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COMMERCIAL IN CONFIDENCE

Novus on Harris

Presented to the IPC January 2024





Novus acknowledges the Traditional Custodians of the lands on which we live and work. We pay respect to Elders past, present and emerging and recognise their deep connection to land and Country.

Novus Build-to-Rent Specialist







Novus on Harris Parramatta – NSW 210 Apts Status: Planning Est Completion: Q4 2026



Novus on Albert Chatswood – NSW 200 Apts Status: Planning Est Completion: Q4 2027



Novus on Bowen South Melb – VIC 220 Apts Status: Early Works Est Completion: Q3 2026



Novus on Victoria Chatswood – NSW 260 Apts Status: Design Comp Est Completion: Q4 2028

Agenda

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- 2. Planning Summary of the Key Assessment Items
- 3. Key Assessment Items

Project Context

- Novus on Harris is in the park precinct of Parramatta, the heart of Greater Sydney.
- Parramatta CBD Planning Proposal made in 2022 to make way for an estimated 16,000 new jobs and 11,000 new dwellings.*
- Subject site is **rezoned from 4:1 to 11.5:1 by Council and DPHI** to accommodate mixed-use development and high-density residential accommodation.
- Sydney Metro West confirmed to proceed in 2023.
- Parramatta Light Rail Stage 1 complete in 2024.
- Rental vacancies in Parramatta are at an **all-time low at 1.0%** amidst a national housing supply crisis.



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View West towards Parramatta CBD

*Source: The Sydney Morning Herald, May 11 2022

Project Benefits

HOUSING DIVERSITY & CHOICE

- 210 apartments located next to transport, jobs, education and health precincts.
- Mix of housing typologies including studios, 1 bed, 2 bed and 3 bed homes.
- **Resident amenities** including pool, wellness and resident dining rooms.



Hassall St Entry

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A RESILIENT & VIBRANT ECONOMY

Novus on Harris is forecast to contribute:

- \$126m to State GDP*
- Create 300+ jobs during construction*
- Create 66 jobs created during operations*

Future Novus residents are forecast to spend **\$5.7m spent annually** in Parramatta CBD*.



Teahouse, Ground Floor

*Source: Novus on Harris Socio-Economic Impact Assessment prepared by Hill PDA December 2022

SUSTAINABLE FUTURE FACING HOMES

- 5 Star Green Star
- >7 Star NatHERs
- Net Zero Carbon in Operations
- 40% improvement in Water consumption
- 25% improvement in Energy consumption



Resident Dining Room, Level 32

Planning Summary of the Key Assessment Items

Key Assessment Items	Resolution	
1. Design Excellence	 The unanimous winner of a Design Excellence Competition that included elected representatives from the Government Architect NSW and the City of Parramatta Council. Design Excellence confirmed by the Design Integrity Panel before DA lodgment and on multiple occasions during the Response to Submissions and DA assessment process. 	
2. Built Form	 The proposal complies with the provisions of PLEP 2011 and the Housing SEPP and provides a bulk and scale which is compatible with the future character of the area. 	
3. Residential Amenity	The proposal achieves a high level of residential amenity for future residents per the ADG when applied flexibly considering the Housing SEPP and DPHI's flexible design provisions to cater for the BTR housing typology.	
4. Public Domain & Landscape	\checkmark The proposal provides dedication of land for local road widening consistent with the PLEP 2011.	
5. Flooding	 The proposal provides habitable floor levels above the Council's Flood Planning Level (FPL), protection for property via driveway crests to the FPL, and automated floor gates to the Probable Maximum Flood Level (PMF) and FERP that includes a Shelter in Place Strategy consistent with Council's PLEP 2011 and DCP. DPHI engaged GRC, a firm specializing in flood engineering work including flood modelling and floodplain risk management to prepare an Independent Peer Review of the proposed development against Council's DCP and LEP. It was found to be compliant with Council's LEP and DCP requirements and the flood protection utilised on the project is endorsed by their inclusion in the Parramatta DCP. 	
6. Traffic, Transport & Accessibility	 The proposal has no unacceptable traffic implications in terms of road network capacity, with projected peak-hour traffic volumes within acceptable limits. It features a car parking ratio of 0.3:1 and promotes sustainable modes of transport. 	

Key Assessment Items

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Item 1: Design Excellence *Process*

Key Dates	Milestone	
15 December 2021	 Pre-lodgement meeting held with Council discussing key design, public domain and planning issues including building envelope. 	
22 February 2022	 Reference design with pre-lodgement feedback presented to Council. No comments or meeting minutes are issued by Council. 	
22 February 2022	 Council acknowledge during the meeting that they are not the Consent Authority. 	
4 April 2022	✓ List of Competitors endorsed by Government Architect's NSW	
24 June 2022	 Design Competition Brief (utilising Council's brief template) and Strategy endorsed by Government Architect's NSW (GANSW) 	
24 June 2022	✓ Jury confirmed as Rory Toomey (GANSW), Kim Crestani (Council) and Aleksander Jelicic (Proponent).	
27 June 2022	✓ Design Excellence Competition commences.	
1 August 2022	 Design Excellence Competition submissions lodged to Competition Manager. 	
22 August 2022	 Jury Presentations held and Rothelowman unanimously announced as the Design Excellence Competition winner. 	
22 August 2022	 Design Integrity Panel consisting of Rory Toomey (GANSW), Kim Crestani (Council) and Aleksander Jelicic (Proponent) formed. 	
19 September 2022	✓ Jury Report endorsed by Design Integrity Panel.	
22 September 2022	✓ Jury Report issued to Council and subsequently acknowledged by Council.	
30 November 2022	✓ Design Integrity Panel endorse the DA Scheme.	
27 February 2023	 EIS, Design Integrity Report, and Jury Report Lodged with DPHI. 	
16 June 2023	✓ RTS Design Scheme endorsed by the Design Integrity Panel.	
27 October 2023	✓ Updated RTS Design Scheme endorsed by the Design Integrity Panel.	

