

SUNSHINE COAST
ENTERTAINMENT, CONVENTION
AND EXHIBITION CENTRE
AND SURROUNDING PRECINCT

DESIGN REPORT | 10 AUGUST 2011

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PART 1: PRECINCT

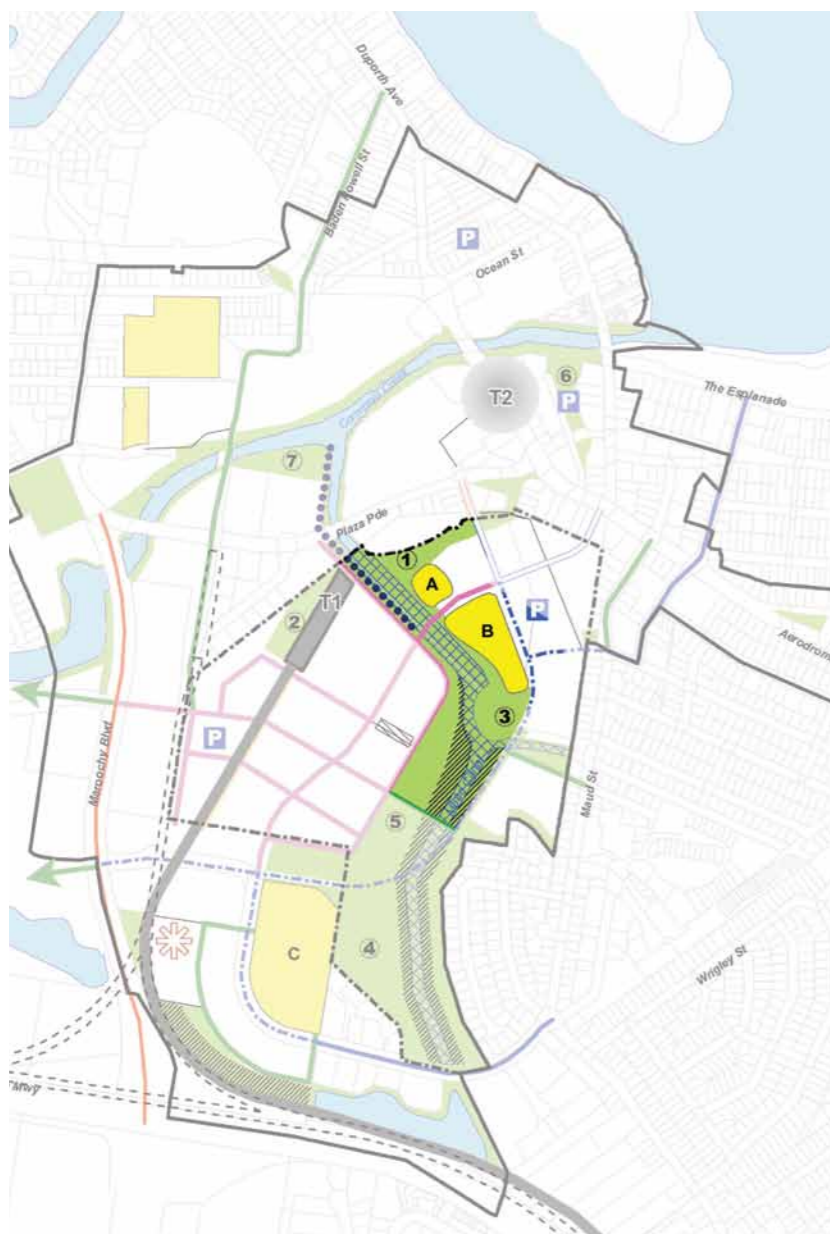
1.1 PLANNING CONTEXT

1.1.1 REGIONAL ENTERTAINMENT CENTRES

The Maroochydore Principal Activity Centre is the ideal location for a new regional entertainment centre. As this map shows, there are currently no regional entertainment centres in the north of the South East Queensland region. The Sunshine Coast Entertainment, Convention and Exhibition Centre will provide a much needed facility for the Sunshine Coast, Somerset and Morton bay regions, enriching the social and cultural experiences for residents in these council areas.



South East Queensland Region



Section of MPAC plan in this proposal



Section of MPAC plan in this proposal

Maroochy Plan 2000
A planning scheme for the future
Sunshine Coast Council

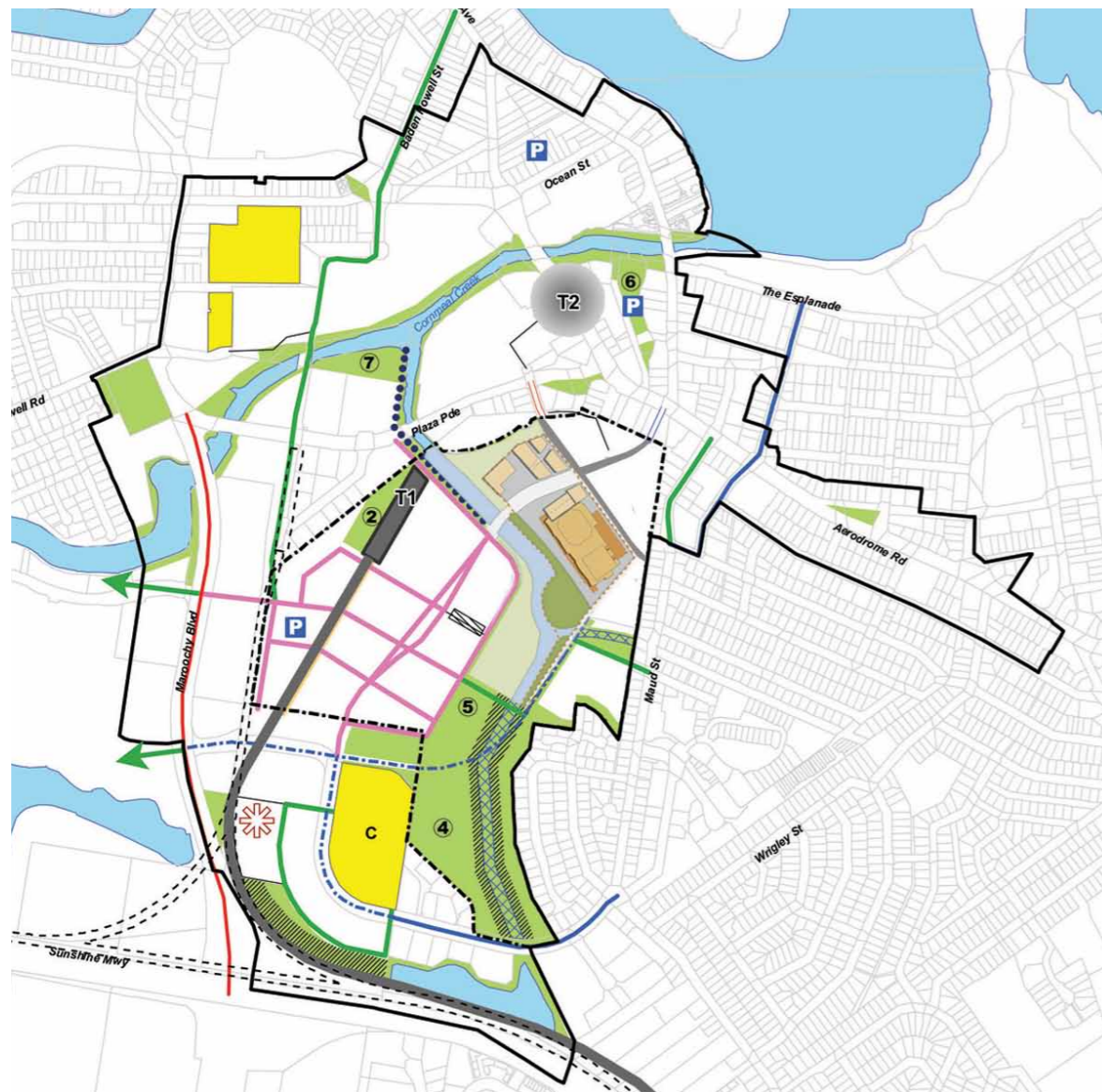
Map 5.3
Maroochy PAC
Master Planned Area
Major Infrastructure
Elements

Legend

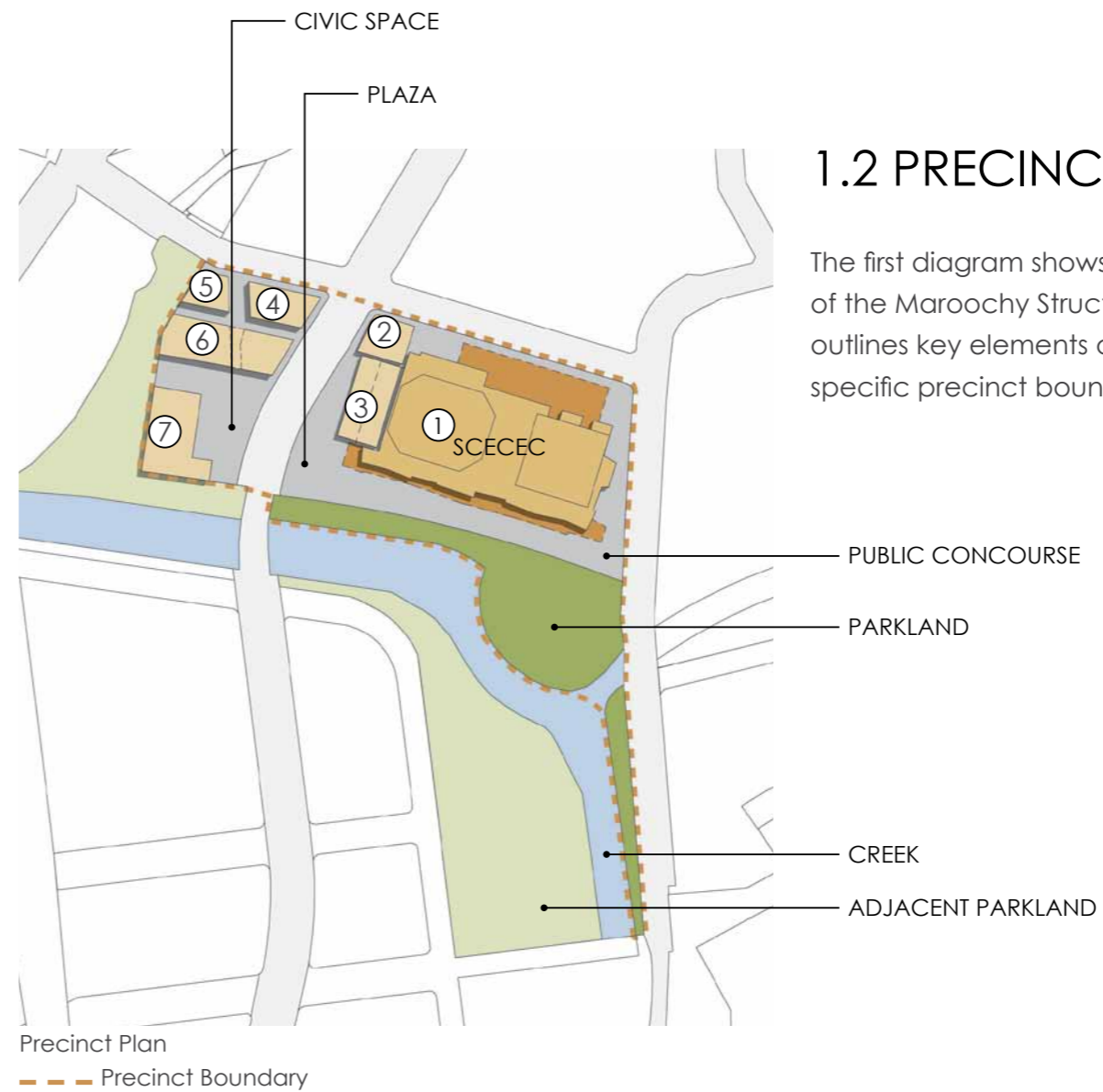
<ul style="list-style-type: none"> Maroochy PAC Master Planned Area Boundary Maroochy Central Precinct (Master Plan Unit) Boundary Cadastral Boundaries Major Urban Open Space Infrastructure Proposed Major Urban Open Space Infrastructure 1 Civic Plaza 2 Transit Plaza 3 Public Amphitheatre 4 District Recreation Park 5 Local Recreation Park 6 Conmeal Creek Plaza 7 Sunshine Gardens Major Community Facilities Infrastructure Community Facilities Land A Proposed Regional Library, Local Community Centre, Meeting Spaces and Administration Space B Proposed Regional Arts Centre C Proposed Regional Health Facility Major Public Transport Infrastructure Dedicated Transit Corridor (CAMCOS) Proposed Transit Corridor (under investigation) T1 Proposed Transit Station and Interchange (CAMCOS) T2 Transit Station and Interchange 	<ul style="list-style-type: none"> Major Road Transport Infrastructure Parking Facilities Road Transport Infrastructure Arterial Roads Highways / Motorways Arterial Road Arterial Main Street Sub Arterial Roads Distributor Road Controlled Distributor Sub Arterial Main Street Collector Streets District Collector Rail Corridor Collector Neighbourhood Collector Proposed Main Street Collector Local Streets Access Street / Access Place Major Stormwater Infrastructure Existing Waterway Proposed Waterway Existing and Proposed Stormwater Corridor Major Bicycle and Pedestrian Infrastructure Proposed Dedicated Pedestrian and Cycle Corridor Public Pedestrian Promenade Major Electricity Infrastructure Proposed Electrical Substation Site
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1.1.2 MAROOCHY PLAN 2000

