trinity point
LAKE MACQUARIE

PREFERRED PROJECT REPORT
PART 3A CONCEPT PLAN

TRINITY POINT MARINA & MIXED USE DEVELOPMENT

REVISED PRINCIPLES, OBJECTIVES & URBAN DESIGN GUIDELINES

TRINITY POINT, MORISSET PARK

MAY 2019

JOHNSON PROPERTY GROUP

squillace

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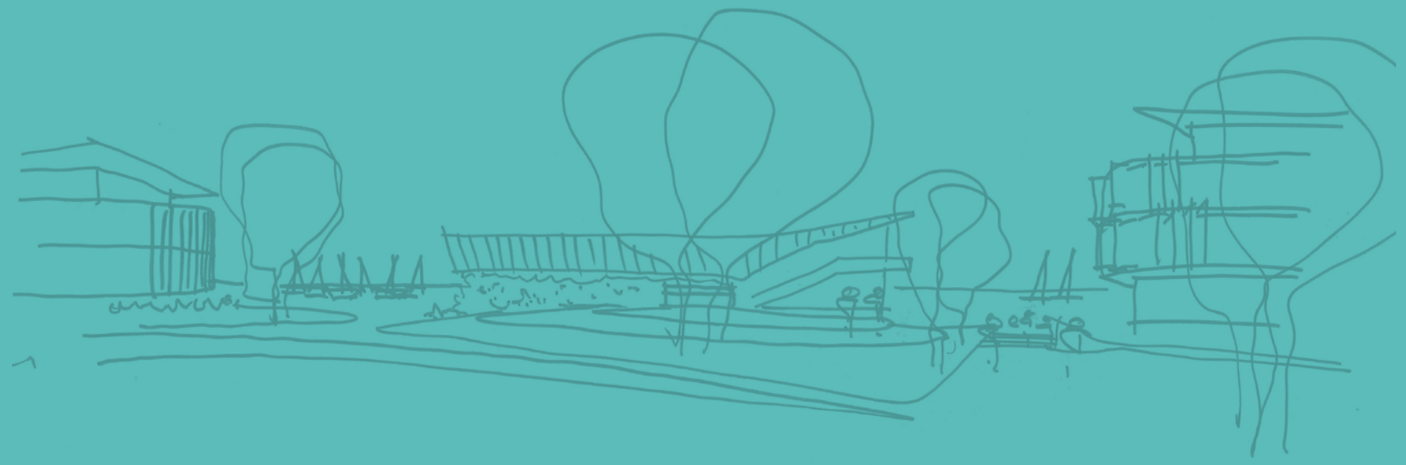
ARCHITECTS
INTERIOR DESIGNERS

SYDNEY
2 Liverpool Lane
East Sydney NSW 2010
Ph: +61 2 8354 1300
Fax: +61 2 8354 1311

MELBOURNE
Suite 6001, Midtown Plaza
Level 6, 246 Bourke Street
Melbourne VIC 3000
Ph: +61 3 9636 3777
Fax: +61 3 9639 3666

squillace.com.au



CONTENTS

PART A: INTRODUCTION

A INTRODUCTION

VISION

Johnson Property Group's (JPG) vision is to create a premier mixed use development, a successful, viable and vibrant place and a world class destination – one that forms part of an experience and interaction with the area's greatest quality – the lake itself. With public access to be facilitated around and through the site, its success as a 'place' is paramount.

The site will be a place where people want to visit for the day or longer, a land and water based destination, a place instantly recognised as part of the profile for tourism in and on Lake Macquarie. It will assist Lake Macquarie to compete in the tourism market. It will not be secluded or exclusive. Public access is encouraged for the site to be successful.

The site will be a place for everyone to enjoy, whether they be residents of Trinity Point, surrounding suburbs of the Morisset Peninsula or wider Lake Macquarie, residents and visitors alike will be able to meet with their friends to eat out, have a coffee, dine in the restaurant, kick back in cabanas, explore environmental and heritage interpretative signage, watch the boats, stroll the foreshore pathway, have a picnic or fish and chips on the marina green and appreciate the lake. Landscaped and safe pedestrian links will invite all through and around the site to enjoy the lakeside location. The south western side of the lake will have a quality lakeside venue for business meetings, functions, weddings and celebrations, and local employment and multiplier effects will be created.

The marina will be a destination for users of the lake, where they can refuel and restock, dispose of waste in an environmentally responsive way, participate in water-based training and events or stop off on a cruise. Importantly, it provides a place for interaction between the lake boating community and will meet increasing demands for boat storage.

New buildings on site will provide tourism accommodation and homes for residents, contributing to surveillance, safety, activity and community. These will be of good quality design, amenity and performance with natural light, sun penetration and natural ventilation. An integrated design theme of form, colours and materials—including stone, concrete, glass and timber—will apply to all buildings and landscape. Within the tourist hospitality precinct, a pair of building forms nestled within the landscape will contribute to the uniqueness of the destination and experience of the place.

OVERVIEW

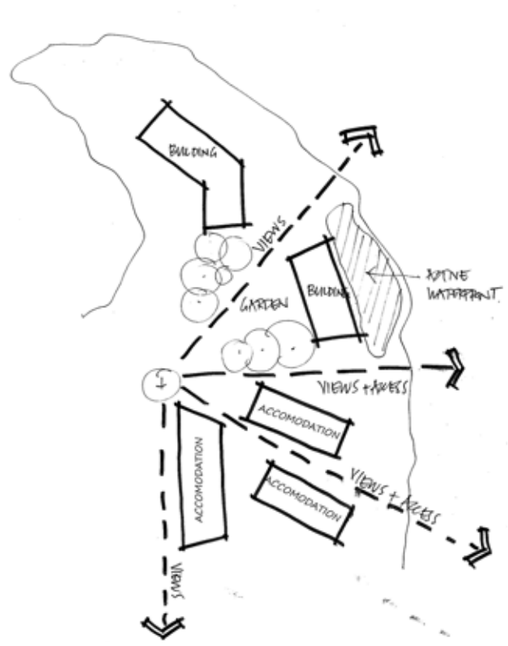
This document is the updated Concept Plan (Preferred Project Report) for which approval is sought.

Its purpose is to establish the framework and guidelines that future development of the site will be consistent with. Development Applications will need to demonstrate achievement of the objectives and consistency with the guidelines. No single principle provides the solution – it is the combination of principles, objectives and guidelines that interact together to provide the framework for the future development of the site.

A INTRODUCTION

The following is a summary of the key principles guiding future development. A more in-depth outline of each principle and the ways in which future development can achieve them follow in *Part B: Site Principles* of this document.

- Create a destination and provide social, economic and employment opportunities.
- The overall site is a mixed use including marina, hospitality, tourism and accommodation (short stay and residential).
- Locate and design the marina to limit impacts on coastal processes, aquatic ecology and extent of footprint within Bardens Bay; to provide modern facilities and environmental management; to provide for staging based on take up rates, environmental monitoring; and to provide for public access and some public berthing.
- Maximise pedestrian public access and amenity around and through the site to the lakes foreshore (apart from the edge of the saltmarsh bay), and along part of the marina landward boardwalk.
- Provide visual links extending from approved roads from within the subdivision behind the site through to the lakes foreshore.
- Maximise setbacks to the lake edge in order to create a relationship to the Council reserve, prioritise public amenity and form an appropriate interface with buildings. Setbacks to the marina interface are reduced to allow efficient access between the marina and marina-related services.
- Maximise open space, pedestrian access and landscape opportunities.
- Enhance existing foreshore vegetation.
- Maximise the opportunity for views to and from the lake from both the private and public domain.
- Provide a mix of uses to generate vibrancy, social interaction, activity and surveillance and ensure building uses are appropriately located to achieve the greatest level of synergy between them.
- Ensure that the majority of buildings outside the tourist hospitality precinct do not protrude past the existing tree line when viewed from east and south on the lake.
- Ensure a destination and focal point is created through the northern positioning of destination uses, as well as the incorporation of a landscaped forecourt and the arrangement of high quality, contemporary buildings that allow vistas to the lake.
- Ensure a built form along Trinity Point Drive that addresses the public road and transitions with the anticipated residential scale opposite.
- Ensure that the proposal can meet SEPP 65 principles where applicable (to be determined as part of future development applications) and provide a high quality residential environment including communal and private open space, solar access and daylight, visual privacy, natural ventilation, energy and water efficiency.
- Retain European historical assets (sundial, grotto) and provide for Indigenous and European site interpretation and environment interpretation as part of creating a sense of place.
- Design stormwater and infrastructure to limit impacts on aquatic ecology and lake water quality.
- Design for flooding (including acknowledging future adaption for climate change implications), acid sulphate soil management and groundwater management in the northern part of the site.



PART B

SITE PRINCIPLES

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BROAD STRUCTURE PRINCIPLES

Figure 1
Greater Context Analysis Plan

0 BROAD STRUCTURE PRINCIPLES

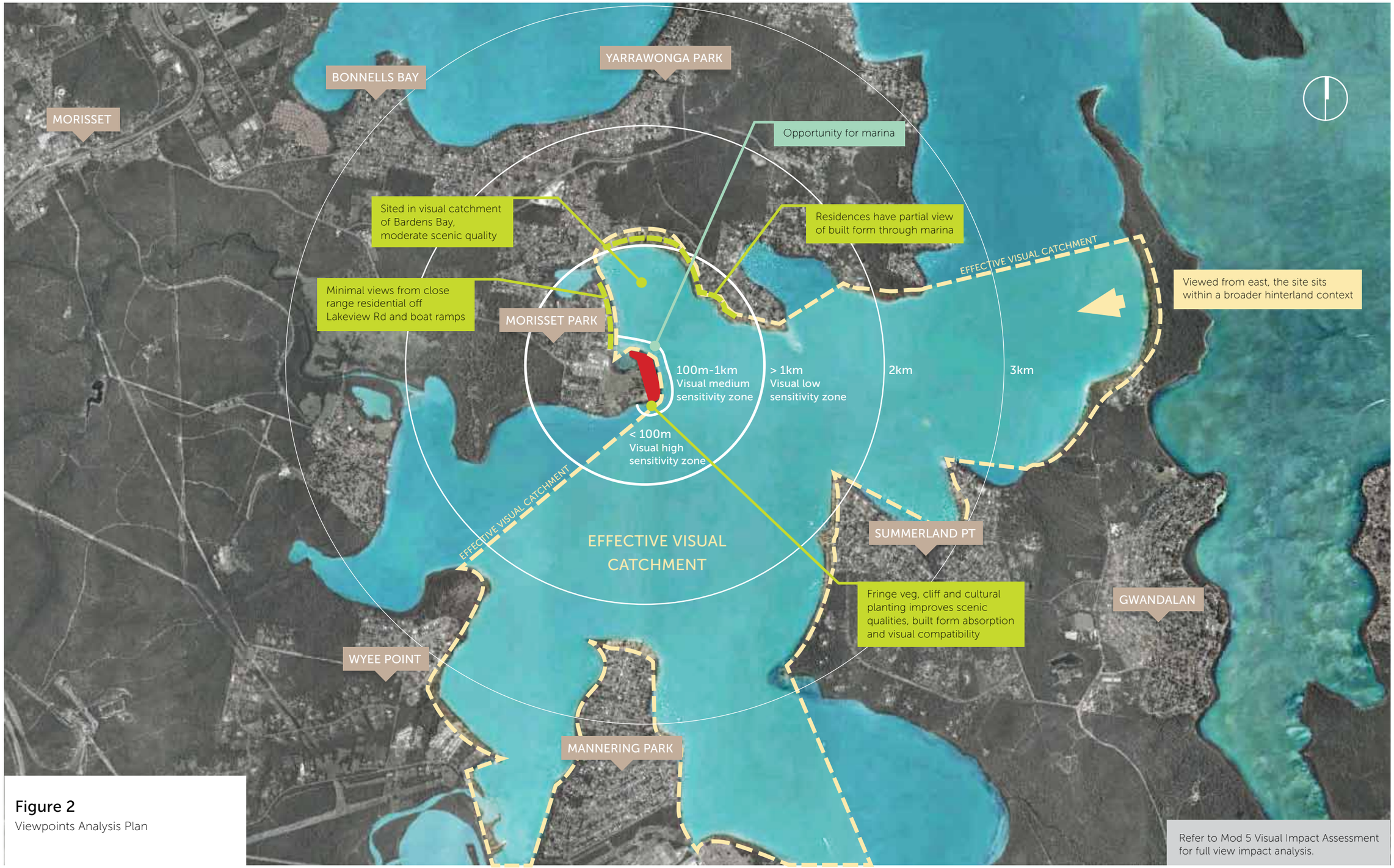

Figure 2
Viewpoints Analysis Plan

0 BROAD STRUCTURE PRINCIPLES

Figure 3
Site Analysis Plan: Environmental Analysis

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PROPOSED - SITE PRIN

BROAD STRUCTURE PRINCIPLES

Existing foreshore vegetation

Key site access points

Pedestrian pathways/connections

Water views

Primary roads

Foreshore reserve

Footnotes

1 Small lot housing provides opportunity for attached, integrated and denser dwellings. The ownership pattern allows JPG to create development that responds to both sides of the street and deliver an integrated outcome and transition from detached single dwellings. JPG is open in their intent through informative residential marketing that manages expectations of future adjoining developments.

Figure 4
Site Analysis Plan: Development Opportunities

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BROAD STRUCTURE PRINCIPLES

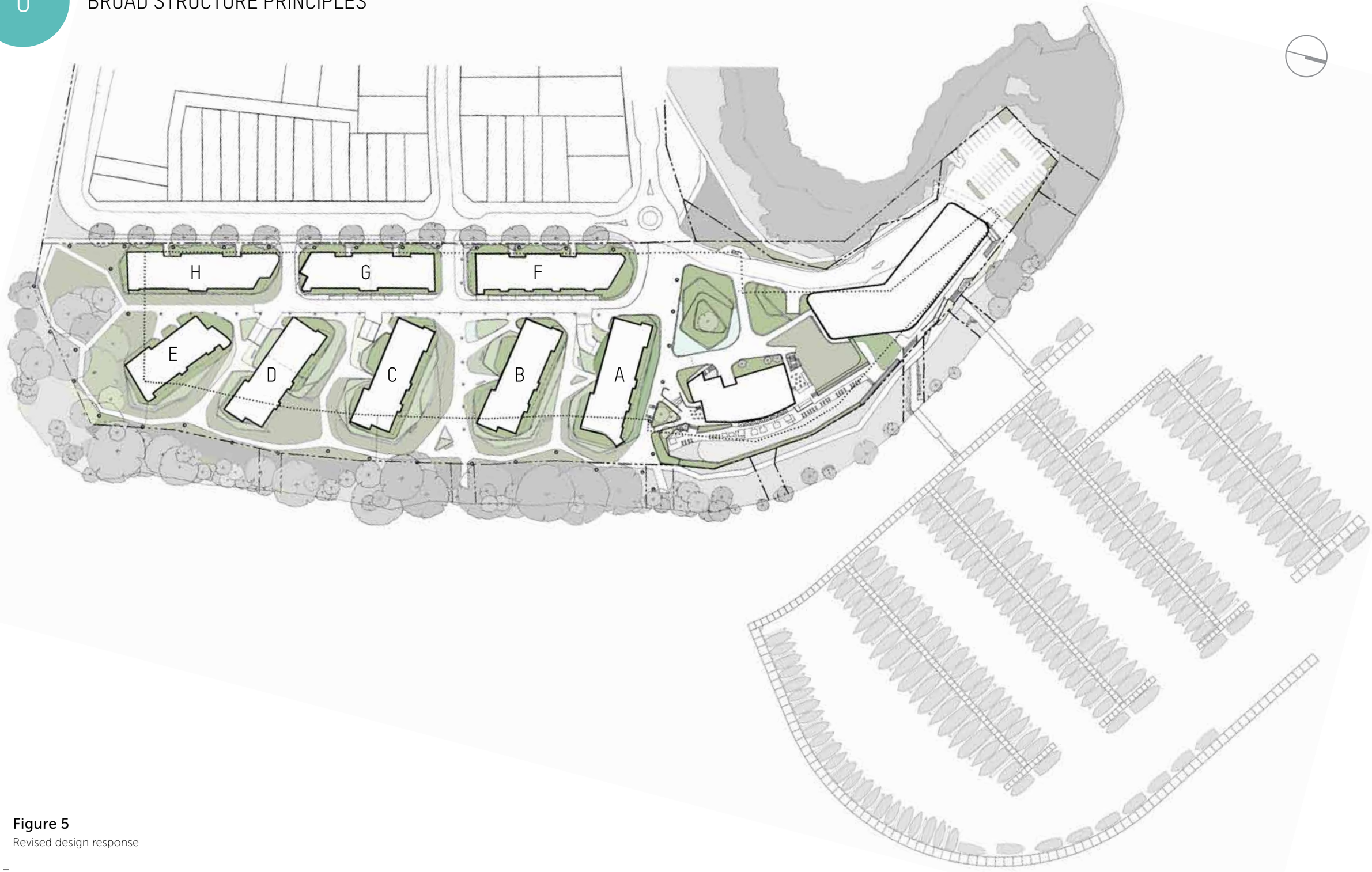


Figure 5
Revised design response

1 LAND USE

Provide for land uses consistent with a Marina and Mixed Use Tourist and Residential Facility.

Objective

Ensure a mix of uses to generate vibrancy, social interaction, activity and surveillance, and importantly to ensure viability into the future. Ensure uses are appropriately located to generate the greatest synergy between them.

Guidelines

Figures 7,8 & 9 illustrate the mix of uses desirable to achieve the objective. The site and proposed usage lends itself to a graduation of uses extending from the marina in the north to the accommodation units in the south. The northern portion of the site is to be a mixed-use tourist and hospitality precinct, while the southern end of the site an accommodation precinct which includes a mix of short stay and permanent accommodation.

Busy and active land uses should be located to the north near the marina where it is most accessible given the topography and presents the best opportunity to minimise foreshore and environmental impact.

The following guidelines pertain specifically to the individual north and south precincts..

Figure 6
Land use across the site.

Tourist Hospitality Precinct

1.1. Locate a staged marina within waters to the north of the site where it has been identified as being most accessible and of least disturbance to the foreshore and the natural environment.

1.2. Locate the marina land-based facilities including a chandlery and related offices on the ground floor in immediate proximity to the marina, along with shops and small sales centre.

1.3. Locate the activity generating uses such as the restaurant, function room and cafe close to the waterfront where the lake can be enjoyed by the public.

1.4. Provide expansive landscaped gardens within which proposed buildings will sit, ensuring vistas are maintained between the buildings.

1.5. Provide a tourist hotel to the north of the site.

1.6. Provide other uses including small meeting rooms, day spa and guest facilities.

1.7. Provide parking facilities primarily beneath a landscaped podium with the new garden and buildings above.

1.8. Provide marina parking facilities on-grade at the northern tip of the site adjacent to the marina itself.

1 LAND USE

Tourist Residential Accommodation Precinct

1.9. Provide and locate 220-250 accommodation apartments, (in addition to hotel rooms) integrated across the site. Combined, provide and locate a maximum of 315 accommodations, consisting of a mix of hotel rooms, serviced apartments and dual use tourist/ residential apartments.

1.10. A maximum of 100% of this accommodation (315 total individual accommodation units) can be available for tourist use while a maximum of 50% of the total accommodation can be nominated and approved for permanent use. Dual-key apartments are considered as one apartment in relation to calculation for this requirement. Refer to Principles 19 regarding staging.

1.11. Nominate accommodation units available for permanent and short stay use and detail strategies to manage potential conflicts between the mix of tourism and residential accommodation uses.

1.12. Predominantly locate short stay accommodation north closer to the tourist hospitality precinct and the short stay/permanent accommodation further south.

1.13. Ensure public access is maintained at key points through the site to the waterfront reserve.

1.14. Ensure public access is maintained to the southern end of the site above Bluff Point.

1.15. Provide a display suite and/or sales centre on site.

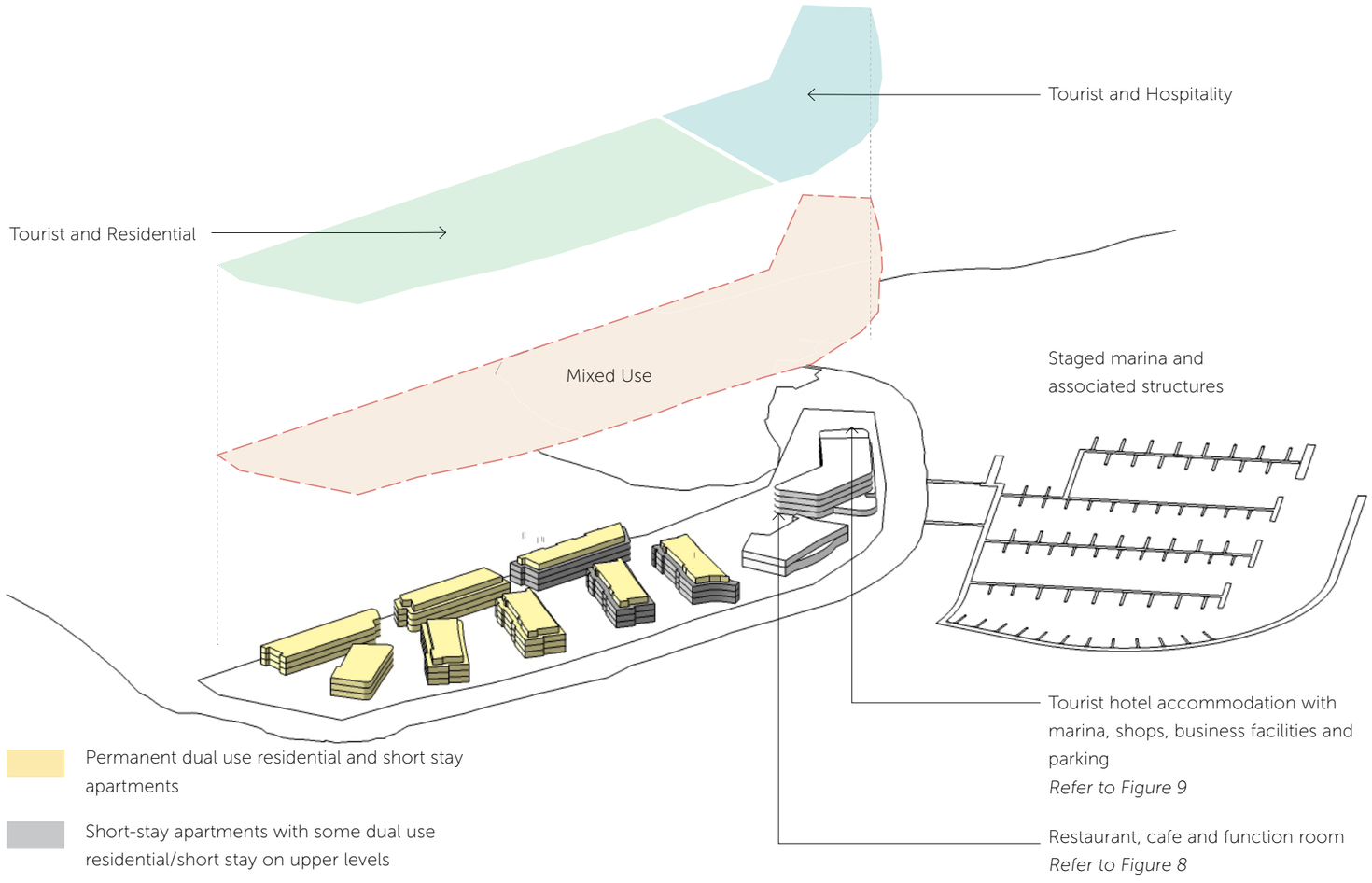


Figure 7
Axonometric Land Use Massing Diagram, demonstrating the various buildings and zones on the site and their uses.

1 LAND USE

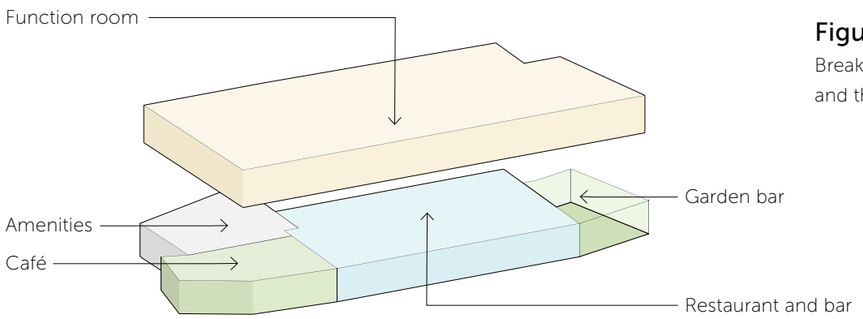


Figure 8
Breakdown of the restaurant and function room spaces and their uses.

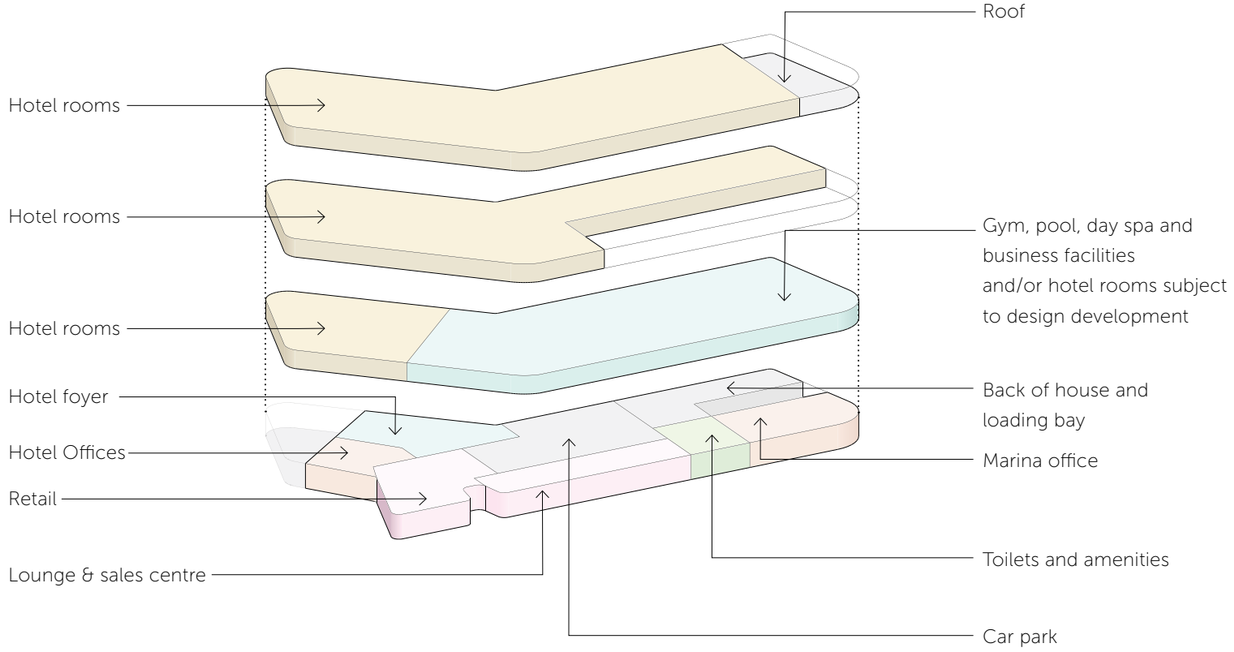


Figure 9
Breakdown of the hotel spaces and marina facilities.