Item 1: Design Excellence Vision

- 1. Concept developed around **Designing with Country**
- 2. Vision brought about from work with Local First Nations Artist and Ecologist.
- 3. Raft design a site-specific response to flood requirements and the urban area.



At the head of the river valley and where the fresh and tidal salt waters ebb and flow, Burramatta has always been a place of interchange – a meeting place. We explored this idea to help us create an architecture that encourages social interaction, fostering connection to country; between city and environment.

The architecture is sympathetic to nature and engages with the environmental and climactic story of its place. We explored an alternative approach to tower typologies, to make it local and specific to Parramatta, an architecture that touches the ground lightly.

The podium is a series of open decks, inviting a multitude of experiences allowing the nature to permeate deep within the site.

Synthesising art with architecture creates an opportunity for deep connection to meaning and memory. Colour, material, and ornament fosters an engagement between people and their place. We sought consultation with 2 Parramatta locals; Teribelang-Bunda artist Geoff Sellman & designer Simon Alexander Cook to assist in tailoring these elements.

The architecture is organic in approach to passive environmental design, each façade is tailored to its specific climactic context. Material, colours and tone of the facades was conceived as though the building itself was crafted from the clay and paperbark directly from the site on which it resides.

By prioritising a humanist agenda, we sort an architecture that celebrates people.

We believe architecture can participate in an organic evolution of our cities rather than prescribed inevitability.

Item 1: Design Excellence *Place*

The importance of the river to life creates a scope to rebuild the once green corridor to allow for a connection back to the river to continue culture. The design opportunity is to not work against the rise and fall of the river, but embrace it, creating a contemporary response to an ancient condition. Native vegetation can be integrated, along with an experience of the cultural narrative through public art integration.



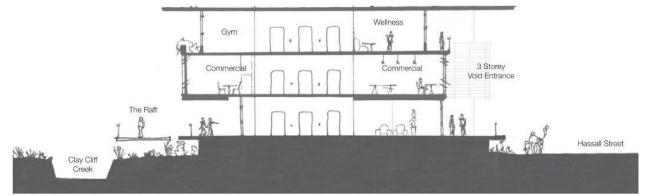


Parramatta lies within the lands of the Burramattagal of the Dharug Nation. Located along a former green vein, following a freshwater creek that leads to the Parramatta River.

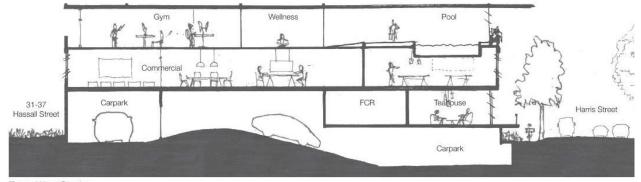
There are opportunities to re-establish this important character, and enhance the connectivity back to the natural landscape, and ebb and flow of the river.

Floods are a part of living on the river, is there a way to safely live with these cycles of the natural environment, understand and work with them.

Item 1: Design Excellence *Designing with Country*

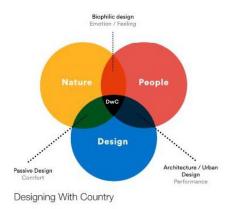






East - West Section

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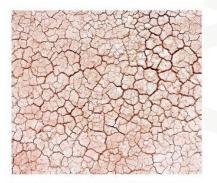




Synthesis of Art & Architecture Burramatta Dreaming (sels crossing country) Published with permission from the artist. Artist: Geoff Sellman, teribelang-bunda artist



Local Landscape & Biophilia

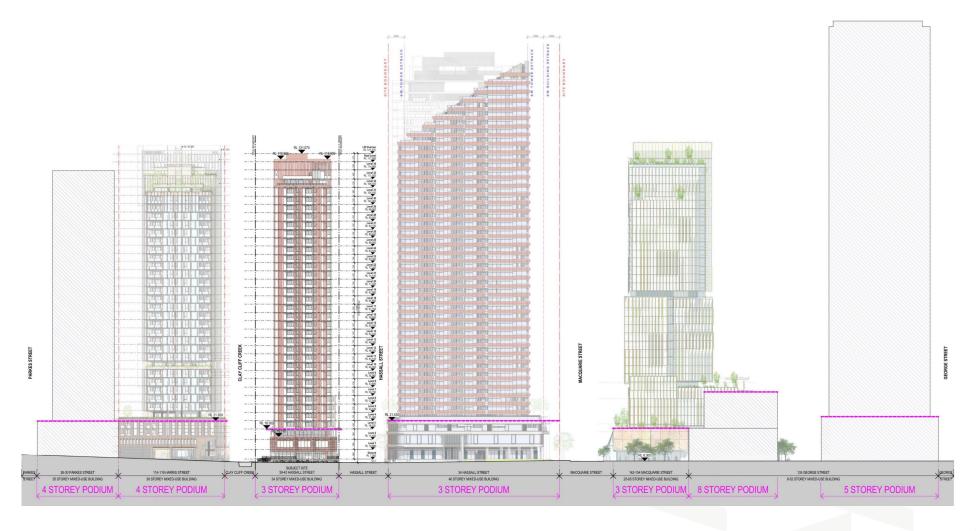


Materials & Hues Inspired by the Local Context

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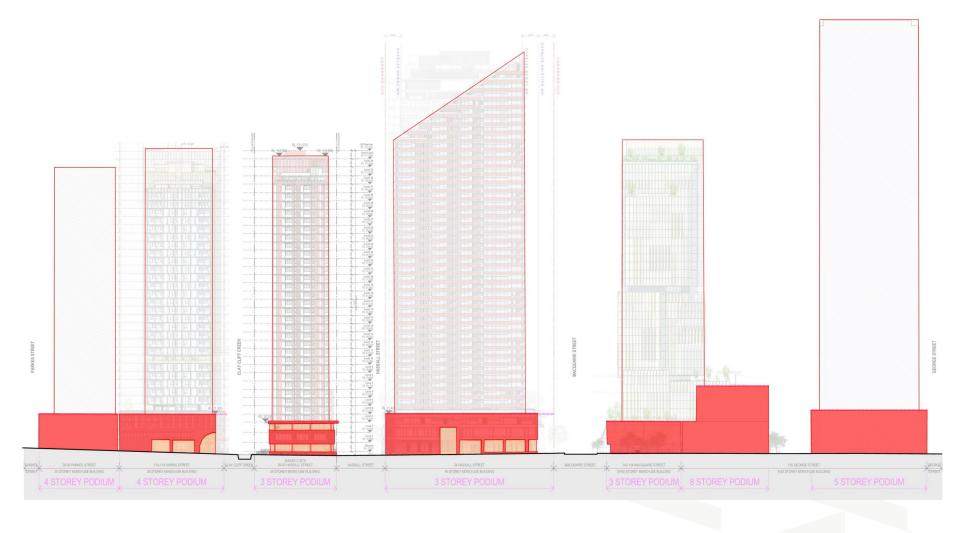
JANUARY 2024