The Maroochy Principal Activity Centre structure plan shows the precinct with two built sections, A and B, and parkland space. The adjusted precinct shows a slightly different orientation and arrangement of the same elements with the addition of A which represents the opportunity for a hotel or similar commercial venture.

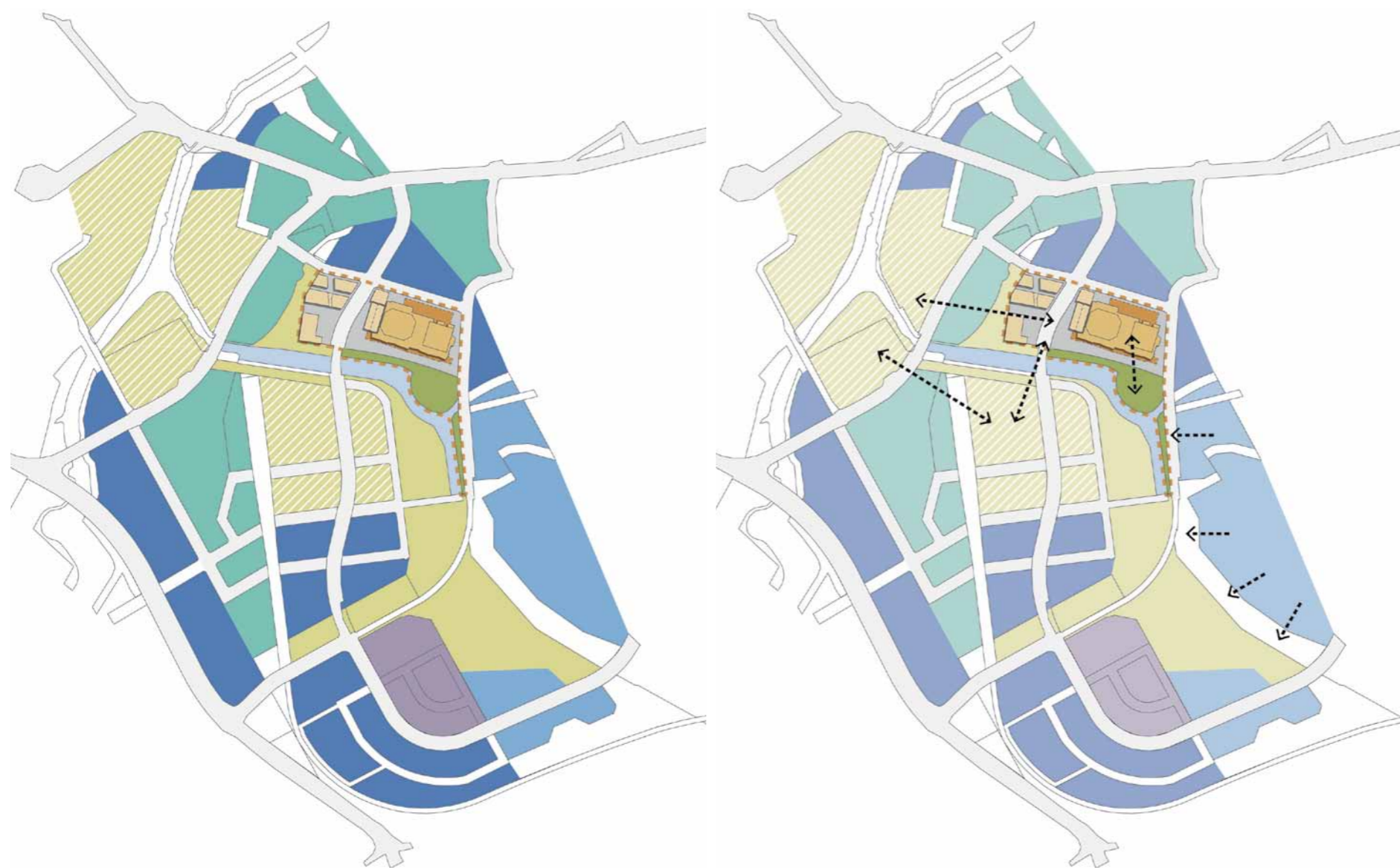


Precinct Plan within MPAC Plan



1.2 PRECINCT PLAN

The first diagram shows the precinct plan in the context of the Maroochy Structure Plan. The second diagram outlines key elements of the precinct plan and the specific precinct boundary.



Land Use Context

- MIXED USE AREA
- COMMERCIAL AREA
- RESIDENTIAL AREA
- MIXED USE RETAIL CORE AREA

- LOCAL AND STATE GOVERNMENT COMMUNITY FACILITIES
- URBAN OPEN SPACE AREA
- MAJOR LAND USE LINKS
- Precinct Boundary

Land Use Interactions

1.3 LAND USE CONTEXT

1.3.1 LAND USE CONTEXT

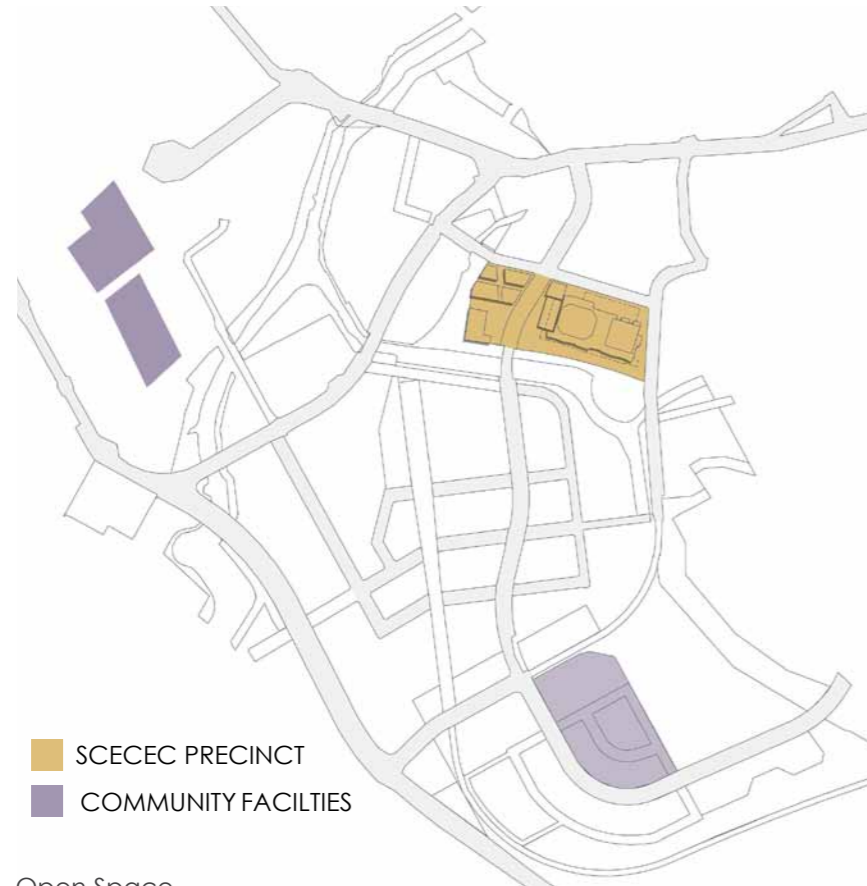
The proposed site is predominantly surrounded by mixed-use and commercial areas. Residential areas lie to the south east of the site, adjacent to the proposed parkland. (Refer to the Maroochy Plan 2000 - Map 5.2 for more detail).

1.3.2 SURROUNDING LAND USE INTERACTION

The precinct will be compatible with surrounding land uses and meet the following objectives:

- The Precinct must connect to and reflect surrounding mixed-use developments
- Provide clear connection to Sunshine Plaza in order to integrate new development into existing surroundings
- Provide clear connection between residential areas and parkland / open space
- Provide legible transition between SCECEC buildings and parkland / open space

