



Attachment 4 to Item 10.1.1.

Appendix 2 Housing Diversity Report

Date of meeting: 11 June 2024
Location: Council Chambers
Time: 6:30pm

Belmont Park Estate

Housing Diversity Report



January 2023

Prepared by Tract for the Kavanagh Family

Acknowledgement of Country



We pay our respects to the Traditional Custodians of Country throughout Australia, their Elders and ancestors, recognising their rich heritage and enduring connection to Country and acknowledging the ongoing sovereignty of all Aboriginal and Torres Strait Islander Nations.

We recognise the profound connection to land, waters, sky and community of the First Nations peoples, with continuing cultures that are among the oldest in human history. We recognise that they are skilled land shapers and place makers, with a deep and rich knowledge of this land which they have cared for, protected and balanced for millennia.

Quality Assurance

Belmont Park Estate
Housing Diversity Report

Prepared for
Kavanagh Family

Project Number
222-0079-00-L-03-RP01

Revisions

Issue	Date	Description	Prepared By	Reviewed By	Project Principal
00	11 January 2023	Issued for Submission	SP	YX	GG

Contents

Introduction

1.1	Regional Context	04
1.2	Housing Diversity in the Hawkesbury	04

Vision and Design Principles

1.3	Distinct Community	06
1.4	Inclusive Community	07
1.5	Healthy Community	08
1.6	Resilient Community	09

Housing Diversity at Belmont Park

1	Indicative Typology Studies - Medium Density	10
1.1	Town Houses	10
1.2	Local Centre - Units & Terraces	11
1.3	Heritage Park	12
2	Housing Typology Benchmarking	13
2.1	Diversity across Distinctive Precincts	13

Introduction

1.1 Regional Context

- The Belmont site sits in the Hawkesbury LGA, 2.5km west of North Richmond, approx. 70km north west of the Sydney CBD.
- The subject site incorporates 4 lots to the south of Grose River Road and to the north of the Hawkesbury River as it splits into the Nepean and Grose Rivers, with a total site area of approx 120ha.
- The Burraberongal people of the Darug nation are the Traditional Custodians of the area, and we recognise their enduring connection with Country.

