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Department of State Development, Infrastructure and Planning

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IDAS form 1—Application details

(Sustainable Planning Act 2009 version 4.1 effective 4 July 2014)

This form must be used for **ALL** development applications.

You **MUST** complete **ALL** questions that are stated to be a mandatory requirement unless otherwise identified on this form.

For all development applications, you must:

- complete this form (*IDAS form 1—Application details*)
- complete any other forms relevant to your application
- provide any mandatory supporting information identified on the forms as being required to accompany your application.

Attach extra pages if there is insufficient space on this form.

All terms used on this form have the meaning given in the *Sustainable Planning Act 2009* (SPA) or the Sustainable Planning Regulation 2009.

This form and any other IDAS form relevant to your application must be used for development applications relating to strategic port land and Brisbane core port land under the *Transport Infrastructure Act 1994* and airport land under the *Airport Assets (Restructuring and Disposal) Act 2008*. Whenever a planning scheme is mentioned, take it to mean land use plan for the strategic port land, Brisbane core port land or airport land.

PLEASE NOTE: This form is not required to accompany requests for compliance assessment.

This form can also be completed online using MyDAS at www.dsdip.qld.gov.au/MyDAS

Mandatory requirements

Applicant details (Note: the applicant is the person responsible for making the application and need not be the owner of the land. The applicant is responsible for ensuring the information provided on all IDAS application forms is correct. Any development permit or preliminary approval that may be issued as a consequence of this application will be issued to the applicant.)

Name/s (individual or company name in full)	**Reef Marina Pty Ltd**			
For companies, contact name	**Peter Dutaillis - RECS Consulting Engineers & Building Design**			
Postal address	P O Box 894			
	Suburb	Port Douglas		
	State	QLD	Postcode	4877
	Country	Australia		
Contact phone number	07 4099 6010			
Mobile number (non-mandatory requirement)	0408 866090			
Fax number (non-mandatory requirement)	07 4099 6020			

Email address (non-mandatory requirement)	peter@recs.net.au @
Applicant's reference number (non-mandatory requirement)	45-2014

1. What is the nature of the development proposed and what type of approval is being sought?

Table A—Aspect 1 of the application (If there are additional aspects to the application please list in Table B—Aspect 2.)

a) What is the nature of the development? (Please only tick one box.)

☑ Material change of use ☐ Reconfiguring a lot ☐ Building work ☐ Operational work

b) What is the approval type? (Please only tick one box.)

☐ Preliminary approval under s241 of SPA ☐ Preliminary approval under s241 and s242 of SPA ☑ Development permit

c) Provide a brief description of the proposal, including use definition and number of buildings or structures where applicable (e.g. six unit apartment building defined as a *multi-unit dwelling*, 30 lot residential subdivision etc.)

Construction of additional fully serviced marine berths from 115 to approximately 145 (subject to final configuration. Berths consist of combination of 15m, 17m, 22m, 30m and utility berths within existing lease area Lot 146 Crown Plan SR 861

d) What is the level of assessment? (Please only tick one box.)

☐ Impact assessment ☑ Code assessment

Table B—Aspect 2 of the application (If there are additional aspects to the application please list in Table C—Additional aspects of the application.)

a) What is the nature of development? (Please only tick one box.)

☐ Material change of use ☐ Reconfiguring a lot ☐ Building work ☐ Operational work

b) What is the approval type? (Please only tick one box.)

☐ Preliminary approval under s241 of SPA ☐ Preliminary approval under s241 and s242 of SPA ☐ Development permit

c) Provide a brief description of the proposal, including use definition and number of buildings or structures where applicable (e.g. six unit apartment building defined as a *multi-unit dwelling*, 30 lot residential subdivision etc.)

d) What is the level of assessment?

☐ Impact assessment ☐ Code assessment

Table C—Additional aspects of the application (If there are additional aspects to the application please list in a separate table on an extra page and attach to this form.)

2. Location of the premises (Complete Table D and/or Table E as applicable. Identify each lot in a separate row.)

Table D—Street address and lot on plan for the premises or street address and lot on plan for the land adjoining or adjacent to the premises (Note: this table is to be used for applications involving taking or interfering with water). (Attach a separate schedule if there is insufficient space in this table.)

☐ Street address **and** lot on plan (All lots must be listed.)

☐ Street address **and** lot on plan for the land adjoining or adjacent to the premises (Appropriate for development in water but adjoining or adjacent to land, e.g. jetty, pontoon. All lots must be listed.)

Street address					**Lot on plan description**		**Local government area** (e.g. Logan, Cairns)
Lot	Unit no.	Street no.	Street name and official suburb/ locality name	Post-code	Lot no.	Plan type and plan no.	
i)		44	Wharf Street	4877	146	SR861	Douglas Shire
ii)							
iii)							

Planning scheme details (If the premises involves multiple zones, clearly identify the relevant zone/s for each lot in a separate row in the below table. Non-mandatory)

Lot	Applicable zone / precinct	Applicable local plan / precinct	Applicable overlay/s
i)	Port Douglas & Environs	Port Douglas Waterfront North	Vehicle Parking and Access Code Design Siting of Advertising Devices Code Filling and Excavation Code Landscaping Code
ii)			
iii)			

Table E—Premises coordinates (Appropriate for development in remote areas, over part of a lot or in water not adjoining or adjacent to land e.g. channel dredging in Moreton Bay.) (Attach a separate schedule if there is insufficient space in this table.)

Coordinates (Note: place each set of coordinates in a separate row)				**Zone reference**	**Datum**	**Local government area (if applicable)**
Easting	Northing	Latitude	Longitude			
					☐ GDA94 ☐ WGS84 ☐ other	

3. Total area of the premises on which the development is proposed (indicate square metres)

4. Current use/s of the premises (e.g. vacant land, house, apartment building, cane farm etc.)

Existing marina facilities

5. Are there any current approvals (e.g. a preliminary approval) associated with this application? (Non-mandatory requirement)

☐ No ☐ Yes—provide details below

List of approval reference/s	Date approved (dd/mm/yy)	Date approval lapses (dd/mm/yy)

6. Is owner's consent required for this application? (Refer to notes at the end of this form for more information.)

☐ No

☐ Yes—complete either Table F, Table G or Table H as applicable

Table F	
Name of owner/s of the land	
I/We, the above-mentioned owner/s of the land, consent to the making of this application.	
Signature of owner/s of the land	
Date	

Table G	
Name of owner/s of the land	**Reef Marina Pty Ltd**
✔ The owner's written consent is attached or will be provided separately to the assessment manager.	

Table H	
Name of owner/s of the land	
☐ By making this application, I, the applicant, declare that the owner has given written consent to the making of the application.	

7. Identify if any of the following apply to the premises (Tick applicable box/es.)

☐ Adjacent to a water body, watercourse or aquifer (e.g. creek, river, lake, canal)—complete Table I

☐ On strategic port land under the *Transport Infrastructure Act 1994*—complete Table J

✔ In a tidal water area—complete Table K

☐ On Brisbane core port land under the *Transport Infrastructure Act 1994* (No table requires completion.)

☐ On airport land under the *Airport Assets (Restructuring and Disposal) Act 2008* (no table requires completion)

☐ Listed on either the Contaminated Land Register (CLR) or the Environmental Management Register (EMR) under the *Environmental Protection Act 1994* (no table requires completion)

Table I
Name of water body, watercourse or aquifer

Table J	
Lot on plan description for strategic port land	Port authority for the lot

Table K	
Name of local government for the tidal area (if applicable)	Port authority for the tidal area (if applicable)
Dickson Inlet Douglas Shire	

8. Are there any existing easements on the premises? (e.g. for vehicular access, electricity, overland flow, water etc)

☐ No ☐ Yes—ensure the type, location and dimension of each easement is included in the plans submitted

9. Does the proposal include new building work or operational work on the premises? (Including any services)

☐ No ✔ ☐ Yes—ensure the nature, location and dimension of proposed works are included in plans submitted

10. Is the payment of a portable long service leave levy applicable to this application? (Refer to notes at the end of this form for more information.)

☐ No—go to question 12 ✔ ☐ Yes

11. Has the portable long service leave levy been paid? (Refer to notes at the end of this form for more information.)

✔ No

☐ Yes—complete Table L and submit with this application the yellow local government/private certifier's copy of the receipted QLeave form

Table L		
Amount paid	Date paid (dd/mm/yy)	QLeave project number (6 digit number starting with A, B, E, L or P)

12. Has the local government agreed to apply a superseded planning scheme to this application under section 96 of the *Sustainable Planning Act 2009*?

✔ No

☐ Yes—please provide details below

Name of local government	Date of written notice given by local government (dd/mm/yy)	Reference number of written notice given by local government (if applicable)

13. List below all of the forms and supporting information that accompany this application (Include all IDAS forms, checklists, mandatory supporting information etc. that will be submitted as part of this application. Note: this question does not apply for applications made online using MyDAS)

Description of attachment or title of attachment	Method of lodgement to assessment manager
RECS Covering letter dated 25 September, 2014	email
IDAS Form 1	email
IDAS Form 5	email
IDAS Checklist 2 - MCU	email
IMC Project Drawings 4577-102D - 112	email

14. Applicant's declaration

✔ By making this application, I declare that all information in this application is true and correct (Note: it is unlawful to provide false or misleading information)

Notes for completing this form

- Section 261 of the *Sustainable Planning Act 2009* prescribes when an application is a properly-made application. Note, the assessment manager has discretion to accept an application as properly made despite any non-compliance with the requirement to provide mandatory supporting information under section 260(1)(c) of the *Sustainable Planning Act 2009*

Applicant details

- Where the applicant is not a natural person, ensure the applicant entity is a real legal entity.

Question 1

- Schedule 3 of the Sustainable Planning Regulation 2009 identifies assessable development and the type of assessment. Where schedule 3 identifies assessable development as "various aspects of development" the applicant must identify each aspect of the development on Tables A, B and C respectively and as required.

Question 6

- Section 263 of the *Sustainable Planning Act 2009* sets out when the consent of the owner of the land is required for an application. Section 260(1)(e) of the *Sustainable Planning Act 2009* provides that if the owner's consent is required under section 263, then an application must contain, or be accompanied by, the written consent of the owner, or include a declaration by the applicant that the owner has given written consent to the making of the application. If a development application relates to a state resource, the application is not required to be supported by evidence of an allocation or entitlement to a state resource. However, where the state is the owner of the subject land, the written consent of the state, as landowner, may be required. Allocation or entitlement to the state resource is a separate process and will need to be obtained before development commences.

Question 7

- If the premises is listed on either the Contaminated Land Register (CLR) or the Environmental Management Register (EMR) under the *Environmental Protection Act 1994* it may be necessary to seek compliance assessment. Schedule 18 of the Sustainable Planning Regulation 2009 identifies where compliance assessment is required.

Question 11

- The *Building and Construction Industry (Portable Long Service Leave) Act 1991* prescribes when the portable long service leave levy is payable.
- The portable long service leave levy amount and other prescribed percentages and rates for calculating the levy are prescribed in the Building and Construction Industry (Portable Long Service Leave) Regulation 2002.

Question 12

- The portable long service leave levy need not be paid when the application is made, but the *Building and Construction Industry (Portable Long Service Leave) Act 1991* requires the levy to be paid before a development permit is issued.
- Building and construction industry notification and payment forms are available from any Queensland post office or agency, on request from QLeave, or can be completed on the QLeave website at www.qleave.qld.gov.au. For further information contact QLeave on 1800 803 481 or visit www.qleave.qld.gov.au.

Privacy—The information collected in this form will be used by the Department of State Development, Infrastructure and Planning (DSDIP), assessment manager, referral agency and/or building certifier in accordance with the processing and assessment of your application. Your personal details should not be disclosed for a purpose outside of the IDAS process or the provisions about public access to planning and development information in the *Sustainable Planning Act 2009*, except where required by legislation (including the *Right to Information Act 2009*) or as required by Parliament. This information may be stored in relevant databases. The information collected will be retained as required by the *Public Records Act 2002*.

OFFICE USE ONLY

Date received | | Reference numbers | |

NOTIFICATION OF ENGAGEMENT OF A PRIVATE CERTIFIER

To | | Council. I have been engaged as the private certifier for the building work referred to in this application

Date of engagement	Name	BSA Certification license number	Building classification/s

QLEAVE NOTIFICATION AND PAYMENT (For completion by assessment manager or private certifier if applicable.)

Description of the work	QLeave project number	Amount paid ($)	Date paid	Date receipted form sighted by assessment manager	Name of officer who sighted the form

The *Sustainable Planning Act 2009* is administered by the Department of State Development, Infrastructure and Planning. This form and all other required application materials should be sent to your assessment manager and any referral agency.

IDAS form 5—Material change of use assessable against a planning scheme

(*Sustainable Planning Act 2009* version 3.0 effective 1 July 2013)

This form must be used for development applications for a material change of use assessable against a planning scheme.

You **MUST** complete **ALL** questions that are stated to be a mandatory requirement unless otherwise identified on this form.

For all development applications, you must:

- complete *IDAS form 1—Application details*
- complete any other forms relevant to your application
- provide any mandatory supporting information identified on the forms as being required to accompany your application.

Attach extra pages if there is insufficient space on this form.

All terms used on this form have the meaning given in the Sustainable Planning Act 2009 (SPA) or the Sustainable Planning Regulation 2009.

This form must also be used for material change of use on strategic port land and Brisbane core port land under the *Transport Infrastructure Act 1994* and airport land under the *Airport Assets (Restructuring and Disposal) Act 2008* that requires assessment against the land use plan for that land. Whenever a planning scheme is mentioned, take it to mean land use plan for the strategic port land, Brisbane core port land or airport land.

This form can also be completed online using MyDAS at www.dsdip.qld.gov.au/MyDAS

Mandatory requirements

1. Describe the proposed use. (Note: this is to provide additional detail to the information provided in question 1 of *IDAS form 1—Application details*. Attach a separate schedule if there is insufficient space in this table.)