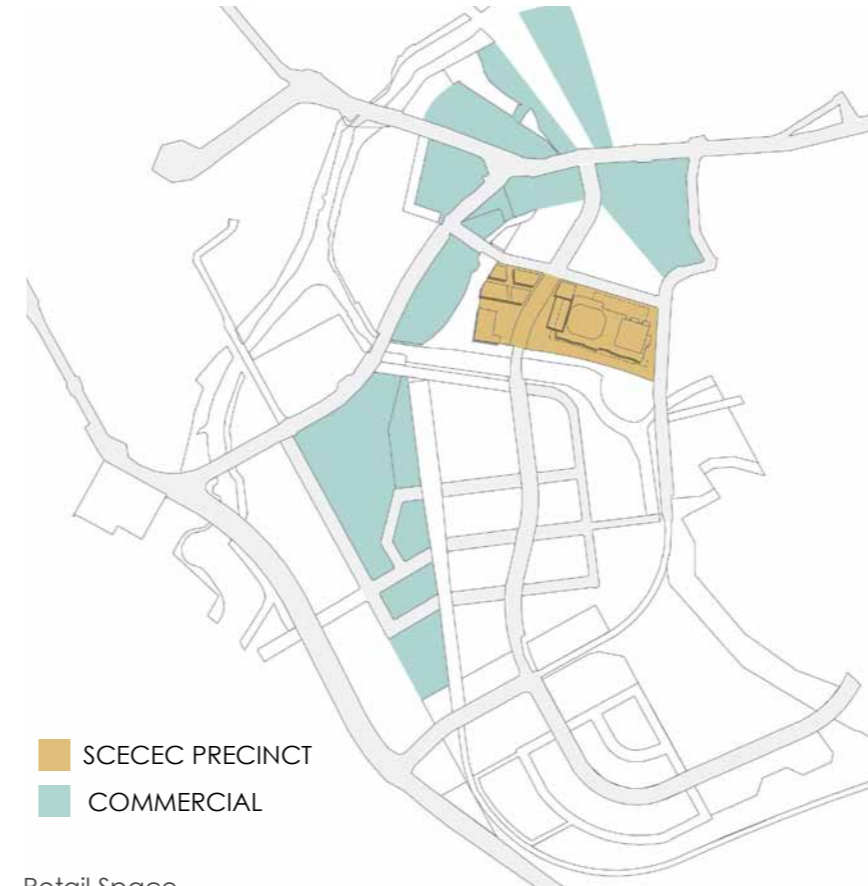
Community Facilities



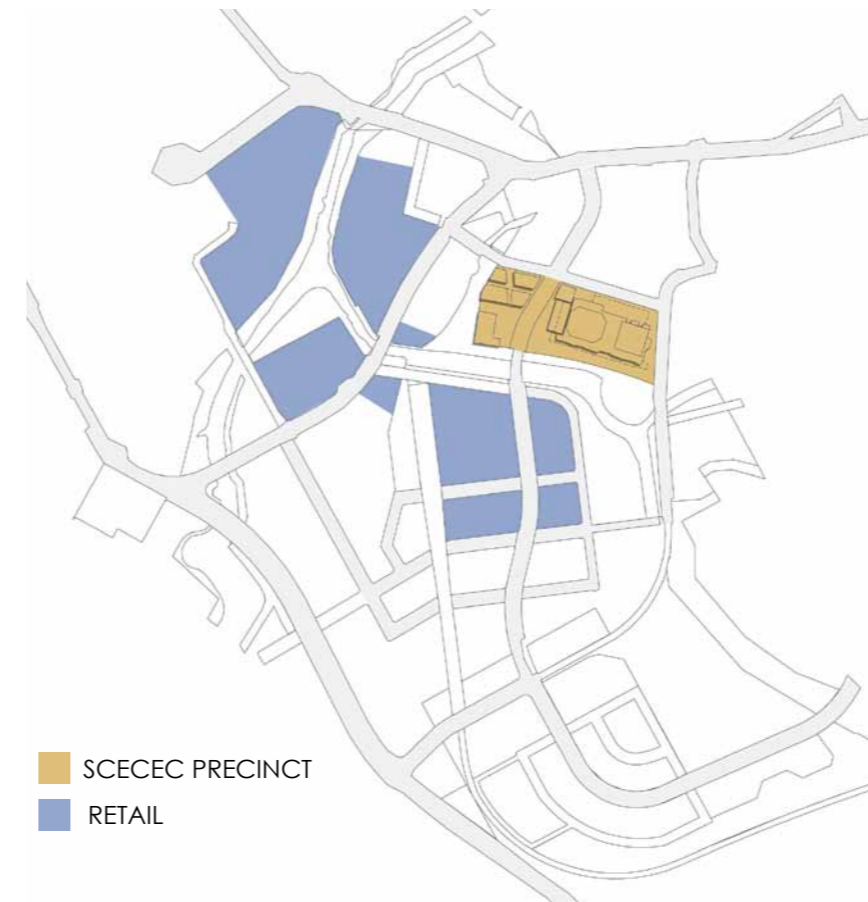
Open Space



Commercial Space



Retail Space



1.3.3 PLACE MAKING SUITABILITY – LAND USE

COMMUNITY FACILITIES

The community facilities within the SCECEC precinct create a much needed link between existing and proposed facilities in Maroochydore. The SCECEC precinct has the potential to become the hub of community and civic activities.

COMMERCIAL

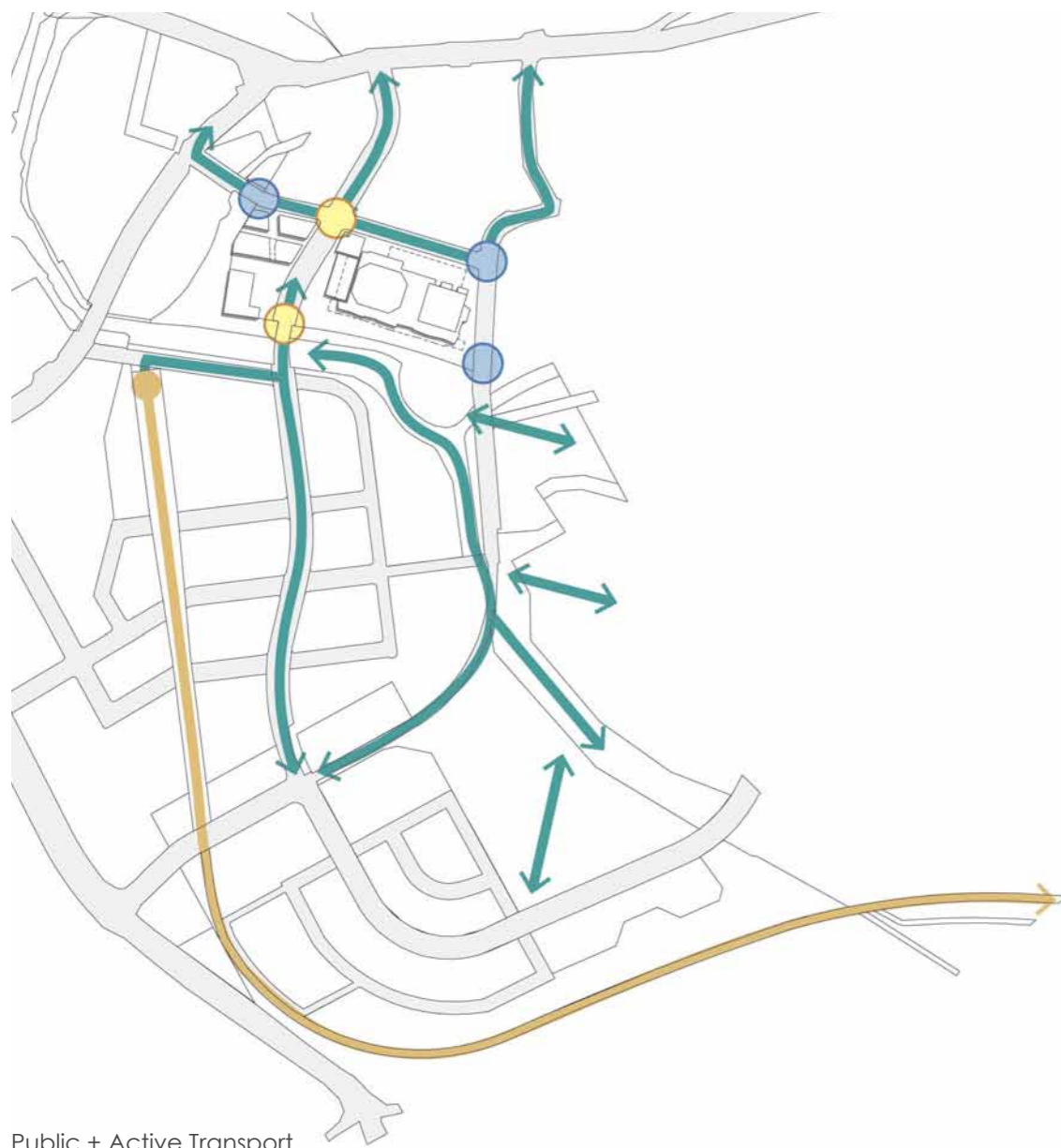
The SCECEC will be a positive influence on the commercial centres in Maroochydore. The SCECEC will generate a higher flow of people in and around the area, providing better opportunities for business owners.

URBAN OPEN SPACE

The SCECEC is located adjacent to proposed urban open space and parkland and along the urban open space corridor that runs through the heart of Maroochydore. Here it will be possible to use community facilities, enjoy the regional entertainment venue and relax in a park all within this precinct.

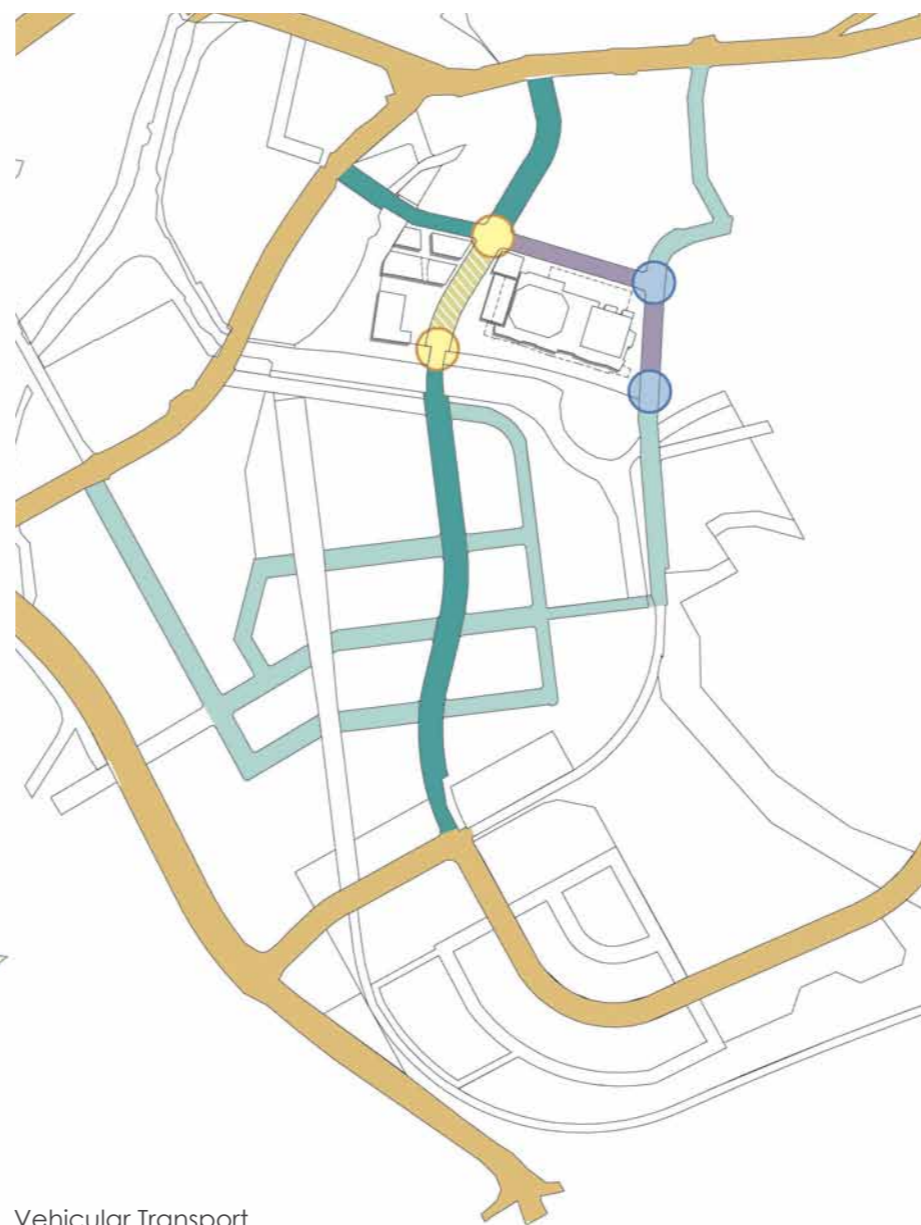
RETAIL

The proposed location of the SCECEC is in close proximity with surrounding existing and proposed retail centres. The civic and entertainment focus of the SCECEC precinct will enhance these centres, creating an active and lively urban environment in Maroochydore.