Item 1: Design Excellence Harris Street Elevation



NOVUS ON HARRIS

Item 1: Design Excellence *Harris Street Elevation*



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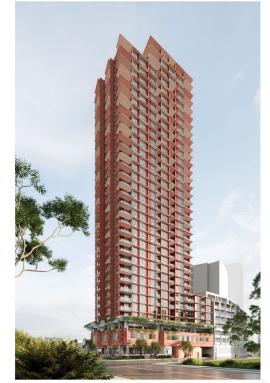
Item 1: Design Excellence Podium Design Three-Storey Void at Entry Activation on North - Hassall Street Frontage. Main lobby, 'The Teahouse', Main entrance on Hassall Street, with on prime corner of the site East vehicle traffic, and closest to Parramatta CBD and transport. Section through Lobby Dual main-entrance ensures equitable access. Bleacher seating used to amplify connection to Hassall St and James Ruse Reserve Loading and services Awning used to mitigate wind and positioned in the East active protect entries and foothpaths. portions of the site and removed from the street frontage where possible. Activation on East - Harris Street/Park Frontage. RETAL Art opportunity. Glazing along all public frontages of the ground plane, for permeability and visual engagement. Re-wilding of the Clay Cliff Creek edge, whilst allowing for overland flow. Southern, fully-ramped entrance ensures equitable access. Activation on South - Clay Cliff Creek Frontage.

Harris St Bleacher Seats



Item 1: Design Excellence *Podium Design*





View of northern facade from Harris Street



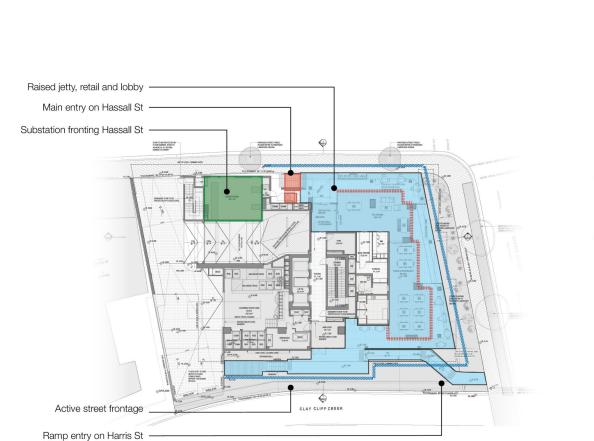
View of driveway from Hassall Street

Item 1: Design Excellence *Podium Design*



Item 1: Design Excellence *Podium Design*





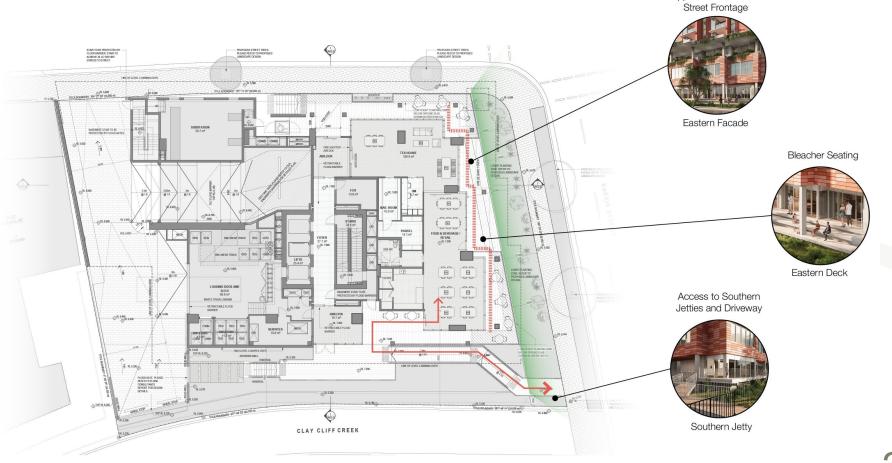
Item 2: Built Form *Street Setback & Wall Height*

Hassall St entry void -SSDA & Current Scheme DCP Scheme 00 000-1 1 10 10 10 10 10 10 10 10 10 10 33 + 22 Pool Haller TOHISLADY DASHG TO 170H HEM FT, DICKIN N Stepped transition along Harris St *** ** ***** ** - SERVER - MORE ACCESSIVATE CLAY CLIFF CREEK