1.2 Housing Diversity in the Hawkesbury

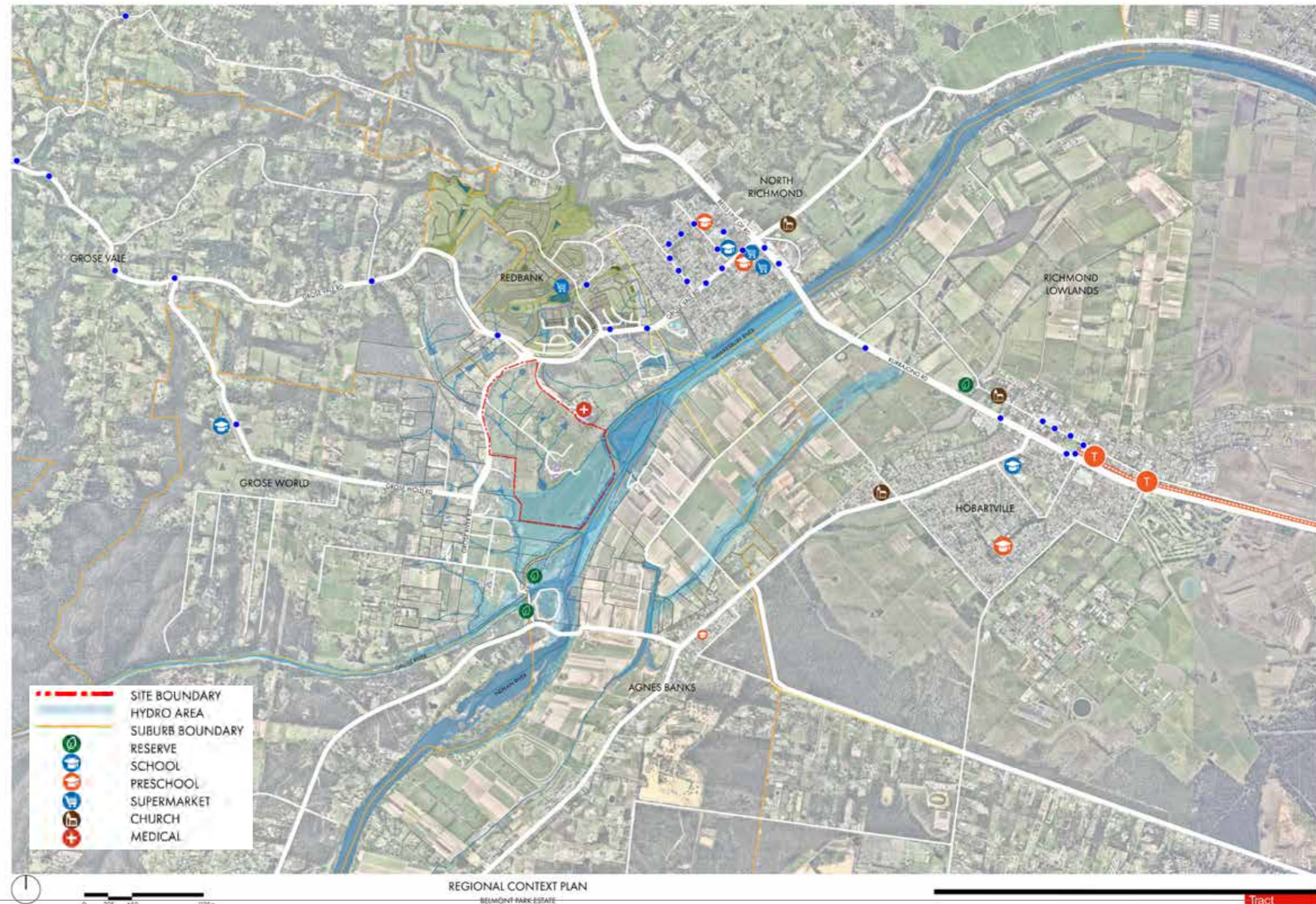
Across Greater Sydney, we face housing affordability challenges. A large contributing factor is the limited availability of housing diversity and smaller dwellings to meet the growing population of small households.

Within the Hawkesbury LGA, a growing population currently faces limited availability of medium or high density housing (13%, Local Housing Strategy- LHS, 2020).

'An increase in the supply of smaller dwellings suited to older people, lone person households and young couples is essential...the greatest opportunity to provide increased housing diversity exists within the greenfield developments.' (LHS, 2020).

There is therefore an opportunity to provide a diverse mix of housing typologies, including smaller dwellings with walk-able access to amenities and open space in a healthy, liveable community.

Alongside increased housing diversity, the proponent of this proposal is committed to the delivery of a minimum of 10% affordable and social housing dwellings, to be delivered in the most appropriate typology to address local needs.



Vision and Design Principles

Vision Statement

Belmont Park is to be a sustainable and innovative residential community that responds to its unique landscape setting and cultural heritage on the convergence of three rivers.

Belmont Park will be...

- A **distinct** community – with expansive river front public open space and landscape that anchors the identity and sense of place, celebrating the site's cultural heritage
- An **inclusive** community – with a range of diverse housing typologies to appeal to a vibrant new community
- A **healthy** community - with best practice urban design principles for a permeable, pedestrian-priority environment that maximises expansive views of the landscape and responds to the dominant topography
- A **resilient** community –with a central local hub, public transport and access to local parks that act as points for connection



Distinct



Inclusive



Healthy



Resilient



Distinct Community

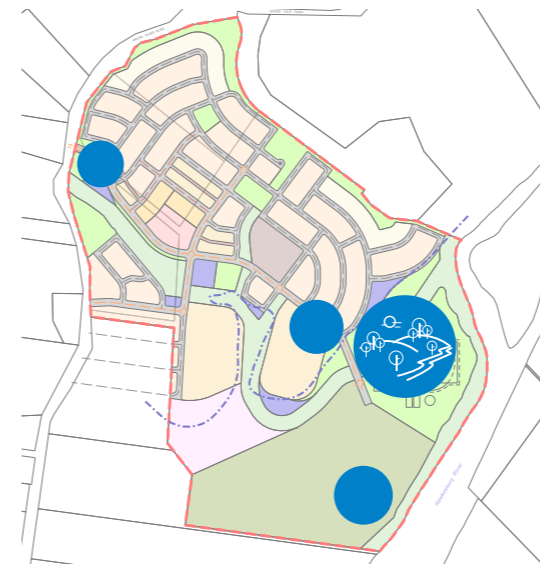
A **distinct** community with vistas across the landscape that anchor the identity and sense of place, and an expansive river front public open space that responds to the significance of Dyarrubin (the Hawkesbury) and the convergence of three rivers.