Public + Active Transport

- PRIMARY ENTRY POINT
- SECONDARY ENTRY POINT
- MAJOR PUBLIC TRANSPORT CORRIDOR
- ↔ ACTIVE AND PUBLIC TRANSPORT CIRCULATION



Vehicular Transport

- PRIMARY ENTRY POINT
- SECONDARY ENTRY POINT
- EXISTING MAJOR ROADS
- PROPOSED SECONDARY ROADS (MPAC STRUCTURE PLAN)
- PROPOSED MINOR ROADS (MPAC STRUCTURE PLAN)
- PROPOSED SERVICE/MINOR ROAD
- ▨ SLOW ZONE

1.3.4 PLACE MAKING SUITABILITY – TRANSPORT

The precinct design and layout must take into consideration all transport routes and networks. The proposed transit stations to the south and north of the precinct will play a key role in how people are likely to access the SCECEC and precinct. The proposed road network will also determine how the precinct will be accessed.

PUBLIC + ACTIVE TRANSPORT

Connection between the precinct and proposed transit stations will be clear and legible with appropriate way finding in place. The precinct and connections to the precinct will prioritise pedestrians and cyclists providing a safe walking and cycling environment. (Refer to the Maroochy Plan 2000 - Map 5.9 for more detailed information).

VEHICULAR TRANSPORT

The precinct will be accessible from major roads such as Horton Parade, Maroochydore Road and Maroochy Boulevard. Clear and legible way finding devices will be in place for drivers to be easily navigated to parking spaces. A slow zone for vehicles will be enforced where road crosses public open space in the precinct. (Refer to the Maroochy Plan 2000 - Map 5.8 for more information).

2.0 URBAN DESIGN PRINCIPLES



VISION

Simple, legible, permeable space.

The site will provide a connection with the residential, parkland and commercial surroundings. It will be safe and accessible and provide the community with an active, integrated and flexible space suitable for many different uses, day and night, supported by community, civic and commercial building functions.

One seamless open space that flows into and around buildings and parkland, providing a flexible space suitable for a wide range of activities, enhanced by a variety of seating and shelter options.

CONNECTED, ACTIVE, INTEGRATED, DEMOCRATIC, CELEBRATORY.

The above goals are over arching design drivers that will influence the urban design of the proposed development.

This diagram represents specific site uses that will fit within the above urban design goals.

2.1 URBAN FORM

2.1.1 AREA CALCULATIONS

The area of community facilities land in the proposed urban structure increases (in comparison to the MPAC plan) due to the re-alignment of the road network and expansion of the precinct (to the north east). The open space reduces slightly due to the alignment of the precinct on the west of the central road.



	MPAC Plan	Proposed concept
Community facilities land	26 346 m2	45 957 m2
Open space	13 717 m2	13 667 m2

Area calculations MPAC plan

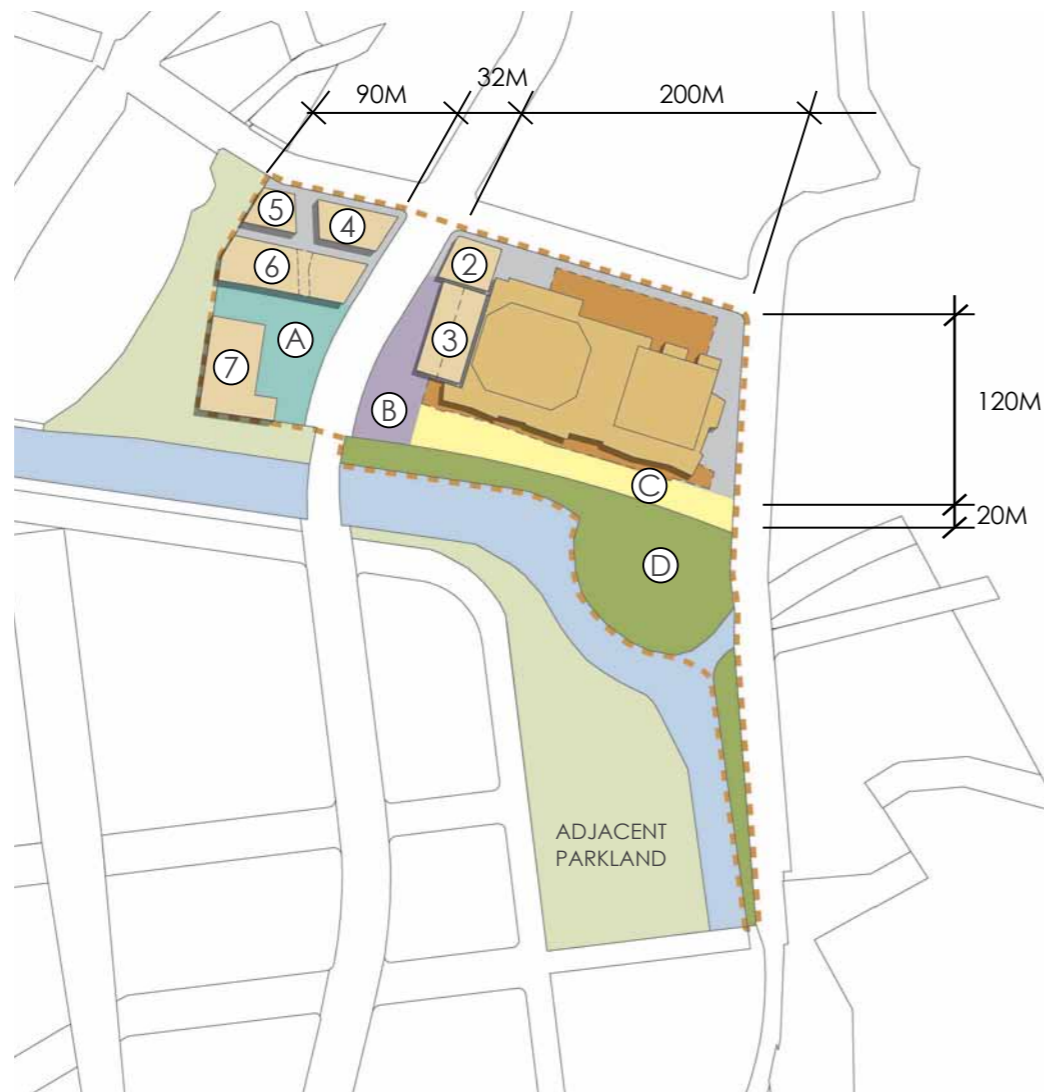
- COMMUNITY FACILITIES AREA 26 346m²
- OPEN SPACE (EXCLUDING CREEK) 13 717m²

Area calculations - proposed urban structure

- TOTAL COMMUNITY FACILITIES AREA 45 957m² (EXCLUDING ROAD, INCLUDING BUILDINGS)
- OPEN SPACE (EXCLUDING CREEK) — 13 667m²

INDICATIVE DIMENSIONS

1:5000 @A3 50 100 N



Ⓐ CIVIC SPACE	4197 M ²	--- Precinct Boundary
Ⓑ PLAZA SPACE	3289 M ²	
Ⓒ CONCOURSE	4611 M ²	
Ⓓ PARKLAND	11 489 M ²	

YIELD STUDY

1:5000 @A3 50 100 N



Ⓐ CIVIC SPACE	4197 M ²	Ⓔ POTENTIAL ADDITIONAL BUILDING 957M ² X 6 STOREYS = 5742M ²	Ⓕ POTENTIAL ADDITIONAL BUILDING 717M ² X 8 STOREYS = 5736M ²
Ⓑ PLAZA SPACE	3289 M ²	Ⓕ POTENTIAL ADDITIONAL BUILDING 884M ² X 3 STOREYS = 2652M ²	Ⓖ POTENTIAL ADDITIONAL BUILDING 2618M ² X 6 STOREYS = 15708M ²
Ⓒ CONCOURSE	4611 M ²	Ⓖ POTENTIAL ADDITIONAL BUILDING 1158M ² X 8 STOREYS = 9264M ²	Ⓙ POTENTIAL ADDITIONAL BUILDING 2404M ² X 6 STOREYS = 14424M ²
Ⓓ PARKLAND	11 489 M ²		

--- Precinct Boundary

SUMMER MORNING SHADE/SUNLIGHT



WINTER MORNING SHADE/SUNLIGHT



SUMMER EVENING SHADE/SUNLIGHT



WINTER EVENING SHADE/SUNLIGHT



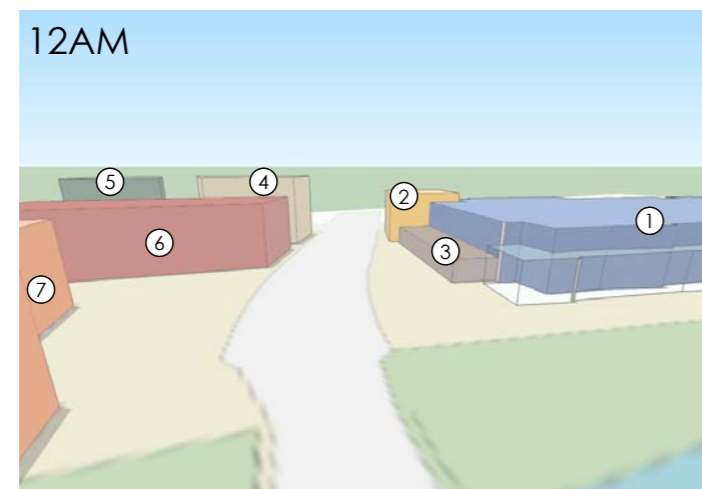
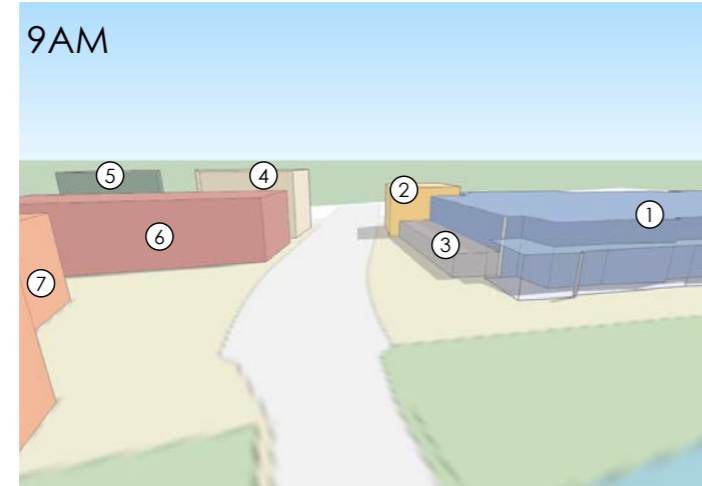
FULL SHADE
 FULL SUN
 FULL SUN ALL DAY
 Precinct Boundary