PART B: SITE PRINCIPLE 2

2 BUILDING SETBACKS

To ensure the provision of setbacks that will provide a high level of amenity for all site users.

Objective

Provide setbacks to the lake edge, site boundaries and between buildings to provide for vistas and amenity for future occupants and all visitors and general public to the site.

Guidelines

Figure 10 illustrates the key building setbacks and separations for development. The following guidelines pertain specifically to the individual north and south precinct.

Tourist Hospitality Precinct

2.1. Provide a publicly accessible pedestrian path located within the existing public open space zoned land between the northeastern shoreline and the site boundary. It provides the opportunity for separation of the path from the edge of built form and follows the natural curvature of the shoreline.

2.2. Generally, provide a 15m setback from the site boundary along the eastern edge of the precinct to the external walls of the restaurant and function room. This allows increased space for an active waterfront zone fronting the lake and overlooking the marina. This setback is in addition to the 20m public Council reserve between the boundary and the water's edge. This waterfront zone then connects with the publicly accessible path which runs along the eastern and southern edges of the precinct.

2.3. Maximise setbacks from the south-western site boundary at the entry to the precinct over the landscaped forecourt to preserve multiple view corridors, established between the buildings, over the gardens to the lake. A generous visual relationship here encourages the public into the space and through to the foreshore, and creates a strong visual connection from the public Trinity Point Drive at the northeast nodal point (where the road turns south) to the marina and lake.

2.4. Generally, provide a 7m setback from the northeastern site boundary of the precinct to the external walls of the marina and hotel building. One exception at the hotel building's ground floor retail shop front has a setback of 5m. This ensures that the hotel building conforms to the natural curvature of the site rather than strictly following the boundary line and does not impact on the amenity and access of the public perimeter pathway.

2.5. Provide a minimum 18m western setback from the shoreline to the hotel to ensure adequate development setback from the ecologically sensitive zone.

2.6. Future applications for buildings with a zero setback are to demonstrate a suitable level of detailing and articulation to ensure they add to the streetscape. Blank walls are to be avoided.

Tourist Residential Accommodation Precinct

2.7. Locate and orient buildings along the eastern edge of the precinct in a general east-west arrangement allowing for predominantly north-facing units and the preservation of east-west through-site vistas to and from the water.

2.8. The proposal maintains vistas to the water from the adjoining residential subdivision, enjoying views over landscaped spaces. A primary north-south axis is proposed, however, will not form part of a larger narrow gridded internal road network but instead a singular axis within the landscaped precinct.

2.9. Maximise opportunities to stagger development along the eastern edge of the precinct to promote varied and increased setbacks and building separation (see Figure 18). This helps avoid positioning extensive development along the foreshore which creates the appearance of excessive bulk. In addition, this guideline ensures building interfaces along the foreshore are careful and considered in design in order to preserve the amenity, use and perception of the proposed publicly accessible pedestrian pathway. While setbacks form an important consideration in achieving this, further detailing of the built form and materials will assist in addressing the relationship between built form and the foreshore.

2.10. Maximise vistas through the entire site to the water, both from the internal accessway and from Trinity Point Drive, by ensuring through-site east-west axes are established between buildings and over landscaped areas which are generally in excess 12m with minor noncompliance proposed at the internal road between buildings F & B, G & C, G & D, H & E and G & H. However, building separations greater than this are achieved elsewhere between buildings.

2.11. Provide a minimum building separation of 18m between Buildings F & G and B & C to deliver a continuous view corridor from Celestial Drive through the site to the foreshore reserve.

2.12. Future applications for buildings with a zero setback are to demonstrate a suitable level of detailing and articulation is provided to ensure they add to the streetscape. Blank walls are to be avoided.

PART B: SITE PRINCIPLE 2

2 BUILDING SETBACKS

2.13. Ensure a minimum 35m setback to the southwestern corner and 22.8m setback to the southeastern corner of the site above Bluff Point, to provide for retention of and curtilage around cultural planting and the sundial and to facilitate a continuous publicly accessible path and visual public connection to the point and lake beyond.

2.14. Maintain a highly permeable pedestrian access network throughout the precinct that connects users to the lake edge, open space la=nds, foreshore paths, Bluff Point, to the tourist hospitality precinct and the external public roads network.

2.15. Ensure a minimum setback of 4m from the western site boundary along Trinity Point Drive.

2.16. Treatment of the accommodation building facades fronting Trinity Point Drive should be articulated through form, setback and material selection to minimise apparent mass and generate a softer transition between the built form of the accommodation precinct and the neighbouring residential subdivision.

2.17. Basement parking below the accommodation buildings are to be raised generally between 1.2m and 1.5m above the finished ground level. This allows the basements to be naturally ventilated but also ensures privacy for ground level apartments is maintained from surrounding pathways, namely the public footpath along Trinity Point Drive and internal accessway.

2.18. The proposal maintains all views from the public domain and roadways. By creating one primary internal roadway larger and wider vistas through the site are achieved.

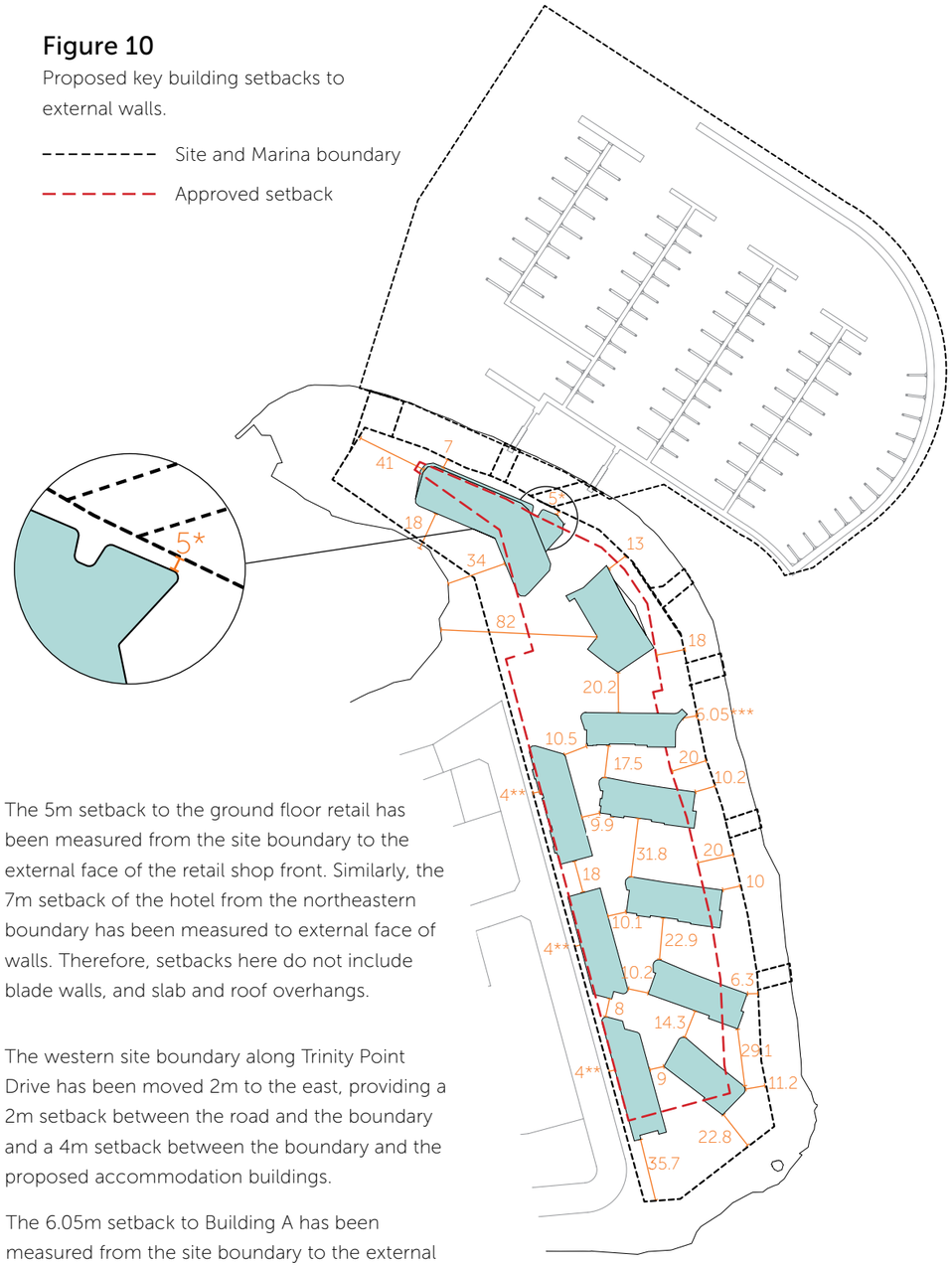
2.19. The narrow eastern ends of the 5 proposed east-west accommodation buildings protrude within the 20m setback from the eastern boundary. However with setback equalisation, the majority of the building mass is set well behind the 20m setback line with extensive landscaped 'fingers' between each of the buildings that extend back into the site. It is likely public accessible path will sit within this setback.

2.20. Setbacks from the boundary on the southern end of the site above Bluff Point continue to satisfy the principles identified for Bluff Point, including public access. The setback along Trinity Point Drive is 4m.

Figure 10
Proposed key building setbacks to external walls.

Site and Marina boundary

Approved setback



* The 5m setback to the ground floor retail has been measured from the site boundary to the external face of the retail shop front. Similarly, the 7m setback of the hotel from the northeastern boundary has been measured to external face of walls. Therefore, setbacks here do not include blade walls, and slab and roof overhangs.

** The western site boundary along Trinity Point Drive has been moved 2m to the east, providing a 2m setback between the road and the boundary and a 4m setback between the boundary and the proposed accommodation buildings.

*** The 6.05m setback to Building A has been measured from the site boundary to the external face of the ground floor wall. Therefore setbacks do not include blade walls, and slab and roof overhangs.

2

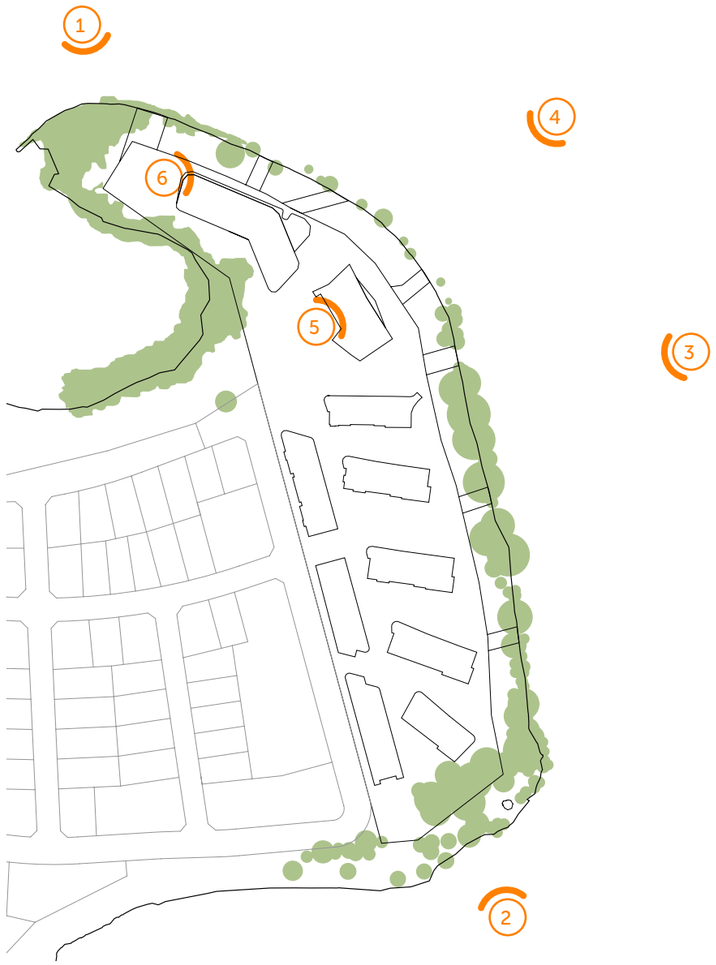
PROPOSED — SITE PRINCIPLE 2

BUILDING SETBACKS

Figure 11
Site photo key diagram.

Existing site photos show the density of the existing perimeter tree line and the relative absence of large, expansive views across the southern end of the site. Some views exist from the northern and northeastern end of the site.

The proposal aims to maximise views where they do exist through the use of increased building separation, varied setbacks, and the strategic orientation of the buildings within the landscape.



PART B: SITE PRINCIPLE 2

2

BUILDING SETBACKS

Figure 12
Building grade change adjacent to Trinity Point Drive.

Throughout the accommodation precinct, where suitable, basement parking below the accommodation buildings will generally be raised by 1.2–1.5m above the finished ground level. This allows the basements to be naturally ventilated but also ensures privacy for ground level apartments is maintained from the public footpath along Trinity Point Drive.

Similarly, for east-facing apartments, where the ground floor above the basement is partially raised above ground, views over the landscape and to the lake are optimised and privacy is maintained from the internal accessways.

In addition to assuring adequate setback, the use of street planting along Trinity Point Drive and at the base of the accommodation buildings will assist in de-emphasising mass along the street, break down the form to a more human scale and soften the transition across the public streetscape. Recessive colours and materials will also aid in reducing the apparent height along Trinity Point Drive.

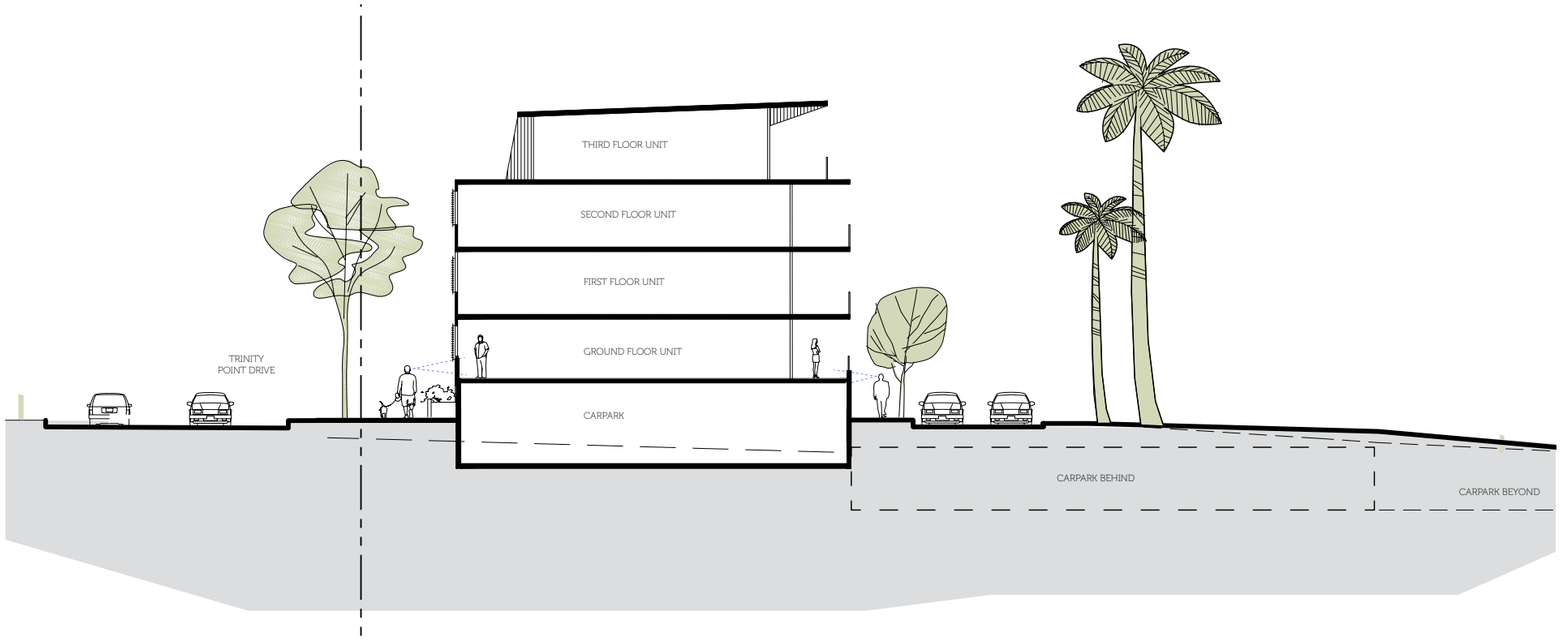


Figure 13
Sketch: Sight lines between buildings within the accommodation precinct.

The proposed design approach emphasises the strengths of the site by prioritising and optimising pedestrian access, views, topography and building orientation.

PART B: SITE PRINCIPLE 2

2

BUILDING SETBACKS

Figure 14

This section illustrates how views from Point A will be primarily of the tree canopy. As one moves to Point B and Point C the views to the lake become more apparent. The proposed building orientation and setback provide better opportunities to view the lake from publicly accessible areas.

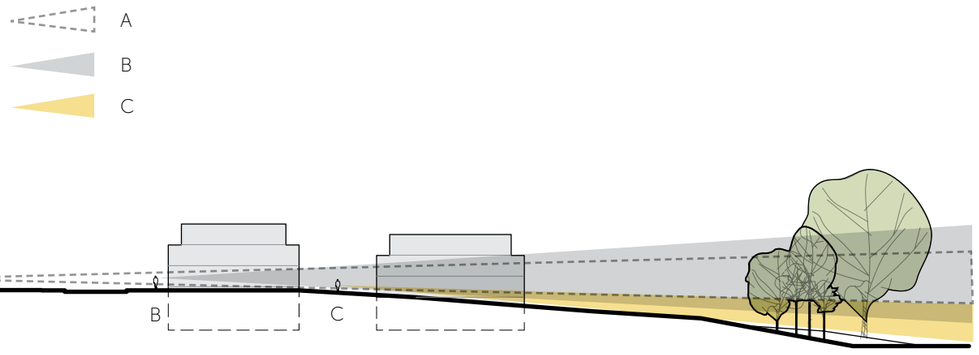


Figure 15

Through-site views and tree line.

PART B: SITE PRINCIPLE 2

2 BUILDING SETBACKS

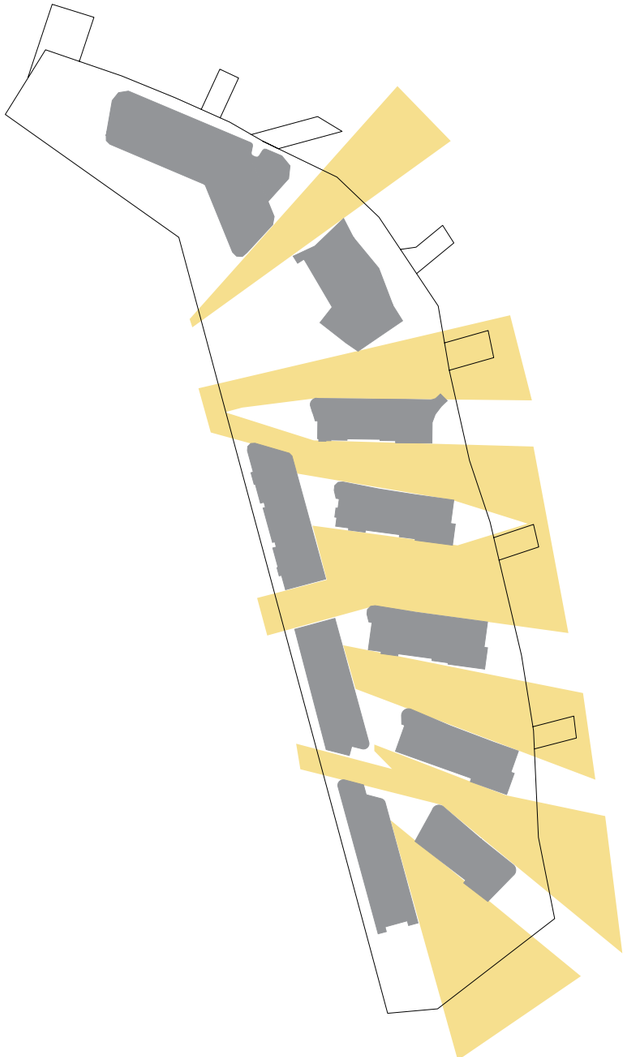
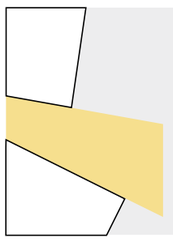


Figure 16
The proposed building layout emphasises the significance of apartment orientation (toward north) and the resultant widening of views supporting a non-urban approach to planning.

Figure 18
View of Bluff Point from the water showing the minimal exposure of the building through the existing tree line.



The proposed scheme is characterised by varied and angled building separation and a widening of views closer to the water.

Figure 17
Zoomed in diagram of typical building separation of the proposed building layout.

PART B: SITE PRINCIPLE 2

2

BUILDING SETBACKS

KEY VISTAS

‘Views from public domain including the lake‘

2.21. Siting and orientation of buildings is determined by key view opportunities through site from Trinity Point Drive and Celestial Drive

2.22. Buildings are orientated to provide increased solar access and enhanced views to all apartments

2.23. View opportunities are increased from the approved concept plan via the radial positioning of buildings

2.24. Central view corridor from Celestial Drive provides a minimum 18m wide unobstructed view which widens at eastern foreshore

2.25. Central view corridor from Celestial Drive physically manifests as a public paved pathway with vertical street lighting delineating the route to the eastern foreshore and shared pathway encircling the foreshore. Informal public nodes provided along the path invite the public within the site to for recreation and to enjoy closer views of the lake

2.26. View corridors are established at multiple points along Trinity Point Drive (achieve minimum of 8m wide unobstructed views which widen at eastern foreshore

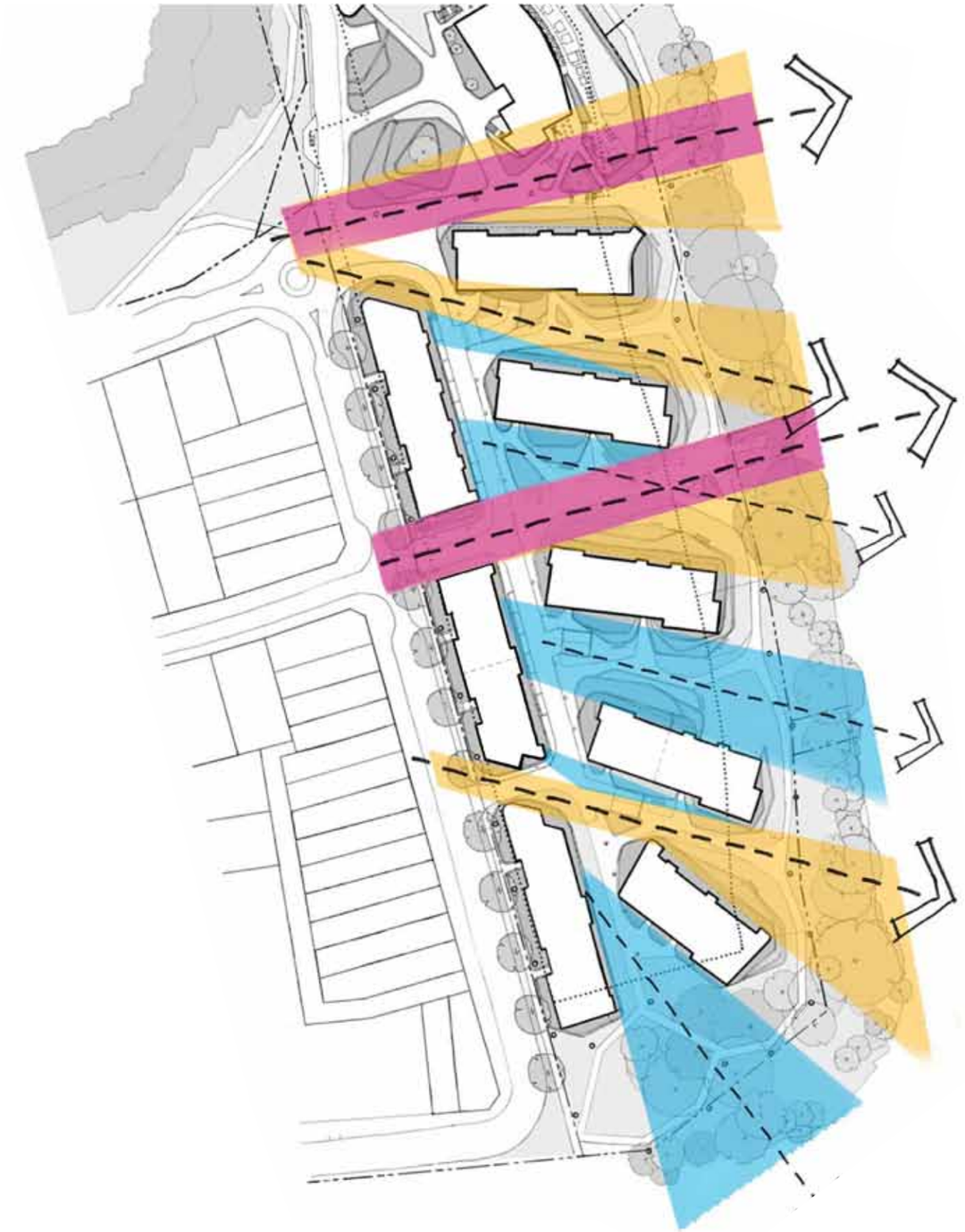


Figure 19

Proposed Site Plan showing Key Vistas

- Vistas achieved from Trinity Point Drive as per approved concept plan
- Vistas achieved from internal road
- Vistas achieved from Trinity Point Drive and internal to site which are additional in width & scope to approved concept plan

PART B: SITE PRINCIPLE 3

3 BUILDING HEIGHTS

To provide for building heights that are appropriate to achieve a high standard of development, promote the development as a destination for tourists that will provide for a viable outcome but also consider existing site opportunities and constraints.

Objective

To adopt taller building forms allowing for larger areas of open space and greater setbacks (such as to the lake and within the site) and thereby ensuring a higher level of amenity, vistas, public access and permeability for future occupants of the development, the general public and visitors to the site. Provide within the northern tourist hospitality precinct the opportunity to use height as a means of achieving high quality design buildings consistent with the overall principle of creating a destination, but one tailored to the existing landscape. Ensure however, that building heights outside the tourist hospitality precinct consider site topography, existing and future tree heights and the views of the site from the surrounding area including the lake. Generally outside the tourist hospitality precinct, heights are to strongly take into account context, height and form opportunities directly opposite the site.

