to the front living room facing River Terrace from sunrise to approximately 1:00pm. It is noted that the existing private open space for the front deck will receive the same sunlight.

**11 Monastery Lane – dwelling**

The site is occupied by a dwelling with the most recent addition (verandah) approved in 1359/2000DA. External living space (balcony) and living room are located and face River Terrace. Solar panels are located on the northern facing roof. 11 Monastery Lane retains similar solar access to 9 River Terrace. Solar panels retain a minimum 4 hours of sunlight.



Above: Subject sites (left 3) and 11 Monastery Lane (right).

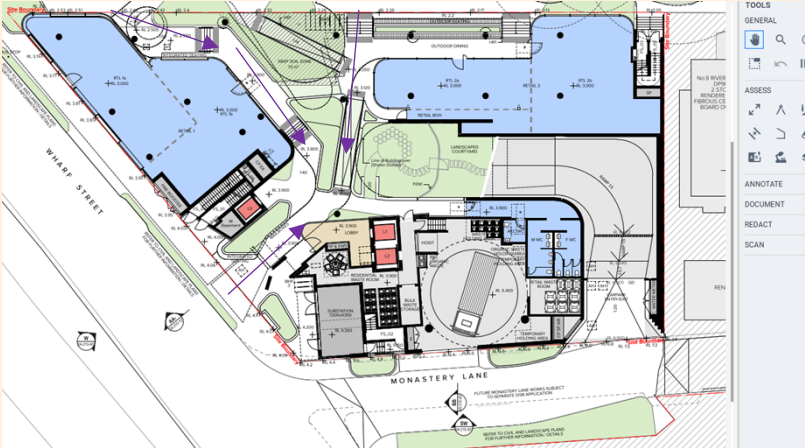



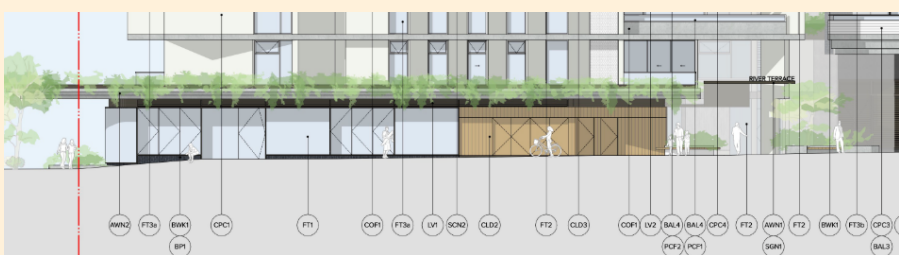
Above: Overshadowing diagrams with 11 Monastery Lane highlighted.

Design guidance

<p>Living areas, private open space and communal open space should receive solar access in accordance with sections <b>3D Communal and public open space</b> and <b>4A Solar and daylight access</b></p> <p>Solar access to living rooms, balconies and private open spaces of neighbours should be considered</p> <p>Where an adjoining property does not currently receive the required hours of solar access, the proposed building ensures solar access to neighbouring properties is not reduced by more than 20%</p> <p>If the proposal will significantly reduce the solar access of neighbours, building separation should be increased beyond minimums contained in section 3F Visual privacy</p> <p>Overshadowing should be minimised to the south or downhill by increased upper level setbacks</p>	<p>The application as originally submitted does not directly consider solar access to neighbouring living rooms, balconies and private open spaces. The application states:</p> <p><i>“Shadow diagrams... demonstrate that the shadow cast by the development is reasonable, having regard to the height and massing of the building...”</i></p> <p>Revised shadow diagrams for 21 June at 12pm were required as the shadow matched that provided for the Equinox.</p> <p><b>Revised</b></p> <p>A revised 21 June shadow diagram was submitted with the RFI response. Solar access to neighbours is addressed above. All neighbouring properties (except for 100-104 Wharf Street) retain 3 hours of direct sunlight to living rooms and private open spaces. 100-104 Wharf Street retains 2.5 hours of sunlight. However, the loss occurs due to additional overshadowing that will occur when the shop-top housing development approved on 6 August 2024 on 151 Wharf Street is constructed. Council can be satisfied that the development is successfully designed to minimise overshadowing of neighbouring properties in mid-winter.</p>	<p>✓</p>
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<p>It is optimal to orientate buildings at 90 degrees to the boundary with neighbouring properties to minimise overshadowing and privacy impacts, particularly where minimum setbacks are used and where buildings are higher than the adjoining development</p> <p>A minimum of 4 hours of solar access should be retained to solar collectors on neighbouring build</p>		
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PUBLIC DOMAIN INTERFACE		
Objective 3C-1		
Transition between private and public domain is achieved without compromising safety and security	Having regard to the design guidance, the proposal generally provides an adequately secured transition between the private and public domain.	✓
Design guidance		
Terraces, balconies and courtyard apartments should have direct street entry, where appropriate	<p>Not applicable. The first residential apartments are located from Level 1 (above the retail ground floor). Entry is obtained via lifts in the lobby and basement. Both are to be secured to control access.</p> <p>Street access to the lobby is via the centre of the site through public communal open space and separated from retail areas.</p> <p>Residential communal open space is located on the rooftop, in the central Gully courtyard (which includes a fence and access controlled gateway) and on Level 3 (on top of the lower River Terrace form).</p> 	✓
Above: Ground Floor Plan excerpt showing street access.		

<p>Changes in level between private terraces, front gardens and dwelling entries above the street level provide surveillance and improve visual privacy for ground level dwellings (see figure 3C.1)</p>	<p>Visual privacy for dwellings is mainly of concern for the dwellings located on the south/east side of Monastery Lane. The ADG provides illustrations of the use of planting or changes in level to increase visual privacy and maintain surveillance. The tower utilises changes in levels in elevated apartments (above the ground level), orientation and screening to Monastery Lane to increase visual privacy for adjacent housing. Balconies are maintained to encourage active surveillance and increase passive surveillance.</p> <p>Passive surveillance is encouraged over Wharf Street and River Terrace via substantial balconies.</p>	<p>✓</p>
<p>Upper level balconies and windows should overlook the public domain</p>	<p>Complies.</p>	<p>✓</p>
<p>Front fences and walls along street frontages should use visually permeable materials and treatments. The height of solid fences or walls should be limited to 1m.</p>	<p>No fences along street frontages are proposed. At ground level, the tower presents clear visible retail (Wharf Street) and open space and dining to River Terrace.</p>  <p><i>Above: River Terrace elevation excerpt.</i></p>  <p><i>Above: Wharf Street elevation excerpt.</i></p>	<p>✓</p>



Length of solid walls should be limited along street frontages

The River Terrace and Wharf Street frontages are shown above respectively.  
The wall to Monastery Lane is shown below.



*Above: Monastery Lane apartments elevation excerpt and 0.0m setback wall (right of elevation).*

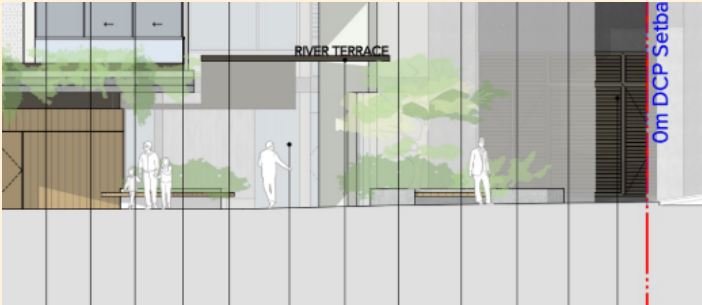


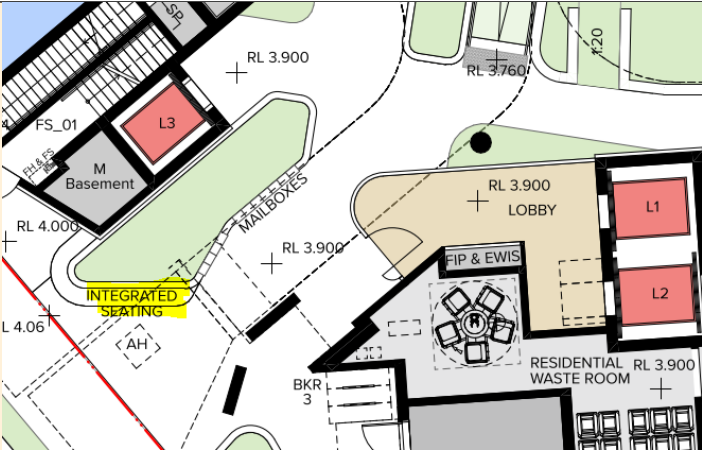
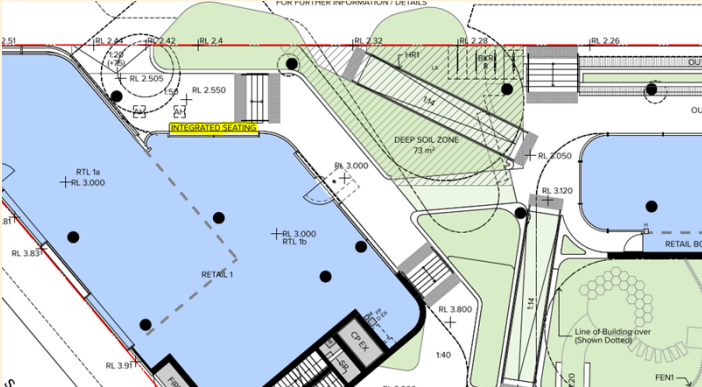
*Above: Monastery Lane apartments concept.*


While the Monastery Lane wall is a large solid colour, the wall incorporates various design treatments including brick juxtaposition, recessed balconies, designed brick

✓


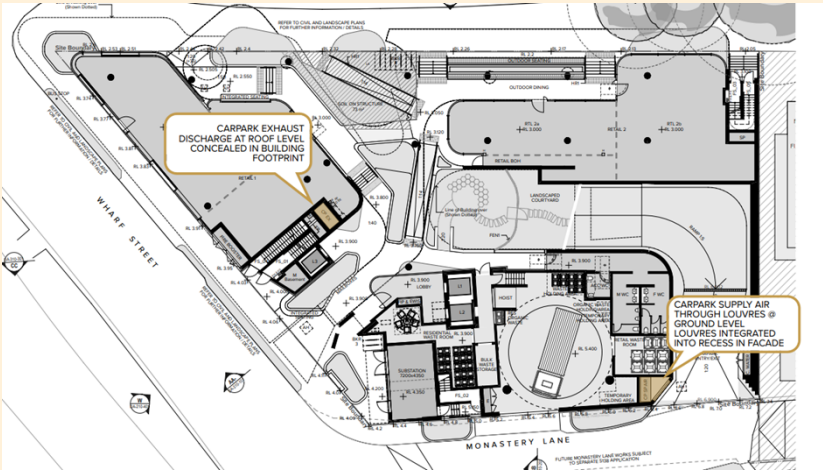


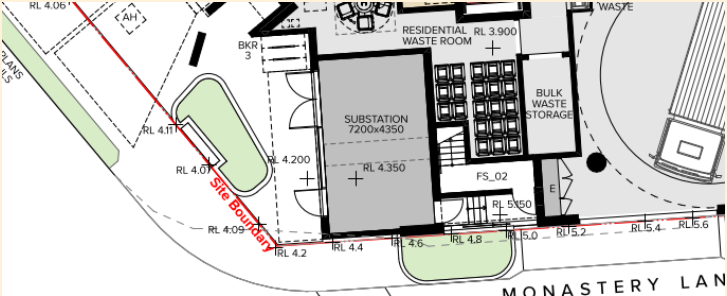
	screening and light colour garage doors. The result is an urban form appropriate to the lane that provides sufficient visual interest while balancing surveillance to the lane and privacy to adjacent dwellings.	
Opportunities should be provided for casual interaction between residents and the public domain. Design solutions may include seating at building entries, near letter boxes and in private courtyards adjacent to streets	<p>Substantial opportunities are available for interaction between residents and the public domain on River Street via access and egress routes and use of the integrated outdoor seating for the food and drink premises. Use of the retail corner on Wharf Street also encourages causal interaction. Seating is also shown outside the Wharf Street entrance and coincides with the local bus stop on Wharf Street. Integrated seating is also proposed next to the mailboxes and alongside the walkway from rental unit 1 to the communal open space towards the centre of the building. As an active retail frontage with a proposed food and drink premises, River Terrace does not raise any concerns with the option for casual interaction.</p>  <p><i>Above: Wharf Street elevation excerpt showing seating in proximity to River Terrace pedestrian connection.</i></p>	✓

	<div><p>Above: Ground Floor plan excerpt showing integrated seating in proximity to River Terrace pedestrian connection.</p><p>Above: Ground Floor plan excerpt showing integrated seating near Retail 1.</p></div>	
In developments with multiple buildings and/or entries, pedestrian entries and spaces associated with individual buildings/entries should be differentiated to	Entries for the individual retail units and walkways to the centre of the site to the lobby are clearly differentiated. Change of material (from lightweight to brick) and colour (from glass and light colours to dark) create a clear indication of the use of Monastery Lane as the vehicular entrance. The permeable front of River Terrace is designed well	✓

<p>improve legibility for residents, using a number of the following design solutions:</p> <ul style="list-style-type: none"><li>• architectural detailing</li><li>• changes in materials</li><li>• plant species</li><li>• colours</li></ul>	<p>to encourage public pedestrian flow and the lobby is set back to the centre of the site allowing an access separated from the clear public area.</p> <p>The Report states (168) that the residential lobby is visible and legible within the Wharf Street frontage and allows simple, accessible connection from the street. The Report goes on to state the residential lobby has high visibility into the main central courtyard.</p> <p>The latter is agreed. The former visibility from Wharf Street is likely considered achieved by the use of the below sign facing Wharf Street and visibility from the footpath if directly facing the lobby.</p>  <p><i>Above: Wharf Street elevation showing building entrance signage.</i></p> <table><tr><td>4.8 Advertising and Signage</td><td>A small building identification sign which consists of the words 'River Terrace', affixed above the entry awning, is proposed on the west elevation (Drawing DA-210-401).</td></tr></table> <p><i>Above: Excerpt of SEE, page 70.</i></p> <p>An additional residential entry is available off River Terrace for the apartments fronting River Terrace.</p>	4.8 Advertising and Signage	A small building identification sign which consists of the words 'River Terrace', affixed above the entry awning, is proposed on the west elevation (Drawing DA-210-401).	
4.8 Advertising and Signage	A small building identification sign which consists of the words 'River Terrace', affixed above the entry awning, is proposed on the west elevation (Drawing DA-210-401).			

	 <p><i>Above: River Terrace apartments concept with residential entrance circled.</i></p> <p>In any event, the high-quality design, changes in entry treatments and signage are sufficient for the design guidance.</p>	
<p>Opportunities for people to be concealed should be minimised</p>	<p>The communal open space is permeable and opportunities for concealment are minimised. Detailed lighting design is proposed to be addressed as part of the construction certificate.</p>	<p>✓</p> <p>Subject to condition requiring a detailed lighting design prior to issue of a construction certificate to ensure opportunities for concealment are minimised (3C-1)</p>
<p><b>Objective 3C-2</b></p>		
<p>Amenity of the public domain is retained and enhanced</p>	<p>Retail tenancies address internal courtyard and frontages.</p>	<p>✓</p>

Planting softens the edges of any raised terraces to the street, for example above sub-basement car parking	<p>The site presents terraces to River Terrace. Landscaping and timber treatments soften these raised edges.</p>  <p>Above: River Terrace elevation excerpt showing raised terraces and proposed landscaping.</p>	✓
Mail boxes should be located in lobbies, perpendicular to the street alignment or integrated into front fences where individual street entries are provided	<p>Complies. The mailbox is perpendicular to the street.</p>	✓
The visual prominence of underground car park vents should be minimised and located at a low level where possible	<p>Exhaust vents for basement ventilation are shown on the ground floor plan. 1 set of vents (left of image) is hidden inside the site. The other set of vents (right of image) is at the vehicular entrance with integrated louvres recessed into the façade.</p>  <p>Ground floor plan showing carpark exhaust discharge at roof level and carpark supply air through louvres at ground level. The plan includes labels for 'CARPARK EXHAUST DISCHARGE AT ROOF LEVEL CONCEALED IN BUILDING FOOTPRINT' and 'CARPARK SUPPLY AIR THROUGH LOUVRES @ GROUND LEVEL LOUVRES INTEGRATED INTO RECESS IN FACADE'. The plan also shows 'WYARP STREET' and 'MONASTERY LANE'.</p>	✓

	<i>Above: Image showing location of car park exhausts.</i>	
Substations, pump rooms, garbage storage areas and other service requirements should be located in basement car parks or out of view	<p><b>Substation</b></p> <p>The substation is on the ground floor and is perpendicular to the corner of Monastery Lane and Wharf Street. The façade presented to Monastery Lane is a ‘natural and brite’ matte concrete mix. The façade presented to Wharf Street is of fixed horizontal aluminium louvres for mechanical services with a dark bronze finish. While the proposed substation is contrary to the design guidance, the proposed view does not detract from the public amenity noting the surrounding façade and landscaping treatment nearby. It is noted the DRP at meeting 04 commented that the proposed location is likely the most appropriate location with alternative locations impacting edges to the public realm on Wharf Street and River Terrace or the pedestrian link of Monastery Lane.</p> 	✓
	<i>Above: Ground Floor plan excerpt showing proposed substation.</i>	





*Above: Wharf Street/Monastery Lane elevation excerpt showing location of proposed substation.*

**COF1** Off Form concrete. Natural, smooth board finish.  
Colour natural 'light and brite' concrete mix.  
Penetrating clear matte sealer over.

*Above: Proposed materials and colour around substation.*



*Above: Elevation excerpt showing proposed substation louvre system.*

**LV1**

Fixed horizontal weatherproof aluminium louvre system for mechanical services, 100mm profile with concealed frame and subframe support / allow for continuous louvre and express joints between. Colour and finish PCF2 including backpan elements. Where integral to a cladding or façade system the colour and finish to match the overall system.

*Above: Details of proposed substation louvre system.*

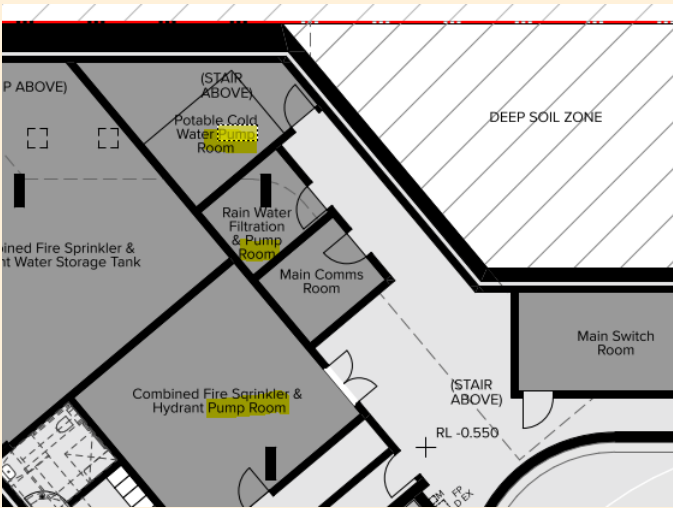
**PCF2**

Powdercoat Finish. Colour and finish equal to Interpon 'Dark Bronze' or equal.

*Above: Colours of proposed substation louvre system.*

**Pump room**

Pump rooms for potable cold water, rain water and fire water are proposed on basement level 01.

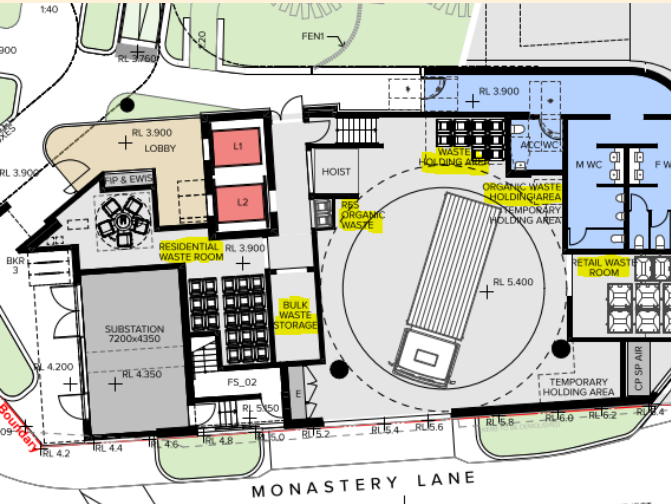


*Above: Basement 01 Plan excerpt showing pump rooms.*



**Garbage storage**

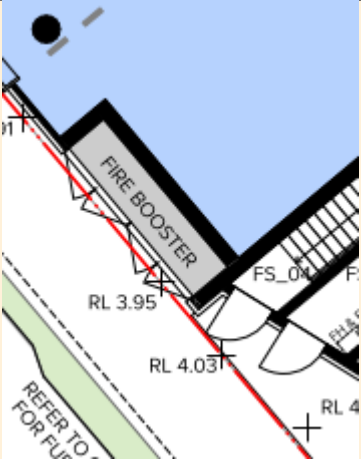

The waste rooms are located on the ground floor accessed via an internal (within the building footprint) hallway for residential waste and via the loading bay for retail waste. No public amenity concerns arise.



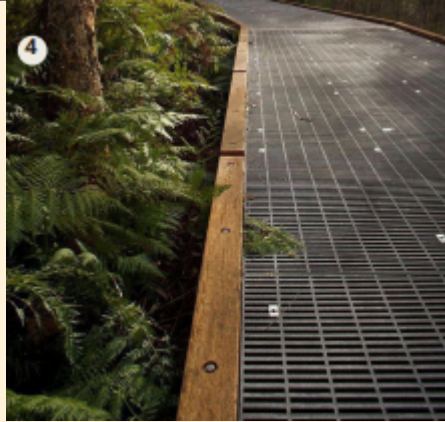
*Above: Ground Floor plan excerpt showing waste storage areas.*

**Fire Boosters**

The fire booster is located to Wharf Street and is adequately shielded with a timber look metal cladding system.

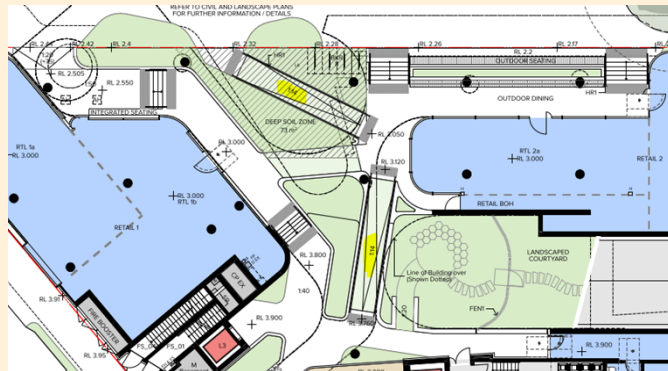
	<div></div> <p><i>Above: Ground Floor plan excerpt showing fire booster location.</i></p> <div><p><b>CLD2</b> Metal cladding system with a timber look finish equal to DecoClad V-Groove system, vertical 'v' jointed 90mm wide. Service door integrated to match. Finish and colour equal to Coastal Spotted Gum in appearance.</p></div> <p><i>Above: Details and colour of fire booster and surrounding cladding.</i></p> <div></div> <p><i>Above: Elevations excerpt showing proposed colours and details of fire booster/Wharf Street cladding.</i></p>	
Ramping for accessibility should be minimised by	Ramping is as below on the ground level.	✓

building entry location and  
setting ground floor levels in  
relation to footpath levels



*Above: Proposed raised ramping.*

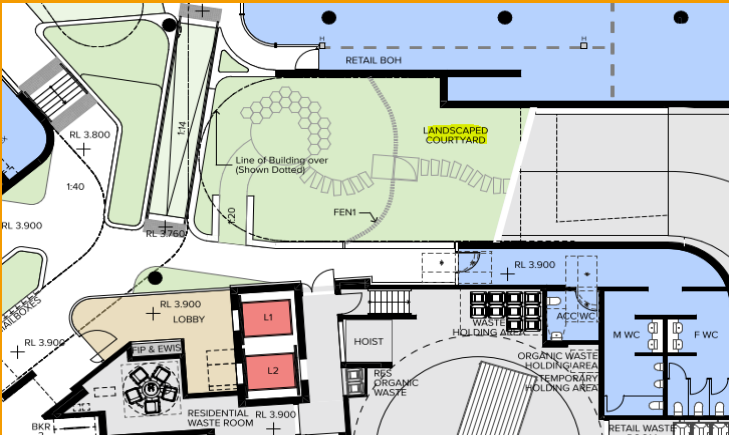
It is noted that some elevation above River Terrace is recommended due to flooding. The ramp across the applicant's nominated Deep Soil Zone (above) contrasts the areas use as a DSZ. Council's S&E unit have not sought relocation subject to other planting details (including planting details for the landscaped courtyard and planters) requested by RFI. The planting details have been submitted in response and subject to conditions, Council's Sustainability & Environment unit have raised no concerns.



*Above: Ground Floor plan excerpt showing ramp locations.*

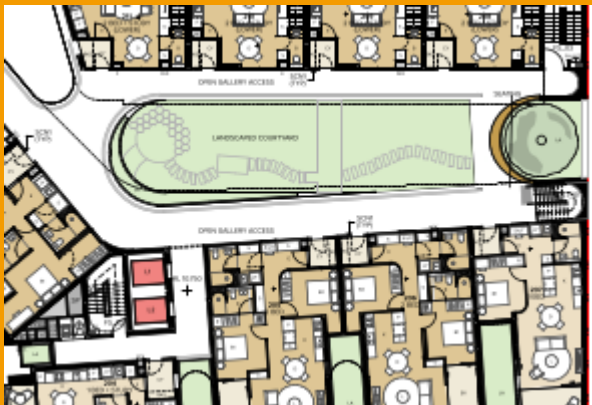
Durable, graffiti resistant and easily cleanable materials should be used	No concerns arise for the substantially brick-faced Monastery Lane. Glass and brickwork are proposed fronting River Terrace. Glass, brickwork and metal cladding are proposed fronting Wharf Street.	✓
<p>Where development adjoins public parks, open space or bushland, the design positively addresses this interface and uses a number of the following design solutions:</p> <ul style="list-style-type: none"> <li>• street access, pedestrian paths and building entries which are clearly defined</li> <li>• paths, low fences and planting that clearly delineate between communal/private open space and the adjoining public open space</li> <li>• minimal use of blank walls, fences and ground level parking</li> </ul>	<p>Section B2 of the DCP (81) states in respect of River Terrace.</p> <div data-bbox="571 343 1124 619"> <p><b>Public space</b></p> <p>c) Provide a new paved shared plaza along River Terrace where tourist uses can spill out onto, and connect directly with, the harbour activities. The shared space allows vehicular access to the harbour and to adjacent buildings, but within a pedestrian priority environment.</p> </div> <p><i>Above: Section B2 excerpt relating to public space.</i></p> <div data-bbox="571 699 1124 1069"> <p><b>Public domain interface</b></p> <p>e) Active street frontages are to be provided along the length of the River Terrace and along the corners with Wharf Street. Lively active uses are encouraged fronting the harbour including restaurants and cafés with outdoor dining areas.</p> <p>f) Car parking is to be entirely accommodated within the block with active frontages at ground level and the first floor level.</p> </div> <p><i>Above: Section B2 excerpt relating to public domain.</i></p> <p>The Report states (180):</p>	✓

	<p>The proposal creates a new retail activated waterfront precinct and ground plane, with residential apartments located above.</p> <p>The design intent is to provide an activated and attractive streetscape with pedestrian permeability through the site. The retail tenancies are orientated towards the river frontage, or the internal landscaped courtyard, providing highly desirable spaces with outdoor dining.</p> <p>The pedestrian walkways provide additional public domain facing spaces, additional opportunities of retail and activation, and areas for outdoor dining/trading which are more protected than the current street facing areas.</p> <p><i>Above: Architectural Design Report response.</i></p> <p>While no concerns have been raised by the Design Review Panel or Council's Strategic Planning and Urban Design unit, the use of the River Terrace and Monastery Lane roads for 'spillover' and for 'shared use' is not supported by Council's Roads section. The objection arises due to the additional maintenance required for the area which is not justified for the current (and after this development) population and level of use.</p> <p>Building entries to retail and to the lobby are clearly legible as is the pedestrian access to the communal areas adjacent to Retail 2. It is noted that the majority of the ground floor is accessible by the public excluding the lobby and services (including loading bay). This includes paths into the central footprint and towards these excluded areas to access public toilets. Navigational signs are proposed and recommended. A higher internal elevation assists to separate the retail and residential uses.</p> <p>Residential reserved open space is available via the gully (the ground floor courtyard) (secured access) on Level 3 and the eastern rooftop.</p>	
On sloping sites protrusion of car parking above ground level should be minimised by using split levels to step underground car park	Not applicable.	✓
<b>COMMUNAL AND PUBLIC OPEN SPACE</b>		

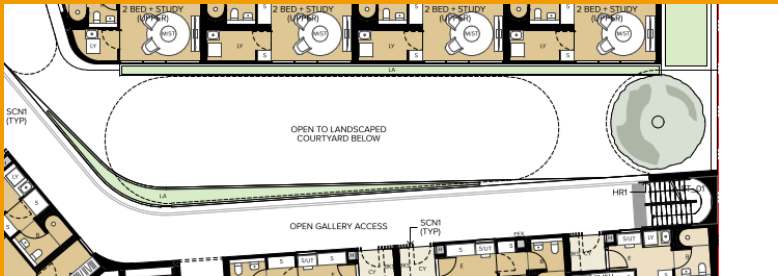
Objective 3D-1		
<p>An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping</p> <div><p>Several, high quality communal open space areas are provided within the development. The communal spaces include a central landscaped courtyard at ground level, Level 1 and 2; a communal roof top terrace overlooking the River Terrace on Level 4; and a landscaped space on Level 13. The 295 square metres communal open space area on Level 4 incorporates seating, a BBQ area, a swimming pool and soft landscaping.</p></div>	<p>Communal open space is provided as follows.</p> <p><b>Gully (and Ground Floor)</b></p> <p>The Gully is the name given to the internal courtyard shown below but is shown in the Report (136) to encompass the general ground floor landscaping. The general ground floor area is accessible by the public and includes integrated seating and circulation to the retail tenancies. The internal courtyard itself is to be secured for residential access only. The internal courtyard is open to the sky and changes in elevation as it proceeds up the levels.</p>  <p>Above: Ground Floor plan excerpt showing “landscaped courtyard”.</p>	<p>✓</p> <p>Subject to condition requiring physical measures to restrict access to the roof grassed area above Level 13.</p>



Above: Level 01 plan excerpt showing step of courtyard from Ground Floor to Level 01.