General explanation of the proposed use	Planning scheme definition (include each definition in a new row) (non-mandatory)	No. of dwelling units (if applicable) or gross floor area (if applicable)	Days and hours of operation (if applicable)	No. of employees (if applicable)
Construction of additional serviced marina berths	Marina			

2. Are there any current approvals associated with the proposed material change of use? (e.g. a preliminary approval.)

☐ No ☑ Yes—provide details below

List of approval reference/s	Date approved (dd/mm/yy)	Date approval lapses (dd/mm/yy)
224 8809 2.1.2773 CG 003 CCO Ex Min 20.10.88	20 October, 1988	

3. Does the proposed use involve the following? (Tick all applicable boxes.)

The reuse of existing buildings on the premises	✔ No	☐ Yes
New building work on the premises	✔ No	☐ Yes
The reuse of existing operational work on the premises	☐ No	✔ Yes
New operational work on the premises	☐ No	✔ Yes

Mandatory supporting information

4. Confirm that the following mandatory supporting information accompanies this application

Mandatory supporting information	Confirmation of lodgement	Method of lodgement
All applications		
A site plan drawn to an appropriate scale (1:100, 1:200 or 1:500 are **recommended** scales) which shows the following: • the location and site area of the land to which the application relates (*relevant land*) • the north point • the boundaries of the relevant land • any road frontages of the relevant land, including the name of the road • the location and use of any existing or proposed buildings or structures on the relevant land (note: where extensive demolition or new buildings are proposed, two separate plans [an existing site plan and proposed site plan] may be appropriate) • any existing or proposed easements on the relevant land and their function • the location and use of buildings on land adjoining the relevant land • all vehicle access points and any existing or proposed car parking areas on the relevant land. Car parking spaces for persons with disabilities and any service vehicle access and parking should be clearly marked • for any new building on the relevant land, the location of refuse storage • the location of any proposed retaining walls on the relevant land and their height • the location of any proposed landscaping on the relevant land • the location of any stormwater detention on the relevant land.	✔ Confirmed	
A statement about how the proposed development addresses the local government's planning scheme and any other planning instruments or documents relevant to the application.	✔ Confirmed	
A statement about the intensity and scale of the proposed use (e.g. number of visitors, number of seats, capacity of storage area etc.).	✔ Confirmed	
Information that states: • the existing or proposed floor area, site cover, maximum number of storeys and maximum height above natural ground level for existing or new buildings (e.g. information regarding existing buildings but not being reused) • the existing or proposed number of on-site car parking bays, type of vehicle cross-over (for non-residential uses) and vehicular servicing arrangement (for non-residential uses).	✔ Confirmed ☐ Not applicable	

A statement addressing the relevant part(s) of the State Development Assessment Provisions (SDAP).	☑ Confirmed ☐ Not applicable	
When the application involves the reuse of existing buildings		
Plans showing the size, location, existing floor area, existing site cover, existing maximum number of storeys and existing maximum height above natural ground level of the buildings to be reused.	☐ Confirmed ☑ Not applicable	
When the application involves new building work (including extensions)		
Floor plans drawn to an appropriate scale (1:50, 1:100 or 1:200 are **recommended** scales) which show the following: • the north point • the intended use of each area on the floor plan (for commercial, industrial or mixed use developments only) • the room layout (for residential development only) with all rooms clearly labelled • the existing and the proposed built form (for extensions only) • the gross floor area of each proposed floor area.	☐ Confirmed	
Elevations drawn to an appropriate scale (1:100, 1:200 or 1:500 are **recommended** scales) which show plans of all building elevations and facades, clearly labelled to identify orientation (e.g. north elevation)	☐ Confirmed	
Plans showing the size, location, proposed site cover, proposed maximum number of storeys, and proposed maximum height above natural ground level of the proposed new building work.	☐ Confirmed ☐ Not applicable	
When the application involves reuse of other existing work		
Plans showing the nature, location, number of on-site car parking bays, existing area of landscaping, existing type of vehicular cross-over (non-residential uses), and existing type of vehicular servicing arrangement (non-residential uses) of the work to be reused.	☑ Confirmed ☐ Not applicable	
When the application involves new operational work		
Plans showing the nature, location, number of new on-site car parking bays, proposed area of new landscaping, proposed type of new vehicle cross-over (non-residential uses), proposed maximum new vehicular servicing arrangement (non-residential uses) of the proposed new operational work.	☑ Confirmed ☐ Not applicable	

Privacy—Please refer to your assessment manager, referral agency and/or building certifier for further details on the use of information recorded in this form.

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Date received | Reference numbers

The *Sustainable Planning Act 2009* is administered by the Department of State Development, Infrastructure and Planning. This form and all other required application materials should be sent to your assessment manager and any referral agency.

Schedule 3 Assessable Development Checklist 2—Material change of use

(*Sustainable Planning Act 2009* version 3.2 effective 4 July 2014)

This checklist only applies when the development application seeks approval for a material change of use of premises. Before completing this checklist, please complete *Checklist 1—Various aspects of development*.

You may complete this checklist as part of your development application. The checklist will:

- help you identify whether you need to make a development application for the proposed development
- help you identify the relevant Integrated Development Assessment System (IDAS) forms you need to complete as part of your application
- assist in identifying the assessment manager or referral agency for development that is assessable development under schedule 3 of the Sustainable Planning Regulation 2009.

If your development involves reconfiguring a lot, building work or operational work, it is recommended you complete the relevant checklists: *Checklist 3—Reconfiguring a lot, Checklist 4—Operational* or *Checklist 5—Building work*, where relevant.

If you are unsure how to answer any questions on this checklist, phone or visit your local government, or go to the Department of State Development, Infrastructure and Planning's (DSDIP) website at **www.dsdip.qld.gov.au**

All terms used in this checklist have the meaning given in the *Sustainable Planning Act 2009* or the Sustainable Planning Regulation 2009.

Part 1—General questions

1.1 Is the proposed material change of use of premises for a brothel?

✔ No	• Continue to question 1.2
☐ Yes	• Complete part 2 of this checklist

1.2 Is the proposed material change of use of premises on strategic port land?

✔ No	• Continue to question 1.3
☐ Yes	• Complete part 3 of this checklist

1.3 Is the proposed material change of use of premises on airport land?

✔ No	• Continue to question 1.4
☐ Yes	• Complete part 4 of this checklist

1.4 Is the proposed material change of use of premises for a major hazard facility or proposed major hazard facility?

✔ No	• Continue to question 1.5

☐ Yes	• A development permit is required. • The chief executive of DSDIP will be assessment manager or concurrence agency for the development application. • You must complete *IDAS form 22—Major hazard facility.*

Section reference:

- Sustainable Planning Regulation 2009, schedule 3, part 1, table 2, item 5
- Sustainable Planning Regulation 2009, schedule 6, table 3, item 4
- Sustainable Planning Regulation 2009, schedule 7, table 2, item 8

1.5 Does the proposed material change of use involve premises which are listed on either the Contaminated Land Register (CLR) or the Environmental Management Register (EMR) under the *Environmental Protection Act 1994*?

✔ No	• Continue to question 1.6
☐ Yes	• Continue to question 1.6, however note that compliance assessment may be required for this aspect of development. Schedule 18 of the Sustainable Planning Regulation 2009 identifies where compliance assessment is required.

Section reference:

- Sustainable Planning Regulation 2009, schedule 18, table 3

1.6 Is the proposed material change of use of premises for aquaculture?

✔ No	• Continue to question 1.7
☐ Yes	• Complete part 5 of this checklist

1.7 Is the proposed material change of use of premises in a wild river area and is the proposed use for agricultural activities or animal husbandry activities (as defined under the *Wild Rivers Act 2005*)?

✔ No	• Continue to question 1.8
☐ Yes	• Complete part 6 of this checklist

1.8 Is the proposed material change of use of premises for an environmentally relevant activity that, under the Environmental Protection Regulation 2008, section 16, is identified as a concurrence ERA (the relevant ERA)?

✔ No	• End of part 1 of checklist
☐ Yes	• Complete part 7 of this checklist

Part 2—Brothel

2.1 Do any of the following apply?

More than five rooms in the proposed brothel are proposed to be used for providing prostitution.	☐ Yes ☐ No
Any land, the subject of the development, is in, or within 200 metres of the closest point on any boundary of, a primarily residential area, or an area approved for residential development or intended to be residential in character (measured according to the shortest route a person may reasonably and lawfully take, by vehicle or on foot, between the land the subject of the development and the other land).	☐ Yes ☐ No

Any land, the subject of the development, is within 200 metres of the closest point on any boundary of land on which there is a residential building, place of worship, hospital, school, kindergarten or any other facility or place regularly frequented by children for recreational or cultural activities (measured according to the shortest route a person may reasonably and lawfully take, by vehicle or on foot, between the land the subject of the development and the other land).	☐ Yes ☐ No
Any land, the subject of the development, is within 100 metres of the closest point on any boundary of land on which there is a residential building, place of worship, hospital, school, kindergarten or any other facility or place regularly frequented by children for recreational or cultural activities, measured in a straight line.	☐ Yes ☐ No
The land, the subject of the development, is in a town with a population of less than 25 000, the local government for the local government area has required that all material changes of use for such development within the area be prohibited, and the Minister has agreed that the development should be prohibited.	☐ Yes ☐ No

- If **yes** to any of the above, this aspect of the development is prohibited development and a development application cannot be made.
- If **no** to all of the above, a development permit is required. You must complete *IDAS form 9—Brothel*, and submit your application to the local government if the development is completely in a single local government area.

Section reference:

- Sustainable Planning Regulation 2009, schedule 3, part 1, table 2, item 2
- Sustainable Planning Regulation 2009, schedule 6, table 1, item 1(a)(iv)
- *Sustainable Planning Act 2009*, schedule 1, item 5

Part 3—Strategic port land

3.1 Do any of the following apply?

The proposed material change of use of premises is inconsistent with the land use plan approved under the *Transport Infrastructure Act 1994*.	☐ Yes ☐ No
The proposed material change of use of premises is assessable development under the land use plan approved under the *Transport Infrastructure Act 1994*, but is not inconsistent with it.	☐ Yes ☐ No

- If **yes** to either of the above, a development permit is required. The port authority may be the assessment manager for the development application (see schedule 6 of the Sustainable Planning Regulation 2009).
- If the proposed material change of use of premises is inconsistent with the land use plan, you are also required to refer the application to the Minister under the *Transport Infrastructure Act 1994* as concurrence agency.
- You must complete *IDAS Form 10—Inconsistent development on strategic port land or Brisbane core port land.*

Section reference:

- Sustainable Planning Regulation 2009, schedule 3, part 1, table 2, item 3
- Sustainable Planning Regulation 2009, schedule 3, part 1, table 5, item 6
- Sustainable Planning Regulation 2009, schedule 6
- Sustainable Planning Regulation 2009, schedule 7, table 2, item 6

Part 4—Airport land

4.1 Do any of the following apply?

The proposed material change of use of premises is inconsistent with the land use plan approved under the *Airport Assets (Restructuring and Disposal) Act 2008*.	☐ Yes ☐ No

The proposed material change of use of premises is assessable development under the land use plan approved under the *Airport Assets (Restructuring and Disposal) Act 2008* for the airport land, but is not inconsistent with it.	☐ Yes ☐ No

- If **yes** to either of the above, a development permit is required for this aspect of development. The chief executive of DSDIP may be the assessment manager (see schedule 6 of the Sustainable Planning Regulation 2009).
- If the proposed material change of use of premises is inconsistent with the land use plan approved under the *Airport Assets (Restructuring and Disposal) Act 2008,* you are also required to refer the application to the chief executive of DSDIP as concurrence agency, if the chief executive of DSDIP is not the assessment manager.
- You must complete *IDAS Form 5—Material change of use assessable against a planning scheme.*

Section reference:

- Sustainable Planning Regulation 2009, schedule 3, part 1, table 2, item 4
- Sustainable Planning Regulation 2009, schedule 3, part 2, table 5, item 7
- Sustainable Planning Regulation 2009, schedule 6, table 2, item 2

Part 5—Aquaculture

5.1 Will the proposed material change of use of premises for aquaculture cause discharge of waste into Queensland waters (as defined in section 36 of the *Acts Interpretation Act 1954*)?

☐ No	• Continue to question 5.2
☐ Yes	• Go to question 5.3

5.2 Do any of the following apply?

The aquaculture is: • of indigenous freshwater fish species mentioned in the Fisheries Regulation 2008, schedule 10C • in a catchment listed in that schedule for that species for aquarium display or human consumption only • carried out in ponds, or using above-ground tanks, that have a total water surface area of no more than five hectares.	☐ Yes ☐ No
The aquaculture is of indigenous freshwater fish for aquarium display or human consumption only, or non-indigenous freshwater fish for aquarium display only, and is carried out using only above-ground tanks that have: • a floor area, excluding water storage area, of no more than $50m^2$ • a roof impervious to rainwater.	☐ Yes ☐ No
The aquaculture is of indigenous marine fish for aquarium display only and is carried out using only above-ground tanks that have a total floor area, excluding water storage areas, of no more than $50m^2$.	☐ Yes ☐ No

- If **no** to all of the above, continue to question 5.3
- If **yes** to any of the above, a development permit is not required for this aspect of development, but the proposed material change of use will be self assessable development and must comply with applicable codes

5.3	**Is any part of the proposed material change of use of premises for aquaculture intended to be located in a wild river area?**
☐ No	• A development permit is required for this aspect of development and this aspect of development requires assessment by the chief executive of DSDIP as assessment manager or concurrence agency • You must complete *IDAS form 25—Aquaculture* • End of part 5 of this checklist
☐ Yes	• Continue to question 5.4

5.4	**Is the proposed material change of use of premises for aquaculture in a wild river high preservation area or wild river special floodplain management area?**
☐ No	• Continue to question 5.5
☐ Yes	• To the extent the development is in a wild river high preservation area or wild river special floodplain management area, this aspect of development is prohibited development and a development application cannot be made. If this is the only aspect of development, then that is the end of part 5 of this checklist, otherwise continue to question 5.5

5.5	**Is any part of the proposed material change of use of premises on land to which a property development plan under the *Wild Rivers Act 2005* applies?**
☐ No	• A development permit is required for this aspect of development and this aspect of development requires assessment by the chief executive of DSDIP as assessment manager or concurrence agency • You must complete *IDAS form 25—Aquaculture* • End of part 5 of this checklist
☐ Yes	• Continue to question 5.6

5.6	**Is the proposed material change of use inconsistent with the property development plan under the *Wild Rivers Act 2005*?**
☐ No	• A development permit is required for this aspect of development and this aspect of development requires assessment by the chief executive of DSDIP as assessment manager or concurrence agency • You must complete *IDAS form 25—Aquaculture* • End of part 5 of this checklist
☐ Yes	• This aspect of development is prohibited development and a development application can not be made for this aspect of development • End of part 5 of this checklist

Section reference:

- Sustainable Planning Regulation 2009, schedule 3, part 1, table 2, item 10
- Sustainable Planning Regulation 2009, schedule 3, part 2, table 2, item 1
- Sustainable Planning Regulation 2009, schedule 6
- Sustainable Planning Regulation 2009, schedule 7, table 2, item 28
- *Sustainable Planning Act 2009*, schedule 1, items 2 and 6

Part 6—Agriculture and animal husbandry activities

6.1 Is the proposed material change of use of premises for animal husbandry activities in a wild river high preservation area or wild river special floodplain management area?