Guidelines

The following guidelines pertain to general building height recommendations across the site. Guidelines relating to each precinct follow in subsequent sections.

3.1. Heights, excluding plant and equipment, fixtures and fittings such as antennas, solar collectors and the like, are not to exceed those shown on pg 29, and as generally described and demonstrated on accompanying elevations and notes. The heights are shown in the number of storeys with notations added regarding relationship to car parking intent.

3.2. Generally, building heights proposed should be designed to minimise building footprint, to create view corridors and to encourage open landscaped gardens between individual buildings. This further develops the original concept of buildings set within a landscape, with the dominance of the existing shoreline vegetation maintained.

3.3. Increased setbacks and building separations will result in taller buildings but allow for significantly larger areas of open space at ground level, promoting permeability of the site.

3.4. Within the northern tourist hospitality precinct, buildings and their heights are to reflect a design philosophy that promotes the precinct as a major destination while remaining sympathetic to the existing landscape and vegetation.

3.5. Buildings in the tourist and residential accommodation precinct are to take into account the existing topography and height of vegetation.

3.6. All proposed buildings are to generally sit below the height of the existing shoreline vegetation.

3.7. 3D modelling and visual impact studies should be prepared to ensure the forms and heights are suitable in the surrounding context.

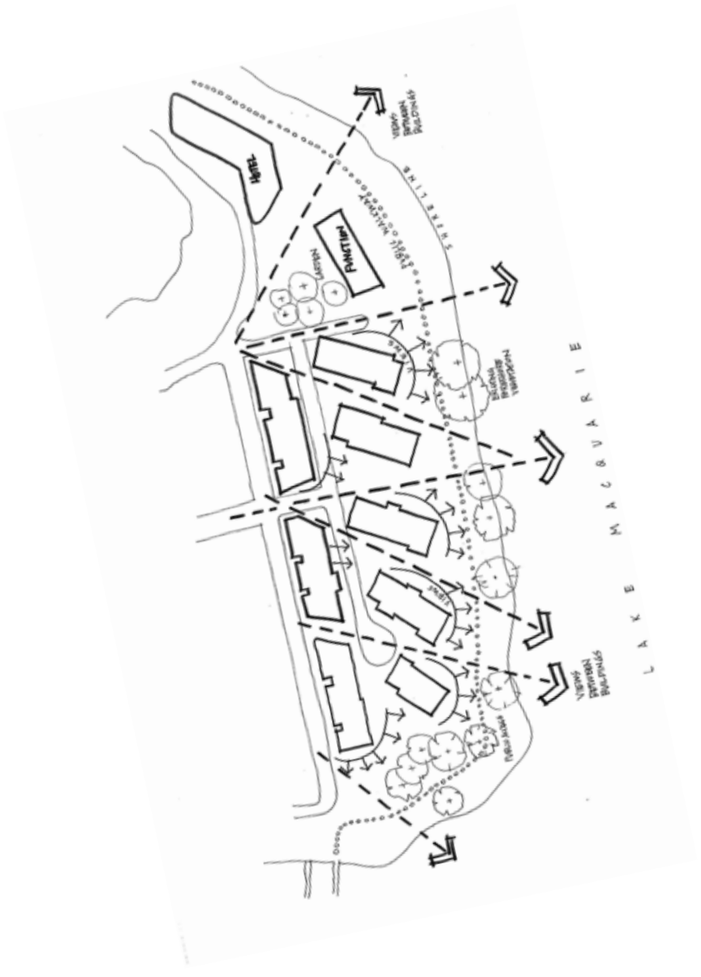


Figure 20
Overall site sight line concept sketch.

3 BUILDING HEIGHTS

Tourist Hospitality Precinct

Proposed building heights to the tourist hospitality precinct are outlined in Figure 21.

3.8. The waterside function room/restaurant building on the eastern edge of the precinct is proposed as a two storey building over podium parking, with the function room and restaurant amalgamated into one building.

3.9. The hotel and marina facilities building is proposed at a maximum of 4 storeys with the exception of the northern tip of the building at the point of a non-trafficable roof deck (3 storeys) and the roof garden sitting atop the ground floor retail (1 storey).

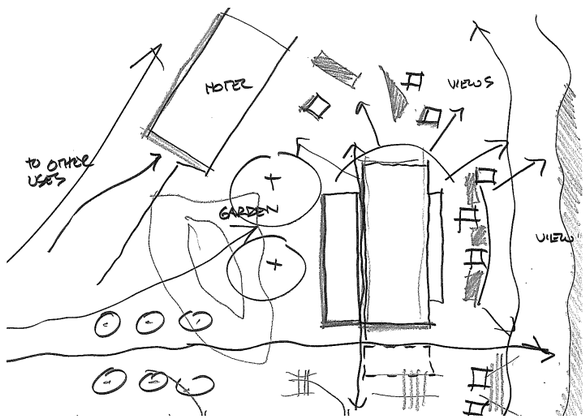
3.10. The proposed restaurant/function building rests on the landscaped podium housing the podium car park. The podium, partially raised above the finished ground level, is to integrate its hard edges and form into the landscape to create interesting level changes, tiered gardens, spatial transitions and help define the different uses within the precinct.

3.11. All proposed buildings are to generally sit below the canopy line of the existing native trees located in the public open space surrounding the extremities of the site. Existing foreshore vegetation to the northeast of the precinct, however, is generally thinner and more dispersed, resulting in slightly more exposure of proposed buildings to the lake.

3.12. The heights and positioning of these two key buildings within the landscape are to ensure a balance between amenity for tourists—by locating the active zone closest to the foreshore—and not impeding views of the lake through the minimisation of building footprint which allows a large, open landscaped forecourt to the southwest of the precinct to be the focus of the site. Additionally, by ensuring the landscaped forecourt remains at a relatively lower level compared to the buildings, views are constantly framed between the buildings without being interrupted by dispersed and ill-positioned bulk or excessively dense planting.

Figure 21
Proposed building heights through tourist hospitality precinct.

Figure 22
Commercial precinct sight line concept sketch.



PART B: SITE PRINCIPLE 3

3

BUILDING HEIGHTS

Tourist Residential Accommodation Precinct

Proposed building heights to the tourist and residential accommodation precinct are outlined in Figure 23.

3.13. The proposed heights throughout the precinct are at a maximum of 4 storeys over basement parking. Similarly, where the topography of the site is higher adjacent to Bluff Point, to the southern lake edge, a maximum of 3 storeys over basement parking is proposed on a substantial setback.

3.14. Upper levels to four storey accommodation buildings are to be set back further and articulated through recessive finishes and colours in order to minimise bulk.

3.15. Establishing these heights ensure building footprint is minimised, view corridors between the buildings are maximised and the formation and planning of open, landscaped gardens between buildings are encouraged. Visually these gardens connect the middle of the site through to the existing shoreline vegetation.

3.16. The overall heights have been determined in consideration of the height of the trees along the lake edge and have been set so that the heights of buildings are generally below this when viewed from the east and south.

3.17. The proposed building heights have been established following site and design analysis. The site analysis established that, provided buildings were predominately at or below the heights of trees on the lake edge, the impact would not be significantly adverse. This can be attributed to the limited viewing catchment of the site. The building heights have also been established following analysis of the topography which suggests that buildings should be lower on the higher parts of the site.

3.18. The buildings are to be raised generally 1.2m above the finished ground line to encourage privacy and naturally ventilated car parks. The height of buildings outlined in this document refer to the number of storeys above the parking podium/ basement unless noted otherwise.

3.19. Treatment of the accommodation building facades fronting Trinity Point Drive should be articulated through form, setback and material selection to minimise apparent mass and height and generate a softer transition between the built form of the accommodation precinct and the neighbouring residential subdivision.

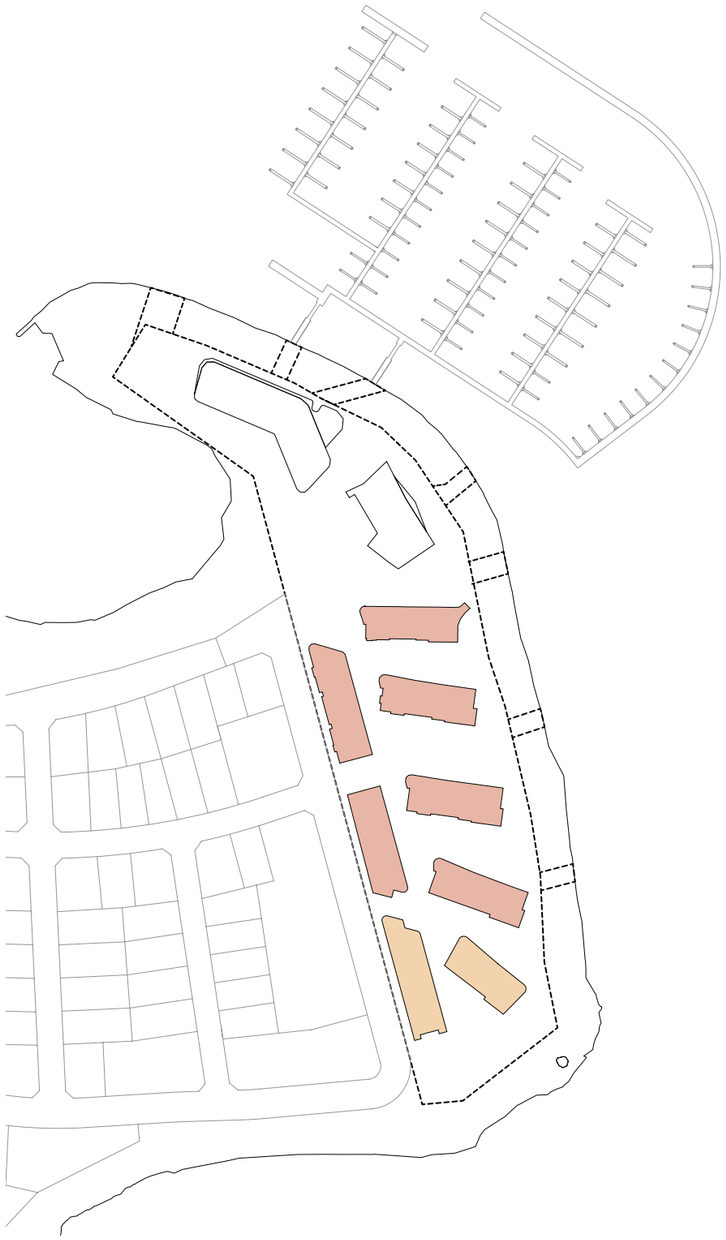
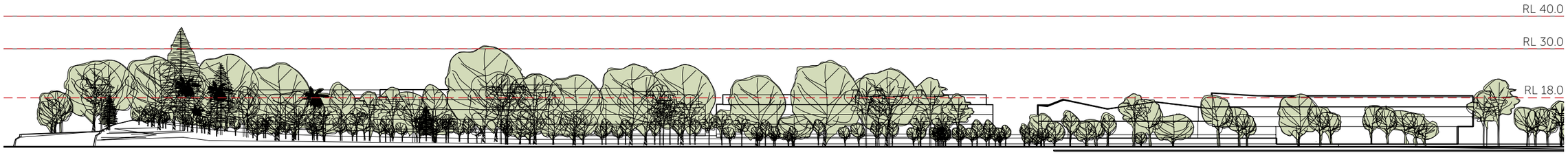


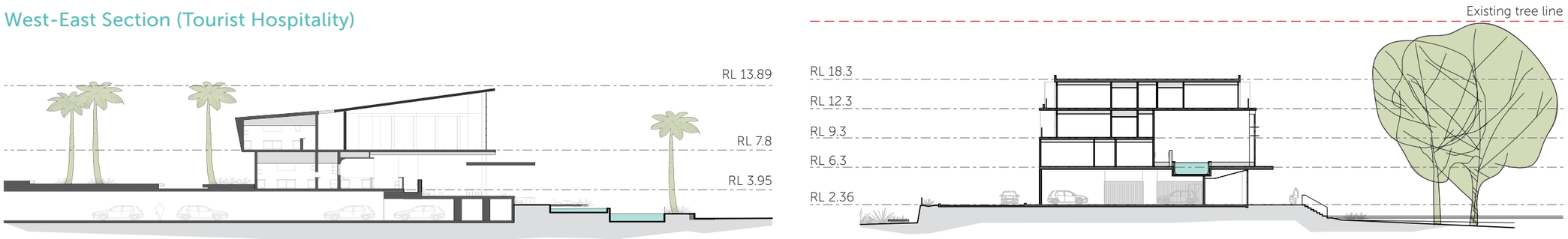
Figure 23
Proposed building heights through accommodation precinct.

3 BUILDING HEIGHTS

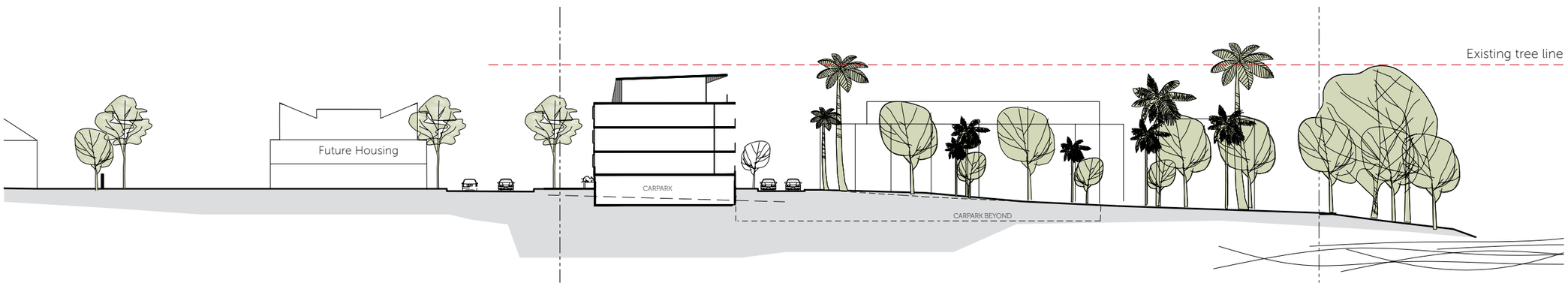
East Elevation



West-East Section (Tourist Hospitality)



West-East Section (Tourist Residential Accommodation)



PART B: SITE PRINCIPLE 3

3

BUILDING HEIGHTS

VISUAL IMPACT ANALYSIS

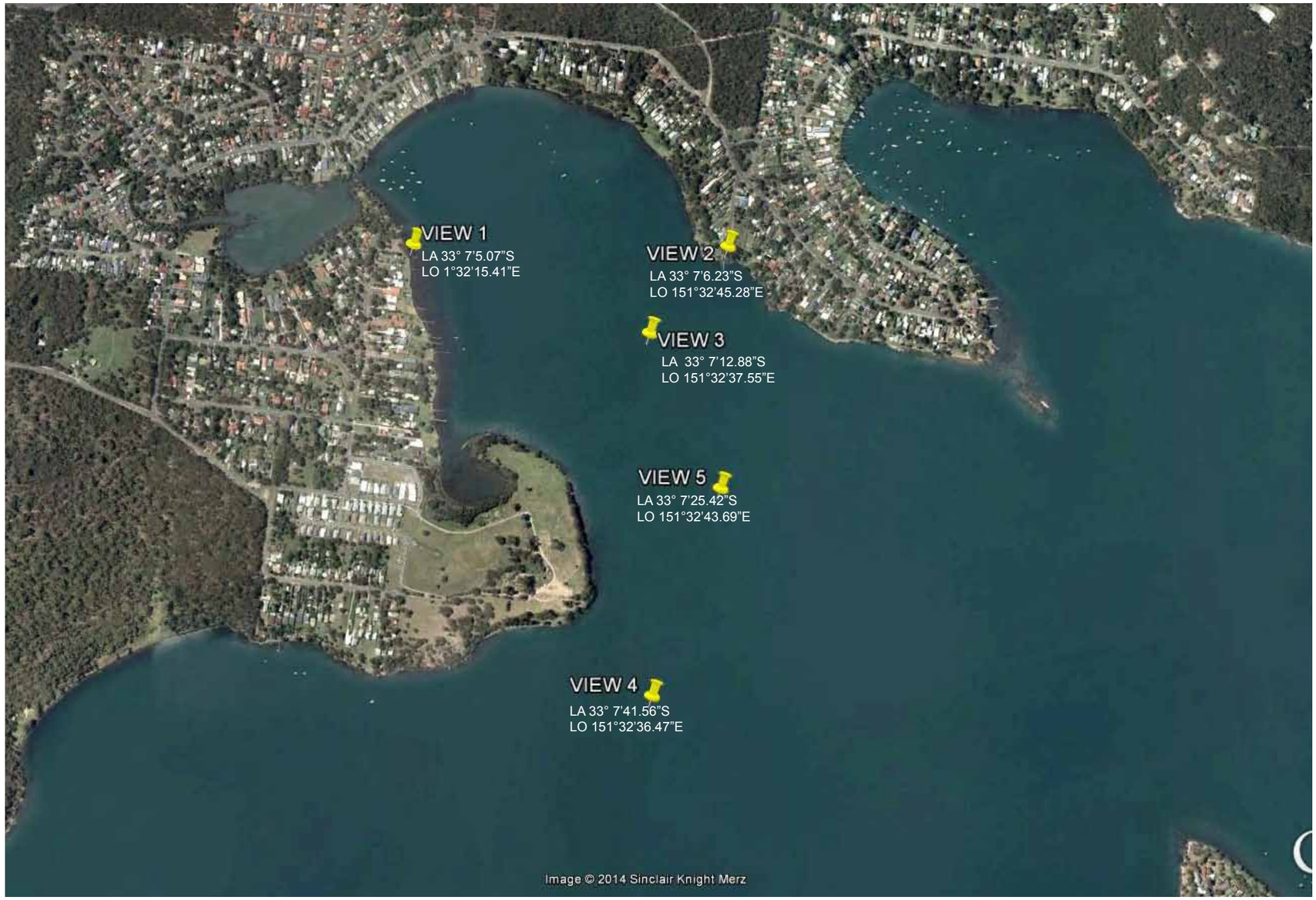


Figure 24
Visual Impact Assessment Key Plan

'Foreshore canopy and the relationship of the proposed buildings to the horizon line'

3.20. Thick foreshore canopy within the public foreshore zone is the prevailing visual element of the site when viewed from the lake and remains as such in the proposal

3.21. The north-eastern tip of the site presents a more visually exposed condition. The marina and tourist-based facilities have been located at this thinning of the foreshore vegetation to establish visual identity for the development. The dominant visual element is the marina berths and their associated boats

3.22. The building scale and positioning is determined to ensure that the tree canopy forms the dominant horizon line in the majority of views

3.23. Articulated apartment elevations along Trinity Point Drive help reduce bulk, address the street and respond to the adjacent massing of the small lot terrace housing

3.24. Top storey of apartment buildings is recessed to reduce impact of built form and minimise the visual appearance of the building height

3.25. Detailed visual impact analysis of the built form impact has been provide by Richard Lamb via a Visual Impact Assessment which indicates that *"The proposal would cause a low level of view loss and be significantly better in that regard than the Concept Approval as sought to be modified. View availability from the site would be superior."*

3

BUILDING HEIGHTS

VISUAL IMPACT ANALYSIS

VIEW 1

Figure 25
Existing site photo

EXISTING - SITE PRINCIPLE 3

3

BUILDING HEIGHTS

VISUAL IMPACT ANALYSIS

VIEW 1

Figure 26

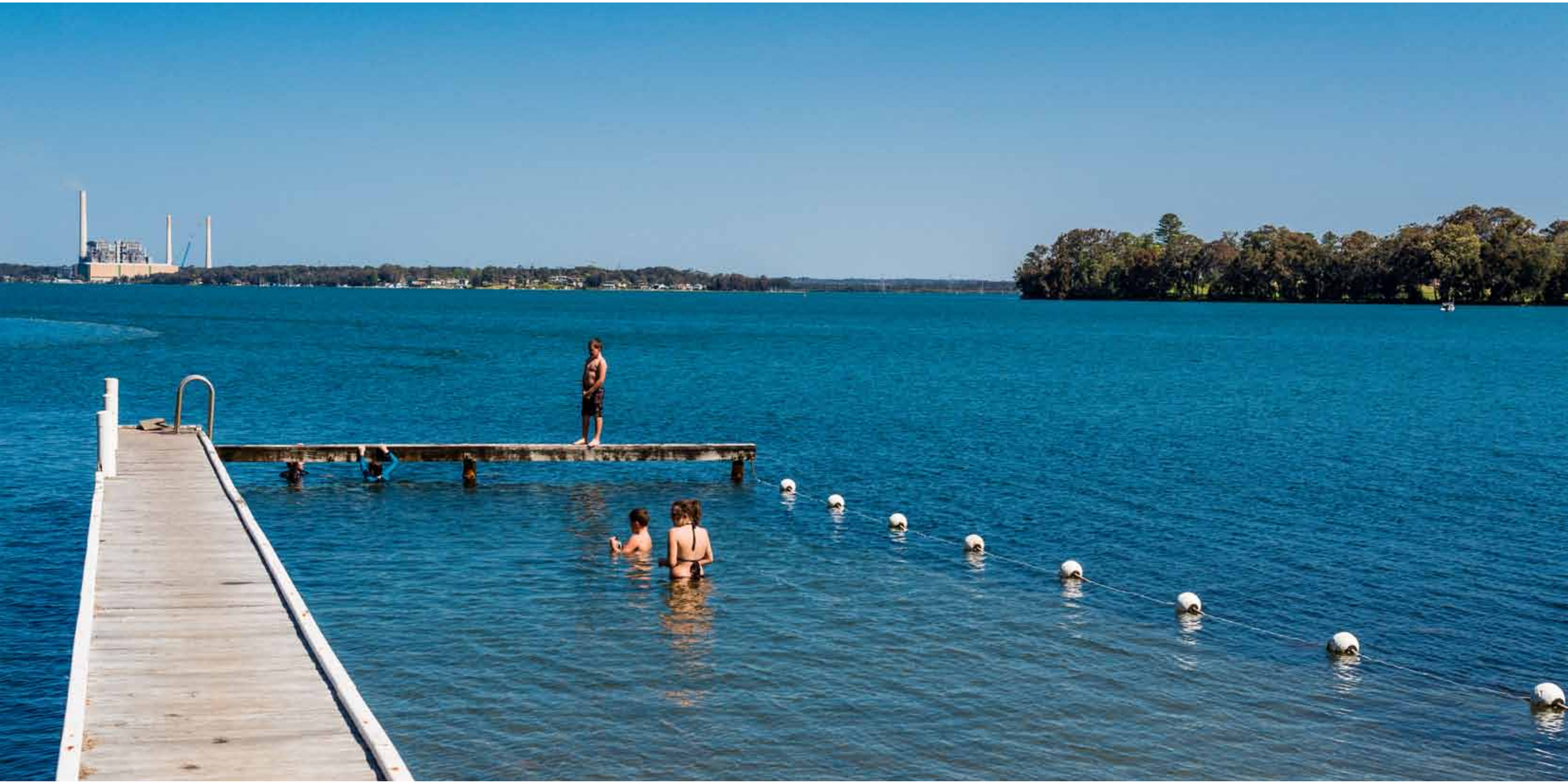
North elevation photomontage showing the proposed building height of the hotel from the north. The building shows minimal exposure from the north through the existing tall and dense tree line.

APPROVED - SITE PRINCIPLE 3

3

BUILDING HEIGHTS

VISUAL IMPACT ANALYSIS



VIEW 2

Figure 27
Existing site photo - (Brightwaters Sea Baths)

3

BUILDING HEIGHTS

VISUAL IMPACT ANALYSIS

VIEW 2

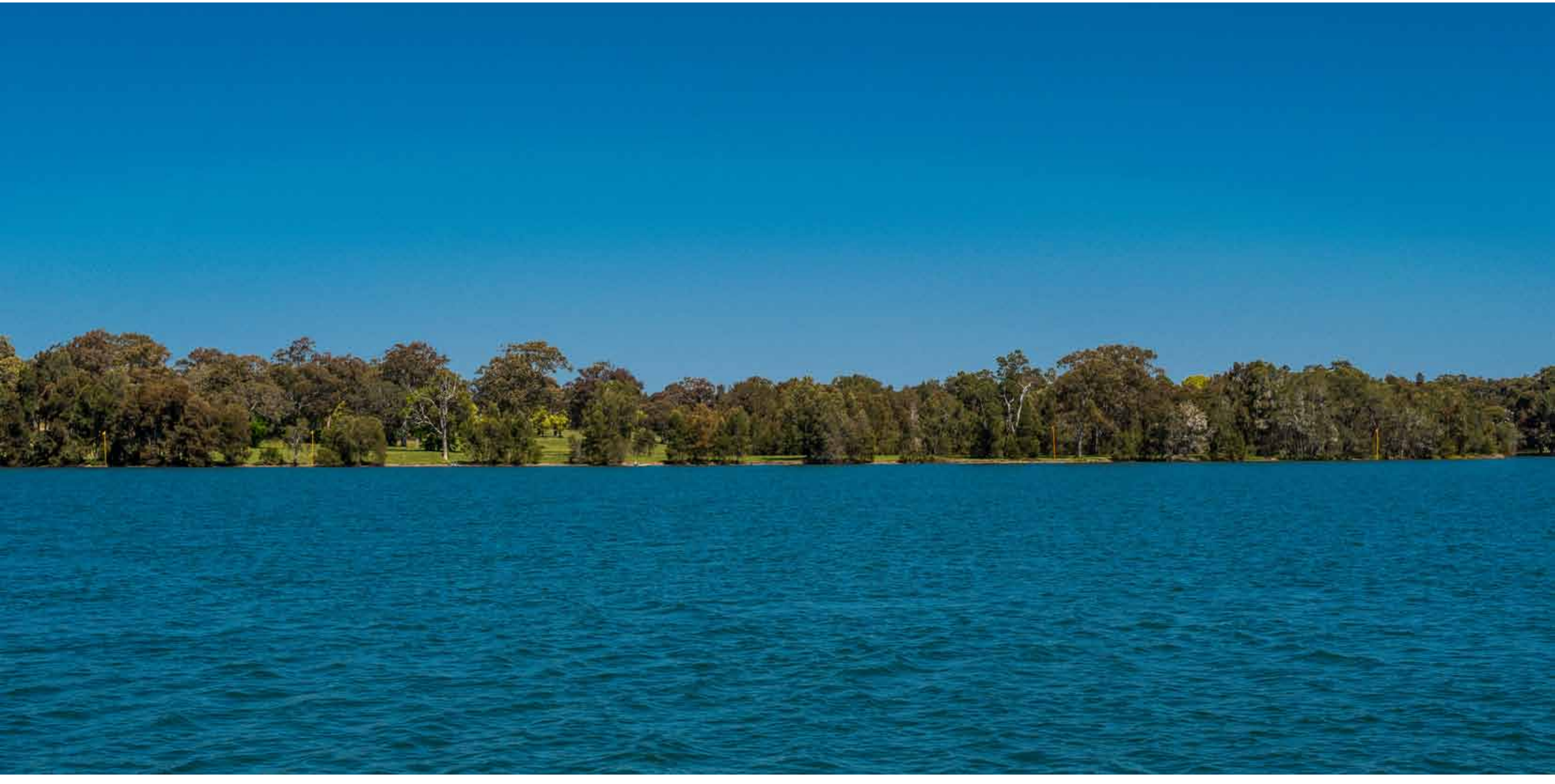
Figure 28

Northeast elevation photomontage showing the proposed building height of the accommodation building largely hidden behind the tree line along the foreshore

3

BUILDING HEIGHTS

VISUAL IMPACT ANALYSIS



VIEW 3

Figure 29
Existing Site photo

3

BUILDING HEIGHTS

VISUAL IMPACT ANALYSIS

VIEW 3

Figure 30
Northeast elevation photomontage showing proposed building heights across the tourist hospitality precinct and into the accommodation precinct to the south.