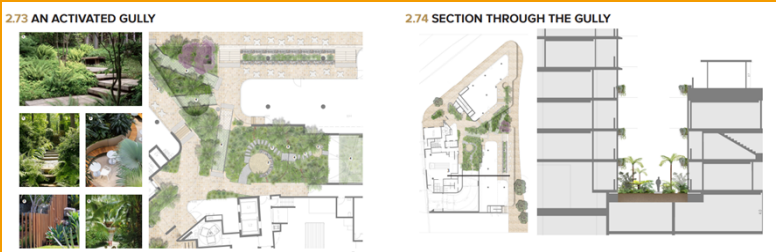


Above: Level 02 plan excerpt showing step of courtyard from Level 01 to Level 012.

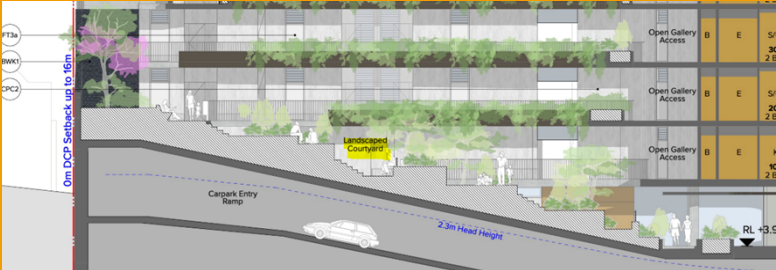




*Above: Level 03 plan excerpt.*



*Above: Gully plan and section from Landscape Package Revision B.*

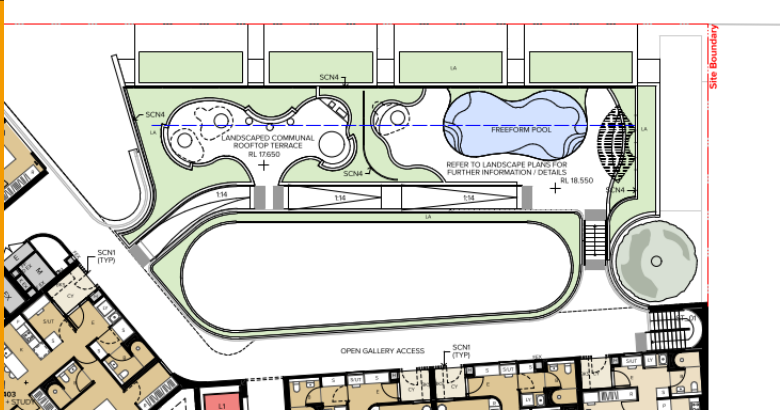


*Above: Sections excerpt showing stepped landscaped courtyard.*

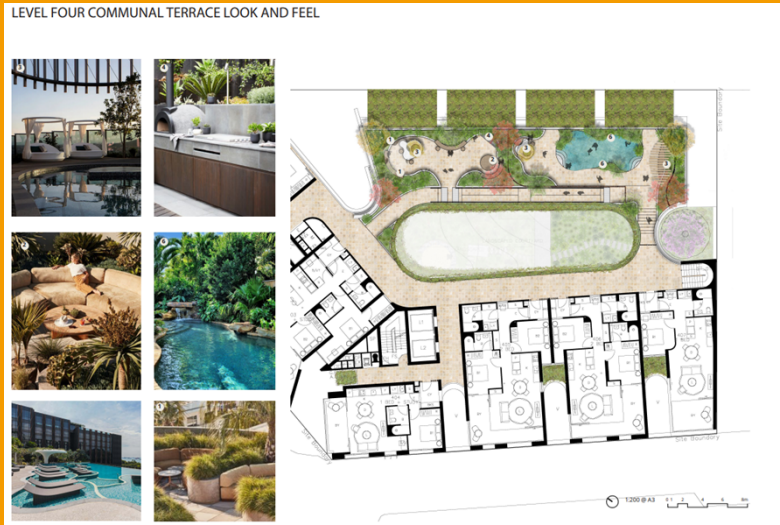
**Level 04 Communal Terrace**

In order to provide a quality communal open space for residents, the level 4 rooftop is dedicated to communal open space. This provides a large, elevated private landscaped space separated from the public domain below, offering passive and active landscape areas with pool, BBQ and communal seating areas overlooking the waterfront views.

*Above: Architects Design Report response to 3D-1, page 180.*



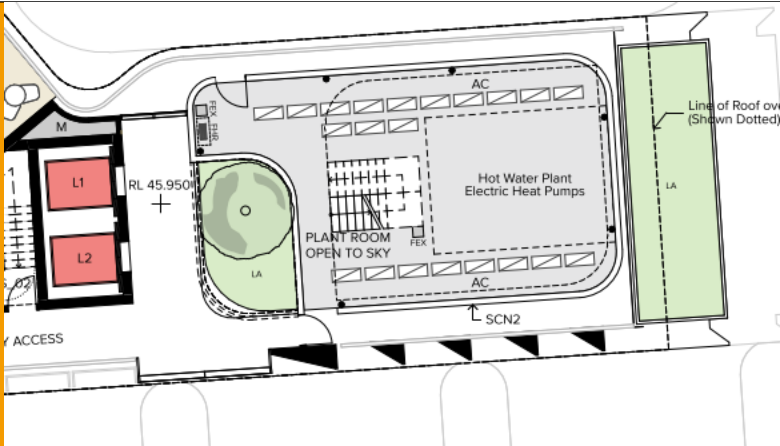
*Above: Level 04 plan excerpt showing communal open space.*



*Above: Communal Terrace (Level 04 communal open space) look and feel.*

**Level 13 Upper Level Rooftop**

The level 13 rooftop is the rooftop above the Level 12 apartments to the southern edge of the tower/site.



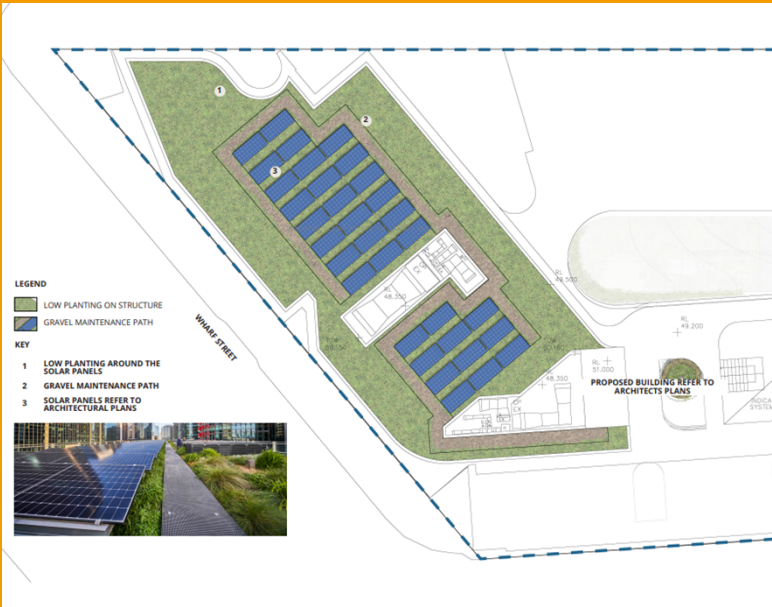
*Above: Level 13 rooftop plan excerpt showing landscaped roof and planting.*

**Roof Level Rooftop**

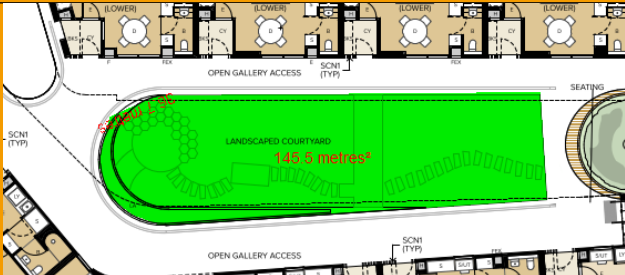
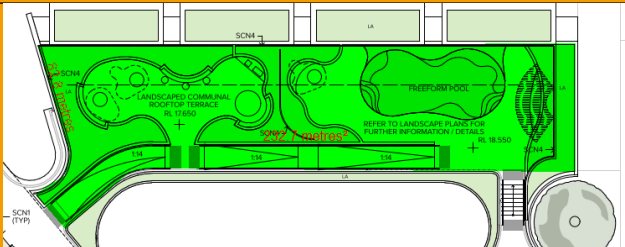
The roof level rooftop is the highest roof of the building above the Level 13 northern to the eastern edge of the tower/site. A walkway and grass is shown in the Landscape Plan. However, the Civil Plans note this area is non-trafficable and the elevations do not show any fencing. Accordingly, it is not included as relevant communal open space and a condition would be recommended for any consent restricting access to the rooftop.

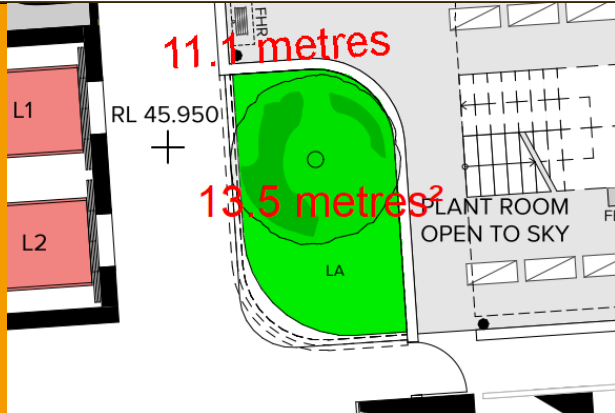
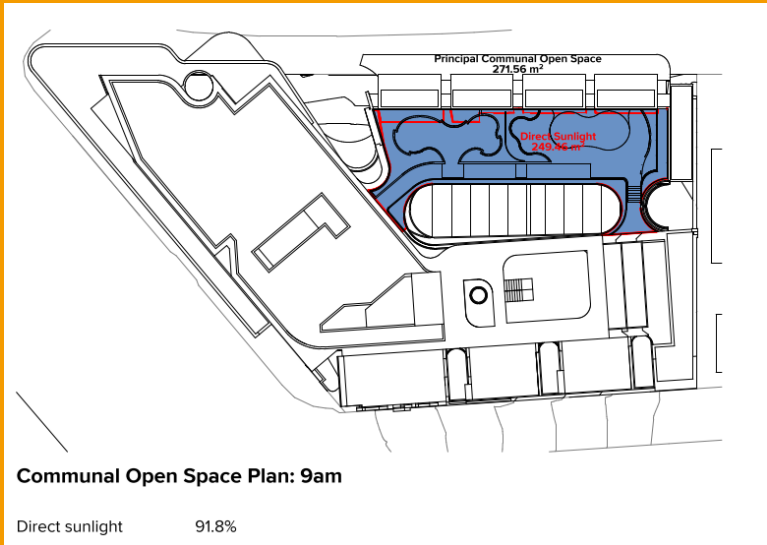


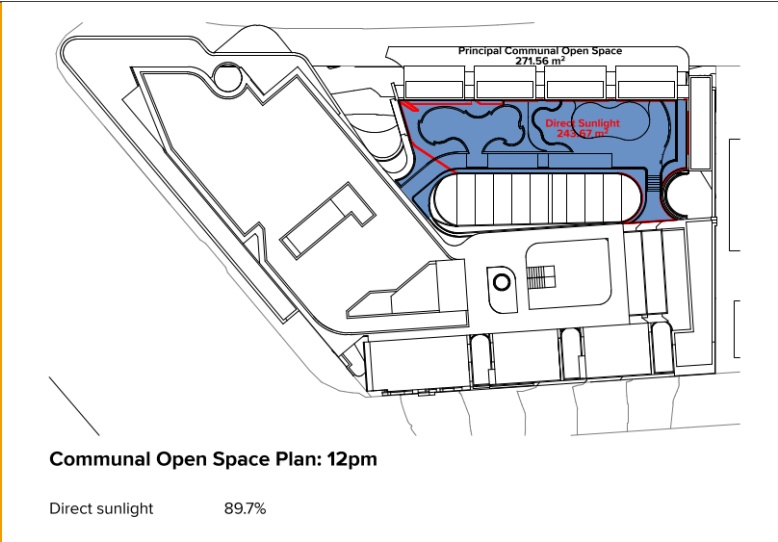
Above: Roof plan above Level 13 showing grassed roof.



Above: Landscape Plan Revision B showing walkway and grassed area.

Design criteria		
1. Communal open space has a minimum area equal to 25% of the site (see figure 3D.3)	The SEE states 635m2 is provided over 5 levels (Plan DA-730-001 and DA-730-002). Council has the below calculations totalling 391.7m2 or 21.21% of the site. While not compliant with the required 25%, it is nevertheless considered that adequate area has been provided. It is noted that most of the ground floor area is not included in this calculation as these areas will be principally used for circulation by the public and/or for retail customers and therefore do not offer exclusive residential usability (i.e. these areas are more appropriately characterised as public open space). Regardless, the area is well-designed and continues to contribute to landscaping and amenity and the opportunity for social interaction. A variation to this design criteria is supported.	
	Area	Measurement
	Gully (Internal Courtyard only. The remaining area is considered supplemental landscaping and seating servicing commercial uses).	<div></div> <p>Above: Measurement of Landscaped Courtyard (“Gully”) – 145.5m².</p>
Level 04 Communal Terrace	<div></div> <p>Above: Measurement of Level 04 communal space (“Communal Terrace”) – 232.7m².</p>	
Generally complies with variation to the numerical communal open space from 25% required to 21% proposed. Variation is recommended for support as significant area is put forward for public open space which contributes to landscaping, amenity and the opportunity for social interaction but which is not considered part of the communal open space area.		

	<p>Level 13 Upper Level Rooftop (North area only. The south area is not accessible and is treated as landscaping only).</p>	 <p>Above: Measurement of Level 13 landscaped area – 13.5m<sup>2</sup>.</p>	
<p>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)</p>	<p>The principal usable part of the communal open space is the Level 04 Communal Terrace. Sunlight is available to this space for a minimum of 3 hours between 9am and 12pm on 21 June.</p> <p>Sunlight to the internal courtyard is not shown. As abovementioned, the principal usable communal open space is Level 04.</p>  <p>Communal Open Space Plan: 9am</p> <p>Direct sunlight 91.8%</p>	✓	

	 <p>Principal Communal Open Space 271.56 m²</p> <p>Direct Sunlight 245.52 m²</p> <p>Communal Open Space Plan: 12pm</p> <p>Direct sunlight 89.7%</p>		
Design guidance			



<p>Communal open space should be consolidated into a well designed, easily identified and usable area</p> <p>Communal open space should have a minimum dimension of 3m, and larger developments should consider greater dimensions</p> <p>Communal open space should be co-located with deep soil areas</p> <p>Direct, equitable access should be provided to communal open space areas from common circulation areas, entries and lobbies</p> <p>Where communal open space cannot be provided at ground level, it should be provided on a podium or roof</p> <p>Where developments are unable to achieve the design criteria, such as on small lots, sites within business zones, or in a dense urban area, they should:</p> <ul style="list-style-type: none"> <li>• provide communal spaces elsewhere</li> </ul>	<p>No design concerns are raised. Area of communal open space is addressed above.</p> <p>Access to the ground floor is public excluding the internal courtyard which is accessible to all residents. It is noted that persons with a disability will only be able to utilise a small portion of this courtyard due to level changes. The entirety of Level 04 Communal Terrace is accessible.</p>	<p>✓</p>
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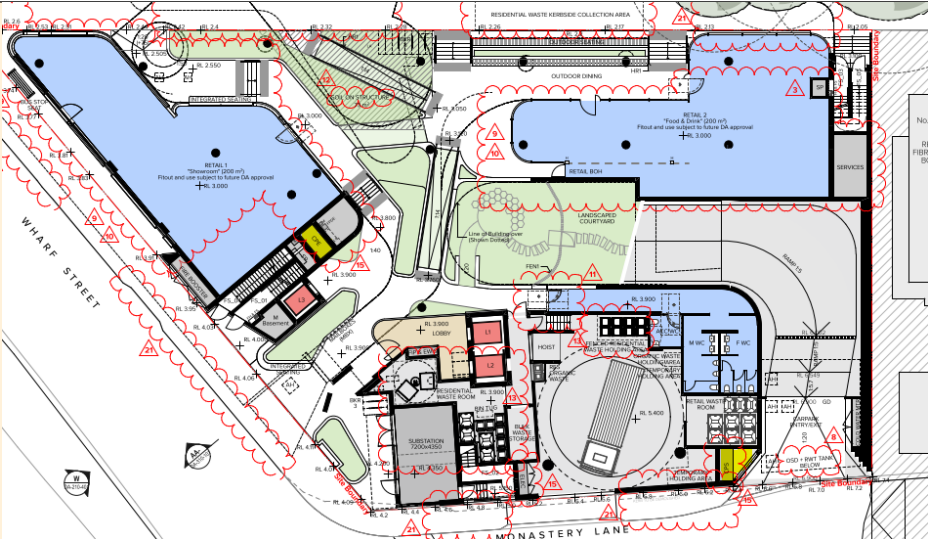
<p>such as a landscaped roof top terrace or a common room</p> <ul style="list-style-type: none"><li>• provide larger balconies or increased private open space for apartments</li><li>• demonstrate good proximity to public open space and facilities and/or provide contributions to public open space</li></ul>		
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<b>Objective 3D-2</b>		
Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting	Complies. The communal open space includes a seating area and terraced courtyard (internal courtyard) and a BBQ area, free form pool and landscaping within seating areas (Level 04 Communal Terrace). The Level 04 Communal Terrace is open to the sun with pergolas for some of the seating.	✓
<b>Design guidance</b>		
Facilities are provided within communal open spaces and common spaces for a range of age groups (see also 4F Common circulation and spaces), incorporating some of the following elements: <ul style="list-style-type: none"> <li>• seating for individuals or groups</li> <li>• barbecue areas</li> <li>• play equipment or play areas</li> <li>• swimming pools, gyms, tennis courts or common rooms</li> </ul>	The primary communal open space provides a BBQ area, a free form pool and well-designed landscaping with seating areas.	✓
The location of facilities responds to microclimate and site conditions with access to sun in winter, shade in summer and shelter from strong winds and down drafts	Wind is addressed by reference to Pedestrian Wind Environment Statement.	✓

DA24/0196 – ADG Compliance Table – 3,5 and 7 River Terrace, Tweed Heads

	<p><u>Ground level trafficable areas:</u></p> <ul style="list-style-type: none"> <li>o Inclusion of the proposed 0.5-1m high planter box with 0.5-1m high densely foliating vegetation to achieve a minimum combined height of 1.5m along the entrances on River Street and Wharf Street.</li> <li>o Retention of the proposed impermeable canopy/awning that connects the north-eastern entrance and western entrance.</li> <li>o Inclusion of high-back seating within the dining zone, or strategic inclusion of operator managed 1.2m high impermeable screens within the dining zone. The screens are to be placed between the various table table/seating set-ups to break up the winds when the zone is used for dining.</li> <li>o Inclusion of 2-3m high densely foliating evergreen trees along the River Terrace.</li> </ul> <p><u>Level 4 Balconies and communal areas:</u></p> <ul style="list-style-type: none"> <li>o Inclusion of proposed 0.5-1m high planter box with 0.5-1m high densely foliating vegetation to achieve a minimum combined height of 1.5m at the passage on the western aspect and throughout the communal areas.</li> <li>o Inclusion of proposed 0.6m high planter box with 0.4-0.6m high densely foliating vegetation to achieve a minimum combined height of 1m along the perimeter of the internal courtyard balustrade.</li> <li>o Retention of proposed 1.2-1.5m high impermeable balustrade on the balconies facing north and west.</li> <li>o Inclusion of a full height porous screen with a maximum porosity of 30% on the balcony facing the east and at the opening passage on the west.</li> <li>o Inclusion of 1.5-1.8m high impermeable screens/blade walls throughout the communal area.</li> </ul> <p><i>Above: Excerpts of Pedestrian Wind Environment Statement.</i></p> <p>Much of the above relates to the inclusion and maintenance of the planter boxes on the ground level and the Communal Terrace. Additional recommendations may be introduced subject to any footpath dining licence which may be issued separate from this application. Other recommendations including retention of balustrading and screens are implemented in the architectural plans.</p>	
Visual impacts of services should be minimised, including location of ventilation duct outlets from	Car park exhaust ventilation is shown in the updated plans below. The exhaust is screened by roller door similar to the immediately adjacent basement entrance.	✓

basement car parks,  
electrical substations and  
detention tanks



Above: Ground Floor plan excerpt showing car park ventilation locations.

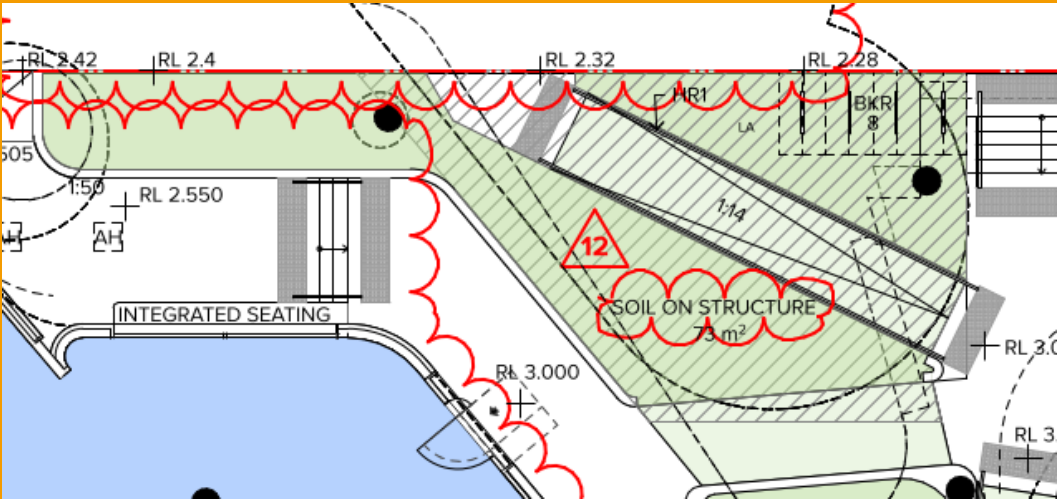


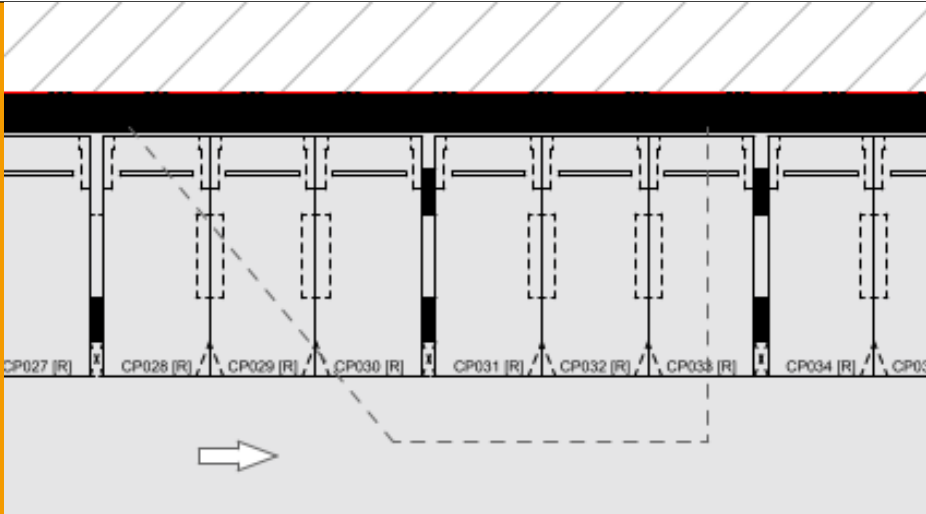
	<p><i>Above: Ventilation screening concept.</i></p> <p>The substation ventilation faces Wharf Street on the turn into Monastery Lane. The design treatment is of fixed horizontal aluminium louvres for mechanical services with a dark bronze finish as noted elsewhere in this report.</p> <p>The proposed ventilation does not impact on communal open space and contains sufficient design treatment to be acceptable in the future context.</p>	
<b>Objective 3D-3</b>		
Communal open space is designed to maximise safety	<p>The primary communal open space offering on Level 4 rooftop, is separated from the public domain through secured control points.</p> <p>The communal open space is accessed directly from the lift lobby or via the external circulation corridors surrounding the central courtyard. There is a secure line separating public and private integrated within the design of the landscaped gully.</p> <p>The communal open space/facilities are safe and contained.</p> <p><i>Above: Architect's Design Report response to 3D-3, page 180.</i></p>	✓
<b>Design guidance</b>		

<p>Communal open space and the public domain should be readily visible from habitable rooms and private open space areas while maintaining visual privacy. Design solutions may include:</p> <ul style="list-style-type: none"> <li>• bay windows</li> <li>• corner windows</li> <li>• balconies</li> </ul> <p>Communal open space should be well lit</p> <p>Where communal open space/facilities are provided for children and young people they are safe and contained</p>	<p>Secured access for residents only will be implemented for the internal courtyard and the Level 04 Communal Terrace.</p> <p>Substantial balconies overlook both communal areas.</p>	<p>✓</p>
<p><b>Objective 3D-4</b></p>		
<p>Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood</p>	<p>The public open space at ground level is connected with the surrounding streets and offers through site connections and permeability. Visual and physical links are provided from Wharf Street through to River Terrace.</p> <p>The retail tenancies encourage an activated ground plane offering outdoor dining, and integrated seating opportunities.</p> <p><i>Above: Architect's Design Report response to 3D-4, page 180.</i></p> <p>The proposed public open space responds to the existing pattern and prepares for the future use of the neighbourhood as a pedestrian friendly precinct utilising River Terrace as a plaza following upgrades proposed in Section B2 of the DCP.</p>	<p>✓</p>

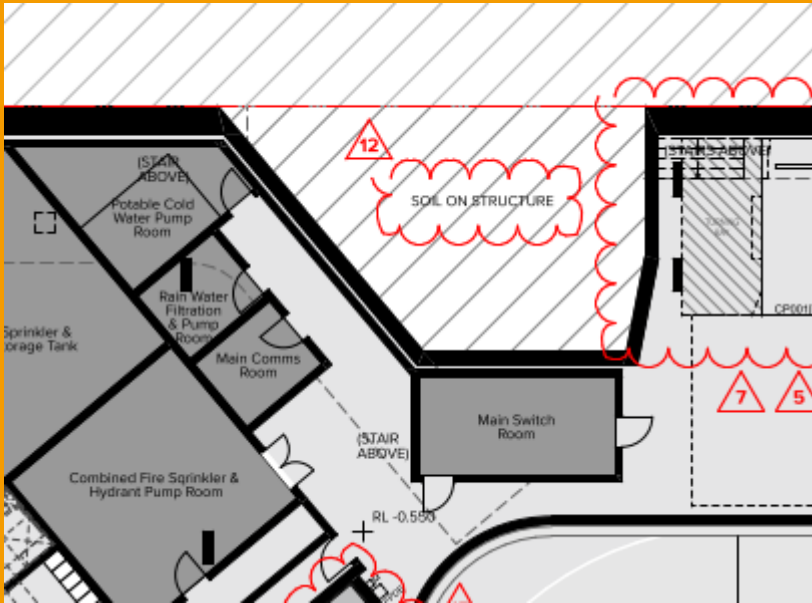


Design guidance		
<p>The public open space should be well connected with public streets along at least one edge</p> <p>The public open space should be connected with nearby parks and other landscape elements</p> <p>Public open space should be linked through view lines, pedestrian desire paths, termination points and the wider street grid</p> <p>Solar access should be provided year round along with protection from strong winds</p> <p>Opportunities for a range of recreational activities should be provided for people of all ages</p> <p>A positive address and active frontages should be provided adjacent to public open space</p> <p>Boundaries should be clearly defined between public open space and private area</p>	<p>River Terrace and Wharf Street frontages are utilised by the development. The ground floor public open space opens up to River Terrace.</p> <p>There is no nearby park or landscape element. However, the open space opens towards the proposed pedestrian plaza on the river set out in Section B2 of the DCP.</p> <p>The ground floor permits pedestrian permeability to and from Wharf Street (including near the Monastery Lane intersection) and River Terrace.</p> <p>Solar access is easily achievable noting the east facing open space. Wind is addressed in the Pedestrian Wind Environment Statement. The Statement includes recommendations extracted elsewhere in this assessment that relate to the open space fronting River Terrace.</p> <p>No concerns arise relating to the positive or active aspects of the Wharf Street or River Terrace public frontages.</p>	✓

DEEP SOIL ZONES		
Objective 3E-1		
Deep soil zones provide areas on the site that allow for and support healthy plant and tree growth. They improve residential amenity and promote management of water and air quality	<p>The plans show a Soil on Structure zone (SOSZ) (formerly labelled by the applicant as Deep Soil Zone) as follows.</p>  <p>The SOSZ coincides with a cutout in Basement 01 but there is no cutout for Basement 02 or 03. Requiring further cutout would cause the loss of 6 car park spaces for Basement 02 and 12 for Basement 02 and 03 together. Following revision, the site is at capacity for parking and cannot afford to lose further car parking spaces.</p>	<p>Does not comply but a variation is supported. The soil on structure area adjacent to River Terrace (3.95% of site) serves similar purpose to DSZ and significant other landscape areas are proposed on the key landmark site.</p>



Above: Basement 02 plan showing soil on structure location above.