☐ No	• Continue to question 6.2
☐ Yes	• To the extent the development is in a wild river high preservation area or wild river special floodplain management area, it is prohibited development and a development application cannot be made. If this is the only aspect of development, end of part 8 of this checklist, otherwise continue to question 6.2

6.2 Is the proposed material change of use of premises for agricultural activities in any of the following?

• A wild river high preservation area	☐ Yes ☐ No
• A wild river preservation area or wild river special floodplain management area and the development involves the production of a high risk species	☐ Yes ☐ No
• A wild river special floodplain management area and the development is for agricultural activities that involve irrigation	☐ Yes ☐ No

- If **yes** to any of the above, this aspect of development is prohibited development and a development application cannot be made. If this is the only aspect of development, end of part 6 of checklist, otherwise continue to question 6.3
- If **no** to all of the above, continue to question 6.3

6.3 Will the development be carried out on land to which a property development plan under the *Wild Rivers Act 2005* applies?

☐ No	• A development permit is required and this application requires assessment by the chief executive of DSDIP as assessment manager or concurrence agency • Your application must include *IDAS form 29—Agricultural activities in a wild river area* or *IDAS form 30—Animal husbandry activities in a wild river area*
☐ Yes	• Continue to question 6.4

6.4 Is the development inconsistent with any property development plan that applies to the land?

☐ Yes	• This aspect of the development is prohibited development and a development application cannot be made. End of part 6 of checklist
☐ No	• A development permit is required and this application requires assessment by the chief executive of DSDIP as assessment manager or referral agency • Your application must include *IDAS form 29—Agricultural activities in a wild river area* or *IDAS form 30—Animal husbandry activities in a wild river area*

Section reference:

- Sustainable Planning Regulation 2009, schedule 3, part 1, table 2, item 11
- Sustainable Planning Regulation 2009, schedule 6
- Sustainable Planning Regulation 2009, schedule 7, table 2, item 41
- *Sustainable Planning Act 2009*, schedule 1, items 1 and 2

Part 7—Environmentally relevant activities (ERA)

7.1 Has an environmental authority to carry out a concurrence ERA been approved for the premises?

☐ No	• Continue to question 7.4
☐ Yes	• Continue to question 7.2

7.2 Is the relevant ERA and the concurrence ERA approved under the environmental authority to be carried out under the environmental authority?

☐ No	• Continue to question 7.4
☐ Yes	• Continue to question 7.3

7.3 Does the relevant ERA have a lower aggregate environmental score than the concurrence ERA approved under the environmental authority, under the Environmental Protection Regulation 2008, section 14(1)?

☐ No	• Continue to question 7.4
☐ Yes	• This aspect of development does not require a development permit. End of checklist

7.4 Do all of the following apply?

The environmentally relevant activity is to be carried out in the North Stradbroke Island Region.	☐ Yes ☐ No
The environmentally relevant activity is mentioned in the Environmental Protection Regulation 2008, schedule 2, part 4, section 16.	☐ Yes ☐ No
The environmentally relevant activity involves dredging or extracting more than 10 000 tonnes of material a year.	☐ Yes ☐ No

- If yes to all of the above, this aspect of development is prohibited development (to the extent it involves dredging or extracting more than 10 000 tonnes of material a year) and a development application cannot be made. If this is the only aspect of development, end of checklist, otherwise continue to question 7.5
- If no to any of the above, continue to question 7.5

7.5 Is any part of the proposed material change of use of premises for an environmentally relevant activity intended to be located in a wild river area?

☐ No	• Go to question 7.14
☐ Yes	• Continue to question 7.6

7.6 Does the proposed development involve development in waters in a wild river area that is for an extraction ERA?

☐ No	• Go to question 7.8
☐ Yes	• Continue to question 7.7

7.7 Will the development application for the proposed development be accompanied by an allocation notice?

☐ No	• This aspect of development is prohibited development and a development application cannot be made. If this is the only aspect of development, end of checklist, otherwise continue to question 7.8
☐ Yes	• Continue to question 7.8

7.8 Does the proposed development involve development in a wild river high preservation area or a wild river special floodplain management area?	
☐ No	• Go to question 7.10
☐ Yes	• Continue to question 7.9

7.9 Is the proposed development any of the following?	
A sewage ERA under the *Environmental Protection Act 1994*, section 174(4)	☐ Yes ☐ No
A water treatment ERA under the *Environmental Protection Act 1994*, section 174(4)	☐ Yes ☐ No
A dredging ERA	☐ Yes ☐ No
An extraction ERA, if the activity is a low impact activity carried out outside waters and is for specified works, residential complexes, or another commercial, industrial or residential purpose in a designated urban area, in the wild river high preservation area or a wild river special floodplain management area	☐ Yes ☐ No
A screening ERA, if the activity is carried out outside waters and is for specified works, or residential complexes, in the wild river high preservation area or a wild river special floodplain management area	☐ Yes ☐ No
A crude oil or petroleum product storage ERA, if the activity is for residential complexes in the wild river high preservation area or a wild river special floodplain management area, and is carried out outside a designated urban area	☐ Yes ☐ No
An exempt prescribed ERA under the *Environmental Protection Act 1994*, section 174(4), in a designated urban area	☐ Yes ☐ No

- If **yes** to any of the above, continue to question 7.10
- If **no** to all of the above, this aspect of development is prohibited development and a development application cannot be made. If this is the only aspect of development, end of checklist, otherwise continue to question 7.10

7.10 Does the proposed development involve an extraction ERA in a wild river floodplain management area?	
☐ No	• Go to question 7.12
☐ Yes	• Continue to question 7.11

7.11 Is the proposed development either of the following?	
A low impact activity carried out outside waters	☐ Yes ☐ No
For specified works, residential complexes, or another commercial, industrial or residential purpose in a designated urban area, in the wild river floodplain management area	☐ Yes ☐ No

- If **yes** to either of the above, continue to question 7.12
- If **no** to all of the above, this aspect of development is prohibited development and a development application cannot be made. If this is the only aspect of development, end of checklist, otherwise continue to question 7.12

7.12 Will the development be carried out on land to which a property development plan under the *Wild Rivers Act 2005* applies?	
☐ No	• Go to question 7.14
☐ Yes	• Continue to question 7.13

7.13 Is the development inconsistent with any property development plan that applies to the land?	
☐ Yes	• This aspect of the development is prohibited development and a development application cannot be made. End of checklist
☐ No	• Continue to question 7.14

7.14 Is the concurrence ERA devolved to local government under the Environmental Protection Regulation 2008?	
☐ No	• A development permit is required and this application requires assessment by the chief executive of DSDIP as assessment manager or concurrence agency • Your application must include *IDAS form 8—Environmentally relevant activity* • End of checklist
☐ Yes	• A development permit is required and this application requires assessment by the local government as assessment manager or concurrence agency • End of checklist

Section reference:

- Sustainable Planning Regulation 2009, schedule 3, part 1, table 2, item 1
- Sustainable Planning Regulation 2009, schedule 6
- Sustainable Planning Regulation 2009, schedule 7, table 2, item 1
- *Sustainable Planning Act 2009*, schedule 1, items 2, 9, 10, 11 and 13

Privacy—Please refer to your assessment manager, referral agency and/or building certifier for further details on the use of information recorded in this form.

Disclaimer:

While DSDIP believes that the information contained on this checklist and provided as part of this process will be of assistance to you, it is provided on the basis that you will not rely on the information. It is your responsibility to make your own enquiries regarding the interpretation and application of the applicable legislation to your circumstances.

To the full extent permitted by law, DSDIP expressly disclaims all liability (including but not limited to liability for negligence) for errors or omissions of any kind or for any loss (including direct and indirect losses), damage or other consequence which may arise from your reliance on this process and the information contained on this checklist.

OFFICE USE ONLY

Date received | Reference numbers

The Sustainable Planning Act 2009 is administered by DSDIP. This checklist and all other required application materials should be sent to your assessment manager and any referral agency.

MEMBER

Master Builders Member

PTY LTD

Our ref: 45-2014/DSC/MCU 29092014

29 September, 2014

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Builder & Building Design

Chief Executive Officer
Douglas Shire Council
PO Box 723
Mossman QLD 4773

Attn: Ms Donna Graham

Subject Material Change of Use Application
Port Douglas Marina – Increase in number of marina berths

Dear Donna,

As requested attached is a material change of use application for the proposed extension to the marina berths.

It is understood the existing development enjoys existing use however, the application is requested to cover the intensification of the use of the Site.

The proposed development is situated under the Port Douglas & Environs locality and the Port Douglas Waterfront North Planning Area. As detailed on the drawings, the proposed use as additional marina berth development sits comfortably within the planning scheme's defined use of marina for the area.

The proposal also substantially complies with all applicable codes namely:

- Vehicle parking and access – The marina has designated parking areas within and adjoining the site; and
- Design and siting of advertising devices code – The development proposes no new advertising devices; and
- Filling and Excavation Code – The development proposes no substantial excavation or filling; and
- Landscaping Code – The development proposes no new landscaped areas.

All utility services are readily available to the site and the applicant is currently investigating any necessary upgrades with service providers.

You will note the provision for utility berths and any use of these berths could be subject to reasonable and relevant conditions.

We request that Council favourably consider the matter on this basis. It would be appreciated if Council could consider the matter at its earliest convenience as some commercial arrangements are required to be finalised in the short term.

An acknowledgement notice in the first instance for posting to concurrence agencies would also assist in expediting the matter.

Please do not hesitate to contact me if you have any queries on the matter.

Yours sincerely,

Peter Dutaillis
Director
MIE Aust, CPEng, NPER, RPEQ, MEIANZ

Encl :

Owners Consent
IDAS Form 1
IDAS Form 5
SDAP Response – Tidal Works
SDAP Response – Coastal Protection
SDAP Response – Maritime Safety
Project Drawings – RPEQ Certified

OWNERS CONSENT

THE REEF MARINA
PORT DOUGLAS

The Reef Marina Pty Ltd
ABN 22 165 492 606
Wharf Street, Port Douglas, QLD 4877

Tel 07 4099 5775
Email info@thereefmarina.com.au

Douglas Shire Council
64-66 Front Street
Mossman, QLD 4873

24 September 2014

LETTER OF AUTHORITY

The Reef Marina Pty Ltd as lessor of Lot 146 Crown Plan SR861 authorises RECS Consulting Engineers & Building Design to act as our agent with respect to seeking council approvals for a marina expansion, including the lodgement of Material Change of Use and Prescribed Tidal Works applications.

Kind regards

Andrew Hooper-Nguyen
Director

IDAS FORMS

SDAP RESPONSE

Response column key:
☑ Achieved
P/S Performance solution
N/A Not applicable

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

Table 10.1.1: All development

Performance outcomes	Acceptable outcomes	Response	Comment
PO1 Development in a coastal hazard area is compatible with the level of severity of the coastal hazard.	**AO1.1** Development is located outside a high coastal hazard area unless it is: (1) coastal-dependent development, or (2) compatible with inundation due to its nature or function, or (3) temporary, readily relocatable, or able to be abandoned, or (4) essential community service infrastructure, or (5) small - to medium-scale tourist development, or (6) redevelopment within an existing built-up urban area, or is redevelopment of built structures that cannot be relocated or abandoned. AND	✔ ☐	
	AO1.2 Development referred to in AO1.1(6) avoids being located within a high coastal hazard area, or where this is not practicable, minimises the exposure of people and permanent structures to coastal hazard impacts.	✔ ☐	
PO2 Development siting, layout and access in a coastal hazard area responds to potential inundation due to a defined storm tide event and minimises associated risks to personal safety and property.	**AO2.1** Development within a coastal hazard area is located, designed, constructed and operated to maintain or enhance the community's resilience to defined storm tide events by limiting the exposure of people and structures to associated impacts. AND	✔ ☐	
	AO2.2 Development mitigates any residual impacts from storm tide inundation in a coastal hazard area including by ensuring: (1) habitable rooms of built structures are located above the defined storm tide event level and any additional freeboard level that would ordinarily apply in a flood prone area under a relevant planning scheme standard, or (2) a safe refuge is available for people within the premises during a defined storm tide event, or (3) at least one evacuation route remains passable for emergency evacuations during a defined storm tide	✔ ☐	

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

Performance outcomes	Acceptable outcomes	Response	Comment
hazardous materials as a result of a natural hazard event. Editor's note: Applications should: (1) assess the risk of storm tide inundation releasing or otherwise exposing hazardous materials, including appropriate emergency planning and contingency measures. (2) applications are to be supported by a report certified by a Registered Professional Engineer of Queensland (RPEQ) that demonstrates this performance outcome will be achieved.	storage of hazardous materials in bulk are designed to: (1) prevent the intrusion of waters from a defined storm tide event into structures or facilities containing the hazardous materials, or (2) ensure hazardous materials remain secured despite inundation, including secure from the effects of hydrodynamic forcing associated with wave action or flowing water.		
PO6 Natural processes and the protective function of landforms and vegetation are maintained in coastal hazard areas.	**AO5.1** Development in an erosion prone area within the coastal management district: (1) maintains vegetation on coastal landforms where its removal or damage may: (a) destablise the area and increase the potential for erosion, or (b) interrupt natural sediment trapping processes or dune or land building processes (2) maintains sediment volumes of dunes and near-shore coastal landforms, or where a reduction in sediment volumes cannot be avoided, increased risks to development from coastal erosion are mitigated by location, design, construction and operating standards (3) minimises the need for erosion control structures or riverbank hardening through location, design and construction standards (4) maintains physical coastal processes outside the development footprint for the development, including longshore transport of sediment along the coast (5) reduces the risk of shoreline erosion for areas adjacent to the development footprint unless the development is an erosion control structure (6) reduces the risk of shoreline erosion for areas adjacent to the development footprint to the maximum extent feasible in the case of erosion control structures. AND	✔ ☐	