3

BUILDING HEIGHTS

VISUAL IMPACT ANALYSIS

VIEW 4

Figure 31
Existing site photo

BUILDING HEIGHTS

VISUAL IMPACT ANALYSIS

VIEW 4

Figure 32
South elevation photomontage showing the proposed building height of the south-most accommodation building largely hidden behind the tree line along the southern foreshore and Bluff Point.

3

BUILDING HEIGHTS

VISUAL IMPACT ANALYSIS

VIEW 5

Figure 33
Existing site photo

3

PROPOSED - SITE PRINCIPLE 3

BUILDING HEIGHTS

VISUAL IMPACT ANALYSIS

VIEW 5

Figure 34
East elevation photomontage showing proposed building heights across the tourist hospitality precinct and into the accommodation precinct.

EXISTING - SITE PRINCIPLE 3

3

BUILDING HEIGHTS

Figure 35
Aerial shot

PART B: SITE PRINCIPLE 4

4 PUBLIC ACCESS & OPEN SPACE

Provide and improve public access through and around the site and in particular to the lake foreshore.

Objective

Maximise access opportunities through the site and ensure a high level of amenity for pedestrians through design quality and site interpretation of themes associated with heritage, culture, environment and the lake. The site should be linked to the surrounding access network through appropriate integration. Ensure that development of the site does not preclude public authority desires for works within existing and proposed future public lands.

Guidelines

Figure 36 demonstrates the key public access principles for this development. *Figure 37* identifies those areas of the site which are to include public access. The principle objective is to promote public access through and around the site to the waterfront.

4.1. Buildings to be setback from the public foreshore recreation space generally in accordance with *Figure 10*.

4.2. Bus stop area to be provided on Trinity Point Drive at location defined in the previous residential subdivision approvals (i.e. near main site entrance).

4.3. Public access through the site is welcomed and encouraged.

4.4. The legal means of securing the proposed public access through the site is to be detailed in future Development Applications for the development.

4.5. The design and construction of the roads and pedestrian path will allow for Public Authorities to access the 6(1) zoned land for maintenance and the like.

Tourist Hospitality Precinct

4.6. A central, open, public landscaped forecourt is to be provided, visually and physically connecting to the lake and surrounding public foreshore open space.

4.7. Access to the lakefront and between the various buildings across this space, with the focus of public access at the waterfront on the east of the site. An active waterfront precinct is proposed across the entire eastern edge of the site, linking the marina, hotel entry and retail, restaurant and café, and the function room located above.

4.8. Public access along the northern end of the site is managed and is set back from the ecological zone on the northern tip with the pathway running through the marina car park. The public path continues along the western edge of the site linking back to Trinity Point Drive.

4.9. Pedestrian pathway to be provided around eastern foreshore.

4.10. A landscaped pedestrian-only pathway along the southern edge of the precinct creates an axial continuation of Trinity Point Drive, linking the public roadway to the lakefront active zone. This also creates a clear break between the tourism hospitality and accommodation precincts.

4.11. Public access to be provided along the marina landward boardwalk as per *Figure 36*.

Figure 36
Public pedestrian access.

4 PUBLIC ACCESS & OPEN SPACE

Tourist Residential Accommodation Precinct

4.12. A primary east-west pedestrian-only access path between the 3 northernmost accommodation buildings (generally to be nominated as short-stay accommodation) and the remaining 5 buildings to the south of the precinct. This primary access path extends from Trinity Point Drive through the site over landscaped gardens and connects with the public pedestrian pathway along the eastern foreshore.

4.13. Public access paths are also introduced in between building A & B along with informal meeting zones in an effort to increase permeability through this portion of the site for both the general public and visitors staying in the surrounding apartments.

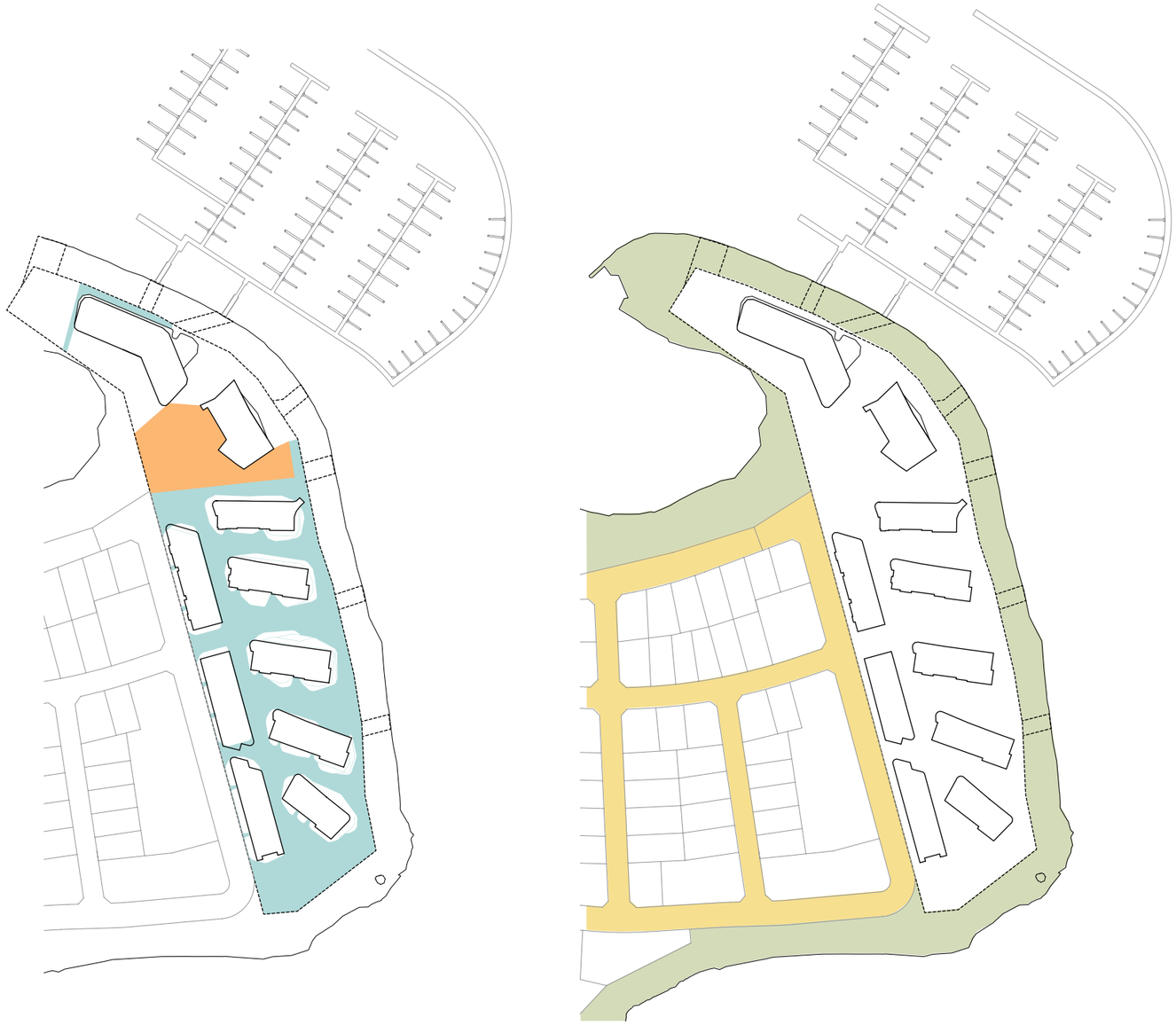
4.14. A primary north-south axis between the western-lined accommodation buildings along Trinity Point Drive and the staggered accommodation buildings to the east. This axis facilitates vehicular access from Trinity Point Drive to the accommodation basement car park entry points but also forms a public pedestrian connection between the tourist hospitality precinct and the Council reserve space to the south of the precinct surrounding Bluff Point. These internal accessways branching off Trinity Point Drive act as continuations of the public road linking the low density single housing to the lakefront.

4.15. Public access is proposed around the perimeter of the 4 southernmost accommodation buildings and will be proposed as long-stay residential apartments with short-stay accommodation located to the north of the residential zone. The main east-west pedestrian pathway forms a natural break between the two distinct accommodation uses.

4.16. Buildings being setback from south eastern corner of the site above Bluff Point are to create a publicly accessible open space area that takes advantage of the views from this location of the lake and allows for retention and respect of the existing cultural setting associated with all cultural planting and sundial. The setback area should be generally consistent with that shown in Figure 10 and not include any removal of cultural trees unless deemed a hazard by a qualified Arborist.

4.17. A publicly accessible pathway to be provided around the southern and eastern edge of the development within the site boundary connecting Trinity Point Drive (south) to the proposed tourist hospitality precinct (north). This pathway also continues with the public footpath along Trinity Point Drive.

4.18. A 1.2m wide footpath to be provided along one side of Trinity Point Drive along the western edge of the site.



Area of site for full public access

Tourist hospitality area and connections. Full public access.

Approved adjoining future streetscape

Public open space zoned land

PROPOSED - SITE PRINCIPLE 4

4 PUBLIC ACCESS & OPEN SPACE

PRIMARY PUBLIC SPACE

Reduced building footprints and increased open space'

4.19. Small encroachments into 20m setback zone are more than offset via the provision of substantial additional public spaces between the radially orientated apartment buildings, generating open public spaces between the buildings and in turn encouraging access through the site

4.20. Apartment building typology provides localised density within each building, opening up greater portions of the site to landscaping opportunities and public access

4.21. Dwellings are congregated into 3-4 storey apartments in lieu of single dwelling subdivision to allow for a significant decrease in footprints from approved concept plan.

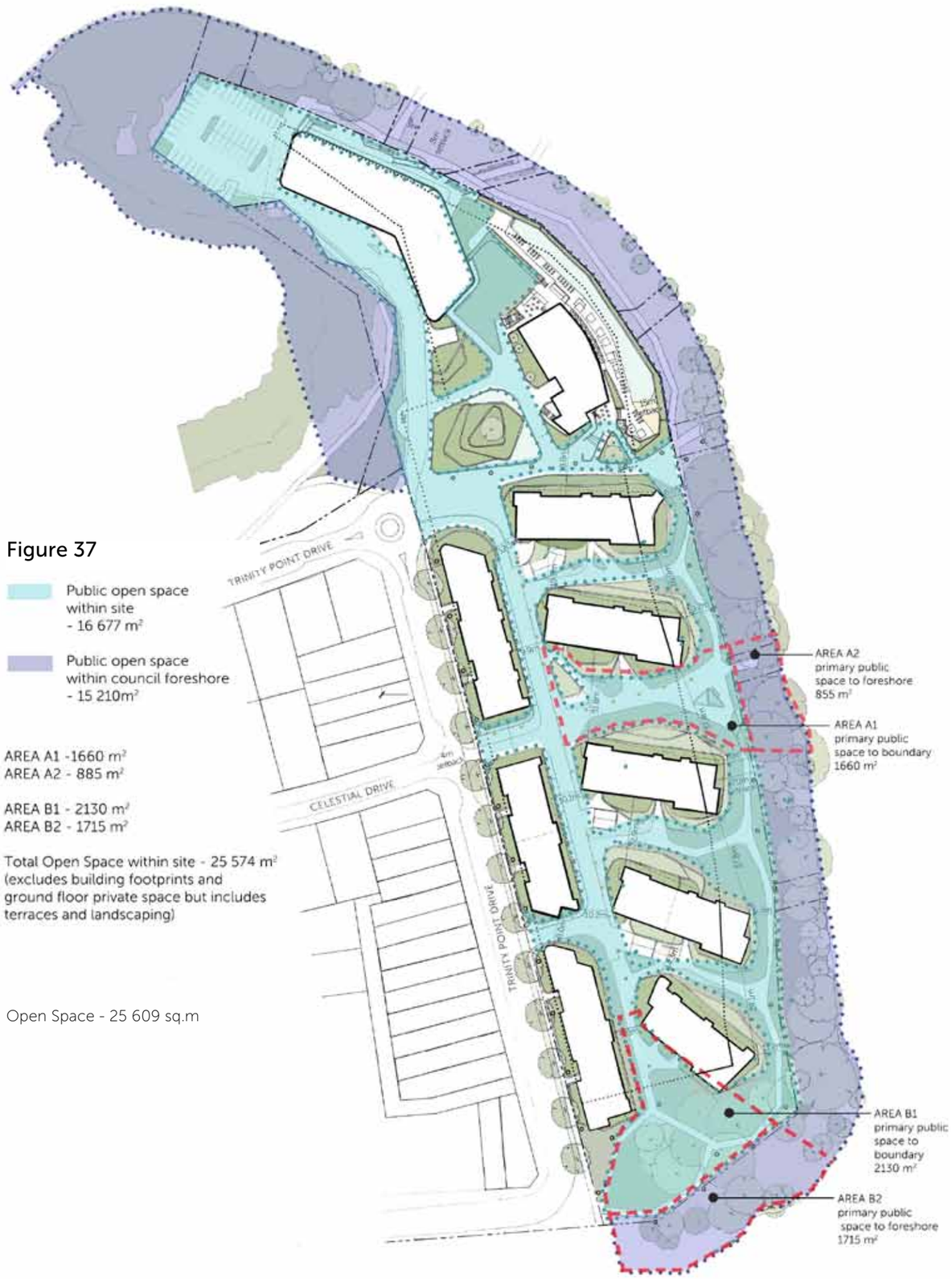


Figure 37

PROPOSED - SITE PRINCIPLE 4

4 PUBLIC ACCESS & OPEN SPACE

PUBLIC/PRIVATE INTERFACE

‘Interface between public and private’

4.22. Hierarchy between public to private is achieved through incremental level changes and landscaping transitional from the private external spaces associated with the buildings to the surrounding topography and public paths

4.23. Visual privacy to buildings is established via an immediate level change of 0.5 - 1.5m from private ground floor gardens to the adjacent landscaped terraces

4.24. Terraces act as informal fences to restrict access between private and semi-private spaces. Landscaping softens the edges of the terraces and replaces the need for a visually obtrusive barrier

4.25. Public areas are generally level with the shared public walkways encircling the eastern foreshore

‘Ground plane interface’

4.26. The site naturally slopes south to north and west to east towards the north-eastern tip which is addressed via terraced landscaping

4.27. Additional landscaped terraces are provided at the eastern end of apartments to aid in transitional to the natural ground line and to accommodate basement parking below

4.28. Accessible paths are provided through the site between buildings. Basement car parking layouts accommodate the required accessible level connections to the eastern shared pathway and allow for deep soil planting

Figure 38

- Public pathways, driveways & roads (Available for public pedestrian permeability)
- Publicly accessible landscape areas
- Public landscaping
- Semi public landscaped terraces
- Private landscaped gardens

PROPOSED - SITE PRINCIPLE 4

4 PUBLIC ACCESS & OPEN SPACE

'Relationship of built form to neighbouring residential subdivision'

4.29. Trinity Point Drive and the small lot terrace housing assist in the transition from the single detached housing to the tourist precinct

4.30. Tall vertical tree planting along either side of the road establishes a coherent character either side of the street

4.31. Tree planting aids screening and privacy for residential dwellings either side of the road

4.32. Apartment setback from the road shoulder of approximately 7-10m (4m setback + 3.3m verge + 2.5m where verge widens) allows for greater distance between the small lot terrace housing and tourist zones and allows for a generously proportioned streetscape with a minimum 25m gap between built form (4m setback + 3.3m verge + 11.4m road + 3.3 verge + 4m setback)

4.33. Small lot terrace housing acts as buffer zone between the western single lot housing and the apartments/tourist precinct

4.34. Top storey of apartment buildings is recessed and composed of a dark colour palette of materials to respond to the lower adjacent 2-3 storey building height to create visual cohesion between the building heights

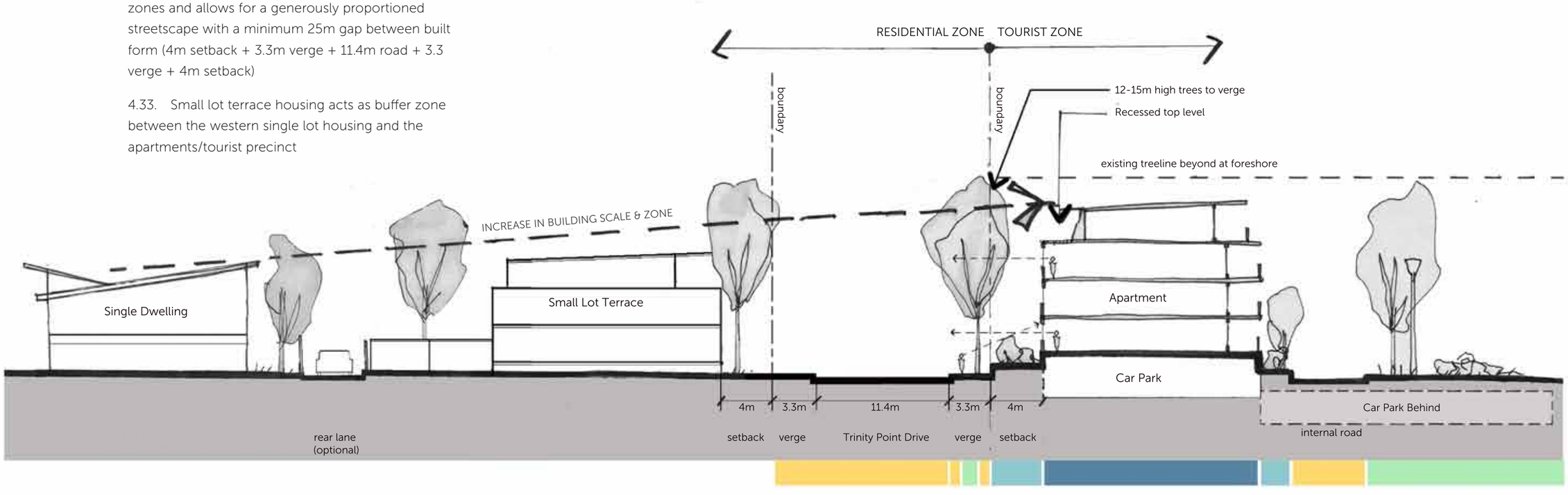
4.35. Articulated apartment elevations along Trinity Point Drive help reduce bulk, address the street and respond to the adjacent massing of the small lot terrace housing

4.36. The apartments engage directly with Trinity Point Drive via living areas and bedrooms which face and overlook the public street

Tree line precedent to Trinity Point Drive

Figure 39

Figure X
Site Plan showing Public - Private interface



Public pathways, driveways & roads
(available for public pedestrian permeability)

Publicly accessible landscaped areas

Public landscaping

Semi-public landscaped terraces

Private landscaped garden

4 PUBLIC ACCESS & OPEN SPACE

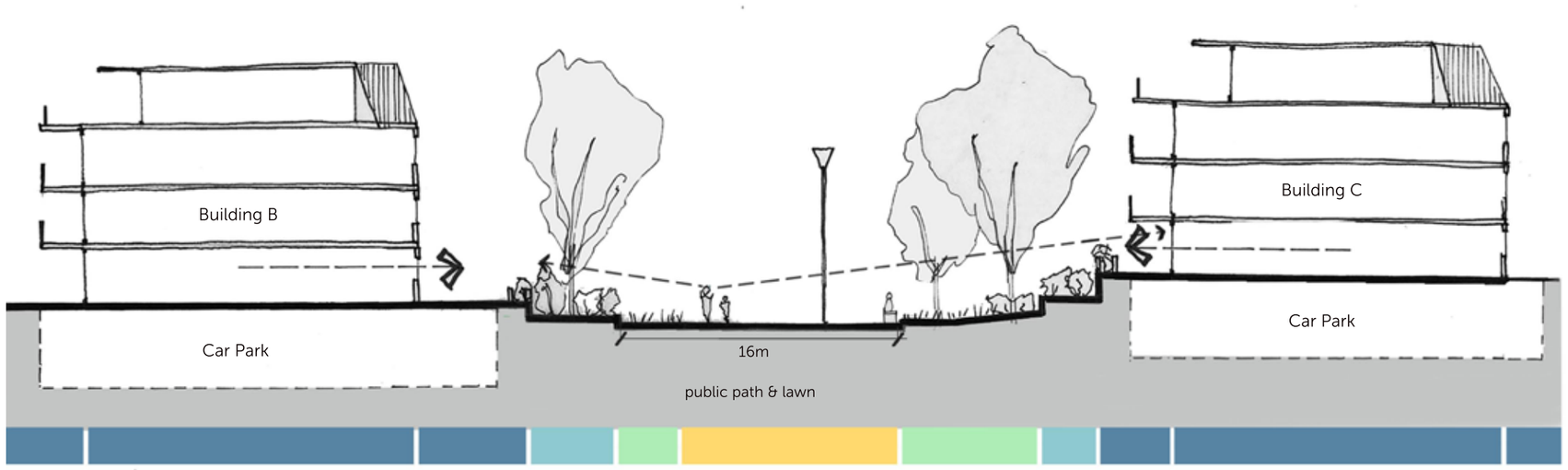


Figure 40 - Section A
Typical Section showing Public - Private interface

Figure 41 - Section B
Typical Section showing Public - Private interface

'Visual permeability'

4.37. Vistas through the site are key in establishing public access through the site. External private spaces are delineated via level changes down to the public paths and associated landscaping. The lack of a physical barrier to the private ground floor gardens allows for unhindered views through the site whilst protecting the private external spaces from visual intrusion via a step down to the secondary semi-private landscaped terraces

4.38. High visibility of public corridors from surrounding residential buildings ensure 'eyes on the street' and help create safe zones for the public occupants

4.39. Street lighting aids nighttime visibility through site and Modification 5 included a crime risk report which generally endorses the scheme

- Public pathways, driveways & roads (available for public pedestrian permeability)
- Publicly accessible landscaped areas
- Public landscaping
- Semi-public landscaped terraces
- Private landscaped garden

PART B: SITE PRINCIPLE 5

5 BUILT FORM

Arrange built form with regard to site opportunities and constraints, to compliment building heights, setbacks, open space pedestrian access, visual linkages and landscaping principles and to express the project as a destination.

Objective

To provide a high level of amenity to future occupants and visitors of the site by locating building and building mass that ensures quality communal and private spaces within the development; spaces that compliment site attributes, maintain privacy, maximise views of the lake without loss of vegetation, provide for adequate solar access, daylight and natural ventilation, consider energy and water efficiency and minimise visual impact.

Guidelines

Proposed development should be generally consistent with Principles 1–5. Images on the following pages illustrate preliminary sketches and artist visualisation of the proposed built form within the landscape. Generally:

5.40. The built form should reflect the functional uses of the buildings but should be considered in terms of their visual appearance from the lake and surrounding areas.

5.41. The proposed development envisages buildings nestled within a landscape and individual buildings separated from each other by extensive gardens and deep soil planting.

5.42. All buildings are to predominantly sit below the tree line of the extensive mature trees located along the northern, eastern and southern waterside edges of the site within the protected Council reserve.

Guidelines pertaining to each precinct are discussed separately in the following sections.

Tourist Hospitality Precinct

5.43. The primary built form philosophy of the precinct is an open garden, which contextually places the buildings in a landscape setting more appropriate to the site. The hotel and restaurant/function room buildings are to open up the public domain, linking the interior of the site to the overall landscaping beyond and creating views to the lake. Locating the buildings to the east adjacent to the lake and the waterfront promenade promotes active pedestrian activities along the waterfront side of the site.

5.44. Proposed built form should allow vistas between the hotel and function room/restaurant buildings to the lake and landscape beyond, with these vistas cast over landscaped gardens in counterpoint to the buildings themselves.

5.45. Maximum heights in the tourist hospitality precinct are to be maintained at 4 storeys, locating the highest points toward the centre of buildings and set back from the waterfront and northern edge. This allows the building form to step down as it approaches the waterside boundary and maintains the dominance of the existing protected vegetation along the northern tip of the site.

5.46. The uppermost level of the hotel building is to form a roof element clad in recessive colours. The proposed hotel façade is to be articulated into a series of small elements reducing the mass of the building when viewed from the lake.

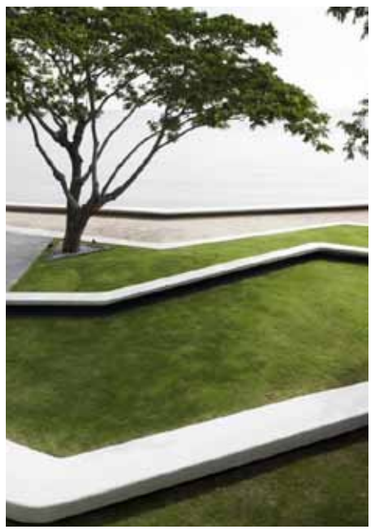
5.47. As one of the key architectural focal points of the precinct, the two storey restaurant/function building atop the landscaped podium should reference the topography and be oriented to the views and landscape while also addressing the foreshore. The inclusion of undulating roof forms exhibit a subtle but significant reference to the Trinity Point landscape and while is more strongly expressed in the restaurant/function building, is also incorporated into the hotel roof form.

5.48. Proposed materials should be a selection of recessive materials and colours including sandstone, zinc, timber, render, with fixed and operable screens for sun shading and to assist in reducing the buildings into a series of smaller forms.

5.49. Rather than monolithic blocks, all buildings should incorporate vertical and horizontal articulation, with a base contrasting to the levels above and in most cases a recessive upper most level clad in recessive colours to reduce their visual impact when viewed from the lake as well as from the land.

5.50. Emphasise the expression of horizontal elements, creating a "base, middle and top". The base, generally consisting of stone and glass, mostly sits below the landscaped podium. Rising above this podium are three storeys with the top-most being recessive and taking on a contemporary "mansard" typology.

Forum of Granada, Spain
by Federico Wulff Barreiro



Baan San Kraam Sales Office, Thailand
by Somdoon Architects

5

BUILT FORM

Figure 42
Squillace Architects projects exhibiting a similar built form philosophy to the proposed accommodation buildings.