	Above: Basement 01 plan excerpt showing soil on structure location.																													
Design criteria																														
Deep soil zones are to meet the following minimum requirements	<p>The site area is 1,847m2. The required Deep Soil Zone dimension is therefore 6m and 7% of the site area, being 129.29m2.</p> <p>The proposed area of the SOSZ is 73m2 or 3.95%.</p> <p>The SOSZ serves the purpose of a Deep Soil Zone for this application. In this case, the proposed area retains sufficient depth to support healthy planting and tree growth (as per Table 5 of Objective 4P-1) and retains contact with soil below the road reserve. Accordingly, the area is acceptable for the purposes of assessment under this Design Criteria.</p>	with variation to design criteria 1 as set out above																												
<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 - 1,500m²</td><td>3m</td></tr><tr><td>greater than 1,500m²</td><td>6m</td></tr><tr><td>greater than 1,500m² with significant existing tree cover</td><td>6m</td></tr></table> <div><p>Table 2    Suggested soil volumes on sites with sand, clay, alluvial, transition and disturbed soils</p><table><tr><th>Tree size</th><th>Height</th><th>Spread</th><th>Soil volume</th></tr><tr><td>Large trees</td><td>13-18m</td><td>16m</td><td>80m³</td></tr><tr><td>Medium tree</td><td>9-12m</td><td>8m</td><td>35m³</td></tr><tr><td>Small tree</td><td>6-8m</td><td>4m</td><td>15m³</td></tr></table><p><small>Note: On sandy sites with reduced soil volumes, the number of trees planted is proportional to the available soil volume</small></p></div>	Site area	Minimum dimensions	Deep soil zone (% of site area)	less than 650m²	-	7%	650m² - 1,500m²	3m	greater than 1,500m²	6m	greater than 1,500m² with significant existing tree cover	6m	Tree size	Height	Spread	Soil volume	Large trees	13-18m	16m	80m³	Medium tree	9-12m	8m	35m³	Small tree	6-8m	4m	15m³	<p>Accepting the SOSZ as acceptable to meet the intent of a DSZ, 3.95% is provided where 7% is required.</p> <p>The Report states (180):</p>	with variation to design criteria 1 as set out above
Site area	Minimum dimensions	Deep soil zone (% of site area)																												
less than 650m²	-	7%																												
650m² - 1,500m²	3m																													
greater than 1,500m²	6m																													
greater than 1,500m² with significant existing tree cover	6m																													
Tree size	Height	Spread	Soil volume																											
Large trees	13-18m	16m	80m³																											
Medium tree	9-12m	8m	35m³																											
Small tree	6-8m	4m	15m³																											

	<p>The proposal is located in an urban locality and has retail uses located on the ground floor with street alignment.</p> <p>4% of the site is nominated as Deep soil zones. Whilst this falls short of the ADG guidelines, through the Design Excellence process, the panel were in agreement that the typical metric requirement of the deep soil zones will be difficult to achieve on this site, given the complexities of the ground plan.</p> <p>It was agreed that the variation was justified based on the following -</p> <ul style="list-style-type: none"> <li>- The non-uniform lot shape which has three frontages</li> <li>- The sites highly urbanised context and land use preference to achieve active ground floor uses. If the required deep soil metrics were achieved, this would undermine the ability to deliver these land uses and the design integrity of the ground plane</li> </ul> <p>Significant other non-deep soil zone landscaping opportunities across the site have been integrated, striving for 100% site landscape reallocation.</p> <p>The Design Review Panel provided in the report for the 3<sup>rd</sup> meeting dated 23 June 2023:</p> <ul style="list-style-type: none"> <li>• In discussing the likely shortfall of AGD guidelines for deep soil zones across the site, the panel concede that the typical metric requirements of the deep soil zone will be difficult to achieve and thereby a variation would be justified based on the following: <ul style="list-style-type: none"> <li>○ The non-uniform lot shape which has three street frontages.</li> <li>○ The sites highly urbanised context and land use preference to achieving active ground floor uses in alignment with the TCCLEP 2012 MU1 Mixed Use zoning. If the required deep soil metrics were achieved, this would undermine the ability to deliver these land uses and design integrity of what is currently proposed on the ground level.</li> <li>○ Significant other non-deep soil zone landscaping opportunities across the site including the landscaped 'gully', above awning and podium level landscape planting opportunities which strives for 100% site landscape reallocation.</li> </ul> </li> </ul> <p>Acceptable stormwater management and alternative landscaping are proposed for various other areas of the building, including the internal courtyard, planter boxes</p>		
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	<p>throughout the tower, Level 04 Communal Terrace, green awnings, green edges and cascading landscaping.</p> <p>While the pedestrian/bicycle ramp transects the SOSZ area, it is not considered that would impact on the functions of the SOSZ given the ramp's elevated nature. Further, removal of the disabled pedestrian access to facilitate additional soil would not result in a more beneficial outcome.</p>	
<b>Design guidance</b>		

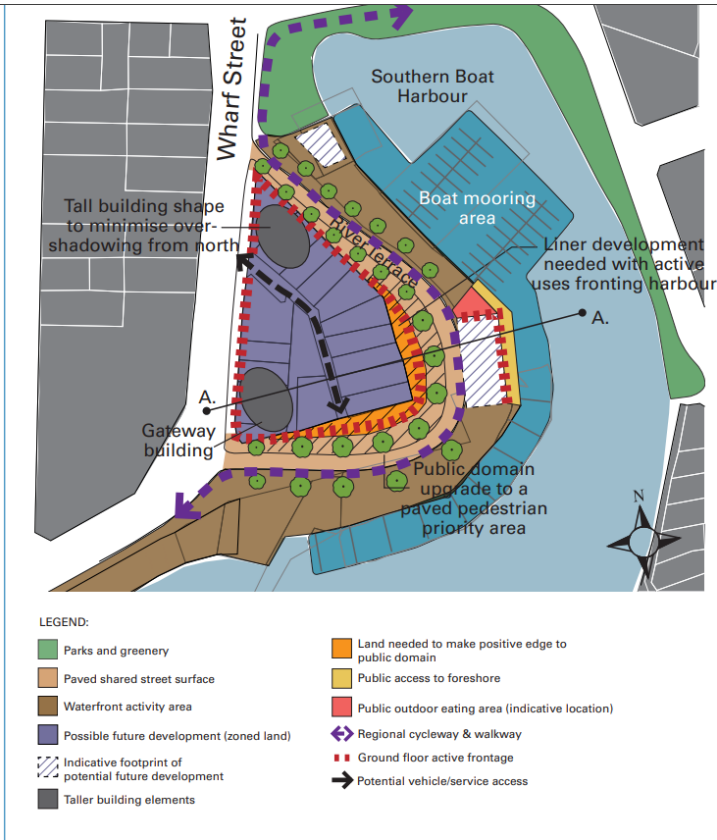
<p>On some sites it may be possible to provide larger deep soil zones, depending on the site area and context:</p> <ul style="list-style-type: none"> <li>• 10% of the site as deep soil on sites with an area of 650m<sup>2</sup> - 1,500m<sup>2</sup></li> <li>• 15% of the site as deep soil on sites greater than 1,500m<sup>2</sup></li> </ul> <p>Deep soil zones should be located to retain existing significant trees and to allow for the development of healthy root systems, providing anchorage and stability for mature trees. Design solutions may include:</p> <ul style="list-style-type: none"> <li>• basement and sub basement car park design that is consolidated beneath building footprints</li> <li>• use of increased front and side setbacks</li> <li>• adequate clearance around trees to ensure long term health</li> <li>• co-location with other deep soil areas on adjacent</li> </ul>	<p>The design guidance addresses situations where it is possible to provide larger deep soil zones but acknowledges this depends on the site area and context. Further, there are situations where the location and building typology leave little space for even the Design Criteria's required deep soil at ground level. Examples of central business districts, high density areas, centres, non-residential uses at ground level and 100% site coverage are provided.</p> <p>This development does not present 100% site coverage and is not located within the CBD. However, it does represent the northern landmark building of the future Monastery Hill development. Section B2 of the DCP makes it clear that the subject site is a key site for development and should rejuvenate the area into a mixed-use destination containing, among other things, restaurants and cafes addressing the boat harbour frontage. The proposed ground floor use is in line with the desired use and provides reasonable opportunity for the public to gather and utilise its ground floor space in line with the retail uses (including a food and drink premises) that it provides. The trade-off for the commercial spaces, pathways and seating that complement the future shared plaza of River Terrace is the loss of space that could otherwise be available for deep soil.</p> <p>This trade-off is considered acceptable as it is balanced by landscaping that is by no means absent simply due to limited deep soil. To this end, the development seeks to be a 'green' building, and does this by designed landscaping of the public open space and communal open space, internal courtyard, planter boxes throughout the tower, cutout facing the neighbouring 9 River Terrace, Level 04 Communal Terrace, green awnings, green edges and cascading landscaping throughout. As addressed by Council's Stormwater Engineer, no concerns as to stormwater flow arise subject to conditions relating to the proposed OSD.</p> <p>The variation to 3E-1 is supported.</p>	<p>with variation to design criteria 1 as set out above</p>
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sites to create larger contiguous areas of deep soil

Achieving the design criteria may not be possible on some sites including where:

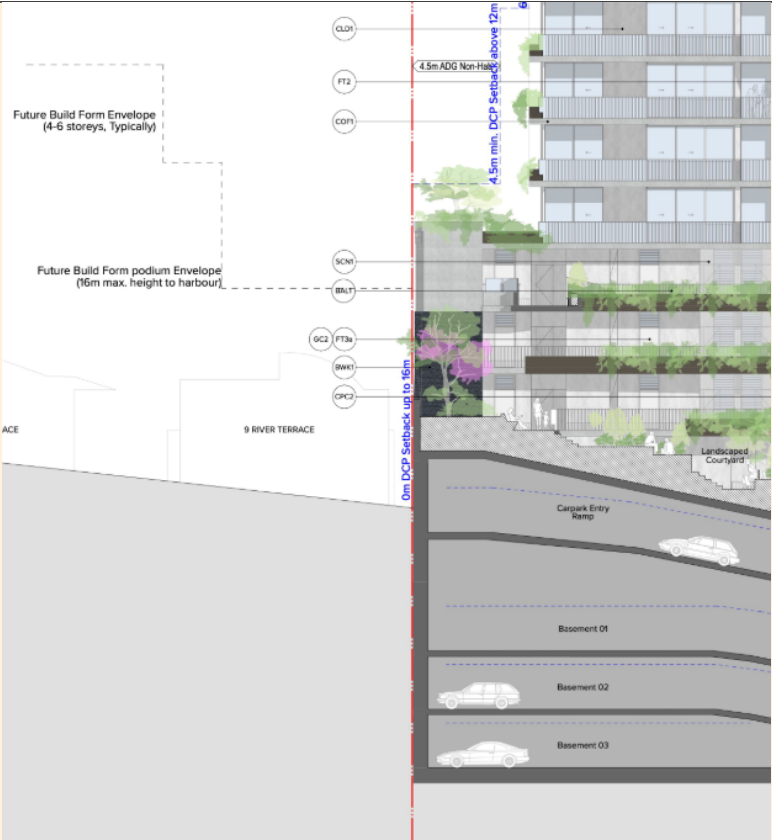
- the location and building typology have limited or no space for deep soil at ground level (e.g. central business district, constrained sites, high density areas, or in centres)
- there is 100% site coverage or non-residential uses at ground floor level
- Where a proposal does not achieve deep soil requirements, acceptable stormwater management should be achieved and alternative forms of planting provided such as on structure



Above: Section B2 of the DCP excerpt showing the future desired Southern Boat Harbour precinct.

VISUAL PRIVACY		
Objective 3F-1		
Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy	<p>The proposal relies on the future context to satisfy this objective.</p> <div><p>The proposal achieves adequate building separation to adjoining properties and anticipates the potential future context and built form.</p><p>The arrangement of apartments also considers views between apartments and to common spaces ensuring that direct sight lines between different spaces are controlled to protect privacy of the residents.</p></div> <p><i>Above: Architect's Design Report response to Objective 3F-1.</i></p> <div><div>2F Building Separation</div><div><p><b>SATISFIES OBJECTIVE</b></p><p>The development is located on a corner site at the junction of three different roads. The orientation and placement of apartments allows the design to meet the ADG objectives.</p><p>The South Eastern boundary condition assumes a lower level party wall built to boundary, consistent with the anticipated future built form. The upper level tower</p></div></div> <p><i>Above: Architect's Design Report response to Objective 2F Building Separation.</i></p> <p>The adjoining 9 River Terrace is the main external concern as the development proposes to build to this boundary (addressed further below).</p>	Does not comply in relation to interface wall with 9 River Terrace subject to a supported variation to (as below)
Design criteria		

<p>1. Separation between windows and balconies is provided to ensure visual privacy is achieved. Minimum required separation distances from buildings to the side and rear boundaries are as follows</p> <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>up 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> <p>Note: Separation distances between buildings on the same site should combine required building separations depending on the type of room (see figure 3F.2) Gallery access circulation should be treated as habitable space when measuring privacy separation</p>	Building height	Habitable rooms and balconies	Non-habitable rooms	up to 12m (4 storeys)	6m	3m	up to 25m (5-8 storeys)	9m	4.5m	over 25m (9+ storeys)	12m	6m	<p>Minimum required separation from buildings to the side and rear boundaries are required to be as follows:</p> <ul style="list-style-type: none"><li>- For habitable rooms and balconies = 12m</li><li>- For non-habitable rooms = 6m</li></ul> <p>The site has road frontage to Wharf Street, River Terrace and Monastery Lane. The only non-road frontage is the southern elevation to 9 River Terrace which is built to boundary. The elevation does not contain any rooms or balconies at heights or angles capable of raising visual privacy concerns with 9 River Terrace.</p> <p>The existing house on 9 River Terrace was erected pursuant to DA0837/2000DA with a garage also later erected pursuant to DA13/0662.</p> <p>The above plans show the existing northern setback (the setback with the subject site. is 1500mm. The rooms facing the northern boundary are a mix of habitable and non-habitable rooms including part of a balcony, laundry, staircase, entry and kitchen on the ground floor and a study, staircase, kitchen and meals room on the upper floor.</p> <p><b><u>Boundary wall – 0.0m setback to boundary to 4 storeys</u></b></p> <p>The proposed blank wall fronting 9 River Terrace is approximately 4 storeys. At 4 storeys the ADG recommends a separation distance of 6m to non-habitable windows or 0.0m to blank boundary walls. Figure 2F.2 also includes a notation stating: “<i>In areas undergoing transition from low density to higher densities, minimum building separation distances may not be achieved until the area completes its transition.</i>”</p>	<p>Does not comply subject to a variation to design criteria 1 required building separation from 9 River Terrace (as below)</p> <table><tr><th>ADG Separation to Boundary</th><th>Proposed Separation to Boundary</th></tr><tr><td>Up to 4 storeys = 6.0m</td><td>0.0m</td></tr><tr><td>5-8 storeys = 9.0m</td><td>6.0m</td></tr><tr><td>9+ storeys = 12.0m</td><td>8.0m</td></tr></table> <p>with a condition requiring window treatment to improve visual privacy for the kitchen windows of apartments 107 and 211.</p>	ADG Separation to Boundary	Proposed Separation to Boundary	Up to 4 storeys = 6.0m	0.0m	5-8 storeys = 9.0m	6.0m	9+ storeys = 12.0m	8.0m
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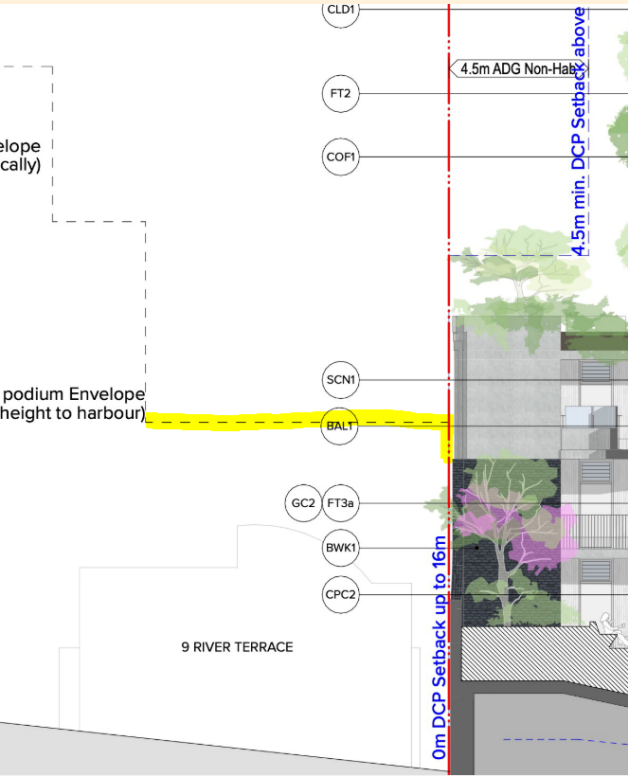
Recommended Separation	Proposed Separation
6m	0.0m (built to boundary)

The application justifies the proposed build to boundary on the basis of a future built form envelope on 9 River Terrace. In this regard, the advice letter Design Review Panel Meeting 3 states the following:

3. It is noted that the proposal includes in part a zero setback and a large inter-allotment wall that will run the length of the southern boundary. Whilst it is recognised that the precinct is in transition and that future development will also likely adopt a podium / tower configuration, this boundary wall will impact the amenity of the neighbouring property. Prior to lodging a development application, it is recommended to consult with this neighbour to introduce the project prior to lodging a development application and ascertain mitigation measures to reduce the amenity impacts. This could include

additional material articulation to the wall material and or further integration of landscape opportunities to reduce the overall scale and bulk of the wall.

*Above: Design Review Panel meeting advice letter 03.*



*Above: Elevation excerpt showing potential future podium level of 9 River Terrace if redeveloped.*

	<p>The letter identifies that it is relevant to consider both the current and future context of the precinct.</p> <p>While there is no evidence of consultation with the neighbour, the DRP 04 recommendation letter identifies:</p> <p><i>The proposal includes a zero setback inter-allotment wall on the eastern boundary. Comments in the DRP 03 letter acknowledged that the boundary wall will impact the amenity of the neighbouring property. While there is no evidence of discussion with the neighbouring property, the submitted detail includes striated concrete, thick bands of soldier course brick lines, hit and miss brick patterns and a break in the wall which reveals landscape beyond. A condition is recommended to ensure the design is constructed as presented.</i></p> <p>Mitigation measures have been presented being use of textures and material changes, a wall cut out and landscaping in the form of a “focal feature tree”.</p> <div style="background-color: #f9f9f9; padding: 5px; margin-bottom: 5px;"> <p><b>CPC2</b> Decorative precast concrete finish with white oxide concrete mix. Pigment stain finish equal to PCF1 (white). Vertical radius profile, form liner finish, 30mm spacing, 32mm diam., 53mm depth equal to Reckli 2/94 ‘Orinoco’ profile. Penetrating clear matte sealer over.</p> </div> <div style="background-color: #f9f9f9; padding: 5px; margin-bottom: 5px;"> <p><b>BWK1</b> Brickwork, Dry pressed. Colour to be selected from dark colour range. 230x76mm ‘standard’ format. Mortar colour to match brick colour or ‘black’.</p> </div> <div style="background-color: #f9f9f9; padding: 5px; margin-bottom: 5px;"> <p><b>BP1</b> Decorative brick pattern Type 1: Soldier course. 230 x 76mm brick size.</p> </div> <div style="background-color: #f9f9f9; padding: 5px;"> <p><b>COF1</b> Off Form concrete. Natural, smooth board finish. Colour natural ‘light and brite’ concrete mix. Penetrating clear matte sealer over.</p> </div>	
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	<div>COF2 Off form concrete. Decorative profiled / stepped wall element, concrete off form finish. Profile depth varies. Natural, smooth board finish. Colour natural 'light and brite' concrete mix. Penetrating clear matte sealer over.</div> <p><i>Above: Proposed materials and colours of the 0.0m boundary setback wall to 9 River Terrace.</i></p> <p>The proposed mitigation measures are acceptable providing for a reasonable level of visual amenity, noting that the aims of building separation, including promoting visual privacy, acoustic privacy, solar access and outlook are very difficult to achieve with a dwelling house adjacent to a key-site tower building. This notwithstanding, it can be confirmed that visual and acoustic privacy are protected by limiting views directly across the boundary until approximately 20m elevated above ground level. Solar access is also addressed in this assessment and 9 River Terrace manages to retain sufficient solar access in accordance with ADG requirements for 9 River Terrace's east facing living room.</p> <p>The proposed 0.0m boundary wall to 9 River Terrace is acceptable.</p> <p><b><u>Above the boundary wall – separation to 9 River Terrace boundary</u></b></p> <p>Multiple step-backs are proposed as show below.</p>	
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Above: Elevation excerpt showing building separation.

Note, the above Elevation excerpt uses measurements referring to non-habitable room separation distances. These are not accepted as the rooms are bedrooms and therefore habitable.

The increase in separation is recommended by the ADG to be at 4 storeys, 5-8 storeys and 9+ storeys. Assuming a worst-case scenario of habitable to habitable rooms, the separations to boundary are as follows:

ADG Separation to Boundary	Proposed Separation to Boundary
Up to 4 storeys = 6.0m	0.0m
5-8 storeys = 9.0m	6.0m
9+ storeys = 12.0m	8.0m



Above: Levels 07-09 floor plan excerpt showing habitable rooms facing 9 River Terrace (right of image).

The 0.0m separation to boundary has been addressed above and is considered acceptable.

	<p>The proposed 6.0m and 8.0m separations are also considered acceptable. These separation distances require a 30% variation to the controls. As noted above, the objectives of the recommended separation distances are to achieve adequate sunlight, allow open space on the site, visual privacy, acoustic amenity and desirable urban form.</p> <ol style="list-style-type: none"> <li>1. Sunlight access is naturally constrained due to the south-easterly lot position of the 9 River Terrace. The proposal seeks a sympathetic design with Levels 05 and above developing as far north and west as possible to permit sunlight to permeate to 9 River Terrace and beyond for as long as possible. Increasing separation would provide only minimal additional benefits in this regard.</li> <li>2. Open space will be naturally constrained due to the slope of Monastery Lane. Open space will likely be available at ground retail level (similar to the subject design) causing the Levels 05+ separation to be of little relevance to open space. Communal terraces may also be utilised for open space. For similar reasons set out directly above in relation to sunlight access, there would be little value in any open space being set on the western or southern boundary where the separation distance requires the variation. Accordingly, it is reasonable to assume any communal open space would be oriented towards River Terrace where no separation concerns arise.</li> <li>3. Visual privacy is of minimal concern. The relevant elevation is narrow with 2 tall windows for each apartment on Levels 05-09 and one tall window for each apartment on Levels 10-12.</li> <li>4. Acoustic amenity is of similar minimal concern, noting the minimal openings present facing 9 River Terrace and the lack of reliance on that elevation for ventilation. Acoustic amenity is managed in accordance with the noise impact assessment requirements for bedrooms (Noise Impact Assessment as conditioned by Council's Environmental Health section)</li> <li>5. No urban form concerns have been raised by the Design Review Panel or Council's Strategic Planning and Urban Design unit in their final review of amended plans.</li> </ol>	
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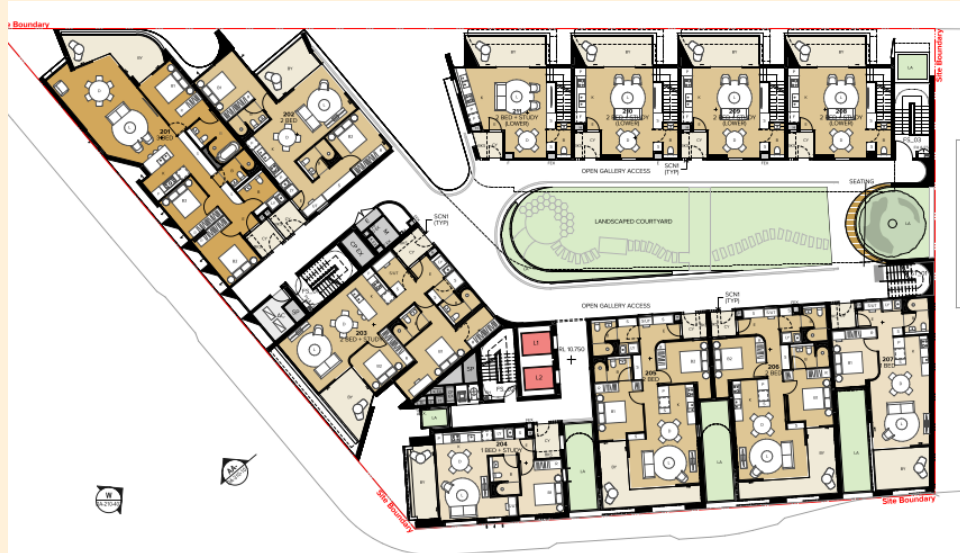
Above: Elevation excerpt facing 9 River Terrace.

**Internal – between units and gallery access circulation**

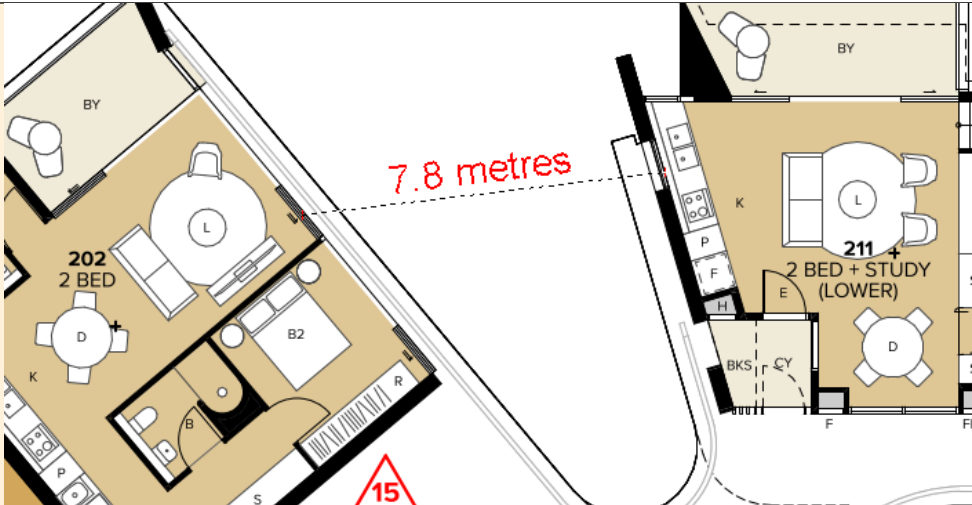
The below floor plan is of Level 02 and provides a good example of the separation achieved by the design which is replicated for each level until Level 04 where the communal terrace begins. Separation and amenity impacts from the communal terrace are addressed elsewhere in this assessment.

The four units at the top-right of the plan are separated from the remaining units by the gully cutout in the building. It is noted that a window from the kitchen of apartments 107 and 211 faces into 102 and 202 respectively with an approximate separation distance of 7.5-8.0m where 12.0m separation is required. A condition is

recommended window treatment for the kitchen windows of 107 and 211 to restrict visual privacy impacts. No concerns otherwise arise, noting that the upstairs level of 211 does not contain any openings facing 202.



*Above: Level 02 floor plan.*



Above: Indicative separation distance between 102 and 107, and 202 and 211.

The two units at the top-left of the Level 02 plan are separated from the units across the gallery hallway by the fire stairs and services. This same layout is replicated on all levels. No visual privacy separation concerns arise within the site.