1.3 Distinct Community

The following key principles will be followed to achieve a Distinct Community:

1. Establish a district scale river front public open space for recreation, walking trails and links to the agricultural and equestrian nature of the site.
2. Connect with Country to celebrate the importance of the Dyarrubin and the significance of the site as a place of loss.
3. Respond to topography to maximise and preserve views of the surrounding landscape.
4. Preserve significant vegetation and increase native tree canopy cover throughout the landscape.
5. Celebrate the rural and agricultural history of the site, with incorporation of a community farm, and celebration of the heritage buildings within parklands.



Grose River landscape and nearby Yarramundi Reserve



Maitland Riverlink connects locals to the river heritage



Riverfield walking trails, Clyde, Victoria. Source: Tract

Inclusive Community

An **inclusive** community with a diverse range of housing typologies that address affordability and create a vibrant social mix in a series of interconnected neighbourhoods.



1.4 Inclusive Community

The following key principles will be followed to achieve an Inclusive Community:

1. Provide a range of lot sizes, and design for a diverse range of housing typologies.
2. Provide suitably placed density, with good access to amenity, rather than sprawling traditional subdivision.
3. Consider alternative typologies such as cluster housing, with common ownership over larger environmental lots.
4. Address issues of housing affordability and social housing availability, with a vibrant mix of housing types.
5. Deliver a minimum of 10% of dwellings as affordable and social housing, in typologies most appropriate to address local needs.



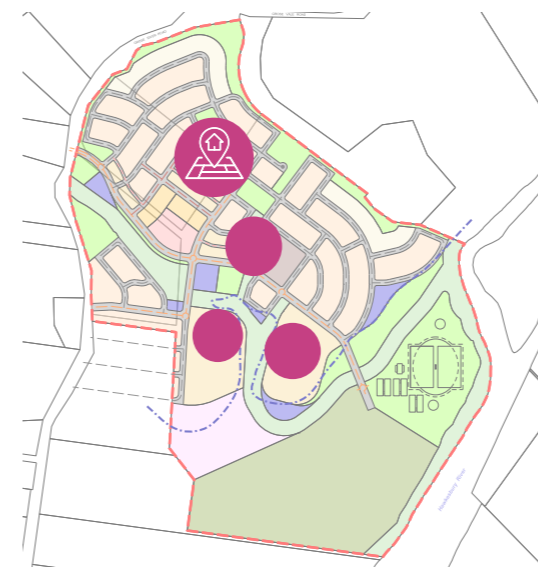
Apartments at Canopy, Bardonia. Source: Tract



Telopea Park, ACT Town houses



Elevated house at Currumbin Eco-Village, Gold Coast



Healthy Community

A **healthy** community with best practice urban design principles for a permeable, pedestrian-priority environment that maximises expansive views of the landscape and responds to the dominant topography.



1.5 Healthy Community

The following key principles will be followed to achieve a Healthy Community:

1. Riparian corridors will be celebrated, with Steading Creek opening up to Hawkesbury River, celebrating this as a recreational and cultural asset.
2. Walkability within the community will be encouraged through active transport corridors and pedestrian-priority streets with ample native tree canopy cover and landscaping.
3. Walking trails on the river front through to Navua Reserve and Yarramundi Reserve.
4. Streets will respond to natural topography to maximise walkability and preserve key views.
5. Development will be considerate of the floodplain and best practice water sensitive urban design measures will mitigate runoff into the river environment.



Green streets with ample tree canopy cover for walkability and amenity



Vermont Park, Vermont South - Merchant Builders (Tract founders)



Vermont Park, Vermont South - Merchant Builders (Tract founders)

Resilient Community

A **resilient** community with a local activity centre that acts as a focal community hub, as well as local parks that serve interconnected but unique communities, responding to the site's unique land form.