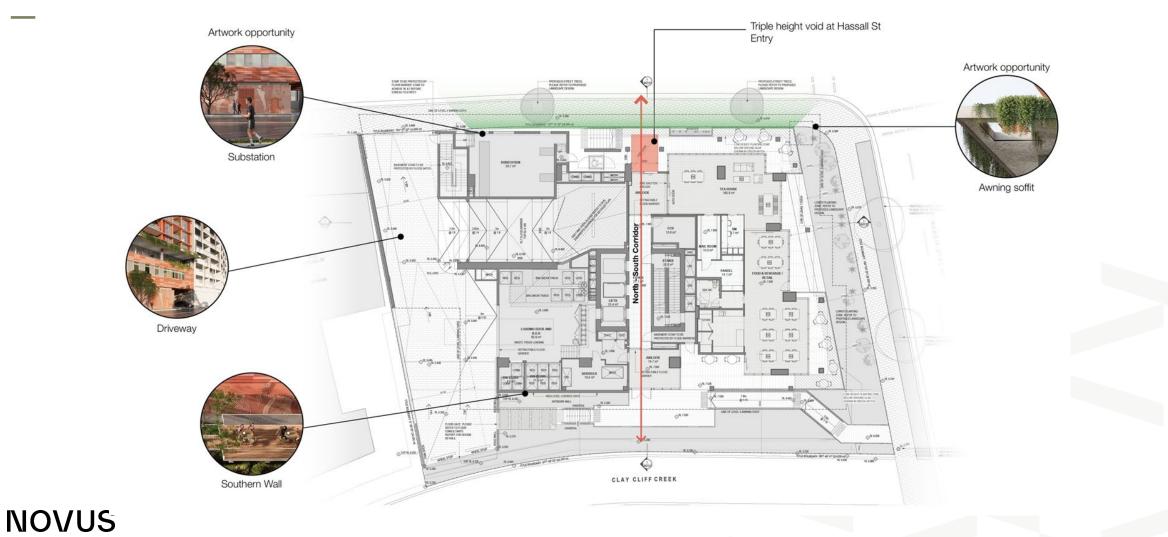


Stepped facade at Harris

Item 2: Built Form *Harris Street Activation*



Item 2: Built Form Hassall Street Activation





Harris St – Robin Thomas Reserve Frontage



Harris St – Clay Cliff Creek Frontage



Harris St – Robin Thomas Reserve Frontage



Hassall St – Northern Frontage

Item 2: Built Form *Ground Floor Ceiling Height*



Item 2: Built Form *Tower Design*



View from North East

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View from South East



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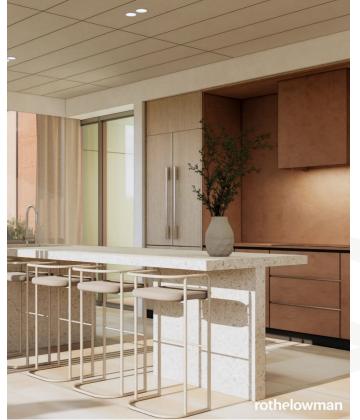
Item 3: Residential Amenity *Housing SEPP BTR Provisions*

Part 4: Build to Rent Housing		
<u>Clause 73:</u> Conditions of build- to-rent housing to apply for at least 15 years	 (1) Development consent must not be granted to the erection or use of a building for development to which this part applies unless the consent authority is satisfied that, during the relevant period, the tenanted component of the building— (a) will not be subdivided into separate lots, and (b) will be owned and controlled by 1 person, and (c) will be operated by 1 managing agent, who provides on-site management. (2) (Repealed) 	
	 (3) In this section—<i>relevant period</i> means— (a) for development on land in Zone E2 Commercial Centre, Zone B3 Commercial Core or Zone SP5 Metropolitan Centre—a period commencing on the day an occupation certificate is issued for all parts of the building or buildings to which the development relates and continuing in perpetuity, or (b) otherwise—a period of 15 years commencing on the day an occupation certificate is issued for all parts of the building or building or cupation certificate is issued for all parts of a building to which the development relates. 	
<u>Clause 75:</u> Design requirements	 (1) This section applies to development to which this Part applies only if Chapter 4 applies to the building resulting from the development. (2) In determining an application for the modification of a development consent or a development application for the carrying out of development to which this section applies, the consent authority must— (a) be flexible in applying the design criteria set out in the Apartment Design Guide, including, in particular, the design criteria set out in Part 4, items 4E, 4G and 4K, and (b) in its consideration of the objectives set out in the Apartment Design Guide, Part 4, consider the following— (i) the amenities proposed to be provided to tenants residing in the building through common spaces and shared facilities and services, (ii) whether the configuration and variety of dwellings in the building will provide adequate options to prospective tenants in relation to the size and layout of the dwellings, (iii) whether tenants residing in the building will be able to relocate to other dwellings in the building that will better accommodate their housing requirements if their requirements change. 	
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Item 3: Residential Amenity *Balconies & Private Open Space*

4E Balconies & Private Open Space

- As part of the Housing SEPP BTR Provisions, terraces and balconies in the development are less than the minimum Apartment Design Guide (ADG) area.
- This reduction in area is offset by the much greater quantum of communal spaces provided as part of the Housing SEPP BTR Provisions.
- The internal spaces of the **pool on level 2** and the **resident's amenity on level 32** are open with natural ventilation and have strong connection to the adjacent external communal open spaces.









Gym & Wellness

Item 3: Residential Amenity Apartment Mix, Size & Layout

4D Apt Size & Layout & 4K Apt Mix

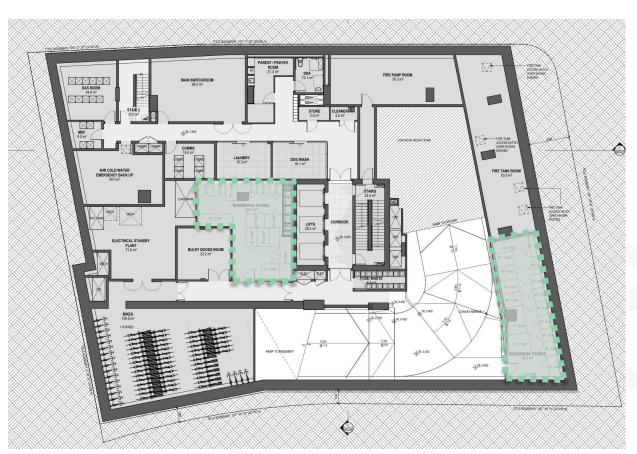
- The building provides a mix of Furnished Studio's, 1, 2 and 3 Bed apartments to meet the BTR customer needs.
- A range of apartments are provided with additional spare (multi-purpose) rooms to further diversify housing typology as well as creating choice within the building.
- All the 1-Bed, 2-Bed and 3-Bed apartments meet the required minimum areas.
- The Furnished Studio type apartment is less than the ADG minimum 35sqm for a Studio Apartment. However, this apartment is a different typology from the typical Studios, as it is a fully furnished studio apartment under the Housing SEPP BTR Provisions.