2.1.2 SUN/SHADE STUDY

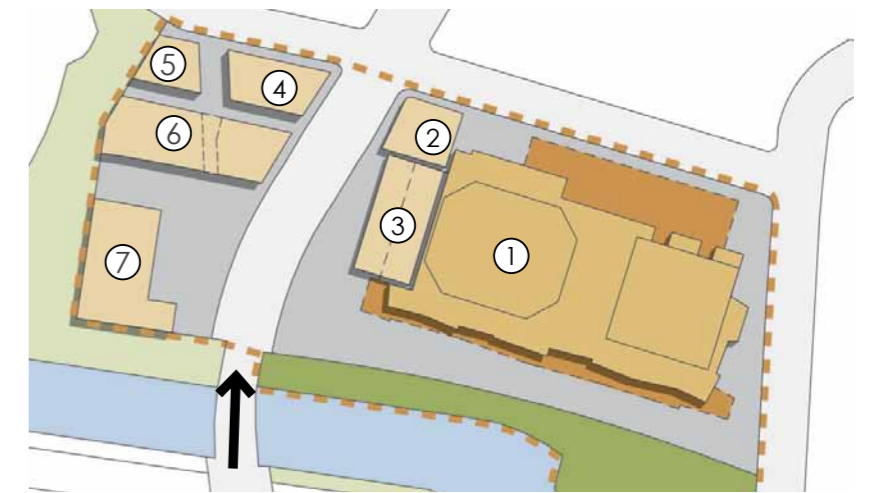
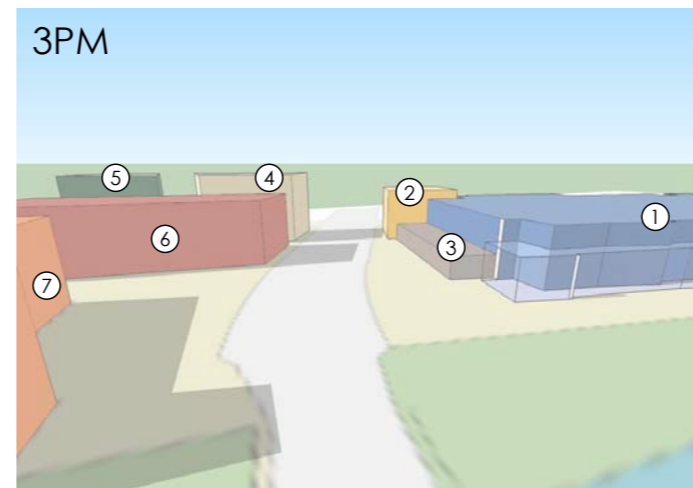
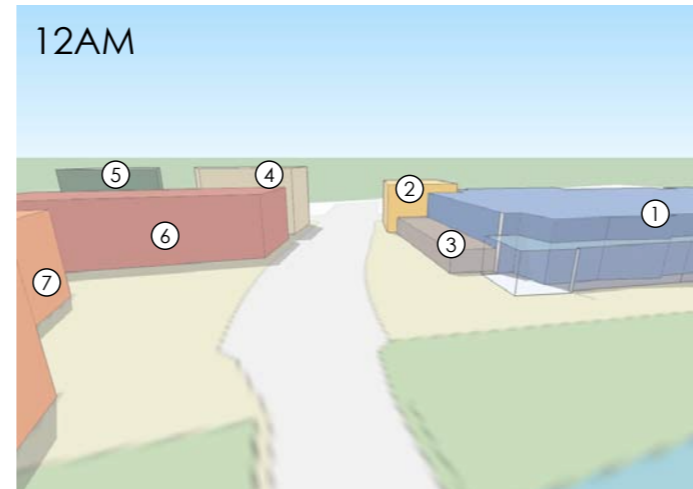
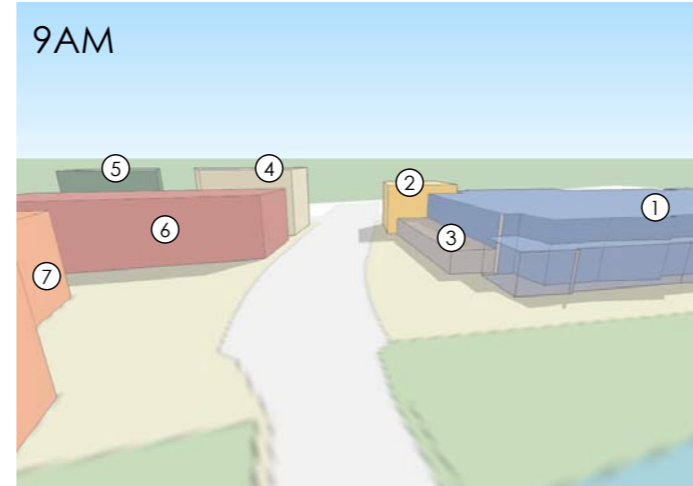
The built form of the SCECEC building will determine the amount of sunlight exposure on the concourse during the morning. The built form of the other buildings in the precinct will determine the amount of sunlight exposure on the civic and plaza areas. It is ideal that the concourse, civic and plaza areas receive adequate sunlight, morning and afternoon, whilst also providing shaded areas for refuge during the hottest hours of the day.

SUN / SHADE STUDY - PLAZA

SUMMER



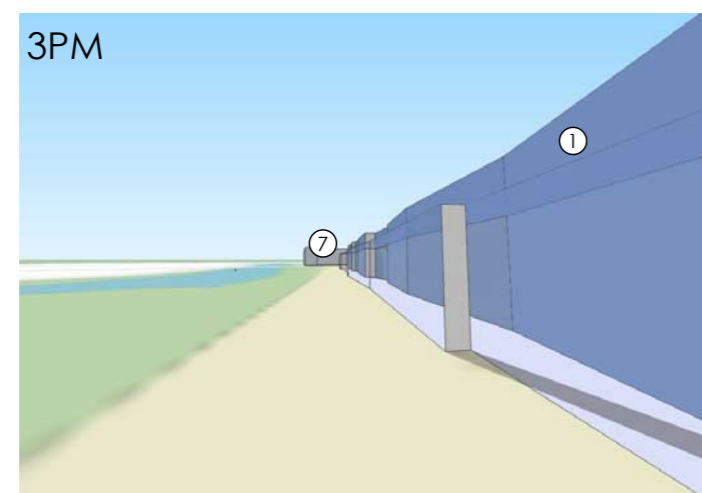
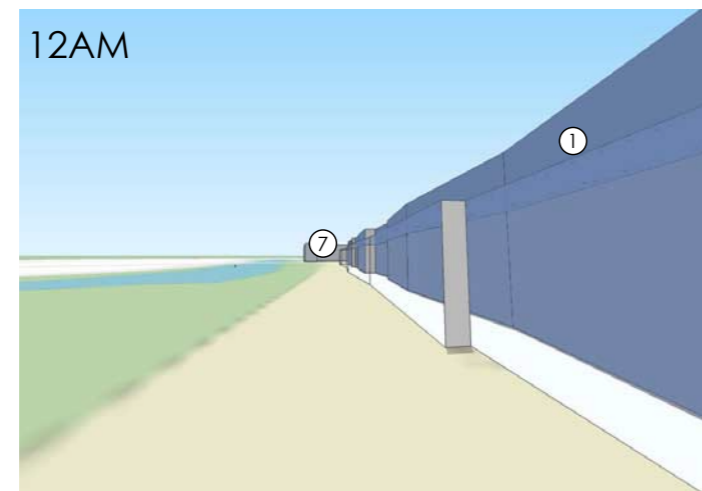
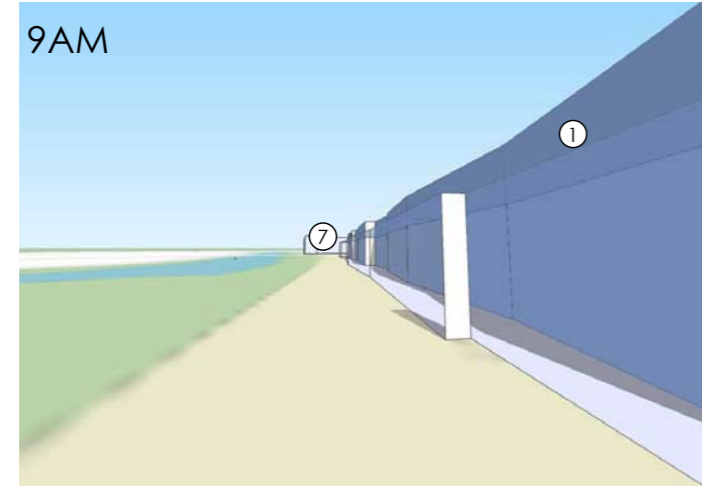
WINTER



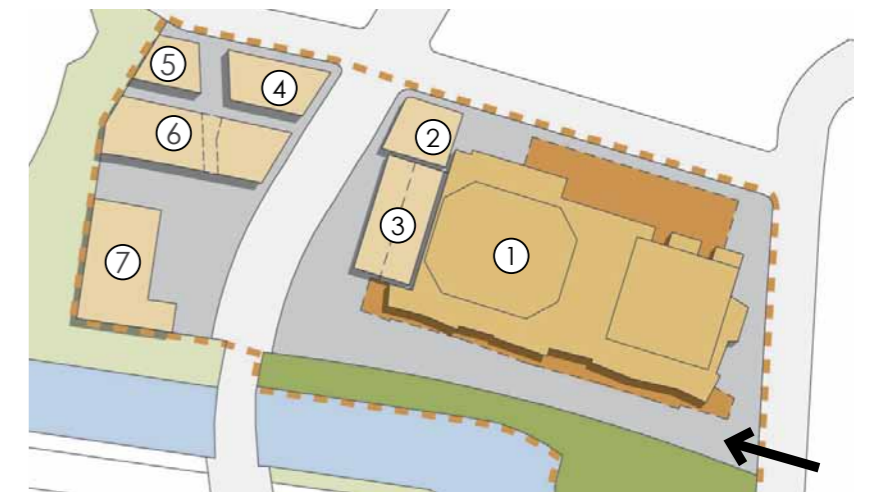
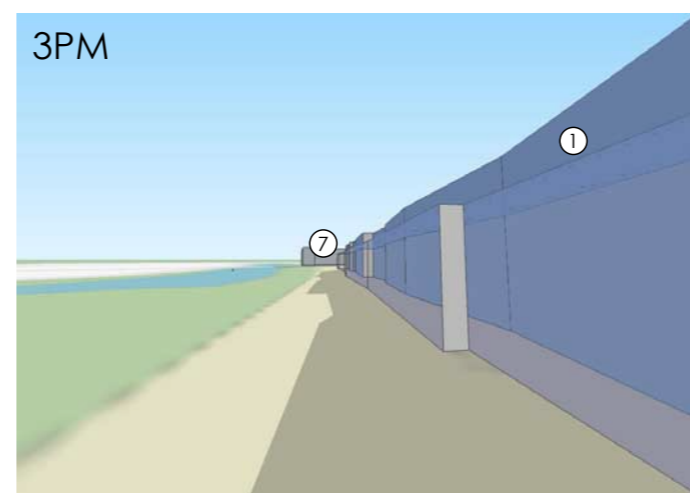
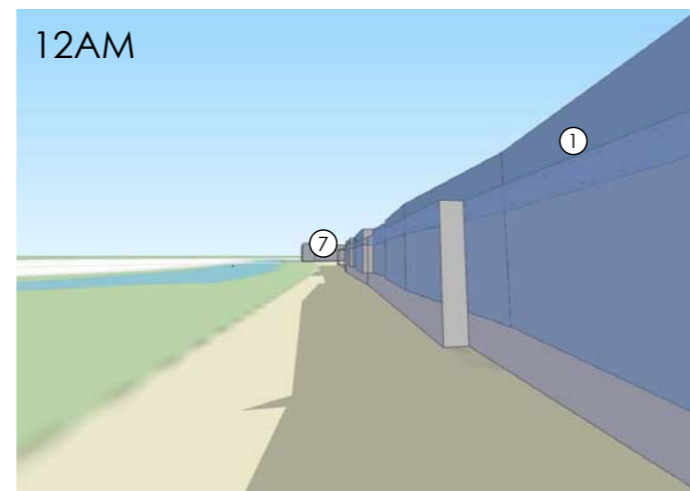
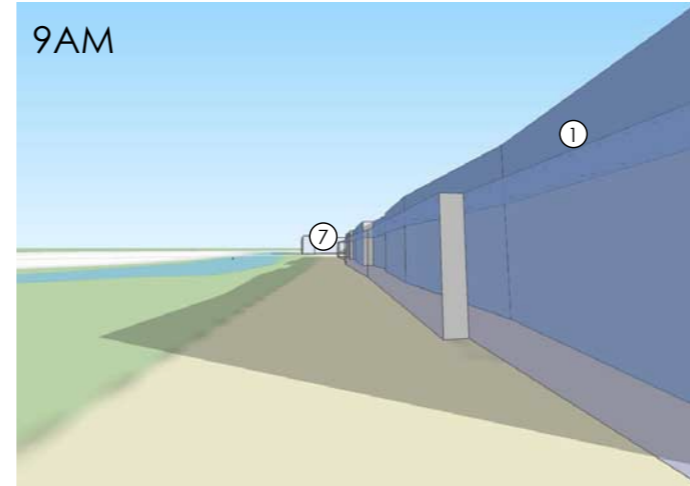
KEY PLAN

