

NORTHERN BEACHES
COUNCIL

IMAGINE MONA VALE

D R A F T
M O N A V A L E
P L A C E P L A N

SEP 2016

“There is no logic that can be super-imposed on the city; people make it, and it is to them, not buildings, that we must fit our plans.”

Jane Jacobs

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Architectural rendering of proposed campus layout

WHAT IS A PLACE PLAN

A Place Plan is a tactical and action-oriented strategy focused on the community's connection to place. It establishes a vision and path forward for an area, allowing incremental change that is aligned with the current and future needs of the community.

A Place Plan identifies the infrastructure and investment needs within a community and seeks to identify the local priorities so that resources can be targeted appropriately.

Mona Vale Place Plan is important to ensure the delivery of a sustainable place. Sustainability is based on many different factors and what is needed to make and maintain a sustainable community in one place may differ in another. This is a bespoke plan that details the priorities, needs and aspirations specific to Mona Vale.

To date, the place planning process has been informed by a 'conversation' with the community, infrastructure and service providers and local businesses. This 'conversation' has enabled the plan to provide an up to date record of infrastructure and investment needs within the Mona Vale area.

This document, 'Imagine Mona Vale - Mona Vale Place Plan' translates the ideas and aspirations from the community, combined with an assessment of challenges and opportunities and analysis by a panel of experts resulting in a coherent and integrated place-based planning and design strategy. **This document will set the scene for the development of future planning controls.**



MONA VIVALE

wildside

a vibrant urban heart of the northern peninsula;
a creative arts and culture hub where the relaxed lifestyle extends from the bush to the beach;
a well connected place with a village atmosphere;
a civic space which offers diverse activities from daytime to nighttime, weekday to weekend;
an innovative environment which offers local employment, affordable housing choice and expanded education opportunities;
a place for people - with local, contemporary and coastal character which showcases the best principles of sustainable growth planning, and design.

JOURNEY SO FAR...

Mona Vale Place Plan went through an extensive activation and community engagement process from January 2014 - June 2015. Information gathered from the community feedback has been grouped into key themes to provide a framework for capturing common ideas and visions for the future of Mona Vale. The summary of the outcome was outlined in 'Imagine Mona Vale - Engagement Summary for Mona Vale Place Plan' which was released in August 2015. This document - The Mona Vale Place Plan, is the final instalment in the series of 'Imagine Mona Vale'.

In order to create a future community for Mona Vale that is liveable, sustainable, and reflects its community's aspirations, changes need to be made. These changes will require some compromise and adjustments to the way we do things. As with other authentic communities around the world, this evolution will take time and occur gradually. Mona Vale Place Plan has been created to facilitate this evolution, describing the ideal place-focused scenario along with guidelines to illustrate the potential physical changes in store for Mona Vale.

COMMUNITY ASPIRATIONS

TOP TRENDING COMMUNITY IDEAS AND ASPIRATIONS*



* From over 18 months intensive community engagement events including the Urban Talk Series, 4 place making events, 8 workshops and open houses, 165 place audits, 200 Imagine Mona Vale bubbles, 1300 community comments, 2000+ social media engagements, 6365 website views, 10000+ people attended or participated in events.

OVERVIEW

Mona Vale Town Centre Core

Liveable and sustainable communities around the world are structured for pedestrian, cycle and transit. The residents are able to access the town centre and its basic services within a five minute walk or a 400m radius.

Mona Vale Town Centre Core is defined generally by a 400m circle radius from Mona Vale's Civic Hub. This area includes recreational, civic, educational, commercial industrial and residential uses.

The Wider Area

Mona Vale 'Area of Influence' is bounded by a 1km circle radius from Mona Vale's Civic Hub. The wider area includes Mona Vale Beach to the East, Winnererremy Bay Reserve to the North, Mona Vale Golf Course to the South and Pittwater RSL to the West.

While most of the detail in this Report focuses on the 'Town Centre Core' area, the wider 'Area of Influence' forms part of the analysis.

A Great Opportunity

Mona Vale is one of the key areas for the northern region of the Northern Beaches.

As a town centre it supports a range of uses, and its character is defined by an engaged and connected local community. Mona Vale Town Centre is the first in the Northern Beaches Council to undergo a "place planning" process. As the highest order centre in the former Pittwater Local Government Area, and as a significant location on the north/south transport corridor, Mona Vale is of strategic importance and will play a vital role in the future of the Northern Beaches.

Mona Vale is recognised as being essential to sustainable growth, providing a focal point for development and contributing to local job containment. In addition it has a role to play in meeting compulsory housing targets.

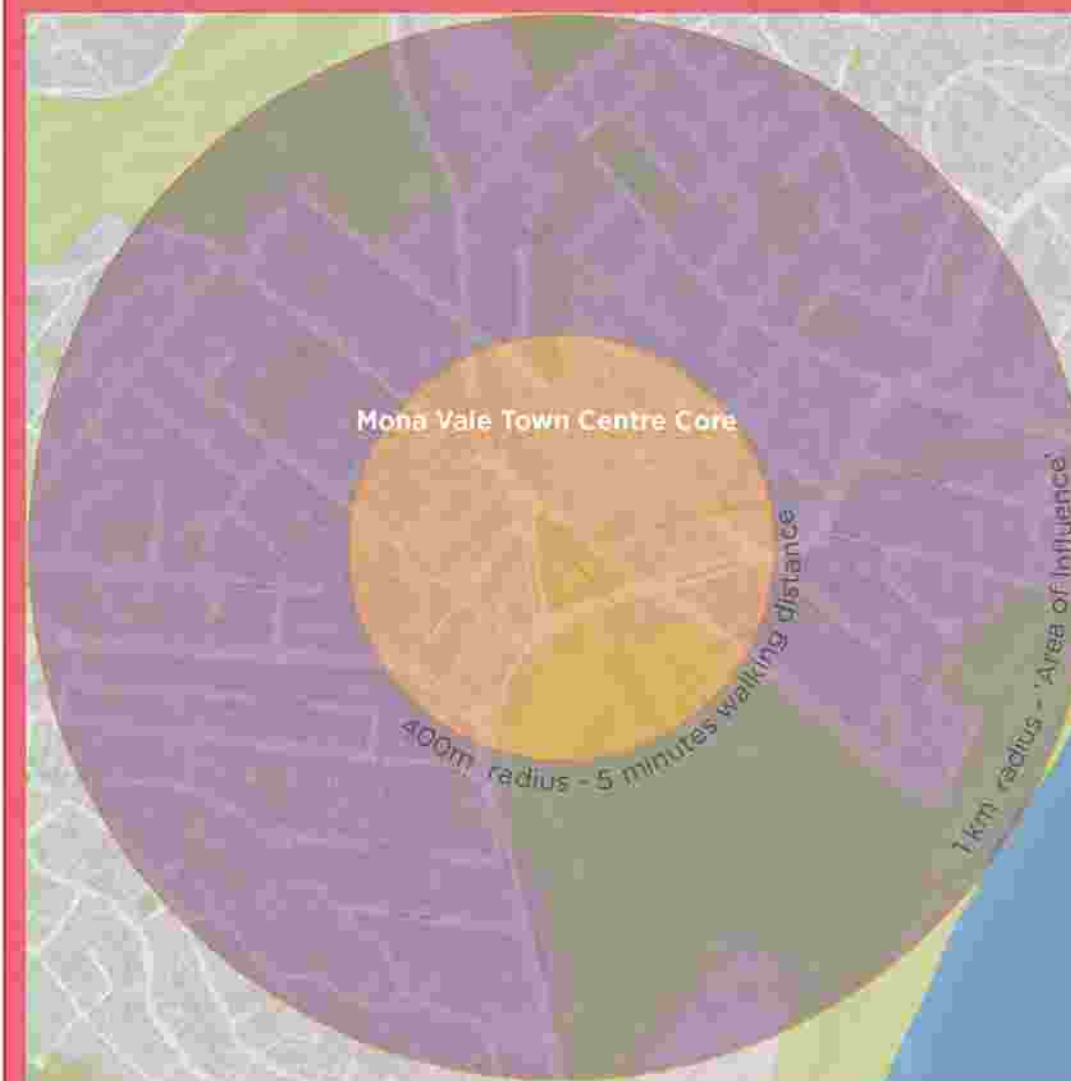
In June 2014 the NSW Government announced the Northern Beaches Transport Action Plan, a \$633 million investment over five years towards key public transport and road improvements. This includes \$125 million to deliver the kerbside Bus Rapid Transit (which was announced later as B-Line) for faster, more reliable bus services for commuters travelling from the Northern Beaches to the City. The B-Line includes plans for

new bus interchanges at Mona Vale, Dee Why, Brookvale and Mosman, as well as new commuter parking at Mona Vale, Narrabeen/North Narrabeen, Warriewood and Brookvale.

Considering Mona Vale is strategically located only 1km from the beach and on a future enhanced bus network, B-Line, the area's potential for development is now more fully recognised. Mona Vale's future transport accessibility will help the creation of a vibrant, regenerative and sustainable development, which shows new ways of living with less reliance on private vehicles as the primary mode of transport.

The RMS is currently upgrading Mona Vale Road to the Macquarie Park corridor in anticipation of the forecasted population and employment growth rates along the corridor, of 13% and 19% respectively over the next 20 years.

Looking ahead, Mona Vale has a strong future with better connections and infrastructure planned for the area. Mona Vale can be a generator for change beyond its boundary.



1.0 UNDERSTANDING MONA VALE

1.1 OPPORTUNITIES

Mona Vale Town Centre:

- is located only 1km or 10 minute walk from the beach.
- is equipped with a large number of open spaces such as a central Village Park, Kitchener Park, Mona Vale Skate Park, Winnererremy Bay and privately and publicly owned golf courses.
- is a thriving centre at daytime during the week.
- is relatively connected with a network of streets and lanes.
- is a unique self contained centre which has a diverse community and mixture of uses such as residential, retail, commercial, educational, community based and light industrial.
- is a proposed location of B-Line Bus Terminus with 150 commuter parking spaces.
- has a high proportion of housing ownership and lower proportion of rental housing compared to Greater Sydney. Opportunities to address the need of young people and the area's low to moderate income households with some affordable housing choices.

1.2 CHALLENGES

Mona Vale Town Centre:

- is divided by busy roads such as Pittwater and Barrenjoey Roads.
- is divided by an under-utilised Village Park.
- is partially affected by flooding* (see areas shown with a light blue colour with a dark blue outline on plan) and will require some flood mitigation measures.
- has limited choice of affordable housing. The high housing cost makes it difficult to retain young people. The next generation of local being priced out of the housing market.
- has a largely fine-grained subdivision pattern with some existing under-capitalised strata titled buildings. The combination of fractured ownership and high land values may inhibit redevelopment.

*Source: McCarrs Creek, Mona Vale & Bayview Flood Study



network of streets and lanes



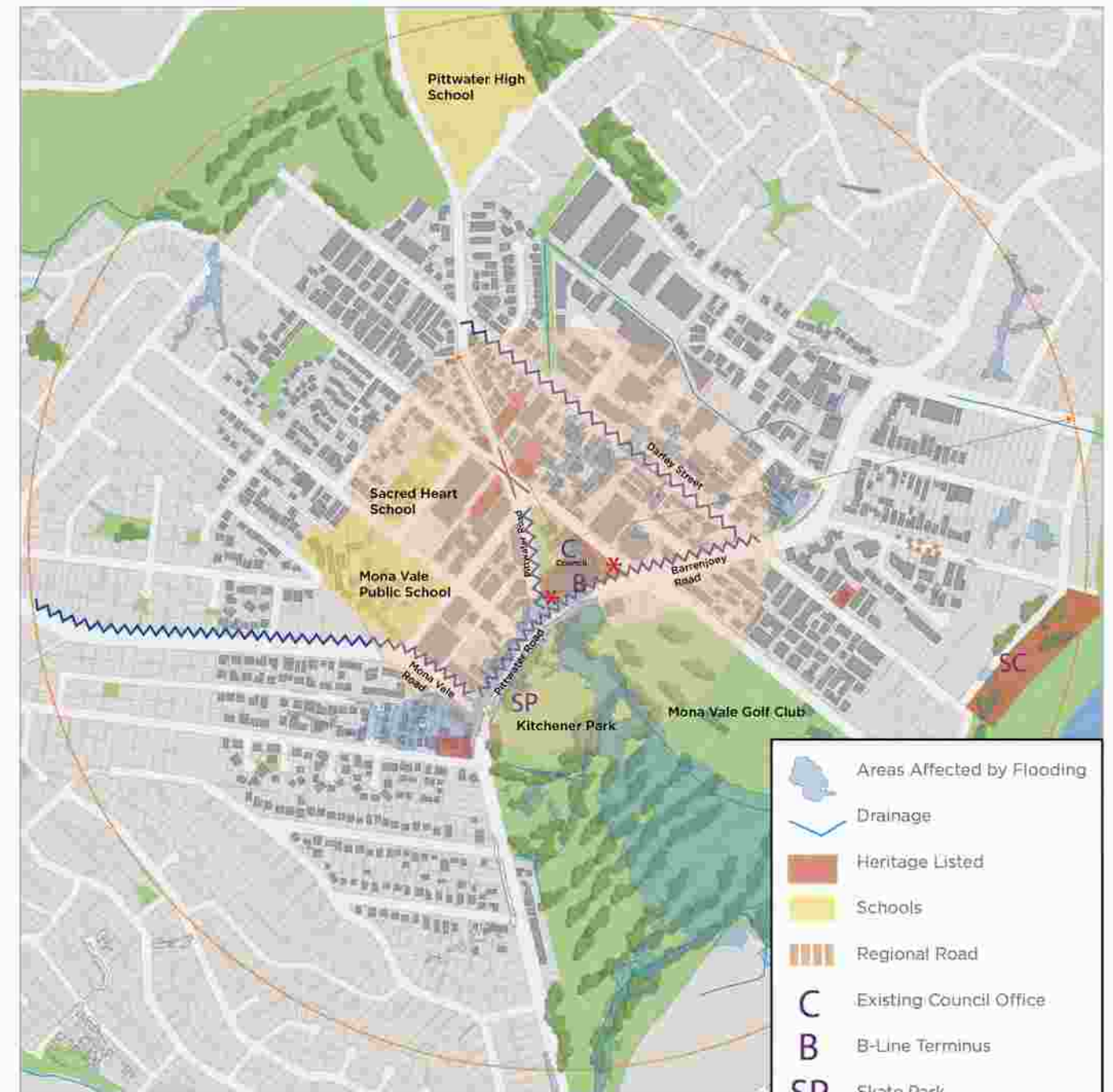
under-utilised Village Park



high cost housing

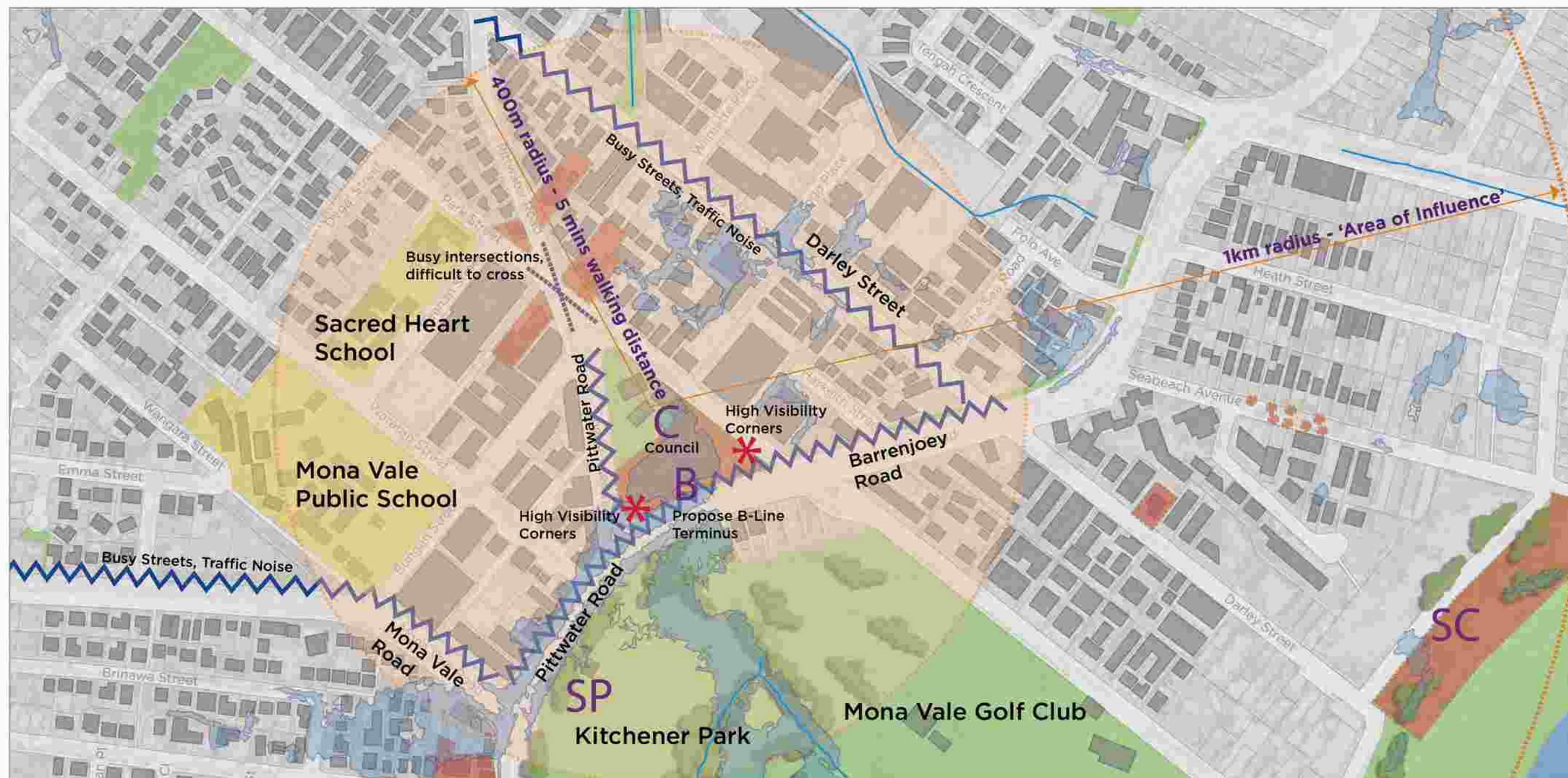


fine-grained, fragmented ownership



OPPORTUNITIES AND CHALLENGES -THE WIDER AREA

1.0 UNDERSTANDING MONA VALE



OPPORTUNITIES AND CHALLENGES - MONA VALE TOWN CENTRE CORE



2.0 DESIGN INTENT

2.1 TOWN CENTRE CORE

Drawing from the community aspirations, the Place Plan strives to create a sustainable community which incorporates a balance of environmental, social and economic objectives.