Item 3: Residential Amenity *Storage*

4G Storage

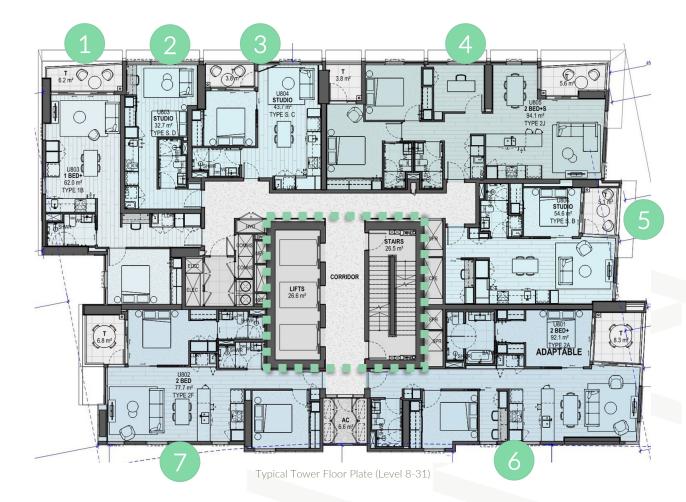
- As part of the Housing SEPP BTR Provisions a proportion of the dwellings in the scheme do not provide the minimum storage areas within the individual apartment.
- 86% of apartments achieve the required minimum internal storage within the apartment.
- This shortfall is supplemented by a **large communal basement storage** which is allocated according to need of residents.



Item 3: Residential Amenity Common Circulation Spaces

4F Common Circulation Spaces

- 3 lifts are provided to service the building, with a ratio of approx. 1 lift per 70 apartments
- The proposal is supported by a lift traffic analysis by ADP Consulting that concludes that the number of lifts to the building is sufficient to provide a peak period of lift service quality.



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Item 4: Public Domain & Landscape LRA Area



Harris St – Robin Thomas Reserve Frontage

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Item 4: Public Domain & Landscape Landscape Plan

Our Approach is to ...

(+) provide an engaging 'waterside' environment

Landscape Plan - Ground

- connect with the indigenous cultural history
- design above the 1-100 year flood level
- provide natural habitat for wildlife

Legend

- (01) Hassall Street step and lift entry
- 02 03 Hassall Street basement entry
- Improved Harris Street frontage with endemic + wildlife attracting wsud species with opportunity for overland flow and flood storage capability
- 04 05 06 Ground level terrace with circulation and seating
- Harris Street ramp (1:14)
- Southern foyer entry
- (07) External jetty landings over Clay Cliff Creek / flood zone
- (08) Stepping paving elements by Architects
- (09) Clay Cliff Creek zone with endemic wildlife attracting + wsud species and opportunity for overland flow and flood storage capability
 - 1200mm high safety balustrade
- Existing Clay Cliff Creek concrete culvert
 - Hassall Street Concrete Paver*
 - Harris Street Concrete paver with stone finish* Street Trees*
- (14) (15)
 - Proposed native setback tree (Angophora floribunda) selected from - List of indigenous / low water use species (Parramatta City Council)





Native Wsud Planting

Ecologica **Revitalisation**



Celebrate its significance to the Dharug people with art / storytelling Amenity platforms



Planting Palette



Item 5: Flooding *Approach*

Issue	Response
Flood Modelling	 Council advised GRC (DPE's Independent Peer Review Flood Engineer) that the model relevant to the subject site is the one used in the 2005 SKM study and results from that assessment should be utilised in assessing the design. Given the 2005 model was not available for this site-specific study, L&A developed a site-specific flood assessment to demonstrate compliance and model the potential impact of the proposed development on the existing flooding affectation at and surrounding the subject site. GRC has determined L&A has utilized the best practice methodology by building the site-specific model in TUFLOW software. The modelling results determined the 2005 modeling work was no longer representative of current day conditions. It was assessed that bridge crossings traversing Clay Cliff Creek were misrepresented as culvert-like structures in the 2005 model resulting in an overestimate of the flood levels upstream of each bridge structure.
Flood Hazard Classification	 In L&A's site-specific TUFLOW model, the 1% AEP inundates parts of the site with flood waters with hydraulic hazard up to H3 (medium hazard). The maximum hydraulic hazard on site would also be H3 if the creek floodwaters were to surcharge the channel in the 1% AEP event. The L&A model users greater flows in Clay Cliff Creek in the 1% AEP flood than was used in the 2005 model and it is therefore more conservative Therefore, the site would be in the Medium Flood Risk Precinct using Council's precinct definitions, permitting residential development.
Increased Flood Risk to Life	 L&A's modelling results indicate the flood level impact of the proposed development would not adversely impact flood behaviour in the design event, with no significant increase of flood levels on surrounding properties and presented no indication of a significant loss of flood storage.
Sheltering in Place	 Sheltering in place is a strategy supported by Council's DCP in order to account for the complexity of facilitating development in the Parramatta CBD and doing so in a way that is safe and considerate of flood risk. Provision has been made to support the sheltering of all occupants on the first floor and above of the proposed development which are above the PMF level for up to 6 hours (the duration of predicted inundation in a PMF event) with back up power and water access. There is flood free access to the building for emergency services in events up to the 1% AEP flood
Flood Protection Measures	 In addition to the refuge areas which allow for sheltering in place, the proposed basement levels are: are proposed to be protected from floodwaters up to the FPL by passive flood protection measures. are proposed to be protected from flood levels from the FPL up to and including the riverine PMF by active measures, such as flood gates and flood doors
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Item 5: Flooding *Protection Measures*

LEGEND Mechanical Barriers Passive Barriers

BARRIER 1 Car Park Entry Hydraulic Tilt Barrier 5.5m protection width 2.4m protection height RL6.7 to RL9.1

BARRIER 2 Loading Dock Entry Electric Retractable Barrier 5.0m protection width 0.6m minimum protection height RL5.6 to RL6.7

BARRIER 3 Driveway Passively Activated Barrier 7.1m protection width 1.0m protection height RL5.2 to RL6.2