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

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

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

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

Performance outcomes	Acceptable outcomes	Response	Comment
	practicable, unless the development is within ports or airports, or is marine development (2) maintaining or enhancing the connectivity of ecosystems in consideration of the cumulative effect of the development in addition to existing developed areas (3) retaining coastal wetlands, seagrass beds and other locally important feeding, nesting or breeding sites for native wildlife. AND		
	AO7.6 Measures are incorporated as part of siting and design of the development to maintain or enhance water quality to achieve the environmental values and water quality objectives outlined in the *Environmental Protection (Water) Policy 2009*. AND	✔ ☐	
	AO7.7 Development avoids the disturbance of acid sulphate soils, or where it is demonstrated that this is not possible, the disturbance of acid sulphate soils is carefully managed to minimise and mitigate the adverse effects of the disturbance on coastal resources.	✔ ☐	
PO8 Coastal protection work is undertaken only as a last resort where erosion presents an imminent threat to public safety or permanent structures. Editor's note: Applications for coastal protection work must be supported by a report certified by an RPEQ that demonstrates how the engineering solution sought by the work will be achieved.	**AO8.1** Coastal protection work is only undertaken to protect existing permanent structures from imminent adverse coastal erosion impacts, and the structures cannot reasonably be relocated or abandoned. AND	✔ ☐	
	AO8.2 Coastal protection work to protect private structures is undertaken on private land to the maximum extent reasonable. AND	✔ ☐	
	AO8.3 Coastal protection work does not increase the coastal hazard risk for adjacent areas or properties.	✔ ☐	
PO9 Development avoids adverse impacts on matters of state environmental significance, or where this	**AO9.1** Development: (1) is set back from matters of state environmental significance	✔ ☐	

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

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

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

Table 10.1.2: Operational work

Performance outcomes	Acceptable outcomes	Response	Comment

Performance outcomes	Acceptable outcomes	Response	Comment
PO1 Tidal works that is private marine development does not result in adverse impacts to tidal land. Editor's note: In addressing this performance outcome, the applicant should also have regard to requirements for private marine development in the prescribed tidal works code in the Coastal Protection and Management Regulation 2003. Editor's note: Applications should be supported by a report certified by an RPEQ to demonstrate compliance with this performance outcome.	**AO1.1** The location and design of tidal works that is private marine development: (1) is on private land abutting tidal water and used for property access purposes (2) occupies the minimum area reasonably required for its designed purpose (3) is not to be roofed or otherwise covered (4) does not require the construction of coastal protection works, shoreline or riverbank hardening or dredging for marine access (5) does not adversely impact on public safety or public access and use of the foreshore.	✔ ☐	
PO2 Development does not result in the disposal of material dredged from an artificial waterway into coastal waters, with the exception of: (1) reclamation works, or (2) coastal protection works, or (3) the maintenance of an existing artificial waterway and the at-sea disposal of material that has previously been approved for the waterway.	No acceptable outcome is prescribed.	N/A☐	
PO3 The design and construction of an artificial waterway maintains coastal landforms.	**AO3.1** The design and construction of the artificial waterway provides for sand bypassing where this is necessary to prevent erosion of adjacent coasts and minimise sedimentation of the waterway. AND	N/A	
	AO3.2 Clean sand accumulating within an artificial waterway is returned to the active beach system, in preference to disposal on land.	N/A☐	
PO4 Development that involves dredging includes and complies with a management plan that demonstrates how environmental impacts will be managed and mitigated, and how the requirements of the National assessment guidelines for dredging, Australia Government Department of the Environment, Water, Heritage and the Arts, 2009 will be met.	**AO4.1** A management plan for the development: (1) directs the operation of the development (2) identifies disposal methods and disposal sites for the removed material for the construction and operational phases of the development (3) outlines how any adverse effects from extraction activities on sediment transport processes or adjacent coastal landforms will be mitigated or otherwise remediated by suitably planned and	N/A	

Performance outcomes	Acceptable outcomes	Response	Comment
	implemented beach nourishment and rehabilitation works. Editor's note: The development should comply with the National assessment guidelines for dredging, Australian Government Department of Environment, Water, Heritage and the Arts, 2009. AND		
	AO4.2 For land based disposal of dredged material, any area used for storing, dewatering, drying or rehandling dredged material as outlined in the dredge management plan is: (1) of sufficient size for the projected volume of dredged material from relevant capital or maintenance dredging (2) protected from future development that would compromise the use of the area for its intended purpose of material storage and dewatering. AND	N/A	
	AO4.3 For at-sea disposal of suitable dredged material, the dredge management plan specifies that material is placed at a dredged material disposal site only if it is demonstrated that it is not feasible to: (1) dispose of the material above the high water mark, if the material is from maintenance works for an existing artificial waterway for which at-sea disposal was previously approved, or (2) keep the dredged material within the active sediment transport system for the locality, or (3) use the material for beach nourishment or another beneficial purpose. AND	N/A	
	AO4.4 For at-sea disposal of dredged material where the marine spoil disposal site is a retentive (i.e. non-dispersive) site, the disposal site identified in the dredge management plan has the capacity to hold and retain the material within its boundaries during construction and operation of the development. Editor's note: The use of dredged material for a beneficial purpose could include development of port or other marine facilities, use for construction or industrial purposes, or use to create or modify land or waters for an approved environmental outcome (such as creation of a bird roosting site). Further	N/A	

Performance outcomes	Acceptable outcomes	Response	Comment
	information about beneficial uses is contained in the National assessment guidelines for dredging, Australian Government Department of Environment, Water, Heritage and the Arts, 2009		
PO5 The clearing of native marine plants within a wild river area is minimised.	**AO5.1** Clearing of marine plants within a wild river area can only occur to the extent of the works, plus the prescribed area around the development to allow for maintenance.	N/A	
PO6 Development within a wild river area does not impact fish passage.	No acceptable outcome is prescribed.	N/A	
PO7 There is no net loss in marine plants beyond the extent of the works in a wild river area.	**AO7.1** Any marine plant damaged during construction in a wild river area is replaced at the completion of the development with the same species of plant in the disturbed area outside the footprint of the development.	N/A	
PO8 Works within a wild river area do not impact on fish habitat values.	**AO8.1** Works located in tidal waters within a wild river area are located, designed, and constructed using materials to ensure that the activities do not impact on fish habitat values and function.	N/A	
PO9 Development within a wild river area does not impound natural drainage lines or flow paths, during both construction and operation.	No acceptable outcome is prescribed.	N/A	
PO10 Excavation and filling for prescribed tidal work within a wild river area is carried out only to the extent necessary for the development.	No acceptable outcome is prescribed.	N/A	
PO11 Works in a tidal area within a wild river area are designed and constructed in a way to ensure they do not adversely affect the stability of the bed and banks of any waterway.	**AO11.1** Where it is necessary to remove a marine plant, the root system must be left in the substrate to minimise disturbance to bed and banks. AND	N/A	
	AO11.2 When the works are completed, any tidal lands disturbed by activities beyond the footprint of the works are restored to pre-disturbance condition to promote	N/A	

Performance outcomes	Acceptable outcomes	Response	Comment
	natural restoration of marine plants and fish habitats.		
PO12 No pollutants are released from the activity.	No acceptable outcome is prescribed.	N/A☐	

Table 10.1.3: Reconfiguring a lot

Performance outcomes	Acceptable outcomes	Response	Comment
PO1 Erosion prone areas in a coastal management district are maintained as development free buffers, or where permanent buildings or structures exist, coastal erosion risks are avoided or mitigated.	**AO1.1** Where reconfiguring a lot is proposed within the coastal management district, the erosion prone area within the lot, or land within 40 metres of the foreshore (whichever is greater), is surrendered to the State for public use unless: (1) the development is in a port or is for coastal-dependent development, or (2) the surrender of the land will not enhance coastal management outcomes, for example, because there is already substantial development seaward of the lot. Editor's note: Land surrendered to the State for public use under AO1.1 is to be: (1) placed in a State land reserve for beach protection and coastal management purposes under the Land Act 1994, with local government as trustee, or (2) managed for beach protection and coastal management purposes under another management regime to the satisfaction of the chief executive administering the Sustainable Planning Act 2009 and Land Act 1994, if it is demonstrated that AO1.1(1) cannot be reasonably achieved. (3) The Land Act 1994 also includes provisions for voluntary land surrender for freehold land to the satisfaction of the chief executive administering the Land Act.	N/A☐	
PO2 Development maintains or enhances general public access to or along the foreshore, unless this is contrary to the protection of coastal resources or public safety.	**AO2.1** Reconfiguring a lot that abuts the foreshore or tidal waters is designed to enhance public access if it involves the creation of 10 or more lots or the opening of a new road, unless it is for coastal-dependent development.	N/A☐	
PO3 Development in connection with a canal enhances public access to coastal waters.	**AO3.1** The canal avoids intersecting with land or tidal land where the passage, use or movement of vessels in water could be restricted by the registered proprietor of the land.	N/A☐	

Performance outcomes	Acceptable outcomes	Response	Comment
	AND		
	AO3.2 The area of the canal relating to the development is surrendered to the State as a public waterway. **AND**	N/A☐	
	AO3.3 The plans of subdivision for the canal are consistent with Requirements for plans of subdivision of an artificial waterway, Department of Environment and Heritage Protection, 2013.	N/A☐	

Response column key:
☑ Achieved
P/S Performance solution
N/A Not applicable

14.1 Maritime safety state code

Table 14.1.1: Operational work

Performance outcomes	Acceptable outcomes	Response	Comment
PO1 Development avoids lighting that has the potential to interfere with aids to navigation.	**AO1.1** Development must ensure that at all times, all lights on or above the development site do not interfere with safe navigation in surrounding waterways by: (1) shielding lights to prevent glare or reflection (2) avoiding flood lighting which may reduce the visibility of aids to navigation (3) avoiding flashing or flickering lights which may be confused with aids to navigation (4) avoiding coloured lights such as green, blue or red lights, which may be confused with aids to navigation. AND	✔☐	
	AO1.2 Lighting complies with section 3 of *AS 4282–1997 Control of the obtrusive effects of outdoor lighting*.	✔☐	
PO2 Development does not interfere with aids to navigation.	**AO2.1** Development must not interfere with any aid to navigation on the development site. AND	✔☐	
	AO2.2 Development must not create any temporary or permanent obstruction of aids to navigation. AND	✔☐	
	AO2.3 Development must keep the sight line of any aids to navigation which cross the land clear of obstructions. AND	✔☐	
	AO2.4 Development must allow ongoing access to aids to navigation for maintenance purposes. AND	✔☐	
	AO2.5 Development does not result in significant electrical or electro-magnetic emissions which may impede the operation of aids to navigation.	✔☐	

Performance outcomes	Acceptable outcomes	Response	Comment
	AND		
	AO2.6 Development: (1) is not within 40 metres of an existing aid to navigation, or (2) does not, within 40 metres of an existing aid to navigation, remove any material that may destabilise the aid to navigation (including ground tackle).	✔	
PO3 Development does not encroach on the navigable waterway in a way that impedes the safe passage of vessels.	**AO3.1** Development is to be carried out in a manner that ensures the navigable waterway is open to vessel traffic at all times. Editor's note: Where development proposes to temporarily or permanently limit the depth of a navigable waterway or the size of vessels which can navigate a waterway, it is recommended that a vessel traffic management plan be provided. It is also recommended a marine execution plan be submitted to the regional harbour master 30 days prior to the commencement of works. AND	✔	
	AO3.2 Development: (1) does not extend beyond the quayline, or (2) if there is no quayline, any structures that are part of the development do not extend beyond that of approved neighbouring structures. AND	PS	Development proposes new berth facilities
	AO3.3 Development does not limit either the depth of a navigable waterway or the size of vessels which can safely navigate the waterway. Editor's note: Where development closes or impedes vessel traffic in a navigable channel, the applicant must prepare a vessel traffic management plan. It is also recommended a marine execution plan be submitted to the Regional Harbour Master 30 days prior to the commencement of works. AND	PS	Development is within an existing marina
	AO3.4 Development involving the demolition of structures in a navigable waterway, including piling, must ensure the	✔	

Performance outcomes	Acceptable outcomes	Response	Comment
	entire structure is removed. AND		
	AO3.5 Structures, including all freestanding piles, must be appropriately lit and clearly visible to approaching vessels, and reflective tape must be fitted to all structures to enhance visibility during the hours of darkness. Editor's note: Where necessary, the Regional Harbour Master may require the installation of aids to navigation on structures.	✔☐	
PO4 Development does not adversely affect navigable access to neighbouring premises.	**AO4.1** Development, including structures and any vessel berthed at the structures: (1) if the development involves a finger pontoon, boat ramp or abuts a park or public area—has a setback area that maintains a safe navigable access to adjoining properties, or (2) otherwise—retains a 1.5 metre setback from the water allocation side boundaries.	✔☐	

PROJECT DRAWINGS

GENERAL NOTES :

1.0 ALL DIMENSIONS AND LEVELS ARE TO BE VERIFIED ON SITE.

2.0 WHEN IN DOUBT 'ASK' DO NOT SCALE.

3.0 ALL DIMENSIONS ARE SHOWN IN MILLIMETRES U.N.O.

4.0 ALL LEVELS ARE SHOWN IN METRES AND ARE REDUCED TO LOWEST ASTRONOMICAL TIDE (LAT).
(AHD IS +1.584 ABOVE LAT.)

5.0 PILES
- TOLERANCE FOR DRIVING IN PLAN +/- 50 mm, MEASURED AS THE WORST COMBINATION OF PLAN DEVIATION AND OUT OF PLUMB OVER FULL TIDAL RANGE. VERTICAL = 1 IN 150 MAX OUT OF PLUMB
- CONTRACTOR TO ADVISE ENGINEER IF BED LEVEL DIFFERS FROM DESIGN LEVEL BY MORE THAN 300mm.

