

TOWN PLANNING REPORT

**COMBINED APPLICATION FOR MATERIAL CHANGE
OF USE AND RECONFIGURATION OF A LOT – STAGED
DEVELOPMENT, DEVELOPMENT PERMITS
ON LAND DESCRIBED AS
LOT 146 SR861, PART OF LOT 126 SR686 and INLET
STREET ROAD RESERVE
LOCATED AT
WHARF STREET, PORT DOUGLAS**

PREPARED FOR

THE REEF MARINA PTY LTD

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CONTENTS PAGE

| | | |
|---------------------|--|-----------|
| 1.0 | INTRODUCTION..... | 1 |
| 2.0 | THE SITE AND LOCALITY | 1 |
| 2.1 | The Site | 1 |
| 2.2 | The Locality | 2 |
| 3.0 | THE PROPOSED DEVELOPMENT | 3 |
| 4.0 | PLANNING OVERVIEW – SPA, FNQ REGIONAL PLAN AND THE PORT DOUGLAS WATERFRONT MASTERPLAN | 10 |
| 5.0 | TOWN PLANNING ASSESSMENT | 13 |
| 5.1 | Locality Code | 16 |
| 5.2 | Zone Code | 25 |
| 5.3 | Overlay Code | 35 |
| 5.4 | Land Use Codes | 36 |
| 5.5 | General Codes..... | 41 |
| 6.0 | OTHER ISSUES..... | 48 |
| 7.0 | CONCLUSION..... | 49 |
| Appendix 1: | SDAP Module 10.1 | |
| Appendix 2: | Site Survey | |
| Appendix 3: | Urban Design Guide and Perspective/s | |
| Appendix 4: | Master Site Plan and Sections | |
| Appendix 5: | Concept Plans - Stage 1a | |
| Appendix 6: | Concept Plans - Stage 1b | |
| Appendix 7: | Concept Plans - Stage 2a | |
| Appendix 8: | Concept Plans - Stage 2c | |
| Appendix 9: | Concept Plans - Stage 3a | |
| Appendix 10: | Economic Impact Study | |
| Appendix 11: | Civil Engineering and Traffic Report | |
| Appendix 12: | Landscape Concept Plan | |
| Appendix 13: | Reconfiguring a Lot Plan | |
| Appendix 14: | Public Art Plan | |

1.0 INTRODUCTION

This Combined Application for Material Change of Use (MCU) and Reconfiguration of a Lot (ROL) relates to land at Port Douglas, known as The Reef Marina (TRM) site.

This report addresses the relevant provisions of the Sustainable Planning Act 2009 (SPA) and the Sustainable Planning Regulation 2009 (SPR), FNQ Regional Plan 2010–2031(FNQRP) Port Douglas Waterfront Master Plan (PDWMP) and the Douglas Shire Planning Scheme (DSPS).

The Application triggers referral under the SPR, through the State Assessment Referral Agency (SARA) based on the following triggers:

- Schedule 7, Table 2, Item 14 - reconfiguring a lot made assessable in the Schedule 3, Part 1, Table 3, item 1 if –
 - (a) the land is situated completely or partly within a coastal management district; or
 - (b) the reconfiguration is in connection with the construction of the canal.

AND

- Schedule 7, Table 3, Item 5 - material change of use, if carrying out the change of use will involve –
 - (a) operational work, other than excluded work, carried out completely or partly in a coastal management district; or
 - (b) building work, carried out completely or partly in a coastal management district, that is –
 - (i) construction of new premises with a GFA of at least 1000 m²; or
 - (ii) the enlargement of the GFA of existing premises by more than 1000 m².

State Development Assessment Provision (SDAP) Module 10.1 is attached at [Appendix 1](#).

2.0 THE SITE AND LOCALITY

2.1 The Site

The development site is a large part of The Reef Marina (TRM) site, located within the southern end of the Port Douglas Tourist Centre. The development site is bounded by Dickson Inlet to the west, Wharf Street to the east, the slipway site to the north and Closehaven Marina and vacant Reserve land to the south.

Lot 146 SR861 has an area of 8.173 hectares and is improved by the Marina development, which has undergone significant refurbishment and expansion and a large commercial/retail complex, which has also been refurbished, in part, with the western wing currently unused and targeted for demolition, in association with the redevelopment of the site.

The Reef Marina Pty Ltd also has a Lease over part of Lot 126 SR686, which is a Reserve for Local Government (Port and Harbour) Purposes, with Council as Trustee.

Inlet Street road reserve, which is also part of the redevelopment site, is proposed to be closed and incorporated into the site.

Lot 146, part of Lot 126 and Inlet Street are currently in the process of being converted to freehold (in addition to adjoining Lot 103 SR500- the slipway site, which is not part of this Combined Application) through an Application to Convert SL 9/50240 made by TRM to the State Government.

A Site Survey Plan is attached at [Appendix 2](#). (Note: The Site Survey Plan includes Lot 103, which is not part of this Combined Application. Lot 103 will be the subject of a separate Application but for the purpose of overall site survey assessment was included).

2.2 The Locality

The locality is dominated by waterfront/tourist/community activities along Dickson Inlet, community and sporting facilities to the east and the Tourist Centre of Port Douglas to the immediate north.



3.0 THE PROPOSED DEVELOPMENT

The proposed development is comprised of five (5) development Stages on four (4) new freehold lots.

- Proposed Lot 1, with an area of 9,970m² will contain:
 - Stage 1a -Multi-Unit Housing/Holiday Accommodation:- 5 dwelling units;
 - Stage 1b - Multi-Unit Housing/Holiday Accommodation:- 14 dwelling units;
 - Stage 2a - Multi-Unit Housing/Holiday Accommodation:- 35 dwelling units and commercial/retail space (shops/restaurants/offices); and
 - a large part of Rainforest Walk (previously described as the harbour park).

- Proposed Lot 2, with an area of 3,615m² will contain:
 - Stage 2c - Multi-Unit Housing/Holiday Accommodation and/or Holiday Accommodation- Dual Key:- 26 dwelling units and commercial/retail space (shops/restaurants/offices); and
 - a small part of Rainforest Walk.

- Proposed Lot 3, with an area of 1000m² will contain:
 - Stage 3a -Multi-Unit Housing/Holiday Accommodation and/or Holiday Accommodation Dual Key:- 5 dwelling units; and
 - a small part of Rainforest Walk.

- Proposed Lot 4, balance area, will contain:
 - The existing marina and commercial development;
 - The Green, a new open grassed area adjacent to Dickson Inlet;
 - An unenclosed pavilion/bandstand structure between the cruise liner transfer terminal and The Green;
 - A centralised waste disposal area;
 - A new maintenance building;
 - A new entry statement; and
 - The existing car parking area.

The publicly accessible boardwalk will be constructed with each adjacent Stage and will be subject to a separate Operational Works/Tidal Works Application.

An Urban Design Guide and Perspective/s are attached at [Appendix 3](#).

MCU Component

STAGE 1a- The Marina Villas:- is comprised of a three (3) storey, Multi-Unit Housing/Holiday Accommodation development containing 5 dwelling units, located in Precinct 1 under the approved Master Plan, with frontage to Dickson Inlet. A public boardwalk is proposed to be located adjacent to the site frontage. Vehicular access to the site is provided by an Access and Service Easement to the rear of the site, from Wharf Street, refer, Master Site Plan and Sections are attached at **Appendix 4**.

Total = 5 dwelling units with a total of 15 bedrooms.

The five (5) dwelling units contain:

- Ground Level – 2 car garage with store, stepping up to a lift foyer, an informal living/multi-purpose room, bathroom, opening onto a roofed terrace with an integrated swimming/plunge pool;
- Level 1 – 1 bedroom with ensuite bathroom, powder room, combined living/dining/kitchen opening to a large roofed terrace;
- Level 2 – 2 bedrooms with ensuite bathrooms, main bedroom with walk in robe, opening to a roofed terrace and an open library/computer area and stair access to roof top decks and service area.

Concept Plans for Stage 1a are attached at **Appendix 5**.

STAGE 1b – The Marina Residences:- is comprised of a three (3) storey, Multi-Unit Housing/Holiday Accommodation development containing 14 dwelling units, located in Precinct 1 under the approved Master Plan, with frontage to Dickson Inlet. A public boardwalk is proposed to be located adjacent to the site frontage. Vehicular access to the site is provided by an Access and Service Easement to the rear of the site, refer Master Site Plan and Sections are attached at **Appendix 4**.

The mix of accommodation in the 14 dwelling units in Stage 1b, is:

- 2 dwelling units with 3 bedrooms, all with ensuite bathrooms;
- 4 dwelling units with 3 bedrooms, and 2 bathrooms;
- 2 dwelling units with 4 bedrooms and 3 bathrooms;
- 2 dwelling units with 2 bedroom with 2 bathrooms; and
- 4 dwelling units with 1 bedroom and ensuite bathrooms.

Dwelling unit 11 on Level 2 includes access to a roof terrace and plunge pool.

TOTAL = 14 dwelling units with a total of 34 bedrooms.

The development is configured, as follows:

- Ground Level – undercover car parking area for 16 vehicles with 14 storage areas, a bicycle store area for 6 bikes and a refuse collection area; a lobby with lift and entry to large deck area incorporating a large communal swimming pool, to be shared between occupants of Stage 1a, Stage 1b and Stage 2a.

Units 1 and 2 are located on ground level and comprise a laundry, store; 3 bedrooms and 2 ensuite bathrooms, with the main bedroom opening to a roofed terrace overlooking Dickson Inlet and a combined living/dining/kitchen area also opening to the roofed terrace overlooking Dickson Inlet. Unit 2 also includes a private terrace and garden courtyard, accessed from bedroom 3;

- Level 1 – Units 3 and 4 each comprising: a private entry courtyard located centrally in the building, 3 bedrooms, 2 bathrooms with combined lounge/kitchen/dining, powder room and laundry, with bedroom 1 and the living area opening to a roofed terrace overlooking Dickson Inlet;

Unit 5 comprising: a private entry courtyard located centrally in the building, 4 bedrooms, 3 bathrooms with combined lounge/kitchen/dining, powder room and laundry and the living area opening to terraces overlooking Dickson Inlet;

Units 6, comprising: 2 bedroom, 2 bathrooms, combined lounge/kitchen/dining, open media/TV space, laundry and a terrace overlooking the Rainforest Walk accessed from both bedrooms and the combined kitchen/living/dining area.

Units 7 and 8 each comprising: 1 bedroom, 1 bathroom, combined lounge/kitchen/dining, open media/TV space, laundry and a terrace overlooking the Rainforest Walk accessed from bedroom 1 and the combined kitchen/living/dining area.

Common areas on this level include the lobby, lift, refuse collection area and landscape planters.

- Level 2 – comprises Units 9, 10, 11, 12, 13 and 14 and has the same configuration as Level 1, except that Unit 11 includes stairs that gain access to a roof terrace and plunge pool.

Concept Plans for Stage 1b are attached at [Appendix 6](#).

STAGE 2a – The Marina Residences:- is comprised of a three (3) storey, mixed use development of Multi-Unit Housing/Holiday Accommodation development, containing 35 dwelling units and 1,204m² of commercial/retail space, located in Precinct 2 under the approved Master Plan, with frontage to both Dickson Inlet and the

Duck Pond and with rear access to Rainforest Walk. Pedestrian circulation areas will connect to the waterfront boardwalk (and in the future to The Plaza). Vehicular access to the site is provided by an Access and Service Easement to the rear of the site, from Wharf Street, refer, Master Site Plan and Sections are attached at [Appendix 4](#).

The mix of accommodation in the 35 dwelling units in Stage 2a, is:

- 2 dwelling units with 4 bedrooms;
- 19 dwelling units with 3 bedrooms;
- 4 dwelling units with 2 bedrooms; and
- 10 dwelling units with 1 bedroom.

TOTAL = 35 dwelling units with a total of 83 bedrooms.

Stage 2a includes two buildings, which share a circular a porte-cochere that provides vehicular drop off and access to the residential development and the two separate at grade car parking areas. Stage 2a contains the following:

- Ground Level

- Building South, commercial/retail space of 444m², 22 covered car parking spaces with storage areas provided in 20 spaces, bicycle store, lobby, lift, reception, offices, luggage store, refuse area, gym and ablutions, service corridor, commercial waste area and receiving area, service corridor, porte-cochere, 2 car hire spaces and a bicycle hire area.
- Building North, commercial/retail space of 760m², 19 covered car spaces with storage areas provided in 16 spaces, bicycle store, lobby, lift, refuse area, commercial waste area and 2 accessible public toilets and frontage and public circulation to the duck pond.

- Levels 1 & 2

- Building South

Above the ground level commercial/car parking area of Building South facing east there are a total of 8 dwelling units, comprising:

- 2 x 2 bedroom and 2 bathroom and media area with combined living dining kitchen area and terraces; and
- 6 x 1 bedroom and 1 bathroom and media area with combined living/dining/kitchen and terraces.

In addition, Level 1 includes a common resident's lounge/kitchen and kids play room/theatre with toilet facilities and Level 2 includes a

Function Centre with servery, store, terrace and ablution facilities, with a net lettable area of approximately 95m².

Above the ground level commercial/car parking area of Building South facing west is a total of 11 dwelling units comprising:

- 10 x 3 bedroom and 2 bathroom with combined living dining kitchen area and terraces; and
- 1 x 3 bedroom and 3 bathroom with combined living/dining/kitchen and terraces front and rear. This dwelling unit is 2 storeys; and

Three (3) of the 3 bedroom dwelling units located on Level 2 include access to roof terraces and plunge pools.

Level 1 & 2

○ Building North

Above the ground level commercial/car parking area of Building North, facing north there are a total of 10 dwelling units comprise:

- 2 x 4 bedroom and 3 bathroom, laundry and media area with combined living/dining/kitchen area and front and rear terraces; and
- 2 x 3 bedroom and 3 bathroom, laundry with combined living/dining/kitchen and front and rear terraces. These units are 2 storeys; and
- 2 x 3 bedrooms and 2 bathrooms, laundry, media and combined living/dining/kitchen and front and side terraces; and
- 4 x 3 bedrooms and 2 bathrooms, laundry and combined living/dining/kitchen and front and rear terraces

Two (2) of the dwelling units on Level 2 have access to a roof terrace and plunge pool.

Above the ground level commercial/car parking area of Building North facing south there is a total of 6 dwelling units comprising:

- 4 x 1 bedroom and 1 bathroom, laundry with media area and combined living/dining/kitchen and terrace; and
- 2 x 2 bedroom and 2 bathroom, laundry with combined living/dining/kitchen and terrace.

Concept Plans for Stage 2a are attached at Appendix 7.

STAGE 2c – The Marina Suites:- is comprised of a three (3) storey mixed use development, Multi-Unit Housing/Holiday Accommodation

and/or Holiday Accommodation– Dual Key, comprising 26 dwelling units and commercial floor space of 236m² at ground level.

The residential component of the development can be occupied for a mix of accommodation types: Multi-Unit Housing/Holiday Accommodation and/or Holiday Accommodation- Dual Key. The development is located in Precinct 2, under the approved Master Plan, with frontage to Rainforest Walk and to Wharf Street. Vehicular access to the site is to and from Wharf Street, refer Master Site Plan and Sections are attached at [Appendix 4](#).

The mix of accommodation in the 26 dwelling units in Stage 2c, is:

- 24 x 2 bedroom dwelling units, which can be separately let as either 24 x 2 bedroom dwelling units or 24 x 1 bedroom self-contained dwelling units and 24 x 1 studio unit comprised of a bedroom with ensuite bathroom; and
- 2 x 1 bedroom dwelling units.

TOTAL = 26 dwelling units and 50 bedrooms

The development is configured, as follows:

- Ground Level – undercover car parking area for 26 vehicles, a bicycle store area for 17 bikes and an electrical room and refuse and general storage areas; a lobby, garden and two lifts, commercial/retail space with a net lettable area of 236m² and 2 Dual Key dwelling units, each comprising, either 2 bedrooms or, if separately let, 1 bedroom self-contained dwelling unit and 1 studio with a bedroom with ensuite bathroom,
- Levels 1 and 2 – 11 Dual Key dwelling units, each comprising, either 2 bedrooms or, if separately let, 1 bedroom self-contained dwelling unit and 1 studio with a bedroom with ensuite bathroom. 1 x 1 bedroom dwelling unit; and central pool and recreation area, with large pool deck, storage under and garden and paving.

Concept Plans for Stage 2c are attached at [Appendix 8](#).

STAGE 3A- The Rainforest Villas:- is comprised of a two (2) storey, 5 x 2 bedroom development that can be occupied for a mix of accommodation types:, Multi-Unit Housing/Holiday Accommodation and/or Holiday Accommodation/Holiday Accommodation- Dual Key. The development is located in Precinct 3, under the approved Master Plan, with frontage to Rainforest Walk. Vehicular access to the site is provided by an Access and Service Easement to the rear of the site, from Wharf Street, refer Master Site Plan and Sections are attached at [Appendix 4](#).

The five (5) dwelling units contain:

- Ground Level – one (1) car garage and laundry with pedestrian entry to and from Rainforest Walk and a separate bedroom and bathroom that has its own direct pedestrian entry to and from Rainforest Walk, through a shared front patio;
- Level 1 – One (1) bedroom with ensuite bathroom, combined living/dining/kitchen opening to a roofed terrace

Each dwelling unit has the flexibility to be occupied as either:

- 1 x 2 bedroom unit; or
- 1 x 1 bedroom unit and 1 x 1 private room. It is also possible that some of the private rooms and ground level may be used as a home office or other low key commercial/business activities operated by the occupant.

TOTAL = 5 dwelling units and 10 bedrooms

Concept Plans for Stage 3a are attached at **Appendix 9**.

In summary, the proposed development is comprised of the following Stages and key elements:

| STAGE | LAND USE MIX | DWELLING UNITS/BEDROOMS | COMMERCIAL M2 |
|--------------|---|--------------------------------|----------------------|
| 1a | Multi-Unit Housing/Holiday Accommodation | 5 x 15 | N/A |
| 1b | Multi-Unit Housing/Holiday Accommodation | 14 x 34 | N/A |
| 2a | Multi-Unit Housing/Holiday Accommodation; and Commercial/Retail Space | 35 x 83 | 1204 |
| 2c | Multi-Unit Housing/Holiday Accommodation and/or Holiday Accommodation – Dual Key; and Commercial/Retail Space | 26 x 50 | 236 |
| 3a | Multi-Unit Housing/Holiday Accommodation and/or | 5 x 10 | N/A |

| | | | |
|--------------|--------------------|-----------------|-------------|
| | Holiday - Dual Key | | |
| TOTAL | | 85 x 192 | 1440 |

4.0 PLANNING OVERVIEW – SPA, FNQ REGIONAL PLAN AND THE PORT DOUGLAS WATERFRONT MASTERPLAN

An assessment against SDAP Module 10.1 is attached at **Appendix 1**.

The site is included in the Urban Footprint designation of the FNQRP. The proposed development is appropriate development within the Urban Footprint.

The PDWMP is a non- statutory strategic plan that acts as a guiding tool for physical improvements and projects for future capital works and funding programs within the Port Douglas waterfront area. Upon its adoption by the (then) Cairns Regional Council in November 2009, amendments were made to the current Planning Scheme to incorporate relevant planning provisions and design guidelines to reflect the outcomes of the master planning process.

There are six (6) Objectives of the PDWMP that seeks..... *to integrate the existing values and features of the waterfront with a range of new initiatives in order to cement the western shoreline of the Peninsula as one of the world's great waterfronts.*

The six (6) Objectives are as follows:

- 1. To document the results of an intensive analysis and interactive community consultation process;*
- 2. To set out a vision for a revitalised waterfront that is the civic and economic heart of Port Douglas and to leverage this to encourage wider investment in the town;*
- 3. To protect and enhance the environmental attributes and credentials of the town;*
- 4. To provide a flexible framework, expressed through several key strategies and scenarios, that will assist the Council and community in managing change;*
- 5. To return access to the waterfront of the town to residents and visitors; and*
- 6. To retain key aspects of the working and heritage character of the waterfront by integrating existing marine maritime activity with new open space and tourism uses.*

Section 5.4 Physical Character - of the PDWMP identifies the character of ‘Port’ as its *tropical latitude, waterside location and mix of tourism and marine industry related activities.*

The existing commercial/retail part of TRM site is identified as Character Precinct 5 – Marina Mirage:

Built form within this area will be taller and higher in intensity than the waterfront area to the north but will respect the overall built form strategy for the township. The waterfront area will adopt a ‘harder’ quayside character, softened through the use of natural materials, shade trees and landscaping.

The proposed staged redevelopment will achieve this built form character.

Schedule of Projects

It is acknowledged that the ultimate sequencing of investment for and development or the schedule of projects is dependent upon, yet to be determined, funding streams, approval processes and market forces. The list of Schedule of Projects represents an ideal sequence that is subject to ongoing review and re-prioritisation.

Relevant to TRM site are the following projects:

Marina Mirage redevelopment:

1. Opportunities - establishment of high quality resort with complementary uses in place of the existing Marina Mirage building, within the Planning Scheme bounds- indicative timeframe: Medium Term;
2. Marina expansion and improvements - establishment of new, extended berthing facilities in line with demand and establishment of best practice waste disposal system - indicative timeframe: Medium Term;
3. Waterfront Plaza and Mowbray Street Inlet Improvements- create a waterfront Plaza and improve the facilities in the Mowbray Street Inlet to ensure fishing fleet and other vessels allow for interactive opportunities for residents and tourists; to be established in line with Project, 1 above - indicative timeframe: Medium Term;
4. Fishing fleet use of Mowbray Street Inlet Improvements -fishing fleet and other vessels use the Mowbray Street Inlet as their berthing facilities and opportunities provided for interaction between the vessels and residents/tourists- to be established in line with Project 1 above -indicative timeframe: Medium Term.

Marine industry reorganisation:

1. Relocation of existing abrasive marine industries - relocating the more abrasive/hazardous industries in the waterfront to ensure that conflicting land uses with public access and use of the waterfront do not arise- leases containing abrasive marine industries are not renewed for their current purpose - indicative timeframe: Short – Medium-Term;
2. Slipway removal/relocation - the slipway is removed from adjacent the public use areas after the establishment of a more suitable location where the slipway will best service the marine industry without causing conflict with public use access and use of the waterfront – depends upon the existence of an alternative functional slipway - indicative timeframe: Medium – Long Term.

(My Emphasis)

The PDWMP seeks to guide, encourage and facilitate sustainable economic, social and cultural development and prosperity for Port Douglas and by association, the Shire, generally. However, the specified timeframes, outlined above, create conflicts in achieving Item 3 – Marina Mirage redevelopment- Waterfront Plaza (Medium Term) because of Item 2 – Marine Industry reorganisation – Slipway removal/relocation (Medium – Long Term). The relevant planning provisions have been included in the current Planning Scheme and the Code relevant to this site is the Waterfront North Planning Area Code. This Code is assessed in the Section 5.0, subsection 5.2 below.

Minimal development activity has occurred to date along the waterfront, in line with the vision outlined in the PDWMP, other than expansion/upgrading of the Combined Club/Tin Shed and development undertaken in recent years by TRM in expanding and upgrading the existing marina and part of the existing commercial area adjacent to the marina.

An Economic Impact Study has been prepared by Cummings Economics which clearly demonstrates the economic value TRM re-development project will bring to Port Douglas and the region and the very significant contribution it will make to the achievement of Objective 2 of the PDWMP.

The key findings of the Study identifies that Port Douglas is a major centre for tourism development in the region and TRM is a key facility and the upsurge in tourism numbers taking place is now starting to exceed existing accommodation capacity.

The TRM project will add approximately 32% to marine capacity and 9% to stock of accommodation in Port Douglas.

Construction activity over two years is estimated to involve an expenditure of \$95million resulting in an addition to Gross Regional Product (GRP) including 'flow-on' of about \$30million a year or 4.4% and employment including 'flow-on' of about 300 jobs or 5.9%.

Operational Phase impact is expected to result in increased marina activity involving the Reef Fleet, visiting superyachts, visits by cruise ships, tenders transferring passengers and other permanent and visiting vessels involving direct expenditure estimated at \$28million per annum.

Commercial space additions are expected to generate an estimated \$8.4million in retail expenditure per annum.

Accommodation development (63% for holiday and 37% for residential purposes), is expected to generate additional expenditure of the order of Holiday \$21million and Residential \$4million per annum.

Allowing for some overlap between the above categories of expenditure, total expenditure generated is estimated at approximately \$55million per annum and with 'flow-on' effects, this could be expected to generate an addition to Douglas Shire's annual GRP of the order of \$40million (or 5.8%) and to employment of about 380 (or about 7.4%).

Net Present Value of addition to GRP, over a project period of 30 years at a 4% real discount rate, is estimated at \$690million.

The TRM project also has wider benefits through improved public amenity and footpath/pedestrian routes and improving the efficiency of pedestrian connectivity in the core Port Douglas tourism area.

A copy of the Economic Impact Study is attached at [Appendix 10](#).

5.0 TOWN PLANNING ASSESSMENT

Under the DSPS the site has the following classifications and designations:

- Port Douglas and Environs Locality;
- Waterfront North Planning Area (zone).

The DSPS includes the following land use definitions for the various residential land uses (permanent and tourist) and various commercial/retail land uses (shops, restaurants and offices) proposed to establish or that may potentially establish, example: Tavern.

Business Facilities - means the use of premises for:

- *the conduct of a business or office where the principle activity is the provision of business or professional advice, services and goods or the office based administrative functions of any organisation;*
- *the medical or paramedical care or treatment of persons, which does not involve the accommodation of those persons on the premises overnight;*
- *the medical care of animals, which does not involve the accommodation of those animals on the premises overnight.*

The use includes:

- *facilities commonly described as professional office, real estate office, bank, building society, credit union or funeral parlour;*
- *care or treatment by practitioners such as an acupuncturist, podiatrist, naturopath, chiropractor, dentist, general or specialist medical practitioner, optometrist, pathologist, physiotherapist, radiologist or veterinarian, together with ancillary services such as pharmacy.*

Holiday Accommodation - means the use of premises for the accommodation of tourists or travellers in private accommodation.

The use may include:

- *restaurants;*
- *bars;*
- *meeting and function facilities;*
- *dining room;*
- *facilities for the provision of meals to guests;*
- *a manager's unit and office; and*
- *a display unit which displays to the general public the type of construction or design offered by the builder/developer, for a maximum period of twelve (12) months and which is then demolished, (if a*

freestanding replica), or converts to its intended purpose within the complex when these facilities are an integral part of the accommodation.

The use includes facilities commonly described as:

- *holiday apartments or suites;*
- *international or resort hotel or motel.*

Multi-Unit Housing- *means the use of premises comprising two or more Dwelling Units on one lot for residential purposes.*

The use includes accommodation commonly described as:

- *duplexes;*
- *flats;*
- *home units/apartments;*
- *townhouses;*
- *villa houses; or*
- *a display unit which displays to the general public the type of construction or design offered by the builder/developer, for a maximum period of twelve (12) months and which is then demolished if a freestanding replica or converts to its intended use within the complex.*

Restaurant- *means the use of licensed or unlicensed premises for the provision of meals or light refreshments to members of the public for consumption on or off the premises.*

The use includes facilities commonly described as:

- *bistro;*
- *bar and grill;*
- *café;*
- *milk bar;*
- *snack bar;*
- *coffee shop;*
- *tearoom;*
- *takeaway;*
- *drive through food outlet; and*
- *fast food outlet.*

Shopping Facility- *means the use of premises for the display and retail sale of goods and for personal services such as betting (in the form of TAB agency or similar facility), hair and beauty care, laundromat, dry cleaning agent and other customer services.*

The use includes:

- *the hiring out of small domestic items such as appliances, entertainment, sporting*
- *and health equipment;*

- *the exchange of domestic items and clothing; and*
- *a small scale bakery, dressmaking establishment, jewellery manufacturing*
- *establishment, etc. where the use includes a shopfront retail component.*

The use also includes facilities commonly described as shop, supermarket, department store, retail chain outlets and the like.

The use does not include facilities herein defined as Display Facilities.

Tavern - means the use of premises for:

- *the sale of liquor for consumption on or off the premises;*
- *dining activities;*
- *entertainment activities, including gaming machines;*

The use may include accommodation of tourists or travellers.

The use includes facilities commonly described as:

- *hotel; or*
- *tavern.*

Under the DSPS, the proposed development requires assessment against the following Codes:

- Port Douglas and Environs Locality Code;
- Waterfront North Planning Area Code;
- Acid Sulfate Soils Overlay Code;
- Multi-Unit Housing/Holiday Accommodation/Retirement Facility Code;
- Advertising Devices Code,
- Landscaping Code;
- Natural Areas and Scenic Amenity Code;
- Reconfiguring a Lot Code;
- Sustainable Development Code; and
- Vehicle Parking and Access Code.

An assessment against the relevant provisions of the DSPS is outlined below. Where only section/s of a Code is relevant the whole Code is not reproduced.

5.1 Locality Code

Port Douglas and Environs Locality Code

Purpose

The purpose of this Code is to facilitate the achievement of the following outcomes for the Port Douglas and Environs Locality:

- *consolidate Port Douglas as the major tourist accommodation and tourist service centre in the Shire;*
- *ensure that tourist development and associated Landscaping is of high quality which reflects and complements the image of Port Douglas as a tropical seaside resort town of international renown;*
- *consolidate the area between Macrossan Street and Marina Mirage as the major tourist, retail, dining and entertainment centre of the Shire;*
- *ensure that all forms of development complement the tropical image of the town by incorporating attractive design and architectural features;*
- *encourage the expansion of residential areas that are pleasant, functional, distinctive and in visually well-defined areas;*
- *protect existing and future residential areas from the intrusion of tourist accommodation and activity;*
- *protect sensitive environments and natural features which give Port Douglas its distinctive character and identity, in particular Four Mile Beach, Dickson's Inlet and Flagstaff Hill;*
- *protect the surrounding rural and natural environments from intrusion by urban development;*
- *maintain the distinct rural hinterland, dominant natural environment of the western escarpment, and the existing vegetated hillside of Flagstaff Hill; and*
- *protect primary functions of the port (marine and fishing activities) from incompatible land uses and acknowledge the industrial and commercial land uses associated with the maritime industry, while also providing secondary opportunities for recreational use by residents and tourists.*

(*NOTE- The following Performance Criteria have been deleted from the Code below, as they are not relevant to the assessment:- P1 (part), P14, P15, P19, P20, P21, P24, P25 to P37)

General Requirements

| PERFORMANCE CRITERIA | ACCEPTABLE SOLUTIONS | COMMENT |
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| <p>P1 Buildings and structures complement the Height of surrounding development,</p> <p>AND</p> <p>The height of buildings in the Port Douglas Waterfront transitions from single Storey in the Community and Recreation Facilities Planning Area through to three Storeys in the Port Douglas Waterfront North Planning Area.</p> <p>AND</p> <p>Buildings are limited to two Storeys outside the Port Douglas Waterfront, except; in the High Scale locations depicted on the Locality Plan, where development of three Storeys is appropriate.</p> | <p>A1.1.....</p> <p>A1.1 In the Planning Areas (and parts thereof) listed below, AND</p> <p>In the Planning Areas (parts thereof) listed below the maximum Height of Buildings/structures is 10 metres and 3 Storeys. In addition, the roof (including any ancillary roof features) does not exceed a maximum Height of 3.5 metres above the intersection of the pitching part of the roof and the wall of the Building:</p> <ul style="list-style-type: none"> •..... • Port Douglas Waterfront North (where depicted within Figure 1 of the Port Douglas Waterfront North Planning Area Code). | <p>All Stages comply.</p> <p>On the basis of the Administrative Definition of Ground Level in the DSPC and Council specifying a ground level of 3.87metres based on storm surge.</p> |
| <p>P2 Development is connected to available urban services.</p> | <p>A2.1 Development is connected to available urban services by underground connections, wherever possible.</p> <p>AND/OR</p> <p>Contributions are paid when applicable in accordance with the requirements of Planning Scheme Policy No 11 - Water Supply and Sewerage Headworks and Works External Contributions.</p> | <p>Complies</p> <p>Refer to the Civil Engineering and Traffic Report at Appendix 11</p> |
| <p>P3 Landscaping of development Sites complements the existing tropical seaside</p> | <p>A3.1 Landscaping of a development Site complies with Planning Scheme Policy No 7 - Landscaping,</p> | <p>Can Comply</p> <p>Refer to the Landscape Concept Report at Appendix 12.</p> |

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| resort town character of Port Douglas and creates a dominant tropical vegetated streetscape. | with particular emphasis on appropriate species for Port Douglas. | |
| P4 Development Sites are provided with efficient and safe vehicle Access and manoeuvring areas on Site and to the Site, to an acceptable standard for the Locality. | A4.1 All Roads, driveways and manoeuvring areas on Site and adjacent to the Site are designed and maintained to comply with the specifications set out in the Planning Scheme Policy No 6 - FNQROC Development Manual. | All Stages can comply Refer to the Civil Engineering and Traffic Report at Appendix 11 |
| Tourist Centre | | |
| P5 Development in the Tourist Centre enhances the distinct tropical resort town character and identity of Port Douglas and encourages pedestrian activity at street level including shade protection across the entire footpath for the length of the building. | A5.1 Development is built up to the street Frontage/s at Ground Level and incorporates a light frame awning a minimum of 3 metres wide for the length of the street Frontage/s. OR If a development includes an outdoor dining area at ground/footpath level, the dining area has a maximum Setback of 6 metres and the required awning is still maintained along the length of the street Frontage/s. | Stage 2c is the only Stage fronting Wharf Street and it does not comply with the zero setback requirements. However, there is no commercial component fronting Wharf Street at ground level and the intention of the overall design is to encourage/direct pedestrians down the axial connection along Rainforest Walk and then connecting to the waterfront and The Boardwalk. The Residential component of the building along Wharf Street is set back so that the area can be landscaped to improve the residential amenity. |
| P6 Development in the Tourist Centre is predominantly commercial in nature with any tourist accommodation having a secondary focus and not located on the street-level Frontage. | A6.1 Commercial development establishes at Ground Level and a maximum of one level above ground with any residential tourist development establishing on levels above ground or on Ground Level but not on the street Frontage, in any mixed use development. | Complies with Preliminary Approval. Where a development Stage is a mixed use development the commercial floor space addresses the public realm. |
| P7 Development in the Tourist Centre is of a height and scale which complements the | A7.1 The achievement of the maximum Building/Structure Height specified above in A1.1, relies | All Stages comply |

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| <p>village character of the town and remains subservient to the natural environment and the backdrop of Flagstaff Hill, in particular.</p> | <p>on compliance with Acceptable Solutions A7.2, A7.3, A7.4 and A8.1 below.</p> <p>A7.2 Development has a maximum length of unbroken building facade of 20 metres and a maximum extent of overall development in the same style/design along the street Frontage/s of 40 metres.</p> <p>A7.3 Any break in the building facade varies the alignment by a 1 metre minimum deviation.</p> <p>A7.4 A minimum of three of the following building design features and architectural elements detailed below are incorporated to break the extended facade of a development:</p> <ul style="list-style-type: none"> • a change in roof profile; • a change in parapet coping; • a change in awning design; • a horizontal or vertical change in the wall plane; or • a change in the exterior finishes and exterior colours of the development. <p>Planning Scheme Policy No 2 Building Design and Architectural Elements should be referred to for demonstrating compliance with elements listed above.</p> <p>A7.5 Any Building which does not comply with A7.2, A7.3 and A7.4 above, is limited to 1 storey and/or 4.5 metres in height.</p> | <p>All Stages comply</p> <p>All Stages comply</p> <p>All Stages comply</p> |
| <p>P8 Development in the Tourist Centre is climate response, contributes positively to the</p> | <p>A8.1 Development incorporates the following design features and corresponding plot ratio</p> | <p><u>Proposed Lot 1 – 9,970m²</u> GFA =9,774m²</p> |

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| | <p>Bonus]; and</p> <p>g)inclusion of windows and balconies to the street facade of the Building [10% Plot Ratio Bonus]; and</p> <p>h)provision of lattice, battens or privacy screens [5% Plot Ratio Bonus]; and</p> <p>i)the overall length of a Building does not exceed 30 metres and the overall length of any continuous wall does not exceed 15 metres [10% Plot Ratio Bonus].</p> | <p>Complies</p> <p>Complies</p> <p>Complies</p> |
| <p>P9 Car parking generated by: the commercial component of development is fully or partly accommodated on the Site of the development, depending on the availability of alternative public car parking nearby with any balance to be paid in lieu of providing on-site car parking for commercial development in accordance with Planning Scheme Policy No 3 – Car Parking Contributions;</p> <p>and</p> <p>the residential component of any mixed use development is provided on the Site for the full allocation for units and visitor parking and is held in a common pool for common use.</p> | <p>A9.1 In respect to P9 (a), a minimum of 30% of the car parking requirements for the commercial component of development is provided on the Site of a development fronting Grant, Macrossan, Owen or Wharf Street, with 100% on-site provision applying for a commercial component along other streets in the Tourist Centre.</p> <p>AND</p> <p>Any balance is paid in lieu of providing on-site car parking for commercial development in accordance with Planning Scheme Policy No. 3 -Car Parking Contributions.</p> | <p>Common car parking area existing on-site to be utilized for commercial development</p> <p>Refer to section 5.5 of this Report which addresses the Vehicle Parking and Access Code</p> <p>N/A</p> |
| <p>P10 The use of on Site public car parking in the Tourist Centre is maximised.</p> | <p>A10.1 On Site car parking available for public use in the Tourist Centre is clearly sign-posted at the Site</p> | <p>N/A</p> |

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| | <p>Frontage.</p> <p>A10.2 Signage for car parking for public use is to be of a standard blue and white sign with a directional arrow unless otherwise specified.</p> <p>A10.3 Boom gates, pay machines or other regulatory devices to control Access to public car parking areas are not constructed/erected.</p> | <p>N/A</p> <p>N/A</p> |
| <p>P11 Car parking and access in the Tourist Centre:</p> <p>a) does not dominate street Frontages, especially along streets with high pedestrian traffic and pedestrian- oriented development; and</p> <p>b) facilitates pedestrian connectivity; and</p> <p>c) is safe and convenient.</p> | <p>A11.1 In respect to P11(a), along Grant, Macrossan, Owen and Wharf Streets, on-site car parking and Access is minimised, and where possible, shared access driveways and Access easements are to be provided to limit the number of vehicles crossings.</p> | <p>Complies- limited points of vehicular access proposed to and from Wharf Street.</p> |
| <p>P12 Residents in residential accommodation located within the Tourist Centre are protected from noise intrusion associated with night time activities, such as outdoor dining, bars and nightclubs.</p> | <p>No Acceptable Solution.</p> <p>(Information that the Council may request to demonstrate compliance with the Performance Criteria 1s outlined in Planning Scheme Policy No 10 - Reports and Information the Council May Request, for code and impact assessable development).</p> | <p>Can comply</p> |
| <p>P13 Safe and convenient pedestrian linkages are promoted in the Tourist Centre.</p> | <p>A13.1 One centrally located pedestrian Access is provided via a sheltered walkway/arcade from Macrossan Street to Warner Street between Grant Street and Owen Street.</p> | <p>Complies with Preliminary Approval and generally complies with Figure 1.</p> |
| <p>P16 Residential development, other than a</p> | <p>A16.1 Development incorporates the following design features</p> | <p>Complies</p> |

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| <p>House, is climate-responsive, contributes positively to the character of the Locality, is complementary in scale to surrounding development and does not exceed the identified Plot Ratio designation on the Locality Map/s (that is):</p> <ul style="list-style-type: none"> • land designated High Scale has a base Plot Ratio of 0.5:1 and a maximum Plot Ratio of 0.8:1; • land designated Medium Scale has a base Plot Ratio of 0.3:1 and a maximum Plot Ratio of 0.45:1; <p>OR</p> <ul style="list-style-type: none"> • land designated Low Scale has a base Plot Ratio of 0.25:1 and a maximum Plot Ratio of 0.35:1. <p>AND</p> <p>Will not achieve the maximum Plot Ratio specified above unless the development incorporates building design features and architectural elements detailed in Planning Scheme Policy No 2 - Building Design and Architectural Elements (and referred to in the Acceptable Solution).</p> | <p>and corresponding plot ratio bonuses [in brackets]:</p> <p>a) appropriate roof form and roofing material [10% Plot Ratio Bonus]; and</p> <p>b) appropriate fenestration in combination with roof form [5% Plot Ratio Bonus]; and</p> <p>c) appropriate window openings with window awnings, screens or eaves shading 80% of the window opening - refer Planning Scheme Policy No. 2 - Building Design and Architectural Elements [15% Plot Ratio Bonus]; and</p> <p>d) minimum of 700mm eaves [15% Plot Ratio Bonus]; and</p> <p>e) orientation of the Building to address the street/s [5% Plot Ratio Bonus];</p> <p>f) sheltered pedestrian Access by unenclosed covered common area walkway of 1.2 metres in width from the car parking area/s to the development [5% Plot Ratio Bonus]; and</p> <p>g) inclusion of windows and balconies to the street facade of the Building [10% Plot Ratio Bonus]; and</p> <p>h) provision of lattice, battens or privacy screens [5% Plot Ratio Bonus]; and</p> <p>i) the overall length of a Building does not exceed 30 metres and the overall length of any continuous wall does not exceed 15 metres [10% Plot Ratio Bonus].</p> | <p>Complies</p> <p>Complies</p> <p>Complies</p> <p>Complies</p> <p>Complies</p> <p>Complies</p> <p>Complies</p> <p>Complies</p> <p>Complies</p> |
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| <p>P17 The Site Coverage of any residential or tourist development does not result in a built form that is bulky or visually obtrusive.</p> | <p>A17.1 The Site Coverage of any residential or tourist development, other than a House, is limited to:</p> <ul style="list-style-type: none"> • 45% at Ground Level; • 40% at first floor level; <p>and</p> <ul style="list-style-type: none"> • 35% at second floor level, if applicable. | <p><u>Proposed Lot 1</u></p> <p>Stages 1a, 1b and 2a -</p> <table style="width: 100%;"> <tr> <td>Ground Level</td> <td style="text-align: right;">48%</td> </tr> <tr> <td>Level 1</td> <td style="text-align: right;">42%</td> </tr> <tr> <td>Level 2</td> <td style="text-align: right;">42%</td> </tr> </table> <p><u>Proposed Lot 2</u></p> <p>Stage 2c-</p> <table style="width: 100%;"> <tr> <td>Ground level</td> <td style="text-align: right;">45%</td> </tr> <tr> <td>Level 1</td> <td style="text-align: right;">41%</td> </tr> <tr> <td>Level 2</td> <td style="text-align: right;">37%</td> </tr> </table> <p><u>Proposed Lot 3</u></p> <p>Stage 3a -</p> <table style="width: 100%;"> <tr> <td>Ground Level</td> <td style="text-align: right;">31%</td> </tr> <tr> <td>Level 1</td> <td style="text-align: right;">31%</td> </tr> <tr> <td>Level 2</td> <td style="text-align: right;">N/A</td> </tr> </table> <p>TOTAL DEVELOPMENT</p> <table style="width: 100%;"> <tr> <td>Ground level</td> <td style="text-align: right;">46%</td> </tr> <tr> <td>Level 1</td> <td style="text-align: right;">41%</td> </tr> <tr> <td>Level 2</td> <td style="text-align: right;">38%</td> </tr> </table> <p>The proposed development is an integrated development on a large waterfront site that has been architecturally designed to complement the QLD architectural vernacular character and pedestrian scale of Port Douglas. It is considered that the proposed development does not result in a built form that is bulky or visually obtrusive and therefore achieves the PC</p> | Ground Level | 48% | Level 1 | 42% | Level 2 | 42% | Ground level | 45% | Level 1 | 41% | Level 2 | 37% | Ground Level | 31% | Level 1 | 31% | Level 2 | N/A | Ground level | 46% | Level 1 | 41% | Level 2 | 38% |
| Ground Level | 48% | | | | | | | | | | | | | | | | | | | | | | | | | |
| Level 1 | 42% | | | | | | | | | | | | | | | | | | | | | | | | | |
| Level 2 | 42% | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ground level | 45% | | | | | | | | | | | | | | | | | | | | | | | | | |
| Level 1 | 41% | | | | | | | | | | | | | | | | | | | | | | | | | |
| Level 2 | 37% | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ground Level | 31% | | | | | | | | | | | | | | | | | | | | | | | | | |
| Level 1 | 31% | | | | | | | | | | | | | | | | | | | | | | | | | |
| Level 2 | N/A | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ground level | 46% | | | | | | | | | | | | | | | | | | | | | | | | | |
| Level 1 | 41% | | | | | | | | | | | | | | | | | | | | | | | | | |
| Level 2 | 38% | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>P18 Tourist development provides a range of services and facilities for the recreational convenience of in-house guests.</p> | <p>A18.1 Tourist development provides a range of recreational facilities and small scale commercial services such as Restaurant/bars, shop/boutique, and tour booking office, for the</p> | <p>Complies</p> | | | | | | | | | | | | | | | | | | | | | | | | |

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| | enjoyment and convenience of in-house guests. | |
| P22 Development does not adversely impact on areas of sensitive natural vegetation, foreshore areas, Watercourses and areas of tidal inundation which contribute the Scenic Amenity and natural values of the locality. | No Acceptable Solution. (Information that the Council may request to demonstrate compliance with the performance Criteria is outlined in Planning Scheme Policy No 10 – Reports and Information the Council May Request, for code and impact assessable development). | Complies |
| Port Douglas Waterfront | | |
| P23 The Port Douglas Waterfront is protected from any new incompatible land uses and activities or intensification of existing incompatible uses, to allow for the future planned spatial arrangements of the waterfront. | A23 .1 Development in the Port Douglas Waterfront North Planning Area and the Port Douglas Waterfront South Planning Area complies with the respective Codes for each Planning Area. | Refer to zone Code and Preliminary Approval. |

All stages of the proposed development are generally compliant with the Port Douglas and Environs Locality Code.

5.2 Zone Code

Waterfront North Planning Area Code

Purpose

The purpose of this Code is to facilitate the achievement of the following desired development outcomes for the Port Douglas Waterfront North Planning Area:

- *The Port Douglas Waterfront North Planning Area evolves as revitalised open space and waterside development precinct;*
- *Development within the Port Douglas Waterfront North Planning Area is designed to be sympathetic to the environmentally sensitive Dickson Inlet and mitigates any adverse impacts;*
- *The establishment of mixed-use development is facilitated to promote activity and vitality;*
- *Development contributes to a high quality public realm;*
- *Built form provides an attractive point of arrival from both land and sea;*
- *Pedestrian connectivity is safe, efficient and provides for the needs of all users of the Port Douglas Waterfront;*

- *Parking (and associated infrastructure) does not undermine the relationship between buildings and street;*
- *A sense of place is created through aesthetic streetscapes and innovative public and private open space;*
- *Character is enhanced through the identification of gateway sites, landmarks, main approach routes and pedestrian thoroughfares and view corridors;*
- *A high level of pedestrian and streetscape amenity is facilitated along the waterfront and road network through the use of landscaping, public art and streetscape elements;*
- *The importance of marine-based industries to the area is recognised;*
- *Marine-based industries are protected from incompatible uses;*
- *Marine infrastructure is established to service the tourism, fishing and private boating community;*
- *The functionality of the Balley Hooley tourist rail is retained;*
- *Uses identified as inconsistent uses in the Assessment Table dealing with material change of use for the Port Douglas & Environs Locality are not established in the Port Douglas Waterfront North Planning Area.*

| PERFORMANCE CRITERIA | ACCEPTABLE SOLUTIONS | COMMENT |
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| Consistent and Inconsistent Uses | | |
| PI The establishment of uses is consistent with the outcomes sought for the Port Douglas Waterfront South (sic) North Planning Area. | AI.1 Uses identified as inconsistent uses in the Assessment Table are not established in the Waterfront South (sic) North Planning Area. | Complies with mix of land uses listed in Preliminary Approval for each Stage. |
| Design, Layout and Built Form | | |
| P2 The bulk and scale of buildings is consistent with surrounding development and steps down to compliment the open space areas in the northern parts of the Port Douglas Waterfront. | A2.1 Development is designed in accordance with the control guidelines shown in Figure 1. Setbacks and building envelopes will be generally in accordance with those specified in this figure. | Complies with the relevant provisions of the Preliminary Approval and, in part with Figure 1. Stage 1a and 1b encroach into the 6 metre setback from Dickson Inlet. However, due to the staggered setback of the buildings to the site frontage the encroachment is overcome by setbacks that are deeper than 6 metres for parts of each building along the Inlet frontage, so that the average setback exceeds 6 |

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| | | <p>metres.</p> <p>An “active edge” will be created in front of the mixed use development and along The Boardwalk and where development is residential in nature the “active edge” will be softened with landscaping and shade planting.</p> <p>The lack of awning in Wharf Street adjacent to Stage 2c has been addressed above.</p> |
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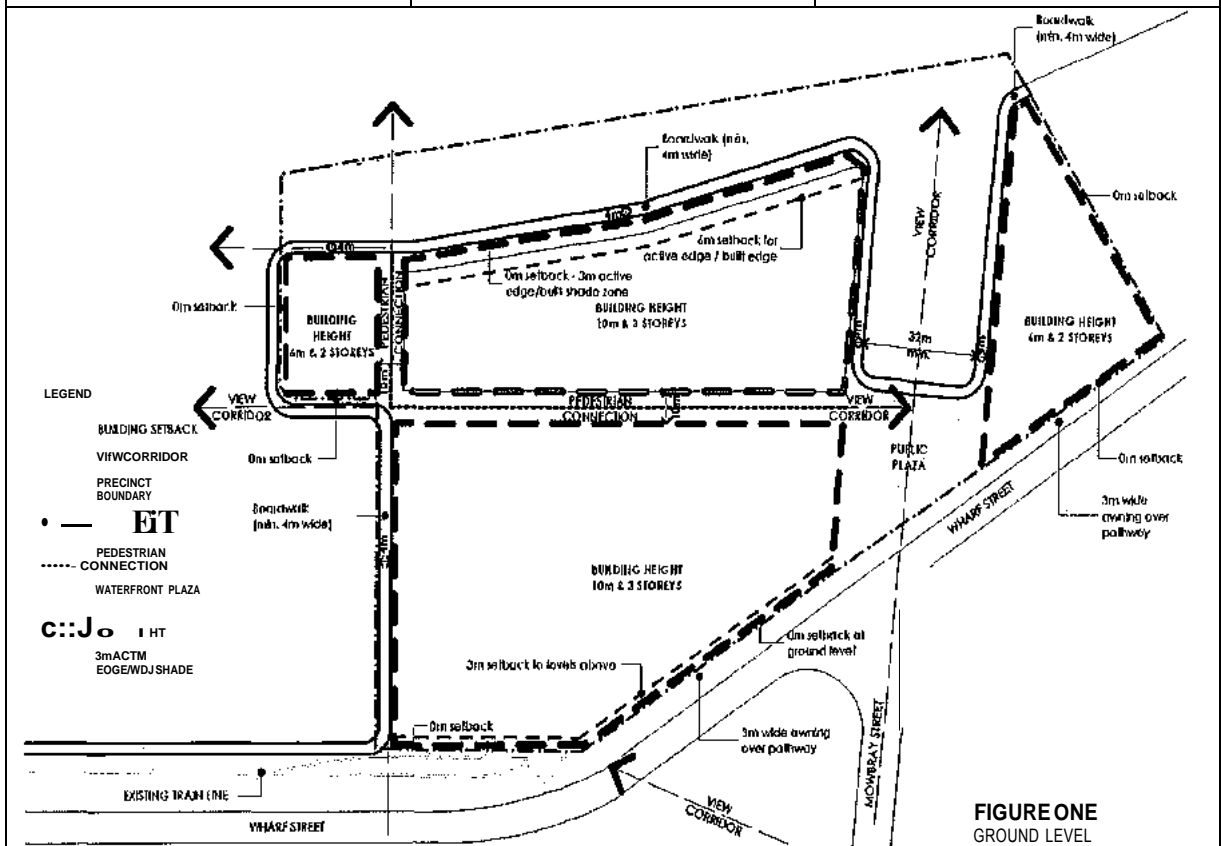


Figure 1: Development Control Guideline (above)

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| <p>P3 Building design is distinctive and reflects the tropical character of Port Douglas and reinforces the amenity of the waterfront and surrounding areas as a major component of the tourism experience.</p> | <p>A3.1 Building design incorporates lightweight cladding and extensive sun-shading and shadowing devices to improve aesthetics and energy efficiency; and</p> <p>A3.2 Buildings are designed</p> | <p>Complies, refer to the Concept Plans for each Stage of the development, Appendices 5, 6, 7, 8 and 9 which include Elevations and Perspectives and the Urban Design Guide and Perspective/s at Appendix 3.</p> |
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| | in accordance with the requirements of the Planning Scheme Policy No 2 - Building Design and Architectural Elements. | |
| P4.1 Buildings are designed and oriented to address and provide activity in the public realm, particularly the public plaza and Wharf Street. | <p>A4.1 Land uses, such as shops, restaurants, bars and commercial services, activate Wharf Street and the pedestrian plaza; and</p> <p>A4.2 Where a building is adjacent to a public place, the building's main entrance addresses the public place; and</p> <p>A4.3 Through use of design features, development enables:</p> <ul style="list-style-type: none"> a. activities in public areas, such outdoor dining; and b. passive recreation (such as places for meeting or busking); and c. informal seating around edges such as garden beds. | <p>Complies</p> <p>Complies</p> <p>Complies</p> |
| P5 The design of buildings ensures that: | <p>A5.1 A non-transparent cantilevered awning is provided for the full length of the road frontage/s of buildings with a zero metre setback, as generally depicted in Figure 1. Posts may be included in the awnings design however these are to be non-load bearing; and</p> <p>A5.2 The underside of the awning is a minimum of 3 metres and a maximum of 4 metres above the finished level of the footpath; and</p> <p>A5.3 The design of the awning allows for street tree</p> | <p>Awnings will be provided over the commercial building elements, to draw pedestrians through to Rainforest Walk and the Boardwalk.</p> <p>The lack of awning in Wharf Street adjacent to Stage 2c has been addressed above</p> |

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| | <p>plantings; and</p> <p>A5.4 Dense landscaping is provided adjacent to the road frontage where buildings are not built to the front boundary.</p> | |
| Retention of Balley Hooley Rail Line | | |
| P6 The Bally Hooley rail line and turn-table is retained and incorporated in development to maintain its functionality. | A6.1 No Acceptable Solutions Specified | Complies |
| P7 Development mitigates the adverse impacts of flood, storm tide inundation and sea level rise. | <p>A7.1 Floors that provide tourist accommodation are located above the Storm Tide Inundation Area and consider rising sea levels; and</p> <p>A7.2 Floors for new commercial and retail uses are located 150mm above the 1 in 100 year ARI flood event; or</p> <p>A7.3 Additions to existing buildings may use existing floor levels only where it is necessary to retain functionality of the building's use.</p> | <p>Complies</p> <p>Council's specified ground level of 3.87 metres has been complied with and floor levels located 150mm above.</p> <p>N/A</p> |
| P8 Development recognises the importance of and relationship between the marina, commercial and residential development in the Port Douglas Waterfront Planning Area, and includes measures to mitigate the impact of: | <p>A8.1 Development incorporates buildings and relationship between the marina, structures and landscaped areas that can serve as a buffer between residential and non-residential use areas; and</p> <p>A8.2 Service and rubbish collection points: are positioned to reduce conflict with residential accommodation; and adverse noises and</p> | <p>Complies</p> <p>Complies</p> |

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| | <p>smells; and minimise the need for trucks to use their reversing horns.</p> <p>A8.3 Service structures and mechanical plant is not visible from:</p> <ul style="list-style-type: none"> a. the street; and b. adjoining properties; and c. Public open space; and <p>A8.4 Service structures and mechanical plant is located away from:</p> <ul style="list-style-type: none"> a. balconies or adjacent to other liveable areas; and b. multiple reflective surfaces such as walls and eaves; and <p>A8.5 Potential noise impacts are mitigated through the use of:</p> <ul style="list-style-type: none"> a. sound insulation; and b. sensitive internal planning; and c. acoustic barriers between residential and non-residential uses; and <p>A8.6 Hazardous Materials are stored in an enclosed, bunded area, away from residential uses.</p> | <p>Complies</p> <p>Complies</p> <p>Complies or can be conditioned to comply</p> <p>N/A</p> |
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| Sustainable Building Design | | |
| P9 New buildings promote exemplary environmentally sustainable building design outcomes. | A9.1 No Acceptable Specified. Solutions | Complies, refer to the Concept Plans for each Stage of the development, Appendices 5, 6, 7, 8 and 9 which include Elevations and Perspectives and the Urban Design Guide and Perspective/s at Appendix 3. |
| Parking, Access and Mobility | | |
| P 10 Vehicle access, parking and service areas: a. do not undermine the relationship between buildings and street or dominate the streetscape; and b. are designed to minimise pedestrian vehicle conflict. | <p>A10.1 For all buildings parking is: a. to the side of buildings and recessed behind the main building line; or b. behind buildings; or c. wrapped by the building facade, and not visible from the street; and</p> <p>A10.2 Ground level parking incorporates clearly defined pedestrian routes; and</p> <p>A10.3 Any porte cocheres, disabled and pedestrian access are accommodated within the boundary of new or refurbished development.</p> <p>A10.4 Where development provides floor area for the Bally Hooley rail station, the gross floor area of the rail line and station does not attract a vehicle parking rate under this Code, or Schedule 1 of the Parking and Access Code.</p> <p>A10.5 Where the development is an integrated mixed-use development incorporating holiday accommodation or multiple dwellings and either</p> | <p>Complies</p> <p>Complies</p> <p>Complies – Stages 1b and 2a</p> <p>N/A</p> <p>Complies, refer commentary in Section 5.5 - Vehicle Parking and Access Code</p> |

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| | restaurant or tavern or shopping facilities or business facilities, on-site parking spaces are provided as per the number prescribed in Schedule 1 - Car Parking Requirements of the Vehicle Parking and Access Code with a relaxation of 30% of the non- residential use. | |
| PI1 Pedestrians, cyclists, motorists and public transport users can easily move into and through the waterfront along planned connectivity routes. | <p>A11.1 An integrated pedestrian and cycle movement network is provided as depicted on the Port Douglas Pedestrian and Cycle Movement Overlay.</p> <p>A11.2 Vehicular access from Wharf Street, is provided for the:</p> <p>a. Accommodation parking and drop off area, this may include a port cohere and entry feature; and</p> <p>b. Non-residential parking; and</p> <p>A11.3 To avoid any confusion, vehicular access may be via separate access points from Wharf Street which must be designed to maintain the pedestrian integrity of the area through safe sightlines for both pedestrians and vehicles.</p> | <p>N/A</p> <p>Complies</p> <p>Complies</p> |
| View Corridors, Gateways, Landscaping and Open Space | | |
| PI2 A combination of pedestrian linkages and open space areas in the private and public realms are provided: | A12.1 Development establishes an integrated open space and pedestrian movement network is provided as generally depicted on the Port Douglas Pedestrian and Cycle Movement Overlay. | Complies with the Preliminary approval |

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| <p>b. through the creation of a continuous waterfront promenade/boardwalk along the quay line.</p> | | |
| <p>P13 A public plaza and pedestrian access is established to create an arrival node to the Port Douglas Waterfront.</p> | <p>A13.1 Development establishes the public plaza as shown in Figure 1.</p> | <p>Stage 2c creates a pedestrian link to Wharf Street and a link through to the Dickson Inlet waterfront boardwalk.</p> <p>A major aim of the PDWMP is the physical link between the marina and the town centre through an axial pedestrian connection.</p> <p>To achieve this pedestrian and visual link a resolution of the planning/urban design dilemma created by the slipway site is required.</p> <p>While the DSPC Code acknowledges/promotes the relocation of heavy industry to other locations, in particular the Waterfront South Planning Area, neither the PDWMP nor the Code offer any solution to solving this dilemma without 3rd party involvement.</p> <p>The creation of the public plaza can only be achieved following further discussions relating to marine base industries and the redevelopment of Stage 2b, hopefully, in the short term.</p> |
| <p>P14 The public plaza shown in Figure 1 is designed and constructed to:</p> <p>a. reflect the character of the Port Douglas Waterfront;</p> <p>b. meet the needs of its users; and</p> | <p>A14.1 The public plaza is designed to be adaptable to community based events and are serviced accordingly; and</p> <p>A14.1 Paths, meeting spaces and seat locations are</p> | <p>Refer above and to the detailed design of Stage 2b.</p> <p>Refer Landscape Concept Report at Appendix 12 and the</p> |

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| <p>c. provide opportunities for social interaction.</p> | <p>designed to encourage incidental social interaction; and</p> <p>A14.3 Shaded seats and shaded standing areas are provided along with drinking taps.</p> | <p>Public Art Plan at Appendix 14.</p> |
| <p>P15 Formalised public spaces and pedestrian paths/areas on freehold land are made accessible to the public, particularly the public plaza and foreshore access.</p> | <p>A15.1 No Acceptable Solutions Specified.</p> | <p>Public accessibility is provided along the foreshore and throughout the site. However, until the conflicts with the slipway site are resolved no strong axial connection can be provided in association with a public plaza.</p> |
| <p>P16 Buildings, civic spaces, roads and pedestrian links:</p> <p>a. are enhanced by appropriate landscape design and planting; and</p> <p>b. themed planting defines entry points, and create strong 'entry corridors' into the waterfront; and</p> <p>c. lighting and well-considered signage complements the building and landscape design; and</p> <p>d. public artwork and other similar features are provided that reflect the heritage and character of the Port Douglas Waterfront.</p> | <p>A16.1 No Acceptable Solutions Specified.</p> | <p>Complies</p> <p>Refer Landscape Concept Report at Appendix 12 and the</p> <p>Public Art Plan at Appendix 14.</p> |
| <p>P17 Buildings are designed and sited to provide vistas along shared pedestrian/open space and movement areas in suitable location.</p> | <p>A17.1 Development is in accordance with the control guidelines shown in Figure 1.</p> | <p>Complies with Preliminary Approval</p> |
| <p>Marine-Based Industry and Marine Infrastructure</p> | | |
| <p>P18 Development does not diminish the viability of marine-based industrial uses that directly serve the Port Douglas tourist and fishing operators and private boat</p> | <p>A18.1 The Slipway is retained until such time as the capacity of the existing slipway is established in the Port Douglas Waterfront South Planning Area, or as</p> | <p>Ref above and,</p> <p>Trawlers will relocate to new berthing facilities in the Duck Pond.</p> |

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| <p>owners, particularly with respect to the slipway operation.</p> | <p>otherwise approved by Council; and</p> <p>A18.2 Buildings are designed to minimise conflict between tourist and pedestrian areas and continued marine-based industrial activities.</p> | <p>The Slipway is not part of this application.</p> <p>Existing marine-based business affected by the redevelopment project will be offered new areas within Lot 103, from which to operate.</p> |
| <p>P19 Marine infrastructure is established to service the tourism, fishing and private boating community.</p> | <p>A19.1 No Acceptable Solutions Specified.</p> | <p>The Duck Pond will accommodate the commercial fishermen who currently tie-up adjacent to the site in the Inlet. It is intended that fresh sales of seafood will occur direct from the trawlers in the Duck Pond to tourists and the public.</p> <p>A new cruise ship tender transfer pontoon will be constructed with an adjacent covered open air pavilion/bandstand type structure for waiting passengers and general use for local entertainers, if required.</p> <p>New berths will be constructed along Dickson Inlet</p> |
| <p>P20 Changes to the Port Douglas Waterfront quay line does not cause adverse impacts to the environmentally sensitive Dickson.</p> | <p>A20.1 Development that results in changes to the Port Douglas quay line are only established where an Ecological Assessment Report provides support to the changes.</p> | <p>Can comply or be conditioned to comply at the time the Operational Works/Tidal Works Permit is sought for the Boardwalk.</p> |

5.3 Overlay Code

Acid Sulfate Soils Code

Purpose

The purpose of this Code is to ensure that development which occurs on a Site containing or potentially containing Acid Sulfate Soils is undertaken so that the potential risks associated with disturbing Acid Sulfate Soils are addressed and minimised.

The proposed development can be conditioned to comply with this Code.