SUN / SHADE STUDY - CONCOURSE

SUMMER



WINTER



KEY PLAN



Ⓐ CIVIC SPACE 4197 M ²	LANDSCAPE	80% HARDSCAPE 20% SOFTSCAPE
	SHELTERS	40% - 70% HARD SHELTER 30% SOFT SHELTER
Ⓑ PLAZA SPACE 3289 M ²	LANDSCAPE	95% HARDSCAPE 5% SOFTSCAPE
	SHELTERS	30% - 80% HARD SHELTER 20% SOFT SHELTER
Ⓒ CONCOURSE 4611 M ²	LANDSCAPE	70% HARDSCAPE 30% SOFTSCAPE
	SHELTERS	50% - 70% HARD SHELTER 30% SOFT SHELTER
Ⓓ PARKLAND 11 486 M ²	LANDSCAPE	5% HARDSCAPE 95% SOFTSCAPE
	SHELTERS	30% - 90% HARD SHELTER 10% SOFT SHELTER

--- Precinct Boundary

2.1.3 SHELTER STRATEGY

Due to the climate of Queensland and in particular the Sunshine Coast, it is necessary to have adequate shelter in public open spaces. The shelter strategy demonstrates possible ratios of shelter to exposed area and within this, hard shelter and soft shelter percentages.



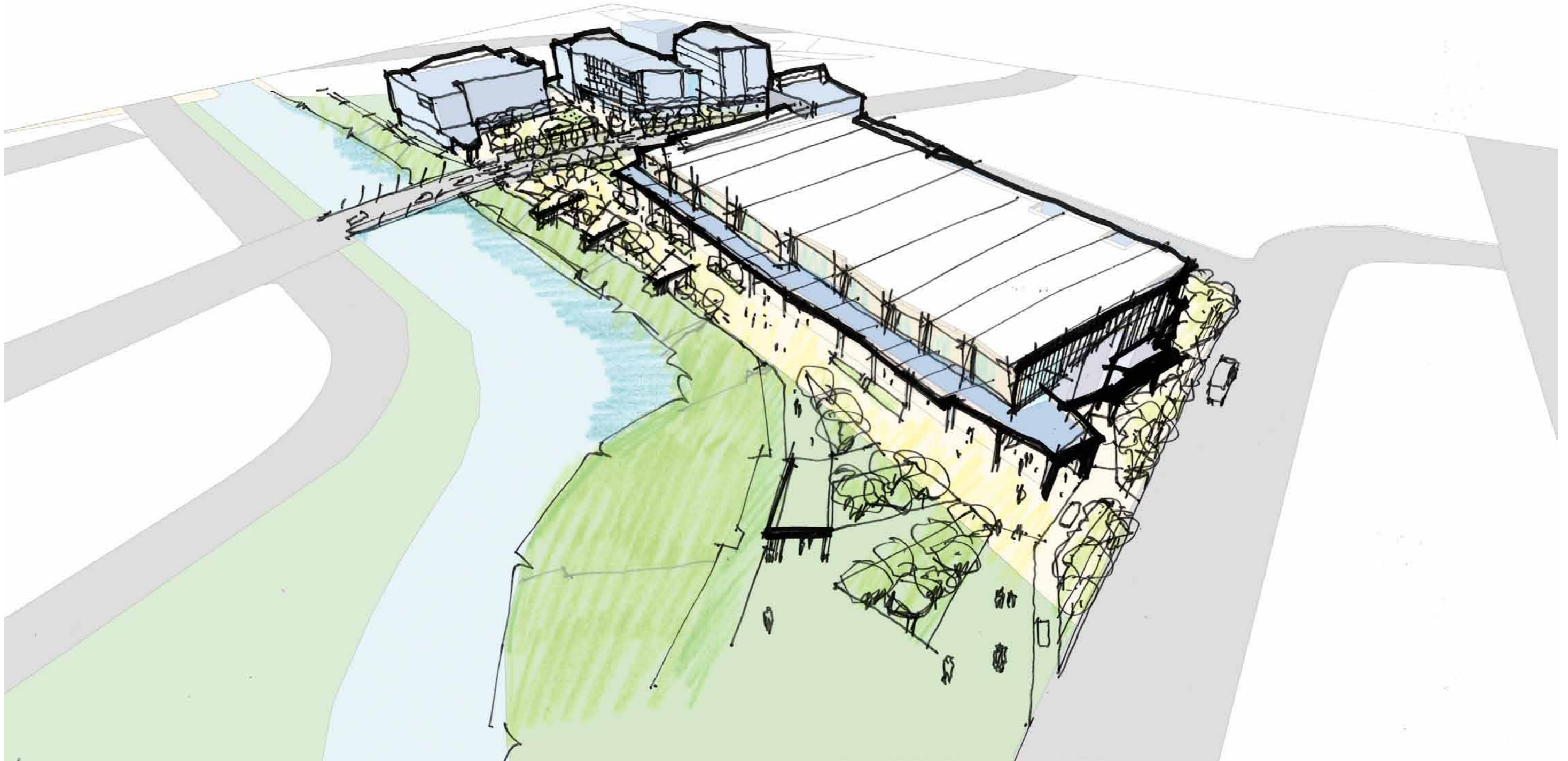
2.1.4 VIEW STUDY

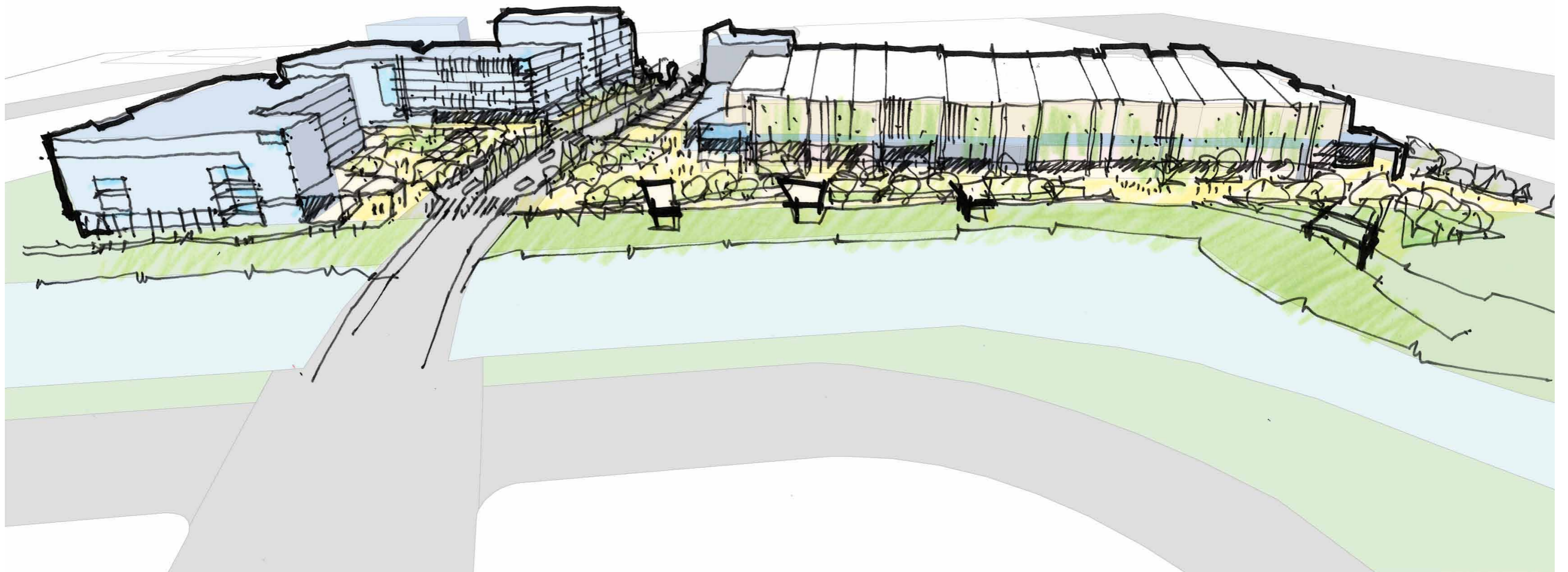
The precinct will be enhanced by specific view lines, visually connecting the civic, plaza, concourse and parkland areas. Key view lines will also provide necessary legibility and way finding for pedestrians. Strategic view lines will also enhance the passive surveillance and overall safety of the precinct.

2.1.5 ALTERNATIVE PRECINCT FORMS

Although the previous analysis of the precinct has been determined by a particular layout of buildings and open space elements, alternative arrangements may or may not provide a more appropriate response to the site. The following images show some examples of how the form of the precinct might differ.







2.2 CHARACTER

2.2.1 CHARACTER PLAN

The SCECEC Precinct will become an attractive destination which entices people for its restaurants and dining areas, lively nightlife, diverse commercial spaces, landscaped open space, and relaxing parkland. The character of the area will be highlighted via several key anchor points throughout the area: the civic space, the plaza, the concourse, the parkland, the SCECEC and adjacent civic and retail buildings. While being unique spaces, these key elements will knit together to form a cohesive precinct. The overall design of the precinct will create a new architectural language for the Sunshine Coast while maintaining distinct sub-tropical qualities.

Ⓐ Civic – The civic space (similar in scale to King George Square, Brisbane) will provide for a variety of both day and evening activities. The community will enjoy a true Sunshine Coast experience with flexible, safe, sheltered open space and a thriving cafe and restaurant scene. This civic space will become the ‘heart’ of this precinct and a key point in the new Maroochydore CBD network.

Ⓑ Plaza – the plaza will be a gathering point between the active civic space and the concourse. It will be a meeting place, an events space, a place to relax, and a place to enjoy comfortable open space and the wonderful Sunshine Coast climate.

Ⓒ Concourse – the concourse will provide a relaxing and sheltered break out space for the SCECEC whilst being a transitional space between civic / plaza areas and the parkland. People will be able to stroll along the concourse, mingle between the lush garden beds or grab a coffee from a small cafe. The design of the concourse plays a key role in ensuring the SCECEC engages with the surrounding urban open space and parkland.



④ Parkland - The parkland will be a natural, green inviting space between the SCECEC and adjacent residential areas. It will become an attractive destination for locals, cyclists, walkers and families. Grassed areas, open forest areas, pathways and picnic shelters will provide a welcoming green space for residents and visitors, while maintaining the opportunity for the space to be used for festivals and celebrations. The parkland will be a vibrant addition to Maroochydore's open space and parkland network.