6.0 PONTOON DIMENSIONS ARE NOMINAL
- DIMENSIONS ARE MEASURED TIMBER TO TIMBER

7.0 PONTOONS ARE TO BE CONNECTED TOGETHER WITH TIMBER WALERS

8.0 ALL THRU-RODS ARE TO BE M20 NOMINAL. ROLL THREADED ROD (GALV.) EX 18.5mm DIA. SPACING TO VARY WITH LOCATION

9.0 ALL TIMBER DESIGN AND CONSTRUCTION TO BE IN ACCORDANCE WITH AS 1720.1

WALER SIZES

ARM A

WALKWAY
- 2/75 x 300 GRADE F17 HARDWOOD PLUS 40 x 300 F8 SOFTWOOD COVERBOARD

FINGERS FOR 25m TO 30m BOAT
- 2/75 x 200 GRADE F17 HARDWOOD PLUS 40 x 300 F8 SOFTWOOD COVERBOARD

FINGERS FOR 22m BOAT
- 2/50 x 200 GRADE F17 HARDWOOD

ARM B

WALKWAY
- 2/50 x 200 GRADE F17 HARDWOOD PLUS 40 x 300 F8 SOFTWOOD COVERBOARD

FINGERS
- 2/50 x 200 GRADE F17 HARDWOOD

UTILITY BERTHS
- 2/50 x 200 GRADE F17 HARDWOOD PLUS 40 x 300 F8 SOFTWOOD COVERBOARD

- ALL TIMBER TO BE SEASONED AND TREATED IN ACCORDANCE WITH AS 1604.
- STRUCTURAL TIMBER MUST NOT BE CUT OR DRILLED FOR ANY REASON OTHER THAN SHOWN ON THESE DRAWINGS.

10.0 ALL WELDS TO BE COMPLETE PENETRATION BUTT WELD OR 6mm FILLET WELD AS REQUIRED U.N.O.

11.0 ALL ALUMINIUM WORK TO BE IN ACCORDANCE WITH AS 1664
- ALL EXTRUSIONS TO BE TYPE 6061-T6 OR 6082-T5 U.N.O.
- PLATES TO BE TYPE 5083 TEMPER H321.
- ALL WELDS SHALL BE INERT GAS WELD USING PULSE M.I.G. OR T.I.G. FUSION WELDING PROCESS.
- ALL WORK SHALL BE NEATLY FINISHED WITH ALL SHARP EDGES GROUND SMOOTH.
- ALL WELDS TO BE COMPLETE PENETRATION BUTT WELD

12.0 ALL STEEL AND ALUMINIUM WORK SHALL BE NEATLY FINISHED WITH ALL SHARP EDGES GROUND SMOOTH.

13.0 PILE GUIDE BLOCKS ARE TO BE ADJUSTED AS REQUIRED TO SUIT PILE SIZE AND POSITION ON SITE.
- CLEARANCE MUST BE PROVIDED BETWEEN PILE AND GUIDE TO PREVENT "HANGING" OF PONTOON UNDER FULL TIDAL RANGE

14.0 CONCRETE
- ALL CONCRETE WORKS SHALL BE IN ACCORDANCE WITH AS 3600
- MINIMUM CONCRETE STRENGTH f'c = 50MPa
- ALL STEEL REINFORCEMENT TO BE HOT DIP GALVANIZED

15.0 WALKING SURFACES SHALL BE FINISHED IN ACCORDANCE WITH AS4586.

16.0 INSULATION

BOLTED MATERIAL	INSULATING MATERIAL
ALUMINIUM / GALV STEEL	DURALAC ANTI CORROSION COMPOUND OR NYLON SEPARATION WASHERS
ALUMINIUM / CONCRETE	3mm NEOPRENE
STEEL / CONCRETE	3mm NEOPRENE

17.0 DESIGN PARAMETERS

WIND
- BASIC WIND SPEED V_U = 69.3m/s
- TERRAIN CATEGORY TC2
- GUST DURATION = 30sec

WAVE
- WIND GENERATED WAVE
  H_s = 0.75m T = 2.1/s (FOR OUTER ARM)
  H_s = 0.3m T = 2.1/s (FOR INNER ARM)
- BOAT WAKE
  H_{MAX} = 0.6m

BERTHING IMPACT
- APPROACHING VELOCITY
  v = 0.3m/s LOA ≤ 25m
  v = 0.2m/s LOA > 25m

LIVE LOAD ON PONTOONS
- MAX. UNIFORMLY DISTRIBUTED LOAD 3 kPa
- FREEBOARD UNDER DEAD LOAD
  NEW ARM A : 600 ±25mm
  NEW ARM B & FISHERMEN BERTHS : 400 ±25mm

DESIGN VESSELS (MAX.)

VESSEL LENGTH (m)	WIND PROFILE AREA (m^2)		DISPLACEMENT (t)
	BEAM	HEAD	
17	57.7	20.7	19.5
20	76.0	24.0	30.0
22	83.6	26.4	40.0
25	95.0	30.0	55.0
26	100.0	33.0	60.0
27	105.0	36.0	65.0
28	110.0	39.0	70.0
29	115.0	42.0	75.0
30	120.0	45.0	80.0
60	326.0	100.0	600.0

18.0 THE PROPOSED PONTOON COMPLIES WITH THE GUIDELINES IN AS3962-2001 "GUIDELINES FOR DESIGN OF MARINAS"

19.0 THE WORKS WILL BE STRUCTURALLY ADEQUATE FOR ANTICIPATED USAGE.

20.0 THE WORKS COMPLY WITH ALL RELEVANT CODES - INCLUDING THE DEHP'S OPERATIONAL POLICY, BUILDING AND ENGINEERING STANDARDS FOR TIDAL WORKS.

FOR APPROVAL

LOCALITY PLAN
SCALE : N.T.S.

LOT 146
SR861
IS221802
PARISH : SALISBURY
COUNTY : SOLANDER
TOWN : PORT DOUGLAS
LOCAL GOVERNMENT : CAIRNS REGIONAL

J. M. LEMAN
REGISTERED PROFESSIONAL ENGINEER
OF QUEENSLAND NUMBER : 2938

B 9/09/14 DESIGN VESSEL TABLE UPDATED
A 12/08/14 NOTE Nos. 9 & 17 UPDATED

Revisions

International Marina Consultants
Consultants to the Marina Industry.
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473 Annerley Road
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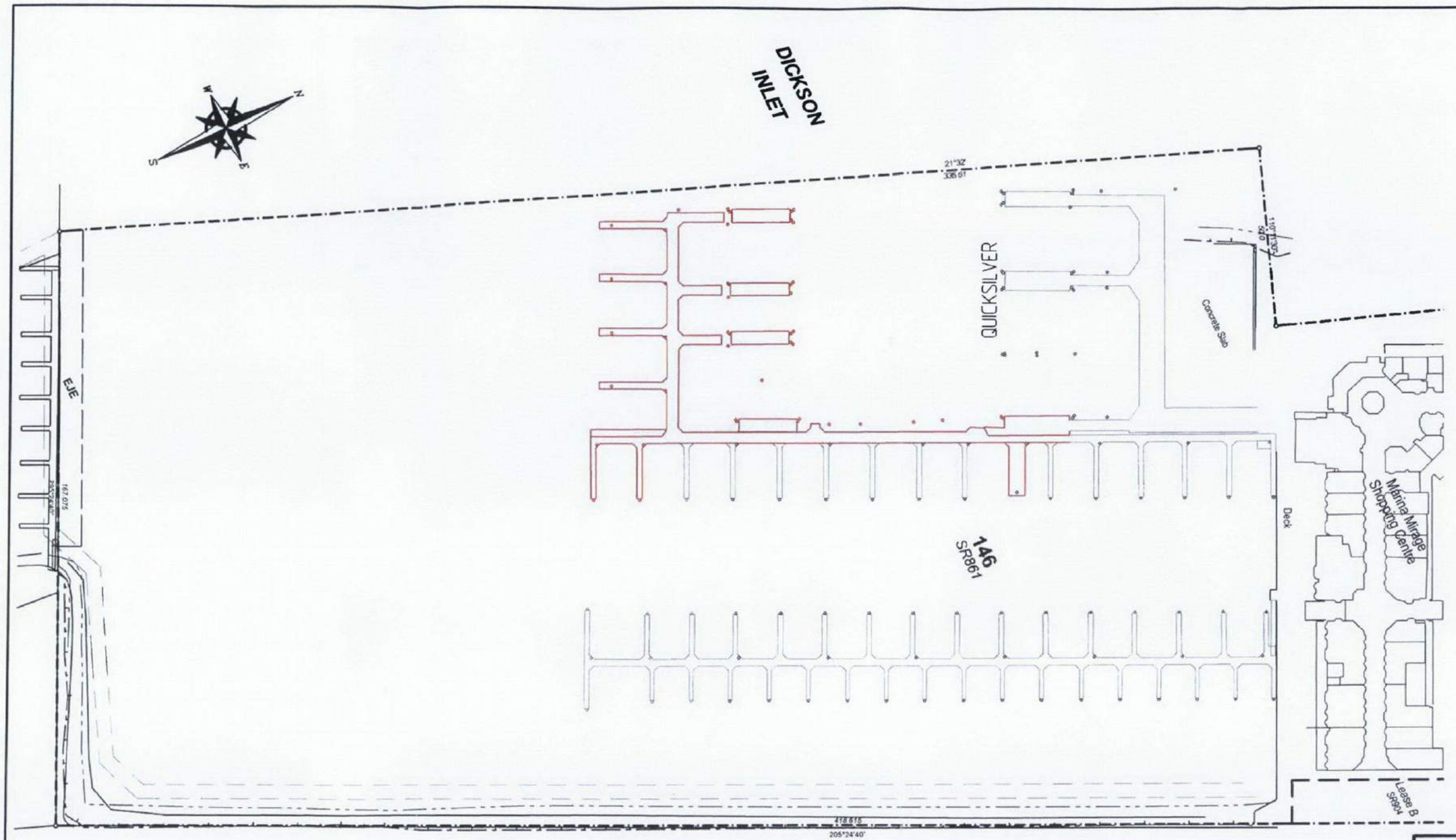
Email : imc@imc-marinas.com

CLIENT:
THE REEF MARINA PTY. LTD.

PROJECT:
THE REEF MARINA

TITLE:
GENERAL NOTES & LOCALITY PLAN

Date:	29/07/2014
Drawing No.:	4577-100/B
Scale:	NIL
Drawn By: JC.	Designed By:
Approved By:	



NOTES:

1. FOR GENERAL NOTES REFER TO DRAWING No 4577-100
2. ON SHORE LAYOUT AND WATER LEASE BOUNDARY ARE BASED ON RPS DRAWING No. PR122724-1 DRAWING FILE : PR122724-1DWG

LEGEND:

- RP BOUNDARY
- EXISTING FLOATING STRUCTURE AND PILES
- EXISTING FLOATING STRUCTURE AND PILES TO BE DEMOLISHED

PLAN

0 25 50 75 100m

SCALE 1 : 1250 (A3)

WHARF ***STREET***

FOR APPROVAL

J. M. LEMAN
REGISTERED PROFESSIONAL ENGINEER
OF QUEENSLAND NUMBER : 2938

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Email : imc@imc-marinas.com

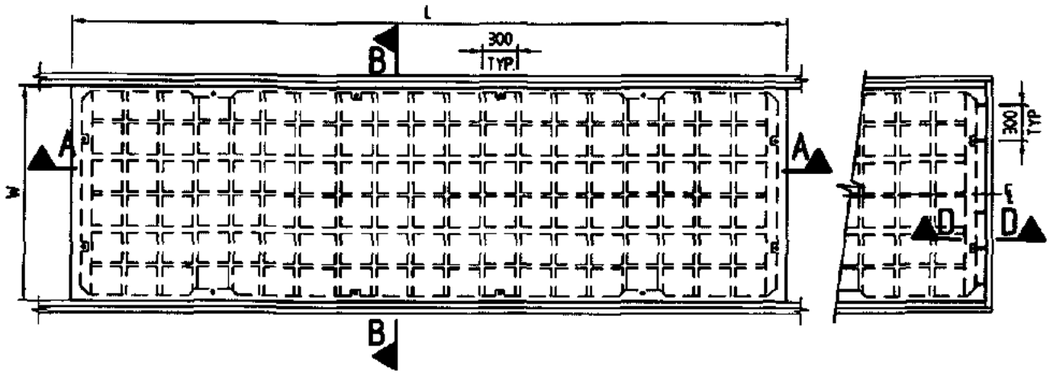
Client: THE REEF MARINA PTY. LTD.

Project: THE REEF MARINA

Title: DEMOLITION PLAN

Revision: A 9/09/14 DEMOLITION PLAN REVISED

Date:	25/07/2014
Drawing No.:	4577-101/A
Scale:	AS SHOWN
Drawn By:	J.C.
Designed By:	
Approved By:	

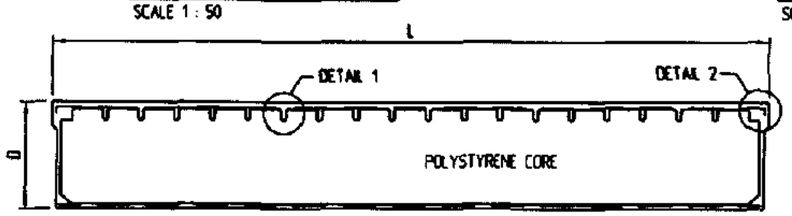


NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES U.N.O.
2. PROVIDE STAINLESS STEEL INSERTS AS REQUIRED TO END OF LAST PONTOON ONLY TO WALKWAYS AND FINGERS.
3. CONCRETE STRENGTH f'c= 50MPa
4. ALL REINFORCEMENT TO BE HOT DIP GALVANIZED.
5. MATERIAL SIZES MAY BE VARIED BY THE MANUFACTURER WITHOUT NOTICE TO COMPLY WITH SPECIFIC APPLICATIONS.
6. DIMENSION 'D' VARIES TO SUIT FREEBOARD REQUIREMENTS.