Design guidance

✓

<p>Generally one step in the built form as the height increases due to building separations is desirable. Additional steps should be careful not to cause a 'ziggurat' appearance</p> <p>For residential buildings next to commercial buildings, separation distances should be measured as follows:</p> <ul style="list-style-type: none"> <li>• for retail, office spaces and commercial balconies use the habitable room distances</li> <li>• for service and plant areas use the non-habitable room distances</li> </ul> <p>New development should be located and oriented to maximise visual privacy between buildings on site and for neighbouring buildings. Design solutions include:</p> <ul style="list-style-type: none"> <li>• site layout and building orientation to minimise privacy impacts (see also section 3B Orientation)</li> </ul>	<p>As set out above noting reliance on the absence of separation required for blank walls.</p> <p>No ziggurat concerns arise.</p> <p>Lines of sight for internal windows and balconies are addressed below.</p>	
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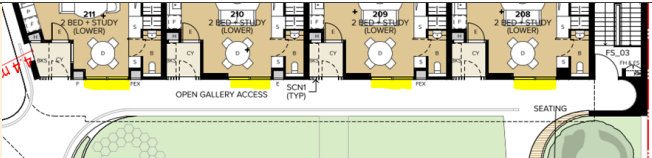


<ul style="list-style-type: none"><li>on sloping sites, apartments on different levels have appropriate visual separation distances (see figure 3F.4)</li></ul> <p>Apartment buildings should have an increased separation distance of 3m (in addition to the requirements set out in design criteria 1) when adjacent to a different zone that permits lower density residential development to provide for a transition in scale and increased landscaping (figure 3F.5)</p> <p>Direct lines of sight should be avoided for windows and balconies across corners</p> <p>No separation is required between blank walls</p>		
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Objective 3F-2		
<p><b>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</b></p>	<p><b>SATISFIES OBJECTIVE</b></p> <p>The proposal is carefully designed to manage privacy between private and communal spaces by way of screens, solid elements and landscaping. Care has been taken to ensure that the private spaces and windows between apartments are set such that there are no direct sight lines that might compromise privacy.</p> <p><i>Above: Architect's Design Report response to Objective 3F-2.</i></p>	<p>✓</p> <p>with a condition demonstrating elevation or window treatment to a height of 1.8m to Council's satisfaction for each of the windows of concern</p> <p>with a condition requiring visual privacy protection to Council's satisfaction for each of 208-211 living room doors</p> <p>with a condition requiring opaque screening to Council's satisfaction for the screen between the communal terrace and 402.</p>
Design guidance		
<p>Communal open space, common areas and access paths should be separated from private open space and windows to apartments, particularly habitable room windows. Design solutions may include:</p> <ul style="list-style-type: none"> <li>• setbacks</li> </ul>	<p>Solid balustrades are provided up to Level 06 for part of the height of the balustrade to assist privacy.</p> <p>The following areas (untreated) do not comply with separation guidance for windows to habitable rooms of apartments and public areas (namely the accessway and open gallery). These are to recommended to be managed by condition (see below).</p> <ol style="list-style-type: none"> <li>1. Level 01 – windows from utility space and bathroom to accessways</li> </ol>	<p>✓</p> <p>subject to above conditions</p>

<ul style="list-style-type: none"><li>• solid or partially solid balustrades to balconies at lower levels</li><li>• fencing and/or trees and vegetation to separate spaces</li><li>• screening devices</li><li>• bay windows or pop out windows to provide privacy in one direction and outlook in another</li><li>• raising apartments/private open space above the public domain or communal open space</li><li>• planter boxes incorporated into walls and balustrades to increase visual separation</li><li>• pergolas or shading devices to limit overlooking of lower apartments or private open space</li><li>• on constrained sites where it can be demonstrated that building layout opportunities are limited, fixed louvres or</li></ul>	<div><p>Above: 102.</p><p>Above: 103.</p></div> <div>2. Level 02 – window from utility space and sliding doors to accessways</div> <div><p>Above: 202.</p></div>	
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screen panels to windows  
and/or balconies

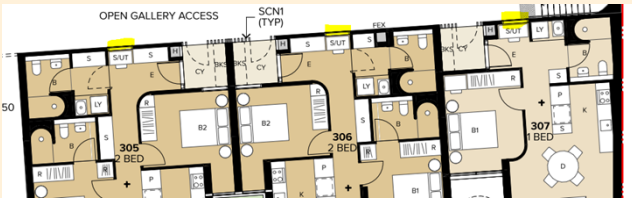


Above: 208-211.

3. Level 03 – windows from utility spaces to accessways

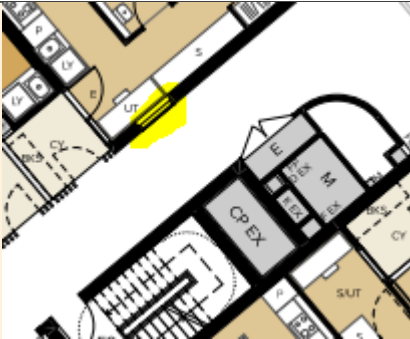


Above: 302.



Above: 305-307.

4. Level 04 – windows from utility spaces to accessways

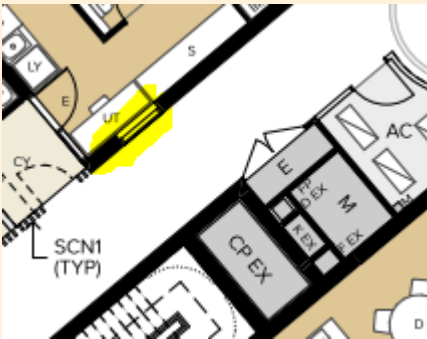


Above: 402.

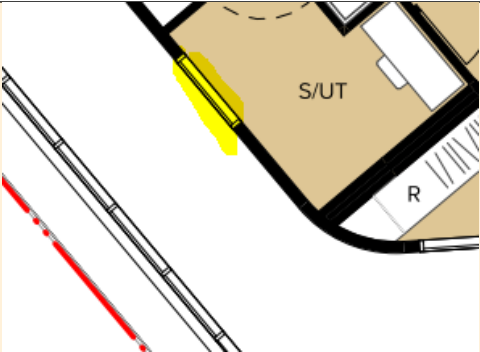


Above: 405-407.

5. Level 05 – window from utility spaces and window from study room to accessways

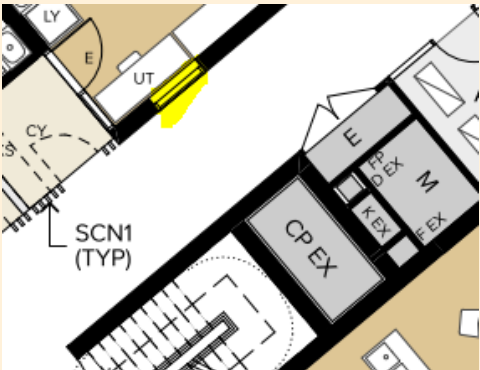


Above: 502.

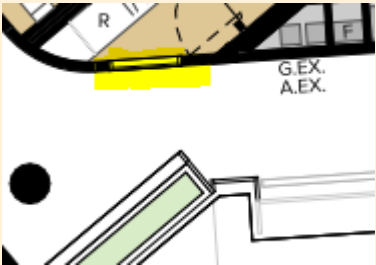


Above: 503.

6. Level 06 – windows from utility spaces and robe to accessways

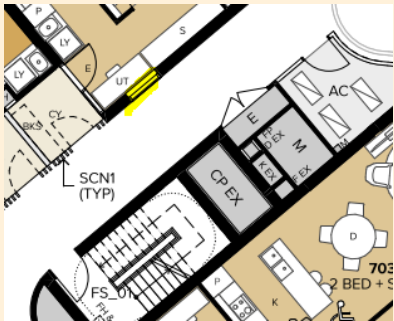


Above: 602.

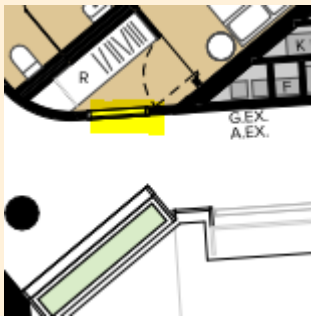


Above: 603.

7. Levels 07 – 09 – windows from utility spaces and robe to accessways



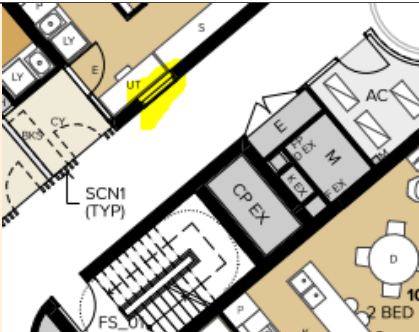
Above: 702, 802, 902.



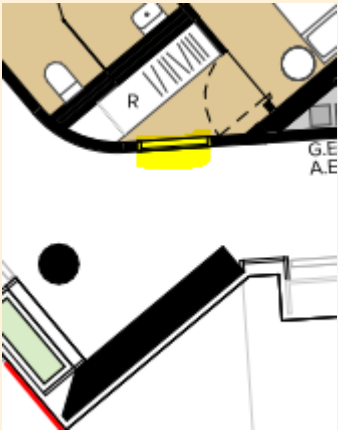
Above: 703, 803, 903.

8. Level 10 – windows from utility spaces and robe to accessways



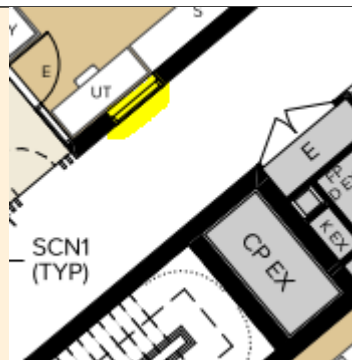


Above: 1002.

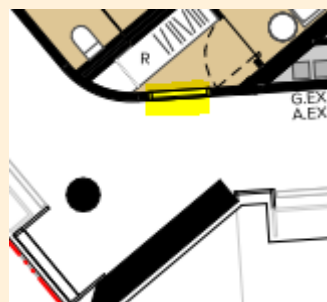


Above: 1003.

9. Levels 11 – 12 – windows from utility spaces and robe to accessways

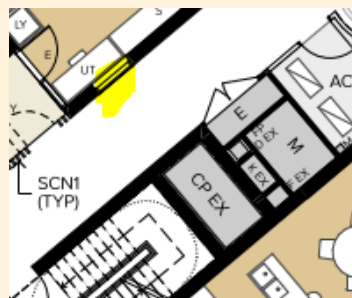


Above: 1102, 1202.

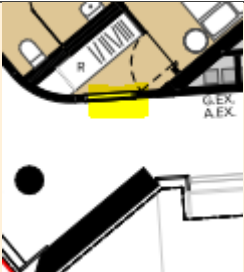
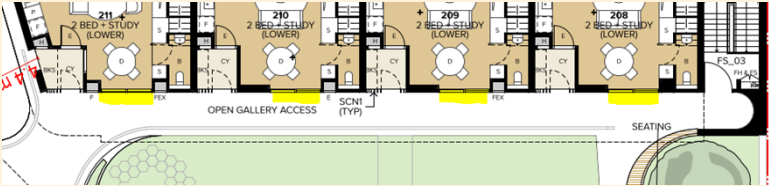
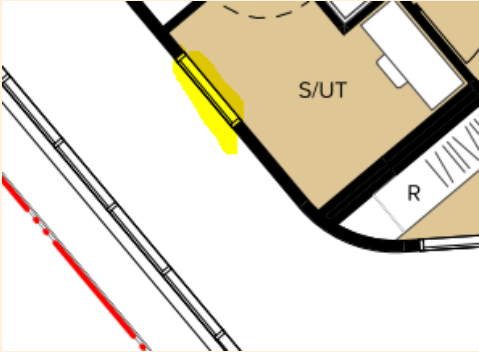


Above: 1103, 1203.

10. Level 13 – windows from utility spaces and robe to accessways



*Above: 1302.*

	 <p>Above: 1303.</p>	
Bedrooms, living spaces and other habitable rooms should be separated from gallery access and other open circulation space by the apartment's service areas	<p>It is considered that the above areas which are into robe rooms or utility spaces can be addressed by elevated windows or window treatment to be submitted by way of condition.</p> <p>Concerns arise with respect to Level 02's large living room sliding doors and Level 05's large utility room window openings to open gallery access.</p>  <p>Above: Level 02.</p> 	✓

*Above: 503.*

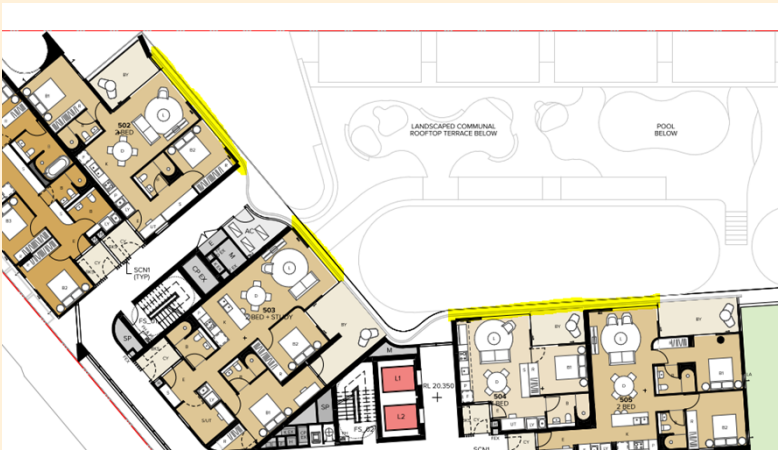
With respect to the Level 02 sliding doors, these windows are to dining/living rooms but are proposed to be covered with 40% transparency film. The application does not demonstrate the visual privacy afforded by this film. A condition is recommended requiring Council satisfaction of visual privacy treatments to these doors prior to CC.

**GC2** Glass type 2, translucent white with 40% visual light transmission. Glazing integral to façade system i.e FT1,2, etc.

*Above: Proposed treatment for 208-211 living room doors.*

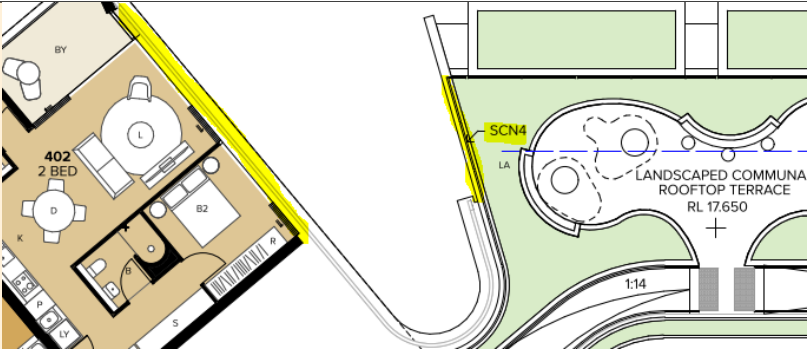
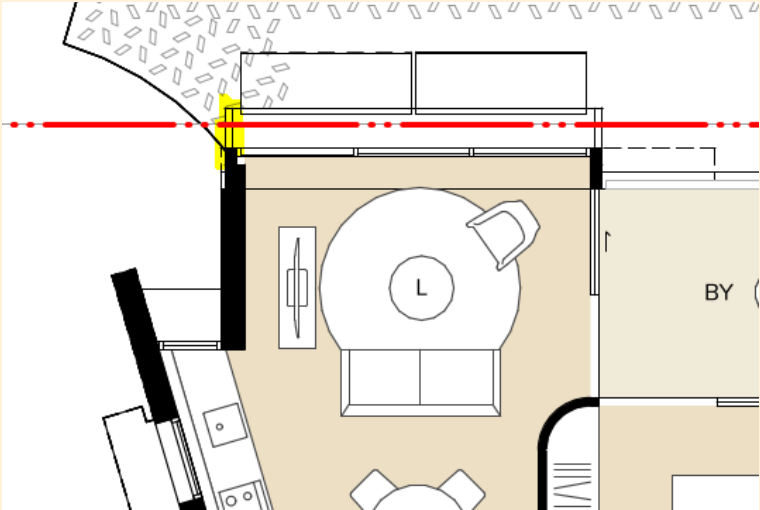
With respect to 503’s utility window, a condition demonstrating elevation or window treatment to a height of 1.8m to Council’s satisfaction is recommended. The same condition is recommended for each of the shown window openings in the design guidance above.

It is noted that balconies are provided which are technically connected to accessways and other apartments. However, it is not considered access is readily available through the 0.2m gap between the balconies and wall.

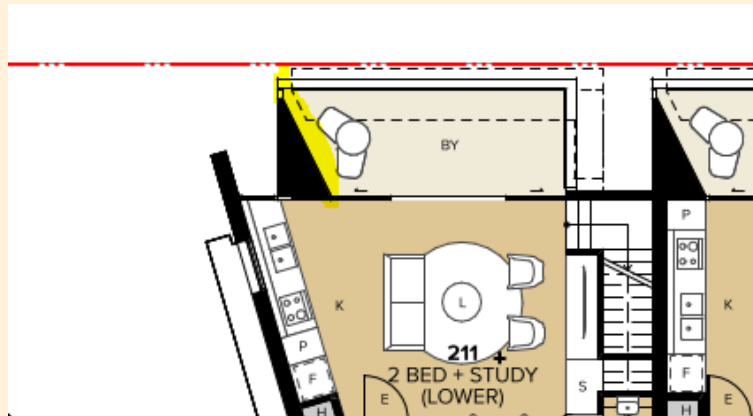


*Above: Balcony for Levels 05-13.*

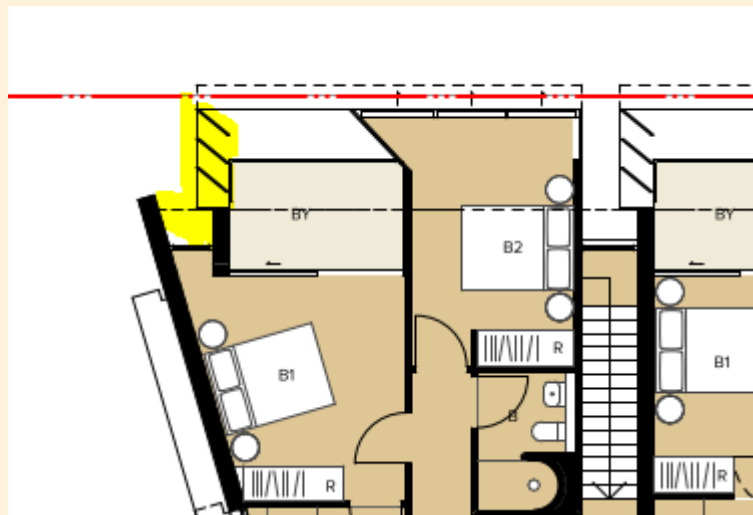
	 <p>Above: Concept of apartment balconies facing River Terrace.</p>	
Balconies and private terraces should be located in front of living rooms to increase internal privacy	Complies	✓
Windows should be offset from the windows of adjacent buildings	<p>There are no buildings on adjacent sites other than 9 River Terrace which is below the height of relevant apartments.</p> <p>Internal privacy concerns are shown below for Levels 01, 02 and 04. No internal privacy concerns arise for the remaining levels.</p>  <p>Above: Levels 01 and 02 - the entirety of the highlighted wall is glass and visible from the adjacent kitchen window.</p>	✓

	 <p>Above: Level 04 – the same highlighted glass wall is visible from the communal area. SCN4 Fixed glass perimeter screening is proposed in the adjacent communal area.</p> <p>Appropriate treatments are conditioned to Council’s satisfaction prior to CC.</p>	
Recessed balconies and/or vertical fins should be used between adjacent balcony	<p>Recessed balconies and fins are used for the northern corner of the tower (corner of Wharf and River). No concerns arise.</p> <p>Balconies are proposed for the apartments fronting River Terrace. The northern-most unit of these has additional fins screening for privacy with the unit across the void.</p> 	✓

*Above: 107.*

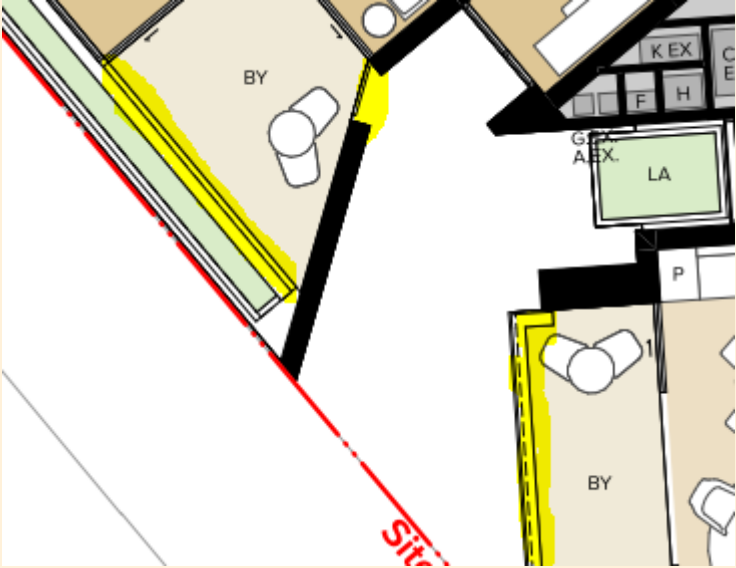


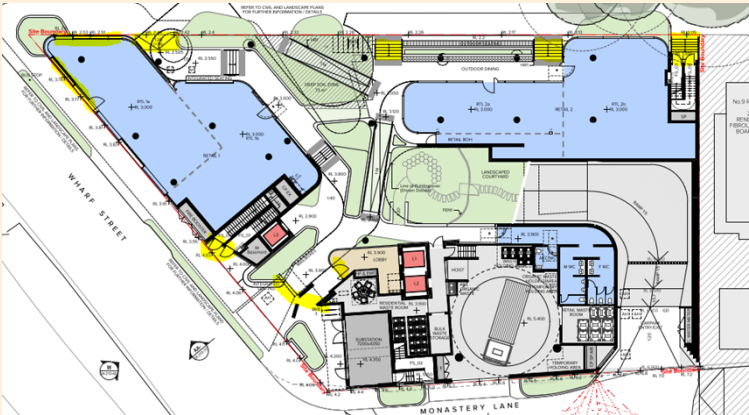
*Above: 211 (ground floor).*





*Above: 211 (upper floor).*





	<p>Regarding the units facing Wharf Street (below), a wall is proposed to block the majority of the view from 204 to 203, 304 to 303 and 404 to 403 (same designs). 203/303/403's primary outlook is out to Wharf Street with a small cut out allowing a minimal slice of planter box visible (shown as LA below). It is considered that the proposed wall is sufficient to maintain visual privacy from 204/304/404.</p>  <p>Above: Level 03 – Units 303 and 304.</p> <p>No concerns arise with respect to Level 05+.</p>	
Objective 3G-1		
Building entries and pedestrian access connects to and addresses the public domain	<div><p><b>SATISFIES OBJECTIVE</b></p><p>The residential lobby is located on Wharf Street and is clearly legible from the street.</p></div> <p>Above: Architect's Design Report response to 3G-1.</p>	✓
Design guidance		

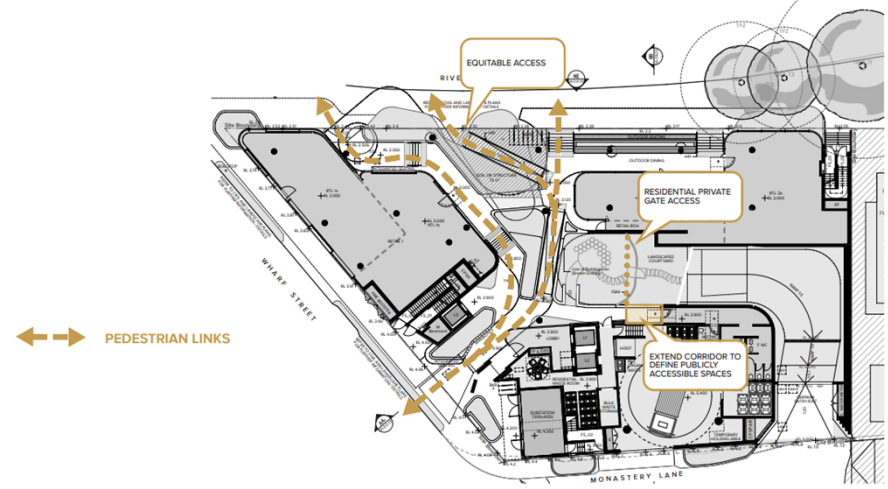
Multiple entries (including communal building entries and individual ground floor entries) should be provided to activate the street edge	<p>Multiple entries are provided on the ground floor to activate the retail areas and to provide for individual entries to the building tower and to the River Terrace residences.</p>  <p>Above: Ground Floor plan excerpt with pedestrian entrances highlighted.</p>	✓
Entry locations relate to the street and subdivision pattern and the existing pedestrian network	<p>The development focuses on addressing the future pedestrian network rather than existing. The desired future network allows for traversal through the building from Monastery Lane and Wharf Street through the site to River Terrace and appropriately activates River Terrace and Wharf Street.</p>	✓
Building entries should be clearly identifiable and communal entries should be clearly distinguishable from private entries	<p>The development identifies the entry to the River Terrace pathway with a 'River Terrace' sign on Wharf Street.</p>	✓

		
	<p>The entrances to Retail 1 are clearly identifiable from the corner of Wharf and River.</p> <p>As the ground level is slightly elevated above the street level, stairs and ramps are required to access Retail 2 and the building centre from River Terrace. These entries are divided by landscaping and landscaped boxes allowing visible entry points at the breaks between landscaping.</p>	
Where street frontage is limited and multiple buildings are located on the site, a primary street address should be provided with clear sight lines and pathways to secondary building entries	Not applicable.	✓
Objective 3G-2		

<b>Access, entries and pathways are accessible and easy to identify</b>	<b>SATISFIES OBJECTIVE</b> The residential lobby is provided with a distinct architectural character for increased legibility. Lobbies and retail tenancies are accessible for all users. As the site includes a complex change in elevation and elevated ground plane to address flood planning levels, ramps are integrated into the ground plane to allow the site to be permeable and accessible.  <i>Above: Architect's Design Report response to 3G-2.</i>	✓
<b>Design guidance</b>		
Building access areas including lift lobbies, stairwells and hallways should be clearly visible from the public domain and communal spaces	<p>The lift lobby is visible in the centre of the building from communal space but not from the public domain.</p>  <p>Above: Ground Floor plan excerpt with lobby highlighted.</p> <p>The stairwells to access the River Terrace units are visible from the street at the southern boundary on River Terrace or by the lobby.</p>	✓

		
	<i>Above: Elevations excerpt showing separate residential entrance to River Terrace apartments.</i>	
The design of ground floors and underground car parks minimise level changes along pathways and entries	1 level change is required to access the ground level from River Terrace via steps or ramps. The level change is necessary to raise the River Terrace frontage above the design flood level.	✓
Steps and ramps should be integrated into the overall building and landscape design	The steps and ramps are integrated into the pathways around Retail 1 and the access to Retail 2. Landscaping design is provided in irregular shapes along the interior pathways that align with the pathway edges. The proposed ramp across the SOSZ is not visually intrusive.	✓


	 <p><i>Above: Ramp concept.</i></p>	
For large developments 'way finding' maps should be provided to assist visitors and residents (see figure 4T.3)	Way-finding maps are not addressed but are recommended for the interior of the site by way of condition.	<p>✓</p> <p>with a condition requiring way-finding maps</p>
For large developments electronic access and audio/video intercom should be provided to manage acc	Recommended for condition.	<p>✓</p> <p>with a condition requiring electronic access and audio/visual intercom</p>
<b>Objective 3G-3</b>		
<b>Large sites provide pedestrian links for access to streets and connection to destinations</b>	<p>8 Lighting, surveillance and sightlines for pedestrian safety on-site (3G-3)</p> <p><b>Addressed.</b> Refer to Council matters package presented 21<sup>st</sup> February 2025, page 11. A detailed lighting design will be addressed as part of future construction certificate documents.</p> <p><i>Above: Architect's Letter in response to RFI.</i></p>	<p>✓</p>

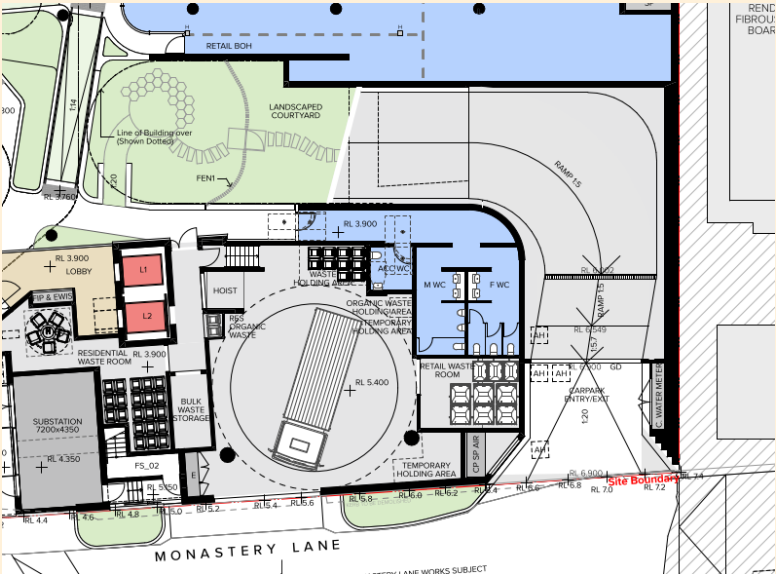
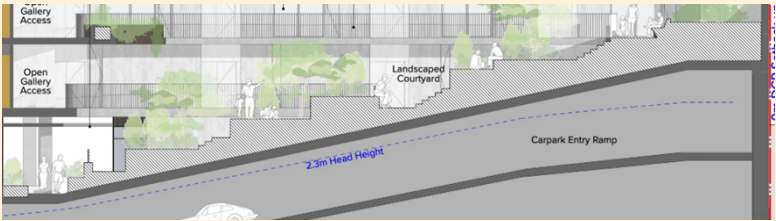
<p>Pedestrian safety treatment including surveillance and sightlines is addressed and is consistent with ADG 3G-3 design guidance. A detailed lighting design will be addressed as part of future construction certificate documents.</p>  <p><b>Above: Excerpt of pedestrian connections.</b></p>		
<p><b>Design guidance</b></p>		
<p>Pedestrian links through sites facilitate direct connections to open space, main streets, centres and public transport</p>	<p>The pedestrian links provide for through access between River Terrace and Wharf Street. While the access routes do not provide single clear sightlines, the links are clearly legible and guided by landscaping. The public transport option currently provided is a bus stop near the corner of Wharf Street. Accordingly, it is more likely that arrivals accessing River Terrace will utilise the footpath to River Terrace rather than the linkage through the building. Regardless a linkage is provided from Wharf Street to River Terrace to support a connection following further activation of the precinct. Exploration of the connection is encouraged by open splayed landscaping and the River Terrace signage directing pedestrians through the pathway.</p>	<p>✓</p>



