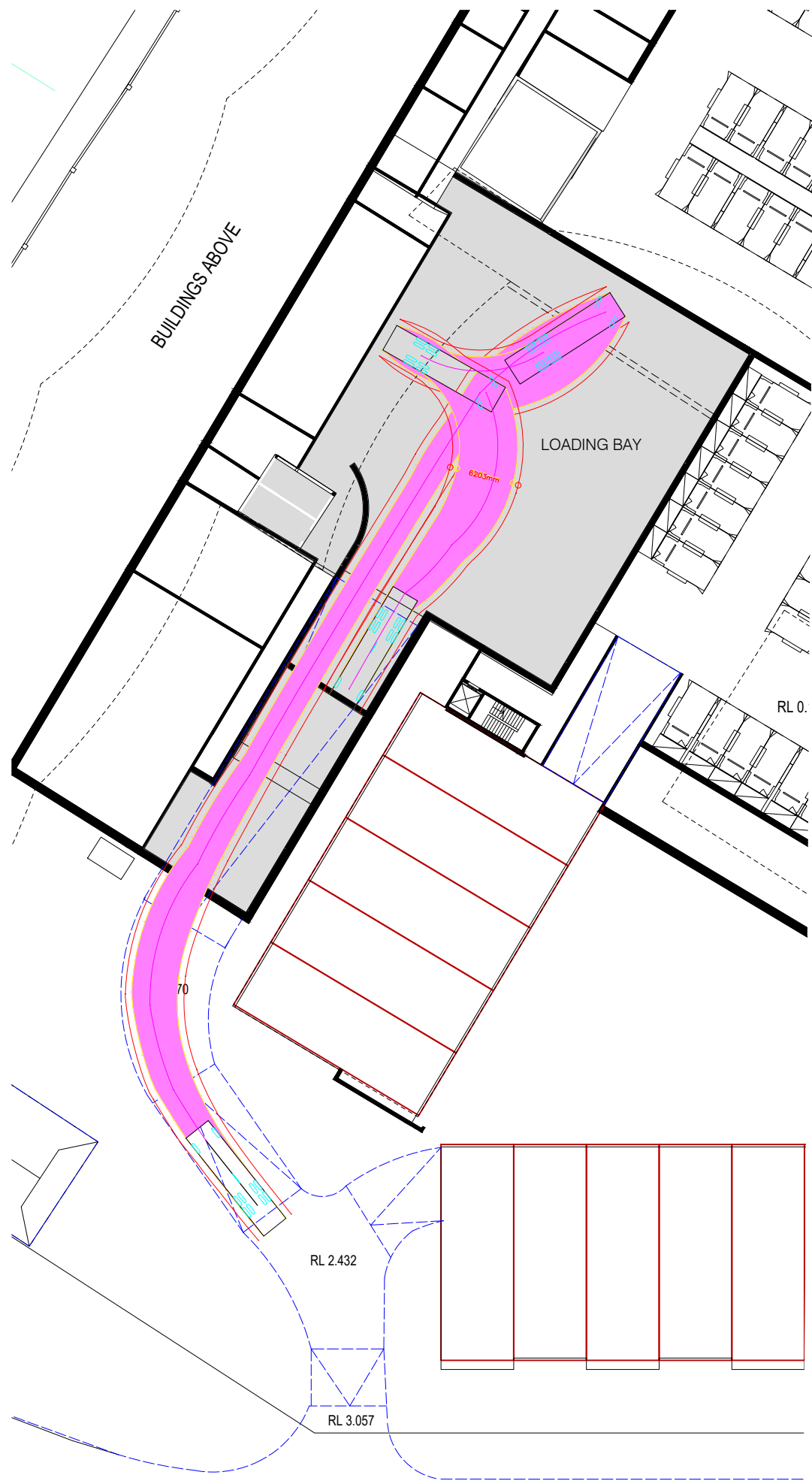
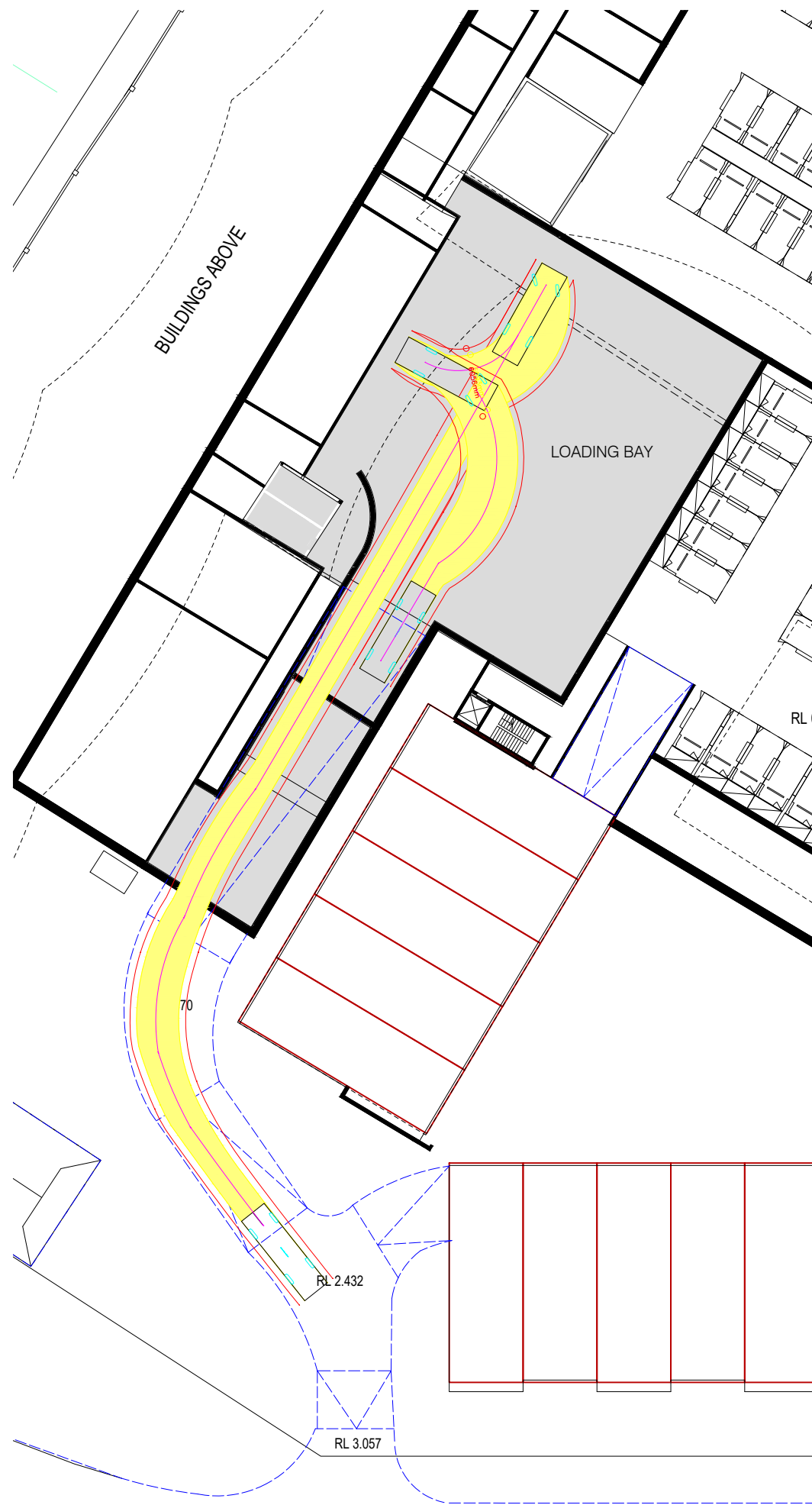


APPENDIX: A

Service Vehicle Access



8.8m Service Vehicle



11.0m Single Unit Truck

APPENDIX: B

Proposed Bus Pickup / Setdown



APPENDIX: C

Car Parking Demand Calculations

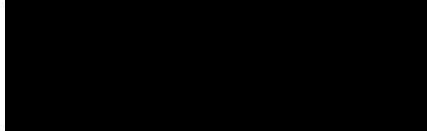
<u>Crystalbrook Superyacht Marina Development</u>			
<u>Carparking Demand Tabulation</u>			
Apartment Precinct			
Villas	36		- DSC Planning Scheme - Multi Unit Accom
Park per Unit =	1.0		
Villas	18		
Park per Unit =	2.0		18 provided with 2 spaces
Total Parks =	72.0		
Total Villa Parks =	72.0		
Resort Precinct			
Rooms	130		- DSC Planning Scheme - Holiday Accom
Park per Unit =	10 + 1per 3		
Total Parks =	50.0		
Total Resort Parks =	50.0		
Restaurants and Retail			
Restaurant, Lounges, Bars:	4076	m2	
Park per 30m ² =	1		- DSC Planning Scheme - Restaurants
Total Parks =	135.9		
Retail:	582	m2	- Shops/Offices
Parks per 30m ² GFA =	1.0		refer to FNQROC D7.08
Total Parks =	19.4		
Total Restaurant/retail Parks =	155.3		
Marina			
No of Berths:	156.0		132 existing + 24 to be constructed
Commercial:	39.0		2.0 spaces/berth
Private:	117.0		93 existing + 24 to be constructed - Operator states 0.1 - 0.2 per berth
Long Term Rentals:	53.0		0.6 spaces/berth
Short term rentals:	65.0		0.25 spaces/berth
Total Marina Parks =	126.1		
Total Parks Required =	403		
Total Available Parks =	402		
		Basement	276
		On Street	126 (141 existing less 15 used for buses)

APPENDIX: D

Council Letter - Without Prejudice Advice Reef Marina Parking Relative To Original Rezoning

YOUR REF: Reef Marina Parking
OUR REF: 775801 *SC*

1 June 2016



RE : WITHOUT PREJUDICE ADVICE REEF MARINA PARKING RELATIVE TO ORIGINAL REZONING

I refer to your enquiries regarding the car parking relative to the original rezoning. The following is summary notes regarding this matter.

1981 Planning Scheme for the Whole of the Douglas Shire

Under the Scheme, gazetted 6 June 1981, the majority of the "land" was included in the *Port Facilities Zone*. The balance of the "land" was below water and was unzoned.

The *Port Facilities Zone* allowed the development of residential units at a density of one unit per four marina berths. Parking was relative to land use types and number of uses as per a set table of the By-Laws. The height of buildings in Port Douglas was controlled by the Development Control Plan 1, gazetted on 26 August 1982, and Development Control Plan 2, gazetted on 20 November 1985. Under the DCP's the maximum height was 10.5m. The Scheme and By-laws also generally considered requirements for site coverage, setbacks and landscaping.

A copy of extract of the original zoning map for the area, *Port Facilities Zone*, is included as Attachment 1.

Rezoning

On 14 July 1998 the Planning Scheme Map was changed reflecting the rezoning of the land to a *Special Facilities Zone* that provided for a range of uses. A copy of the extract of the Zoning Map for Rezoning Application R108 is included as Attachment 2.

The land uses are as defined by the Planning Scheme. The *Special Facilities Zone* for the land does not provide for residential development other than “*Dwelling Unit – Manager’s Residence*.” The uses included, “*Terminal and Depot to be used for the loading, unloading, distribution and delivery of passengers, baggage and freight, the making of bookings and the sale of tickets*.” The land included in the *Special Facilities Zone* appears to be smaller in size than that affected by the recent Preliminary Approval.

Rezoning Deed

The Rezoning Deed was entered into on 20 May 1988. A copy of the Deed is included as Attachment 3.

Condition 7 of the Rezoning Approval requires a specific amount of car parking. The condition reads as follows.

7. *Provision for car parking spaces shall provide for a minimum of four hundred and forty-eight (448) car parking spaces as shown on Plan Numbers 6580-R3, Revision Number C and 6580-C4, Revision Number C. All car parking areas shall be drained, imperviously sealed and line marked to the satisfaction of Council’s Building Surveyor.*

Council Considerations

The former Douglas Shire Council considered the rezoning application at the Special meeting held on 2 February 1988 and the General Meeting of the 23 February 1988. Car parking provision was specifically discussed and a submission lodged by the Applicant.

At the meeting held on 2 February the planning report commented that 320 car spaces and additional bus parking would be provided on the land. The report further advised that the identified a shortfall of 146 spaces should be provided as a monetary contribution, at a rate of \$1,100 per space for the Council to provide additional parking in the locality. The original wording for condition 7, as minuted by Council included the ability for an off-site contribution. The original wording was as follows:

7. *Provision for car parking spaces shall provide for a minimum of 320 on-site car spaces and actual provision, the applicant shall make a contribution, at a rate of \$1,100 per space, to Council for the provision of alternative parking external to the site. All car parking areas shall be drained, imperviously sealed and line marked to the satisfaction of Council’s Building Surveyor.*

The further report, submitted to the meeting held on 23 February, identified a variance of demand ranging between 228 and 530 spaces depending on how the demand rate was calculated. The final demand figure of 448 was determined by the number of provided onsite spaces (327) and the number of kerb side Wharf Street spaces (121).

The Minutes state, “*The Building Surveyor tabled at the Meeting plans no. 6580-C4 and 6580-R3 showing a layout of 448 proposed car spaces.*”

A copy of these minutes is included in Attachment 4.

The condition of the rezoning deed reflects the final Council resolution on this matter.

Parking Layout Plans

To date the location of the identified plans, recognized to be GHD (Gutteridge Haskins and Davey) Plans, "*Plan Numbers 6580-R3, Revision Number C and 6580-C4, Revision Number C,*" is unknown.

The GHD *Site Plan and External Lighting Plan*, drawing 6580-E1 Revision E, stamped and dated as approved 29 January 1988 of the building approval, for the subsequent marina complex show a car park layout. A copy of this plan is included as Attachment 5.

Current Parking

The current onsite parking is as depicted in the aerial photograph included in Attachment 6.

The current onsite construction is similar to that of GHD Drawing 6580-E1, Revision E. An exception is that the most southerly bank of double car parking is used as bus parking for the marina reef fleet passengers, for example parking for the Quicksilver Group vessels.

A count off the aerial photograph and including a "parking area" adjacent to the former tavern at the northern end of the complex can identify some 242 car parking spaces and 32 bus parking bays. This number is considerably still less than the 320 car spaces and additional bus parking that was reported to the former Council. The Council minutes state that a bus parking space was equivalent to three car parking spaces.

Constructed on-street parking along Wharf Street, adjacent to the marina facility includes 89 angled spaces and 54 parallel spaces, giving an additional 143 car spaces to the area.

It is noted a further 116 (approximately) spaces have been constructed on reserve land between Grant and Wharf Streets. This car park appears to have been developed after February 1987, as it was not included in the "regulated parking area" map for Port Douglas at the time. It is not currently known who established this car park. This parking area is operated as a Council parking facility.

Planning Comment

Of relevance is the wording of the Deed, including the specified uses and Condition 7, the reports to Council regarding car parking, the approved electrical plan for the car parking area that appears to have been constructed.

While the rezoning only applied to the land parcel and did not include the road the Applicant's representations sought Council's consideration of on-street parking.

Having regard to the wording of the minutes it would appear that the nominated plans of Condition 7, included the Wharf Street onsite parking. In the absence of the nominated plans consideration should be given to the written minutes and **consider the requirement of 327 onsite spaces where a bus parking space is equivalent to three car parking spaces**. It is noted the additional 141 spaces have been constructed along Wharf Street.

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Should you have further enquiries regarding this matter please contact Jenny Elphinstone on (07) 4099 9482.

Yours faithfully



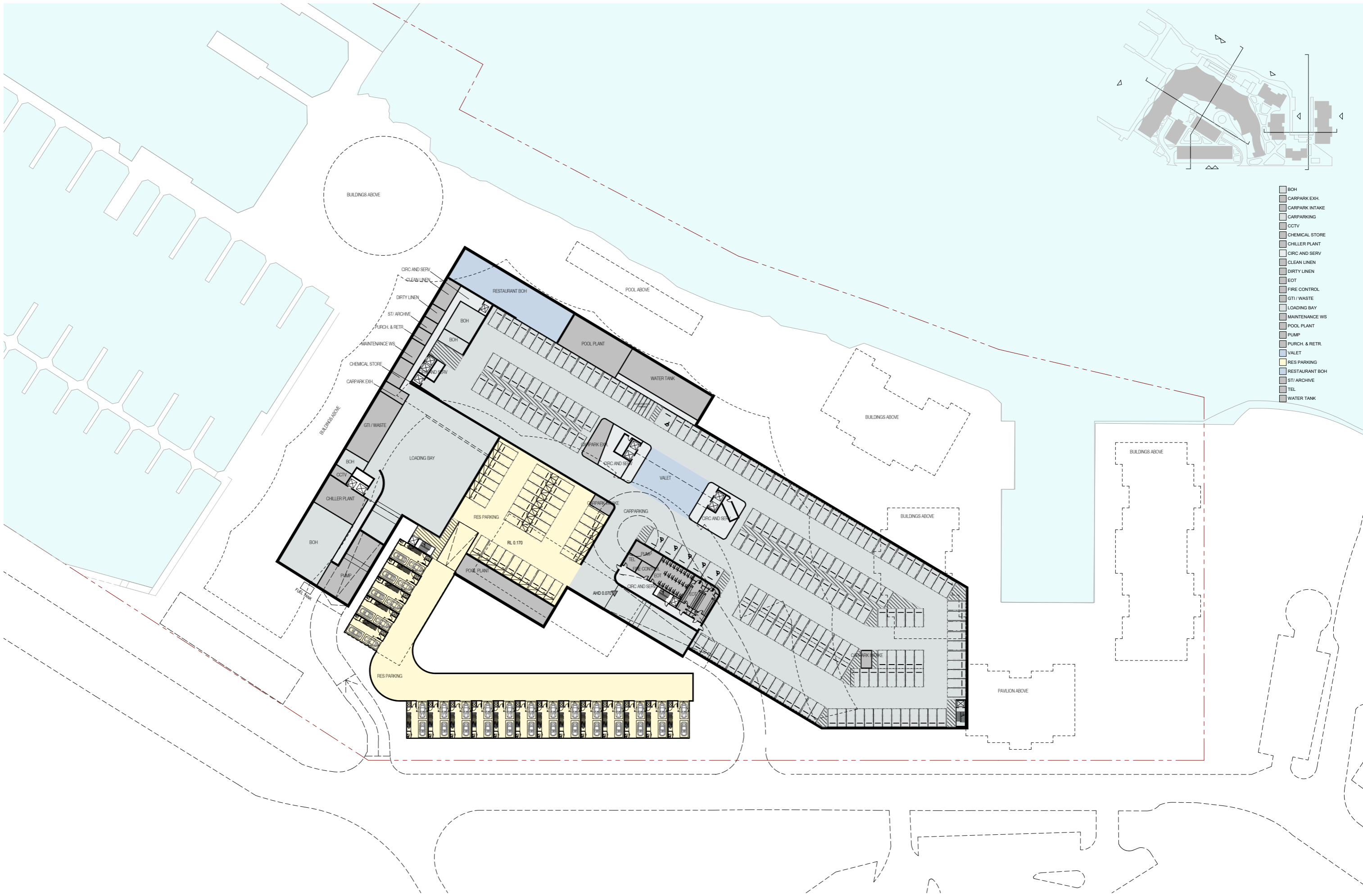
Paul Hoyer
MANAGER SUSTAINABLE COMMUNITIES

Attachments:

1. Port Facilities Zoning
2. Rezoning Map
3. Rezoning Deed
4. Council Minutes
5. GHD Electrical Layout for Car Park
6. Aerial Plans of site and Surrounds

APPENDIX: E

Basement Car Parking Plan



- BOH
- CARPARK EXH.
- CARPARK INTAKE
- CARPARKING
- CCTV
- CHEMICAL STORE
- CHILLER PLANT
- CIRC AND SERV
- CLEAN LINEN
- DIRTY LINEN
- EOT
- FIRE CONTROL
- GTI / WASTE
- LOADING BAY
- MAINTENANCE WS
- POOL PLANT
- PUMP
- PURCH. & RETR.
- VALET
- RES PARKING
- RESTAURANT BOH
- STI ARCHIVE
- TEL
- WATER TANK

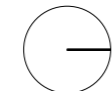
INDICATIVE LAYOUT ONLY

21/12/2017 11:33:28 PM

Project
CRYSTALBROOK SUPERYACHT
MARINA DEVELOPMENT

Job No.
21383

Scale
1 : 500 @A1
0 5 10 15 20 25
m



Drawing
SD02_01
FLOOR PLAN - B1

Revision
A
21.12.2017

Level 5, 18 Oliver Lane
Melbourne VIC
3000 Australia
T 61 3 9699 6688
sjb.com.au



APPENDIX: F

Sewer Demand Calculations

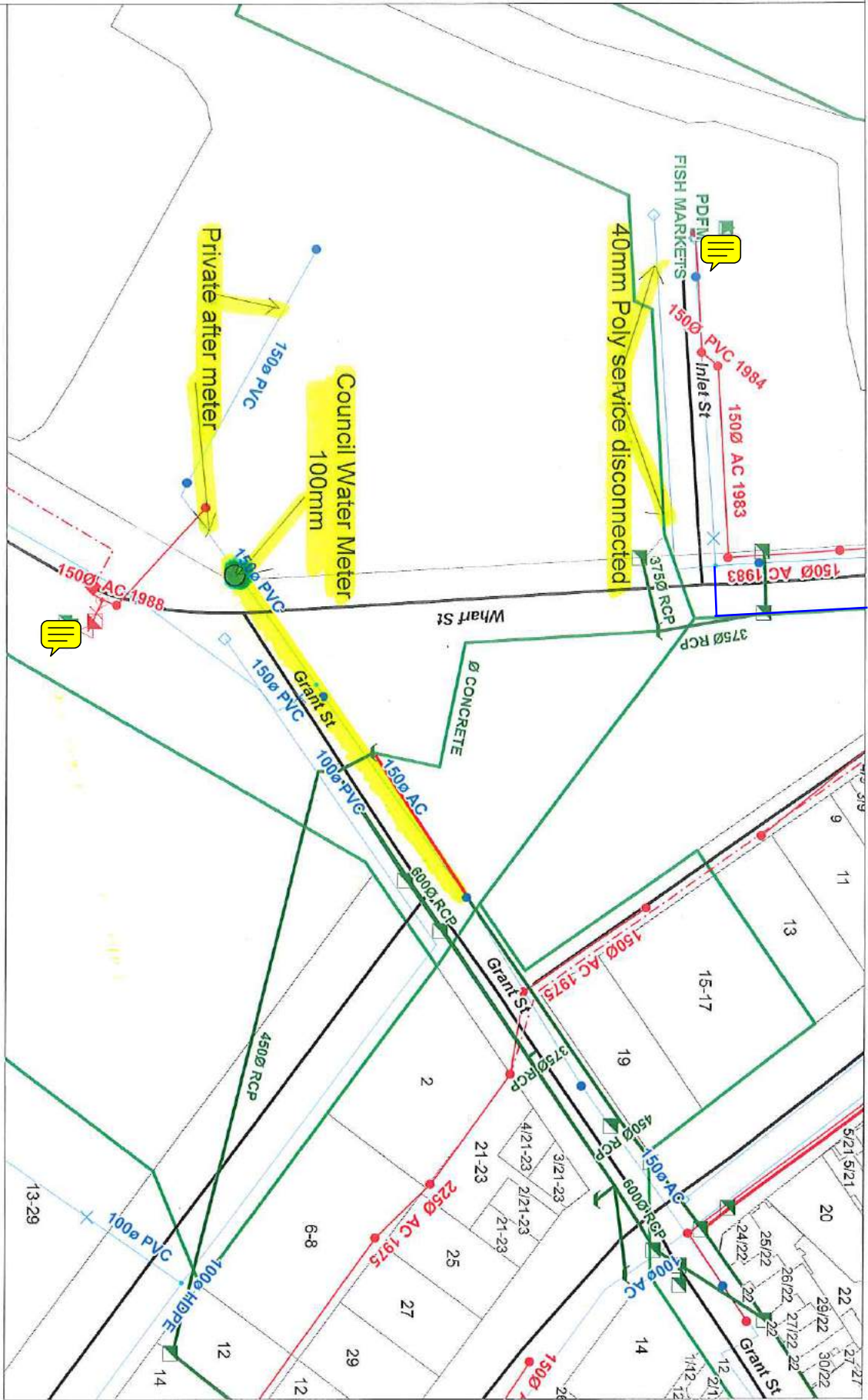
<u>Crystalbrook Superyacht Marina Development</u>			
Sewer Demand Tabulation			
1. Equivalent Demands			
Apartment Precinct			
2 Bedroom:	9		- Multi Unit Accom - Units < 2 bedrooms
EP per Unit =	1.6		refer to FNQROC D6.07
Total EP =	14.4		
Total Apartment EP =	14.4		
Villa Precinct			
2 Bedroom:	11		- Multi Unit Accom - Units =2 bedrooms
EP per lot =	1.6		refer to FNQROC D6.07
Total EP =	17.6		
3 Bedroom:	32		- Multi Unit Accom - Units =3 bedrooms
EP per Unit =	2.2		refer to FNQROC D6.07
Total EP =	70.4		
4 Bedroom:	2		- Multi Unit Accom - Units >3 bedrooms
EP per Unit =	2.8		refer to FNQROC D6.07 - 0.4+0.6x no. bedrooms)
Total EP =	5.6		
Total Villa EP =	93.6		
Resort Pricinct			
1 Bedroom:	130		- Multi Unit Accom - Units =2 bedrooms
EP per Unit =	1.0		refer to FNQROC D6.07
Total EP =	130.0		- assumed any food outlets with hotel are accounted for by rooms
Total Resort EP =	130.0		
Restaurants and Retail			
Restaurant, Lounges, Bars:	4076	m2	
Industrial Class:	8		
Number of similar connections (N):	1		
EP per Ha GFA =	500.0		- Calculated from WSAA 02 Part 1
Total EP =	203.8		
Cafe:	0	m2	
EP per m2 GFA =	0.0		- assume EP accounted for by suites
Total EP =	0.0		
Retail:	582	m2	- Shops/Offices
EP per 90m2 GFA =	1.0		refer to FNQROC D7.08
Total EP =	6.5		
Total Restaurant/retail EP =	210.3		
Marina			
No of Berths:	156.0		
Commercial:	39.0		- use marina wet berth EP from City of Gold Coast = 2.18 EP/berth
Private:	117.0		- 93 existing/24to be constructed
Long Term Rentals:	53.0		- Assume no usage of sewerage system
Short term rentals:	65.0		- Assume 3/4 occupancy at any time and use Marina - transient Moorage
from City of Gold Coast = 1.09 EP/berth			
Total Marina EP =	138.2		
Total Development EP =	586.4		

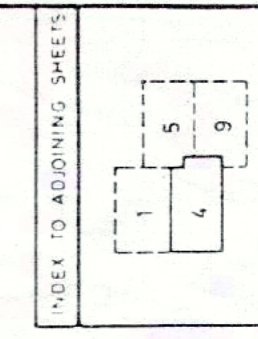
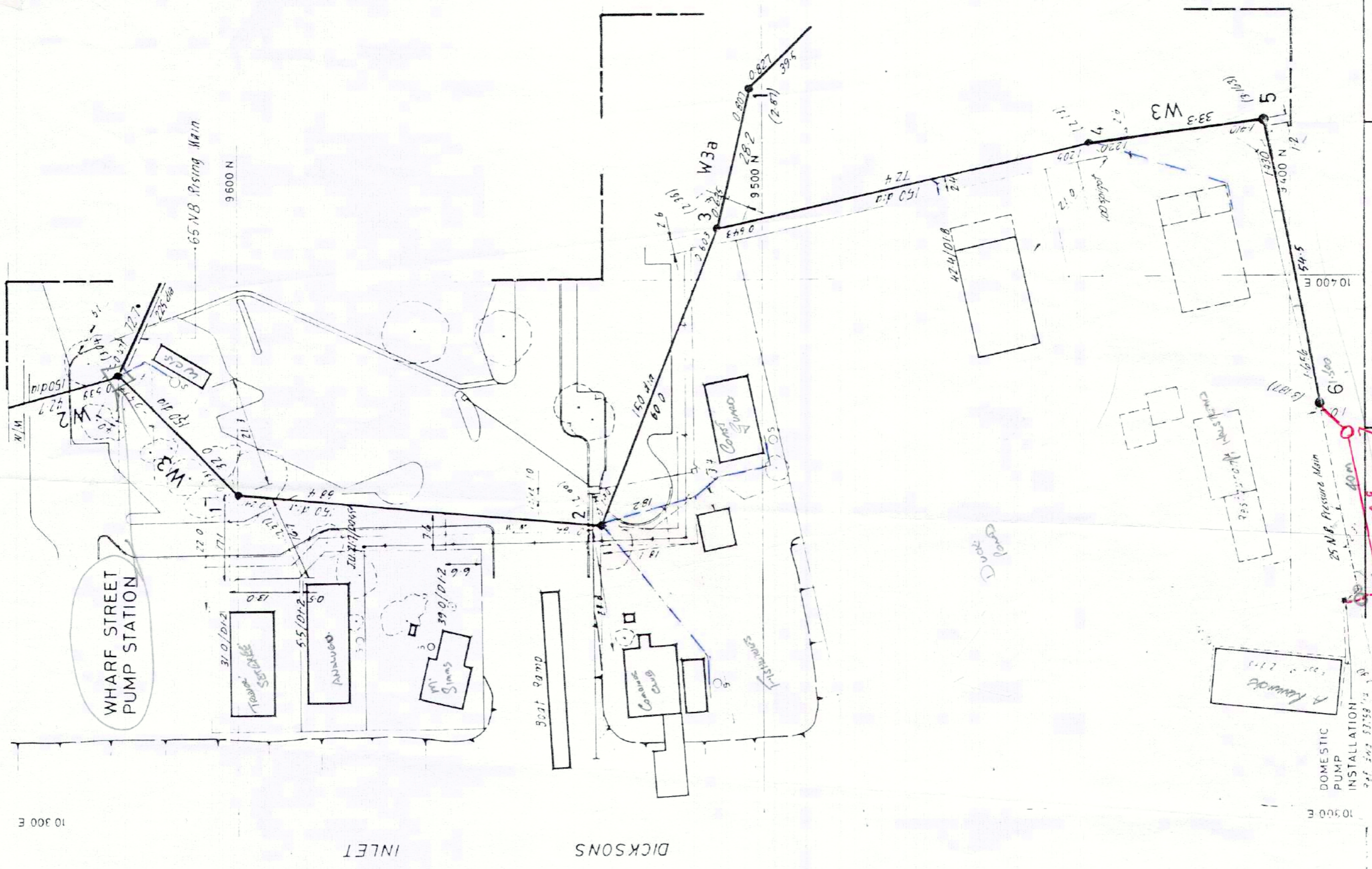
<u>Crystalbrook Superyacht Marina Development</u>	
Sewer Demand Tabulation	
2. Flow Calculation	
ADWF = 270 L/EP/day	- refer to FNQROC D7.08
= 158334.525 L/day	
= 1.833 L/s	
PWWF = 5 x ADWF	- refer to FNQROC D7.08
= 791672.625 L/day	
= 9.16 L/s	
or (greater of)	
PWWF = C1 x ADWF	- refer to FNQROC D7.08
= 1216199 L/day	
= 14.08 L/s	
PDWF = C2 x ADWF	- refer to FNQROC D7.08
= 381076 L/day	
= 4.411 L/s	

APPENDIX: G

Marina E SPS Information

- Drainage Network**
- Unknown
 - Drain Inlet
 - Kerb Inlet
 - Manhole
 - Wing Wall
 - Gross Pollutant Trap
- Water Supply Network**
- Air Release Valve
 - Altitude Valve
 - Borehole
 - Butterfly Valve
 - End Cap
 - Flow Meter
 - Gate Valve
 - Gate Valve Closed
 - Hydrant
 - Hydraulic Control Valve
 - Intake
 - Junction
 - Water
 - Pressure Reducing Valve
 - Pump
 - Reducer
 - Reflux Valve
 - Reservoir
 - Scour Outlet
 - Scour Valve
 - Tower
 - Water Treatment Plant
- Sewerage Network**
- End Cap
 - Junction
 - Manhole
 - Meter Point
 - Overflow Ch
 - Overflow Outlet
 - Open Valve
 - Pump Station (Actual)





1.215
1.54
3.05
3.187
1.656
1.531

DOUGLAS SHIRE COUNCIL
 PORT DOUGLAS SEWERAGE SCHEME
 DETAIL PLAN No 4
 SCALE 0 5 M
 S 3758/5 E

MCINTYRE & ASSOCIATES PTY. LTD.
 CONSULTING ENGINEERS
 QUEENSLAND AUSTRALIA

LEVEL DATUM	State	DESIGNED	K.E. B.V.
REF. B.M.	B.M. 4 R.L. 3057 Cnr Wharf St. & Warner St	DRAWN	M.J.
AZIMUTH		PLOTTED	
FIELD B.	3758/1	CHECKED	
LEVEL B.	3758/1		
PASSED		DATE	18.3.83

50 NB PRESSURE MAIN + 100 OVERFLOW

NOTES: See 3758/2 & 3758/3

NO	DATE	DESCRIPTION	APPD.
1	1/85	Line W3 to be constructed	S.S.
2	1/85	Line W3 to be constructed	S.S.
3	1/85	Line W3 to be constructed	S.S.
4	1/85	Line W3 to be constructed	S.S.
5	1/85	Line W3 to be constructed	S.S.