5.4 Land Use Codes

Multi -Unit Housing/Holiday Accommodation/Retirement Facility Code

Purpose

The purpose of this Code is to:

- *ensure that Multi-Unit Housing/Holiday Accommodation/Retirement Facilities are compatible and complementary with surrounding development, with regard to scale, bulk, appearance and streetscape;*
- *ensure that Multi-Unit Housing/Holiday Accommodation/Retirement Facilities do not adversely impact on the natural environment;*
- *ensure that Multi-Unit Housing/Holiday Accommodation/Retirement Facilities are located in appropriate locations and separated from incompatible noise and hazards; and*
- *ensure that the design of Multi-Unit Housing/Holiday Accommodation/Retirement Facilities creates a pleasant living environment and is appropriate for the tropical climate of Far North Queensland.*

(*NOTE- The additional provisions for Retirement Facility, included in the Code, have been deleted, as they are not relevant to the assessment)

| PERFORMANCE CRITERIA | ACCEPTABLE OUTCOMES | COMMENT |
|---|---|---|
| Site Requirements | | |
| P1 A Site for Multi-Unit Housing/Holiday Accommodation/Retirement Facilities has sufficient area and dimensions to accommodate the Buildings/structures, open space, car parking and associated vehicular Access, Landscaping and recreation facilities for the enjoyment of guests. | AI.1 The Site has a minimum area of 1000 m ² . AND The Site has a minimum Road Frontage of 25 metres. | All sites exceed 1000m ² in area and will provide landscaping/recreational facilities and practical vehicular access will be provided to each site- all Stages comply. |

| Site Layout | | |
|---|--|---|
| <p>P2 The building bulk is reduced through effective design and materials.</p> | <p>A2.1 The overall length of any Building does not exceed 30 metres.</p> | All Stages comply |
| | <p>A2.2 The length of any continuous wall plane does not exceed 15 metres.</p> | All Stages comply |
| | <p>A2.3 Building bulk is reduced by balconies, patios, recesses and variations in exterior building materials and colours.</p> | All Stages comply |
| | <p>A2.4 Elevations provide visual interest through building elements, exterior colours, textures and materials.</p> <p>AND</p> <p>Buildings are designed in accordance with the requirements of the Planning Scheme Policy No 2 - Building Design and Architectural Elements.</p> | All Stages comply |
| <p>P3 The development addresses the Main Street Frontage to facilitate casual surveillance and to enhance the amenity of the streetscape.</p> | <p>A3.1 The Building has balconies, windows or patios that face the Main Street Frontage, and remain unenclosed.</p> | All Stages comply. |
| | <p>A3.2 Perimeter fencing to any street Frontage complies with any specific fencing requirements detailed in the relevant Planning Area Code.</p> | All Stages can be conditioned to comply |
| <p>P4 The development does not adversely affect the privacy or liveability of adjoining development, and achieves a pleasant living environment for residents.</p> | <p>A4.1 Windows and openings of Habitable Rooms do not overlook Habitable Rooms of adjoining developments.</p> <p>OR</p> | All Stages comply |
| | <p>A4.2 Where Habitable</p> | All Stages comply |

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| | <p>Rooms overlook Habitable Rooms of adjoining developments, privacy is protected by fixed external screens or other suitable elements to avoid overlooking.</p> <p>Screening is provided where any windows, balconies or patios overlook other windows, balconies or patios of other Dwelling Units/Private Rooms within the development.</p> | <p>All Stages comply</p> |
| <p>P5 Vehicle parking areas and driveways are safe, convenient and have minimal impacts on adjoining development.</p> | <p>A5.1 Vehicle parking areas are located under or behind the Building so they are not visually prominent from the street.</p> <p>A5.2 The car parking area is:</p> <ul style="list-style-type: none"> •illuminated at night; •well ventilated to avoid fumes being trapped; •screened from adjoining development; •60% covered. <p>A5.3 The driveway is a minimum of 2 metres from the side or rear boundary. OR A minimum of 1 metre with an average of 1.5 metre Landscaping screen is provided along the side or rear boundary adjacent to the driveway.</p> | <p>All Stages comply</p> <p>All Stages can comply</p> <p>Stages 1a and 1b and 2c and 3a do not comply with the A5.3 but can comply with the PC. Stage 2a complies.</p> |
| <p>P6 Development does not adversely impact on the natural environment.</p> | <p>A6.1 The siting of Multi-Unit Housing/Holiday Accommodation minimises cut unless required for a basement or semi-basement car park.</p> | <p>All Stages comply</p> |

| Landscaping and Open Space | | |
|--|--|--|
| <p>P7 The development provides a functional and usable Landscaping and Recreation Area for the use of guests.</p> | <p>A7.1 Landscaping and Recreation Areas must be provided at a minimum rate of:</p> <ul style="list-style-type: none"> • 30m² for the first bedroom of each Dwelling Unit; plus • 15m² for each additional bedroom of each Dwelling Unit; or • 15m² for each Private Room. <p>AND</p> <p>A minimum of 4 metres by 4 metres of Landscaping and Recreation Area is provided for each Dwelling Unit which is directly accessible from a habitable living room.</p> <p>OR</p> <p>At least 50% of the total Landscaping and Recreation Area required for all Dwelling Units/Private Rooms specified above is provided as one communal area, having a minimum dimension of 6 metres.</p> <p>A7.2 Each Dwelling Unit/Private Room is provided with a private roofed balcony, or patio with a minimum area of 6 m and a minimum depth of 2 metres.</p> <p>In the case of each Dwelling Unit if the private roofed balcony, or patio is</p> | <p><u>Proposed Lot 1- Stages 1a, 1b and 2a</u></p> <p>Stage 1a – requires 375m² Stage 1b requires 720m² Stage 2a requires 1,770m²</p> <p><u>Required = 2,865m²</u></p> <p><u>Provided = 2,897m²</u></p> <p><u>Proposed Lot 2</u></p> <p>Required = 1,140m²</p> <p>Provided = 1,180m²</p> <p><u>Proposed Lot 3</u></p> <p>Required = 225m²</p> <p>Provided = 400m²</p> <p>All three Stages comply with A7.1 and A7.2.</p> <p>In Stages 1a several of the above ground swimming pools intrude into the 6 metre setback, A7.3 refers.</p> <p>However, the swimming pools are part of the building and are not a typical ugly above ground backyard pool structure and are therefore considered acceptable and compliance is achieved with the PC.</p> |

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| | <p>directly accessible to the private open space area required in A7.1 above, the area of the balcony, or patio can be used in the calculation of the private open space area up to a maximum area of 6 m for each Dwelling Unit.</p> <p>A7.3 Any swimming pool, including surrounding coping or paving, located within the front Setback is a minimum of 3 metres from the Main Street Frontage.</p> <p>AND</p> <p>No suspended or above ground swimming pool structures are located within the 6 metre Setback to the Main Street Frontage.</p> | |
| <p>P8 The development provides residents with a range of on Site services and facilities.</p> | <p>A8.1 A communal clothes drying area of 30 m² is provided in a central location.</p> <p>OR</p> <p>Each Dwelling Unit has its own clothes drying area designated in their private open space and screened from view from public vantage points and other Dwelling Units on Site or on adjacent Sites.</p> <p>A8.2 A refuse bin storage area is provided and located for convenient use by all guests and is readily accessible to waste management contractors.</p> | <p>N/A</p> <p>Dryers provided in each dwelling unit.</p> <p>All Stages comply</p> <p>Stage 1a = located in garages and taken to the central facilities collection point</p> |

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| | <p>AND</p> <p>The refuse bin storage area is screened from view from public Roads, is roofed and drained to sewer and has a hose and hose cock attached to provide for cleaning.</p> | <p>Stage 1b = located in car parking area and taken to the central facilities collection point</p> <p>Stage 2a – located in car parking area and taken to the central facilities collection point</p> <p>Stage 2c – located in car parking area and taken to the central facilities collection point</p> <p>Stage 3a = located in garages and taken to the central facilities collection point</p> <p>All Stages comply and/or can be conditioned to comply</p> |
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5.5 General Codes

Design and Siting of Advertising Devices Code

Purpose

The purpose of this Code is to:

- *ensure that Advertising Devices do not adversely impact on the streetscape or detract from the amenity of the locality;*
- *ensure that Advertising Devices are appropriate to the scale of surrounding Buildings and the locality;*
ensure that any Advertising Devices which are incorporated in the Site design of a development or the architecture of a Building, complement the Building or development;
- *limit the number of Advertising Devices to avoid excessive signage throughout the Shire; and*
- *ensure that Advertising Devices do not dominate the surrounding vegetation, Landscaping or natural features of the environment and scenic amenity values of the Shire.*

An advertising package is yet to be finalized for the redevelopment of TRM site. Any approval can be conditioned to require compliance with the Design and Siting of Advertising Devices Code and the Urban Design Guide, refer [Appendix 3](#).

Landscaping Code

Purpose

The purpose of this Code is to:

- *ensure that new Landscaping incorporates plants which encourage Biodiversity;*
- *maintain and strengthen the tropical and native landscape character of the Shire through high quality landscape works;*
- *ensure that Landscaping enhances the visual quality and unique identity of different parts of the Shire by featuring endemics;*
- *create attractive streetscapes and public spaces through landscape design and the use of street trees and shade trees;*
- *ensure that native species are incorporated into Landscaping, as a means of providing continuity between developed and undeveloped areas;*
- *ensure that existing vegetation on Site is retained, protected during works and integrated with the built environment;*
- *ensure preferred plant species are selected in accordance with the Plant Species Schedule in Planning Scheme Policy No 7 -Landscaping; and*
- *ensure that Landscaping screens Buildings to reduce their bulk and to enhance the landscape character of the Shire.*

All the stages comply with the area requirements for onsite landscaping detailed in the relevant Land Use Codes. Detailed landscape design for each Stage of the re-development has not yet been undertaken. However, Landscape Architects, Scott Carver, have prepared a Landscape Concept Report, attached at [Appendix 12](#), that established the landscaping intent for the entire redevelopment of the site. (Note: Lot 103 SR500 is not included in this Application but is shown on a number of the Landscape Plans for continuity in the future).

Natural Areas and Scenic Amenity Code

Purpose

The purpose of this Code is to ensure that areas of natural value/environmental significance and Scenic Amenity value throughout the Shire are retained and conserved in order to:

- *maintain and improve landscape integrity and Scenic Amenity values;*
- *retain areas in their natural state and protect them from inappropriate, visually obtrusive development;*
- *protect areas as valuable natural, environmental and scenic areas which are an asset to the Shire;*
- *maintain areas for their combination of landscape elements which create the dominant landscape character of the Shire;*
- *protect fauna habitat and linkages;*
- *maintain and improve the ecosystem functions of aquatic systems;*

- *maintain essential ecological processes;*
- *protect Biodiversity; and*
- *protect the unique environmental values of the Shire which are of International significance.*

The natural values of Dickson Inlet and the scenic views and vistas from the site and the ecological process of Dickson Inlet are of pivotal importance to the success of the project. They will be retained, protected and wherever possible upgraded as natural values and features upon which the project relies, given its unique waterfront location.

Reconfiguring a Lot Code

Purpose

The purpose of this Code is to ensure that:

- *lots are suitable for their intended purpose;*
- *the environmental and scenic values of the Shire are protected;*
- *lot reconfiguration in the Rural Planning Area and Rural Settlement Planning Area does not result in the fragmentation or alienation of GQAL;*
- *lot reconfiguration of land achieves good urban design outcomes; and*
- *lot reconfiguration in the urban areas of the Shire facilitates:*
 - *the efficient use of land;*
 - *safe, convenient and attractive neighbourhoods and functional industrial or commercial areas;*
 - *the efficient provision of infrastructure;*
 - *the efficient provision of transport services;*
 - *the provision of public open space, Landscaping and Recreational Areas for outdoor recreation and community activities; and*
 - *opportunities for walking and cycling for recreation and as alternative methods of travel.*

The Code does not specify a minimum area or minimum dimensions for land in the Port Douglas Waterfront North Planning Area (zone).

The reconfiguration of the site to facilitate four (4) freehold lots is proposed, as follows:

- Proposed Lot 1 has an area of 9,970m² and a frontage to Dickson Inlet of approximately 150 metres. It is generally regular in shape and is provided with services and vehicular access by an Easement over Proposed Lot 4, which connects to Wharf Street. Proposed Lot 1 also includes an Easement for Access and Services benefitting that part of Proposed Lot 4 included in Precinct 5.

Proposed Lot 1 will contain Stage 1a- The Marina Villas, Stages 1b and 2a – The Marina Residences and potentially, part of the public Boardwalk structure along Dickson Inlet and a large part of the centrally located Rainforest Walk, public walkway.

- Proposed Lot 2 has an area of 3,615m² and a frontage to Wharf Street of approximately 80 metres. It is generally regular in shape and also includes an Access and Services Easement benefitting Proposed Lots 1, 3 and 4.

Proposed Lot 2 will contain Stage 2c – The Marina Suites and a small section of Rainforest Walk – public walkway.

- Proposed Lot 3 has an area of 1,000m² and a frontage to Rainforest Walk-public walkway of approximately 46 metres. It is rectangular in shape and is provided with Access and Service Easements in Proposed Lot 2 and Proposed Lot 4. Proposed Lot 3 also includes an Access Easement in favour of proposed Lot1 and Lot 4.

Proposed lot 3 will contain Stage 3a – The Rainforest Villas and a small section of Rainforest Walk – public walkway.

- Proposed Lot 4 is the balance area of the TRM site, excluding Lot 103 SR500 - the Slipway site, which is not part of this Application.

Proposed Lot 4 will include Access and Service Easements benefitting Proposed Lot 1 and Proposed Lot 3.

Proposed Lot 4 will contain the existing commercial building and marina facilities, central waste collection area, maintenance building, The Green, an adjacent open roof pavilion/bandstand and the large existing car/bus parking and circulation area that will service the entire development for marina and commercial/retail car parking and a new entry statement.

It is considered that the proposed reconfiguration of the TRM site, excluding Lot 103 SR500- the slipway site, provides for the creation of large, functional and practical freehold lots that generally comply with the relevant provisions of the Preliminary Approval and the DSPS and facilitates the efficient staged redevelopment of the site.

In the creation of the freehold lots it is anticipated that the Department of Natural Resources and Mines (DNRM) will convert the leasehold land and close Inlet Street simultaneously to create the freehold titles so that project can progress expeditiously.

A copy of the Proposal Plan of Reconfiguration is attached at [Appendix 13](#).

Sustainable Development Code

Purpose

The purpose of this Code is to enhance the sustainability of development by increasing the extent to which it:

- *protects the environment, including reducing greenhouse gas emissions, saving energy, conserving water and minimizing waste; and*
- *enhances the economic, physical and social wellbeing of Shire's residents and communities, including lifecycle affordability, accessibility, safety and security.*

The design of TRM redevelopment aims to facilitate easy pedestrian access throughout TRM site and to and from the town centre. Providing an alternative to car use and reducing impacts of cars in the Tourist Centre. In addition, car hire and bicycle hire facilities/services will be available in Stage 2a of the redevelopment.

An Economic Impact Study has been prepared in relation to the proposed TRM redevelopment project. A copy of the Economic Impact Study is attached at **Appendix 10**.

Vehicle Parking and Access Code

Purpose

The purpose of this Code is to ensure that:

- *sufficient vehicle parking is provided on-Site to cater for all types of vehicular traffic accessing and parking on the Site, including staff, guests, patrons, residents and short term delivery vehicles;*
- *sufficient bicycle parking and end of trip facilities are provided on-Site to cater for customer and staff;*
- *on-Site parking is provided so as to be accessible and convenient, particularly for any short term use; the provision of on-Site parking, loading/unloading facilities and the provision of Access to the Site, do not impact on the efficient function of the street network or on the area in which the development is located; and*
- *new vehicle Access points are safely located and are not in conflict with the preferred ultimate streetscape character and local character and do not unduly disrupt any current or future on-street parking arrangements.*

Refer to the Civil Engineering and Traffic Report at **Appendix 11**.

The Code specifies the following car parking requirements by land use:

Multi- Unit Housing:- within the Port Douglas Tourist Centre 1 car space per dwelling unit with 60% covered, plus 1 bicycle space per 3 units and 1 visitor bicycle space per 12 units.

Holiday Accommodation – (self- contained):- same as above for Multi-Unit Housing;

Holiday Accommodation – Dual Key:- 1 car space for the self-contained element of the Dual Key apartment and 30% of a car space for the non-self-contained element of the Dual Key apartment. Plus a parking bay for the unloading of buses where 30 rooms/dwelling units or more are provided on site and 1 bicycle space per 10 rooms.

Shopping Facilities: – in the Port Douglas Tourist Centre 1 space per 30 m² of Net Lettable Area (NLA).

Business Facilities:- in the Port Douglas Tourist Centre 1 space per 30 m² of NLA.

Restaurant:- in the Port Douglas Tourist Centre 1 space per 30 m² of NLA.

Tavern:- Licensed facilities: 1 space per 15m² of bar, lounge, beer garden and other public areas; plus 1 space per 50m² of floor area of liquor barn or bulk liquor sales area, plus if drive- through bottle shop.....(Note: N/A in this instance as no facility to provide drive-through bottle shop within the new commercial area of the development).

Based on the car parking rates outlined above the car parking generated by each Stage of the proposed development is outlined in the Table below.

Note: there is no allocation of floor area for a Tavern in either Stage 2a or 2c, as it is only a “possible” commercial land use, not a known commercial land use, like shops and restaurants. In any event there is spare capacity in the on-site commercial car parking, refer below).

| STAGE | LAND USE MIX | DWELLING UNITS/ BEDROOMS | COMMERCIAL M2 | CARS/BIKES REQUIRED | CARS/BIKES PROVIDED |
|-------|---|-----------------------------|---------------|--|---|
| 1a | Multi-Unit Housing/Holiday Accommodation | 5 x 15 | N/A | <u>Residential</u> Cars = 5 Covered 60% Bikes = 3 | <u>Residential</u> Cars = 10 Covered 100% Bikes = 5 in garages |
| 1b | Multi-Unit Housing/Holiday Accommodation | 14 x 34 | N/A | <u>Residential</u> Cars = 14 Covered 60% Bikes = 7 | <u>Residential</u> Cars = 16 Covered – 100% Bikes = 6 provided in an outside reception area - 5 visitor |
| 2a | Multi-Unit Housing/Holiday Accommodation; and Commercial/Retail | 35 x 83 | 1204 | <u>Residential</u> Cars = 35 Covered 60% Bikes = 16 | <u>Residential</u> Cars = 41 Covered – 100% Bikes – 19 residents’ bikes |

Town Planning Report
The Reef Marina, Wharf St, Port Douglas

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|--------------|---|-----------------|--------------------------|---|--|
| | Space | | | <u>Commercial</u> 1 space per 30m ² of NLS (1204/30) = 40 | provided in car parking area, visitor parking provided outside and a bike hire facility. <u>Commercial</u> Cars = 39 spaces-allocated to the existing common car parking area |
| 2c | Multi-Unit Housing/Holiday Accommodation and/or Holiday Accommodation – Dual Key; and Commercial/Retail Space | 26 x 50 | 236 | <u>Residential</u> Cars = 34 Covered 60% Bikes = 12 <u>Commercial</u> 1 space per 30m ² of NLS (236/30) = 7.9 | <u>Residential</u> Cars = 26 covered 8 uncovered. Residents provided in car parking area and visitor provided outside (82%) Bikes – 17 <u>Commercial</u> Cars = 8 spaces-allocated to the existing common car parking area |
| 3a | Multi-Unit Housing/Holiday Accommodation and/or Holiday and/or Holiday Accommodation-Dual Key | 5 x 10 | N/A | <u>Residential</u> Cars = 7 Covered 60% Bikes = 3 | <u>Residential</u> Cars = 5 covered (72%) 2 uncovered = 7 spaces Bikes – 5 stored in garages |
| TOTAL | | 85 x 197 | 1440m² | <u>Residential</u> Cars = 95 Bikes = 41 <u>Commercial</u> Cars = 48 | <u>Residential</u> Cars = 110 Bikes = 52 all on-site <u>Commercial</u> Allocated in existing car parking area |

The existing (retained) commercial and marina component of the development, require the provision of:

- Commercial (following demolition of the western wing)
(3258/30) - 30%= (109-33) = 76 spaces

- Marina - 134 berths now and 164 total new stage (Marina and Duck Pond and along the Dickson Inlet)

(164/3) = 55 spaces

TOTAL = 131 spaces

Based on the car parking generation for the redevelopment outlined in the Table above, the new commercial component (1408/30 - 30%) = **33 spaces.**

Total required = 164 spaces

(Note: The redevelopment results in a net decrease in the overall commercial area).

The existing large, common car parking area is proposed to be reconfigured to accommodate:

- 184 car parking spaces;
- 10 bus parking bays; and

In addition, there are 121 spaces on Wharf Street attributed to the TRM site.

Spare capacity = **141 spaces.**

Clearly, based on contemporary car parking standards, which are those car parking rates outlined in the current Planning Scheme, there are adequate car parking spaces available on site in the common car parking area to accommodate the commercial component of the proposed re-development, with 141 spaces of spare capacity for the future development of Stage 2b and possibly other stages in the future.

6.0 OTHER ISSUES

An Urban Design strategy for the development site, required as a condition of the Preliminary Approval, is attached at **Appendix 3** - Urban Design Guide and Perspective/s.

The implementation of the Public Art Plan, refer **Appendix 14** and the Urban Design Guide, refer **Appendix 3**, in association with the Landscape Concept Report, refer **Appendix 12** and future detailed Landscape Plans for each staged of the redevelopment and the public realm, will create a precinct of the highest quality that will significantly contribute to creating “one of the world's great waterfronts”, a key objective of the PDWMP.

It is proposed to relocate the commercial fishermen, currently moored in front of the site on Dickson Inlet into the Duck Pond. It is anticipated that live seafood sales will occur from the fishing trawlers in the Duck Pond to tourist and the general public. This will activate this part of the site, to be enjoyed by tourists and local residents alike.

The slipway site being, Lot 103 SR500, cannot be included in the Combined Application or in this staged redevelopment project, due to unresolved issues associated with maintaining marine industries along the waterfront. Clearly there is a distinct conflict with maintaining a marine industry such as a working slipway, which is considered to be in heavy industry, and at the same time provide for a public plaza, on part of the slipway site. Even if the slipway site was modified to accommodate part of the public plaza it would hardly be an acceptable solution and would be totally contrary to creating “one of the world's great waterfronts”, a key objective of the PDWMP.

Currently, because the site of the operational slipway is also, in part, the site of the public plaza, which is a key element in creating the axial connection between the existing town centre of Port Douglas and the Reef Marina, it is important that the relevant parties actively seek to resolve outstanding issues so that the public plaza can be integrated into the project as a key urban design element, in the short term.

7.0 CONCLUSION

The staged development and reconfiguration of part of TRM site generally complies with the relevant provisions of the DSPS. Council support for the project, which will bring significant economic benefit to the local community, is warranted and the Combined Application is recommended to Council subject to reasonable and relevant conditions.



E A TAYLOR
September, 2016



Author: Graeme Geisler
File number: 2016/004836
Directorate / Unit: State Land Asset Management

Department of
Natural Resources and Mines

15 September 2016

Liz Taylor
Elizabeth Taylor Town Planner
23 Valley St
FRESHWATER QLD 4870

By email: liz@elizabethtaylor.net.au

Dear Liz

Reference is made to the request for owners consent required to accompany the development application for Material Change of Use and proposed reconfiguration of a lot on land described as Lot 146 on Crown Plan SR861, part of Lot 126 on Crown Plan SR868 and part of the road named Inlet St, Port Douglas, for the proposed staged development of The Reef Marina, Port Douglas.

It is noted by the delegate of the Department of Natural Resources and Mines (the department) the land described above is currently subject to conditional offers of freehold made to The Reef Marina. Further these offers, accepted by The Reef Marina include –

The department requires a plan to be prepared at your expense to satisfy the requirements of this and all related offers, and arrangements should be made with a Registered Consulting Surveyor to prepare the plan.

The plan must provide for the following:

- Lot 1 – the area above high water mark, being part of Lot 146 on Plan SR861 (to be Deed of Grant);
- Lot 2 – the area above high water mark, being part of Lot 103 on Plan SR500 (to be Deed of Grant);
- Lot 3 – the areas above high water mark that are part of Lot 126 SR868, currently described as Trustee lease D, Trustee lease E and Trustee lease J and Inlet Street
(one Deed to be granted over unallocated State land upon excision of the Trustee lease areas out of the Reserve and the permanent closure of the road);
- Lot 4 – the whole of the subject areas below high water mark (BHWM) -

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Your client will also need to comply with all other legislative and regulatory requirements which may also include approvals that are not part of the assessment of the development application under the *Sustainable Planning Act 2009* (SPA) e.g. a marine park permit if in a marine park.

Further, please note that the above consent will expire on 16 March 2017. Should the development application not be lodged with the assessment manager prior to this date, your client will be required again to lodge the IDAS Form 1 and any attachments with this Department with a further request for owners consent - any further request will need to be reconsidered by the Department.

It is also advised that any land use activities must comply with the *Aboriginal Cultural Heritage Act 2003* or the *Torres Strait Islander Heritage Act 2003*.

Finally, owner's consent is required under SPA to enable the application to be considered properly made for lodging with the assessment manager and is a completely separate process to assessment of the application under SPA.

Accordingly, the State may act at a later date as assessment manager, concurrence/referral agency, or advice agency in the assessment of the development application - providing owners consent will not influence any statutory role the State may have in this assessment.

If you wish to discuss this matter please contact Graeme Geisler on 07 4741 1657.

All future correspondence relative to this matter is to be referred to the contact Officer at the address below or by email to Townsville.SLAMS@dnrm.qld.gov.au. Any hard copy correspondence received will be electronically scanned and filed. For this reason, it is recommended that any attached plans, sketches or maps be no larger than A3-sized.

Please quote reference number 2016/004836 in any future correspondence.



Rianha Rolland
Manager, Land Allocation and Sales
A duly authorised delegate of the Minister
under the current Land Act (Ministerial) Delegation

APPENDIX: 1

10.1 Tidal works, or development in the coastal management district state code

Response column key:

- Achieved
- P/S** Performance solution
- N/A** Not applicable

Table 10.1.1: All development

| Performance outcomes | Acceptable outcomes | Response | Comment |
|---|--|---|---------|
| <p>PO1 Development in a coastal hazard area is compatible with the level of severity of the coastal hazard.</p> | <p>AO1.1 Development is located outside a high coastal hazard area unless it is:</p> <ul style="list-style-type: none"> (1) coastal-dependent development, or (2) compatible with inundation due to its nature or function, or (3) temporary, readily relocatable, or able to be abandoned, or (4) essential community service infrastructure, or (5) small- to medium-scale tourist development, or (6) redevelopment within an existing built-up urban area, or is redevelopment of built structures that cannot be relocated or abandoned. <p>AND</p> | <p>The development is medium scale tourist development and is redevelopment within an existing built-up urban area.</p> | |
| | <p>AO1.2 Development referred to in AO1.1(6) avoids being located within a high coastal hazard area, or where this is not practicable, minimises the exposure of people and permanent structures to coastal hazard impacts.</p> | <p>Habitable buildings have been designed in accordance with Council's specified habitable floor levels.</p> | |
| <p>PO2 Development siting, layout and access in a coastal hazard area responds to potential inundation due to a defined storm tide event and minimises associated risks to personal safety and property.</p> | <p>AO2.1 Development within a coastal hazard area is located, designed, constructed and operated to maintain or enhance the community's resilience to a defined storm tide event by limiting the exposure of people and structures to associated impacts.</p> <p>AND</p> | <p>Complies</p> | |
| | <p>AO2.2 Development mitigates any residual impacts from storm tide inundation in a coastal hazard area including by ensuring:</p> <ul style="list-style-type: none"> (1) habitable rooms of built structures are located above the defined storm tide event level and any additional freeboard level that would ordinarily apply in a flood prone area under a relevant planning scheme standard, or (2) a safe refuge is available for people within the premises during a defined storm tide event, or (3) at least one evacuation route remains passable for emergency evacuations during a defined storm tide | <p>Complies</p> <p>Complies- can be designated, if required</p> <p>Can comply</p> | |

| Performance outcomes | Acceptable outcomes | Response | Comment |
|---|--|---|---------|
| | <p>event, including consideration of the capacity of the route to support the evacuation of the entire local population within a reasonably short timeframe (for example, 12 hours).</p> <p>AND</p> | | |
| | <p>AO2.3 Development within a coastal hazard area is located, designed and constructed to ensure exposed structures can sustain flooding from a defined storm tide event.</p> <p>AND</p> | Complies | |
| | <p>AO2.4 Essential community service infrastructure is:</p> <p>(1) located so that it is not inundated by a recommended storm tide event specified for that infrastructure, or</p> <p>(2) located and designed to ensure any components of the infrastructure that are likely to fail to function or may result in contamination when inundated by a storm tide (for example, electrical switch gear and motors, water supply pipeline air valves) are:</p> <p>(a) located above the peak water level for a recommended storm tide event, or</p> <p>(b) designed and constructed to exclude storm tide intrusions or infiltration (including by being located in the ground), or</p> <p>(c) able to temporarily stop functioning during a recommended storm tide event without causing significant adverse impacts to the infrastructure or the community.</p> <p>AND</p> | Essential community Infrastructure exists | |
| | <p>AO2.5 Emergency services infrastructure and emergency shelters, police facilities, and hospitals and associated facilities have an emergency rescue area above the peak water level for a recommended storm tide event.</p> | N/A | |
| <p>PO3 Development directly, indirectly and cumulatively avoids an unacceptable increase in the severity of the coastal hazard, and does not significantly increase the potential for damage on the premises or to other premises.</p> | <p>AO3.1 Development avoids increasing the number of premises from which people would need to be evacuated to prevent death or injury from a defined storm tide event.</p> | Proposed type and form of development is compliant with the Douglas Shire Planning Scheme | |
| <p>PO4 Development avoids the release of</p> | <p>AO4.1 Development that involves the manufacture or</p> | N/A | |

| Performance outcomes | Acceptable outcomes | Response | Comment |
|--|--|--|---------|
| <p>hazardous materials as a result of a natural hazard event.</p> <p>Editor's note: Applications should:</p> <p>(1) assess the risk of storm tide inundation releasing or otherwise exposing hazardous materials, including appropriate emergency planning and contingency measures.</p> <p>(2) applications are to be supported by a report certified by a Registered Professional Engineer of Queensland (RPEQ) that demonstrates this performance outcome will be achieved.</p> | <p>storage of hazardous materials in bulk are designed to:</p> <p>(1) prevent the intrusion of waters from a defined storm tide event into structures or facilities containing the hazardous materials, or</p> <p>(2) ensure hazardous materials remain secured despite inundation, including secure from the effects of hydrodynamic forcing associated with wave action or flowing water.</p> | | |
| <p>PO5 Natural processes and the protective function of landforms and vegetation are maintained in coastal hazard areas.</p> | <p>AO5.1 Development in an erosion prone area within the coastal management district:</p> <p>(1) maintains vegetation on coastal landforms where its removal or damage may:</p> <p>(a) destabilise the area and increase the potential for erosion, or</p> <p>(b) interrupt natural sediment trapping processes or dune or land building processes</p> <p>(2) maintains sediment volumes of dunes and near-shore coastal landforms, or where a reduction in sediment volumes cannot be avoided, increased risks to development from coastal erosion are mitigated by location, design, construction and operating standards</p> <p>(3) minimises the need for erosion control structures or riverbank hardening through location, design and construction standards</p> <p>(4) maintains physical coastal processes outside the development footprint for the development, including longshore transport of sediment along the coast</p> <p>(5) reduces the risk of shoreline erosion for areas adjacent to the development footprint unless the development is an erosion control structure</p> <p>(6) reduces the risk of shoreline erosion for areas adjacent to the development footprint to the maximum extent feasible in the case of erosion control structures.</p> <p>AND</p> <p>AO5.2 Development in a storm tide inundation area is</p> | <p>None exists</p> <p>None exists</p> <p>Rock edge and man- made structures exist</p> <p>Can Comply</p> <p>Rock edge and man- made structures exist</p> <p>Rock edge and man- made structures exist</p> | |

| Performance outcomes | Acceptable outcomes | Response | Comment |
|----------------------|--|---|---------|
| | <p>located, designed, constructed and operated to:</p> <p>(1) maintain dune crest heights, or where a reduction in crest heights cannot be avoided, mitigate risks to development from wave overtopping and storm tide inundation</p> <p>(2) maintain or enhance coastal ecosystems and natural features, such as mangroves and coastal wetlands, between the development and tidal waters, where the coastal ecosystems and natural features protect or buffer communities and infrastructure from sea-level rise and impacts from storm tide inundation.</p> <p>AND</p> | <p>N/A</p> <p>N/A</p> | |
| | <p>AO5.3 Redevelopment of built structures in the erosion prone area within a coastal management district:</p> <p>(1) avoids intensifying the use of the premises, or</p> <p>(2) demonstrates that any intensification of use will not result in an increase in the need for erosion control structures or riverbank hardening.</p> <p>AND</p> | <p>Rock edge and man- made structures exist</p> | |
| | <p>AO5.4 Development that is coastal protection work involves, in order of priority:</p> <p>(1) beach nourishment undertaken in accordance with a program of beach nourishment works that source sediment of a suitable quality and type from outside the active beach system, or</p> <p>(2) the construction of an erosion control structure, where it is demonstrated that installing an erosion control structure is the only feasible option for protecting permanent structures from coastal erosion and those structures cannot be abandoned or relocated in the event of coastal erosion occurring.</p> <p>Editor's note: Applications for coastal protection work should be supported by a report certified by a Registered Professional Engineer of Queensland (RPEQ) that demonstrates how the engineering solution sought by the work will be achieved.</p> <p>Editor's note: Applications for erosion control structures should demonstrate the consideration of beach nourishment techniques, and include a statement of why nourishment (in whole or part) has not been adopted as the preferred means of controlling the erosion risk.</p> | <p>N/A</p> | |

| Performance outcomes | Acceptable outcomes | Response | Comment |
|--|--|------------------------------|---------|
| | AND | | |
| | <p>AO5.5 Development involving reclamation:</p> <p>(1) does not alter, or otherwise minimises impacts on, the physical characteristics of a waterway or the seabed near the reclamation, including flow regimes, hydrodynamic forces, tidal water and riverbank stability</p> <p>(2) is located outside the active sediment transport area, or otherwise maintains sediment transport processes as close as possible to their natural state</p> <p>(3) ensures activities associated with the operation of the development maintain the structure and condition of vegetation communities and avoid wind and water run-off erosion.</p> <p>Editor's note: Applications for reclamation should be supported by a report certified by an RPEQ that demonstrates how the engineering solutions sought by the work will be achieved</p> | N/A | |
| <p>PO6 Erosion prone areas in a coastal management district are maintained as development free buffers, or where permanent buildings or structures exist, coastal erosion risks are avoided or mitigated.</p> | <p>AO6.1 Development locates built structures outside the part of the coastal management district that is the erosion prone area unless the development is listed under AO1.1 (1) – (4).</p> <p>AND</p> | Complies | |
| | <p>AO6.2 Small to medium scale tourist development is located outside the erosion prone area unless it is redevelopment.</p> <p>AND</p> | This is a redevelopment site | |
| | <p>AO6.3 Coastal-dependent development:</p> <p>(1) locates, designs and constructs relevant buildings or structures to withstand coastal erosion impacts, including by use of appropriate foundations, or</p> <p>(2) installs and maintains coastal protection works to mitigate adverse impacts to people and permanent structures from coastal erosion at the location.</p> <p>AND</p> | N/A | |
| | <p>AO6.4 Development that is temporary, readily relocatable or able to be abandoned, or essential community service infrastructure:</p> | N/A | |

| Performance outcomes | Acceptable outcomes | Response | Comment |
|----------------------|---|---|---------|
| | <p>(1) locates built structures landward of an applicable coastal building line, or</p> <p>(2) where there is no coastal building line, locates habitable built structures landward of the alignment of adjacent habitable buildings, or</p> <p>(3) locates lifesaver towers or beach access infrastructure to minimise its impacts on physical coastal processes, or</p> <p>(4) where it is demonstrated that (1) or (2) is not reasonable and (3) does not apply:</p> <p style="padding-left: 20px;">(a) locates built structures as far landward as practicable</p> <p style="padding-left: 20px;">(b) uses layout design to minimise the footprint of the development that remains within the erosion prone area.</p> <p>AND</p> | | |
| | <p>AO6.5 Redevelopment of existing built structures not referred to in AO6.4, and excluding marine development:</p> <p>(1) relocates built structures outside that part of the erosion prone area that is within the coastal management district, or</p> <p>(2) relocates built structures as far landward as practicable, and landward of an applicable coastal building line, or</p> <p>(3) where there is no coastal building line:</p> <p style="padding-left: 20px;">(a) relocates built structures landward of the alignment of adjacent habitable buildings, or</p> <p style="padding-left: 20px;">(b) uses layout design to minimise the footprint of the development that remains within the erosion prone area, or</p> <p style="padding-left: 20px;">(c) provides sufficient space seaward of the development within the premises to allow for the construction of erosion control structures.</p> <p>AND</p> | <p>Rock edge and man- made structures exist</p> | |
| | <p>AO6.6 Redevelopment of built structures in the erosion prone area within a coastal management district, which results in an intensification of use, mitigates the erosion threat to the development, having regard to:</p> <p>(1) design and construction standards</p> <p>(2) installing and maintaining on-site erosion control</p> | <p>Can comply or be conditioned to comply</p> | |

| Performance outcomes | Acceptable outcomes | Response | Comment |
|---|---|----------|---------|
| | structures within the premises if the development is not intended to be temporary. | | |
| PO7 Development avoids or minimises adverse impacts on coastal resources and their values, to the maximum extent reasonable. | AO7.1 Coastal protection work that is in the form of beach nourishment uses methods of placement suitable for the location that do not interfere with the long-term use of the locality of, or natural values within or neighbouring, the proposed placement site. AND | N/A | |
| | AO7.2 Marine development is located and designed to expand on or redevelop existing marine infrastructure unless it is demonstrated that it is not practicable to co-locate the development with existing marine infrastructure. AND | N/A | |
| | AO7.3 Marine development: (1) relies on a natural channel of a depth adequate for the intended vessels, or (2) where there are no feasible alternative locations for the facility in the local area that do not require dredging for navigation channel purposes, development is located, designed and operated to minimise the need for capital and maintenance dredging for navigation channel purposes. AND | N/A | |
| | AO7.4 Development minimises dredging or the disposal of material in coastal waters during key biological events (such as fish aggregations or spawning) for species found in the area. AND | N/A | |
| | AO7.5 Measures are to be incorporated as part of siting and design of the development to protect and retain identified ecological values and underlying ecosystem processes within or adjacent to the development site to the greatest extent practicable. This includes: (1) maintaining or restoring vegetated buffers between development and coastal waters to the extent practicable, unless the development is within ports or airports, or is marine development | N/A | |

| Performance outcomes | Acceptable outcomes | Response | Comment |
|---|---|--|---------|
| | <p>(2) maintaining or enhancing the connectivity of ecosystems in consideration of the cumulative effect of the development in addition to existing developed areas</p> <p>(3) retaining coastal wetlands, seagrass beds and other locally important feeding, nesting or breeding sites for native wildlife.</p> <p>AND</p> | N/A | |
| | <p>AO7.6 Measures are incorporated as part of siting and design of the development to maintain or enhance water quality to achieve the environmental values and water quality objectives outlined in the <i>Environmental Protection (Water) Policy 2009</i>.</p> <p>AND</p> | N/A | |
| | <p>AO7.7 Development avoids the disturbance of acid sulphate soils, or where it is demonstrated that this is not possible, the disturbance of acid sulphate soils is carefully managed to minimise and mitigate the adverse effects of the disturbance on coastal resources.</p> | Can comply or be conditioned to comply | |
| <p>PO8 Coastal protection work is undertaken only as a last resort where erosion presents an imminent threat to public safety or permanent structures.</p> <p>Editor's note: Applications for coastal protection work must be supported by a report certified by an RPEQ that demonstrates how the engineering solution sought by the work will be achieved.</p> | <p>AO8.1 Coastal protection work is only undertaken to protect existing permanent structures from imminent adverse coastal erosion impacts, and the structures cannot reasonably be relocated or abandoned.</p> <p>AND</p> | N/A | |
| | <p>AO8.2 Coastal protection work to protect private structures is undertaken on private land to the maximum extent reasonable.</p> <p>AND</p> | N/A | |
| | <p>AO8.3 Coastal protection work does not increase the coastal hazard risk for adjacent areas or properties.</p> | N/A | |
| <p>PO9 Development avoids adverse impacts on matters of state environmental significance, or where this is not reasonably possible, impacts are minimised and an environmental offset is provided for any significant residual</p> | <p>AO9.1 Development:</p> <p>(1) is set back from matters of state environmental significance</p> <p>(2) avoids interrupting, interfering or otherwise adversely impacting underlying natural ecosystem components or processes and interactions that affect or maintain</p> | <p>Rock edge and man- made structures exist</p> <p>Rock edge and man- made</p> | |

| Performance outcomes | Acceptable outcomes | Response | Comment |
|--|---|--|---------|
| <p>impacts to matters of state environmental significance that are prescribed environmental matters.</p> | <p>the matters of state environmental significance, such as water quality, hydrology, geomorphology and biological processes, or</p> <p>(3) incorporates measures as part of its location and design to protect and retain matters of state environmental significance and underlying ecosystem processes within and adjacent to the development site to the greatest extent practicable.</p> <p>Editor's note: Applications for development should identify any threatened species or their habitats, or threatened ecosystems that may be affected by the proposal. In particular, applications should identify and describe how the development avoids adverse impacts on any critical life stage ecological processes within or adjacent to the development area.</p> <p>AND</p> | <p>structures exist</p> <p>Rock edge and man- made structures exist</p> | |
| <p>PO10 Development maintains or enhances general public access to or along the foreshore, unless this is contrary to the protection of coastal resources or public safety.</p> | <p>AO9.2 Where impacts cannot be reasonably avoided or minimised, an environmental offset is provided for any significant residual impact on matters of state environmental significance that are prescribed environmental matters caused by the development.</p> <p>Editor's note: Applications for development should identify anticipated losses, and outline what actions are proposed to be undertaken to offset the loss in accordance with the <i>Significant Residual Impact Guideline</i> and the relevant <i>Queensland Environmental Offsets Policy</i>.</p> <p>AO10.1 Development adjacent to state coastal land or tidal water:</p> <p>(1) demonstrates that restrictions to public access are necessary for:</p> <p>(a) the safe or secure operation of development, or</p> <p>(b) the maintenance of coastal landforms and coastal habitat</p> <p>(2) separates residential, tourist and retail development from tidal water with public areas or public access facilities, or</p> <p>(3) maintains existing public access (including public access infrastructure that is in the public interest) through the site to the foreshore for:</p> <p>(a) pedestrians, via access points including approved walking tracks, boardwalks and viewing platforms, or</p> | <p>N/A</p> <p>N/A</p> <p>Public access provided along the waterfront</p> <p>Public access provided along the waterfront</p> | |

| Performance outcomes | Acceptable outcomes | Response | Comment |
|---|---|--|---------|
| | <p>(b) vehicles, via access points including approved roads or tracks.</p> <p>AND</p> | | |
| | <p>AO10.2 Development adjacent to state coastal land, including land under tidal water:</p> <p>(1) is located and designed to:</p> <p>(a) allow safe and unimpeded access to, over, under or around built structures located on, over or along the foreshore</p> <p>(b) ensure emergency vehicles can access the area near the development, or</p> <p>(2) minimises and offsets any loss of access to and along the foreshore within two kilometres of the existing access points, and the access is located and designed to be consistent with (1)(a) and (b).</p> <p>AND</p> | <p>Complies</p> <p>Public access not restricted along waterfront</p> | |
| | <p>AO10.3 Any parts of private development that extend over tidal water are to be designed, constructed and used for marine access purposes only.</p> | N/A | |
| <p>PO11 Private marine development avoids structures attaching to, or extending across, non-tidal state coastal land abutting tidal waters.</p> | <p>AO11.1 Private marine development and other structures such as decks or boardwalks for private use do not attach to, or extend across state coastal land that is situated above the high water mark.</p> <p>Editor's note: For occupation permits or allocations of State land, refer to the <i>Land Act 1994</i>.</p> | N/A- boardwalk is for all to use | |
| <p>PO12 Further development of artificial waterways avoids or minimises adverse impacts on coastal resources and their values, and does not contribute to:</p> <p>(1) an increase in the risk of flooding or erosion</p> <p>(2) degradation of water quality</p> <p>(3) degradation and loss of matters of state environmental significance (including, but not limited to, coastal wetlands, fish habitat areas and migratory species habitat).</p> | <p>AO12.1 The design, construction and operation of artificial tidal waterways maintains the tidal prism volume of the natural waterway to which it is connected.</p> <p>AND</p> | N/A | |
| | <p>AO12.2 The design, construction and operation of artificial tidal waterways does not increase risk from flooding.</p> <p>AND</p> | N/A | |
| | <p>AO12.3 The design, construction and operation of an artificial waterway in connection with the reconfiguration of a lot ensures:</p> <p>(1) water inlet and outlets structures are of sufficient capacity to maintain the water quality within the</p> | N/A | |

| Performance outcomes | Acceptable outcomes | Response | Comment |
|---|--|----------|---------|
| | <p>waterway</p> <p>(2) water discharged from the artificial waterway protects the environmental values and water quality objectives of the receiving waters</p> <p>(3) dredged material is not disposed of to tidal water beyond the artificial waterway unless there is a beneficial reuse, e.g. beach nourishment.</p> <p>Editor's note: For more information on environmental values and water quality objectives see Schedule 1 of the <i>Environment Protection (Water) Policy 2009</i>.</p> <p>AND</p> | | |
| | <p>AO12.4 The location of the artificial waterways avoids matters of state environmental significance, or does not result in any significant adverse impact on matters of state environmental significance.</p> | N/A | |
| <p>PO13 Development does not involve reclamation of land below tidal water, other than for the purposes of:</p> <p>(1) coastal-dependent development, public marine development or community infrastructure</p> <p>(2) strategic ports, boat harbours or strategic airports and aviation facilities, in accordance with a statutory land use plan, where there is a demonstrated net benefit for the state or region and no feasible alternative exists</p> <p>(3) coastal protection work or work necessary to protect coastal resources or physical coastal processes.</p> | No acceptable outcome is prescribed. | Complies | |

Table 10.1.2: Operational work

| Performance outcomes | Acceptable outcomes | Response | Comment |
|--|--|---------------------------------|---------|
| <p>PO1 Tidal works that is private marine development does not result in adverse impacts to tidal land.</p> | <p>AO1.1 The location and design of tidal works that is private marine development:</p> <p>(1) is on private land abutting tidal water and used for</p> | N/A to this MCU/ROL Application | |

| Performance outcomes | Acceptable outcomes | Response | Comment |
|---|--|---------------------------------|---------|
| <p>Editor's note: In addressing this performance outcome, the applicant should comply with the performance criteria and acceptable standards set out in the <i>Operational Policy Building and engineering standards for tidal works</i>, Department of Environment and Heritage Protection, 2013.</p> <p>Editor's note: Applications should be supported by a report certified by an RPEQ to demonstrate compliance with this performance outcome.</p> | <ul style="list-style-type: none"> property access purposes (2) occupies the minimum area reasonably required for its designed purpose (3) is not to be roofed or otherwise covered (4) does not require the construction of coastal protection works, shoreline or riverbank hardening or dredging for marine access (5) does not adversely impact on public safety or public access and use of the foreshore. | | |
| <p>PO2 Development does not result in the disposal of material dredged from an artificial waterway into coastal waters, with the exception of:</p> <ul style="list-style-type: none"> (1) reclamation works, or (2) coastal protection works, or (3) the maintenance of an existing artificial waterway and the at-sea disposal of material that has previously been approved for the waterway. | <p>AO2.1 The design and construction of the artificial waterway includes onsite provisions for drying, re-handling and disposal of dredge material on site to facilitate the timely disposal to land or re-use.</p> | N/A to this MCU/ROL Application | |
| <p>PO3 The design and construction of an artificial waterway maintains coastal landforms.</p> | <p>AO3.1 The design and construction of the artificial waterway provides for sand bypassing where this is necessary to prevent erosion of adjacent coasts and minimise sedimentation of the waterway.</p> <p>AND</p> | N/A to this MCU/ROL Application | |
| | <p>AO3.2 Clean sand accumulating within an artificial waterway is returned to the active beach system, in preference to disposal on land.</p> | N/A to this MCU/ROL Application | |
| <p>PO4 Development that involves dredging includes and complies with a management plan that demonstrates how environmental impacts will be managed and mitigated, and how the requirements of the <i>National assessment guidelines for dredging</i>, Australian Government Department of the Environment, Water, Heritage and the Arts, 2009, will be met.</p> | <p>AO4.1 A management plan for the development:</p> <ul style="list-style-type: none"> (1) directs the operation of the development (2) identifies disposal methods and disposal sites for the removed material for the construction and operational phases of the development (3) outlines how any adverse effects from extraction activities on sediment transport processes or adjacent coastal landforms will be mitigated or otherwise remediated by suitably planned and implemented beach nourishment and rehabilitation works. | N/A to this MCU/ROL Application | |

| Performance outcomes | Acceptable outcomes | Response | Comment |
|----------------------|--|---------------------------------|---------|
| | <p>Editor's note: The suitability of the dredged sediment for ocean disposal is to follow the assessment of potential contaminants under the <i>National assessment guidelines for dredging</i>, Australian Government Department of the Environment, Water, Heritage and the Arts, 2009.</p> <p>AND</p> | | |
| | <p>AO4.2 For land based disposal of dredged material, any area used for storing, dewatering, drying or rehandling dredged material as outlined in the dredge management plan is:</p> <ol style="list-style-type: none"> (1) of sufficient size for the projected volume of dredged material from relevant capital or maintenance dredging (2) protected from future development that would compromise the use of the area for its intended purpose of material storage and dewatering. <p>AND</p> | N/A to this MCU/ROL Application | |
| | <p>AO4.3 For at-sea disposal of suitable dredged material, the dredge management plan specifies that material is placed at a dredged material disposal site only if it is demonstrated that it is not feasible to:</p> <ol style="list-style-type: none"> (1) dispose of the material above the high water mark, if the material is from maintenance works for an existing artificial waterway for which at-sea disposal was previously approved, or (2) keep the dredged material within the active sediment transport system for the locality, or (3) use the material for beach nourishment or another beneficial purpose. <p>AND</p> | N/A to this MCU/ROL Application | |
| | <p>AO4.4 For at-sea disposal of dredged material where the marine spoil disposal site is a retentive (i.e. non-dispersive) site, the disposal site identified in the dredge management plan has the capacity to hold and retain the material within its boundaries during construction and operation of the development.</p> <p>Editor's note: The use of dredged material for a beneficial purpose could include development of port or other marine facilities, use for construction or industrial purposes, or use to create or modify land or waters for an approved environmental outcome (such as creation of a bird roosting site). Further</p> | N/A to this MCU/ROL Application | |

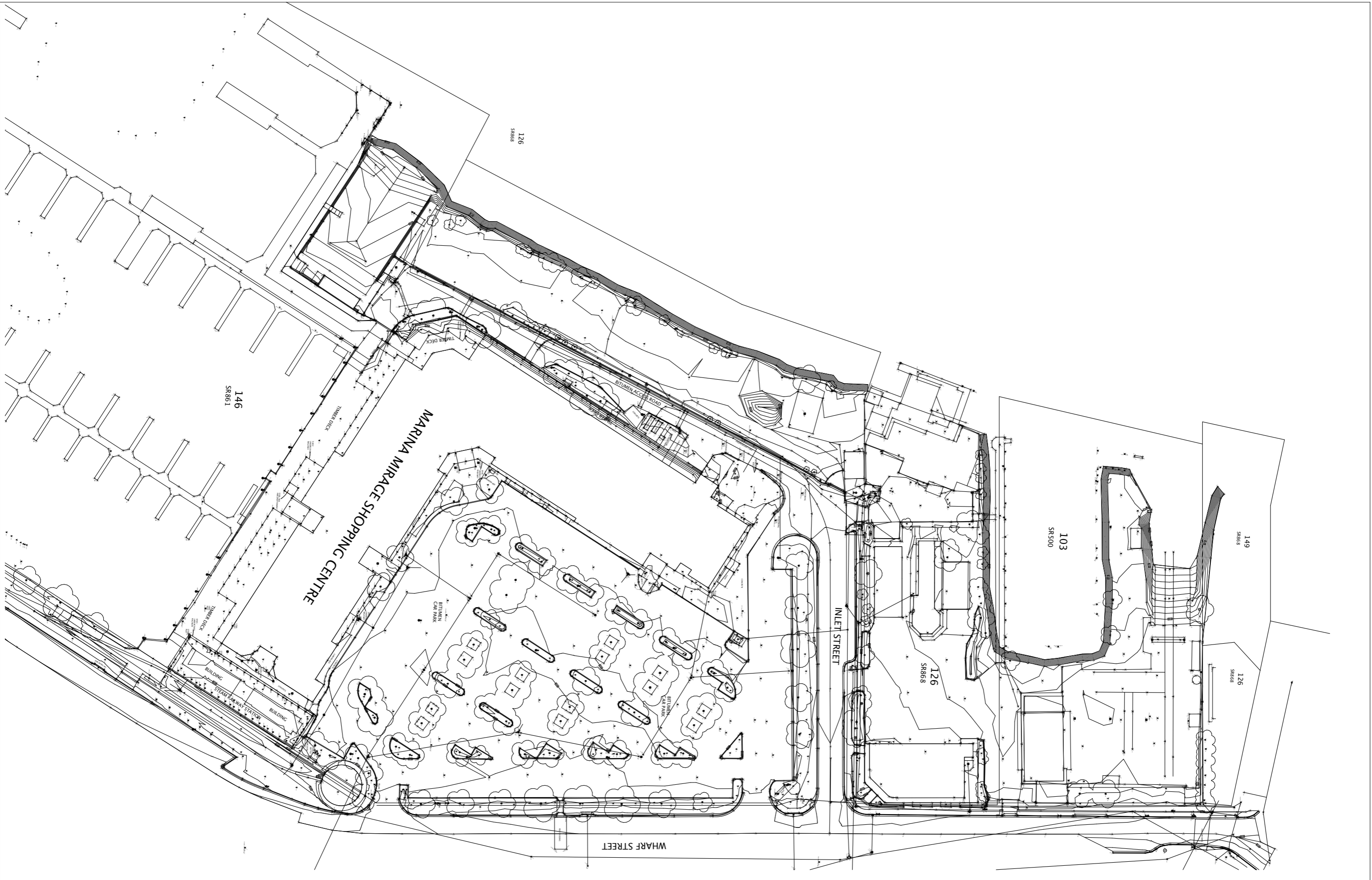
| Performance outcomes | Acceptable outcomes | Response | Comment |
|---|---|---------------------------------|---------|
| | information about beneficial uses is contained in the <i>National assessment guidelines for dredging</i> , Australian Government Department of Environment, Water, Heritage and the Arts, 2009 | | |
| Within a strategic environmental area: riparian and wildlife corridor functions | | | |
| PO5 Natural regeneration of any cleared or work area is facilitated wherever possible. | AO5.1 There is no impediments to the natural regeneration of native plant species in the area of clearing and works following completion of works. | N/A to this MCU/ROL Application | |
| Within a strategic environmental area: hydrological processes | | | |
| PO6 Development avoids or minimises impacts on natural drainage lines or flow paths, during both construction and operation. | No acceptable outcome is prescribed. | N/A to this MCU/ROL Application | |
| Within a strategic environmental area: water quality | | | |
| PO7 Development avoids or minimises any adverse impacts on environmental values and water quality objectives for receiving waters (surface and groundwater) from pollutants on site or leaving a site located in a strategic environmental area. | AO7.1 Development demonstrates best practice environmental management to meet relevant environmental values and water quality objectives of the <i>Environmental Protection (Water) Policy 2009</i> . OR | N/A to this MCU/ROL Application | |
| | AO7.2 All stormwater, wastewater, discharges and overflows leaving the site are: (1) treated to the quality of the receiving waters prior to discharge, OR; (2) reclaimed or re-used such that there is no export of pollutants to receiving waters. | N/A to this MCU/ROL Application | |

Table 10.1.3: Reconfiguring a lot

| Performance outcomes | Acceptable outcomes | Response | Comment |
|---|--|--|---------|
| PO1 Erosion prone areas in a coastal management district are maintained as development free buffers, or where permanent buildings or structures exist, coastal erosion risks are avoided or mitigated. | AO1.1 Land within the erosion prone area is surrendered to the State and dedicated as a reserve for beach protection, coastal management or environmental purposes, unless: (1) the development is in a port or is for coastal-dependent development, or | The State has offered this land for sale in freehold title | |

| Performance outcomes | Acceptable outcomes | Response | Comment |
|--|---|---------------------------|---------|
| | <p>(2) the surrender of the land will not enhance coastal management outcomes, for example, because there is already substantial development seaward of the lot.</p> <p>Editor's note: Land surrendered to the State for public use under AO1.1 is to be:</p> <p>(1) placed in a State land reserve for beach protection and coastal management purposes under the <i>Land Act 1994</i>, with local government as trustee, or</p> <p>(2) managed for beach protection and coastal management purposes under another management regime to the satisfaction of the chief executive administering the <i>Sustainable Planning Act 2009</i> and <i>Land Act 1994</i>, if it is demonstrated that AO1.1(1) cannot be reasonably achieved.</p> <p>(3) The <i>Land Act 1994</i> also includes provisions for voluntary land surrender for freehold land to the satisfaction of the chief executive administering the Land Act.</p> | | |
| PO2 Development maintains or enhances general public access to or along the foreshore, unless this is contrary to the protection of coastal resources or public safety. | AO2.1 Reconfiguring a lot that abuts the foreshore or tidal waters is designed to enhance public access if it involves the creation of 10 or more lots or the opening of a new road, unless it is for coastal-dependent development. | N/A- only 5 lots proposed | |
| PO3 Development in connection with a canal enhances public access to coastal waters. | AO3.1 The canal avoids intersecting with land or tidal land where the passage, use or movement of vessels in water could be restricted by the registered proprietor of the land. AND | N/A | |
| | AO3.2 The area of the canal relating to the development is surrendered to the State as a public waterway. AND | N/A | |
| | AO3.3 The plans of subdivision for the canal are consistent with <i>Requirements for plans of subdivision of an artificial waterway</i> , Department of Environment and Heritage Protection, 2013. | N/A | |


APPENDIX: 2



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THE REEF MARINA
 PORT DOUGLAS QLD



THE REEF MARINA
 PORT DOUGLAS

DRAWN: SG/AT
 CHECKED: JL
 APPROVED: PR/JL
 DATE 16/09/2016

SURVEY
 1:1000



| | | |
|---------------------------------|----------------------------|------------------------|
| PROJ NO. 160303 | DWG NO. DA-S-102 | REVISION: 02 |
| STATUS: DEVELOPMENT APPLICATION | | |

/Volumes/YODA/Project Files/2016/160303 The Reef Marina/3.0 Design/3.1 Design (Arch)/3.1.2 Sketch Design/160303 Reef Marina Site.pn

APPENDIX: 3

The Reef Marina Wharf Street, Port Douglas Qld. Urban Design Guide & Perspectives



Executive Summary



Location



Renewal



Tropical

The Reef Marina and associated lease areas is a pivotal Port Douglas precinct with superb water, marina and hinterland views. The Reef Residences seeks to create a new mixed use waterfront development on Dickson Inlet integrated with the existing marina and connected to the town centre – putting the town on the water and the water in the town with a seamless transition between the two.

Port Douglas still has a “relaxed character” and “unique charm” that can be used to inform the design outcomes, build authenticity and positively contribute to the town’s intrinsic charm. Key design strategies include an axial pedestrian rainforest connection to the town centre; a walkable waterfront and a high quality public realm including a town Plaza. This Urban Design guide sets the framework to ensure development achieves these aims. The framework is informed by a range of considerations including the town’s history. The guide includes the architectural response to the proposed development.

The Reef Marina has undergone a rebirth over the past two years under new ownership with significant investment and the first marina expansion in 28 years. This forward looking integrated waterfront development approach will make a major contribution to the economic life of the Shire.

Contents

| | Page |
|----------------------------------|------|
| Executive Summary | 2 |
| 1.0 INTRODUCTION..... | 4 |
| 2.0 OVERVIEW..... | 5 |
| 3.0 WATERFRONT EXAMPLES | 10 |
| 4.0 COMPONENTS | 14 |
| 5.0 ARCHITECTURAL RESPONSE | 24 |
| References - | 26 |

Appendix A Indicative view from Dickson Inlet.

Appendix B Indicative view looking South to Rainforest walk.

1.0 INTRODUCTION

The Douglas Shire Council Decision Notice of 18 May 2016 for Preliminary Approval over Lot 146 SR861, Lot 103 SR500, Lot 126 SR868 and Inlet Street required submission of the Urban Design themes for the proposed development (DSC 43.2016.1288 p10). The Preliminary Approval notes the importance of the Public Waterfront Access to be provided as well as the Arbour (now called Rainforest Walk) and Public Plaza and requires that:

These key urban design elements are to be generally designed to provide a coordinated theme across the Reef Marina site that reflects the identity of Port Douglas as a distinctive tropical north Queensland seaside resort town in both its urban spaces and built form character. . .

Amongst other things, the urban design theme for the Reef Marina Site is to address urban design elements such as street furniture, surface treatments, railings, signage, lighting, built form design elements, materials and colours.

The Waterfront North Planning Area which encompasses The Reef Marina and the sites identified above is a pivotal Port Douglas precinct with superb water, marina and hinterland views. The proposed development seeks to create a new mixed use waterfront precinct on Dickson Inlet integrating the existing marina and the town centre with a seamless transition between the two. The marina has a high occupancy rate including a number of large commercial operators. There are significant numbers of visitors passing through the marina prior to morning departures and again when tours return in the afternoon. Cruise ship visitation days add significantly to visitor numbers with 21 vessels scheduled for 2017. The redevelopment proposal will result in town renewal, in a long neglected area disconnected from the heart of Port Douglas.

This document sets the framework for the Urban Design Strategies for the Waterfront North Planning Area.

2.0 OVERVIEW

To help formulate a comprehensive understanding of the Port Douglas Waterfront North Planning Area (PDWPA) including its potential, a detailed background review was undertaken including historical development, the current Preliminary Approval and a site inventory.

The precinct is located on Dickson Inlet south west of the Port Douglas town centre and Macrossan Street.



Port Douglas Waterfront North Planning Area 2014 (prior to marina extension).

2.1 Heritage

2.1.1 Meeting Place and Natural Resource

The Port Douglas area was an important meeting and food resource for the local indigenous communities. Dickson Inlet has been noted as a “story site” (particularly the Yirmbal rainbow serpent – rainbows/water/snake) and for “past use of the area as a “crab hole.” (CRC Agenda 11/02/2009 p343-346).

2.1.2 Maritime Port

Port Douglas was rapidly established in 1877 to provision the remote Palmer River gold field. Well into the 20th century Port Douglas still acted as a gateway to the hinterland with the port infrastructure and waterfront providing the visual, historic core from which the settlement evolved. It was

opportunistic, frontier development. Allom Lovells' *The former Sugar Wharf* (p12, 2008) includes an evocative description by an early visitor recording the ad hoc settlement:

Commercial Street extends from beach to beach and lies at the foot of a beautiful hill. The street is lined with structures composed of calico, iron and brandy cases. All beautifully blended and resulting in the rummiest looking dwellings imaginable. About 100 of them are grog shanties.¹

The first wharf was located at the tip of Island Point at the northern end of Wharf Street in a relatively exposed and inconvenient location. This facility was extended in 1888/89. Dredging of the bar and inlet and a need to provide improved facilities, saw wharfing relocated to the southern end of Wharf Street. The Douglas Divisional Board wharf (now incorporated within the Combined Services Club) dates from the mid 1890's. The 1904 Department of Harbour and Rivers *Plan of Wharves and Foreshore for Port Douglas* shows the Douglas Divisional Board wharf serviced by the tramway with private wharf facilities to the north (Jack & Newell) and south (Walsh & Co) (Meredith Walker, 1977, p 24). This plan also shows the tramway infrastructure and station (at the end of Wharf Street) which connected Port Douglas to Mossman on 1 August 1900.

The Sugar Wharf was completed in October 1905 and built to facilitate sugar shipping. The structure forms a striking composition over the water and was originally connected to the foreshore by a trestle tramway bridge.

These elements are discernible in a DNRM aerial photograph from 1942 indicating very little development occurred in the interim

¹ The Australian Handbook and Almanac and Shippers and Importers' Directory for 1879, Gordon and Gotch, London Melbourne Sydney Brisbane 1879, p.329 quoted by Allom Lovell.

and the town appears no more than a hamlet sheltered behind Island Point with the hill denuded of vegetation.

Sugar shipments from Port Douglas ceased in 1958 as road transportation to Cairns improved. The DNRM aerial from 1974 still shows many of the features described above. The tram tracks have been removed but their locations are still discernible in the landscape. New waterfront development is to the south of the former Douglas Divisional Board wharf building. There is a small shipyard facility with cradle rails leading into a shed and a small peninsular jutting out to the edge of Dickson Inlet with attached jetty. Tidal mangrove vegetation abuts the southern side of the peninsular with Wharf Street from Warner Street an unsealed track.



From DNRM aerial photograph 26/11/1974
QAP2995_3568

The first 100 years of the township's evolution could be characterised as pragmatic, utilitarian and responsive to the needs of the time, even somewhat idiosyncratic. The most strategic outcome from this period has been the preservation of the waterfront at the end of Macrossan street as public open space with water views framed by the Sugar Wharf providing the town with a strong and identifiable image.



From DNRM aerial photograph 28/06/1983
QAP4232_082

A major change in the waterfront was evident in the 1983 aerial which shows the expansion of the slipway area and a new shed; the formation of the duck pond with a large expanse of adjacent reclaimed land and a new peninsular extending upstream with mooring facilities. The southern tidal vegetation has been removed in the area of the future marina basin. The foreshore north of the slipway has also altered with an engineered straight edge, new buildings on the previous tidal flats and the Sugar Wharf tramway trestle bridge subsumed by a new concrete wharf structure. While the Douglas Divisional and Jack & Newell wharves and sheds are still evident, the sheds sit on new land and the wharves are just small extensions into Dickson Inlet with a new boat ramp separating the two. This illustrates the change to a more recreational/tourism and fishing based port with a substantial increase in the number of vessels moored in Dickson Inlet.

Port Douglas entered a new phase of development as a resort town with the opening of the Sheraton Mirage in October 1987 followed shortly after by the Marina Mirage (now The Reef Marina) both developed by Quintex Limited and designed by Media Five Pty Ltd (now DBI). The architect's statement in *Architecture Australia* August 1989 (p54) noted that the "design intention was to create a tropical architecture of casual elegance, sympathetic to the natural context" incorporating "typical features of the 'far north Queensland' style, such as louvred shutters, lattice work and balustrades" with the roofs using "a series of planes" to break up large structures. This is best captured in their phase "casual luxury in a tropical

setting.” The Marina Mirage building was the largest structure in the town centre when opened with approximately 4,500m² of gross floor area. The layout is a typical stand-alone shopping centre typology isolated from the traditional town centre and oriented only to the southern marina vista. However, for such a large structure, the efforts to reduce the building bulk with a varied roof line, gables and turrets was remarkably successful. The building effectively turns its back on Dickson Inlet with service areas located along the western frontage facing the mooring facilities with a limited attempt to exploit views to Dickson Inlet.



The Reef Marina, 2014.

Generally, the materials are painted weatherboard, colorbond metal deck roofing with steel structural elements often clad with a mixture of materials to give the impression of a finely detailed 19th century structure with timber battening to large openings in key entry points. Colours were white roof, structural elements and ceiling, cream walls and heritage green features. This approach is more finely detailed than the more pragmatic, utilitarian traditional Port Douglas approach.

The buildings at the end of Inlet Street and fronting the duck pond where built between 1983 and 1996 with the building on the corner of Inlet and Wharf Streets post 1996. These are simple industrial buildings

with no architectural significance. However, there may be elements of significance to the Port Douglas narrative that could be considered for inclusion in the new development and these options will be investigated (eg the fish weigh station).

2.1.3 Character

Meredith Walker described the feel as “an informal relaxed character”, “a town of great charm” as a result of “small scale buildings at the base of a majestic headland with the dividing range in the background;” “an irregular street pattern so that views are contained;” “vegetation dominates the townscape hiding many of the buildings;” with character derived from “the dramatic quality of the headland, the bush, native vegetation, the narrow informal streets and the presence of buildings and monuments of special historic interest.” (Meredith Walker, 1977).



Eccentric street character.

This “informal relaxed character” and “charm” are still evident in parts of Macrossan and is uniquely Port Douglas. Recent commercial developments lacks consideration of the Port Douglas character and could be located/found anywhere.



Development lacking sense of place.

Recent Master Plans refer to a “Character defined by its tropical latitude, waterside location, and mix of tourism and marine activity. These elements have been a defining feature of Port Douglas’ success combined to create unique character underpins towns appeal;” reinforcing the “Relaxed tropical style” and using landscape design to add “authenticity to the tropical village character.” (Port Douglas Master Plan Landscape Design Guide 2012).