1. Recessed top level characterised by more glass and recessive colours.
2. Accommodation apartment levels resting on a stone base and over basement car parking.
3. A stepped built form characterised by increasing setbacks and a roof downturn on the top level.
4. Predominant use of glass in a recessed and set back top level.
5. Dominant and architecturally defined mid levels sitting on a stone ground floor base while the top level is recessed.
6. Prominent and articulated first and second accommodation levels with a minimally visible fourth storey set back from the boundary.

PART B: SITE PRINCIPLE 5

5 BUILT FORM

Tourist Residential Accommodation Precinct

Principle 3 outlines the revised heights for this part of the site. Built form guidelines for the tourist residential accommodation precinct include:

5.51. Envisage both a higher density of built forms and a considered response to the topography and orientation of the site. An integration of design, theme and character across these areas is critical to the success of the project.

5.52. Buildings on the east of the residential accommodation precinct are to be positioned with their long axis running generally east-west. This allows the majority of dwellings to face north while ensuring that vistas through the site to the lake are maintained. Individual buildings in a landscape setting, surrounded and separated from each other by landscaped gardens, should radiate out as they move from north to south.

5.53. Buildings along Trinity Point Drive are to be articulated using setbacks, facade elements and material choice to create a softer transition between the site and the street and link back to the more urban subdivision to the west of the site.

5.54. The accommodation buildings are to have a maximum of 4 storeys over basement parking. The upper levels are to be set back from the lower and treated with recessive colours and textures in order to minimise the apparent bulk of these buildings. Heights should decrease toward the south of the site as the land levels rise towards Bluff Point. Building heights must primarily sit below the canopy of the existing trees located outside the site in the protected public reserve, maintaining the contextual idea of buildings in a landscaped setting.

5.55. All buildings facing the foreshore shall have their facades articulated in order to break down bulk and scale. Devices such as awnings, eaves and folding and sliding screens shall be used to cast shadows over facades to reduce visual impacts and break the facade into a series of small elements with recessive colours and textures such as stone for the base. The base will link back to the landscaping between each of the buildings to reinforce the idea of buildings in a landscape setting.

5.56. All buildings facing the foreshore shall provide opportunities for the facade to accommodate for the planting of small native trees (mature height adjacent to the building in locations that will not obscure the view from any window facing the lake). These are to be planted at-grade in deep soil.

5.57. Built form on the western edge of the site along Trinity Point Drive should emphasise the street edge with facades and massing articulated to clearly separate the structures into separate forms. Vistas to the water between the buildings is to be provided.

5.58. Buildings should be articulated to break down bulk and scale where appropriate.

5.59. Development applications must also document and demonstrate achievement of SEPP 65 design principles (where triggered and relevant).

Figure 43
View of Hotel from foreshore boardwalk

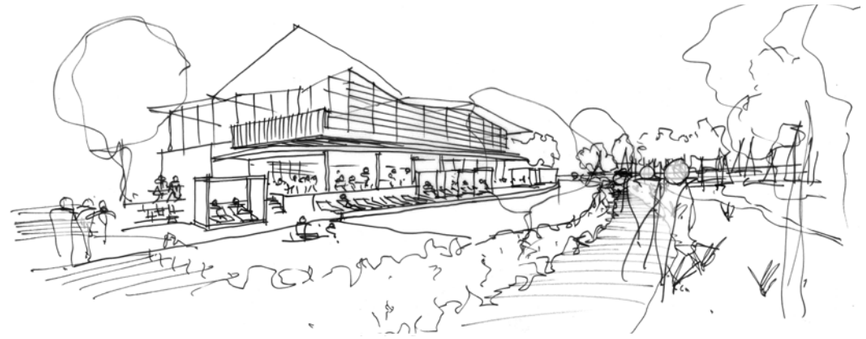


Figure 44
View of Restaurant Function Centre from foreshore boardwalk

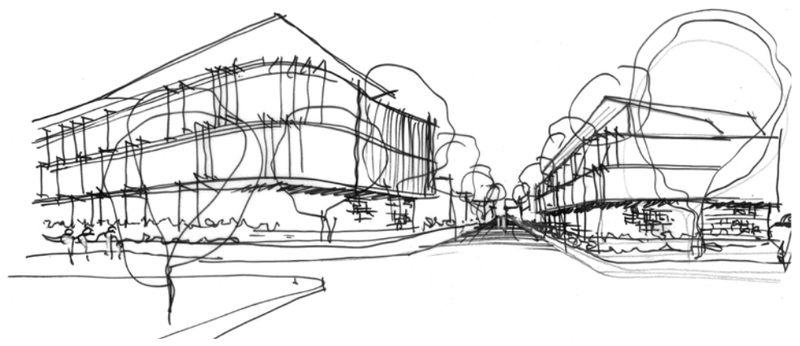


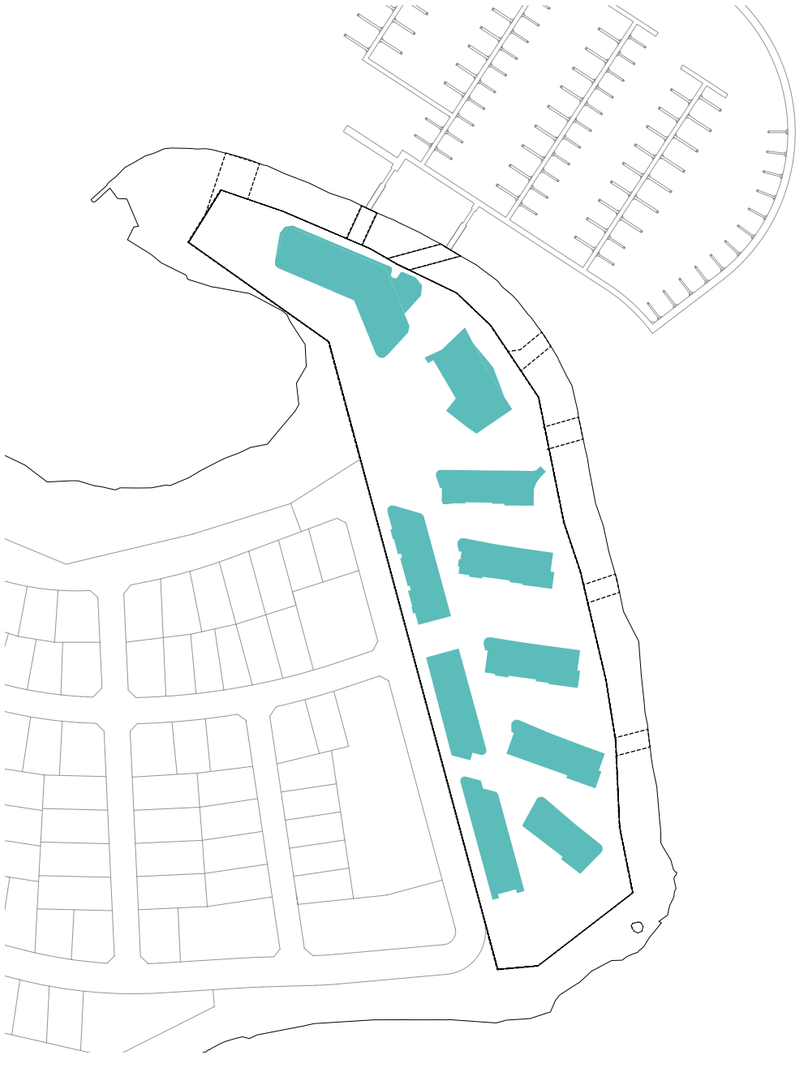
Figure 45
View of residential accommodation south down internal accessway

5 BUILT FORM

Figure 46

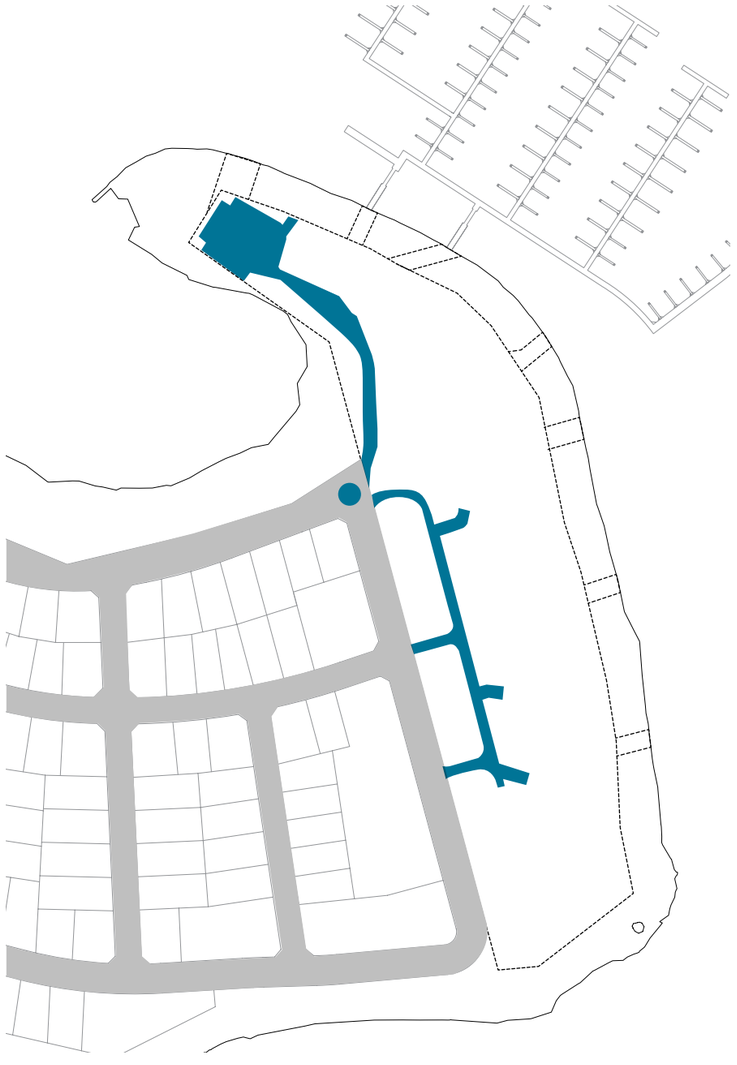
Preliminary 3D visualisations. 1) View of restaurant/function room eastern facade showing the angled roof form above the waterfront dining and drinks area, the pool and the public foreshore boardwalk. 2) View of the restaurant/function room western facade showing the placement of the architecture within the open landscaped forecourt and the preservation of lake views either side of and through the building. 3) View of the hotel and landscaped podium showing considered articulation of the built form and the recessive fourth storey. 4) View of typical accommodation building showing variations in setback and the articulation of the facade through folding metal screens, render and timber screens.

5 BUILT FORM



Proposed building footprint

Figure 47
Proposed building footprint diagram.



Proposed vehicular roads layout

Figure 48
Proposed vehicular roads layout diagram.

5 BUILT FORM

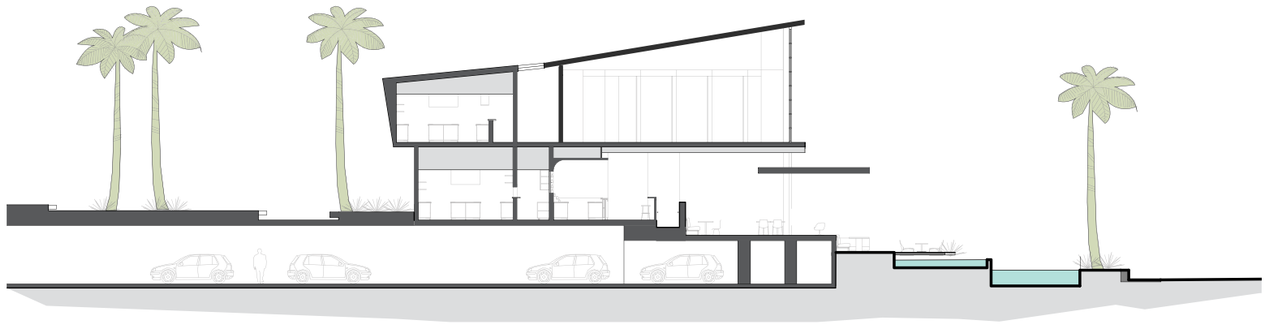


Figure 49
Section through restaurant/function building, tiered landscaping and podium underground carpark showing the transitions from Trinity Point Drive to the water as a landscape outcome instead of a built form outcome. It illustrates how the proposal conforms to the topography of the site, ensures views are retained and maximised and supports the 'building in a landscape' philosophy.

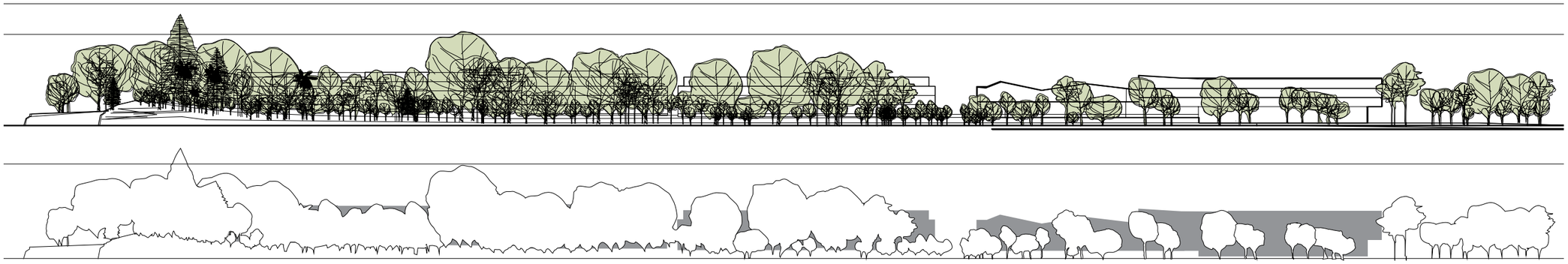


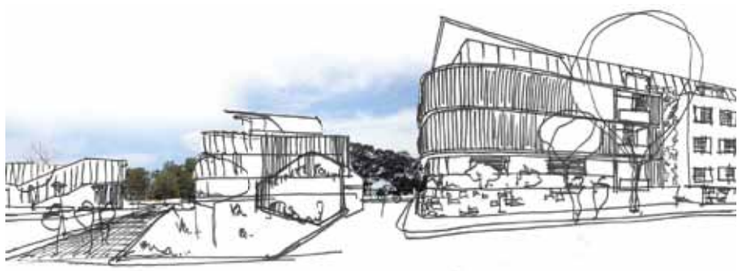
Figure 50
East elevation showing the proposed building height across the site will be largely obscured by the existing tree line, leaving little existing opportunities for views both to and from the site. Above is a graphic representation of the areas of the building's elevations not obscured by the tree line.

PROPOSED - SITE PRINCIPLE 5

5

BUILT FORM

3D VIEWS



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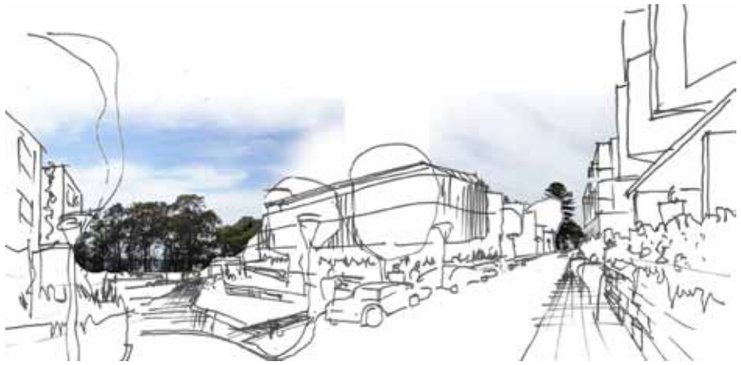

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Proposal - Artists Impression

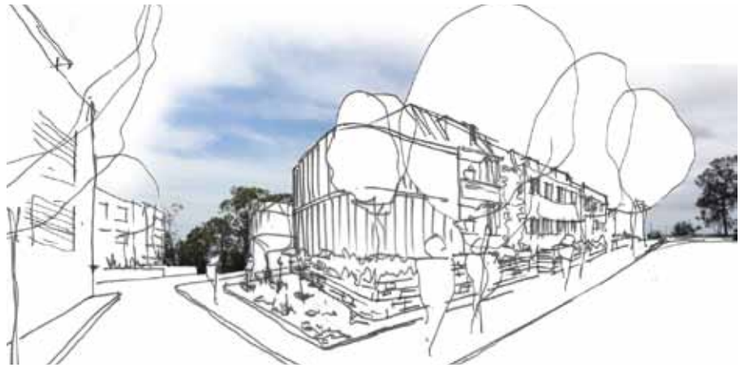
Proposal - 3D model

PROPOSED - SITE PRINCIPLE 5

5

BUILT FORM

3D VIEWS



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Proposal - Artists Impression

Proposal - 3D model

5

BUILT FORM

3D VIEWS

20

Proposal - Artists Impression

Proposal - 3D model

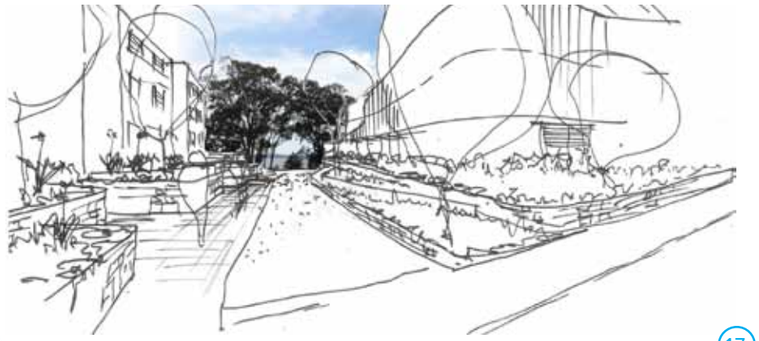
21

PROPOSED - SITE PRINCIPLE 5

5

BUILT FORM

3D VIEWS



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Proposal - Artists Impression

Proposal - Artists Impression

6

PART B: SITE PRINCIPLE 6

FSR

To provide an appropriate density of development across the site.

Objective

To provide for a Floor Space Ratio (FSR) consistent with the overall objectives and other principles for the site. To ensure that the FSR proposed is based on the site's capability identified through site analysis and consistent with the vision to create a destination with a desire to maximise public access, pedestrian linkages, vistas, setbacks, open space and landscaping opportunities.

Guidelines

6.1. The proposed FSR of 0.8:1 was established through the design review process and the combination of building heights, building footprints, setbacks and open space has been established, in consideration also of site context, constraints and opportunities such as topography and tree heights, the adjoining public road system and housing and the important site features such as the cultural area of Bluff Point and the perimeter lake edge, and in consideration of the desire to provide high amenity vistas and public access through the site. The FSR was determined out of the design process rather than identified as an up front number.

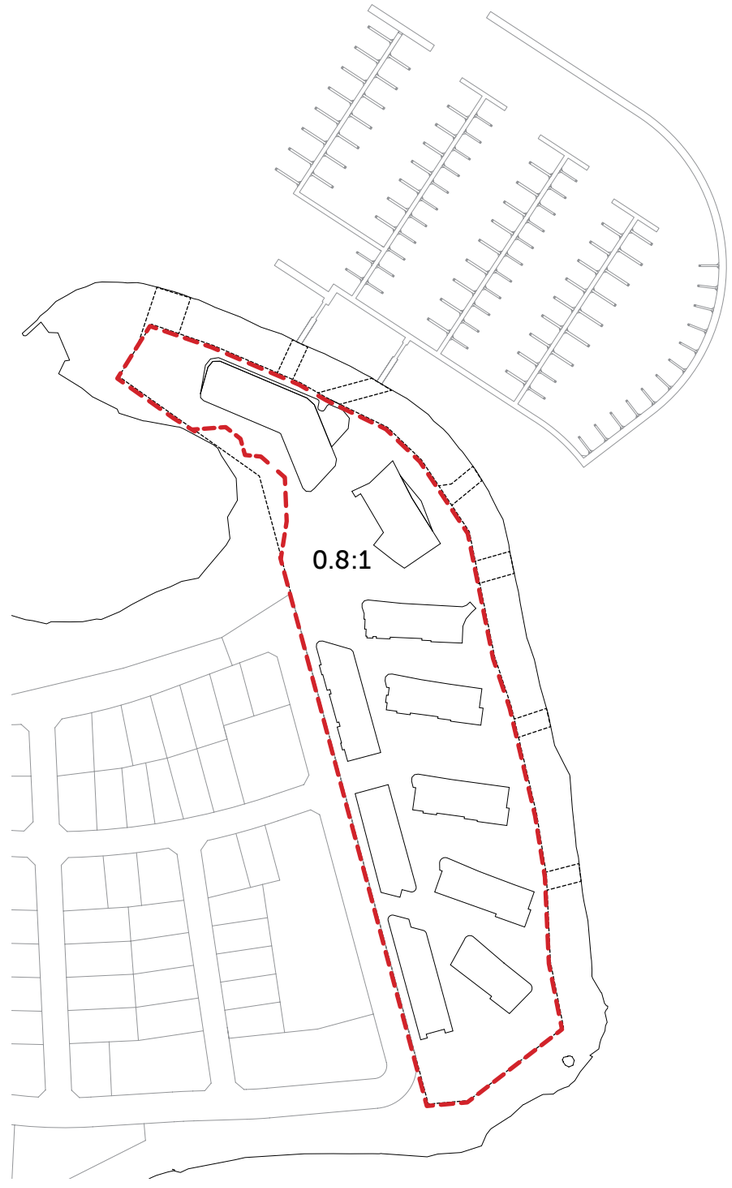


Figure 51
Proposed floor space ratio.

PART B: SITE PRINCIPLE 7

7 BUILDING MATERIALS & COLOURS

Provide materials and colours that respond to the surrounding environment and that create interest and patterns.

Objective

To achieve a high standard of visual appearance that will be aesthetically pleasing to future occupants and visitors but that reflects the existing nature of the area. The objective is to use colours and materials that will contribute to the Trinity Point experience.

Guidelines

7.1. Buildings should incorporate materials that respond to the surrounding environment as well as create visual interest.

7.2. Proposed materials will be a selection of recessive materials and colours including sandstone, zinc, timber, render, with fixed and operable screens for sun shading and to assist in reducing the buildings into a series of smaller forms.

7.3. Rather than monolithic blocks, all buildings are proposed as both vertically and horizontally articulated, with a base contrasting to the levels above and in most cases a recessive upper most level clad in recessive colours to reduce their visual impact when viewed from the lake as well as from the land.

7.4. Drawing inspiration from the stone stratification of Bluff Point, the buildings are conceived as a series of horizontal layers, with a stone base reading as a continuation of the landscaped terraces of the surrounding gardens. The mid levels above this are articulated into smaller elements with recessive screens and the upper levels are recessive roof elements.

7.5. Materials of the tourist hospitality precinct exhibit a similar logic, with the more prominent upper levels of the function room and the hotel proposed in recessive colours. Again, these floor levels will contrast to the floors below in order to articulate the facades of individual buildings.

Tourist Hospitality

Accommodation

7

BUILDING MATERIALS & COLOURS

Figure 52
Simplified section through typical accommodation building showing the use and influences of materials.

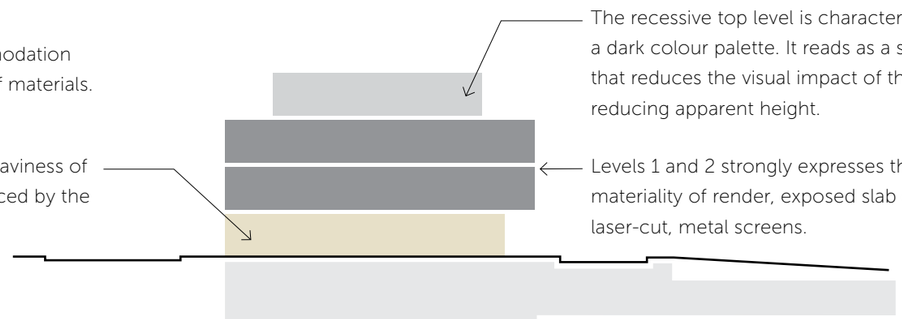


Figure 53
Northeast elevation photomontage showing proposed materiality of the hotel, restaurant and accommodation buildings and the recessive palette in receding the top levels among the existing tree line.

Figure 54
East elevation showing darker materials schemes to the restaurant/function room and hotel where they are more exposed, and lighter materials to the accommodation buildings where they are obscured by the tree line.

The accommodation precinct is largely concealed by the existing tree line prompting the use of a lighter, passive and more recessive architectural language. Glass, darker finishes and increased setbacks to the top floor help to reduce its apparent mass.

The tourist hospitality precinct is largely exposed to the views and functions as the active zone of the site. The material palette here is thus darker in order to recede the architecture into the tree line as to not exemplify its presence in the landscape.

BUILDING MATERIALS & COLOURS

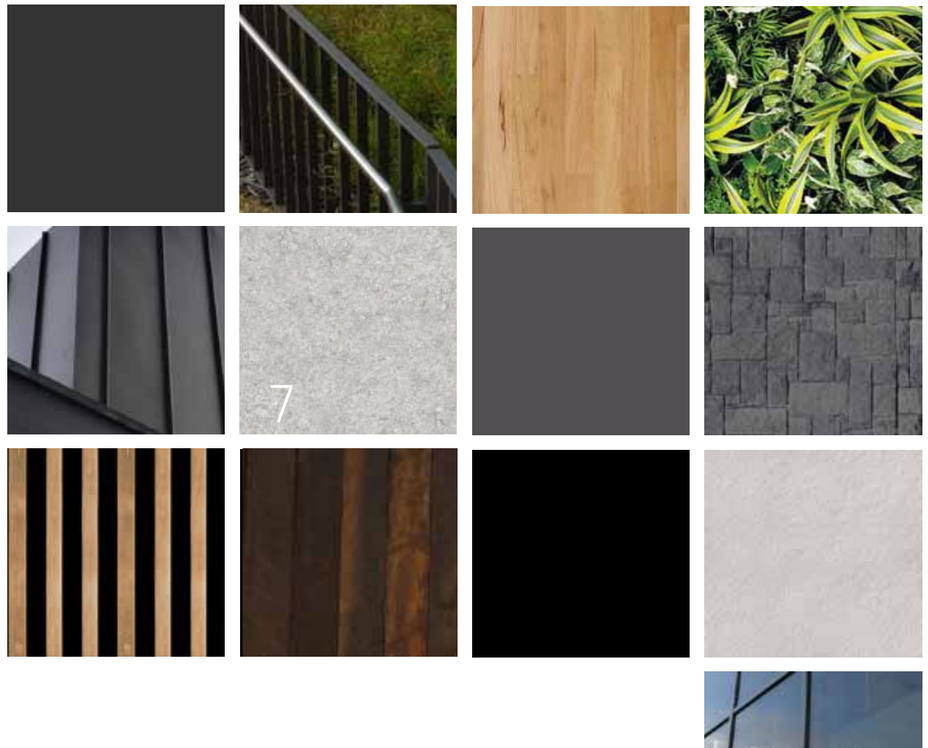


Figure 55
Proposed external colour schedule for the restaurant and function building.