Project **Marina**
 Customer pos.no
 Project ID **Port Douglas**
 Pos.no **1**
 Created by **Nasir.A**



Page 1 / 5
 2017-12-11

Data sheet

Pump type

Amarex KRT F 80-250/54UG-S

Operating data

Flow		l/s	Fluid		
Head		m	Density	0.998	kg/dm ³
Operating speed		1/min	Viscosity	1	mm ² /s
Shaft power		kW	Temperature	20	°C
Efficiency		%			
Required pump NPSH		m			
Head H(Q=0)	17.5	m			
Application range	Head		Flow		
	From	17.5 m	0	l/s	
	To	4.74 m	40.3	l/s	

Design

Make	KSB	Impeller type	Vortex	
Design	Submersible pump		Open	
Series	Amarex KRT F	Impeller size	237	mm
Frame size	80-250		Max.	265 mm
Stages	1		Min.	190 mm
Curve number	K42873s	Free passage	76	mm
		Weight	148.5	kg
Type of bearings	Antifriction			
Nos. of bearings	1 / 1			
Lubrication	Grease lubrication, lubricated for lifetime			
Suction port	Pressure rating	---		
	Nominal pipe size	DN0	---	
	Nominal pipe size	DN1	DN 100	
	Standard		---	
Discharge port	Pressure rating		PN 10	
	Nominal pipe size	DN2	DN 80	
	Nominal pipe size	DN3	DN 80	
	Standard		EN 1092-2	

Suction port: pump (DN1)

Discharge port: discharge elbow (DN3)

Materials

Pump casing	Grey cast iron EN-GJL-250 (A 48 Class 35B)
Discharge cover	Grey cast iron EN-GJL-250 (A 48 Class 35B)
Impeller	Grey cast iron EN-GJL-250 (A 48 Class 35B)
Shaft	Stainless steel EN-1.4021+QT800 (A 276 Type 420)
Bearing bracket	Grey cast iron EN-GJL-250 (A 48 Class 35B)
Motor casing	Grey cast iron EN-GJL-250 (A 48 Class 35B)
Bolts, nuts	Stainless steel A4 (EN-1.4571) (A 276 Type 316)
Shaft protection sleeve	---
Casing wear ring	
Impeller wear ring	
O-Rings	Nitrile rubber (NBR)

Project **Marina**
Customer pos.no
Project ID **Port Douglas**
Pos.no **1**
Created by **Nasir.A**

Data sheet

Pump type

Amarex KRT F 80-250/54UG-S

Shaft seal

Type of seal	Double mechanical seal
Arrangement:	Tandem
Seal on medium side	with elastomer bellows
Mechanical seal, pump-side	Silicon carbide / Silicon carbide
Mechanical seal, bearing-side	Carbon / Silicon carbide

Monitoring

Thermal winding protection	By temperature sensitive switches
Explosion proof protection	---
Motor housing monitoring	By conductive moisture sensor electrode
Mechanical seal leakage detection	---
Bearing temperature monitoring	---

Coating

Preparatory treatment	Sa 2 1/2 to ISO 8501-1 / ISO 12 944-4 DIN 55928, Part 4
Blasting method	Steel grit blasting
Primer	Zinc phosphate or Zinc dust
Dry film thickness primer	> 35 microns
Top coat	2-component epoxy resin
Solids content	> 82 %
Dry film thickness top coat	> 150 microns
Colour	Ultramarine Blue (RAL 5002 to DIN 6174)

Installation

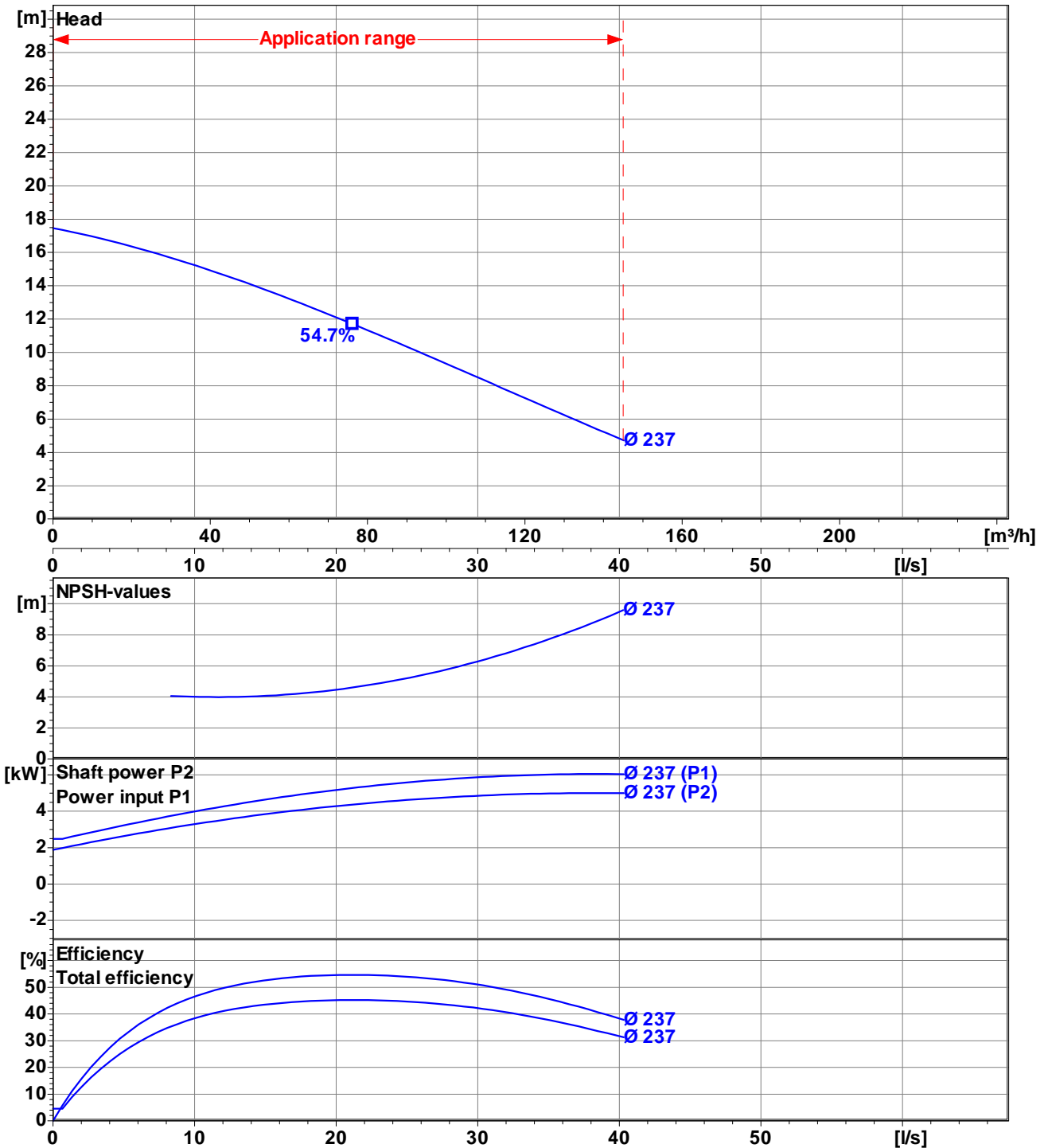
INSTALLATION

Type of installation:	Wet well installation designed for automatic connection to a permanently installed discharge elbow
Discharge elbow size (DN2/DN3):	DN 80 / DN 80
Flange dimensions to:	EN 1092-2, PN 10
Claw:	Bolted to the pump
Guide system:	Double guide bars
Guide bar diameter:	2 x 2 in pipe, outside dia. 60,3 mm (2,4 in), inside dia. 50...54 mm (2,0...2,1 in)
Installation depth:	4,5 m (15 ft)
Lifting device:	stainless steel lifting chain
Length of lifting device:	10 m (33 ft)
Lifting loops:	Every 2,5 m (8 ft)
Installation accessories:	Discharge elbow, DN 80 / DN 80 fasteners, claw, bracket, lifting chain, but without guide bars
Materials:	
Discharge elbow:	Grey cast iron EN-GJL-250 (A 48 Class 35B)
Claw:	Grey cast iron EN-GJL-250 (A 48 Class 35B)
Bracket:	Stainless steel EN-1.4571 (A 276 Type 316 Ti)
Guide bars:	Not part of this specification
Lifting device:	Stainless steel EN-1.4404 (A 276 Type 316 L)

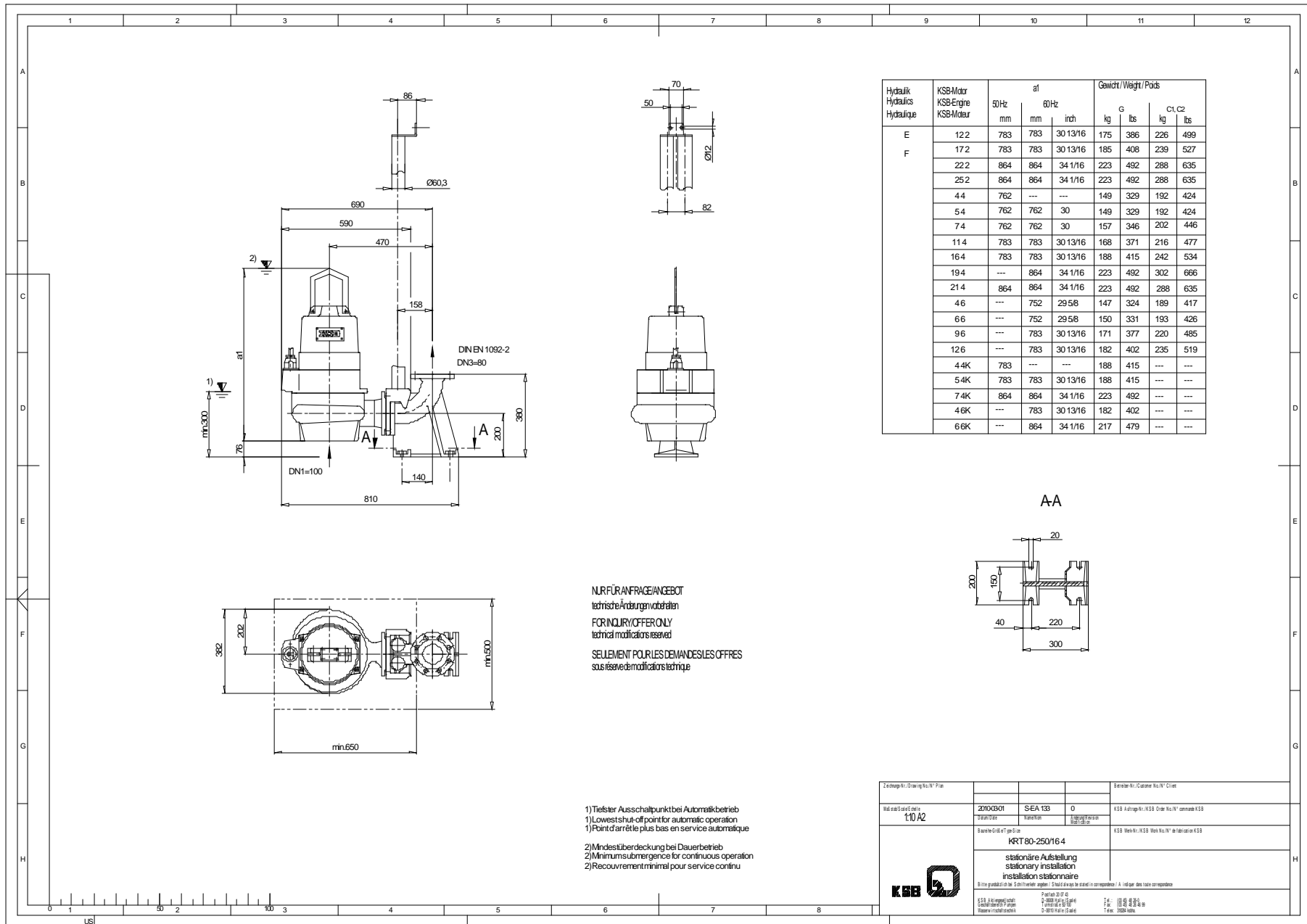
Performance curve

Pump type

Amarex KRT F 80-250/54UG-S



Impeller type	Vortex	, Open	Curve number	K42873s	
Free passage	76 mm	Density	0.9983 kg/dm ³	Frequency	50 Hz
Impeller size	237 mm	Viscosity	1.005 mm ² /s	Speed	1450 1/min



NUR FÜR ANFRAGE/ANGEBOT
 technische Änderungen vorbehalten
 FOR INQUIRY/OFFER ONLY
 technical modifiers reserved
 SEULEMENT POUR LES DEMANDES/LES OFFRES
 sous réserve de modifications technique

- 1) Tiefster Ausschaltpunkt bei Automatikbetrieb
 1) Lowest shut-off point for automatic operation
 1) Point d'arrêt le plus bas en service automatique
- 2) Mindestüberdeckung bei Dauerbetrieb
 2) Minimum submergence for continuous operation
 2) Recouvrement minimal pour service continu

Zerlegung Nr./Drawing No./N° Plan

Teilzeichnung: 1:10 A2

Bestell-Nr./Order No./N° Client: 633 Auftrags-Nr./KSB Order No./commande KSB

Bestell-Nr./Order No./N° Client: 633 Best-Nr./KSB Best No./N° commande KSB

Bestell-Nr./Order No./N° Client: KRT 80-250/164

stationäre Aufstellung
 stationary installation
 installation stationnaire

Bitte prüfen Sie bei Zeichnungsanfrage: 1) ob das Werkstück in der angegebenen Ausführung lieferbar ist. 2) ob das Werkstück in der angegebenen Ausführung lieferbar ist.

KSB Logo

Produktionsdatum: 1. April 2014
 Zeichnungsdatum: 1. April 2014
 Zeichnungsnummer: 1.0 A2

Plan: 1:10 A2
 Blatt: 1 von 1
 Zeichner: [Name]
 Geprüft: [Name]
 Freigegeben: [Name]

Project **Marina**
 Customer pos.no
 Project ID **Port Douglas**
 Pos.no **1**
 Created by **Nasir.A**



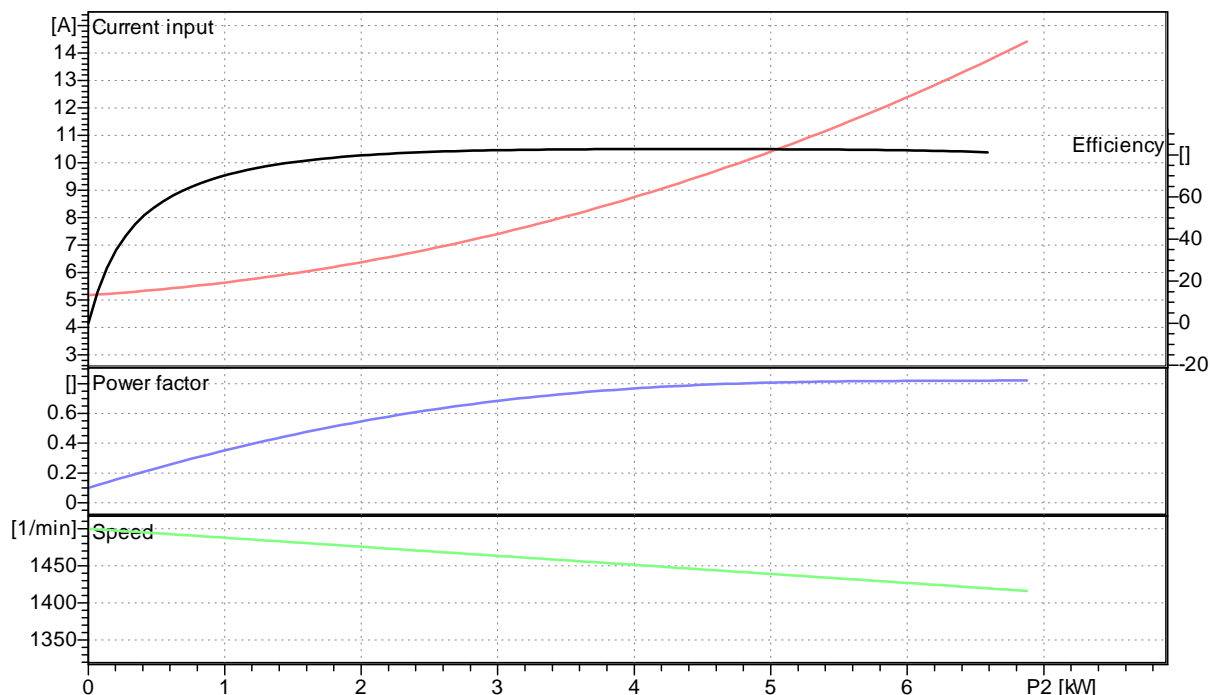
Data sheet: Motor data

Motor type **54UG**

Motor manufacturer	KSB Aktiengesellschaft	Rated voltage	415	V
Design acc. standard	-	Rated frequency	50	Hz
Degree of protection	IP68	Rated power P2	5.5	kW
Insulation class	F	Rated current	11.4	A
Coolant temperature	</= 40 °C (104 °F)	Nominal speed	1433	1/min
Starting mode	Direct	Starting to rated current	4.8	
No. starts / h	30	Starting current	54.7	A
		Max. voltage	436	V
		Min. voltage	394	V
Motor casing	Grey cast iron EN-GJL-250 (A 48 Class 35B)			
Explosion protection	--			
Pump type	Amarex KRT F 80-250/54UG-S			

Load	P1 kW	P2 kW	eta %	cos phi	I A
4/4	6.71	5.5	82.0	0.82	11.4
3/4	4.96	4.1	83.2	0.77	8.9
2/4	3.34	2.8	82.3	0.66	7.0
1/4	1.84	1.4	74.7	0.43	6.0

Main cable	1 x S1BN8-F 12G1.5	Diameter	16.60..17.60 mm
Control cable	---	Diameter	
Cable, outer sheath	Waterproof synthetic rubber compound		
Cable length	15 m		



James Mansfield

From: Peter White <Peter.White@douglas.qld.gov.au>
Sent: Friday, 8 December 2017 8:43 AM
To: Greg Applin
Subject: RE: Water and sewer records for network at Marina

Greg

Draw down test data	date	time	rising main (mm)	high level alarm (mm)	start level (mm)	stop level (mm)	overflow (mm)	well depth (mm)	inlet invert level	well diameter (mm)	well radius (mtr)	stop/start distance (mtr)	pump draw down time secs #1	pump draw down time secs #2	pump pressure Kpa # 1	pump pressure Kpa # 2	pump performance l/ps# 1	pump performance l/ps # 2	Pump Station SL - Top of lid (AHD)	Overflow level (AHD)	Pipe Diameter (mm)	Distance from top of pump to overflow level (mm)
E (Marina)	25/08/2010	11.00am	1420	2420	3430	4260		4920	3380	2110	1055	830	248	272	80	80	11.70	10.67	3.27	1.62	225	1650

Regards

Peter White | Water & Wastewater Operations | Douglas Shire Council
P: 07 4099 9466
M: 04 2714 9966
E: Peter.White@douglas.qld.gov.au | **W:** www.douglas.qld.gov.au
Mail: PO Box 723, Mossman Q 4873 | **Office:** 64-66 Front Street, Mossman Q

From: Greg Applin [mailto:Greg@flanaganconsulting.com.au]
Sent: Thursday, 7 December 2017 4:38 PM
To: Peter White
Cc: James Mansfield; 4985-02 Civil Engineering
Subject: RE: Water and sewer records for network at Marina

Peter,
Can you please confirm the internal diameter of the existing pump station?

We need to know this to determine the current emergency storage capacity so we can determine if augmentation is required.

Regards,

Greg Applin

Senior Civil Engineer
RPEQ: 6073
M:



APPENDIX: H

Pump Station Design Calculations

Sewage Pump Station Design

Location Marina Pump Station Port Douglas

Catchment Data

No. of Equivalent Persons	587
ADWF (litres/capita/day)	270
Average Dry Weather Flow (litres/sec)	1.83
Wet Weather Peaking Factor "C1"	5.00
Dry Weather Peaking Factor "C2"	2.41
Peak Dry Weather Flow (litres/sec) PDWF	4.41
Peak Wet Weather Flow (litres/sec) PWWF	9.17

Pressure Main, Pumping Rate and Control Volume

Maximum Pipe Velocity (m/s)	2	
Maximum Allowable Detention Time (Hours)	2	
Maximum Number of Pump Starts (Per Hour)	8	
Length of Pressure Main (m)	1200	Estimate Length (To be confirmed)
Peak Dry Weather Flow (litres/sec) PDWF	4.41	
Peak Wet Weather Flow (litres/sec) PWWF	9.17	
Required Internal Pressure Main Diameter (mm)	76	Minimum 184 Maximum
Adopted Rising Main Internal Pipe Diameter (mm)	150	
Allowable Pumping Rates (litres/sec)	17.3	Minimum 35.3 Maximum
Design Pump Rate (litres/sec)	11.2	Average from DSC Pump Test
Wet Well Storage Volume Required (m ³)	1.3	
Actual Number of Pump Starts (Per Hour)	6.5	
Actual Pipe Flow Velocity (m/s)	0.6	

Pump Well Storage Requirements

Internal Diameter of Pump Well (m)	2.10
Minimum Req'd Height of Storage Allowance in Well	0.364
Adopted Height of Storage Allowance in Well (m)	0.600
Actual Storage Volume	2.078

Sewage Pump Station Design

Location Marina Pump Station Port Douglas

Pump Control Levels

Invert Level of Pump Station Inlet	-0.110	AHD
Recommended Pump Submersion Depth (m)	0.300	
High Level Alarm (Standby Start + 150mm)	-0.350	AHD
Standby Start Level (TWL) (Duty Start + 150mm)	-0.500	AHD
Duty Start Level (BWL + Adopted Storage Height)	-0.650	AHD
Pump Stop Level (BWL) (Base of well + Pump Submersion Depth + 100mm)	-1.250	AHD
Base Level of Pump Well	-1.650	AHD

Pump Station Details

Level of Top of Pump well (FSL + 0.15m)	3.270	AHD
Total Pump Well Depth (m)	4.920	

Pump Station Levels Summary

Ref	Description	Level
A	Top of Pump Well	3.270
B	Base of Pump Well	-1.650
D	Inlet IL	-0.110
E	Outlet IL	1.850
-	Overflow	1.620
-	Overflow Alarm	
-	Alarm	-0.350
-	Standby Start	-0.500
-	Duty Start	-0.650
-	Pump Stop	-1.250

DSC Supplied Data

DSC Supplied Data
 DSC Supplied Data

Currently Set at RL 0.850

Sewage Pump Station Design

Catchment Data

ADWF (litres/EP/day)	270
Equivalent Population	587
Gross Catchment Area (ha)	N/A
ADWF (l/s)	1.83

Storage Calculations

Top Water Level (m)	-0.500
Overflow Level (m)	1.620
587 Manhole Diameter (mm)	1050
Pump Stn Diameter (mm)	2100

Pump Well Emergency Storage

Storage volume measured from 300mm below inlet level (ie Standby Pump Start)

Manhole Number	Base Level of	Overflow Level	Storage height	Storage Volume
Marina PS	-0.500	1.620	2.120	7.343
Total				7.3

Manhole Emergency Storage

Manhole Number	Downstream Invert	Manhole Cover	Storage height	Storage Volume
Collection MH	-0.150	2.850	1.770	2.002
U/S MH 1	0.060	2.930	1.560	1.351
MH 2	0.150	3.090	1.470	1.273
			0.000	0.000
			0.000	0.000
Total				4.626

Manholes

Additional Storage available in manholes not measured in these calculations

REQUIRED STORAGE

Minimum Required Duration of Storage (Hours x ADWF)	4.0
Minimum Required Emergency Storage (m ³)	26.4

AVAILABLE STORAGE

Available Duration of Storage (Hours x ADWF)	1.81
Available Total Emergency Storage (m ³)	12.0

ADDITIONAL STORAGE REQUIRED (m ³)	14.4
---	------

Equivalent Pipe Lengths for Additional Storage

Pipe Dia (mm)	Area (m ²)	Length of pipe required (m)			
		Single Barrel	Double	Triple Barrel	Four Barrel
1500	1.77	8.2	4.1	2.7	2.0
1650	2.14	6.8	3.4	2.3	1.7
1855	2.70	5.3	2.7	1.8	1.3
1950	2.99	4.8	2.4	1.6	1.2
2250	3.98	3.6	1.8	1.2	0.9

APPENDIX: I

Water Supply Pre and Post Demand Calculations

<u>Crystalbrook Superyacht Marina Development</u>	
Water Demand Tabulation - PRE DEVELOPMENT	
1. Equivalent Demands	
Shipyards	
Ha:	0.16 - Calculated from WSAA 02 Part 1
Typical Peak Hr Rate(L/s/ha):	0.25
Total (l/s) =	0.040
EP =	36.5
Total Boat Yard Peak Hr Flow (l/s) = 0.040	
Restaurants and Retail	
Restaurant, Lounges, Bars:	6195 m2
Industrial Class:	8
Number of similar connections (N):	1
EP per Ha GFA =	500.0 - Calculated from WSAA 02 Part 1
Total EP =	309.8
Cafe:	0 m2
EP per m2 GFA =	0.0 - assume EP accounted for by suites
Total EP =	0.0
Retail:	5156 m2 - Shops/Offices
EP per 90m2 GFA =	1.0 refer to FNQROC D6.07
Total EP =	57.3
Total Restaurant and retail EP = 367.0	
Marina	
No of Berths:	132.0
Commercial:	39.0 - use marina wet berth EP from City of Gold Coast = 2.18 EP/berth
Private:	93.0 - 93 existing
Long Term Rentals:	52.0 - Assume no usage of sewerage system
Short term rentals:	41.0 - Assume 3/4 occupancy at any time and use Marina - transient Moorage from City of Gold Coast = 1.09 EP/berth
Total Marina EP =	118.5 - maximum AD allowance
Total Development EP = 522.1 - refer to FNQROC D6.07	
2. Flow Calculation	
Average Day, AD =	500 L/day/EP - refer to FNQROC D6.07
=	261057.8 L/day
=	3.23 L/s - maximum PD allowance
Mean Day Max Month, MDMM =	1.5 x AD - refer to FNQROC D6.07
=	391587 L/day - maximum PH allowance
=	4.69 L/s
Peak Day, PD =	2.25 x AD
=	587380 L/day - for 2 hours; 1 @ 2 hours
=	7.27 L/s - for 4 hours; 1 @ 4 hours
Peak Hour, PH =	1/12 x PD
=	0.65 L/s
3. Fire Demand	
Residential	
Fire Flow =	15 L/s
Commercial	
Fire Flow =	30 L/s

<u>Crystalbrook Superyacht Marina Development</u>		
Water Demand Tabulation - POST DEVELOPMENT		
1. Equivalent Demands		
Apartment Precinct		
2 Bedroom:	9	- Multi Unit Accom - Units < 2 bedrooms
EP per Unit =	1.6	refer to FNQROC D6.07
Total EP =	14.4	
Total Apartment EP = 14.4		
Villa Precinct		
2 Bedroom:	11	- Multi Unit Accom - Units =2 bedrooms
EP per lot =	1.6	refer to FNQROC D6.07
Total EP =	17.6	
3 Bedroom:	32	- Multi Unit Accom - Units =3 bedrooms
EP per Unit =	2.2	refer to FNQROC D6.07
Total EP =	70.4	
4 Bedroom:	2	- Multi Unit Accom - Units >3 bedrooms
EP per Unit =	2.8	refer to FNQROC D6.07 - 0.4+0.6x no. bedrooms)
Total EP =	5.6	
Total Villa EP = 93.6		
Resort Precinct		
1 Bedroom:	130	- Multi Unit Accom - Units =2 bedrooms
EP per Unit =	1.0	refer to FNQROC D6.07
Total EP =	130.0	- assumed any food outlets with hotel are accounted for by rooms
Total Resort EP = 130.0		
Restaurants and Retail		
Restaurant, Lounges, Bars:	4076 m2	
Industrial Class:	8	
Number of similar connections (N):	1	
EP per Ha GFA =	500.0	- Calculated from WSAA 02 Part 1
Total EP =	203.8	
Cafe:	0 m2	
EP per m2 GFA =	0.0	- assume EP accounted for by suites
Total EP =	0.0	
Retail:	582 m2	- Shops/Offices
EP per 90m2 GFA =	1.0	refer to FNQROC D6.07
Total EP =	6.5	
Total Restaurant and retail EP = 210.3		
Marina		
No of Berths:	132.0	
Commercial:	39.0	- use marina wet berth EP from City of Gold Coast = 2.18 EP/berth
Private:	93.0	- 93 existing/24to be constructed
Long Term Rentals:	52.0	- Assume no usage of sewerage system
Short term rentals:	41.0	- A _s - refer to FNQROC D6.07
Total Marina EP = 118.5		from City of Gold Coast = 1.09 EP/berth
- maximum AD allowance		
- refer to FNQROC D6.07		

<i>Crystalbrook Superyacht Marina Development</i>	
<i>Water Demand Tabulation - POST DEVELOPMENT</i>	
<i>Total Development EP = 566.8</i>	
<i>2. Flow Calculation</i>	
<i>Average Day, AD = 500 L/day/EP</i>	<i>- refer to FNQROC D6.07</i>
<i>= 283402.1 L/day</i>	
<i>= 3.28 L/s</i>	<i>- maximum PD allowance</i>
<i>Mean Day Max Month, MDMM = 1.5 x AD</i>	
<i>= 425103 L/day</i>	<i>- maximum PH allowance</i>
<i>= 4.92 L/s</i>	
<i>Peak Day, PD = 2.25 x AD</i>	
<i>= 637654.7 L/day</i>	<i>- for 2 hours; 1 @ 2 hours</i>
<i>= 7.38 L/s</i>	<i>- for 4 hours; 1 @ 4 hours</i>
<i>Peak Hour, PH = 1/12 x PD</i>	
<i>= 0.62 L/s</i>	
<i>3. Fire Demand</i>	
<i>Residential</i>	
<i>Fire Flow = 15 L/s</i>	
<i>Commercial</i>	
<i>Fire Flow = 30 L/s</i>	

**ATTACHMENT 5
LANDSCAPE DESIGN**

- Scott Carver (Landscape Design)



Crystalbrook Super Yacht Marina

[Landscape Design Report]



Prepared for

[Prime Constructions (QLD) Pty Ltd]
[36 Moffat Street, North Cairns, QLD 4870]
[07 4037 9800]

Submission

[Development Application]

Project Number

[20170181]

Scott Carver Pty Ltd
Level One, One Chifley Square
Sydney NSW 2000 Australia
Telephone +61 2 9957 3988
www.scottcarver.com.au

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Masterplan	15
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01 Introduction

01 Introduction

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 1.4585ha and is to be developed for mixed residential, hotel 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.