Major aims of the 2009 Port Douglas Waterfront Master Plan (PDWMP) included creating a “coherent and accessible waterfront. . . the heart of Port Douglas . . . visually accessible and appealing from both land and water;” development that is “locally sensitive and climatically appropriate to create harmony with the town’s setting” and “Building forms that are expressive of the latitude and waterside setting.” Specific references to The Reef Marina area state that the “Built form . . . will be taller and higher in intensity than the waterfront area to the north but will respect the overall built form strategy for the township. The waterfront area will adopt a ‘harder’ quayside character, softened through the use of natural materials, shade trees and landscaping.” Both Master Plan documents require that “Green elements should be a defining element within the landscape” with the Landscape Design Guide calling for “Green infrastructure as a foil to urban fabric of the Town Centre;” respect for the “Eclectic ad hoc nature of streets,” reinforce

the “Unhurried feel of Port Douglas;” and honouring “the many layers of cultural Heritage in Port Douglas through art, design, interpretation and story telling.”

2.1.4 Planning Scheme and current Approval

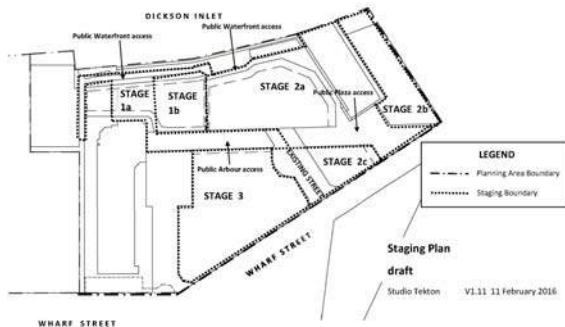
The Douglas Shire Planning Scheme 2006 Waterfront North & South Planning Area Codes as well as the PDWMP promotes the relocation of marine based industries to the Waterfront South Planning Area. This area includes the Closehaven Marina, the Port Douglas Yacht Club and State Land located off Spinnaker Close as well as waterfront land at the end of Port Street. While the Planning Scheme doesn’t indicate timing, the Port Douglas Waterfront Master Plan states that “Relocating the more abrasive/hazardous industries in the Waterfront to ensure that conflicting land uses with public access and use of the Waterfront do not arise” as a high priority with a Short-Medium timeframe identified. While the relocation of the slipway is seen as a medium-long term timeframe, the two activities are interlinked due to the nature of the marine industry. It should be noted that the Waterfront Master Plan is a non-statutory strategic plan but the logic for relocating heavy industrial activities to allow the extension of the Tourist Centre to the water is sound urban design.

The Preliminary Approval MCUC (774433) dated 16 May 2016 shows the slipway site as public plaza with the balance of the land allowing a range of uses including multi-residential and commercial in line with the intent of the Planning Scheme. While there is no condition specifically relating to the slipway area, the approval includes the following advice:

2) Although this preliminary approval only permits broad land uses by precinct, and noting that it still allows for the continuation of the slipway and fishermen’s facilities as they currently exist, no development permit will be issued for Stage 2 until agreement has been reached among all relevant stakeholders sufficient to enable Council to provide written confirmation to the Department of Natural Resources and Mines that such development does-not diminish the marine uses that directly serve the tourist and fishing operators (including

the slipway and the fishermen's facilities) and private boat owners in line with one of the overarching principles of the Port Douglas Waterfront Master Plan.

While Planning objectives retain marine-based industries, these are relocated elsewhere in Dickson Inlet. This is a sound planning and urban design strategy given the intent of the Waterfront North Planning Area. The Waterfront South Planning Area Performance criteria P3 refers to Figure (1) and indicates a possible slipway location on a semi developed site at the Dickson Inlet end of Port Street currently owned by MARANO ENTERPRISES (MIALLO) PTY LTD a non-related 3rd party. Despite these provisions, neither the Scheme and its associated Codes, nor the Waterfront Master Plan offer mechanisms to achieve these aims.



Preliminary Approval Staging Plan

The advice linking approval of Stage 2 to reaching agreement “among all relevant stakeholders” without clearly defining stakeholder (as the clause could be interpreted to mean any boat owner) or a mechanism to manage/facilitate this process (including balancing competing interests) is considered, in practical terms, to be unachievable entrenching the status quo.

The current application does not include the slipway site (Lot 103 SR500) because of the difficulties identified above. While Stage 2a has been configured for a future direct connection to the original Wharf Street alignment – a direct connection to the public waterfront boardwalk, the Public Plaza and continuation of the Arbour axial connection providing the link to Macrossan Street cannot be implemented without closure or a reconfiguration of the existing

slipway. Therefore, the current design proposal is considered a reasonable approach until further clarity/certainty can be obtained regarding the slipway.

The inclusion of the major public elements associated with Stages 2a, 2c and 3a, including the publicly accessible waterfront boardwalk and the Rainforest Walk, represents a more cohesive urban design and development outcome, rather than limiting development to only Stage 1, which would fragment the site in terms of public accessibility and circulation.

In any event, the operation/relocation of the slipway needs to be resolved promptly to provide certainty for all parties, including the proponent, prospective purchasers and businesses, that inappropriate heavy industrial activities will be relocated within a reasonable timeframe in accordance with the Planning Scheme and Master Plan intent.

3.0 WATERFRONT EXAMPLES

These examples were chosen after the Pre-lodgement presentation to Council and the subsequent discussion with Councillors. Council indicated that the Mandurah Ocean Marina was considered a building dominated development. The Fremantle Harbour Village was considered a more appropriate form of development where the buildings and landscape complement each other. A review of each has been undertaken to determine the development provisions.

3.1 Mandurah Ocean Marina, W.A.

Example site

Precinct 1: Residential/Mixed Use

Site area: 260m²

Site dimensions: 10m x 26m

built form and height

- max plot ratio 2:1
(by calculation - no requirement)
- site cover 85%
(by calculation – no requirement)
- min setbacks

| | |
|-------------------------------------|------|
| Front to building | 1.5m |
| Front to garage | 0m |
| Side | 0m |
| Rear (to walkway wall) | 3m |
| Rear balconies (to walkway wall) | 0m |
- 2 storey min, 3 Storey max.

Mandurah Ocean Marina Village was seen as an example of over development in the context of the built form character of Port Douglas. The relevant planning code has been included for information to determine the development parameters that contributed to the resulting form.

Commentary:

This is a multi-award winning development on the coast 1 hour south of Perth. The public spaces in the residential areas are intensely developed typically 3 storeys high and built to boundaries in most cases. This leaves very little area for landscaping on street frontages or the waterfront. The development could be characterised as building dominated development where vegetation makes limited or no contribution to the urban environment.

Rear lanes that access the waterfront units have a predominance of hard surfaces. The waterfront public walkway utilises change in height to achieve privacy. These are also hard environments as the landscape tends to be small scale planting due to the design criteria. Buildings form large blocks with no ability to allow for cooling breezes to permeate the development.

The plot ration is double the Harbour Village and Douglas Planning Scheme provisions. Site cover is also significantly higher than the Douglas Planning Scheme provisions (45%) but only a 10% increase on the Harbour Village. Buildings are built to boundary and three storeys creating significant long unbroken building walls following boundary lines with little or no variation. The cumulative effect results in an intensely urban development with limited landscaping in the residential areas which is considered inappropriate for Port Douglas and a tropical environment.



Mandurah Ocean Marina part plan residential precinct (Outline Development Plan) from Design Criteria August 2013.



Precinct 1 waterfront.



Waterfront with buildings dominating the landscape.



Level changes and recesses vary boardwalk and contribute to unit privacy.



Access lanes to waterfront buildings – no landscaping.

3.2 – Harbour Village Development Challenger Harbour, Fremantle.

| | |
|------------------|---------------------|
| Site area: | 3,200m ² |
| Site dimensions: | 100m x 32m |
| Height: | 2/3 Storeys. |

built form and height

- max plot ratio 1:1
- max site cover 75%
- min setbacks

| | |
|-------------------------|----|
| (front to public space) | 6m |
| Side | 3m |
| Rear (to waterfront) | 9m |
- max. building height 8m to eave line or 2 storeys (whichever is the least)

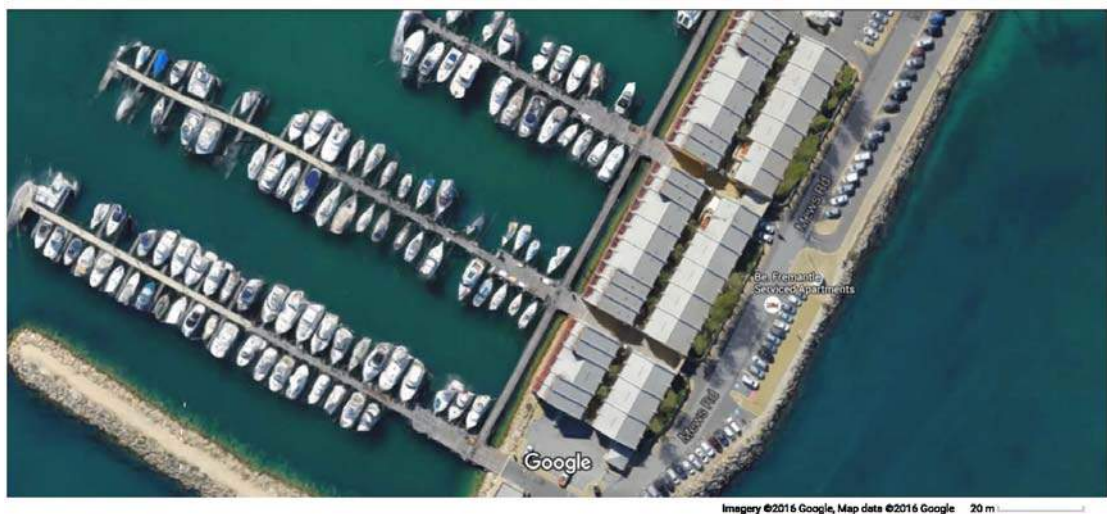
The basic format consists of 3 buildings facing east and 3 facing the harbour each with 2 x 36m and 1 x 18m long buildings. A narrow private laneway separates the two wings and there are two 5m wide pedestrian accessways linking the street to the public boardwalk and marina fingers. The buildings are 2 storey facing east with 2/3 storeys facing the west and marina. There is minimal landscaping but the Norfolk Pines, which are an established feature of Fremantle, have been used to great effect to reduce the scale of the buildings and contribute to a more balanced development. Parking is uncovered at grade. A public boardwalk running parallel

with the buildings is built out over the water and provides access to the marina fingers.

Commentary:

The form takes its cue from the local context of small scale terrace buildings applied to a much larger development with the roof form broken down with parapets between units. The Development appears to have no setback to side and waterfront boundaries. The Norfolk Pines have an enormous impact on softening what would otherwise be a very harsh landscape as the street and grade parking on three sides lack vegetation. Units have individual terraces and fenced private open space to the eastern units and fully exposed decks facing west. While the development does not dominate the landscape, the private open spaces, particularly to the west, lack privacy and protection from the extreme coastal location and harsh WA summers.

The Harbour Village built form provisions are comparable to the Douglas Panning Scheme although site cover is significantly higher. A major contributing factor in achieving a more balanced development is allowing space for large trees to counter the buildings and reducing building extent with articulation and stepping.



Harbour Village (BE serviced apartments), Challenger Harbour, W.A. Google Maps.



Harbour Village from Street – building scale reduced with parapets.



View from North East – note extensive grade parking and lack of external landscape.



Building entry and link to waterfront boardwalk.



Public boardwalk over water. Harbour village built to revetment wall edge with exposed private open space over wall.



Varied height to waterfront.



Harbour Village communal bike hire facility.

4.0 COMPONENTS

The Waterfront North Planning Area will contribute to the character and economy of the town centre by being a distinctive area within the town where the maritime functions of a working port are clearly evident.

There are three main strategies informing the design: 1) a strong pedestrian axial link to the original Wharf Street alignment and Macrossan Street. 2) A publicly accessible waterfront boardwalk and 3) A town Plaza connecting the Town to the waterfront.

There are a number of components which provide the guiding framework to ensure the development of the precinct occurs coherently.

The components of the plan are:

- Public Open Space.
- Streetscape.
- Active Edges.
- Public Art, Interpretation & Way-Finding.
- Pathways.
- Furniture.
- Lighting.
- Built form design elements.
- Colours.

4.1 PUBLIC OPEN SPACE

4.1.1 THE PLAZA

It is intended that this area is a place where the Town meets the Port and provides a uniquely Port Douglas waterfront experience. A major strategy is to allow visual connection from the street to the water including Dickson Inlet, Magazine Island and the hinterland beyond with the potential for the Plaza to develop into the main “civic” area for Port Douglas. The Plaza provides a vantage point to observe and interact with the local maritime activity including purchasing fresh seafood direct from the trawlers.

It is intended that this area will allow for larger gatherings and activities in a more contained robust environment in contrast to the softer park-like quality of Rex Smeal Park to the north.

Key Strategies will include:

- Design inspired by the precinct’s history;
- Use of trees to provide shelter and shade and to ameliorate the heat effects of paving;
- Shade canopies incorporating sails and movement to reinforce the dynamic nature of the location;
- Open space with flexibility to accommodate a range of uses;
- Possible water play feature providing a place of fun for children while cooling the micro environment.
- High quality paving for a robust town plaza;
- Developing a water edge interface that allows interaction with the Inlet and an appreciation of the daily tidal cycle and seasonal fluctuations.
- Interpretive artwork incorporating water and natural elements.
- Ground floor uses fronting the plaza to activate the public realm.

A major aim of the Master Plan is the physical linking of the Marina with the Town Centre through the linear pedestrian axis.

This organizing element will inform the design of the Plaza and be reflected in the built form of Stage 2b.

The pedestrian crossing of Wharf Street should be redesigned and enlarged as a shared, low speed zone, with a pedestrian focus although this is beyond the site boundaries.

The Plaza also acts as a main nodal point along the proposed town pedestrian axis Rainforest Walk connecting Macrossan Street and the Town Centre with the Marina and water based activities.



Main Plaza, San Antonio, Texas
Rios Clementi Hale Studios

<https://www.google.com.au/search?q=san+antonio+plaza&client>

4.1.2 RAINFOREST WALK

Rainforest Walk is a lineal pedestrian pathway connecting the existing Marina directly back to the Town Centre via the original Wharf Street. The alignment is along the arcade of the original Marina Building to be demolished with the intent to reuse the mall structural framework to create a pergola

like element with a combination of roofs, battens and trellis to promote vine growth and providing a shaded pathway with integrated seating. This provides a direct connection with the Town Centre and also provides an alternative route to the more open and exposed waterfront boardwalk.

Rainforest Walk is a more contained space promoting local vegetation and a connecting path. Adjacent uses will promote passive surveillance.



Narrow Rainforest, Port Douglas QT.

4.1.3 BOARDWALK

The waterfront boardwalk is a pedestrian pathway connecting the Marina to the Plaza adjacent to Dickson Inlet. The pathway adjoins both commercial and residential uses and will have different design characteristics for each.



Natural Timber Boardwalk, Port Coogee, WA.

Hierarchy of finishes - Boardwalks adjoining commercial or marine uses, where there is activity and opportunities for pedestrians to linger, will incorporate natural timber finishes. Boardwalks promoting movement will be in more resilient finishes.



Boardwalk - Connecting, Port Coogee, WA.

The Boardwalk will provide ample opportunity to sit and admire the magnificent views with furniture integrated into the boardwalk design where possible.

Boardwalk structures should not impede views to the water. Boardwalk structures should reflect the simple working nature of the historic wharves; simple, raw forms are preferred over more sophisticated urban design solutions.

Materials Palette:

- Timber decking.
- Concrete – coloured (natural colours).

- Exposed aggregate (using local aggregate and sand).



Stainless Steel balustrade with tensioned wire. Port Coogee, WA.

Railings

Railings will be used along pathways adjacent to water or in accordance with the Building Code. Railings will consist of a top handrail, uprights and cable barrier bolted to the boardwalk.

Materials Palette:

- Stainless Steel Handrail, uprights and tensioned cables.

4.2 STREETSCAPE

- COMMON INTERNAL VEHICULAR STREETSCAPE

The Reef Marina has extensive bituminised roadways and parking areas generally demarcated with kerbs and line markings. New access roads will also be bituminized except as noted. The existing parking area utilised mature palm trees to shade parking. Shade trees mitigate the heat island effect and improves outdoor comfort for people. Shade trees will be incorporated into the vehicle access network and any reconfiguration of the car park.

Marina Lane servicing the Marina, Stages 1a & 1b will be a small scale, shared laneway with low travel speeds. A pedestrian priority

crossing will terminate the Rainforest Walk at the reconfigured Marina Building entry. The surface material will be a continuation of the Rainforest Walk surface upgraded to a trafficable standard.

Coral Close (replacing Inlet Street) will be bituminized from the existing car park to Wharf Street. From the car park to Stage 2a the road will be a low speed shared space for pedestrians, cycling and vehicles, utilizing a different finish to emphasize the change in character so that the road contributes to the public open space rather than dividing the area.



Shared Space, Port Coogee, WA.

4.3 ACTIVE EDGES

Both the PDWMP and Waterfront North Planning Area Code use the term “Active Edges.” This term is not defined in the Planning Scheme and it is taken to mean frontages where there is “an active visual engagement” between the public realm and the uses in the adjoining buildings. (<http://www.dlaust.com/media/an-a-z-of-urban-design-concepts-and-their-misuse/>)

This concept is important but does not necessarily imply that adjoining uses are commercial. Active edges can include visual connections that create casual surveillance and include elements such as building

entries. In addition, Port Douglas does not have the population to support extensive commercial activity at ground level without affecting existing commercial uses in the town centre and dissipating intensity. Active edges with commercial uses will be limited to key areas such as the northern end of Dickson Inlet, the Duck Pond and the Plaza to support an active and lively town. Other areas need to support the aims of Crime Protection through Environmental Design (CPTED) using passive surveillance.

Buildings must have active edges at key frontages – Stage 2a on water frontage including the Duck Pond and facing the Plaza; Stages 2b and 2c facing the plaza and water.

4.4 PUBLIC ART, INTERPRETATION & WAY-FINDING



Interpretation signage/seat/artwork, Barangaroo, NSW.



Artwork wall, Port Coogee, WA.

Public art is to be used to enrich the visual appearance and add to the precinct identity of the public spaces. Artworks will be integrated with the built form, focus on celebrating and communicating the area’s cultural diversity and heritage. Refer to Milne & Stonehouse *Public Art Plan*.



Directional Signage signage/seats, Barangaroo, NSW.

- Wayfinding

Interpretation and signage will play a vital role in the legibility, permeability and accessibility of the Waterfront North Planning Area and connections with the town centre and Waterfront South. Signage assists way-finding by helping visitors move within and beyond the precinct and to help the physical connection with Macrossan Street. The Waterfront North Precinct has a rich layered heritage which will be communicated to visitors and locals through interpretive communication. The aim is for active engagement with the wider cultural and historical heritage (indigenous, European settlement and even recent iterations) that have influenced the development of the area.

There are opportunities to reuse & repurpose materials from structures to be demolished.

Signage Interpretation

Materials Palette:

- Recycled timber/steel
- Stone and Concrete
- Stainless and galvanised steel



Repurposing: The original Port Douglas weigh station, now the Grouper feeding jetty.

4.5 PATHWAYS

- Open Space

Materials Palette:

- Concrete – coloured (natural colours).
- Exposed aggregate (using local aggregate and sand).
- Timber decking.
- Unit pavers and interlocking paving systems.



Paving, Port Douglas.

- Footpaths

Materials Palette:

- Natural Clay Pavers (Boral Summerset Opal 113x228x40 or equal)

Paver Pattern

- 45degree Herringbone
- Soldier bond edge restraint with mitred corner

4.6 FURNITURE

It is important that all elements contribute to a cohesive character in the precinct and reflect the working port and tourist destination character. Furniture will be characterized by the use of robust materials and heavy fabrication. Mining, sugar industry, tram, and maritime themes can all be used to inform design. Furniture will be simple, contemporary and authentic. The existing town centre has a wide variety of street furniture suggesting a more relaxed approach celebrating difference, however within this precinct, there will be an overall continuity. Seating can include custom designed artwork in certain key locations.

4.6.1 Seating



Custom Timber Seat. Port Coogee, WA.

Seating will be located to emphasise areas of interest; provide shaded rest areas; maximise key views, and grouped to facilitate informal meeting places.



Bench seat

The SSD Metro seat is a robust vandal resistant unit manufactured from corrosion resistant aluminium with stainless steel fixings as standard. The modular design allows up to 4.0m in continuous FSC 100% hardwood planking. Options include armrests for the assistance of elderly and impaired users and edge guards for deterring skateboard damage. The Metro seat can also be provided as a mitred assembly to suit both internal or external layouts.

Materials Palette:

- Concrete – coloured (natural colours and exposed aggregate).
- Recycled Timber.
- Stainless and galvanised steel.

4.6.2 Rubbish Bins

The LB1 'Town' Litterbin is a vandal resistant unit manufactured from corrosion resistant aluminium with stainless steel fixings.

The unit features a keyless latch with the option of an integrated ashtray receptacle that eliminates hot ash from potentially igniting waste. The ashtray's lid with simple emptying procedure also eliminates unnecessary contact between the garbage collector and harmful waste, e.g. needles, glass, etc.

Spacing Every 50 metres within centres, plus additional bins in the plaza and adjacent to food outlets. Minimum 1500mm from bench seats and street dining.



Materials Palette:

- Sandcast Aluminium surface mount.

4.6.3 Drinking Fountains

Town and Park's DF7/WA City wheelchair access drinking fountain is a vandal resistant unit manufactured from corrosion resistant aluminium with stainless steel fixings as standard. Chrome-plated internal fittings including water-pressure regulation and filter components are standard, with easy and secure access available for servicing requirements.

Soft-touch water control ensures water is easily accessible and child-friendly. The option of a hose cock is available with either spring loaded or secure tap fittings.

Spacing Generally 100 metres intervals, plus additional fountains in plaza.



Materials Palette:

- Sandcast Aluminium surface mount (alloy AA601).

4.6.4 Bollards

Town and Park's B8 Park Bollard is a striking example of sturdy vandal resistant urban furniture. Crafted from select grade hardwood ecotimber and corrosion resistant aluminium with stainless steel fixings.

Personalised logos or enamelled badges can be incorporated into the system detailing.

The bollards are designed to visually and physically define areas, edges and corridors within a designed space.



Material Palette:

- Sandcast aluminium (Alloy AA 601)
Select hardwood ecotimber
Stainless steel fixings

4.6.5 Bike Racks

Town and Park's Hoop Bike Rack is a vandal resistant unit that can be manufactured from Stainless and Galvanised Steel. Available as Sub-surface or Surface Mount.



Material Palette:

- 316 Stainless Steel

4.7 LIGHTING

Lighting

Pole diameter 114 mm

Pole height (3000mm - 6000mm)

“Sutton” type luminaire shown.

Lighting of pedestrian areas in public spaces to conform with AS/NZS 1158.3.1:2005.

Material Palette:

- Sandcast aluminium (Alloy AA 601)
Extruded aluminium (Alloy 6106 T6)
Stainless steel fixings.



Bollard – for boardwalks and where low level lighting is required.

“Waterfront” by Louis Poulsen The fixture emits 100% glare-free downward light. The light distribution is symmetric and soft. The four supports create a comfortable symmetric light pattern at ground level.

Material Palette:

- Aluminium coloured with textured surface or graphite with textured surface, powder coated.
- Enclosure: Injection moulded clear polycarbonate. Housing: Die cast aluminium. Top: Die cast aluminium. Post: Extruded aluminium. Base plate: Die cast aluminium.



- Roofs will be metal deck. Awning roofs can include glazing with suitable sun control eg batten screens.

Port Douglas Policy No 2 Building Design and Architectural Elements will also be used to inform design responses.

4.8 BUILT FORM DESIGN ELEMENTS

Awnings

Awnings play an important role in creating a pleasant street/pedestrian environment and welcome relief from heat and direct sunlight. They also provide shelter from unexpected rain showers. Awnings provide a detailed element at the street level, maintaining a pedestrian scale.

- Awnings to be a minimum clearance height of 2.75m, a minimum 2.1m width and may extend into road reserve areas over footpaths and pedestrian lanes.
- Awnings will be in-line with the architectural intent of the building to which they belong.

External Materials

Buildings are to include a number of different materials to create variety and interest. Materials can include:

- rendered masonry.
- timber boarding.
- Fibre cement “boards”
- Painted timber or fibre cement weather boarding.
- Painted fibre cement sheet with expressed joints.
- Custom orb (walls).
- Stone (local feature walls).
- Tilt concrete or precast concrete with texture and paint finish to look similar to rendered masonry.

4.9 COLOURS

Building and urban design element colours will reflect the maritime and waterfront location.



5.0 Architectural Response

A clear site strategy has been established that seeks to engage with the existing town fabric, provide an accessible waterfront and a clear connection with the original Wharf Street alignment and Macrossan Street.

The western wing of the existing shopping centre and several of the existing smaller single storey industrial buildings will be demolished to facilitate these strategies.

Proposed development built form frames the Rainforest Walk and provides active frontages to both the Rainforest Walk, The Boardwalk and the entry into Rainforest Walk from Wharf Street.

The scale of the architectural expression of the built form is complementary to Port Douglas by working within the building height requirements, articulating larger elements including the use of gables, stepped roof lines, using a palette of materials, window shading and facilitating interaction with the pedestrian experience.

The project is arranged into 5 main buildings with a total of 85 units providing a range of accommodation types and price points and includes:

- 5 x large 3 storey waterfront townhouses.
- 5 x small 2 storey flexible townhouses.
- 4 x 4-bed waterfront apartments.
- 25 x 3-bed waterfront apartments.
- 24 x 2-bed dual key apartments.
- 6 x 2-bed apartments.
- 16 x 1-bed apartments.

The small townhouses, 1 and 2 bedroom apartments are oriented to the Rainforest Walk, Duck Pond or Wharf Street.

Unit parking is generally arranged within the building envelopes with a limited number of external spaces providing a total of 108 spaces.

There will also be 1,450 m² of new commercial area. Parking for all commercial uses will be located in the reconfigured common car park which will have parking for 184 cars and 10 buses.

Additional mooring facilities will be provided and the Duck Pond upgraded to facilitate fresh seafood sales direct to the public from trawlers.

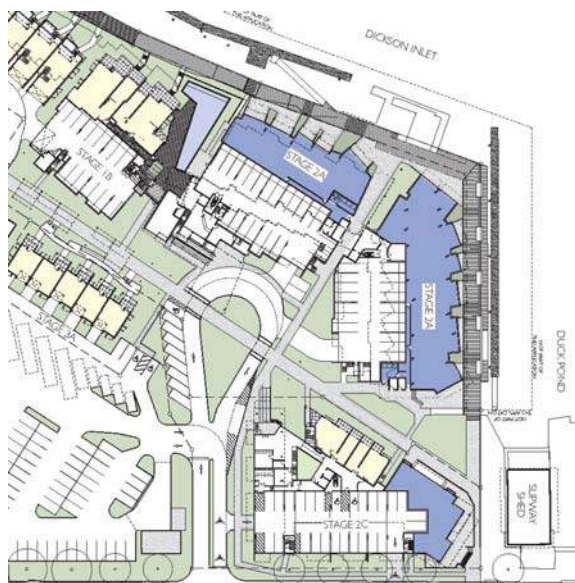
The southern end of Rainforest Walk will terminate in a new shopping centre entry with large verandah elements expressing the building's intrinsic structure. This continues the clearly defined Rainforest Walk pathway into the building and links with the marina and associated water based activities.

The existing shopping centre arcade frame structure will be retained (where possible) and repurposed as a trellis/shade structure in the Rainforest Walk.

The total gross floor area of the proposal is 13,363m². The calculated site area is 14,585m² but doesn't include any allocation of the proposed Plaza site area (which will increase site area and therefore decrease the GFA ratio). This equates to a GFA ratio of 0.92:1. This represents a density that can be supported by comparison with other integrated waterfront developments and achieves a balance between built form and landscape (see 3.0 Waterfront Examples).

Overall site cover calculation at ground level is 48%, level 1 - 41% and level 2 - 38%. The calculation doesn't include any allocation of the proposed Plaza site area (which will increase site area and therefore decrease the site cover value). While these figures are slightly above the Planning Scheme (Ground - 45%, Level 1 - 40% and Level 2 - 35%), the proposed site cover can be supported because the

proposal achieves the Planning Scheme aims of reducing building bulk and is well below other integrated waterfront developments where site cover is between 75% to 85% (see 3.0 Waterfront Examples).



Ground level commercial uses in key places.

Commercial

The ground floor commercial uses are located in key locations: at the junction of the Rainforest Walk with Wharf Street; the Duck Pond facing north; and the northern section of The Boardwalk. The commercial frontages are broken down by box like elements oriented at different angles to create variety, complexity and reflect the smaller scale of the traditional Port Douglas main street. The boxes will also be in contrasting materials to the building and each box will have attached awnings to the frontage for shading. Boxes are further defined by landscaping wedges. Commercial boxes to the west include an additional transition zone between The Boardwalk and the tenancy line which will include battened screens for vegetation.

The architectural character was developed as a response to the Port Douglas heritage; Port Douglas Policy No 2 Building Design and Architectural Elements and the tropical location. Building design facilitates natural

cross ventilation by utilising rear courts and balconies.

There is a legible hierarchy of open space with public fronts to Wharf Street, Rainforest Walk, and The Boardwalk; protected communal spaces for residents and/or a combination of small private gardens and/or generous terraces/balconies for individual units. Building design also supports natural surveillance by orienting balconies and living areas towards public open space.

The proposal presents a considered response to the site, heritage issues, and to the surrounding town context.

Conclusion

In developing the urban design principles for the redevelopment of The Reef Marina site, significant thought and consideration has been given to the outcomes sought in the relevant planning and master planning documents for Port Douglas, the actual opportunities and constraints of the site itself, the review of waterfront development elsewhere and contemporary urban design standards.

The treatment of the public realm, the integration of the town centre with the waterfront and considering how the built form will complement both the waterfront location and the natural tropical environment have been key considerations in seeking to achieve high quality urban design in the redevelopment of The Reef Marina site.

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p343-346

APPENDIX A



APPENDIX B



APPENDIX: 4

THE REEF MARINA

WHARF STREET | PORT DOUGLAS | QUEENSLAND



REDEVELOPMENT PROPOSAL | SEPTEMBER 2016



DICKSON INLET

THE REEF MARINA

WHARF STREET

MAGAZINE ISLAND



PORT DOUGLAS ROAD

MACROSSAN STREET

FOUR MILE BEACH



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

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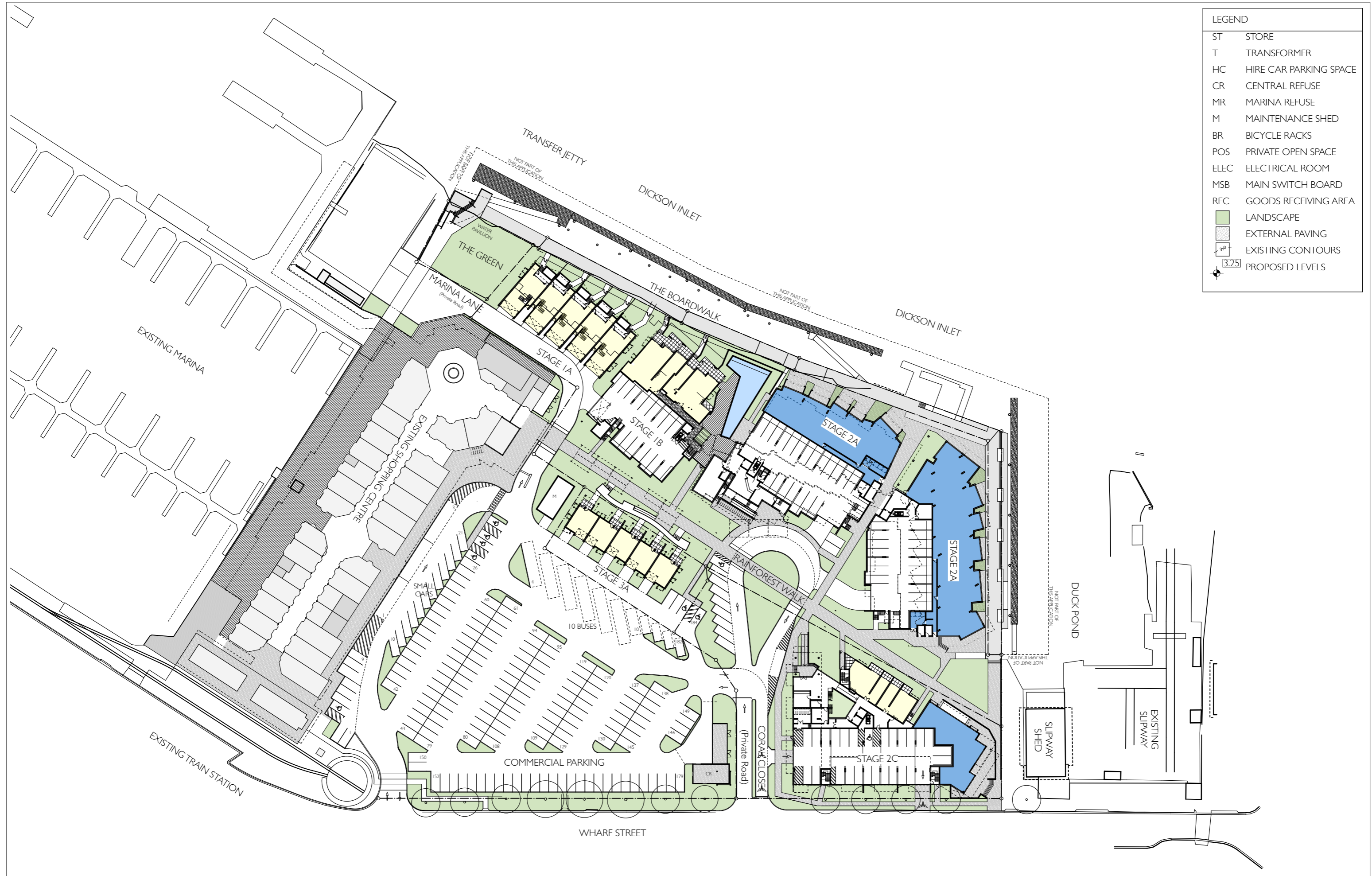
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 CHECKED: JL
 APPROVED: PR/JL
 DATE 16/09/2016

SITE LOCATION



| | | |
|---------------------------------|----------------------------|------------------------|
| PROJ NO. 160303 | DWG NO. DA-S-101 | REVISION: 02 |
| STATUS: DEVELOPMENT APPLICATION | | |


| LEGEND | |
|---|------------------------|
| ST | STORE |
| T | TRANSFORMER |
| HC | HIRE CAR PARKING SPACE |
| CR | CENTRAL REFUSE |
| MR | MARINA REFUSE |
| M | MAINTENANCE SHED |
| BR | BICYCLE RACKS |
| POS | PRIVATE OPEN SPACE |
| ELEC | ELECTRICAL ROOM |
| MSB | MAIN SWITCH BOARD |
| REC | GOODS RECEIVING AREA |
|  | LANDSCAPE |
|  | EXTERNAL PAVING |
|  | EXISTING CONTOURS |
|  | PROPOSED LEVELS |



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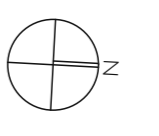
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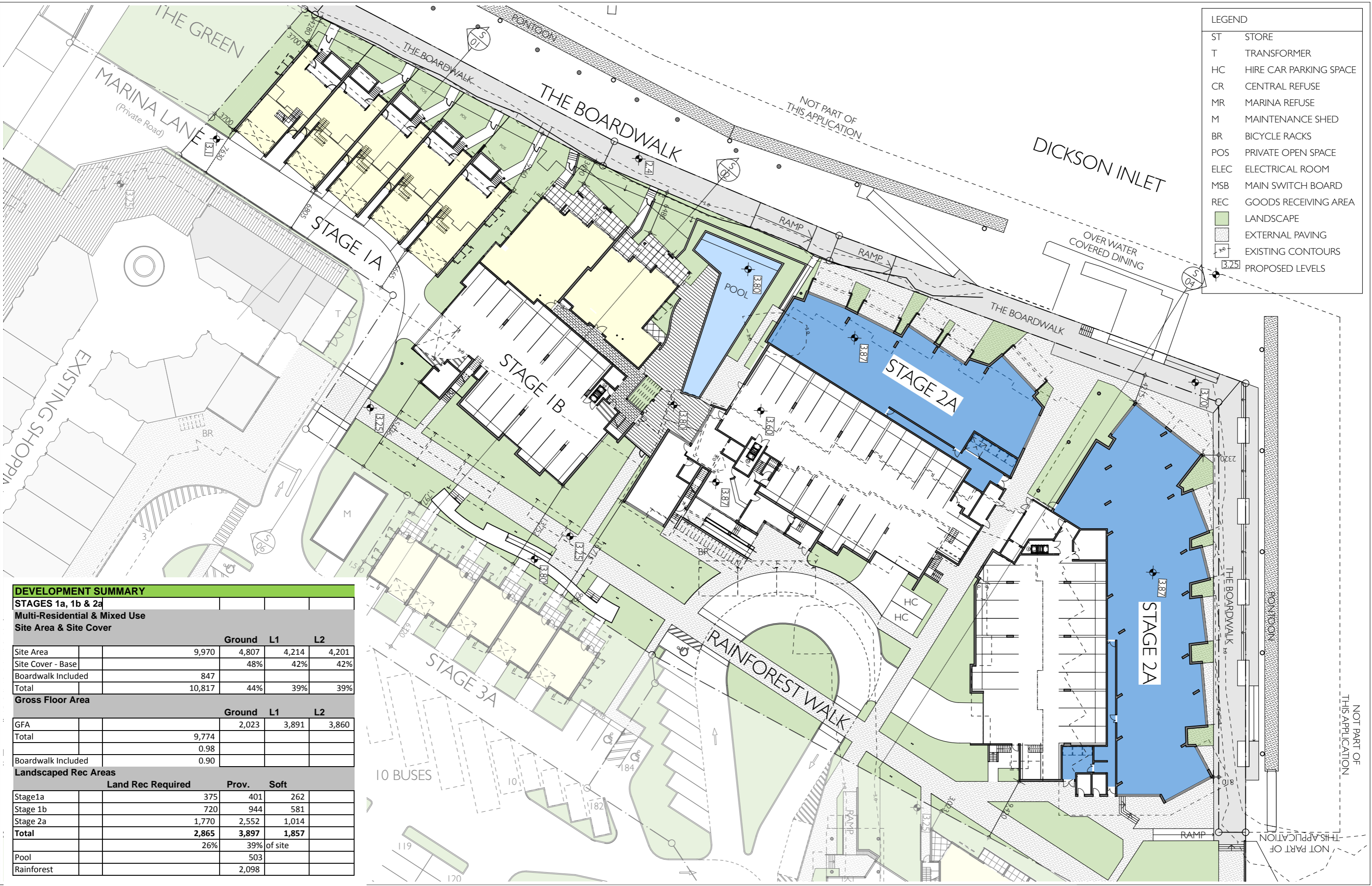
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 APPROVED: PR/JL
 DATE: 16/09/2016

MASTER SITE PLAN
 1:1000

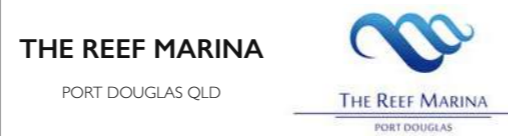


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| STATUS: DEVELOPMENT APPLICATION | | |

/Volumes/YODA/Project Files/2016/160303 The Reef Marina/3.0 Design/3.1 Design (Arch)/3.1.2 Sketch Design/160303 Reef Marina Site.pn



| DEVELOPMENT SUMMARY | | | | |
|-------------------------------|-------------------|--------------|--------------|------------|
| STAGES 1a, 1b & 2a | | | | |
| Multi-Residential & Mixed Use | | | | |
| Site Area & Site Cover | | | | |
| | Ground | L1 | L2 | |
| Site Area | 9,970 | 4,807 | 4,214 | 4,201 |
| Site Cover - Base | | 48% | 42% | 42% |
| Boardwalk Included | 847 | | | |
| Total | 10,817 | 44% | 39% | 39% |
| Gross Floor Area | | | | |
| | Ground | L1 | L2 | |
| GFA | | 2,023 | 3,891 | 3,860 |
| Total | 9,774 | | | |
| | 0.98 | | | |
| Boardwalk Included | 0.90 | | | |
| Landscaped Rec Areas | | | | |
| | Land Rec Required | Prov. | Soft | |
| Stage 1a | 375 | 401 | 262 | |
| Stage 1b | 720 | 944 | 581 | |
| Stage 2a | 1,770 | 2,552 | 1,014 | |
| Total | 2,865 | 3,897 | 1,857 | |
| | 26% | 39% of site | | |
| Pool | | | 503 | |
| Rainforest | | 2,098 | | |

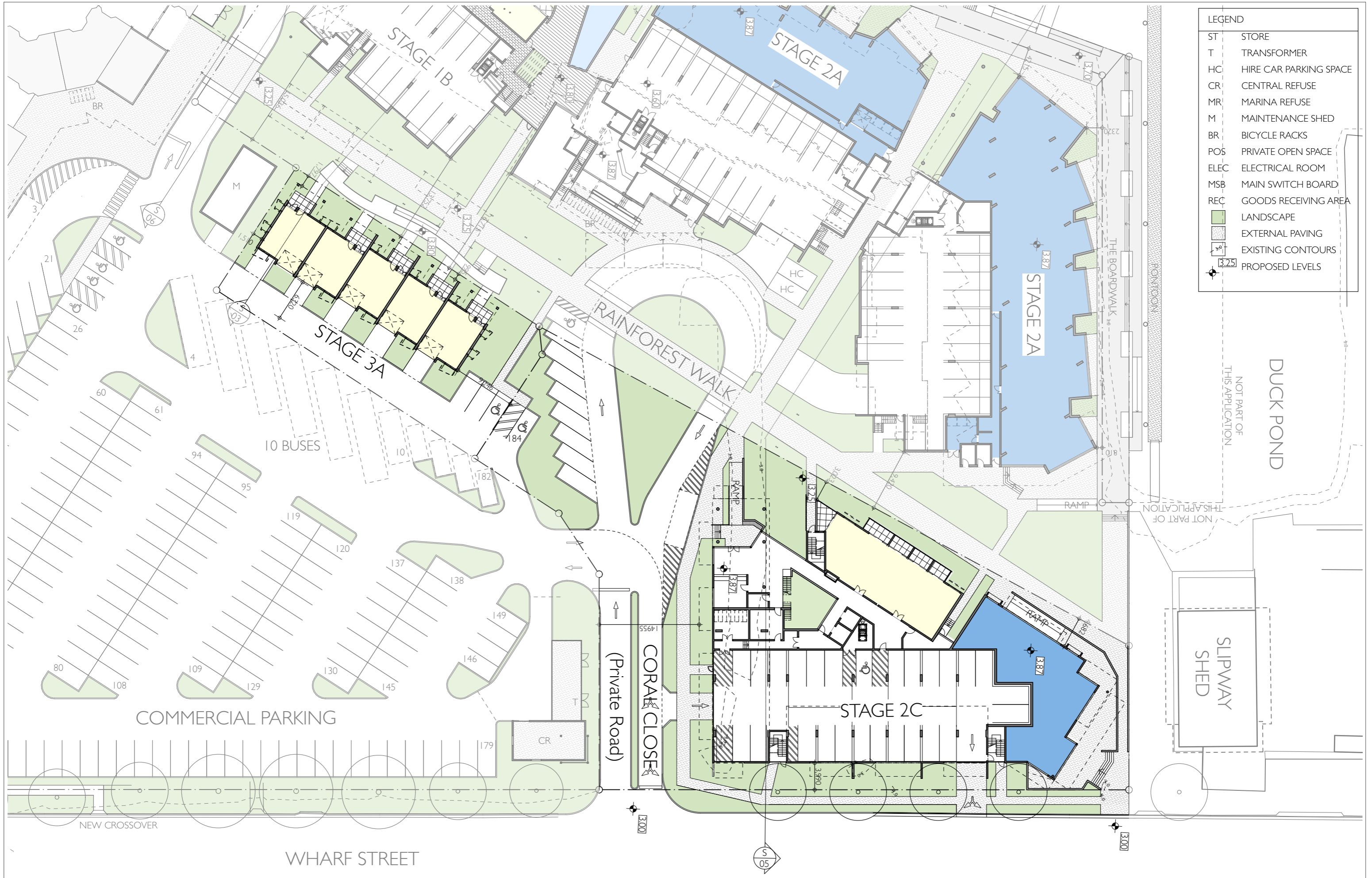


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 APPROVED: PR/JL
 DATE: 16/09/2016

SITE PLAN : PROPOSED LOT I
 1:500

| | | |
|---------------------------------|----------------------------|------------------------|
| PROJ NO. 160303 | DWG NO. DA-S-105 | REVISION: 02 |
| STATUS: DEVELOPMENT APPLICATION | | |

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| LEGEND | |
|-------------------|------------------------|
| ST | STORE |
| T | TRANSFORMER |
| HC | HIRE CAR PARKING SPACE |
| CR | CENTRAL REFUSE |
| MR | MARINA REFUSE |
| M | MAINTENANCE SHED |
| BR | BICYCLE RACKS |
| POS | PRIVATE OPEN SPACE |
| ELEC | ELECTRICAL ROOM |
| MSB | MAIN SWITCH BOARD |
| REC | GOODS RECEIVING AREA |
| [Green Area] | LANDSCAPE |
| [Grey Area] | EXTERNAL PAVING |
| [Dashed Line] | EXISTING CONTOURS |
| [Dot with Number] | PROPOSED LEVELS |



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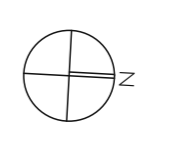
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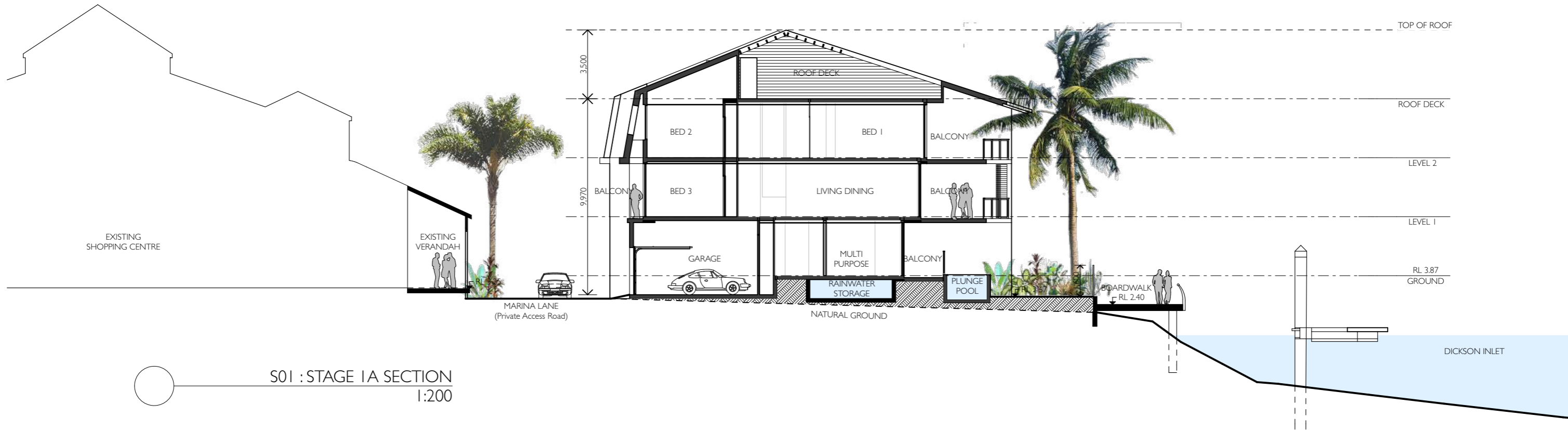
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 APPROVED: PR/JL
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○ SITE PLAN : PROPOSED LOT 2 & 3
 1:500

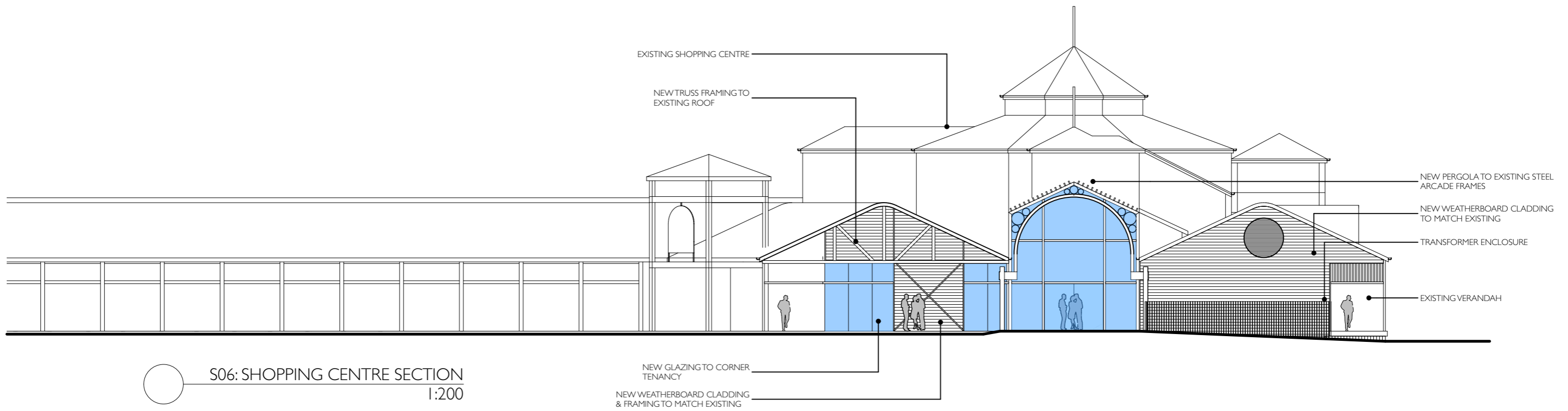


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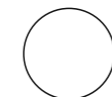
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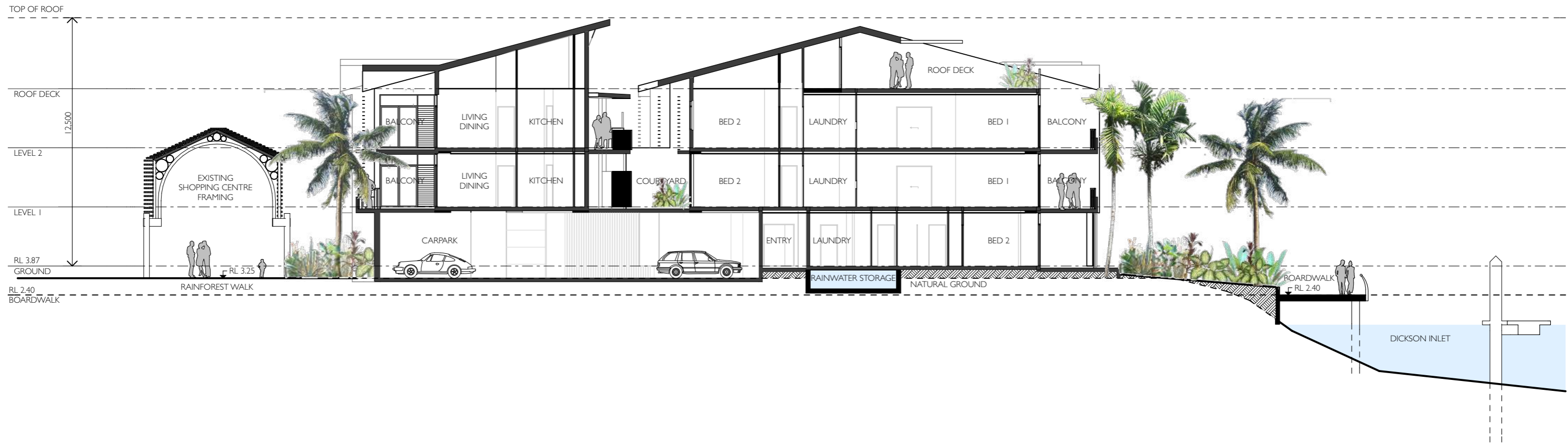


S01 : STAGE 1A SECTION
1:200

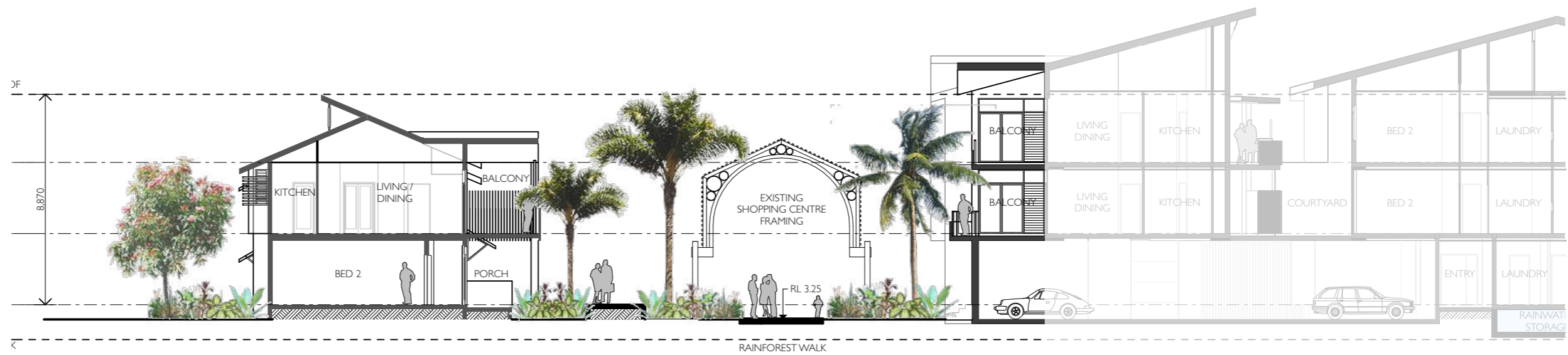


S06: SHOPPING CENTRE SECTION
1:200

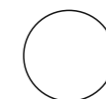




○ S02 : STAGE 1B SECTION
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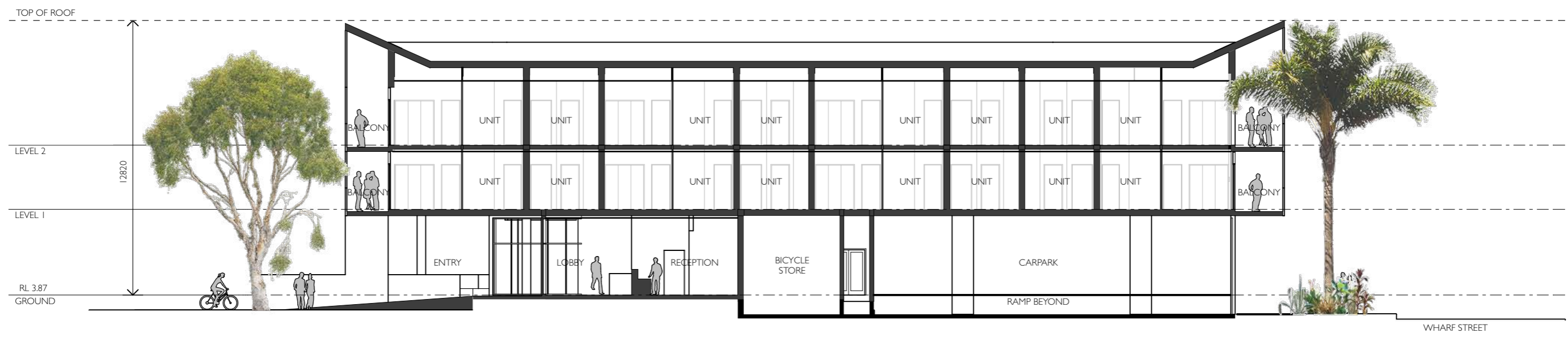


○ S03 : STAGE 3A SECTION
1:200





S04 : STAGE 2A SECTION
1:200



S05 : STAGE 2C SECTION
1:200

APPENDIX: 5

LEGEND

| | |
|------|------------------------|
| ST | STORE |
| T | TRANSFORMER |
| HC | HIRE CAR PARKING SPACE |
| CR | CENTRAL REFUSE |
| MR | MARINA REFUSE |
| M | MAINTENANCE SHED |
| BR | BICYCLE RACKS |
| POS | PRIVATE OPEN SPACE |
| ELEC | ELECTRICAL ROOM |
| MSB | MAIN SWITCH BOARD |
| REC | GOODS RECEIVING AREA |
| | LANDSCAPE |
| | EXTERNAL PAVING |
| | EXISTING CONTOURS |
| | PROPOSED LEVELS |



| DEVELOPMENT SUMMARY | | | | | |
|-----------------------------------|------------|------------|------------|------------|--|
| STAGE 1a | | | | | |
| Multi-Residential | | | | | |
| 5 x 3 Bedroom | | | | | |
| Total | | 5 | | | |
| Site Area & Site Cover | | | | | |
| Refer Site Plan | | | | | |
| Gross Floor Area | | | | | |
| Refer Site Plan | | | | | |
| Landscaped Rec Areas | | | | | |
| | Land Rec | Soft Land. | Bal/Tce | Req. | |
| Unit 1 | 93.9 | 70 | 93.9 | 75 | |
| Unit 2 | 51.2 | 24.1 | 82.9 | 75 | |
| Unit 3 | 56.8 | 28.05 | 83.2 | 75 | |
| Unit 4 | 62 | 33.1 | 82.9 | 75 | |
| Unit 5 | 137 | 106.4 | 93.6 | 75 | |
| Total | 401 | 262 | 437 | 375 | |
| Parking | | | | | |
| | Req. | Prov. | | | |
| Cars | 5 | 10 | | | |
| Bikes - Units | 1.7 | 5 | | | |
| Bikes - Visitors | 0.4 | 1 | | | |



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 CHECKED: JL/JL
 APPROVED: PR/JL
 DATE: 16/09/2016

STAGE 1A SITE PLAN
 1:200

| | | | |
|---------------------------|-----------------------------|------------------------|------------------------------------|
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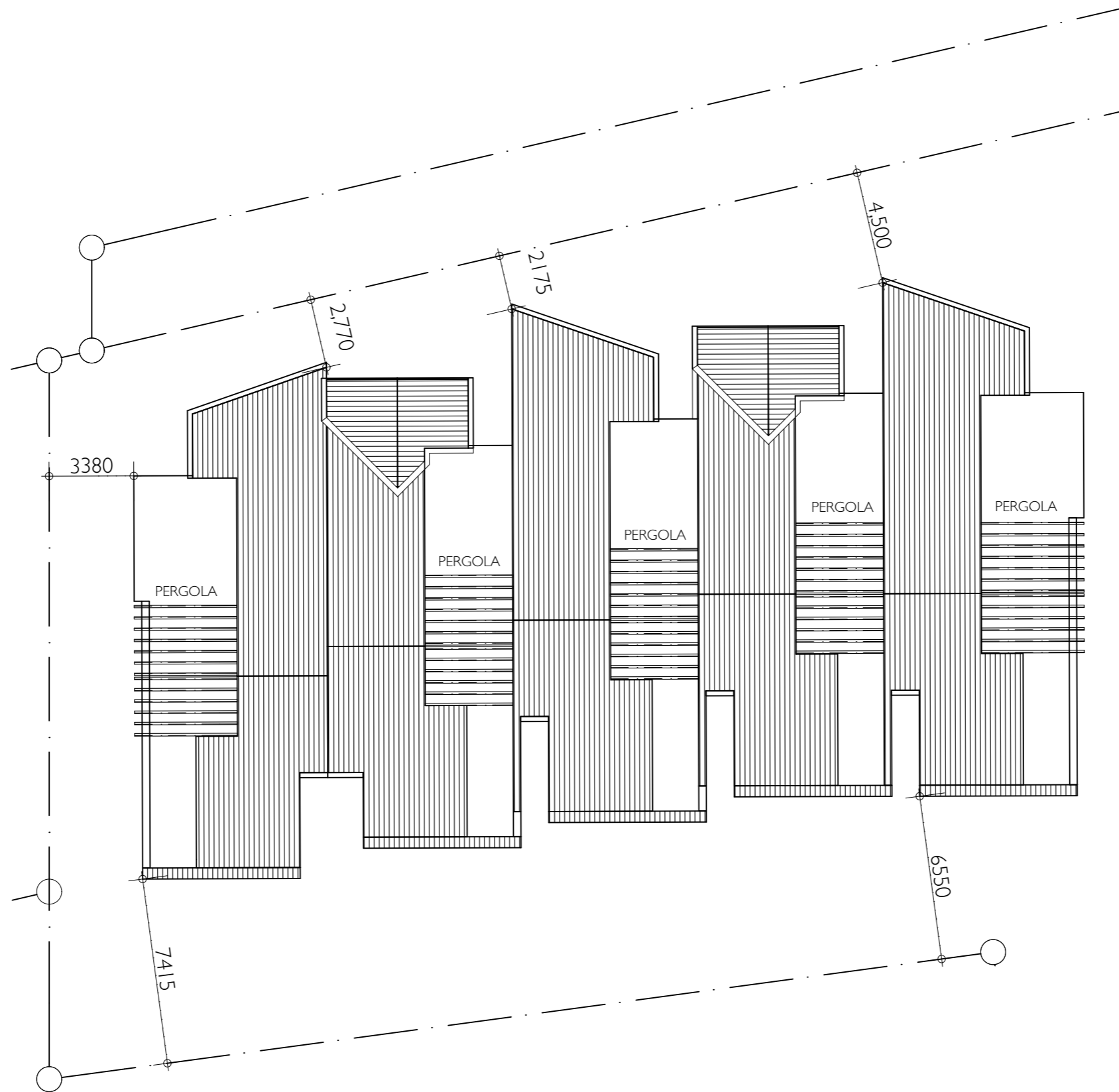




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| STATUS: DEVELOPMENT APPLICATION | | |







LEGEND

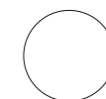
- B1** GLAZED BALUSTRADE IN STAINLESS STEEL FRAME
- B2** CFC WEATHERBOARD + GLAZED BALUSTRADE
- B3** GLAZED BALUSTRADE IN STAINLESS STEEL FRAME
- B4** GLAZED BALUSTRADE IN STAINLESS STEEL FRAME
- B5** STAINLESS STEEL + WIRE BALUSTRADE
- BA** BATTENED SCREEN
- C1** CFC WEATHERBOARD CLADDING
- C2** CFC WEATHERBOARD CLADDING
- F1** IRREGULAR STONE FEATURE WALL
- L1** POWDER COATED ALUMINIUM LOUVRES
- LS** STACKING LOUVRE SHUTTERS
- PE** POWDER COATED ALUMINIUM PERGOLA
- PL** PANEL LIFT DOOR
- M1** RENDERED MASONRY COLOUR 1
- M2** RENDERED MASONRY COLOUR 2
- MD** METAL DECK ROOFING
- S1** POWDER COATED SHADING DEVICE WITH METAL DECK ROOFING
- S2** POWDER COATED SHADING DEVICE WITH METAL DECK ROOFING
- S3** POWDER COATED SHADING DEVICE WITH METAL DECK ROOFING

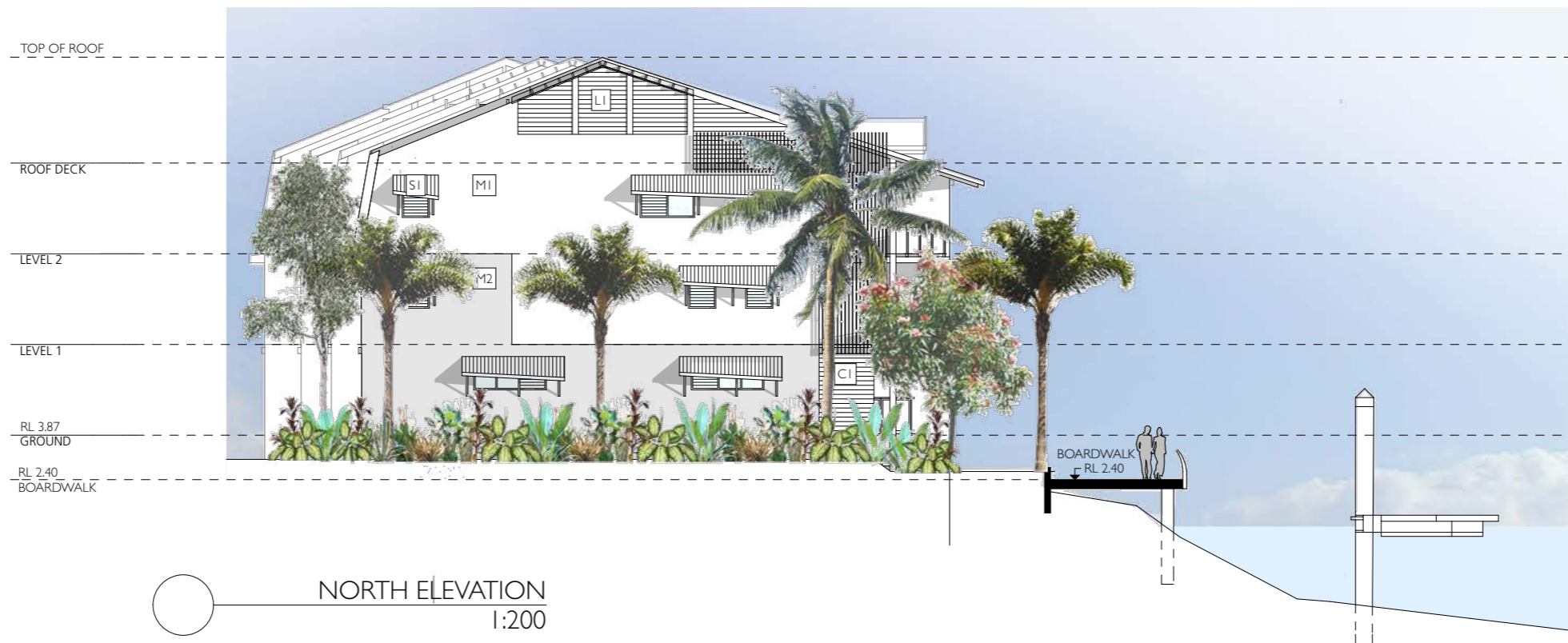


WEST ELEVATION
1:200



EAST ELEVATION
1:200

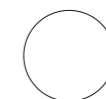




NORTH ELEVATION
1:200



SOUTH ELEVATION
1:200



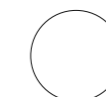


○ SOUTH WEST PERSPECTIVE



○ SOUTH PERSPECTIVE

STAGE 1A PERSPECTIVE



| | | |
|---------------------------------|-----------------------------|------------------------|
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THE REEF MARINA
PORT DOUGLAS QLD