BUILDING MATERIALS & COLOURS

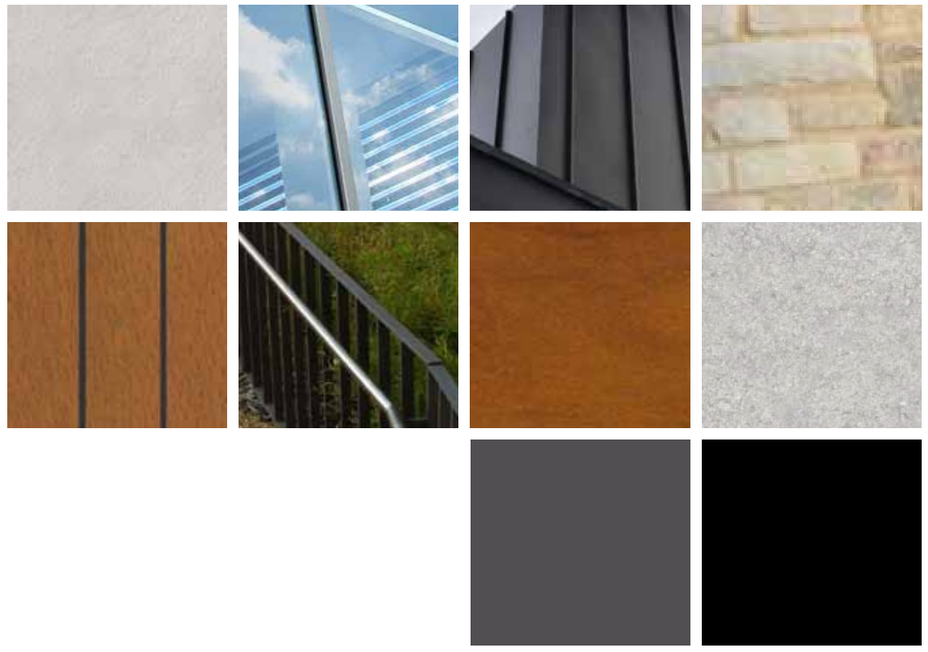


Figure 56
Proposed external colour schedule for the hotel.

7

BUILDING MATERIALS & COLOURS

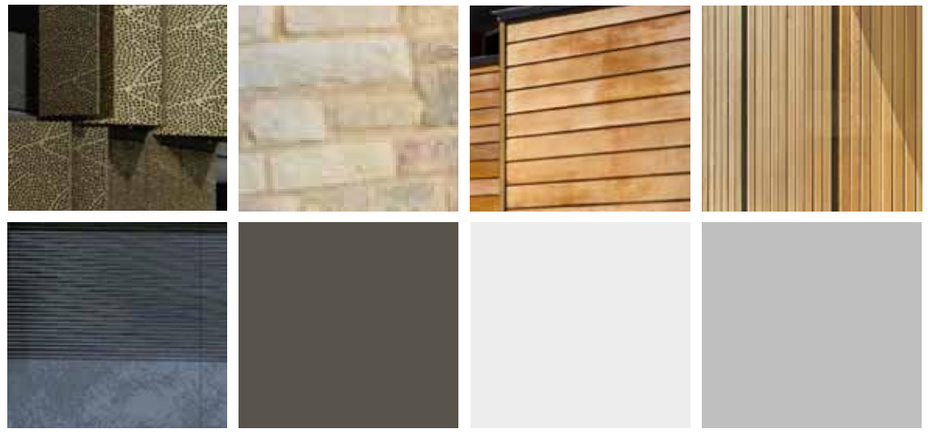


Figure 57
Proposed external colour schedule for a typical accommodation building.

PART B: SITE PRINCIPLE 8

8 VEGETATION

To provide for reinstatement and rehabilitation of vegetation to mitigate against any proposed removal of endangered ecological communities as a result of the Concept plan proposal.

Objective

To acknowledge that it is appropriate to demonstrate no nett loss of biodiversity against an improve or maintain outcome where any clearing of endangered ecological communities is proposed.

Guidelines

To achieve the vegetation objective, the following measures are to be incorporated into requirements for the project:

8.1. Provide complimentary and generous landscaping in and around the built form to create a connectivity with the surrounding vegetation topography.

8.2. Retain as much existing vegetation as possible encircling the site and along the foreshore, ensuring visual dominance of the tree line external to the site is maintained.

8.3. Conduct ongoing monitoring of the Vegetation Management Area with particular attention paid to ecologically sensitive areas of the site in order to preserve, protect and restore existing native vegetation communities.

8.4. Conduct weed control throughout the vegetation in the remaining public foreshore open space zoned lands adjacent to the site. This will encourage natural regeneration within these communities (which are also endangered ecological communities).

8.5. Should any existing vegetation be impacted upon, then include further infill planting of native ground cover, shrubs and trees throughout the vegetation in the identified part of the public foreshore open space zoned lands, primarily around the unnamed bay and the eastern foreshore beyond the tourist hospitality precinct. This work is to be carried out by a qualified bushland regenerator working under guidelines set out in a Vegetation Management Plan. The Vegetation Management Plan will provide detailed information on weed control, access control, rubbish control, planting, monitoring and timing of any revegetation works to be conducted within the retained vegetation and any areas to be revegetated. Revegetation must be done in accordance with best practice measures, principles and specifications as outlined in nationally accepted guidelines (where appropriate). Any replanting of native species must use specimens of local provenance.

8.6. A landscape plan shall be provided with the first development application for the marina which incorporates an appropriate level of screening along the northern boundary of the marina car park. Screening should be comprised Casuarina Glauca Open Forest as a minimum

Existing trees

New mass planting

New lawn

Existing public open space zoned land

Figure 58

Proposed vegetation plan showing existing trees generally to be retained and the areas of new landscaping to be introduced. The majority of native vegetation now sits in Council reserve. As per the guidelines, the landscape strategy of the site is to provide additional vegetation in and around the built form and to retain and preserve most of the existing vegetation outside the site along the foreshore.

PART B: SITE PRINCIPLE 9

9 LANDSCAPE

Provide a landscaped outcome that enhances the existing site conditions and proposed future development of the site.

Objective

Build on the existing landscape opportunities that are available as well as create new opportunities to provide a high level of amenity to future occupants and users of the site and that protects and augments the landscape quality of the locality. The landscape to be fully integrated with the development to create a harmonious outcome that considers the built form and the natural environment.

Design Rationale

The proposed landscaping scheme preserves the natural environment in the public foreshore open space zoned land and introduces significant landscaping in and around the buildings, integrating built form with the landscape to create a seamless transition into the site.

Overall the proposal seeks to draw together the various existing landscape elements of the site, such as cultural planting above Bluff Point, existing lake front tree planting and new proposed planting around and between the new buildings to create a harmonious landscape responding to the unique site.

Refer to the landscape report *Section 75 Submission: Landscape Analysis & Design Principles*, dated October 2014, prepared by *Terras Landscape Architects*.

Guidelines

The following landscape principles and strategies are to be incorporated and detailed in Development Applications.

Foreshore Zone

9.1. The proposed marina access is to be provided in a manner that ensures any desired works by public authorities within the public open space zoned land (such as the lineal pathway) are not precluded or compromised.

9.2. Provide a foreshore public pedestrian pathway extending from the north of the site at the marina's entry point down south along the eastern foreshore to Bluff Point, around to Trinity Point Drive and to the former sea baths along the southern foreshore. This path, partly located within the site and partly in the foreshore reserve where agreed to by Council, maximises opportunities for the public to access and enjoy the foreshore edge around the entire site.

9.3. Sundial and grotto to be retained and restored.

9.4. Low fencing may be provided within vegetation around Bluff Point to minimise access to steep edges.

9.5. The proposed development is to be sensitive to the native vegetation edging the shallow unnamed bay.

9.6. Where agreed to by Council, landscaping may extend into the foreshore zone.

9.7. To be consistent with Principle 8.

9.8. The use of exotic species within the 20m foreshore reserve is prohibited.

Pathways

9.9. Provide a publicly accessible pathway (generally 2.5m wide) between the water and the edge of built form to extend around the southern and eastern edge of development through to the tourist hospitality precinct. This path will be partly located within the site and partly located in the public foreshore reserve where agreed to by Council.

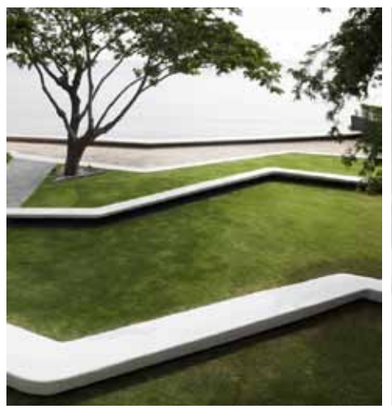
9.10. The pathway will provide for the first time on this site physical public access to the lake view. From the tourist hospitality precinct, the pathway moves gently along the foreshore up the sloping ground to the important viewing point of Bluff Point. The pathway experience will build upon the already unique lakeside character and will move relative to the adjacent built form and provide full access for the public that enriches and informs (heritage, culture and environment). Detailed design will include pause points, lookouts, seating, ramps, landscape elements and provisions for pedestrians and cyclists to share the facility.

9.11. Pathway to provide universal access.

9.12. Pedestrian access to be provided through the site linking to the reserve at key points.

9.13. Passive recreation space created between foreshore and built form, with landscaping in these areas to facilitate public use and recreation.

9.14. Cultural planting between built form and foreshore in the southern part of site to be retained.



PART B: SITE PRINCIPLE 9

9 LANDSCAPE

Tourist Hospitality Precinct

9.15. The landscaped strategy across the precinct is to position and articulate built form within a large, open landscaped setting.

9.16. The landscaped forecourt will have full public access and is proposed as a combination of trees, low planting and hard paved pedestrian pathways allowing access to the various buildings placed around it. This planting sits on a podium, with car parking located beneath it. The proposed planting will be tiered to allow a variety of plant species that will emphasise the concept of the buildings being located within a landscaped garden, with sufficient deep planters to allow significant tree planting along the pedestrian main east-west link separating the tourist hospitality and tourist residential accommodation precinct.

9.17. The restaurant/function building located on eastern edge of the site is to provide an active waterfront zone which links up with the waterside reserve walkway. This landscape includes low planting surrounding an arrangement of trees, stepped paving, sand gardens and pool. Pathways from this active waterfront zone will also link to the marina and site perimeter boardwalk.

Trinity Point Drive Streetscape

9.18. The Concept Plan is to inform an integrated streetscape design of Trinity Point Drive (which forms the western edge to the site).

9.19. Vehicular entry to the site is available from the west via Trinity Point Drive, through two access points at the accommodation precinct and an access point from the roundabout at the tourist hospitality precinct. Refer to Principle 10.

9.20. The total streetscape is to incorporate carriageway, street tree planting, parking and pedestrian paths. Detail design will need to integrate the grade change edges into the streetscape.

9.21. Planting along Trinity Point Drive and the new internal accessway of the tourist residential accommodation precinct should emphasise the street edge, with formal street planting combining with planting at the base of the accommodation buildings.

Internal Accessways

9.22. A primary north-south axis is to be established between east and west accommodation buildings comprising a combination of landscaping, pedestrian pathways and three separate vehicular access driveways from Trinity Point Drive. This axis ensures both a physical and visual connection between the northern tourist hospitality precinct and the southern public and foreshore spaces surrounding Bluff Point.

9.23. The internal accessway, accessible via Trinity Point Drive should facilitate visitor and resident access to the basement car parks underneath the accommodation buildings.

9.24. Extensive landscaping between the accommodation buildings will create east-west pedestrian links across the site linking the accommodation zones and internal access driveways to the lakefront reserve. The major east-west pedestrian link in this precinct will run between the predominantly short stay and the permanent accommodation buildings; a space that will primarily be a deep soil zone. Other landscaped spaces between the accommodation buildings will be part deep soil and part planting over basement car parking below.

9.25. Development Applications are to document the accessway including vehicle carriageway, pedestrian pathways, landscape and apartment access. The design intent is low-speed shared use zones (with narrow carriageway, minimal kerbs and mix of materials). The landscape is to reinforce the lake landscape character with diversity and interest.

9.26. Publicly accessible pathways are to be provided as part of internal open space ensuring links are created along both north-south and east-west directions as one moves through the site. Refer to Principle 4.

Planting

9.27. The soft landscaping design for the site needs to create a distinctive yet harmonious landscape style whilst addressing a number of design constraints.

9.28. The landscape theme consists of two plant palettes. The first planting palette is essentially native plants, typically endemic that would be used for the areas where the site interfaces with the adjoining protected foreshore areas. This will allow the development to blend into the existing landscape and minimise any visual disparity.

9.29. The second planting palette is a more stylised theme to create using distinctive 'architectural' plant forms that include natives but have a wider range of plant types. All the plants need to be suited to windy exposed condition.

PART B: SITE PRINCIPLE 9

9 LANDSCAPE

Architecture

9.30. Each building is to incorporate landscaping that integrates with its design, boundaries and interfaces. Careful design consideration is to be given to interface edges by ensuring an active contribution to streetscape with landscaping continuing to the road or path edge from built edge.

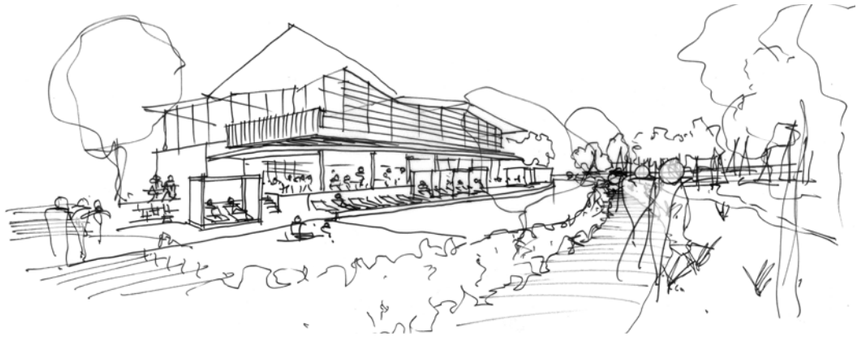
Materials & Hard Landscaping

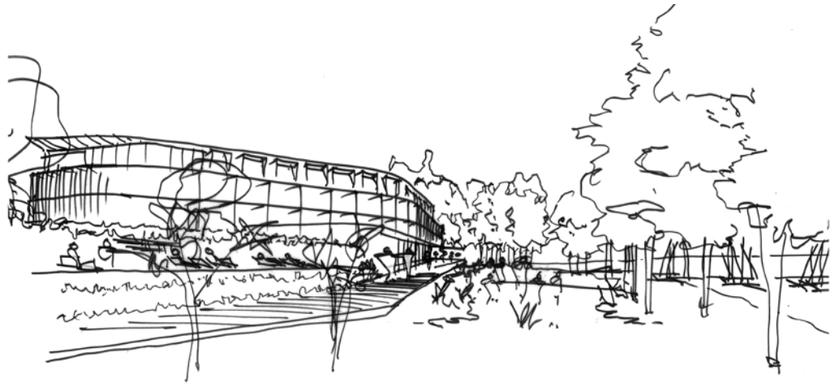
9.31. Material palette to define consistent sense of space through public domain.

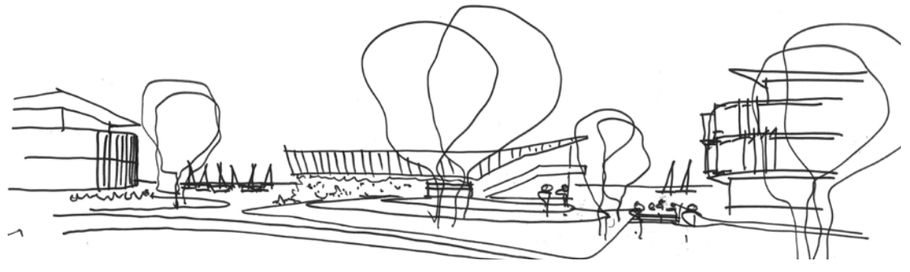
9.32. Provide consistent signposting / way finding, interpretative signage, seating, furniture, litter bins, bicycle parking, handrails and the like throughout the site.

9.33. Lighting strategies to provide indirect subtle lighting.

9.34. Develop a site interpretation strategy that will assist in creating a sense of place and responsibility for environmental and indigenous and cultural heritage of the site.







9 LANDSCAPE

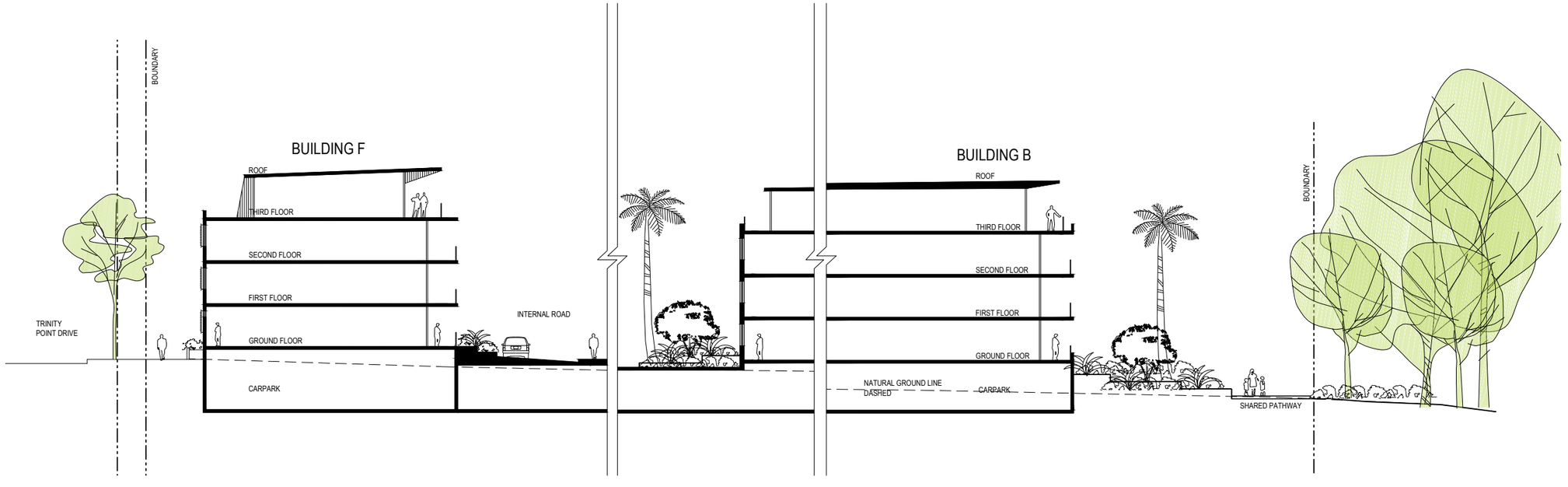


Figure 59
East-west section through accommodation precinct showing the relationship between built form and landscape, between individual accommodation buildings, and between the public/private spaces where built form and the shared perimeter foreshore pathway are nearest.

9 LANDSCAPE

Landscape Design Concept Plan

Prepared by

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terras
landscape architects

Figure 1b.
Amended Proposal

4 Trinity Point Marina & Mixed Use Development

PART B: SITE PRINCIPLE 9

9

LANDSCAPE

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Deep soil planting zones

Concept site deep soil planting zones

9

LANDSCAPE

Mass Planting Open Space

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Foreshore Land
Turf grass area
Mass Planting
Pathways

PROPOSED - SITE PRINCIPLE 9

9

LANDSCAPE

Landscape Look & Feel

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PROPOSED - SITE PRINCIPLE 9

9

LANDSCAPE

Landscape Look & Feel

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9 LANDSCAPE

3 Landscape Look & Feel

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PROPOSED - SITE PRINCIPLE 9

9

LANDSCAPE

Landscape Look & Feel

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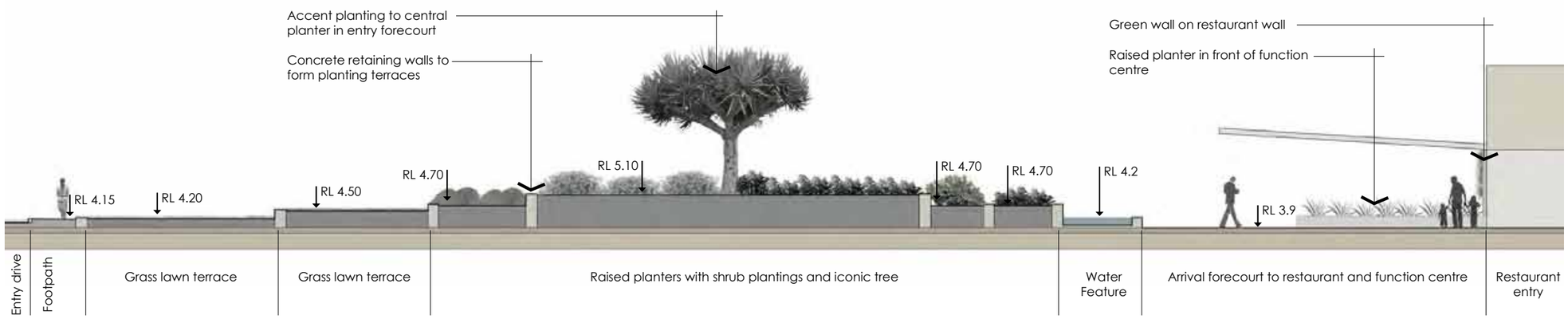
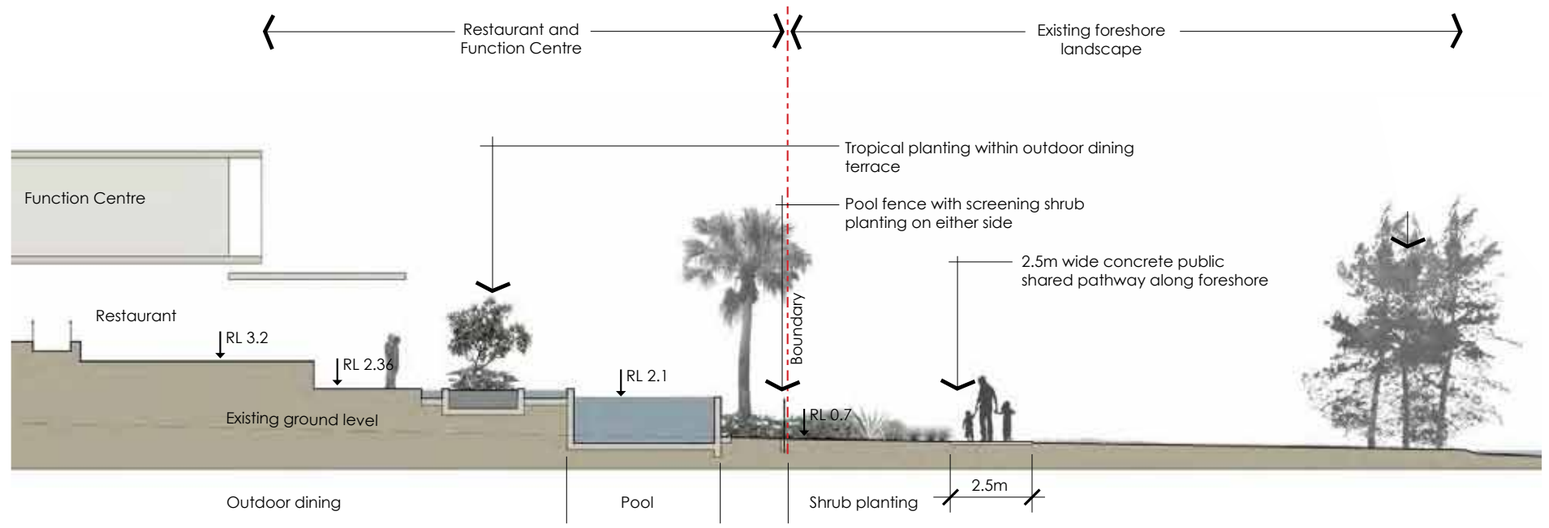
Entry Forecourt Landscape Section



Pool Terrace and Foreshore Landscape Section



9 LANDSCAPE

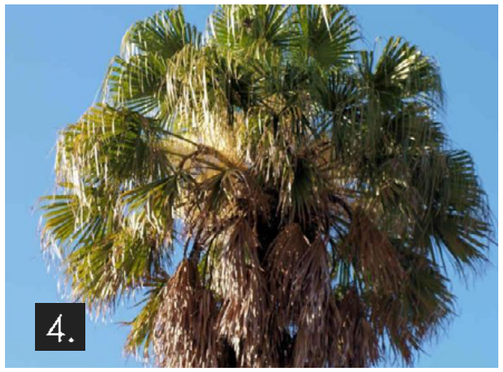
Prepared by

-

terras landscape architects

Plant Palette 1

9.35. The landscape theme consists of two plant palettes. The first planting palette is essentially native plants, typically endemic that would be used for the areas where the site interfaces with the adjoining protected foreshore areas. This will allow the development to blend into the existing landscape and minimise any visual disparity.



.EGEND

1. *Howea forsteriana* [Kentia Palm]
2. *Isolepsis nodosa* [Knobby Club Rush]
3. *Banksia integrifolia* [Coast Banksia]
4. *Livistona australis* [Cabbage Tree Palm]
5. *Asplenium australasicum* [Birds Nest Fern]
6. *Banksia serrata* [Old Mans Banksia]
7. *Pandanus spiralis* [Screw Pine]
8. *Alocasia brisbanensis* [Elaphants Ears]

9 LANDSCAPE

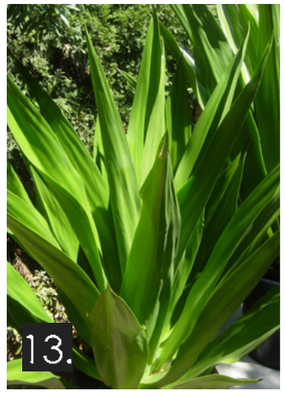
Prepared by

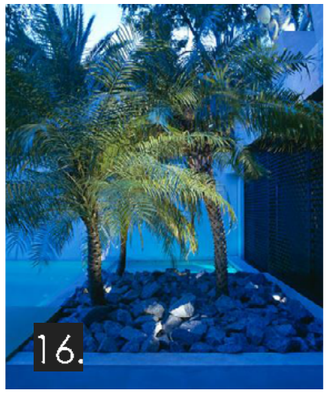
-

terras
landscape architects

Plant Palette 2

9.36. The second planting palette is a more stylised theme to create using distinctive 'architectural' plant forms that include natives but have a wider range of plant types. All the plants need to be suited to windy exposed conditions with some salt tolerance.