02 Vision

02 Vision Statement

To transform Crystalbrook Superyacht Marina into a globally recognised entertainment and cultural precinct...



Walkable + Connected Waterfront

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.



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 CSM (Crystalbrook Superyacht Marina) draws from the sites existing tropical ecology and setting. The planting will 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.



Cultural Destination

The landscape is designed to complement the architecture of the development, while providing environmental amenity within an attractive tropical setting. The design will 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 CSM (Crystalbrook Superyacht Marina) is to be branded as a waterfront destination and this sense of place of the site will restore, reinforce and forge a new community identity and ownership.



03 Design Principles

03 Design Principles

LANDSCAPE OBJECTIVES / PRINCIPLES

The landscape master plan will address the following design objectives:

- Enhance the appearance and amenity of the 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.

- 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 CSM (Crystalbrook Superyacht 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 will have an extensive native shady canopy and complement the existing tropical character. The Landscape planting for the site will have a minimum of 60% of indigenous / water sensitive planting species.



Hillary's Wharf, WA

03 Urban Cooling + Comfort Strategies

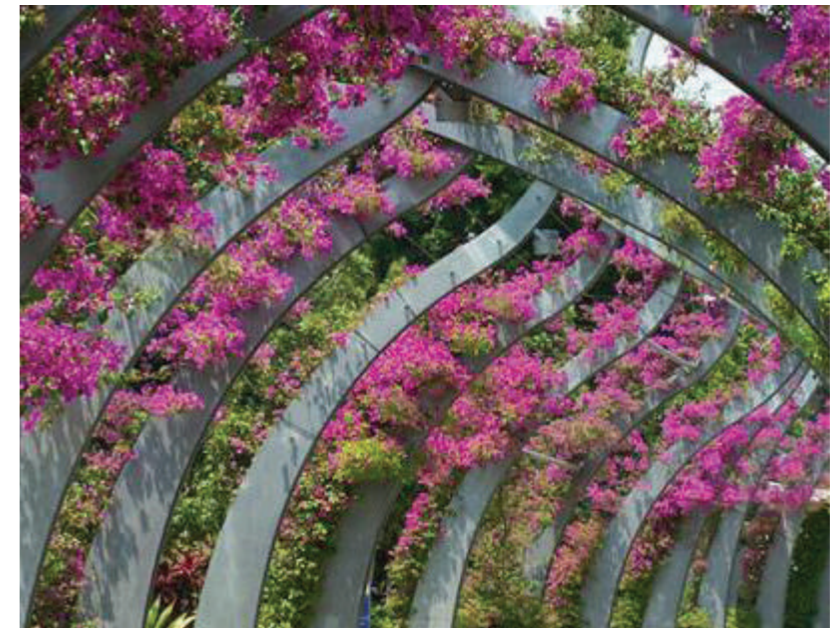
COOLING OBJECTIVES / PRINCIPLES

The landscape master plan will address the following design objectives to mitigate temperatures and provide urban cooling:

- To mitigate the urban heat island effect and provide habitable settings throughout the development through the use of cool materials, urban vegetation, water and shading solutions.
- The careful selection of permeable paving materials to reduce heat storage throughout the site. Selecting materials with greater reflectivity, less heat capacity and more moisture capacity.
- Increasing urban vegetation throughout the site through the use of street trees, parkland trees, dense shrub and ground cover plants along with natural lawn areas.
- The use of intensive and extensive green roofs and green walls to deflect solar radiating and provide evapotranspirative cooling.
- Evaporative cooling systems such as spray misters and water play elements to reduce ambient air temperatures.
- The use of shade structures within the public domain to prevent solar radiation from urban surfaces.



Green Wall



Urban Shade



Water - Evaporative Cooling



Water Misting (Micro Climate)



Bicentennial Boardwalk, Airlie Beach QLD

04 Public Domain and Landscape Strategy

4.1 Two Precincts

1

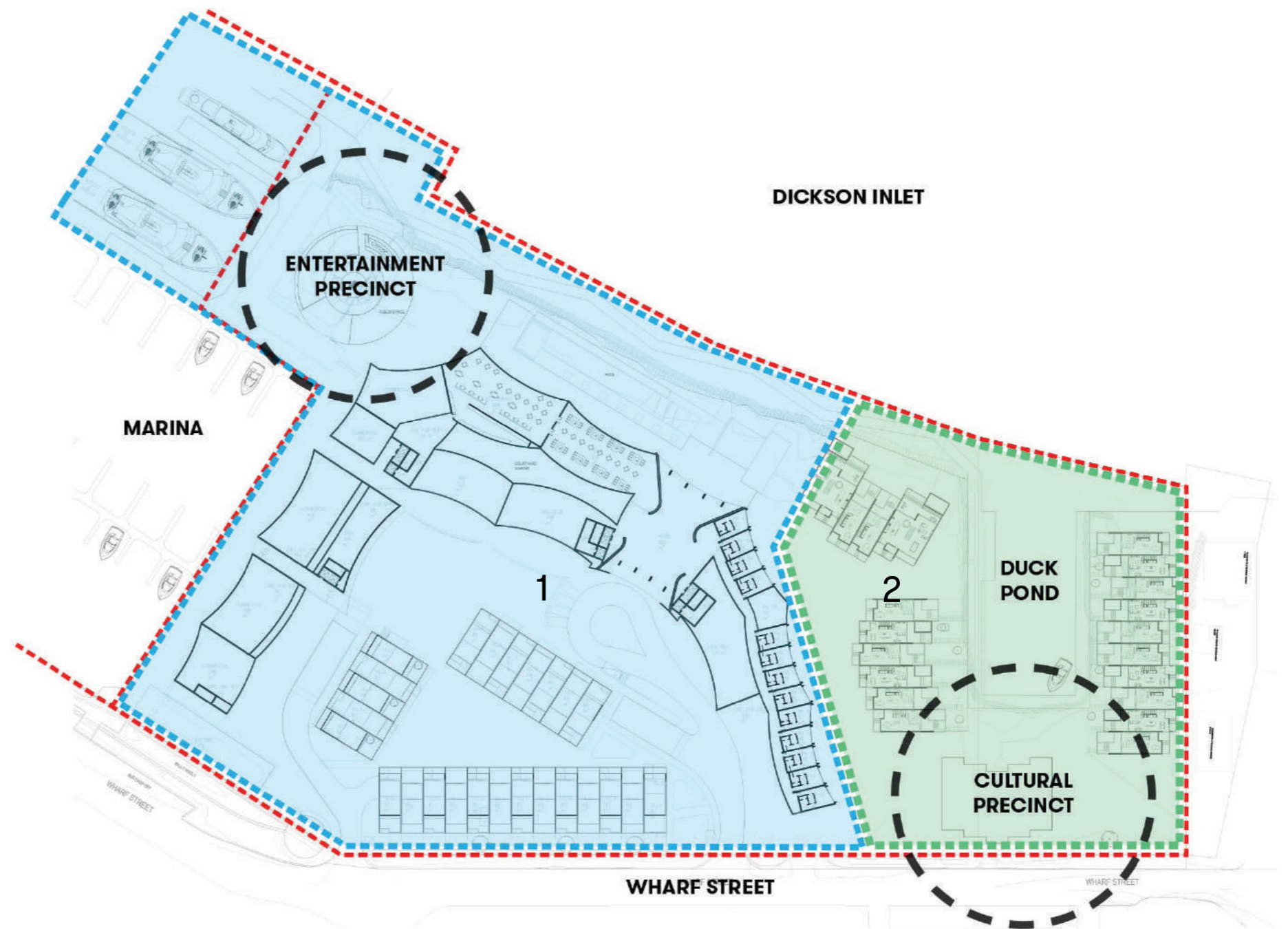
Entertainment Precinct

The primary function of the Entertainment precinct is to serve as a global tourism destination. The precinct will include a variety of retail and food and beverage outlets as well as a hotel and private apartments. The public domain will provide permeable connections throughout the site as well as a variety of spaces including boardwalk connections, meandering walkways and an urban entertainment plaza.

2

Cultural Precinct

The cultural precinct will serve as a conduit that connects the existing Town Centre to the new Entertainment Precinct. The Cultural precinct will include a series of residential developments and a pavilion structure. A publicly accessible boardwalk will connect the site along the waterfront whilst a cultural plaza will provide a social space for the Port Douglas community.

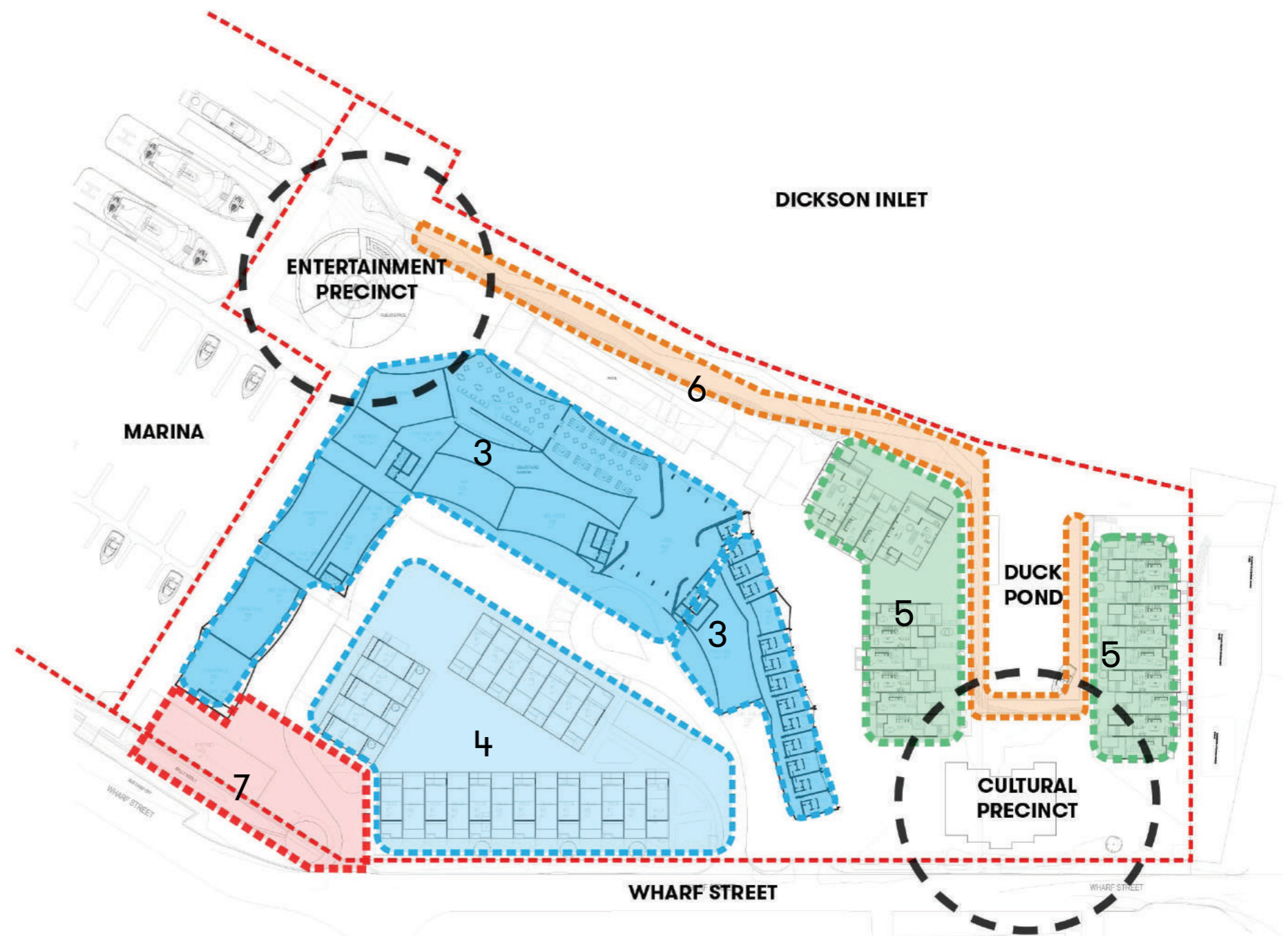


04 Public Domain and Landscape Strategy

4.2 Site Villages






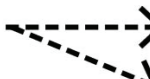
The public domain will be required to respond to a variety of typologies throughout the site. In order to create strong connections between architecture and the public realm the site has been characterised into a number of 'Villages.' These villages will be anchored by two distinct plazas at the northern and southern ends of the site.

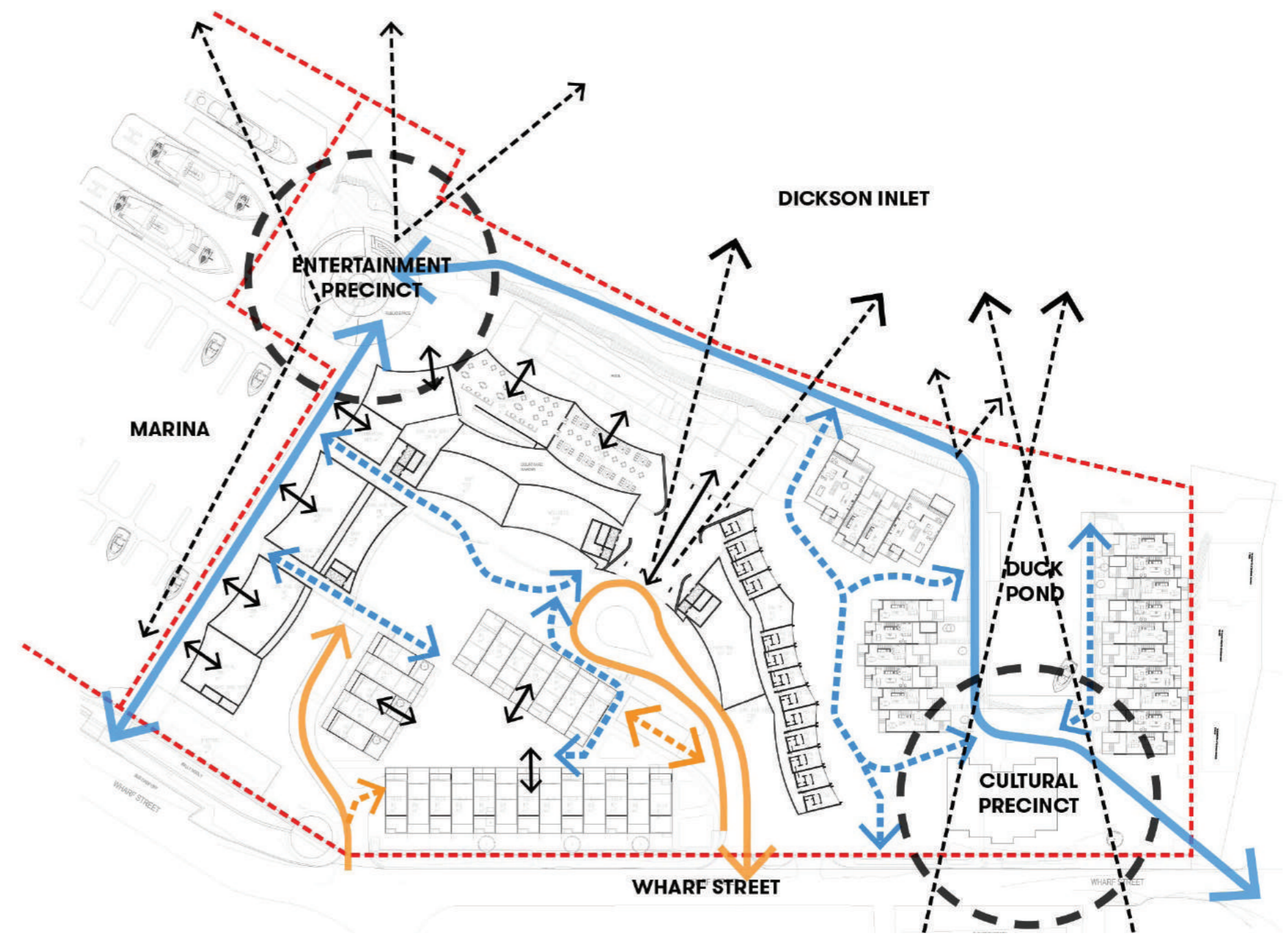
- 3 Mixed Use Village**
 To be comprised of food and beverage outlets, a hotel core and various apartments. The landscape strategy will respond with a number of typologies including a urban public boardwalk, hotel pools and a various breakout spaces.
- 4 Private Apartments**
 A tropical landscape will reinforce the relaxed FNQ lifestyle with a central internalised recreation space and supporting community amenities. A structured landscape to Wharf Street will ameliorate the architectural form. The zone will be accessed by secure control points.
- 5 Cultural Apartments**
 A series of apartments will be focussed on the Duck Pond and associated cultural plaza. The landscape strategy will maximise publicly accessible areas and subtly delineate private land and create a sense of privacy for residents.
- 6 Public Boardwalk**
 A new public boardwalk connection will promote north to south connection along the waterfront. The public boardwalk will provide opportunity for pedestrian and cycle movement. Artwork installations are proposed as a key vista/nodal.
- 7 Historical Village**
 The existing railroad tracks and historical turn table are significant cultural elements of the site. These elements will be sensitively integrated into the proposal.



04 Public Domain and Landscape Strategy

4.3 Access and Circulation

- 
Primary Vehicle Connections
 Entrances include Hotel core entrance and the basement entrance to the mixed use village.
- 
Secondary Vehicle Connections
 Entrances to residential basement
- 
Primary Pedestrian Connections
 Publicly accesible waterfront connection including boardwalk access from Wharf Street and from the cultural plaza. Primary connection to intergrate existing town centre with the new development.
- 
Secondary Pedestrian Connections
 Publicly accesible waterfront connection to private apartments at the northern end of the site and the rainforest walk providing a public connection through the site to the board walk structure.
- 
Indoor / outdoor connections
 Visual and physical connections between the landscape and architecture. Connections to include permeable interfaces between food and beverage outlets, hotel lobby and private courtyards inside the apartment areas.
- 
Vistas
 Views through the hotel lobby and drop off area to Dickon Inlet.





05 Landscape Masterplan



05 Landscape Concept

5.1 Entrances and street frontages



Street Frontage



Hotel Entrance



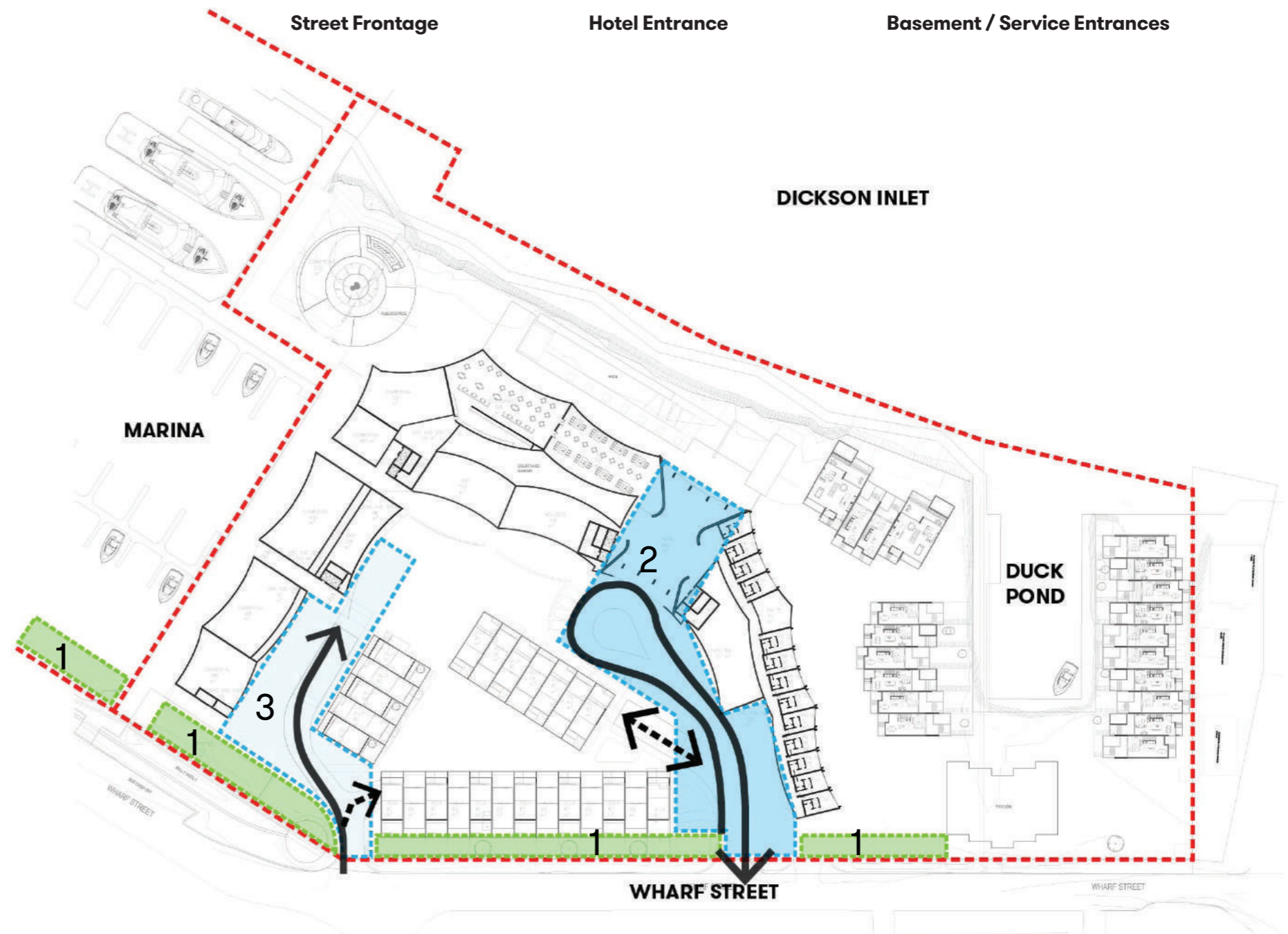
Basement / Service Entrances

- 1 Street Frontage - Wharf Street**

Planted setback to mitigate the scale of the proposed development. A mixture of understorey planting and street trees to tie into the existing character of Wharf Street. Footpath to meander amongst mounded planter beds and lawn areas.
- 2 Hotel Entrance**

Informal arrangement of planting and mounding to create a calming and relaxed arrival experience. Landscape strategy to tie into hotel lobby with planting to frame views beyond into Dickson Inlet. Planting to include a mix of lipstick palms and foxtail palms with a tropical understorey including zamia and cordyline species. Lighting to include a combination of bollards and up-lighting.
- 3 Basement / Service Entrances**

Subtle level changes through mounding and terracing will assist in grounding the built form, disguising car parking entrances and provide privacy for adjoining building usages. Planting to include foxtail palms to provide verticality and a mix of small to medium sized trees including Elaeocarpus and Magnolia species. Lighting to be a combination of up-lights and bollard lighting.