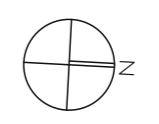


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CHECKED: JL
APPROVED: PR/JL
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APPENDIX: 6

| DEVELOPMENT SUMMARY | | | | |
|------------------------|----------|------------|------------|------------|
| STAGE 1b | | | | |
| Multi-Residential | | Number | Land Rec | |
| 2 x 4 Bedrm, 3 Bath. | | 2 | | 150 |
| 2 x 3 Bedrm, 3 Bath | | 2 | | 120 |
| 4 x 3 Bedrm, 2 Bath | | 4 | | 240 |
| 2 x 1 Bedrm, 2 Bath | | 2 | | 90 |
| 4 x 1 Bedrm, 1 bath | | 4 | | 120 |
| Total | | 14 | | 720 |
| Site Area & Site Cover | | | | |
| Refer Site Plan | | | | |
| Gross Floor Area | | | | |
| Refer Site Plan | | | | |
| Landscaped Rec Areas | Land Rec | Soft Lan | Bal/Tce | |
| Unit 1 | | 118.9 | 106 | 93.9 |
| Unit 2 | | 114.1 | 98 | 82.9 |
| Common | | 711 | 377 | |
| Total | | 944 | 581 | 177 |
| Parking | | Req. | Prov. | |
| Cars | | 14 | 16 | |
| Bikes - Units | | 4.7 | 5 | |
| Bikes - Visitors | | 1.2 | 2 | |

| LEGEND | |
|-----------------|------------------------|
| ST | STORE |
| T | TRANSFORMER |
| HC | HIRE CAR PARKING SPACE |
| CR | CENTRAL REFUSE |
| MR | MARINA REFUSE |
| M | MAINTENANCE SHED |
| BR | BICYCLE RACKS |
| POS | PRIVATE OPEN SPACE |
| ELEC | ELECTRICAL ROOM |
| MSB | MAIN SWITCH BOARD |
| REC | GOODS RECEIVING AREA |
| [Green Box] | LANDSCAPE |
| [Grey Box] | EXTERNAL PAVING |
| [Dashed Line] | EXISTING CONTOURS |
| [Number in Box] | PROPOSED LEVELS |

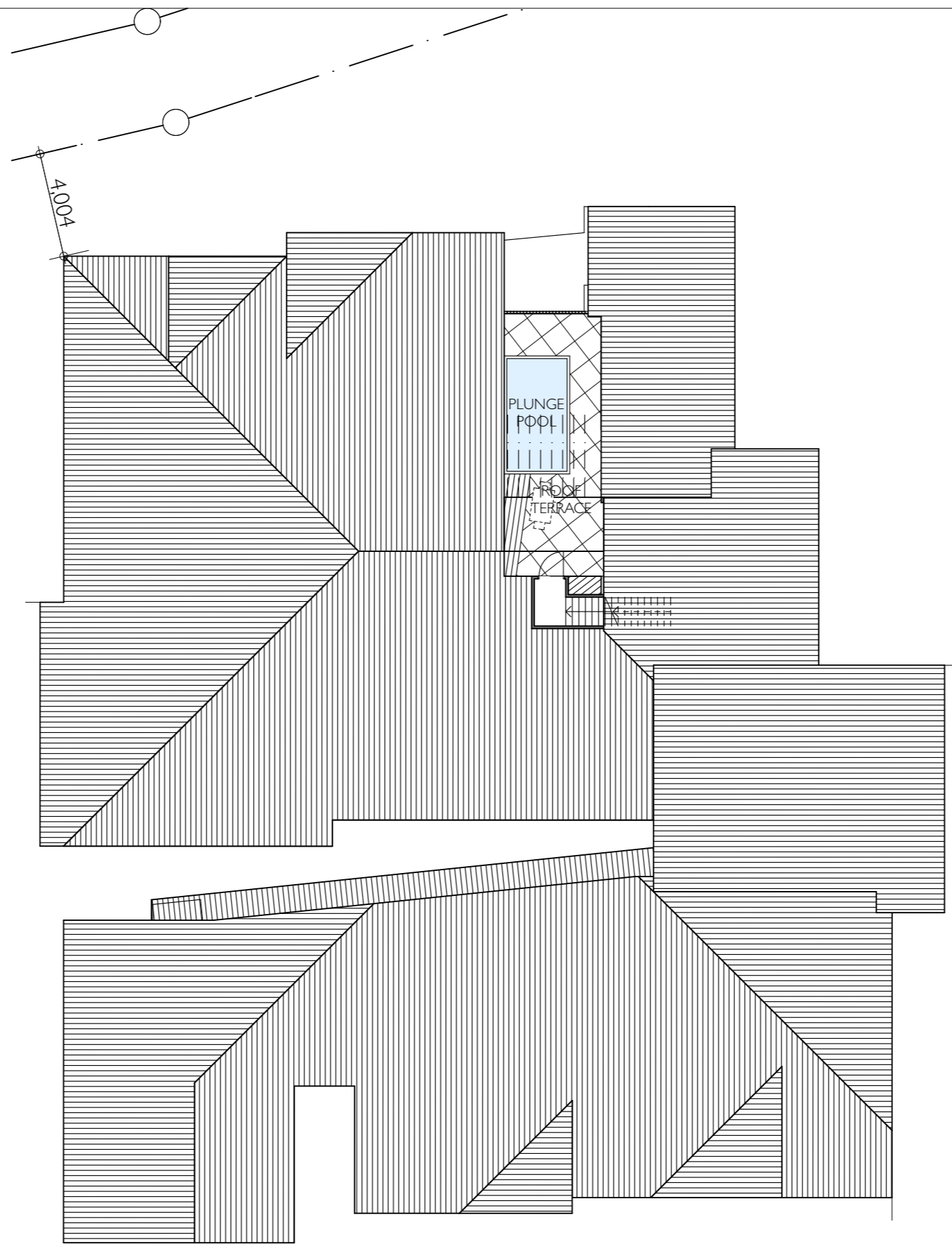


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TOP OF ROOF
 ROOF DECK
 LEVEL 2
 LEVEL 1
 RL 3.87
 GROUND
 RL 2.40
 BOARDWALK



WEST ELEVATION
 1:200

LEGEND

| | |
|----|--|
| B1 | GLAZED BALUSTRADE IN STAINLESS STEEL FRAME |
| B2 | CFC WEATHERBOARD + GLAZED BALUSTRADE |
| B3 | GLAZED BALUSTRADE IN STAINLESS STEEL FRAME |
| B4 | GLAZED BALUSTRADE IN STAINLESS STEEL FRAME |
| B5 | STAINLESS STEEL + WIRE BALUSTRADE |
| BA | BATTENED SCREEN |
| C1 | CFC WEATHERBOARD CLADDING |
| C2 | CFC WEATHERBOARD CLADDING |
| F1 | IRREGULAR STONE FEATURE WALL |
| L1 | POWDERCOATED ALUMINIUM LOUVRES |
| LS | STACKING LOUVRE SHUTTERS |
| PE | POWDERCOATED ALUMINIUM PERGOLA |
| PL | PANEL LIFT DOOR |
| M1 | RENDERED MASONRY COLOUR 1 |
| M2 | RENDERED MASONRY COLOUR 2 |
| MD | METAL DECK ROOFING |
| S1 | POWDER COATED SHADING DEVICE WITH METAL DECK ROOFING |
| S2 | POWDER COATED SHADING DEVICE WITH METAL DECK ROOFING |
| S3 | POWDER COATED SHADING DEVICE WITH METAL DECK ROOFING |

TOP OF ROOF
 ROOF DECK
 LEVEL 2
 LEVEL 1
 RL 3.87
 GROUND
 RL 2.40
 BOARDWALK



NORTH ELEVATION
 1:200



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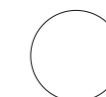
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ELEVATIONS



| | | |
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| STATUS: DEVELOPMENT APPLICATION | | |

TOP OF ROOF
 ROOF DECK
 LEVEL 2
 LEVEL 1
 RL 3.87
 GROUND
 RL 2.40
 BOARDWALK



○ EAST ELEVATION
 1:200

LEGEND

| | |
|----|--|
| B1 | GLAZED BALUSTRADE IN STAINLESS STEEL FRAME |
| B2 | CFC WEATHERBOARD + GLAZED BALUSTRADE |
| B3 | GLAZED BALUSTRADE IN STAINLESS STEEL FRAME |
| B4 | GLAZED BALUSTRADE IN STAINLESS STEEL FRAME |
| B5 | STAINLESS STEEL + WIRE BALUSTRADE |
| BA | BATTENED SCREEN |
| C1 | CFC WEATHERBOARD CLADDING |
| C2 | CFC WEATHERBOARD CLADDING |
| F1 | IRREGULAR STONE FEATURE WALL |
| L1 | POWDERCOATED ALUMINIUM LOUVRES |
| LS | STACKING LOUVRE SHUTTERS |
| PE | POWDERCOATED ALUMINIUM PERGOLA |
| PL | PANEL LIFT DOOR |
| M1 | RENDERED MASONRY COLOUR 1 |
| M2 | RENDERED MASONRY COLOUR 2 |
| MD | METAL DECK ROOFING |
| S1 | POWDER COATED SHADING DEVICE WITH METAL DECK ROOFING |
| S2 | POWDER COATED SHADING DEVICE WITH METAL DECK ROOFING |
| S3 | POWDER COATED SHADING DEVICE WITH METAL DECK ROOFING |

TOP OF ROOF
 ROOF DECK
 LEVEL 2
 LEVEL 1
 RL 3.87
 GROUND
 RL 2.40
 BOARDWALK



○ SOUTH ELEVATION
 1:200



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ELEVATIONS



| | | |
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| STATUS: DEVELOPMENT APPLICATION | | |



○ SOUTHERN PERSPECTIVE



○ NORTHERN PERSPECTIVE





NORTH ELEVATION (DUCK POND)
1:200

LEGEND

| | |
|----|--|
| B1 | GLAZED BALUSTRADE IN STAINLESS STEEL FRAME |
| B2 | CFC WEATHERBOARD + GLAZED BALUSTRADE |
| B3 | GLAZED BALUSTRADE IN STAINLESS STEEL FRAME |
| B4 | GLAZED BALUSTRADE IN STAINLESS STEEL FRAME |
| B5 | STAINLESS STEEL + WIRE BALUSTRADE |
| BA | BATTENED SCREEN |
| C1 | CFC WEATHERBOARD CLADDING |
| C2 | CFC WEATHERBOARD CLADDING |
| F1 | IRREGULAR STONE FEATURE WALL |
| L1 | POWDERCOATED ALUMINIUM LOUVRES |
| LS | STACKING LOUVRE SHUTTERS |
| PE | POWDERCOATED ALUMINIUM PERGOLA |
| PL | PANEL LIFT DOOR |
| M1 | RENDERED MASONRY COLOUR 1 |
| M2 | RENDERED MASONRY COLOUR 2 |
| MD | METAL DECK ROOFING |
| S1 | POWDER COATED SHADING DEVICE WITH METAL DECK ROOFING |
| S2 | POWDER COATED SHADING DEVICE WITH METAL DECK ROOFING |
| S3 | POWDER COATED SHADING DEVICE WITH METAL DECK ROOFING |



ELEVATION
1:200



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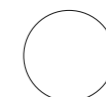
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STAGE 2A ELEVATIONS (2 of 3)



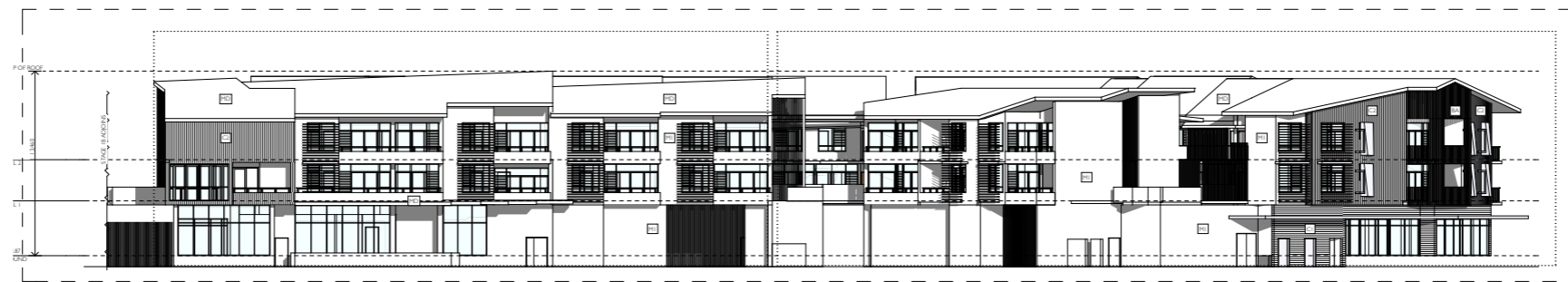
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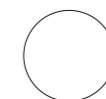
○ EAST ELEVATION (RAINFOREST WALK)
1:200



○ EAST ELEVATION (RAINFOREST WALK)
1:200



○ EAST ELEVATION
1:500





○ NORTH WEST PERSPECTIVE



○ SOUTH WEST PERSPECTIVE



| DEVELOPMENT SUMMARY | | | |
|--------------------------|---------------|-----|-----------------|
| STAGE 2a | | | |
| Multi-Residential | Number | | Land Rec |
| 2 x 4 Bedrm, 3 Bath. | 2 | | 150 |
| 19 x 3 Bedrm, 2 Bath | 19 | | 1,140 |
| 4 x 2 Bedrm, 2 Bath | 4 | | 180 |
| 10 x 1 Bedrm, 1 bath | 10 | | 300 |
| Total | 35 | | 1,770 |
| Commercial Ground | | | |
| Net Lettable Commercial | 1,204 | sqm | |

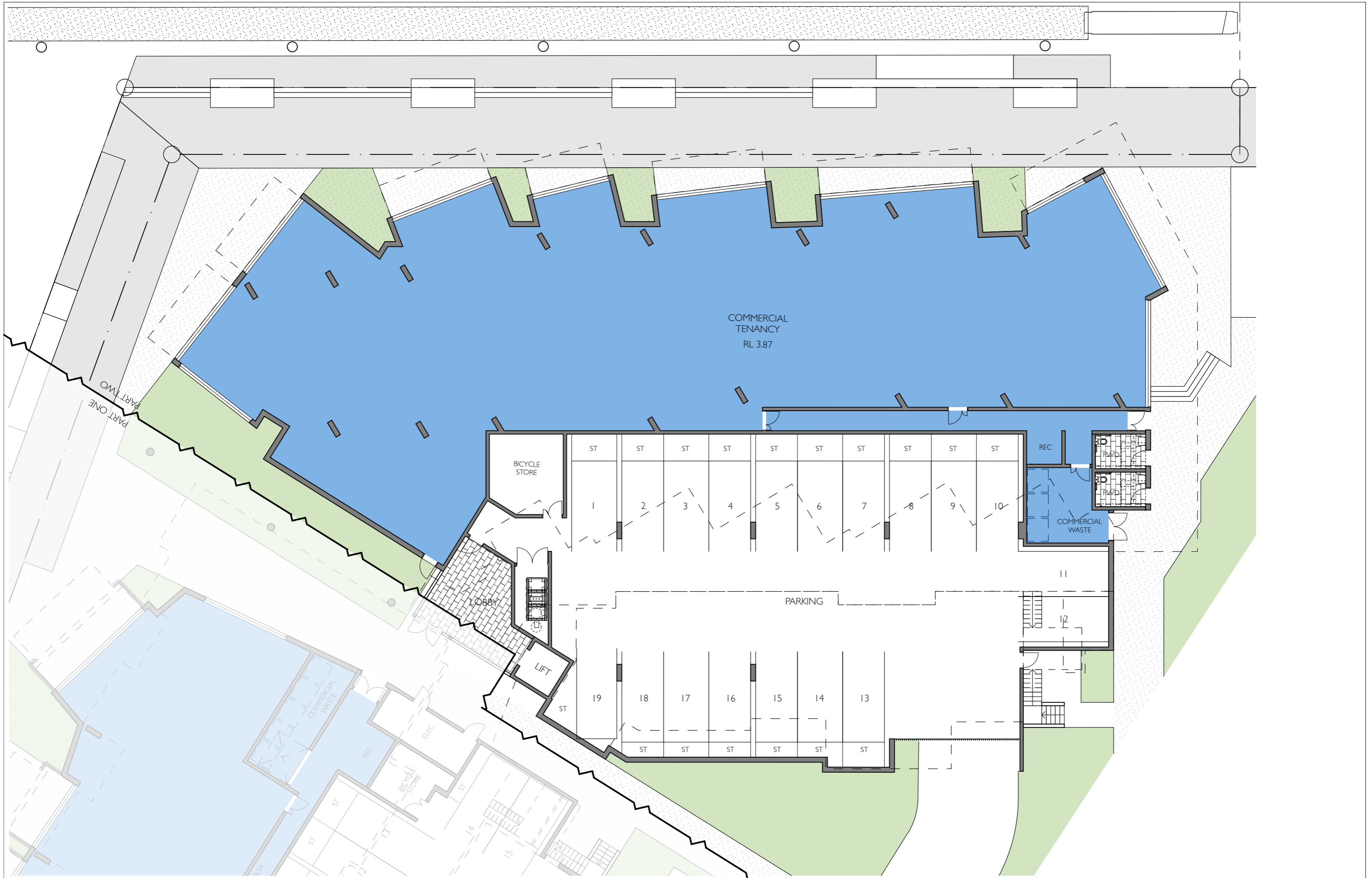
| Site Area & Site Cover | | | |
|-----------------------------|-----------------|--|-----------------|
| Refer Site Plan | | | |
| Gross Floor Area | | | |
| Refer Site Plan | | | |
| Landscaped Rec Areas | Land Rec | | Soft Lan |
| General | 807.5 | | 1013.9 |
| Pool | 210 | | |
| Rainforest | 1534.9 | | |
| Total | 2,552 | | 1014 |
| Parking | Req. | | Prov. |
| Cars | 35 | | 41 |
| Commercial | | | |
| Bikes - Commercial | 12.0 | | 12 |
| Bikes - Units | 11.7 | | 12 |
| Bikes - Visitors | 2.9 | | 3 |



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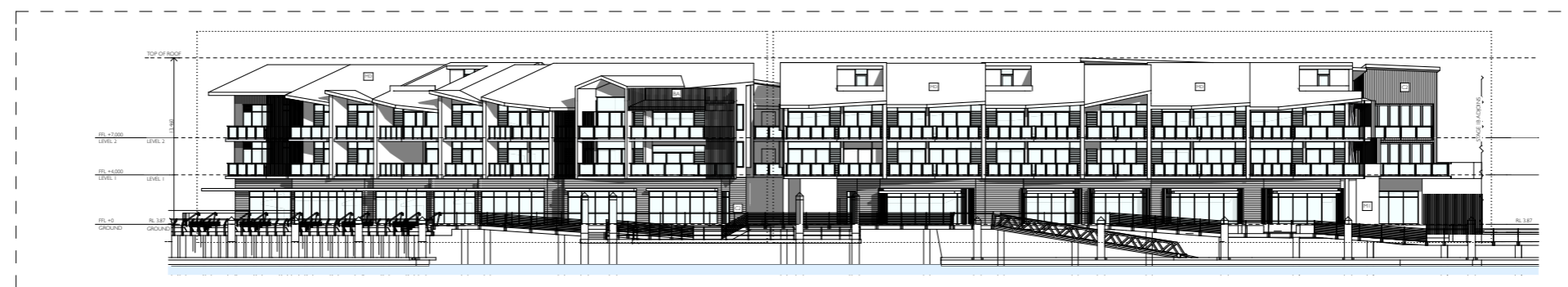
APPENDIX: 7



WEST ELEVATION
1:200



WEST ELEVATION
1:200



WEST ELEVATION
1:500



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STAGE 2A ELEVATIONS (1 of 3)



| | | |
|---------------------------------|-----------------------------|---------------------|
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NORTH ELEVATION (DUCK POND)
1:200

LEGEND

| | |
|----|--|
| B1 | GLAZED BALUSTRADE IN STAINLESS STEEL FRAME |
| B2 | CFC WEATHERBOARD + GLAZED BALUSTRADE |
| B3 | GLAZED BALUSTRADE IN STAINLESS STEEL FRAME |
| B4 | GLAZED BALUSTRADE IN STAINLESS STEEL FRAME |
| B5 | STAINLESS STEEL + WIRE BALUSTRADE |
| BA | BATTENED SCREEN |
| C1 | CFC WEATHERBOARD CLADDING |
| C2 | CFC WEATHERBOARD CLADDING |
| F1 | IRREGULAR STONE FEATURE WALL |
| L1 | POWDERCOATED ALUMINIUM LOUVRES |
| LS | STACKING LOUVRE SHUTTERS |
| PE | POWDERCOATED ALUMINIUM PERGOLA |
| PL | PANEL LIFT DOOR |
| M1 | RENDERED MASONRY COLOUR 1 |
| M2 | RENDERED MASONRY COLOUR 2 |
| MD | METAL DECK ROOFING |
| S1 | POWDER COATED SHADING DEVICE WITH METAL DECK ROOFING |
| S2 | POWDER COATED SHADING DEVICE WITH METAL DECK ROOFING |
| S3 | POWDER COATED SHADING DEVICE WITH METAL DECK ROOFING |



ELEVATION
1:200



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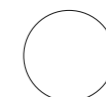
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STAGE 2A ELEVATIONS (2 of 3)



| | | |
|---------------------------|-----------------------------|--|
| PROJ NO. 160303 | DWG NO. DA-2A-111 | REVISION: 02 STATUS: DEVELOPMENT APPLICATION |
|---------------------------|-----------------------------|--|

APPENDIX: 8



NORTH ELEVATION
1:200

LEGEND

| | |
|----|--|
| B1 | GLAZED BALUSTRADE IN STAINLESS STEEL FRAME |
| B2 | CFC WEATHERBOARD + GLAZED BALUSTRADE |
| B3 | GLAZED BALUSTRADE IN STAINLESS STEEL FRAME |
| B4 | GLAZED BALUSTRADE IN STAINLESS STEEL FRAME |
| B5 | STAINLESS STEEL + WIRE BALUSTRADE |
| BA | BATTENED SCREEN |
| C1 | CFC WEATHERBOARD CLADDING |
| C2 | CFC WEATHERBOARD CLADDING |
| F1 | IRREGULAR STONE FEATURE WALL |
| L1 | POWDERCOATED ALUMINIUM LOUVRES |
| LS | STACKING LOUVRE SHUTTERS |
| PE | POWDERCOATED ALUMINIUM PERGOLA |
| PL | PANEL LIFT DOOR |
| M1 | RENDERED MASONRY COLOUR 1 |
| M2 | RENDERED MASONRY COLOUR 2 |
| MD | METAL DECK ROOFING |
| S1 | POWDER COATED SHADING DEVICE WITH METAL DECK ROOFING |
| S2 | POWDER COATED SHADING DEVICE WITH METAL DECK ROOFING |
| S3 | POWDER COATED SHADING DEVICE WITH METAL DECK ROOFING |



EAST ELEVATION
1:200



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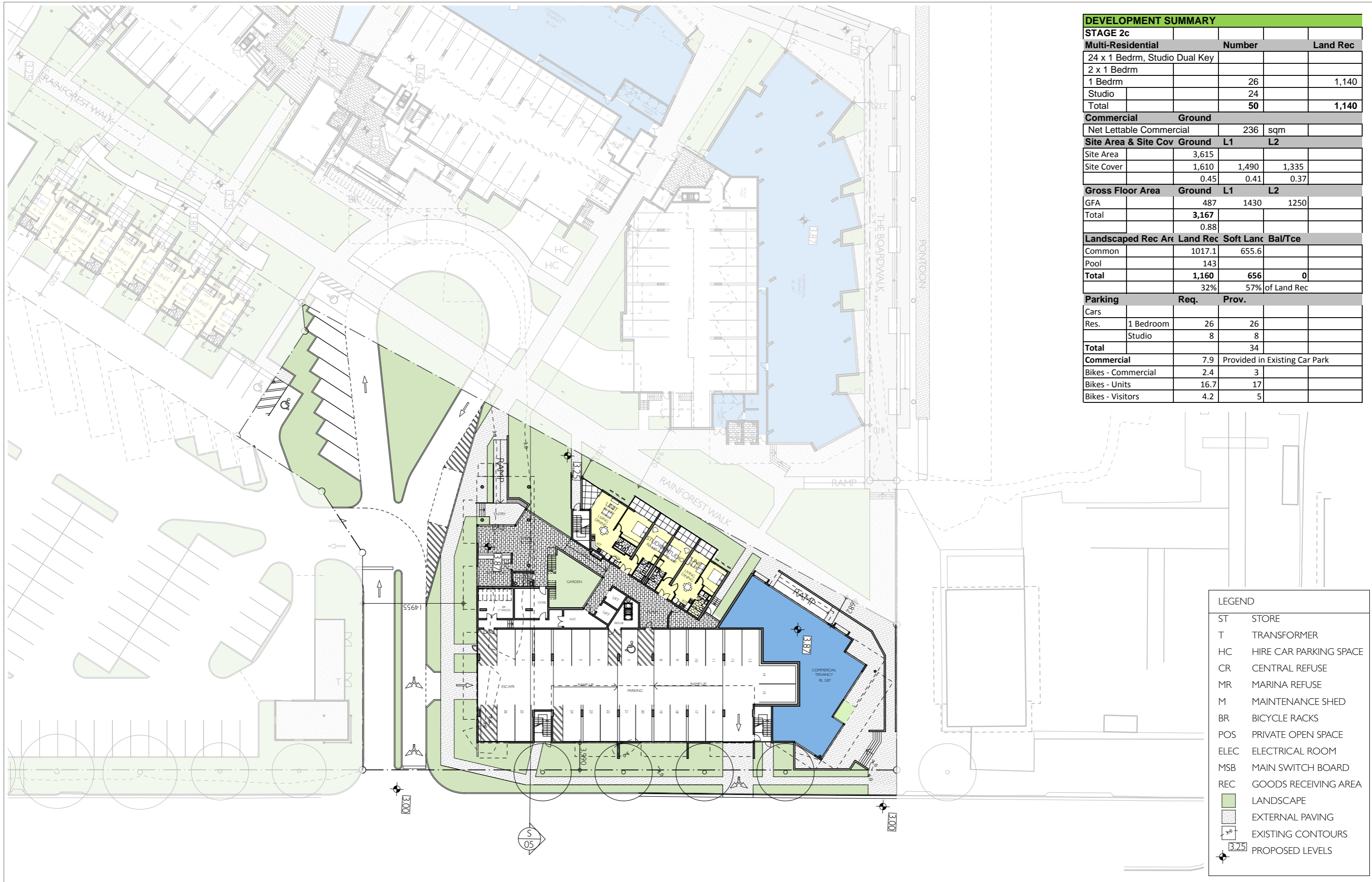
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STAGE 2C ELEVATIONS



| | | |
|---------------------------|-----------------------------|--|
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|---------------------------|-----------------------------|--|

APPENDIX: 8



| DEVELOPMENT SUMMARY | | | |
|-------------------------------|--------------|-------------------------------|-------------|
| STAGE 2c | | | |
| Multi-Residential | Number | Land Rec | |
| 24 x 1 Bedrm, Studio Dual Key | | | |
| 2 x 1 Bedrm | | | |
| 1 Bedrm | 26 | 1,140 | |
| Studio | 24 | | |
| Total | 50 | 1,140 | |
| Commercial Ground | | | |
| Net Lettable Commercial | 236 | sqm | |
| Site Area & Site Cov | | | |
| | Ground | L1 | L2 |
| Site Area | 3,615 | | |
| Site Cover | 1,610 | 1,490 | 1,335 |
| | 0.45 | 0.41 | 0.37 |
| Gross Floor Area | | | |
| | Ground | L1 | L2 |
| GFA | 487 | 1430 | 1250 |
| Total | 3,167 | | |
| | 0.88 | | |
| Landscaped Rec Arc | | | |
| | Land Rec | Soft Land | Bal/Tce |
| Common | 1017.1 | 655.6 | |
| Pool | 143 | | |
| Total | 1,160 | 656 | 0 |
| | 32% | 57% | of Land Rec |
| Parking | | | |
| | Req. | Prov. | |
| Cars | | | |
| Res. 1 Bedroom | 26 | 26 | |
| Studio | 8 | 8 | |
| Total | | 34 | |
| Commercial | 7.9 | Provided in Existing Car Park | |
| Bikes - Commercial | 2.4 | 3 | |
| Bikes - Units | 16.7 | 17 | |
| Bikes - Visitors | 4.2 | 5 | |


| LEGEND | |
|-----------------|------------------------|
| ST | STORE |
| T | TRANSFORMER |
| HC | HIRE CAR PARKING SPACE |
| CR | CENTRAL REFUSE |
| MR | MARINA REFUSE |
| M | MAINTENANCE SHED |
| BR | BICYCLE RACKS |
| POS | PRIVATE OPEN SPACE |
| ELEC | ELECTRICAL ROOM |
| MSB | MAIN SWITCH BOARD |
| REC | GOODS RECEIVING AREA |
| [Green Box] | LANDSCAPE |
| [Grey Box] | EXTERNAL PAVING |
| [Dashed Line] | EXISTING CONTOURS |
| [Number in Box] | PROPOSED LEVELS |



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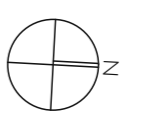
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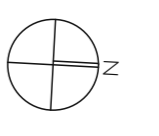
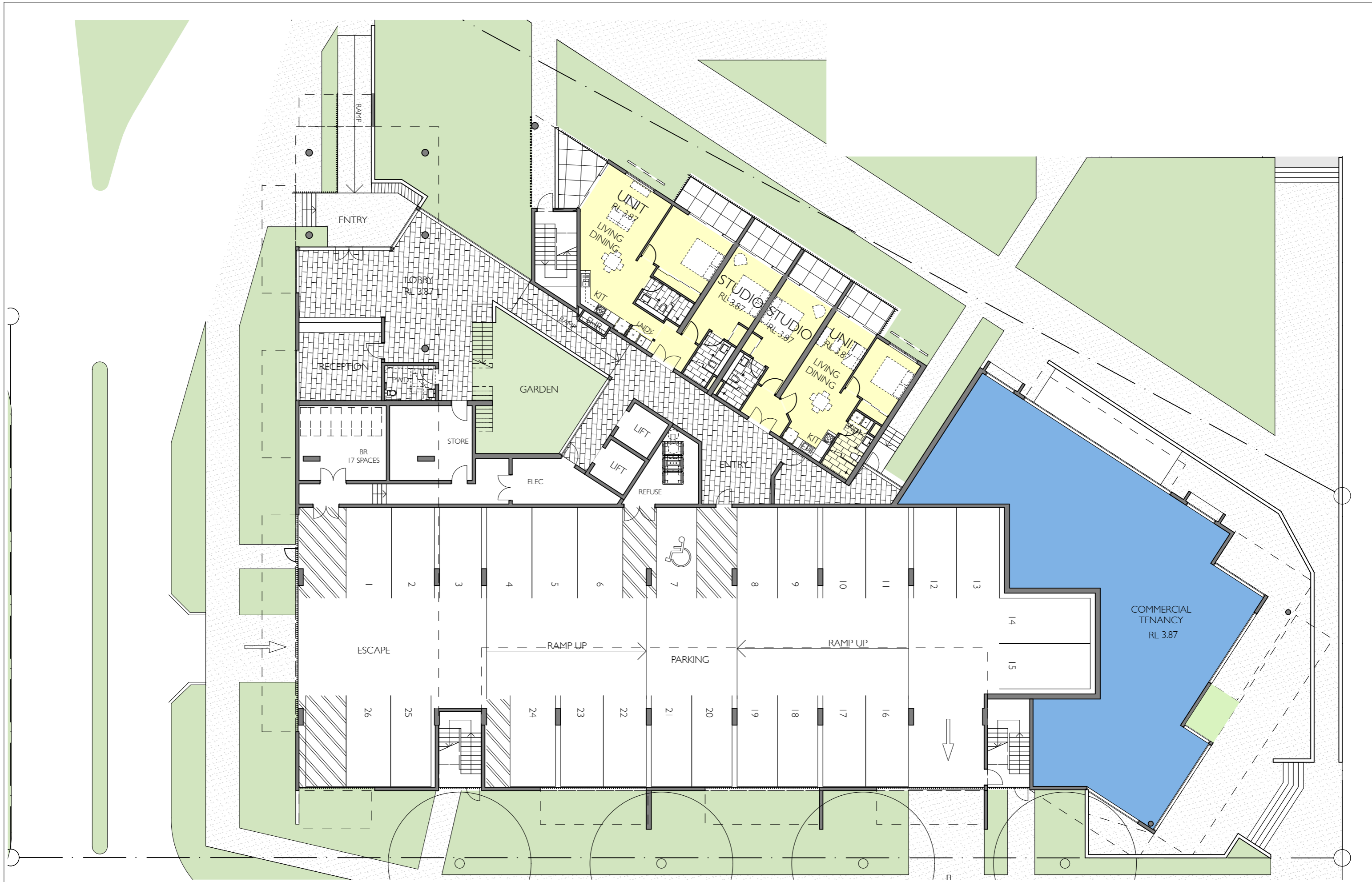
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STAGE 2C SITE PLAN
 1:500

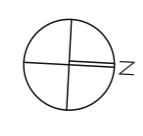


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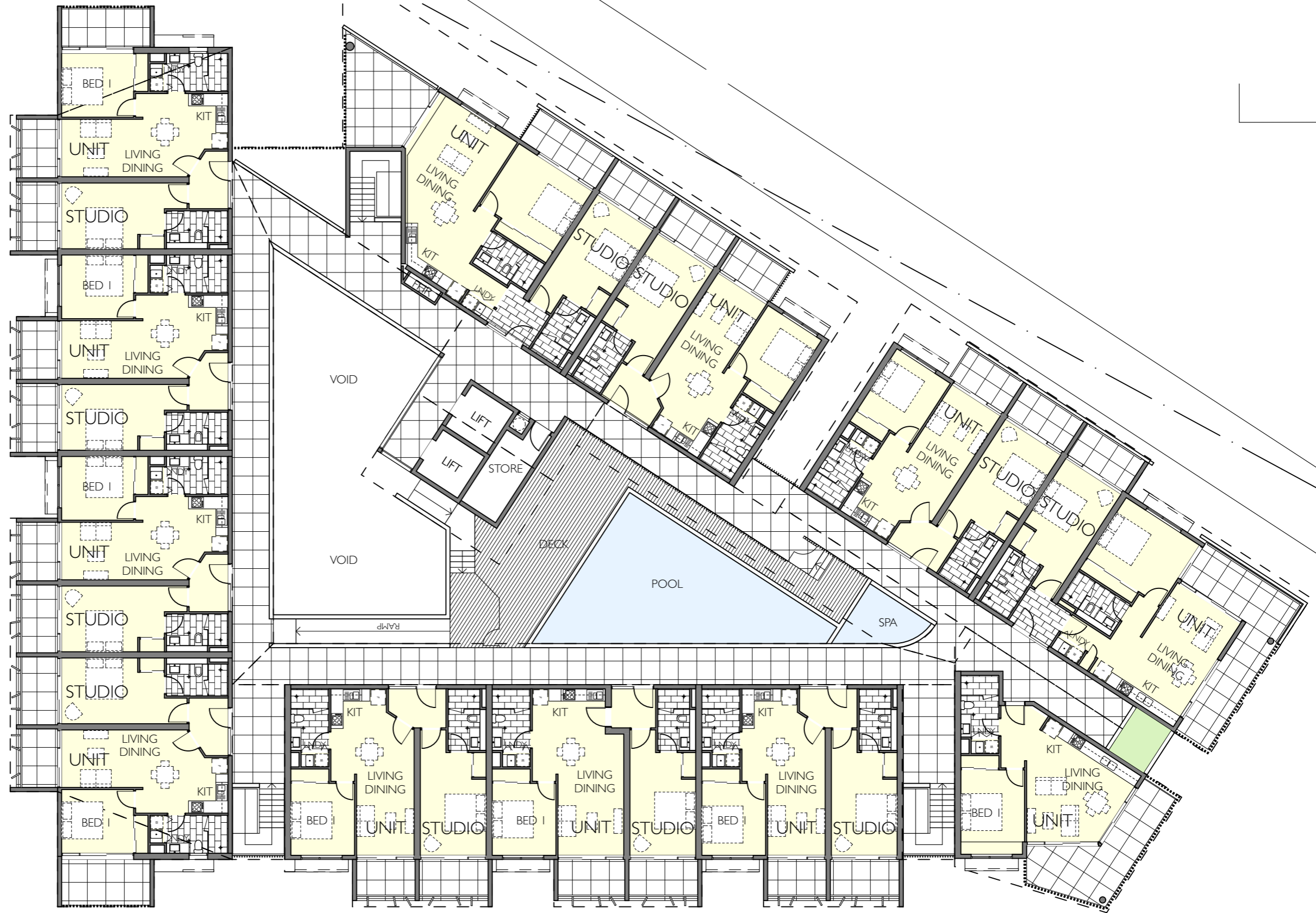


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THE REEF MARINA

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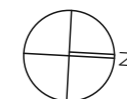


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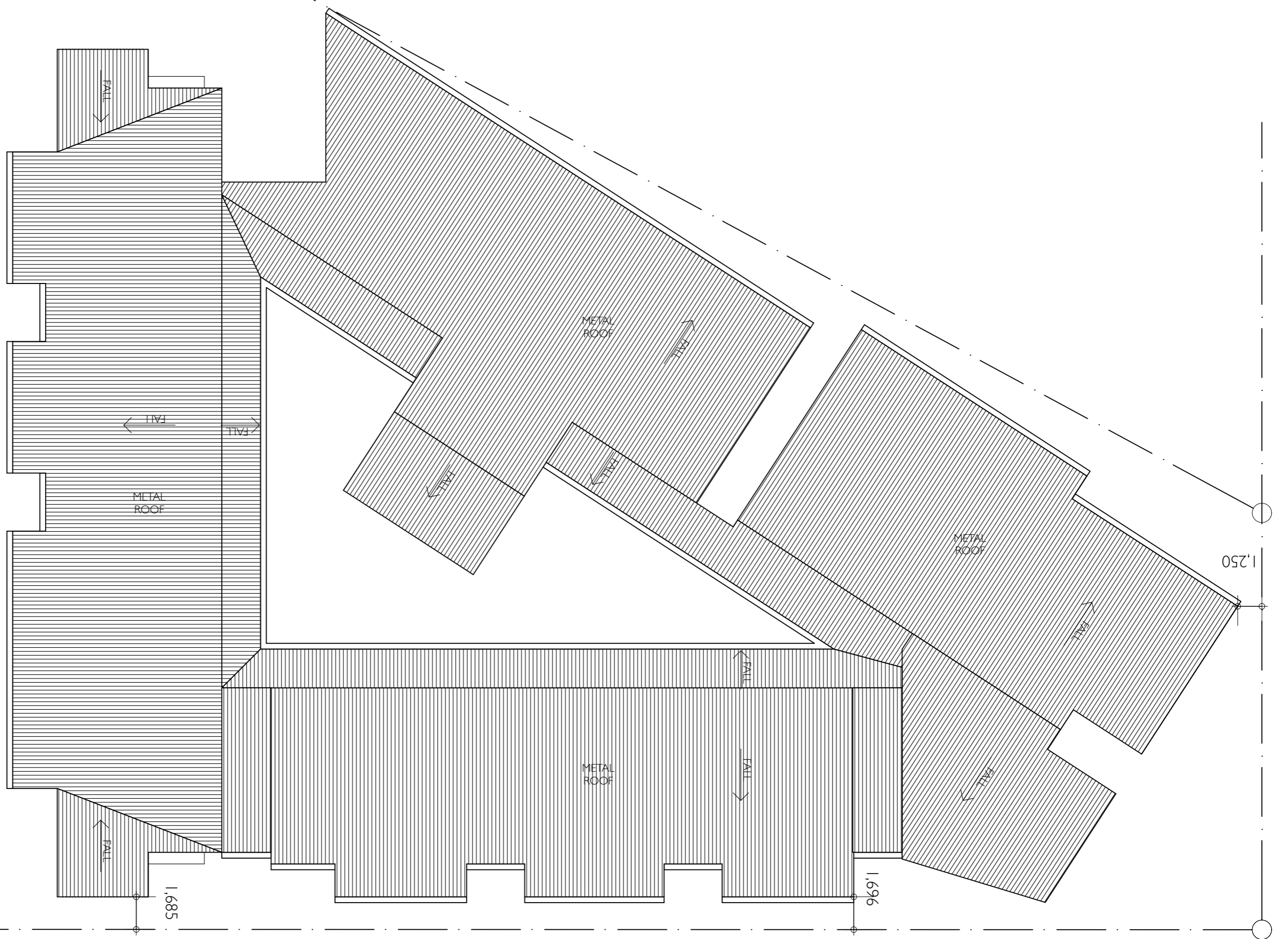
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STAGE 2C LEVEL 2 PLAN

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APPENDIX: 8

LEGEND

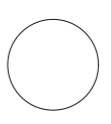
- B1** GLAZED BALUSTRADE IN STAINLESS STEEL FRAME
- B2** CFC WEATHERBOARD + GLAZED BALUSTRADE
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- S3** POWDER COATED SHADING DEVICE WITH METAL DECK ROOFING



SOUTH ELEVATION
1:200



WEST ELEVATION
1:200



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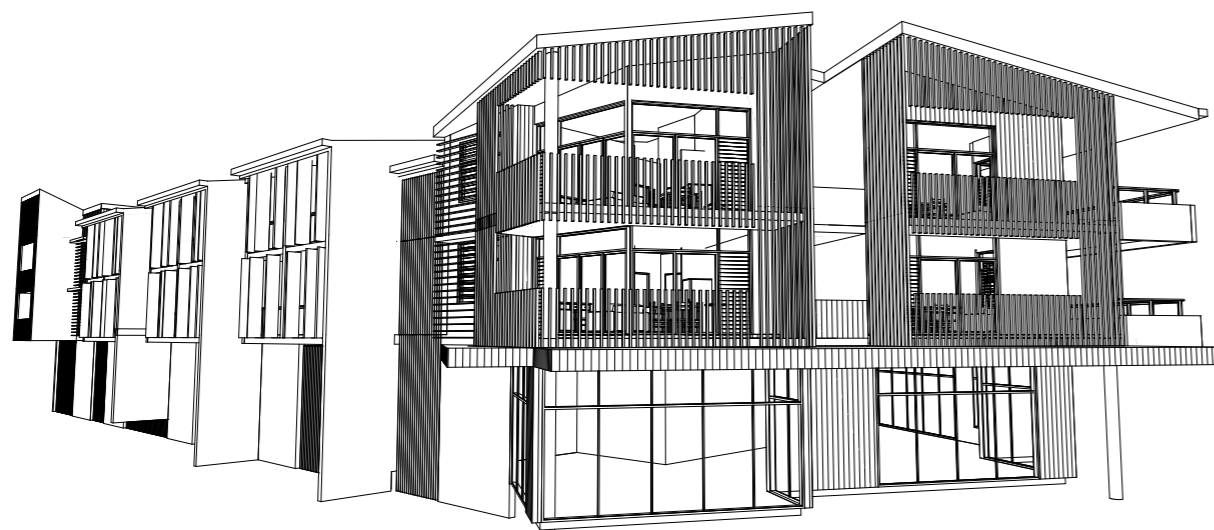
APPENDIX: 8



SOUTH WEST ELEVATION
1:200



SW STREET ELEVATION
1:250



NORTH PERSPECTIVE



SW PERSPECTIVE



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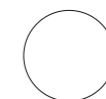
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STAGE 2C ELEVATION + PERSPECTIVES



| | | |
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NORTH ELEVATION
1:200

LEGEND

| | |
|----|--|
| B1 | GLAZED BALUSTRADE IN STAINLESS STEEL FRAME |
| B2 | CFC WEATHERBOARD + GLAZED BALUSTRADE |
| B3 | GLAZED BALUSTRADE IN STAINLESS STEEL FRAME |
| B4 | GLAZED BALUSTRADE IN STAINLESS STEEL FRAME |
| B5 | STAINLESS STEEL + WIRE BALUSTRADE |
| BA | BATTENED SCREEN |
| C1 | CFC WEATHERBOARD CLADDING |
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| F1 | IRREGULAR STONE FEATURE WALL |
| L1 | POWDERCOATED ALUMINIUM LOUVRES |
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| M2 | RENDERED MASONRY COLOUR 2 |
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| S2 | POWDER COATED SHADING DEVICE WITH METAL DECK ROOFING |
| S3 | POWDER COATED SHADING DEVICE WITH METAL DECK ROOFING |



EAST ELEVATION
1:200



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STAGE 2C ELEVATIONS



| | | |
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APPENDIX: 9

DEVELOPMENT SUMMARY

STAGE 3a

Multi-Residential

5 x 2 Bedroom

Site Area & Site Co Ground L1

| | | | |
|------------|-------|-----|--|
| Site Area | 1,000 | | |
| Site Cover | 305 | 307 | |
| | 31% | 31% | |

Gross Floor Area Ground L1 L2

| | | | |
|--------------|-------------|-----|--|
| GFA | 147 | 275 | |
| Total | 422 | | |
| | 0.42 | | |

Landscaped Rec Ar Land Rec Soft Lan Bal/Tce Req.

| | | | | |
|--------------|------------|------------|-----------|------------|
| Unit 1 | 59 | 48.6 | 14.7 | 45 |
| Unit 2 | 34 | 23.0 | 14.7 | 45 |
| Unit 3 | 37 | 24.8 | 14.7 | 45 |
| Unit 4 | 37 | 23.1 | 14.7 | 45 |
| Unit 5 | 41 | 22.9 | 14.7 | 45 |
| Communal | 192 | 85.5 | | |
| Total | 400 | 228 | 74 | 225 |
| | 40% | | | |

Parking

Cars

| | | | |
|--------------|-----------|-----|---|
| Res. | 1 Bedroom | 5 | 5 |
| | Studio | 1.7 | 2 |
| Total | | | 7 |

Bikes - Units 1.7 5

Bikes - Visitors 0.4 1

LEGEND

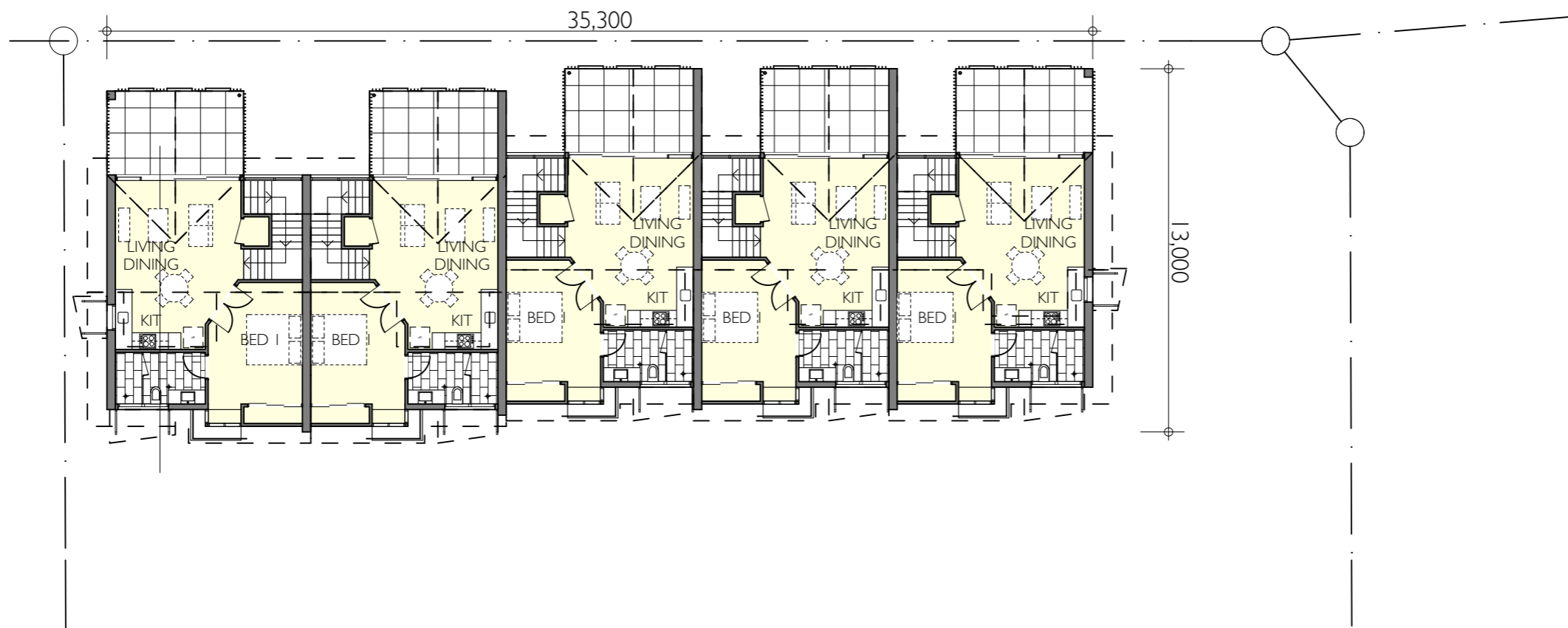
- ST STORE
- T TRANSFORMER
- HC HIRE CAR PARKING SPACE
- CR CENTRAL REFUSE
- MR MARINA REFUSE
- M MAINTENANCE SHED
- BR BICYCLE RACKS
- POS PRIVATE OPEN SPACE
- ELEC ELECTRICAL ROOM
- MSB MAIN SWITCH BOARD
- REC GOODS RECEIVING AREA
- LANDSCAPE
- EXTERNAL PAVING
- EXISTING CONTOURS
- PROPOSED LEVELS



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GROUND FLOOR
1:200



LEVEL 1
1:200



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STAGE 3A PLANS



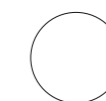
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ROOF PLAN
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NORTH WEST PERSPECTIVE



LEGEND

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- B2** CFC WEATHERBOARD + GLAZED BALUSTRADE
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WEST ELEVATION (RAINFOREST WALK)

1:200



EAST ELEVATION

1:200

LEGEND

| | |
|----|--|
| B1 | GLAZED BALUSTRADE IN STAINLESS STEEL FRAME |
| B2 | CFC WEATHERBOARD + GLAZED BALUSTRADE |
| B3 | GLAZED BALUSTRADE IN STAINLESS STEEL FRAME |
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| S3 | POWDER COATED SHADING DEVICE WITH METAL DECK ROOFING |



 NORTH ELEVATION
1:200



 SOUTH ELEVATION
1:200



APPENDIX: 10



THE REEF MARINA WATERFRONT DEVELOPMENT PROJECT PORT DOUGLAS



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Economic Impact

August 2016

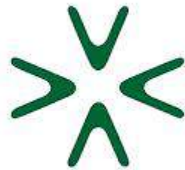
WATERFRONT DEVELOPMENT PROJECT PORT DOUGLAS



THE REEF MARINA

PORT DOUGLAS

Economic Impact



Ref: J2999
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Contents

| | |
|---|-----------|
| SUMMARY OF MAIN POINTS..... | 4 |
| 1. INTRODUCTION | 6 |
| 1.1 General..... | 6 |
| 1.2 Methodology..... | 6 |
| 1.3 Timing..... | 6 |
| 2. THE PROJECT..... | 7 |
| 2.1 Original Development..... | 7 |
| 2.2 Upgrades Already Undertaken..... | 7 |
| 2.3 The Proposed Project..... | 7 |
| 2.4 Accommodation Elements - Bedrooms..... | 8 |
| 2.5 New Commercial Area | 8 |
| 2.6 Timing..... | 9 |
| 2.7 Capital Cost..... | 9 |
| 3. ESTIMATED ECONOMIC IMPACTS OF REFURBISHMENT | 10 |
| 3.1 General..... | 10 |
| 3.2 Retail | 10 |
| 3.3 Marina | 11 |
| 3.4 Summary..... | 12 |
| 4. BACKGROUND – PORT DOUGLAS | 13 |
| 4.1 Historical Background | 13 |
| 4.2 The Current Situation | 14 |
| 4.3 The Reef Marina..... | 16 |
| 4.4 The Project in Context..... | 16 |
| 5. ECONOMIC IMPACT – PROJECT CONSTRUCTION PERIOD..... | 17 |
| 5.1 Direct Expenditure..... | 17 |
| 5.2 Total including ‘Flow-on’ Impacts..... | 17 |
| 6. ECONOMIC IMPACT – PROJECT OPERATING PHASE | 19 |
| 6.1 General..... | 19 |
| 6.2 Expenditure Generated – Marina Operations | 19 |
| 6.3 Expenditure Generated – Retail..... | 21 |
| 6.4 Expenditure Generated – Accommodation | 21 |
| 6.5 Summary of Expenditure Generated..... | 23 |
| 6.6 Estimated Total Expenditure & Economic Activity Generated | 23 |
| 6.7 Wider Economic Benefits | 23 |

Appendices

| | |
|---|----|
| 1 Residential and Commercial Development | 25 |
| 2 Marina Extension | 26 |
| 3 Summary of Bedroom Numbers and Commercial Space Gross Floor Area..... | 27 |
| 4 Estimated Fit Out/Furnishings Expenditure Generated, 2016-17 Prices | 30 |
| 5 Input/Output Multiplier Ratios – Douglas Shire | 31 |

SUMMARY OF MAIN POINTS

- The proposed project will:
 - Remove surplus retail space;
 - Add holiday and residential accommodation of 197 rooms to the stock available in Port Douglas;
 - Add 1447 sq meters of retail space in appropriate locations;
 - Add an additional 44 marina berths.
- The development comes on top of a recent \$4.2m refurbishment of retail space and additions to the marina that have already resulted in:
 - Investment in additional retail fit-out, etc. of an estimated \$11.5m;
 - Additional retail turnover of an estimated \$7.2m and additional 91 direct jobs;
 - Additional marina boat operational expenditure estimated at about \$5.6m.
- The extensions have helped the marina provide capacity to meet the current upsurge in visitor numbers to the reef.
- Port Douglas is a major centre for tourism development in the region. The Reef Marina is a key facility. The upsurge in tourism numbers taking place is now starting to exceed existing accommodation capacity. The project will add approximately 32% to marine capacity and 9% to stock of accommodation in Port Douglas.
- Construction activity over two years is estimated to involve a \$95m expenditure resulting in an addition to Gross Regional Product including 'flow-on' of about \$30m a year or 4.4% and employment including 'flow-on' of about 300 or 5.9%.
- Operational Phase impact is expected to result in increased marina activity involving the Reef Fleet, visiting superyachts, visits by cruise ships, tenders transferring passengers and other permanent and visiting vessels involving direct expenditure estimated at \$19m per annum.

- Commercial space additions are expected to generate an estimated \$8.4m in retail expenditure per annum.
- Accommodation development (63% for holiday and 37% for residential purposes), is expected to generate additional expenditure of the order of Holiday \$21m and Residential \$4m per annum.
- Allowing for some overlap between the above categories of expenditure, total expenditure generated is estimated at approximately \$48m per annum.
- With 'flow-on' effects, this could be expected to generate an addition to Douglas Shire's annual Gross Regional Product of the order of \$34m (or 5.1%) and to employment of about 320 (or about 6.2%).
- Net Present Value of addition to Gross Regional Product, over a project period of 30 years at a 4% real discount rate, is estimated at \$588m.
- The project has wider benefits through improved footpath routes, improving efficiency of pedestrian connectivity in the core Port Douglas tourism area.

1. INTRODUCTION

1.1 General

Cummings Economics was asked to review the proposed Reef Marina and Waterfront Development Project at Port Douglas and to provide an Economic Impact report, to accompany a Development Approval Application to the Douglas Shire Council.

1.2 Methodology

Economic Impact of a proposed development usually involves a construction phase and a following operational phase.

Impacts are usually defined first as 'direct', being the expenditure (output) relating to the project itself, employment and impact on Gross Regional Product.

This 'direct' expenditure will generate 'flow-on' (at times referred to as 'multiplier' or 'indirect') impacts in the economy in terms of expenditure (output), employment and addition to Gross Regional Product which when added to 'direct' impact, produce 'total' impacts.

It is usual that 'direct' impacts of expenditure will be available from the project proponent and at times, employment.

Models of the regional/local economy can be developed/accessed based on national coefficients adapted to regional/local economic structures to provide relationships between 'direct' expenditure, employment and impact on Gross Regional Product and 'flow-on' impacts.

In this case, 'direct' expenditure/output has been available for the construction phase and likely 'direct' expenditure/output for the operational phase.

Other 'direct' impacts and 'flow-on' impacts have been generated based on the North Australia Research Group; - Input Output Multiplier Tables for Douglas Shire (see Technical Note, [Appendix 1](#)).

In addition to the above impacts, projects will often have "wider economic benefits" and these are canvassed.

1.3 Timing

Research for the project has taken place in August 2016. Unless otherwise specified, values are in 2016-17 dollars.

2. THE PROJECT

2.1 Original Development

The Reef Marina, Port Douglas, was established in 1988 with following major elements:

- A 115 berth marina in Dickson Inlet;
- An 'L' shaped retail complex fronting the marina of approximately 6,700 sq metres;
- Parking area.

2.2 Upgrades Already Undertaken

The current owners took over The Reef Marina in late 2013.

They have already spent \$4.2m in upgrading the facility:

- \$0.4m in refurbishing the retail space;
- \$3.8m on extending the marina by a net additional 17 berths.

As part of the refurbishment of retail space, the bulk of the underutilised north wing was closed off to concentrate on the main retail area fronting the marina.

These upgrades have already had an economic impact that is identified in the following Section 3.

2.3 The Proposed Project

The project to be undertaken now and subject of this application involves as follows:

Accommodation and Commercial Elements

- * Demolition of the northern wing of the retail complex.
- * Stage 1a 5 x 3 levels town houses
- * Stage 1b 14 x residential apartments over 3 levels
- * Stage 2a 35 x residential apartments over 2 levels and 1 level of commercial (about 1200 sq m primarily focused on food and beverages)
- * Stage 2c..... 26 x residential apartments/boutique hotel over 2 levels plus 1 level of commercial about 390 sq m)
- * Stage 3a 5 x 3 levels town houses

Various public amenities including waterfront boardwalk and public access parkway linking the existing marina with Wharf Street.

(Note: A Stage 2b covering the existing slipway site is not part of this stage of redevelopment.)

Marina Elements

- * Cruise ship tender dock
- * 32 new marina berths
- * 12 berths for relocation of fishing vessels

2.4 Accommodation Elements - Bedrooms

The following **Table #1** derived from **Appendix 2**, summarises number of bedrooms.

Table #1: Number of Bedrooms

| <u>Estimated Timing</u> | <u>Accommodation</u> | <u>No.</u> |
|-------------------------|----------------------|------------|
| Year 1a – Stage 1a | Town houses | 20 |
| Year 2 – Stage 1b | Multi residential | 34 |
| Year – Stage 2a | Residential | 83 |
| Year – Stage 2c | Units/Boutique Hotel | 50 |
| Year – Stage 3a | Town houses | 10 |
| Total | | 197 |

It is estimated that the properties will be occupied as follows as between residents and holiday let:

| | |
|--|-----|
| Residents permanent | 25% |
| Half year resident/half-holiday let..... | 25% |
| Virtually year-round holiday let..... | 50% |

We thus have estimated occupancy in terms of room nights:

| | |
|-------------------|-------|
| Residential | 37.5% |
| Holiday let..... | 62.5% |

2.5 New Commercial Area

| | <u>Gross Floor Space (GFS)</u> |
|------------------------------------|--------------------------------|
| <u>Stage 2a</u> | <u>sq m</u> |
| Retail (west)..... | 489 |
| Retail (north)..... | 736 |
| Gym, Function, Mariners Club | 332 |
| Other..... | 110 |
| Total | 1667 |
| <u>Stage 2c</u> | |
| Retail..... | 323 |
| Other..... | 403 |
| Total | 726 |
| Overall Total..... | 2393 |

Actual operating retail space is estimated to be 1447 sq meters.

The retail space involved will be located on the northern side of the complex with an outlook over Dickson's Inlet, and mainly consist of restaurants/food outlets rather than general retail that will remain in the retail area fronting the marina.

2.6 Timing

Although the accommodation development is marked in stages, it is proposed that the whole project will be delivered over a 2-year construction phase currently modelled for the purpose of this report as being in 2017-18 and 2018-19.

2.7 Capital Cost

Estimated total expenditure on construction excluding land acquisition is estimated at \$81m in 2016-17 prices (see further details, Section 5.1).

3. ESTIMATED ECONOMIC IMPACTS OF REFURBISHMENT AND EXTENSIONS ALREADY UNDERTAKEN

3.1 General

It is estimated that the \$4.2m refurbishment and extensions already undertaken have resulted in the following direct impacts.

3.2 Retail

The refurbished space has enabled the Reef Marina to attract additional retail tenants including the Hemmingway's Micro Brewery with an employment of approximately 50 and an additional upmarket restaurant operation and beer garden. Current retail space is estimated as follows:

| | <u>Sq m</u> | <u>Est employment</u> |
|-----------------------------|--------------|-----------------------|
| Located in retail area..... | 3,786 | 199 |
| Slipway | 40 | 3 |
| Ramp | 40 | 1 |
| Total | 3,866 | 203 |

Of this, it is estimated that five of the leases would not have occurred without the refurbishment involving 1,960 sq metres and 91 employed with a retail turnover estimated at about \$10.0m (not including boat operation of those with boat operations).

It is estimated that in addition, capital expenditure stimulated was of the order of \$11.7m as follows.

| | |
|---|------------------|
| Bar, restaurant, brewery, fit-outs..... | \$5.35 m |
| Shop and office fit-outs..... | \$0.64 m |
| New coaches and vehicles..... | \$0.92 m |
| Other equipment..... | \$0.82 m |
| Special marketing | \$4.00 m |
| Total | \$11.73 m |

3.3 Marina

The marina, before the 2015 upgrade, generally had vessels occupying berths as follows.

| <u>Berth length</u> | <u>Number</u> |
|---------------------------------|---------------------|
| 12 metres..... | 28 |
| 15 metres..... | 30 |
| 17 metres..... | 21 |
| 30 metres..... | 6 |
| 35 metres..... | 4 |
| Total | 89 |
| Total berth metres | 1,463 metres |

Composition was:

| | <u>Number</u> | <u>Berth metres</u> |
|---------------------------|---------------|---------------------|
| Commercial permanent..... | 33 | 641 |
| Private permanent | 43 | 693 |
| Private casual | 10 | 129 |
| Total | 86 | 1,463 |

Additional after 2015 upgrading was as follows.

| <u>Berth length</u> | <u>Number</u> |
|--------------------------------------|-------------------|
| 22 metres..... | 14 |
| 30 metres..... | 7 |
| Total | 21 |
| Total berth metres | 518 metres |
| Increase in berth metres..... | 35% |

Composition was:

| | <u>Number</u> | <u>Berth metres</u> |
|---------------------------|---------------|---------------------|
| Commercial permanent..... | 12 | 288 |
| Private permanent | 4 | 104 |
| Private casual | 5 | 126 |
| Total | 21 | 518 |

Value of vessels is estimated:

| | |
|------------------------------|-------------|
| Before 2015 | \$63 m |
| Additional after 2015 | \$56 m |
| Total..... | \$119 m |
| Percent increase..... | +89% |

Expenditure generated on maintenance / operations is estimated at 10% of capital value:

| | |
|-----------------------------|--------------------|
| Before 2015 | \$6.3 m pa |
| Additional after 2015 | \$5.6 m pa |
| Total | \$11.9 m pa |

3.4 Summary

We thus have the refurbishment and expansion of the Reef Marina already contributing:

- Capital expenditure in fit-outs, extra equipment and marketing\$11.25 m
- Retail – 91 direct jobs and retail turnover approximately \$7.2 m pa
- Additional marina boat operation – expenditure estimated \$5.6 m pa
- In addition, extension of the marina helped provide capacity to deal with the rapid upswing in visitor numbers in 2015 and 2016.

4. BACKGROUND – PORT DOUGLAS

4.1 Historical Background

Port Douglas played a role in the early development of the region as a port for hinterland gold and base metal discoveries but languished for many years after it was decided to build the hinterland servicing railway from Trinity Inlet further south.

The port on Dickson Inlet played a role for many years as a loading port for bagged sugar from Mossman Sugar Mill taken by “highters” to Cairns for overseas shipment.

Development of bulk sugar terminals in Cairns in the 1960s saw this trade transferred to carriage by trucks in bulk via the Cook Highway.

The upsurge in tourism in the region that commenced in earnest during the 1960s and 1970s initially based on road-borne visitors but then increasingly on fly-in visitors, saw Port Douglas rise as a tourism destination in its own right.

This role was given a boost in 1978 with the commencement of direct reef operations to Low Isles followed by the development of Quicksilver fast catamaran services to the outer reef areas.

With the opening of Cairns airport to long distance wide-bodied jets from around Australia and overseas in 1984, and a major fall in the value of the Australian dollar in 1986, tourism in the region boomed including to Port Douglas.

The increasing tourism trade to the Cairns Northern Beaches and Port Douglas was also encouraged by the continuing growth of Cairns as an urban centre, leading to loss of amenities for some market segments seeking a more relaxed resort type of environment.

A further land mark event occurred in the late 1980s when following banking deregulation and competition by banks for market share, funds became readily available for expansion of tourism facilities and the Mirage Resort was developed along with the Reef Marina.

Visitor numbers to Port Douglas increased strongly during the 1990s (apart from a slow down immediately following the Asian Crisis) and early 2000s to reach a peak about 2006 when an increasingly high dollar and the Global Financial Crisis led to growth being curtailed (See **Table #2**).

The figures indicate that international numbers went down about 2006 and 2007 and by YE March 2016, had not recovered. Domestic figures generally showed no growth after 2008 until YE March 2016 when the retreat in the Australian dollar and overseas security threats saw a large rise. The Year 2016 is seeing accommodation shortages develop during peak periods.

Table #2: Visitor Numbers – Port Douglas

| <u>Year ending</u> <u>March</u> | <u>Domestic</u> <u>'000</u> | <u>International</u> <u>'000</u> | <u>Total</u> <u>'000</u> |
|------------------------------------|--------------------------------|-------------------------------------|-----------------------------|
| 2006 | 202 | 91 | 293 |
| 2007 | 185 | 84 | 269 |
| 2008 | 243 | 80 | 323 |
| 2009 | 178 | 77 | 253 |
| 2010 | 275 | 69 | 344 |
| 2011 | 188 | 75 | 263 |
| 2012 | 232 | 61 | 293 |
| 2013 | 227 | 67 | 294 |
| 2014 | 224 | 66 | 290 |
| 2015 | 237 | 74 | 311 |
| 2016 | 333 | 70 | 403 |

Note: Accuracy – The above figures are from a sample survey and at this level, short term smaller movements may not be significant.

Source: Tourism Research Australia.

4.2 The Current Situation

Today, Port Douglas has a mix of elements in its economy, but very heavily oriented to tourism.

Table #3 from the 2011 Census illustrates that the very large number of visitors in the ‘on-the-ground’ population exceeded the local residential population.