The Plan intends to facilitate a revitalisation that integrates with the existing communities and surrounding areas. The provision of safer, better connectivity and access to all parts of the Centre will create a synergy between distinct activities in the area.

Village Park, Council Administration and Mona Vale Library can be enhanced to create a 'Heart' that will provide a strong visual identity for Mona Vale.

The network of streets and spaces will create opportunities for diverse activities and housing choice that will generate a lifestyle associated with sustainable urban living.

2.2 WIDER AREA

The strong message from the community during the workshop events reinforced that both the Wider Area and Town Centre Core need to be integrated primarily to ensure that the Core is accessible to

everyone. Community members also suggested a number of ways that the wider area could be improved, including:

- safer pedestrian and cycling networks throughout the area
- connecting Mona Vale's natural assets such as the beach and open spaces
- more spaces for a range of recreational activities, art and culture
- more mixed use development, especially around the light industrial area
- developing the Town Centre Core streets as pedestrian, cyclist friendly streets and improving access to local and specialty shops
- a range of housing, including affordable housing for young people
- strengthening the sense of community by providing more opportunities for social interaction with better access to community services and facilities

This Place Plan offers a framework that allows for planned development of this diverse area as a successful centre as well as ensuring its integration with the neighbouring areas.



Winnereremy Bay



Mona Vale Beach



pedestrian link between Bassett Street and Darley Street



Village Park



WIDER AREA PLAN

2.0 DESIGN INTENT

KEY IDEAS UNDERLYING THE PLACE PLAN

The Heart

Enhancement of existing asset as a focal point of activity and local landmark. This 'Heart' will contain a range of community based uses as well as supporting retail and commercial use to ensure viability in the long term.

Public transport and a new civic square underpin the site creating a place for residents and visitors.



A Connected Community

New linkages are proposed to improve connectivity with the neighbouring streets, and integrating with the existing network. This provides a seamless connection to the external street network for vehicle, cycle and pedestrian movement.

An internal but open, semi-public pedestrian link that is characteristic of the area will be maintained and encouraged for new development.



Green Links

The stormwater network overlays the street network. This creates opportunities for landscape spaces and streets.

Landscaped streets and linkages (green line) are proposed to enhance pedestrian experience and to connect recreational spaces.



Mix of Activities

Provision of non-singular uses to promote mixed activities will maximise opportunity for social interaction and natural surveillance.

LEGEND

1. Civic, supporting commercial/retail, recreation, transport
2. Education, retail, commercial, residential including some affordable housing choice
3. Mainly residential
4. Light Industrial and initial exploration of the **'Affordable Housing for the Next Generation' (AHNG)**
5. Light Industrial with ancillary uses



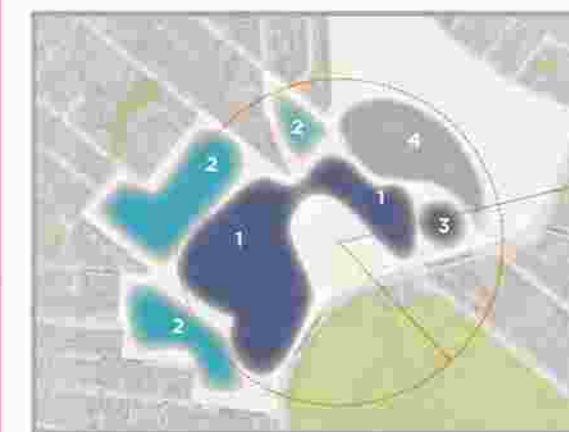
Housing Choice

A diversity of housing types is proposed to accommodate more people in the Centre. The AHNG will address the housing supply gap for young people.

The scale and form of housing provides a transition around the centre fringe ensuring its character is commensurate with existing context.

LEGEND

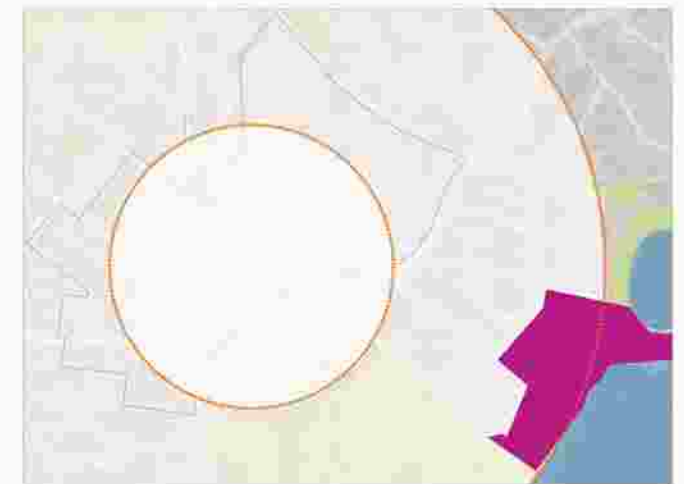
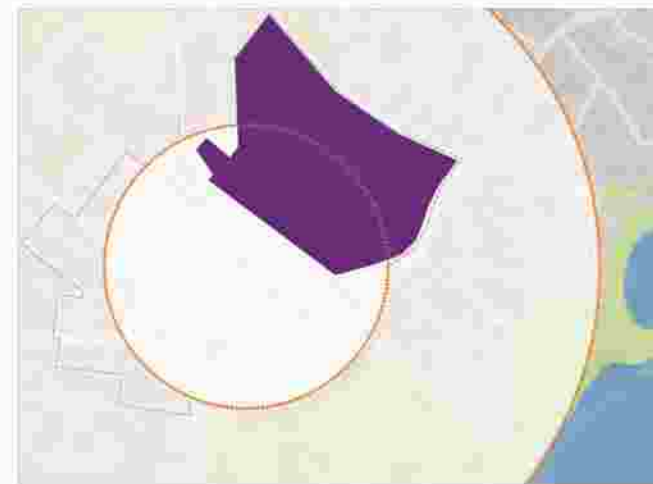
1. Mixed Use and affordable housing.
2. Transition from low to medium density housing
3. Initial investigation of AHNG.
4. Further expansion of AHNG to be investigated having regard to detailed analysis of land use compatibility, residential amenity, protection of industrial-related functions and employment, and the performance and impact of AHNG in area 3.



3.0 MONA VALE TOWN CENTRE

3.1 PRECINCTS

Three core precincts have been identified based on the existing and potential future activities: Civic, Village and Industrial Precincts. Considering the vicinity of the Centre to the beach and its influence on the lifestyle, the Beach Precinct is included as one of the precincts within the Place Plan.



3.1.1 CIVIC PRECINCT

This centrally located precinct houses a number of community and civic spaces, including Mona Vale Library, Memorial Hall, Northern Beaches Council North office and Village Park.

3.1.2 VILLAGE PRECINCT

This precinct is characterised by the existing fine-grain subdivision pattern and occasional large lots associated with a 'big box' shopping mall.

The fine-grain character of a traditional town centre will be maintained to create pedestrian friendly community.

3.1.3 INDUSTRIAL PRECINCT

This precinct consists of mainly light industrial and ancillary retail/commercial uses.

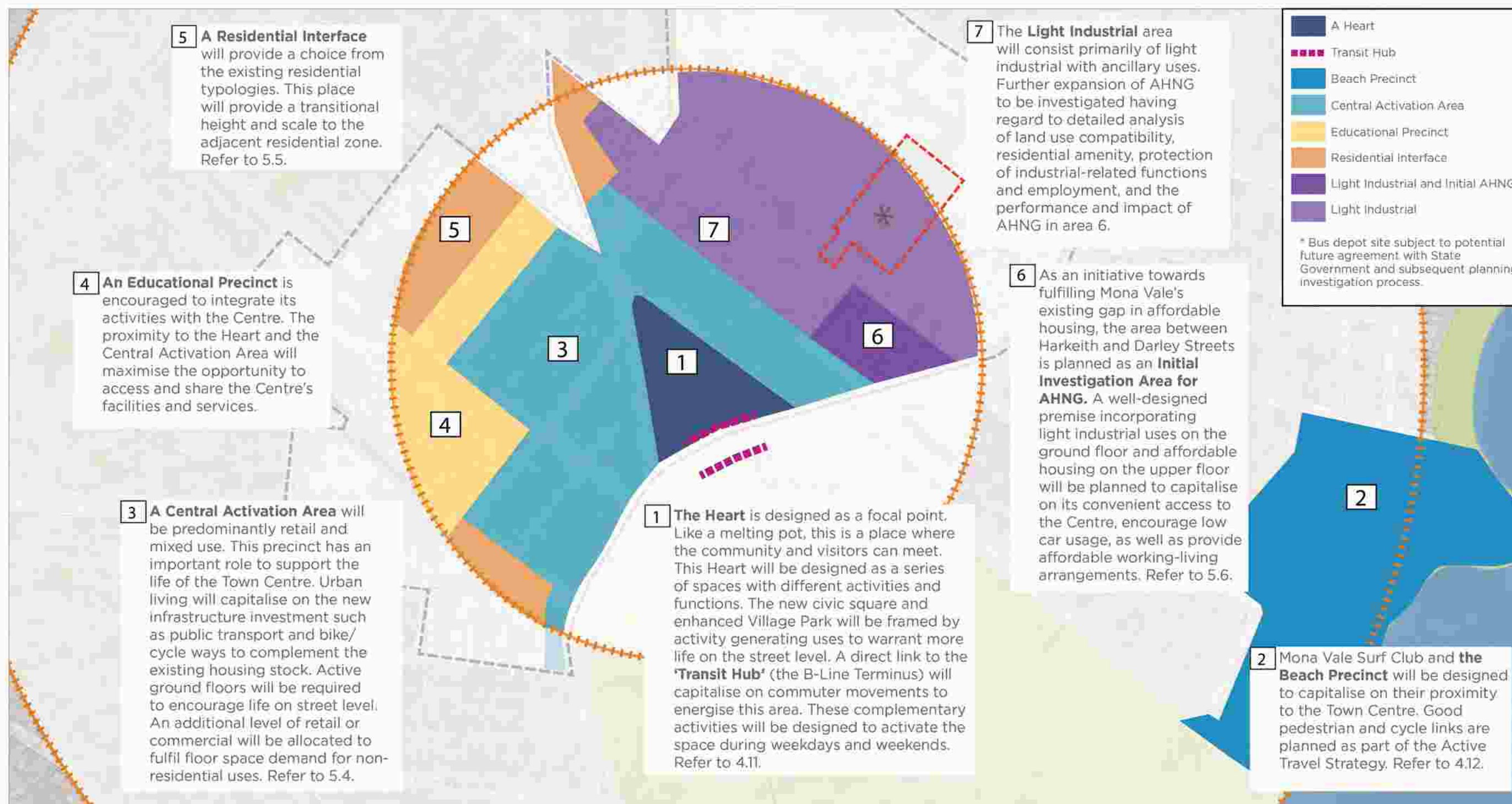
A potential redevelopment on selected compatible sites was explored to incorporate the AHNG above street level with a view of maintaining this precinct's continuation of its employment and service function.

3.1.4 BEACH PRECINCT

Mona Vale Beach is located only 1km away from the Town Centre. Although this precinct is not within the core area, it is well-served by local cafes, restaurants and a playground.

Mona Vale Surf Club future redevelopment should be integrated with the existing character and complement the vision of Mona Vale Town Centre. Pedestrian and cycle links will connect this precinct to the Centre.

3.0 MONA VALE TOWN CENTRE



3.0 MONA VALE TOWN CENTRE

3.2 KEY ELEMENTS

The place plan lays the foundations for the creation of a vibrant community which capitalises on existing assets, better access to public transport and a connective street network. It enables innovative building responses which are shaped by the character unique to Mona Vale.

Key elements of Mona Vale Town Centre Core:

- 1 **The Heart:** a central community space which is vibrant and defines the identity of Mona Vale. It consists of a Village Park, Knowledge, Community, Cultural and Transit Hubs.
- 2 **Village Park:** redefining the role of Village Park not just as a central open space, but more as a community focussed leisure space with supporting daytime and night-time activities.
- 3 **Mona Vale Library expansion as the new 'Knowledge Hub':** recognising the role of a modern library as a place of social interaction and facilitating the local enterprises/'Business Incubator' on the upper floor.
- 4 **Existing Council Office and potential future 'Cultural Hub':** 'open up' part of the building to improve building relationship with outdoor spaces. Future 'Artist in Residence' exhibit.
- 5 **New Civic Square and Auditorium as the new 'Community Hub':** reassigns centrally located land from car spaces to become people's spaces.
- 6 **Transit Hub:** incorporating the B-Line Terminus as one of the key activity generators and to enhance the arrival experience.
- 7 **Bungan Street as a 'Main Street':** enhancing the existing local retail precinct as a street based shopping precinct with some opportunity for outdoor dining and residential intensification above street level.
- 8 **Pittwater Road as the 'Boulevard':** increase the space for pedestrians and cyclists to improve the relationship between the two sides of the street and Village Park.
- 9 **Park Street:** reconfiguration of the street to facilitate safer pedestrian movements and ground floor activation.
- 10 **Connections and On-site Links:** Encourage the activation of the existing links. Support the creation of new links in addition to the existing links to facilitate easy access to/from the industrial zone. Better access will encourage more walking.
- 11 **Exploration of selected Light Industrial zoned areas, beginning with the block bounded by Harkeith and Darley Streets, for 'Affordable Housing for the Next Generation' (AHNG).** Maintain the role of the light industrial zone at street level and explore opportunities for affordable and key worker housing above street level. Possible future opportunities for AHNG elsewhere, such as the Bus Depot site, to be investigated having regard to detailed analysis of land use compatibility, residential amenity, protection of industrial-related functions and employment, and the performance and impact of the Harkeith/Darley Street block.



TOWN CENTRE ELEMENTS

PLACEMAKING

4.0 PEOPLE, STREETS AND PLACES

4.1 SUSTAINABLE TRAVEL: FUTURE ACTIVE TRAVEL STRATEGY

Active Travel is an approach to travel and transport that focuses on physical activity (walking and cycling) as opposed to motorised and carbon-dependent means. As the population grows there will be continued impact on the congestion of roads and competition for car parking at destinations. High levels of private car use is prevalent across Pittwater, and particularly concentrated in the Town Centre of Mona Vale. By increasing access to Active Travel linkages in concentrated locations, the economic efficiencies also increase, as the need for expenditure on roads and car parks is reduced.

Pittwater has for many years had a strong focus on active travel through the 'Walks & Rides' strategy. Building on this, a local Active Travel Strategy has been developed and will be incorporated to the Northern Beaches wider area Active Travel Strategy, to achieve greater efficiency and the capacity to plan active travel. Overall, a walking and cycling friendly environment will create a more socially inclusive community.

The Active Travel vision is "to enable a culture which supports people to choose active travel choices that benefit their health,

enhance community lifestyle and create a village atmosphere in a well-connected sustainable transport network".

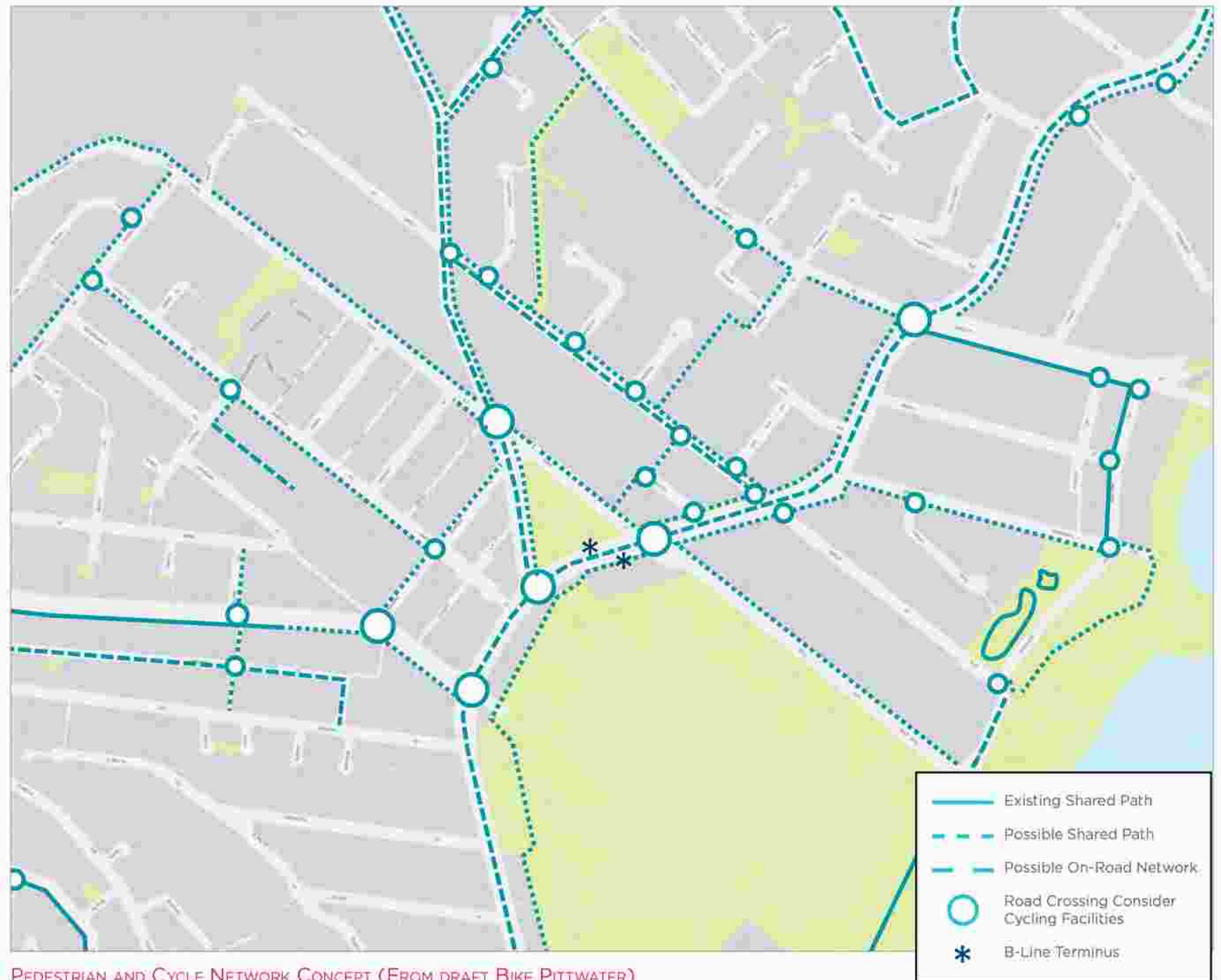
Council is currently reviewing their Active Travel Strategy for the Northern Beaches.