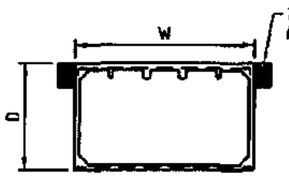
DIMENSIONS SCHEDULE		
TYPE	L	W
1.2/4.5	4490	1200
1.2/6.0	5990	1200
1.8/4.8	4790	1800
1.8/5.1	5090	1800
1.8/6.0	5990	1800
3.0/3.0	2990	3000
3.0/2.4	2390	3000
5.4/3.0	2990	5400

PLAN - TYPICAL WALKWAY PONTOON (1800 WIDE SHOWN)
SCALE 1 : 50



SECTION A - A
SCALE 1 : 50

PART PLAN SHOWING INSERT AT ONE END
SCALE 1 : 50



SECTION B - B
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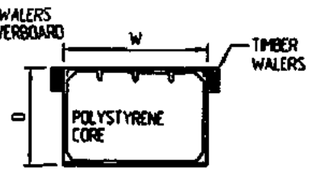

SECTION C - C
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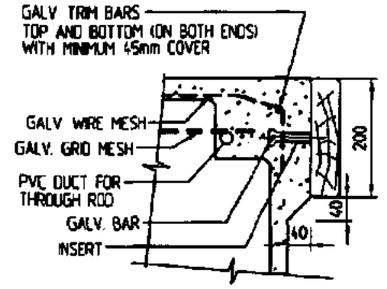

SECTION D - D
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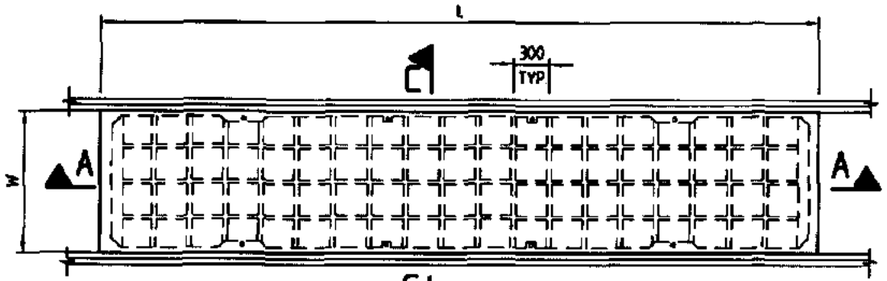
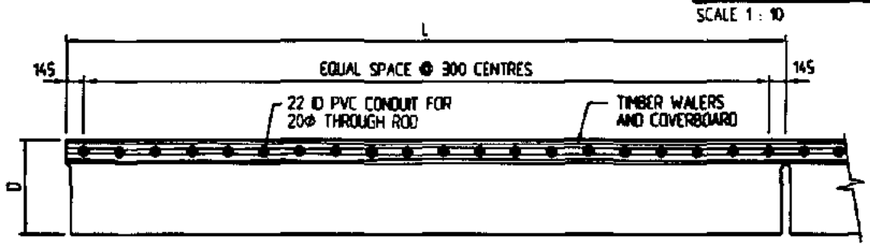


PLAN - TYPICAL FINGER PONTOON (1200 WIDE SHOWN)
SCALE 1 : 50



ELEVATION
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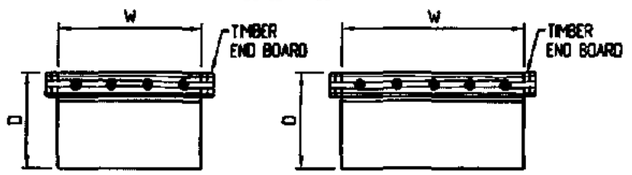
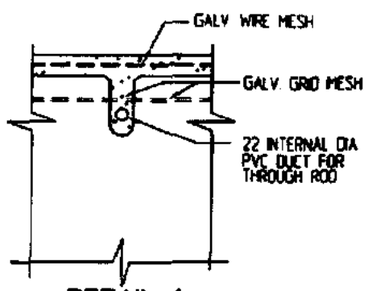
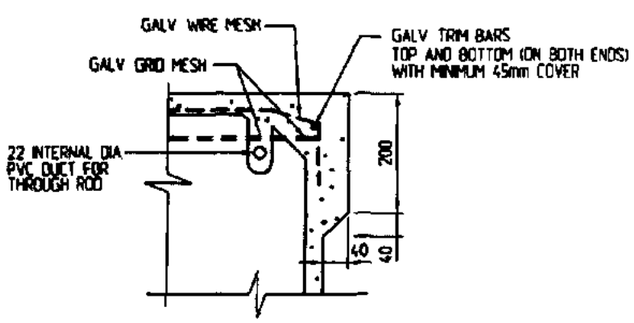


END ELEVATION
SCALE 1 : 50

END ELEVATION
SCALE 1 : 50



DETAIL 1
SCALE 1 : 10



DETAIL 2
SCALE 1 : 10

FOR APPROVAL

J. M. LEMAN
REGISTERED PROFESSIONAL ENGINEER
OF QUEENSLAND NUMBER : 2938

Revisions

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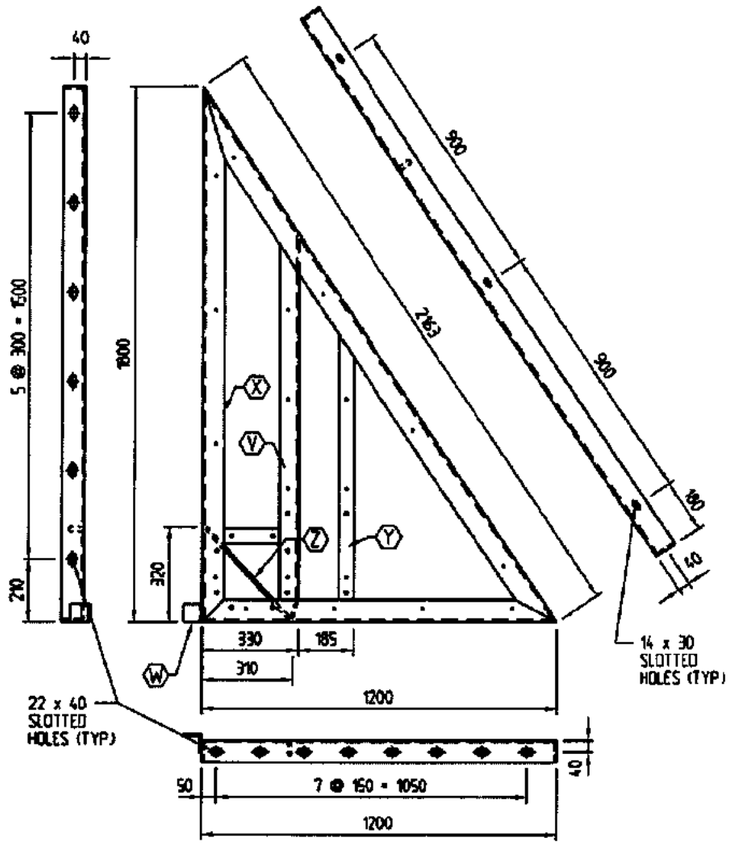
Email : imc@imc-marinas.com

CLIENT:
THE REEF MARINA PTY. LTD.

PROJECT:
THE REEF MARINA

TITLE:
STANDARD PONTOON DETAILS

Date:	29/07/2014
Drawing No.:	4577-112
Scale:	AS SHOWN
Drawn By: J.C.	Designed By:
Approved By:	



FRAME
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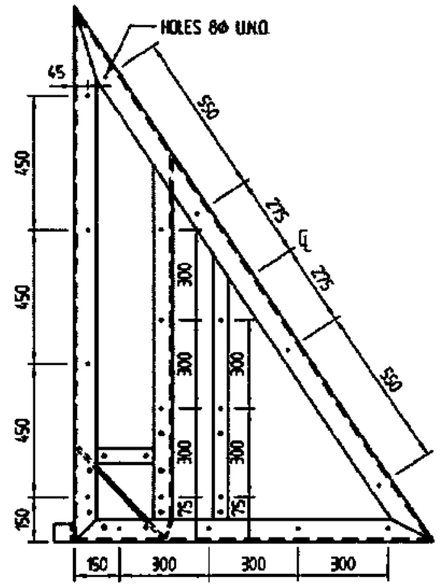


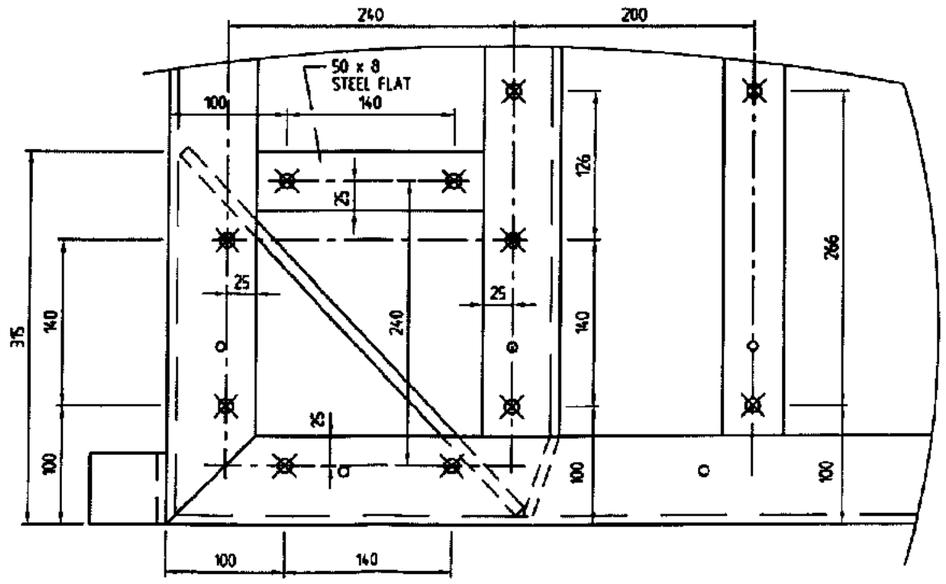
GENERAL ARRANGEMENT
SCALE 1 : 20

NOTES:

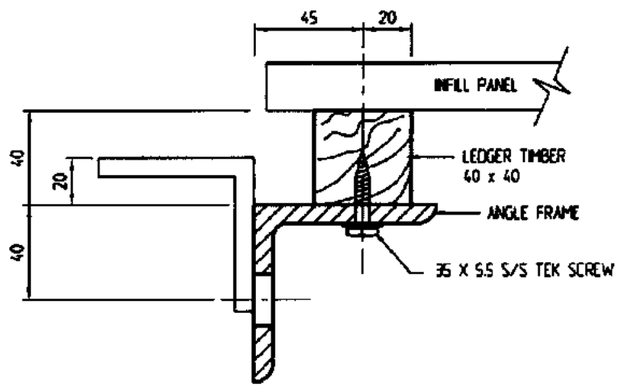
1. ALL MATERIALS TO BE HOT DIP GALVANIZED IN ACCORDANCE WITH AS 4680.
2. PROTECTIVE COATINGS TO STEEL COMPONENTS -
   a. ACID DIP AND HOT DIP GALVANIZE IN ACCORDANCE WITH AS4680.
   b. - AVERAGE COATING 750g/m²
      - EQUIVALENT THICKNESS 100 MICRONS.
3. ALL WELDS TO BE FULL PENETRATION BUTT WELDS OR 6mm FILLET WELD AS REQUIRED.
4. ALL WORK SHALL BE NEATLY FINISHED WITH ALL SHARP EDGES GROUND SMOOTH.

LEGEND:

Ⓥ	65 x 50 x 8 STEEL ANGLE
Ⓦ	65 x 65 x 8 STEEL ANGLE
Ⓧ	75 x 75 x 8 STEEL ANGLE
Ⓨ	50 x 8 STEEL FLAT
Ⓩ	50 x 10 STEEL FLAT
○	8Ø HOLE
⊗	12Ø HOLE



PEDESTAL MOUNTING PROVISIONS
SCALE 1 : 5



INFILL SUPPORT SECTION
SCALE 1 : 25

FOR APPROVAL

J. M. LEMAN
REGISTERED PROFESSIONAL ENGINEER
OF QUEENSLAND NUMBER : 2938

Revisions

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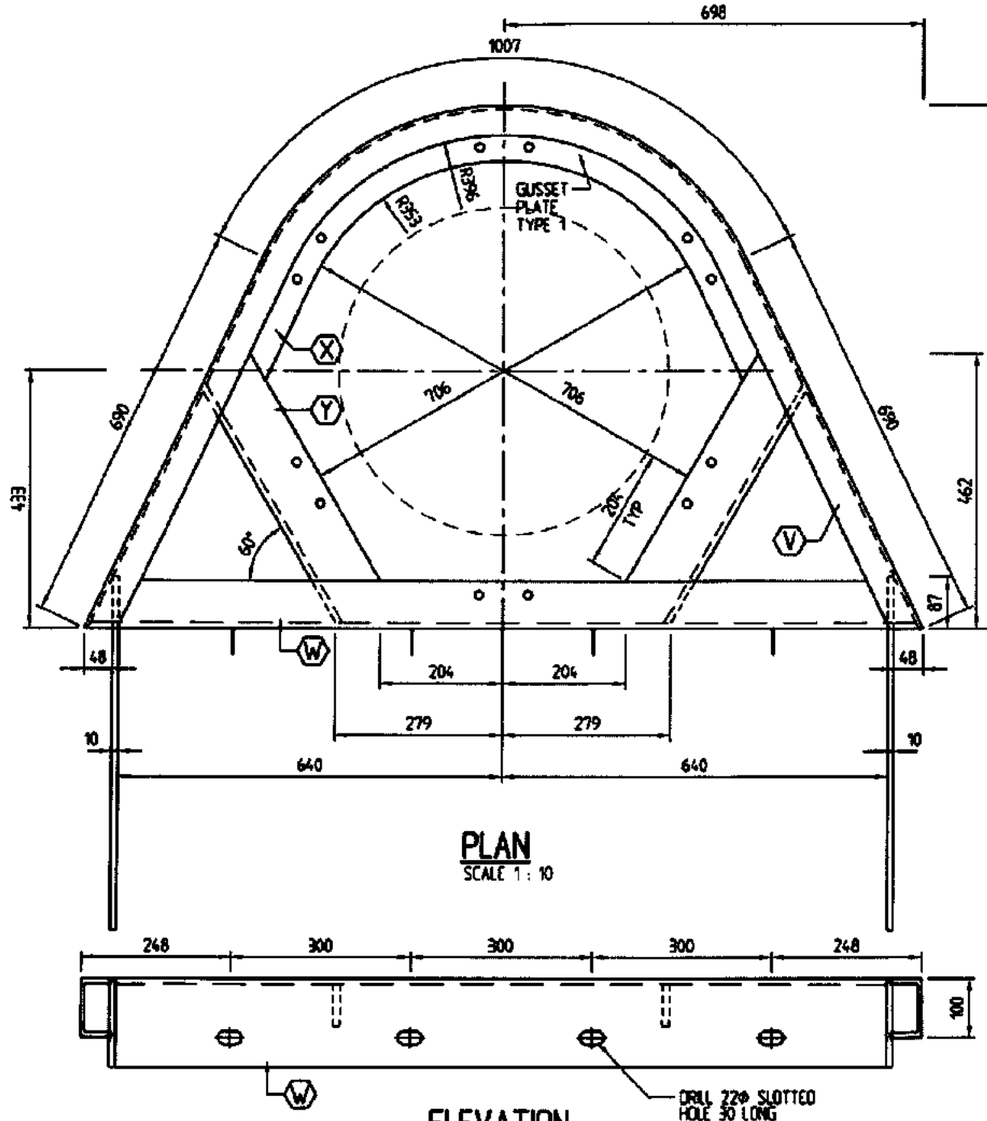
Email : imc@imc-marinas.com

CLIENT:
THE REEF MARINA PTY. LTD.