05 Landscape Concept

5.2 Mixed use, hotel and apartments...

- 4

Urban Boardwalk / Promenade
Boardwalk to facilitate both commercial access and service access to the Marina and Plaza areas. Boardwalk to rely on architectural expressions of the façade and awnings to create shade a visual interest. Lighting to include light posts to create a safe and relaxing atmosphere.
- 5

Entertainment Plaza
Plaza to include a food and beverage outlet along with publicly accessible shading and seating areas. Plantings to include foxtail palms and large shade trees. Other strategies to provide cooling and comfort include misting and shade structures.
- 6

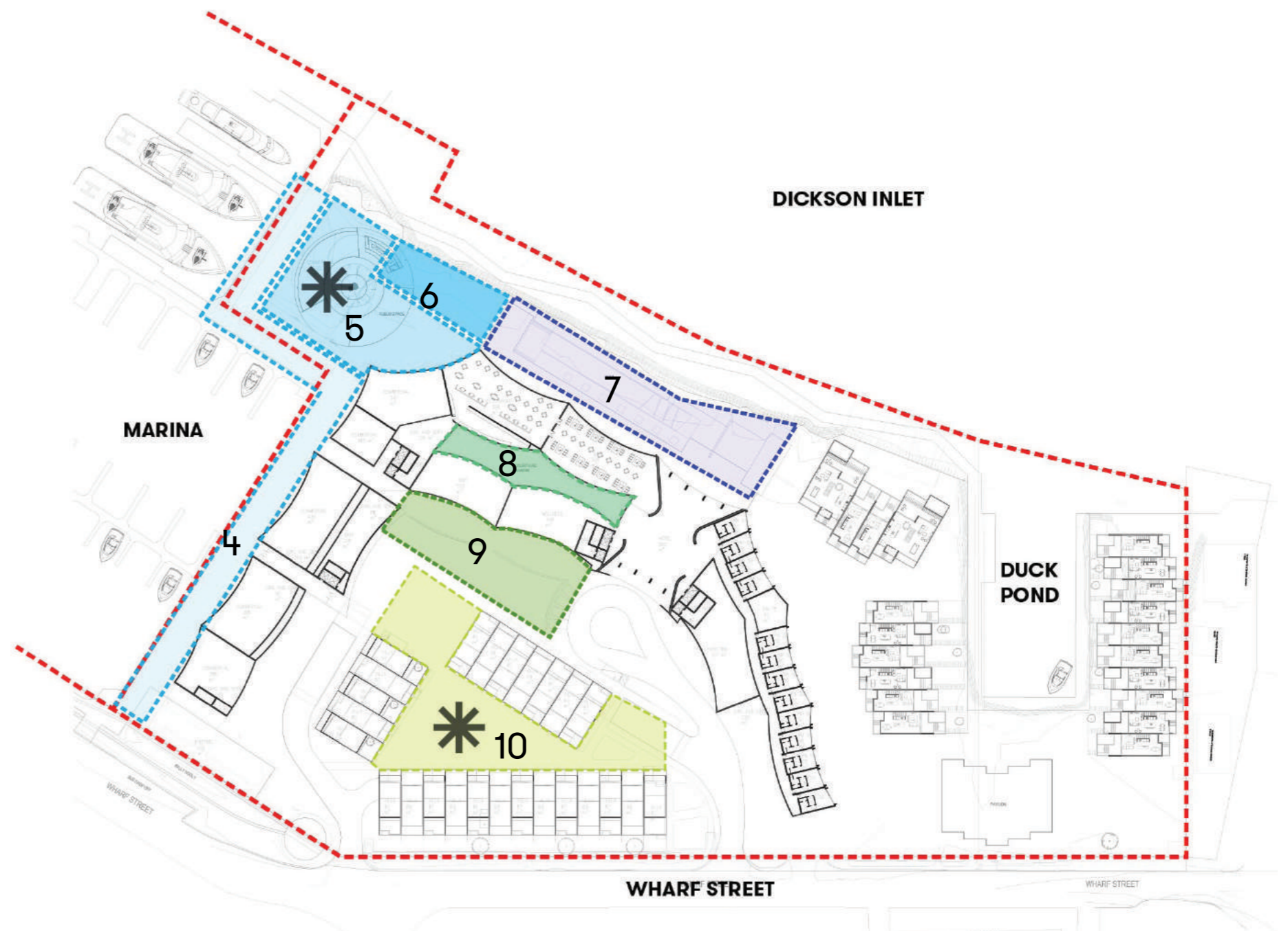
Children's Play Area
Informal children's play area with generous tree plantings and incorporation with shade structures. Water play element to be include to assist in cooling.
- 7

Hotel Pool
Pool to be associated with Hotel accessible only to hotel guests. Clean geometric lines create a calming atmosphere combined with foxtail palms and coastal understory planting. Cabana's to be located throughout the pool area with various shade structure providing amenity for hotel guests.
- 8

Rainforest Gully
VA secluded escape with lush tropical planting and gravel paving to create informal and tranquil spaces. Shade tolerant planting such as fern trees and bamboo to be densely planted throughout.
- 9

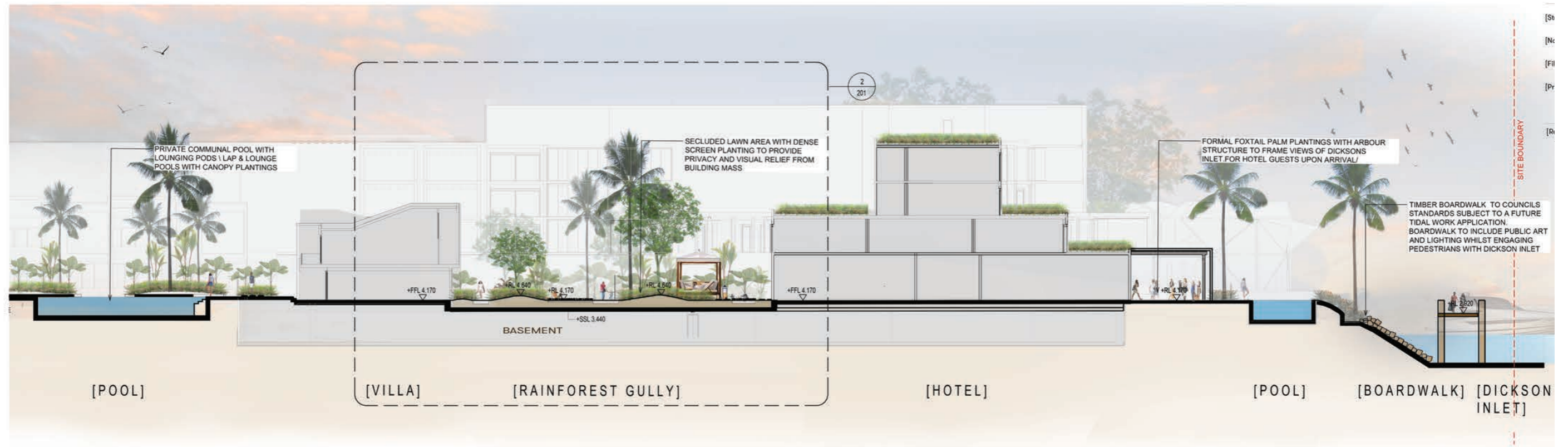
Secluded Retreat
A space for contemplation and relaxation. Tropical plantings, informal water features, meandering pathways and private seating areas. Cabana's and decking areas to escape or wait for treatment in the adjoining health spa.
- 10

Private Landscape
Private garden for residents in the adjoining properties. Garden to include a pool and various amenities such as a barbeque area, toilets and a pavilion with associated communal breakout spaces.



05 Landscape Cross Sections

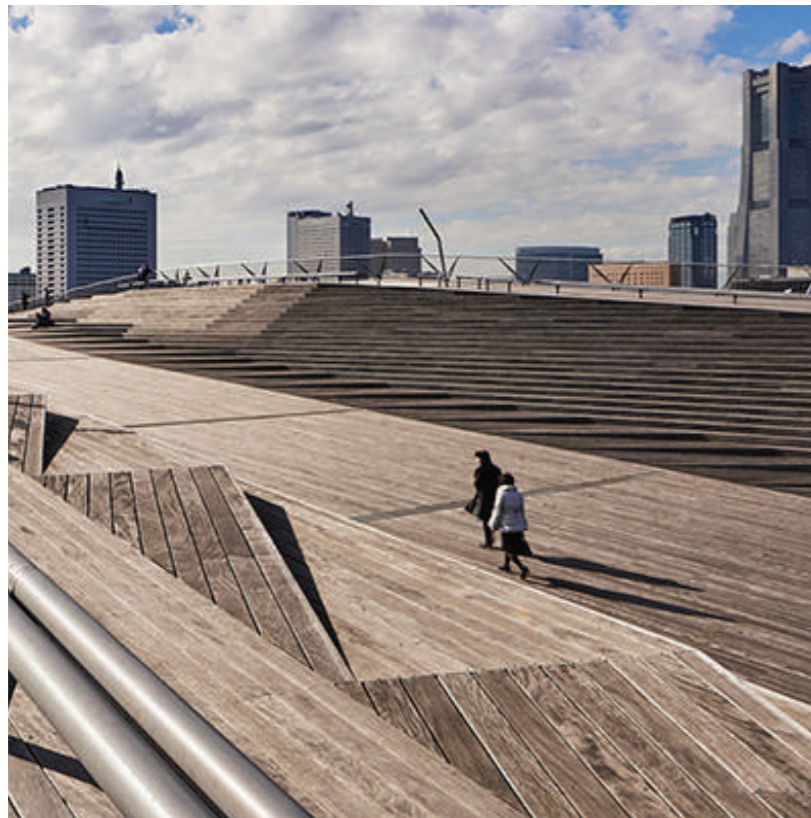
5.2 Mixed use, hotel and apartments...



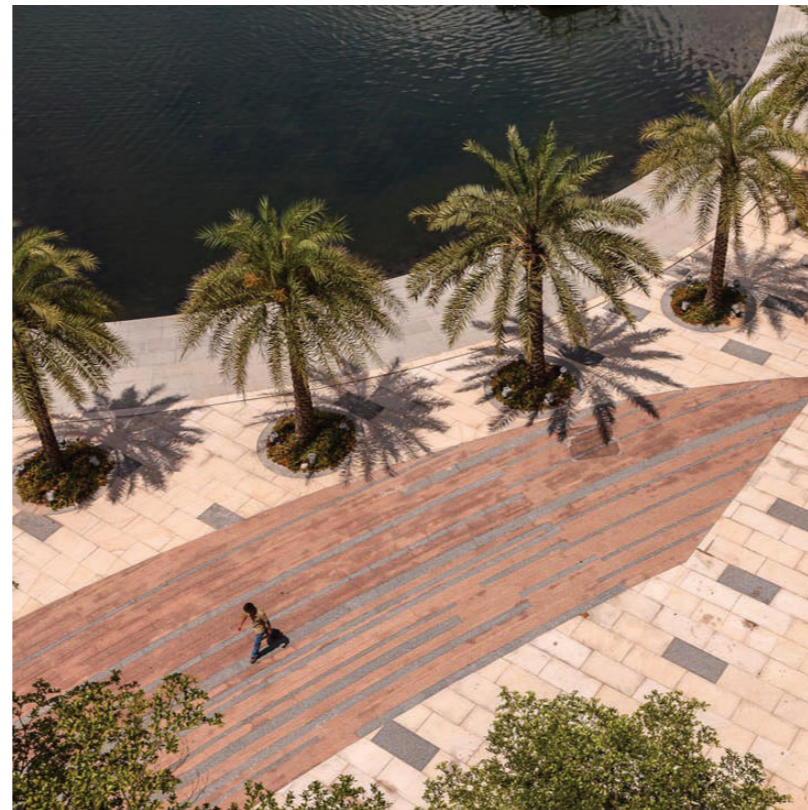
1 SECTION BB
1:200

05 Landscape Concept

5.2 Mixed use, hotel and apartments...



Urban Boardwalk / Promenade



Entertainment Plaza



Children's Play Area

05 Landscape Concept

5.2 Hotel...



Hotel Pool



Rainforest Gully



Secluded Retreat

05 Landscape Concept

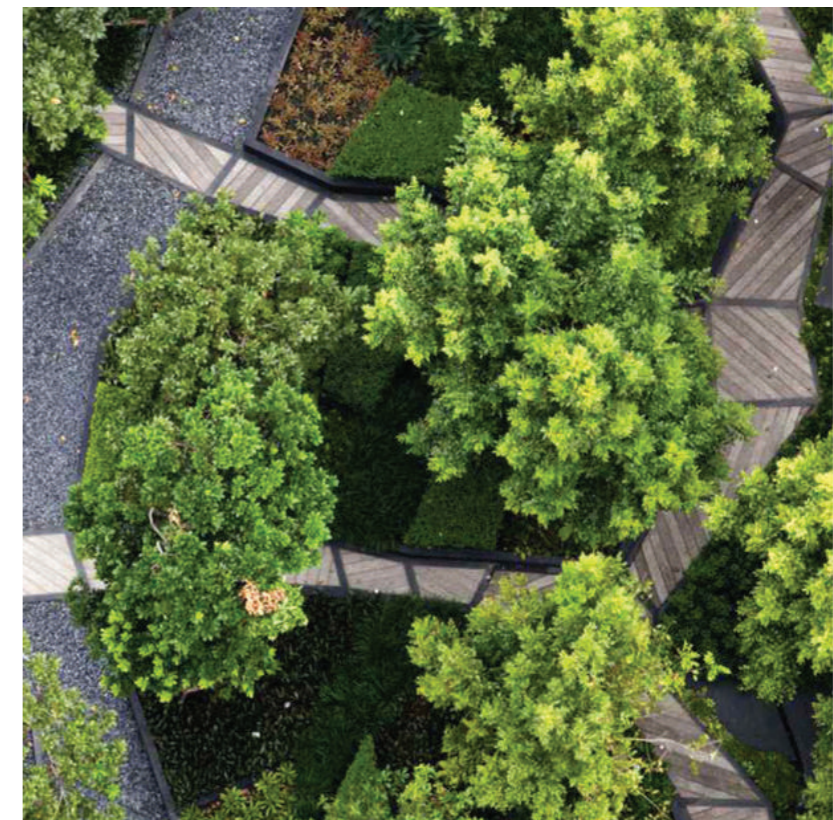
5.2 Apartments...



Amenities pavillion



Private Pool



Secluded Gardens

05 Landscape Concept

5.3 Rainforest walk, apartments and cultural plaza...

11

Rainforest Walk

A meandering pathway system that creates a link connecting the cultural plaza to the boardwalk. The Rainforest walk also provides access to adjacent residential properties. Planting to include rainforest species such as Elaeocarpus, Hymenosporum, Lip Stick Palms and lush understorey plantings. Gentle mounding will also assist in dealing with overland flow issues throughout the site. Lighting to include strip lighting to the base of seating elements combined with bollards and uplighting to feature trees.

12

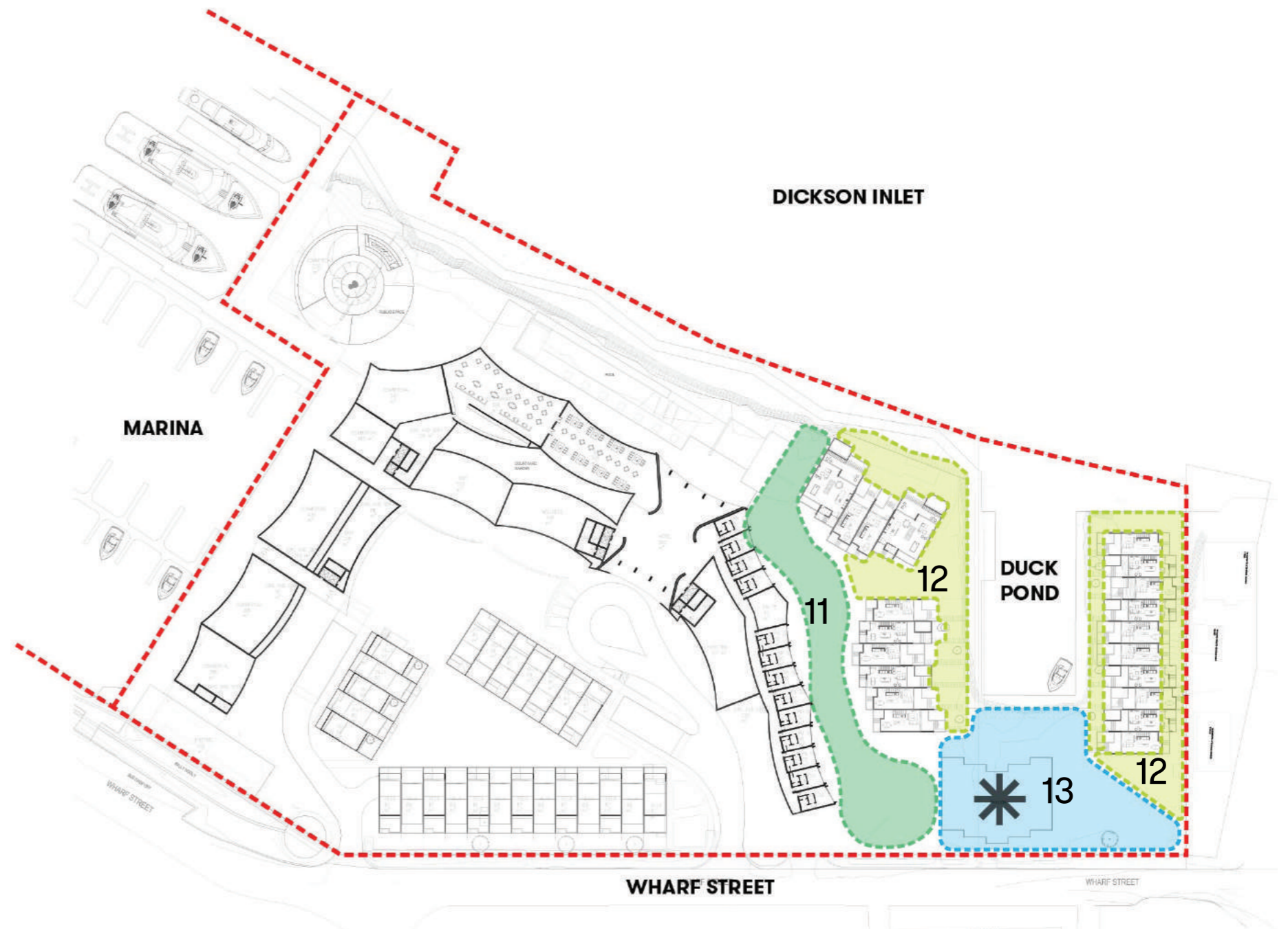
Public / Private Interfaces

Layering of planting to create visual privacy for adjacent residents located in close proximity to the public domain. Level change to the ground floor combined with plantings of Frangipani and Hibiscus species to ensure views are retained from within the apartments.

13

Cultural Plaza

The plaza serves as an arrival point when travelling from the town centre. A permeable pavilion will allow views from Wharf Street into the plaza whilst providing opportunity for cultural events such as live performances or galleries. Shade structures combined with generous plantings will reduce temperatures within the plaza. Various formal and informal seating opportunities will also be provided.



05 Landscape Concept

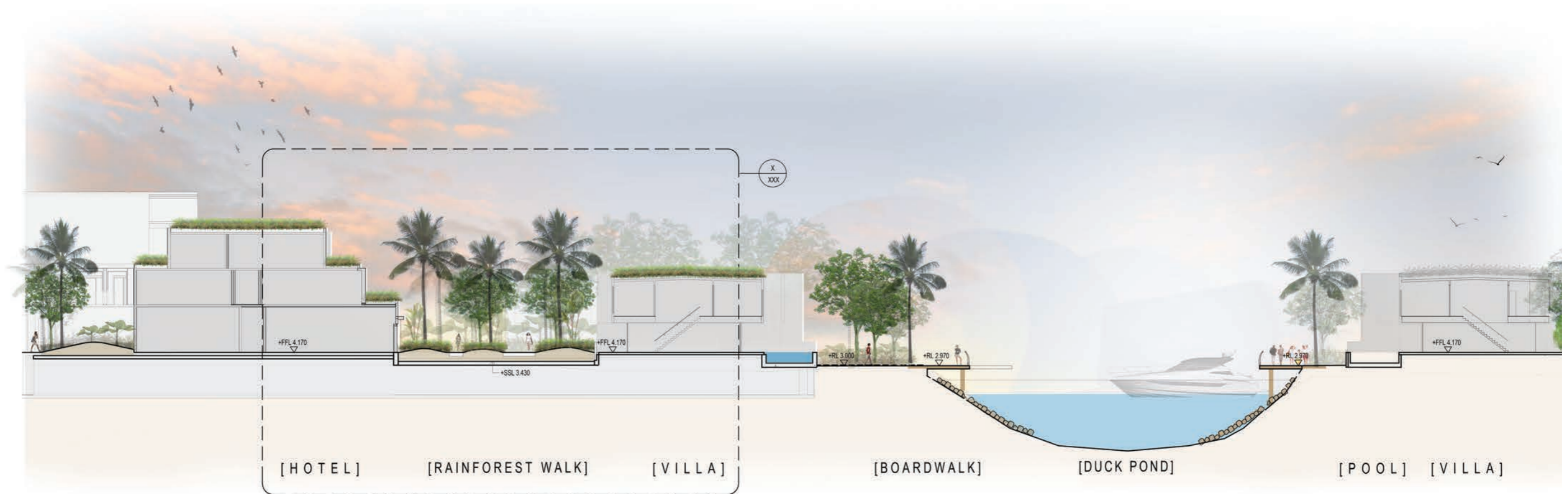
5.3 Rainforest walk, apartments and cultural plaza...

- 1: Rainforest walk - planting to be a mix of Elaeocarpus, Syzygium, Bamboo and Zamia species. Lush understorey to provide visual screening to adjacent hotel and villa uses.
- 2: Meandering pathway with informal lawn to provide access between rainforest walk and public boardwalk.
- 3: Walkable Waterfront: Provides secondary pedestrian access. Estuarine boardwalk with seating, viewing platforms, lighting and public artwork engages pedestrians with Duck Pond. Tropical planting creates shade and a buffer between the private residents and the publicly accessible promenade.
- 4: Cultural plaza - Formal plantings of Foxtail palms combined with a terraced amphitheatre to Pavillion. Formal and informal seating to be provided in shaded areas.
- 5: Wharf Forecourt - Large shade trees combined with raised informal lawn create an arrival point for visitors from the Port Douglas town centre. Informal clusters of bespoke seating elements.
- 6: Screen planting to northern property boundary to create separation with adjoining buildings and car park. Informal clusters of large shrubs and palms to create privacy.



05 Landscape Concept

5.3 Rainforest walk, apartments and cultural plaza...



1 SECTION CC
1:200

05 Landscape Concept

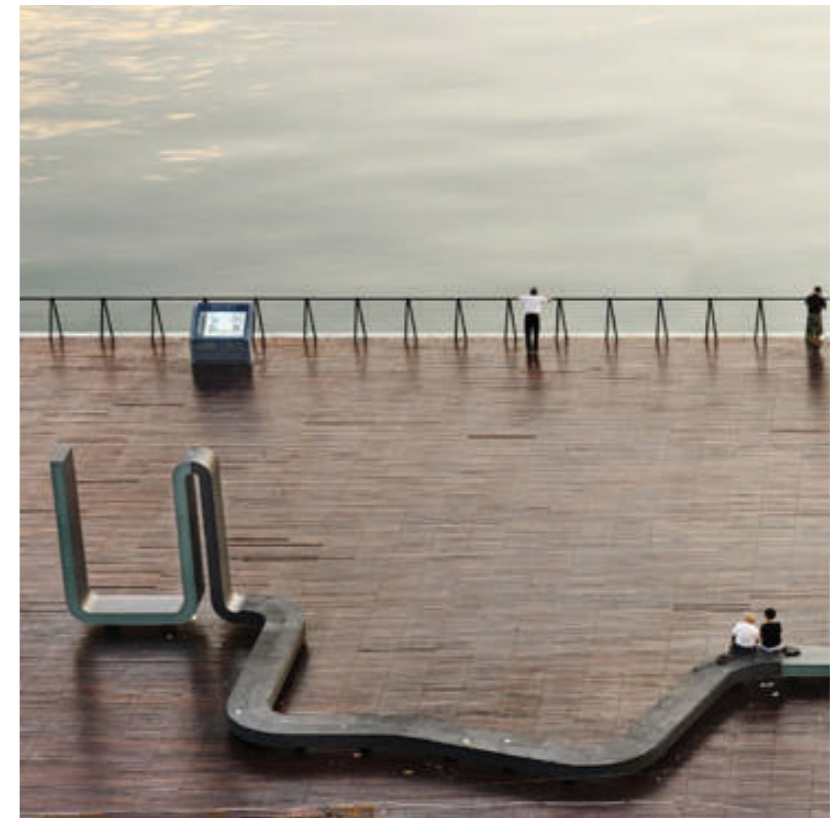
5.3 Rainforest walk, apartments and cultural plaza...



Rainforest Walk



Public / Private Interfaces



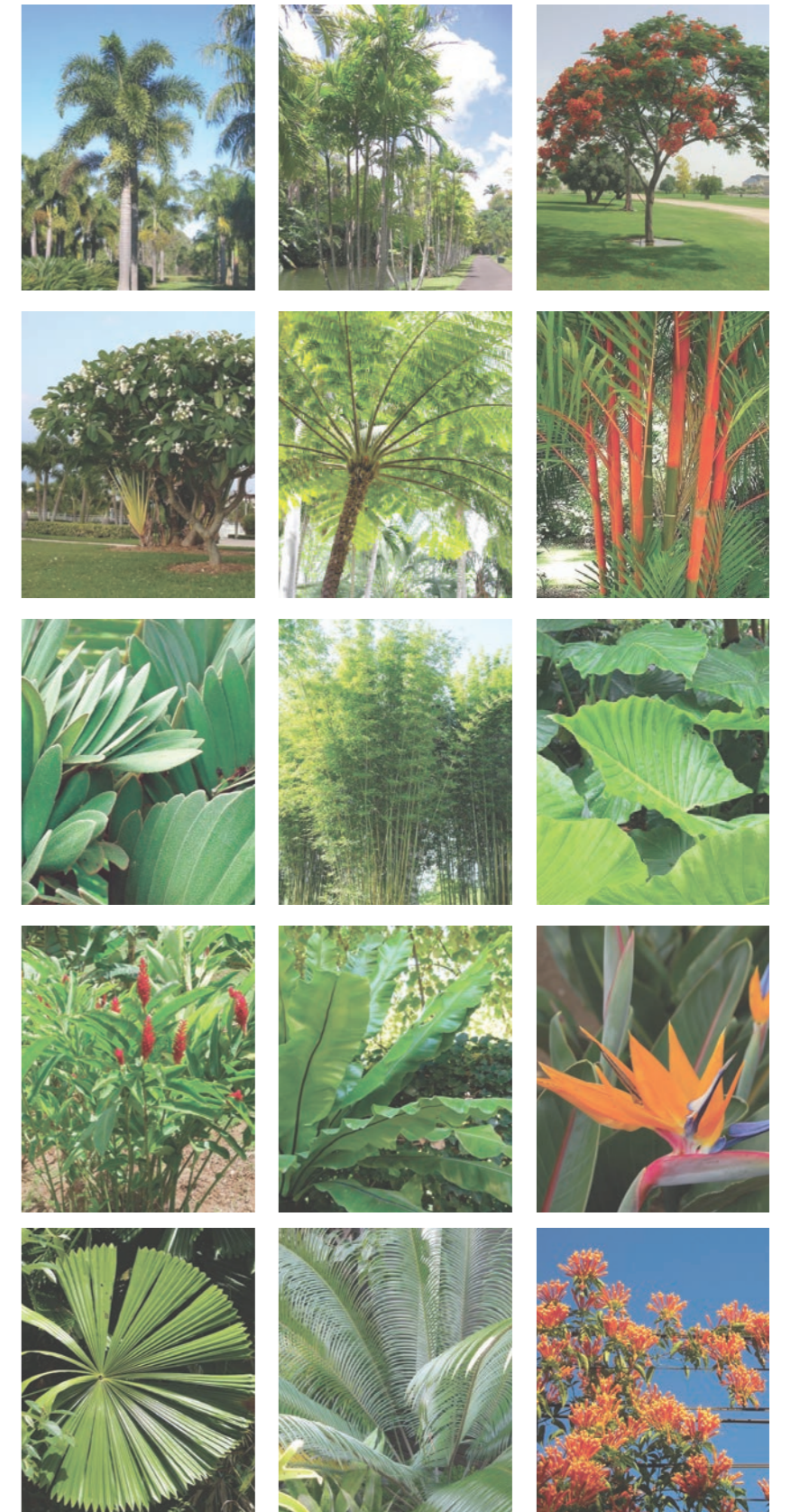
Cultural Plaza



06 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 cannifolia	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





07 Indicative 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 CSM (Crystalbrook Superyacht 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:

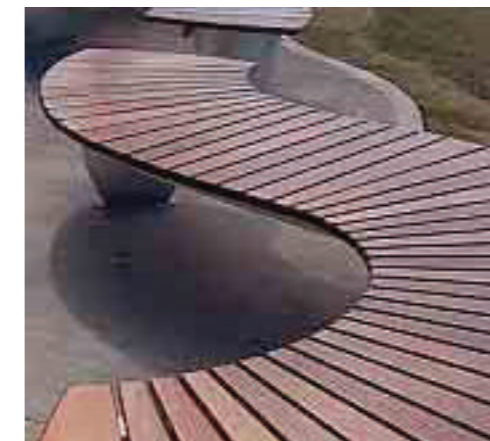
- Design for Pedestrian Priority
- Emphasise and Enhance Activation
- Improve Public Domain Quality



07 Public Domain and Landscape Strategy

Materials, Finished 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
Kerb edges to road / planter edges	White concrete off formed class 1







CRYSTALBROOK SUPER YACHT MARINA

DEVELOPMENT APPLICATION

CLIENT
PRIME CONSTRUCTIONS [QLD] PTY LTD

20170181: LANDSCAPE ARCHITECTURAL DRAWING LIST



Site Reference N.T.S





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-DA110	LANDSCAPE ROOFTOP PLAN	1
LD-DA200	LANDSCAPE SECTION AA	1
LD-DA201	LANDSCAPE SECTION BB	1
LD-DA202	LANDSCAPE SECTION CC	1

* PLEASE NOTE PLANS TO BE READ IN CONJUNCTION WITH THE FOLLOWING DA DESIGN REPORT PREPARED BY SCOTT CARVER

20170181LA-DR000 LANDSCAPE DA DESIGN REPORT

[Rev#]	[Description]	[Date]
1	DEVELOPMENT APPLICATION	22.12.2017

LEGEND:

-  Site Boundary
-  Extent of basement/ slab
-  Existing tree to be retained and protected (indicative only). To future arborist report.
-  Existing tree to be removed (indicative only). To future arborist report.

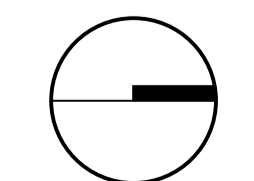
General Notes:

- 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 & ARBORIST INPUT



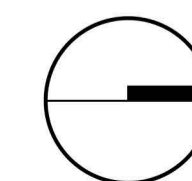
SELECT GROUP OF EXISTING PALMS TO BE TRANSPLANTED AND RELOCATED THROUGHOUT THE SITE - TO FUTURE DESIGN DEVELOPMENT



History





[Rev#]	[Description]	[Date]
1	DEVELOPMENT APPLICATION	22.12.2017

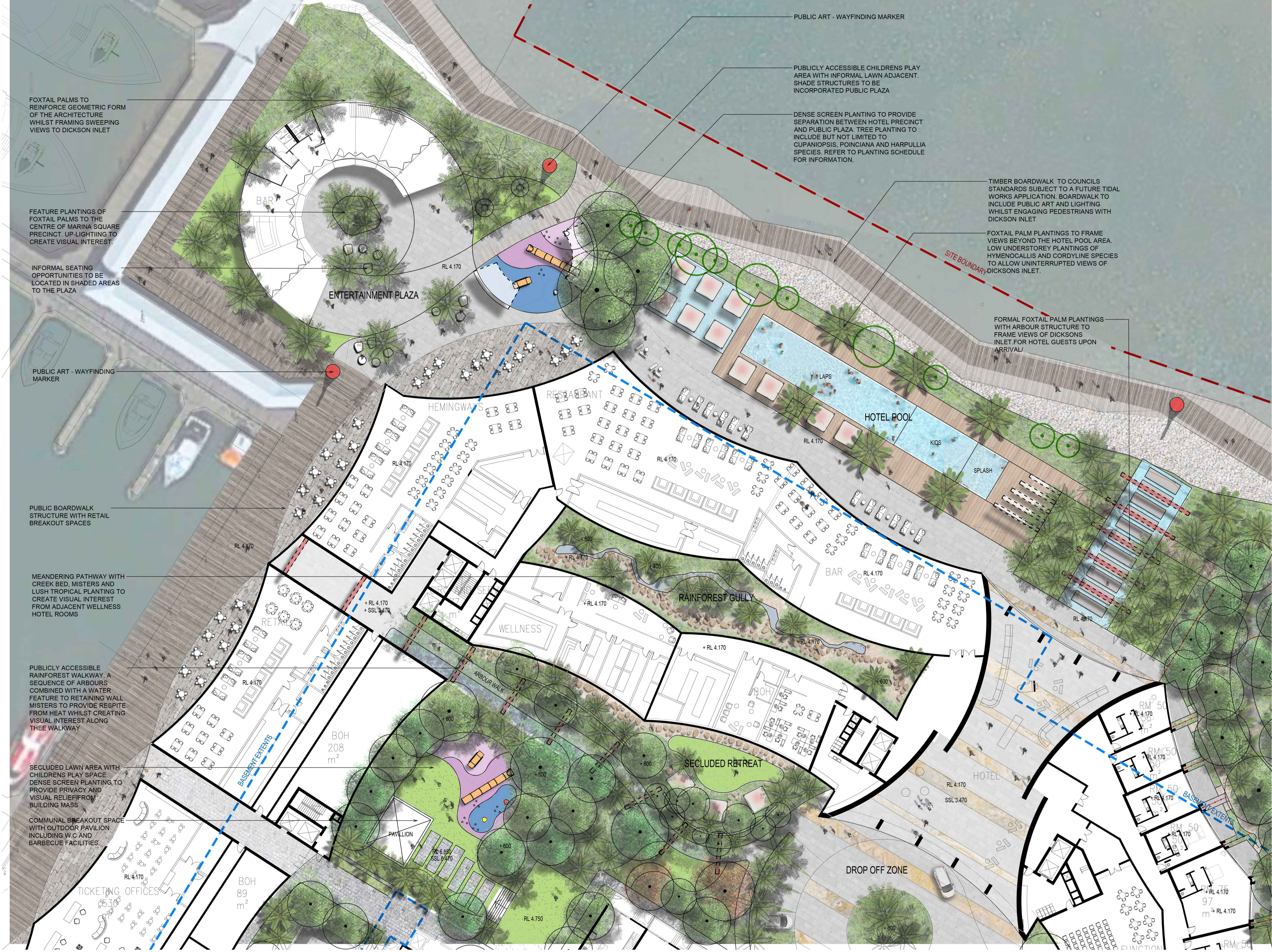
- LEGEND:
- Site Boundary
 - Extent of Slab
 - + RL 4.170 Proposed RL
 - Existing tree to be retained (indicative only). To future arborist report.
 - Proposed trees



[Rev#]	[Description]	[Date]
1	DEVELOPMENT APPLICATION	22.12.2017

LEGEND:

-  Site Boundary
-  Extent of Slab
- + RL 4.170 Proposed RL
-  Existing tree to be retained (indicative only). To future arborist report.
-  Proposed trees



FOXTAIL PALMS TO REINFORCE GEOMETRIC FORM OF THE ARCHITECTURE WHILST FRAMING SWEEPING VIEWS TO DICKSON INLET

FEATURE PLANTINGS OF FOXTAIL PALMS TO THE CENTRE OF MARINA SQUARE PRECINCT. UP-LIGHTING TO CREATE VISUAL INTEREST.