4.1.1 PEDESTRIAN AND CYCLE PLAN

The concept on this page shows potential infrastructure investments and upgrades to increase amenity and connectivity for pedestrians and cyclists. A mixture of 'Off Road' and 'On Road' cycle links are intended to provide choices for the recreational and commuter cyclist. Pedestrian amenity will be improved by allocated traffic calming measures and lower speed limits on key streets.

4.1.2 B-LINE (NEW BUS LINE)

The Northern Beaches (NB) B-Line route is proposed to extend 30km along the primary north-south spine from the Sydney CBD to Mona Vale. Facilitating rapid bus movements along this corridor will reduce bus travel times, reduce car reliance, and connect higher density areas with other modes of transport. Mona Vale's B-Line Terminus will be centrally located and accessible from most part of the Centre. The Centre will benefit from this improved public transport service.



PEDESTRIAN AND CYCLE NETWORK CONCEPT (FROM DRAFT BIKE PITTWATER)

4.0 PEOPLE, STREETS AND PLACES

4.2 FUTURE NETWORK DESIGN AIMS

Accessibility is a very important aspect to support the life and activities of a town centre. Currently, most of the Mona Vale Town Centre is accessed via a connective street network. However, the current preferred mode of travel is by car (see Appendices for the analysis by Parking and Traffic Consultants). This creates an impact on the amenity and the atmosphere of the Centre.

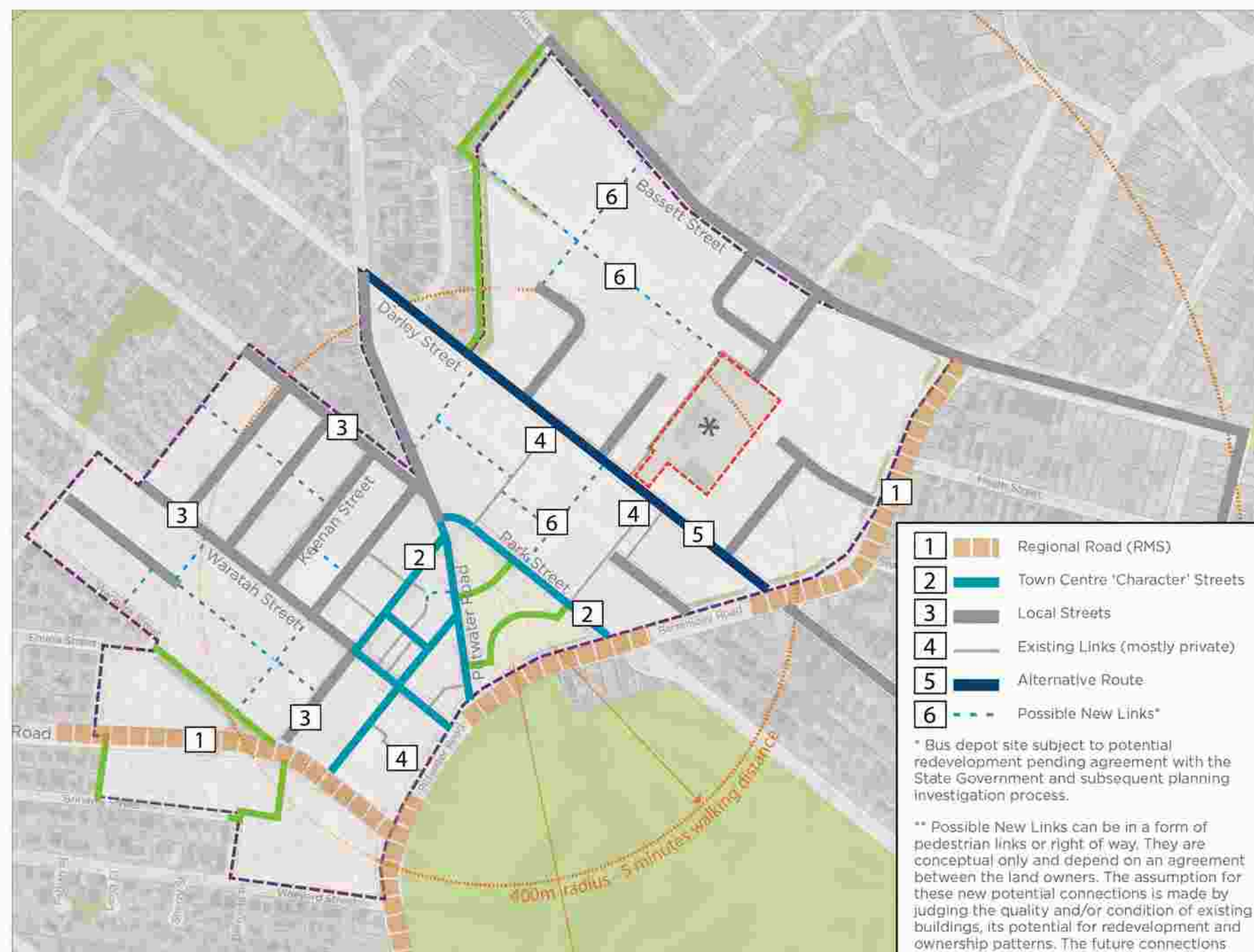
During the community engagement process, there was a common perception that the pedestrian experience and overall connectivity can be improved.

The Place Plan aims to achieve a more permeable street network with improved connectivity to the surrounding areas. New connections will create high levels of choice and mobility for pedestrians, cyclists and vehicles, with an emphasis on creating a highly walkable community that will provide a seamless access to all parts of the Centre.

Town Centre Character Streets (1) will be **People Streets**. They will facilitate activation of the ground floor uses and place a significant focus on pedestrian and cyclist movement.

Connectivity from the adjoining residential area is maintained with **Local Streets (2)** and **Local Links (3)** and improved with **New Links (5)**. Most of the Local Links are within private land, however they should be retained as a feature in the future redevelopment of these sites. Proposed New Links are conceptual only and subject to future discussion with the land owners. The future connections represent a desirable outcome and are approximate patterns only in the likelihood of redevelopment within the medium/long term.

An analysis and traffic modelling by Parking and Traffic Consultants recommends a relocation of the main traffic route from Pittwater Road to Darley Street - as an **Alternative Route (4)** on the northern side of the Centre, subject to incorporation of further traffic treatments and RMS agreement. This will control the vehicle movement through the Town Centre streets and smaller local streets. Reduction of speed may be proposed for Pittwater Road, Park and Bungan Streets. Signs to advise of changes to traffic conditions also are proposed for Pittwater Road and Park Street reinforcing Darley Street as the main traffic route.



1	Regional Road (RMS)
2	Town Centre 'Character' Streets
3	Local Streets
4	Existing Links (mostly private)
5	Alternative Route
6	Possible New Links*

* Bus depot site subject to potential redevelopment pending agreement with the State Government and subsequent planning investigation process.

** Possible New Links can be in a form of pedestrian links or right of way. They are conceptual only and depend on an agreement between the land owners. The assumption for these new potential connections is made by judging the quality and/or condition of existing buildings, its potential for redevelopment and ownership patterns. The future connections represent a desirable outcome and are approximate patterns only in the likelihood of redevelopment within the medium/long term.

4.0 PEOPLE, STREETS AND PLACES

4.3 STREET DESIGN EXPLORATION

4.3.1 BUNGAN STREET

Existing Conditions

Bungan Street North is currently lined by specialty retail and outdoor dining facilities. There are two lanes of traffic with on-street parallel parking on the western side and 90 degree parking on the eastern side.

Bungan Street South is less active than Bungan Street North. There are two lanes of traffic with on-street parking on both sides. Ground floor activities are visible on the retail frontage eastern side. However, the elevated footpath on the corner of Waratah and Bungan Streets creates some disruptions in movement.

For the purpose of this Place Plan, Bungan Street North is considered one of the character streets while the southern part will continue as a local street.

Design ideas

During the community consultation process, one of the common ideas was to reduce traffic and create a pedestrian and cycle friendly Bungan Street. As one of the 'Town Centre Streets', Bungan Street North's design will focus on the amenity and ease of pedestrian and cyclist movement.

The key design ideas for Bungan Street North are below:

1. Sense of enclosure and a perception of a narrower street to improve the setting.
2. Landscape treatments, paving patterns, placements of street furniture and rain-gardens to be used to delineate spaces.
3. Facilitating an informal pedestrian and cyclist movement to activate the street.
4. Integrating safer, bike friendly traffic lanes. A shareway system will prioritise pedestrian and cycle movements.
5. Using on-street parking as a tool to separate the traffic. 90 degree parking will be allocated as parallel parking to increase community spaces and improve pedestrian safety.
6. Encourage al-fresco dining to enable a creation of 'Eat Street'.



recent evolution of Bunda Street into a shared-zone, ACT



Existing Bungan Street North



Existing Bungan Street South



shared streets in Auckland and Pittsburgh: ease of pedestrian and cyclist movements, without preventing car access

4.0 PEOPLE, STREETS AND PLACES



CONCEPT EXPLORED - BUNGAN STREET - "MAIN STREET" - PLAN AND SECTION

4.0 PEOPLE, STREETS AND PLACES

4.3.2 PITTWATER ROAD

Existing Conditions

Pittwater Road (between Bungan Street and Barrenjoey Road) is currently lined by retail use on one side and community use on another. The total reserve width is 30m with four traffic lanes in addition to on-street parking.

The landscape wall along the retail side of Pittwater Road is created to separate the pedestrians from busy traffic but somehow it also conceal the active uses from the street.

This street continues beyond the roundabout with 2 lanes

of traffic and is lined by mostly residential uses. For the purpose of this Place Plan, Pittwater Road East is considered as one of the character streets while the western part will continue as a local street.

Design Ideas

The key design ideas for Pittwater Road East are below:

1. Slower vehicular speed to improve the setting. Sense of enclosure and a perception of a narrower street will help to achieve this.
2. Reduction of 4 traffic lanes into 2 traffic lanes to match
3. Use of on-street parking as a tool to separate the traffic and the pedestrian zones.
4. Widening the footpath to facilitate outdoor dining on the southern side, landscaping and Water Sensitive Urban Design features on both sides.
5. Utilise the existing wide reserve to project the grand 'Boulevard' character as a gateway to the Town Centre.

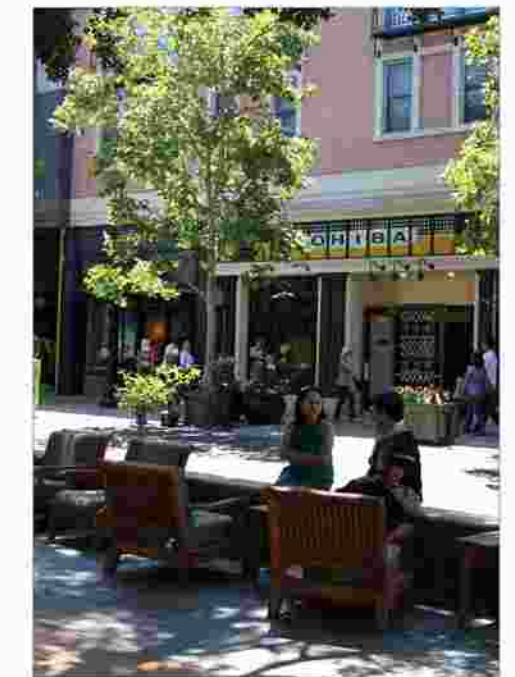
the rest of Pittwater Road and the reconfiguration of on-street parking. This will reduce the bitumen width and minimise the separation between both sides of the street.



existing Pittwater Road East



wide boulevard of Lonsdale Street, VIC, incorporating generous footpath with seating, landscaping and raingardens and bicycle lane



wide footpath to allow for seating and social interaction

4.0 PEOPLE, STREETS AND PLACES



CONCEPT EXPLORED - PITTWATER ROAD - 'THE BOULEVARDE' - PLAN AND SECTION

4.0 PEOPLE, STREETS AND PLACES

4.3.3 PARK STREET

Existing Conditions

Park Street East (between Bungan Street and Barrenjoey Road) is currently lined by retail use to the north and community use to the south. Ground floor activities are visible on the retail frontage. However, the changes of footpath levels at Pittwater Place and driveway access create some disruptions in movements.

The width and the centreline of Park Street East varies along the street. It has two lanes of traffic with on-street parking on both sides. The on-street parking is a combination of

angled and 90 degree parking. Two pedestrian crossings connect pedestrian movements from south to north. The existing bus stop is located near one of the crossings and to remain in the same location.

Park Street West (west of Pittwater Road) is lined by mostly residential uses. For the purpose of this Place Plan, Park Street East is considered as one of the character streets while the western part will continue as a local street.

Design Ideas

The key design ideas for Park Street East are below:

1. Creating more consistent street conditions to

improve safety. Landscape treatments and street furniture are required to note the change of conditions.

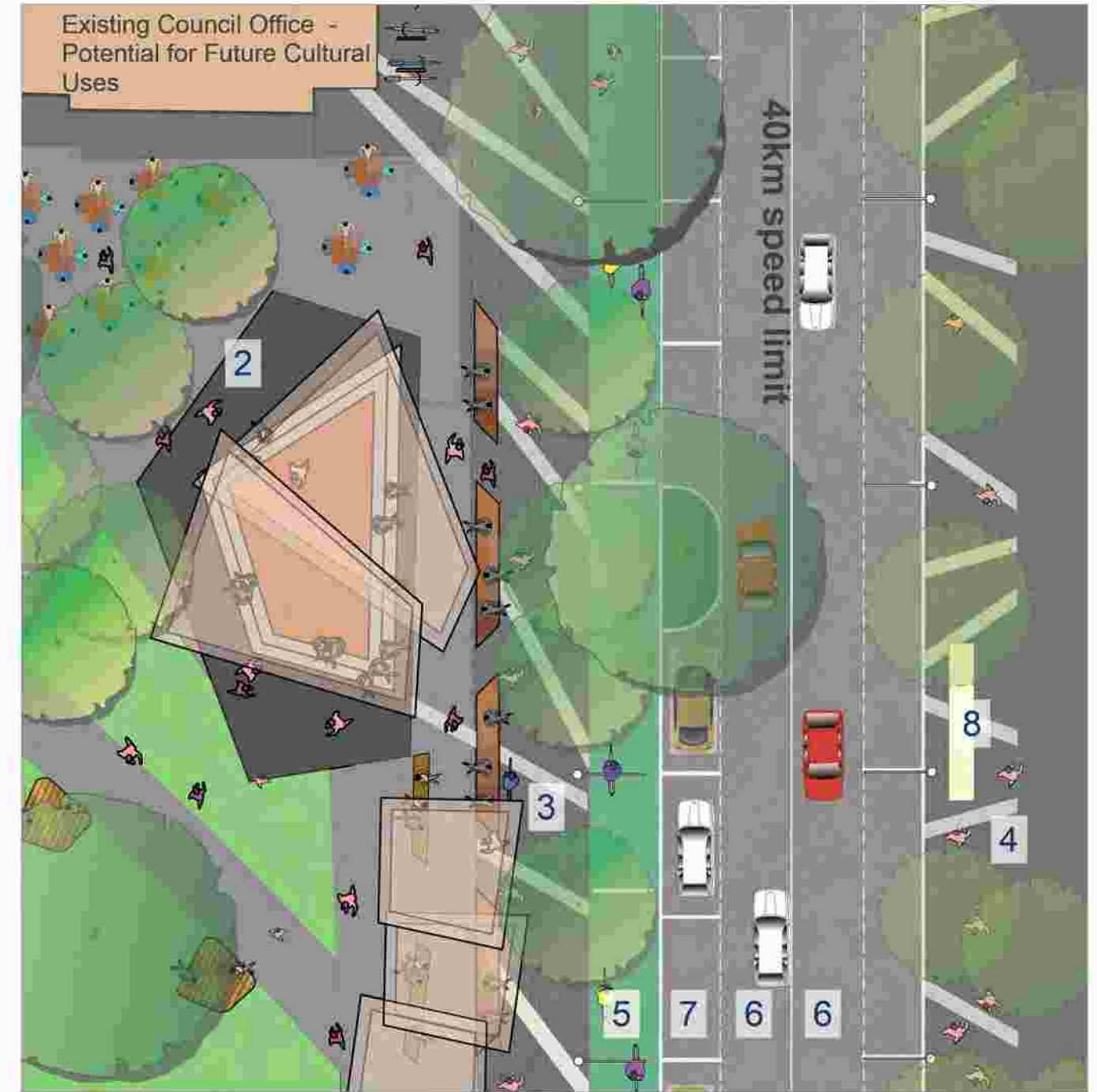
2. Facilitating informal, free flowing pedestrian and cyclist movements to activate the street. Active uses on both sides will improve the life at street level.
3. Using on-street parking as a tool to separate the traffic and the pedestrian zone.
4. Integrating safer, bike friendly traffic lanes. Landscaping, rain-gardens, and paving patterns will be used to help delineate spaces.