PROJECT:
THE REEF MARINA

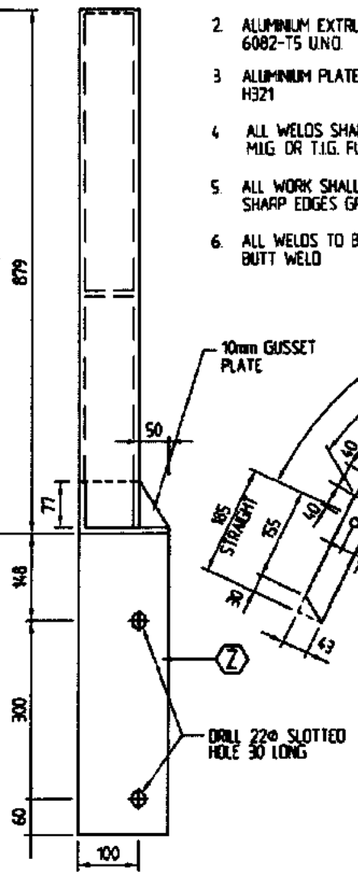
TITLE:
TYPICAL BRACKET DETAILS

Date:	29/07/2014
Drawing No.:	4577-111
Scale:	AS SHOWN
Drawn By: J.C.	Designed By:
Approved By:	



PLAN
SCALE 1 : 10

ELEVATION
SCALE 1 10



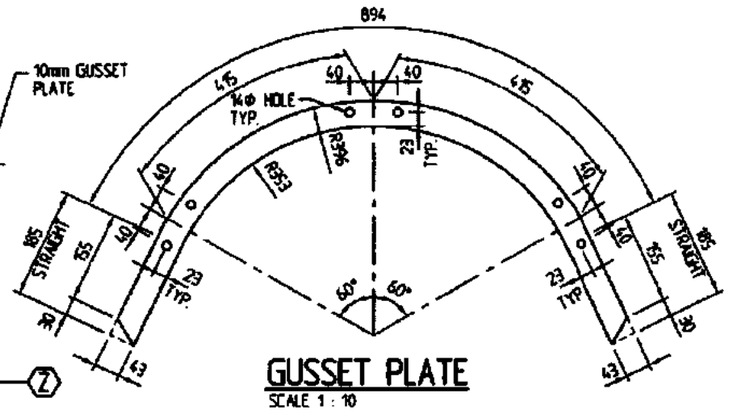
SIDE ELEVATION
SCALE 1 : 10

NOTES:

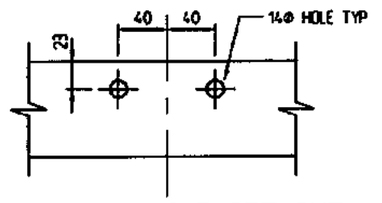
1. ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AS1664
2. ALUMINIUM EXTRUSIONS SHALL BE 6061-T6 OR 6082-T5 U.N.O.
3. ALUMINIUM PLATES SHALL BE TYPE 5083 TEMPER H321
4. ALL WELDS SHALL BE INERT GAS WELD USING PULSE MIG OR T.I.G. FUSION WELDING PROCESS.
5. ALL WORK SHALL BE NEATLY FINISHED WITH ALL SHARP EDGES GROUND SMOOTH.
6. ALL WELDS TO BE COMPLETE PENETRATION BUTT WELD

LEGEND:

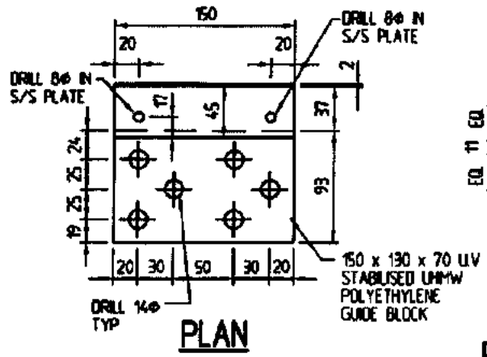
- V — 100 x 50 x 6 x 9 CHANNEL
- W — 150 x 80 x 10 ALUMINIUM ANGLE
- X — 10 ALUMINIUM PLATE
- Y — 100 x 80 x 10 ALUMINIUM ANGLE
- Z — 150 x 10 ALUMINIUM FLAT



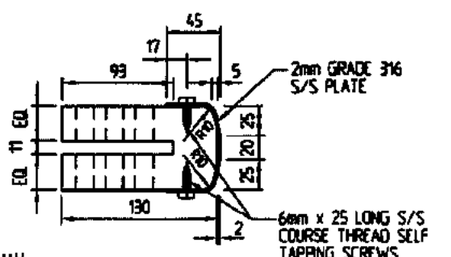
GUSSET PLATE
SCALE 1 : 10



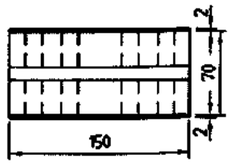
TYPICAL HOLE SET-OUT FOR PILE GUIDE
SCALE 1 : 5



PLAN



SIDE ELEVATION



FRONT ELEVATION

PILE GUIDE BLOCK
SCALE 1 : 5

NOTES: FIX PILE GUIDE WITH 2 NUMBER M12 S/S BOLTS

FOR APPROVAL

J. M. LEMAN
REGISTERED PROFESSIONAL ENGINEER
OF QUEENSLAND NUMBER : 2938

Revisions

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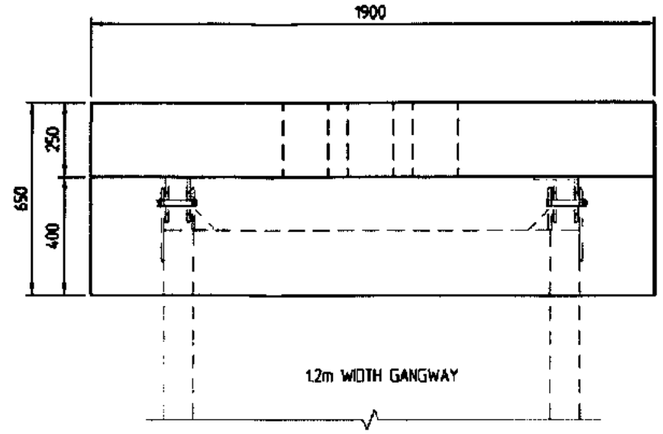
CLIENT: THE REEF MARINA PTY. LTD.

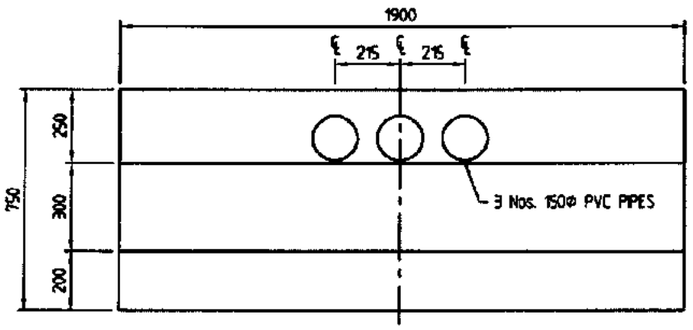
PROJECT: THE REEF MARINA

TITLE: TYPICAL PILE BRACKET DETAILS

Date:	29/07/2014
Drawing No.:	4577-110
Scale:	AS SHOWN
Drawn By: J.C.	Designed By:
Approved By:	

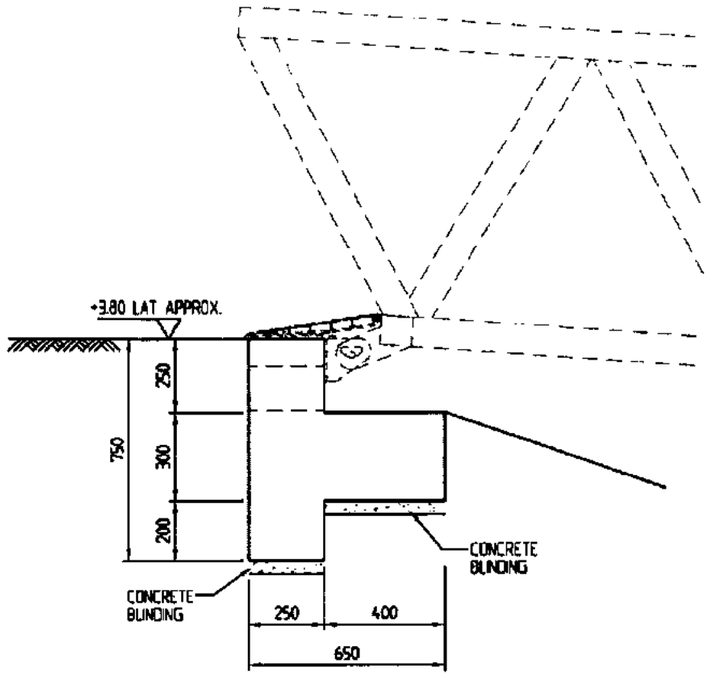


PLAN
SCALE 1 20



(GANGWAY NOT SHOWN FOR CLARITY)

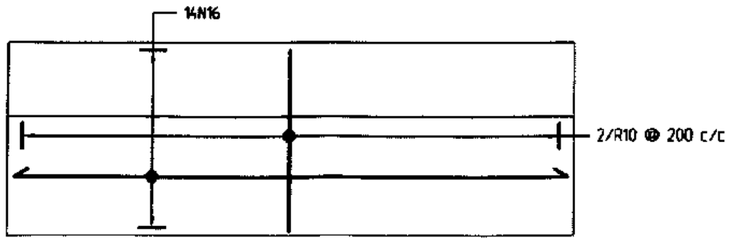
ELEVATION
SCALE 1 : 20



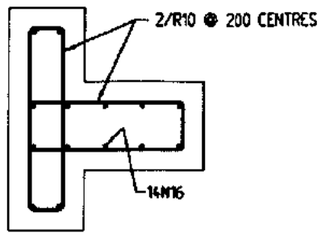
ELEVATION
SCALE 1 : 20

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES UNO
2. ALL LEVELS ARE SHOWN IN METRES AND REDUCED TO LOWEST ASTRONOMICAL TIDE (LAT)
   (AHD IS +1.584 ABOVE LAT.)
3. CONCRETE
   - ALL CONCRETE WORKS SHALL COMPLY WITH AS 3600
   - MINIMUM CONCRETE STRENGTH f'c = 40MPa
   - MINIMUM COVER TO REINFORCEMENT = 70mm
4. THE ABUTMENT FOUNDATION BEARING CAPACITY AND SLOPE STABILITY OF REVETMENT TO BE CHECKED AND CONFIRMED BY A GEOTECHNICAL ENGINEER.



PLAN



TYPICAL SECTION

REINFORCEMENT DETAILS
SCALE 1 : 20

FOR APPROVAL

J. M. LEMAN
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OF QUEENSLAND NUMBER : 2938

Revisions

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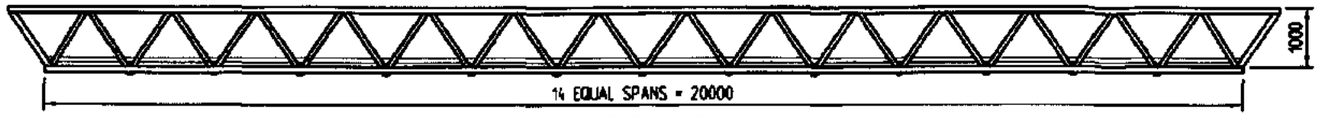
CLIENT:
THE REEF MARINA PTY. LTD.