Table #3: Place of Enumeration, Port Douglas SA2 Area, 2011 Census

| | <u>No.</u> |
|---------------------------------|---------------|
| Counted at home in Port Douglas | 4,513 |
| Domestic visitors Queensland | 2,314 |
| Domestic visitors Interstate | 2,007 |
| International visitors | 2,206 |
| Total | 11,040 |

Source: Australian bureau of Statistics, 2011 Census.

Table #4 illustrates the importance of Port Douglas in the region’s tourism with almost a quarter of all hotel/motel rooms and serviced apartments located in the area.

Table #4: Room Numbers, Hotels/Motels & Serviced Apartments, Tropical North Queensland, June Qtr 2016

| | <u>No.</u> |
|---------------------------|---------------|
| Cairns CBD / Cairns North | 5,341 |
| Cairns northern beaches | 1,300 |
| Port Douglas | 2,535 |
| Remainder | 2,147 |
| Total | 11,323 |

Source: Tourism Research Australia.

Table #5 shows the composition of the residential population from the 2011 Census by age group illustrating that Port Douglas has a relatively low proportion of children and youths, but high in working age and up to 69, but lower 70 plus.

**Table #5: Age Composition, Residential Population, Port Douglas SA2,
(count by usual place of residence), 2011 Census**

| <u>Years</u> | <u>Port Douglas</u> | <u>Queensland</u> |
|--------------|---------------------|-------------------|
| 0 – 14 | 14.8% | 20.2% |
| 15 – 24 | 10.8% | 13.5% |
| 25 – 29 | 16.6% | 13.5% |
| 30 - 39 | 15.3% | 13.7% |
| 40 - 49 | 15.7% | 14.2% |
| 50 - 59 | 15.0% | 13.7% |
| 60 - 69 | 12.6% | 9.9% |
| 70 plus | 6.8% | 8.9% |

Source: Australian bureau of Statistics, 2011 Census.

Table #6 shows composition of the workforce by industry group and **Table #7** by occupation illustrating the strong influence of tourism employment on patterns.

**Table #6: Composition of Workforce by Industry, Residential Population, Port Douglas SA2,
(count by usual place of residence), 2011 Census**

| <u>Industry</u> | <u>Port Douglas</u> | <u>Queensland</u> |
|--|---------------------|-------------------|
| Accommodation | 18.9% | 1.6% |
| Cafes, restaurants, etc | 10.5% | 4.2% |
| Science and sightseeing | 5.6% | 0.1% |
| Building, cleaning, pest control, and gardening services | 3.5% | 1.5% |
| Clothing, footwear and personal accessory retailing | 3.3% | 1.2% |

Source: Australian bureau of Statistics, 2011 Census.

**Table #7: Composition of Workforce by Occupation, Residential Population, Port Douglas SA2,
(count by usual place of residence), 2011 Census**

| <u>Occupation</u> | <u>Port Douglas</u> | <u>Queensland</u> |
|--|---------------------|-------------------|
| Managers (including business owners) | 16.6% | 12.0% |
| Technical and trade workers | 16.2% | 14.9% |
| Community and personal service workers | 16.0% | 10.0% |
| Labourers | 12.6% | 10.6% |
| Sales workers | 12.5% | 9.8% |
| Professionals | 10.4% | 14.7% |
| Machinery operators and drivers | 3.7% | 7.3% |

Source: Australian bureau of Statistics, 2011 Census.

4.3 The Reef Marina

Tourism in the region is heavily oriented to experiencing the pleasant environment, especially in the winter months, and exploring the region's natural attractions.

There are two key elements that underpin a tourism location along the tropical coast – access to the World Heritage Great Barrier Reef and access to land based attractions, especially the World Heritage rainforest.

Port Douglas' growth as a tourism centre has been linked especially with the development of reef access and with the rise of the Daintree/Cape Tribulation Rainforests as a day trip destination.

In this, The Reef Marina is a pivotal piece of infrastructure through which almost all first time visitors, and many repeat visitors will pass.

4.4 The Project in Context

A **Table #2** illustrates, after a period when visitor numbers showed no growth, the upsurge of tourism is such that an increase in capacity will be needed and justified.

- 1) The recent and proposed expansion of The Reef Marina will provide capacity for the range of marina activities serviced to grow by a substantial margin.

This will include:

- Reef visitation;
- Visiting super yachts;
- Cruising yachts and other private users.

Importantly, it will also include a special area for use by cruise ships sitting off the coast and using their own boats (tenders) to bring passengers ashore.

- 2) The additional accommodation (197 rooms), will expand capacity in Port Douglas. The location of much of the space overlooking Dickson Inlet with mountain views in the distance can be expected to be commercially viable.
- 3) The commercial space involved will reconfigure the retail space in the complex more in line with market realities.
- 4) Importantly, the reconfiguration of foot traffic access linking the complex more efficiently with the main Port Douglas retail area will improve efficiency of Port Douglas for the large amount of foot traffic generated, especially by the high proportion of fly-in visitors.

5. ECONOMIC IMPACT – PROJECT CONSTRUCTION PERIOD

5.1 Direct Expenditure

The total project cost is estimated at \$87m plus fit out of retail and furnishing of units as follows.

| | |
|--|-----------------|
| Marina Stage 2 expansion..... | \$2.5 m |
| Marine structures Dickson Inlet..... | \$5.0 m |
| Accommodation & Commercial ⁽¹⁾ | \$76.0 m |
| Unit Furnishings (see Appendix 4)..... | \$5.1 m |
| Retail fit-out (est 1447 sq m @ \$3500/sq m) | \$5.0 m |
| Total | \$93.6 m |

⁽¹⁾Note: Excluding land acquisition costs.

For this project, Year 2018-19 is taken as Year Zero and 2019-20 is taken as Year 1.

Net Present Value (2016-17 prices) at 4% real discount/interest rate assuming equal capital expenditure over the two years:

| | |
|---|-----------------|
| Marina Stage 2 expansion..... | \$2.5 m |
| Marina construction | \$5.1 m |
| Accommodation & Commercial construction | \$77.5 m |
| Furnishings | \$4.4 m |
| Fit-out..... | \$5.1 m |
| Total | \$95.4 m |

5.2 Total including 'Flow-on' Impacts

Based on North Australia Research Group Input Output Multiplier ratios for Douglas Shire (see Appendix 5) total impacts including 'flow-on' are estimated as follows.

Table #8: Total including 'Flow-on' Impacts

| | <u>Initial expenditure</u> | <u>Total expenditure incl flow-on</u> | <u>Total addition to GRP incl flow on</u> | <u>Initial employment</u> | <u>Total employment incl flow-on</u> |
|--|--------------------------------|---|---|-------------------------------|--|
| Marina construction (heavy & civil engineering construction) | \$7.6 m | \$12.2 m | \$4.9 m | 8.6 | 27.4 |
| Accommodation & commercial construction (residential building construction) | \$77.5 m | \$144.1 m | \$46.5 m | 251.8 | 490.6 |
| Furnishing (retail) | \$4.4 m | \$6.3 m | \$3.5 m | 39.0 | 47.3 |
| Fit-out (construction services) | \$5.1 m | \$9.2 m | \$3.4 m | 13.4 | 27.6 |
| Total | \$94.6 m | \$171.8 m | \$58.3 m | 312.8 | 592.9 |

We thus have over a 2-Year period Total Expenditure including 'flow-on' generated of about \$170m, addition to Gross Regional Product including 'flow-on' of about \$59m, and, estimated direct employment of about 320 job years and with 'flow-on', total of about 600.

This compares with estimated Gross Regional Product for Douglas Shire 2013-14 of \$680m and employment of 5200. In each year during the construction period of 2 years, total activity generated is estimated to increase Gross Regional Product by of the order of 4.4% and employment by of the order of 5.8%. Thus, during the construction period, the project is estimated to have a substantial impact on growth.

6. ECONOMIC IMPACT – PROJECT OPERATING PHASE

6.1 General

Generation of income from the operating phase will have a number of elements:

- 1) The additional accommodation will increase capacity to accommodate additional permanent residents and visitors to Port Douglas who will generate expenditure in the region.
- 2) The marina will accommodate additional permanently located and visiting vessels that will generate additional expenditure.
- 3) The new retail space will add to expenditure.

Direct expenditure generated will be at the project itself and some in Port Douglas beyond the project.

6.2 Expenditure Generated – Marina Operations

The following table gives vessels located at the marina pre 2015 and post 2015 along with likely usage of proposed development.

| | <u>Number of berths</u> | <u>Occupied %</u> | <u>Berth metres</u> |
|---------------------------|-------------------------|-------------------|---------------------|
| Pre 2015 | 115 | 92% | 1907 |
| Post 2015 | net 17 | 70% | net 515 |
| Proposed Development..... | 44 ⁽¹⁾ | 90% | 772 |
| Total | 176 | | 3194 |

⁽¹⁾ Includes a number of berths for relocation of fishing vessels.

It is estimated that the extra 32 berths (excluding fishing vessels) will achieve maximum occupancy of 90% over a two-year period, ie. 29 berths, a 22% increase in capacity excluding fishing vessels.

Reef Fleet

Expenditure by passenger operations for reef visitation is estimated 250,000 pax at average of \$200 per passenger, ie. \$50m per annum.

Visiting Super Yachts

Research carried out by Cummings Economics in 2008 in relation to super yacht visits to Cairns estimated that expenditure averaged \$6,000 per day for visiting super yachts excluding refits and \$8,000 - \$10,000 per day for permanently based.

Allowing for inflation, this would work out at visiting about \$7,000 a day and permanent \$9,600 - \$12,000 in 2016 prices.

Permanent and Visiting Cruising Yachts and Other Private Vessels

As indicated in earlier section, the value of existing vessels located in the marina is estimated at \$119m and operating cost at 10%, ie \$11.9m. Over the 107 vessels involved, this represents an operating cost of approximately \$108,000 per annum per vessel. Because the Reef Fleet and superyachts include a number of very large vessels, it is estimated that, for the cruising yachts and other types of vessels, operating costs are lower and a figure of \$40,000 per annum is used.

Current vessel numbers and expenditure generated is estimated as follows.

| | <u>Vessels</u> | <u>Direct expenditure</u> |
|-----------------------------------|----------------------|---------------------------|
| <u>Reef Fleet</u> | | |
| Commercial permanent | 45 | \$50.0 m |
| <u>Private permanent</u> | | |
| Superyachts | 5 | \$16.43 m |
| Other | 42 | \$1.68 m |
| Total | 47 | \$18.11 m |
| <u>Private casual</u> | | |
| Superyachts | 2 | \$4.38 m |
| Other | 13 | \$0.52 m |
| Total | 15 | \$4.90 m |
| <u>Cruise Ships</u> | | \$7.00 m |
| Overall Total | | \$80.01 m |

A 22% increase delivered by the additional berths gives an annual value of \$17.60m.

Visiting Cruise Ships

The marina is used to transfer passengers from cruise ships sitting off the coast.

Passenger and crew capacity on ship sending passengers ashore at Port Douglas is given in the following Table #9.

Table #9: Cruise Ship Visits, Port Douglas

| <u>Year</u> | <u>Number</u> | <u>Pax capacity</u> | <u>Crew</u> |
|----------------|---------------|---------------------|-------------|
| 2013 | 19 | 40,356 | 16,246 |
| 2014 | 22 | 40,285 | 17,888 |
| 2105 | 27 | 55,300 | 22,538 |
| Scheduled 2016 | 23 | 43,144 | 13,666 |
| Scheduled 2017 | 21 | 42,590 | 17,506 |

Source: Cummings Economics from Ports North data.

Total passengers is about 42,000 per annum. Only a few crew would come ashore when a ship is standing offshore.

Ships are not always at full capacity and not all passengers come ashore. It is estimated that about 35,000 are coming ashore with an expenditure of about \$200 per head, ie. about \$7m per annum. The new development will allow this to expand in the future by an amount estimated to be equivalent to the general expansion of the marina of 22%, ie. an estimated amount of about \$1.5m.

6.3 Expenditure Generated – Retail

Retail

The existing operating retail space in the centre of 3866 sq m is estimated to employ 203.

The additional commercial space involved of 1447 sq m is estimated to employ about 76 and have a turnover of the order of \$110,000 per employee (see Multipliers, [Appendix 5](#)) and total about \$8.4m.

6.4 Expenditure Generated – Accommodation

Holiday Let

Australian Bureau of Statistics data for accommodation in Port Douglas in hotels/motels and serviced apartments for 2014-15 provides the following profile.

| | |
|---|-----------|
| Establishments | 49 |
| Rooms (average)..... | 2,520 |
| Room nights available | 919,668 |
| Room nights occupied | 502,540 |
| Visitor nights occupied | 1,125,727 |
| Average room occupancy rate | 54.6% |
| Average visitors per room | 2.24 |
| Takings from accommodation | \$89.46 m |
| Average takings per room night occupied..... | \$178.0 |
| Average takings per room night available..... | \$97.2 |
| Average takings per room available..... | \$35,500 |

In 2014-15, peak occupancy was 75% in the September Qtr. In 2016, it can be expected to be much higher. Long term average is assumed to be 60% (cf 2014-15 54.6%).

With inflation, takings per room available could be expected to be about \$40,000 in 2016-17 prices. Given the standard of rooms and location, takings per room are estimated at a 75% premium, ie. \$70,000 per room. This would indicate the additional 197 rooms of which 62.5% in holiday let (123) and occupancy 60%, would result in a turnover of the order of \$8.6m per annum.

However, this figure is internal to the project. Total expenditure generated will be higher.

Port Douglas has now reached a point where accommodation is at capacity and needs to be expanded to accommodate growth, especially in the peak period.

The accommodation will enable an expansion of visitor numbers to Port Douglas estimated to account for 714,400 visitor days at a bed occupancy per room night of 2.24 (average Port Douglas 2014-15).

Tourism Research Australia data indicates that average spend per visitor night in Port Douglas was \$199 in 2014 and staying in commercial accommodation \$222.

This would include backpackers and persons staying in caravan parks and camping grounds. Allowing for inflation since 2014 and for the type of visitor staying in the subject property to have a higher than average spending by a third, estimated total spending in 2016 dollars generated by the expanded availability of accommodation is estimated at \$300 per night and total \$21.4m per annum.

Residents

It is estimated that 37 of the dwellings will be residential. Average bedrooms per dwelling in the complex is 2.33.

Data from Queensland Rental Tenancy Authority indicates that for June Qtr 2016, median weekly rentals in Douglas Shire Post Code 4877, was as follows for 2 and 3 bedroom establishments.

| | <u>2 br</u> | <u>3 br</u> | <u>Est 2-3 br av</u> |
|------------------|-------------|-------------|----------------------|
| Flats/Units..... | \$300 | \$350..... | \$330 |
| Town Houses..... | \$330 | \$395..... | \$365 |

The quality and location of the units and town houses involved could be expected to have an average rental well above median. At \$550 per week per dwelling, total annual imputed rental would be \$1.06m.

Estimate of expenditure generated by residential units is based on Australian Bureau of Statistics Household Expenditure data.

It is believed that the quality and location of the units will result in occupancy by household in the top quartile of incomes.

Latest available data from Australian Bureau of Statistics indicates an expenditure on goods and services including mortgages and insurance in 2009-10 for the highest quartile of an average of \$1,630 per week.

Allowing for inflation, annual expenditure per household is estimated at \$98,000 and over the residential households, \$3.7m per annum.

6.5 Summary of Expenditure Generated

The following summarises estimated total expenditure impacts per annum:

| | |
|--------------------------------|-----------------|
| Marina operations..... | \$17.6 m |
| Visiting cruise ships..... | \$1.5 m |
| Retail..... | \$8.4 m |
| Accommodation Visitor..... | \$21.4 m |
| Accommodation Residential..... | \$3.7 m |
| Total | \$52.6 m |

There is a small amount of overlap in this in that part of the expenditure generated through the accommodation will be on retail in the development and in reef trips and marina boat operations.

Allowing for an estimated 10% overlap would give the following estimated expenditure.

| | |
|--------------------------------|-----------------|
| Marina operations..... | \$15.8 m |
| Visiting cruise ships..... | \$1.4 m |
| Retail..... | \$7.6 m |
| Accommodation Visitor..... | \$19.5 m |
| Accommodation Residential..... | \$3.4 m |
| Total | \$47.7 m |

6.6 Est Total Expenditure & Economic Activity Generated including 'Flow-on' Effects

Based on the multipliers in Appendix 5, the foregoing summary of expenditure totalling \$47.0m translates into the following economic impacts per annum.

| | |
|--|----------|
| Direct expenditure..... | \$47.7 m |
| Total expenditure including 'flow-on' | \$74.5 m |
| Total impact on Gross Regional Product including 'flow-on' | \$34.4 m |
| Direct employment..... | 241 |
| Total employment including 'flow-on' | 320 |

Gross Regional Product of Douglas Shire in 2013-14 was estimated at \$680m and employment at 5,200.

The above represents an increase of 5.1% in Gross Regional Product and 6.2% in employment.

6.7 Wider Economic Benefits

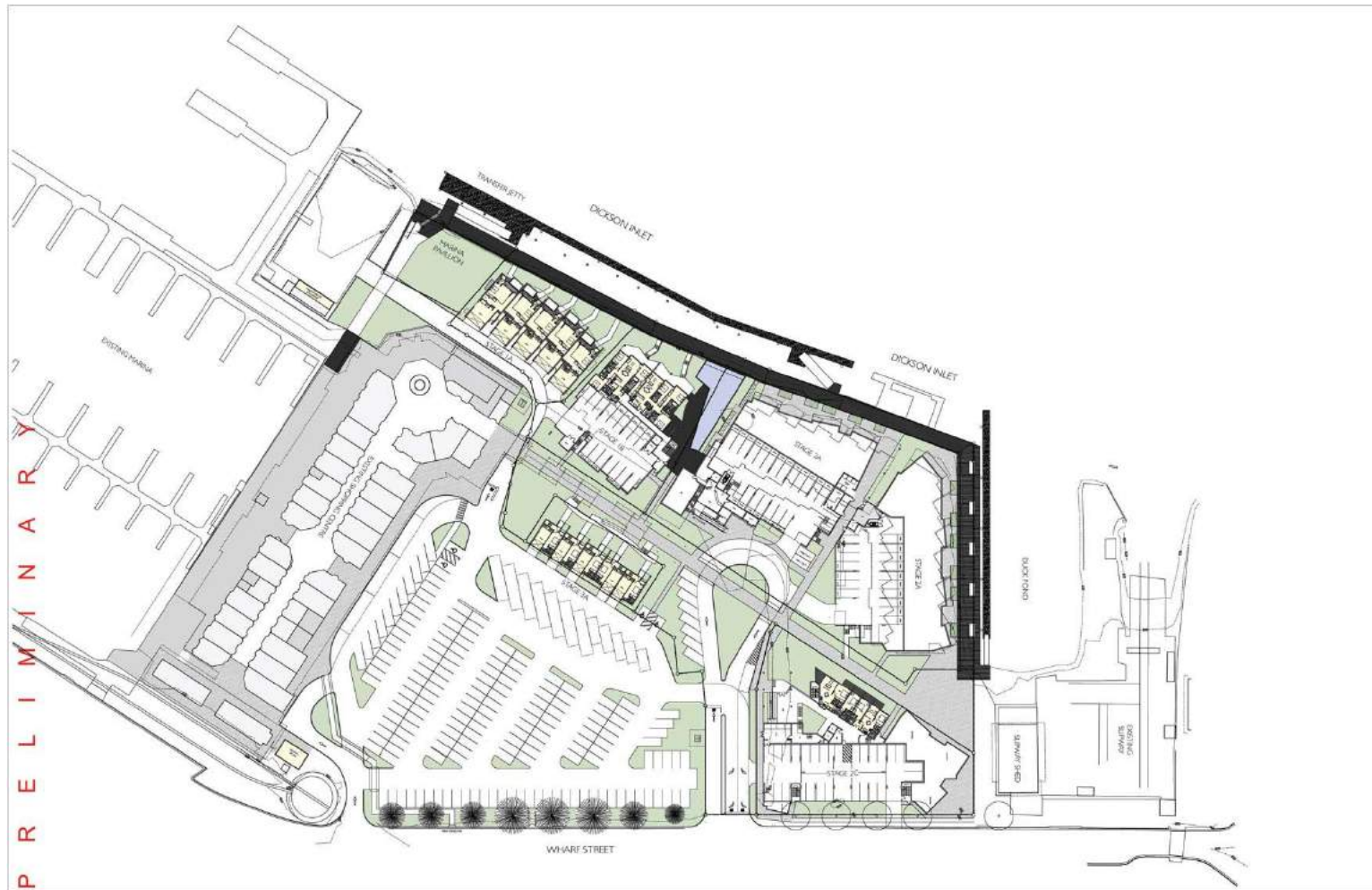
A significant wider benefit will be the contribution to efficiency of the core Port Douglas tourism and shopping precinct, the reconfiguration of walking paths and resulting pedestrian connectivity will bring.

**THE REEF MARINA WATERFRONT
DEVELOPMENT PROJECT
PORT DOUGLAS**

APPENDICES



Residential and Commercial Development



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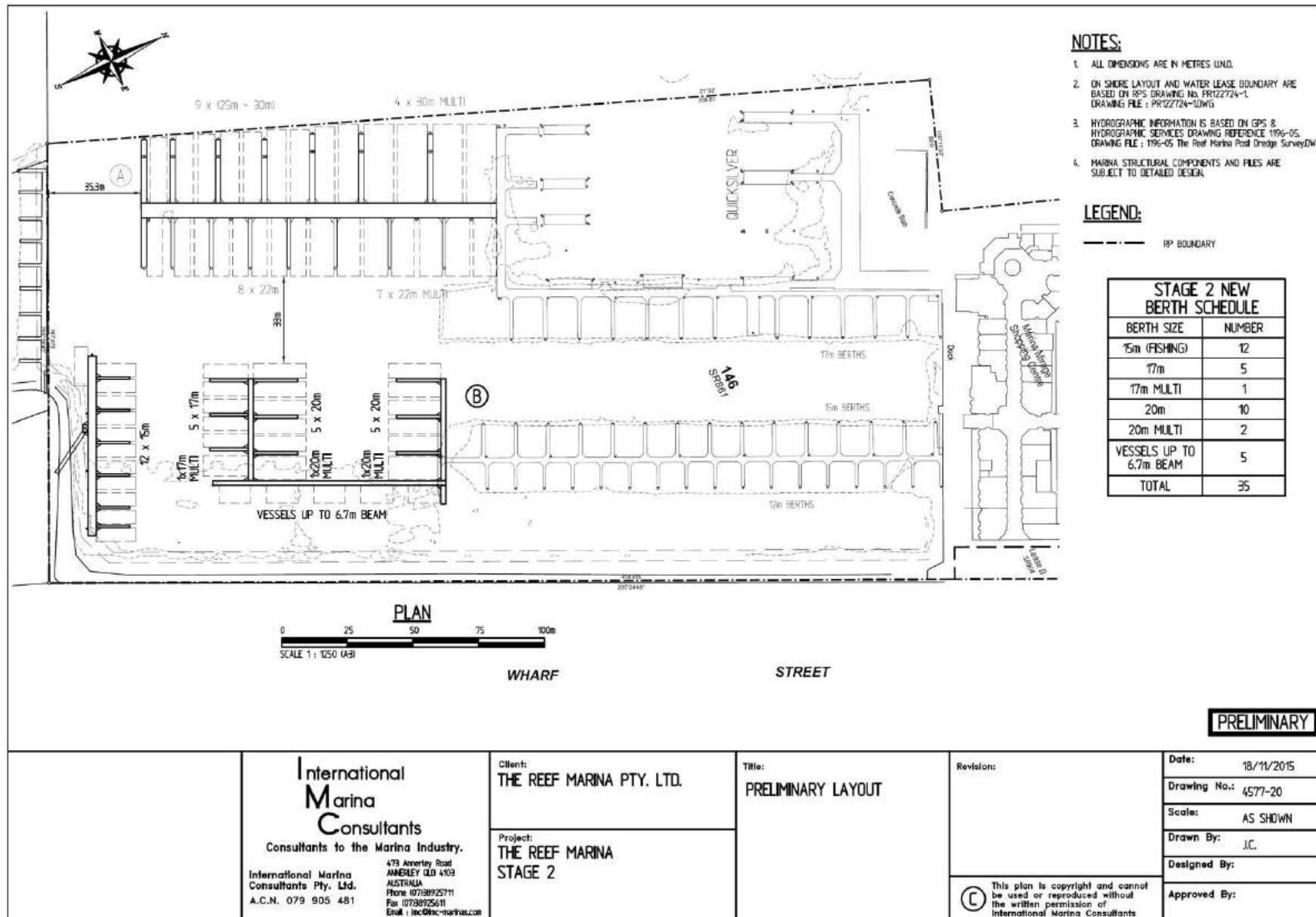
MASTER GROUND PLAN
SCALE 1:500 @ A1



| | | | |
|--------------------|--------------------|-------------------|------------|
| DATE: 2/07/2018 | PROJ NO: 160303 | DWG NO: DA-003 | REV: P3 |
|--------------------|--------------------|-------------------|------------|



Marina Extension



Summary of Bedroom Numbers and Commercial Space Gross Floor Area

Ref:1401reef/Development Summary 06 27 2016/Beds & Commercial

The Reef Marina Waterfront

DATE: 29 July 2016

| BED & COMMERCIAL SUMMARY | | |
|-------------------------------------|--|-----------|
| Stage 1a - Townhouses | | |
| Unit 1 | | 4 |
| Unit 2 | | 4 |
| Unit 3 | | 4 |
| Unit 4 | | 4 |
| Unit 5 | | 4 |
| Total Bedrooms | | 20 |

| | Description | Bedrms |
|-------------------------------------|----------------|-----------|
| Stage 1b - Multi Residential | | |
| Unit 1 | Ground | 3 |
| Unit 2 | | 3 |
| Unit 3 | Level 1 | 3 |
| Unit 4 | | 3 |
| Unit 5 | | 4 |
| Unit 6 | | 2 |
| Unit 7 | | 1 |
| Unit 8 | | 1 |
| Unit 9 | Level 2 | 3 |
| Unit 10 | | 3 |
| Unit 11 | | 4 |
| Unit 12 | | 2 |
| Unit 13 | | 1 |
| Unit 14 | | 1 |
| Totals | | 34 |

| | | Area | |
|----------------------------------|-------|------|------------|
| Stage 2a - Mixed Use | | | |
| Reception/Common | | 92 | |
| Commercial (west) | | 489 | See Note 1 |
| Commercial (north) | | 736 | See Note 1 |
| Plaza Toilets (M & F accessible) | | 18 | |
| Gym | +1xWC | 89 | |
| Function (Level 1) | +2xWC | 143 | |
| Mariners Club (Level 2) | +2xWC | 100 | |

Notes:

- 1) Commercial gfa will include individual toilets per tenancy.

| | Description | Bedrms |
|--------------------|----------------------|----------|
| Residential | | |
| Level 1 | | |
| Unit 1 | | 3 |
| Unit 2 | | 3 |
| Unit 3 | 2 storey unit | 3 |
| Unit 4 | | 3 |
| Unit 5 | | 3 |
| Unit 6 | | 3 |
| Unit 7 | | 4 |
| Unit 8 | | 3 |



| | | |
|----------------|----------------------|-----------|
| Unit 9 | 2 storey unit | 3 |
| Unit 10 | | 3 |
| Unit 11 | 2 storey unit | 3 |
| Unit 12 | | 3 |
| Unit 13 | | 1 |
| Unit 14 | | 1 |
| Unit 15 | | 2 |
| Unit 16 | | 1 |
| Unit 17 | | 1 |
| Unit 18 | | 1 |
| Unit 19 | | 2 |
| Level 2 | | |
| Unit 20 | | 3 |
| Unit 21 | | 3 |
| Unit 22 | | 3 |
| Unit 23 | | 3 |
| Unit 24 | | 3 |
| Unit 25 | | 4 |
| Unit 26 | | 3 |
| Unit 27 | | 3 |
| Unit 28 | | 3 |
| Unit 29 | | 1 |
| Unit 30 | | 1 |
| Unit 31 | | 2 |
| Unit 32 | | 1 |
| Unit 33 | | 1 |
| Unit 34 | | 1 |
| Unit 35 | | 2 |
| Totals | | 83 |

| Stage 2c- Mixed Use /Short Term Accommodation | | | |
|--|------------------|---------------|----------------|
| Ground Floor | | | |
| Reception/Common/Court | | | 370 |
| Commercial | | | 323 See Note 1 |
| Commercial (Inlet Lane) | | | 34 See Note 1 |
| Units | | | |
| Ground Floor | | Bedrms | |
| Unit 1 | All dual key uon | 2 | |
| Unit 2 | | 2 | |
| Level 1 | | | |
| Unit 3 | All dual key uon | 2 | |
| Unit 4 | | 2 | |
| Unit 5 | | 2 | |
| Unit 6 | 1 Bedroom Only | 1 | |
| Unit 7 | | 2 | |
| Unit 8 | | 2 | |
| Unit 9 | | 2 | |
| Unit 10 | | 2 | |
| Unit 11 | | 2 | |
| Unit 12 | | 2 | |
| Unit 13 | | 2 | |
| Unit 14 | | 2 | |
| Level 2 | | | |
| Unit 15 | All dual key uon | 2 | |
| Unit 16 | | 2 | |
| Unit 17 | | 2 | |
| Unit 18 | 1 Bedroom Only | 1 | |

| | | | |
|---------------|--|-----------|--|
| Unit 19 | | 2 | |
| Unit 20 | | 2 | |
| Unit 21 | | 2 | |
| Unit 22 | | 2 | |
| Unit 23 | | 2 | |
| Unit 24 | | 2 | |
| Unit 25 | | 2 | |
| Unit 26 | | 2 | |
| Totals | | 50 | |

Dual Key - 1 bedroom with kitchenette + laundry & 1 studio no kitch
 Unit 6 & 18 1 bedroom with kitchentte + laundry only

| Description Bedrms | Description | Bedrms |
|------------------------------|--------------------|---------------|
| Stage 3a - Townhouses | | |
| Unit 1 | | 2 |
| Unit 2 | | 2 |
| Unit 3 | | 2 |
| Unit 4 | | 2 |
| Unit 5 | | 2 |
| Total Bedrooms | | 10 |

Estimated Fit out/Furnishings Expenditure Generated,
2016-17 Prices

| | <u>2014 Prices</u> | |
|----------------|--------------------|------------------|
| Single Bedroom | 14,700 x 16 | 235,200 |
| 2 Bedroom | 20,200 x 70 | 1,414,000 |
| 3 Bedroom | 23,300 x 75 | 1,747,500 |
| 4 Bedroom | 26,700 x 36 | 961,200 |
| Total | | 4,357,900 |

Input/Output Multiplier Ratios – Douglas Shire

The following gives estimated input/output 'flow-on' multipliers for relevant industry classifications North Australia Research Group Input/Output Multiplier Tables – Modified National Coefficients Model 2013-14.

| | <u>Direct expenditure</u> | <u>Total expenditure incl flow-on</u> | <u>Total addition to GRP incl flow-on</u> | <u>Direct employment</u> | <u>Total employment incl flow-on</u> |
|--|---------------------------|---------------------------------------|---|--------------------------|--------------------------------------|
| Residential building construction | \$1.0 m | \$1.86 m | \$0.60 m | 3.25 | 6.33 |
| Heavy & civil engineering construction | \$1.0 m | \$1.72 m | \$0.68 m | 1.21 | 3.86 |
| Construction services | \$1.0 m | \$1.79 m | \$0.70 m | 2.62 | 5.41 |
| Retail trade | \$1.0 m | \$1.43 m | \$0.79 m | 8.87 | 10.75 |
| Water transport | \$1.0 m | \$1.55 m | \$0.67 m | 2.70 | 4.10 |
| Tourism | \$1.0 m | \$1.59 m | \$0.73 m | 6.38 | 8.63 |
| Residential consumption expenditure | \$1.0 m | \$1.69 m | \$0.76 m | 3.50 | 4.80 |

Note: These coefficients are for broad industry categories and should be taken as giving order of magnitude estimates only.

APPENDIX: 11



15 September 2016

PDR 16470

Studio Tekton Pty Ltd

PO Box 199
Spring Hill QLD 4004
www.studiotekton.com

Attention: John Loneragan

Dear John

RE: Proposed Planning Application for the Redevelopment of the Reef Marina at Wharf Street, Port Douglas – Civil Engineering Infrastructure and Traffic

Further to your request, following is a report based on our investigations into the civil engineering infrastructure and traffic related issues associated with the proposed redevelopment of the existing Reef Marina. This report is to accompany proposed planning applications to Douglas Shire Council (DSC).

The proposed redevelopment project includes demolition of a portion of the existing main commercial building and other structures and replacing them with a mix of new residential and commercial facilities.

This report has been prepared based on the available concept master plans and following a review of existing infrastructure. We have also held preliminary discussions with DSC officers regarding the existing civil infrastructure servicing the area.

1. General:

Refer **Appendix A** for:

- Locality Plan and Existing Redevelopment Site Plan (Google Maps)
- Proposed *Staging Plan* – referenced Project No. 160303, Drawing No. DA-003, Rev P5 prepared by Studio Tekton.
- A general proposed demolition plan (Google Maps)
- An Existing Detail Survey Plan as provided by Studio Tekton.
- Various GHD design drawings of existing sewers, sewerage pump station and rising main, water, stormwater, etc as provided by Studio Tekton.

The redevelopment site (approximately 9.5 ha) includes the boat marina, the existing main commercial building and carpark, the existing esplanade and boat mooring facilities, the existing restaurant and other smaller commercial buildings.

The proposed redevelopment is to include the demolition of the north-west portion of the existing main commercial building, the restaurant adjacent the *Duck Pond*, and other stand alone commercial buildings on Inlet Street.

The redevelopment site comprises a mix of land tenure leases and reserves, and is generally bounded by Wharf Street, the Duck Pond, and Dickson Inlet.

The redevelopment site contains existing civil services infrastructure including roads, driveways, carparking, water, stormwater and sewerage. All services are currently fully maintained and operational, and are generally connected to Council's infrastructure.

The proponents propose to close the Inlet Street road reserve and to include it into the overall redevelopment parcel.

2. Stormwater Drainage and Stormwater Quality:

Refer **Appendix B** for:

- Plan of existing stormwater culverts as provided by DSC
- *Proposed Site Schematic Stormwater Services Plan* prepared by PDR Engineers
- Schedules of preliminary catchment runoff calculations prepared by PDR Engineers

The existing site has two separate areas where the collected site stormwater runoff is discharged. Some of the existing systems collecting primary stormwater runoff discharge directly into the Dickson Inlet, while other systems collect and discharge to the east side of Wharf Street (Refer **Appendix A** – Existing Detail Survey Plan and GHD design drawings).

It is apparent the roof stormwater runoff from the Dickson Inlet side of the existing commercial buildings is collected and discharged through roof gutters, downpipes and below surface pipe networks and directly into Dickson Inlet. These systems will be retained status-quo only for those portions of the buildings that are proposed to be retained.

The balance of the site's existing primary stormwater runoff i.e. from the Wharf Street side of the buildings, from carparks, driveways, soft and hardstands etc. is collected in pits and underground pipes, which then discharge at the east side of Wharf Street. From these outlets, the stormwater is combined with runoff from other areas of Port Douglas, and continues to flow southward in open surface swales, and then through various culverts back under Wharf and Port Streets and into Dickson Inlet.

It is proposed to utilise this existing stormwater infrastructure under Wharf Street to service the proposed redevelopment, and to construct new internal infrastructure to meet the requirements of the redevelopment.

The redevelopment works will not increase the stormwater runoff to the east side of Wharf Street as in utilising the existing infrastructure under Wharf Street, the hydraulic capacities of the existing system will not be changed. This infrastructure under Wharf Street will only be replaced to the same size capacity should inspections reveal they are in poor structural or hydraulic condition.

Our preliminary calculations indicate the existing culverts under Wharf Street have sufficient capacity for the proposed redevelopment primary stormwater runoff to a 10 year ARI storm event.

All secondary surface flows will be managed by surface level detail design to ensure discharge to Wharf Street, Dickson Inlet and/or the Duck Pond, all discharge areas being the site's Legal Points of Discharge (LPD).

The proposed internal site stormwater collection system of pits and pipes will collect runoff from building rooves in traditional gutters and downpipes, driveways, carparks, and soft and hardstand surfaces. The proposed internal system will be designed for the minor storm events to a 10 year ARI.

By limiting the runoff to the capacity of the existing culverts under Wharf Street, the stormwater discharging from this proposed redevelopment will have no worsening impacts on properties upstream or downstream of the development site.

Where appropriate and in accordance with Council and FNQROC requirements, gross pollutant traps (GPTs) will be installed to treat the primary discharge from the redevelopment site. The use of the east side of Wharf Street existing swale drains and ponds will continue to assist with improving water quality by providing areas for natural bio-retention treatments.

Refer the Proposed Site Schematic Stormwater Services Plan for a sketch of the proposed internal stormwater collection system. Final calculations, construction detail drawings and specifications in accordance with FNQROC and relevant standards and codes will be provided to Council for Operational Works Approvals.

Based on our investigations to date there appears to be no hindrance to the management of stormwater runoff for the proposed redevelopment.

3. Water Supply

Refer **Appendix C** for:

- A summary of pressure readings at various times and locations as provided by DSC.
- A layout plan of existing Council water mains as provided by DSC
- *Proposed Site Schematic Water Services Plan* prepared by PDR Engineers
- Schedules of preliminary water demand calculations prepared by PDR Engineers

Domestic Demand.

The development site is currently serviced by Council's reticulated water supply system through a meter and 150 mm diameter main. The meter is located inside the Wharf Street boundary and adjacent to the south entry to the carpark.

Council has confirmed a 150 mm diameter metered water main serves the marina and commercial section of the development site. The 150 mm is tapped directly off their 300 mm diameter primary town supply main near the Grant and Warner Street intersection. Council further advised the main is a dedicated supply to the marina and commercial development site only. Council also confirmed measured residual pressures in the main at various locations.

Council also confirmed separate metered services to the restaurant and commercial buildings located on the north side of Inlet Street.

The proposed redevelopment will provide various land tenancy arrangements, where the final arrangement (to be determined) may require separate water supplies and meters (located at the Wharf Street boundaries) for individual lots as only one service and meter per lot is permitted by DSC. The final arrangement for the individual lots services and meters will be resolved at the detail design phase.

Assuming the residual pressures and existing 150 mm diameter dedicated service main as provided by Council, our preliminary calculations indicate that this existing service infrastructure will cater for the estimated total development site's domestic peak hour demand of 8.2 litres per second (l/s).

Fire Demand

The FNQROC requirements for fire flow demands are as follows:

- For residential – 15 l/s for 2 hours
- For commercial – 30 l/s for 4 hours

Assuming the residual pressures and the existing 150 mm diameter dedicated service main as provided by Council, our preliminary calculations indicate that this existing service infrastructure will cater for the estimated total development site's maximum fire demands of 30 l/s.

Further, as there is only one dedicated service for supply of water to the site, the metering at the main's entrance will be checked and upgraded as necessary to ensure either a "high flow" metering device, or a "high flow" bypass arrangement.

Assuming a single development site, it is proposed to extend the existing onsite water mains to service the proposed redevelopment with appropriate sized looped systems. Refer **Appendix B** for a concept sketch of the proposed internal distribution system. This arrangement will be changed should the final lot tenure be in multiple parcels. Final calculations, construction detail drawings and specifications in accordance with FNQROC and relevant standards and codes will be provided to Council for Operational Works Approvals.

Based on our investigations to date there appears to be no hindrance to the provision of reticulated town water to the proposed redevelopment to cater for the proposed domestic and fire demands.

4. Sewerage

Refer **Appendix D** for:

- Existing Council's gravity sewers servicing the site as provided by DSC
- *Proposed Site Schematic Sewer Services Plan* prepared by PDR Engineers
- Schedules of preliminary sewage generation calculations prepared by PDR Engineers

The development site currently collects and discharges generated sewage into Council's system.

The existing development areas on the north side of Inlet Street discharge to Council's collection gravity sewers through a lift pump station located at the west end of Inlet Street. From there, the gravity sewers discharge further north into Port Douglas's main pump station and rising main.

The sewage generated from the existing development to the south of Inlet Street is collected in gravity sewers and discharged to the Council's pump station at the east side of Wharf Street and from there, through a 150 mm diameter rising main running southward along the

east side of Wharf Street to the Council's treatment facility. Refer **Appendix A** - Various GHD design drawings of existing sewers, sewerage pump station and rising main, water, stormwater, etc

It is intended that the total of the redevelopment site (both new development and including that development retained), will utilise the existing gravity system within the site and under Wharf Street discharging to the existing pump station at the east side of Wharf Street.

Our preliminary calculations indicate an approximate total Equivalent Population (EP) of 315.5 persons. Assuming the generated flows and peaking factors recommended in FNQROC, the peak wet weather flow is equivalent to 6.3 l/s. With these numbers, the existing 150 mm diameter gravity sewer system under Wharf Street will not have sufficient capacity for the total redevelopment site and will require upgrading - possibly to a 225 mm diameter or a duplication 150mm diameter. Similarly, the Wharf Street pump station, the discharge rising main and the treatment plant will require capacity checking for the increased loadings and upgrading as necessary. The alternative to utilising the existing gravity system on the north side of Inlet Street may provide a solution where upgrades are not required.

Further detailed design engineering calculations for the final redevelopment arrangements, and further detailed information on the existing infrastructure are required to ensuring the provision of sufficient available capacity in all of the collection and discharge components – the DSC's gravity sewer system, pump station and pumps, rising main, treatment plant etc.

Refer **Appendix D** for a concept sketch of the proposed internal sewer collection system. Final calculations, construction detail drawings and specifications in accordance with FNQROC and relevant standards and codes will be provided to Council for Operational Works Approvals.

Based on our investigations to date and noting possible upgrades of the existing downstream infrastructure, there appears to be no hindrance to the collection and disposal of generated sewage from the proposed redevelopment.

5. Traffic Generated, Parking and Road Works:

A traffic study was carried out to address the following issues:

- Traffic generated from the new development to determine any possible impact on surrounding road network and Wharf Street in particular.
- Access to Wharf Street including sight distance and visibility.
- Classification of Wharf Street as a collector road.
- Suitability of car park layout including access and manoeuvrability of tourist buses and garbage collection trucks.

These matters are addressed as follows:

Traffic generation:

Traffic generation figures were determined using recommended generation rates from DTMR and RTA publications and surveys. The approach was to determine generation figures for the new development and compare these with comparable generation rates for the existing development.

Applicable data used for generation purposes was as follows:

- Regional shopping centres less than 10000 sqm – peak hour 12 vehicles/100 sqm with a total daily of 100 vehicles.
- Unit development in tourist area – 6 VPD/unit.

This results in the following generated traffic movements

| | Peak Hour | Daily volume |
|---|-----------|--------------|
| Proposed development – 3258 sqm shopping and 85 units | 440 | 3760 |
| Existing development – 5181 sqm of shopping | 621 | 5200 |

Based on these calculations it is clear that the proposed development reduces overall and peak hour movements and, as a result, has no impact on the existing road network or on Wharf Street.

Access and sight distance:

Sight distance was checked from the exit holding lines for both the northern and southern egress points with the following results:

- Northern exit – 140m left and 150m right
- Southern exit – 150m left and 60m right.

Given the speed regime on Wharf Street these distances are acceptable. Note that vision to the right at the southern exit is from the future holding line which is clear of the Bally Hooley train turntable area.

Wharf Street classification:

Based on FNQROC definitions and the configuration of Wharf Street it would be classified as a collector road capable up carrying up to 6000 VPD. Whilst no current traffic numbers were available from Council records the amended development will have a reduced impact and would not be detrimental to the traffic flow rates in Wharf Street. Therefore, this development would not require additional on Street works.

Car park layout:

Car parking has been provided by an open car park area and 98 spaces under the building for the units. The layout has been assessed and satisfies the manoeuvrability requirements of AS 2890.

We have also run swept path diagrams for accessibility for buses and garbage collection vehicles. Minor modifications were required to accommodate these vehicles and the parking layout and northern entry points have been modified accordingly. The swept path diagrams and minor modifications are shown in Appendix E. The proposed garbage collection area is suitable and trucks can leave the site in a forward direction or reverse internally if required without disruption.

Full checks will be carried out at detailed design stage, however, this will not have major implications on the layout or numbers of spaces.

We trust this information is sufficient for your present requirements, however please do not hesitate to contact us should you require further information or assistance.

Yours faithfully
PDR Engineers

A handwritten signature in black ink, appearing to read 'Alan McPherson'.

Alan McPherson
Senior Civil Engineer

A handwritten signature in black ink, appearing to read 'Jeffrey Sue Yek'.

Jeffrey Sue Yek
Senior Civil Engineer

APPROVED:

A handwritten signature in black ink, appearing to read 'Peter De Roma'.

Peter De Roma
Principal/Director Engineer

APPENDIX A

Reef Marina

Legend

Extent of site of Proposed Redevelopment

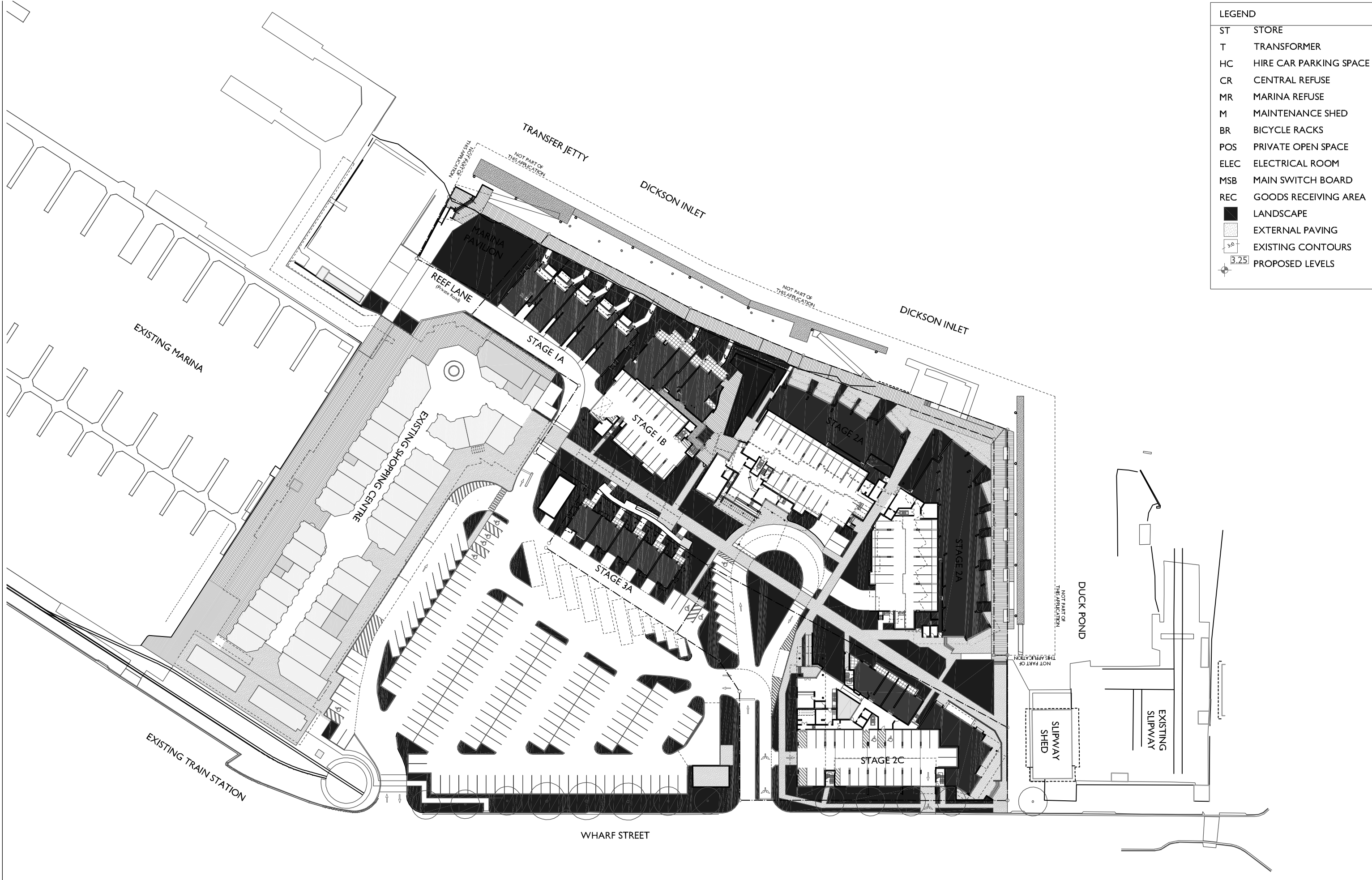
Full Development Site

Google earth

© State of Queensland 2016



| LEGEND | |
|--------|------------------------|
| ST | STORE |
| T | TRANSFORMER |
| HC | HIRE CAR PARKING SPACE |
| CR | CENTRAL REFUSE |
| MR | MARINA REFUSE |
| M | MAINTENANCE SHED |
| BR | BICYCLE RACKS |
| POS | PRIVATE OPEN SPACE |
| ELEC | ELECTRICAL ROOM |
| MSB | MAIN SWITCH BOARD |
| REC | GOODS RECEIVING AREA |
| | LANDSCAPE |
| | EXTERNAL PAVING |
| | EXISTING CONTOURS |
| | PROPOSED LEVELS |



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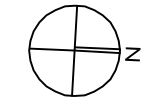
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 T: 07 3852 8700
 F: 07 3852 8701
 E: MAILBOX@DEICKERICHARDS.COM.AU
 W: WWW.DEICKERICHARDS.COM.AU

THE REEF MARINA
 PORT DOUGLAS QLD



DRAWN: SG AT
 CHECKED: JL
 APPROVED: PR JL
 DATE 12/09/2016

MASTER SITE PLAN
 1:1000



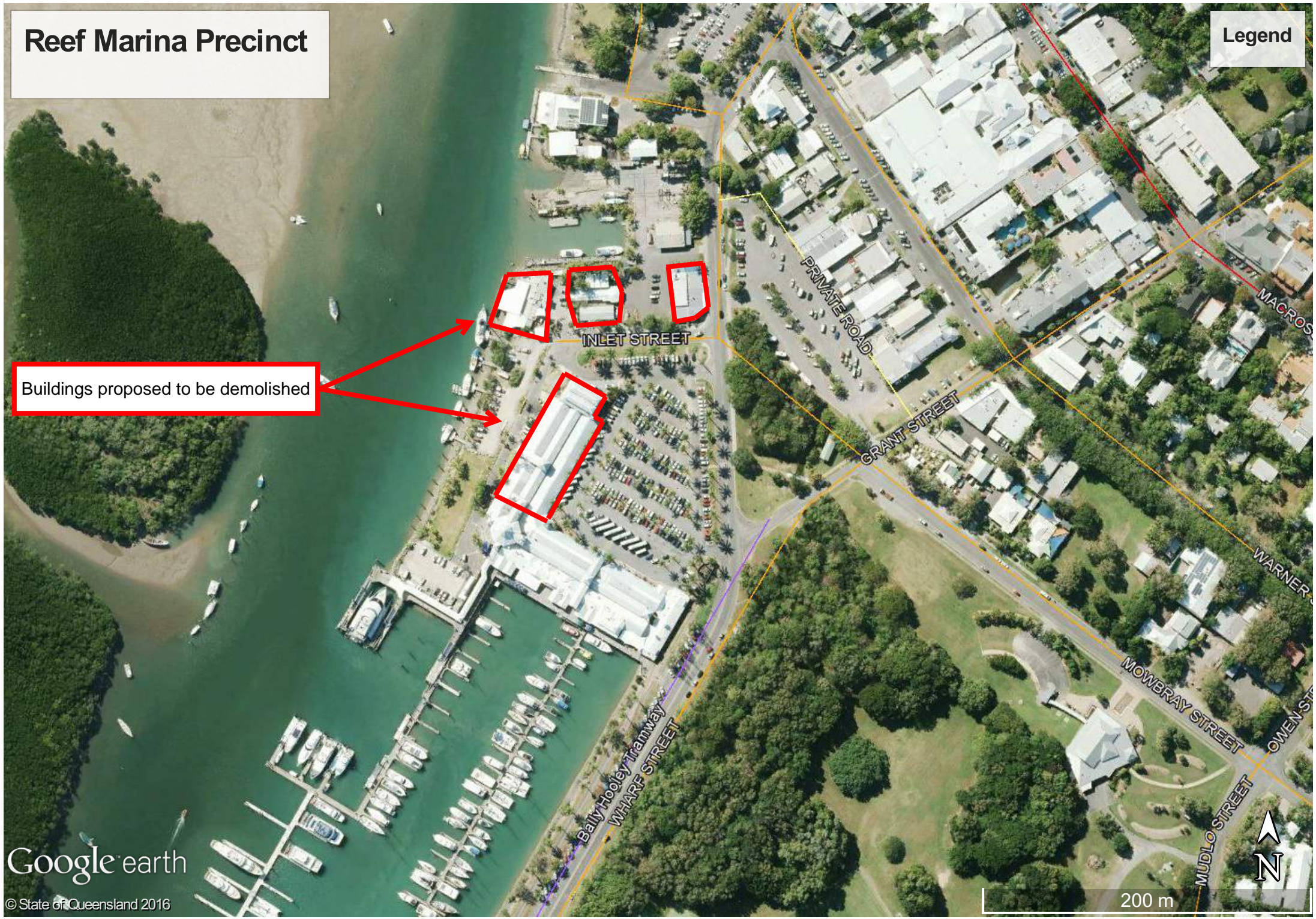
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| STATUS: DNRM SUBMISSION | | |

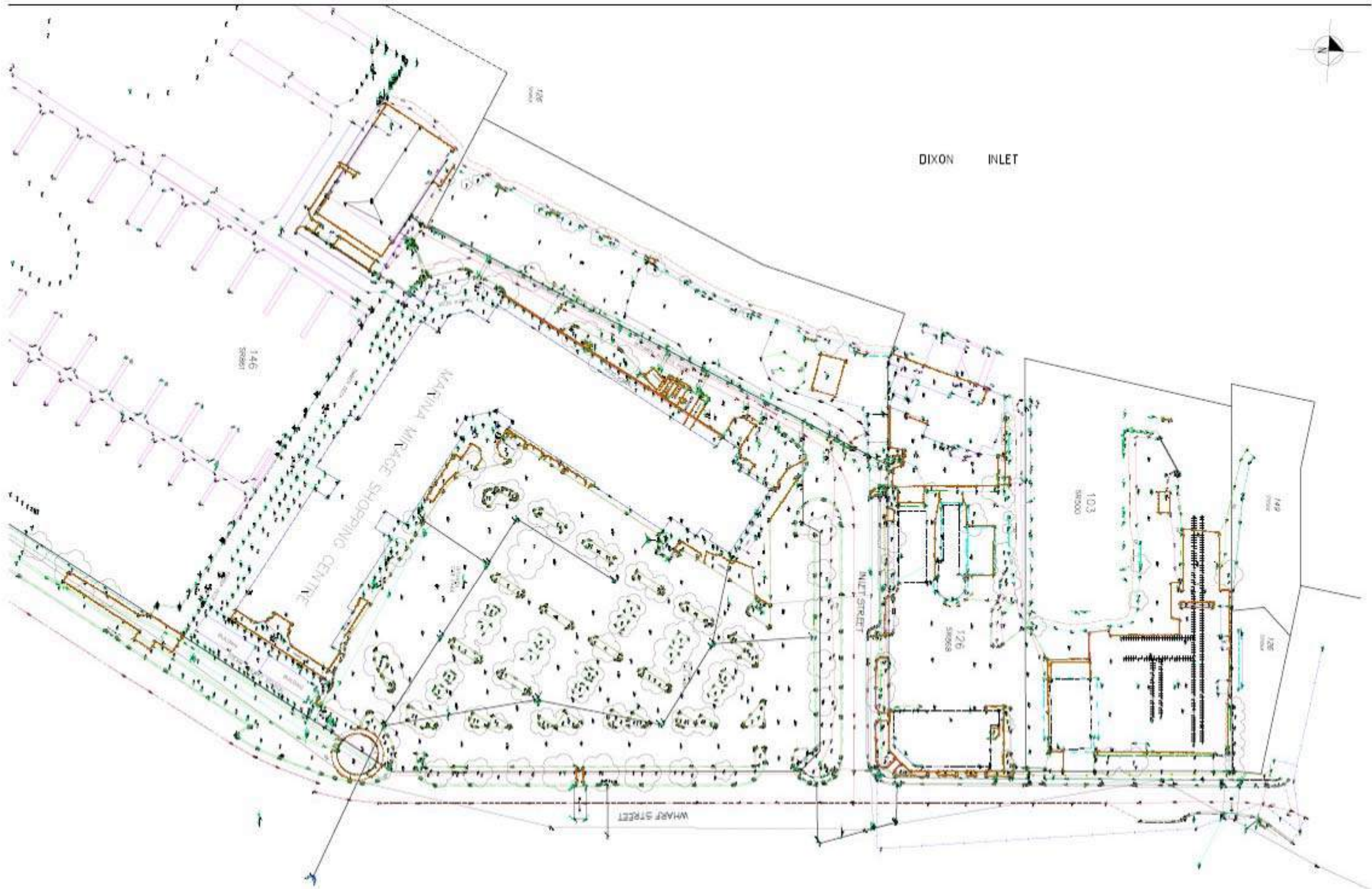
N:\volumes\YODA\Project Files\2016\160303 The Reef Marina\3.0 Design\3.1 Design (Arch)\3.1.2 Sketch Design\160303 Reef Marina Site.pxl

Reef Marina Precinct

Legend

Buildings proposed to be demolished





| | |
|----------------|---------------|
| Drawn | RF |
| Checked | RF |
| Approved | RF |
| Date | AUG '16 |
| Drawing Number | 16470-SK-SV01 |
| Revision | A |

Drawing Status
PRELIMINARY

SCALE 1:500
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Scale Before Reduction

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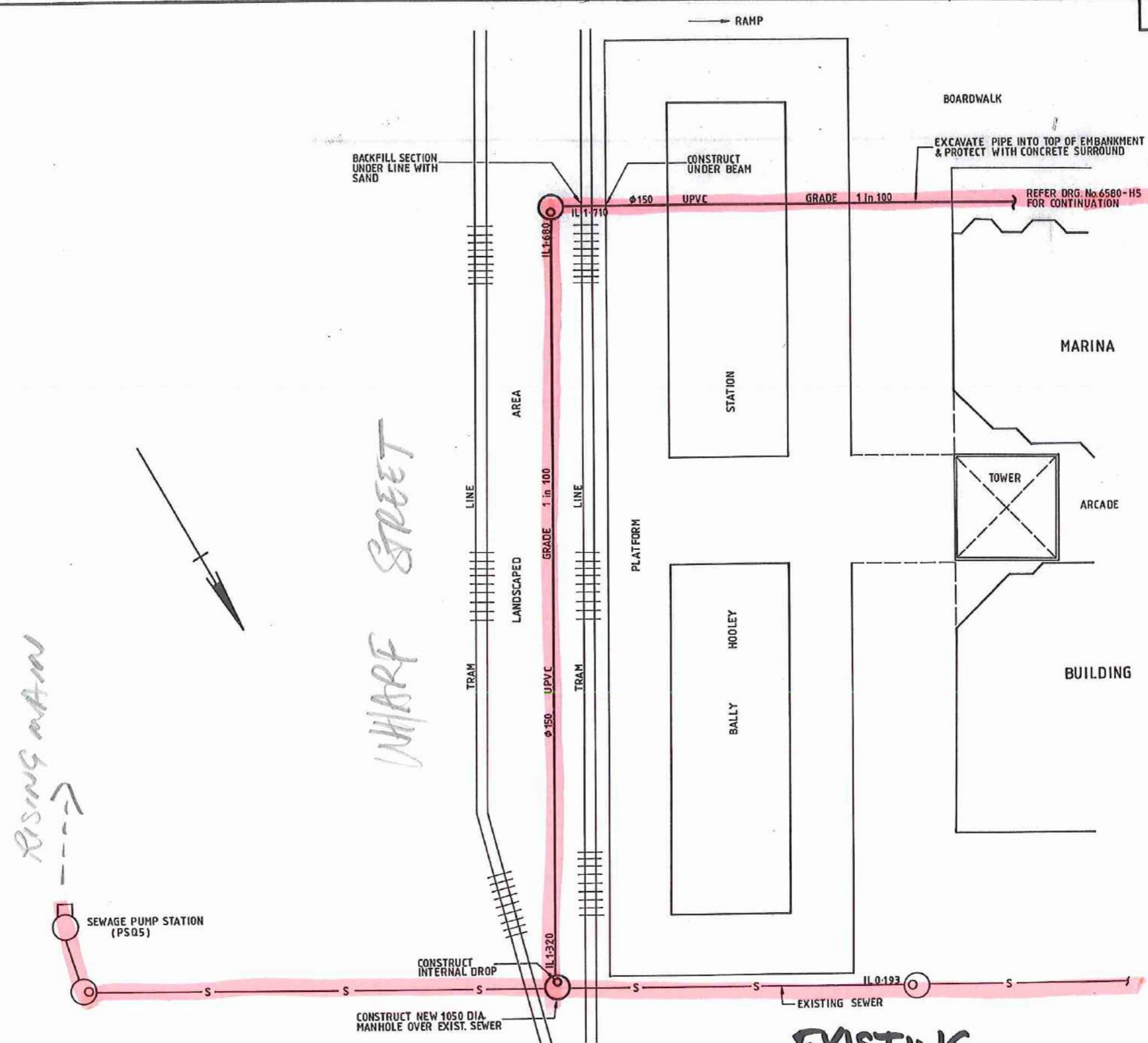
Client
**STUDIO TEKTON
PTY LTD**

Project
**PROPOSED REEF MARINA
DEVELOPMENT**

Drawing Title
EXISTING DETAIL SURVEY

| | | | | | |
|----------|----|----------|---------|----------|---|
| Drawn | RF | Designed | - | Verified | - |
| Approved | - | Date | AUG '16 | Revision | A |

DO NOT SCALE



RISING MAIN

WHARF STREET

REEF MARINA

EXISTING SEWER

SCALE 1:100

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 PORT DOUGLAS NORTH QUEENSLAND

6580-H11

| NO. | DESCRIPTION | DATE | INTS |
|-----|--------------|----------|------|
| A | PLAN REDRAWN | 19/08/88 | SAC |

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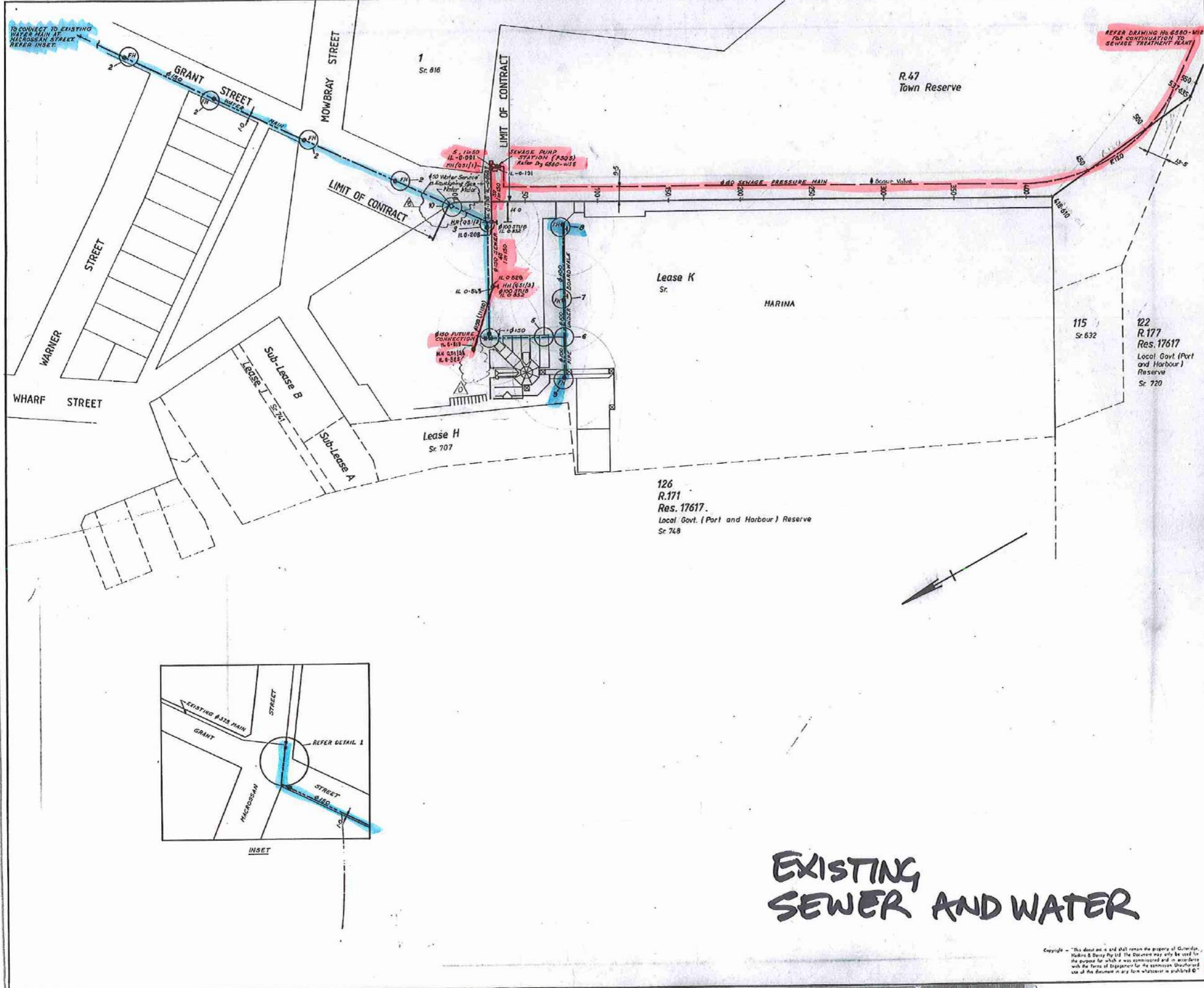
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| | | | |
|-----------|-------------------|---------|--------|
| DESIGNED | SAC | DRAWN | SAC |
| CHECKED | BY | TRACED | S.M.C. |
| SUBMITTED | BY | CHECKED | BY |
| APPROVED | <i>H. Haskins</i> | | |
| DATE | 11 Aug 1988 | | |

PORT DOUGLAS MARINA
 SOUTH EAST WING - GROUND FLOOR PLAN
 DRAINAGE CONNECTION FROM
 BOARDWALK TO EXISTING SEWER

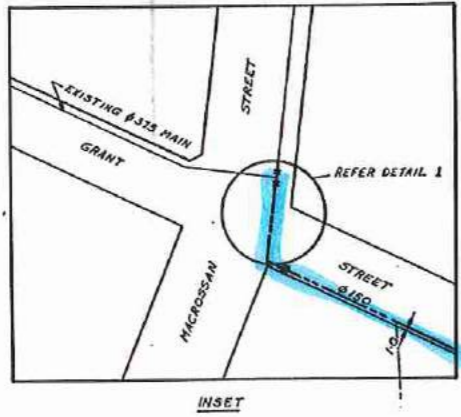
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| REVISIONS | A | | | |
|-----------|---|--|--|--|



NOTES:-
 1. Refer Dwg N° 6850-WS3 for Water Supply Details.