Park Street East

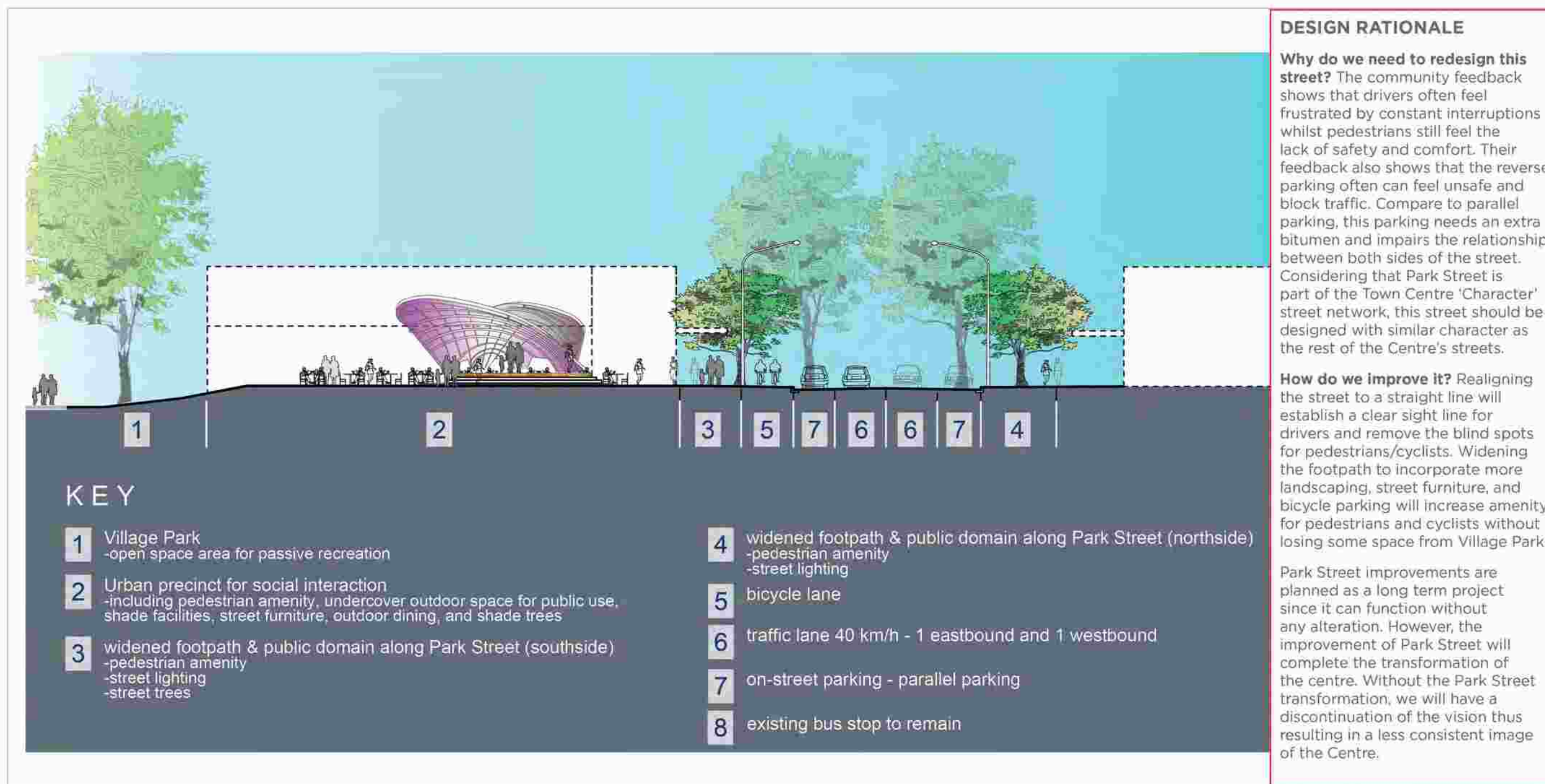


pedestrian and bike path to incorporate landscaping and raingardens



CONCEPT EXPLORED - PARK STREET PLAN

4.0 PEOPLE, STREETS AND PLACES



CONCEPT EXPLORED - PARK STREET SECTION

4.0 PEOPLE, STREETS AND PLACES

4.3.4 LANEWAYS

Existing Conditions

Mona Vale has a network of established laneway systems. Some properties are using these lanes as their front address, therefore some parts are showing more activities on the street level than the others.

However, most of these lanes are used mainly for service related purposes such as delivery, alternative traffic connections and additional parking spaces.

Some of Mona Vale's laneways are owned by private entities. This section shows a potential upgrade of the public laneway system.

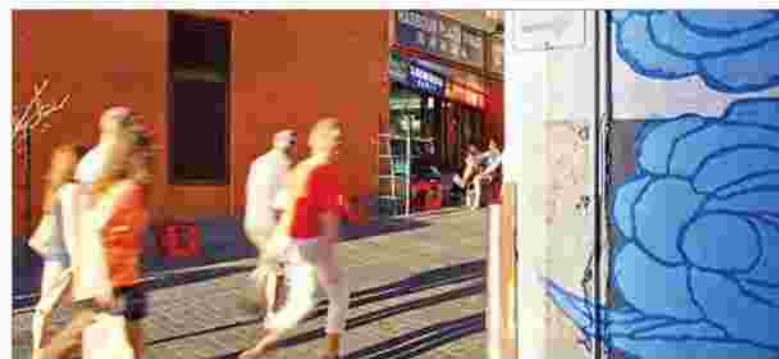
Design Ideas

The key design ideas for the laneways are below:

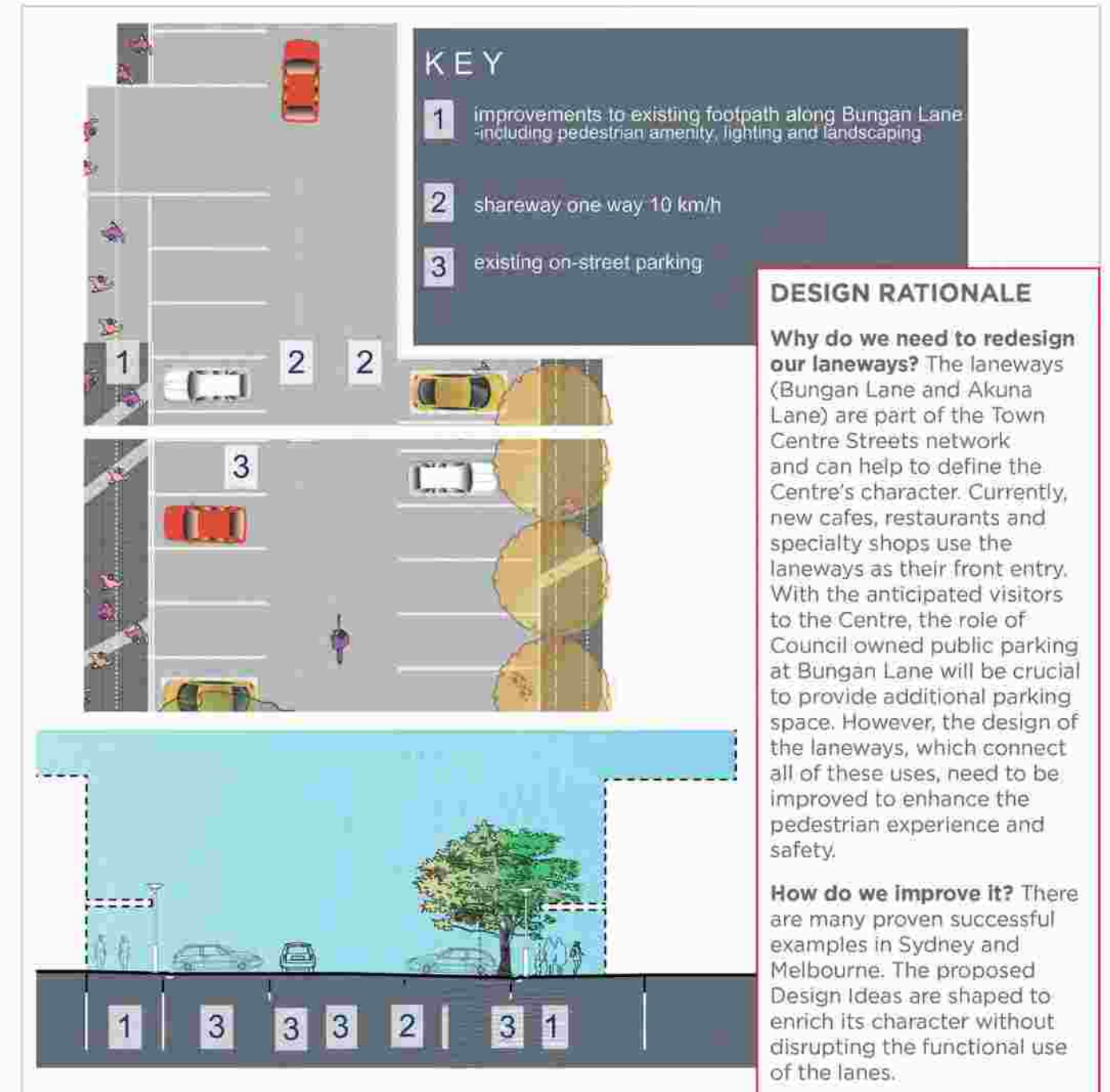
1. Continue to facilitate informal pedestrian, cyclist and vehicular movements.
2. Continue to encourage pedestrian entries off the laneways to promote natural surveillance and ground floor activation.
3. Use of paving patterns to delineate spaces and create areas of activities.
4. Incorporate some landscaping and street furniture for the wide part of the laneway to increase pedestrian amenity and promote activities.
5. Design the laneways to be part of the shareway system.



existing Bungan Lane



laneways as shareways to focus on pedestrians activities - City of Sydney



CONCEPT EXPLORED - BUNGAN LANE - PLAN AND SECTION

4.0 PEOPLE, STREETS AND PLACES

4.4 SIGNAGE AND WAYFINDING

Providing legible wayfinding information and appropriate lighting are critical to ensure movement networks are clearly defined and easily understood so that people are confident of finding their way around the Centre.

A signage, wayfinding and lighting strategy, including a design manual is required to provide a clear and coordinated framework. The strategy and manual will ensure signage is consistent and help people get to their desired destination.

Signage within Mona Vale is currently lacking visual cohesion. This is leading to a decrease in visual clarity and legibility. The Place Plan can be viewed as an opportunity to review the current practice.

During the community engagement period, Florence Lam, Arup Fellow Global Lighting Design Leader, suggested using urban lighting not just as a functional add-on, but as a fundamental solution to improving quality of life, reinforcing urban design principles, enhancing the cultural experience and encouraging social interaction.

A consistent and coherent wayfinding and lighting strategy will be integral to the success of these places.

4.4.1 DESIGN IDEAS

The key design ideas are below:

1. Design a system which allows for different abilities of wayfinding processing, such as cognitive mapping and point-to-point navigation.
2. Provide consistent Design Language: the sign elements appear as part of a system to strengthen the image of the places.
3. Design a comprehensible system so that it can be recognised, read, understood, and compared in the shortest time possible.
4. Create a framework for specialised lighting in certain locations such as using skilful lighting design at key places, building and streets to reinforce the distinctiveness of an area.



example of consistent signage at Oakleigh, VIC



SIGNAGE, WAYFINDING AND LIGHTING CHARACTER PRECINCT PLAN

- 1 Civic Precinct and the Heart: wayfinding and lighting design to enhance the character of civic grandeur and focal point.
- 2 Village Precinct: wayfinding and lighting design to enhance urban character and street level activities
- 3 Residential Interface: wayfinding and lighting design to reflect transitional character to residential area
- 4 Light Industrial: wayfinding and lighting design to facilitate the working environment and reflect transitional character to light industrial zone
- 5 Recreational: wayfinding and lighting design to reflect recreational character and natural context

4.0 PEOPLE, STREETS AND PLACES

4.5 DESIGN CONCEPT FOR PEOPLE'S SPACES

4.5.1 THE HEART

Design ideas

- Create a focus on community spaces and synergy between complementary uses.
- Design public open space to be accessible and intimately scaled to encourage social interaction.
- Maintain the visual connection between the Civic Square and Village Park.
- Allocate built form to frame Pittwater Road and Park Street.
- Facilitate easier pedestrian movement from Bungan Street 'Main Street' to Civic Square. Removal of the existing roundabout is recommended by 'Mona Vale Town Centre, Traffic Flow and Parking Strategy'.
- Design areas of activities and activity programs to encourage the use of space which provides natural surveillance for daytime and night-time.
- Potential future conversion of the existing Council Administration building to a collective artist 'in-residence' facility to include retail, exhibition and workshop space.



urban, civic square



shading and seating



daytime and nighttime activities



green, community gathering space



- 1 'Community Hub', Auditorium, Restaurants, Civic Square, Potential Underground Parking under the Square
- 2 'Knowledge Hub', Contemporary Library, Smart-Hub, Business Incubator/Commercial Office, Rooftop Garden, Cafe
- 3 'Cultural Hub': Existing Council Office, Possible Future Art And Cultural Uses.
- 4 'Village Park': Outdoor Cafe, Playground, Village Park, Urban Activation Space, Potential Civic/Commercial Expansion, B-Line Terminus - 'Transit Hub'
- 5 Pittwater Road - 'The Boulevard' - Gateway to the Town Centre
- 6 Bungan Street - the 'Main Street' - eat street and local shops

THE 'HEART' CONCEPT EXPLORATION (MORE DETAILED IDEAS FOR THE CIVIC SQUARE AND VILLAGE PARK ARE SET OUT ON TO THE FOLLOWING PAGES)

4.0 PEOPLE, STREETS AND PLACES

THE CIVIC SQUARE

Considering the future growth in Mona Vale's population, there is a real need for good civic spaces in the centre.

Brewster Hjorth Architects (BHA) were originally engaged by the Council in 2003 to design the existing Mona Vale Library and the council building and were completed by 2004.

To ensure and maintain the relationship of many good elements in these spaces, BHA were engaged again in 2016 to provide a preliminary design for the future expansion of the civic buildings. Architectural concept and drawings on the following pages are produced by BHA.

Design Ideas

- The Civic Square must be enclosed by built form with activity generators on the ground floor. Activity programs can be used to maintain daytime and night-time activity.
- Design the Civic Square as a focal point and melting pot to allow for social interaction with low key design features as informal seating, shading and water features.
- Allocate multiple entries from public spaces to encourage activity and

natural surveillance. Entries and openings to the Civic Square, rooftop garden, Village Park and the streets are mandatory.

- Avoid extended blank walls visible from the public domain. The auditorium and multi-purpose library building are designed with a transparent facade to show activities within the buildings. The buildings are to front the Civic Square, rooftop garden, Village Park and the streets.
- Relocate the existing isolated cafe to a new location for activation of Village Park.
- Design a flexible upper floor plan to increase robustness to future commercial adaptation.
- Offer business incubator and co-shared offices to provide affordable options in prime locations for local workers.
- Design a self-contained village with access to public transport to reduce dependency on private cars.
- Consider reduction of on-site parking to promote active travel and to maximise usage of public spaces.



a large centralised civic square



indoor-outdoor relationship



contemporary, multi-purpose space



opening to courtyard and rooftop garden



- 1 Transitional space to utilise the change of level, resting space for pedestrian movement, seating and shade with tree planting
- 2 Civic Square: a central meeting spot and temporary event space
- 3 Ai-fresco dining adjacent to restaurant and auditorium
- 4 Water Features
- 5 Steps as amphitheatre seating
- 6 Raised deck under the existing trees for informal seating
- 7 Formal shade structure and seating integrated with entry ramp for underground parking
- 8 Widened footpath to incorporate bike lane
- 9 Upper Plaza; link from Civic Square to Village Park

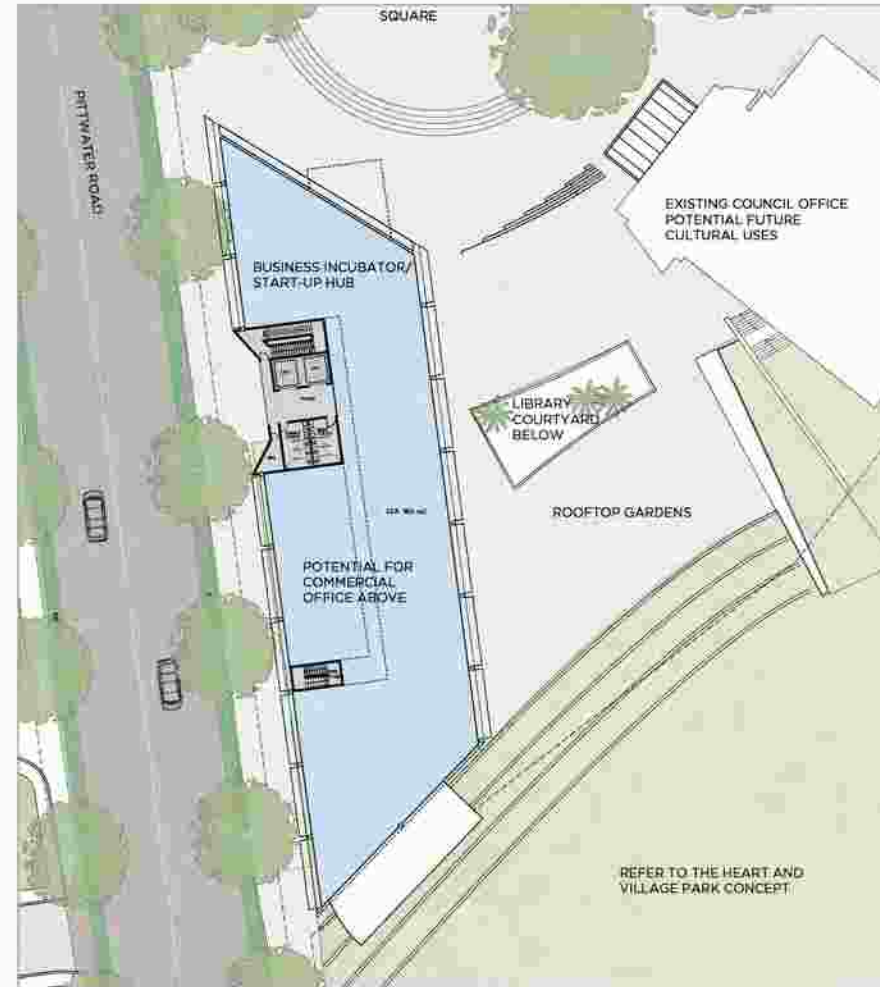
CONCEPT EXPLORED FOR THE CIVIC SQUARE

4.0 PEOPLE, STREETS AND PLACES

Architectural Concept below is produced by Brewster Hjorth Architects



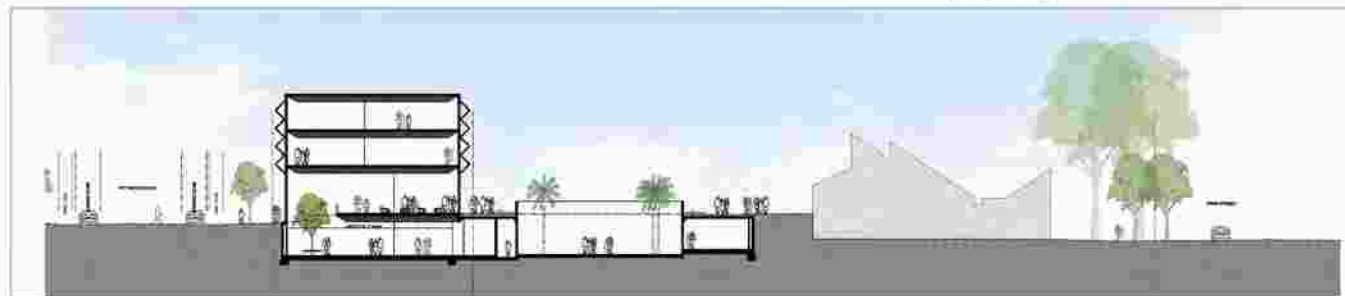
Pittwater Road Level Plan: contemporary library expansion, WiFi hub, cafe