- ① GRASSED SPACE - 10% TREE COVERAGE
- ② CONCOURSE EXTENSION - 50% HARD SHELTER
- ③ SPORT PLAYING FIELD - FLAT GRASSED AREA
- ④ PLAYGROUND - 10% TREE COVERAGE
- ⑤ PICNIC - 10% TREE COVERAGE
- ⑥ REST SEATING - 80% HARD SHELTER
- ⑦ PLANTED CREEK BANK - 100% LOW PLANTING



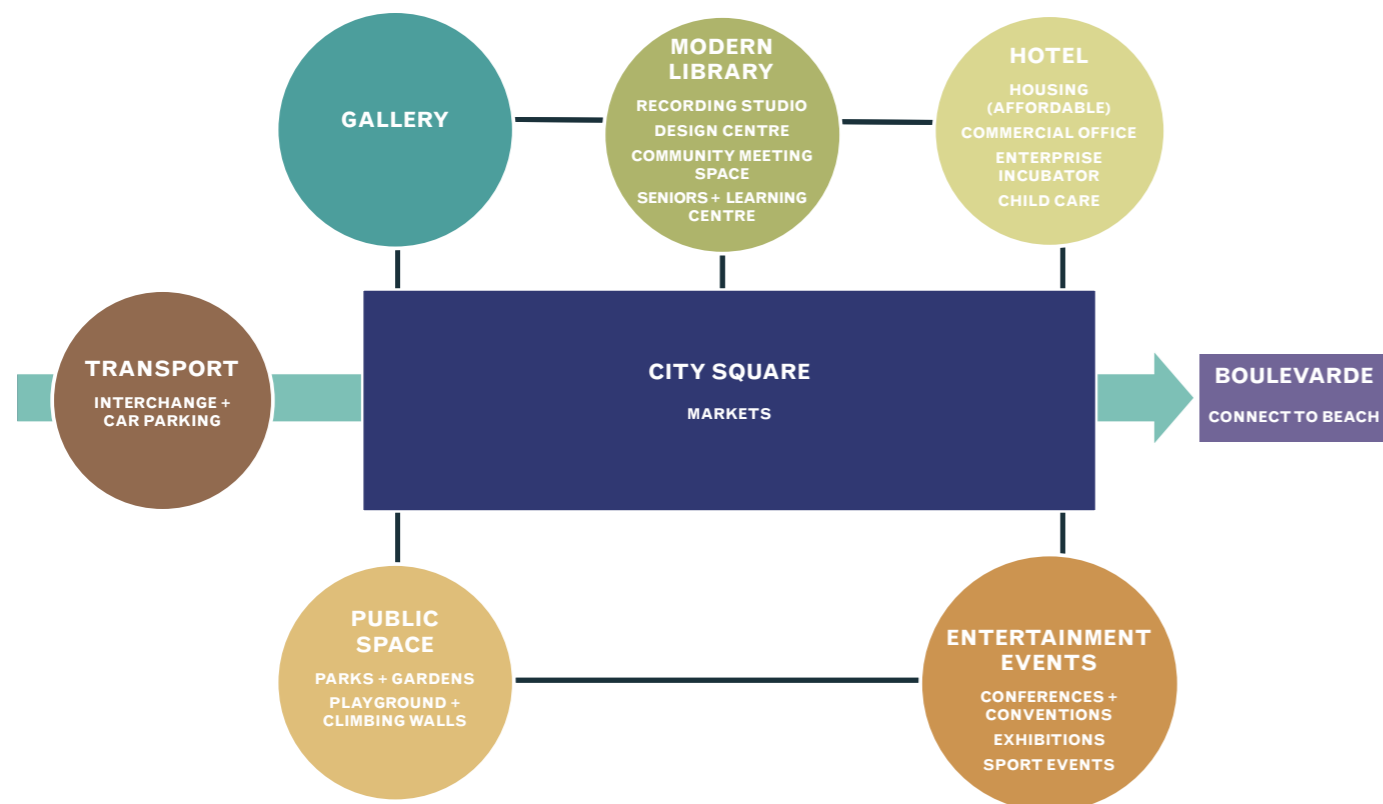
Indicative Parkland Breakdown

1:5000 @A3 0 50 100 N

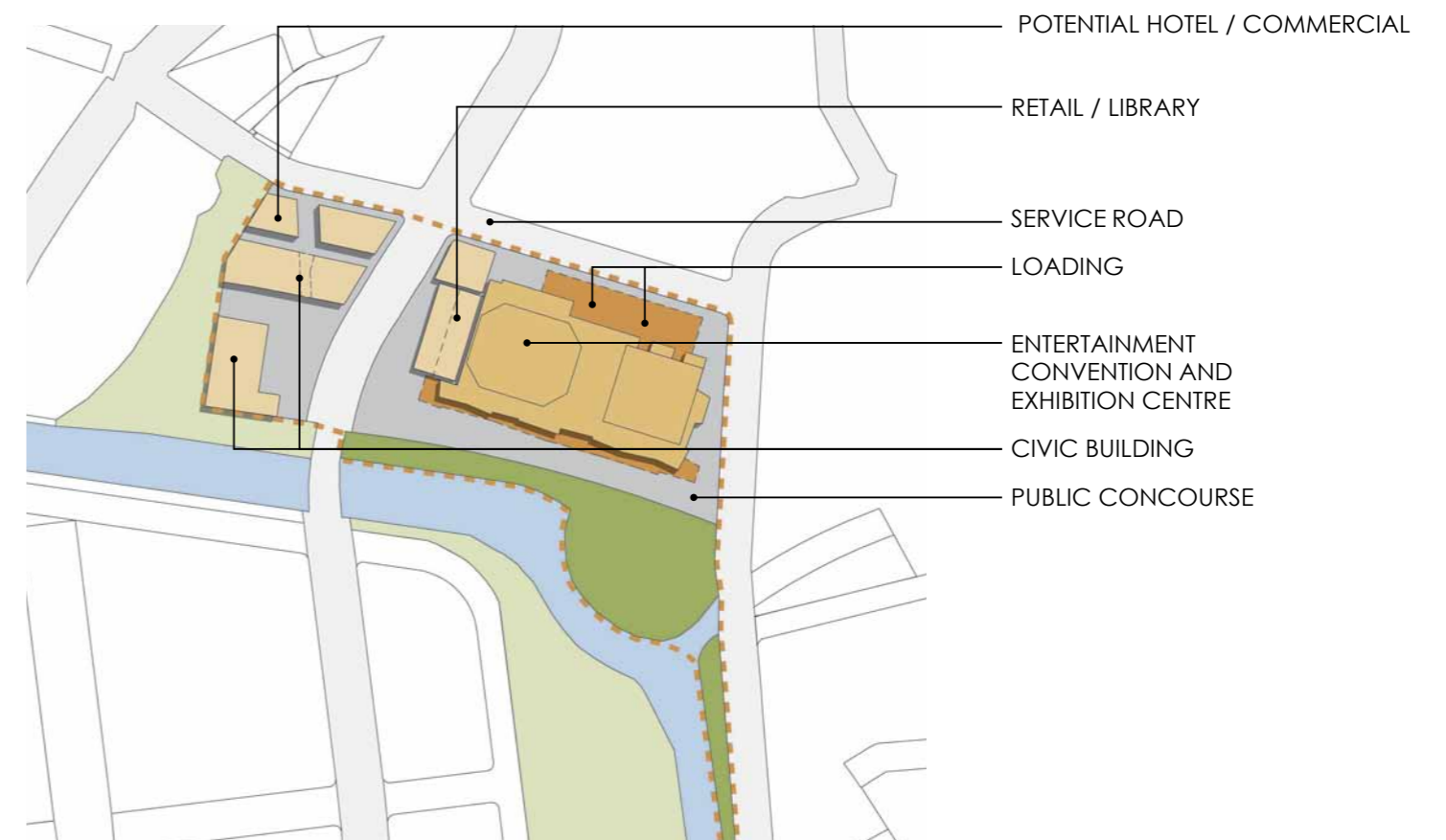
--- Precinct Boundary

2.2.2 SUGGESTED BUILDING FUNCTION

The six additional buildings must enhance the overall civic and community function of the precinct, whilst providing opportunities for passive surveillance over public open space. The building uses must also complement the SCECEC.



Urban Function Diagram



Suggested Building Function Diagram






--- Precinct Boundary

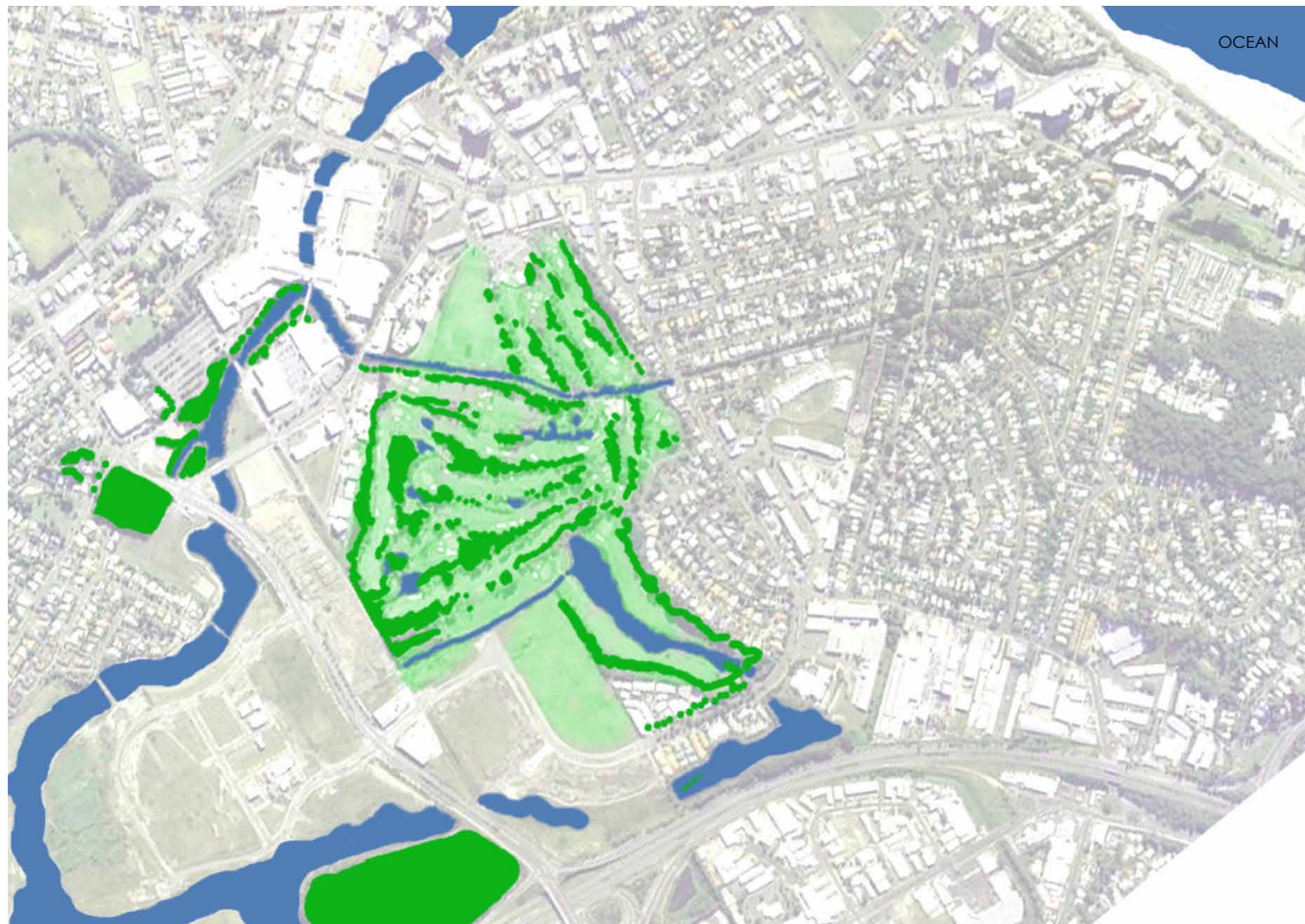
2.3 CIRCULATION

2.3.1 PRECINCT CIRCULATION

The precinct will be easy to navigate, permeable and open creating smooth circulation patterns and movement. The precinct is designed to allow pedestrians to take direct routes to specific destinations while ensuring all areas are universally accessible.