BARRIER 4 Jetty Access Passively Activated Barrier 1.4m protection width 1.0m protection height RL5.2 to RL6.2

BARRIER 5 Foyer North Electric Retractable Barrier 2.2m protection width 2.5m protection height RL7.0 to RL9.5

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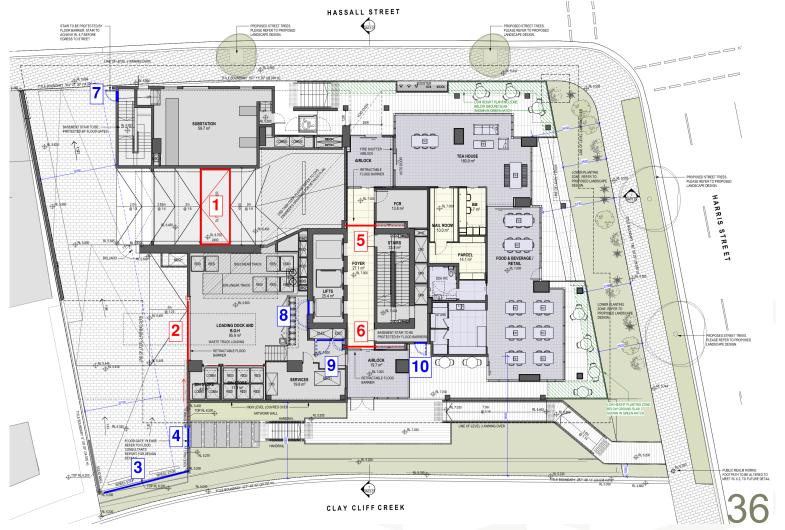
BARRIER 6 Foyer South Electric Retractable Barrier 2.2m protection width 2.5m protection height RL7.0 to RL9.5

BARRIER 7 Basement Stair Personnel Door 1.0m width Protection to full height of door

BARRIER 8 Loading Dock Elevator Drop Hinge Swing Door 1.2m protection width 2.5m protection height RL7.0 to RL9.5

BARRIER 9 Electrical Riser Personnel Door 0.9m & 1.2m width Protection to full height of door

BARRIER 10 Tower Stair Personnel Door 1.0m width Protection to full height of door



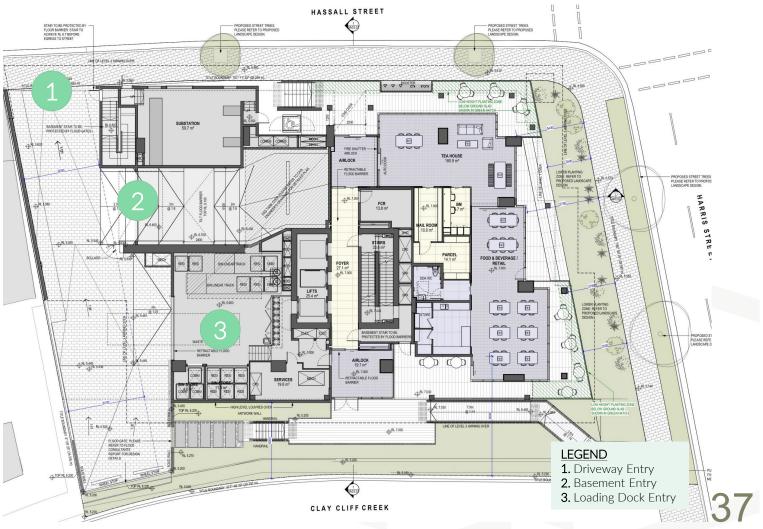
Item 6: Traffic, Transport & Accessibility

Items Identified by Pentelic Advisory (DPE Independent Peer Review)

• Site specific SIDRA modelling and analysis has been undertaken on the site and incorporated into the Traffic Impact Assessment (TIA) prepared by Stantec.

DPE Independent Peer Review of the Stantec's TIA and determined:

- The increase in traffic generated by the proposed development will be modest when distributed on the surrounding road network and will not result in adverse effects on the operational performance of the Hassall Street and Harris Street and Harris and Parkes Street intersections.
- The proposed development has no unacceptable traffic implications in terms of road network capacity, with projected peak hour traffic volumes within acceptable limits.



Summary

Key Assessment Items

1. Design Excellence

2. Built Form

3. Residential Amenity

- 4. Public Domain & Landscape
- 5. Flooding
- 6. Traffic, Transport & Accessibility



Hassall St – Northern Frontage

Appendix.

2. Supplementary Assessment Items

Project Detail

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Project Detail

Feature	Detail	
Site Area	1,448.6m ²	
FSR	11.5:1	
GFA	16,656.3m² (max allowable GFA – 16,658.	9m²)
Yield	210 Apartments	
Solar	2hrs Solar Access – 96.2%	0-2hrs Solar Access - 3.8%
Cross Ventilation	62%	

Supplementary Assessment Items

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Built Form *Accessibility* EUAR TO BE PROTECTED BY FLOOR BARRER, STAR TO ACHEVE R. 4.7 BEFORE EGRESS TO STREET E B (8 RETAL 8 E. B 8 < _ 2"" CLAY CLIFF CREEK

JANUARY 2024

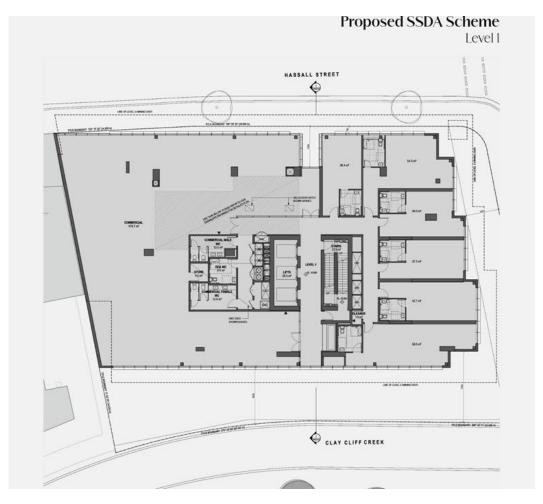
Built Form *Floor Space Ratio & Site Isolation*