1.6 Resilient Community

The following key principles will be followed to achieve a Resilient Community:

1. A central local hub will become the focal point of the community and will serve as a centre for social connection.
2. Local parks and play spaces will be walk-able from all neighbourhoods and will instil a sense of community pride and identity.
3. Streets will be treated as public spaces, with ample amenity particularly on the connector spine.
4. Interconnected neighbourhoods will be linked and connected but also uniquely responsive to the land form of the site with their own identities.
5. Appropriate commercial activities and opportunities on and beside the water can enhance the local economy and celebrate the community's identity.



Local centres provide convenience shopping and act as a community anchor point



Cafes and other amenities provide a reason to stay and dwell in the centre



Local parks provide a place of connection and can reflect the site's culture and identity



Housing Diversity at Belmont Park

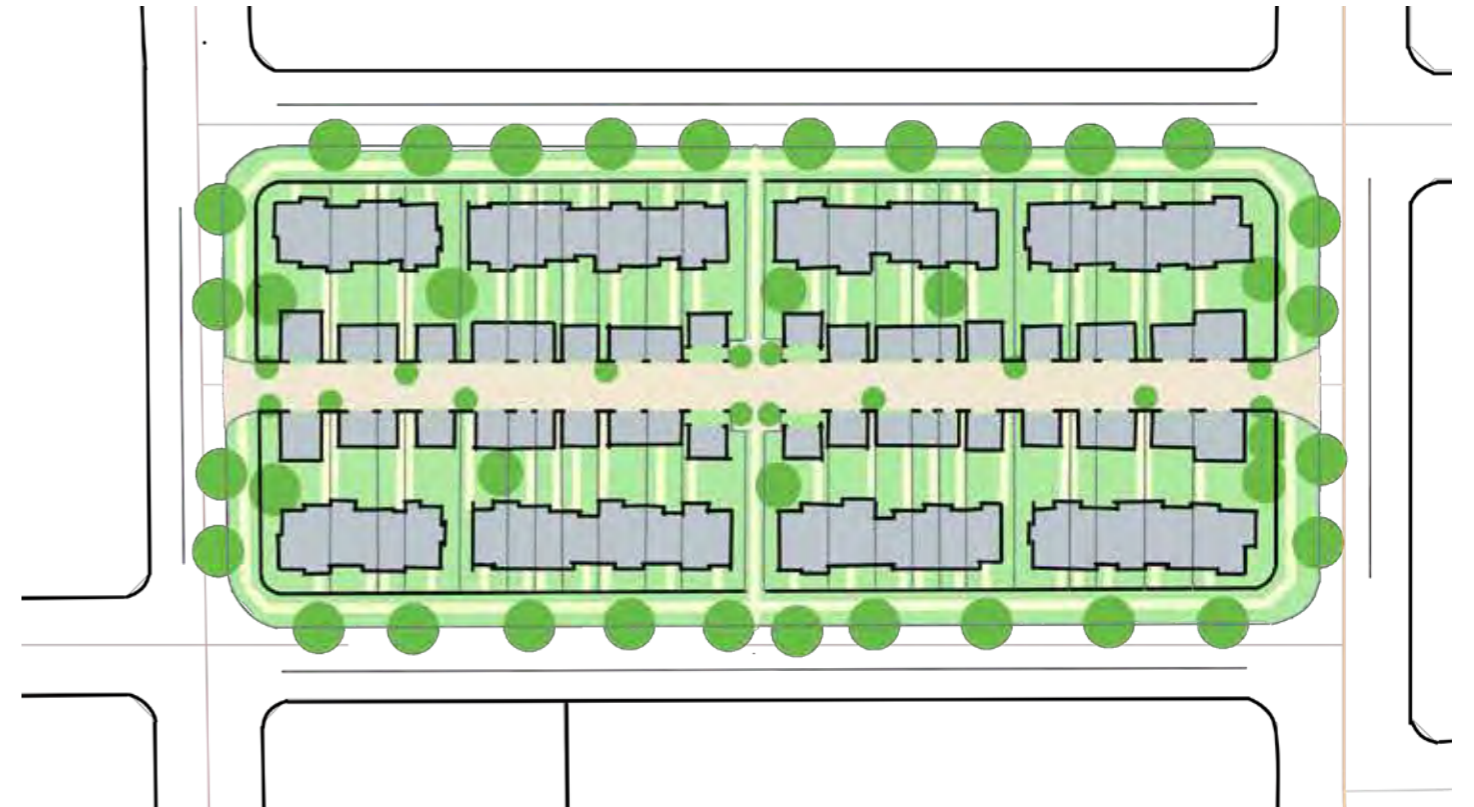
1 Indicative Typology Studies - Medium Density