<p>Pedestrian links should be direct, have clear sight lines, be overlooked by habitable rooms or private open spaces of dwellings, be well lit and contain active uses, where appropriate</p>	<p>The proposal promotes safety, passive surveillance and CPTED principles.</p> <p>The residential lobby is visible and legible within the Wharf Street frontage and allows simple, accessible connection from the street and through the site.</p> <p>The retail and residential lobbies are separated and have separate lift access. The residential lobby has high visibility into the main central courtyard, including an external mail collection point, integrated seating areas and other spaces to encourage resident interaction.</p> <p><i>Above: Architect's Design Report response to Design Quality Principle 7.</i></p> <p>Lighting is recommended for the pedestrian accessways. It is noted that after retail hours, the interior of the building is unlikely to be visible from the streets in addition to not being subject to passive surveillance from balcony or main road. A detailed lighting design is to provided at CC stage. A condition is recommended to this effect.</p> <p>The lobby entrance will be directly visible to entrees at Wharf Street with landscaping low enough to avoid obscuring sight lines. A condition is recommended requiring these planter boxes off Wharf Street be maintained to avoid restricting visibility during the use phase of the development.</p>	<p>✓</p> <p>with a condition requiring a detailed lighting design</p> <p>with a condition requiring landscaping to be maintained to avoid restricting visibility of the lobby from Wharf Street</p>
<p><b>Objective 3H-1</b></p>		
<p>Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes</p>	<p>Initial Development Engineering unit and Traffic section comments queried various aspects related to the proposed vehicle access off Monastery Lane including the proposed width of Monastery Lan, pedestrian footpaths, sightlines and turning circles.</p> <p>Following receipt of revised widths for Monastery Lane including a pedestrian footpath, revised sightline assessments and revised turning circle diagrams, no further concerns were raised by Council's internal units subject to conditions. These items are discussed in detail in the determination report accompanying this assessment.</p>	<p>✓</p> <p>with conditions as recommended by Council internal officers</p>
<p><b>Design guidance</b></p>		

<p>Car park access should be integrated with the building's overall facade. Design solutions may include:</p> <ul style="list-style-type: none"><li>• the materials and colour palette to minimise visibility from the street</li><li>• security doors or gates at entries that minimise voids in the facade</li><li>• where doors are not provided, the visible interior reflects the facade design and the building services, pipes and ducts are concealed</li></ul>	<p>The proposed car park access is provided off Monastery Lane.</p>  <p>Above: Elevation showing Monastery Lane apartments.</p>  <p>Above: Ground Floor plan showing service dock design.</p>	<p>✓</p>
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<p>Car park entries should be located behind the building line</p>	<p><i>Above: Concept showing Monastery Lane apartments. Note, the proposed flush and shared road was not supported by Council's Roads section. A kerb and gutter road and pedestrian footpath is now proposed.</i></p> <p>Large roller doors are provided for both entrances. The development presents a design made expressly to provide a visually interesting yet urban façade to the residences and street view of Monastery Lane. The garage doors are a lighter bronze colour than the black façade.</p>		<p>✓</p>
<p>Vehicle entries should be located at the lowest point of the site minimising ramp lengths, excavation and</p>	<p>The site naturally slopes from up Monastery Lane down to Wharf Street. The lower point of the site is therefore either River Terrace (which is below the design flood level) or Wharf Street (which is the main road). Siting the vehicle access on the higher Monastery Lane results in a portion of the landscaped 'gully' area being raised to</p>		<p>✓</p>

<p>impacts on the building form and layout</p> <p>- Note: a variation is required from this Design Guidance but there are no concerns meeting the objective.</p>	<p>facilitate the location of the ramp. Combined, the loading dock and carpark entry ramp both occupy space on the ground level and intrude into Level 01 space.</p>  <p>Above: Floor Plan excerpt showing the service dock's and vehicle access ramp's intrusion into ground level space.</p> <p>The design adequately addresses this impact by utilising stepped landscaping features in the courtyard gully from ground level to Level 02. This also has the benefit of allowing a walkable access in the centre of the site to Level 01 and Level 02 River Terrace units.</p> 	
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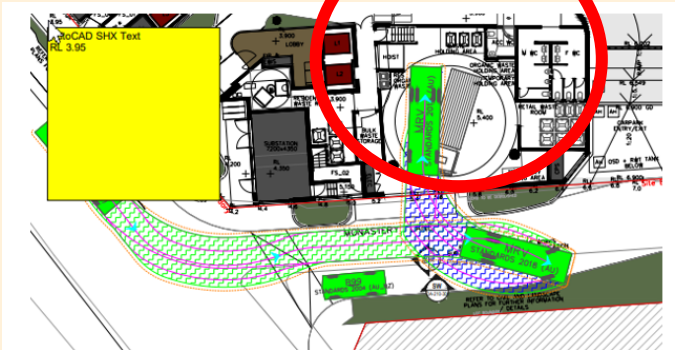
	<i>Above: Sections excerpt showing landscaped courtyard stepping up the carpark entry ramp.</i>	
Car park entry and access should be located on secondary streets or lanes where available	The car park access is located off Monastery Lane.	✓
Vehicle standing areas that increase driveway width and encroach into setbacks should be avoided	None proposed.	✓
Access point locations should avoid headlight glare to habitable rooms	Complies. Headlight swing will cross garages (not habitable rooms) and tree landscaping on Monastery Lane.	✓
Adequate separation distances should be provided between vehicle entries and street intersections	Following receipt of additional information, Council's Traffic Engineer has raised no concerns regarding separation distances or sight lines.	✓
The width and number of vehicle access points should be limited to the minimum	Vehicle access points are minimised with one access to the dock and one access to the basement levels.	✓
Visual impact of long driveways should be minimised through changing alignments and screen planting	No concerns arise.	✓
The need for large vehicles to enter or turn around	A turntable is provided in the service dock to facilitate larger vehicles turning around. It is noted that the swept paths for access and egress to the dock show MRVs only and that the MRV paths does not start in the turntable but rather to the side. It is considered that use of the turntable would achieve the same ability to enter and exit in	✓  with a condition requiring service vehicles to enter



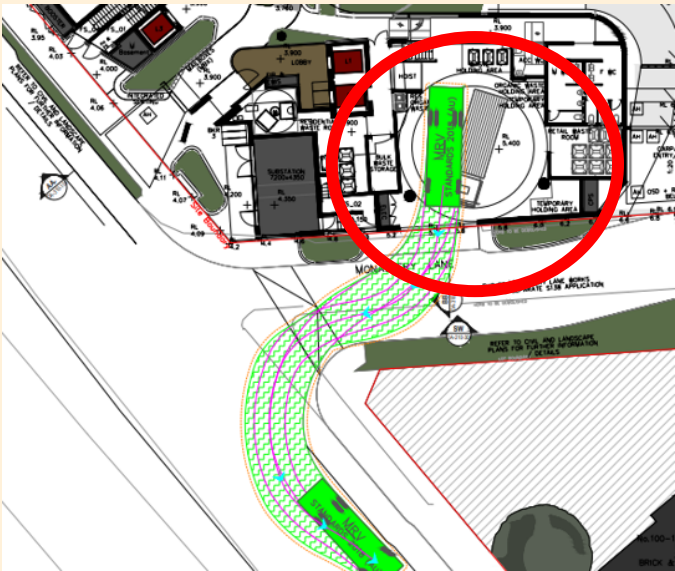
within the site should be avoided

a forward direction. In this regard, Council’s Traffic Engineer notes the directly below submitted swept path shows the MRV reversing into the site. It is not considered that an MRV is unable to enter and exit in a forward direction and a condition has been recommended requiring same.

and exit in a forward moving direction  
with a condition requiring service vehicles accessing the site be limited to MRVs or smaller vehicles only



Above: MRV swept path showing reversing into site.



Above: MRV swept path showing egress from site.

	<p>The directly above swept path shows partial blocking of Monastery Lane for traffic entering from Wharf Street. Council's Traffic Engineer notes that there is sufficient queuing space for a vehicle to wait for a truck the site without impeding Wharf Street.</p> <p>The applicant has proposed warning lights warning oncoming traffic to potential movements of egressing vehicles is not supported as this may result in egressing drivers assuming they have right of way when entering Monastery Lane.</p> <p>As the assessment is based on an MRV only, a condition is recommended limiting use by MRV or smaller vehicles only.</p>	
Garbage collection, loading and servicing areas are screened	<p>The garbage, storage, collection, loading and service areas are screened by roller door.</p> <p>Collection of residential waste will be from River Terrace kerbside. A condition is recommended to limit the placement period of these bins.</p>	<p>✓</p> <p>with condition recommending limited placement period</p>
Clear sight lines should be provided at pedestrian and vehicle crossings	<p>Sightlines were initially raised as a concern by way of RFI. Following receipt of additional information, Council's Roads section has raised no concerns with the sightlines subject to conditions requiring speed calming devices on Monastery Lane (to slow oncoming traffic) and on the development side of the boundary (to slow egress).</p>	<p>✓</p> <p>with a condition requiring traffic calming devices on Monastery Lane and on the development side of the boundary</p>
Traffic calming devices such as changes in paving material or textures should be used where appropriate	<p>Changes in Monastery Lane paving were initially proposed. Concerns were raised by Council's Roads section that this would increase maintenance costs in an area that does not yet receive sufficient pedestrian traffic (including with the development) to justify the proposed flush paving. The Design Review Panel also raised concerns in DRP meeting 04 about stormwater impacts in the absence of gutters.</p> <p>Council's Traffic Engineer has recommended a rubber speed cushion south/east of the resident's vehicle access on Monastery Lane and a speed hump with internal warning signage within the property itself for vehicles egressing the residential vehicle access.</p>	<p>✓</p> <p>with a condition as set out above</p>



<p>Pedestrian and vehicle access should be separated and distinguishable. Design solutions may include:</p> <ul style="list-style-type: none"><li>• changes in surface materials</li><li>• level changes</li><li>• the use of landscaping for separation</li></ul>	<p>Vehicle access is separated by way of access off Monastery Lane. Pedestrian access is proposed off Wharf and River and servicing pedestrian access to loading areas is obtained from inside the site separate from the vehicle access.</p>	<p>✓</p>
<p><b>BICYCLE AND CAR PARKING</b></p>		
<p><b>Objective 3J-1</b></p>		
<p><b>Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas</b></p> <p><b>Nominated regional centres: Albury, Ballina, Batemans Bay, Bathurst, Bega, Bowral, Cessnock, Charlestown, Coffs Harbour, Dapto, Dubbo, Glendale–Cardiff, Gosford, Goulburn, Grafton, Lismore, Maitland, Morisset, Newcastle, Nowra, Orange, Port Macquarie, Queanbeyan, Raymond Terrace, Shellharbour, Tamworth, Taree, Tuggerah–Wyong, Tweed Heads, Wagga Wagga, Warrawong and Wollongong</b></p>		<p>✓</p> <p>with a condition requiring Retail 1 use be limited to a use that generates similar car parking under Section B2 of the DCP</p>

<p><b>For development in the following locations:</b></p> <ul style="list-style-type: none"><li>• on sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area; or</li><li>• on land zoned, and sites within 400 metres of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre</li></ul> <p><b>the minimum car parking requirement for residents and visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less</b></p> <p><b>The car parking needs for a development must be provided off street</b></p>	<p>The site is zoned MU1 Mixed Use (formerly B4 Mixed Use) within a nominated regional centre.</p> <p>The minimum car parking is the lesser of the Guide to Traffic Generating Developments and Council's DCP (Section B2).</p> <div><p><b>SATISFIES OBJECTIVE</b></p><p>The proposed parking rates seek a variation to the DCP rates, and have been based on the Guide to Traffic Generating Developments (GTTGD) for high density residential within metropolitan sub-regional centres.</p><p>Tweed Heads is a nominated regional centre.</p><p>The development anticipates, and proposes a shared parking strategy between the residential visitor and the F&amp;B retail visitor customers seeing their uses as complementary. Given the location, the food and beverage retail users are anticipated to be mostly 'walk up' trade with less patrons driving to visit requiring basement parking.</p><p>The demand for the total number of visitors to the development is likely to be less than standard Council's requirements. This approach has been further detailed and justification provided in the Traffic Report prepared by Bitzsios Consulting submitted as part of this application.</p></div> <p><i>Above: Architect's Design Report response to 3J-1.</i></p> <p>Residential parking -&gt; ADG</p> <p>Non-residential parking -&gt; Section B2</p> <table><tr><td>USE</td><td>CARS</td><td>BICYCLES</td><td>MOTORBIKES</td></tr></table>	USE	CARS	BICYCLES	MOTORBIKES	
USE	CARS	BICYCLES	MOTORBIKES			

Retail			
Supermarkets, department stores or retail complexes	1 space per 25m <sup>2</sup>	2 spaces per 100m <sup>2</sup> up to 100m <sup>2</sup> and 1 space per 200m <sup>2</sup> thereafter	1 motorbike space per 25 car spaces
Showrooms, wholesale and bulky good stores	2 spaces per 100m <sup>2</sup>	0.5 spaces per staff member	1 motorbike space per 25 car spaces
Other retail	1 space per 40m <sup>2</sup> in the areas shown in Figures 5-1 and 5-2 and 1 space per 25m <sup>2</sup> elsewhere	2 spaces per 100m <sup>2</sup> up to 100m <sup>2</sup> and 1 space per 200m <sup>2</sup> thereafter	1 motorbike space per 25 car spaces

Above: Excerpt of Section B2 of the DCP applicable parking rates.

**Car Parking – Initially Proposed**

Required car spaces		Proposed	Comment
Residence parking	68.3 (69)	69	Complies
Visitor/ Customer parking	14.4 (15) Residential	24	Shortfall of 11 spaces. Variation requested on the basis of shared parking.
	19.6 (20) Food and Drink (490m2 proposed)		

\* The separate amenities area is considered to service the whole of the development and does not contribute to parking generation.

**Car Parking – Revised**

Council confirmed they did not accept the proposed “shared arrangement” for car parking. In response to a request further information the applicant has reduced the retail areas GFA and proposed a “Showroom” use for the Wharf Street premises. This changes the parking as follows:

Required car spaces		Proposed	Comment
Residence parking	68.3 (69) – no change	69 – no change	Complies

	Visitor/ Customer parking	14.4 Residential  4 Showroom (2 per 100m2 – 200m2 proposed)  8 Food and Drink (1 per 40m2 – 200m2 proposed)	15 Residential  4 Showroom  8 Food and Drink	Complies		
			<b>96 Total</b>			

The new compliance with car parking rates is due primarily to restricting the Wharf Street premises (Retail 1) to a ‘Showroom’ use which generates less parking requirements than other retail uses under Section B2.

While a “Showroom” might not activate the street frontage in the way that a food and drinks premises might, it nevertheless relies on an interface with the street. Retail 1 defined as a “Showroom” has a lesser car parking requirement which is necessary to permit approval of an active use for the premises. A condition is recommended ensuring the use is restricted to a “Showroom” under Section B2 unless subject to a change of use under a development application which would be assessed on its merits and the circumstances at that time.

**Service Vehicle parking**

No service vehicle parking is provided for in Section B2.

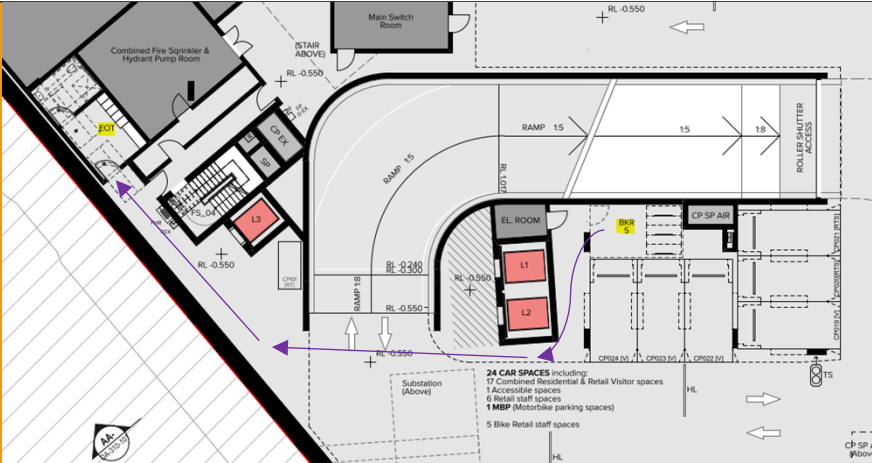
The application provides for an MRV accessible service dock.

A condition will be imposed requiring use of MRV or smaller service vehicles only.

<u>Bicycle parking per Austroad*</u>			
Required bicycle spaces		Proposed	Comment
Residential	18 Class 2 (resident)	72 Class 2	Complies
	4.5 Class 3 (visitor)	9 Class 3	
Commercial	4.9 Class 2 (staff)	5 Class 2	Complies
	2.0 Class 3 (visitor)	2 Class 3	

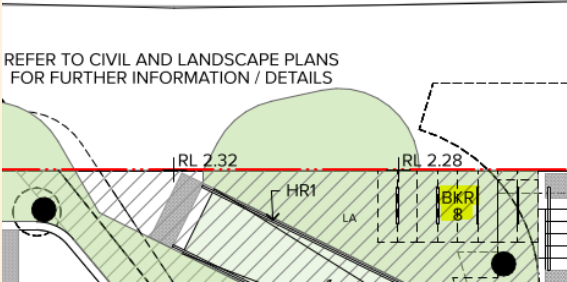
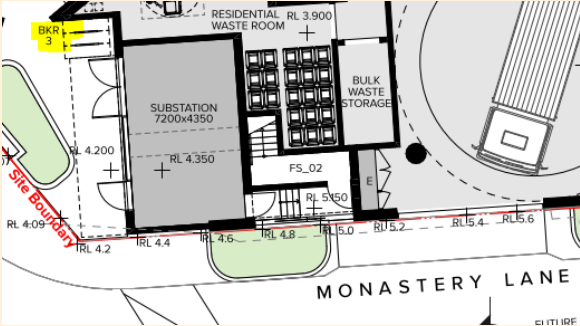
\*Council's Traffic section has raised no concerns with the use of Austroad figures over Section B2 or A2 of the DCP. It is noted that if A2 commercial (1 per 50m2) is used, required (commercial) visitor bicycle parking raises to 9.8. If B2 residential (2 per dwelling) is used, required (total) bicycle parking raises to 144. As the development only proposes 88, a shortfall of 65.8 spaces would arise under DCP rates.

EoT facilities are proposed in Basement 01 with stairs and Lift 3 (dedicated basement to ground lift) close to the entrance. Bicycle racks are proposed off Wharf Street and River Terrace.

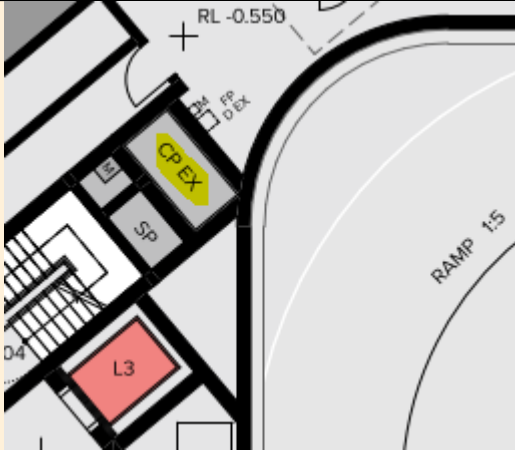
		
<p><i>Above: Basement 01 plan excerpt showing bicycle racks in the basement and EoT facilities</i></p>		
<b>Design guidance</b>		
Where a car share scheme operates locally, provide car share parking spaces within the development. Car share spaces, when provided, should be on site	Not applicable.	✓
Where less car parking is provided in a development, council should not provide	Not applicable.	✓

on street resident parking permits		
<b>Objective 3J-2</b>		
<b>Parking and facilities are provided for other modes of transport</b>	<p><b>Bicycle parking is discussed above.</b></p> <p>Motorcycle and bicycle parking is provided at rates required under the DCP. An end-of-trip facility is provided for the retail tenancies and for retail staff.</p> <p><b>Above: Architect's Design Report response to 3J-2.</b></p>	✓
<b>Design guidance</b>		
Conveniently located and sufficient numbers of parking spaces should be provided for motorbikes and scooters	<p>Regarding motorbike parking, 5 motorbike spaces are proposed.</p> <p>Section B2 requires 1 per 25 car spaces.</p> <p>A total 96 car spaces are required combining the required parking under GtTGD and Section B2 resulting in a required 4 motorbike spaces. 6 are proposed. No concerns arise.</p>	✓
Secure undercover bicycle parking should be provided that is easily accessible from both the public domain and common areas	<p>Undercover bicycle parking is provided in each resident car park.</p> <p>The public will have access to bicycle racks on Wharf Street (8) and River Terrace (3).</p> <p>The River Terrace bicycle rack (8) is not undercover. The Wharf Street bicycle rack (3) is undercover due to overhanging units above.</p>	✓



	<div><p>RIVER TERRACE</p><p>Above: Ground Floor plan excerpt showing bicycle rack fronting River Terrace.</p><p>Above: Ground Floor plan excerpt showing bicycle rack fronting Wharf Street.</p></div>	
Conveniently located charging stations are provided for electric vehicles, where desirable	No charging stations have been provided. It is noted EVC stations are exempt development under Section 2.124D of the SEPP (Transport and Infrastructure) 2022.	✓
Objective 3J-3		
Car park design and access is safe and secure	The proposed residential car parking is gated.	✓
Design guidance		

Supporting facilities within car parks, including garbage, plant and switch rooms, storage areas and car wash bays can be accessed without crossing car parking spaces	Plant and switch rooms are located separate from vehicle movement areas. Additional facilities are also located separate, noting the already raised concern of separation of the bicycle racks and the EOT facilities.	✓
Direct, clearly visible and well lit access should be provided into common circulation areas	A detailed lighting design is recommended for condition. The design is to address lighting for access into common circulation areas.	✓ with a condition requiring a detailed lighting design providing well-lit access to common circulation areas
A clearly defined and visible lobby or waiting area should be provided to lifts and stairs	The waiting area for the lobby is exclusive for the residential apartments on the ground floor. Lift areas for the basement are located adjacent to the ramp.	✓
For larger car parks, safe pedestrian access should be clearly defined and circulation areas have good lighting, colour, line marking and/or bollards	Bollards and line markings are recommended to provide for safe pedestrian access.	✓ with a condition requiring a detailed lighting design providing good lighting to the car parks  with a condition requiring compliance with AS2890 with respect to the car parking treatment
<b>Objective 3J-4</b>		✓
<b>Visual and environmental impacts of underground car parking are minimised</b>		✓

Design guidance		
Excavation should be minimised through efficient car park layouts and ramp design	No concerns arise with respect to the ramp design and car park layout. Matters relating to impact on available floor space due to the ramp intrusion have been addressed elsewhere in this assessment and is considered acceptable.	✓
Car parking layout should be well organised, using a logical, efficient structural grid and double loaded aisles	Double loaded aisles are not available for the basement area. Providing for additional basement area would require relocation of the entrance ramp which is likely to result in additional excavation or loss of ground floor area facing the frontage. Internal holding lights in the basements are proposed for access and egress. Council's Roads section has raised no concerns in relation to the use of internal lights to manage traffic.	✓
Protrusion of car parks should not exceed 1m above ground level. Design solutions may include stepping car park levels or using split levels on sloping sites	The car park does not protrude above ground.	✓
Natural ventilation should be provided to basement and sub basement car parking areas	 <p>Above: Indicative basement level plan showing mechanical car park ventilation.</p>	✓

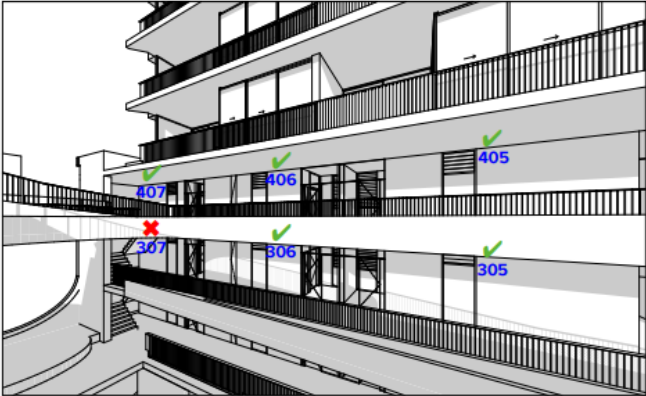
	Mechanical ventilation is provided to the basement car park levels.	
Ventilation grills or screening devices for car parking openings should be integrated into the facade and landscape design	Screening of ventilation exhaust has been addressed elsewhere in this assessment and is considered acceptable.	✓
<b>Objective 3J-5</b>		
<b>Visual and environmental impacts of on-grade car parking are minimised</b>	<b>No on grade parking is proposed.</b>	✓
<b>Design guidance</b>		
On-grade car parking should be avoided		
<p>Where on-grade car parking is unavoidable, the following design solutions are used:</p> <ul style="list-style-type: none"> <li>• parking is located on the side or rear of the lot away from the primary street frontage</li> <li>• cars are screened from view of streets, buildings, communal and private open space areas</li> <li>• safe and direct access to building entry points is provided</li> </ul>		

<ul style="list-style-type: none"> <li>• parking is incorporated into the landscape design of the site, by extending planting and materials into the car park space</li> <li>• stormwater run-off is managed appropriately from car parking surfaces</li> <li>• bio-swales, rain gardens or on site detention tanks are provided, where appropriate</li> <li>• light coloured paving materials or permeable paving systems are used and shade trees are planted between every 4-5 parking spaces to reduce increased surface temperatures from large areas of pav</li> </ul>		
<b>Objective 3J-6</b>		
Visual and environmental impacts of above ground enclosed car parking are minimised	None applicable.	✓
<b>Design guidance</b>		

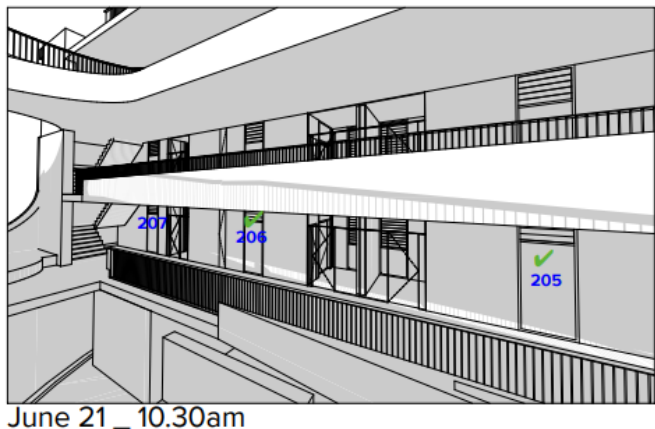
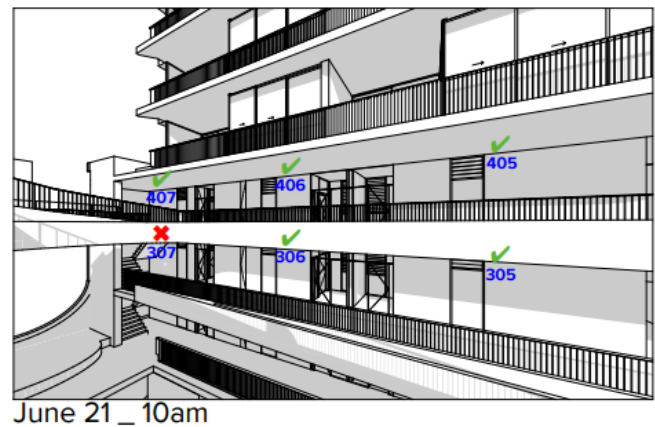
Exposed parking should not be located along primary street frontages		
<p>Screening, landscaping and other design elements including public art should be used to integrate the above ground car parking with the facade. Design solutions may include:</p> <ul style="list-style-type: none"> <li>• car parking that is concealed behind the facade, with windows integrated into the overall facade design (approach should be limited to developments where a larger floor plate podium is suitable at lower levels)</li> <li>• car parking that is 'wrapped' with other uses, such as retail, commercial or two storey Small Office/Home Office (SOHO) units along the street frontage (see figure 3J.9)</li> </ul>		
Positive street address and active frontages should be provided at ground level		






PART 4: DESIGNING THE BUILDING		
Solar Access and Daylight (4A)		
<p><b>4A-1: To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space.</b></p> <ul style="list-style-type: none"><li>• 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.</li><li>• In all other areas, living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 3 hours direct sunlight between 9 am and 3 pm at mid-winter</li><li>• A maximum of 15% of apartments in a building receive no direct sunlight between 9am and 3pm at mid-winter.</li></ul> <p><b>Design Guidance</b></p> <ul style="list-style-type: none"><li>• The design maximises north aspect and the number of single aspect south facing apartments is minimised.</li><li>• Single aspect, single storey apartments should have a northerly or easterly aspect.</li></ul>	<p>Amenity Diagrams for the apartment levels are provided in the plans. No shadowing concerns arise outside the site.</p> <p>Further information was requested to demonstrate direct sunlight access to the apartments fronting Monastery Lane and overshadowed by apartments fronting River Terrace.</p> <p>These include 205, 206, 207, 305, 306, 307, 405, 406 and 407.</p> <p>Further information was submitted as set out below.</p>  <p>June 21 _ 9am</p>	✓

- Living areas are best located to the north and service areas to the south and west of apartments
- To optimise the direct sunlight to habitable rooms and balconies a number of the following design features are used:
  - dual aspect apartments
  - shallow apartment layouts
  - two storey and mezzanine level apartments
  - bay windows
- To maximise the benefit to residents of direct sunlight within living rooms and private open spaces, a minimum of 1m<sup>2</sup> of direct sunlight, measured at 1m above floor level, is achieved for at least 15 minutes
- Achieving the design criteria may not be possible on some sites. This includes:
  - where greater residential amenity can be achieved along a busy road or rail line by orientating the living rooms away from the noise source
  - on south facing sloping sites
  - where significant views are oriented away from the desired aspect for direct sunlight



<ul style="list-style-type: none"><li>Design drawings need to demonstrate how site constraints and orientation preclude meeting the design criteria and how the development meets the objective</li></ul>	<div data-bbox="613 165 1283 580"></div> <div data-bbox="613 580 860 608"><p>June 21 _ 10.45am</p></div> <div data-bbox="613 624 1319 651"><p><i>Above: Solar access diagrams submitted in response to RFI.</i></p></div> <div data-bbox="613 683 1789 836"><p>The above diagrams were provided by the applicant to demonstrate receipt of direct sunlight. Direct sunlight is only available to the Monastery Lane apartments early in the morning and for a short period (approximately 1-1.5 hours). <b>This excludes 207 and 307 which receive no direct sunlight.</b> Notwithstanding the ‘tick’ in the above diagrams and the applicant’s statement below, it is not considered the silver of sunlight shown at 10:45am is sufficient to justify as direct sunlight.</p></div> <div data-bbox="613 868 1247 1251"><p><b>Addressed.</b> Daylight access to Monastery Lane apartments is maximised via high level windows in NE facade, consistent with ADG 4A-2 design guidance. Further analysis has identified that 1 apartment (307) does not receive direct sunlight at mid-winter. Refer to Council matters package presented 21<sup>st</sup> February 2025, page 12,13. Amenity diagrams updated to reflect that 0.7% of apartments in the development receive no direct sunlight at mid-winter consistent with ADG 4A-1.3</p></div>	
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design criteria. Refer to drawings DA-720-001 & DA-720-003 Item 18.