REFER DRAWING No. 6880-NR2 FOR CONTINUATION TO SEWAGE TREATMENT PLANT

TO CONNECT TO EXISTING WATER MAIN AT MACROSSAN STREET REFER INSET.



| NO | Date | Description | Initials |
|----|---------|------------------------------------|----------|
| D | 23.9.07 | Sewer details amended | IJS |
| C | 0.9.07 | SEWER MAIN RELOCATED AND REGRADED. | RE. |
| B | 4.0.07 | Water Meter added | GP |
| A | 23.07 | Base Line added | GR |

REVISIONS

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| | | | |
|----------------|--------|-----------------|-----|
| DESIGNED | GP | DRAWN | GP |
| DESIGN CHECKED | GP | TRACED | GP |
| SUBMITTED | J.H.C. | DRAWING CHECKED | IJS |

APPROVED *H. Adams* DATE *20.06.07*

MIRAGE PORT DOUGLAS RESORT PTY LTD
 PORT DOUGLAS, NORTH QUEENSLAND

PORT DOUGLAS MARINA

WATER SUPPLY AND SEWERAGE

SCALES

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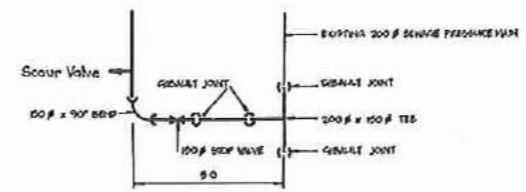
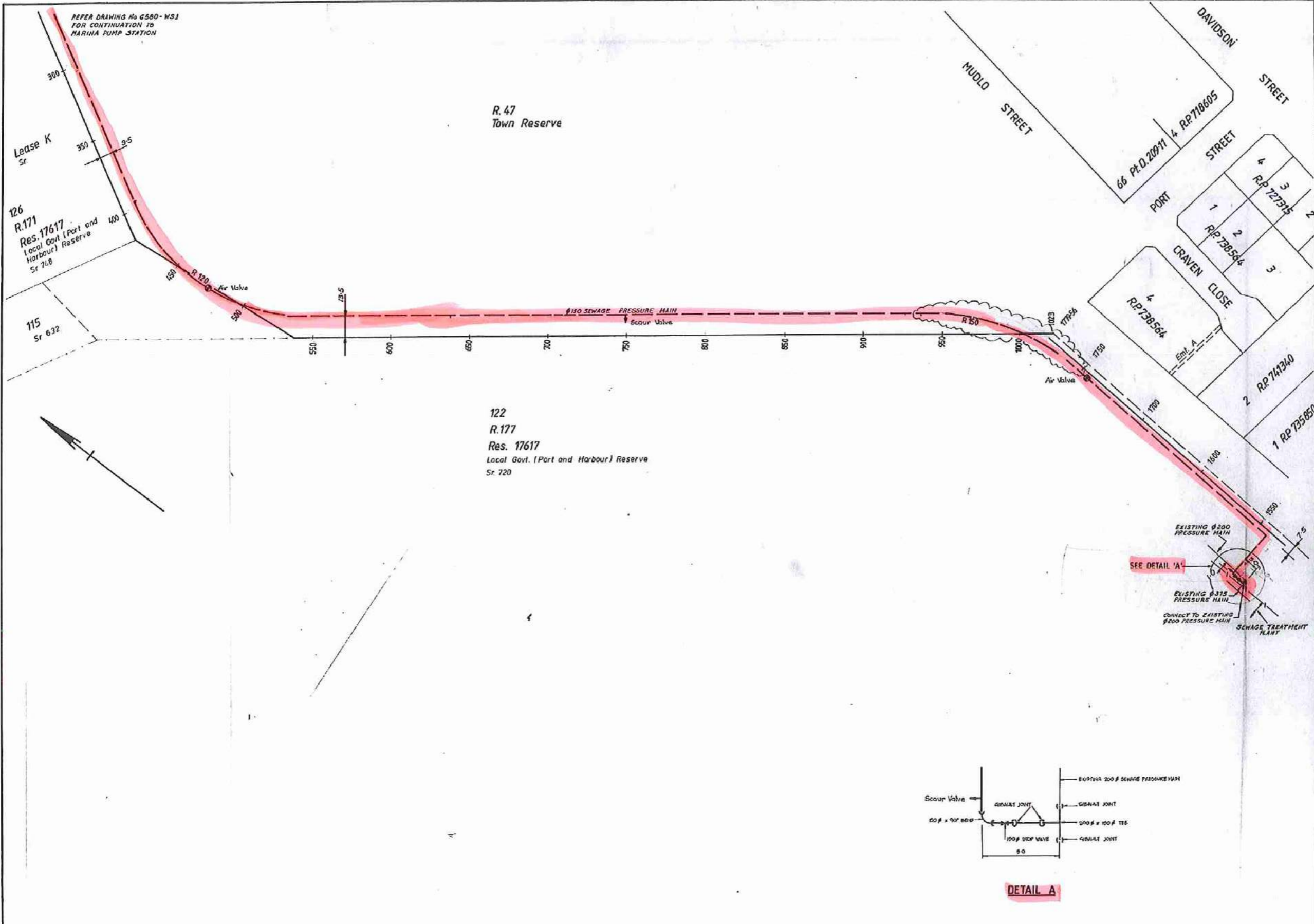
6580-WS1 REV. NO. **C**

EXISTING SEWER AND WATER

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NOTES:-



EXISTING SEWER RISING MAIN

| REV | Date | Description | Initials |
|-----|---------|-----------------|----------|
| B | 3-8-87 | ROOMS AMENDED | GP |
| A | 23-6-87 | Base line added | GP |

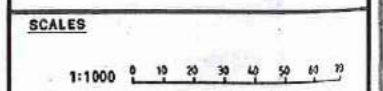
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| DESIGNED | G.P. | DRAWN | C.P. |
|----------------|--------|-----------------|--------|
| DESIGN CHECKED | JL | TRACED | GP |
| SUBMITTED | J.A.R. | DRAWING CHECKED | I.J.S. |

APPROVED
H. O'Connell DATE 14/8/87

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 PORT DOUGLAS, NORTH QUEENSLAND

PORT DOUGLAS MARINA
 WATER SUPPLY AND
 SEWERAGE



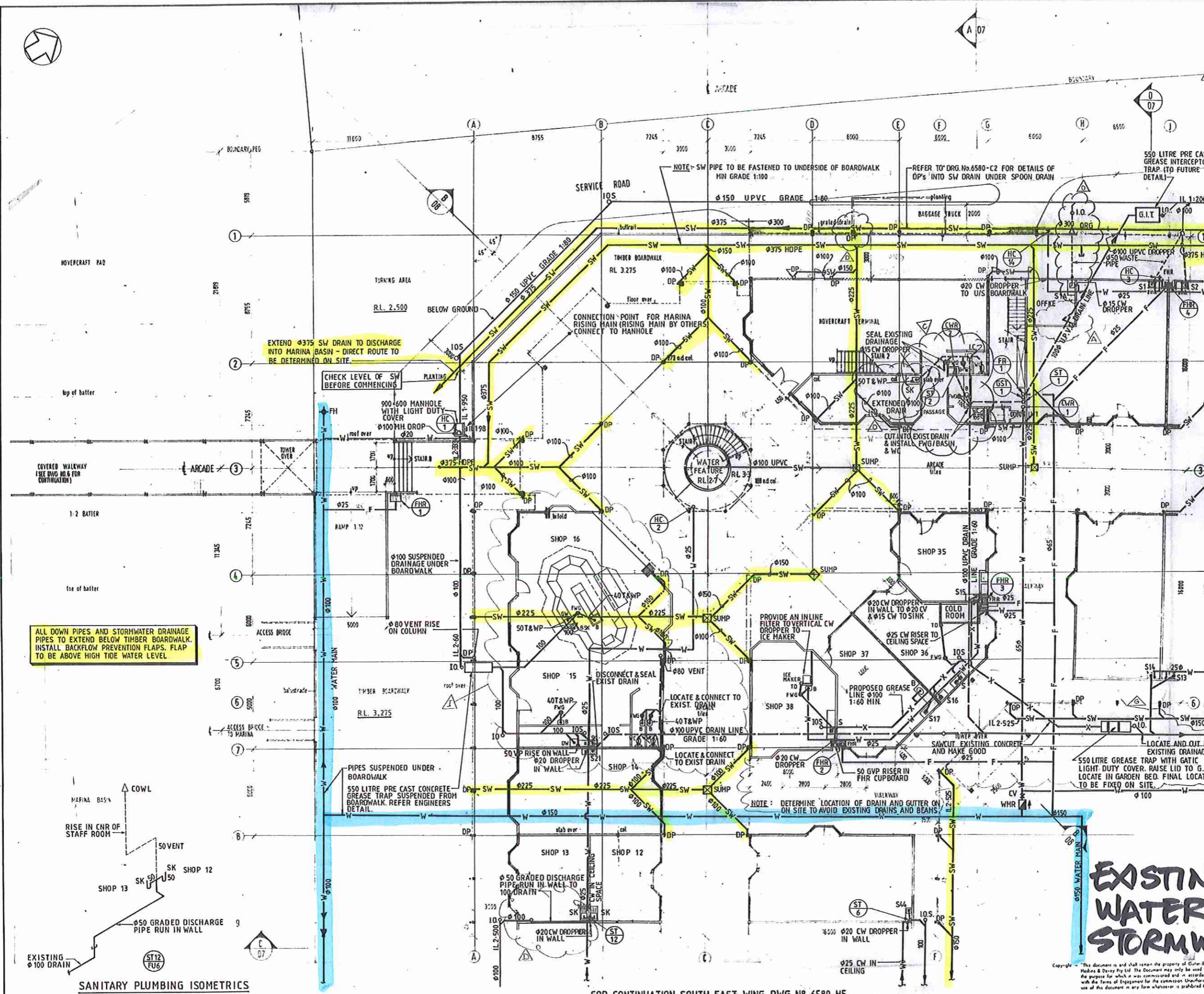
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6580-WS2

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- NOTES:-
1. REFER TO DWG NO 6580-H7 FOR NOTES, LEGEND AND DETAILS
 2. $\phi 32$ TO ALL SINK WASTES IN EACH SHOP. FOR AIR CONDITIONING CONDENSATE PIPE, SEE DWG NO 6580-H7.
 3. REFER TO STRUCTURAL DRAWINGS FOR POSITIONS OF PILES AND GROUND BEAMS.
 4. REFER ALL QUERIES OR DISCREPANCIES TO THE PROJECT MANAGER.
 5. CONTRACTOR TO VERIFY ALL DIMENSIONS OF BUILDING ON SITE BEFORE CONSTRUCTION



| No | Date | Description | Initialed |
|----|---------|---|-----------|
| I | 11-7-88 | SHOP 37 AMENDED, NEW DESIGN FOR SHOP 16. | DKP |
| H | 30-6-88 | PROPOSED GREASE LINE ADDED & DESIGN FOR SHOPS 35 & 38. | DKP |
| G | 15-6-88 | GREASE TRAP FOR SHOPS 35 TO 38 ADDED | R.W. |
| F | 14-3-88 | SINKS IN SHOP 12 & 13 RELOCATED. ST-12 ISOMETRICS ADDED. GIT MOVED TO SHOP 15. | SAC |
| E | 9-2-88 | GIT ADDED FOR SHOP 14 DRAINAGE REVISED | SAC |
| D | 8-12-87 | COFFEE SHOP DRAINAGE ADDED. S1A RELOCATED, SINK ADDED TO SHOP 18. | SAC |
| C | 9-11-87 | ADDITIONAL SINK 21A SINK S18 CONNECTION SHOWN & PUBLIC TOILETS AMENDED | SAC |
| B | 22-2-87 | NOTE DELETED | I.E. |
| A | 7-9-87 | S1A ADDED $\phi 300$ SW DRAIN UNDER SPOON DRAIN, CW CONNECTED TO HE'S 1&2 CHANGED | D.K.P. |

REVISIONS

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 (A/NS - PORT DOUGLAS - TOWNSVILLE - MACKAY - BOWSBANE)

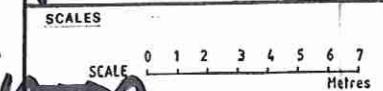
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|----------------|-----|-----------------|-----|
| DESIGNED | DKP | DRAWN | DKP |
| DESIGN CHECKED | SAC | TRACED | DA |
| SUBMITTED | JNC | DRAWING CHECKED | |

APPROVED *el. Redmond* DATE AUG 87

MIRAGE PORT DOUGLAS RESORT PTY LTD
 PORT DOUGLAS NORTH QUEENSLAND

PORT DOUGLAS MARINA SERVICES BUILDING
 LEVEL 1 FLOOR PLAN
 HYDRAULIC AND FIRE SERVICES



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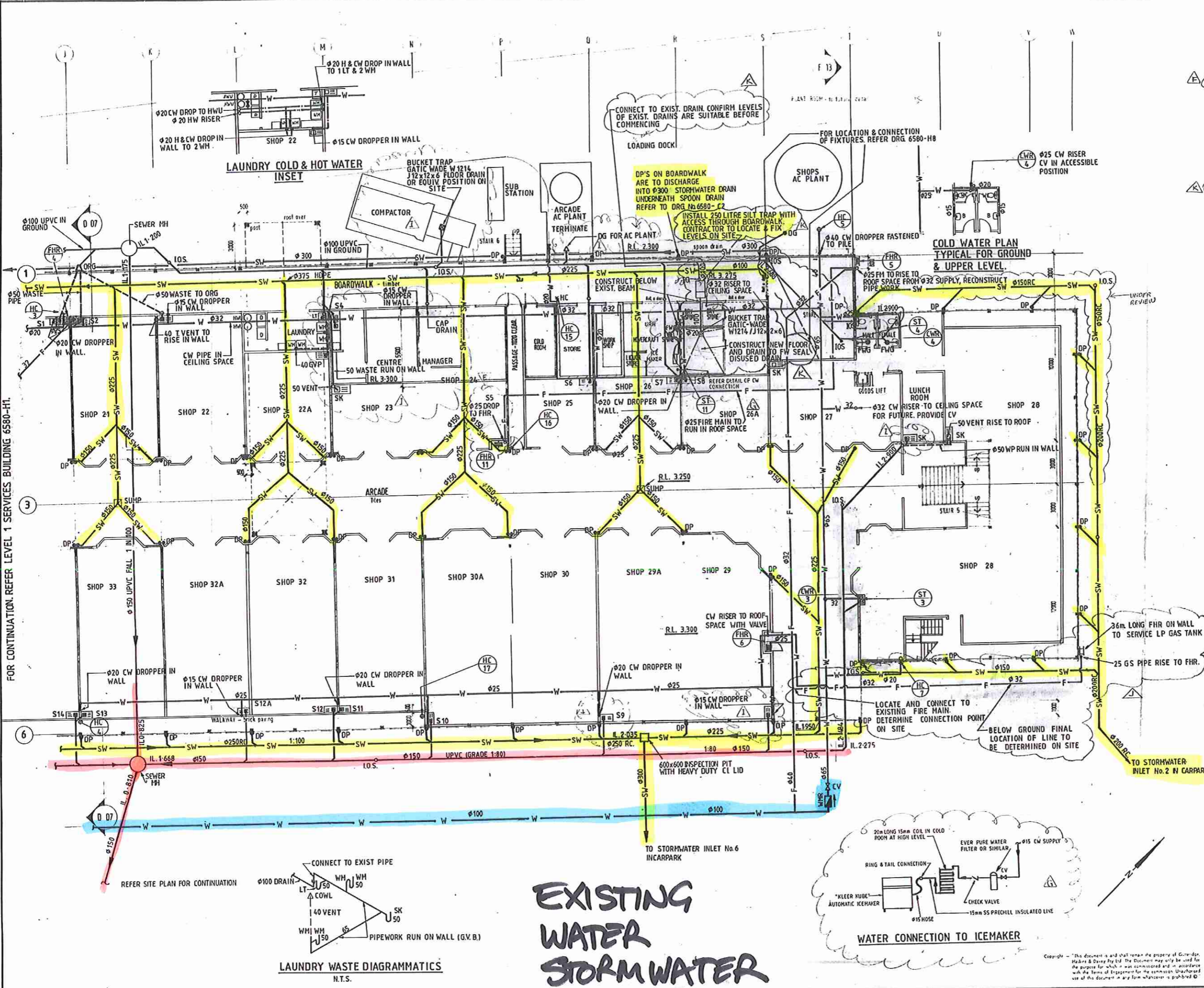
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REV N9 I

EXISTING WATER STORMWATER

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- NOTES:-
- REFER TO DWG N° 6580-H7 FOR NOTES, LEGEND AND DETAILS.
 - Ø32 TD TO ALL SINK WASTES IN EACH SHOP FOR AIR CONDITIONING CONDENSATE PIPE, SEE DWG N° 6580-H7.
 - REFER TO STRUCTURAL DRAWINGS FOR POSITIONS OF PILES AND GROUND BEAMS.
 - REFER ALL QUERIES OR DISCREPANCIES TO THE PROJECT MANAGER.
 - CONTRACTOR TO VERIFY ALL DIMENSIONS OF BUILDING ON SITE BEFORE CONSTRUCTION.
 - CONTRACTOR TO LOCATE & CONFIRM EXIT DRAINS & LEVELS ARE SUITABLE FOR ADDITIONAL WORK BEFORE COMMENCING.



FOR CONTINUATION, REFER LEVEL 1 SERVICES BUILDING 6580-H1.

| No | Date | Description | Initials |
|----|----------|---|----------|
| K | 20-9-88 | BIN WASHING AREA GRID-R-5 & NOTE 6 ADDED. | SAC |
| J | 15-6-88 | FHR ON GRIDLINE 'W' ADDED | RW |
| I | 20-5-88 | CENTRE MANAGER ADDED. AMEND TO ARCHITECTS CHANGES F1 9/88 | SAC |
| H | 21-3-88 | DRG REVISED TO SUIT CHANGES | SAC |
| G | 17-12-87 | URN & ICE MAKER ADDED | SAC |
| F | 8-12-87 | ADDITIONAL SINKS 9A, 10A, 12A NOTE 2 AMENDED | SAC |
| E | 9-10-87 | FHR 11 & SUPPLY RELOCATED | SAC |
| D | 26-9-87 | IL'S AND NOTE ADDED | IE |
| C | 21-9-87 | NOTE AND IL'S ADDED | IE |
| B | 7-9-87 | Ø300 SW PIPE ADDED | SAC |
| A | 3-9-87 | REVIEWED TO AGREE WITH ARCHITECTS CHANGES | SAC |

REVISIONS

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 PERTH • GARDINER • BOWEN • GOLD COAST • SUNSHINE COAST

MIRAGE PORT DOUGLAS RESORT PTY LTD

PORT DOUGLAS, NORTH QUEENSLAND

| | | | |
|----------------|-----|------------------|---------|
| DESIGNED | DKP | DRAWN | DA + KP |
| DESIGN CHECKED | SAC | TRACED | DA |
| SUBMITTED | JNE | DRAWINGS CHECKED | DA |

APPROVED: *S. Adcock* DATE: 17/9/88

PORT DOUGLAS MARINA NORTH EAST WING GROUND FLOOR PLAN HYDRAULIC AND FIRE SERVICES

SCALES

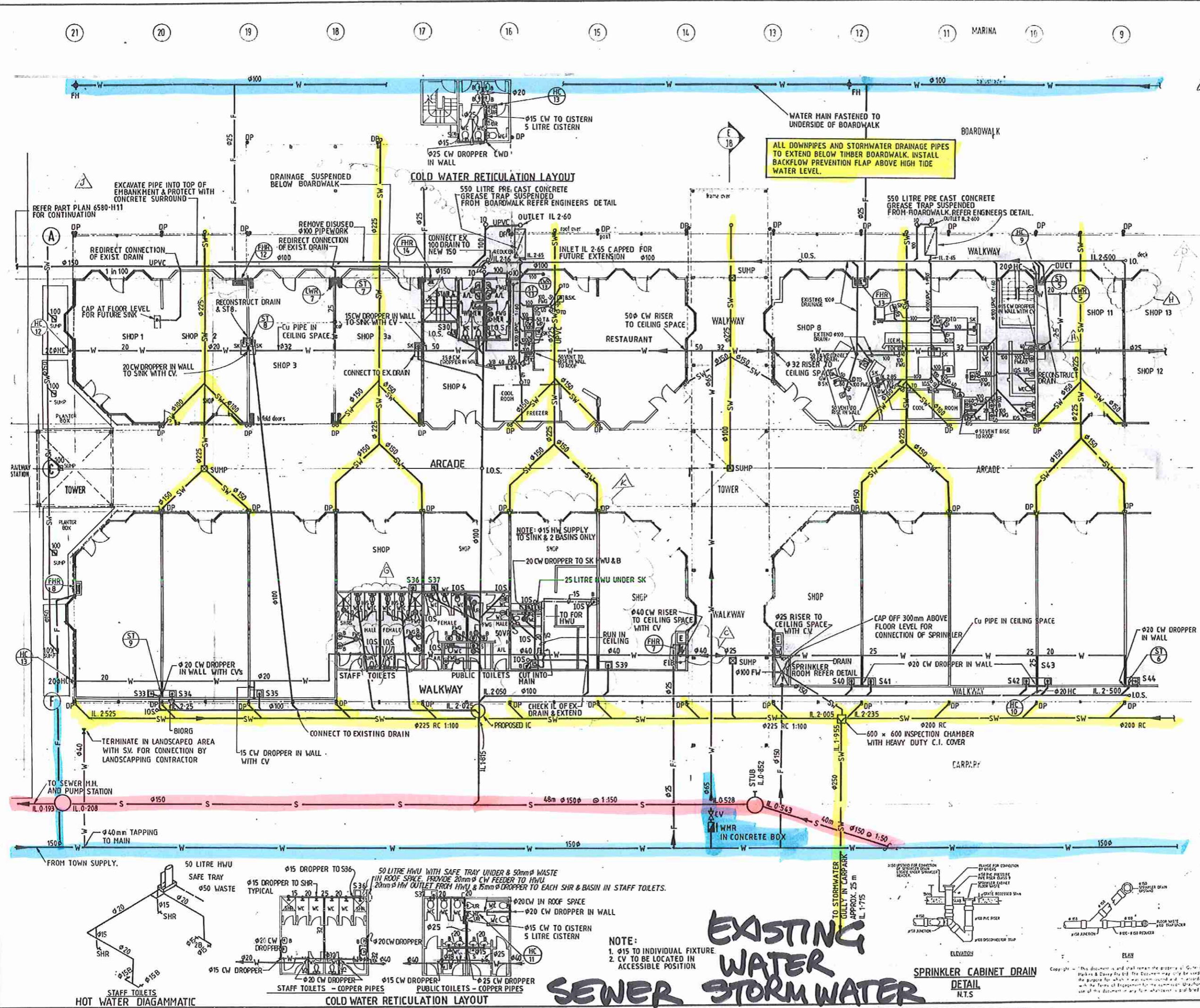
SCALE 0 1 2 3 4 5 6 7 Metres

DO NOT SCALE

6580-H3 REV N° K

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- NOTES:-
- REFER TO DWG NO 6580-H7 FOR NOTES, LEGEND AND DETAILS.
 - #32 TO ALL SINK WASTES IN EACH SHOP. FOR AIR CONDITIONING CONDENSATE PIPE, SEE DWG NO 6580-H7.
 - REFER TO STRUCTURAL DRAWINGS FOR POSITIONS OF PILES AND GROUND BEAMS.
 - REFER ALL QUERIES OR DISCREPANCIES TO THE PROJECT MANAGER.
 - CONTRACTOR TO VERIFY ALL DIMENSIONS OF BUILDING ON SITE BEFORE CONSTRUCTION.
 - REFER TO ARCHITECTS DETAIL NO. A 4-71 FOR TREE SURROUNDS AND STD. DETAIL FROM GATIC FOR W1100 PLANTER BOX DRAIN SINGLE INLET.



FOR CONTINUATION REFER SERVICES BUILDING DWG NO 6580-H1

| No | Date | Description | Initials |
|------------|------|--|----------|
| K 29-7-88 | | HYDRAULIC DESIGN FOR SHOP 45 | SAC |
| J 25-7-88 | | NEW DRAINAGE CONNECTION FROM BOARDWALK | SAC |
| I 5-4-88 | | FHR 12 RELOCATED PLANTER BOX DRAINAGE GL 12 ADDED | SAC |
| H 4-3-88 | | SINKS IN SHOPS 1, 2, 3, 8, & 11 AMENDED, G.I.T. REMOVED, DIAGRAMS ADDED FOR STAFF TOILETS. | SAC |
| G 25-2-88 | | STAFF TOILET FACILITIES ADDED | MH |
| F 9-2-88 | | GREASE TRAPS ADDED BETWEEN GRID LINES 16-17, 10-11 | SAC |
| E 18-12-87 | | 40 WATER FOR LANDSCAPING ADDED | SAC |
| D 8-12-87 | | SINK 21A ADDED AND NOTE 2 AMENDED | SAC |
| C 22-9-87 | | NOTE DELETED | |
| B 11-9-87 | | FHR 14 ADDED BASINS RELOC. BISTRO DRAINAGE REVISED | SAC |
| A 7-9-87 | | H/W IN CEILING FOR MARINA FAC. PLANTERS ADDED & SW DRAINS REVISED. ORG 13 FOR SINK ON LEVEL 2. | D.K.P. |

GUTTERIDGE HASKINS AND DAVEY PTY LTD
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 15/161 STONEY MELBOURNE CANBERRA HOBART ADELAIDE PERTH DUNEDIN BOWEN GOLD COAST SUNSHINE COAST

MIRAGE PORT DOUGLAS RESORT PTY LTD

PORT DOUGLAS NORTH QUEENSLAND

| | | | |
|----------------|--------|-----------------|--------|
| DESIGNED | D.K.P. | DRAWN | K.A.P. |
| DESIGN CHECKED | SAC | TRACED | K.A.P. |
| SUBMITTED | J.M.C. | DRAWING CHECKED | L.B.C. |

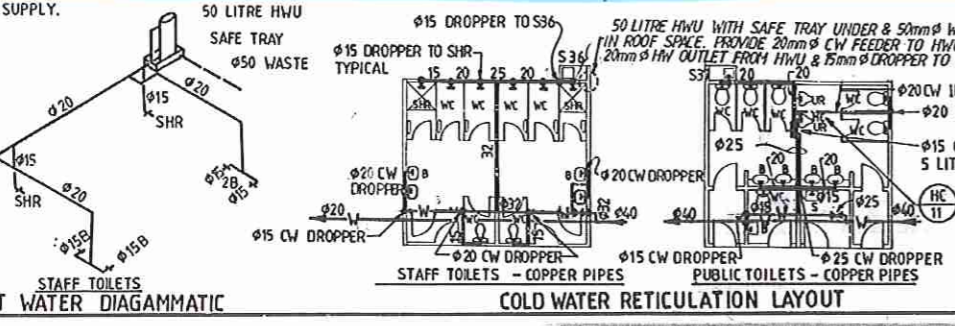
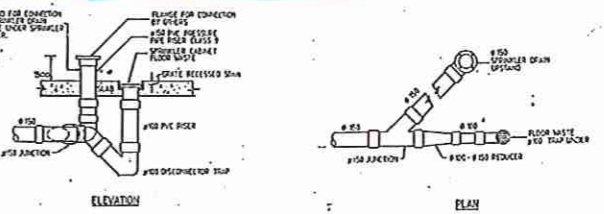
APPROVED: *S. Adair* DATE: 17/1/87

PORT DOUGLAS MARINA SOUTH EAST WING GROUND FLOOR PLAN HYDRAULIC AND FIRE SERVICES

SCALES
 SCALE 0 1 2 3 4 5 6 7 Metres

DO NOT SCALE
 6580 - H5 REV. NO. K

EXISTING WATER SEWER STORM WATER



NOTE:
 1. Ø15 TO INDIVIDUAL FIXTURE
 2. CV TO BE LOCATED IN ACCESSIBLE POSITION

APPENDIX B

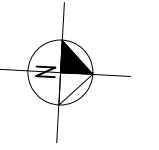
Douglas Shire Council - Drainage Infrastructure



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Scale 1cm = (???? m or km) at A3
Map Grid of Australia Zone 55 (GDA94)

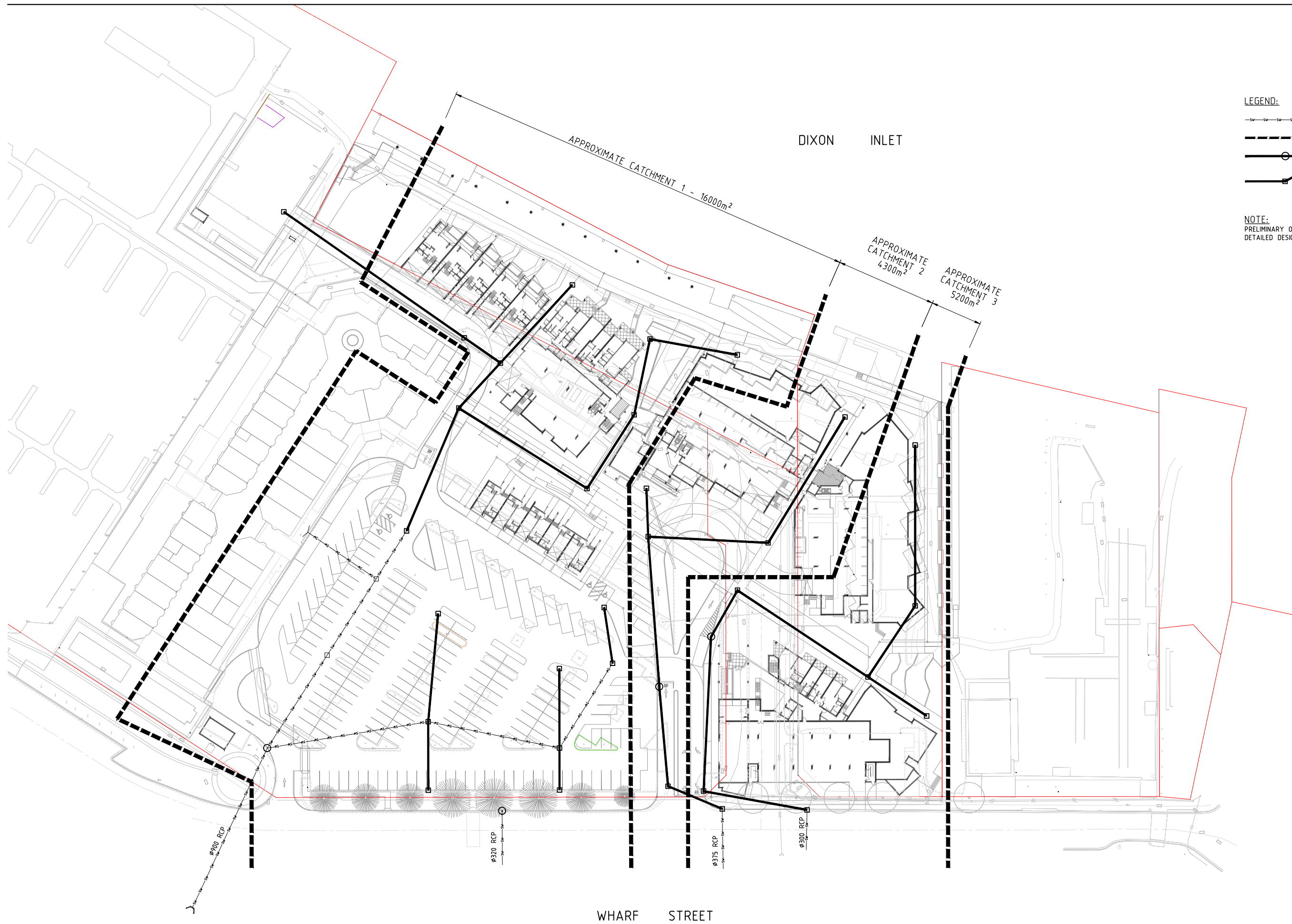




LEGEND:

- EXISTING STORMWATER SYSTEM
- APPROXIMATE CATCHMENTS
- POSSIBLE GPT LOCATIONS
- PROPOSED NEW PRIMARY STORMWATER RUNOFF PIT AND PIPE COLLECTION SYSTEMS

NOTE:
PRELIMINARY ONLY. ALL SUBJECT TO DETAILED DESIGN & DOCUMENTATION



| | | |
|-----|------------------------|----------|
| A | FOR PRELIMINARY REVIEW | 26/08/16 |
| SUE | DESCRIPTION | DATE |

| | |
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| Drawing Status | PRELIMINARY |
|----------------|--------------------|

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| Scales Before Reduction | |
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A.B.N. 88 126 211 461
A.C.N. 126 211 461

Client
**STUDIO TEKTON
PTY LTD**

Project
**PROPOSED REEF MARINA
DEVELOPMENT**

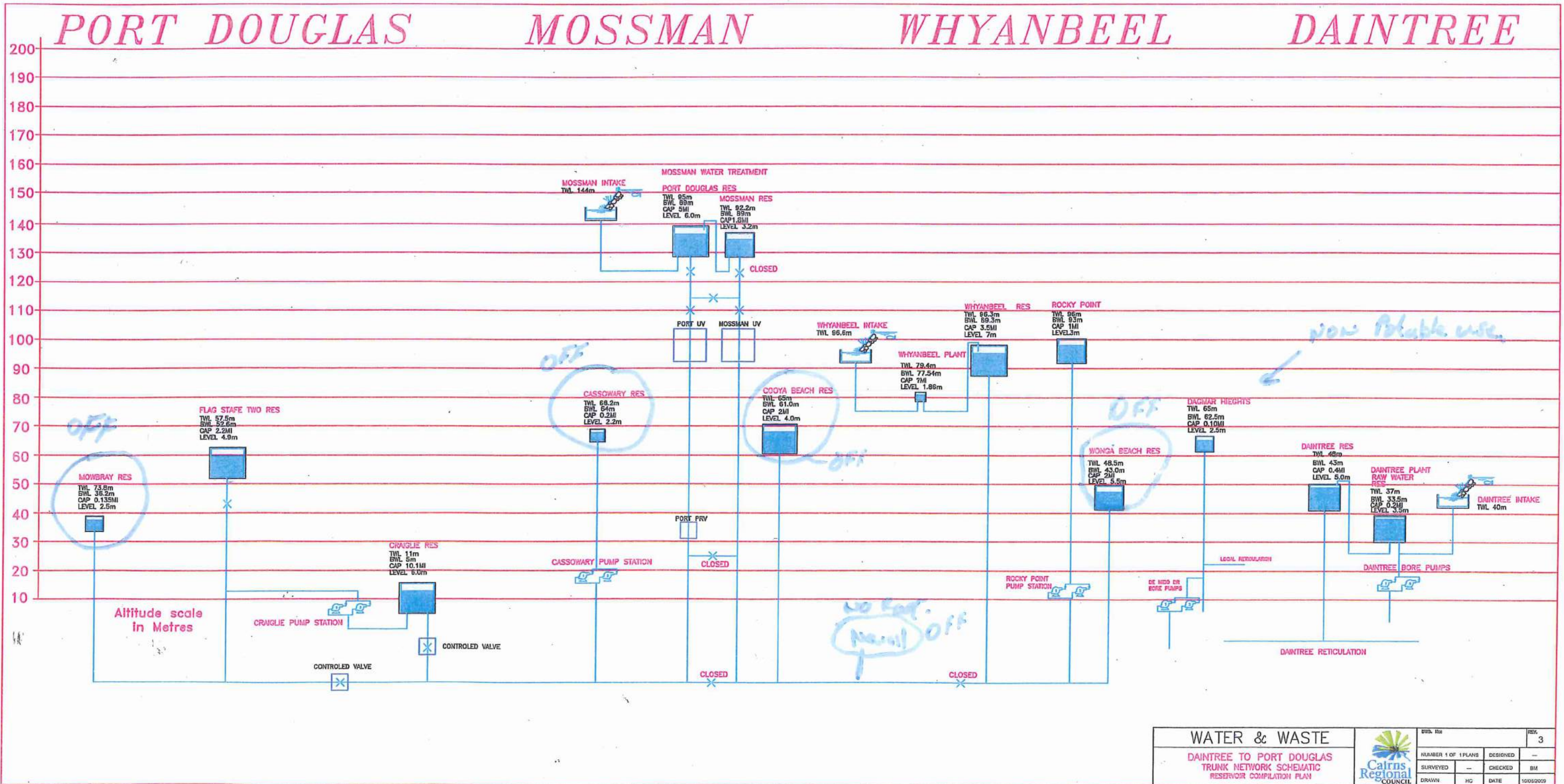
Drawing Title
**PROPOSED SITE SCHEMATIC
STORMWATER SERVICE PLAN**

| | | |
|--|------------------------|----------------------|
| Drawn NP | Designed - | Verified - |
| Approved - | Date AUG '16 | |
| Drawing Number 16470-SK-SW01 | | Revision A |

APPENDIX C

PRESSURE TESTS KPA

| | | | | | | |
|---|--------|----------|-----|-----|---------|-----|
| ① | 4-8-16 | 12:00 PM | 600 | 5-8 | 8:00 AM | 550 |
| ② | 4-8-16 | 12:30 PM | 600 | 5-8 | 8:05 | 500 |
| ③ | 4-8-16 | 1:30 PM | 550 | 5-8 | 8:10 | 450 |
| ④ | 4-8-16 | 1:35 PM | 550 | 5-8 | 8:15 | 450 |
| ⑤ | 4-8-16 | 1:40 PM | 550 | 5-8 | 8:20 | 450 |
| ⑥ | 4-8-16 | 1:45 PM | 600 | 5-8 | 8:25 | 450 |
| ⑦ | 4-8-16 | 1:50 PM | 500 | 5-8 | 8:30 | 450 |



| | | | | | | | |
|---------------|--|---|--|---|--|---|--|
| WATER & WASTE | | Daintree to Port Douglas Trunk Network Schematic Reservoir Compilation Plan | | DWS No: _____ NUMBER 1 OF 1 PLANS SURVEYED: -- DRAWN: HC | | REV: 3 DESIGNED: -- CHECKED: BM DATE: 10/05/2009 | |
|---------------|--|---|--|---|--|---|--|

Title



Scale 1cm = (???) m or km at A3
 Map Grid of Australia Zone 55 (GDA94)

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DOUGLAS
 SHIRE COUNCIL

Heaps of SERVICES ETC

Not in 250
 meter

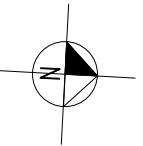
1

3

4

5

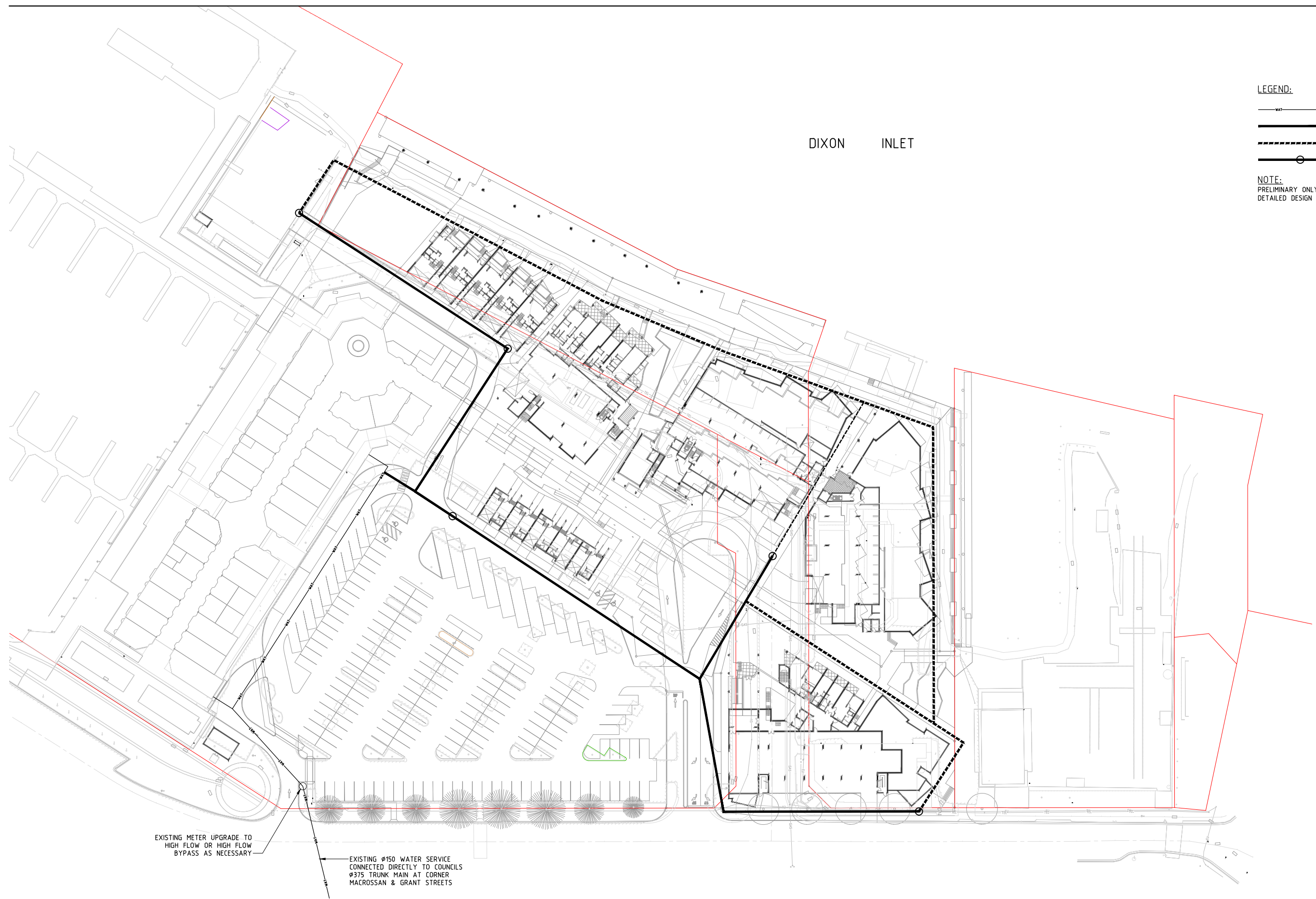
6



LEGEND:

- EXISTING Ø150 WATER SERVICE
- PROPOSED NEW Ø150 WATER SERVICE
- PROPOSED NEW 50Ø WATER SERVICE LOOP
- PROPOSED NEW HYDRANT LOCATIONS

NOTE:
PRELIMINARY ONLY. ALL SUBJECT TO
DETAILED DESIGN & DOCUMENTATION



EXISTING METER UPGRADE TO
HIGH FLOW OR HIGH FLOW
BYPASS AS NECESSARY

EXISTING Ø150 WATER SERVICE
CONNECTED DIRECTLY TO COUNCIL'S
Ø375 TRUNK MAIN AT CORNER
MACROSSAN & GRANT STREETS

WHARF STREET

| | | |
|-----|------------------------|----------|
| A | FOR PRELIMINARY REVIEW | 26/08/16 |
| SUE | DESCRIPTION | DATE |

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PRELIMINARY

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5 0 5 10 15 20 25 m

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Client
**STUDIO TEKTON
PTY LTD**

Project
**PROPOSED REEF MARINA
DEVELOPMENT**

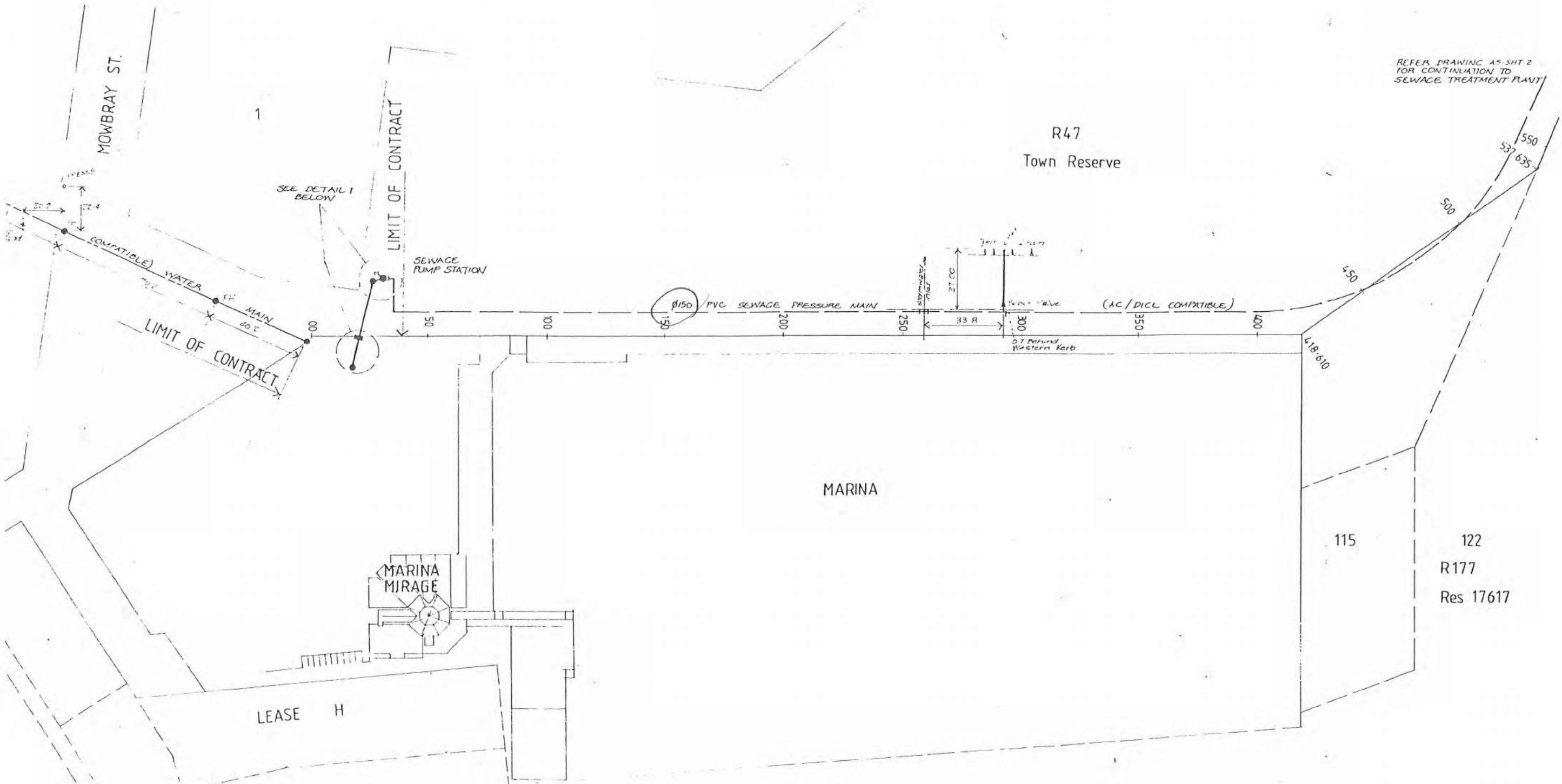
Drawing Title
**PROPOSED SITE SCHEMATIC
WATER SERVICE PLAN**

| | | |
|--------------------------------|-----------------|---------------|
| Drawn NP | Designed - | Verified - |
| Approved - | Date AUG '16 | |
| Drawing Number 16470-SK-W01 | Revision A | |

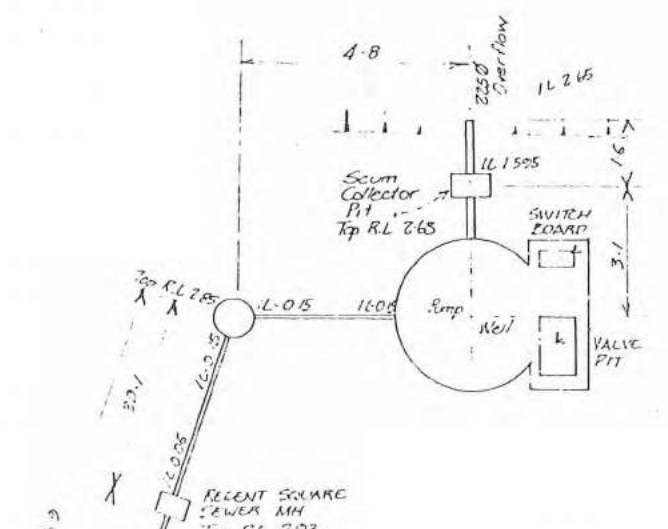
| WATER DEMANDS | | | | | |
|---|---------|--|----------|--|--|
| FNQROC | EP/unit | | | | |
| DOMESTIC - Proposed | | | | | |
| 9x4bed | 2.8 | | 25.2 | | |
| 31x3bed | 2.2 | | 68.2 | | |
| 44x2bed | 1.6 | | 70.4 | | |
| 16x1bed | 1 | | 16 | | |
| COMMERCIAL - Proposed | | | | | |
| GFA/90 sqm for 2732 sqm | 1 | | 30.4 | | |
| COMMERCIAL - Existing | | | | | |
| GFA/90 sqm for 5340 sqm | 1 | | 59.3 | | |
| BOAT MARINA - Proposed | | | | | |
| 164 berths (assume as for recent planning approval 0.1 EDC/berth = 0.28 EP/berth) | 0.28 | | 45.9 | | |
| | | | | | |
| total EP | | | 315.4 | | |
| FLOW CALCULATIONS | | | | | |
| Average Day (AD) = 500 l/p/d | | | 157704.4 | | |
| Mean Day Maximum Month (MDMM) = 1.5xAD | | | 236556.7 | | |
| Peak Day (PD) = 2.25xAD | | | 354835 | | |
| Peak Hour (PH) = PD/12 (l/h) | | | 29569.6 | | |
| PH (l/s) | | | 8.2 | | |

| | | | | | |
|--|-----------------------|--|-----------------|-------------------|--|
| | FIRE | | | | |
| | FNQROC | | | | |
| | Residential | | 15l/s for 2 hr | 1 hydrant @ 2hrs | |
| | Commercial Industrial | | 30l/s for 4 hrs | 1 hydrant @ 4 hrs | |

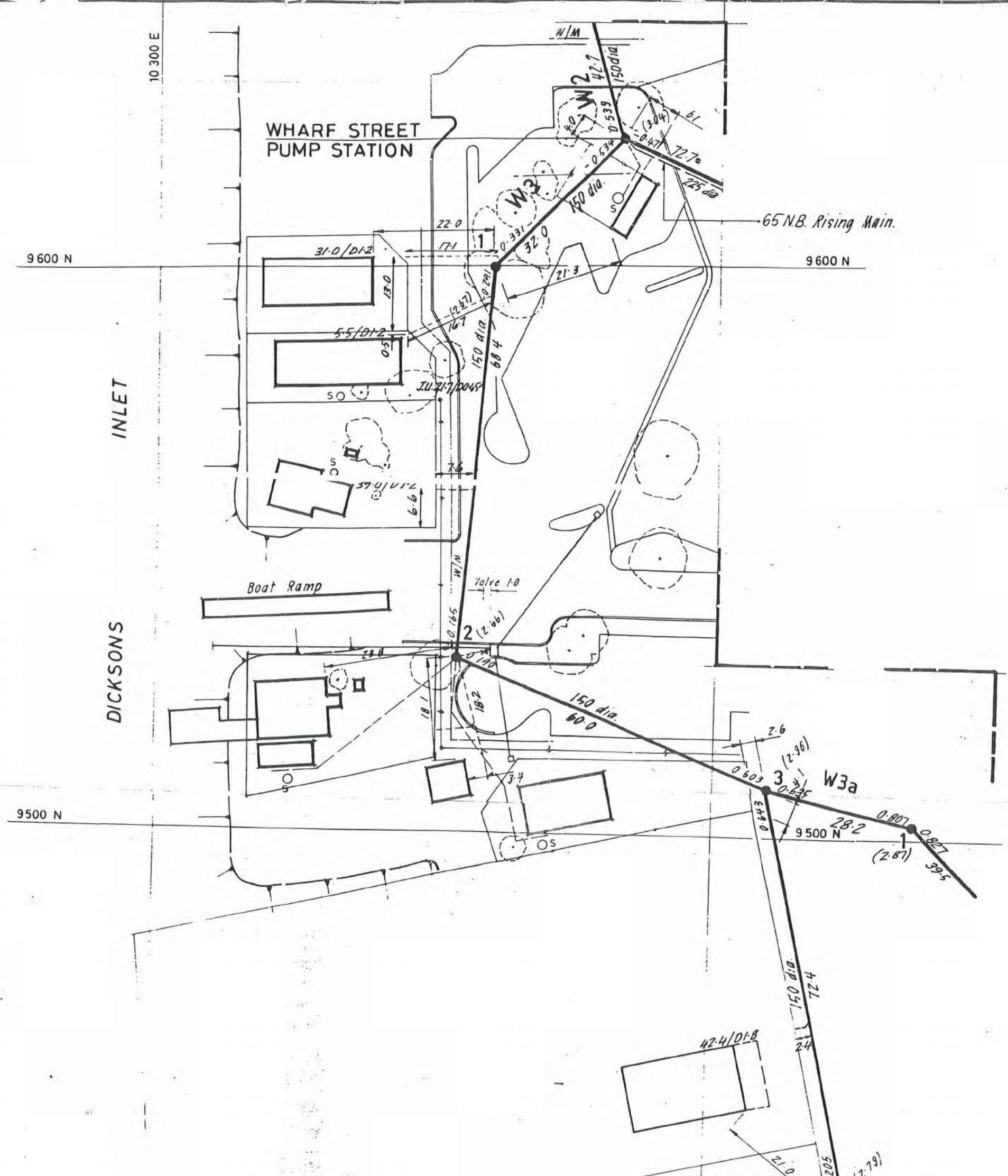
APPENDIX D



REFER DRAWING AS-SHT 2 FOR CONTINUATION TO SEWAGE TREATMENT PLANT



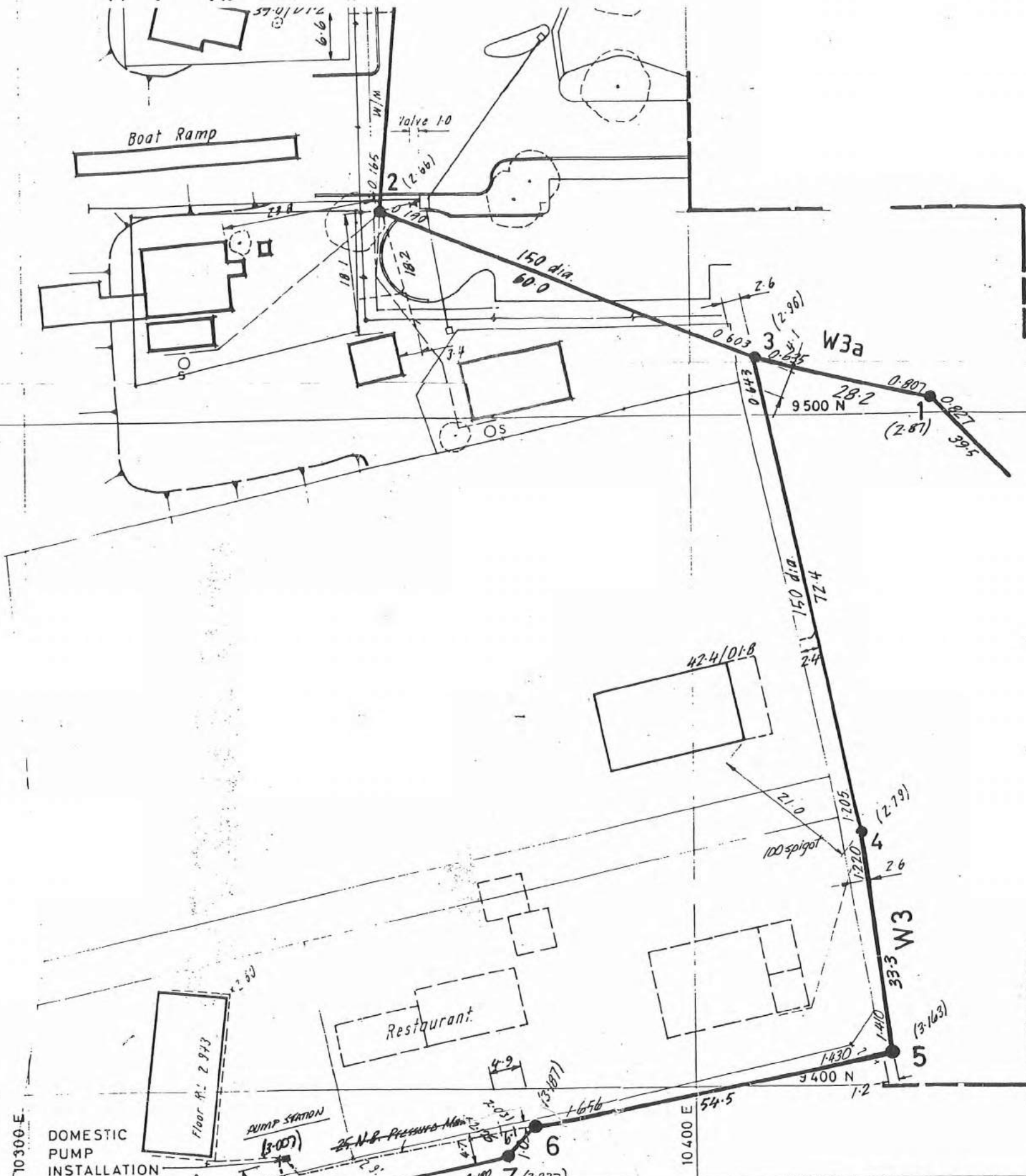
engineers
GUTTERIC
MIRAGE P



DICKSONS

9500 N

9400 N



NOTES • For Notes refer dwg. 53758/4



DOMESTIC PUMP INSTALLATION
Ref dwg. 53758/14

SIN.B. PRESSURE MAIN +100 OVERFLOW

PUMP STATION

25 N.B. PRESSURE MAIN

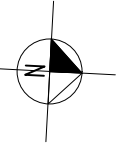
| | | | |
|-------------|--------|----------------------------|---------|
| LEVEL DATUM | | State | |
| REF. B.M. | | B.M. 4 R.L. 3.057 | |
| | | Gr. Wharf St. & Warner St. | |
| AZIMUTH | | | |
| FIELD B. | 375/11 | DESIGNED | KE. BY. |
| LEVEL B. | 375/11 | DRAWN | EH |
| PLOTTED | | CHECKED | |

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CONSULTING ENGINEERS
QUEENSLAND • AUSTRALIA

PASSED DATE *[Signature]*
DATE 18-3-83.

DOUGLAS SH
PORT DOUGLAS S
DETAIL PI

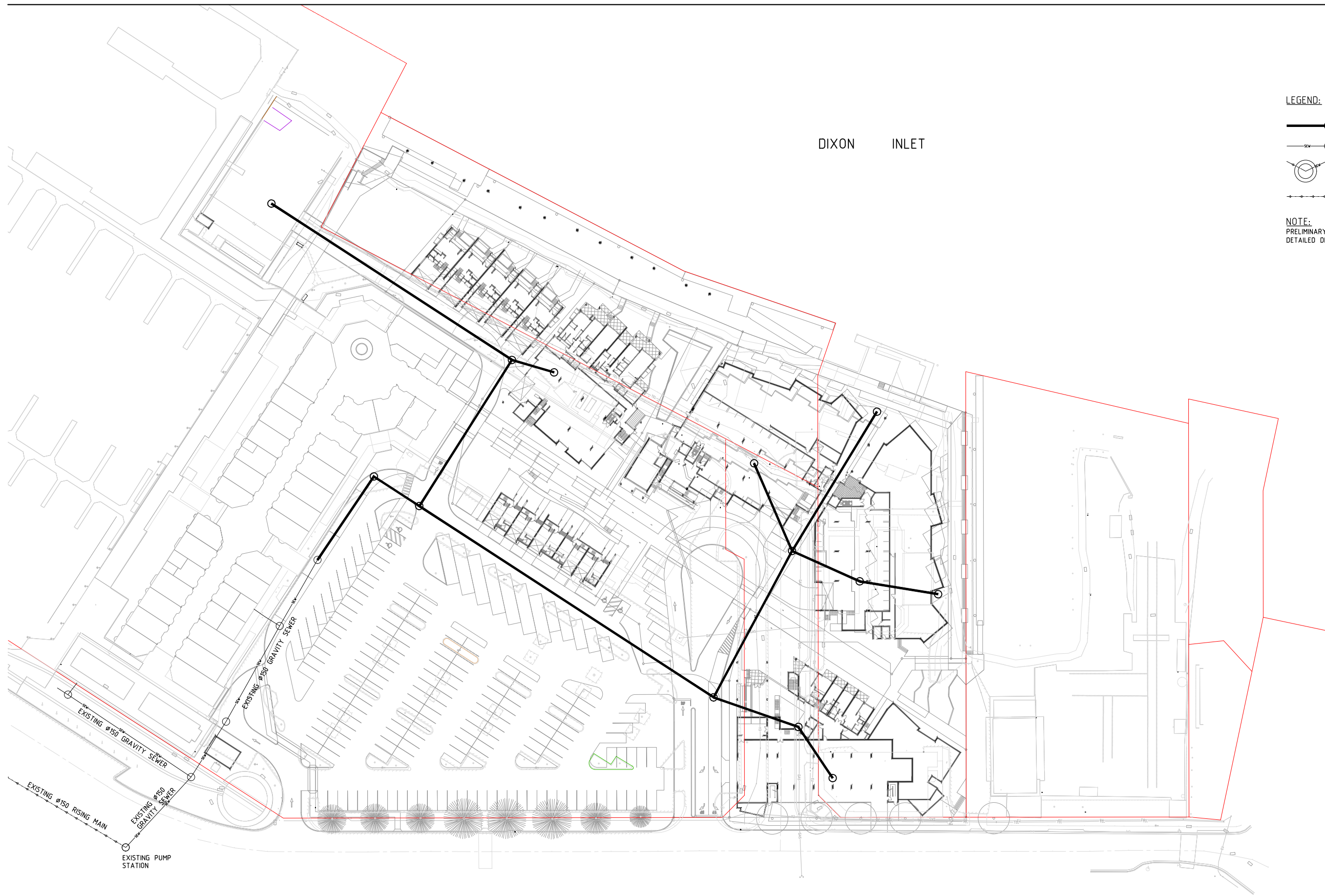
SCALE 0 5 m
U.S.N.