1.1 Town Houses

This typology provides the flexibility for strata or torrens title, and is generally more affordable, requiring less land area than single detached dwellings. A third of homeowners surveyed by the Dept of Planning said they would consider downsizing to terraces (*Making it Easier to Build Terrace Houses, 2016*).

Well-designed town houses, or attached dwellings, with rear lane access provide a desirable and dynamic street frontage and allow for increased densities within lots without increased height. Limiting the block size, with well placed pedestrian links to enhance walkability, provides visual interest and reduces massing. Facade articulation, landscaping of the streetscape and rear lane, and appropriate addressing of the corner lots also aid a high-quality design outcome that can contribute to the local character.

A number of medium density sites with rear lane access have been proposed in the Belmont master plan, focusing around the local centre with access to the adjacent riparian corridor and active transport network.



Gledswood Hills, Sydney



Crace Town Houses, ACT



Crace Town Houses, ACT



Tailors Walk, Botany

1.2 Local Centre - Units & Terraces

Within adjacent proximity to the local centre, terraces and 1,2 and 3 bedroom units are considered. This is the most dense and potentially the most affordable typology proposed. Co-location with the centre provides vibrancy and foot traffic for local businesses in the town centre, which can act as a community hub and 'backyard' with high quality public realm that enables people to dwell.

In this study, we propose units and terraces with undercroft parking and open space at podium level. Further development of this concept would consider the technical constraints and allow for the buildings to be nestled into the site's natural topography.

The local centre is proposed as a 1.3 hectare site to include convenience shopping for local residents, community facilities and a landscaped town square (shown indicatively).



Watsons Grove, Epping



Hamilton Reach, QLD

Vermont Park, VIC



Habitat, Byron Bay



Vermont Park, VIC

1.3 Heritage Park

Belmont Park benefits not only from the unique natural landscape and cultural importance of the convergence of the rivers, but also from European history in two sandstone farm buildings constructed in 1896. These buildings sit to the south of the site, as the views to the river front are approached.

Maintaining these heritage assets in a parkland setting provides an opportunity to celebrate the site's unique history, and adaptive reuse could provide a community function that serves the residents of Belmont.

Homes facing the heritage parkland provides a sense of community and safety, and achieve an adjacent area for recreation and gathering. In this study, rear loaded town houses are provided with a pedestrian pathway and landscaping to the park frontage



Jack Road Town Houses, VIC



Belmont Park Estate - Heritage Buildings



Bangalow Parklands, Byron



Telopea Park Town Houses, ACT

2 Housing Typology Benchmarking

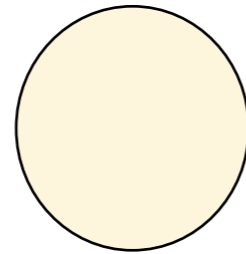
2.1 Diversity across Distinctive Precincts

Belmont Park aims to set a new bench mark for sustainable residential greenfield development, in part through creating housing choices that are inclusive to a diverse community. This is proposed through delivery of a broader range of housing diversity than currently provided for in the locality, as well as a minimum of 10% affordable and social housing. This section benchmarks some of these housing typologies beyond the conventional offering in the locality.

The range of housing options proposed includes residential allotments ranging from 250sqm - 700sqm and frontages of 10m-18m. Low rise medium density housing, also referred to as 'the missing middle' is proposed in rear-loaded town houses, as well as low-rise units adjacent to the local centre.

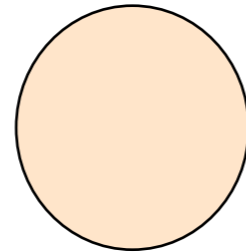
We have also considered some alternative housing models, such as cluster housing and community living, which could incorporate live-work areas or urban agriculture elements. The proposal also includes two hectares designated for a seniors housing site.