INFORMAL SEATING OPPORTUNITIES TO BE LOCATED IN SHADED AREAS TO THE PLAZA

PUBLIC ART - WAYFINDING MARKER

PUBLIC BOARDWALK STRUCTURE WITH RETAIL BREAKOUT SPACES

MEANDERING PATHWAY WITH CREEK BED, MISTERS AND LUSH TROPICAL PLANTING TO CREATE VISUAL INTEREST FROM ADJACENT WELLNESS HOTEL ROOMS

PUBLICLY ACCESSIBLE RAINFOREST WALKWAY. A SEQUENCE OF ARBOURS COMBINED WITH A WATER FEATURE TO RETAINING WALL. MISTERS TO PROVIDE RESPITE FROM HEAT WHILST CREATING VISUAL INTEREST ALONG THE WALKWAY

SECLUDED LAWN AREA WITH CHILDRENS PLAY SPACE. DENSE SCREEN PLANTING TO PROVIDE PRIVACY AND VISUAL RELIEF FROM BUILDING MASS

COMMUNAL BREAKOUT SPACE WITH OUTDOOR PAVILLION INCLUDING W.C AND BARBECUE FACILITIES.

PUBLIC ART - WAYFINDING MARKER

PUBLICLY ACCESSIBLE CHILDRENS PLAY AREA WITH INFORMAL LAWN ADJACENT. SHADE STRUCTURES TO BE INCORPORATED PUBLIC PLAZA

DENSE SCREEN PLANTING TO PROVIDE SEPARATION BETWEEN HOTEL PRECINCT AND PUBLIC PLAZA. TREE PLANTING TO INCLUDE BUT NOT LIMITED TO CUPANIOPSIS, POINCIANA AND HARPULLIA SPECIES. REFER TO PLANTING SCHEDULE FOR INFORMATION.

TIMBER BOARDWALK TO COUNCILS STANDARDS SUBJECT TO A FUTURE TIDAL WORKS APPLICATION. BOARDWALK TO INCLUDE PUBLIC ART AND LIGHTING WHILST ENGAGING PEDESTRIANS WITH DICKSON INLET

FOXTAIL PALM PLANTINGS TO FRAME VIEWS BEYOND THE HOTEL POOL AREA. LOW UNDERSTOREY PLANTINGS OF HYMENOCALLIS AND CORDYLINA SPECIES TO ALLOW UNINTERRUPTED VIEWS OF DICKSONS INLET.

FORMAL FOXTAIL PALM PLANTINGS WITH ARBOUR STRUCTURE TO FRAME VIEWS OF DICKSONS INLET FOR HOTEL GUESTS UPON ARRIVAL

Note: Plans are generally in accordance with the following landscape and urban design principles established by The Douglas Shire Council.

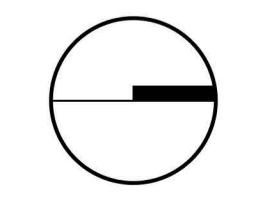
- Douglas Shire Council Landscape Policy 7 - 2006
- Landscape Design Guide 2009
- Port Douglas Waterfront Master Plan 2009

All future development applications shall also be in accordance with the above policies.

PLANS TO BE READ IN CONJUNCTION WITH LANDSCAPE DESIGN REPORT 20170181 - 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	DEVELOPMENT APPLICATION	22.12.2017

- LEGEND:
- Site Boundary
 - - - Extent of Slab
 - + RL 4.170 Proposed RL
 - Existing tree to be retained (indicative only). To future arborist report.
 - Proposed trees



SITE BOUNDARY

SCREEN PLANTING TO SITE BOUNDARY TO CREATE PRIVACY TO ADJACENT BUILDINGS AND CAR PARK AREA. PLANTING TO INCLUDE A MIX OF ELAEOCARPUS, SYZYGIUM AND DYPISIS SPECIES. REFER TO PLANT SCHEDULE FOR INFORMATION.

Note: Plans are generally in accordance with the following landscape and urban design principles established by The Douglas Shire Council.

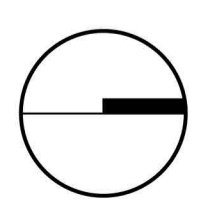
- Douglas Shire Council Landscape Policy 7 - 2006
- Landscape Design Guide 2009
- Port Douglas Waterfront Master Plan 2009

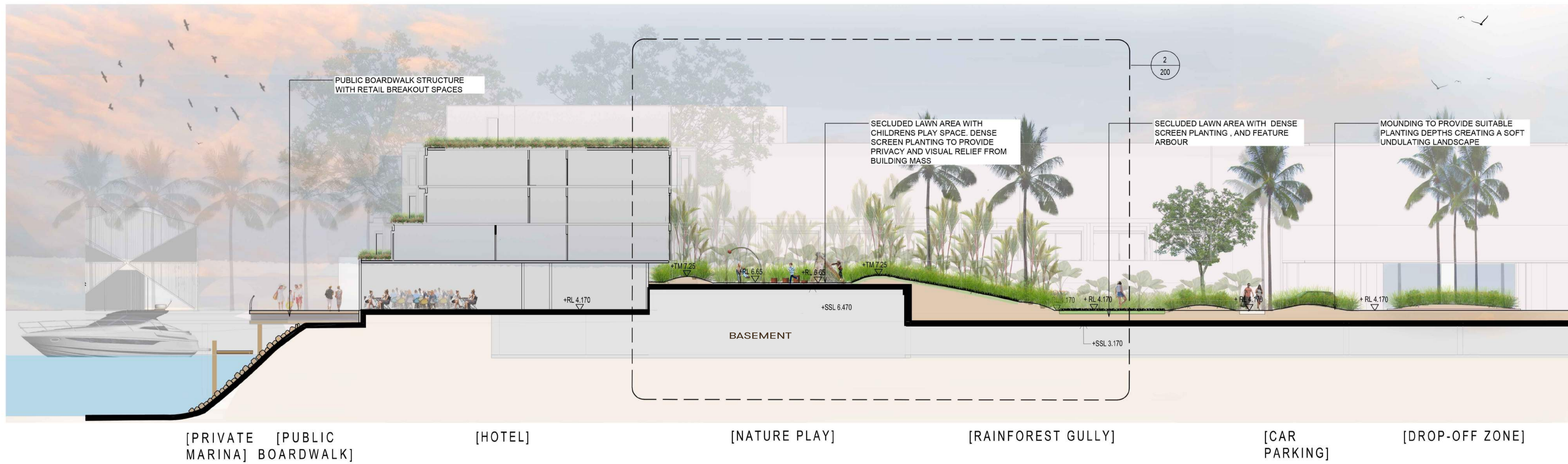
All future development applications shall also be in accordance with the above policies.

PLANS TO BE READ IN CONJUNCTION WITH LANDSCAPE DESIGN REPORT 20170181 - LR-DA001

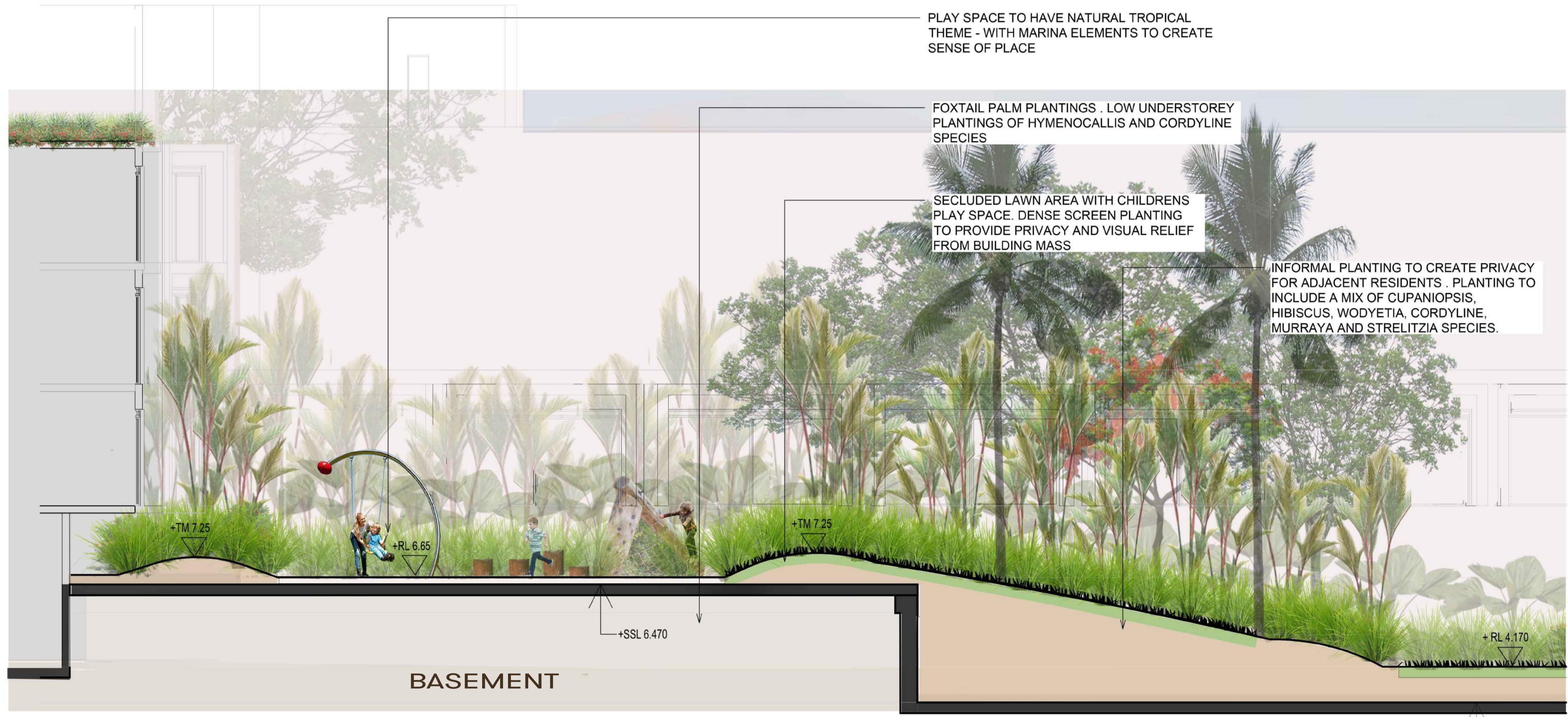
PLANS ARE CONCEPTUAL AND ARE ILLUSTRATIVE ONLY TO CONVEY DESIGN INTENT FOR PLANNING PURPOSES.

INDICATIVE LAYOUT TO FUTURE DEVELOPMENT APPLICATION

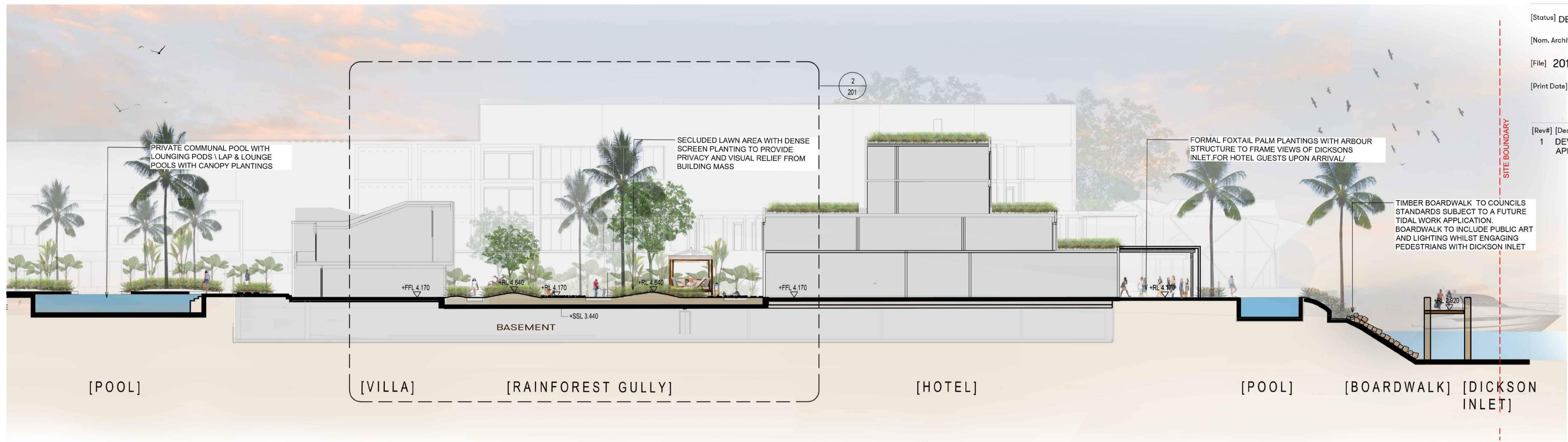




1 SECTION AA
 1:200



2 INSET AA
 1:75



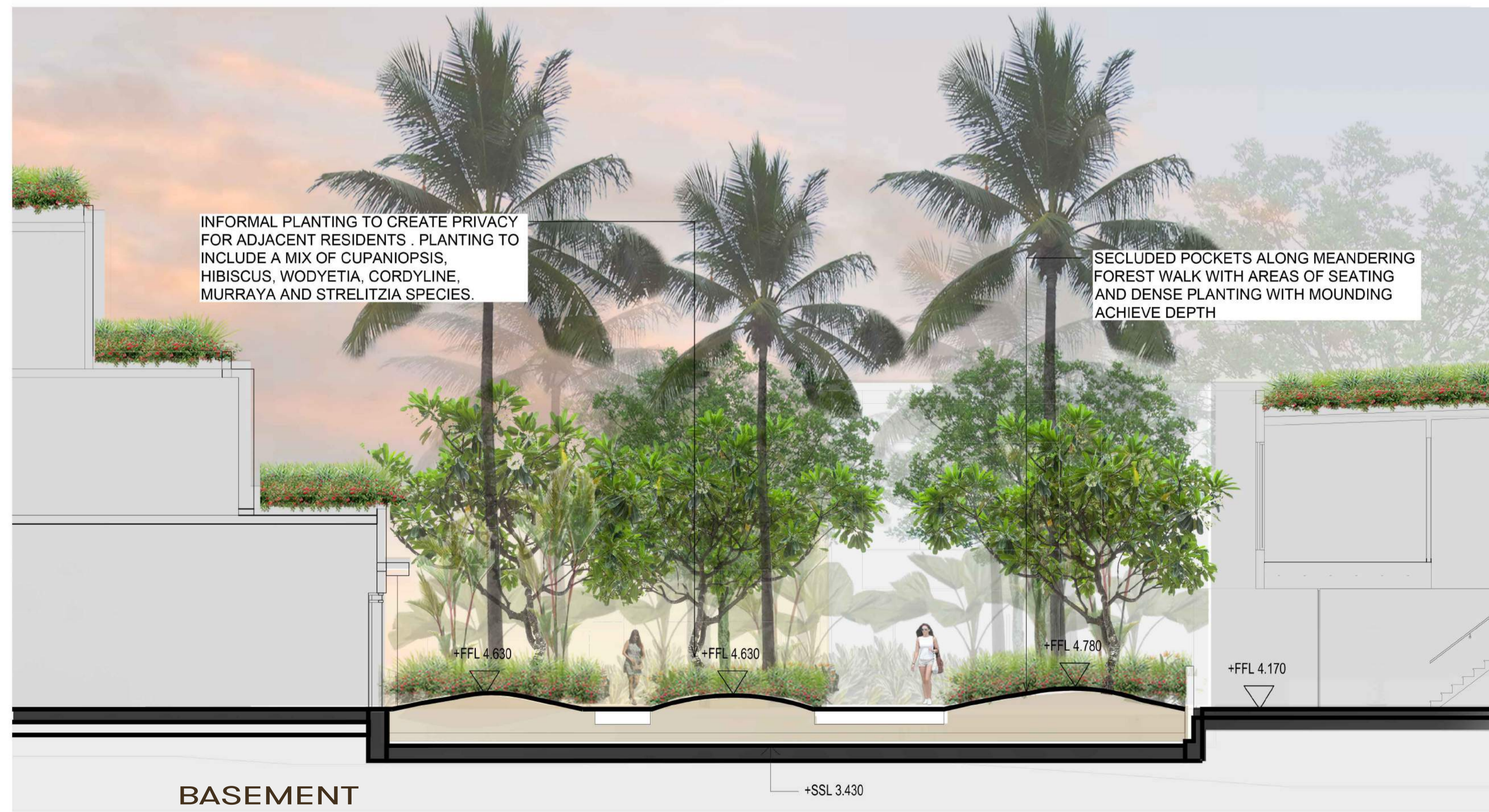
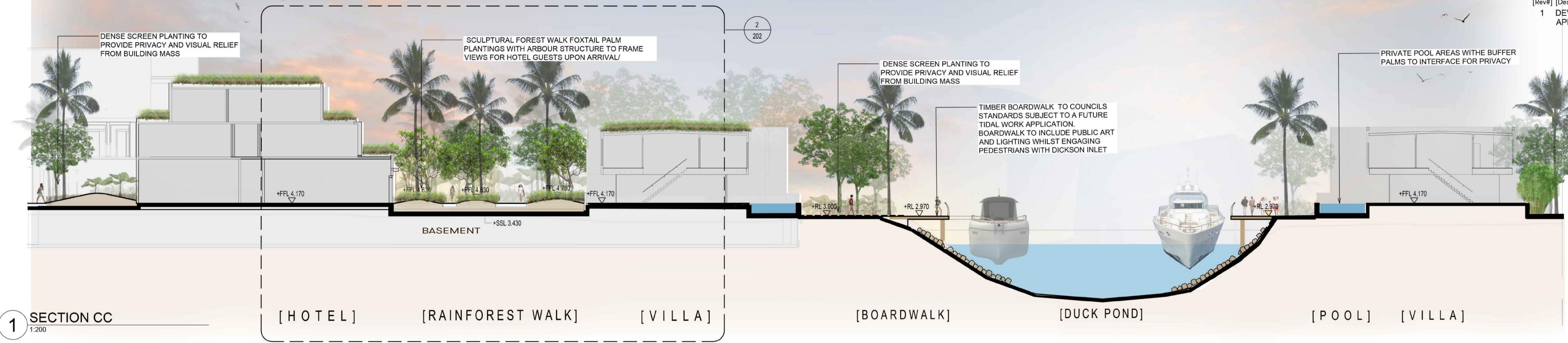
[Status] DEVELOPMENT APPLICATION
 [Nom. Architect] Andrew Turnbull
 RLA | RUD #673
 [File] 20170181 LD-DA200.DWG
 [Print Date] 20 December 2017
 History

[Rev#]	[Description]	[Date]
1	DEVELOPMENT APPLICATION	22.12.17

1 SECTION BB
1:200



2 INSET BB
1:75



**ATTACHMENT 6
CODE ASSESSMENT**

- Douglas Shire Planning Scheme 2006



APPLICABILITY

This Code applies to self-assessable and assessable development in the Port Douglas and Environs Locality for:

- Material Change of Use:
Except for:
 - Business Facilities – using an existing Building in the Commercial Planning Area and the Port Douglas Waterfront North Planning Area
 - Primary Industry in the Rural Planning Area
 - Restaurant – using an existing Building in the Commercial Planning Area and the Port Douglas Waterfront North Planning Area
- Reconfiguring a Lot;
- Operational Work Associated with Reconfiguring a Lot;
- Operational Work – Filling or Excavation not associated with a Material Change of Use;
- Operational Work – Engineering Works not associated with a Material Change of Use;
- Operational Work – Placing an Advertising Device on Premises not associated with a Material Change of Use; and
- Building Work other than Minor Building Work not associated with a Material Change of Use in the Conservation Planning Area.

For self-assessable development assessed against this Code, the applicable Acceptable Solutions are A1.1 and A2.1.

Self assessable development which does not comply with Acceptable Solutions as listed above, outlined in this Code will require Code Assessment.

ELEMENTS OF THIS CODE

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIES	COMMENT
General Requirements			
<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</p>	<p>A1.1 In the Planning Areas (and parts thereof) contained in the Port Douglas Waterfront listed below, the maximum Height of Buildings/structures is 3.0 metres. 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"> • Community and Recreation Facilities <p>AND</p> <p>In the Planning Areas (and parts thereof) listed below the maximum Height of Buildings/structures is 6.5 metres. 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"> • Residential 1; 	<p>YES & ALTERNATE SOLUTION</p>	<p>The land is subject to a Port Douglas Waterfront North Planning Area, where it is recognised that the following maximum heights are accepted:</p> <ol style="list-style-type: none"> 1. 10m & 3 Storeys; and 2. 6.5m & 2 Storeys. <p>We note also that a 3.5m allowance for the roof height is provided in respect of architecture and design meaning that the development of heights is generally acceptable to 13.5m and 10m respectively above the Finished Floor Level (FFL).</p>

<p>locations depicted on the Locality Plan, where development of three Storeys is appropriate.</p>	<ul style="list-style-type: none"> • Industry; • Conservation; • Community and Recreational Facilities (except in the Port Douglas Waterfront); • Residential 2; • Tourist and Residential (Medium Scale); • Commercial – (Medium Scale, outside the Tourist Centre); • Commercial – (High Scale, outside the Tourist Centre); • Commercial – (High Scale, within the Tourist Centre and on the high side of Macrossan Street) – in this instance there is no specified number of storeys, however, the maximum height prevails; • Port Douglas Waterfront North (where depicted within Figure 1 of the Port Douglas Waterfront Planning Area Code); and • Port Douglas Waterfront South. <p>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"> • Tourist and Residential – (High Scale); and • Commercial – (High Scale, within the Tourist Centre and on the low side of Macrossan Street, through to Warner Street); and • Port Douglas Waterfront North (where depicted within Figure 1 of the Port Douglas Waterfront North Planning Area Code). 		<p>The Crystalbrook Marina Masterplan includes the establishment of nine (6) freestanding structures over the subject land, which comprises:</p> <ul style="list-style-type: none"> ▪ 45 villas spread over six (6) independent structures, standing approx. 8.65m - 10.3m & 2 storeys in height, which includes skillion pitched roof; ▪ A ‘Pavilion’ building located in the central plaza, standing approx. 7.8m & 2 storeys in height, plus approx. 1.3m high roof; ▪ A single standalone commercial tenancy adjacent Marina which is described as the ‘Marina Bar, standing approx. 8.5m & 2 storey in height; and ▪ Primary Hotel and commercial tenancies C-shaped building, which transitions form the road and site boundaries via terracing design that stands a maximum of 18.6m & five (5) storey tall. <p>It is submitted that the development presents areas where building heights are consistent with the Acceptable Outcomes. There are however other areas (the ‘landmark’ elements of the main building) where the proposal seeks to provide for an alternative design outcome.</p> <p>The applicants and designers consider that there exist suitable grounds in this instance for Council to support expansion of height above the Acceptable Outcome.</p> <p>Additional commentary is provided under Section 7 of the Planning Report.</p>
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<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>YES</p>	<p>The entire development presents the ability to connect to all essential services and infrastructure. An Engineering Services Report has been prepared by Flanagan Consulting Group to address the capacity and servicing requirements.</p> <p>Please refer to Attachment 5</p>
<p>P3 Landscaping of development Sites complements the existing tropical seaside resort town character of Port Douglas and creates a dominant tropical vegetated streetscape.</p>	<p>A3.1 Landscaping of a development Site complies with Planning Scheme Policy No 7 – Landscaping, with particular emphasis on appropriate species for Port Douglas.</p>	<p>YES</p>	<p>The Crystalbrook Marina Masterplan includes significant areas for public access and community use (i.e. Foreshore, Plaza and Marina Boardwalks)</p> <p>Please refer to Landscaping Report and Preliminary Concept Plans as Attachment 6.</p>
<p>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.</p>	<p>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.</p>	<p>YES</p>	<p>Traffic Impact Assessment and Engineering Services Report has been prepared to review the access and movement of vehicles internal within the development and at the interface with the external networks.</p> <p>All vehicular access, parking, and manoeuvring areas are designed in accordance with the relevant provisions of the Australian Standards.</p> <p>Please refer to Attachment 4 &5</p>
<p>Tourist Centre</p>			
<p>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</p>	<p>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.</p> <p>OR</p>	<p>N/A</p>	<p>The development site at Crystalbrook Marina is included in the ‘Tourist Centre’</p> <p>The design has sought to provide an attractive streetscape along Wharf Street and an ‘entry’ style approach to the hotel activities</p>

	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.		<p>The development proposal does not include any buildings built up to the street front.</p> <p>NB: it is noted that the existing Bally Hooley Station already presents a 0m setback to Wharf Street. However, considering the nature of the of the structure (i.e. existing and holding cultural heritage values), it is submitted that the arrangements relating to this structure and its siting over the site are not relevant in this instance.</p>
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.	YES	<p>The Crystalbrook Superyacht Marina is representative of a mixed-use development, with the primary structure being for 5-star accommodation with supporting restaurants, commercial tenancies and other ancillary elements.</p> <p>These landuses demonstrate compliance with the provisions of this Acceptable Measure – i.e. commercial and ancillary hotel uses (restaurant, function space, and wellness centre) located on the ground floor, with hotel rooms on the ground floor sited away from the road frontage or above the ground level.</p> <p>It is noted that a residential element (i.e. Villas) are sited along the Wharf Street frontage and provide complimentary activities and provision for continued usage of this area.</p>
P7 Development in the Tourist Centre is of a height and scale which complements the village character of the town and remains subservient to the natural environment and the backdrop of Flagstaff Hill, in particular.	A7.1 The achievement of the maximum Building/structure Height specified above in A1.1, relies on compliance with Acceptable Solutions A7.2, A7.3, A7.4 and A8.1 below.	YES	<p>The developers of the Crystalbrook Superyacht Marina and the project designers understand the objectives in respect of maintaining the Port Douglas Character.</p>

			<p>While in this instance, there are connections to the past activities (mining, sugar cane, and the ‘tropics’) the designers have also sought to provide a commentary edge to the design and connections to the natural environment</p> <p>Refer to commentary provided below respectively.</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>YES</p>	<p>The façade of each building offers a high level of articulation, where the length, width, and height of all structures is broken up through the use of shapes, steps, recesses, contrast of light and shade, and variation of materials (i.e. exposed polished concrete, timber, glass, etc.).</p> <p>Please refer to elevations and impressions as Attachment 2.</p>
	<p>A7.3 Any break in the building facade varies the alignment by a 1 metre minimum deviation.</p>	<p>YES</p>	<p>Please refer to design plans, elevations, and impressions as Attachment 2.</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>YES</p>	<p>The proposed façade design of each building is articulated through the following:</p> <ul style="list-style-type: none"> • change in roof profile; • a horizontal or vertical change in the wall plane; and • a change in the exterior finishes and exterior colours of the development

	<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>P8 Development in the Tourist Centre is climate-responsive, contributes positively to the character of the Locality, is complementary in scale to surrounding development and does not exceed a base Plot Ratio of 0.5:1 and a maximum Plot Ratio of 1:1.</p> <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>A8.1 Development incorporates the following design features and corresponding plot ratio bonuses [in brackets]:</p> <ul style="list-style-type: none"> a) appropriate roof form and roofing material [10% Plot Ratio Bonus]; and b) appropriate fenestration in combination with roof form [5% Plot Ratio Bonus]; and 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 d) minimum of 700mm eaves [15% Plot Ratio Bonus]; and e) orientation of the Building to address the street/s [5% Plot Ratio Bonus]; f) sheltered pedestrian Access by unenclosed covered common area walkway of 1.5 metres in width from the car parking area/s to the development [5% Plot Ratio Bonus]; and g) inclusion of windows and balconies to the street façade of the Building [10% Plot Ratio Bonus]; and h) provision of lattice, battens or privacy screens [5% Plot Ratio Bonus]; and 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>YES & ALTERNATE SOLUTION</p>	<p>The proposed design embraces the following design features:</p> <ul style="list-style-type: none"> a) roof form and roofing material; b) appropriate arrangement of windows c) appropriate allocation of openings; d) the use of eaves and/or overhands throughout in some instances e) orientation to address the street where able and appropriate; f) a mixture of sheltered and open pedestrian access and manoeuvring areas to take advantage and protect against the elements where required and appropriate; g) windows, entrances, and public spaces facing the street and other adjacent pedestrian/public movement areas (i.e. boardwalks) where able and appropriate; h) provision of contemporary-style privacy screens to suit architectural vernacular. i) The proposed structures comply with the overall length provisions specified; however, a small level of departure is experienced with respect to the primary c-shaped structure and the single Villas fronting Wharf Street, of which both present a length greater than 30m. <p>In contrast however, it is noted that each structure presents a very high level of articulation ensuring that no wall plane exceeds 15m. In respect to this departure commentary has been provided under section 7 of the Planning Report, where compliance with the P8 is demonstrated.</p>

<p>P9 Car parking generated by:</p> <p>a) 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; and</p> <p>b) 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>YES</p>	<p>The proposed carparking arrangements within Basement 1 are more than sufficient (i.e. a surplus is experienced) to accommodate all the off-street parking requirements generated by continuing marina operations and the tourist operations of the tour boats.</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 Frontage.</p>	<p>N/A</p>	<p>All public use car parking is provided along Wharf Street (121 spaces).</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>N/A</p>	<p>As per A10.1 above.</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>As per A10.1 above.</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>YES</p>	<p>Access to the site will be reduced to two (2) crossovers primarily being for the service/delivery/operations and the larger access will accommodate the needs of the hotel and other commercial activities.</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>A12.2 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).</p>	<p>YES</p>	<p>All night time activities are centred around the southern and western boundaries, fronting the Marina & Dickson’s Inlet, where the primary structure will act as a sound barrier between these activities and the cluster</p>

			Villas to the centre and north of the site. With respect to the Pavilion, it is noted that the upstairs function facility directs activity towards the centre plaza, where it is anticipated that should the balconies be made available for use during the evening, any sound will be carried out over the duck pond.
P13 Safe and convenient pedestrian linkages are promoted in the Tourist Centre.	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.	YES	The urban design principles on which the design has been undertaken prioritise the pedestrian movements both internally and extending to Macrossan Street via Wharf Street
Local Centres			
P14 Local Centres outside the Tourist Centre service the surrounding residential area and do not adversely impact on the viability of the Tourist Centre	A14.1 The Net Lettable Area of each of the existing Local Centres does not exceed 300 m2 and is apportioned equally between the total number of lots which comprise the Local Centre.	N/A	The land is not subject to a local centre designation.
	A14.2 Any proposed new Local Centre with a maximum Net Lettable Area of 500 m2, only establishes when an identifiable population of 1000 persons is located more than 2 km from any existing Local Centre or the Tourist Centre.	N/A	The land is not subject to a local centre designation.
	A14.3 Any new Local Centre is located at a “gateway” location to a residential area, which best serves the surrounding residential area.	N/A	The land is not subject to a local centre designation.
Residential Development Outside a Tourist Centre			
P15 Existing residential housing estates are protected from incursion by higher density residential uses.	A15.1 Multi-Unit Housing does not establish in the residential estate of Solander and the areas in Reef Park estate included in the Residential 1 Planning Area.	N/A	The subject land located within a Tourist Centre.
P16 Residential development, other than a 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):	A16.1 Development incorporates the following design features and corresponding plot ratio bonuses [in brackets]: a) appropriate roof form and roofing material [10% Plot Ratio Bonus]; and b) appropriate fenestration in combination with roof form [5% Plot Ratio Bonus]; and	N/A	The subject land located within a Tourist Centre.