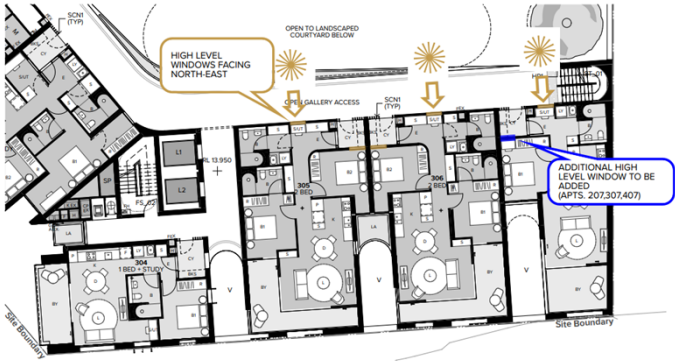
The Monastery Lane apartments (205, 206, 207, 305, 306, 405, 406, 407) have not been identified as receiving a minimum of 3 hours of direct sunlight between 9 am and 3 pm during mid-winter, as indicated in the Amenity Diagrams (ADG) drawing DA-720-001.

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An additional high level window has been added to introduce more light to the bedrooms of apartment 207, 307, 407.

In summary of the above, the further information reveals:

Apartment	Result
205	Less than 3 hours direct sunlight
206	Less than 3 hours direct sunlight
207	No direct sunlight
305	Less than 3 hours direct sunlight
306	Less than 3 hours direct sunlight
307	No direct sunlight
405	Less than 3 hours direct sunlight
406	Less than 3 hours direct sunlight
407	Less than 3 hours direct sunlight

	<p>The above is in addition to the amenity diagrams which note apartments 103, 503, 504, 603, 604, 703, 803, 903, 1003, 1103, 1203 and 1303 (total 12) also do not receive 3 hours of direct sunlight to living rooms and private open spaces (Refer DA-720-001-003).</p> <p><b>In total, 2 units receive no direct sunlight and 21 apartments receive less than 3 hours of direct sunlight. As 72 units are proposed, 70.83% of apartments receive 3 hours of direct sunlight in compliance with 4A-1.</b></p>	
<p><b>4A-2: Daylight access is maximised where sunlight is limited.</b></p> <ul style="list-style-type: none"> <li>Courtyards, skylights and high level windows (with sills of 1,500mm or greater) are used only as a secondary light source in habitable rooms.</li> <li>Where courtyards are used: <ul style="list-style-type: none"> <li>use is restricted to kitchens, bathrooms and service areas.</li> <li>building services are concealed with appropriate detailing and materials to visible walls.</li> <li>courtyards are fully open to the sky.</li> <li>access is provided to the light well from a communal area for cleaning and maintenance</li> <li>acoustic privacy, fire safety and minimum separation distances (see section 3F Visual privacy) are achieved.</li> </ul> </li> </ul>	<p>No reflected light is proposed.</p> <p>The relevant units with limited sunlight are Levels 02-04 that face south/south-east. High level windows are proposed to facilitate sunlight to these apartments.</p>  <p>Building indentations and the central courtyard provide opportunities for indirect sunlight to the struggling apartments.</p>	✓

<ul style="list-style-type: none"> <li>• Opportunities for reflected light into apartments are optimised through: <ul style="list-style-type: none"> <li>- reflective exterior surfaces on buildings opposite south facing windows.</li> <li>- positioning windows to face other buildings or surfaces (on neighbouring sites or within the site) that will reflect light.</li> <li>- integrating light shelves into the design</li> <li>- light coloured internal finishes</li> </ul> </li> </ul>		
<p><b>4A-3: Design incorporates shading and glare control, particularly for warmer months</b></p> <ul style="list-style-type: none"> <li>• A number of the following design features are used: <ul style="list-style-type: none"> <li>- balconies or sun shading that extend far enough to shade summer sun, but allow winter sun to penetrate living areas</li> <li>- shading devices such as eaves, awnings, balconies, pergolas, external louvres and planting</li> <li>- horizontal shading to north facing windows.</li> <li>- vertical shading to east and particularly west facing windows.</li> <li>- operable shading to allow adjustment and choice.</li> <li>- high performance glass that minimises external glare off windows, with</li> </ul> </li> </ul>	<p>Awnings are proposed for the ground level.</p> <p>Window treatments (recesses, window awnings and balconies) are proposed for the units facing River Terrace. Deep north facing balconies provide for adequate shading in the tower and above the apartments fronting Monastery Lane. Perforated external screens are provided to the west facing Wharf Street.</p>	<p>✓</p>

consideration given to reduced tint glass or glass with a reflectance level below 20% (reflective films are avoided).




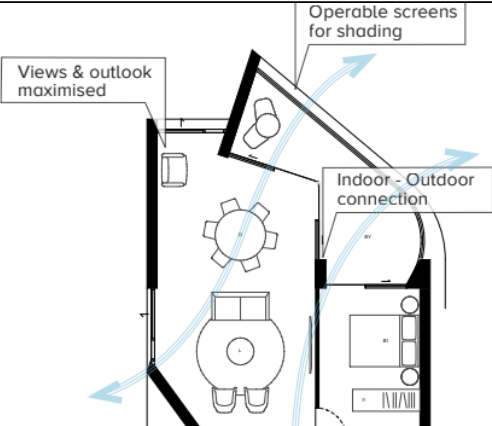
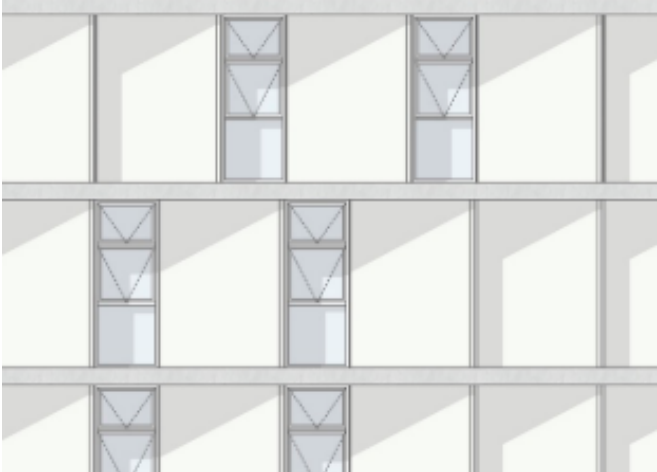
*Above: Concept showing window and balcony shading designs for River Terrace apartments (east/north-east).*



*Above: Concept showing balcony shading designs for tower apartments facing River Terrace (east/north-east).*

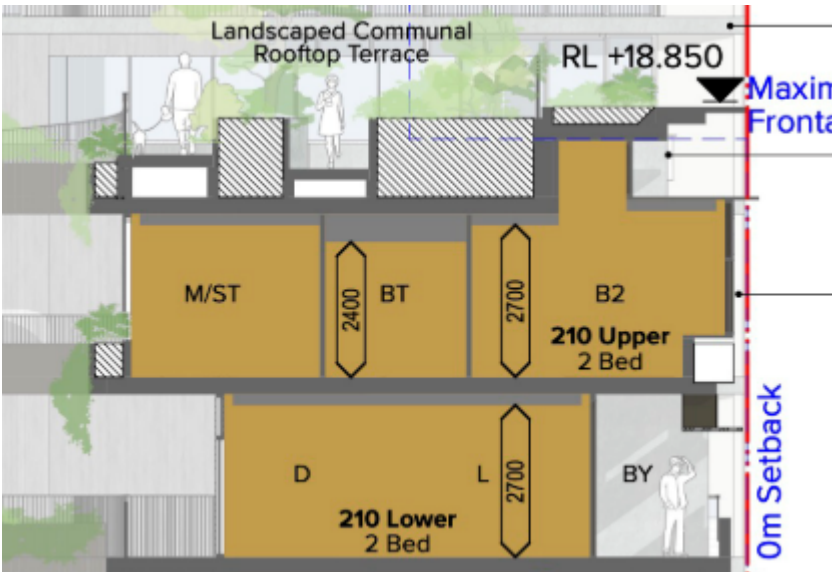


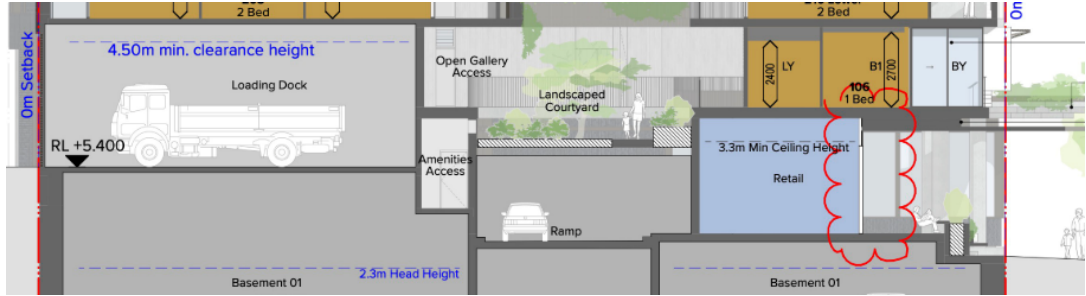
	 <p>Above: Concept showing perforated screening designs for tower apartments facing Wharf Street (west).</p>	
<b>Natural Ventilation (4B)</b>		
<p><b>4B-1: All habitable rooms are naturally ventilated</b></p> <ul style="list-style-type: none"> <li>• The building's orientation maximises capture and use of prevailing breezes for natural ventilation in habitable rooms.</li> <li>• Depths of habitable rooms support natural ventilation.</li> <li>• The area of unobstructed window openings should be equal to at least 5% of the floor area served</li> <li>• Light wells are not the primary air source for habitable rooms.</li> <li>• Doors and openable windows maximise natural ventilation</li> </ul>	<p>Ventilation diagrams are provided in the Architectural Design Report.</p> <p>The diagrams are generally acceptable noting that the Typical 1 bed and 2 bed apartments rely heavily on internal entry courtyards to support ventilation. A condition requiring openable windows to support these courtyards is conditioned to allow this to occur noting each internal door will be a fire door and therefore not capable of servicing ventilation. No conflict with the Noise Impact Assessment is likely to arise noting the relevant windows do not face the roads.</p> <p>While the 'tip' of the tower jutting towards Wharf Street contains 'long' apartments, the layout obtains a cross-breeze across the section via a balcony on the 'corner' of the apartment and openable windows in the living area.</p>	<p>✓</p> <p>with a condition requiring windows to internal entry courtyards be openable</p>


<p>opportunities by using the following design solutions:</p> <ul style="list-style-type: none"><li>- adjustable windows with large effective openable areas</li><li>- a variety of window types that provide safety and flexibility such as awnings and louvres.</li><li>- windows which the occupants can reconfigure to funnel breezes into the apartment such as vertical louvres, casement windows and externally opening doors</li></ul>	<div data-bbox="645 151 1135 579"></div> <p>Above: Typical tower 'tip' apartment showing ventilation.</p> <p>A variety of window openings are proposed for the units fronting River Terrace. An airspace license will be conditioned for windows that open into Council road reserve airspace.</p> <p>The tower proper (excluding the tower 'tip' apartments) rely on large sliding doors to the east to permit ventilation entry with some varied window openings for the southernmost apartments (9 River Terrace boundary).</p> <div data-bbox="604 858 1258 1332"></div> <p>Above: Elevations excerpt showing typical windows for apartments on the 9 River Terrace boundary (south-east).</p>	
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<p><b>4B-2: The layout and design of single aspect apartments maximises natural ventilation</b></p> <ul style="list-style-type: none"> <li>• Apartment depths are limited to maximise ventilation and airflow.</li> <li>• Natural ventilation to single aspect apartments is achieved with the following design solutions: <ul style="list-style-type: none"> <li>- primary windows are augmented with plenums and light wells (generally not suitable for cross ventilation)</li> <li>- stack effect ventilation / solar chimneys or similar to naturally ventilate internal building areas or rooms such as bathrooms and laundries</li> <li>- courtyards or building indentations have a width to depth ratio of 2:1 or 3:1 to ensure effective air circulation and avoid trapped smells</li> </ul> </li> </ul>	<p>The Architectural Design Report states (page 183):</p> <p><i>“Each apartment has an individual secure entry courtyard which has been specially designed to allow light, ventilation and connection to the external corridors without affecting apartment privacy.”</i></p> <p>A condition is already recommended requiring openable windows to support the courtyards use for ventilation.</p> <p>It is considered that each of the apartments are ‘single aspect’ apartments excluding the tower ‘tip’ apartments fronting the corner of Wharf Street and River Terrace which benefit from cross-ventilation at minimum.</p> <p>Courtyard indentations are compliant for the apartments fronting River Terrace and those fronting Monastery Lane in levels 02-04. The same applies for all tower ‘tip’ courtyards.</p> <p>Levels 02-04 apartments fronting Monastery Lane all have restricted circulation to the balcony and living rooms due to brick screens. However, it is considered that the brick screens assist to reduce visual privacy concerns with 100-104 Monastery Lane. The building indentations assist to provide ventilation options which balance the lost ventilation in favour of visual privacy. On balance, the proposed ventilation is considered acceptable noting the cumulative privacy benefits.</p> <p>The Levels 05-06 courtyards for apartments facing Monastery Lane are generally unlikely to offer much ventilation being recessed in corridors away from natural ventilation. However, the single aspect fronts contain balconies and large sliding doors which are adequate for ventilation.</p> <p>No concerns arise for Levels 07-13 due to substantial sliding doors and balconies.</p> <p>Building indentations have 3:1 depths with additional landscaping.</p>	<p>✓</p> <p>with a condition recommended as set out above</p>
<p><b>4B-3: The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents</b></p> <ul style="list-style-type: none"> <li>• <b>At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building. Apartments at ten storeys or greater are deemed to be cross ventilated only if any</b></li> </ul>	<p>The Architectural Design Report states (184):</p> <p><i>“The proposal achieves excellent natural cross-ventilation, with 100% of apartments achieving the ADH definition by way of through or corner cross-ventilation.”</i></p> <p>Use of the open galleries provides easy ventilation access. The apartments are not considered cross-over apartments but do benefit from courtyards subject to a condition requiring openable windows. It is noted that the inlet and outlet openings are not equivalent. Noting the substantial balcony and sliding door openings for the majority of the apartments, no concerns arise with respect to the 60% requirement.</p>	<p>✓</p>

<p><b>enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed.</b></p> <ul style="list-style-type: none"> <li>• <b>Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line.</b></li> </ul> <p><b>Design Guidance</b></p> <ul style="list-style-type: none"> <li>• The building should include dual aspect apartments, cross through apartments and corner apartments and limit apartment depths.</li> <li>• In cross-through apartments external window and door opening sizes/areas on one side of an apartment (inlet side) are approximately equal to the external window and door opening sizes/areas on the other side of the apartment (outlet side)</li> </ul>		
<b>Ceiling Height (4C)</b>		
<p><b>4C-1: Ceiling height achieves sufficient natural ventilation and daylight access.</b></p> <p>1. Measured from finished floor level to finished ceiling level, minimum ceiling heights are:</p> <ul style="list-style-type: none"> <li>• Habitable Rooms – 2.7 metres</li> <li>• Non-habitable rooms – 2.4 metres</li> </ul>	<p>The Architectural Design Report states (185):</p> <p><i>“A minimum floor-to-floor height of 3.2m is used to allow the ADG recommendation of 2.7m to be achieved in living, dining and bedroom areas.”</i></p> <p>The report goes on to state that kitchen heights have been reduced to 2.4m in some instances to accommodate hydraulic services which has also occurred in some habitable rooms (for some small portions) for the same reason.</p> <p>The sections plans show consistent heights throughout the tower elements. Kitchens are shown at 2.4m and living/dining rooms are shown at 2.7m.</p>	<p>✓</p>

<p><b>Design Guidance</b></p> <ul style="list-style-type: none"><li>• Ceiling height can accommodate use of ceiling fans for cooling and heat distribution</li></ul>	<p>Bedrooms are shown at 2.7m and bathrooms at 2.4m.</p> <p>The two storey apartments fronting River Terrace comply with the required 2.7m height for the main living area and a mix of 2.7m and 2.4m for the second floor.</p>  <p><i>Above: Sections excerpt showing the 2 storey apartments' ceiling heights.</i></p>	
<p><b>4C-2: Ceiling height increases the sense of space in apartments and provides for well-proportioned rooms</b></p> <p><b>Design Guidance</b></p> <ul style="list-style-type: none"><li>• A number of the following design solutions can be used:</li><li>- the hierarchy of rooms in an apartment is defined using changes in ceiling heights and alternatives such as raked or curved</li></ul>	<p>Smaller study rooms in the apartments fronting River Terrace use a 2.7m ceiling. Living and dining rooms using 2700 heights as well.</p>	✓

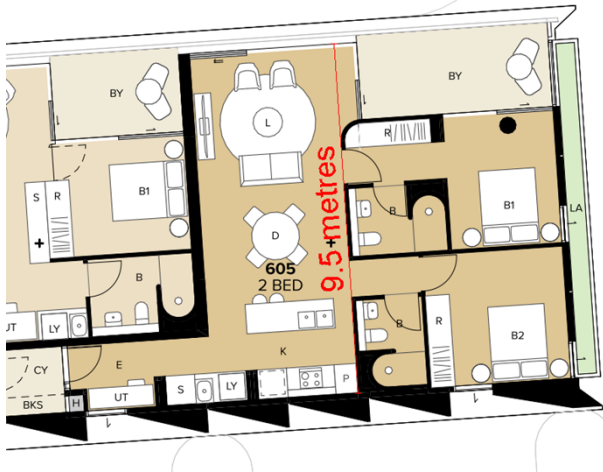
<p>ceilings, or double height spaces</p> <ul style="list-style-type: none"> <li>- well-proportioned rooms are provided, for example, smaller rooms feel larger and more spacious with higher ceilings</li> <li>- ceiling heights are maximised in habitable rooms by ensuring that bulkheads do not intrude. The stacking of service rooms from floor to floor and coordination of bulkhead location above non-habitable areas, such as robes or storage, can assist</li> </ul>		
<p><b>4C-3: Ceiling heights contribute to the flexibility of building use over the life of the building.</b></p> <p><b>Design Guidance</b></p> <ul style="list-style-type: none"> <li>• Ceiling heights of lower level apartments in centres should be greater than the minimum required by the design criteria allowing flexibility and conversion to non-residential uses.</li> </ul>	<p>Non-compliant. The use of the relevant area is not considered a good candidate for conversion or greater ceiling heights as it would conflict with the level changes above the loading dock and the landscaped gallery. Access from the land also does not support more intensive commercial use of the lane. The loading dock also restricts the potential to increase ceiling heights. The site is zoned MU1 but is an area transitioning from predominantly residential. Accordingly, an upper floor retail use is unlikely to receive critical mass to support viability. As an alternative to commercial, office space could be proposed. However, the locality is unlikely to be suitable for office space.</p>  <p><i>Above: Sections excerpt showing lower-level apartments above the retail ground floor.</i></p>	<p>Does not comply subject to a supported variation to the requirement for lower-level apartments be capable of conversion to a non-residential use</p>

								
Above: Elevations excerpt showing lower-level apartments above the retail ground floor.								
Apartment Layout (4D)								
<b>4D-1: The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity.</b> <b>Design Criteria</b> <b>1. Apartments are required to have the following minimum internal areas:</b> <ul style="list-style-type: none"><li>• Studio - 35m<sup>2</sup></li><li>• 1 Bedroom - 50m<sup>2</sup></li><li>• 2 Bedroom - 70m<sup>2</sup></li><li>• 3 Bedroom - 90m<sup>2</sup></li></ul> <b>The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m<sup>2</sup> each.</b>  <b>A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m<sup>2</sup> each.</b>  <b>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</b>	<table><tr><td>1 Bedroom</td><td>50m2 (104, 105, 106, 204, 504)</td></tr><tr><td>2 Bedroom</td><td>75.5m2 (102)</td></tr><tr><td>3 Bedroom</td><td>106.5m2 (101)</td></tr></table>	1 Bedroom	50m2 (104, 105, 106, 204, 504)	2 Bedroom	75.5m2 (102)	3 Bedroom	106.5m2 (101)	✓
	1 Bedroom	50m2 (104, 105, 106, 204, 504)						
	2 Bedroom	75.5m2 (102)						
	3 Bedroom	106.5m2 (101)						
	The above are the smallest example apartments and all comply with the criteria including the additional bathroom requirements for 2 and 3 bedroom apartments.							
Regarding window areas (10%) – no concerns are raised noting the use of large windows and sliding doors and the extension of some bedrooms to include an 'arm' to connect to building indentations to facilitate external windows. No rooms borrow daylight or air from other rooms.								



<p><b>area of the room. Daylight and air may not be borrowed from other rooms.</b></p> <p><b>Design Guidance</b></p> <ul style="list-style-type: none"> <li>• Kitchens should not be located as part of the main circulation space in larger apartments (such as hallway or entry space).</li> <li>• A window should be visible from any point in a habitable room.</li> <li>• Where minimum areas or room dimensions are not met apartments need to demonstrate that they are well designed and demonstrate the usability and functionality of the space with realistically scaled furniture layouts and circulation areas. These circumstances would be assessed on their merits.</li> </ul>		
<p><b>4D-2: Environmental performance of the apartment is maximised.</b></p> <ul style="list-style-type: none"> <li>• <b>Habitable room depths are limited to a maximum of 2.5 x the ceiling height (2.7m = 6.75).</b></li> <li>• <b>In open plan layouts (where the living, dining and</b></li> </ul>	<p>Regarding habitable room depths –</p> <ul style="list-style-type: none"> <li>- Level 01 – no concern</li> <li>- Level 02 – no concern</li> <li>- Level 03 – no concern</li> <li>- Level 04 – no concern</li> <li>- Level 05 – no concern</li> <li>- Level 06 – no concern</li> <li>- Level 07-09 – no concern</li> <li>- Level 10 – no concern</li> <li>- Level 11-12 – no concern</li> </ul>	<p>Generally complies subject to a variation to the maximum habitable room depths for open plan layouts for 0.6m exceedances (103, 203, 303, 403, 503, 603, 703, 803, 903, 1003, 1103, 1203) and 1.5m exceedances (505,</p>


<p><b>kitchen are combined) the maximum habitable room depth is 8m from a window.</b></p> <p><b>Design Guidance</b></p> <ul style="list-style-type: none"> <li>• Greater than minimum ceiling heights can allow for proportional increases in room depth up to the permitted maximum depths.</li> <li>• All living areas and bedrooms should be located on the external face of the building.</li> <li>• Where possible: <ul style="list-style-type: none"> <li>- bathrooms and laundries should have an external openable window.</li> <li>- main living spaces should be oriented toward the primary outlook and aspect and away from noise sources.</li> </ul> </li> </ul>	<p>- Level 13 – no concern</p> <p>Regarding open plan layouts (living, dining and kitchen) (8m maximum) –</p> <ul style="list-style-type: none"> <li>- Level 01 – 101 at 10.3m (significant window openings and sliding doors along measured 'depth') / <b>103 at 8.6m</b></li> <li>- Level 02 - 201 at 10m (significant window openings and sliding doors along measured 'depth') / <b>203 at 8.6m</b></li> <li>- Level 03 - 301 at 10m (significant window openings and sliding doors along measured 'depth') / <b>303 at 8.6m</b></li> <li>- Level 04 - 401 at 10m (significant window openings and sliding doors along measured 'depth') / <b>403 at 8.6m</b></li> <li>- Level 05 - 501 at 10m (significant window openings and sliding doors along measured 'depth') / <b>503 at 8.6m / 505 at 9.5m</b></li> <li>- Level 06 - 601 at 10m (significant window openings and sliding doors along measured 'depth') / <b>603 at 8.6m / 605 at 9.5m</b></li> <li>- Level 07-09 – 701, 801, 901 at 10m (significant window openings and sliding doors along measured 'depth') / <b>703, 803, 903 at 8.6m / 705, 805, 905 at 9.5m</b></li> <li>- Level 10 - 1001 at 10m (significant window openings and sliding doors along measured 'depth') / <b>1003 at 8.6m</b></li> <li>- Level 11-12 – 1101, 1201 at 10m (significant window openings and sliding doors along measured 'depth') / <b>1103, 1203 at 8.6m</b></li> <li>- Level 13 - 1301 at 10m (significant window openings and sliding doors along measured 'depth') / <b>1303 at 8.6m</b></li> </ul> <p>10m depths are acceptable noting each instance is alleviated by additional windows along the measured 'depth'.</p> <p>8.6m depths are acceptable noting the 600m generally reflects the length of the kitchen cabinets.</p> <p>9.5m depths are of more concern noting that these depths are not alleviated by additional windows. 5 instances exist for 505, 605, 705, 805 and 905. These apartments have wall to wall sliding doors facing east to allow substantial light. Additional windows to the west (Monastery Lane) are not provided with vertical bladed fins on the external wall. Noting that this non-compliance is for 3 apartments from 72 and that each apartment easily attains 3 hours plus direct sunlight to living rooms, the variation is supported.</p>	<p><b>605, 705, 805 and 905)</b></p>
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	 <p>Living areas and bedrooms are located on external faces of the building oriented to the available views. Apartments facing Monastery Lane have B2s that are recessed behind the building indentation which is acceptable noting the limited available external wall is used efficiently for the living room.</p> <p>Bathrooms and laundries are generally located towards the centre of apartments and away from the external walls. Noting the limited external walls for the site, mechanical ventilation will be acceptable.</p>	
<p><b>4D-3: Apartment layouts are designed to accommodate a variety of household activities and needs.</b></p> <ul style="list-style-type: none"><li>• Master bedrooms have a minimum area of 10m<sup>2</sup> &amp; other bedrooms 9m<sup>2</sup> (excluding wardrobe space).</li><li>• Bedrooms have a minimum dimension of 3m (excluding wardrobe space).</li></ul>	<p>Regarding bedroom areas and dimensions:</p> <ul style="list-style-type: none"><li>- Level 01 – no concern</li><li>- Level 02 – no concern</li><li>- Level 03 – no concern</li><li>- Level 04 – no concern</li><li>- Level 05 – no concern</li><li>- Level 06 – no concern</li><li>- Level 07-09 – no concern</li><li>- Level 10 – no concern</li><li>- Level 11-12 – no concern</li><li>- Level 13 – no concern</li></ul> <p>Regarding living/dining room widths:</p>	<p>✓</p> <p>with a condition recommended to require main wardrobes be a minimum 2.1m high</p>