We have benchmarked some comparable residential developments in the following pages, and categorised these based on the diversity of densities/uses proposed at Belmont Park:



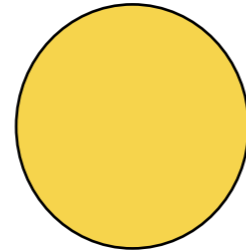
Large Lot / Environmental Housing

The ridge-line of the site to the north and east is designated as large lots, to create a rural transition to the surrounding landscape and accommodate steep topography, whilst maximising views.



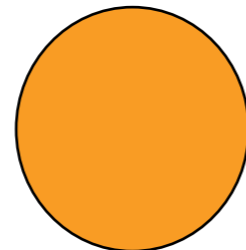
Residential - Standard Density

Standard density detached dwellings allow for lot sizes between 300 and 525 square metres, transitioning from the rural character to the vibrant heart.



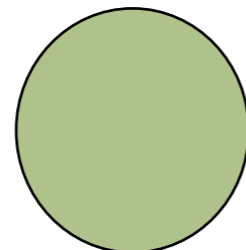
Medium Density

Low rise medium density includes for town houses or terraces, as well as other typologies such as manor houses and multi dwelling housing.



Medium Density (High) - Local Centre

Directly adjacent to the local centre, a higher density is proposed with strata titled units in terraces or low rise residential flat buildings.



Community Farm, Recreation & River Identity

The flood plain provides opportunity for river front recreation and links to the surrounding open space. A sustainable organic community farm is also proposed and we have benchmarked some examples to illustrate the intention.





Currumbin, QLD

The Ecovillage at Currumbin showcases best practice in residential ecologically sustainable development. The ecovillage project has been developed on degraded farmland on the ex-urban fringe of the City of Gold Coast. The developer has rehabilitated the site and is protecting its environmental integrity and biodiversity by preserving 50 percent of the site as an environmental reserve.

The 120 homes support a community of over 450 residents. The community is managed by a Caretaker and other support bodies. The village also contains a cafe, health rooms and green grocer at 'Ground'.





Vermont Park, Melbourne, VIC

During the 1960s and '70s, when many architects were turning their backs on suburbia, Merchant Builders used the suburbs to experiment with innovative, affordable housing models that encouraged community and invited nature into the home. Today, 20 kilometres east of Melbourne's central business district, Vermont Park remains an exemplar for how we might rethink residential development.

Vermont Park was master planned by Tract (Merchant Builders' in-house landscape architects and planners at the time). It comprised 43 cluster houses arranged across a four-acre site, a central park and shared facilities such as barbecues and a pool, all integrated into the landscape setting.



Wybalena Grove, Cook, ACT

Wybalena Grove is a group of over 100 town houses sited in natural bushland in Cook. The town houses are an excellent example of late twentieth century Sydney regional style: split level with dark tiled roofs, clinker bricks, stained timber posts and beams situated on a sloping site in a natural bushland setting.

The housing development was built by the Cook-Aranda Housing Cooperative, a private group of Canberra residents interested in designing and building a medium-density town house complex. The group pooled their resources to maximize cost efficiencies by building at the same time. They sought to explore the idea of 'living cooperatively' in an urban space which encouraged community interaction, an equal say in the management of their community, the sharing of common spaces, and a respect for the surrounding environment.



Augusta Villas, Kooralbyn

Kooralbyn Hillside Housing is an arrangement of 55 small, split-level resort houses on a hillside by Harry Seidler and Associates about 100km south-west of Brisbane. The rear entry is via the upper floor, which maximises internal space and views down the hillside, working with the natural topography of the site which slopes down to a lake and golf course.

Inspiration was taken from the delightful hill towns of Italy, reflecting the rural location, climate and topography of the resort. Continuous soft curves follow the irregular contours of the site, meaning groups of buildings step up the hill and become an integral part of it.



Gledswood Hills Townhouses, NSW

Gledswood Hills town houses is a group of over 100 dwellings located in Sydney's South West. The town houses are integrated into an overall master plan with a variety of typologies. The rear loaded dwellings consider solar orientation, sustainable building design and are integrated into the landscape and topography of the site.