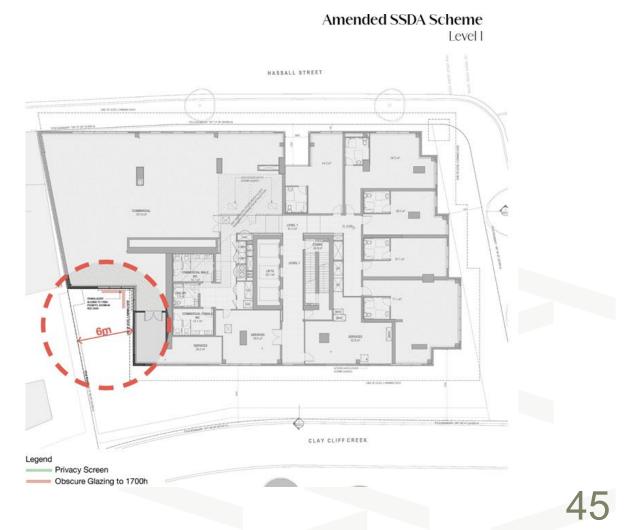


Clay Cliff Creek Stormwater Channel



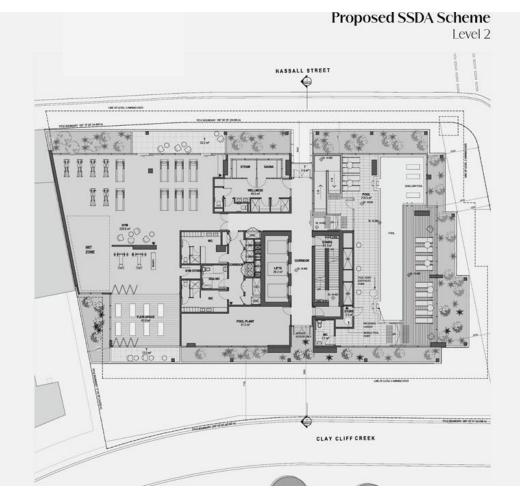
Built Form *Building Separation & Privacy*

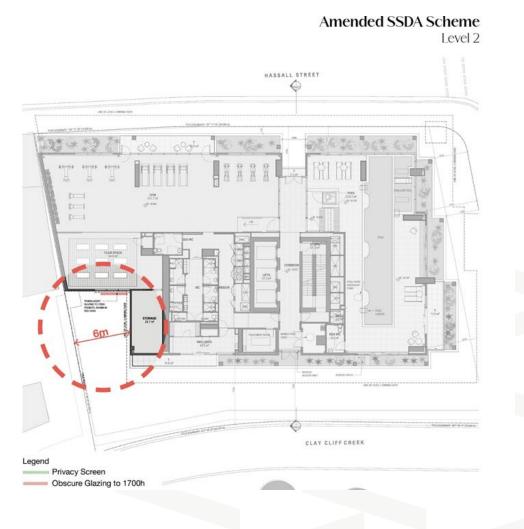






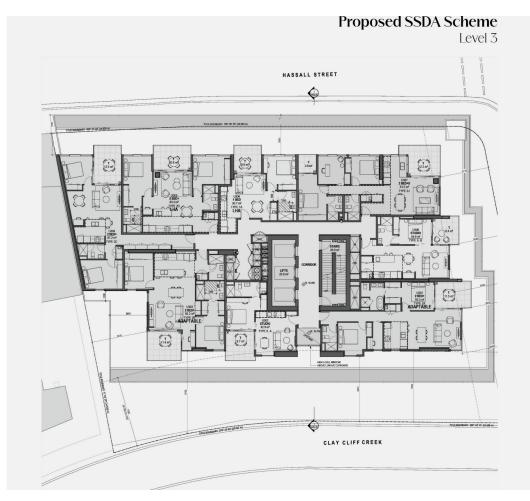
Built Form *Building Separation & Privacy*