<ul style="list-style-type: none"> <li>• <b>Living rooms or combined living/dining rooms have a minimum width of:</b> <ul style="list-style-type: none"> <li>• <b>3.6m for studio and 1 bedroom apartments</b></li> <li>• <b>4m for 2 and 3 bedroom apartments</b></li> </ul> </li> <li>• <b>The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts.</b></li> <li>• Access to bedrooms, bathrooms and laundries is separated from living areas minimising direct openings between living and service areas.</li> <li>• All bedrooms allow a minimum length of 1.5m for robes</li> <li>• The main bedroom of an apartment or a studio apartment should be provided with a wardrobe of a minimum 1.8m long, 0.6m deep and 2.1m high</li> <li>• Apartment layouts allow flexibility over time, design solutions may include: <ul style="list-style-type: none"> <li>- dimensions that facilitate a variety of furniture arrangements and removal</li> <li>- spaces for a range of activities and privacy</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>- Level 01 – 101 irregular diamond shape 3.3m to 4.7m to 3m (rear to front) – length and available widths are acceptable to adapt for living and dining</li> <li>- Level 02 - 201 irregular diamond shape 3.3m to 4.7m to 3m (rear to front) – length and available widths are acceptable to adapt for living and dining – 208/211 upper living at 3.3m (lower living is compliant)</li> <li>- Level 03 - 301 irregular diamond shape 3.3m to 4.7m to 3m (rear to front) – length and available widths are acceptable to adapt for living and dining</li> <li>- Level 04 - 401 irregular diamond shape 3.3m to 4.7m to 3m (rear to front) – length and available widths are acceptable to adapt for living and dining</li> <li>- Level 05 - 601 irregular diamond shape 3.3m to 4.7m to 3m (rear to front) – length and available widths are acceptable to adapt for living and dining</li> <li>- Level 06 - 601 irregular diamond shape 3.3m to 4.7m to 3m (rear to front) – length and available widths are acceptable to adapt for living and dining</li> <li>- Level 07-09 - irregular diamond shape 3.3m to 4.7m to 3m (rear to front) – length and available widths are acceptable to adapt for living and dining</li> <li>- Level 10 - irregular diamond shape 3.3m to 4.7m to 3m (rear to front) – length and available widths are acceptable to adapt for living and dining</li> <li>- Level 11-12 - irregular diamond shape 3.3m to 4.7m to 3m (rear to front) – length and available widths are acceptable to adapt for living and dining</li> <li>- Level 13 - irregular diamond shape 3.3m to 4.7m to 3m (rear to front) – length and available widths are acceptable to adapt for living and dining</li> </ul> <p>Regarding robe lengths:</p> <ul style="list-style-type: none"> <li>- Level 01 – no concern</li> <li>- Level 02 – no concern noting robe lengths have been split to accommodate doorways</li> <li>- Level 03 – no concern noting robe lengths have been split to accommodate doorways</li> <li>- Level 04 – no concern</li> <li>- Level 05 – no concern</li> <li>- Level 06 – no concern</li> <li>- Level 07-09 – no concern</li> <li>- Level 10 – no concern</li> <li>- Level 11-12 – no concern</li> <li>- Level 13 – no concern</li> </ul> <p>Heights of wardrobes are not provided but can be conditioned. No concerns arise regarding depth and length noting that B1s of 104-107 utilise a rounded end from 1.4 to 2m.</p>	
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<p>levels between different spaces within the apartment</p> <ul style="list-style-type: none"> <li>- dual master apartments</li> <li>- dual key apartments <i>Note: dual key apartments which are separate but on the same title are regarded as two sole occupancy units for the purposes of the Building Code of Australia and for calculating the mix of apartments</i></li> <li>- room sizes and proportions or open plans (rectangular spaces (2:3) are more easily furnished than square spaces (1:1))</li> <li>- efficient planning of circulation by stairs, corridors and through rooms to maximise the amount of usable floor space in rooms.</li> </ul>		
<b>Private Open Space and Balconies (4E)</b>		
<p><b>4E-1: Apartments provide appropriately sized private open space and balconies to enhance residential amenity</b></p> <ul style="list-style-type: none"> <li>• All apartments are required to have primary balconies as follows: <ul style="list-style-type: none"> <li>• Studio - 4m<sup>2</sup></li> <li>• 1 Bedroom - 8m<sup>2</sup> (Min depth 2m)</li> <li>• 2 Bedroom - 10m<sup>2</sup> (Min depth 2m)</li> <li>• 3 Bedroom - 12m<sup>2</sup> (Min depth 2.4m)</li> </ul> </li> </ul>	<p>Regarding balconies.</p> <ul style="list-style-type: none"> <li>- Level 01 – 101 has an irregular balcony shape with a 2.4m depth adjacent to the bedroom and dinking area. The remaining area is 1.5m to 2.4m.</li> <li>- Level 02 – <ul style="list-style-type: none"> <li>o 201 has an irregular balcony shape with a 2.4m depth adjacent to the bedroom and drinking area. The remaining area is 1.5m to 2.4m.</li> <li>o 205 and 206 contain 1.4m lengths and 2m lengths.</li> </ul> </li> <li>- Level 03 – additional balcony is provided for the upper floor for 207-211 (not included): <ul style="list-style-type: none"> <li>o 301 has an irregular balcony shape with a 2.4m depth adjacent to the bedroom and drinking area. The remaining area is 1.5m to 2.4m.</li> <li>o 305 and 306 contain 1.4m lengths and 2m lengths.</li> </ul> </li> <li>- Level 04 – <ul style="list-style-type: none"> <li>o 401 has an irregular balcony shape with a 2.4m depth adjacent to the bedroom and drinking area. The remaining area is 1.5m to 2.4m.</li> <li>o 405 and 406 contain 1.4m lengths and 2m lengths.</li> </ul> </li> </ul>	<p>Generally complies subject to a minor variation to the minimum balcony depths due to irregular shaped balconies for 101, 201, 205, 206, 301, 305, 306, 401, 405, 406, 501, 601, 701, 801, 901, 1001, 1101, 1201, 1301</p>

<p><b>Minimum balcony depth contributing to the balcony area is 1m.</b></p> <ul style="list-style-type: none"> <li>• <b>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 15m<sup>2</sup> and a minimum depth of 3m.</b></li> </ul> <p><b>Design Guidance</b></p> <ul style="list-style-type: none"> <li>• Increased communal open space should be provided where the number or size of balconies are reduced</li> <li>• Storage areas on balconies is additional to the minimum balcony size</li> <li>• Balcony use may be limited in some proposals by: <ul style="list-style-type: none"> <li>- consistently high wind speeds at 10 storeys and above</li> <li>- close proximity to road, rail or other noise sources</li> <li>- exposure to significant levels of aircraft noise</li> <li>- heritage and adaptive reuse of existing buildings</li> </ul> </li> </ul> <p>In these situations, Juliet balconies, operable walls, enclosed winter gardens or bay windows may be appropriate, and other amenity benefits for occupants should also be provided in the apartments or in</p>	<ul style="list-style-type: none"> <li>- Level 05 – <ul style="list-style-type: none"> <li>○ 501 has an irregular balcony shape with a 2.4m depth adjacent to the bedroom and drinking area. The remaining area is 1.5m to 2.4m.</li> </ul> </li> <li>- Level 06 – <ul style="list-style-type: none"> <li>○ 601 has an irregular balcony shape with a 2.4m depth adjacent to the bedroom and drinking area. The remaining area is 1.5m to 2.4m.</li> </ul> </li> <li>- Level 07-09 – <ul style="list-style-type: none"> <li>○ 701/801/901 have irregular balcony shapes with a 2.4m depth adjacent to the bedroom and drinking area. The remaining area is 1.5m to 2.4m for each balcony.</li> </ul> </li> <li>- Level 10 – <ul style="list-style-type: none"> <li>○ 1001 has an irregular balcony shape with a 2.4m depth adjacent to the bedroom and drinking area. The remaining area is 1.5m to 2.4m.</li> </ul> </li> <li>- Level 11-12 – <ul style="list-style-type: none"> <li>○ 1101/1201 have irregular balcony shapes with a 2.4m depth adjacent to the bedroom and drinking area. The remaining area is 1.5m to 2.4m for each balcony.</li> </ul> </li> <li>- Level 13 – <ul style="list-style-type: none"> <li>○ 1301 has an irregular balcony shape with a 2.4m depth adjacent to the bedroom and drinking area. The remaining area is 1.5m to 2.4m.</li> </ul> </li> </ul> <p>The proposed balconies are acceptable. The main concern relates to irregular shaped balconies for the tower 'tip' apartments. As these balconies all exceed the minimum area requirements (01 apartments &gt;3m<sup>2</sup>, 05/06 apartments &gt;6m) and contain adequate space to fit a table and 2-4 chairs (see Figure 4E.2), the proposed balconies are considered acceptable.</p>	
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<p>the development or both. Natural ventilation also needs to be demonstrated.</p>	<div data-bbox="600 151 1158 710"></div> <p>Above: Level 01 Floor plan excerpt indicative of 01 apartment balconies.</p>
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	 <p>Above: Level 02 Floor plan excerpt indicative of 05 and 06 apartment balconies.</p>	
<p><b>4E-2: Primary private open space and balconies are appropriately located to enhance liveability for residents</b></p> <p><b>Design Guidance</b></p> <ul style="list-style-type: none"><li>• Primary open space and balconies should be located adjacent to the living room, dining room or kitchen to extend the living space</li><li>• Private open spaces and balconies predominantly face</li></ul>	<p>Balconies are adjacent to living rooms and main bedrooms and face north, east and west. It is noted that the southernmost apartments look both west and south.</p> <p>Longer orientations generally face outwards.</p>	<p>✓</p>



<p>north, east or west</p> <ul style="list-style-type: none"> <li>Primary open space and balconies should be orientated with the longer side facing outwards or be open to the sky to optimise daylight access into adjacent rooms</li> </ul>		
<p><b>4E-3: Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building</b></p> <p><b>Design Guidance</b></p> <ul style="list-style-type: none"> <li>Solid, partially solid or transparent fences and balustrades are selected to respond to the location. They are designed to allow views and passive surveillance of the street while maintaining visual privacy and allowing for a range of uses on the balcony. Solid and partially solid balustrades are preferred</li> <li>Full width full height glass balustrades alone are generally not desirable</li> <li>Projecting balconies should be integrated into the building design and the design of soffits considered</li> <li>Operable screens, shutters, hoods and pergolas are used to control sunlight and wind</li> </ul>	<p>The Architectural Design Report states (186):</p> <p><i>“...Transitioning from lower to upper levels, the design incorporates additional solid banding at lower levels to uphold resident privacy and maintain a relationship with the streetscape.”</i></p> <p>The River Terrace apartments combine partially solid balustrading with transparent glass and vertical bar balustrades. The balconies are integrated into the design and the lower floor (1<sup>st</sup> floor) uses operable screens to control sunlight and wind (below).</p>  <p><i>Above: Concept showing River Terrace apartments. Note the partially solid balustrades and inset balconies.</i></p> <p>The tower ‘tip’ balconies utilise a partially solid balustrade (below).</p>	<p>✓</p>

- Balustrades are set back from the building or balcony edge where overlooking or safety is an issue
- Downpipes and balcony drainage are integrated with the overall facade and building design
- Air-conditioning units should be located on roofs, in basements, or fully integrated into the building design
- Where clothes drying, storage or air conditioning units are located on balconies, they should be screened and integrated in the building design
- Ceilings of apartments below terraces should be insulated to avoid heat loss
- Water and gas outlets should be provided for primary balconies and private open space






*Above: Concept showing tower ‘tip’ apartments balustrading. Note, the partially solid balustrades.*

The balconies and corridors fronting River Terrace in the tower building utilise a juliet-like style with white vertical bars. As privacy protection from these setback apartments is of less concern, the transparency is acceptable (below).

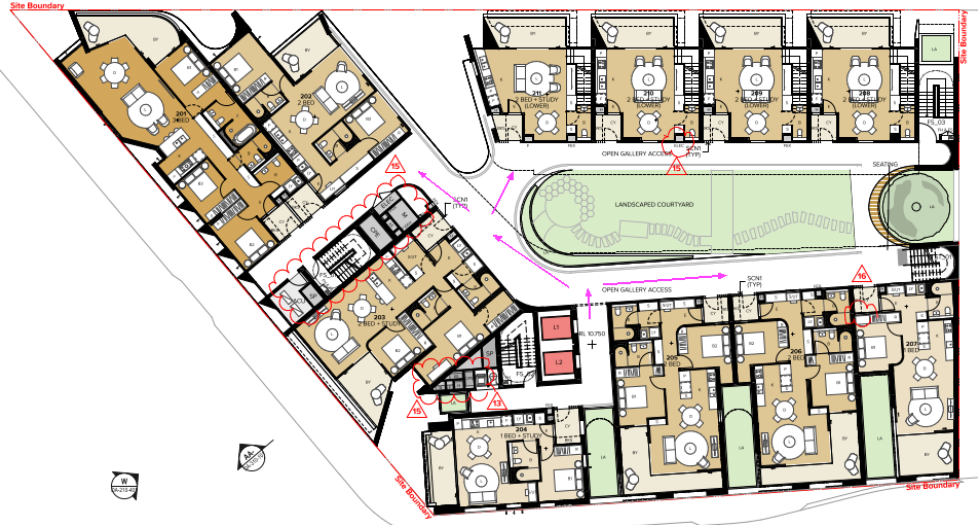


*Above: Concept showing the balconies for the apartments setback off River Terrace.*

	<p>The balconies fronting Wharf Street utilise a partially solid and setback balcony design (below).</p>  <p><i>Above: Concept showing the balconies for the apartments fronting Wharf Street. Note the partially solid balustrades and landscaped planters.</i></p> <p>The balconies fronting Monastery Lane utilise a different brick screening design from the remainder of the development. The brick screening effectively halves the available view and streetscape availability while providing for privacy for the section so screened. The balconies are also set back from the building façade. Cumulatively, the design presents a clear desire to balance privacy with passive surveillance. Noting that the Monastery Lane apartments somewhat front existing single dwellings, the proposed balance is supported.</p>	
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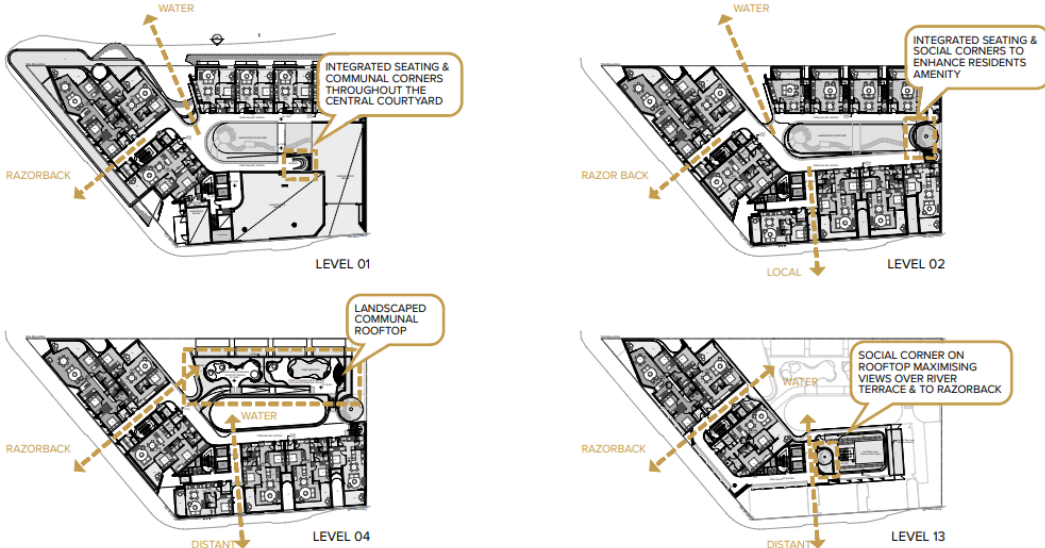
	 <p>Above: Concept showing Monastery Lane apartments. Note the brick screening design and inset balconies.</p>	
<p><b>4E-4: Private open space and balcony design maximises safety</b></p> <ul style="list-style-type: none"><li>• Changes in ground levels or landscaping are minimised</li><li>• Design and detailing of balconies avoid opportunities for climbing and falls</li></ul>	<p>Changes in ground levels along River Terrace utilise stairs and ramps to address flooding concerns.</p>  <p>Above: Elevations excerpt showing landscaped changes in ground level.</p> <p>Balconies are designed as solid or vertical bars.</p>	✓



Common Circulation Space (4F)		
<p><b>4F-1: Common circulation spaces achieve good amenity and properly service the number of apartments</b></p> <ul style="list-style-type: none"><li>• The maximum number of apartments off a circulation core on a single level is eight.</li><li>• For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40</li></ul> <p><b>Design Guidance</b></p> <ul style="list-style-type: none"><li>• Greater than minimum requirements for corridor widths and/ or ceiling heights allow comfortable movement and access particularly in entry lobbies, outside lifts and at apartment entry door</li><li>• Daylight and natural ventilation should be provided to all common circulation spaces that are above ground</li><li>• Windows should be provided in common circulation spaces and should be adjacent to the stair or lift core or at the ends of corridors</li><li>• Longer corridors greater than 12m in length from the lift core should be articulated. Design solutions may include:</li></ul>	<p>The largest number of apartments is 11 apartments on Level 2. While, the front 4 apartments facing River Terrace are accessed by a separate staircase but will also be accessed by the lifts for parking. In this manner, the tower exceeds the maximum number permitted of 8.</p> <p>The proposed exceedance is acceptable as the exceedance does not surpass 12 apartments and a high level of amenity is provided by way of natural light, cross-ventilation and access to/view of the landscaped gallery. Additionally, the cross between the River Terrace apartments and the other apartments is limited to the area around the lifts only (purple arrows below).</p>	<p>Generally complies subject to a variation to the maximum number of apartments off a circulation core from 8 apartments maximum to 11 proposed in compliance with the design guidance</p>
	<div></div> <p>Above: Level 02 Floor plan. Note the purple arrows showing distribution of residents to apartments from the lifts.</p> <p>No concerns arise with respect to corridor widths or ceiling heights noting the substantial open space adjacent to the majority of the accessways.</p> <p>Living room and bedroom windows do not open to the open gallery. It is noted that Level 2 River Terrace apartments have windows in the dining area facing the open gallery access which are proposed to be managed by translucent film with 40% visual light transition.</p> <p>Corridors longer than 12m are required but are open to either the open landscaped gallery Levels 02-05, landscaped roofs or are otherwise ventilated and feature screened.</p>	

<ul style="list-style-type: none"> <li>- a series of foyer areas with windows and spaces for seating</li> <li>- wider areas at apartment entry doors and varied ceiling heights</li> <li>• Design common circulation spaces to maximise opportunities for dual aspect apartments, including multiple core apartment buildings and cross over apartments</li> <li>• Achieving the design criteria for the number of apartments off a circulation core may not be possible. Where a development is unable to achieve the design criteria, a high level of amenity for common lobbies, corridors and apartments should be demonstrated, including:             <ul style="list-style-type: none"> <li>- sunlight and natural cross ventilation in apartments</li> <li>- access to ample daylight and natural ventilation in common circulation spaces</li> <li>- common areas for seating and gathering</li> <li>- generous corridors with greater than minimum ceiling heights</li> <li>- other innovative design solutions that provide high levels of amenity</li> </ul> </li> <li>• Where design criteria 1 is not achieved, no more than 12 apartments should be provided</li> </ul>		
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<p>off a circulation core on a single level</p> <ul style="list-style-type: none"> <li>Primary living room or bedroom windows should not open directly onto common circulation spaces, whether open or enclosed. Visual and acoustic privacy from common circulation spaces to any other rooms should be carefully controlled</li> </ul>		
<p><b>Objective 4F-2: Common circulation spaces</b></p> <p><b>Design Guidance</b></p> <ul style="list-style-type: none"> <li>Direct and legible access should be provided between vertical circulation points and apartment entries by minimising corridor or gallery length to give short, straight, clear sight lines.</li> <li>Tight corners and spaces are avoided</li> <li>Circulation spaces should be well lit at night</li> <li>Legible signage should be provided for apartment numbers, common areas and general wayfinding</li> <li>Incidental spaces, for example space for seating in a corridor, at a stair landing, or near a window are provided.</li> </ul>	<p>Wayfinding and lighting are recommended for condition.</p> <p>The apartment entries are accessed off the lifts by a mix of straight lines and corners. Tight corners and spaces are generally avoided by use of building indentations and openings. Incidental spaces are provided as part of the open landscaped gallery for social interaction but not in the corridors themselves. Noting the available incidental spaces on lower floors with the integrated landscaped gallery and the feature screened corridors, the proposed corridors are nevertheless acceptable from a design perspective.</p> <p>The galleries are open and may be considered external with balustrading. Note, the outer galleries use perforated feature screening on higher levels to assist with protection from the elements.</p> <p><b>SCN2</b> Perforated folded mesh screen façade system, with projecting aluminium vertical reveals. 50% perforated. Powder coat finish, colour and finish to match PCF1.</p> <p><i>Above: Proposed detail for accessway screening on Wharf Street elevation.</i></p>	<p>✓</p> <p>with a condition requiring a detailed lighting design addressing circulation spaces</p> <p>with a condition requiring legible signage for apartment numbers, common areas and general wayfinding</p>

<ul style="list-style-type: none"> <li>In larger developments, community rooms for activities such as owners corporation meetings or resident use should be provided and are ideally co-located with communal open space.</li> <li>Where external galleries are provided, they are more open than closed above the balustrade along their length.</li> </ul>	<p>Common circulation spaces have been designed consistent with ADG 4F-2 guidance. We have provided for Outdoor social spaces with integrated seating to encourage social and neighbourly interaction that are strategically placed throughout the development. Common circulation spaces are naturally lit and ventilated and provide views and frame vistas to enhance visual connections with surroundings.</p>  <p>Above: Applicant's response to Objective 4F-2 identifying circulation and areas for casual interaction.</p>	
<b>Storage (4G)</b>		
<p><b>Objective 4G-1: Adequate, well designed storage is provided in each apartment.</b></p> <p>1. In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:</p> <ul style="list-style-type: none"> <li>Studio - 4m<sup>3</sup></li> <li>1 Bedroom - 6m<sup>3</sup></li> <li>2 Bedroom - 8m<sup>3</sup></li> <li>3 Bedroom - 10m<sup>3</sup></li> </ul>	<p>The Architectural Design Report states (187):</p> <p><i>"All apartments accommodate a minimum of 50% of the required storage within the apartment with all apartments having storage in the car park making up the difference as a minimum."</i></p> <p>Regarding storage, 23 units were initially non-compliant based on the initial Development Schedule that accompanied the application (excluding 101-1301 which are deficient by 1%):</p> <ul style="list-style-type: none"> <li>102-1302 by 29%</li> <li>107-407 by 13%</li> <li>211 by 38%</li> <li>505-905 by 29%</li> </ul> <p><b>Further information submitted</b></p>	<p>✓</p> <p>with a condition requiring all apartments receive clearly signed storage units in the basement and that 211 be allocated one of the larger storage units</p>



<p><b>At least 50% of the required storage is to be located within the apartment.</b></p> <p><b>Design Guidance</b></p> <ul style="list-style-type: none"><li>Storage is accessible from either circulation or living areas.</li><li>Storage provided on balconies (in addition to the minimum balcony size) is integrated into the balcony design, weather proof and screened from view from the street.</li><li>Left over space such as under stairs is used for storage.</li></ul>	<p><b>Addressed.</b></p> <p>At least 50% of the required storage is located within the apartments. Additionally, every apartment is provided with basement storage cage with minimal volume of 3.4m³.</p> <p><u>Refer to amended Development Schedule Rev E.</u></p> <p>With the addition of basement storage, sufficient storage is provided for each apartment except for apartment 211 which is deficient by .6m². it is noted there are 2 storage cages in the basement that are of slightly larger depth than the others. A condition is recommended requiring apartment 211 be allocated one of these larger storage units to compensate for the missing storage. Provided this occurs, Council can be satisfied that the required 8m2 of storage will be fully provided for apartment 211.</p> <table><tr><th>Level 02</th><th></th><th></th><th></th><th></th><th></th></tr><tr><th>Unit</th><th>Beds</th><th>Required Storage</th><th>Proposed Storage</th><th>50% in Aptmnt</th><th>Total Storage</th></tr><tr><td>201</td><td>3</td><td>10</td><td>8.9</td><td>Yes</td><td>12.30</td></tr><tr><td>202</td><td>2</td><td>8</td><td>4.7</td><td>Yes</td><td>8.10</td></tr><tr><td>203</td><td>2</td><td>8</td><td>14.8</td><td>Yes</td><td>18.20</td></tr><tr><td>204</td><td>1</td><td>6</td><td>8.6</td><td>Yes</td><td>12.00</td></tr><tr><td>205</td><td>2</td><td>8</td><td>10.8</td><td>Yes</td><td>14.20</td></tr><tr><td>206</td><td>2</td><td>8</td><td>10.8</td><td>Yes</td><td>14.20</td></tr><tr><td>207</td><td>1</td><td>6</td><td>4.2</td><td>Yes</td><td>7.60</td></tr><tr><td>208</td><td>2</td><td>8</td><td>8.4</td><td>Yes</td><td>11.80</td></tr><tr><td>209</td><td>2</td><td>8</td><td>8.4</td><td>Yes</td><td>11.80</td></tr><tr><td>210</td><td>2</td><td>8</td><td>8.4</td><td>Yes</td><td>11.80</td></tr><tr><td>211</td><td>2</td><td>8</td><td>4</td><td>Yes</td><td>7.40</td></tr></table>	Level 02						Unit	Beds	Required Storage	Proposed Storage	50% in Aptmnt	Total Storage	201	3	10	8.9	Yes	12.30	202	2	8	4.7	Yes	8.10	203	2	8	14.8	Yes	18.20	204	1	6	8.6	Yes	12.00	205	2	8	10.8	Yes	14.20	206	2	8	10.8	Yes	14.20	207	1	6	4.2	Yes	7.60	208	2	8	8.4	Yes	11.80	209	2	8	8.4	Yes	11.80	210	2	8	8.4	Yes	11.80	211	2	8	4	Yes	7.40	
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211	2	8	4	Yes	7.40																																																																											
<p><b>4G-2: Additional storage is conveniently located, accessible and nominated for individual apartments</b></p> <p><b>Design Guidance</b></p> <ul style="list-style-type: none"><li>Storage not located in</li></ul>	<p>Clear allocation by way of signage is recommended for condition.</p> <p>Storage is provided separate from car spaces leaving car spaces accessible.</p> <p>Storage is not visible from the public domain.</p>	<p>✓</p> <p>with a condition recommended as set out above</p>																																																																														

<p>apartments I secure and clearly allocated to specific apartments.</p> <ul style="list-style-type: none"> <li>• Storage is provided for larger and less frequently accessed items.</li> <li>• Storage space in internal or basement car parks is provided at the rear or side of car spaces or in cages so that allocated car parking remains accessible</li> <li>• If communal storage rooms are provided, they should be accessible from common circulation areas of the building.</li> <li>• Storage not located in an apartment is integrated into the overall building design and is not visible from the public domain.</li> </ul>		
<b>Acoustic Privacy (4H)</b>		
<p><b>Objective 4H-1: noise transfer is minimised through the siting of buildings and building layout.</b></p> <p><b>Design Guidance</b></p> <ul style="list-style-type: none"> <li>• Adequate building separation is provided within the development and from neighbouring buildings/adjacent uses (Parts 2F and 3F).</li> <li>• Window and door openings are generally orientated away from noise sources.</li> </ul>	<p>Building separation is addressed in Objective 3F in this assessment.</p> <p>Apartments adjacent to circulation areas are buffered by plant and equipment areas with main living areas generally located away from the trafficked gallery area.</p> <p>Building services areas are located adjacent to B1 of 103-1303. The Noise Impact Assessment provides that all Mechanical Services Equipment are to be acoustically treated to ensure noise levels at all surrounding receivers comply with noise emission criteria set out in the NIA. No concerns have been raised by Council's Environmental Health section in relation to the relevant criteria. A condition has been recommended accordingly.</p>	<p>✓</p> <p>with conditions as recommended by Council's Environmental Health section related to noise</p>

<ul style="list-style-type: none"><li>Noisy areas within buildings including building entries and corridors should be located next to or above each other and quieter areas next to or above quieter areas.</li><li>Storage, circulation areas and non-habitable rooms should be located to buffer noise from external sources.</li><li>The number of party walls (walls shared with other apartments) are limited and are appropriately insulated.</li><li>Noise sources such as garage doors, driveways, service areas, plant rooms, building services, mechanical equipment, active communal open spaces and circulation areas should be located at least 3m away from bedrooms.</li></ul>	 <p>Above: Level 13 Floor plan excerpt showing indicative 03 apartment. Note the services room to the bottom-right of the unit.</p>	
<p><b>4H-2: Noise impacts are mitigated within apartments through layout and acoustic treatments</b></p> <p><b>Design Guidance</b></p> <ul style="list-style-type: none"><li>Internal apartment layout separates noisy spaces from quiet spaces, using a number of the following design solutions:<ul style="list-style-type: none"><li>rooms with similar noise requirements are grouped together</li></ul></li></ul>	<p>The internal layouts use doors to separate zones, generally living and dining to bedroom. Wardrobes are generally located to as sound buffers between habitable rooms with some exceptions.</p>	<p>✓</p>

<ul style="list-style-type: none"> <li>- doors separate different use zones</li> <li>- wardrobes in bedrooms are co-located to act as sound buffers</li> <li>• Where physical separation cannot be achieved noise conflicts are resolved using the following design solutions: <ul style="list-style-type: none"> <li>- double or acoustic glazing</li> <li>- acoustic seals</li> <li>- use of materials with low noise penetration properties</li> <li>- continuous walls to ground level courtyards where they do not conflict with streetscape or other amenity requirements</li> </ul> </li> </ul>		
<b>Noise Pollution (4J)</b>		
<p>To minimise impacts the following design solutions may be used:</p> <ul style="list-style-type: none"> <li>• physical separation between buildings and the noise or pollution source</li> <li>• residential uses are located perpendicular to the noise source and where possible buffered by other uses</li> <li>• buildings should respond to both solar access and noise. Where solar access is away from the noise source, non-habitable rooms can provide a buffer</li> <li>• landscape design reduces the perception of noise and acts as a filter for air pollution generated by traffic and industry</li> </ul>	<p>Outward facing apartments are to include glazing systems to reduce the effects of traffic noise.</p> <p>It is noted that Council's Environmental Health section have raised additional concerns with the revised Noise Impact Assessment submitted in response to a request for further information. In summary, the NIA does not address all the items requested in the RFI. A condition has been imposed by Council's Environmental Health section requiring a revised NIA addressing these items. Among these items are quantitative assessments of the impact of the development's noise generating sources on the apartments.</p>	<p>✓</p> <p>with conditions as recommended by Council's Environmental Health section related to noise</p>

Apartment Mix (4K)																				
<p><b>4K-1: A range of apartment types and sizes is provided to cater for different household types now and into the future.</b></p> <p><b>Design Guidance</b></p> <ul style="list-style-type: none"><li>A variety of apartment types is provided.</li><li>The apartment mix is appropriate, taking into consideration:<ul style="list-style-type: none"><li>the distance to public transport, employment and education centres</li><li>the current market demands and projected future demographic trends</li><li>the demand for social and affordable housing</li><li>different cultural and socioeconomic groups</li></ul></li><li>Flexible apartment configurations are provided to support diverse household types and stages of life including single person households, families, multi-generational families and group households</li></ul>	<p>A variety of apartments are proposed and are reflected in the façade composition and within the floor plate of the tower ‘tip’ and River Terrace apartment ‘segment’.</p> <table><tr><td>1 Bed</td><td>16.7%</td></tr><tr><td>1 Bed + Study</td><td>4.2%</td></tr><tr><td></td><td>20.9%</td></tr><tr><td>2 Beds</td><td>34.7%</td></tr><tr><td>2 Beds + Study</td><td>22.2%</td></tr><tr><td></td><td>56.9%</td></tr><tr><td>3 Beds</td><td>18.1%</td></tr><tr><td>3 Beds + Study</td><td>4.2%</td></tr><tr><td></td><td>22.3%</td></tr></table> <p>The apartment mix is appropriate noting the proximity to the Tweed Heads town centre and the desired future population density of the precinct.</p>	1 Bed	16.7%	1 Bed + Study	4.2%		20.9%	2 Beds	34.7%	2 Beds + Study	22.2%		56.9%	3 Beds	18.1%	3 Beds + Study	4.2%		22.3%	✓
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<p><b>4K-2: The apartment mix is distributed to suitable locations within the building.</b></p> <p><b>Design Guidance</b></p> <ul style="list-style-type: none"><li>Different apartment types are located to achieve successful façade composition and to</li></ul>	<p>Façade composition is addressed elsewhere in this assessment. No concerns arise with respect to the locations of the apartments.</p> <p>Solar access is optimised by east, west and north external faces being utilised on the site. Larger apartment types (3 Beds) are on the corner tower ‘tip’ which adequately combines with a 2 Bed to minimise inefficient floor plate spacing from the slender tower form.</p>	✓																		