LEGEND:

- PROPOSED NEW Ø150 GRAVITY SEWERS AND MANHOLES
- EXISTING Ø150 GRAVITY SEWER
- EXISTING COUNCIL PUMP STATION
- EXISTING COUNCIL Ø150 RISING MAIN

NOTE:
PRELIMINARY ONLY. ALL SUBJECT TO DETAILED DESIGN & DOCUMENTATION



DIXON INLET

WHARF STREET

| | | |
|-----|------------------------|----------|
| A | FOR PRELIMINARY REVIEW | 26/08/16 |
| SUE | DESCRIPTION | DATE |

| |
|--------------------|
| Drawing Status |
| PRELIMINARY |

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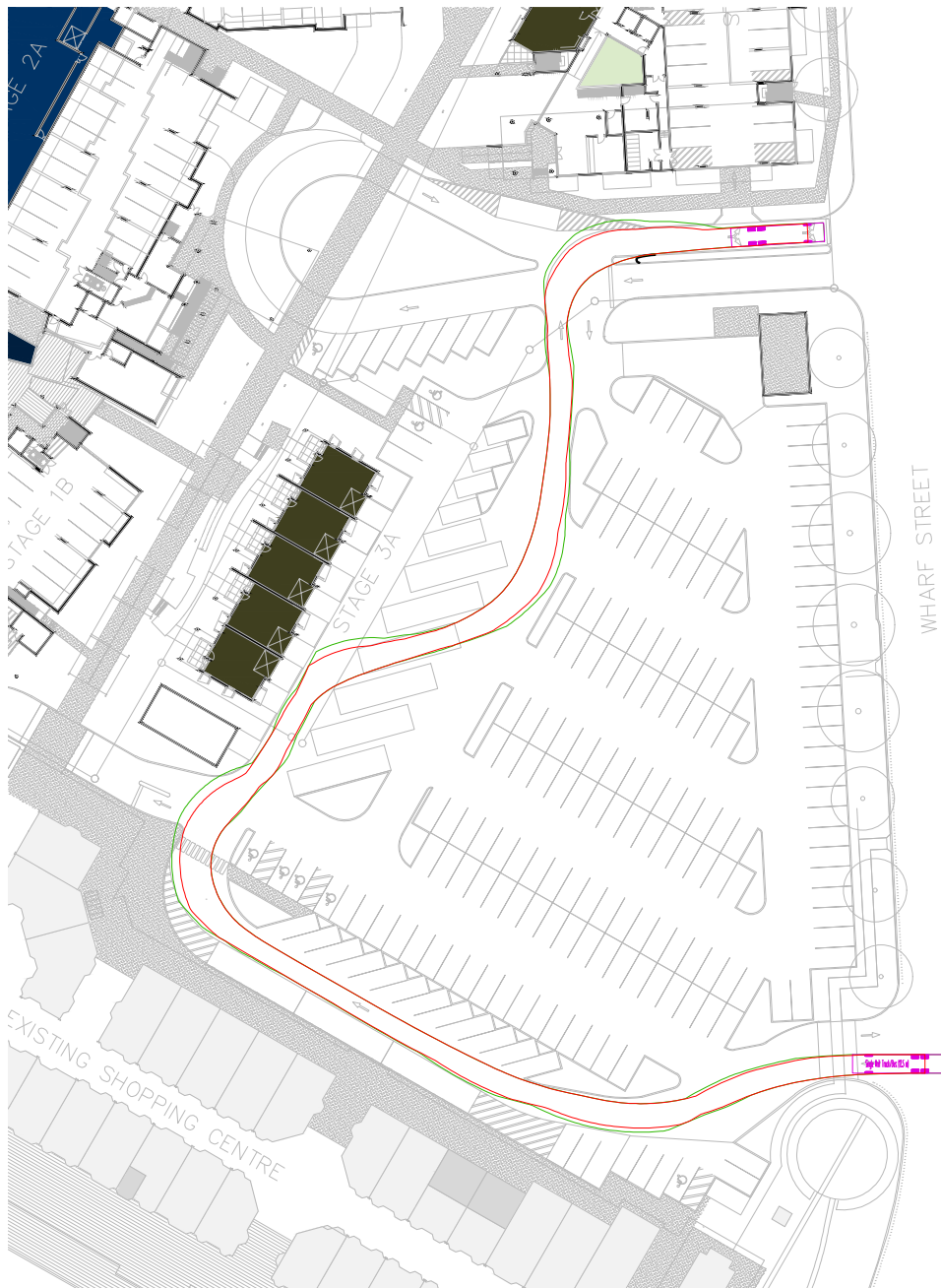
| | |
|---------|---|
| Project | PROPOSED REEF MARINA DEVELOPMENT |
|---------|---|

| | |
|---------------|---|
| Drawing Title | PROPOSED SITE SCHEMATIC SEWER SERVICE PLAN |
|---------------|---|

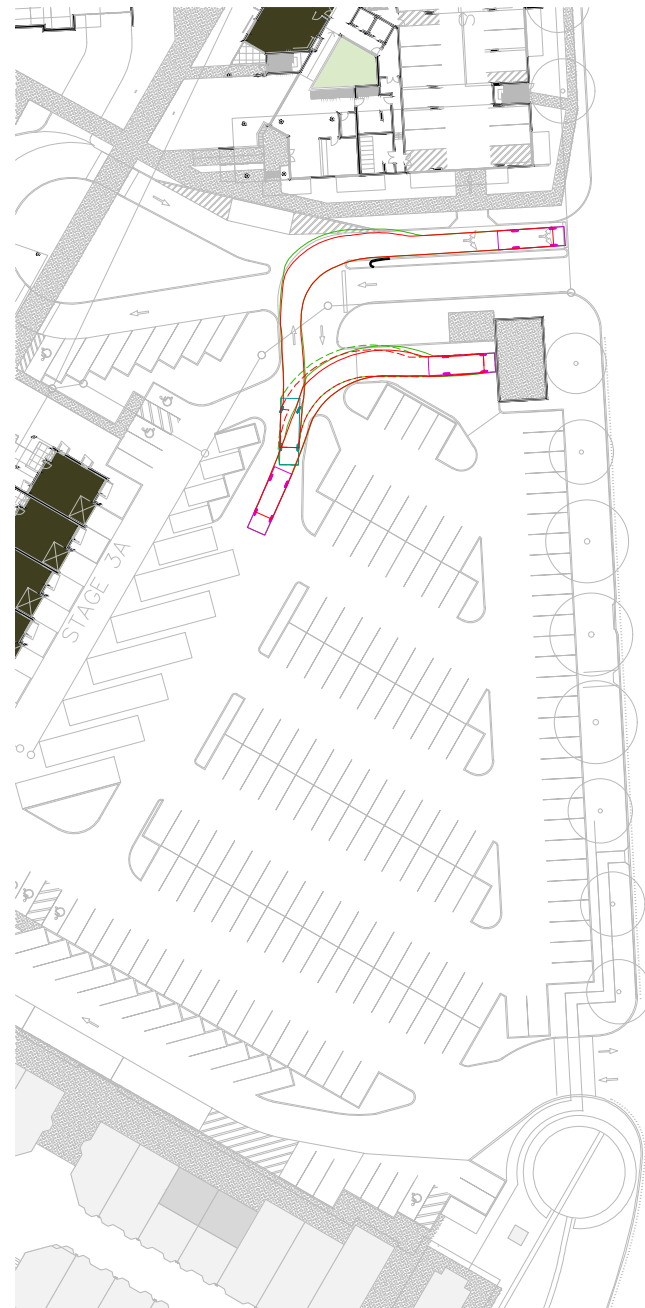
| | | |
|--------------------------------|-----------------|---------------|
| Drawn NP | Designed - | Verified - |
| Approved - | Date AUG '16 | |
| Drawing Number 16470-SK-S01 | Revision A | |

| | | | | |
|--|---|--------|----------|--|
| | SEWERAGE FLOWS | | | |
| | FNQROC | EP/bed | | |
| | DOMESTIC - Proposed | | | |
| | 9x4bed | 2.8 | 25.2 | |
| | 31x3bed | 2.2 | 68.2 | |
| | 44x2bed | 1.6 | 70.4 | |
| | 16x1bed | 1 | 16 | |
| | COMMERCIAL - Proposed | | | |
| | GFA/90 sqm for 2732 sqm | 1 | 30.4 | |
| | COMMERCIAL - Existing | | | |
| | GFA/90 sqm for 5340 sqm | 1 | 59.3 | |
| | BOAT MARINA - Proposed | | | |
| | 164 berths (assume as for recent planning approval 0.1 EDC/berth = 0.28 EP/berth) | 0.28 | 45.9 | |
| | total EP | | 315.5 | |
| | FLOW CALCULATIONS | | | |
| | average dry weather flow (ADWF) at 270l/p/d | | 85172.4 | |
| | Peaking Factor $C1=15 \times (EP)^{-.1587}$ | | 6.42 | |
| | Peak Wet weather flow l/d | | 546806.8 | |
| | Peak wet weather flow l/s | | 6.3 | |

APPENDIX E



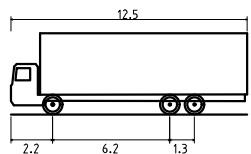
12.5m BUS TURN PLAN
SCALE: 1:500



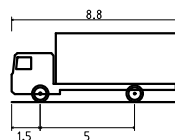
**MRV / FNQROC GARBAGE TRUCK
REVERSE TURN PLAN**
SCALE: 1:500



**MRV / FNQROC GARBAGE TRUCK
CAR PARK TURNAROUND TURN PLAN**
SCALE: 1:500



Single Unit Truck/Bus (12.5 m)
Overall Length 12.500m
Overall Width 2.500m
Overall Body Height 4.300m
Min Body Ground Clearance 0.490m
Track Width 2.500m
Lock-to-lock time 6.00s
Curb to Curb Turning Radius 12.500m



MRV - Medium Rigid Vehicle
Overall Length 8.800m
Overall Width 2.500m
Overall Body Height 3.633m
Min Body Ground Clearance 0.428m
Track Width 2.500m
Lock-to-lock time 4.00s
Curb to Curb Turning Radius 10.000m

LEGEND

- VEHICLE OUTLINE
- FORWARD MOVEMENTS**
- WHEEL TRACKING
- VEHICLE SWEEP PATH
- REVERSE MOVEMENTS**
- WHEEL TRACKING
- VEHICLE SWEEP PATH

| ISSUE | DESCRIPTION | DATE |
|-------|------------------------|----------|
| B | REVISED CARPARK LAYOUT | 12/09/16 |
| A | FOR PRELIMINARY REVIEW | 01/09/16 |

Drawing Status
PRELIMINARY

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Orig. Sheet A1
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0 5 10 15 20 25 m

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A.C.N. 126 211 461

Client
**STUDIO TEKTON
PTY LTD**

Project
**PROPOSED REEF MARINA
DEVELOPMENT**

Drawing Title
TURN PATH PLANS

| Drawn | Designed | Verified |
|----------------|----------|----------|
| NP | - | - |
| Approved | - | Date |
| - | - | AUG '16 |
| Drawing Number | Revision | |
| 16470-SK-TP01 | B | |

APPENDIX: 12



Reef Marina Port Douglas

LANDSCAPE CONCEPT REPORT - rev 1
SEPTEMBER 2016



Prepared for

The Reef Marina
44 Wharf Street,
Port Douglas. QLD |
T 07 40995775
thereefmarina.com.au



Submission Status

Planning Proposal [1]
16/09/2016

This statement should be read in conjunction with Scott Carver Landscape Planning proposal drawings 20160045_LD_DA, dated September 2016. Prepared by Scott Carver

This Design Report provides an explanation that verifies how the development addresses how design quality principles are achieved, and demonstrates, in terms of the Douglas shire development codes, how the objectives and relevant sections have been achieved.

Charlie Robinson = [Associate | RLA 5898]
[Senior Landscape Architect]

Scott Carver Pty Ltd

**Level One, One Chifley Square,
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+61 2 9957 3988
www.scottcarver.com.au**

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Contents

1.0 INTRODUCTION + CONTEXT

- 1.1 Local Context
- 1.2 Site Overview and Development Description

2.0 VISION

- 2.1 Vision Statement
- 2.2 Vision

3.0 DESIGN PRINCIPLES AND ANALYSIS

- 3.1 Design principles & Analysis
- 3.2 Existing Natural Environment
- 3.3 Access and Circulation
- 3.4 Activation
- 3.5 Program

4.0 MASTERPLAN

- 4.1 Concept Master Plan
- 4.2 Masterplan
- 4.3 Detailed Plan
- 4.4 Walkable Waterfront
- 4.5 The Village Green
- 4.6 Arbor Walk
- 4.7 Detailed Plan
- 4.8 Marina Drop Off
- 4.9 The Plaza

5.0 PUBLIC ART STRATEGY + INTERPRETATIONAL ART

- 5.1 Public Art Strategy + Interpretation Art

6.0 INDICATIVE PLANTING PALETTE

- 6.1 Planting Palette
- 6.2 Indicative Planting Palette

7.0 INDICATIVE MATERIAL PALETTE

- 7.1 Material Palette
- 7.2 Indicative Material Palette

APPENDIX A: 20160045_LD_DA 100-205
Planning proposal drawing set

APPENDIX B:

Douglas Shire Council Landscape Policy 7 - 2006
Port Douglas Waterfront Master Plan Landscape Design Guide
Waterfront Master Plan Indigenous Cultural Assessment 2009
Port Douglas Waterfront Master Plan 2009

Introduction + Context





local context+

1.2 Site Overview + Development Description

SITE OVERVIEW

This report outlines the planning proposal that would lead to the re-development/revitalization of The Reef Marina, Port Douglas. The site is approximately 14,585m² and is to be developed for mixed residential and commercial use.

This design report demonstrates the quality of the public domain and private open space provisions and embellishments.

DEVELOPMENT DESCRIPTION

A crucial element to the success of the development is the activation of the waterfront, creating a cultural destination for visitors and residents. This is achieved through a variety of linked passive and active spaces maximising views to the waterfront. Flexible open space allows for both public and private recreational use such as cultural community activities, markets, resting and gathering opportunities. The boardwalk along the waterfront will enable walking and jogging, while acting as a link to surrounding green spaces.

The revitalization of Reef Marina has the opportunity to integrate and represent a number of environmental and heritage features that greatly benefit the village and tropical character of the region. The use of shady native vegetation and significant exotic plant species to the area will be a crucial element in establishing the tropical park-like character of Port Douglas in the development. Interpretive signage will also be used to capture the character of Port Douglas.



Site Image: Reef Marina, Port Douglas

Vision



2.1 Vision Statement

‘THE REEF MARINA - PORT DOUGLAS’



“ To enhance the experience of residents & visitors along the waterfront destination and revitalize the Reef Marina

”

2.2 Vision

Cultural destination+

The landscape proposal is designed to complement the architecture of the proposed development, while providing environmental amenity within an attractive tropical setting. The design will provide and enhance the community's connection with the heritage and tourism of the site and it's surroundings to the wider context. Interpretation, public art and signage will play a critical role in enabling this connection. The Reef Marina precinct is to be re branded as a waterfront destination and this sense of place of the site will restore, reinforce and forge a new community identity and ownership.

Tropical identity+

The landscape and public domain along the waterfront presents an opportunity to balance the built form with the *natural while creating a destination for visitors and residents*. The landscape masterplan of the Reef Marina seeks to draw from the sites existing tropical ecology and setting. The planting aims to complement the site character with color, variation, and strong defined forms being the focus of the palette. The Landscape planting for the site will have a minimum of 60% of indigenous / water sensitive planting species. The planting palette will be carefully selected to provide continuity between developed and undeveloped areas within this region.

Walkable & Connected Waterfront+

To create a high quality mixed use development involving commercial, retail and residential appropriate to the local waterfront setting. The intent is to design a walkable destination and waterfront by improving access to and within the site, presenting an opportunity to link existing open spaces. This design will activate the waterfront; including a boardwalk, outdoor dining experiences and maritime activities. Improved access and walkability will benefit Port Douglas by connecting the Town Centre to its waterfront, creating a central destination for both residents and visitors. These outcomes are achieved with a natural material palette and tropical landscape setting reflective of Port Douglas.



Design Principles + Analysis



3.1 Design Principles + Analysis

LANDSCAPE OBJECTIVES / PRINCIPLES

The landscape master plan will address the following design objectives:

- Enhance the appearance and amenity of the proposed mixed use development by sensitively integrating architecture and landscape through effective site planning and landscape design consistent with the tropical character in Port Douglas
- Create an identifiable waterfront development and public domain with a range of inviting safe and accessible open spaces for residents and visitors with a strong pedestrian focus.
- Improve public access and pedestrian access to the waterfront for activities including walking, cycling and viewing.
- Take forward the landscape principles and urban design principles established by the **Douglas Shire Landscape Policy 7- 2006 - and other studies.**
- Establish a visually and environmentally sensitive landscape, complimentary to the architectural vision and greater village setting, while selecting materials consistent with the tropical character of Port Douglas
- Create a shady park-like atmosphere through the selection and placement of planting that features and showcases native species to the region.
- Assimilate the development into the surrounding town centre context through the development of an integrated and permeable landscape and open space environment
- Incorporate water sensitive urban design principles and

environmentally sensitive design to create a low maintenance, environmentally sensitive landscape that has a distinctive shady tree canopy with diverse low shrub groundcover and expanses of lawn reflective of the tropical region.

- Acknowledge the cultural heritage in Port Douglas through art, design, interpretation and story telling.
- Create a variety of high quality public open spaces which can accommodate a range of active and passive recreational and social activities.
- Ensure accessibility for all within a safe and secure urban domain whilst accommodating a range of passive recreational and social activities within the public domain.
- Establish the Reef Marina as a regionally and internationally recognised tourist destination.

Water sensitive urban design (WSUD) principals have been incorporated into the landscape materplan.

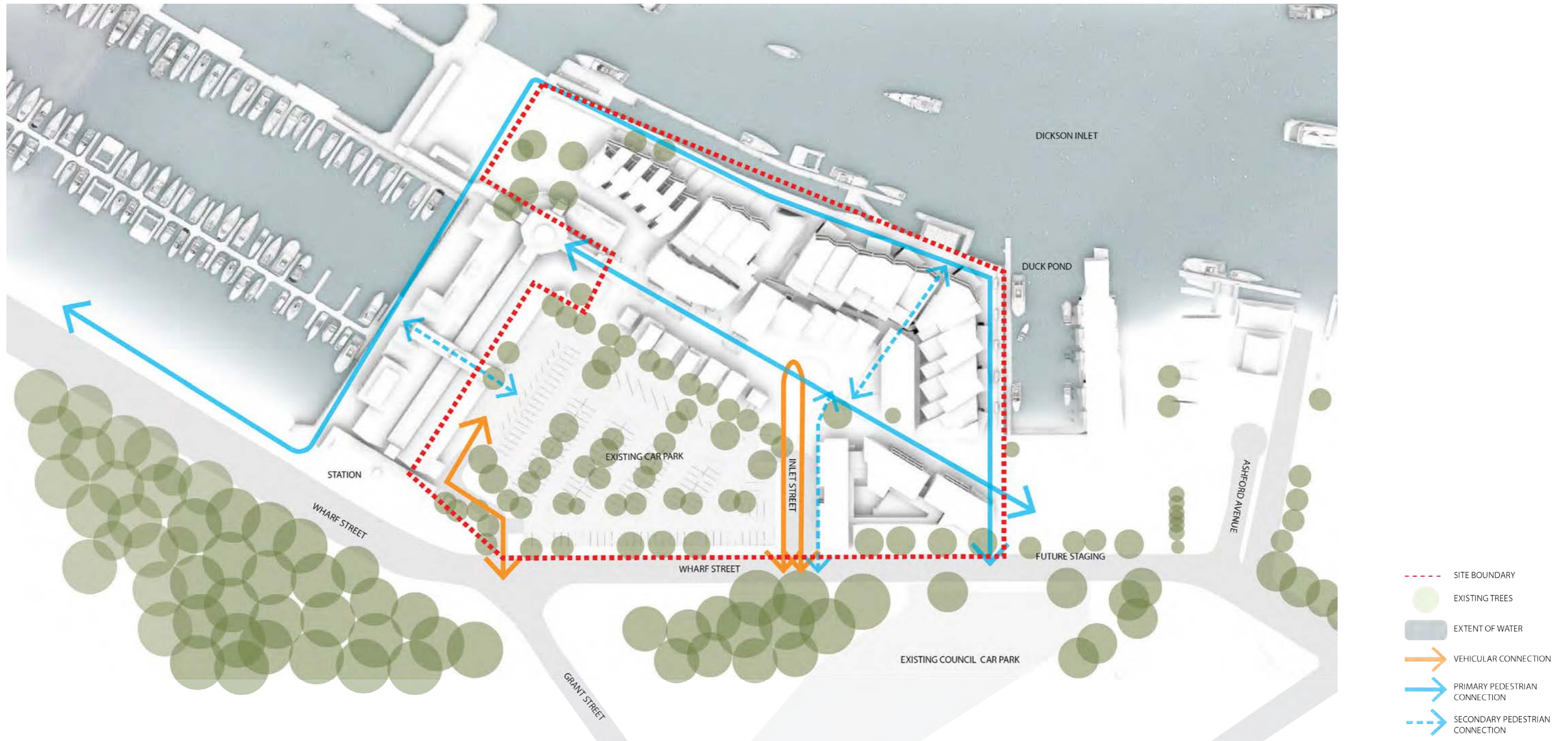
The Landscape planting for the site will have an extensive native shady canopy and complement the existing tropical character. The Landscape planting for the site will have a minimum of 75% of indigenous / water sensitive planting species.



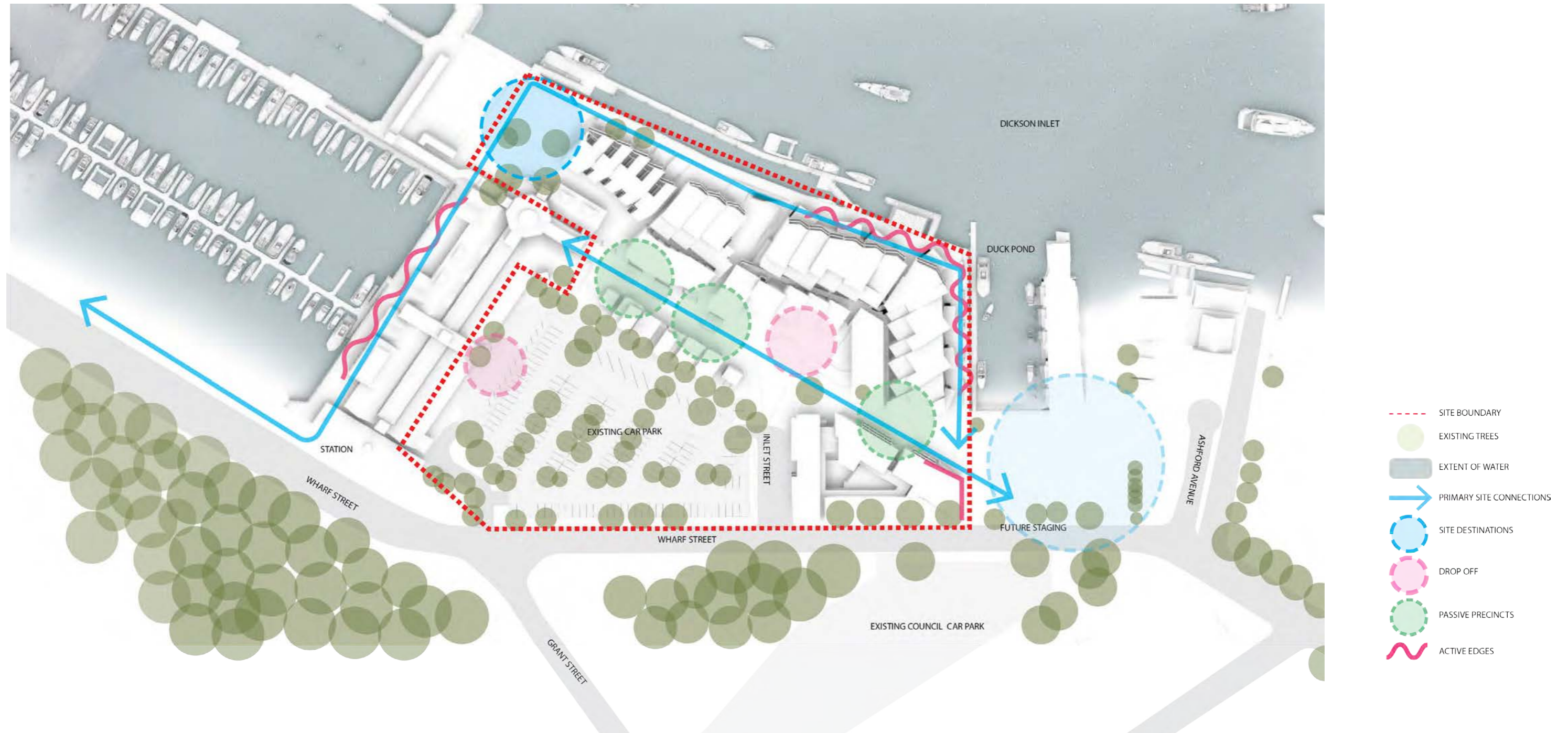
3.2 Existing natural environment



3.3 Access + Circulation



3.4 Activation



3.5 Program



- SITE BOUNDARY
- EXISTING TREES
- EXTENT OF WATER
- SITE CONNECTION
- 🚌 🚶 TRANSPORTATION HUB + SHADED WAITING SPACES
- 🚶 BOARDWALK PROMENADE
- 🎭 OUTDOOR THEATRE + PERFORMANCE
- 🪑 BREAK OUT SPACE
- 🌳 🌳 PASSIVE + SHADED SPACES
- ☕ ☕ CAFE + RETAIL SPACES
- ☕ ☕ CAFE + RETAIL SPACES
- 🏢 FUTURE TOWN CENTRE + PLAZA
- 💦 WATER PLAY + FEATURE
- 🛒 COMMUNITY MARKETS

Master plan



4.1 Concept Master Plan

OVERVIEW / DESIGN INTENT

The site is broken up into

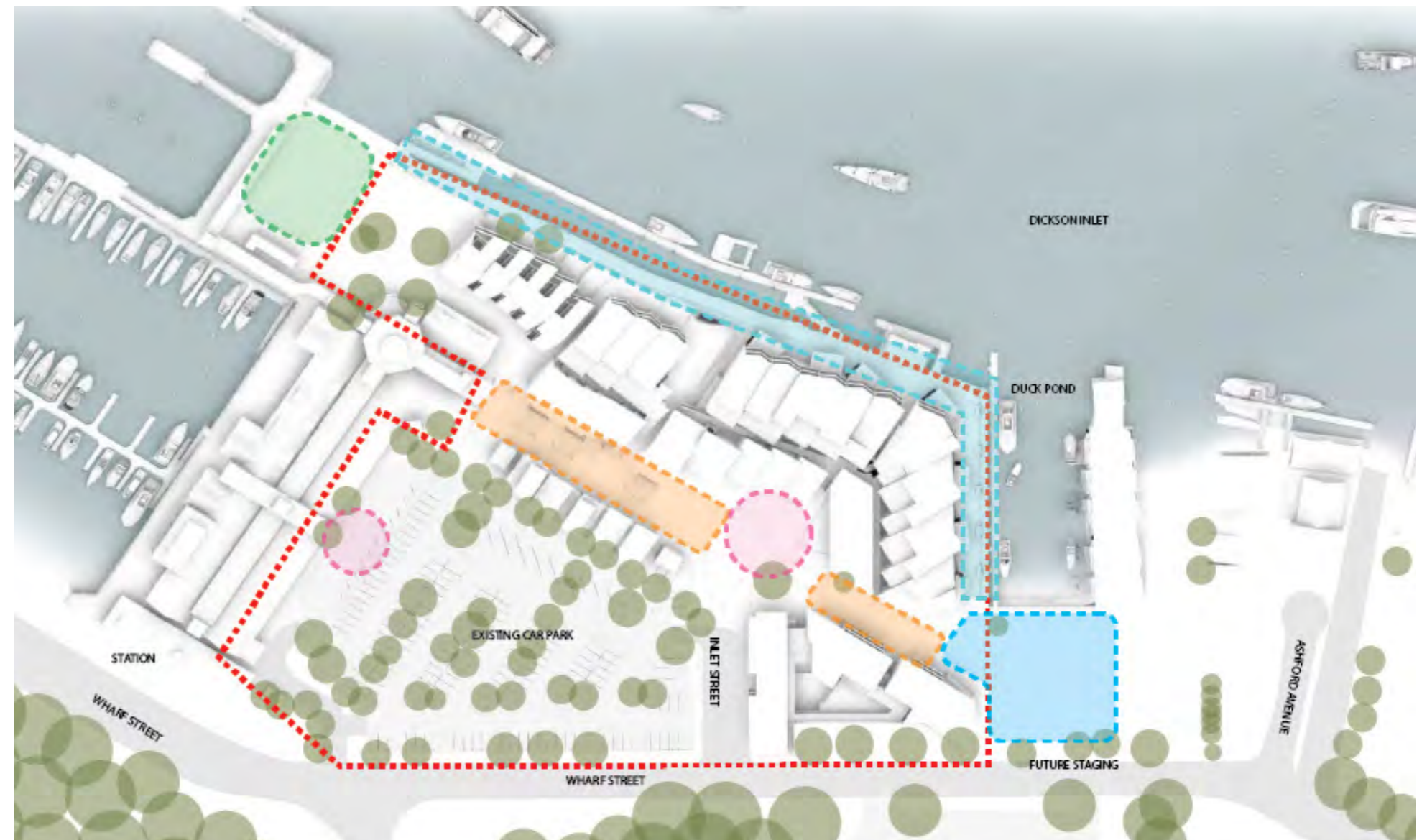
“Waterfront Drop Off” is a significant entry/exit node for visitors to the waterfront, particularly groups. The drop off is significant as it should provide signage and interpretation to the heritage of the area, furthermore it should clearly outline the key areas within The Reef Marina for tourists to navigate throughout the site.

“The Rainforest Walk” provides a significant connection between “The Green” and shopping centre to “The Plaza”. The Rainforest Walk provides shaded passive spaces, consisting of masses of lush tropical shaded vegetation to act as a buffer from the residential developments. A natural material palette is adopted to retain consistency with the local context. The rainforest walk will also feature a series of signage + artwork elements to assist with wayfinding through out the site.

“The Green” provides a gathering space for open recreation and gatherings surrounded by both a residential and commercial edge. The green provides an opportunity for outdoor performance, with a pavilion and stage and weekend markets for community interaction. The green will also include opportunities for resting and gathering within a shaded tropical setting, with views to the waterfront.

“Walkable Waterfront” will be the spine of the development. The publicly accessible waterfront will include a boardwalk connection between The Plaza and The Green with opportunities for retail engagement, viewing platforms and public art. The waterfront precinct will include a mix of natural materials and an appropriate planting strategy to reinforce the coastal village character of Port Douglas.

“The Plaza” has a unique estuarine and village character which provides a transition from the rainforest walk and the surrounding open green space. The plaza will have a programmed edge relating to both the marina and retail spaces along with a flexible central space to allow for market and public gatherings. The plaza incorporates a stage for outdoor performances, shaded tree planting along the edges, seating opportunities and public art + water play elements.





⊖ N.T.S
 Plans shown for reference only. Refer to LD-DA-101 for information.

master plan+

- 1: The Green - A shaded open lawn space with outdoor performance stage. Trees frame sweeping views to Dickson Inlet.
- 2: Shared low traffic volume lane. Large palms define the open lawn area and retail break out space with opportunity for public art.
- 3: Walkable Waterfront: Provides secondary pedestrian access. Estuarine boardwalk with seating, viewing platforms, lighting and public artwork engages pedestrians with Dickson Inlet. Tropical planting creates shade and a buffer between the private residents and the publicly accessible promenade.
- 4: Rainforest Walk. Remnant structural steel arbors with bougainvillea climbers will frame the connection between The Village Green and The Plaza. Luscious rainforest planting references the wider landscape condition. Opportunity for informative signage and public art.
- 5: Private landscape courtyard for residential development to include BBQ facilities, seating opportunities and a communal pool.
- 6: Waterfront Drop Off. Clusters of *Archontophoenix alexandrae* planted on gentle mounding + public artwork announce the sense arrival into The Reef Marina development.



detailed plan+

⊖ N.T.S
 Plans shown for reference only. Refer to LD-DA-102 for information.

4.4 Walkable Waterfront

OVERVIEW / DESIGN INTENT

The waterfront provides an area for both visitors and the local community to enjoy with views over the waterfront. The precinct offers a range of activities to promote healthy work / life balance and create a dynamic engaging environment for all.

The objectives of the design is to reinforce the principles outlined in the Douglas Shire Council Planning Scheme Policy No 7 - Landscaping Design Guide and the Port Douglas Waterfront Masterplan Landscape Design Guide.

AMENITIES PROVIDED

- WiFi break out spaces for commercial areas
- Boardwalk along the waterfront
- Interpretational and story telling art pieces
- Signage and wayfinding
- Lighting
- Shaded seating areas overlooking waterfront
- Activated commercial edge
- Fishermen's Wharf and public seafood sales from trawlers



4.5 The Green

OVERVIEW / DESIGN INTENT

The Green provides substantial open space for a range of activities. The Green is framed by shaded planting, taking advantage of views over the waterfront.

The objectives of the design is to reinforce the principles outlined in the Douglas Shire Council Planning Scheme Policy No 7 - Landscaping Design Guide and the Port Douglas Waterfront Masterplan Landscape Design Guide.

AMENITIES PROVIDED

- Performance stage/ pavilion and stage
- Shaded planting framing this space, reflective of the tropical character of the site
- Lawn space for gathering and relaxing
- Views over the waterfront



4.5 The Green- illustrative perspective



4.6 The Rainforest Walk

OVERVIEW / DESIGN INTENT

The design for the rainforest walk represents the tropical character of Port Douglas, evident through lush, overgrown native bamboo and shaded trees. The design focusses on the through site link from the Marina Shopping Centre to the Plaza. The original context, and heritage of the site plays a significant role, this is evident in the arbour structures and interpretational signage and artwalk incorporated along the walk.

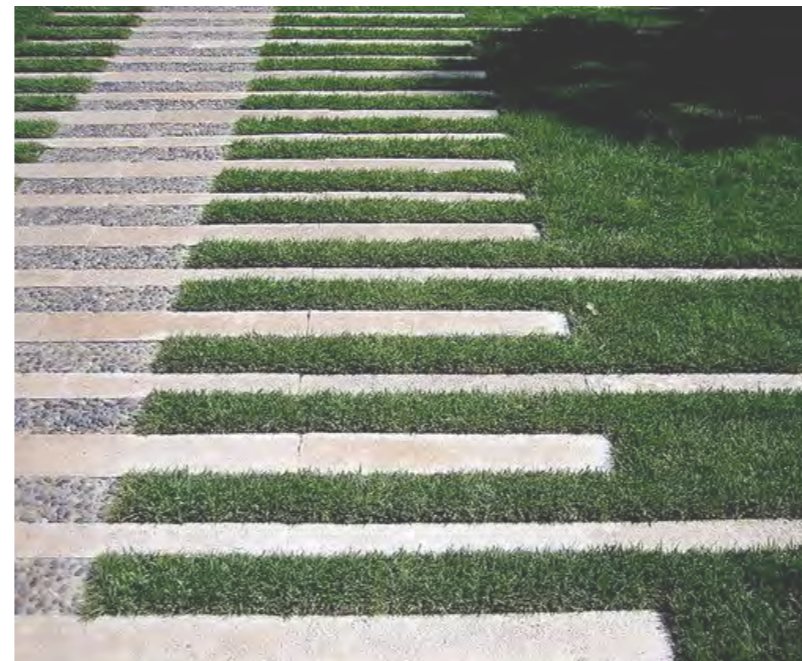
The objectives of the design is to reinforce the principles outlined in the Douglas Shire Council Planning Scheme Policy No 7 - Landscaping Design Guide and the Port Douglas Waterfront Masterplan Landscape Design Guide.



4.6 The Rainforest Walk

OBJECTIVES

- Enhancing biodiversity and habitat
- Create a quality Port Douglas Landscape
- Management of ecosystems , through a green corridor
- Improve Public Domain Quality
- Education and awareness of original heritage
- Aesthetics and scenic amenity
- Main site link and access



- 1: A relaxed entrance avenue planted with *Archontophoenix alexandrae* introduce visitors and residents into the Reef Marina. Entry walling + signage to Wharf Street.
- 2: Waterfront Drop Off. Clusters of *Archontophoenix alexandrae* planted on gentle mounding + public artwork announce the sense arrival into Reef Marina. Furthermore a shared zone creates a sense of arrival for pedestrians and vehicles when entering + leaving drop off area.
- 3: Walkable Waterfront: Estuarine boardwalk with seating, lighting and public artwork engages pedestrians with Dickson Inlet. Tropical planting creates a permeable transition between the retail break out spaces and the publicly accessible promenade.
- 4: Rainforest Walk. Remnant structural steel arbors with bougainvillea climbers will frame the connection between The Green and the Plaza. Luscious rainforest planting references the wider landscape condition. Opportunity for informative signage and public art.
- 5: Outdoor lounge rooms. Informal groves of shade tree planting provide opportunity for rest and refuge from the heat. Flexible seating arrangements.
- 6: The Future Plaza. A flexible open space framed by formal plantings of *Archontophoenix alexandrae*. Opportunity for markets, water play elements, outdoor performance and public artwork. The plaza to include seating for retail usage along with publicly accessible spaces.



→ N.T.S
Plans shown for reference only. Refer to LD-DA-103 for information.

→ detailed plan+

4.8 Waterfront Drop Off

OVERVIEW / DESIGN INTENT

The waterfront drop off is designed to welcome tourists and locals to the waterfront. As visitors drive into the Marina, they are welcomed by corten signage walls backdropped by palm trees, marking the Reef Marina as a destination. The drop off area is marked by an international art pieces reflective of the heritage of the site, also backdropped by palm trees. A change in the paving marks a change in this threshold, slowing down traffic as the drop off forms part of the harbour walk.

The objectives of the design is to reinforce the principles outlined in the Douglas Shire Council Planning Scheme Policy No 7 - Landscaping Design Guide and the Port Douglas Waterfront Masterplan Landscape Design Guide.

OBJECTIVES

- Entrance signage/ wall
- Creation of a destination
- Interpretational art/ public art strategy
- Shared pedestrian zones to aid site circulation
- Community access and recreation
- Education and awareness
- Managed site circulation/entry and exit
- Communal car & bike facilities



4.9 The Plaza • Future

OVERVIEW / DESIGN INTENT

The Plaza provides substantial open space to bring the community together for a range of events such as markets and retail break out space overlooking the waterfront. The plaza creates a link to the Town Centre and the wider context of the site.

The objectives of the design is to reinforce the principles outlined in the Douglas Shire Council Planning Scheme Policy No 7 - Landscaping Design Guide and the Port Douglas Waterfront Masterplan Landscape Design Guide.

AMENITIES PROVIDED

- Pavilion / outdoor stage
- Retail break out spaces
- Flexible open space
- Market space
- Water play
- Views over the waterfront
- Interpretational and story telling art pieces
- Framed by shaded tropical planting
- Fresh Seafood off trawlers



Public Art Strategy + Interpretational Art



5.1 Public Art Strategy + Interpretational Art

LANDSCAPE & ART STRATEGY SPECIFICS

Please refer to the **PUBLIC ARTS PLAN The Reef Marina Port Douglas:**

Prepared by **MILNE & STONEHOUSE Artists Sept 2016**

The Art/Interpretational strategy should reinforce all the themes as previously discussed. This strategy is to form part of a wider strategy for Port Douglas. The theme requires that the art and story telling draw on the history of the local indigenous communities “past use of the area.”

The understanding and interpretation of this original working waterfront is significant in understanding the development of the township. The many layers of cultural heriatge in Port Douglas is to be evident throughout the site through art, design, interpretation and storytelling.

OBJECTIVES:

To develop the amenity of the waterfront as a major component of the tourism experience

Selection of materials are reflective of the tropical/village character of the site

Signage should be easy to read and accessible

Public art strategy to form part of a wider interpretive signage strategy for the region



Indicative Planting Palette



6.1 Planting Palette

LANDSCAPE SPECIFICS

The plant palette used for the site should reinforce all the themes as previously discussed. The environmental theme requires that the planting palette draw from the existing local vegetation communities.

Street trees should respond to the street hierarchy and Council's street tree list

Proposed planting to reinforce existing site character in particular the Strangers Creek reserve area and adjoining bushland reserve and reflect the principals **Douglas Shire Council Landscape Policy 7 - 2006** and species outlined in the **Port Douglas Waterfront Master Plan Landscape Design Guide** species list.

The following list outlines the signature planting for the site and has been established with reference to the **Port Douglas Waterfront Master Plan Landscape Design Guide**

OBJECTIVES:

To increase the number of indigenous species planted in Douglas shire region

To eliminate the use of noxious weeds or potentially invasive species in developments

To use plants in such a way to foster energy efficient development that relies on passive energy principles for heating and cooling

To reduce maintenance and water consumption through appropriate species selection

To create buffer zones and add to existing areas of remnant vegetation with locally indigenous species

To incorporate Water sensitive urban design (WSUD) principals into the landscape masterplan and environmentally sensitive landscape features such as a bioswale, which add to the character and support ecological systems.

To promote an extensive native canopy and compliment the existing **Port Douglas Waterfront Master Plan Landscape Design Guide** The Landscape planting for the site will have a minimum of 75% of indigenous / water sensitive planting species.



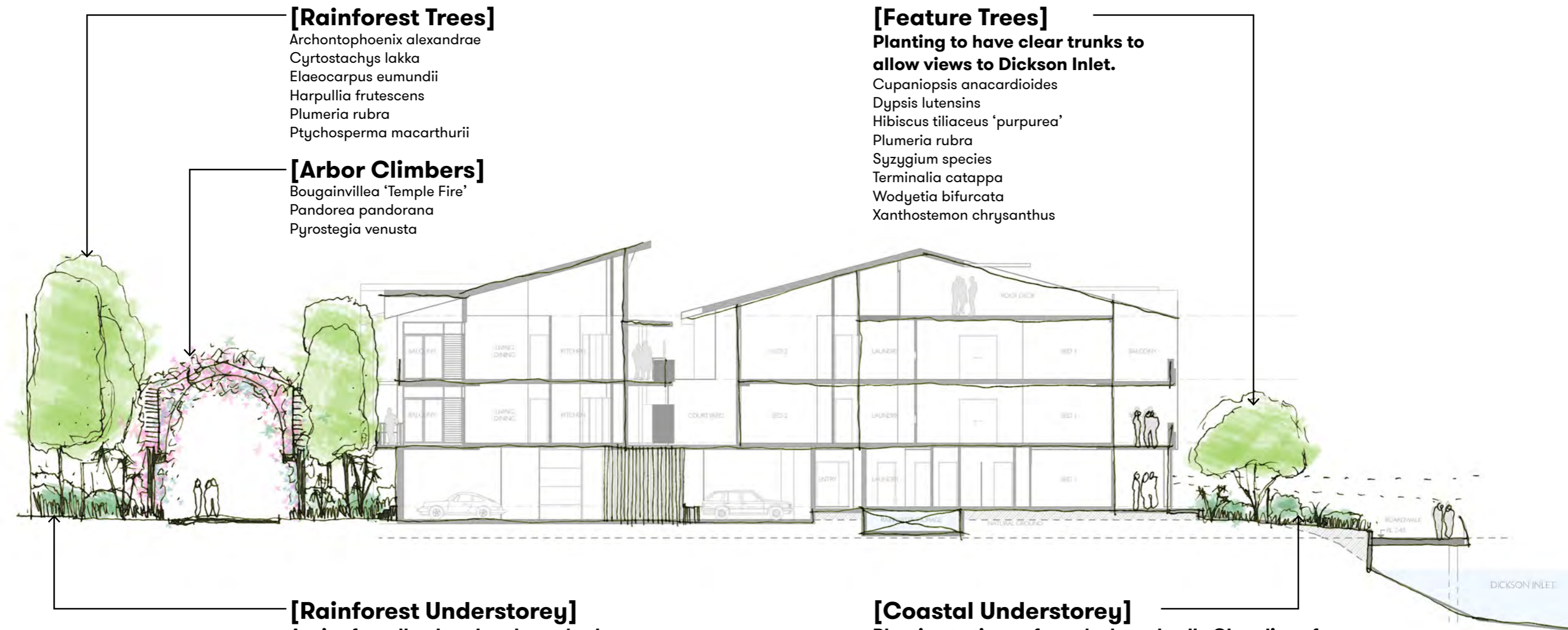
6.2 Indicative Planting Palette

| Botanic Name | Common Name | Native/ Exotic | Size |
|-----------------------------------|-------------------------|----------------|-------|
| Large Palms + Marker Trees | | | |
| Dyopsis lutescens | Golden Cane | Exotic | 2.1m |
| Pandanus cookii | Screwn Palm | Native | 100L |
| Ptychosperma macarthurii | MacArthur Palm | Native | 2.1m |
| Wodyetia bifurcata | Foxtail Palm | Native | 2.4ct |
| Shade + Rainforest Trees | | | |
| Cupaniopsis anacardioides | Tuckeroo | Native | 100L |
| Delonix regia | Poinciana | Exotic | 200L |
| Elaeocarpus bancroftii | Kuranda Quandong | Native | 100L |
| Elaeocarpus eumundii | Smooth Quandong | Native | 100L |
| Elaeocarpus grahamii | Graham's Quandong | Native | 100L |
| Elaeocarpus michaelii | Michael's Walnut | Native | 100L |
| Elaeocarpus reticulatus | Blue Berry Ash | Native | 100L |
| Harpullia arborea | Cooktown Tullip | Native | 100L |
| Harpullia frutescens | Tulipwood | Native | 100L |
| Harpullia pendula | Tulipwood | Native | 100L |
| Hibiscus tiliaceus 'purpurea' | Purple Hau Tree | Exotic | 100L |
| Hymenosporum flavum | Native Frangipani | Native | 100L |
| Macaranga tanarius | Macaranga | Exotic | 100L |
| Melia azedarach | White Cedar | Native | 100L |
| Melicope elleryana | Corkwood | Native | 100L |
| Plumeria rubra | Frangipani Tree | Exotic | 100L |
| Stenocarpus sinuatus | Wheel of Fire | Native | 100L |
| Syzygium australe | Creek Lily Pilly | Native | 100L |
| Syzygium luehmannii | Small Leaved Lily Pilly | Native | 100L |
| Syzygium 'jambos' | Lily Pilly | Exotic | 100L |
| Terminalia catappa | Sea Almond Tree | Native | 100L |
| Xanthostemon chrysanthus | Golden Penda | Native | 100L |
| Palms + Bamboo | | | |
| Archontophoenix alexandrae | Alexandra Palm | Native | 100L |
| Bambusa buddah | Buddah Belly bamboo | Exotic | 45L |
| Bambusa forbesii | Native Bamboo | Native | 300mm |
| Bambusa textilis | Slender Weaver bamboo | Exotic | 45L |
| Cyathea cooperi | Tree fern | Native | 300mm |
| Cycas revoluta | Sago Palm | Exotic | 300mm |
| Cyrtostachys lakka | Lipstick Palm | Exotic | 300mm |
| Dyopsis lutescens | Golden Cane | Exotic | 300mm |
| Licuala ramsyii | Fan Palm | Native | 45L |
| Livistona muelleri | Fan Palm | Native | 45L |
| Raphis excelsa | Rhaphis | Exotic | 45L |
| Zamia furfuracea | Jamaican Sago Palm | Exotic | 300mm |
| Shrubs + Accents | | | |
| Alocasia elephant ears | Elephant Ear | Exotic | 200mm |
| Alocasia brisbanensis | Native Lilly | Native | 150mm |
| Alpinia arctiflora | Native Ginger | Native | 150mm |
| Alpinia arctiflora | Common Ginger | Native | 150mm |

| Botanic Name | Common Name | Native/ Exotic | Size |
|--|------------------------|----------------|-------|
| Shrubs + Accents | | | |
| Ardisia crenata | Coral Bush | Exotic | 200mm |
| Asplenium australasicum | Bird's Nest Fern | Native | 200mm |
| Asplenium nidus | Bird's Nest Fern | Native | 200mm |
| Bauhinia galpinii | African Plume | Exotic | 200mm |
| Clivea miniata | Kaffir Lily | Exotic | 150mm |
| Codiaeum variegatum | Croton | Native | 200mm |
| Cordyline canniifolia | Native Cordyline | Native | 200mm |
| Cordyline rubra | Palm Lily | Native | 150mm |
| Crinum pedunculatum | Swamp Lily | Native | 200mm |
| Dianella caerulea | Flax Lily | Native | 150mm |
| Diets bicolor | African Iris | Exotic | 150mm |
| Doryanthes palmeri | Spear Lily | Native | 150mm |
| Glycosmis trifoliata | Pink Lime | Native | 200mm |
| Gardenia augusta 'Florida' | Dwarf Gardenia | Exotic | 150mm |
| Hymenocallis littoralis | Spider Lily | Exotic | 150mm |
| Hibiscus rosa sinensis | Rose of China | Exotic | 200mm |
| Ixora 'pink malay' | Pink Malay | Exotic | 200mm |
| Lepidozamia peroffskyana | Pinapple Zamia | Native | 200mm |
| Leptospermum polygalifolium | Tea Tree | Native | 200mm |
| Lomandra katrinus | Forest Mat Rush | Native | 200mm |
| Lomandra longifolia | Mat Rush | Native | 200mm |
| Lycoris radiata | Spider Lily | Exotic | 150mm |
| Metrosideros 'Tahiti' | NZ Christmas Bush | Exotic | 200mm |
| Murraya paniculata | Orange Blossom | Exotic | 200mm |
| Monstera deliciosa | Swiss Cheese Plant | Exotic | 200mm |
| Philodendron 'Xanadu' | Dwarf xanadu | Exotic | 200mm |
| Pittosporum rubiginosum | Red Pittosporum | Native | 200mm |
| Schefflera arboricola variegata | Umbrella Tree | Exotic | 300mm |
| Strelitzia reginae | Bird of paradise | Exotic | 200mm |
| Syzygium australe | Lillipilli | Native | 300mm |
| Tabernaemontana orientalis | Gondola Bush | Native | 300mm |
| Tibouchina 'Jules' | Dwarf Tibouchina | Exotic | 450mm |
| Groundcovers + Climbers | | | |
| Adiantum atroviride | Maidenhair Fern | Native | 140mm |
| Bougainvillea 'Temple Fire' | Temple Fire | Exotic | 140mm |
| Bromiliad species | Bromiliad | Exotic | 300mm |
| Epipremnum aureum | Pothos | Exotic | 200mm |
| Neoregelia "orange tart" | Bromiliad orange | Exotic | 200mm |
| Liriope muscari | Lilac beauty | Native | 140mm |
| Hoya australis | Native Hoya | Native | 140mm |
| Isolepis nodosa | Mat reed | Native | 140mm |
| Pandorea pandorana | Wonga Vine | Native | 140mm |
| Pyrostegia venusta | Orange Trumpet Creeper | Exotic | 140mm |
| Trachelospermum jasminoides variegated | Star Jasmine varigated | Exotic | 140mm |
| Trachelospermum jasminoides | Star Jasmine | Exotic | 140mm |
| Viola hederacea | Native violet | Native | 140mm |



6.3 Indicative Planting Layout



[Rainforest Trees]

- Archontophoenix alexandrae
- Cyrtostachys lakka
- Elaeocarpus eumundii
- Harpullia frutescens
- Plumeria rubra
- Ptychosperma macarthurii

[Arbor Climbers]

- Bougainvillea 'Temple Fire'
- Pandorea pandorana
- Pyrostegia venusta

[Feature Trees]

Planting to have clear trunks to allow views to Dickson Inlet.

- Cupaniopsis anacardioides
- Dyopsis lutensins
- Hibiscus tiliaceus 'purpurea'
- Plumeria rubra
- Syzygium species
- Terminalia catappa
- Wodyetia bifurcata
- Xanthostemon chrysanthus

[Rainforest Understorey]

A mix of small palms, bamboo, shrubs, grasses + groundcovers:

- Alocasia species
- Alpinia species
- Asplenium nidus
- Bambusa forbesii
- Bromeliads
- Cordyline rubra
- Cyathea cooperi
- Cyrtostachys lakka
- Doryanthes palmeri
- Hymenocallis littoralis
- Lepidozamia peroffskyana
- Zamia furfuracea

[Coastal Understorey]

Planting to tier up from the boardwalk. Clear line of sight through from private domain to Dickson Inlet.

A mix of small palms, bamboo, shrubs, grasses + groundcovers:

- Cordyline rubra
- Dyopsis lutensins
- Ixora 'pink malay'
- Licuala ramsyii
- Lomandra katrinus
- Murraya paniculata
- Schefflera arboricola variegata
- Strelitzia reginae

Indicative Material Palette



7.1 Materials Palette

The material palette has been prepared in conjunction with the following appendices

Cairns Regional Council - “Port Douglas Waterfront Master Plan Landscape Design Guide”

A fundamental premise of the landscape master plan is the selection of materials for the public domain and waterfront. For the Reef Marina site materials such as concrete paving, stone and timber are recommended as they reflect the regional and cultural setting

Materials should be selected to provide consistency throughout the development as well as to bring out the cultural values enriching the themes of open spaces.

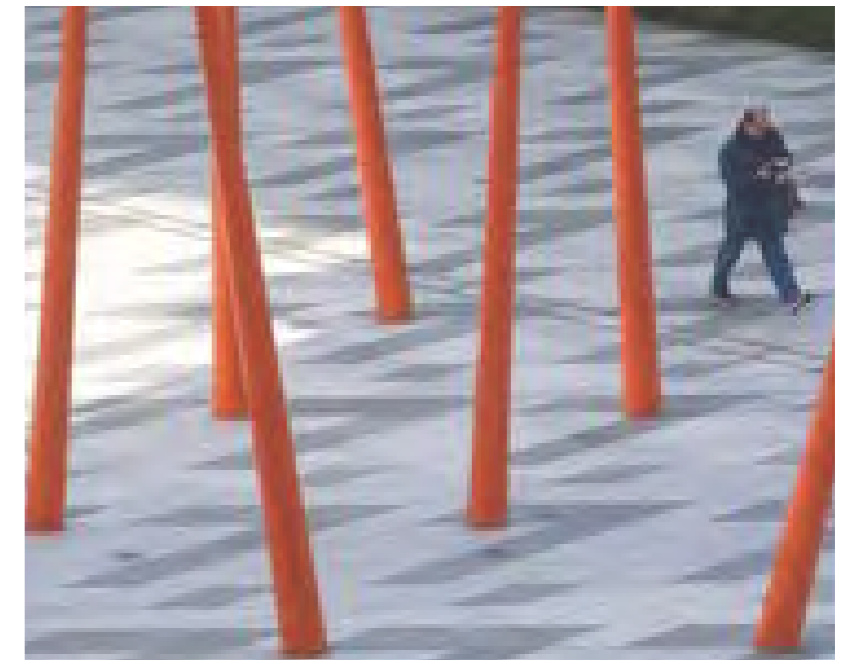
The material selection should be culturally sensitive throughout the public domain. The combination of grasses, trees and shrubs, as well as rock, sandstone, and timber should be explored and integrated into the public realm.

The material selection should reflect on going consultations with Douglas shire council representatives

Materials should be enduring and robust, have a low carbon footprint and be low maintenance.

The fundamental objectives of the proposed materiality is to:

- Design for Pedestrian Priority
- Emphasise and Enhance Activation
- Improve Public Domain Quality



7.2 Indicative Materials Palette

Materials, Finishes and Furniture Schedule

| ITEM | FINISH |
|---|--|
| Wall type 1: Precast off white formed concrete walls | White concrete off formed class 2. In accordance with council specifications |
| Wall type 2: Precast off white formed concrete edge min 200mm high | White concrete off formed class 2: In accordance with council specifications |
| Wall type 3: Precast off white formed concrete planter wall with seated edge min 450mm high | White concrete off formed class 2: In accordance with council specifications |
| Paving Type 1: 600x400x40mm, 400x400x40mm, 300x400x40mm concrete pavers | Council / Engineers standards: In accordance with council specifications |
| Paving Type 2: Retail high quality paver mix. | In accordance with council specifications |
| Paving Type 3: Concrete driveway to council standards | In accordance with council specifications |
| Seating Type 1: Seat proprietary item to council standards | In accordance with council specifications |
| Seating Type 2: Concrete seat with timber cladding | White concrete off formed class 1: refer to Hanson specification. Treated timber cladding. To be confirmed through Council Co-ordination |
| Light poles At nominal 17m spacings | In accordance with council specifications |
| Timber decking to wharf waterfront | Recycled Hardwood timber selected grade and ACQ treated , In accordance with council specifications |



Appendices

APPENDIX A: 20160045_LD_DA 100-205

Planning proposal drawing set

APPENDIX B:

Douglas Shire Council Landscape Policy 7 - 2006

Port Douglas Waterfront Master Plan Landscape Design Guide

Port Douglas Waterfront Master Plan 2009

THE REEF MARINA

PORT DOUGLAS, QLD 4877

LANDSCAPE MASTER PLAN - PLANNING PROPOSAL

Status: **PLANNING PROPOSAL**

Nom. Architect: Andrew Turnbull RLA | RUD #673

File: 20160045-LD-DA101.DWG

Print Date: 16 September 2016

| Rev. | Description | Date |
|------|------------------------------|------------|
| 1 | Issued for Planning Proposal | 16.09.2016 |

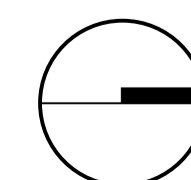
| LANDSCAPE DRAWING REGISTER | | |
|----------------------------|-------------------------|----------|
| SHEET | SHEET NAME | REVISION |
| LD-DA000 | COVER SHEET | 1 |
| LD-DA100 | TREE MANAGEMENT PLAN | 1 |
| LD-DA101 | LANDSCAPE MASTERPLAN | 1 |
| LD-DA102 | LANDSCAPE DETAIL PLAN 1 | 1 |
| LD-DA103 | LANDSCAPE DETAIL PLAN 2 | 1 |
| LD-DA200 | LANDSCAPE SECTION AA | 1 |
| LD-DA201 | LANDSCAPE SECTION BB | 1 |
| LD-DA202 | LANDSCAPE SECTION CC | 1 |
| LD-DA203 | LANDSCAPE SECTION DD | 1 |




* PLEASE NOTE PLANS TO BE READ IN CONJUNCTION WITH THE FOLLOWING DA DESIGN REPORT PREPARED BY SCOTT CARVER

20160045-LR-DA001 LANDSCAPE DA DESIGN REPORT



Site Reference N.T.S



-  Staging Boundary
-  Existing tree to be retained and protected (Significant Trees Numbered as per Arborists Report)
-  Existing trees to be removed (Significant Trees Numbered as per Arborists Report)

General Notes:

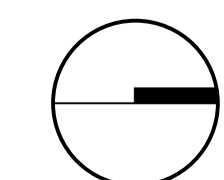
- Plans to be read in conjunction with the following reports/ Documentation
- Port Douglas Waterfront Landscape Design Guideline
 - Douglas Shire Council Planning Scheme Policy No.7
 - Douglas Shire Council Landscaping Code
 - Surveyed by Brazier Motti dated 11.03.2016

NOTE : DRAWING TO BE USE FOR ILLUSTRATIVE PURPOSES ONLY : FINAL TREE LOCATIONS SUBJECT TO DETAILED SURVEY



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THE REEF MARINA - PORT DOUGLAS
Project
Client
THE REEF MARINA



1 : 500 @ A1



TREE MANAGEMENT PLAN

| Reference No. | Discipline | Drawing No. | Rev. |
|---------------|------------|-------------|------|
| 20160045 | LD | DA100 | 1 |

| Rev. | Description | Date |
|------|------------------------------|------------|
| 1 | Issued for Planning Proposal | 16.09.2016 |

- LEGEND:**
- Staging Boundaries
 - Existing tree to be retained (indicative only). To future arborist report.
 - Existing trees to be removed (indicative only)
 - Proposed trees



Note: Plans are generally in accordance with the following landscape and urban design principles established by The Douglas Shire Council.

- Douglas Shire Council Landscape Policy 7 - 2006
- Landscape Design Guide 2009
- Port Douglas Waterfront Master Plan 2009

All future development applications shall also be in accordance with the above policies.

PLANS TO BE READ IN CONJUNCTION WITH LANDSCAPE DESIGN REPORT 20160045-LR-DA001.

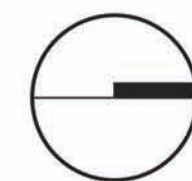
PLANS ARE CONCEPTUAL AND ARE ILLUSTRATIVE ONLY TO CONVEY DESIGN INTENT FOR PLANNING PURPOSES.

INDICATIVE LAYOUT TO FUTURE DEVELOPMENT APPLICATION

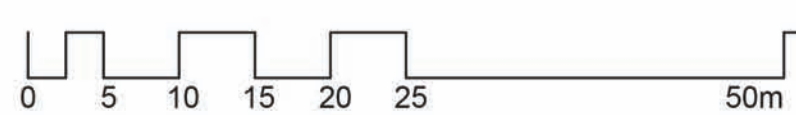


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LANDSCAPE MASTERPLAN

| Reference No. | Discipline | Drawing No. | Title |
|---------------|------------|-------------|-------|
| 20160045 | LD | DA101 | 1 |

| Rev. | Description | Date |
|------|------------------------------|------------|
| 1 | Issued for Planning Proposal | 16.09.2016 |

- LEGEND:**
- - - Staging Boundaries
 - Existing tree to be retained (indicative only). To future arborist report.
 - Existing trees to be removed (indicative only)
 - Proposed trees



Note: Plans are generally in accordance with the following landscape and urban design principles established by The Douglas Shire Council.

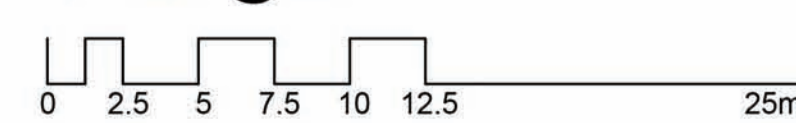
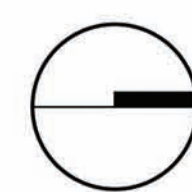
- Douglas Shire Council Landscape Policy 7 - 2006
- Landscape Design Guide 2009
- Port Douglas Waterfront Master Plan 2009

All future development applications shall also be in accordance with the above policies.

PLANS TO BE READ IN CONJUNCTION WITH LANDSCAPE DESIGN REPORT 20160045-LR-DA001.

PLANS ARE CONCEPTUAL AND ARE ILLUSTRATIVE ONLY TO CONVEY DESIGN INTENT FOR PLANNING PURPOSES.

INDICATIVE LAYOUT TO FUTURE DEVELOPMENT APPLICATION



| Rev. | Description | Date |
|------|------------------------------|------------|
| 1 | Issued for Planning Proposal | 16.09.2016 |

- LEGEND:**
- Staging Boundaries
 - Existing tree to be retained (indicative only). To future arborist report.
 - Existing trees to be removed (indicative only)
 - Proposed trees



Note: Plans are generally in accordance with the following landscape and urban design principles established by The Douglas Shire Council.

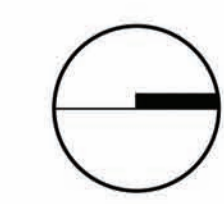
- Douglas Shire Council Landscape Policy 7 - 2006
- Landscape Design Guide 2009
- Port Douglas Waterfront Master Plan 2009

All future development applications shall also be in accordance with the above policies.

PLANS TO BE READ IN CONJUNCTION WITH LANDSCAPE DESIGN REPORT 20160045-LR-DA001.

PLANS ARE CONCEPTUAL AND ARE ILLUSTRATIVE ONLY TO CONVEY DESIGN INTENT FOR PLANNING PURPOSES.

INDICATIVE LAYOUT TO FUTURE DEVELOPMENT APPLICATION





[THE REEF MARINA SHOPPING CENTRE]

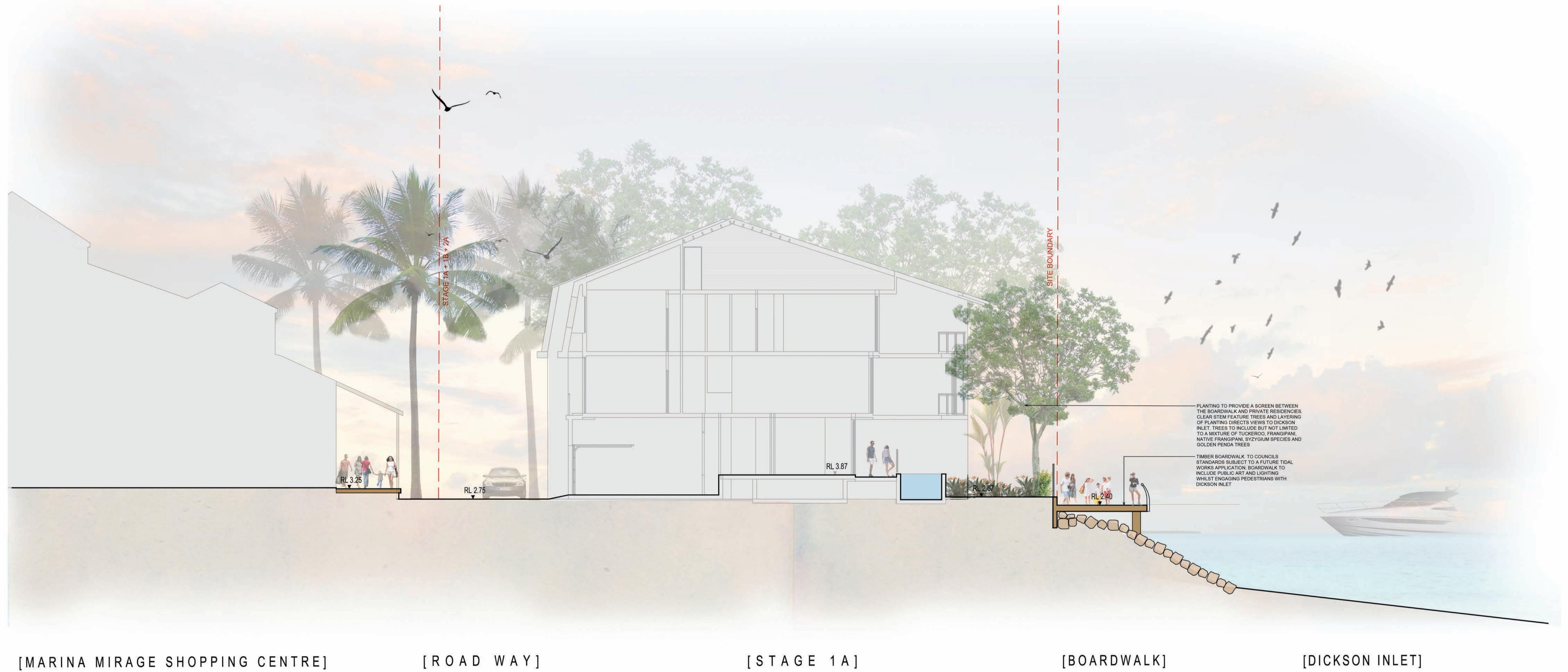
[SHARED ZONE]

[THE GREEN]

[BOARDWALK]

[DICKSON INLET]

1 TYPICAL SECTION AA
1:100



1 TYPICAL SECTION B
1:100



1 TYPICAL SECTION C
1:100



RELAXED ENTRANCE TO THE REEF MARINA DEVELOPMENT WITH ADDITIONAL PLANTINGS OF FOXTAIL PALMS INTRODUCE VISITORS TO THE SITE WHILST COMPLEMENTING THE EXISTING SITE CHARACTER

SCULPTURAL INTERVENTION IN GENTLE MOUNDING WITH PLANTING REINFORCES THE ARRIVAL EXPERIENCE. SUBJECT TO A FUTURE DEVELOPMENT APPLICATION.

RAINFOREST WALK VISIBLE AT THE SITE ENTRANCE CREATING A LINK TO THE NEW BUILDING ENTRANCE

WATERFRONT DROP OFF: A RAISED THRESHOLD / PEDESTRIAN SHARED ZONE WITH PLANTINGS OF FOXTAIL PALMS ON GENTLE MOUNDING AND PUBLIC ARTWORK CREATES A SENSE OF ARRIVAL INTO THE REEF MARINA DEVELOPMENT.

RETAIL BREAK OUT SPACES WITH GRANITE PAVING AND SHADE TREE PLANTING PLANTING TO INCLUDE BUT NOT LIMITED TO A MIXTURE OF PONGKAWA, TUCKERO AND COOKTOWN TULLIP TREES

TIMBER BOARDWALK TO COUNCIL'S STANDARDS SUBJECT TO A FUTURE TIDAL WORK APPLICATION. BOARDWALK TO INCLUDE PUBLIC ART AND LIGHTING WHILST ENGAGING PEDESTRIANS WITH DICKSON INLET

[CORAL CLOSE]

[THE DROP OFF]

[WATER FRONT RETAIL]

[BOARDWALK]

[DICKSON INLET]

1 TYPICAL SECTION DD
1:200

APPENDIX: 13



APPENDIX: 14

Public Art Plan

The Reef Marina Port Douglas

prepared by

MILNE & STONEHOUSE artists
PO Box 500 Avalon 2107
p: 0429428813
www.milnestonehouse.com

September 2016



CONTENTS

| | | | |
|---|----------------------|---|---------------------------|
| 1 | INTRODUCTION | | pages 1 |
| | 1.1 | Objectives | |
| | 1.2 | What are the Outcomes for the Community | |
| 2 | DEFINITIONS | 2 | What is Public Art 2 |
| | 2.0 | Project Types | 3 |
| | 2.1 | Intervention | |
| | 2.2 | Integration | |
| | 2.3 | Intervention / Integration | |
| 3 | PROCESSES | Implementation of the Public Art Works | 4 |
| | 3.1 | Stages | |
| | 3.2 | Concept Design | 5 |
| | 3.3 | Design Development | 6 |
| | 3.4 | Fabrication | 7 |
| | 3.5 | Installation | 8 |
| 4 | HISTORICAL OVERVIEW | Port Douglas timeline | 9 |
| 5 | SITE OVERVIEW | Marina Location | 10 |
| 6 | CONCEPTUAL FRAMEWORK | | |
| | 6.0 | Public Art Overview | 11 |
| | 6.1 | Passage | 12 |
| | 6.2 | The Littoral | 13 |
| | 6.3 | Surface Tension | 14 |
| 7 | OPPORTUNITIES | PROJECTS | |
| | 7.1 | Overview | 15 |
| | 7.2 | Tidal Ripple | 16 |
| | 7.3 | Shelter and Performance Space | 17 |
| | 7.3 | Accretion | 18 |
| | 7.3 | Glass Examples | 19 |
| | 7.3 | Sculptural Shelters | 20 |
| | 7.4 | Anchor Artwork for Plaza | 21 |
| | 7.5 | Wayfinders | 22 |
| 8 | | 8.1 | Procurement Strategies 23 |
| 9 | LOCATION PLAN | Plan | 24 |



1.1 OBJECTIVES

This plan explores the opportunities and processes for the integration of artworks as part of the development for the Reef Marina Port Douglas.