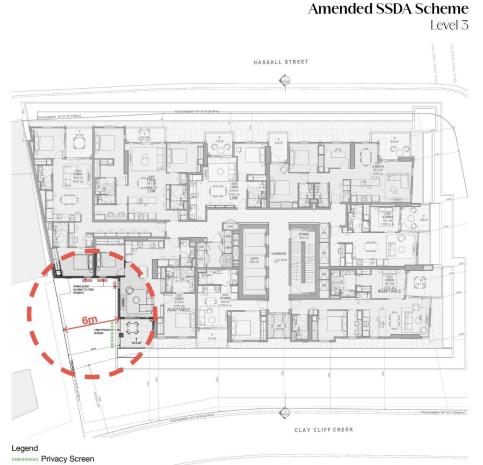






Built Form *Building Separation & Privacy*



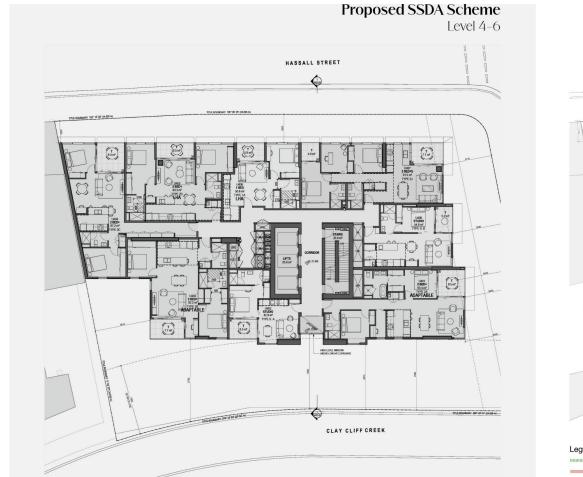


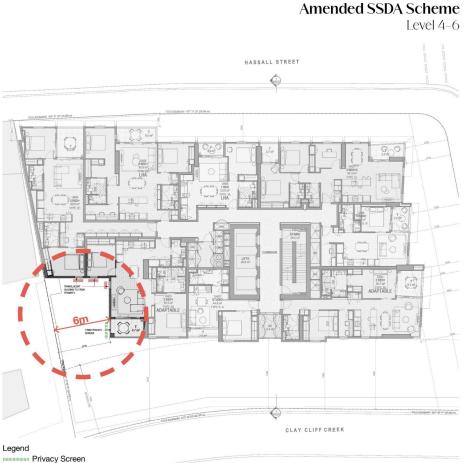
Obscure Glazing to 1700h



Obscure Glazing to 1700h

Built Form *Building Separation & Privacy*

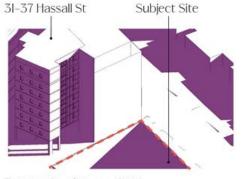




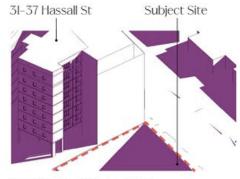
Proposed Shadows

Existing Shadows

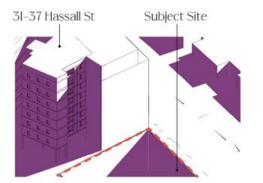
Built Form *Overshadowing*



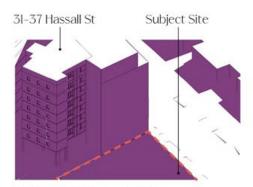
Existing Conditions - 9AM



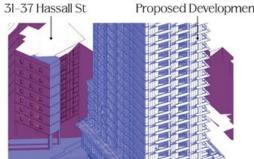
Existing Conditions - IOAM



Existing Conditions - IIAM

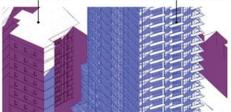


Existing Conditions - I2PM



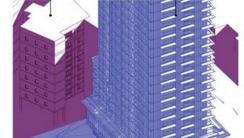
Proposed Conditions - 9AM

Proposed Development 31–37 Hassall St

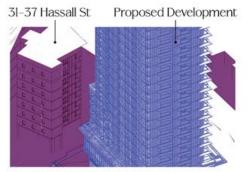


Proposed Conditions - IOAM

Proposed Development 31-37 Hassall St Proposed Development



Proposed Conditions - IIAM



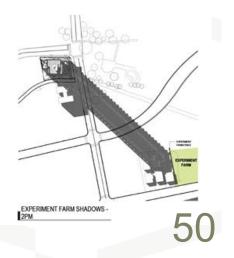
Proposed Conditions - 12PM

EXPERIMENT FARM SHADOWS

Built Form *Building Height*

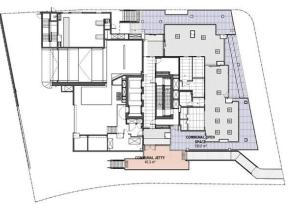
Proposed SSDA Scheme EXPERIMENT FARM SHADOWS -11AM EXPERIMENT FARM SHADOWS -10AM Amended SSDA Scheme

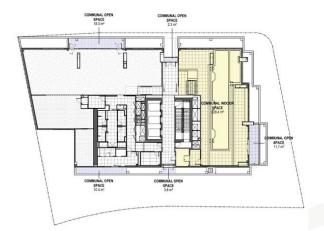
EXPERIMENT FARM SHADOWS -12PM





Residential Amenity Communal Open Space



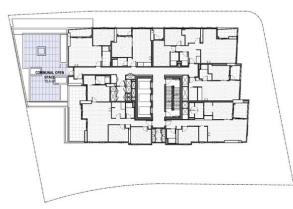




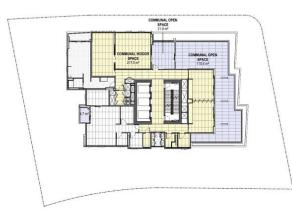
COMMUN	AL INTERNAL SPACE AREA
LEVEL	AREA
Level 2	226.1 m ²
Level 32	177.2 m ²
	403.3 m ²

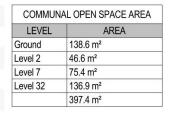
COMM	IUNAL JETTY AREA
LEVEL	AREA
Ground	40.3 m ²
	40.3 m ²

642 - Chi
Ground





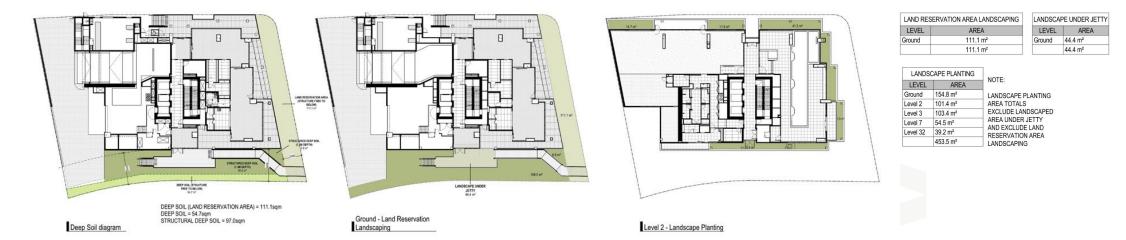


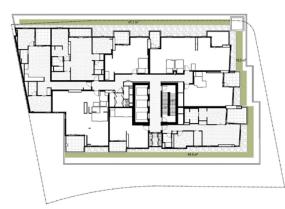


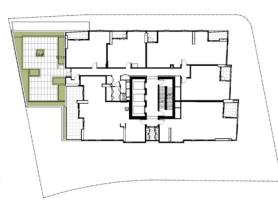
COMMUNAL OPEN SPACE REQUIRED				
ADG REQUIREMENT	AREA ACHIEVED	% ACHIEVED		
25%	397.4 m²	27%		
AREA EXCLUDES	S COMMUNA	L JETTY ARE		

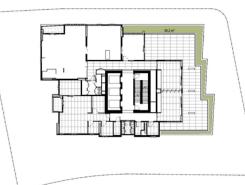
NOVU_

Public Domain & Landscape *Deep Soil Planting*









Public Domain & Landscape *Clay Cliff Creek Corridor*



NOVUS

Thank you.

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