<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>	<ul style="list-style-type: none"> 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 d) minimum of 700mm eaves [15% Plot Ratio Bonus]; and e) orientation of the Building to address the street/s [5% Plot Ratio Bonus]; 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 g) inclusion of windows and balconies to the street façade of the Building [10% Plot Ratio Bonus]; and h) provision of lattice, battens or privacy screens [5% Plot Ratio Bonus]; and 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>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; and 35% at second floor level, if applicable. 	<p>N/A</p>	<p>The subject land located within a Tourist Centre.</p>
<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 enjoyment and convenience of in-house guests</p>	<p>N/A</p>	<p>The subject land located within a Tourist Centre.</p>

Other Development			
P19 Industrial development is limited to Service Industry and is located in existing or identified Industrial areas and is of a scale and intensity of development which is acceptable in the Locality.	A19.1 Service Industry development is located in the identified Industrial areas of: <ul style="list-style-type: none"> • Special Management Area 3 - Service Industry Precincts (Craiglie); and • Special Management Area 4 - Service Industry Precincts (Mahogany Street) 	N/A	None of the proposed uses are defined as a 'service' or 'industrial' development.
Community Facilities			
P20 Community facilities are provided to service the local community and visitors in convenient and accessible locations.	A20.1 Community facilities are conveniently located within or near the Tourist Centre and in close proximity to existing community facilities to service the needs of local residents and visitors. A20.2 Public car parking areas are provided within or in close proximity to the Tourist Centre, existing community facilities, sporting/recreation grounds and Four Mile Beach.	N/A	There are no community facilities proposed under this application.
Protection of Scenic Amenity and Natural Values			
P21 The views and vistas of Four Mile Beach from the intersection of Davidson Street and Macrossan Street to the beach front are maintained.	A21.1 Any development in Macrossan Street between Davidson Street and the beach front, outside the Tourist Centre, is designed with Macrossan Street as the Main Street Frontage and the Buildings are Setback 6 metres from the Main Street Frontage.	N/A	The subject land does not front Macrossan Street
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	A22.1 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).	YES	Consideration in the early stages have be provided to the planning approvals which reside on the land. The project team have also completed several preliminary meetings with Council's development officers to clarify and deal with constricts/opportunities assessment

			The overall masterplan for the Crystalbrook Superyacht Marina has respected the constraints and opportunities (i.e. the existing Marina and waterfront) of a site of this nature and seeks to protect these values to ensure its unique character underpins and provides distinctiveness to this proposal.
Port Douglas Waterfront			
<p>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.</p>	<p>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; and</p>	YES	Refer to the detailed assessment against the Port Douglas Waterfront North Planning Area Code provided over.
	<p>A23.2 Development in the Commercial Planning Area on premises that has road frontages on both Warner Street and the unnamed laneway at the rear, use Warner Street as the Primary Road frontage for pedestrian access and business frontage ensuring centralised parking on Lot 12 on SR787 for the Port Douglas Waterfront and Tourist Centre is unimpeded.</p>	N/A	As above.

Applicability

- (1) This code applies to self-assessable and assessable development in the Port Douglas Waterfront North Planning Area for:
- (a) Material Change of Use:
 - Except for:
 - Shopping Facilities, Business Facilities or Restaurant – using an existing Building
 - (b) Reconfiguring a Lot;
 - (c) Operational Work Associated with Reconfiguring a Lot;
 - (d) Operational Work – Filling or Excavation not associated with a Material Change of Use;
 - (e) Operational Work – Engineering Works not associated with a Material Change of Use;
 - (f) Operational Work – Placing and Advertising Device on Premises not associated with a Material Change of Use.

For self-assessable development assessed against this Code, the applicable Acceptable Solutions are A 1.1 and A2.1.

Self-assessable development which does not comply with Acceptable Solutions as listed above, outlined in this Code will require Code Assessment.

Criteria for assessment

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIES	COMMENT
CONSISTENT AND INCONSISTENT USES			
P1 The establishment of uses is consistent with the outcomes sought for the Port Douglas Waterfront South Planning Area.	A1.1 Uses identified as inconsistent uses in the Assessment Table are not established in the Waterfront South Planning Area.	N/A	The land is not designated under the Waterfront South Planning Area. NB: the subject land is located within the Waterfront North Planning Area, where all proposed uses are subject to code assessment, where it is therefore considered to be consistent with the Planning Area.
DESIGN, LAYOUT AND BUILT FORM			
P2 The bulk and scale of buildings is consistent with surrounding development and steps down to compliment the	A2.2 Development is designed in accordance with the control guidelines shown in <i>Figure 1</i> . Setbacks and building	ALTERNATE SOLUTION	Refer to commentary provided under Section 7 of the Planning Report which describes the built form arrangements by the project designers

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIES	COMMENT
open space areas in the northern parts of the Port Douglas Waterfront.	envelopes will be generally in accordance with those specified in this figure.		(SJB Architects), where commentary is provided to demonstrate compliance with the corresponding Performance Criteria.

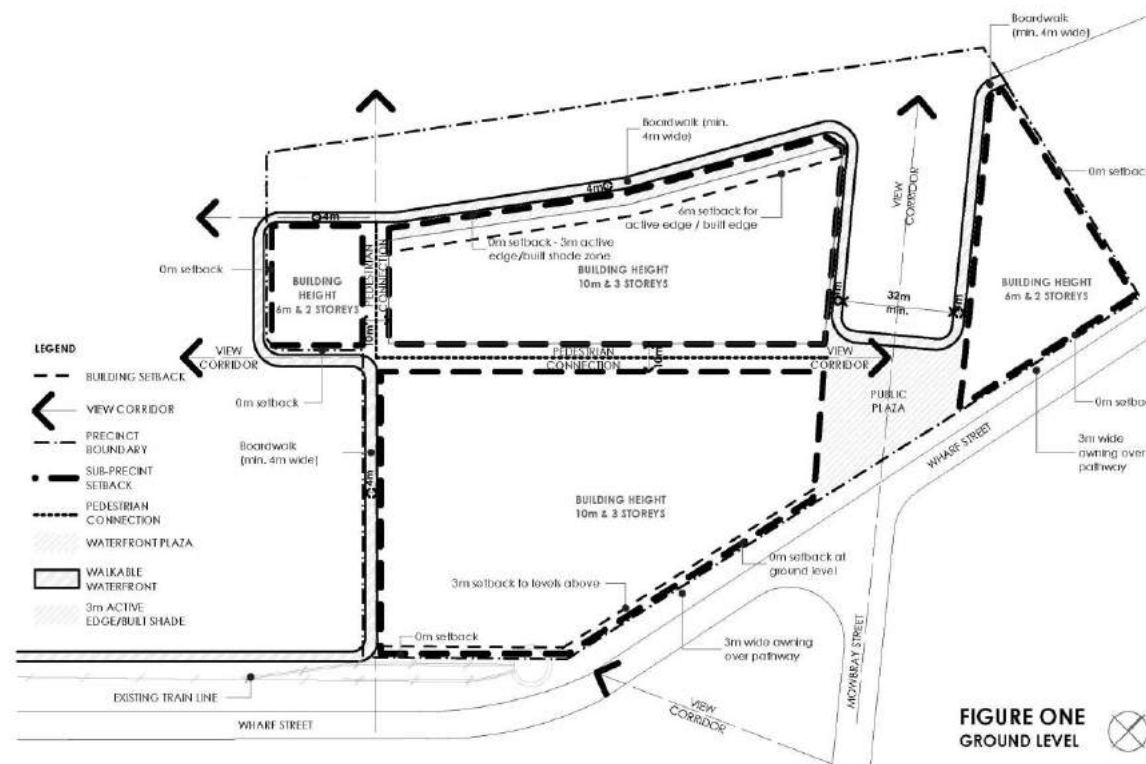


Figure 1: Development Control Guideline

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIES	COMMENT
<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>YES</p>	<p>The project designers have provided an Architectural Design statement that speaks to the building arrangements including a variety of contemporary-style shades/awnings and overhands to offer a level of protection to all openings.</p> <p>In addition to this, it is submitted that the primary structure incorporates a steeped roof design that comprises a series of green roofs to further assist in passive cooling.</p>
	<p>A3.2 Buildings are designed in accordance with the requirements of the Planning Scheme Policy No 2 – Building Design and Architectural Elements.</p>	<p>YES</p>	<p>The project designers have provided an Architectural Design statement that speaks to the building arrangements to embrace the tropical vernacular through a modern, contemporary design palate that achieves the provisions of the prescribed policy through the following architectural elements:</p> <ul style="list-style-type: none"> • Overhangs; • Contemporary screens; • Shaded and glazed openings; and • Expansive openings, windows and doors
<p>P4 Buildings are designed and oriented to address and provide activity in the public realm, particularly the public plaza and Wharf Street.</p>	<p>A4.1 Land uses, such as shops, restaurants, bars and commercial services, activate Wharf Street and the pedestrian plaza; and</p>	<p>YES</p>	<p>The Crystalbrook Superyacht Marina Masterplan seeks to reactivate Wharf Street (via community space and plaza) and the Marina Boardwalk, along with catering for further activation over the site.</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>YES</p>	<p>The primary structure seeks to address the existing Marina and waterfront (Dickson’s Inlet).</p>

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIES	COMMENT
	<p>A4.3 Through use of design features, development enables:</p> <ul style="list-style-type: none"> a. activities in public areas, such as outdoor dining; and b. passive recreation (such as places for meeting or busking); and c. informal seating around edges such as garden beds. 	YES	<p>The project designers have provided an Architectural Design statement that speaks to the building and incorporates the following areas to promote activation:</p> <ul style="list-style-type: none"> a. Establishment of a large walkway wrapping around the southern and western facing portions of the primary structure to support the establishment of dining (incl. outdoor dining) activities that look over the Marina and Dickson's Inlet; plus, a dedicated, free standing commercial tenancy (Marina Bar) that offers a unique food and beverage dining experience that integrates with the surrounding public and green space. b. Several areas to support social interaction, interpretative displays, wayfinding etc including covered walkways, several green spaces, the pedestrian plaza, duck pond, and various boardwalks throughout; which are also support by several different forms of informal seating.
<p>P5 The design of buildings ensures that:</p> <ul style="list-style-type: none"> a. the streetscape is cohesive; and b. pedestrians are afforded protection from the sun and from rain; and c. development allows for on-site landscaping and street trees for an attractive and tropical streetscape. 	<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 <i>Figure 1</i>. Posts may be included in the awnings design however these are to be non load bearing; and</p>	N/A	<p>None of the proposed structures present a 0m setback to Wharf Street.</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>	N/A	<p>As A5.1 above.</p>

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIES	COMMENT
	A5.3 The design of the awning allows for street tree plantings; and	N/A	As A5.1 above.
	A5.4 Dense landscaping is provided adjacent to the road frontage where buildings are not built to the front boundary.	YES	Refer to landscaping design inputs as Attachment 6 .
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.	YES	The Bally Hooley Rail Line, Turntable, and Railway Station have all been retained under this application – refer to architectural design plans as Attachment 2 .
MITIGATING ADVERSE IMPACTS			
P7 Development mitigates the adverse impacts of flood, storm tide inundation and sea level rise.	A7.1 Floors that provide tourist or permanent accommodation are located above the Storm Tide Inundation Area and consider rising sea levels; and	YES	The design team has sought to ensure that the proposed development achieves a reasonable level of flood immunity (i.e. Defined 1% AEP Inundation Event + 300mm freeboard). Please refer to the Engineering Services Report (Attachment 5)
	A7.2 Floors for new commercial and retail uses are located 150mm above the 1 in 100 year ARI flood event; or	YES	The design team has sought to ensure that the proposed development achieves a reasonable level of flood immunity (i.e. Defined 1% AEP Inundation Event + 300mm freeboard).

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIES	COMMENT
	<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>N/A</p>	<p>This Crystalbrook Marina development does not propose to seek to retain any structures over the subject land, other than the Bally Hooley Station.</p>
<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> <ul style="list-style-type: none"> a. noise; and b. odour; and c. hazardous materials; and d. aesthetics. 	<p>A8.1 Development incorporates buildings, structures and landscaped areas that can serve as a buffer between residential and non-residential use areas; and</p>	<p>YES</p>	<p>All structures are appropriately sited to ensure a reasonable level of separation is provided between all residential and non-residential uses proposed over the site (and adjoining to the site.)</p> <p>The site development will include complimentary landscape Design including tropical gardens that seek to not only enhance the tropical character and amenity of the site but to also offer a level of privacy and amenity between each use.</p>
	<p>A8.2 Service and rubbish collection points:</p> <ul style="list-style-type: none"> a. are positioned to minimise conflict with residential accommodation; and b. include measures to mitigate adverse noises and smells; and c. minimise the need for trucks to use their reversing horns. 	<p>YES</p>	<p>Service/rubbish collection points are proposed to be provided in Basement 1, which is more than suitably separated from all proposed accommodation/residential uses to ensure that minimal disruption (i.e. noise and odour) is presented.</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>YES</p>	<p>Mechanical plant and other service plant, structures, and equipment, will either be located in Basement 1 or hidden within the proposed plant room on level 4.</p>

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIES	COMMENT
	<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 	YES	<p>The plant room on level 4 is a dedicated, closed room to ensure that plant and equipment cannot be viewed from external to the site or from vantage/viewpoints (i.e. pedestrian plaza, balconies, etc.) within the site.</p>
	<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 	YES	<p>All mechanical plant areas will incorporate the appropriate insulation measures to ensure that any noise impacts are either reduced or can be appropriately managed.</p> <p>NB: it is offered that the provisions of this Acceptable Solution can form part of the conditions of approval to ensure compliance.</p>
	<p>A8.6 Hazardous Materials are stored in an enclosed, bunded area, away from residential uses.</p>	YES	<p>The redevelopment includes the relocation of the marina fuel tank and distribution. This tank is located within the service/operational basement areas and will be built to the requirements and standards (including bunding and emergency services)</p>
SUSTAINABLE BUILDING DESIGN			
<p>P9 New buildings promote exemplary environmentally sustainable building design outcomes.</p>	<p>A9.1 No Acceptable Solutions Specified.</p>	YES	<p>The project Designs SJB have engaged the services of an (ESD consultant to ensure that design has considered energy efficiency, waste efficiencies and water efficiencies, which are assessed and determined at the BA Stage.</p> <p>Preliminary advice can be provided to Council on request</p>

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIES	COMMENT
PARKING, ACCESS AND MOBILITY			
<p>P10 Vehicle access, parking and service areas:</p> <ul style="list-style-type: none"> 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:</p> <ul style="list-style-type: none"> a. to the side of buildings and recessed behind the main building line; or b. behind buildings; or c. wrapped by the building façade, and not visible from the street; and 	<p>YES</p>	<p>Generally, ALL carparking associated with the hotel, villas, apartments and commercial on-site tenancies are provided at basement level.</p> <p>The four (4) short-term spaces provided as part of the porte cochere will be hidden from view of the street through the strategic placement of building fronting Wharf Street and landscaping inputs.</p> <p>The development also seeks to retain use of the existing 121 street parking available along Wharf Street. It is offered that although this parking is not screened from view of the street, this space is landscaped appropriately to soften the streetscape.</p>
	<p>A10.2 Ground level parking incorporates clearly defined pedestrian routes; and</p>	<p>YES</p>	<p>The site includes a series of pathways and pedestrian linkages to support the movement of people throughout the site and to adjacent areas of interest (i.e. to the Marina, or directed towards the CBD).</p> <p>The development places emphasis on wayfinding and the opportunities of encouraging the flow of people from Macrossan Street through the site along the waterfront boardwalk to the Marina</p>
	<p>A10.3 Any porte cocheres, disabled and pedestrian access are accommodated within the boundary of new or refurbished development.</p>	<p>YES</p>	<p>The porte cochere will be of a suitable design and construction to ensure it can support disabled access, if and when required. It is offered that this provision is managed under the Australian</p>

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIES	COMMENT
			Standards, therefore detailed documentation ensuring compliance can be provided at the BA Stage.
	<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>	YES	There is no additional floor area proposed to be added to the existing station and it is confirmed here that the existing commercial floor spaces has not been included in any carparking calculations.
	<p>A10.5 Where the development is an integrated mixed-use development incorporating holiday accommodation or multiple dwellings and either 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.</p>	YES	It is confirmed here that a 30% relaxation of non-residential uses has been included in all carparking calculations.
<p>P11 Pedestrians, cyclists, motorists and public transport users can easily move into and through the Waterfront along planned connectivity routes.</p>	<p>A11.1 An integrated pedestrian and cycle movement network is provided as depicted on the Port Douglas Pedestrian and Cycle Movement Overlay.</p>	YES	The sites frontage will be improved by a 2.0m wide concrete footpath to accommodate pedestrian movements other the site and between the street and adjacent developments.
	<p>A11.2 Vehicular access from Wharf Street, is provided for the:</p> <ul style="list-style-type: none"> a. Accommodation parking and drop off area, this may include a port cochere and entry feature; and b. Non-residential parking; and 	YES	<p>Vehicular access from Wharf Street is to support:</p> <ol style="list-style-type: none"> 1. Access to reserved basement parking for residential uses; 2. Access to hotel and valet parking within the basement; 3. Use of porte cochere and short-term visitor parking at the primary entry to the Hotel; 4. Support movement of all anticipated services vehicles (i.e. delivery trucks, garbage truck, etc.)

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIES	COMMENT
	<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>YES</p>	<p>The development incorporates 2x vehicular access areas, which are considered to present an appropriate level of separation from each other and adjacent buildings to ensure suitable sightlines can be provided to minimise conflict with the adjacent pedestrian, cyclist, and vehicular traffic network.</p> <p>Please refer to Traffic Impact Assessment as Attachment 4</p>
VIEW CORRIDORS, GATEWAYS, LANDSCAPING AND OPEN SPACE			
<p>P12 A combination of pedestrian linkages and open space areas in the private and public realms are provided:</p> <ol style="list-style-type: none"> a. as a key feature of the Port Douglas Waterfront; and b. through the creation of a continuous waterfront promenade/boardwalk along the quayline. 	<p>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.</p>	<p>YES</p>	<p>As above.</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>YES</p>	<p>The Crystalbrook Superyacht Marina incorporates the establishment of a 'community space' retail opportunity (ie café) and plaza adjacent to the Duck Pond.</p>
<p>P14 The public plaza shown in Figure 1 is designed and constructed to:</p> <ol style="list-style-type: none"> a. reflect the character of the Port Douglas Waterfront; b. meet the needs of its users; and c. provide opportunities for social interaction. 	<p>A14.1 The public plaza is designed to be adaptable to community based events and are serviced accordingly; and</p>	<p>YES</p>	<p>The plaza is designed to integrate with the adjoining 'Pavilion', which is designed to encourage a café and possibly an art gallery on the ground floor as well as host functions on the first floor, ensuing that there are a variety of spaces that can be used by the general public / community.</p>

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIES	COMMENT
	<p>A14.1 Paths, meeting spaces and seat locations are designed to encourage incidental social interaction; and</p>	<p>YES</p>	<p>The site has been designed with an emphasis on pedestrian wayfinding and footpaths though to boardwalks to promote pedestrian movement over the through the site.</p> <p>These spaces are proposed to be improved by various seating arrangements (both formal and informal), shade structures, and are sited adjacent uses that foster social interaction.</p>
	<p>A14.3 Shaded seats and shaded standing areas are provided along with drinking taps.</p>	<p>YES</p>	<p>As per commentary provided under A14.1 above. In addition to this, it is noted that, at this preliminary stage, no drinking taps have been detailed on the proposed design plans. Therefore, the provision of drinking taps can form part of the conditions of approval to ensure compliance.</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>YES</p>	<p>The public will be afforded unrestricted access to the pedestrian plaza and the footpaths/boardwalks and open spaces provided throughout, apart from those dedicated to residential uses.</p>
<p>P16 Buildings, civic spaces, roads and pedestrian links:</p> <ul style="list-style-type: none"> a. are enhanced by appropriate landscape design and planting; and b. themed planting defines entry points, and create strong 'entry corridors' into the waterfront; and c. lighting and well-considered signage complements the building and landscape design; and 	<p>A16.1 No Acceptable Solutions Specified.</p>	<p>YES</p>	<p>Refer to landscaping inputs as Attachment 6.</p>

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIES	COMMENT
<p>d. public artwork and other similar features are provided that reflect the heritage and character of the Port Douglas Waterfront.</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>ALTERNATE SOLUTION</p>	<p>Development has been designed generally in accordance with the specified parameters of Figure 1; however, presents a departure with respect to height, with the proposed development seeking to maximise the opportunity to provide a dense mix of a variety of uses.</p> <p>Please refer to Section 7 of the Planning Report, where compliance with the corresponding Performance Criteria (P17) can be demonstrated.</p>
MARINE-BASED INDUSTRY AND MARINE INFRASTRUCTURE			
<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 owners, particularly with respect to the slipway operation.</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 otherwise approved by Council; and</p>	<p>N/A</p>	<p>This application does not propose any marine-based industrial activities or infrastructure.</p>
	<p>A18.2 Buildings are designed to minimise conflict between tourist and pedestrian areas and continued marine-based industrial activities.</p>	<p>N/A</p>	<p>As A18.1 above.</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>N/A</p>	<p>As A18.1 above.</p>
<p>P20 Changes to the Port Douglas Waterfront quayline does not cause adverse impacts to the environmentally sensitive Dickson Inlet.</p>	<p>A20.1 Development that results in changes to the Port Douglas Waterfront quayline are only established where an Ecological Assessment Report provides support to the changes.</p>	<p>N/A</p>	<p>As A18.1 above.</p>

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIES	COMMENT
	<p><i>Note: 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, with particular reference to the requirements of an Ecological Assessment Report</i></p>		

APPLICABILITY

This Code applies to development that is:

- Assessable Development ;
- On premises:
 - With a natural ground level of below 20 metres AHD; and
 - Where activity affects subsoil below 5 metres AHD (see figure 1); and
- Identified in the table below.

APPLICABLE DEVELOPMENT

Material Change of Use except for a House, Home Activity, Home Based Business, Illuminated Tennis Court, Caretaker’s Residence, Dual Occupancy, Shopping Facilities (0-500m2 gfa), Restricted Premises, Detached Bottle Shop, Business Facilities, Tavern, Restaurant, Child Care Centre, Veterinary Facilities, Primary Industry, Aquaculture Minor, Intensive Animal Husbandry, Industry Class A, B & C, Business and Technology Park, Park, Place of Assembly, Telecommunication Facility, Railway Activities, Institution, Indoor Sport and Entertainment, or Outdoor Sport and Entertainment.

Reconfiguring a Lot resulting in one or more additional lots.

Operational Work associated with Reconfiguring a Lot.

Operational Work involving excavation or filling of more than 50m3 of material not associated with a Material Change of Use.

ELEMENTS OF THIS CODE

PART A – FOR SELF ASSESSABLE & ASSESSABLE DEVELOPMENT

PERFORMANCE CRITERIA	ACCEPTABLE MEASURES	COMPLIES	COMMENT
None	None	None	None

PART B – FOR ASSESSABLE DEVELOPMENT ONLY

PERFORMANCE CRITERIA	ACCEPTABLE MEASURES	COMPLIES	COMMENT
IDENTIFICATION AND MANAGEMENT OF ACID SULFATE SOILS			
<p>P1 The extent and location of acid sulfate soils or potential acid sulfate soils must be identified.</p>	<p>A1.1 No acceptable measures are specified. Note: The Planning Scheme Policy, Reports and Information Council may request, provides a guide to the information which should be provided to demonstrate that the performance criteria are achieved.</p>	<p>YES</p>	<p>Geotechnical investigations remain ongoing, with the location and extent of acid sulfate soils will be confirmed during the subsequent application for operational works.</p>

			These works will also endeavour to address any potential issues and offer treatment/management solutions if required.
DISTURBANCE OF ACID SULFATE SOILS			
P2	No environmental harm resulting from acid sulfate soils or potential acid sulfate soils exposure is caused.	A2.1 No acceptable measures are specified.	YES As A1.1 above.
P3	The disturbance of acid sulfate soils or potential acid sulfate soils is avoided or minimised.	A3.1 The disturbance of acid sulfate soils or potential acid sulfate soils must be avoided by: a) Not excavating or otherwise removing soil or sediment identified as containing acid sulfate soils; and b) Not permanently or temporarily extracting groundwater that results in the aeration of previously saturated acid sulfate soils; and c) Not undertaking filling that results in: i. Actual acid sulfate soils being moved below the water table; and ii. Previously saturated acid sulfate soils being aerated.	YES As A1.1 above.
P4	The release of acid and associated metal contaminates into the environment is avoided or minimised.	A4.1 The disturbance of acid sulfate soils or potential acid sulfate soils avoids the release of acid and metal contaminants by: a) Neutralising existing acidity and preventing the generation of acid and metal contaminants; and b) Preventing the release of surface or groundwater flows containing acid and metal contaminants into the environment.	YES As A1.1 above.
		A4.2 Acid sulphate soils must undergo appropriate treatment before disposal whether or not that disposal occurs offsite.	YES As A1.1 above.

APPLICABILITY

This Code applies to development that is:

- Material Change of Use;
- Reconfiguring a Lot;
- Operational Work Associated with Reconfiguring a Lot;
- Operational Work – Filling or Excavation not associated with a Material Change of Use;
- Operational Work – Engineering Work not associated with a Material Change of Use;
- Operational Work – Placing an Advertising Device on Premises not associated with a Material Change of Use in the World Heritage and Environs Locality; and
- Building Work other than Minor Building Work not associated with a Material Change of Use in the World Heritage and Environs Locality.

On a site/land identified on a Cultural Heritage and Valuable Sites Overlay on the Locality Maps.

ELEMENTS OF THIS CODE

PERFORMANCE CRITERIA	ACCEPTABLE MEASURES	COMPLIES	COMMENT
CULTURAL HERITAGE FEATURES			
P1 Cultural Heritage Features of National and State Cultural Heritage Significance are protected and enhanced.	A1.1 No acceptable solution. (Information that the Council may request to demonstrate compliance with the Performance Criteria is outlined in the Planning Scheme Policy No 10 – Report and Information the Council May Request, for code and impact assessable development).	YES	All cultural heritage features present over and adjacent to the site (i.e. the Bally Hooley Railway, Turntable, and Railway Station) are proposed to be retained in their current state under this application. These elements from and important component of the Crystalbrook Superyacht Marina activities and the Port Douglas Character
VALUABLE CONSERVATION FEATURES AND VALUABLE SITES – IDENTIFIED IN SCHEDULE 1 OF PLANNING SCHEME POLICY NO 4 – CULTURAL HERITAGE AND VALUABLE SITES			
P2 Valuable Conservation Features and Valuable Sites identified on a Cultural Heritage and Valuable Sites Overlay on any Locality Map are identified, recognised, recorded and retained, wherever possible and the form, appearance and integrity of Valuable Conservation Features and Valuable Sites is not adversely affected by the new development.	A2.1 Buildings, structures, places or sites containing Valuable Conservation Features and Valuable Sites, which are to be demolished, removed or altered are to be recorded prior to demolition, removal or alteration by means of photographs, maps and site records with the material submitted to Council in accordance with Planning Scheme Policy No 4 – Cultural Heritage Valuable Sites.	N/A	As A1.1 above.