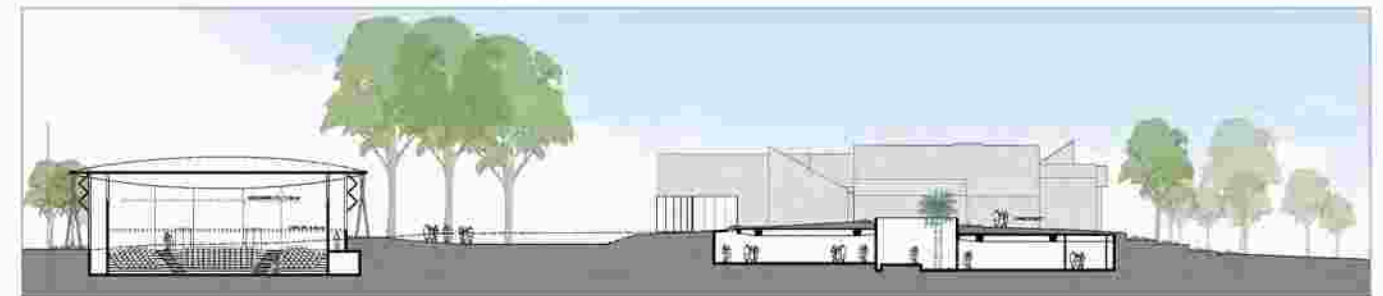
Typical Upper Level Plan - business incubator/start-up hub, potential for commercial offices



Park Street Level Plan - the auditorium, a lecture/performance space and a restaurant



Section through the 'Knowledge Hub' showing contemporary library connects to existing library, cafe, distance learning, business incubator, potential for commercial offices.



Section Through the 'Community Hub' Showing the auditorium, restaurant and the Civic Square (underground parking is not shown)

4.0 PEOPLE, STREETS AND PLACES



Buildings and activities to frame the Civic Square



Entry from Pittwater Road



Cafe to activate Village Park



Vista from the Main Street to Civic Square



The Heart of the community - the Civic Square, library, cafe and restaurant, auditorium, business incubator and potential art/cultural workshop and retail space



Section through the 'Community Hub' showing the auditorium, restaurant and civic square (underground parking is not shown)

4.0 PEOPLE, STREETS AND PLACES

VILLAGE PARK

Design Ideas

- Create a rooftop garden linked to the Council building, Village Park, streetscape & transport.
- Activate interface between the Council building and Village Park with community activities.
- Provide public amenity including: raised podium area for entertainment, artspace, and pop-up stalls; lawn area for relaxation; and an upgraded playground. All access to be provided by linking activity areas.
- Retain recreational open space and provide areas of shade within the Village Park.
- Create an environment conducive to social interactions and recreational activities to the edges of the open space.
- Create a unique character to the gateways of Village Park on Pittwater Road and Park Street.
- Maintain and enhance the existing War Memorial precinct.
- Improve the interface between Pittwater Road and Village Park with an activity generator.



urban, family friendly spaces



park activation



modern, low key playground



indoor - outdoor relationship



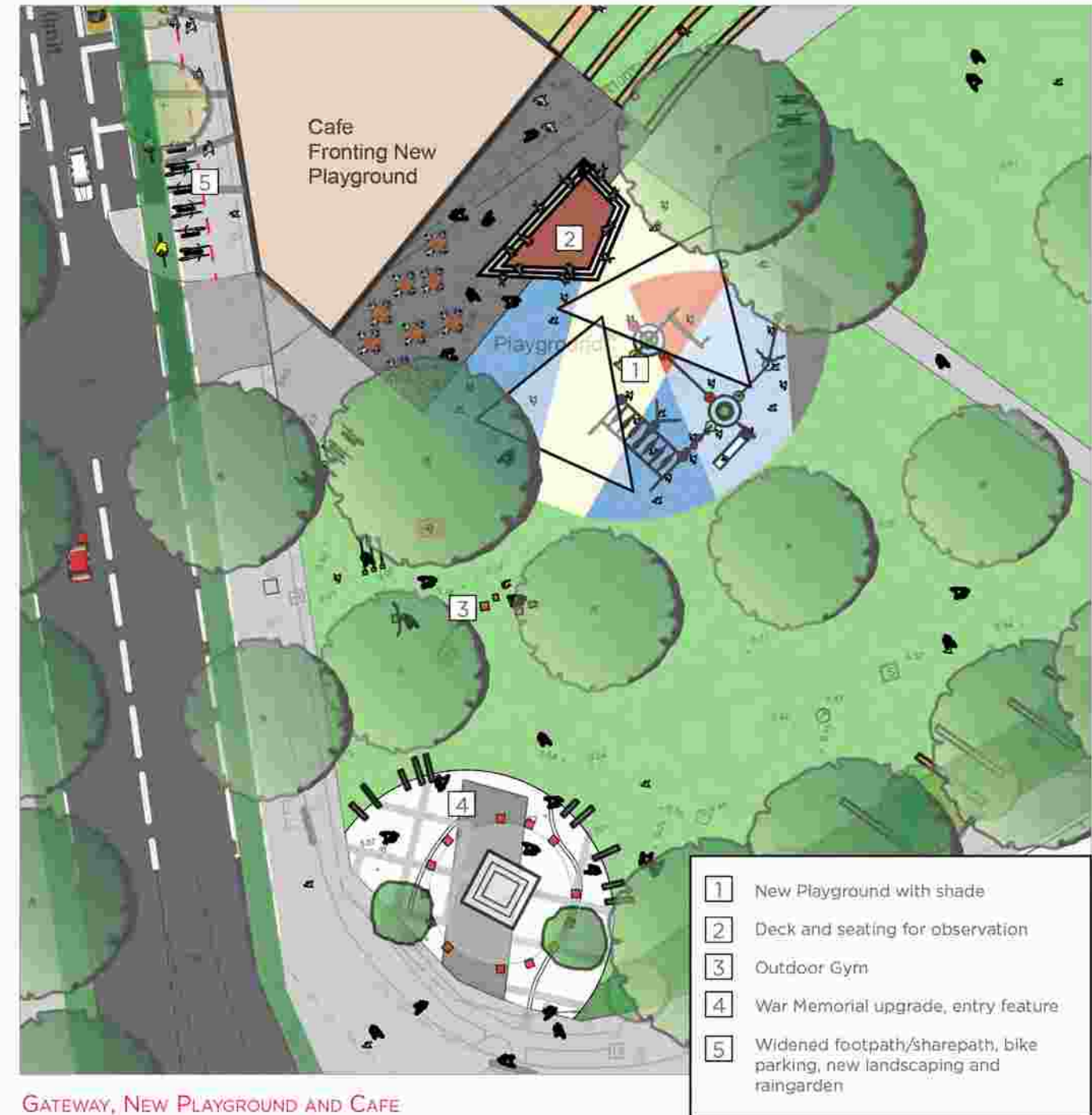
VILLAGE PARK CONCEPT EXPLORATION

- 1 Entry statement to Upper Plaza, seating with shades
- 2 Water feature
- 3 Rooftop garden, roof opening for Library below
- 4 Seating with shade, artwork and sculpture, landscape garden near the opening to Library
- 5 Existing amphitheatre seating
- 6 Pedestrian link connecting Cafe, Playground and Park Street. Seating along the link
- 7 Direct pedestrian link from bus stop to the rest of the centre
- 8 New Playground
- 9 New trees for shading. Filtered view to/from the street. Sparsely located to maintain the feel of openness.
- 10 Urban Activation Space
- 11 Entry Feature
- 12 B-Line Terminus
- 13 Public domain artwork, entry feature and promenade to add interest to the Barrenjoey Road frontage
- 14 Entry feature, War Memorial upgrade

4.0 PEOPLE, STREETS AND PLACES



URBAN ACTIVATION SPACE



GATEWAY, NEW PLAYGROUND AND CAFE

4.0 PEOPLE, STREETS AND PLACES

4.6 BEACH PRECINCT AND ITS VICINITY

Design Ideas

- Improve pedestrian and cycle connections to Mona Vale Town Centre core and the surrounding areas.
- Integrate the design and planning of the Surf Lifesaving Club with public domain improvements to create a strong identity for the precinct.
- Improve the relationship between the Public Parkland, the Surf Lifesaving Club and the Beach by creating a pedestrian and cycle friendly environment.
- Maximise opportunities for pedestrian connection from the Beach area to the Park.
- Increase connectivity between the Beach area and the existing retail precinct.



existing cafe near the beach



Mona Vale Beach



rows of cafe on Darley Street East



Apex Park, Mona Vale



5.0 BUILT FORM CHARACTER

5.1 DESIRED BUILT FORM CHARACTER

The scale and height of buildings defines the street and public realm. Built form reinforces the structure of the street system by aligning building facades parallel to and overlooking streets and public spaces.

Built forms are to reflect Mona Vale's existing fine grain character to emphasise the desired village atmosphere. Fine grain built form needs to be replicated by a larger redevelopment proposal.

Light-weight expressions and a natural colour palette are appropriate to reflect the relaxed contemporary beach side lifestyle.

Buildings are to be climatically responsive and incorporate expressions of light and shade with well detailed and articulated facades.

Building elements such as weather protection and sun shading (including eaves and overhangs) are to be incorporated into facades and roof forms to reduce direct solar heat and for rain protection.

The built form has visible and expressive roof forms and includes outdoor/semi-outdoor

living, indoor to outdoor integration by the use of balconies and courtyards and large windows creating open facades.

Lower scale buildings are on the perimeter to integrate with the adjoining residential development.

Pockets of increased density built form are located to take advantage of the topography and amenity to public transport and to define the community heart and core area.

5.1.1 HEIGHTS

Mixed used apartment buildings will be the dominant built form in the Town Centre core, focussing on housing diversity and affordability for a range of households. Maximum height within the core area will be **6 storeys (1)** with an exception of some **4 storeys (2)** to allow infiltration of sunlight to the public domain. The interface area will allow up to **3 storeys (3)** to provide a transition of scale to the adjacent **2 storey (4)** residential and education zone.

An upper level setback is required for any buildings above 3 stories to fit into the existing context and to maintain pedestrian scale on the street level.



contemporary, open, articulated facades



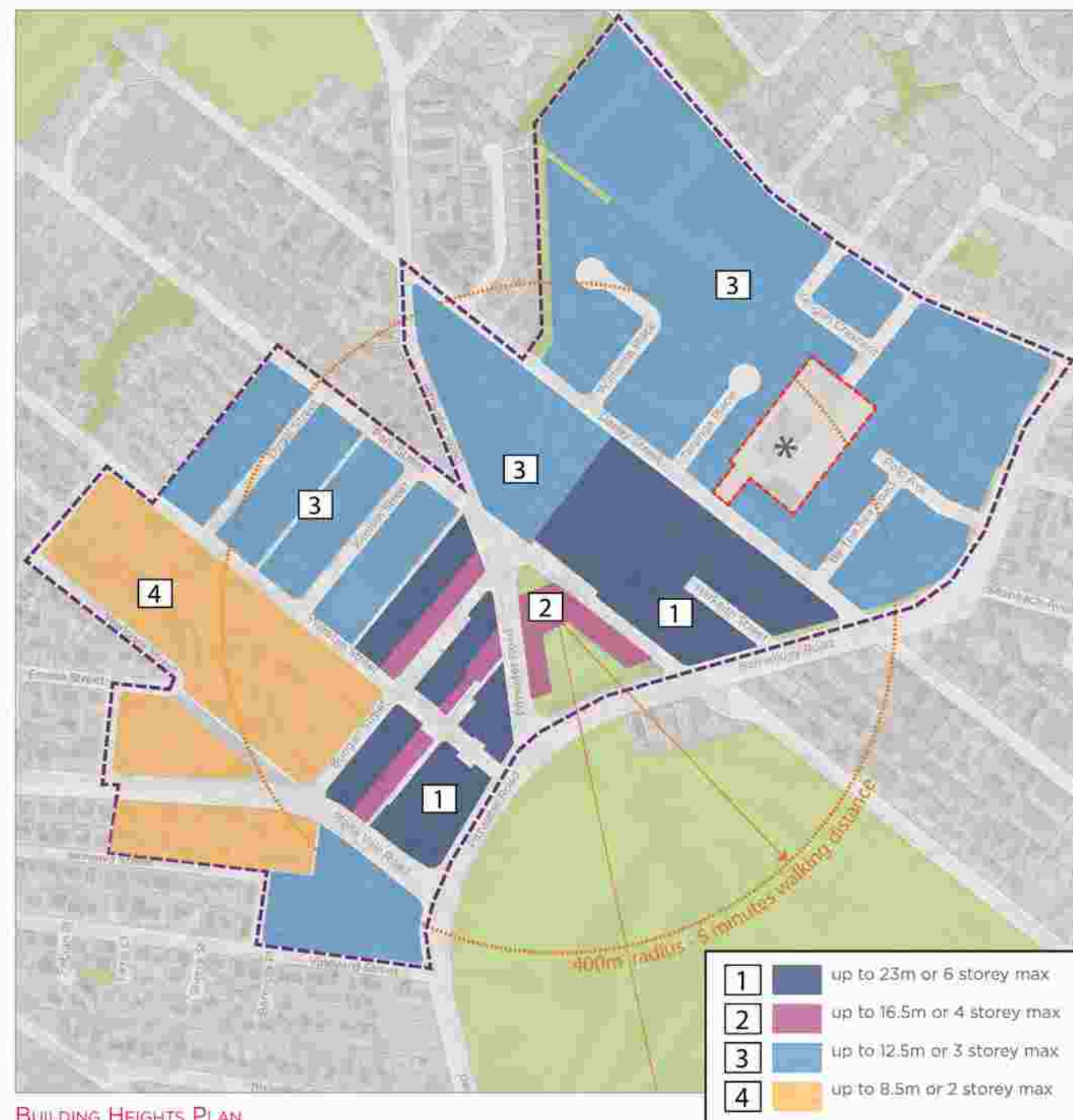
natural surveillance to public spaces



mixed activities, informal character



adequate weather protection and human-scale environment



BUILDING HEIGHTS PLAN

5.0 BUILT FORM CHARACTER

5.2 DEVELOPING THE CHARACTER

5.2.1 CENTRAL ACTIVATION AREA

Design Ideas

- Avoid blank solid walls in the public domain. Large redevelopment sites are to be designed to minimise the extent of blank walls to public areas.
- Incorporate active uses on the ground floor to promote activity on the street level. An additional level of commercial/retail on the upper floor is required to fulfil floor space demand for non-residential uses.
- Incorporate vertically proportioned architectural elements to enhance visual experience and reinforce the fine grain subdivision pattern.
- Provide a well defined public domain and sense of main street enclosure. Awnings can be used to define pedestrian space and provide weather protection.
- Include landscaped streets and public domain to provide generous shade for users
- Provide three storey street wall height with upper levels setback to fit into the existing context and to maintain pedestrian scale.
- Locate car parking to the rear of buildings or underground with vehicular access from side street or lanes.



al-fresco dining



informal shared spaces



active frontages: creative display



street wall podium and upper level setback to maintain human scale



5.0 BUILT FORM CHARACTER

5.2.2 RESIDENTIAL INTERFACE

Design Ideas

- Allocate a transitional height, scale and typology between denser core area and the adjacent lower density residential.
- Adopt built form principles of domestic typology with distinct base, middle and top with well defined roof.
- Promote vertical modulation and facade definition for street frontage and corner lots.
- Allocate direct pedestrian entry from the street and minimise impacts of driveway access with appropriate setback and recess. Vehicular access from lane or side streets are preferred, where possible.
- Encourage amalgamation on narrow lots (less than 10m wide).
- Allocate the front setback area as Deep Soil Planting zone to soften the built form.
- For lots fronting Dygal Street, allocate a centrally located courtyard with landscaping for a communal open space. Built form also needs to address Triglone Lane.
- For lots fronting Waratah and Park Streets, allocate the rear setback area for landscaping area.



vertical modulation



'domestic' typology with generous landscaping



transitional heights to core area



5.0 BUILT FORM CHARACTER

5.2.3 INITIAL INVESTIGATION AREA OF AHNG

Design Ideas

- Ensure the ground floor is allocated to non-residential uses (consistent with the IN2 zone) with minimum ceiling heights to accommodate a range of light industry workshops and associated storage. Display activities and direct pedestrian entries from the street.
- Options are explored for incorporating **Affordable Housing for the Next Generation (AHNG)** which is targeted for young people and workers (in the levels above ground).
- Investigations will include analysis of the area's employment functions, housing affordability, and the potential compatibility of light industrial and residential uses. Design solutions will include reliable mechanisms for ensuring that potential impacts from existing and future industrial uses on the ground floor and surrounding vicinity do not unduly impact on the health, well-being and amenity of residents.
- Some form of activation is encouraged on the Harkerith and Darley Streets frontage.
- Ensure that built form achieves appropriate pedestrian scale with three storey podium elements and any levels above are set back accordingly.



informal shared spaces for work and living



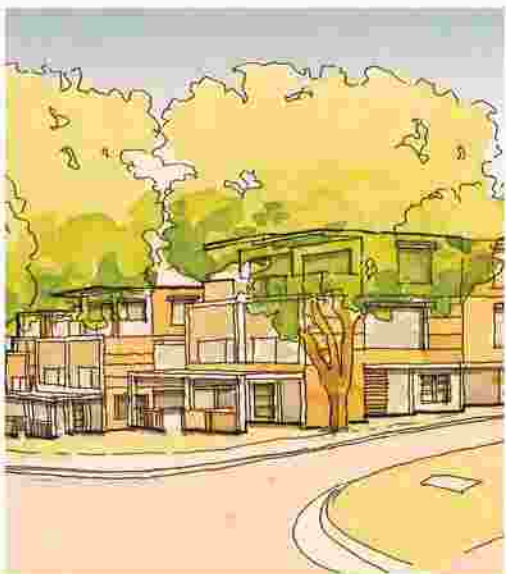
light industrial on ground floor



supporting retail to activate street



snapshot



7700m²+ potential total new outdoor public spaces when the Civic Precinct is fully redeveloped. This includes a new Civic Square with water features, playground, outdoor gym, performance stage and outdoor seating.