<p>optimise solar access.</p> <ul style="list-style-type: none"> <li>• Larger apartment types are located on the ground or roof level where there is potential for more open space and on corners where more building frontage is available.</li> </ul>		
<b>Ground Floor Apartments (4L)</b>		
<p><b>4L-1: Street frontage activity is maximised where ground floor apartments are located</b></p> <p><b>Design Guidance</b></p> <ul style="list-style-type: none"> <li>• Direct street access should be provided to ground floor apartments.</li> <li>• Activity is achieved through front gardens, terraces and the facade of the building. Design solutions may include: <ul style="list-style-type: none"> <li>- both street, foyer and other common internal circulation entrances to ground floor apartments</li> <li>- private open space is next to the street</li> <li>- doors and windows face the street</li> </ul> </li> <li>• Retail or home office spaces should be located along street frontages</li> <li>• Ground floor apartment layouts support small office home office (SOHO) use to provide future opportunities for conversion</li> </ul>	<p>There are no ground floor apartments.</p>	<p>✓</p>

into commercial or retail areas. In these cases, provide higher floor to ceiling heights and ground floor amenities for easy conversion		
<b>4L-2: Design of ground floor apartments delivers amenity and safety for residents.</b>  <b>Design Guidance</b> <ul style="list-style-type: none"> <li>Privacy and safety should be provided without obstructing casual surveillance. Design solutions may include: <ul style="list-style-type: none"> <li>elevation of private gardens and terraces above the street level by 1-1.5m (see figure 4L.4)</li> <li>landscaping and private courtyards</li> <li>window sill heights that minimise sight lines into apartments</li> <li>integrating balustrades, safety bars or screens with the exterior design.</li> </ul> </li> <li>Solar access should be maximised through: <ul style="list-style-type: none"> <li>high ceilings and tall windows</li> <li>trees and shrubs that allow solar access in winter and shade in summer</li> </ul> </li> </ul>	Not applicable.	✓
<b>Facades (4M)</b>		
<b>4M-1: Building facades provide visual interest along the street while respecting the character of the local area.</b>	The Architectural Design Report states (188):  <i>"The design of the building facades has been carefully tailored to suit the distinct characteristics of each setting."</i>	✓



<ul style="list-style-type: none"> <li>• Design solutions for front building facades may include: <ul style="list-style-type: none"> <li>- a composition of varied building elements</li> <li>- a defined base, middle and top of buildings</li> <li>- revealing and concealing certain elements</li> <li>- changes in texture, material, detail and colour to modify the prominence of elements</li> </ul> </li> <li>• Building services should be integrated within the overall facade</li> <li>• Building facades should be well resolved with an appropriate scale and proportion to the streetscape and human scale. Design solutions may include: <ul style="list-style-type: none"> <li>- well composed horizontal and vertical elements</li> <li>- variation in floor heights to enhance the human scale</li> <li>- elements that are proportional and arranged in patterns</li> <li>- public artwork or treatments to exterior blank walls</li> <li>- grouping of floors or elements such as balconies and windows on taller buildings</li> </ul> </li> <li>• Building facades relate to key datum lines of adjacent buildings through upper level setbacks, parapets, cornices,</li> </ul>	<p><i>For the Wharf Street elevation, the design aims to mitigate noise, solar exposure, and the bustling urban environment, while also offering pleasant outlooks to the distant views beyond. Conversely, the facades facing River Terrace and the Marina have been crafted to be open and airy, maximizing scenic views and promoting natural ventilation to foster a strong connection with the outdoor surroundings.</i></p> <p><i>In the case of Monastery Lane, the approach involves integrating landscaping elements with recesses and projections to create a sense of depth and visual interest and privacy for the apartments overlooking the laneway.”</i></p> <p>The report further discusses the character and context of the locality (162):</p> <p><i>“The proposal has been carefully considered to align with both the present and forthcoming urban landscape of Tweed Heads. It takes into account the envisioned development of the Tweed City Centre as outlined in the Tweed City Centre Plan, as well as the revitalisation plans for the Boat Harbour Precinct.</i></p> <p><i>Situated as the Southern Gateway to the Tweed City Centre, the site holds significant importance in fulfilling the vision for the Boat Harbour Precinct. By focusing on the prominent corner site at the junction of River Terrace and Wharf Street, the proposal aims to create vital connections and activate the ground level with dynamic retail tenancies, seamlessly linking to the waterfront. This aligns with the aspiration for the riverside to become a vibrant tourist destination.</i></p> <p><i>The architectural design, particularly the massing and form, has been thoughtfully shaped to harmonize with both the current and future surroundings. Tower setbacks above the podium create a distinctive slender tower atop a low-rise podium, contributing to an elegant riverfront aesthetic.</i></p> <p><i>Furthermore, the tower's positioning along Wharf Street serves to accentuate the pivotal corner, effectively establishing it as a significant landmark and gateway to the city.”</i></p> <p>In relation to the building design, the report notes that the desired appearance is of a slender tower that provides for massing along the street-edge in order to create a distinctive landmark building.</p> <p>There are no adjacent buildings yet to reflect key datum lines. Shadows are created throughout the day and on both sides of the tower via articulation and indentations.</p> <p>The building façade utilises a defined base via the River Terrace and Monastery Lane massing and commercial openings. The massing and tower utilise a composition of building elements and materials to create an articulated and defined façade. The design review panel reports provide further assessment and approval of the design.</p>	
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<p>awnings or colonnade heights</p> <ul style="list-style-type: none"> <li>Shadow is created on the facade throughout the day with building articulation, balconies and deeper window reveals</li> </ul>	<p>The Architectural Design Report also notes the use of a light external colour scheme to reduce heat transfer and contribution to the urban heat island effect (155).</p>	
<p><b>4M-2: Building functions are expressed by the facade</b></p> <ul style="list-style-type: none"> <li>Building entries should be clearly defined.</li> <li>Important corners are given visual prominence through a change in articulation, materials or colour, roof expression or changes in height.</li> <li>The apartment layout should be expressed externally through facade features such as party walls and floor slabs</li> </ul>	<p>The development utilises a glass expanse and landscaping overhanging the front awning to provide visual prominence on the corner of Wharf Street and River Terrace. Substantial change in articulation occurs from the River Terrace angle due to the River Terrace apartments but is less prominent on the Wharf Street façade.</p>  <p><i>Above: Concept showing visual prominence granted by the primary activated frontage and sculpted tower form facing up Wharf Street towards Tweed Mall and the border.</i></p>	<p>✓</p>



Above: Streetview image of future location of tower apartments and River Terrace frontage. View looking south along Wharf Street.



Above: Streetview image of future location of sculpted tower. Note the development will protrude

	<p><i>behind and slightly to the right of the red roofed building in the image.</i></p>  <p><i>Above: Concept showing the Wharf Street design as seen passing the development from the north.</i></p> <p>While the Wharf Street design is less expressive, the River Terrace view is nevertheless the key elevation seen when approaching from the north. When approaching from the south, the Monastery Lane corner provides for a visually interesting urban form.</p>	
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Above: Concept showing the Monastery Lane urban apartments as seen passing the development from the south.





Above: Streetview image of future location of tower and Monastery Lane urban form when passing from the south. Note the development will take the place of the red roofed buildings and further up the lane.

Roof Design (4N)



<p><b>4N-1: Roof treatments are integrated into the building design and positively respond to the street</b></p> <p><b>Design Guidance</b></p> <ul style="list-style-type: none"> <li>• Roof design relates to the street. Design solutions may include: <ul style="list-style-type: none"> <li>- special roof features and strong corners</li> <li>- use of skillion or very low pitch hipped roofs</li> <li>- breaking down the massing of the roof by using smaller elements to avoid bulk</li> <li>- using materials or a pitched form complementary to adjacent buildings</li> </ul> </li> <li>• Roof treatments should be integrated within the building design. Design solutions may include: <ul style="list-style-type: none"> <li>- roof design proportionate to the overall building size, scale and form</li> <li>- roof materials compliment the building</li> <li>- service elements are integrated</li> </ul> </li> </ul>	<p>The roof treatment for the tower will not be visible from the street due to elevation. The tower roof provides for low planting around solar panels designed to assist reduction of the heat island urban effect.</p> <p>The overall visible roof and awning effect is one of a series of interconnected varied forms which provides for a visually interesting and greenscaped view along River Terrace and Wharf Street.</p>  <p><i>Above: Concept showing River Terrace apartments. Note the landscaped communal terrace (top of image), planter boxes in the stairs (left of image) and landscaping along River Terrace (bottom and right of image).</i></p>  <p><i>Above: Concept showing River Terrace roof design and landscaping. Note the landscaping along River Terrace along ground level and the cascading landscaped awning.</i></p>	<p>✓</p>
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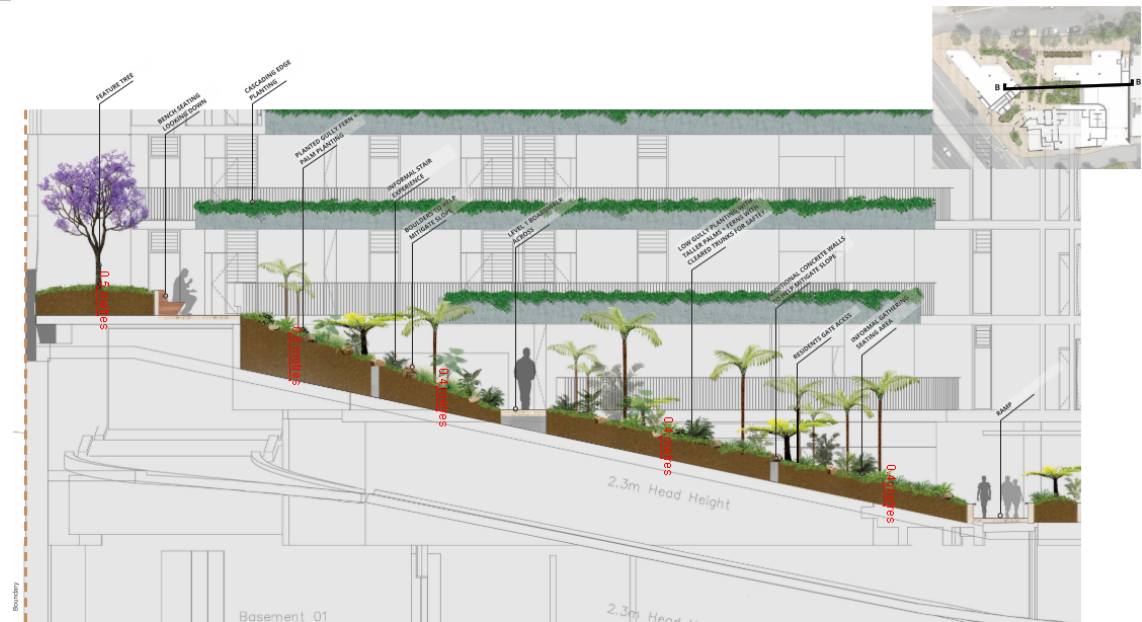
	 <p>Above: Concept showing Monastery Lane apartments landscaping. Note the landscaping in the building indentations, the cascading landscaped roof (top of image) and the planter boxes shown in the apartment balconies above the Monastery Lane apartments (top-left of image).</p>  <p>Above: Concept showing Wharf Street frontage. Note the wrap-around landscaped awning and the planter boxes shown in the apartment balconies (top-right of image).</p>	
<p><b>4N-2: Opportunities to use roof space for residential accommodation and open space are maximised.</b></p> <p><b>Design Guidance</b></p> <ul style="list-style-type: none"> <li>Habitable roof space should be provided with good levels of amenity. Design solutions may include:</li> </ul>	<p>The roof is not proposed to be used for a habitable purpose. It is noted that the Architectural Design Report makes reference to a development with a rooftop farm but does not propose the same in this development (209).</p> <p>Use of the rooftop could feasibly be provided but would result in further increases to the sought height variation. Instead, the rooftop of the River Terrace apartments are used as the residential communal open space providing shading, seating, pools, landscaping and a bbq area. The area looks over the open landscaped gallery/courtyard increasing the amenity of the area.</p>	<p>✓</p> <p>with a condition requiring physical measures restricting access as previously recommended in this assessment</p>



<ul style="list-style-type: none"> <li>- penthouse apartments</li> <li>- dormer or clerestory windows</li> <li>- openable skylights</li> <li>• Open space is provided on roof tops subject to acceptable visual and acoustic privacy, comfort levels, safety and security considerations</li> </ul>		
<p><b>4N-3: Roof design incorporates sustainability features</b></p> <p><b>Design Guidance</b></p> <ul style="list-style-type: none"> <li>• Roof design maximises solar access to apartments during winter and provides shade during summer. Design solutions may include: <ul style="list-style-type: none"> <li>- the roof lifts to the north</li> <li>- eaves and overhangs shade walls and windows from summer sun</li> </ul> </li> <li>• Skylights and ventilation systems should be integrated into the roof design</li> </ul>	<p>Shading is provided by way of vertical fins and balconies not via the roof. No skylight or roof ventilation systems are proposed, noting that the Statement of Environmental Effects repeatedly asserts 100% of apartments achieve cross-ventilation and the Design Review Panel has also generally supported a 'high level of analytical thinking' which has resulted in (among other things) 'cross ventilation for most units' (DRP 02 – Design Advice, page 2).</p>	<p>✓</p>
<p><b>Landscape Design (40)</b></p>		
<p><b>4O-1: Landscape design is viable and sustainable</b></p> <p><b>Design Guidance</b></p> <ul style="list-style-type: none"> <li>• Landscape design should be environmentally sustainable and can enhance environmental performance by incorporating: <ul style="list-style-type: none"> <li>- diverse and appropriate planting</li> <li>- bio-filtration gardens</li> <li>- appropriately planted shading trees</li> </ul> </li> </ul>	<p>The DRP Design Advices 02 and 03 consistently praised the proposed landscaping design while noting that the provision of Deep Soil Zone will fall short from the ADG requirements. Justifications for the lack of DSZ are provided in DRP 03 – Design Advice and replicated in the SEE.</p> <p>Among these justifications is the following statement (DRP 03 – Design Advice, page 2):</p> <p>Significant other non-deep soil zone landscaping opportunities across the site including the landscaped 'gully', above awning and podium level landscape planting opportunities which strives for 100% site landscape reallocation.</p> <p>The main concern from the DRP was whether the planter and garden beds will be adequate to support the proposed range of plant types. For example, DRP 03 – Design Advice, page 3 considered the proposal may need to rationalise some landscaping areas such as narrow planter areas. DRP 02 – Design Advice, page 4 considers that the planter/void areas on the Monastery Lane elevation may be too deep and not receive adequate light.</p>	<p>✓</p> <p>with a condition requiring irrigation and maintenance consistent with Landscape Plan Revision B</p>

<ul style="list-style-type: none"> <li>- areas for residents to plant vegetables and herbs</li> <li>- composting</li> <li>- green roofs or walls</li> </ul> <ul style="list-style-type: none"> <li>• Ongoing maintenance plans should be prepared</li> </ul> <ul style="list-style-type: none"> <li>• Microclimate is enhanced by: <ul style="list-style-type: none"> <li>- appropriately scaled trees near the eastern and western elevations for shade</li> <li>- a balance of evergreen and deciduous trees to provide shading in summer and sunlight access in winter</li> <li>- shade structures such as pergolas for balconies and courtyards</li> </ul> </li> <li>• Tree and shrub selection considers size at maturity and the potential for roots to compete (see Table 4)</li> </ul>	<p>No detail on landscape area survivability had been provided.</p> <p>Council requested various information relating to planter depth, proposed planting, infrastructure and maintenance required to support long-term health and viability of the plants. This further information request applies to all planters including the awnings, the feature tree facing 9 River Terrace, the soil on structure (formerly Deep Soil Zone) facing River Terrace and the rooftop planting above Level 13.</p> <p>On receipt of further information, Council have raised no concerns with the development subject to conditions including submission of a Detailed Plan of Landscaping and replacement planting in the event of failed vegetation within 2 years of issue of the OC. An additional condition requiring vegetation to be maintained in perpetuity is further recommended.</p> <p>It is noted that these conditions do not address maintenance. As this has been satisfactorily addressed in the RFI including installation of irrigation, conditions requiring irrigation and maintenance consistent with the Landscape Plan Revision B are recommended for consent.</p>	
<p><b>4O-2: Landscape design contributes to the streetscape and amenity</b></p> <p><b>Design Guidance</b></p> <ul style="list-style-type: none"> <li>• Landscape design responds to the existing site conditions including: <ul style="list-style-type: none"> <li>- changes of levels</li> <li>- views</li> <li>- significant landscape features including trees and rock outcrops</li> </ul> </li> </ul>	<p>The existing site conditions involve a change of level from the River Terrace road level up to the proposed Retail 1 and Retail 2 areas elevated above flood level. Steps, ramps, planters and vegetated areas (soil on structure) are proposed to merge the elevations. There are no significant landscape features on the site.</p> <p>A Detailed Plan of Landscaping has been conditioned for consent requiring a minimum 80% local species in accordance with the Tweed Shire Native Species Planting Guide.</p>	<p>✓</p> <p>with a condition requiring a Detailed Plan of Landscaping that demonstrates a minimum 80% local species</p>

<ul style="list-style-type: none"> <li>Significant landscape features should be protected by:                             <ul style="list-style-type: none"> <li>tree protection zones (see figure 4O.5)</li> <li>appropriate signage and fencing during construction</li> </ul> </li> <li>Plants selected should be endemic to the region and reflect the local ecology.</li> </ul>		
<b>Planting on Structures (4P)</b>		
<p>Appropriate soil profiles are provided</p> <p>Plant growth is optimised with appropriate selection and maintenance</p> <p>Planting on structures contributes to the quality and amenity of communal and public open spaces</p>	<p>The development incorporates opportunities for planting on the structure including use of green roofs, planter boxes and indentations. A “SOSZ” is also proposed off River Terrace noting that this will be a soil on slab (car park) area. Sections detailing soil depths and plant sizes have been provided as have soil plans. It is noted that the soil plans comply with Table 5 in Objective 4P and the proposed planting in the relevant area (see pages 41 and 46 of the Landscape Package Rev B).</p> <p>However, the soil plan does not address soil depth for the feature tree at the top of the stepped gully (Section shown below). Measurements of the shown section reveals the depth to be approximately 0.5m. It is noted that 0.5m is not sufficient depth for a tree based on the Table 5 of the ADG (Objective 4P). Revised details are to be submitted as part of the conditioned detailed landscaping plan detailing soil depths and planting for this area to Council's satisfaction (noting that this 'feature tree' is proposed as a key viewing item and the purpose of the cut-out in the zero setback wall with 9 River Terrace).</p>	<p>✓</p> <p>with a condition requiring revised soil depths and planting for the 'feature tree' on Level 02 with Table 5 of 4P to Council's satisfaction</p> <p>with a condition requiring irrigation be provided for the whole of the landscaped development to Council's satisfaction</p>




Above: Sections excerpt showing soil depths noting a proposed 0.5m soil depth for a feature tree.

With respect to maintenance, drip irrigation is proposed for each planter box, the SOSZ, the courtyard gully (subject to the below comment) and the communal space planting areas on Level 04 (see pages 42 and 47 of the Landscape Package Rev B).

However, irrigation or proposed maintenance is only shown for the areas directly referred to above and no other areas (see below).

	<div><p>INDICATIVE IRRIGATION PLAN - GROUND</p><p>RIVER TERRACE</p><p>RIVER TERRACE, TWEED HEADS   DEVELOPMENT APPLIC</p><p>PROPOSED BUILDING REFER TO ARCHITECTS PLANS</p><p>LEGEND</p><p>DRIIP IRRIGATION</p><p>MONASTERY LANE</p><p>UNPAVED STREET</p><p>Note: Irrigation plans are indicative and are to be</p></div>	
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Above: Irrigation Plan submitted with the Landscape Package Revision B for the ground level. Note that the remainder of the courtyard gully is not shown.

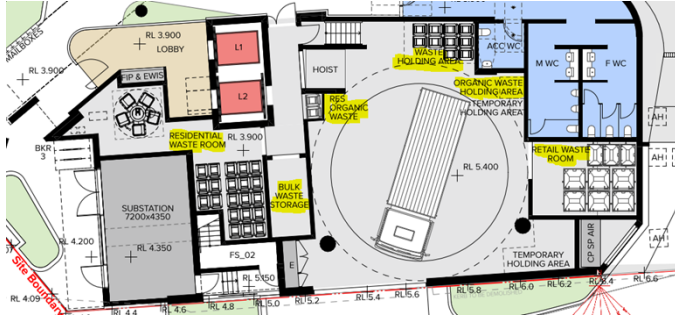
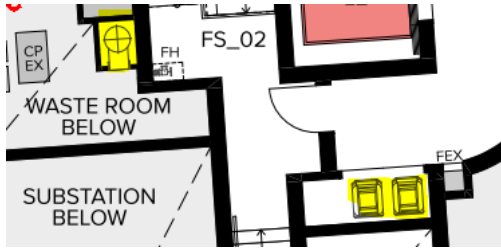
	<div>INDICATIVE IRRIGATION PLAN - LEVEL 4</div> <div></div> <p>Above: Irrigation Plan submitted with the Landscape Package Revision B for the communal terrace.</p> <p>Details have not been provided to confirm the remaining landscaped parts of the development will be adequately maintained including (but not limited to) the feature tree fronting 9 River Terrace, the cascade awning plantings and the building indentations fronting Monastery Lane.</p> <p>Revised plans demonstrating irrigation for the whole of the landscaped development to Council's satisfaction are recommended for condition.</p> <p>Drainage is proposed and discussed on page 50 of the Landscape Package Revision B.</p>	
Universal Design (4Q)		
<b>4Q-1: Universal design features are included in apartment design to promote flexible housing for all community members.</b>	An Access Review accompanied the proposal confirming that 20% of the 72 apartments (14) comply with the silver unit design. Note, the plans state 15 apartments comply, 7 3 Beds and 8 2 Beds – see DA810-002.	✓
<b>Design Guidance</b>	Compliance with the accessibility report is recommended.	

<ul style="list-style-type: none"> <li>• Developments achieve a benchmark of 20% of the total apartments incorporating the Livable Housing Guideline's silver level universal design features.</li> </ul>		
<p><b>4Q-2: A variety of apartments with adaptable designs are provided</b></p> <p><b>Design Guidance</b></p> <ul style="list-style-type: none"> <li>• Adaptable housing should be provided in accordance with the relevant council policy.</li> <li>• Design solutions for adaptable apartments include: <ul style="list-style-type: none"> <li>– convenient access to communal and public areas</li> <li>– high level of solar access</li> <li>– minimal structural change and residential amenity loss when adapted</li> <li>– larger car parking spaces for accessibility</li> <li>– parking titled separately from apartments or shared car parking arrangements</li> </ul> </li> </ul>	<p>The access review notes that 10% (8 apartments) have been provided as adaptable housing in accordance with the DCP – see DA810-001.</p> <p>Compliance with the accessibility report is recommended.</p>	✓
<p><b>4Q-3: apartment layouts are flexible and accommodate a range of lifestyle needs.</b></p> <p><b>Design Guidance</b></p> <ul style="list-style-type: none"> <li>• Apartment design incorporates flexible design solutions which may include:</li> </ul>	<p>Dual master bedroom apartments are proposed where available. Open place style apartments are preferred throughout the development.</p>	✓



<ul style="list-style-type: none"> <li>- rooms with multiple functions</li> <li>- dual master bedroom apartments with separate bathrooms</li> <li>- larger apartments with various living space options</li> <li>- open plan 'loft' style apartments with only a fixed kitchen, laundry and bathroom</li> </ul>		
<b>Mixed Use (4S)</b>		
Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement	Complies – addressed elsewhere.	✓
<b>Awnings and Signage (4T)</b>		
<p>Awnings are well located and complement and integrate with the building design</p> <p>Awnings should be located over building entries for building address and public domain amenity</p>	Visually interesting awnings are provided and complemented by the DRP. Landscaping on the awnings is subject to a condition requiring irrigation. Standard air licence conditions to apply.	✓
<b>Awnings and Signage (4T-2)</b>		
<p>Signage responds to the context and desired streetscape character.</p> <p>Signage should be integrated into the building design and respond to the scale, proportion and detailing of the development.</p> <p>Legible and discrete way finding should be provided for larger developments.</p> <p>Signage is limited to being on and below awnings and a single façade sign on the primary street frontage.</p>	<p>The Architectural Design Report states (190):</p> <p><i>“Signage will be limited to building identification, navigation and statutory signs. It will be designed to fit harmoniously in the architecture and to contribute positively to the precinct.”</i></p> <p>The proposal only seeks consent for a building identification sign “River Terrace” above the entry awning on the west elevation (SEE, 70).</p>	✓

	 <p>Above: Elevations excerpt showing the proposed 'River Terrace' signage.</p> <p>While signage is generally limited to be being on or below awnings, the proposed signage acts as an entrance marker and directional sign adjacent to the awning. No concerns arise in this regard.</p> <p>Additional way finding signs are not shown but are satisfactorily addressed by condition elsewhere in this assessment.</p>	
<b>Energy Efficiency (4U)</b>		
Development incorporates passive environmental design, passive solar design to optimise heat storage in winter and reduce heat transfer in summer, natural ventilation minimises need for mechanical ventilation	Passive design elements have been addressed elsewhere in this report and considered satisfactory.	✓
<b>Water Management and Conservation (4V)</b>		
Potable water use is minimised, stormwater is treated on site before being discharged, flood management systems are integrated into the site design.	<p>The Architectural Design Report states (190):</p> <p><i>"The development incorporates water efficient fittings, appliances and stormwater re-use."</i></p> <p>An OSD tank is proposed with treatment devices. Further information was requested in relation to stormwater by the Flooding &amp; Stormwater section but no concerns were raised in relation to flooding.</p> <p>Following receipt of additional information, no concerns were raised by Council's Flooding &amp; Stormwater section subject to conditions.</p>	<p>✓</p> <p>with conditions as recommended by Council's Flooding &amp; Stormwater section</p>
<b>Waste Management (4W)</b>		

<p><b>4W-1: Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents</b></p> <ul style="list-style-type: none"> <li>Adequately sized storage areas for rubbish bins should be located discreetly away from the front of the development or in the basement car park</li> <li>Waste and recycling storage areas should be well ventilated</li> <li>Circulation design allows bins to be easily manoeuvred between storage and collection points.</li> <li>Temporary storage should be provided for large bulk items such as mattresses</li> <li>A waste management plan should be prepared</li> </ul>	<p>The Architectural Design Report states (190):</p> <p><i>“A bulky-waste area for residents is included in the loading area. There is a separate garbage collection room in the basement for the retail garbage. Residential waste is collected in the basement via a chute system, and transferred via hoist to the loading area. Recycling bins are provided on each level, and will be transferred to the waste collection point by the building manager. Organic waste bins are provided.”</i></p>   <p>Council's Resource Recovery unit reviewed the proposal and raised concerns with the use of the turntable and collection off Monastery Lane. Following a request for further information, the new collection point for residential waste is kerbside on River Terrace. The turntable will remain to service commercial waste. A revised Waste Management Plan has been provided. No further concerns have been raised by Council's Resource Recovery unit subject to conditions.</p>	<p>✓</p> <p>with conditions as recommended by Council's Resource Recovery unit</p>
<p><b>4W-2: Domestic waste is minimised by providing safe and convenient source separation and recycling</b></p> <ul style="list-style-type: none"> <li>All dwellings should have a waste and recycling cupboard</li> </ul>	<p>The Architectural Design Report states (190):</p> <p><i>“A communal waste chute is provided for residents in a convenient and accessible location. Waste and recycling storage areas will be well ventilated and have durable and washable finishes All dwellings will be designed to have sufficient internal space for the holding of waste and recycling as required under DCP. For further information review the waste management report included as part of this proposal.”</i></p>	<p>✓</p>

<p>or temporary storage area of sufficient size to hold two days' worth of waste and recycling</p> <ul style="list-style-type: none"> <li>Communal waste and recycling rooms are in convenient and accessible locations related to each vertical core</li> <li>For mixed use developments, residential waste and recycling storage areas and access should be separate and secure from other uses</li> <li>Alternative waste disposal methods such as composting should be provided</li> </ul>	<p>Residential and retail waste storage areas are separate from each other.</p>	
<b>Building Maintenance (4X)</b>		
<p>Building design detail provides protection from weathering Systems and access enable ease of maintenance Material selection reduces ongoing maintenance costs</p>	<p>The applicant provided the below in response to Objective 4X (Architect Letter in response to RFI, dated 9 April 2025).</p> <p>Long lasting and robust materials have been chosen for the building envelope design. This includes a combination of off-form and in-situ concrete, dry-pressed brickwork, aluminium glazing, and fine-grain elements such as steelwork, corrugated metal cladding, GRC planters, and aluminium screens. Natural materials and durable finishes will be utilized to safeguard the building against the harsh marine environment. Refer to drawing DA-890-001 Materials &amp; Finishes Board.</p> <p>The above demonstrates materials have been selected to withstand weathering and manage environmental impacts.</p>	<p>✓</p>