EGEND

9. *Viburnum odoratissimum* [Emerald Lustre]
10. *Hibiscus tiliaceus* 'Rubra' [Bronze Cottonwood]
11. *Arthopodium cirratum* [Renga Lily]
12. *Senecio serpens* [Blue Chalk Sticks]
13. *Furcraea foetida* [Mauritius Hemp]
14. *Philodendron* [Congo Philodendron]
15. *Dioon spinulosum* [Gum Palm]
16. *Phoenix roebelenii* [Pygmy Date Palm]
17. *Alpinia zerumbet* [Shell Ginger]

PART B: SITE PRINCIPLE 10

10 ROADS, VEHICULAR ACCESS & PARKING

Provide for adequate, safe and efficient vehicular access to and around the site, ensuring adequate provision of parking.

Objective

To ensure adequate arrangements are in place to access the site and park based on the likely traffic volumes and parking generation and accounting also for service vehicles in order to provide for the amenity and convenience of future occupants and visitors to the site and to ensure no unreasonable off site impacts.

Guidelines

A number of external intersections have been identified as requiring upgrading as a result of cumulative traffic associated with other traffic growth or anticipated growth in the locality (and other approvals), in some cases including a component of traffic from the Trinity Point Marina and Mixed Use Development. These are now addressed through Council's adopted Section 94 Contributions Plan and also separately by arrangements from other developments. It is expected that development applications will be subject to contributions levied under adopted plans.

Key access and parking principles for the site include:

10.1. Vehicular access to all areas is to be from Trinity Point Drive.

10.2. Main access to the tourist hospitality precinct to be from the proposed roundabout at the northeast nodal point of Trinity Point Drive. No general vehicular access is proposed to the east of this nodal point. Within the tourist hospitality precinct, a two-way driveway connection along the western boundary connects the public Trinity Point Drive to the car park below the landscaped podium and the at-grade marina car park at the northern tip of the precinct.

10.3. Main access to the tourist residential accommodation precinct is to be from three access points along the north-south length of Trinity Point Drive parallel to the western boundary of the site. 1 entry from the roundabout and 2 two way entries off Trinity Point Drive connect to the internal road/accessway. Vehicular entry to the basement car parking (located beneath the accommodation buildings) is via three separate ramps.

10.4. Bus stop to be provided and constructed as part of adjacent residential subdivision for dual purpose of general public transport and tourist bus stopping (time limited).

10.5. Development applications are to integrate other functions such as pedestrian pathways, parking and landscaping.

10.6. This access maintains the primacy of the pedestrian links across the site and conforms to the proposed planning philosophy of buildings sited in a landscape setting.

10.7. Parking numbers to be provided on site to address relevant Development Control Plans and comply with AS 3962-2001 (Guidelines for the Design of Marinas). Specifically for the marina (berths, marina operations, management and administration areas and marina lounge / amenities), parking is to be provided at a rate of 0.3 spaces per berth, plus 0.5 per FTE staff member. Additionally, where it is demonstrated that vehicle parking will be used to access a variety of activities within the development, or that relevant DCP rates are inappropriate, the total parking provisions may be reduced.

10.8. A Parking Management Strategy should be prepared to manage parking on site, including during peak events within the marina and tourist hospitality precinct.

10.9. The proposed development is to make appropriate provisions for service vehicles including the delivery of goods and collection of garbage, taking into account swept path requirements of those vehicles.

10.10. The approved Trinity Point Drive road carriageway along the western site boundary is to be investigated for parking given the length available due to limited vehicle crossing points.

10.11. The marina car park is to be set above the 20 year ARI flood level at 1.23m AHD.

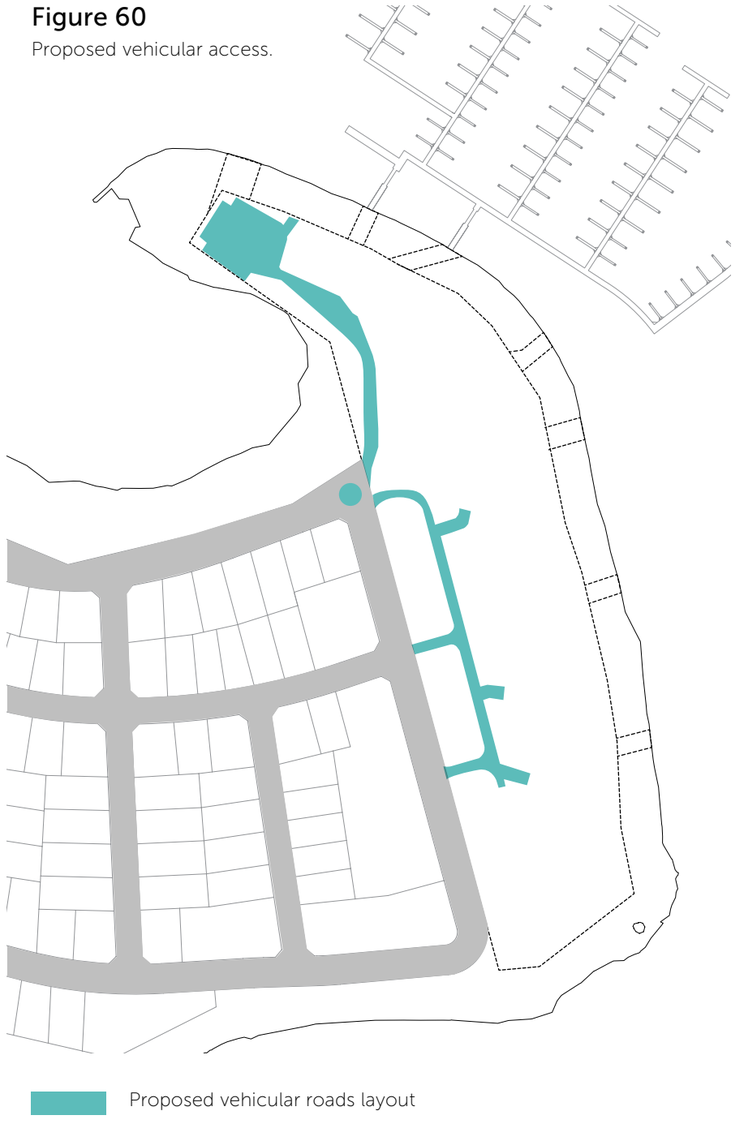
10.12. Any shortfall in car parking for the marina shall be considered as part of the first development application for the land based component of the development.

10.13. The proponent will pay a proportional contribution to the RMS toward the upgrade of the Fishery Point Road/ Macquarie Street intersection in accordance with the Deed of Agreement required under Term C7 of the Concept Approval.

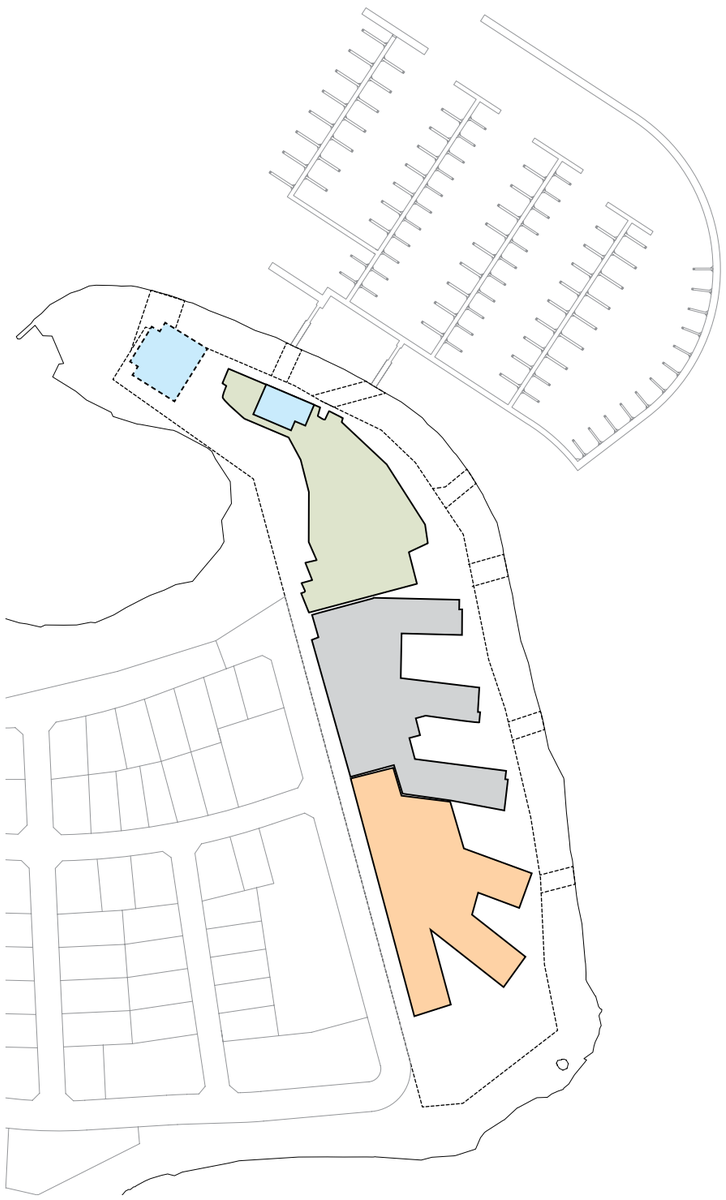
10

ROADS, VEHICULAR ACCESS & PARKING

Figure 60
Proposed vehicular access.



Proposed vehicular roads layout



Indicative Primary Purpose of Parking

- Dual Use (residential and short stay)
- Short Stay
- Tourism & Hospitality
- Marina / Retail and other uses

Above ground parking.
Indicative allocations are subject to dual-use, similar across development uses, phasing, and separate development applications.

Figure 61
Parking spaces.

11 WATER

Ensure stormwater runoff is managed to limit impacts on the receiving environment.

Objective

To provide preventative measures to limit impacts on aquatic environment and lake water quality and to provide for water harvesting and re-use opportunity.

Guidelines

Stormwater Management Plans are to be provided with Development Applications, incorporating the following measures:

11.1. Adopt a best practice water sensitive design approach, focusing on preventative and source controls where possible.

11.2. Provide rainwater harvesting and bio-filtration swales as part of overall stormwater strategy (where deemed appropriate). Residential accommodation to achieve water efficiency targets as required by BASIX.

11.3. Fuel storage tanks are to be designed according to authority requirements including double skinned tanks.

11.4. All potential contaminants and their collection systems must be located so they are adequately protected from entering the lake during a 1 in 100 year flood event, plus sea level rise. This includes, but is not limited to, things such as fuel, oil separators and the like.

11.5. Implement a water quality monitoring program during construction and for three years of marina operation (for marina only).

11.6. Design and install sediment and erosion control structures during construction according to an erosion and sediment control plan.

11.7. Incorporate overland flow paths as necessary.

11.8. In addition to the above, the following broad stormwater management strategies should also be considered:

11.9. Reduce the extent of paved surfaces to maximise landscape opportunities. The reduced impervious services minimises the impact upon the catchment hydrology and reduces potential sources of waterway pollutants. Additionally, source controls including rainwater harvesting, gross pollutant traps and bio-filtration swales are to be proposed as part of an overall water quality strategy.

11.10. Consider acid sulphate soils management, in line with a management plan, in design and construction methodologies.

11.11. Consider groundwater implications in design and construction methodologies.

11.12. Helipad is to include first flush treatments and/or bunding as described in the Environmental Assessment (MOD 3) dated November 2016 prepared by ADW Johnson.

11.13 Suitable operational management procedures for the Helipad, as identified in Principle 15, are to be incorporated including but not limited to inspections of the helipad, integration of the helipad into the wider marina pollution and incident management system and availability on site of spill kits and emergency containment booms

PART B: SITE PRINCIPLE 12

12 FLOODING

Ensure that the proposed buildings consider and design for the effects of flooding.

Objective

Locate buildings above flood level, with flood level to be determined with regard to sea level rise through climate change.

Guidelines

12.1. Flood planning levels have been devised taking into account frequency, still water level, wave action, potential climate change impact and design life of various components of the site.

12.2. In complying with Lake Macquarie City Council's (LMCC) *Waterway Flood Risk Management Study and Plan (June 2012),* the proposed minimum flood planning levels, which include a 500mm freeboard, are:

- On-grade marina car park: 1.23m AHD
- Marina office, shops and commercial: 2.36m AHD.
- Hotel foyer and hotel/marina/other uses car park: 2.36m AHD
- Tourist hospitality basement car park entry: 2.82m AHD
- Restaurant: 2.82m AHD
- Accommodation habitable floor levels: 2.82m AHD.

12.3. Where necessary, Development Applications relating to the tourist hospitality precinct (including the parking underneath the podium) and marina components of the project are to document broad sea level rise adaption measures and strategies available and how they have been, or can be, incorporated for the undercroft car parking, this includes a flood gate in one location to provide adequate protection whilst facilitating a desirable pedestrian connection between the car park and land uses.

12.4. Appropriate evacuation strategies and draft evacuation plans across the marina and tourist hospitality precinct are to be prepared and submitted with relevant development applications. Flooding in Lake Macquarie is governed by long duration rainfall events, hence a 2 to 4 day time to peak would be expected. Allowing sufficient time for flood preparation and excavation measures to be undertaken.

12.5. Minimum flood planning levels must be consistent with Council's *Lake Macquarie Waterway Flood Risk Management Study and Plan,* June 2012, or as amended or replaced from time to time.

Adaptive Management in Response to Climate Change

12.6. Evacuation routes to be defined above the anticipated PMF level in 100 years.

12.7. Adoption of shorter design life for structures with adaptive capability and higher acceptable flood risk such as marina piles and marina access walkways. Piles can be extended to accommodate rising sea levels and therefore flood levels over time.

PART B: SITE PRINCIPLE 13

13 SERVICES & WASTE MANAGEMENT

To provide adequate utility infrastructure including provision for handling waste to cater for the demands of the development.

Objective

Comply with the requirements of utility and waste collection authorities.

Guidelines

Development applications are to incorporate the following measures:

13.1. Utility infrastructure including water, sewer, electricity, telecommunications and gas is to be extended to the site.

13.2. Services and waste collection points to be supplied throughout the development.

13.3. Waste for the tourist hospitality precinct is to be collected from the loading bay at the northern end of the site, as well as internally within the basement car park.

13.4. Waste from the tourist residential accommodation precinct will be collected from the internal accessway within the accommodation zone.

13.5. Provide adequate on-site storage opportunity for waste and recycling streams commensurate with the land use types and provide adequate arrangements for regular collection (including marina).

13.6. All chemical and fuel storages are to be designed and operated in accordance with Information Sheets 5 and 6 DECC's Environmental Action for Marinas, Boat sheds and Slipways (June 2007).

13.7. A waste management plan to be prepared to address the building construction and operational phases of development.

13.8. Full details will be provided in any future waste management plans for specific areas.

PART B: SITE PRINCIPLE 14

14 MARINA

To provide a Marina

Objective

Having regard to the contextual analysis undertaken, the proposal aims to take advantage of the Lake for the purposes of promoting tourism to the region. This site presents that opportunity, given limited environmental constraints and impacts (no dredging required, no significant impacts on sea grass or marina species and the like) together with the unique chance to combine it with a land based marina and tourism component.

Guidelines

14.1. Stage 1 of the marina (divided into substages 1a and 1b) will consist of a maximum of 94 berths with part of the floating breakwater as required. Subsequent stages of up to 94 additional berths may proceed subject to a range of strict assessment triggers to be outlined in any Concept Plan or subsequent approval (see also Principle 19). Other land based marina functions will also occur without being limited to specific staging of the water-based marina.

14.2. The proposed 188 berth marina being constructed in stages (up to 5 stages across the full marina with a 94 berth 'hold point' as defined in the Concept Approval) as conceptually identified in Figure 62 and being designed to meet AS 3962-2001 "Guidelines for Design of Marinas".

14.3. The proposed Marina will provide for boats predominantly up to a maximum length of 20m, with the option to provide up to two berths for boats between 20-30m length with a maximum draught of 1.9m generally in locations as shown in Figure 63. No dredging is permitted to facilitate the berthing of any vessels

14.4. NOTE: The berthing of boats with a draught in excess of 1.9m in the locations identified in Figure 63 in Principle 14 may be permitted if it can be demonstrated that these vessels can safely pass through the Swansea Channel.

14.5. The proposed Marina will be connected to the shore based components in a manner than does not unreasonably restrict public access along the foreshore. Structures crossing the narrow fringing seagrass, to be constructed with open grating to limit shading impacts.

14.6. The proposed Marina to be protected by an outer floating Breakwater

14.7. The proposed Marina is to include a landward floating boardwalk parallel to the foreshore. That boardwalk and its connections to the foreshore, are to be publicly accessible.

14.8. Marina arms to consist of floating pontoons.

14.9. Provision being for casual public berthing (as part of each stage including temporary provision in Stage 1a) and provision made for occasional berthing of tourist boats on outside eastern edge of the breakwater. This berthing is in addition to the maximum 188 berths of the marina and can be under the care and control of the marina but to be made available for casual public berthing

14.10. Vessel exclusion zone to south of southern breakwater to protect extensive sea grass areas, if required by authorities.

14.11. Berths to be provided with water, power and lighting services.

14.12. Marina to include required fire fighting equipment plus public fuel and sewage pump out within Stage 1a. Double skinned fuel storage tanks to be provided on land.

14.13. Maximum draughts for the fuel facility are to be communicated with marina information and signposted on the wharf.

14.14. No dredging required with marina designed to existing water depths, with tubular steel piles used throughout construction to reduce seabed impact.

14.15. Associated land based facilities including marina facilities and services and service infrastructure, as well as mixed use development and parking (refer other components of Concept Plan, including flood planning). At grade marina carpark forms part of concept approval, replacing the deleted vessel hardstand and repair/ maintenance facilities.

14.16. A water quality monitoring program is to be developed for the construction phase of the water and land based marina development.

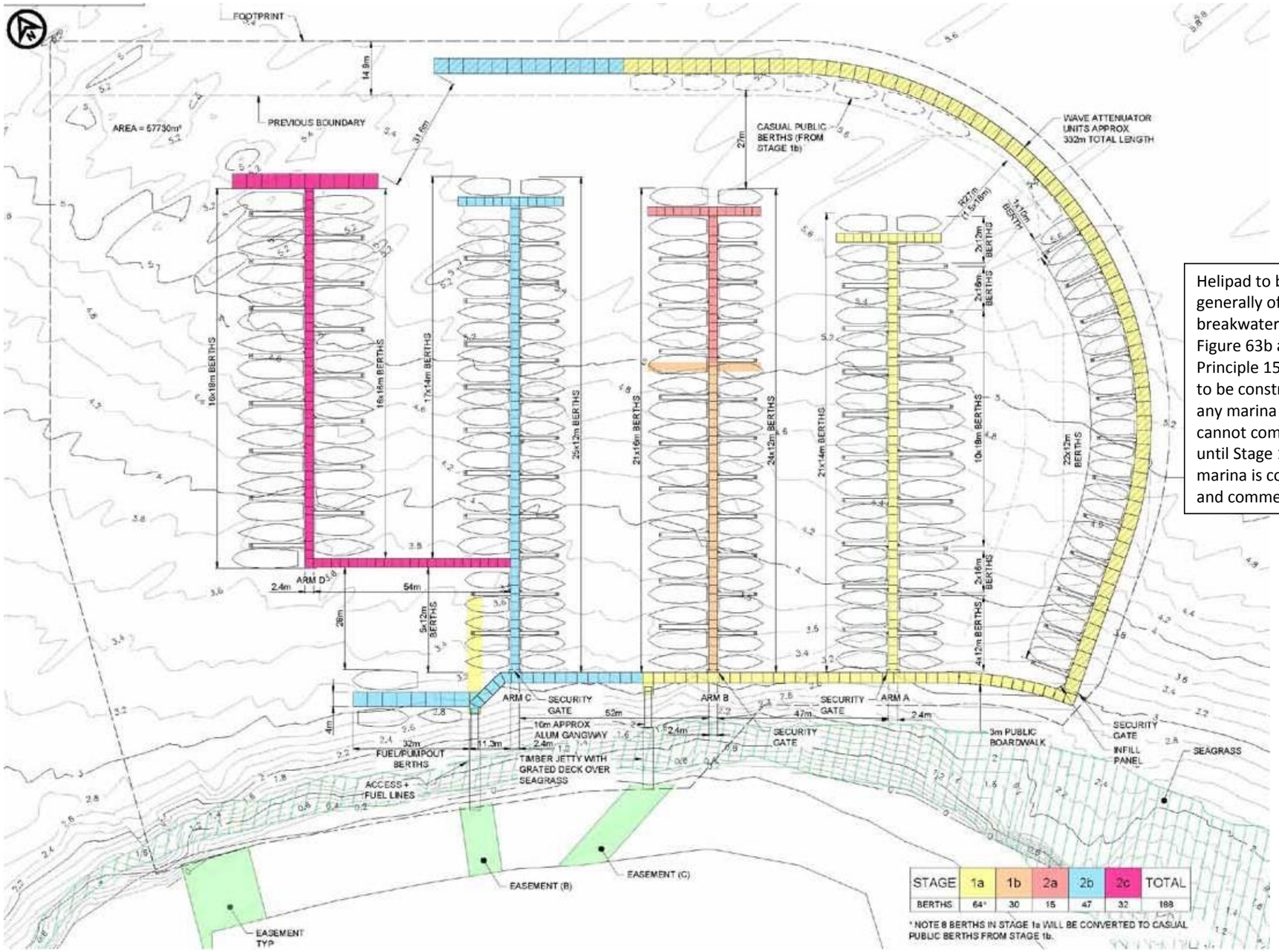
14.17. Construction Environmental Management Plans are to be prepared (water quality, erosion and sediment, noise, acid sulphate soil management and the like).

14.18. Operational Environmental Management Plans are to be prepared, to also include operational management of the facility.

14.19. (Note: In the event of an inconsistency between this Principle and other site principles, this Principle 14 prevails).

14.20 A helipad and associated structures, connected to the marina as shown in Principle 15, may be constructed at any stage of the marina, but cannot commence until the first stage of the marina is constructed and commenced.

14 MARINA

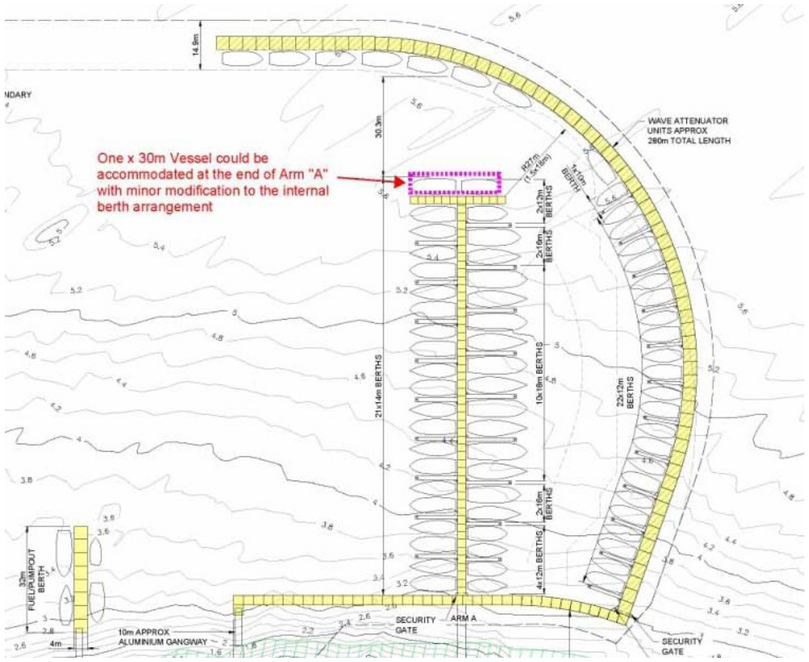


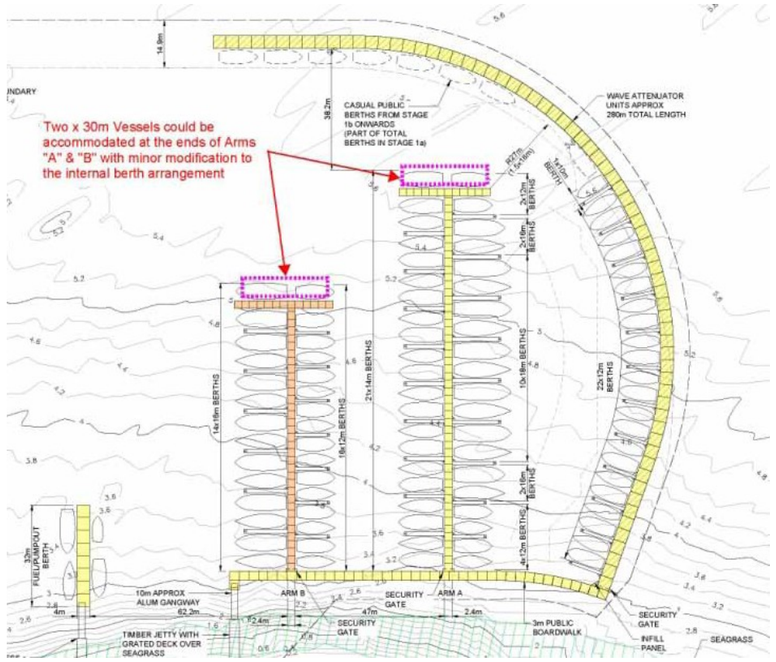
Helipad to be located generally off breakwater as per Figure 63b and Principle 15. Helipad to be constructed with any marina stage, but cannot commence until Stage 1a of marina is constructed and commenced.

Figure 62
Concept Marina and Staging
(refer also Principle 15 for Helipad)

14

MARINA





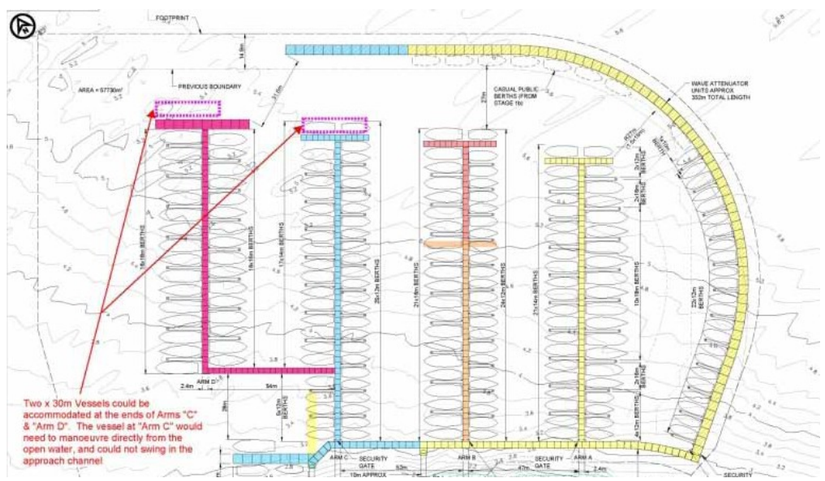


Figure 63

Potential Berths for Vessels 20-30m length across marina staging

DESIGNATED HELICOPTER TAKE OFF AND LANDING AREA

EXCLUSION AREA FOR TRINITY POINT HELIPAD

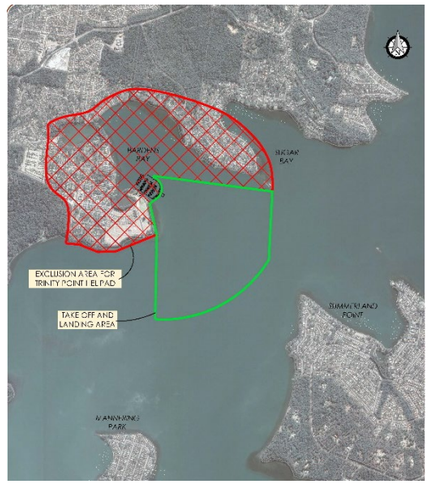


Figure 63b

Proposed Helipad (refer also Principle 15)

15 HELIPAD

To provide a controlled helicopter landing site attached to and operated in conjunction with the marina.