-  MAJOR PEDESTRIAN THOROUGHFARE
-  PEDESTRIAN CIRCULATION
-  VEHICULAR SLOW ZONE
-  VEHICULAR ROUTES
-  PEDESTRIAN CYCLE ROUTES



Existing Environmental Elements



2.4 ENVIRONMENT

The precinct design will be sensitive to the surrounding environment. Located on a Greenfield site, the current environment must be considered. Established trees and significant vegetation will be retained where possible, new plantings will be local species and potentially harmful run-off into the creek will be minimised. The natural environment in the wider context surrounding the precinct must also be taken into consideration. The parkland and landscaping in the precinct will be a valuable addition to the local ecosystem and provide habitat for local fauna.

3.0 INDICATIVE URBAN DESIGN



3.1 INDICATIVE MASTERPLAN

The masterplan shown here is an indication of how the urban design principles discussed might translate into urban forms and elements.

- (A) CIVIC SPACE
- (B) PLAZA SPACE
- (C) CONCOURSE
- (D) PARKLAND

1:2000 @A3 20 40 N

NOTE: LEVELS YET TO BE RESOLVED

INDICATIVE CONCEPT DESIGN - CIVIC, PLAZA + CONCOURSE

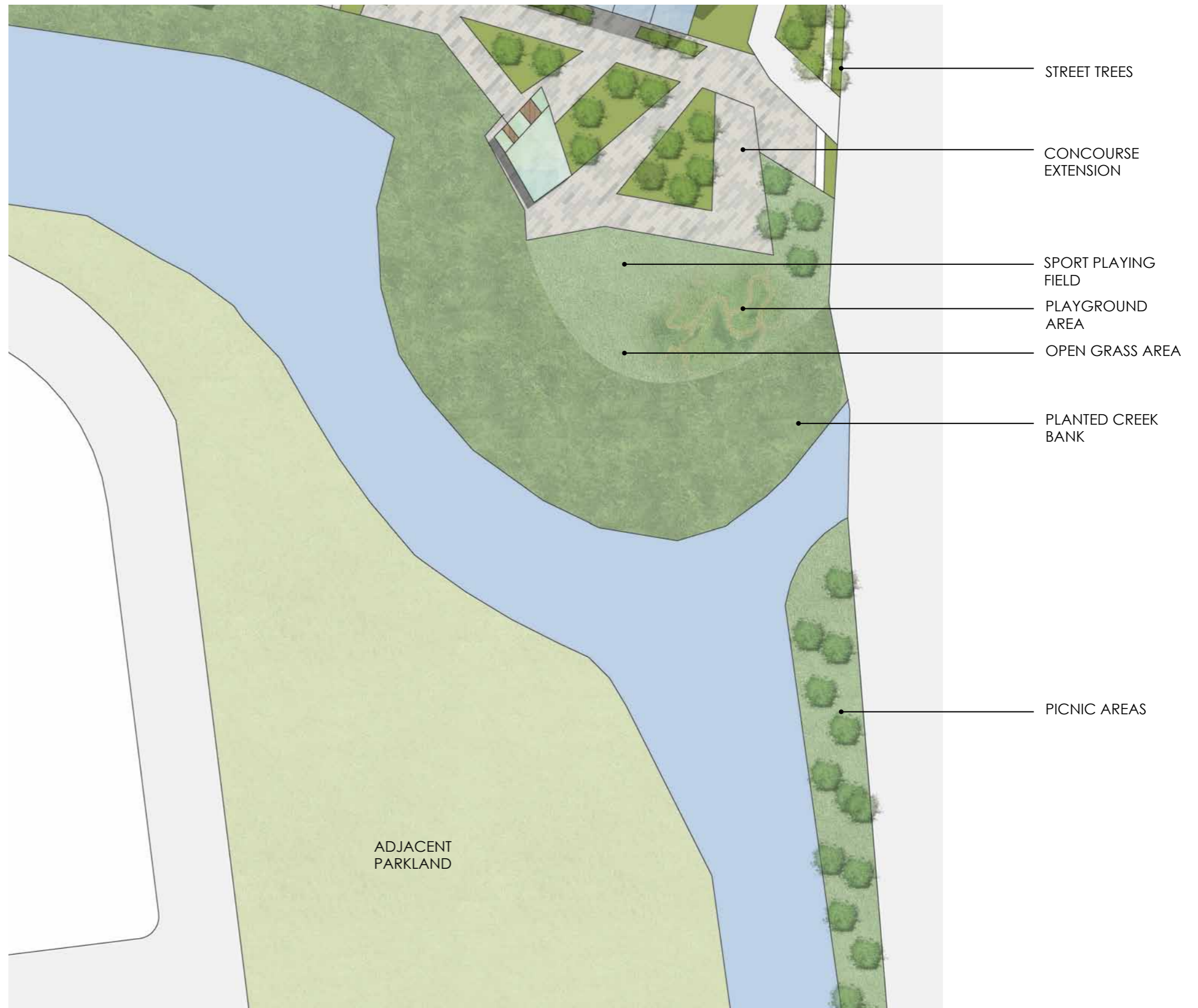


- GRASSED SPACE
- ON-STREET PARKING
- OPEN PLAZA SPACE FOR COMMUNITY GATHERINGS / EVENTS
- CONCOURSE
- SHELTERED REST AREAS WITH SEATING AND PICNIC FACILITIES
- RAISED TREE PLANTERS WITH ATTACHED TIMBER PLINTH SEATING
- POTENTIAL FOR RETAIL VENTURES E.G. COFFEE CART

1:1000 @A3 10 20 N

NOTE: LEVELS YET TO BE RESOLVED

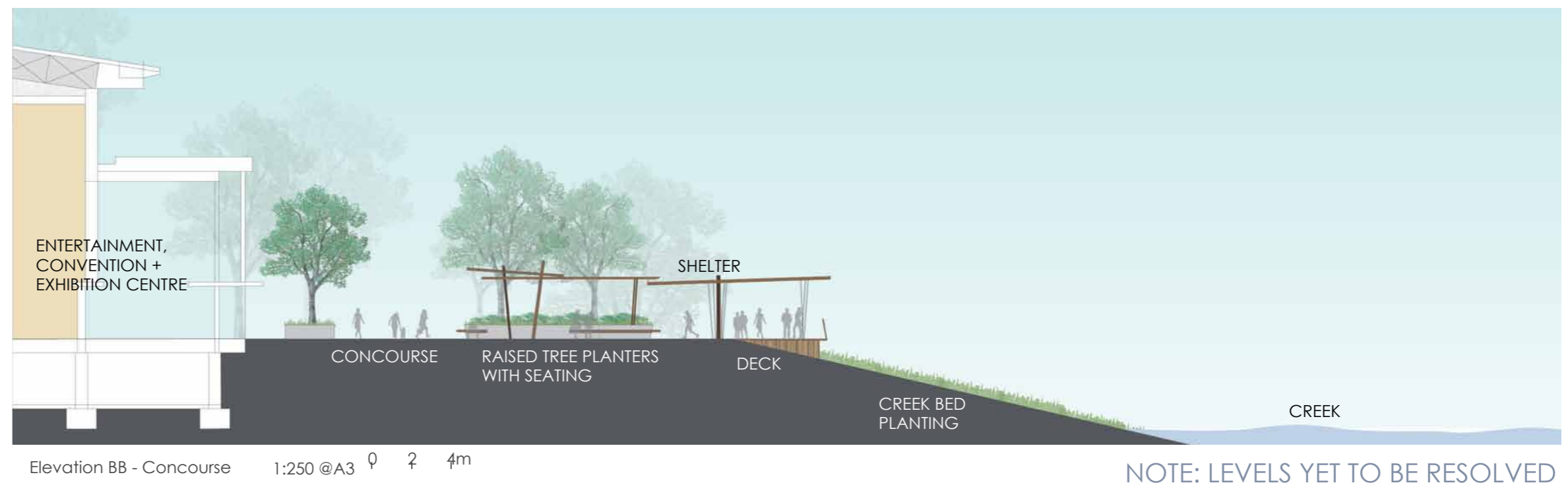
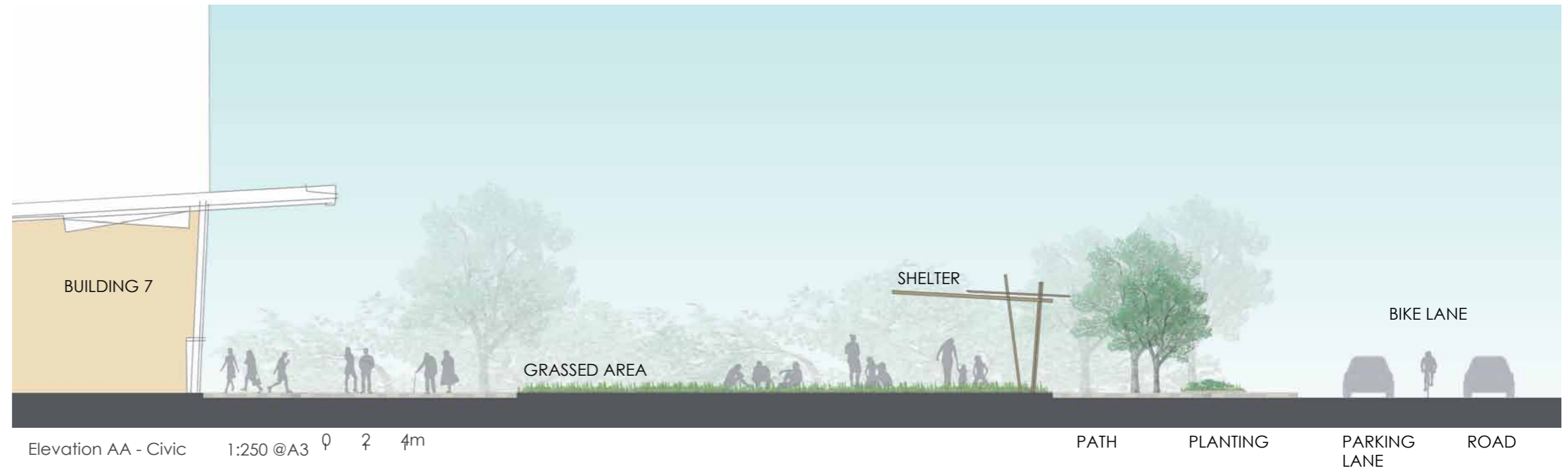
INDICATIVE CONCEPT DESIGN - PARKLAND



1:1000 @A3 1p 2p N

NOTE: LEVELS YET TO BE RESOLVED

INDICATIVE ELEVATIONS



NOTE: LEVELS YET TO BE RESOLVED

3.2 EXEMPLAR PROJECTS

CIVIC



Mackay Convention + Exhibition Centre, Mackay, Australia



Manitoba, Canada

PLAZA



Margot + Bill Winspear Opera House, Texas, USA



Parc de la Villette, Paris, France

CONCOURSE



Split Waterfront, Croatia



VC, San Diego



Thuringowa, Townsville, Australia

PARKLAND



Zadar Waterfront, Croatia



Thuringowa, Townsville, Australia



Parc de la Villette, Paris, France