	<p>A2.2 Where a Building, structure, place or site containing Valuable Conservation Features and Valuable Sites is to be redeveloped and it is proposed to retain the Valuable Cultural Features and Valuable Sites, various provisions of the relevant Land Use Code may be relaxed to accommodate the retention of the Valuable Conservation Features and Valuable Sites. PROVIDED Development/redevelopment is in accordance with the requirements of <i>The Australia ICOMOS Charter for the Conservation of Places of Cultural Significance</i>, detailed in Planning Scheme Policy No 4 – Cultural Heritage and Valuable Sites.</p>	<p>N/A</p>	<p>A relaxation is not required in this instance.</p>
<p>VALUABLE CONSERVATION FEATURES AND VALUABLE SITES NOT IDENTIFIED PRECISELY IN SCHEDULE 1 OF PLANNING SCHEME POLICY NO 4 – CULTURAL HERITAGE AND VALUABLE SITES</p>			
<p>P3 The cultural significance of Valuable Conservation Features and Valuable Sites, the precise locations of which have not been specifically identified, is not adversely affected by development.</p>	<p>A3.1 Operational works are not undertaken within areas listed in Schedule 1 of Planning Scheme Policy No 4 – Cultural Heritage and Valuable Sites and identified – “Address/Property Description – Non Specific”, unit site investigations confirm there are no features, items or elements of cultural heritage significance within the designated site. Should features, items or elements of cultural heritage significance be identified than Acceptable Solutions A2.1 and A2.2 above apply.</p>	<p>N/A</p>	<p>The valuable conservation feature is identified in Schedule 1.</p>
	<p>A3.2 Where representations are made to the Council prior to development, identifying a site of Indigenous or European cultural heritage significance not listed in Schedule 1 of Planning Scheme Policy No 4 – Cultural Heritage and Valuable Sites, no Operational Works are undertaken until site investigations confirm there are no features, items or elements of cultural</p>	<p>N/A</p>	<p>The valuable conservation feature is identified in Schedule 1.</p>

	<p>heritage significance within the designated development site.</p> <p>Should features, items or elements of cultural heritage significance be identified then Acceptable Solutions A2.1 and A2.2 above apply and Schedule 1 of Planning Scheme Policy No 4 – Cultural Heritage and Valuable Sites is amended, if applicable, to include details of the site.</p>		
<p>P4 The management of sites identified on a Cultural Heritage Overlay on any Locality Map and sites potential cultural heritage significance ensures they are not disturbed before their significance has been evaluated.</p>	<p>A4.1 Before any disturbance of a place identified in Acceptable Solutions A2.1, A2.2, A3.1, and A3.2 above, where it is known or may be expected that features, items or elements of cultural heritage significance exist, the significance of that site is established and should features, items or elements of significance be identified, then:</p> <ul style="list-style-type: none"> • Disturbance of below ground relics is minimised; • The contribution of all periods to the cultural significance of a site is respected; • Design and location of new works do not negatively impact on the inherent significance of the site • A feature, item or element of cultural heritage significance is not moved unless it has a previous history of being moved, and does not have a strong association with its current site. Any structure that is moved is recorded and described above in A2.1 and the details submitted to Council in accordance with Planning Scheme Policy No 4 – Cultural Heritage and Valuable Sites. 	<p>N/A</p>	<p>The valuable conservation feature is identified in Schedule 1.</p>

APPLICABILITY

This Code applies to assessable development for a Material Change of Use for Multi-Unit Housing/Holiday Accommodation/Retirement Facility.

ELEMENTS OF THIS CODE

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTION	COMPLIES	COMMENT
CULTURAL HERITAGE FEATURES			
<p>P1 A site for Multi-Unit Housing/Holiday Accommodation/Retirement Facilities has sufficient area and dimensions to accommodate the building/structures, open space, car parking and associated vehicular access, landscaping and recreation facilities for the enjoyment of guests.</p>	<p>A1.1 The site has a minimum area of 1000m²</p> <p>AND</p> <p>The site has a minimum road frontage of 25 metres.</p>	<p>YES</p>	<p>Site Area: 3.4291ha</p> <p>Wharf St Frontage: approx. 334m</p>
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>	<p>YES</p> <p>ALTERNATE SOLUTION</p>	<p>Crystalbrook Superyacht Marina includes a large primary building to cater for the needs of hotel, visitors, commercial tenancies etc</p> <p>The architectural design statement provided by SJB Architects deals with the approach to building elements and integration with the site.</p> <p>We note that the main structure exceeds 30m in the overall length of each wing. However, the building has been improved with a high level of articulation as a means of breaking up the apparent bulk of the built form and to generate visual interest both vertically and horizontally.</p> <p>It is also noted that although the eight (8) other structures present over the site do not exceed 30m in any general direction, they also offer a high level of articulation.</p>

			Refer to section 7 of the planning report where commentary has been provided to demonstrate compliance with the corresponding Performance Criteria (P2).
	A2.2 the length of any continuous wall plane does not exceed 15 metres.	YES	All elements and buildings throughout the Crystalbrook Superyacht marina will offer a high level of articulation, where any plane is broken up through the use of varying materials (exposed polished concrete, glass, timber, etc.), changes in shade and colour, texture, etc.
	A2.3 Building bulk is reduced by balconies, patios, recesses and variations in exterior building materials and colours.	YES	<p>The design of the primary is underpinned by the principal of biomimetics, where the overall shape and flow of the structure (i.e. curves and layered landscape) is based upon the Nautilus shell.</p> <p>This design vernacular itself offers opportunities to create a patterned sequence of curves, steps (terraces), and recesses which are complimented by various colours and materials to further articulate and accentuate the built form.</p> <p>Other structures are also articulated through the use of patio's, balconies, and contemporary-style roofing; as well as contemporary cladding that not only offers to further articulate a single plane, but also acts as a shade device.</p> <p>In addition to this, it is noted that the proposed Villas present a stepped mirrored pattern, where further opportunities are made available for greater articulation through addition steps and recesses which are also coupled by variants to natural light and shade. Please refer to elevations and impressions available as Attachment 2.</p>

	A2.4 Elevations provide visual interest through building elements, exterior colours, textures, and materials AND Buildings are designed in accordance with the requirements of the Planning Scheme Policy No 2 – Building Design and Architectural Elements.	YES	As A2.3 above.
P3 The development addresses the main street frontage to facilitate casual surveillance and to enhance the amenity of the streetscape.	A3.1 The building has balconies, windows or patios that face the main street frontage, and remain unenclosed.	YES	All buildings fronting the street (i.e. Villa structure and Pavilion) both address the street and offer opportunities for casual surveillance
	A3.2 Perimeter fencing to any street frontage complies with any specific fencing requirements detailed in the relevant Planning Area Code.	N/A	There is no fencing proposed.
P4 The development does not adversely affect the privacy or liveability of adjoining development, and achieves a pleasant living environment for residents.	A4.1 Windows and openings of habitable rooms do not overlook habitable rooms of adjoining developments. OR Where habitable rooms over look habitable rooms of adjoining developments, privacy is protected by fixed external screens or other suitable elements to avoid overlooking.	YES	There is very little opportunity for any habitable rooms to overlook other areas of the development.
	A4.2 Screening is provided where any windows, balconies or patios overlook other windows, balconies or patios of other dwelling units/private rooms within the development.	YES	Buildings within the Crystalbrook Superyacht marina are appropriately sited and separated from each other structure to ensure that there limited-to-no opportunity for overlooking – i.e. each structure is placed on an angel to ensure that no direct line of sight is available to any habitable rooms, or is provided a very high level of separation which is also complimented and further obscured by landscaping.

<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>YES</p>	<p>All onsite carparking spaces will be provided at basement level. Four (4) visitor and drop-off bays are to be provided within the Port Cochre</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>YES</p>	<p>All parking areas will be appropriately illuminated in accordance with Australian Standards to ensure the safety of all staff, guests, and visitors to the site can be maintained. It is noted that the main basement carparking will be supported by mechanical ventilation solutions to ensure air quality of this space can be maintained to an appropriate level.</p> <p>The basement servicing the residential villas will be mid-level based and therefore will be naturally ventilated.</p>
	<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>YES</p>	<p>Both access driveways are greater than 2m away from each side and rear boundary.</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>YES</p>	<p>All Villas generally sit at grade, the only allowances that have been made to alter their height either relate to basement carparking or to ensure a reasonable level of flood immunity is achieved.</p> <p>Finished Floor Level (FFL) will be 4.17m AHD which is set by Council regarding maintaining the immunity required for habitable areas.</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; • 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>YES</p>	<p>POS on regards to the 'Private' Villas ranged between 31m², 46m² to a maximum of 96m² with additional balcony spaces serving the needs of individual villas.</p> <p>Additionally, there are communal areas which are provided for the benefit of residents</p> <p>100% of all landscaping and recreation area requirements have been provided as a large communal space throughout the site for the enjoyment of all guests and residents alike.</p>
	<p>A7.2 Each dwelling unit/private room is provided with a private roofed balcony or patio with a minimum area of 6m² and a minimum depth of 2 metres.</p> <p>In the case of each dwelling unit if the private roofed balcony, or patio is 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 6m² for each dwelling unit.</p>	<p>YES</p>	<p>Refer to the design plans in respect of Villa (A – G)</p>
	<p>A7.3 Any swimming pool, including surrounding coping or paving, located within the front setback is setback a minimum of 3 metres from the main street frontage.</p> <p>AND</p>	<p>N/A</p>	<p>There is no swimming pool proposed within the front setback.</p>

	No suspended or above ground swimming pool structures are located within the 6 metres setback to the main street frontage.		
P8 The development provides residents with a range of on site services and facilities.	A8.1 A communal clothes drying area of 30m ² is provided in a central location. OR Each dwelling unit has its own clothes drying areas designated in their private open space and screened from view from public vantage points and other dwelling units on site or on adjoining sites.	YES	Each unit is afforded the opportunity to place a retractable clothesline on either their patio or first floor balcony, which will be landscaped or a contemporary shed screen. Otherwise mechanical options (i.e. clothes dryers) will be made available to each unit.
	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. AND 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 or cleaning.	YES	All refuse will be collected and stored in the services area of basement 1, where provisions have been made for its collection at basement level.
RETIREMENT FACILITY – ADDITIONAL PROVISIONS			
LOCATION AND AMENITY			
P9 Retirement Facilities are located in areas which offer convenience to residents, and are designed to be compatible with the locality and surrounding area in which they are located.	A9.1 Retirement Facilities are conveniently located in established areas in close proximity to public transport, Shopping Facilities, and health care services.	N/A	This application does not seek to establish a Retirement Facility use.
DESIGN AND LAYOUT			
P10 Retirement Facilities are designed to provide for the amenity and security of residents.	A10.1 The Retirement Facility incorporates covered walkways wide enough to accommodate wheelchairs and ramps, where necessary, which	N/A	As A9.1 above.

	provide on site weather protection between all areas of the complex.		
	A10.2 Decorative perimeter security fencing and gates are provided to ensure the safety and security of residents and the fencing complies with the relevant Planning Area Code.	N/A	As A9.1 above.
	A10.3 Security screens are provided on all dwelling units or residential rooms to ensure the safety and security of residents, while allowing for the capture of breezes.	N/A	As A9.1 above.
P11 The internal layout of the Retirement Facility and the location of the Retirement Facility allows for the safe evacuation of residents in an emergency and provides for emergency services to efficiently access the site.	A11.1 The design of the Retirement Facility ensures that external circulation and access and egress points on the site facilitate the evacuation of the site in an efficient manner.	N/A	As A9.1 above.
	A11.2 The site of the Retirement Facility is not prone to inundation and all circulation pathways throughout the site are constructed above 3.2m AHD.	N/A	As A9.1 above.
	A11.3 The location and site of the Retirement Facility are readily accessible to emergency vehicles.	N/A	As A9.1 above.
ANCILLARY FACILITIES			
P12 Retirement Facilities provides residents with a range of on site services and facilities.	A12.1 Retirement Facilities incorporate a range of ancillary services and facilities, such as: lounge areas, library /reading room, TV games/recreation room, pharmacy, hairdresser, convenience store and the like.	N/A	As A9.1 above.

APPLICABILITY

This Code applies to assessable development for:

- Material Change of Use: Except for:
 - Business Facilities – using and existing Building
 - Home Activity
 - Off Premises Advertising Device
 - Primary Industry
 - Private Forestry
 - Restaurant – using and existing Building
 - Shopping Facility – using an existing Building
- Operational Work Associated with Reconfiguring a Lot;
- Operational Work – Filling or Excavation not associated with a Material Change of Use; and
- Operational Work – Engineering Works not associated with a Material Change of Use.

ELEMENTS OF THIS CODE

PERFORMANCE CRITERIA	ACCEPTABLE MEASURES	COMPLIES	COMMENT
Filling & Excavation - General			
P1 All filling and excavation work does not create a detrimental impact on the slope stability, erosion potential or visual amenity of the Site or the surrounding area.	A1.1 The height of cut and/or fill, whether retained or not, does not exceed 2 metres in height. AND Cuts in excess of those stated in A1.1 above are separated by benches/terraces with a minimum width of 1.2 metres that incorporate drainage provisions and screen planting.	ALTERNATE SOLUTION	Extensive excavation works are required to assist in the establishment and construction of the two (2) proposed basement car parks. The proposal includes Engineering Services Report which addresses these code provisions for your review as Attachment 5
	A1.2 Cuts are supported by batters, retaining or rock walls and associated benches/terraces are capable of supporting mature vegetation.	YES	As A1.1 above.
	A1.3 Cuts are screened from view by the siting of the Building/structure, wherever possible.	YES	As A1.1 above.
	A1.4 Topsoil from the Site is retained from cuttings and reused on benches/terraces.	YES	As A1.1 above.
	A1.5 No crest of any cut or toe of any fill, or any part of any retaining wall or structure, is located closer than 600	YES	As A1.1 above.

	mm to any boundary of the property, unless the prior written approval of the adjoining landowner and the Council, has been obtained.		
	A1.6 Non-retained cut and/or fill on slopes are stabilised and protected against scour and erosion by suitable measures, such as grassing, Landscaping or other protective/aesthetic measures.	YES	As A1.1 above.
Visual Impact and Site Stability			
P2 Filling and excavation are carried out in such a manner that the visual/scenic amenity of the area and the privacy and stability of adjoining properties is not compromised.	A2.1 The extent of filling or excavation does not exceed 40% of the Site area or 500m ² whichever is the lesser. EXCEPT THAT A2.1 does not apply to reconfiguration of 5 lots or more.	ALTERNATE SOLUTION	The proposal includes Engineering Services Report which addresses these code provisions for your review as Attachment 5
	A2.2 Filling and excavation does not occur within 2 metres of the Site boundary.	YES	As A2.1 above.
	Flooding & Drainage		
P3 Filling and excavation does not result in a change to the run off characteristics of a Site which then have a detrimental impact upon the Site or nearby land or adjacent Road reserves.	A3.1 Filling and excavation does not result in the ponding of water on a Site or adjacent land or Road reserves.	YES	The Applicant will ensure all appropriate stormwater management arrangements are put in place to ensure there is no ponding experienced over the site or that any adjacent bodies of water are negatively impacts The proposal includes Engineering Services Report which addresses these code provisions for your review as Attachment 5
	A3.2 Filling and excavation does not result in an increase in the flow of water across a Site or any other land or Road reserves.	YES	As A3.1 above.
	A3.3 Filling and excavation does not result in an increase in the volume of water or concentration of water in a Watercourse and overland flow paths.	YES	As A3.1 above.
	A3.4 Filling and excavation complies with the specifications set out in the Planning Scheme Policy No 6 – FNQROC Development Manual.	YES	As A3.1 above.
Water Quality			

<p>P4 Filling and excavation does not result in a reduction of the water quality of receiving waters.</p>	<p>A4.1 Water quality is maintained to comply with the specifications set out in the Planning Scheme Policy No 6 – FNQROC Development Manual</p>	<p>YES</p>	<p>As A3.1 above.</p>
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APPLICABILITY

This Code applies to assessable development for:

- Material Change of Use: Except for the following Use:
 - House (other than a House which is Code Assessable and then the Code Applies)
- Operational Work Associated with Reconfiguring a Lot;

ELEMENTS OF THIS CODE

PERFORMANCE CRITERIA	ACCEPTABLE MEASURES	COMPLIES	COMMENT
Landscape Design			
P1 Landscape design satisfies the purpose and the detailed requirements of this Code.	<p>A1.1 Landscaping is undertaken in accordance with a Landscape Plan drawn to scale which complies with and illustrates all the relevant requirements of this Code and Planning Scheme Policy No 7 – Landscaping.</p> <p>AND</p> <p>Landscaping is maintained in accordance with the requirements specified in this Code and Planning Scheme Policy No 7 – Landscaping.</p>	YES	<p>The Crystalbrook Superyacht Marina will include a ‘high’ level of landscaping both hard & soft throughout the private and public spaces.</p> <p>The landscaping will be complimentary to the architecture and include opportunities to guide users through pedestrian experiences and in regard to wayfinding. Consultants Scott Carver Pty Ltd have completed a design report in relation to landscaping which s included as Attachment 6.</p> <p>NB: It is offered that the provisions of this Acceptable Measure can form part of the conditions of approval to ensure compliance.</p>
Landscape-Character and Planting			
P2 Landscaping contributes to a sense of place, is functional to the surroundings and provides dominant visual interest and form.	A2.1 A minimum of 80% of the proposed landscape area is open to the sky for sunlight and ventilation.	YES	<p>The landscaping design will compliment the themes and objectives being promoted throughout the Crystalbrook Superyacht Marina</p> <p>A clear majority of the landscaping is provided in areas of open space, which has direct access to sunlight and ventilation – refer to landscaping design inputs as Attachment 6.</p>

	<p>A2.2 The percentage of native or endemic species utilised in the Landscaping is as specified in the Locality Code. OR Where not specified in the Locality Code, in accordance with Planning Scheme Policy No. 7 – Landscaping.</p>	YES	Refer to landscaping design inputs as Attachment 6 for further details.
	<p>A2.3 Landscaping includes planting layers comprised of canopy, middle storey, screening and groundcovers, with palm trees used as accent plants only.</p>	YES	Refer to landscaping design inputs as Attachment 6 for further details.
<p>P3 Landscaping is consistent with the existing landscape character of the area and native vegetation existing on the Site is to be retained wherever possible and integrated with new Landscaping⁴⁷</p>	<p>A3.1 Existing native vegetation on Site is retained and incorporated into the Site design, wherever possible.</p>	YES	The Applicant will endeavour to retain any mature vegetation where possible.
	<p>A3.2 Any mature vegetation on the Site which is removed or damaged during development of the Site is replaced with advanced native species.</p>	YES	Mature vegetation will be utilised where possible and practical to contribute to the landscape character of the area and to soften the built form and
	<p>A3.3 Where there is an existing landscape character in a street or locality which results from existing vegetation, similar species are planted on Site or on the street.</p>	YES	Refer to landscaping design inputs as Attachment 6 for further details.
	<p>A3.4 Street trees are 100% native species which enhance the landscape character of the streetscape, with species chosen from the Plant Species Schedule in Planning Scheme Policy No 7 – Landscaping.</p>	YES	Refer to landscaping design inputs as Attachment 6 for further details.
<p>P4 Plant species are selected with consideration to the scale and form of development, screening, buffering, streetscape, shading and the locality of the area.</p>	<p>A4.1 Species are selected in accordance with the Plant Species Schedule in Planning Scheme Policy No 7 – Landscaping.</p>	YES	Refer to landscaping design inputs as Attachment 6 for further details.
<p>P5 Shade planting is provided in car parking areas where uncovered or open, and adjacent to driveways and internal Roadways.</p>	<p>A5.1 Where car parking areas are uncovered or open, shade trees are planted at regular intervals (a minimum of 1 shade tree is provided for every 5 car parks) throughout the car parking areas, and adjacent to driveways and internal Roadways.</p>	YES	Landscaping has been provided around the four (4) parking spaces provided at grade as part of the porte cochere.
	<p>A5.2 A minimum of 1 shade tree is provided for every 10 metres along a driveway or internal Roadway.</p>	YES	Landscaping has been provided along all access driveway and manoeuvring areas – refer to landscaping design inputs as Attachment 6 for further details.

	A5.3 Landscape beds and trees are protected by garden edging, bollards or wheel stops.	YES	The Applicant will comply with the provisions of this Acceptable Measure where required. NB: it is offered that the provisions of this Acceptable Measure can form part of the conditions of approval to ensure compliance.
	A5.4 Trees within car parking areas have a minimum planting area the equivalent of 1 car parking bay, with a minimum topsoil depth of 0.8 metre.	YES	Landscaping arrangements proposed around the four (4) short-term parking spaces as part of the porte cochere will more than sufficiently comply with the provisions of this Acceptable Measure.
Screening			
P6 Fences along street Frontages are articulated with appropriate Landscaping.	A6.1 Perimeter fencing to any street Frontage complies with the relevant Planning Area Code.	N/A	There is no fencing proposed to the sites frontage.
	A6.2 Trees, shrubs and groundcovers are planted within any recessed areas along the fence line.	N/A	As A6.1 above.
P7 Landscaping within Recreation Areas of residential development are functional, well designed and enhance the residential amenity.	A7.1 One shade tree is provided for each private open space or private Recreation Area.	N/A	There are no private open spaces or recreation areas proposed. Each patio/pool area within each villa unit, however, comprises a reasonably sized planter box to screen assist in screening this space and to offer a level of privacy and amenity.
	A7.2 Tree species provide 30% shade over the area within 5 years.	WILL COMPLY	Refer to landscaping design inputs as Attachment 6 for further details.
	A7.3 A minimum of 50% of the Landscaping and Recreational Area is landscaped, with trees, shrubs, groundcovers, minimising large expanses of hardstand areas and structures.	YES	The gardens around the site include a mixture of mature trees, shrubs, and grasses. The only real hard stand areas proposed relate specifically to the pedestrian plaza, areas around the pool, and the series of footpaths and boardwalks provided throughout the site. it is offered that the proposed landscaping areas equal more than 50% of these areas.
	A7.4 Plants are located to provide shelter and shade to Habitable Rooms and outdoor Recreation Areas from the hot summer sun.	YES	A variety of landscape treatments, including green roofs, have been provided adjacent to each of the proposed structures, with the intent to not only

			embrace the tropical character of the area, but to provide shade, soften the built form, and to reduce the thermal load.
P8 Undesirable features are screened with Landscaping.	A8.1 Landscaping of Dense Planting is planted along and near retaining walls, long blank walls of Buildings, mechanical and air-conditioning units, clothes drying areas, bin enclosures and other utility structures with appropriate trees, shrubs and groundcovers.	YES	As A7.4 above.
P9 The environmental values of the Site and adjacent land are enhanced.	A9.1 Landscaping using similar endemic or native species, is planted on-Site on land adjoining an area of natural environmental value	YES	Refer to landscaping design inputs as Attachment 6 for further details.
Streetscape and Site Amenity			
P10 Landscaping for residential development enhances the streetscape and the visual appearance of the development.	A10.1 Dense Planting along the front of the Site incorporates: <ul style="list-style-type: none"> shade canopy trees to provide shade to the Frontage of the Site within 5 years of planting; landscape screening of blank walls; low shrubs, groundcovers and mulch to completely cover unsealed ground. 	YES	Refer to landscaping design inputs as Attachment 6 for further details.
	A10.2 Dense Planting to the rear of the Site incorporates: <ul style="list-style-type: none"> 1 shade tree for an average of every 75 m², growing to the Building eave Height within 5 years of planting; screening shrubs to grow to 3 metres in Height within 2 years of planting; low shrubs, groundcovers and mulch to completely cover unsealed ground. 	YES	Refer to landscaping design inputs as Attachment 6 for further details.
	A10.3 Dense Planting to the side boundaries incorporates: <ul style="list-style-type: none"> trees planted for an average of every 10 metres where adjacent to a Building; low shrubs, groundcovers and mulch to completely cover unsealed ground.	YES	Refer to landscaping design inputs as Attachment 6 for further details.

<p>P11 Landscaping for non-residential development enhances the streetscape and the visual appearance of the development.</p>	<p>A11.1 Dense Planting along the front boundary of the Site where a Building is Setback from the front alignment, incorporates:</p> <ul style="list-style-type: none"> • shade canopy trees to provide shade to the Frontage of the Site within 5 years of planting where appropriate; • landscape screening of blank walls; • low shrubs, groundcovers and mulch to completely cover unsealed ground. 	<p>YES</p>	<p>Refer to landscaping design inputs as Attachment 6 for further details.</p>
	<p>A11.2 Dense Planting to the rear of the Site where a Building is Setback from the rear alignment, incorporates:</p> <ul style="list-style-type: none"> • 1 shade tree for an average of every 75 m² growing to the Building eave Height within 5 years of planting; • screening shrubs to grow to 3 metres in Height within 2 years of planting; <p>low shrubs, groundcovers and mulch to completely cover unsealed ground.</p>	<p>YES</p>	<p>Refer to landscaping design inputs as Attachment 6 for further details.</p>
	<p>A11.3 Dense Planting to the side boundaries where visible from the street or adjoining a boundary to a different Planning Area, and where a Building is Setback from the side boundary, incorporates:</p> <ul style="list-style-type: none"> • trees planted for an average of every 10 metres where adjacent to a Building; • screening shrubs, low shrubs and groundcover appropriate for the amount of space, light and ventilation of the area; • low shrubs, groundcovers and mulch to completely cover unsealed ground. 	<p>YES</p>	<p>Refer to landscaping design inputs as Attachment 6 for further details.</p>
	<p>A11.4 A minimum of 20% of shade trees and shrubs is incorporated in all areas of Landscaping growing to the Building eave Height within 5 years.</p>	<p>YES</p>	<p>Refer to landscaping design inputs as Attachment 6 for further details.</p>

Maintenance & Drainage			
P12 Landscaped areas are designed in order to be maintained in an efficient manner	A12.1 A maintenance program is undertaken in accordance with the Maintenance Schedule in Planning Scheme Policy No 7 – Landscaping.	YES	A maintenance program will be established and managed by the body corporate, who will ensure that all landscaping is appropriately maintained.
	A12.2 A reticulated irrigation system is provided to common Landscaping and Recreation Areas and planter boxes in accordance with Australian Standards, with 1 hose cock within each area.	YES	As A12.1 above. Irrigation will be installed to garden throughout the site where required.
	A12.3 Turf areas are accessible by standard lawn maintenance equipment.	YES	Refer to landscaping design inputs as Attachment 6 for further details.
	A12.4 Plant species are selected with long life expectancy and minimal maintenance requirements where on-Site management will be limited.	YES	Refer to landscaping design inputs as Attachment 6 for further details.
	A12.5 Mulching is provided to all garden beds to reduce weed growth and to retain water, and is to be replenished every year in the ongoing maintenance program.	YES	As A12.1 above.
P13 Stormwater runoff is minimised and re-used in Landscaping through water infiltration, where appropriate	A13.1 Adequate drainage is provided to all paving, turf and garden beds, including the use of swales, spoon drains, subsurface drainage, field gullies, rock or pebble lined Watercourses and stormwater connections.	YES	Appropriate stormwater drainage will be provided throughout to ensure compliance with the latest standards and to ensure that runoff can be suitably managed/treated before leaving the site – refer to Engineering Services Report as Attachment 5 . NB: it is offered that the provisions of this Acceptable Measure can form part of the conditions of approval to ensure compliance.
	A13.2 Overland flow paths are not to be restricted by Landscaping works.	YES	As A13.1 above.
	A13.3 Water runoff is re-used through draining of hard surface areas towards permeable surfaces, turf, garden beds and by minimising impervious surfaces on the Site.	YES	As A13.1 above.
Safety			
P14 Tree species and their location accommodate vehicle and pedestrian sight lines.	A14.1 Trees located near pathways, driveways, Access points, parking areas and street corners have a minimum 3.0 metres of clear trunk	YES	Refer to landscaping design inputs as Attachment 6 for further details.

<p>P15 The landscape design enhances personal safety and reduces the potential for crime and vandalism.</p>	<p>A15.1 Security and foot lighting is provided to all common areas, including car parks, entries, driveways and pathways.</p>	<p>YES</p>	<p>Appropriate lighting will be provided to all public and communal areas throughout the site as a means of not only contributing to an active night life in Port Douglas, but also offer a high level of security and safety to all people using the site.</p>
	<p>A15.2 Hard surfaces are stable, non-slippery and useable in all weathers.</p>	<p>WILL COMPLY</p>	<p>It is offered that the provisions of this Acceptable Measure can form part of the conditions of approval to ensure compliance.</p>
	<p>A15.3 Bushfire hazard is minimised with planting of bushfire resistant species near bushfire prone areas, (refer to the Bushfire Risk Overlay on the relevant Locality Map).</p>	<p>N/A</p>	<p>The site is not subject to risk of a bushfire hazard.</p>
	<p>A15.4 Lighting for bicycle paths is provided in accordance with the relevant Australian Standards</p>	<p>YES</p>	<p>As A15.1 above.</p>
<p>Utilities & Services</p>			
<p>P16 The location and type of plant species does not adversely affect the function and accessibility of services and facilities and service areas.</p>	<p>A16.1 Plant species are selected and sited with consideration to the location of overhead and underground services.</p>	<p>WILL COMPLY</p>	<p>The Applicant will ensure all landscaping works are free of any existing infrastructure or services to safeguard against any damage.</p> <p>NB: it is offered that the provisions of this Acceptable Measure can form part of the conditions of approval to ensure compliance.</p>
	<p>A16.2 All underground services are to be located under pathways and below the eaves of the Building.</p>	<p>WILL COMPLY</p>	<p>As A16.1 above.</p>
	<p>A16.3 Irrigation control devices are located in the common Landscaping and Recreation Area.</p>	<p>WILL COMPLY</p>	<p>As A12.2 above.</p>
	<p>A16.4 Landscaping is located to enable trade persons to Access and view meters and other mechanical equipment within the Site.</p>	<p>YES</p>	<p>All meters and mechanical plant are either located in basement 1 or on level 4, all spaces of which are not obstructed by landscaping.</p>
	<p>A16.5 Landscaping does not limit Access for service vehicles or rubbish trucks to utility areas, bin enclosures or docking areas.</p>	<p>YES</p>	<p>All these services are located in Basement 1.</p>

	<p>A16.6 Landscaping near electric lines or substations is designed and developed so that any vegetation at maturity or Landscaping structures or works do not exceed 40 metres in Height on land:</p> <ul style="list-style-type: none"> • in an electric line shadow; or • within 5.0 metres of an electric line shadow; or within 5.0 metres of a substation boundary. 	<p>YES</p>	<p>As A16.1 above.</p>
	<p>A16.7 Elsewhere, vegetation is planted at a distance that is further from the nearest edge of an electric line shadow or substation boundary than the expected maximum Height at maturity of the vegetation.</p>	<p>YES</p>	<p>As A16.1 above.</p>
	<p>A16.8 On a Site adjoining an electricity substation boundary, the vegetation foliage at maturity is not within 3.0 metres of the substation boundary. However, where a substation has a solid wall along any part of its boundary, foliage may extend to, but not above or beyond, that solid wall.</p>	<p>N/A</p>	<p>There are no substations present over adjacent sites.</p>

APPLICABILITY

This Code applies to self-assessable or assessable development for:

- Material Change of Use.
Except for the following Uses in all Localities:
 - Home Industry
 - Off Premises Advertising Device

For self-assessable development assessed against this Code, the applicable Acceptable Solutions is A1.1.