Objective

To support Trinity Point as a regional destination and promote additional capture of the visitor economy, whilst minimizing impacts to the immediate community around Bardens Bay and users of the wider Lake.

Helicopter Types:

Bell 407
Bell 206B
Bell 206L
McDonnell Douglas MD 500 C/D/E
Airbus H125
Airbus 120
Airbus 130
AS 355F
Agusta Westland AW109

Guidelines

15.1 A Helicopter Landing Site (HLS) may be attached to the south-western side of the marina breakwater, clear of seagrass beds and not extending beyond the marina footprint to the north-east. The HLS has been sited to enable flight paths over water and to cater for different wind conditions.

15.2 Any HLS is to be limited to a maximum of six (6) movements per day (ie. 3 landings and 3 departures) and a maximum of 38 movements per week (ie. 19 landings and 19 departures). No movements are to occur before 8am (Mon-Sat) and 9am (Sun, public holidays). No movements are to occur after sunset, and all night use is prohibited.

15.3 Use of the HLS is to be limited to the list of helicopter types (or type equivalents including any derivatives), that do not exceed the weight and size limitations of the HLS as listed, the maximum of which is the Agusta Westland AW109. Joyflights from the HLS must be precluded. Use of the HLS by Robinson R22/44 helicopters (or equivalent) are precluded.

15.4 No helicopters using the HLS are to fly within the exclusion area (at any height) as shown in Figure 63c.

15.5 All helicopters must land and take-off within the designated take off and landing area.

15.6 Use of the HLS is to be strictly by “Prior Permission” only protocol, which requires pilots and users of the HLS to receive, review and agree to the terms of the prior permission, including the type of helicopter able to use the HLS, use only of the approved take off and landing area as shown in Figure 63c, movements to meet ’fly neighbourly’ procedures (including no fly within the exclusion area), operating hours and safety procedures.

15.7 If a pilot determines that wind or other conditions do not allow safe movement confined to the designated take-off and landing area, helicopters must not undertake the movement. Pilots are to check weather and wind conditions prior to movements. An on site weather station is to be installed, with staff trained to communicate weather data to pilots prior to landing and take-off.

15.8 Pilots are to be advised that helipad operations occur within a marine environment, in which watercraft may be present at any time. Other water users are to be avoided when within the designated take-off and landing area and outside the nominated safety management areas and where, in the opinion of the pilot, they present an obstacle to safe flight movement or would create a hazard, including due to rotor downwash, to those other water users. If a pilot determines that they cannot undertake a safe movement relative to obstructions or other water users confined to the designated take-off and landing area, helicopters must not undertake that movement. The need to avoid boats within the marina and any other water users is relevant also for any emergency procedure relating to forced landings.

15.9 Design of the HLS is to be conceptually as shown in Figures 63d-f, generally being a floating pontoon of size and standard to meet the requirements of ‘Guidelines for the establishment and operation of onshore Helicopter Landing Sites’ CAAP 92-2(2). Additionally, water quality measures are to be included into the design that prevents runoff of any accidential spills direct into the lake.

15.10 Installation of piles and construction of the helipad are to be undertaken to minimise construction impacts.

15.11 No refuelling and no maintenance of helicopters is permitted.

15.12 During landing and take-off only, access control is to be provided over part of the marina breakwater and part of surrounding waters that sits within a minimum managed safety zone of 30m around the HLS, or otherwise as required for helicopter downwash management and to a radius of 66.5 metres from the centre of the helipad, where within the approved take off and landing area, generally as shown on the concept plans. Helicopter downwash management and procedures are to be included in a helipad operations manual (HOM) in order to manage impacts of helicopter operations and downwash on watercraft.

15.13 A helipad operations manual (HOM) is to be prepared and approved prior to commencement of use of the HLS. This is to identify operational parameters for the helipad, include a prior permission protocol, establish a noise management and monitoring plan, require a method of recording flight track information, establish safety management protocols and include appropriate emergency response and containment procedures and equipment, which can be linked into those associated with the marina operation.

15.14 A register and flight movement log is to be maintained that logs all prior permissions granted and movements to and from the HLS, including dates, times, types of helicopter used, wind condition and flight path. A copy of the register shall be kept for two (2) years and provided to approval bodies on request. The HOM shall include a reporting and review procedure that describes activites, summarises any complaints, outlines monitoring results, provides comparisons against approvals and predictions, and identifies and analyses any issues, for distribution to approval bodies.

15.15 A complaints management and communications protocol is to be prepared prior to commencement of use of the HLS and included in the HOM.

15 HELIPAD

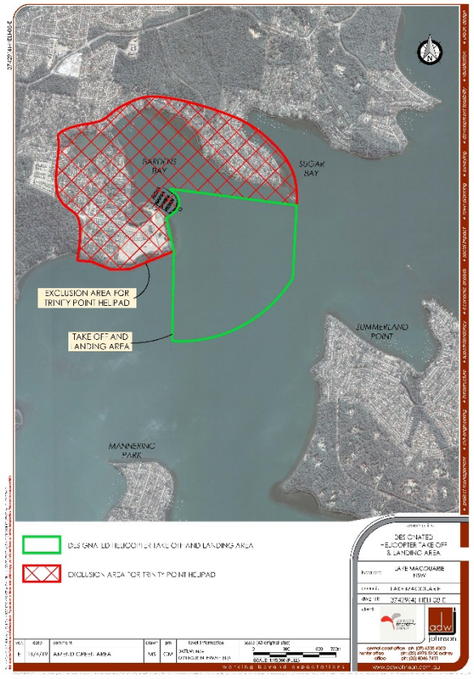


Figure 63c - Exclusion Area and Take Off and Landing Area

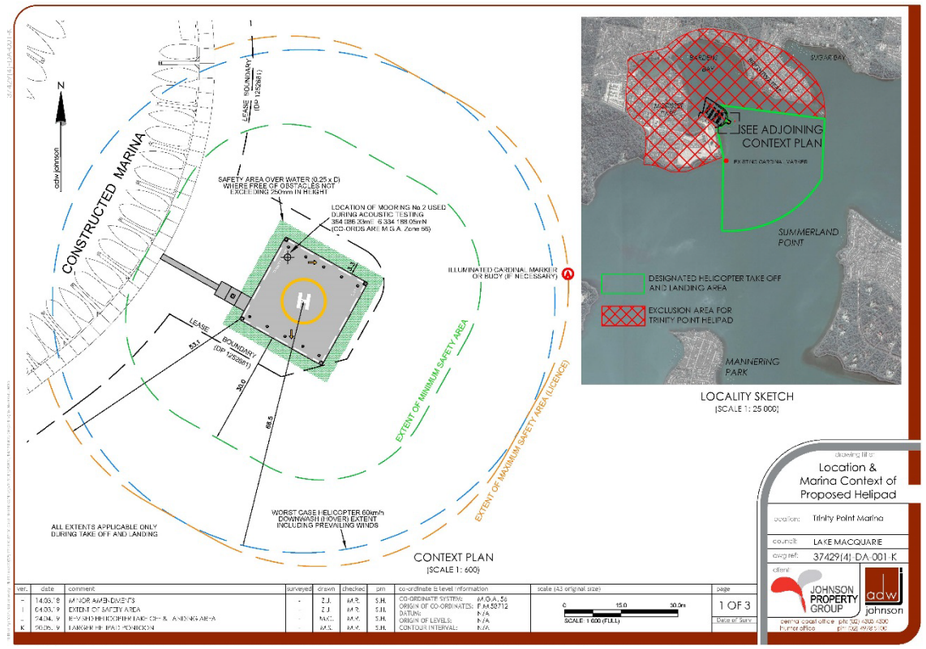


Figure 63d - Proposed Helipad

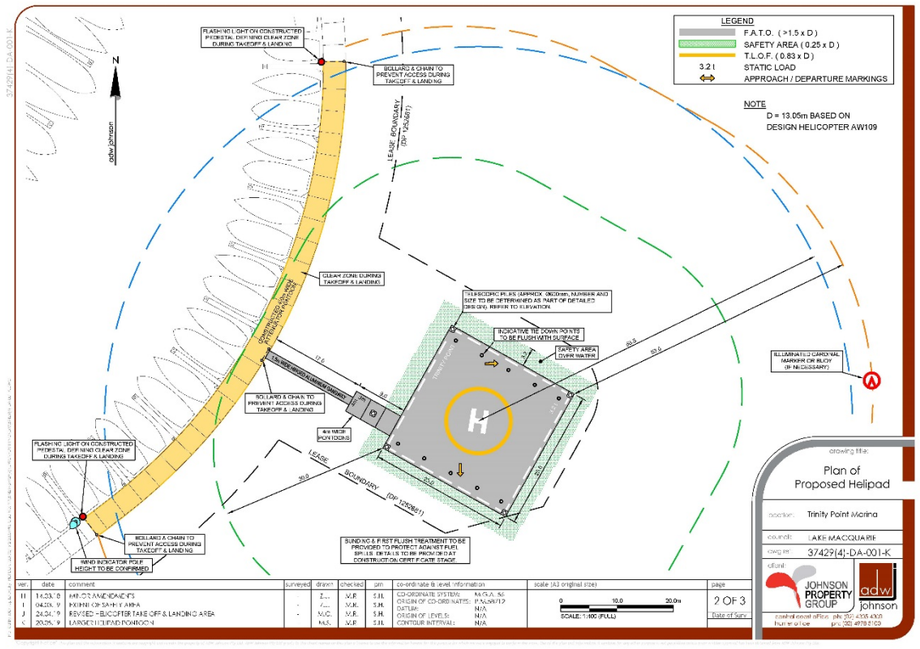


Figure 63e - Concept Helipad Design

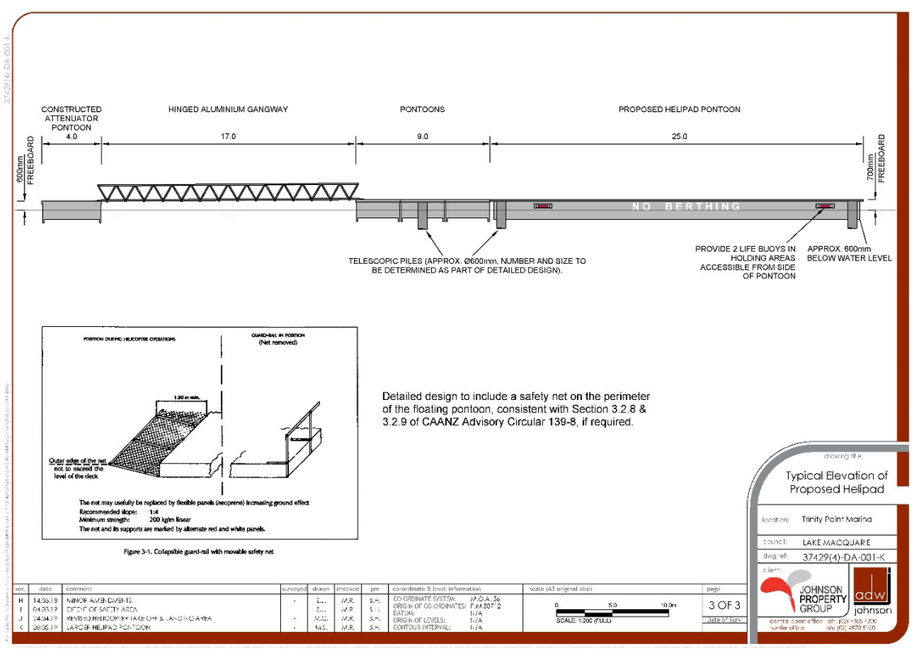


Figure 63f - Concept Helipad Elevation

PART B: SITE PRINCIPLE 16

16 ACOUSTICS

Ensure that the proposed development does not have an unreasonable acoustic impact on the surrounding locality and on future occupants of the site.

Objective

The proposed development to comply with relevant standards for the emission of noise.

Guidelines

Proposed development is to incorporate the following measures:

16.1. The general EPA criterion of background + 5 dB(A) when measured as an Leq level over 15 minutes at any residential boundary is a standard noise criterion used and will apply to this development; this background + 5 dB(A) criterion is commonly identified as the EPA's "intrusive noise" criterion and will cover all noise emitted from the operations of the development. The intrusive criterion will cover mechanical plant noise.

16.2. Due to the intermittent nature of noise from the construction of the development the EPA's relevant Construction Noise Criteria will be adopted for the development.

16.3. The noise limits for construction noise requires extensive noise control measures to be maintained throughout the construction phase of the development with on-going noise and vibration monitoring to occur and the provision of a dedicated noise complaint hotline.

16.4. The NSW Road Noise Policy will be applied to all traffic generating developments.

16.5. As part of an overall acoustic control the proponent will be required to produce a Noise Management Plan that provides self-imposed noise control measures.

16.6. Whilst the Concept Plan has indicated preliminary acoustic concepts for the development and has been modified during the construction process to address some of the acoustic issues, the actual controls that will be incorporated into the development have yet to be finalised, due to the concept nature of the application.

16.7. A Construction Noise and Vibration Management Plan is to be prepared prior to construction activity commencing.

16.8. An Operational Noise Management Plan is to be prepared for relevant components of projects as a condition to subsequent development consents.

Noise assessments which accompany the marina project component (those which are covered by the need for an Environmental Protection Licence) are to specifically provide data analysis on the assertions relating to ambient noise, explain differential between day and evening / night periods, justify vessel sound power levels used, include a sleep disturbance assessment and consider noise from refuelling and sewage / sullage pump out operations..

PART B: SITE PRINCIPLE 17

17 SUSTAINABLE DEVELOPMENT

To ensure that the proposed development adopts appropriate sustainability measures.

Objective

The proposed development is to minimise its impact on the environment by adopting sustainable design that includes the built form as well as energy efficiency and greenhouse gas minimisation during the design, construction and operational phase of the development.

Guidelines

Proposed development should incorporate the following sustainable practices and measures:

17.1. Relevant components of the proposed development are to be designed to meet the orientation, solar access, sun protection and cross ventilation principles of SEPP 65.

17.2. Relevant components of the proposed development being designed to meet the requirements of Section J of the Building Code of Australia.

17.3. Relevant components of the proposed development meeting the requirements of BASIX and the relevant certificate being included with the development application for each stage.

17.4. The proposed development being designed and operated to minimise the emission of greenhouse gases.

17.5. The proposed development complying with the stormwater harvesting and re-use requirements of relevant requirements.

The proposal aims to minimise its impact on the environment by adopting the following sustainable design practices:

17.6. Optimising building orientation to maximise access to natural light and sunlight where desired

17.7. The design and incorporation of sun shading elements such as the considered placement of overhangs

17.8. Rainwater harvesting

17.9. Bio-swales

17.10. Maximising cross ventilation through the buildings

17.11. Section J compliance to be achieved at Construction Certificate stage

17.12. The use of low maintenance materials

17.13. Optimising thermal efficiency through the considered selection of materials and finishes

17.14. Extensive landscaping and deep soil throughout the site

17.15. Natural ventilation to the basement car park where possible

17.16. Sustainable disposal and waste management of construction materials

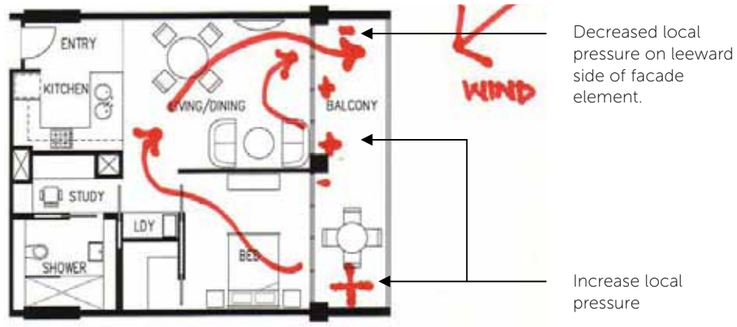


Figure 64 - Single Aspect

Reference: Steve King, *Optimising ventilation and solar access*, NEERG Seminars.

Variations in facade pressure distribution and the resultant ventilation patterns. The illustration is of a typical south facing one-bedroom unit on an upper floor, subject to southerly summer winds relatively common in Sydney. Cross ventilation is achieved in single aspect apartments through the use of recesses and protrusions in the facade.

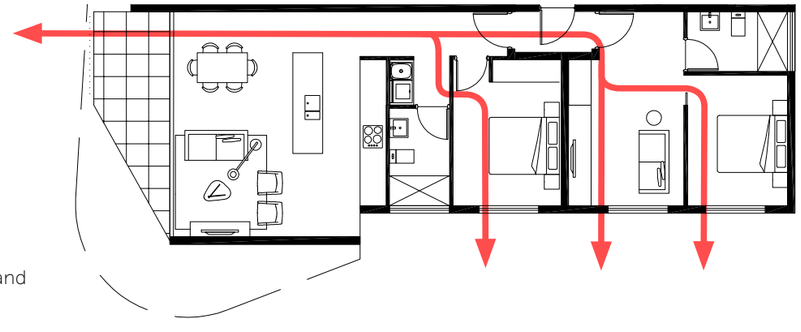


Figure 65 - Dual Aspect

Dual aspect apartment showing cross ventilation paths.

17

SUSTAINABLE DEVELOPMENT

Figure 66

Potential arrangement of single and dual aspect apartments on a typical accommodation floor. All apartments achieve cross ventilation.

Single aspect apartments achieving cross ventilation.

Dual aspect apartments achieving cross ventilation.

17

SUSTAINABLE DEVELOPMENT

Dual use permanent and short stay residential apartments receiving 3 hour solar access requirements.

Dual use permanent and short stay residential apartments receiving 2 hour solar access requirements.

Figure 67
Potential Arrangement of apartments satisfying 3 and 2 hour solar access requirements.

18 INDIGENOUS & EUROPEAN HERITAGE

To incorporate appropriate Indigenous and European heritage management.

Objective

To minimise impacts on Indigenous and European heritage values and maximise opportunities to reinforce and interpret those values.

Guidelines:

INDIGENOUS HERITAGE

Community Consultation

The ongoing consultation and involvement with the development of the project shall be carried out with the Aboriginal community as represented by the Biraban and Bahtahbah Local Aboriginal Land Councils and the Awabakal Descendants Traditional Owner Aboriginal Corporation and the Awabakal Traditional Owner Aboriginal Corporation as primary stakeholders. Additional stakeholders may be availed of information as requested, and their opinions documented in the Aboriginal Heritage Management Plan.

Aboriginal Cultural Heritage Management Plan (ACHP) and Heritage Interpretation Policy

Development is carried out in accordance with an Aboriginal Cultural Heritage Management Plan and an Interpretation Policy prepared for the whole site. It shall be prepared by the proponent.

The Aboriginal Cultural Heritage Management Plan is to be a guiding document that outlines required policies and procedures. The Heritage Interpretation Policy is to be prepared and detailed to enhance the Cultural Heritage Management Plan. They are to be prepared to meet the following criteria:

18.1. Developed in conjunction with the Aboriginal community and be based on historical data, cultural knowledge and archaeological evidence specific to Trinity Point;

18.2. Provide procedures for ongoing Aboriginal consultation and involvement and management of any recorded sites within the Concept Plan area;

18.3. Provide the framework for further archaeological investigations and/or salvage projects prior to impact and provide the framework for identification and management of previously unrecorded sites (excluding human remains);

18.4. Provide a framework for the interpretation of the Aboriginal values and heritage of the site to the general public, for incorporation into overall site interpretation and into development details. This may be presented in different ways including interpretation/history devices and the display of artefacts in secure cases included within the development's interpretation/landscape strategies.

18.5. Specify policies and actions required to mitigate and manage impacts of the proposal on Aboriginal heritage;

18.6. Provide policies and measures for active conservation of in-situ deposits in the foreshore setback where possible;

18.7. Be based on the recommendations of the Insite 'Trinity Point Marina Mixed Use Development Morisset Peninsula NSW, Archaeological Assessment' 30 October 2008;

18.8. Provide measures for providing interpretation within the publicly accessible areas and protect parts of the lake foreshore land from additional increased visitation;

18.9. Clarify the proponent's and future owners' responsibilities, financial obligations and commitments to implementing the ACHP and Interpretation Policy;

18.10. Include timeframes for implementation of the developed policies of the ACHP for various stages of the project.

Onsite Heritage Interpretation and Management

The foreshore pathway:

18.11. Provide controlled public access and Heritage Interpretation primarily on site away from the more sensitive south-eastern lake shore, where sensitive aboriginal features have been observed. This is to allow them to remain in-situ without development impact. Any proposals within the reserve in those locations will be subject to additional impact assessment including measures to provide additional access control.

18.12. Retain the siting of the proposed foreshore pathway for public access within the Concept Plan / tourism zoned land on the south-eastern lake shore to address community concern about impacts of increased visitation to the sensitive foreshore edge.

Building Setback:

18.13. Provide setback of buildings from Bluff Point to allow for space to enable some preservation of in-situ deposits, and as space for interpretation.

18 INDIGENOUS & EUROPEAN HERITAGE

Salvage Excavations

18.14. Salvage excavations are to occur where there is potential for intact deposits to remain and where development footprint is to occur. This is to be limited to an additional 50m^2 in two 25m^2 excavation areas. Whilst the deposits will not be stratified, the analysis of those excavations in combination with others in the adjoining residential subdivision can provide a landscape analysis of the site for use in the recommended Interpretation Policy. It will add valuable information to the archaeological record of the Lake Macquarie Area.

Grader Scraps

18.15. Grader scraps prior to topsoil stripping and earthworks, only in the northern part of the site, is to be undertaken by the Aboriginal community or as determined through AHIP process. Any artefacts found during this monitoring and in the salvage excavations are to be recovered for relocation by the Aboriginal community in accordance with DECC guidelines.

Site Protection

18.16. Measures of precaution shall be implemented by the proponent to include precautions within the development proposal to ensure the recorded sites in the lake shore area are not impacted, destroyed or damaged by construction works regardless of ownership or management of the land.

NON-INDIGENOUS HERITAGE

Development is carried out in accordance with an adopted Heritage Interpretation Policy and Implementation Plan and for the whole site the subject of this Concept Plan. It is to be prepared by the proponent and is to address the proponent's and future owners' responsibilities, financial obligations and commitments for implementation of these policies.

Heritage Interpretation Policy

18.17. An Interpretation Policy and Implementation Plan and Management Plan is to be prepared by the proponent and adopted, drawing from the information in past historic research and heritage / archaeological assessments and investigations. The interpretation policy is to provide a framework for interpretation of the European use of the site to the general public, for incorporation into overall site interpretation and into development details.

18.18. Interpretation of the grotto and the stone base sundial near Bluff Point is to be included in this policy and its management strategies.

Earthworks

18.19. Monitoring of particular earthworks is to occur in the southern part of the site in the general area of the Bailey residence to record any peripheral infrastructure.

18.20. A management plan is to specify measures for in-situ conservation and management of the grotto and the stone base sundial near Bluff Point and specify protective measures whilst development is occurring within their vicinity.

Landscaping

18.21. Existing cultural planting near Bluff Point are to be retained and managed. Interpretation of these cultural planting is to be incorporated. This is to be addressed in the Interpretation Policy.

PART B: SITE PRINCIPLE 19

19 STAGING, SUBDIVISION & MANAGEMENT

To ensure that any staging of the proposal protects key site outcomes.

Objective

To ensure that staging, subdivision, operation and management of the development is orderly.

Guidelines

19.1. The main components of the marina is to be developed in two main stages (across five substages), generally as described in Principle 14, being:

19.1.1. **Marina Stage One** – 94 private berths (completed in substages) on floating arms with the jetty connecting to the foreshore, fuel and pump out facilities and services, and the necessary component of the floating breakwater including casual public berthing. Stage 1 may also include service facilities (tanks and pumping stations), office, marina lounge, plus necessary access and car parking to cater for uses.

19.1.2. **Marina Stage Two** – 94 private berths (completed in substages) on floating arms, services, the additional component of the breakwater, and necessary access and car parking to cater for Stage 2 use. It is anticipated that any Concept Plan approval (and subsequent development consents) will specify the terms and requirements to enable construction of Stage 2 to proceed.

19.1.3. The above staging of the marina is not sequentially linked to staging of the remaining components of the land use proposal.

19.2. The remaining land based components are not subject to definite staging at this Concept Plan step as flexibility is sought. The following principles are to guide staging when it is proposed:

19.2.1. It is important to create the tourist hospitality precinct in an early stage and some of the activating land uses.

19.2.2. Staging of development for accommodation purposes is to be consistent with land use provisions as outlined in Principle 1 of this report. For example, in a staging sense, the cumulative number of residential accommodation units is not to exceed the cumulative number of tourist accommodation units (including hotel rooms) at any stage.

19.2.3. Whilst the public pathway, spaces and their improvements will be staged, it is important that each stage provides a temporary pedestrian circulation system back to the public road network until it is replaced by subsequent final works in subsequent stages.

19.3. Development Applications are to provide details on intended subdivision, titling, operation and management of the development, and link that into management of potential conflicts between on site uses and necessary management of other operational issues such as marina operation, noise management, public domain management and maintenance and the like.

19.4. Development application/s may be lodged addressing relevant design issues such as desired character and built form essentials. Where a development application is lodged for part of the site, the established principles are to be carried through the balance of the site in future applications. Overall theming across the site must be tied together through the design of external spaces and landscaping.

19.5. The Concept Plan principles present an integrated design solution for the total site. Their success will be reliant upon a commitment to the design intent in the detail of the development to produce a high quality and integrated built form and landscape. These principles should be reflected within individual precincts, built form groupings, between precincts created by the landscaping, access network and to external interfaces. It is not however anticipated that the solution must be incorporated into only one development application, instead, the ongoing integration of the core principles whilst allowing the project to seek approvals and development of discrete components of the project with a degree of flexibility should be emphasised.

PART C

INDICATIVE OUTCOME

SUMMARY FIGURE

APPROVED CONCEPT PLAN SUMMARY FIGURE WITH ADDITION OF HELIPAD

OCTOBER 2016