2500m²+ potential space for al-fresco dining and outdoor seating.

1500m²+ potential additional space for 176-seat auditorium, new restaurant and cafe, contemporary library/reading room with WiFi connection which is open longer hours for the public.

870m+ potential new cycle lanes when the Town Centre Streets are fully redeveloped. This will form part of a larger bicycle network across the region.

275+ proposed additional public off-street parking spaces provided when TfNSW B-Line Park and Ride (150 spaces) and the Civic Square (underground parking 125 spaces) are fully developed.

52 proposed total on-street parking lost when Mona Vale Town Centre streets are fully redeveloped. Current on-street parking provided within 400m radius is 787 spaces.

44 proposed total public off-street parking lost when Mona Vale Town Centre streets are fully redeveloped. Current public off-street parking provided within 400m radius is 394 spaces.



TIMELINE



CREDIT

Northern Beaches Council appreciates the contribution made to the project by:

Community, survey and workshop participants

Kinesis - Mona Vale Development Feasibility Testing

Parking and Traffic Consultants - Traffic and Parking Study

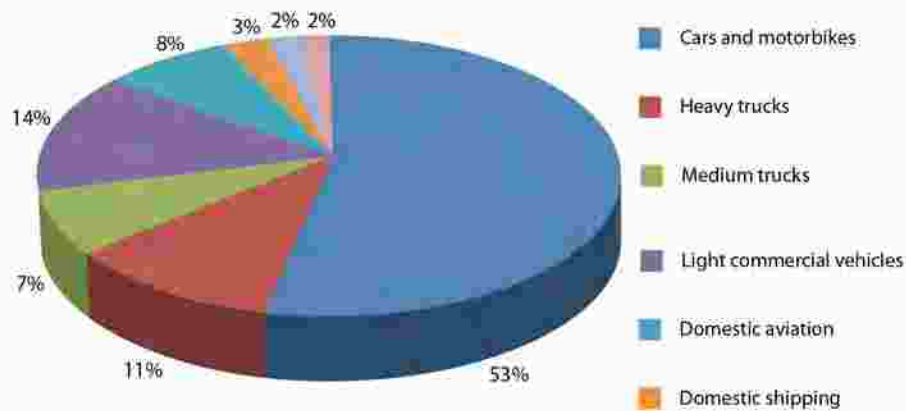
Brewster Hjorth Architects - Architectural Concept of Mona Vale Auditorium and Library

Council staffs and Place Management team

APPENDICES

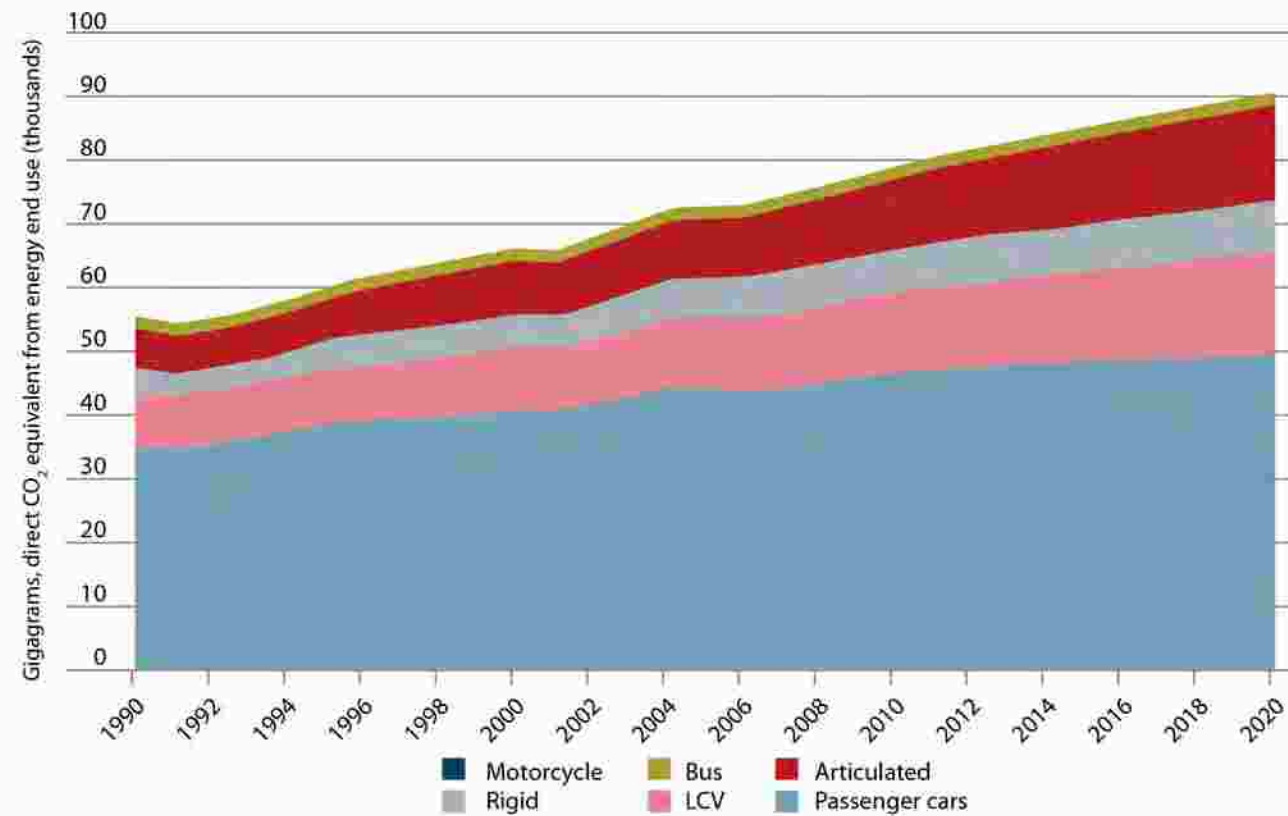
A. GLOBAL AND LOCAL TRENDS

TOTAL DOMESTIC TRANSPORT EMISSIONS BY TRANSPORT TYPE



Source: Garnaut, 2008, *the Garnaut Climate Change Review*

GREENHOUSE GAS EMISSIONS GROWTH FOR ROAD TRANSPORT



Source: Bureau of Infrastructure, Transport and Regional Economics, 2010

90% of all trips taken by car. Australia has one of the world's highest private motor vehicle mode shares in the world.

99.9% of private vehicles run on fossil fuels, and despite a move towards smaller vehicles and a greater awareness of the need for energy conservation and energy efficiency, total fuel consumption is rising.

1  = **40** cars off the road at current occupancy rates for cars.

Based on 2004 occupancy figures for cars and buses, the fuel consumption of buses

was **2.5** litres for every 100 passenger km.

compared with **7** litres for every 100 passenger km for cars.

10% shift to bus passenger transport from cars would reduce GHG emissions by more than

400,000 tonnes a year, every million passenger km on public transport, instead of cars, saves

45,000 litres of fuel.

Traffic congestion is forecast to cost the Australian

economy **\$20**

billion in lost revenue by 2020.

A. GLOBAL AND LOCAL TRENDS

SYDNEY IS GLOBALLY EXPENSIVE.....

Housing Affordability & Regulation: 2014 METROPOLITAN AREAS OVER 2,000,000 POPULATION

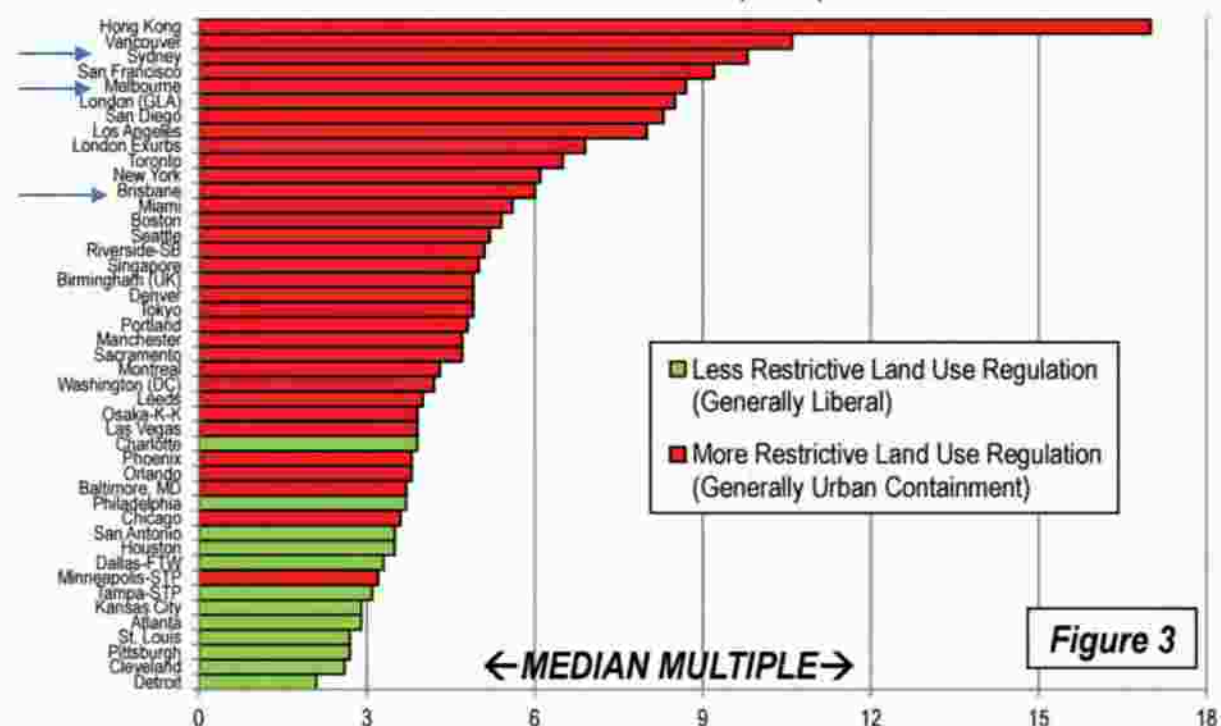
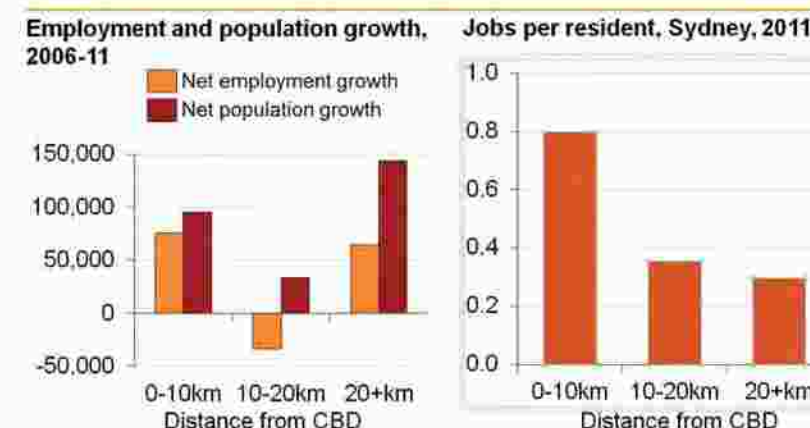


Figure 3

HOUSING AFFORDABILITY ISSUES

- Prices brought about by money supply (negative gearing/CGT) as much as housing demand and a lack of alternatives for investment.
- Perverse incentives for multiple ownership
- Enabling higher leverage by existing home-owners and investors
- Squeezing out first time buyers
- Supply increases have marginal impact: 2% of new supply each year

HOMES ARE NOT BEING BUILT WHERE PEOPLE WORK



Source: Grattan Institute

in comparison to other major cities around the world, Australian cities have some of the lowest population densities per person per hectare. (Source: EU Urban Audit 2004, US Census Bureau 2006, Tourism Transport Forum 2010)

B. KINESIS FEASIBILITY STUDY

B.1 OVERVIEW

Successful Place Planning understands and responds to the physical opportunities and constraints of the place and the community's aspirations. The analysis in this section is to acknowledge the existing conditions and key elements. The aspirations of the community were gained from an extensive engagement process which was then documented in the Imagine Mona Vale - Engagement Summary for Mona Vale Place Plan. This combined with the analysis of external consultants, will define the vision for Mona Vale.

B.2 MONA VALE TRENDS

During the community engagement process and further analysis by Kinesis, there are four key areas of interest which influence the future growth of the Centre:

1. Retaining young people
2. Increasing local employment
3. Projecting the social vision
4. Working towards sustainability - shared urban experience

The diagrams on this page explain the current trends in the local area.

WHO LEAVES PITTWATER?

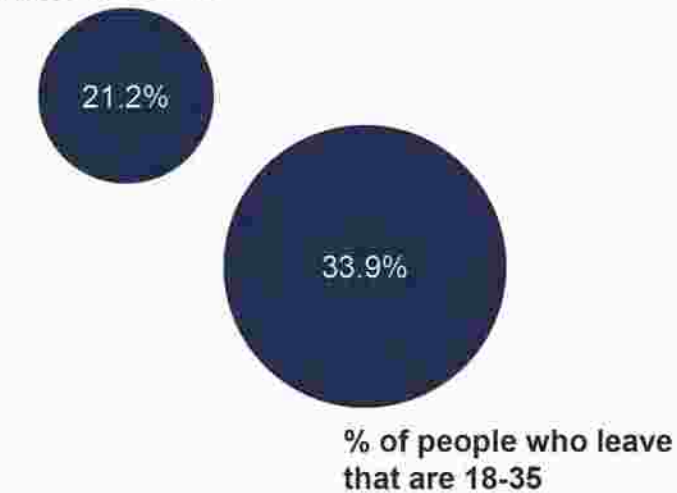
Leave Pittwater per year



18-35s Leave Pittwater per year

WHO LEAVES PITTWATER?

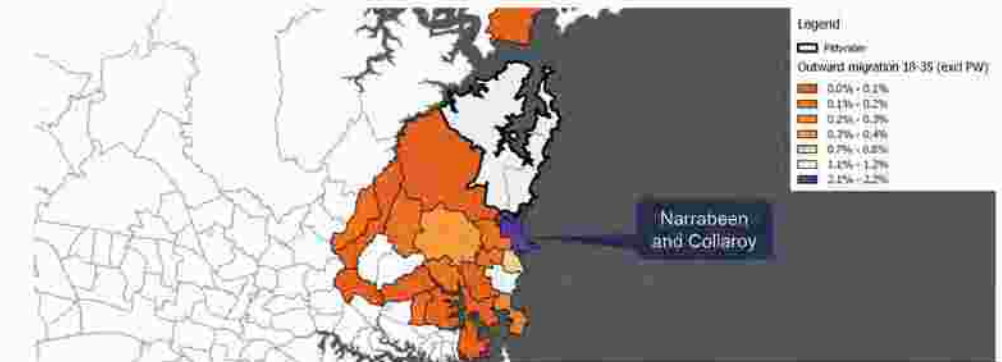
% of total population who are 18-35



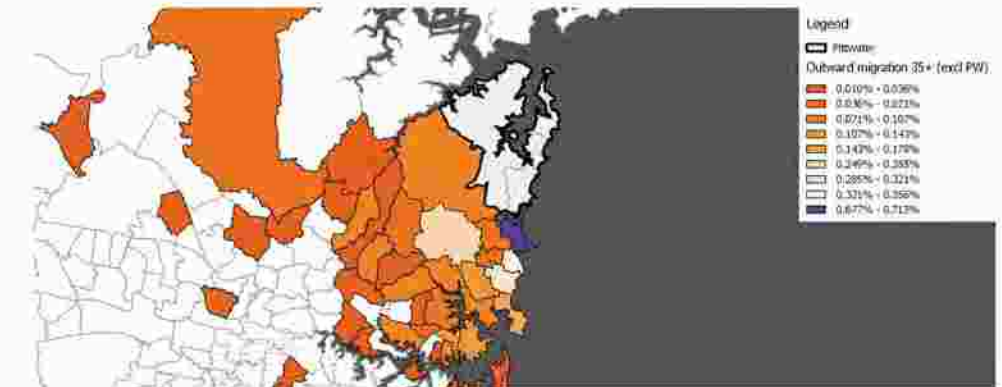
% of people who leave that are 18-35

MIGRATION PATTERNS

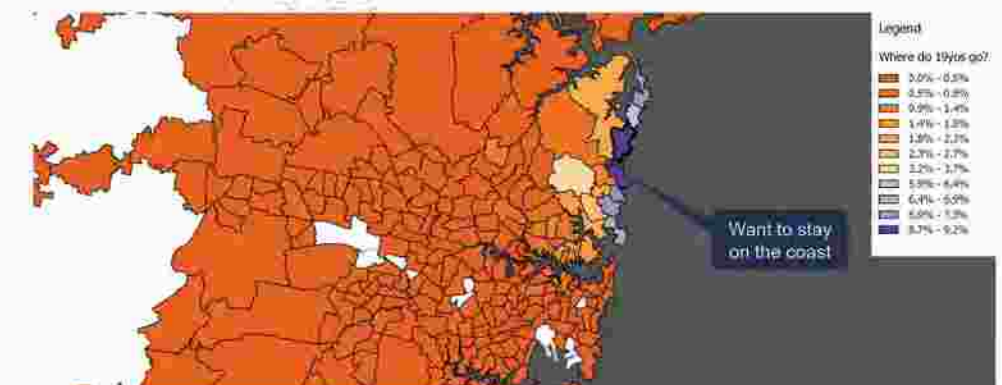
Where do 18-35s move to?