Self-assessable development which does not comply with Acceptable Solution A1.1, will require Code Assessment.

ELEMENTS OF THIS CODE

PERFORMANCE CRITERIA	ACCEPTABLE MEASURES	COMPLIES	COMMENT
Vehicle Parking Numbers			
<p>P1 Sufficient parking spaces are provided on the Site to accommodate the amount and type of vehicle traffic expected to be generated by the use or uses of the Site, having particular regard to:</p> <ul style="list-style-type: none"> • the desired character of the area in which the Site is located; • the nature of the particular use and its specific characteristics and scale; • the number of employees and the likely number of visitors to the Site; • the level of local accessibility; • the nature and frequency of any public transport serving the area; • whether or not the use involves the retention of an existing Building and the previous requirements for car parking for the Building; • whether or not the use involves an identified Valuable Conservation Feature and Valuable Site; and • whether or not the use involves the retention of significant vegetation. 	<p>A1.1 The minimum number of vehicle parking spaces provided on the Site is not less than the number prescribed in Schedule 1 of this Code for the particular use or uses. Where the number of spaces calculated from the Schedule is not a whole number, the number of spaces provided is the next highest whole number</p>	<p>YES</p>	<p>Required: 403 Spaces Provided: 402 Spaces</p> <p>Basement Spaces = 276 Wharf Street Spaces = 126 Coach Drop-off = 5 Spaces</p> <p>Please refer to section 5 of the Planning Report where a detailed breakdown of carparking calculations has been provided.</p>

Parking for People with Disabilities			
<p>P2 Parking spaces are provided to meet the needs of vehicle occupants with disabilities⁴⁹.</p>	<p>A2.1 For parking areas with a total number of ordinary vehicle spaces less than 50, wheelchair accessible spaces are provided as follows:</p> <ul style="list-style-type: none"> • Medical, higher education, entertainment facilities and shopping centres – 2 spaces; • All other uses – 1 space. <p>A2.2 For parking areas with 50 or more ordinary vehicle spaces, wheelchair accessible spaces are provided as follows:</p> <ul style="list-style-type: none"> • Medical, higher education, entertainment facilities and shopping centres – 3% (to the closest whole number) of the total number of spaces required; • All other uses – 2% (to the closest whole number) of the total number of spaces required. 	<p>YES</p>	<p>Required: 3.2 or 4 spaces Provided: 4 spaces</p>
Motor Cycles			
<p>P3 In recognition that motorcycles are low Road-space transport, a proportion of the parking spaces provided may be for motorcycles. The proportion provided for motor cycles is selected so that:</p> <ul style="list-style-type: none"> • ordinary vehicles do not demand parking in the spaces reserved for motor cycles due to capacity constraints; and, • it is a reflection of the make-up of the likely vehicle fleet that uses the parking; and, • it is not a reflection of the lower cost of providing motorcycle 	<p>A3.1 Parking for motorcycles is substituted for ordinary vehicle parking to a maximum level of 2% per cent of total ordinary parking.</p> <p>AND</p> <p>The motorcycle parking complies with other elements of this Code.</p>	<p>N/A</p>	<p>The Applicant does not desire to substitute any ordinary vehicle parking spaces to accommodate motorcycle parking.</p>
Compact Vehicles			
<p>P4 A proportion of the parking spaces provided may be for compact vehicles. The proportion of total parking provided for compact vehicles is selected considering:</p>	<p>A4.1 For parking areas exceeding 100 spaces for short term users or 50 spaces for long-term users, parking is provided for compact vehicles as a substitute for ordinary vehicle parking so that:</p>	<p>N/A</p>	<p>The deign team have sought to provide arrangements to support all full-sized vehicles to ensure that all vehicle types can be accommodated over the site at all times without any restrictions.</p>

<ul style="list-style-type: none"> compact vehicles spaces are not available to non-compact vehicles; and, it is a reflection of the proportion of the likely vehicle fleet that uses the parking; and, compact vehicle spaces are located so as to be proximate to pedestrian destinations such that they present significant inclination for use by users of compact vehicles; and, the scale of parking spaces, likely users and the likely degree of familiarity with the availability of such spaces. 	<ul style="list-style-type: none"> compact vehicle parking does not exceed 10% of total vehicle parking required; and, the parking location is proximate to the entry locations for parking users; and, the parking provided complies with other elements of this Code 		
Bicycle Parking			
<p>P5 Sufficient bicycle parking spaces with appropriate security and end of trip facilities are provided on-Site to accommodate the amount of bicycles expected to be generated by the use or uses.</p>	<p>A5.1 The minimum number of bicycle parking spaces provided on Site is not less than the number prescribed in Schedule 1 of this Code, for the particular use or uses</p>	<p>YES</p>	<p>Required: 38.56 or 39 spaces Provided: 39 spaces Please refer to section 5 of the Planning Report where a detailed breakdown of bicycle parking calculations has been provided.</p>
Vehicular Access to the Site			
<p>P6 The location of Access points minimises conflicts and is designed to operate efficiently and safely taking into account:</p> <ul style="list-style-type: none"> the amount and type of vehicular traffic; the type of use (eg long-stay, short-stay, regular, casual); Frontage Road traffic conditions; the nature and extent of future street or intersection improvements; current and future on-street parking arrangements; the capacity of the adjacent street system; and the available sight distance 	<p>A6.1 The location of the Access points is in accordance with the provisions of the relevant Australian Standards.</p> <p>AND</p> <p>Where the Site has Frontage to more than one street, the Access is from the lowest order street.</p>	<p>YES</p>	<p>The design team has certified that all vehicular access and manoeuvring area have been designed in accordance with the relevant Australian Standards. NB: it is offered that the provisions of this Acceptable Measure can form part of the conditions of approval to ensure compliance.</p>
	<p>A6.2 All redundant Accesses must be removed and a suitable barrier Erected to prevent further use of the Access.</p>	<p>YES</p>	<p>All redundant vehicular access to Lots 2 and 3 will be replaced with kerb and channelling.</p>
	<p>A6.3 Only one Access point is to be provided to each Site unless stated otherwise in another Code.</p>	<p>YES</p>	<p>Although the redeveloped site will present two (2) vehicular access areas, it is noted that these provisions are also managed under other codes, being:</p> <ul style="list-style-type: none"> Port Douglas and Environs Locality Code, particularly A11.1; and

			<ul style="list-style-type: none"> Port Douglas Waterfront North Planning Area Code, particularly A11.3 <p>Therefore, as this matter contrarily managed under other codes, it is confirmed that the proposed redevelopment is not required to achieve compliance with this particular Acceptable Measure.</p>
Accessibility and Amenity for Users			
<p>P7 On-Site vehicle parking is provided where it is convenient, attractive and safe to use, and does not detract from an attractive or existing streetscape character.</p>	<p>A7.1 Short term visitor parking is provided at the front or on the main approach side of the Site, with easy Access to the Building entry, where such provision is in keeping with the desired character of the area in which the Site is located.</p> <p>AND</p> <p>In mixed use premises that include residential or accommodation uses (excluding, Port Douglas – Tourist Centre), at least 50% of the required number of parking spaces for the non-residential use/s on the Site is provided in an easily accessible location on the premises, so as to be convenient to use for customers and other visitors.</p>	<p>YES</p>	<p>Four (4) short-term visitor spaces are provided at the front entry to the hotel, access off the proposed porte cochere.</p> <p>In respect to visitor spaces for non-residential use/s, the site will continue to utilise the 70-odd spaces available along its Wharf Street frontage.</p>
<p>P8 The layout of parking areas provides a high degree of amenity and accessibility for different users.</p>	<p>A8.1 The layout of the parking area provides for the accessibility and amenity of the following:</p> <ul style="list-style-type: none"> People with Disabilities Cyclists Motorcyclists Compact Vehicles Ordinary Vehicles Service Delivery Vehicles. 	<p>YES</p>	<p>The design team has certified that all vehicular access and manoeuvring area have been designed in accordance with the relevant Australian Standards.</p> <p>NB: it is offered that the provisions of this Acceptable Measure can form part of the conditions of approval to ensure compliance.</p>
	<p>A8.2 Where covered parking areas are required in accordance with Schedule 1 of this Code, sails or other secure structural forms of covering provide shade and weather protection for vehicles and passengers.</p>	<p>YES</p>	<p>A clear majority of car parking is provided in the basement/s.</p>

Access Driveways			
P9 The dimensions of Access driveways cater for all vehicles likely to enter the Site and minimises the disruption of vehicular, cyclist and pedestrian traffic.	A9.1 Access driveways are designed in accordance with the provisions of the relevant Australian Standards	YES	The design team has certified that all vehicular access and manoeuvring area have been designed in accordance with the relevant Australian Standards. NB: it is offered that the provisions of this Acceptable Measure can form part of the conditions of approval to ensure compliance.
P10 The surface construction materials of Access driveways within the Road reserve contribute to the streetscape and alerts pedestrians to the location of the driveway.	A10.1 Surface construction materials are consistent with the current or intended future streetscape or character of the area and contrast with the surface construction materials of any adjacent footpath.	YES	The access and manoeuvring areas will present as either an asphalt or concrete-finished surface. Further details on the complete finish of these spaces can be provided during the detailed design and development phase if required.
Access for People with Disabilities			
P11 Access for people with disabilities is provided to the Building from the parking area and from the street	A11.1 Access for people with disabilities is provided in accordance with the relevant provisions of the Australian Standards.	YES	The design team has certified that all vehicular access and manoeuvring area have been designed in accordance with the relevant Australian Standards. NB: it is offered that the provisions of this Acceptable Measure can form part of the conditions of approval to ensure compliance.
Access for Pedestrians			
P12 Access for pedestrians is provided to the Building from the parking area and from the street.	A12.1 Defined, safe pedestrian pathways are provided to the Building entry from the parking area and from the street.	YES	The design team has sought to create variety of spaces that are easily accessible for pedestrians, to create an atmosphere that encourages movement throughout the site to public spaces on and adjacent to the site; as well as provide a level of connectivity to the CBD
Access for Cyclists			
P13 Access for cyclists is provided to the Building or to bicycle parking area from the street.	A13.1 Access pathways for cyclists are provided in accordance with the relevant provisions of the Australian Standards. AND	WILL COMPLY	The design team has certified that all vehicular access and manoeuvring area have been designed in accordance with the relevant Australian Standards. NB: it is offered that the provisions of this Acceptable Measure can form part of the conditions of approval to ensure compliance.

	<p>Where Access for cyclists is shared with Access for pedestrians and vehicles, the shared use is identified by signage and linemarking.</p>		
<p>Dimensions of Parking Spaces</p>			
<p>P14 Parking spaces have adequate areas and dimensions to meet user requirements.</p>	<p>A14.1 Car parking for the disabled, ordinary car parking spaces and motorcycle parking spaces meet the requirements of the relevant Australian Standards.</p> <p>AND</p> <p>Parking spaces for special vehicles that are classified in accordance with the relevant Australian Standards meet the requirements of that Standard.</p> <p>AND</p> <p>Parking spaces for standard sized buses have the following minimum dimensions:</p> <ul style="list-style-type: none"> • width: 4 metres • length: 20 metres • clear Height: 4 metres. <p>Parking spaces for compact vehicles have the following minimum dimensions:</p> <ul style="list-style-type: none"> • 15 per cent less in width measurements than required by Australian Standards for any ordinary vehicle; and, • 20 per cent less in length measurements than required by Australian Standards for any ordinary vehicle. <p>AND</p> <p>Parking spaces for special vehicles meet the requirements dictated by the vehicle dimensions and</p>	<p>YES & N/A</p>	<p>The design team has certified that all vehicular access and manoeuvring area have been designed in accordance with the relevant Australian Standards.</p> <p>NB: it is offered that the provisions of this Acceptable Measure can form part of the conditions of approval to ensure compliance.</p> <p>As A3.1 and A4.1 above, the Applicant has not sought to provide any provisions to accommodate special vehicles or motorbikes.</p> <p>Arrangements to support short-term bus parking will be made available within the sites Wharf Street frontage, directly adjacent the Bally Hooley Railways Station.</p>

	manoeuvring characteristics and provide sufficient clearance to obstructions and adjacent vehicles to achieve a level of service to users equivalent to that specified by the relevant Australian Standards. A14.2 Parking spaces for bicycles meet the requirement of the relevant Australian Standard.		
On-site Driveways, Manoeuvring Areas and Parking/Standing Areas			
<p>P15 On-Site driveways, manoeuvring areas and vehicle parking/standing areas are designed, constructed and maintained such that they:</p> <p>are at gradients suitable for intended vehicle use;</p> <ul style="list-style-type: none"> consider the shared movements of pedestrians and cyclists; are effectively drained and surfaced; and are available at all times they are required. 	<p>A15.1 On-Site driveways, vehicle manoeuvring and loading/unloading areas:</p> <ul style="list-style-type: none"> are sealed in urban areas: <p>AND</p> <p>upgraded to minimise noise, dust and runoff in other areas of the Shire in accordance with the relevant Locality Code;</p> <ul style="list-style-type: none"> have gradients and other design features in accordance with the provisions of the relevant Australian Standards; and drain adequately and in such a way that adjoining and downstream land is not adversely affected. <p>A15.2 Parking areas are kept and used exclusively for parking and are maintained in a suitable condition for parking.</p>	YES	<p>All onsite parking and manoeuvring areas will be imperviously sealed and linemarked.</p> <p>The design team has certified that all vehicular access and manoeuvring area have been designed in accordance with the relevant Australian Standards. NB: it is offered that the provisions of this Acceptable Measure can form part of the conditions of approval to ensure compliance.</p>
Vehicle Circulation, Queuing and Set Down Areas			
<p>P16 Sufficient area or appropriate circulation arrangements are provided to enable all vehicles expected to use the Site to drive on and off the Site in forward gear.</p>	<p>A16.1 Circulation and turning areas comply with the provisions of the relevant Australian Standards.</p>	YES	<p>The design team has certified that all vehicular access and manoeuvring area have been designed in accordance with the relevant Australian Standards. NB: it is offered that the provisions of this Acceptable Measure can form part of the conditions of approval to ensure compliance.</p>

<p>P17 An on-Site circulation system provides safe and practical Access to all parking, loading/unloading and manoeuvring areas.</p>	<p>A17.1 Circulation driveways comply with the provisions of the relevant Australian Standards.</p>	<p>YES</p>	<p>The design team has certified that all vehicular access and manoeuvring area have been designed in accordance with the relevant Australian Standards. NB: it is offered that the provisions of this Acceptable Measure can form part of the conditions of approval to ensure compliance.</p>
<p>P18 Where vehicle queuing, set down or special vehicle parking is expected, sufficient queuing or parking area is provided to enable vehicles to stand without obstructing the free flow of moving traffic or pedestrian movement</p>	<p>A18.1 Queuing and set down areas comply with the relevant Australian Standard and any relevant AUSTROAD Guidelines.</p>	<p>YES</p>	<p>The design team has certified that all vehicular access and manoeuvring area have been designed in accordance with the relevant Australian Standards. NB: it is offered that the provisions of this Acceptable Measure can form part of the conditions of approval to ensure compliance.</p>

**ATTACHMENT 7
CODE ASSESSMENT**

- State Development Assessment Provisions



State code 8: Coastal development and tidal works

Table 8.2.1: All development

Development in the erosion prone area		
<p>PO1 Development does not occur in the erosion prone area unless the development:</p> <ol style="list-style-type: none"> 1. is one of the following types of development: <ol style="list-style-type: none"> a. coastal-dependent development; or b. temporary, readily relocatable or able to be abandoned; or c. essential community infrastructure; or d. redevelopment of an existing permanent building or structure that cannot be relocated or abandoned; and 2. cannot feasibly be located elsewhere. 	<p>No acceptable outcome is prescribed.</p>	<p>Complies with PO1</p> <p>The site currently operates as a 'Marina' providing vital gateway for tourists and commercial vessels to experience the Great Barrier Reef</p> <p>The 'Crystalbrook Superyacht Marina' redevelopment is considered to comply with items 1(d) and 2 of the corresponding Performance Outcome, where the Applicants desire underpins the proposal to redevelop the site (i.e. demolish all existing structures over Lots 1, 2, and 3) to create a primary structure that presents a likeness to the existing primary structure currently present over Lot 1. Further, it is noted that the redevelopment is also underpinned with the intent to accommodate alternate and a higher cluster of uses that are not currently catered for over the site.</p> <p>Given the breadth and scope of the proposal, it is offered that there is little-to-no opportunity available to accommodate this proposal over another site within the prime tourist centre of Port Douglas that is also outside of the erosion prone area – i.e. a clear majority of the Port Douglas township is in the erosion prone area.</p> <p>The project DOES propose some reclamation works in the location of the 'slipway' where the positioning of villas will replace these maritime activities. It is intended that the slipway will be suitably relocated with the support and acceptance of Douglas Shire Council.</p>

<p>PO2 Development other than coastal protection work:</p> <ol style="list-style-type: none"> 1. avoids impacting on coastal processes; and 2. ensures that the protective function of landforms and vegetation is maintained. <p>Note: In considering reconfiguring a lot applications, the state may require land in the erosion prone area to be surrendered to the State for coastal management purposes under the <i>Coastal Protection and Management Act 1995</i>.</p> <p>Where the planning chief executive receives a copy of a land surrender requirement or proposed land surrender notice under the <i>Coastal Protection and Management Act 1995</i>, this must be considered in assessing the application.</p>	<p>No acceptable outcome is prescribed.</p>	<p>Complies with PO2</p> <p>The existing landform is protected via a series of existing revetment walls, which are proposed to be retained throughout this application.</p> <p>The proposal encourages public access to the waterfront along Dickson's Inlet consistent with the intent of the Planning Scheme and other Masterplan documents</p> <p>NOTE: It is intended to undertake reclamation works to reinstate the landform at the position of the 'slipway'.</p>
<p>PO3 Development is located, designed and constructed to minimise the impacts from coastal erosion by:</p> <ol style="list-style-type: none"> 1. locating the development as far landward as practicable; or 2. where it is demonstrated that 1 is not feasible, mitigate or otherwise accommodate the risks posed by coastal erosion. 	<p>No acceptable outcome is prescribed.</p>	<p>Complies with PO3</p> <p>The subject land is already encircled by a revetment wall, which is proposed to reduce the potential risk of coastal erosion.</p> <p>It is noted here that the existing revetment wall is proposed to be retained throughout this redevelopment to ensure any risk of erosion are minimised. Further revetment wall construction will be detailed through the reclamation of the slipway areas for future development</p>
<p>PO4 Development does not significantly increase the risk or impacts to people and property from coastal erosion.</p>	<p>No acceptable outcome is prescribed.</p>	<p>Complies with PO4</p> <p>As per commentary provided to PO3 above.</p>
<p>PO5 Development other than coastal protection work avoids directly or indirectly increasing the severity of coastal erosion either on or off the site.</p>	<p>No acceptable outcome is prescribed.</p>	<p>Complies with PO5</p> <p>As per commentary provided to PO3 above.</p>
<p>PO6 In areas where a coastal building line is present, building work is located landward of the coastal building line unless coastal protection work has been constructed to protect the development.</p>	<p>No acceptable outcome is prescribed.</p>	<p>Not Applicable</p> <p>The land is not subject to a coastal building line.</p>

Artificial waterways		
<p>PO7 Development of artificial waterways, canals and dry-land marinas minimises impacts on coastal resources by:</p> <ol style="list-style-type: none"> 1. maintaining the tidal prism volume of the natural waterway to which it is connected 2. demonstrating a whole-of-life strategy for the disposal of dredged material. 	No acceptable outcome is prescribed.	<p>Not Applicable</p> <p>There are no artificial waterways, canals, or dry-land marinas proposed under this application.</p>
Coastal protection work		
<p>PO8 Works for beach nourishment minimise adverse impacts on coastal processes and avoid any increase in the severity of erosion on adjacent land by:</p> <ol style="list-style-type: none"> 1. sourcing sand from an area that does not adversely impact on the active beach system 2. ensuring imported sand is compatible with natural beach sediments and coastal processes of the receiving beach. 	No acceptable outcome is prescribed.	<p>Not Applicable</p> <p>There are no coastal protection works proposed under this application as it is considered that the existing coastal protection arrangements encircling the site (i.e. revetment wall) is suitable to minimise any potential risk of coastal erosion. The revetment wall remains in a good state of repair and is proposed to be retained under this application.</p> <p>Expansion of revetment wall will be completed at the 'slipway' where development of residential activities is proposed subject to later detailed engineering and design works</p>
<p>PO9 Erosion control structures are only constructed where there is an imminent threat to buildings or infrastructure of value, and there is no feasible option for either:</p> <ol style="list-style-type: none"> 1. beach nourishment; or 2. relocation or abandonment of structures. <p>Note: The monetary value of buildings or infrastructure should be more than the cost of associated erosion control structures.</p>	No acceptable outcome is prescribed.	<p>Not Applicable.</p> <p>As per commentary provided to PO8 above.</p>
<p>PO10 Erosion control structures minimise interference with coastal processes, or any increase to the severity of erosion on adjacent land by:</p> <ol style="list-style-type: none"> 1. locating the erosion control structure as far landward as practicable and directly adjacent to the structure it is intended to protect 2. where required and feasible, importing sand to the site to mitigate any increase in the severity of erosion 3. the design of the structure. 	No acceptable outcome is prescribed.	<p>Not Applicable.</p> <p>As per commentary provided to PO8 above.</p>

Water quality		
<p>PO11 Development:</p> <ol style="list-style-type: none"> 1. maintains or enhances environmental values of receiving waters 2. achieves the water quality objectives of Queensland waters 3. avoids the release of prescribed water contaminants to tidal waters. <p>Note: See Environmental Protection (Water) Policy 2009 for the relevant water quality objectives.</p>	No acceptable outcome is prescribed.	<p>Complies with PO11</p> <p>The Applicant will ensure that the appropriate stormwater quality devices will be installed throughout both construction and operational phases to ensure that any and all receiving waters will not be adversely impacted.</p> <p>NB: it is offered here that the provisions of this Performance Outcome can form part of the Departments conditions of approval to ensure compliance.</p>
Category C and R areas of vegetation		
<p>PO12 Development:</p> <ol style="list-style-type: none"> 1. avoids impacts on category C areas of vegetation and category R areas of vegetation; or 2. minimises and mitigates impacts on category C areas of vegetation and category R areas of vegetation after demonstrating avoidance is not reasonably possible. 	No acceptable outcome is prescribed.	<p>Complies with PO12</p> <p>There is no regulated vegetation proposed to be removed under this application</p>
Public use of and access to state coastal land		
<p>PO13 Development maintains or enhances public use of and access to and along state coastal land (except where this is contrary to the protection of coastal resources or public safety).</p>	No acceptable outcome is prescribed.	<p>Complies with PO13</p> <p>The proposed redevelopment incorporates a series of footpaths and boardwalks to promote pedestrian movement over the site, between adjacent land, as well as through to the marina and/or Dickson's Inlet.</p>
<p>PO14 Private marine development ensures that works:</p> <ol style="list-style-type: none"> 1. are used for marine access purposes only 2. minimise the use of state coastal land 3. do not interfere with access between navigable waterways and adjacent properties. 	No acceptable outcome is prescribed.	<p>Not Applicable</p> <p>This application is not for a private marine development.</p>
<p>PO15 Development ensures erosion control structures are located within the premises they are intended to protect unless there is no feasible alternative.</p>	No acceptable outcome is prescribed.	<p>Not Applicable.</p> <p>As per commentary provided to PO8 above.</p>
Matters of state environmental significance		
<p>PO16 Development:</p> <ol style="list-style-type: none"> 1. avoids impacts on matters of state environmental significance; or 2. minimises and mitigates impacts on matters of state environmental significance after demonstrating avoidance is not reasonably possible; and 	No acceptable outcome is prescribed.	<p>Not Applicable</p> <p>The subject land does not comprise or sit adjacent any recognised matters of state environmental significance.</p>

<p>3. provides an offset if, after demonstrating all reasonable avoidance, minimisation and mitigation measures are undertaken, the development results in an acceptable significant residual impact on a matter of state environmental significance.</p> <p>Statutory note: For Brisbane core port land, an offset may only be applied to development on land identified as E1 Conservation/Buffer, E2 Open Space or Buffer/Investigation in the Brisbane Port LUP precinct plan. For the Brisbane Port LUP, see www.portbris.com.au.</p> <p>Note: Guidance for determining if the development will have a significant residual impact on the matter of state environmental significance is provided in the Significant Residual Impact Guideline, Department of State Development, Infrastructure and Planning, 2014. Where the significant residual impact is considered an acceptable impact on the matter of state environmental significance and an offset is considered appropriate, the offset should be delivered in accordance with the <i>Environmental Offsets Act 2004</i>.</p>		
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Table 8.2.2: All operational work

Private marine development		
PO17 Private marine development does not require the construction of coastal protection work, shoreline or riverbank hardening or dredging for marine access purposes.	No acceptable outcome is prescribed.	Not Applicable There are no operational works proposed under this application.
Disposal of solid waste or dredged material from artificial waterways		
PO18 Solid waste from land and dredged material from artificial waterways is not disposed of in tidal water unless it is for beneficial reuse.	No acceptable outcome is prescribed.	Not Applicable There are no operational works proposed under this application.
Disposal of dredged material other than from artificial waterways		
PO19 Dredged material is returned to tidal water where this is needed to maintain coastal processes and sediment volume.	No acceptable outcome is prescribed.	Not Applicable There are no operational works proposed under this application.
PO20 Where it is not needed to maintain coastal processes and sediment volume, the quantity of dredged material disposed to tidal water is minimised through beneficial reuse or disposal on land.	No acceptable outcome is prescribed.	Not Applicable There are no operational works proposed under this application.
All dredging and any disposal of dredged material in tidal water		

<p>PO21 All dredging and any disposal of dredged material in tidal water is:</p> <ol style="list-style-type: none"> 1. demonstrated to be safe with regard to protection of the marine environment and by meeting the National Assessment Guidelines for Dredging 2009, Department of Environment and Energy, 2009, or later version; and 2. supported by a monitoring and management plan that protects the marine environment and that complies with the National Assessment Guidelines for Dredging 2009, Department of Environment and Energy, 2009, or later version. 	<p>No acceptable outcome is prescribed.</p>	<p>Not Applicable There are no operational works proposed under this application.</p>
<p>Reclamation</p>		
<p>PO22 Development does not involve reclamation of land below tidal water, other than for the purposes of:</p> <ol style="list-style-type: none"> 1. coastal-dependent development, public marine development or community infrastructure; or 2. strategic ports, priority ports, boat harbours or strategic airports and aviation facilities, in accordance with a statutory land use plan or master plan, where there is a demonstrated net benefit for the state or region and no feasible alternative exists; or 3. coastal protection work or work necessary to protect coastal resources or coastal processes. 	<p>No acceptable outcome is prescribed.</p>	<p>The project DOES seek to undertaken minor reclamation works associated with the 'slipway'.</p> <p>This activity is to be relocated in conjunction with the Douglas Shire Council to a more suitable position and the Crystalbrook Superyacht Marina masterplan looks to reintroduce more appropriate activities consistent with the landuse intent expressed under the Statutory Frameworks which guides development of the land.</p> <p>It should be noted that the reclamation works being proposed would return a regular form to the coastal edge of the site consistent with the adjoining revetment walls</p>

Table 8.2.3: Operational work which is not assessed by local government

<p>PO23 Works are located and designed such that they continue to operate safely during and following a defined storm tide event.</p>	<p>AO23.1 Tidal work is designed and located in accordance with the Guideline: Building and engineering standards for tidal works, Department of Environment and Heritage Protection, 2017.</p>	<p>Not Applicable There are no operational works proposed under this application.</p>

State code 13: Unexploded ordnance

Table 13.2.1: Material change of use and reconfiguring a lot

Performance outcomes	Acceptable outcomes	Response
<p>PO1 A contractor approved by the Commonwealth Department of Defence has certified that the area identified as having substantial UXO potential has been remediated or can be managed to be suitable for the proposed use.</p> <p>Note: A UXO search can be conducted through the Australian Department of Defence located at www.defence.gov.au/uxo. The Australian Department of Defence maintains a list of approved UXO consultants (D2) and contractors (F2) on the Defence Environment and Heritage Panel. Further details are located at: www.defence.gov.au/estatemangement/support/DEHP/WhoToEngage.asp.</p>	<p>No acceptable outcome is prescribed.</p>	<p>Not Applicable</p> <p>The Departments Development Assessment Mapping System has confirmed that the subject land is noted located within or in proximity to an area 'with substantial potential for UXO'</p>