This document responds to

- the location in the estuary with the mangrove and mountain backdrop,
- the design and connectivity of the buildings,
- the street presentation,
- the scale and footprint of the public spaces,
- the proximity to Port Douglas's town centre.

This Art Plan initiates a documentation process which will take one or two artworks through design briefs, design development, fabrication and installation.

1.2 OUTCOMES FOR THE COMMUNITY

The outcomes for artworks proposed for the Reef Marina development affect the amenity of residents and the local community. These outcomes include

- enhanced amenity,
- celebration of cultural expression and heritage of Port Douglas and the marina,
- integration of a visual signature for the development
- economic development and a sense of pride for locals and residents,
- connections between the Town Centre and the marina
- enhancement of the marina's function as a threshold for the reef.
- creating a destination for visitors and residents.



2 WHAT IS PUBLIC ART?

Public Art is defined as artworks and performance located in the public realm. This includes the participation of artists in the design process of public spaces and facilities.

The term "Public Art" also refers to contemporary art practice that occurs outside of the traditional gallery or museum system, and can include a diverse range of ephemeral artworks and activities such as performance art, electronic, computer-generated and projected artworks.

This plan acknowledges the engagement of communities, who are the Public, with their collective spaces and the art inhabiting there. The objectives for public space as a democratic site are idyllic. According to age, gender and cultural background, people negotiate different worlds. Public Art has multiple meanings and access for the diverse groups who interact in the locale.

Site specificity refers to the articulation of communities through space as much as the context of histories and the built environment. The Public Art then should engage with the memories and current narratives of social relationships overlaying the site.

Public Art is built from a conceptual framework, interacts with the audience/participant in a shared space, and contributes to the cultural voices in placemaking.

For the success of a Public Artwork, it should be an integral part of its environment.



Artist
Milne and Stonehouse
Brisbane



Artist:
James Drake
Police Dog Attack
Birmingham USA



Artist
Milne and Stonehouse
Advanz
Rushcutter's Bay

2.0 PROJECT TYPES

The following categories indicate the context of artworks within a place. The planning stages of this process should anticipate the approach and the kinds of artworks. It is difficult to separate artworks definitively into categories because of the overlapping of project strategies.

2.1 INTERVENTION

Intervention projects transform dramatically the physical or traditional spatial relationships of a site.

- Intervention artworks hold a strong position in the foreground as iconic pieces.
- The sheer size of a public space may require an intervention to assert a significant position
- Sculpture festivals are temporal outdoor exhibition spaces where the work intervenes outside instead of framed within the white cube of a gallery.

2.2 INTEGRATION

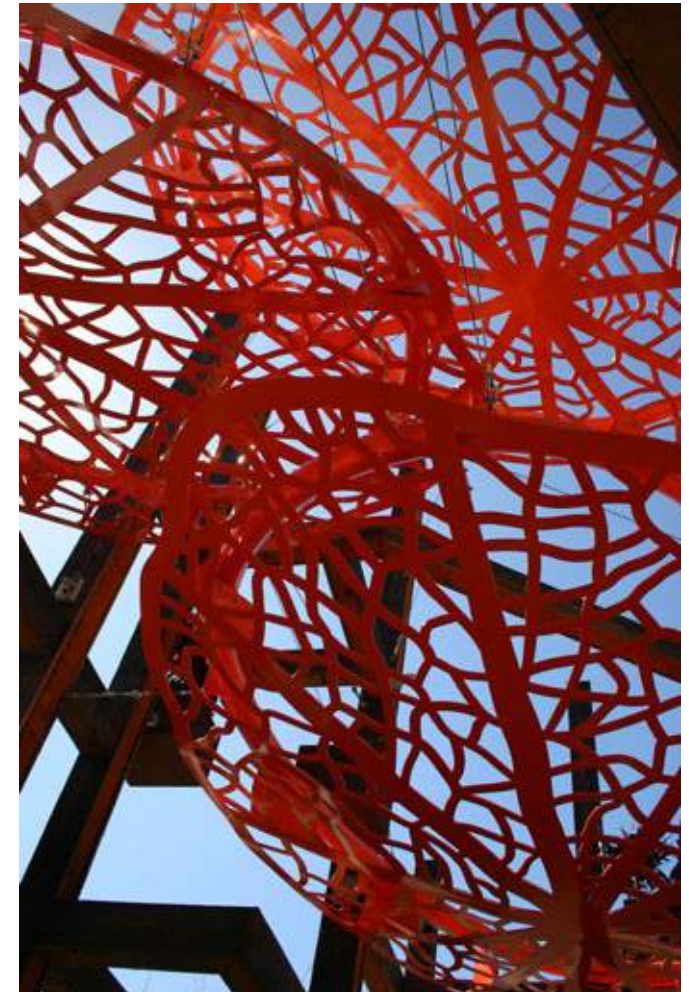
Integration projects conceive art as a seamless part of a building or the built environment.

- An integrated artwork responds to and engages with site and is a cohesive element of the design.
- The best practice develops integrated artworks in collaboration with architects and consults with the community early in the concept development stage.
- Integration projects engage specifically with the unique character of a place.

2.3 INTERVENTION /INTEGRATION

The presence of an integrated artwork may still provoke a powerful intervention in a space.

- When the relationship between infrastructure and artwork is blurred, the combined presence is both integration and intervention.
- The relationship of the structure and its attachment is often explored by their difference.
- The benefit of this kind of artwork is its ability to fit easily into a constrained space or a formal structure and yet speak powerfully to its audience.



ARTIST Milne and Stonehouse, Top Ryde
Artist Planner Marla Guppy

3 IMPLEMENTATION OF PUBLIC ART WORKS

STAGES

The process of Public Artworks from idea to installation involves the management and co-ordination of this project through the stages of

- Concept design
- Design development
- Fabrication
- Installation

These processes for the residential development require coordination with the ongoing building program and where possible the inclusion of these works.

The engagement of artists for the outlined projects will occur at the Concept Design stage and proceed according to the brief to the Installation Stage.

This timetable will run concurrently with the construction schedule for each of the stages and can be submitted to Council when work has commenced.

The artworks will be installed within the relevant stage prior to the Certificate of Occupancy.



*Origami Horses
Coles West Ryde
Milne and Stonehouse*

3 IMPLEMENTATION OF PUBLIC ART WORKS

3.1 CONCEPT DESIGN

The concept design stage considers the idea of an artwork in context with the site, the community and its longevity. Council input and feedback can be sought at this point to determine parameters such as material, maintenance and scale.

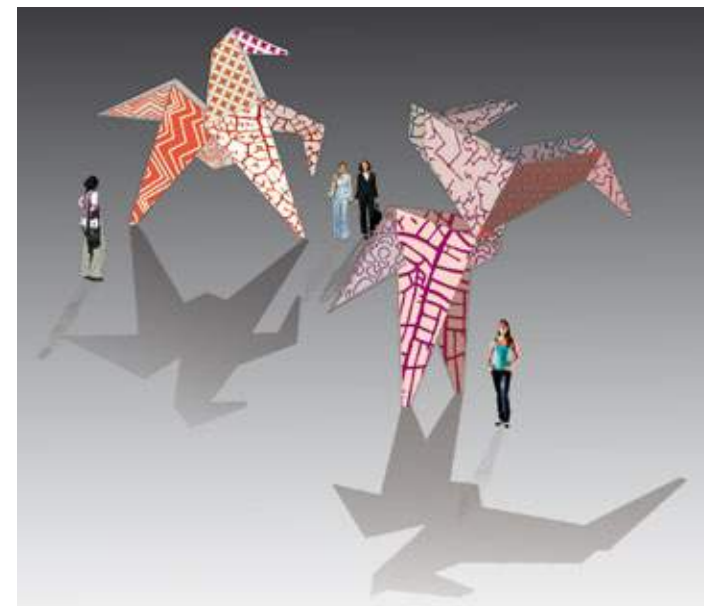
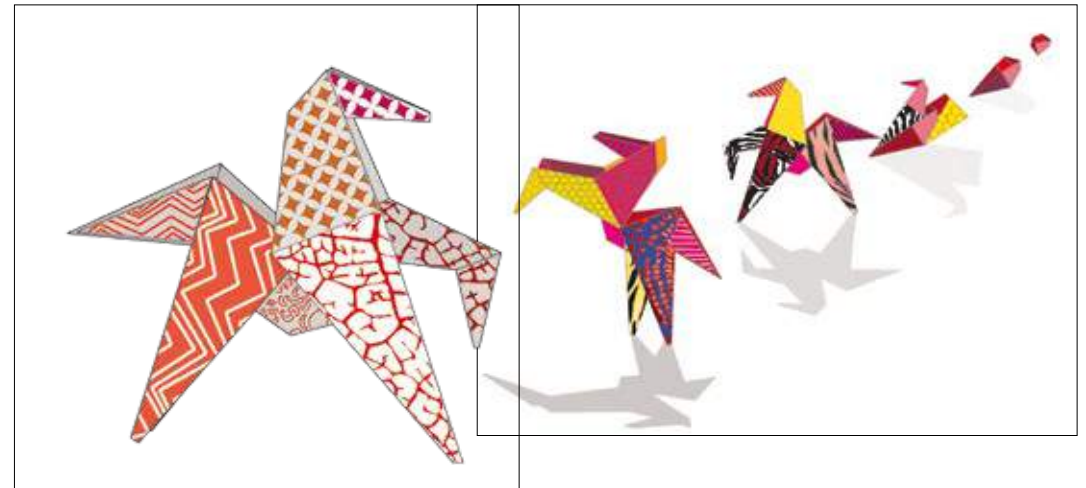
Artists are engaged to imagine artworks within a conceptual framework. Issues to be raised at this point include engineering, lighting, maintenance and OH&S considerations.

Before the design is initiated, the parameters of the proposed artwork will explore

- site characteristics
- safety
- scale
- audience
- budget

The budget may be agreed upon to frame the scale and material resolution for the artist.

The deliverables for this stage will include visual presentation and written documentation that communicates the concept and its situation. There will be a preliminary budget estimate provided to indicate a real context for design scale and materials .



*Concept Design Stage for Origami Horses
Coles West Ryde
Milne and Stonehouse,*

3 IMPLEMENTATION OF PUBLIC ART WORKS

3.2 DESIGN DEVELOPMENT

The design development stage refines the form, the cost and the material choice of the artwork.

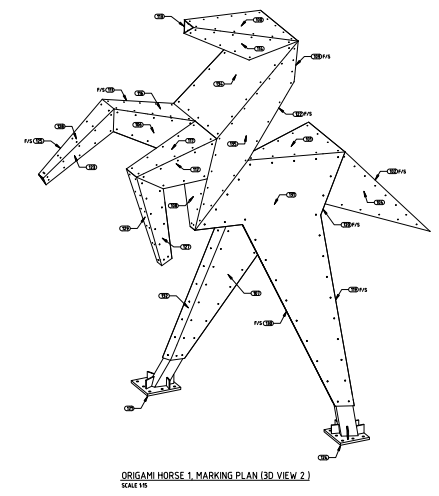
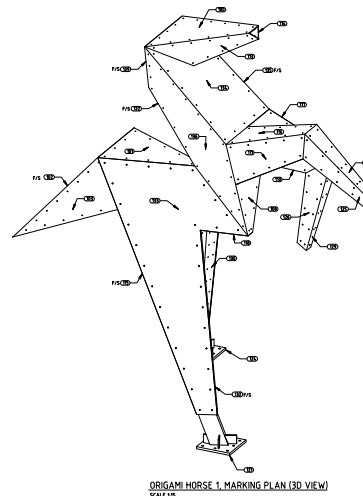
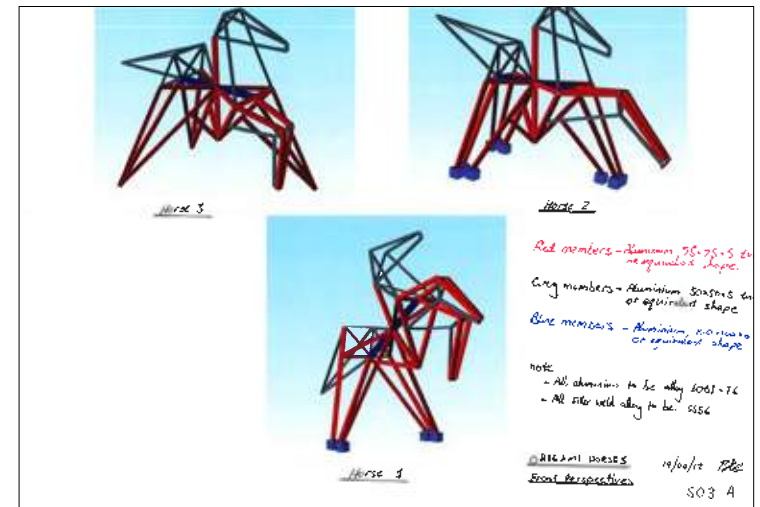
This stage refines the materiality of the proposed work and refines

- project budgets
- maintenance requirements
- compliance within OH&S standards, structural design & engineering specifications, shop drawings and Council guidelines

The artist may be required to further refine the artwork to meet with this quality assurance. Materials and finishes will be finalised in terms of durability and longevity.

The deliverables at the end of this stage will include full documentation such as engineering specifications, materials and installation resolutions and a maintenance manual.

Tenders or quotations will be sought from specialised fabricators or the artist using this documentation. Where possible without compromising the integrity of the artwork, the sourcing of local business enterprises for the artwork's fabrication and installation will be sought to promote local industry.



Design Development Stage for Origami Horses
West Ryde
Milne and Stonehouse,

3 IMPLEMENTATION OF PUBLIC ART WORKS

3.3 FABRICATION

The fabrication stage inspects the quality and efficiency of the fabrication using hold points.

Often a number of specialist contractors including painters need to be coordinated to ensure the artwork moves smoothly between operations and timeframes are met.

The artist's role is to comment upon the artistic integrity of the artwork and the detail of fabrication such as welding and finishes. Usually the client will be present or require photographic documentation to confirm the quality of work produced.

The engineer will inspect to ensure warranted specifications are being followed.

At this point, the project manager will implement a method statement for installation after discussion with the artist and contractor. This will ensure proper integration between artwork and the landscaping vision and allows the artist to advise processes for the handling of fragile artwork elements and situating the artwork exactly according to plans.



*Fabrication Stage for Origami Horses
Coles West Ryde
Milne and Stonehouse,*



3 IMPLEMENTATION OF PUBLIC ART WORKS

3.4 INSTALLATION

The installation stage delivers a high quality artwork that reflects the previous stages in its integration within place.

The artist's overseeing of the installation is necessary for the integrity of the artwork, however, the methodology and work statement of the contractor is assured by the client or project manager.

The coordination and overseeing of this stage may be carried out by a member of the design team as these stages have been carefully considered.

- The engineer will inspect footing details prior to assembly.
- The site manager will ensure best practice is carried out during this process.
- The artist ensures the placement of the artwork is accurate in accordance with the approved plans.

A technical manual will provide full documentation for the artwork in case major rectification of the artwork is required.

A decommissioning manual will be provided for each artwork. This anticipates a minimum life for the artwork and promotes a mutually respectful approach for the owner, the community and the artist.

A maintenance manual will be provided for each artwork which includes a timetable of appropriate cleaning and retouching to ensure both artwork integrity and warranties are met.

Hand over responsibilities will be finalised at this stage including a regular maintenance schedule to be supplied to the owner. Items such as graffiti removal and retouching will be a part of this schedule.



*Installation Stage for Origami Horses
West Ryde
Milne and Stonehouse,*

HISTORICAL OVERVIEW

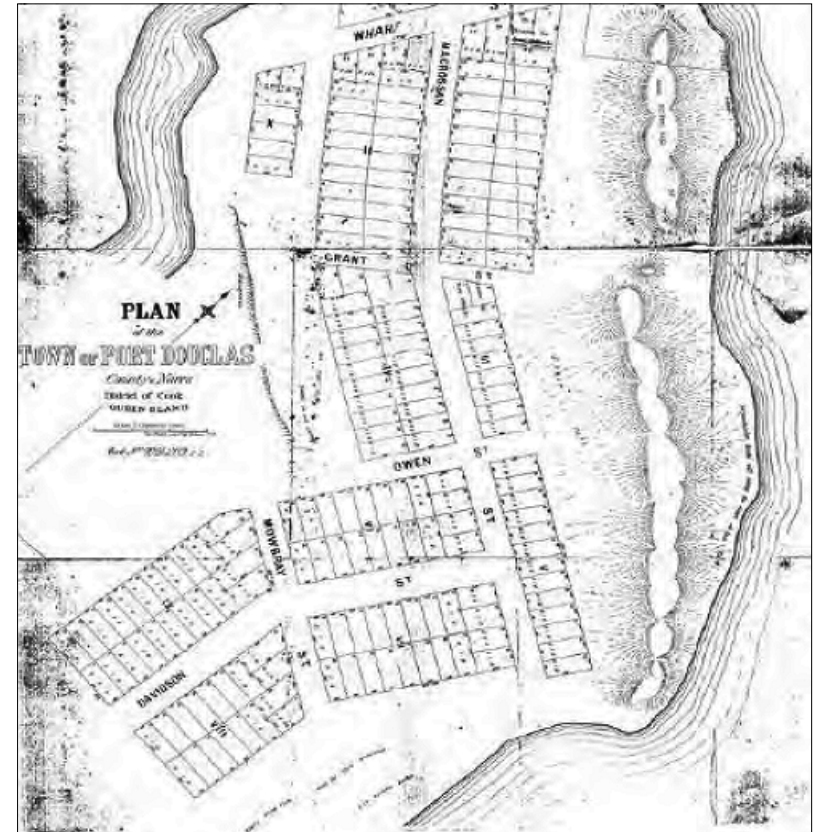
4 PORT DOUGLAS TIMELINE

For over 9000 years the area was inhabited and utilised by three principal Aboriginal groups. Once the Europeans occupied their land, these traditional boundaries and cultural continuity were disrupted and in spite of a valiant resistance, the Aboriginal groups were dispersed or compelled to absorb western cultural mores within their own way of life. With the increased value placed on this world heritage environment, the First People's understanding of their land, their stories, names and cultural projection is a prominent voice in a changing view of the region.

Port Douglas's struggle has been to establish itself as a viable port and economic hub for the region and has been thwarted by the railway constructed in Cairns, the decline in the gold extraction on the tableland and the rise of Mossman as a sugar and administrative centre.

The rise of tourism has signalled Port Douglas's growth to the present day. In fact the modesty of its development and exotic location around the point into the inlet is its jewel. With a sense of conservation and sustainable preoccupation among its visitors, they are drawn to its low scale and more sensitive interface with the natural environment than its southern neighbour.

Just as in the 1880s when the Chinese made up 40% of the population, much of the local residents of Port Douglas today come from somewhere else. The climate, the richness of vegetation above and below the water and a sense of the wild are magnetic attractors for all.



5 THE REEF MARINA LOCATION

The marina development combines private and commercial premises, a boardwalk along the waterfront, a future central plaza with the existing marina operations. The marina up until now, has been separate from the Town Centre by awkward street alignments and functions to give visitors access to the reef. It does not celebrate the beauty of the inlet or thriving mangrove colony across the water, nor has it really encouraged a destination experience. With the introduction of the micro brewery and other boutique businesses, the marina has indicated the direction and context for this important edge in Port Douglas.

This development affirms the marina as a destination and a connected edge to the Macrossan Street spine. This approach considers Port Douglas as a whole and promises an innovative edge on the water with movement east from and to the Town Centre.

Because of its scale, the development provides varying experiences. Along the water, boardwalks with open cafes and shops encourage the rhythm of a pedestrian enjoying the water edge while a shaded canopied walk shelters the direct access to the berths and older marina. A plaza will punctuate the Town Centre connection and act as an interactive open space for the core of the development.



CONCEPTUAL FRAMEWORK

6.0 PUBLIC ART OVERVIEW

The role of public art in this locale reinforces the design intent of the development by

- Acknowledging the voices of the First Peoples,
- Punctuating its collective spaces,
- Interacting with the elements and people,
- Celebrating the waterfront location,
- Reinforcing movement, pauses and destinations,
- Building upon rich cultural and historical layers.

These ideas explore the integration of artworks. These ideas will be developed as an artwork or suite of artworks. The opportunities in this plan identify all potentials but do not prescribe a final response. During design development, the final design and material palette will be resolved.

It is expected that an Aboriginal artist or artists will be engaged to develop ideas for one of the proposed artworks. This artist will be considered according to their country, their track record as an artist and their suitability for a brief creating an artwork at this scale. The art manager would coordinate this process depending upon the experience of the chosen artist.



Above Left:
Local sites
Above Right:
Public artworks by Milne and Stonehouse

CONCEPTUAL FRAMEWORK

6.1 PASSAGE

Port Douglas has acted as a meeting place for neighbouring Aboriginal groups, a berth for ships unloading passengers and cargo, a loading dock for sugar, an entrance to the Great Barrier Reef and even the Bump Track to access the interior for mining.

The very existence of Port Douglas was a long running scrap between competing ports to the north and south. As Mossman developed its sugar processing plant, this caused the regional administration to establish there, away from the coast. Today visitors stop on the way to the Daintree with Port Douglas reinvigorated as a destination. Even the small rail system operates again on a regular basis with the potential for linking it to Mossman.

Today many of the locals are southerners who have settled here within a more intimate community in this stunning place. This tradition of movement is reflected in the natural world with the coconuts drifting on currents and reshooting on the fringes, the mangroves building a buttress of roots and the reef growing just outside.

This idea in artworks can be explored by

- Interacting with the wind and tides
- Referencing historic forms in sculptural elements



Images showing the geometry of sails and the perch of local bird life.

6.2 THE LITTORAL

The littoral refers to the edge of coast and forest. Dickson Inlet is an organic shelter with a burgeoning mangrove colony subject to the winds and tides. The rainforest is close here tumbling down the mountain into the sea further north. Because of its luxuriant edge, Port Douglas stands on the littoral, responds to this water land edge and perches and floats here.

This is an advantage enabling a speedy departure to the reef, an immersive experience of a mangrove system, the proximity of birds, fish and crocodiles and an immediate interface with the water and wind.

This idea in artworks can be explored by

- Responding to the mangrove architecture
- Exploring the fish weighing platform
- Exploring the unique habitat of the littoral system



Images showing the natural and human made interface.

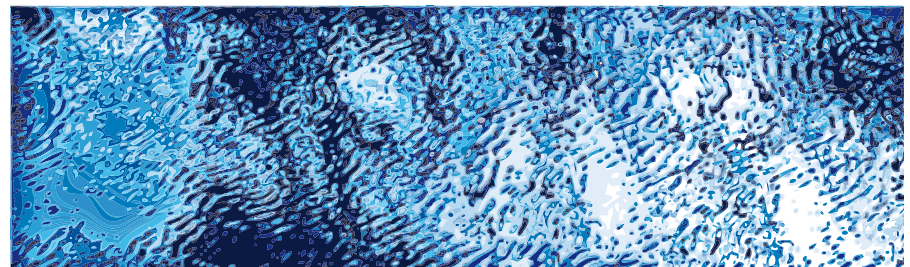
6.3 SURFACE TENSION

Surface tension is the elastic tendency of a fluid surface which makes it acquire the least surface area possible. Surface tension allows insects (e.g. water striders), usually denser than water, to float and stride on a water surface. The differences between opposites are reformed as paradoxical relationships, connective links and mutual benefits. For this conceptual framework, we stretch its meaning to include;

- Aboriginal traditional stories within a contemporary Indigenous voice
- the corrosive and renewing properties of water,
- the forest and canopy as a single entity with a riot of species inside its understorey,
- the surface ripple with vibrant underwater coral,
- the fleeting experience of this environmental treasury combining a light footprint with an expanding tourist market,
- the surging and waning demographic responding to seasonal climates.

This idea in artworks can be explored by

- Celebrating the coral kingdom
- Using the unique form, textures and colour of plants,
- Reinforcing an understanding of these interconnected relationships.



Above:
Images revealing the corrosive patina, fish and surface glass ripple.

7 ARTWORK OPPORTUNITIES

7.1 OVERVIEW

The insertion of artworks for the development projects a sense of place in the public realm. References to history, current environmental thought, and the exotic riches beyond, sets a tone for experiences and transform the development into a landmark presence for Port Douglas, celebrating old and new narratives.

The existing and new piles in the water become opportunities for hugging, attaching and collaring artworks, the shelters allow an art roof response as a seamless integration and even the jutting retail boxes have an opportunity for art elements.

Each artwork poses questions.

How does it reveal the cultural layers of Port Douglas?

What does the artwork do for the development?

How does it create a sense of place?



These artworks explore local historical layers of the sites.

Top: Artists: Milne, Stonehouse, Tobin

Below: Artists: Milne & Stonehouse

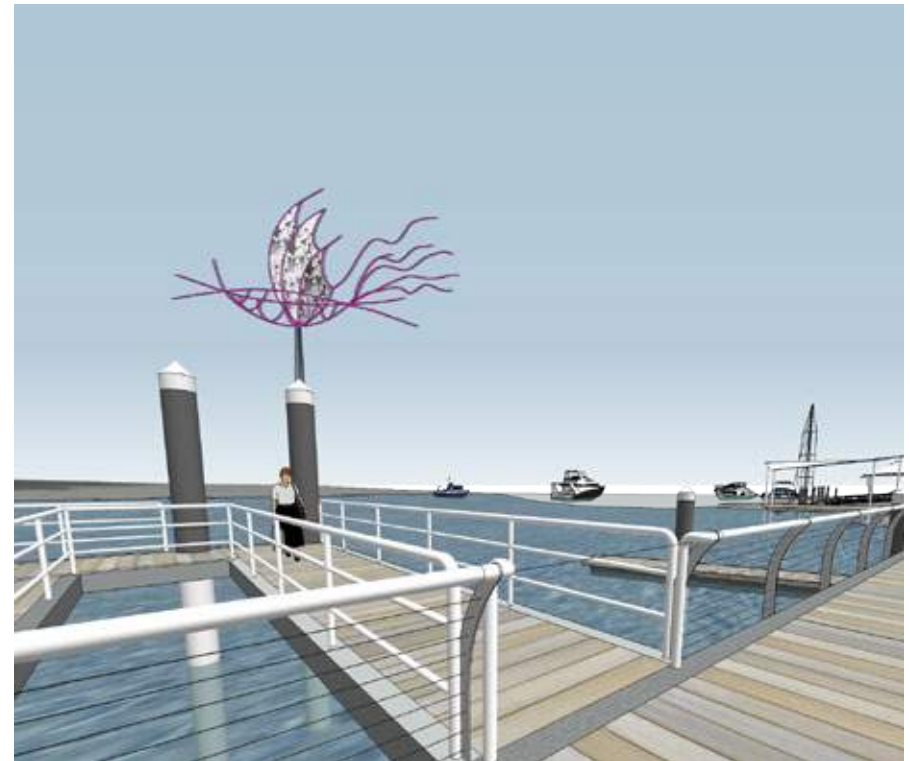
7.2 TIDE RIPPLE

The artworks are designed to interact with the wind and tide. They can respond and move with the tidal movements in the inlet and can shift with the winds in response as a wind vane or move more dynamically with atmospheric changes.

Their function in the development is to punctuate the boardwalk experience and project the marina edge into the water in response to the prevailing winds and tidal movement.

The material palette chooses highly durable materials to survive in a marine environment such as 316 stainless steel and glass. Having a highly reflective skin creates a mirror to the sky and water.

Any turning mechanism for proposed wind vanes is a contained unit requiring minimal inspection and regreasing.



Above: Montage depicting a wind vane in reference to the concept of "Passage."

Left: Examples of wind vanes produced by Milne and Stonehouse. The snapper fish was a collaboration between Milne and Stonehouse and Aboriginal artist Chris Tobin.

7.3 SHELTER AND PERFORMANCE SPACE

CONCEPT INTEGRATION

The two shelters speak to each other across the boardwalk. One functions as an outdoor performance space to house musicians and bands while the other acts more like a pause point along the boardwalk.

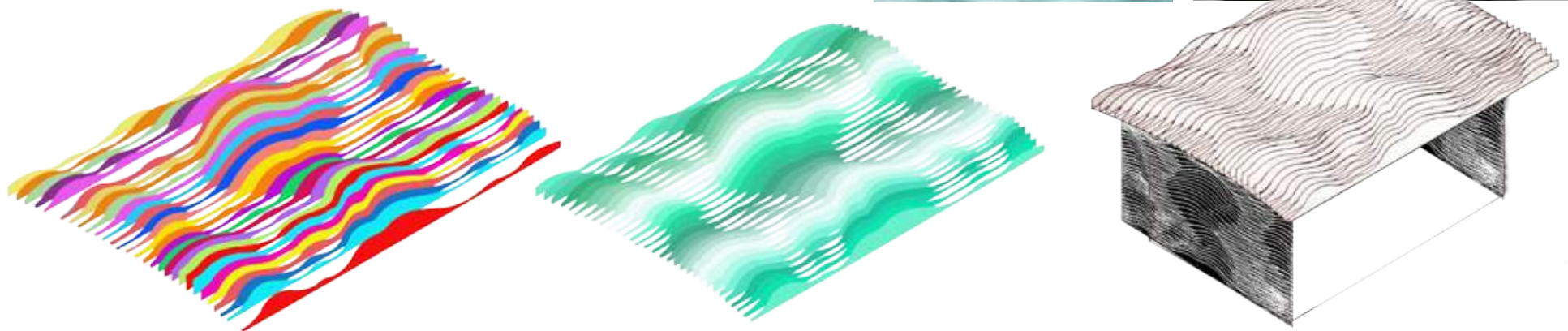
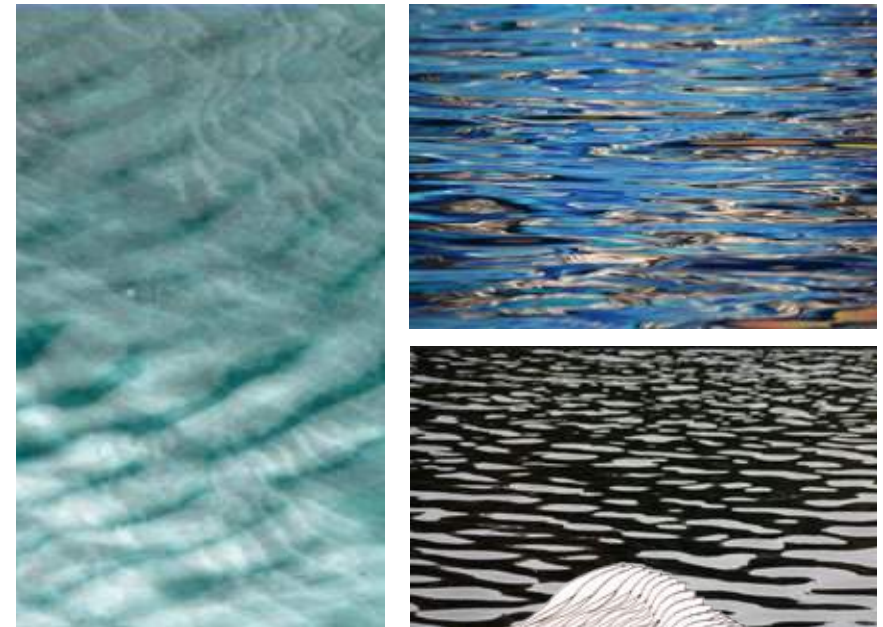
The architecture and artwork are integrated seamlessly and result from artist architect collaboration.

Currents

One concept explores the water surface and wind action as texture, colour and rhythm.

Accretion

An alternative concept responds to the fantastic coral life under the sea and its organic growth spurts.



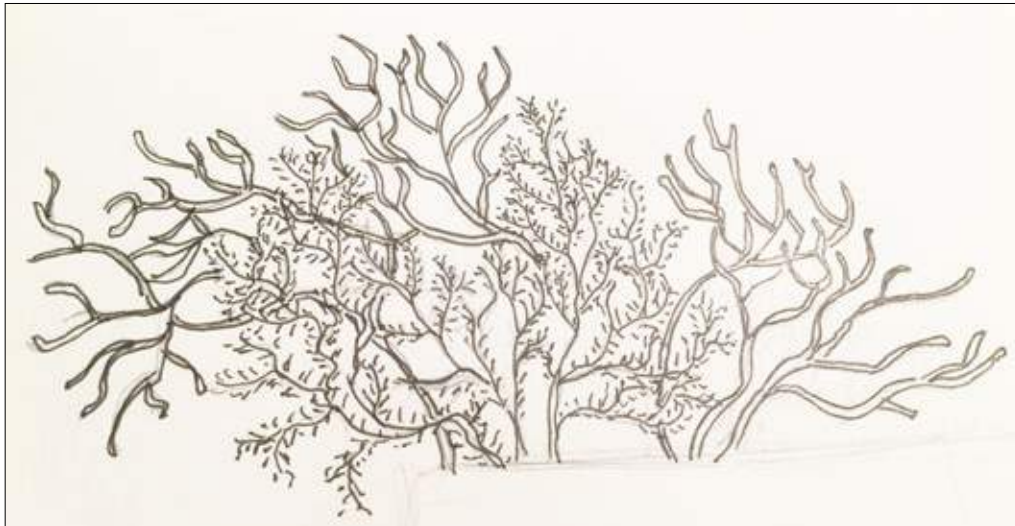
These montages explore a different colour and more organic pattern taken from the surface ripple of water.

7.3 SHELTER AND PERFORMANCE SPACE

ACCRETION

With the marina as the entry to the Great Barrier Reef, the opportunity to anticipate this journey is well positioned for a response in the performance space. As the reef is both a single organism and a shelter for a vast array of life, a bright, bold reference to this colourful undersea world is a powerful celebration of its life force.

There is the potential to explore these form, colours and patterns in the glass. There is also the potential of exploring these forms in 3D structures on the roof of the shelter and the performance space. Integrated lighting will play an important part of the animation of this artwork at night.

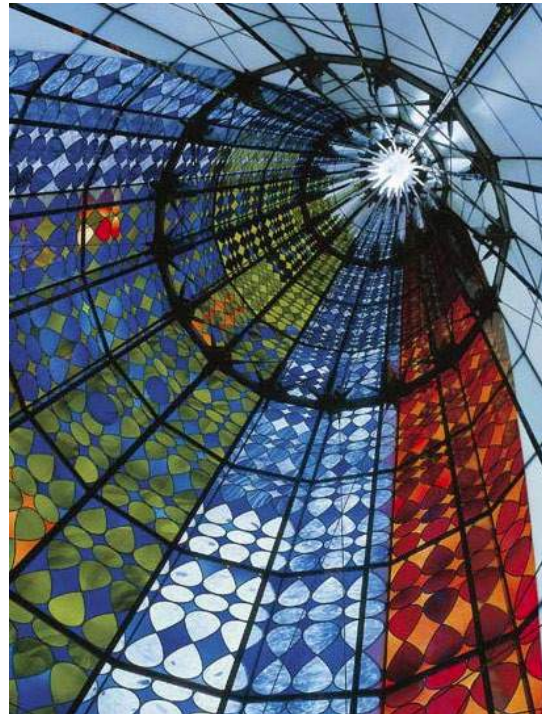


These images reveal the riot of colour underwater with the coral branches swaying with the currents and tide.



7.3 SHELTER AND PERFORMANCE SPACE

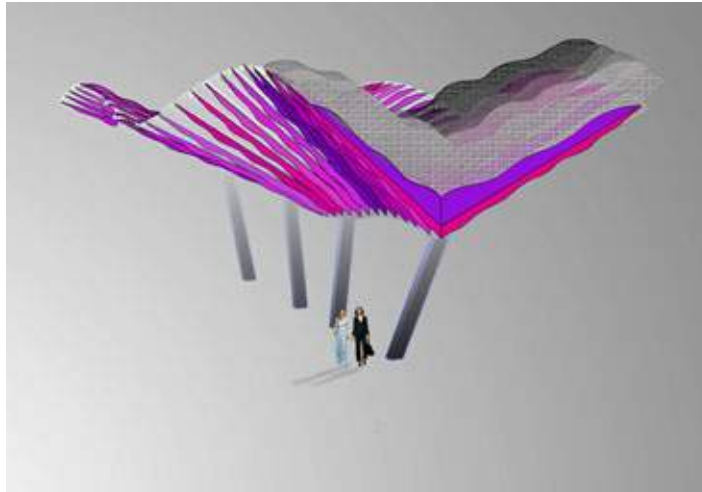
GLASS EXAMPLES



Examples of hand painted enamelled glass as a material in sculptural forms.

7.3 SHELTER AND PERFORMANCE SPACE

SCULPTURAL SHELTER EXAMPLES



The images show actual shelters and models of shelters using mixed media

7.4 ANCHOR ARTWORK FOR FUTURE PLAZA

FUNCTION OF CENTRAL ARTWORK

This artwork occupies the future plaza as a large scaled sculpture with interactive components to enable a younger audience to stay and experience. The use of water acts as a cooling mechanism as well as a playful element for the space. This destination provides retail and cafe experiences and connects directly to the Duck Pond. From this hub, visitors and locals may walk around the promenade or directly head towards the marina to embark upon boat trips.



These artworks show different materiality that transforms the artwork from day to night.

7.5 WAYFINDERS

FUNCTION

Artworks often remind or mark reference points to help orient people within a place. Their scale determines the audience whether car or pedestrian and they provide a cultural layer potentially to visitors. While immersed within this contemporary place, an audience may engage simultaneously with prior stories or histories. This unlocks hidden strata making for a more enriching encounter in the marina development.

They can be integrated with existing infrastructure such as the old pylons.



8.1 PROCUREMENT STRATEGIES

APPROACHES

The procurement for public art for the marina development will utilise different approaches depending upon the function, scale and type of artwork as well as the calibre of artists and community input. The engagement of Aboriginal artists will require strict protocols with appropriate local groups. To give local artists the opportunity to submit for projects, a mentorship program may be necessary to enable a proper investment in their talent. For those artists who work in certain media, the translation of their ideas across media will stretch their experience and produce powerful artworks.

The range of approaches to procure public art includes:

Invitation where artists are invited to submit concepts in response to a brief. The invited artists are paid a fee to provide these concepts.

EOI where an open call to artists to submit a written response with CVs and three artists are selected to present concepts. The invited artists are paid a fee to provide these concepts.

Indigenous only invitation where local Aboriginal artists are selected to include work or create a concept for the development. Protocols are adhered to including the invitation of acceptable local representatives.

Mentorship of local artists to invest in the local emerging artist bank. The selection of local artists considers their potential and their ability to work to a brief.

Collaborative process engages a principal artist to collaborate with community, historical groups, and local artists to respond to this consultative process as a layer in artworks.



This artwork titled "origami horses" used primary school students to design the patterns for each facet.

9.1 PLAN

LOCATION

Locations shown are approximate.
The artwork material and form is yet to be finalised
and will influence the design and imagery.

- Anchor artwork ■
- Shelters ■
- Tide Ripple ■
- Wayfinders ■



IDAS form 1—Application details

(Sustainable Planning Act 2009 version 4.2 effective 3 August 2015)

This form must be used for **ALL** development applications.

You **MUST** complete **ALL** questions that are stated to be a mandatory requirement unless otherwise identified on this form.

For all development applications, you must:

- complete this form (*IDAS form 1—Application details*)
- complete any other forms relevant to your application
- provide any mandatory supporting information identified on the forms as being required to accompany your application.

Attach extra pages if there is insufficient space on this form.

All terms used on this form have the meaning given in the *Sustainable Planning Act 2009* (SPA) or the Sustainable Planning Regulation 2009.

This form and any other IDAS form relevant to your application must be used for development applications relating to strategic port land and Brisbane core port land under the *Transport Infrastructure Act 1994* and airport land under the *Airport Assets (Restructuring and Disposal) Act 2008*. Whenever a planning scheme is mentioned, take it to mean land use plan for the strategic port land, Brisbane core port land or airport land.

PLEASE NOTE: This form is not required to accompany requests for compliance assessment.

Mandatory requirements

Applicant details (Note: the applicant is the person responsible for making the application and need not be the owner of the land. The applicant is responsible for ensuring the information provided on all IDAS application forms is correct. Any development permit or preliminary approval that may be issued as a consequence of this application will be issued to the applicant.)

Name/s (individual or company name in full)

The Reef Marina Pty Ltd

For companies, contact name

C/- Elizabeth Taylor, Town Planner

Postal address

23 Vallely Street

| | | | |
|--------|------------|--|--|
| Suburb | Freshwater | | |
|--------|------------|--|--|

| | | | |
|-------|-----|----------|------|
| State | QLD | Postcode | 4870 |
|-------|-----|----------|------|

| | | | |
|---------|-----------|--|--|
| Country | Australia | | |
|---------|-----------|--|--|

Contact phone number

Liz - 40552548

Mobile number (non-mandatory requirement)

Liz - 0407584966

Fax number (non-mandatory requirement)

N/A

Email address (non-mandatory requirement)

liz

@ elizabethtaylor.net.au

Applicant's reference number (non-mandatory requirement)

ET15-027

1. What is the nature of the development proposed and what type of approval is being sought?**Table A**—Aspect 1 of the application (If there are additional aspects to the application please list in Table B—Aspect 2.)

- a) What is the nature of the development? (Please only tick one box.)
- Material change of use Reconfiguring a lot Building work Operational work
- b) What is the approval type? (Please only tick one box.)
- 1) Preliminary approval under s241 of SPA Preliminary approval under s241 and s242 of SPA Development permit
- c) Provide a brief description of the proposal, including use definition and number of buildings or structures where applicable (e.g. six unit apartment building defined as a *multi-unit dwelling*, 30 lot residential subdivision etc.)
- Redevelopment of part of The Reef Marina site at Port Douglas to provide for staged development of:
 Stage 1a – 5 x Multi-Unit Housing/Holiday Accommodation; Stage 1b – 14 x Multi-Unit Housing/Holiday Accommodation; Stage 2a - Mixed Use Development – 35 x Multi-Unit Housing/Holiday Accommodation and Commercial/Retail Space [Shops/Restaurants/Offices/Tavern]; Stage 2c – Mixed Use Development – 26 x Multi-unit Housing/Holiday Accommodation and/or Holiday Accommodation - Dual Key and Commercial/Retail Space [Shops/Restaurants/Offices/Tavern]; Stage 3a – 5 x Multi-Unit Housing/Holiday Accommodation and/or Holiday Accommodation - Dual Key.
- d) What is the level of assessment? (Please only tick one box.)
- Impact assessment Code assessment

Table B—Aspect 2 of the application (If there are additional aspects to the application please list in Table C—Additional aspects of the application.)

- a) What is the nature of development? (Please only tick one box.)
- Material change of use Reconfiguring a lot Building work Operational work
- b) What is the approval type? (Please only tick one box.)
- Preliminary approval under s241 of SPA Preliminary approval under s241 and s242 of SPA Development permit
- c) Provide a brief description of the proposal, including use definition and number of buildings or structures where applicable (e.g. six unit apartment building defined as a *multi-unit dwelling*, 30 lot residential subdivision etc.)
- Reconfiguration of the site into 4 staged freehold lots.
- d) What is the level of assessment?
- Impact assessment Code assessment

Table C—Additional aspects of the application (If there are additional aspects to the application please list in a separate table on an extra page and attach to this form.)

Refer attached schedule Not required

2. Location of the premises (Complete Table D and/or Table E as applicable. Identify each lot in a separate row.)

Table D—Street address and lot on plan for the premises or street address and lot on plan for the land adjoining or adjacent to the premises (Note: this table is to be used for applications involving taking or interfering with water.) (Attach a separate schedule if there is insufficient space in this table.)

- Street address **and** lot on plan (All lots must be listed.)
- Street address **and** lot on plan for the land adjoining or adjacent to the premises (Appropriate for development in water but adjoining or adjacent to land, e.g. jetty, pontoon. All lots must be listed.)

| Street address | | | | | Lot on plan description | | Local government area (e.g. Logan, Cairns) |
|----------------|----------|------------|--|-----------|-------------------------|------------------------|---|
| Lot | Unit no. | Street no. | Street name and official suburb/ locality name | Post-code | Lot no. | Plan type and plan no. | |
| i) | | | Wharf St, Port Douglas | | 146 | SR861 | Douglas Shire |
| ii) | | | | | 126 (part) | SR868 | Douglas |
| iii) | | | | | Inlet Street | Road Reserve | Douglas Shire |

Planning scheme details (If the premises involves multiple zones, clearly identify the relevant zone/s for each lot in a separate row in the below table. Non-mandatory)

| Lot | Applicable zone / precinct | Applicable local plan / precinct | Applicable overlay/s |
|------|---|----------------------------------|----------------------|
| i) | Port Douglas Waterfront North Planning Area | Tourist Centre | |
| ii) | | | |
| iii) | | | |

Table E—Premises coordinates (Appropriate for development in remote areas, over part of a lot or in water not adjoining or adjacent to land e.g. channel dredging in Moreton Bay.) (Attach a separate schedule if there is insufficient space in this table.)

| Coordinates (Note: place each set of coordinates in a separate row) | | | | Zone reference | Datum | Local government area (if applicable) |
|--|----------|----------|-----------|----------------|--|---------------------------------------|
| Easting | Northing | Latitude | Longitude | | | |
| | | | | | <input type="checkbox"/> GDA94 <input type="checkbox"/> WGS84 <input type="checkbox"/> other | |

3. Total area of the premises on which the development is proposed (indicate square metres)

Approximately 9 hectares.

4. Current use/s of the premises (e.g. vacant land, house, apartment building, cane farm etc.)

Marina and associated marina activities, commercial development and ancillary car parking

5. Are there any current approvals (e.g. a preliminary approval) associated with this application? (Non-mandatory requirement)

- No Yes—provide details below

| List of approval reference/s | Date approved (dd/mm/yy) | Date approval lapses (dd/mm/yy) |
|------------------------------|--------------------------|---------------------------------|
| Preliminary Approval | 18 May 2016 | |

6. Is owner's consent required for this application? (Refer to notes at the end of this form for more information.)

- No
 Yes—complete either Table F, Table G or Table H as applicable

Table F

| | |
|---|--|
| Name of owner/s of the land | |
| I/We, the above-mentioned owner/s of the land, consent to the making of this application. | |
| Signature of owner/s of the land | |
| Date | |

Table G

| | |
|---|---------------------|
| Name of owner/s of the land | State of Queensland |
| <input checked="" type="checkbox"/> The owner's written consent is attached or will be provided separately to the assessment manager. | |

Table H

| | |
|--|----------------------|
| Name of owner/s of the land | QLD State Government |
| <input checked="" type="checkbox"/> By making this application, I, the applicant, declare that the owner has given written consent to the making of the application. | |

7. Identify if any of the following apply to the premises (Tick applicable box/es.)

- Adjacent to a water body, watercourse or aquifer (e.g. creek, river, lake, canal)—complete Table I
 On strategic port land under the *Transport Infrastructure Act 1994*—complete Table J
 In a tidal water area—complete Table K
 On Brisbane core port land under the *Transport Infrastructure Act 1994* (No table requires completion.)
 On airport land under the *Airport Assets (Restructuring and Disposal) Act 2008* (no table requires completion)
 Listed on either the Contaminated Land Register (CLR) or the Environmental Management Register (EMR) under the *Environmental Protection Act 1994* (no table requires completion)

Table I

| |
|--|
| Name of water body, watercourse or aquifer |
| Dickson Inlet |

| Table J | |
|---|----------------------------|
| Lot on plan description for strategic port land | Port authority for the lot |
| | |

| Table K | |
|---|---|
| Name of local government for the tidal area (if applicable) | Port authority for the tidal area (if applicable) |
| Douglas Shire | |

8. Are there any existing easements on the premises? (e.g. for vehicular access, electricity, overland flow, water etc)

No Yes—ensure the type, location and dimension of each easement is included in the plans submitted

9. Does the proposal include new building work or operational work on the premises? (Including any services)

No Yes—ensure the nature, location and dimension of proposed works are included in plans submitted

10. Is the payment of a portable long service leave levy applicable to this application? (Refer to notes at the end of this form for more information.)

No—go to question 12 Yes

11. Has the portable long service leave levy been paid? (Refer to notes at the end of this form for more information.)

No

Yes—complete Table L and submit with this application the yellow local government/private certifier's copy of the receipted QLeave form

| Table L | | |
|-------------|----------------------|--|
| Amount paid | Date paid (dd/mm/yy) | QLeave project number (6 digit number starting with A, B, E, L or P) |
| | | |

12. Has the local government agreed to apply a superseded planning scheme to this application under section 96 of the Sustainable Planning Act 2009?

No

Yes—please provide details below

| | | |
|--------------------------|---|--|
| Name of local government | Date of written notice given by local government (dd/mm/yy) | Reference number of written notice given by local government (if applicable) |
| | | |

13. List below all of the forms and supporting information that accompany this application (Include all IDAS forms, checklists, mandatory supporting information etc. that will be submitted as part of this application)

| Description of attachment or title of attachment | Method of lodgement to assessment manager |
|--|---|
| LAND OWNERS CONSENT | By Email |
| IDAS FORMS 5 and 7 | By Email |
| SUPPORTING TOWN PLANNING REPORT AND APPENDICES | By Email |
| | |
| | |

14. Applicant's declaration

By making this application, I declare that all information in this application is true and correct (Note: it is unlawful to provide false or misleading information)

Notes for completing this form

- Section 261 of the *Sustainable Planning Act 2009* prescribes when an application is a properly-made application. Note, the assessment manager has discretion to accept an application as properly made despite any non-compliance with the requirement to provide mandatory supporting information under section 260(1)(c) of the *Sustainable Planning Act 2009*

Applicant details

- Where the applicant is not a natural person, ensure the applicant entity is a real legal entity.

Question 1

- Schedule 3 of the Sustainable Planning Regulation 2009 identifies assessable development and the type of assessment. Where schedule 3 identifies assessable development as "various aspects of development" the applicant must identify each aspect of the development on Tables A, B and C respectively and as required.

Question 6

- Section 263 of the *Sustainable Planning Act 2009* sets out when the consent of the owner of the land is required for an application. Section 260(1)(e) of the *Sustainable Planning Act 2009* provides that if the owner's consent is required under section 263, then an application must contain, or be accompanied by, the written consent of the owner, or include a declaration by the applicant that the owner has given written consent to the making of the application. If a development application relates to a state resource, the application is not required to be supported by evidence of an allocation or entitlement to a state resource. However, where the state is the owner of the subject land, the written consent of the state, as landowner, may be required. Allocation or entitlement to the state resource is a separate process and will need to be obtained before development commences.

Question 7

- If the premises is listed on either the Contaminated Land Register (CLR) or the Environmental Management Register (EMR) under the *Environmental Protection Act 1994* it may be necessary to seek compliance assessment. Schedule 18 of the Sustainable Planning Regulation 2009 identifies where compliance assessment is required.

Question 11

- The *Building and Construction Industry (Portable Long Service Leave) Act 1991* prescribes when the portable long service leave levy is payable.
- The portable long service leave levy amount and other prescribed percentages and rates for calculating the levy are prescribed in the Building and Construction Industry (Portable Long Service Leave) Regulation 2002.

Question 12

- The portable long service leave levy need not be paid when the application is made, but the *Building and Construction Industry (Portable Long Service Leave) Act 1991* requires the levy to be paid before a development permit is issued.
- Building and construction industry notification and payment forms are available from any Queensland post office or agency, on request from QLeave, or can be completed on the QLeave website at www.qleave.qld.gov.au. For further information contact QLeave on 1800 803 481 or visit www.qleave.qld.gov.au.

Privacy—The information collected in this form will be used by the Department of Infrastructure, Local Government and Planning (DILGP), assessment manager, referral agency and/or building certifier in accordance with the processing and assessment of your application. Your personal details should not be disclosed for a purpose outside of the IDAS process or the provisions about public access to planning and development information in the *Sustainable Planning Act 2009*, except where required by legislation (including the *Right to Information Act 2009*) or as required by Parliament. This information may be stored in relevant databases. The information collected will be retained as required by the *Public Records Act 2002*.

OFFICE USE ONLY

Date received Reference numbers

NOTIFICATION OF ENGAGEMENT OF A PRIVATE CERTIFIER

To Council. I have been engaged as the private certifier for the building work referred to in this application

| Date of engagement | Name | BSA Certification license number | Building classification/s |
|--------------------|------|----------------------------------|---------------------------|
| | | | |

QLEAVE NOTIFICATION AND PAYMENT (For completion by assessment manager or private certifier if applicable.)

| Description of the work | QLeave project number | Amount paid (\$) | Date paid | Date receipted form sighted by assessment manager | Name of officer who sighted the form |
|-------------------------|-----------------------|------------------|-----------|---|--------------------------------------|
| | | | | | |

The *Sustainable Planning Act 2009* is administered by the Department of Infrastructure, Local Government and Planning. This form and all other required application materials should be sent to your assessment manager and any referral agency.

IDAS form 5—Material change of use assessable against a planning scheme

(Sustainable Planning Act 2009 version 3.1 effective 3 August 2015)

This form must be used for development applications for a material change of use assessable against a planning scheme.

You **MUST** complete **ALL** questions that are stated to be a mandatory requirement unless otherwise identified on this form.

For all development applications, you must:

- complete *IDAS form 1—Application details*
- complete any other forms relevant to your application
- provide any mandatory supporting information identified on the forms as being required to accompany your application.

Attach extra pages if there is insufficient space on this form.

All terms used on this form have the meaning given in the *Sustainable Planning Act 2009* (SPA) or the Sustainable Planning Regulation 2009.

This form must also be used for material change of use on strategic port land and Brisbane core port land under the *Transport Infrastructure Act 1994* and airport land under the *Airport Assets (Restructuring and Disposal) Act 2008* that requires assessment against the land use plan for that land. Whenever a planning scheme is mentioned, take it to mean land use plan for the strategic port land, Brisbane core port land or airport land.

Mandatory requirements

1. Describe the proposed use. (Note: this is to provide additional detail to the information provided in question 1 of *IDAS form 1—Application details*. Attach a separate schedule if there is insufficient space in this table.)

| General explanation of the proposed use | Planning scheme definition (include each definition in a new row) (non-mandatory) | No. of dwelling units (if applicable) or gross floor area (if applicable) | Days and hours of operation (if applicable) | No. of employees (if applicable) |
|---|---|---|---|----------------------------------|
| Proposed staged redevelopment of part of The Reef Marina Site for Stage 1a – 5 x Multi-Unit Housing/Holiday Accommodation; Stage 1b – 14 x Multi-Unit Housing/Holiday Accommodation; Stage 2a - Mixed Use Development – 35 x Multi-Unit Housing/Holiday Accommodation and Commercial/Retail Space [Shops/Restaurants/Offices/Tavern]; Stage 2c – Mixed Use Development – 26 x Multi-unit Housing/Holiday Accommodation and/or Holiday Accommodation - Dual Key and Commercial/Retail Space [Shops/Restaurants/Offices/Tavern]; Stage 3a – 5 x Multi-Unit Housing/Holiday Accommodation and/or Holiday Accommodation - Dual Key. | Refer supporting Town Planning Report | 85 dwelling units and 1498m2 of commercial/retail space | 24/7 residential | unknown |

| | | | | |
|--|--|--|--|--|
| AND Reconfiguration into 4 freehold lots. | | | | |
|--|--|--|--|--|

2. Are there any current approvals associated with the proposed material change of use?
(e.g. a preliminary approval.)

No Yes—provide details below

| List of approval reference/s | Date approved (dd/mm/yy) | Date approval lapses (dd/mm/yy) |
|------------------------------|--------------------------|---------------------------------|
| Preliminary Approval | 14 May 2016 | |

3. Does the proposed use involve the following? (Tick all applicable boxes.)

- The reuse of existing buildings on the premises No Yes
- New building work on the premises No Yes
- The reuse of existing operational work on the premises No Yes
- New operational work on the premises No Yes

Mandatory supporting information

4. Confirm that the following mandatory supporting information accompanies this application

| Mandatory supporting information | Confirmation of lodgement | Method of lodgement |
|--|---|---------------------|
| All applications | | |
| A site plan drawn to an appropriate scale (1:100, 1:200 or 1:500 are recommended scales) which shows the following: <ul style="list-style-type: none"> • the location and site area of the land to which the application relates (<i>relevant land</i>) • the north point • the boundaries of the relevant land • any road frontages of the relevant land, including the name of the road • the location and use of any existing or proposed buildings or structures on the relevant land (note: where extensive demolition or new buildings are proposed, two separate plans [an existing site plan and proposed site plan] may be appropriate) • any existing or proposed easements on the relevant land and their function • the location and use of buildings on land adjoining the relevant land • all vehicle access points and any existing or proposed car parking areas on the relevant land. Car parking spaces for persons with disabilities and any service vehicle access and parking should be clearly marked • for any new building on the relevant land, the location of refuse storage • the location of any proposed retaining walls on the relevant land and their height • the location of any proposed landscaping on the relevant land • the location of any stormwater detention on the relevant land. | <input checked="" type="checkbox"/> Confirmed | |
| A statement about how the proposed development addresses the local government’s planning scheme and any other planning instruments or documents relevant to the application. | <input checked="" type="checkbox"/> Confirmed | |

| | | |
|--|--|--|
| A statement about the intensity and scale of the proposed use (e.g. number of visitors, number of seats, capacity of storage area etc.). | <input checked="" type="checkbox"/> Confirmed | |
| Information that states: <ul style="list-style-type: none"> the existing or proposed floor area, site cover, maximum number of storeys and maximum height above natural ground level for existing or new buildings (e.g. information regarding existing buildings but not being reused) the existing or proposed number of on-site car parking bays, type of vehicle cross-over (for non-residential uses) and vehicular servicing arrangement (for non-residential uses). | <input checked="" type="checkbox"/> Confirmed <input type="checkbox"/> Not applicable | |
| A statement addressing the relevant part(s) of the State Development Assessment Provisions (SDAP). | <input checked="" type="checkbox"/> Confirmed <input type="checkbox"/> Not applicable | |
| When the application involves the reuse of existing buildings | | |
| Plans showing the size, location, existing floor area, existing site cover, existing maximum number of storeys and existing maximum height above natural ground level of the buildings to be reused. | <input checked="" type="checkbox"/> Confirmed <input type="checkbox"/> Not applicable | |
| When the application involves new building work (including extensions) | | |
| Floor plans drawn to an appropriate scale (1:50, 1:100 or 1:200 are recommended scales) which show the following: <ul style="list-style-type: none"> the north point the intended use of each area on the floor plan (for commercial, industrial or mixed use developments only) the room layout (for residential development only) with all rooms clearly labelled the existing and the proposed built form (for extensions only) the gross floor area of each proposed floor area. | <input checked="" type="checkbox"/> Confirmed | |
| Elevations drawn to an appropriate scale (1:100, 1:200 or 1:500 are recommended scales) which show plans of all building elevations and facades, clearly labelled to identify orientation (e.g. north elevation) | <input checked="" type="checkbox"/> Confirmed | |
| Plans showing the size, location, proposed site cover, proposed maximum number of storeys, and proposed maximum height above natural ground level of the proposed new building work. | <input checked="" type="checkbox"/> Confirmed <input type="checkbox"/> Not applicable | |
| When the application involves reuse of other existing work | | |
| Plans showing the nature, location, number of on-site car parking bays, existing area of landscaping, existing type of vehicular cross-over (non-residential uses), and existing type of vehicular servicing arrangement (non-residential uses) of the work to be reused. | <input checked="" type="checkbox"/> Confirmed <input type="checkbox"/> Not applicable | |
| When the application involves new operational work | | |
| Plans showing the nature, location, number of new on-site car parking bays, proposed area of new landscaping, proposed type of new vehicle cross-over (non-residential uses), proposed maximum new vehicular servicing arrangement (non-residential uses) of the proposed new operational work. | <input checked="" type="checkbox"/> Confirmed <input type="checkbox"/> Not applicable | |

Privacy—Please refer to your assessment manager, referral agency and/or building certifier for further details on the use of information recorded in this form.

OFFICE USE ONLY

Date received

Reference numbers

The *Sustainable Planning Act 2009* is administered by the Department of Infrastructure, Local Government and Planning. This form and all other required application materials should be sent to your assessment manager and any referral agency.

IDAS form 7—Reconfiguring a lot

(Sustainable Planning Act 2009 version 3.2 effective 3 August 2015)

This form must be used for development applications or requests for compliance assessment for reconfiguring a lot.

You **MUST** complete **ALL** questions that are stated to be a mandatory requirement unless otherwise identified on this form.

For all development applications, you must:

- complete *IDAS form 1—Application details*
- complete any other forms relevant to your application
- provide any mandatory supporting information identified on the forms as being required to accompany your application.

For requests for compliance assessment, you must:

- complete IDAS form 32—Compliance assessment
- Provide any mandatory supporting information identified on the forms as being required to accompany your request

Attach extra pages if there is insufficient space on this form.

All terms used on this form have the meaning given in the *Sustainable Planning Act 2009* (SPA) or the Sustainable Planning Regulation 2009.

Mandatory requirements

1. What is the total number of existing lots making up the premises? **2 and road reserve**

2. What is the nature of the lot reconfiguration? (Tick all applicable boxes.)

- subdivision—complete questions 3–6 and 11
- boundary realignment—complete questions 8, 9 and 11
- creating an easement giving access to a lot from a constructed road—complete questions 10 and 11
- dividing land into parts by agreement—please provide details below and complete questions 7 and 11

3. Within the subdivision, what is the number of additional lots being created and their intended final use?

| Intended final use of new lots | Residential | Commercial | Industrial | Other—specify |
|-----------------------------------|-------------|------------|------------|---------------|
| Number of additional lots created | 2 | | | Mixed use -2 |

4. What type of approval is being sought for the subdivision?

- Development permit
- Preliminary approval
- Compliance permit

5. Are there any current approvals associated with this subdivision application or request?
(E.g. material change of use.)

No Yes—provide details below

| List of approval reference/s | Date approved (dd/mm/yy) | Date approval lapses (dd/mm/yy) |
|------------------------------|--------------------------|---------------------------------|
| Preliminary Approval | 14 May 2016 | |

6. Does the proposal involve multiple stages?

No—complete Table A Yes—complete Table B

Table A

| | |
|--|--|
| a) What is the total length of any new road to be constructed? (metres) | 0 |
| b) What is the total area of land to be contributed for community purposes? (square metres) | The Boardwalk, The Rainforest, The Green |
| c) Does the proposal involve the construction of a canal or artificial waterway? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes | |
| d) Does the proposal involve operational work for the building of a retaining wall? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes | |

Table B—complete a new Table B for every stage if the application involves more than one stage

| | |
|---|--|
| a) What is the proposed estate name? (if known and if applicable) | The marine residences |
| b) What stage in the development does this table refer to? | Proposed lot 1 – Stage 1a, Stage 1b and Stage 2a |
| c) If a development permit is being sought for this stage, will the development permit result in additional residential lots? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes—specify the total number | 9970m2 |
| d) What is the total area of land for this stage? (square metres) | none |
| e) What is the total length of any new road to be constructed at this stage? (metres) | The Boardwalk, The Rainforest and The Green |
| f) What is the total area of land to be contributed for community purposes at this stage? (square metres) | AS Above |
| g) Does the proposal involve the construction of a canal or artificial waterway? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes | |
| h) Does the proposal involve operational work for the building of a retaining wall? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes | |

7. Lease/agreement details—how many parts are being created and what is their intended final use?

| Intended final use of new parts | Residential | Commercial | Industrial | Other—specify |
|---------------------------------|-------------|------------|------------|---------------|
| | | | | |

| | | | | |
|------------------------------------|--|--|--|--|
| Number of additional parts created | | | | |
|------------------------------------|--|--|--|--|

8. What are the current and proposed dimensions following the boundary realignment for each lot forming the premises?

| Current lot | | | Proposed lot | | |
|----------------------|----------------------|-------------------------|--------------|----------------------|-------------------------|
| Lot plan description | Area (square metres) | Length of road frontage | Lot number | Area (square metres) | Length of road frontage |
| | | | | | |

9. What is the reason for the boundary realignment?

| |
|--|
| |
|--|

10. What are the dimensions and nature of the proposed easement? (If there are more than two easements proposed please list in a separate table on an extra page and attach to this form.)

| Width (m) | Length (m) | Purpose of the easement (e.g. pedestrian access)? | What land is benefitted by the easement? |
|-----------|------------|---|--|
| | | Access and Services | Surrounding new lots |
| | | | |

Mandatory supporting information

11. Confirm that the following mandatory supporting information accompanies this application or request

| Mandatory supporting information | Confirmation of lodgement | Method of lodgement |
|---|---|---------------------|
| All applications and requests for reconfiguring a lot | | |
| Site plans drawn to an appropriate scale (1:100, 1:200 or 1:500 are the recommended scales) which show the following: <ul style="list-style-type: none"> the location and site area of the land to which the application or request relates (relevant land) the north point the boundaries of the relevant land any road frontages of the relevant land, including the name of the road the contours and natural ground levels of the relevant land the location of any existing buildings or structures on the relevant land the allotment layout showing existing lots, any proposed lots (including the dimensions of those lots), existing or proposed road reserves, building envelopes and existing or proposed open space (note: numbering is required for all lots) any drainage features over the relevant land, including any watercourse, creek, dam, waterhole or spring and any land subject to a flood with an annual exceedance probability of 1% any existing or proposed easements on the relevant land and their function all existing and proposed roads and access points on the relevant land any existing or proposed car parking areas on the relevant land the location of any proposed retaining walls on the relevant land and their height | <input checked="" type="checkbox"/> Confirmed | |

| | | |
|--|--|--|
| <ul style="list-style-type: none"> • the location of any stormwater detention on the relevant land • the location and dimension of any land dedicated for community purposes • the final intended use of any new lots. | | |
| <p>For a development application – A statement about how the proposed development addresses the local government’s planning scheme and any other planning documents relevant to the application.</p> <p>For a request for compliance assessment – A statement about how the proposed development addresses the matters or things against which the request must be assessed.</p> | <input checked="" type="checkbox"/> Confirmed | |
| <p>A statement addressing the relevant part(s) of the State Development Assessment Provisions (SDAP).</p> | <input checked="" type="checkbox"/> Confirmed <input type="checkbox"/> Not applicable | |

Notes for completing this form

- For supporting information requirements for requests for compliance assessment, please refer to the relevant matters for which compliance assessment will be carried out against. To avoid an action notice, it is recommended that you provide as much of the mandatory information listed in this form as possible.

Privacy—Please refer to your assessment manager, referral agency and/or building certifier for further details on the use of information recorded in this form.

OFFICE USE ONLY

Date received

Reference numbers

The *Sustainable Planning Act 2009* is administered by the Department of Infrastructure, Local Government and Planning. This form and all other required application materials should be sent to your assessment manager and any referral agency.