Where do 35+ move to?



Where will the 19 year olds of Mona Vale end up?

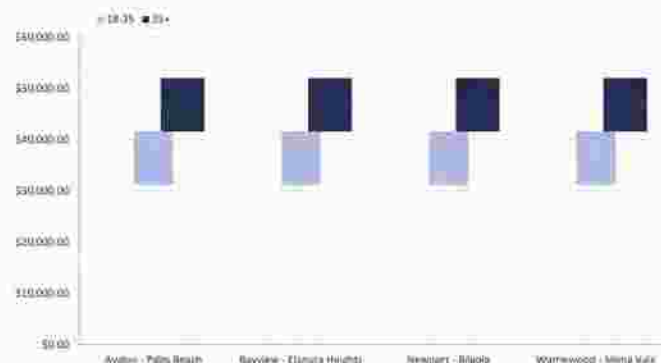


B. KINESIS FEASIBILITY STUDY

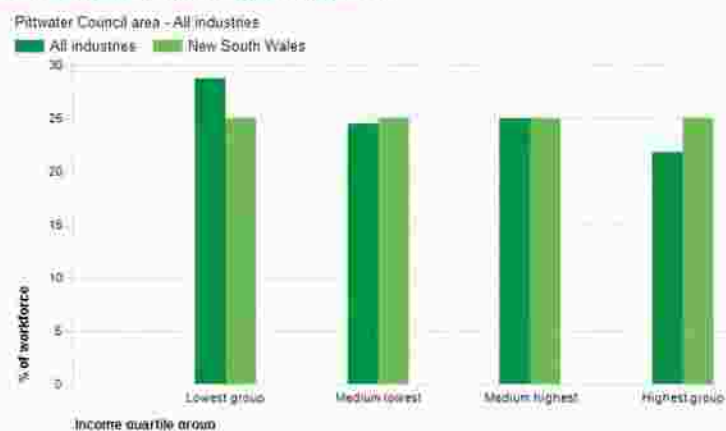
IS PITTWATER UNAFFORDABLE?

PITTWATER INCOME

Median income range (\$ per working adult)



Workforce individual income quartiles, 2011



Source: Australian Bureau of Statistics, Census of Population and Housing, (2011). Compiled and presented in economic by the population experts.

The largest group of Pittwater's individual workforce (29%) is on the lowest income quartile.

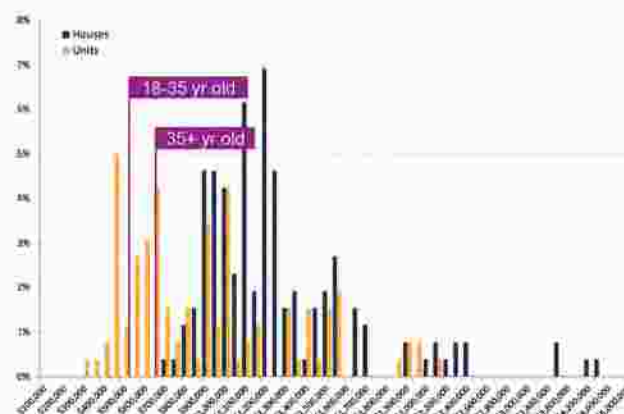
What is affordable housing?

"As a rule of thumb, housing is usually considered affordable if it costs less than 30 percent of gross household income" (NSW Dept of Family and Community Services)

For Pittwater, this equates to:

- 18-35 year olds ~\$360,000
- +35 year olds ~\$510,000

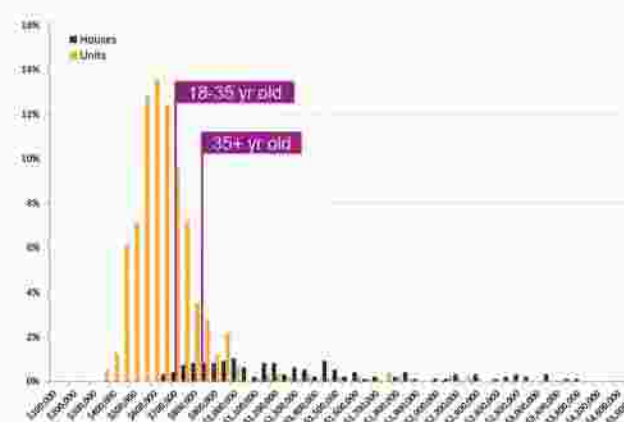
First home buyer affordable housing price point.



NARRABEEN / DEE WHY SALES DATA

First home buyer affordable housing price point.

50% OF INCOME

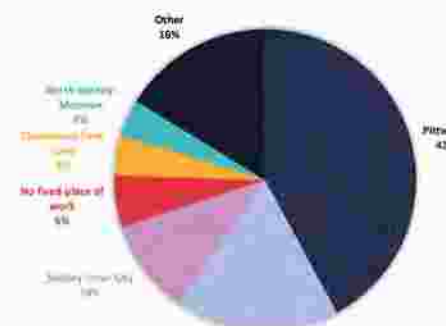


Neighbouring suburb offers more choice for affordable housing price point.

A PATH TO SUSTAINABLE COMMUNITY?

EMPLOYMENT CONTAINMENT

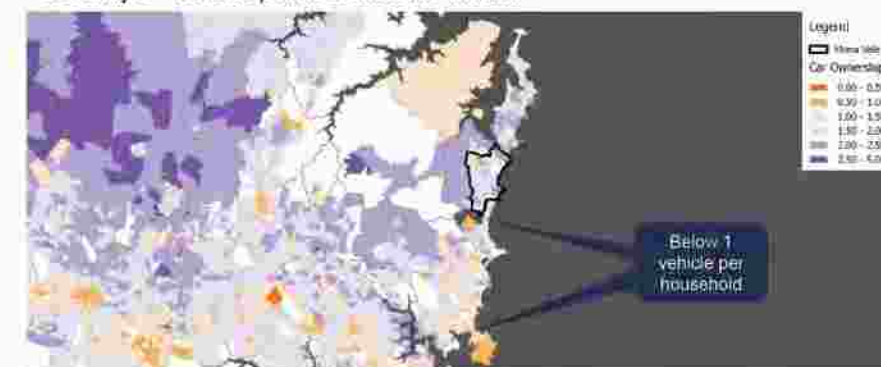
People who work in Pittwater commute from:



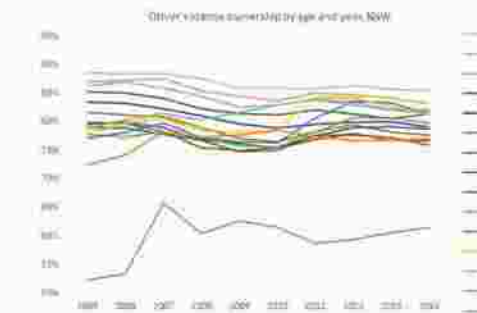
Pittwater has high level of containment.

CAR OWNERSHIP RATES

Currently 2+ vehicles per household in Pittwater.



What are the trends we are planning for?
e.g. 25% of 18-35 year olds do not have a licence (Sydney Metropolitan Area)



B. KINESIS FEASIBILITY STUDY

B.3 FEASIBILITY STUDY

Kinesis was engaged by the former Pittwater Council to provide an analysis of the current conditions and the development potential of Mona Vale with a focus on providing affordable housing.

The analysis shows:

- an evidence base to demonstrate challenges and opportunities, and
- an outline of the approaches needed to deliver a substantial amount of affordable housing and housing choice in the Centre.

A decision to pursue these approaches will inform and influence the future vision.

An analysis of the development potential of four sites in the Mona Vale centre was undertaken. A range of design options were considered:

- retention of existing structures with development of underutilised land,

- demolition & redevelopment of the entire site,
- varying the amount and type of car parking,
- varying building heights from current controls.

The analysis showed these factors as well as the ownership pattern, existing zoning and specific housing types and choices taken together determined whether a development was viable and feasible.

The findings of this study showed that due to the sensitivity of the feasibility to this wide range of factors, and the particular characteristics of each site, each site needed to be considered individually and a generic adjustment to planning controls would be unlikely to achieve the desired outcome.

The analysis showed that it should be possible to achieve social and environmental objectives, but this will require a more proactive, site based approach by Council.

B.3 1 KEY FINDINGS

• Affordable housing vs lower cost dwellings

The analysis of the current condition shows that Mona Vale faces a challenge to retain young people. In addition to this, the demographic analysis shows that the largest group (29%) of the individual workforce is on the lowest income quartile. Considering that housing is the second biggest household expenditure after food, it is essential that the future strategy should include a form of Affordable Housing. The analysis shows that providing options for lower cost dwellings will not deliver Affordable Housing objectives. An integrated approach which includes some concessions and interventions for eligible intensified/redevelopment sites, is recommended to deliver the preferred outcome.

• IN2 zone and its potential for 'SEPP (Affordable Rental Housing) 2009' and/or New Generation Boarding House

Pittwater has a high level of containment, 42% of

employed local residents work within the former Pittwater area and a further 18% work in neighbouring former neighbouring Warringah area. Mona Vale IN2 zone is strategically located within a 400m radius of the Town Centre, which means that this area can share most of the amenities that the Centre offers. Selected sites on Darley and Harkeith Streets have the potential to continue the ground floor light industrial employment generating uses with potential opportunities to introduce affordable housing residential uses on the upper floors. This will require a Local Environmental Plan (LEP) amendment and negotiation with the Department of Planning & Environment. Affordable Housing would be permitted, subject to; the consent authority being satisfied that it is provided in accordance with the objective of the zoning and the vision of the Mona Vale Place Plan; its being compatible with existing, approved and permissible uses in the vicinity; comprises non-residential uses on the ground floor; and having not an adverse effect on the environment.

• Potential Redevelopment of B4 Zone

Sites located within the B4 zones are not without challenges. Some of these sites are quite narrow, fine grain, and consist of fragmented ownership. However, selected sites within the existing B4 zone have opportunities for intensification and/or redevelopment. The test sites show a common result for feasibility analysis. They are feasible and viable for Affordable Housing sites, but less viable as 'market' housing. The redevelopment of these sites is subject to the fulfilment of the zone objectives and protection of the existing retail and commercial space. Ground floor and first floor are generally allocated for non-residential uses.

• Reduction of on-site car parking provision

Pittwater Development Control Plan (DCP) 21 requires higher on-site car parking provision in comparison to Road and Maritime Services (RMS) and other Local Government Areas (LGA). Considering the cost of providing parking on-

site, whether it is at grade or basement parking, the analysis shows that all test sites are neither feasible nor viable to comply with the current provision. In light of the Council Active Transport Strategy vision, the Centre will benefit from improved public transport services and walking/cycling infrastructure augmentation. Comprehensive car parking strategies that reduce on-site parking requirements in conjunction with the Active Transport Strategy are integral to housing affordability, and essential to foster sustainable growth in the long term.

• Existing building height

The analysis shows that B4 zone height limit (13m or 4 storeys) does not comply with the revised height definitions in the Standard Instrument and the recommended floor to floor dimensions in the Apartment Design Guide. In light of the recent redevelopment pattern and the feasibility of selected test sites, greater heights such as 6 storeys can be suggested where there is no adverse impact to amenity.

B. KINESIS FEASIBILITY STUDY

- **Block planning and site amalgamation**

During the analysis it has become clear that approaching renewal on a site by site basis has limitations and that approaching the design of entire street blocks may have significant urban design and financial benefits. There are a number of mechanisms that may be worth investigating further, including tradable development rights and 'land re-adjustment' techniques. The incentive/stimulus for such an approach would need to be a significant increase in land value, which could be achieved through changes to the permissible uses, floor space ratio, heights or a combination of all three. This concession will be subject to the fulfilment of the vision of the Mona Vale Place Plan, to express the existing Mona Vale fine-grain, human-scale and village character.

- **Opportunities for increasing housing diversity and density around the Centre**

The study shows opportunities for updating Council planning controls to provide for an increase in density around the Centre in providing extensions and/or modifications to accommodate ancillary dwellings in the areas within a 1km radius of the Centre. Existing R2 zone within a 400m radius of the Town Centre, such as areas fronting Dygal Street, can also benefit from up-zoning to R3 to allow development of residential apartments.

- **Increased amenities within redevelopment sites**

The potential of roof terraces to provide common open space which would provide high amenity and have little impact on adjoining sites, should be considered and allowed for in the DCP.

CONCLUSION

In the course of testing the feasibility of both 'conventional market housing' and 'affordable housing' options, the need for changes to planning controls (additional permitted uses, building heights and roof terrace), strategic planning (car parking), and planning mechanisms for more holistic planning, has become apparent.

It is important to recognise and integrate the Affordable Housing State Environmental Policy into the planning for housing choices in Mona Vale. There is a great opportunity to tailor this policy within the LEP and DCP by definitive provisions in relation to height, car parking and other potential concessions.

POSSIBLE FUTURE WORK REQUIRED

1. Undertake further work to develop a policy which includes legal and planning processes for the delivery of affordable housing, and for Council's potential role and involvement.
2. Undertake more detailed feasibility costing for selected development sites that may engage local landowners via transparent and equitable processes defined in step (1).
3. Undertake an analysis of potential for value adding/sharing between local landowners and Council via S94 or other mechanisms.
4. Undertake more detailed demand and supply analysis of residential, employment and industrial lands in Mona Vale.
5. Undertake work to amend Council's Planning Controls including the discrepancies between existing and standard LEP definitions, and the incorporation of policy and strategic considerations.

C. PARKING AND TRAFFIC CONSULTANTS STUDY

C.1 OVERVIEW

Parking and Traffic Consultants were engaged by the former Pittwater Council to conduct a traffic analysis and parking study for Mona Vale in the context of the Place Planning process.

The aims of the study are to assess the road network capacity by way of traffic modelling and the current parking activity across the study area, providing Council with the information required to develop a plan of civic improvements and a parking strategy.

The study has involved the collection of data through extensive surveys of the road network and parking usage as well as a public consultation process. This data has been modelled in relation to the future parking demands and traffic impacts across the Town Centre road network.

C.2 TRAFFIC STUDY

C.2.1 ROAD NETWORK OPERATION

- In 2021 the traffic growth is relatively evenly distributed across the network and causes mainly even impacts at each intersection,
- The primary impact of the Civic Work will be the distribution of increased traffic along Darley Street. This will require the extension of the right turn lane on the southbound Barrenjoey Road approach to Darley Street,
- The increase in traffic along Darley Street increases the delays at each end for vehicles joining Barrenjoey Road and Pittwater Road, although both intersections continue to operate within capacity,

- The Mona Vale Road / Pittwater Road intersection reaches a Level of Service C during the evening peak, which is consistent with the AECOM findings,
- The civic works compress Pittwater Road and Park Street, so while the traffic volumes reduce, the delays remain relatively unchanged.
- The Civic Works result in only minor impacts on the Town Centre Road network.
- It should be noted that a traffic growth rate of 1% per year was adopted, although current records indicate zero growth over the past 5 years.
- The results of the traffic modelling are detailed in Section 5 of the Traffic and Parking Strategy Report.



PROPOSED ADJUSTMENTS TO STREET NETWORK AND TRAFFIC FLOW

C. PARKING AND TRAFFIC CONSULTANTS STUDY



ARTERIAL AND REGIONAL ROAD CONSTRAINTS

C.2.2 ROAD NETWORK FINDINGS

- The operational capacity of the road network has been assessed through modelling, based on peak hour traffic surveys, traffic signal data and a simulation of the road layout and traffic controls. The model confirms that the existing road network operates within capacity during the daily peak periods and that there is spare capacity to accommodate future growth in traffic activity.
- The model tested a future scenario whereby the existing traffic activity was increased by 1% per annum (accumulatively) to 2021. This scenario confirms that the road network can accommodate this level of growth, although there are indications that certain intersections will require adjustments to the traffic signal timing or some physical works (primarily within the state roads).
- The proposed civic works were applied to the road network model to assess the impacts on the road network. The results indicate that the works can be undertaken with some relatively minor mitigated works required. The primary impact results from redirecting traffic along Darley Street, whereby the right turn movement from Barrenjoey Road generates a queue that extends beyond the existing right turn lane, which then blocks a southbound lane. This will likely require an adjustment to the traffic signal timing and an extension to the right turn lane.