The housing development was developed by Sekisui House Australia (SHA) with Tract providing landscape services, and will be completed in 2026. The master plan includes a 2.5km purpose built green corridor from the north to the south of the site and over 40 hectares of landscaped parkland and reserves. The development was praised by UDIA judges for its consideration and integration with the site's topography, natural vegetation and riparian corridors.



Denman Prospect, ACT

This suburb is currently under development in the Molonglo Valley district of Canberra at the base of Mount Stromlo. It features a variety of multi-dwelling town house and separate-title terrace typologies that respond to a demand for a more compact style of living. The relatively higher density requires ample public open spaces with high-quality design for community use.

The site slope informed the building layouts and design. It allows the building forms to step down the site, maximising views to the stunning Molonglo.

The Ridgeline Park becomes a focal point for the suburb with landscaping, wide open spaces and playgrounds making the most of the top of the site.



Hamilton Reach, QLD

Located on the Brisbane river and 6km from the Brisbane CBD, Hamilton Reach features a range of housing typologies, including apartments, town houses and freehold residences.

The rear loaded 2-3 storey town houses are afforded river front views with dynamic, high quality façades that contribute to the public realm of the river front walk. High quality landscaping is integrated throughout the masterplan development.



ReGen Villages, Netherlands

Source: EFFEKT Architects

ReGen Villages is a visionary and regenerative model for engineering and facilitating the development of off-grid, integrated and resilient neighbourhoods that power and feed self-reliant families around the world.

ReGen stands for regenerative, where the output of one system is the input of another. The concept has a holistic approach and combines a variety of innovative technologies such as energy positive homes, renewable energy, energy storage, high-yield organic food production, vertical farming aquaponics, water management and waste-to-resource systems.

The model has yet to be developed, but funding is underway to establish a number of these communities worldwide.



Habitat, Byron Bay

Habitat is a mixed use greenfield development integrating residential, commercial, retail and recreational uses. It is an exemplar model for genuine place making, with a new "village centre" creating a dynamic setting for living and working 4km outside Byron Bay, connected via bus, cycleway and a solar train.

Part of the success of the project can be attributed to the high quality public realm, with wide streets, narrower lanes and walkways that provide a generous pedestrian network. Spaces between buildings are greened with pergolas, planter beds and gardens. Terrace buildings provide dedicated ground-floor 'home offices' and 'pocket living' dwellings provide affordable, compact accommodation. Workers and residents share communal recreational facilities.



Yanweizhou Park, China

This 64 acres of riparian wetland comprises of 3 rivers which flood annually. Rather than trying to stop the water, this project “makes friends” with flooding using a cut-and-fill strategy to balance earthwork, creating a water-resilient, terraced river embankment covered in flood-adapted native vegetation.

Flood-able pedestrian paths and pavilions are integrated with the planting terraces, which will be closed to the public during the short period of flooding. A new bridge is elevated above the 200yr flood level. The floods bring fertile silt that is deposited over the terraces and enriches the growing condition for the tall grasses that are native to the riparian habitat. The terraced embankment will also re-mediate and filtrate the storm water from the pavement above. The Yanweizhou Park project showcases a replicable and resilient ecological solution to large-scale flood management.



The Ecology Centre, California

Source: The Surfers Journal

This regenerative organic farm sits on 28-acres in South Orange County, with a “Grow, Eat, Make” mission. Farm stands sell seasonal harvest to thousands over the weekends, and volunteers prep food for a regular community stew. There are walkways through shaded, plant-rich gardens, to learning and craft stations where curricula is offered to children in 10 week sessions throughout the year. The centre has become hugely popular, with sold out Friday Community Table events, and 80 busy employees producing a year-round yield. The overall aim is to instil core values into the surrounding community: ‘Learn by doing. Be part of the solution. Collaborate for change. Give more than what we take. Be here now!’





Georges River Parklands, NSW

Tract developed a strategic master plan for this riparian corridor in south west Sydney. This 'blue and green' network forms an important swathe of open space through the Liverpool City Council LGA.

The aim was to create a vibrant river city with a mix of uses in a long term framework. Four key precincts were identified and analysed for revitalised and generous public access to the river front and a plethora of recreation and leisure opportunities.



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