PROPOSED SHARED ZONE

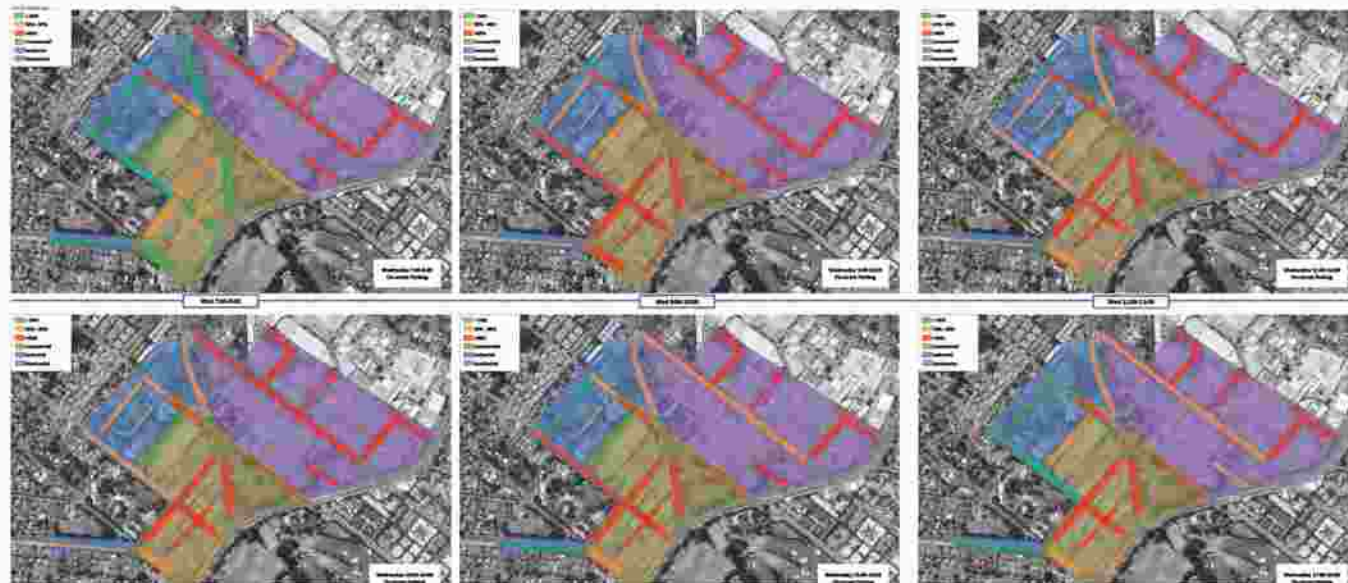


PROPOSED PITTWATER/BARRENJOEY ROADS INTERSECTION IMPROVEMENTS

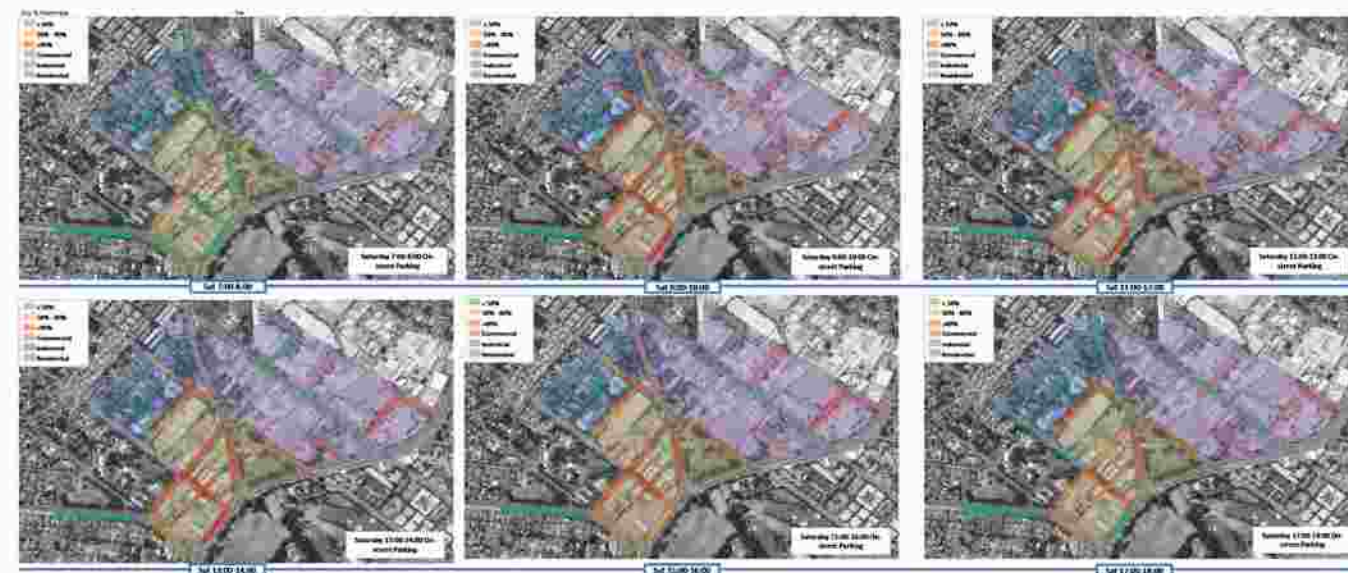
ROAD NETWORK RECOMMENDATIONS

- Continue to develop the civic works plan on the basis that the traffic modelling confirms that the road network will still operate with a good level of service, subject to some mitigating works being undertaken.
- Develop the proposal for a Shared Zone along Bungan Street and the adjacent lanes to the south
- Liaise with RMS and develop concept plans in relation to changes to the arterial roads, particularly the proposal to reduce the intersection of Pittwater Road and Barrenjoey Road.
- Develop a concept plan of the intersections of Pittwater Road with Bungan Street and Park Street in the context that the modelling has confirmed that the removal of the existing roundabout can be achieved in relation to road capacity.

C. PARKING AND TRAFFIC CONSULTANTS STUDY



Wednesday



Saturday

ON-STREET PARKING ANALYSIS

C.3 PARKING STRATEGY

B.3.1 PARKING INVENTORY ANALYSIS

At peak demand there were 980 cars parked in Council managed public car spaces in the study area; 422 (273+57+92) in restricted spaces (excluding 8P) and 558 (402+118+38) in 8P plus unrestricted spaces.

Of the 201 available spaces at peak 118 spaces (59%) were located in the commercial zone. Of these spaces, 77 (65%) were located in the Bungan Lane car park; 20(26%) in the 8P parking and 57 (74%) elsewhere in the car park. 32% of available spaces were located in the residential zone, predominantly in the unrestricted on street parking areas.

The survey indicates that at least 440 vehicles, (calculated by the sum of all cars with a length of stay less than 5 hours 303+137), present during the peak demand period relate to short stay parkers, being visitors to the surrounding businesses and/or residences, although they are not necessarily parked in the time restricted spaces,

particularly those staying for greater than 2 hours. It also shows that 82% of these were parked in time restricted parking spaces (excluding 8P). The remaining 540 vehicles would be made up of workers in the area, commuters and residents leaving their vehicles on-street throughout the day. Approximately 12% were parked in restricted spaces which may indicate a need to review enforcement management as time restrictions are only effective if appropriately enforced.

Based on the above analysis, the estimated supply and demand for each of the main user groups that require parking in the area during weekday peak periods is:

- Commuters, workers in the area and residents - Unrestricted + 8P spaces: 108 spaces
- Visitors for Business and Social purposes - Restricted Spaces (excl 8P): 93 spaces

C.3.2 PARKING FINDINGS

These estimates confirm there is available parking in the study area for all user groups at peak

however not necessarily easy to locate (e.g. Bungan Lane car park) or in the most convenient location (unrestricted spaces in the residential zone).

The perception that parking is not available may be due to the following:

- Drivers prefer to park on-street close to their destination rather than off-street and walk;
- Drivers are unaware that there is parking available;
- Drivers wish to find parking for a time period longer than is available; and
- Drivers expect to find parking close to their desired location.

50% drivers are driving alone.

18% drivers park at off-street Council Car Park.

C. PARKING AND TRAFFIC CONSULTANTS STUDY

C.3.2 PARKING STRATEGY

- The parking surveys confirm that parking turnover within the Town Centre is high with a relatively short average length of stay, which is entirely appropriate within commercial centres.
- The surveys indicate a high degree of all day parking within the light industrial area surrounding Darley Street, which is indicative of commuters and workers. This type of activity prevents use by visitors and shoppers and therefore decreases the value of the parking spaces.
- The Town Centre is primarily subject to a 1 hour parking limit, while no restrictions apply to roads in close proximity to the Town Centre, which provides an opportunity for all-day parking, which in turn may encourage car usage.
- A comparison of current planning controls with neighbouring councils indicates that the minimum parking requirements are high in the context of a Town Centre and could be either reduced or converted to maximum limits to discourage car ownership and usage. This must however, be done in the context of the density of the Town Centre, access to employment and services, and public transport.
- There is high demand for drop-off and pick-up parking associated with the Mona Vale Public School, which impacts on the operation of Bungan Street and Waratah Street. This could be better managed through the provision of 5min parking controls during the School Zone times.
- The Parking Strategy recommendations are detailed in Section 6 of the Traffic and Parking Strategy Report.

PARKING STRATEGY RECOMMENDATIONS

- Adopt a general principle that where occupancy exceeds 85% (practical capacity) on a consistent basis, consideration is given to changing time restrictions and/or implementing paid parking to manage parking demand
- Introduce time restrictions into the residential and industrial zones (Darley Street) adjoining the commercial zone (e.g. 2P).
- Consider converting off street car parks in the commercial zone (car parks A and B and Bungan Lane car park Levels 1 and 2) to 2P weekdays.
- The time restrictions will still be greater than on street (1P).
- Similarly 8P parking in the Bungan Lane car park could be converted to 3P parking.
- Consider either a reduction in the current parking requirements for developments, or the conversion of the existing rates to maximum limits, rather than minimum requirements.
- Work with the local schools to investigate alternative drop off /pick up zones (e.g. rear of Mona Vale Primary site) and the efficient management of existing drop off/ pick up areas.
- Develop a town centre signage plan to direct parkers to available parking to minimise circulating traffic (e.g. the Bungan Lane car park).
- Consider dynamic signage as part of the signage plan.
- Consider encouraging car share schemes through the provision of 'pods' in lieu of on-street parking spaces.
- Incentivise employers to introduce car-pooling and/or public transport for staff.
- Install bike racks within strategic locations and in close proximity to major destinations (e.g. the front door of supermarkets or within the eat-street areas once established)
- Work with local schools and businesses to promote travel smart initiatives (e.g. car-pooling, walking and cycling to school, etc.)
- Develop overflow parking plans for peak periods. Potential sites for overflow parking on weekends include school parking.
- Unbundle parking in new developments.
- Reduce parking requirements for new developments, particularly those adjacent to public transport hubs – assess parking demand before creating parking.

43% drivers spend 5 minutes to find parking. Further 33 % spend 2 minutes or less.

30.4% drivers walk 100m from parking spot to their destination. A further 24 % walk 50m or less.

57% drivers in favour for time-restricted parking during peak times.

D. WALK MONA VALE

D.1 WHAT IS A PEDESTRIAN ACCESS & MOBILITY PLAN?

A Pedestrian Access and Mobility Plan (PAMP) is a strategic action plan for the development and installation of pedestrian network improvements, such as footpaths, pedestrian crossings and kerb ramps. It also considers initiatives to positively affect the community through programs and promotions to encourage more people to walk.

The former Pittwater Council, in partnership with the Roads and Maritime Services (RMS) has a responsibility to provide a safe, convenient and connected pedestrian network which will provide infrastructure to support increased walking activity.

The PAMP has provided an opportunity for Council to review the existing Mona Vale pedestrian network through the 2015 Urban Talks workshops and the development of Walk Mona Vale.

D.2 BENEFIT OF PAMP

Walk Mona Vale will provide many benefits to the community through transportation, environmental and social factors, such as:

- Identified pedestrian priority network and network gaps
- Improved access for mobility impaired groups
- Safe and convenient crossing opportunities
- Reduce injuries to pedestrians
- Active travel links to Northern Beaches B-Line Program
- Intergration with planning controls
- Improved walking direction throughout Mona Vale and destinations
- Provision of new linkages with Council's Active Strategy and infrastructure works program

D.3 PEDESTRIAN CRASHES

A Roads and Maritime Services crash data analysis has been completed and outlined crash 'hotspots' from the past five years for the study area.

Key points to note are:

- The majority of pedestrian-vehicle accidents occurred on Barrenjoey Road. There is also a crash cluster on Barrenjoey Road near the Mona Vale Town Centre between Park Street and Darley Street. This corresponds to the section of Barrenjoey Road where the central pedestrian fencing ends.
- There were two recorded accidents in the Town Centre at intersections with Pittwater Road at Park Street intersection (between Kennan Street and Akuna Lane) and at Pittwater Road and Bungan Lane.
- One accident on Darley Street at By The Sea Road
- One accident on Mona Vale Road at Foley Street.

Walk Mona Vale Strategies

Based on community consultation and background review and analysis, the following refined strategies have been established:

Strategy 1	Improve access and linkages to Mona Vale and local destinations through priority pedestrian network
Strategy 2	Prioritise future pedestrian crossing facilities for improved crossing of roads
Strategy 3	Improve walking directions through Mona Vale and to local destinations
Strategy 4	Create places for people through Place Planning
Strategy 5	Reduce car movements in and around the Mona Vale town centre and local schools
Strategy 6	Establish a healthy and active Mona Vale community by connecting Mona Vale with their neighborhood through improved pedestrian networks which support and encourage walking.
Strategy 7	Encourage walking to the northern beaches B-Line network
Strategy 8	Advocate for increased funding for infrastructure improvements
Strategy 9	Encourage walking through behavioral change campaigns.
Strategy 10	Prioritise active travel throughout the Local Government Area

D. WALK MONA VALE

Pedestrian improvement priorities

Through community engagement and detailed network audits, it has been identified that the top priorities for the Mona Vale are:

Priority 1	Improved pedestrian access for Mona Vale Public School students across Oliver Way through construction of a pedestrian refuge
Priority 2	Improved pedestrian access on Darley Street through construction of kerb extensions and pedestrian refuges
Priority 3	Speed cushions or raised pedestrian crossings at three locations on Park Street
Priority 4	Improved pedestrian access at the intersection of Pittwater Road, Bungan Street and Park Street
Priority 5	Improved pedestrian footpath connectivity on Waratah Street and Bungan Street
Priority 6	New signalised crossing leg on Mona Vale Road and Pittwater Road intersection
Priority 7	New signalised crossing leg on Barrenjoey Road and Golf Avenues intersection
Priority 8	New signalised crossing leg on Barrenjoey Road and Darley Street East
Priority 9	Complete missing pedestrian footpath links on Darley Street and Darley Street West
Priority 10	Upgrade all kerb ramps identified as non-compliant through pedestrian network audits
Priority 11	Improved pedestrian access across By The Sea Road at the Darley Street intersection
Priority 12	Improved pedestrian access at Mona Vale Beach to cafes and restaurants through a pedestrian refuge
Priority 13	Improved pedestrian access across Waratah Street at the intersection of Pittwater Road*
Priority 14	Implement way finder signs through Mona Vale to key destinations
Priority 15	Work with the community to encourage walking to the Mona Vale Town Centre and local schools

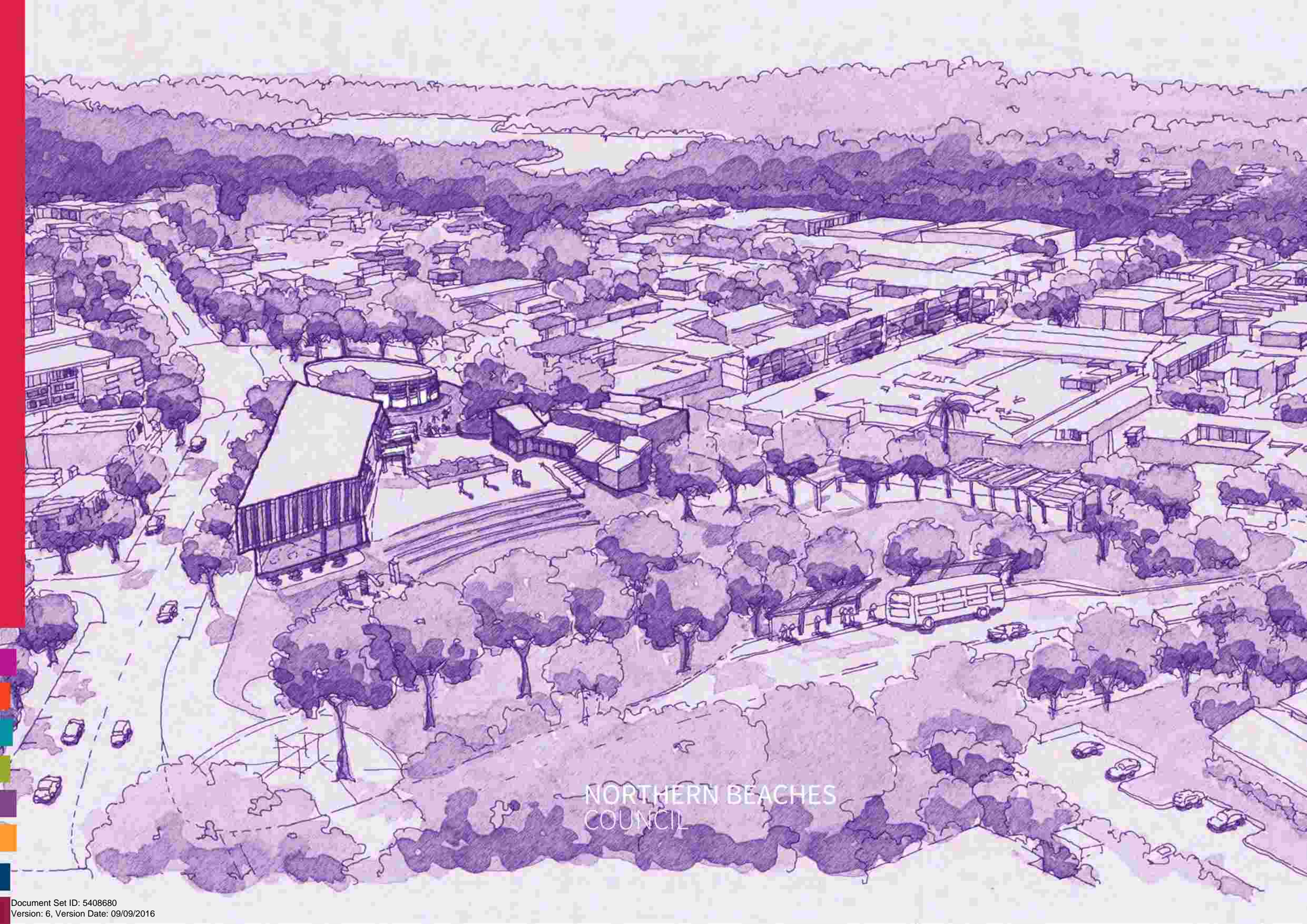
Future Mona Vale pedestrian connections

Creating a walking network between our town centre, public transport and local destinations, will encourage our community to walk more often while helping to reduce congestion on our road network.

We are committed to improving the Mona Vale active travel network with plans for footpaths on:

- Parklands Road
- Maxwell Street
- Emma Street
- Mona Vale Road (shared path)
- Narrabeen Park Parade





NORTHERN BEACHES
COUNCIL