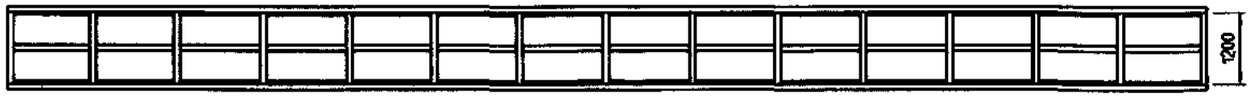
PROJECT:
THE REEF MARINA

TITLE:
CONCRETE ABUTMENT DETAILS

Date:	29/07/2014
Drawing No.:	4577-109
Scale:	AS SHOWN
Drawn By: JC.	Designed By:
Approved By:	



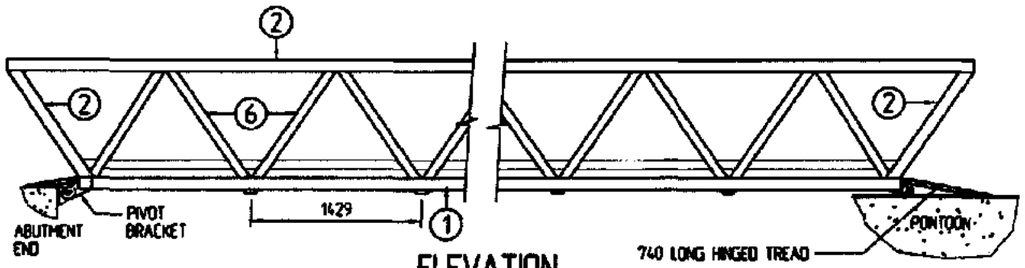
ELEVATION



PLAN

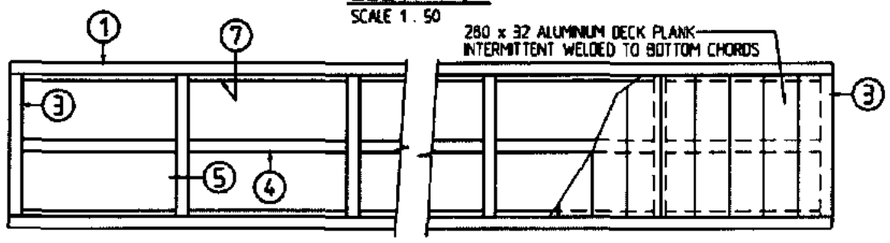
GENERAL ARRANGEMENT

SCALE 1 : 100



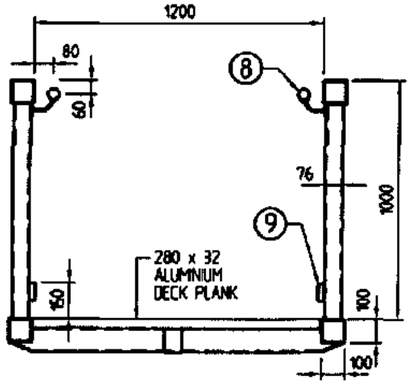
ELEVATION

SCALE 1 : 50



PLAN VIEW BOTTOM CHORD

SCALE 1 : 50



TYPICAL SECTION

SCALE 1 : 25

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AS1664.
3. ALUMINIUM STRUCTURAL EXTRUSIONS SHALL BE 6061-T6, 6082-T5 OR 6005A-T5 U.N.O. HANDRAILS, KICKRAILS AND DECK PLANK SUPPORTING ANGLES CAN BE GRADE 6060-T5.
4. ALUMINIUM PLATES SHALL BE TYPE 5083 TEMPER H321
5. ALL WELDS SHALL BE INERT GAS WELD USING PULSE M.I.G. OR T.I.G. FUSION WELDING PROCESS.
6. ALL WORK SHALL BE NEATLY FINISHED WITH ALL SHARP EDGES GROUND SMOOTH.
7. ALL WELDS TO BE COMPLETE PENETRATION BUTT WELD.
8. DESIGN LIVE LOADS

UDL	4.0kPa
CONCENTRATED LOAD	4.5kN
HANDRAIL	0.75kN/m

9. SPLICE JOINT IN TOP CHORD TO BE LOCATED OUTSIDE THE CENTRAL 6m
10. WALKING SURFACES SHALL BE FINISHED IN ACCORDANCE WITH AS4586.

ITEM	DESCRIPTION
1	SHS 100 x 100 x 6
2	SHS 100 x 100 x 6
3	SHS 100 x 100 x 6
4	RHS 1016 x 76.2 x 2.35
5	SHS 100 x 100 x 6
6	SHS 76 x 76 x 6
7	ANGLE 50 x 25 x 3
8	CHS 50 x 3
9	RHS 76.2 x 25.4 x 2.36

FOR APPROVAL

J. M. LEMAN
REGISTERED PROFESSIONAL ENGINEER
OF QUEENSLAND NUMBER : 2938

Revisions

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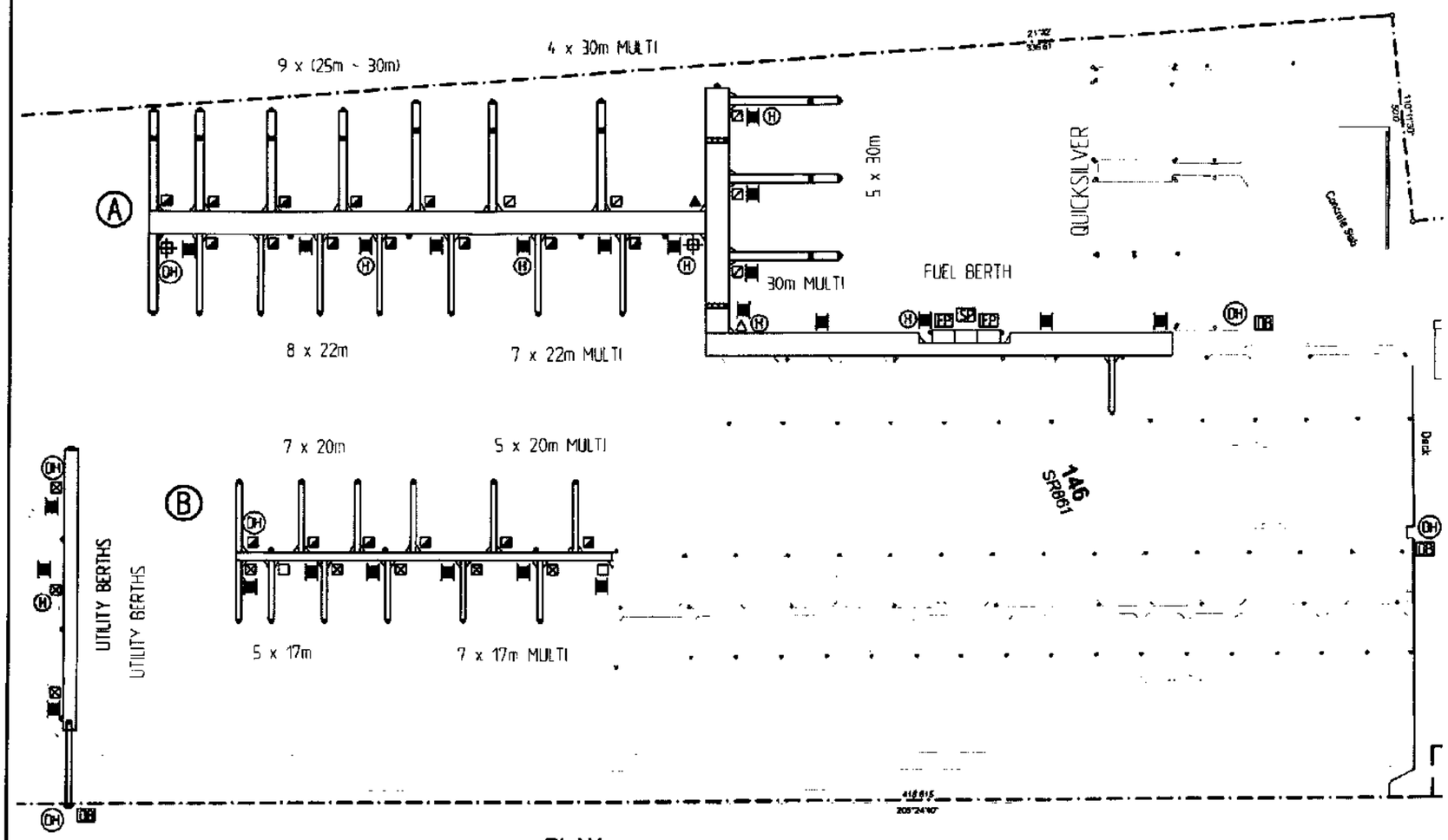
CLIENT:
THE REEF MARINA PTY. LTD.

PROJECT:
THE REEF MARINA

TITLE:
1.2m WIDE x 20m LONG GANGWAY

Date:	29/07/2014
Drawing No.:	4577-108
Scale:	AS SHOWN
Drawn By: J.C.	Designed By:
Approved By:	



PLAN
SCALE 1 : 1250

WHARF

STREET

NOTES:

1 FOR GENERAL NOTES REFER TO DRAWING No 4577-100

LEGEND:

- SERVICE MODULE FITTED WITH :
  2 Nos 15AMP (SINGLE PHASE) OUTLETS
  2 Nos. RCD/MCBs
  1 No. (kWh) METER
  1 No. 1/2" HOSE TAP (CHROME)
  1 No FLURO LIGHT
- SERVICE MODULE FITTED WITH :
  4 Nos 15AMP (SINGLE PHASE) OUTLETS
  4 Nos. RCD/MCBs
  2 Nos. (kWh) METERS
  1 No. 1/2" HOSE TAP (CHROME)
  1 No FLURO LIGHT
- SERVICE MODULE FITTED WITH :
  2 Nos 32AMP (THREE PHASE) OUTLETS
  4 Nos 15AMP (SINGLE PHASE) OUTLETS
  6 Nos. RCD/MCBs
  2 Nos (kWh) METERS
  1 No. 1/2" HOSE TAP (CHROME)
  1 No. FLURO LIGHT
- SERVICE MODULE FITTED WITH :
  1 No 125AMP (THREE PHASE) OUTLET
  2 Nos 15AMP (SINGLE PHASE) OUTLETS
  3 Nos. RCD/MCBs
  1 No. (kWh) METER
  1 No 1/2" HOSE TAP (CHROME)
  1 No FLURO LIGHT
- SERVICE MODULE FITTED WITH :
  1 No 32AMP (THREE PHASE) OUTLET
  2 Nos. 15AMP (SINGLE PHASE) OUTLETS
  3 Nos. RCD/MCBs
  1 No (kWh) METER
  1 No 1/2" HOSE TAP (CHROME)
  1 No FLURO LIGHT
- SERVICE MODULE FITTED WITH :
  1 No. 63AMP (THREE PHASE) OUTLET
  2 Nos 15AMP (SINGLE PHASE) OUTLETs
  3 Nos. RCD/MCBs
  2 Nos (kWh) METERs
  1 No 1/2" HOSE TAP (CHROME)
  1 No FLURO LIGHT
- SERVICE MODULE FITTED WITH
  2 Nos 63AMP (THREE PHASE) OUTLETs
  4 Nos 15AMP (SINGLE PHASE) OUTLETS
  6 Nos RCD/MCBs
  2 Nos (kWh) METERs
  1 No. 1/2" HOSE TAP (CHROME)
  1 No FLURO LIGHT
- FP FUEL PUMP
- SP SEWAGE PUMPOUT
- DB DISTRIBUTION BOX
- DH TWIN HEAD FIRE HYDRANT
- H FIRE HYDRANT
- FIRE HOSE REEL WITH MANUAL CALL POINT AND 9kg DRY CHEMICAL EXTINGUISHER WITH MINIMUM RATING RATING OF 2A80BE

FOR APPROVAL

J. M. LEMAN
REGISTERED PROFESSIONAL ENGINEER
OF QUEENSLAND NUMBER : 2938

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Client: THE REEF MARINA PTY. LTD.

Project: THE REEF MARINA

Title: SERVICES LAYOUT

Revision:
A 12/08/14 REVISED AS PER CLIENT'S COMMENT
B 16/09/14 MARINA LAYOUT UPDATED, ARMS A & B SERVICES REVISED
C 18/09/14 ARM A LAYOUT UPDATED, SERVICES ADDED

Date: 28/07/2014
Drawing No.: 4577-107/C
Scale: AS SHOWN
Drawn By: J.C.
Designed By:
Approved By:

PILE SCHEDULE

PILE No.	DESIGNED BED LEVEL (m LAT)	PILE SIZE	MINIMUM EMBEDMENT (m)	PILE TOP LEVEL (m LAT)	ESTIMATED PILE LENGTH (m)
P1	-22	610Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	75	+52	150
P2	-23	610Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	75	+52	150
P3	-22	610Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	75	+52	150
P4	-23	457Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	63	+52	140
P5	-20	457Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	63	+52	135
P6	-20	457Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	63	+52	135
P7	-21	457Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	63	+52	140
P8	-22	457Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	63	+52	140
P9	-22	457Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	63	+52	140
P10	-22	610Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	66	+52	140
P11	-22	610Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	66	+52	140
P12	-22	610Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	66	+52	140
P13	-22	610Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	66	+52	140
P14	-22	610Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	66	+52	140
P15	-23	610Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	66	+52	145
P16	-22	610Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	72	+52	150
P17	-25	610Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	72	+52	150
P18	-25	610Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	72	+52	150
P19	-26	610Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	72	+52	150
P20	-27	610Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	72	+52	155
P21	-25	610Φ x 16.0 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	82	+52	160
P22	-26	610Φ x 16.0 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	82	+52	160
P23	-25	610Φ x 16.0 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	82	+52	160
P24	-25	610Φ x 16.0 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	82	+52	160
P25	-25	610Φ x 16.0 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	82	+52	160
P26	-27	610Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	70	+52	150
P27	-27	610Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	70	+52	150
P28	-26	610Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	70	+52	150
P29	-27	610Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	70	+52	150
P30	-26	610Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	70	+52	150
P31	-25	610Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	70	+52	150
P32	-27	610Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	70	+52	150
P33	-25	610Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	70	+52	150
P34	-26	610Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	64	+52	145

PILE SCHEDULE

PILE No.	DESIGNED BED LEVEL (m CD)	PILE SIZE	MINIMUM EMBEDMENT (m)	PILE TOP LEVEL (m CD)	ESTIMATED PILE LENGTH (m)
P35	-25	610Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	64	+52	145
P36	-25	610Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	64	+52	145
P37	-26	610Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	64	+52	145
P38	-26	508Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	63	+52	145
P39	-26	508Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	63	+52	145
P40	-27	457Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	63	+52	145
P41	-27	457Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	63	+52	145
P42	-25	457Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	62	+52	140
P43	-26	457Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	62	+52	140
P44	-27	457Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	60	+52	140
P45	-26	457Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	60	+52	140
P46	-26	457Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	60	+52	140
P47	-25	457Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	60	+52	140
P48	-20	508Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	64	+52	140
P49	-20	508Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	64	+52	140
P50	-21	508Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	64	+52	140
P51	-22	508Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	64	+52	140
P52	-25	610Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	72	+52	150
P53	-25	610Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	72	+52	150
P54	-25	610Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	72	+52	150
P55	-26	610Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	72	+52	150
FB1	-25	457Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	58	+52	135
FB2	-25	457Φ x 12.7 WALL GRADE 350 CORROSION PROTECTED STEEL PILE	58	+52	135

FOR APPROVAL

J. M. LEMAN
REGISTERED PROFESSIONAL ENGINEER
OF QUEENSLAND NUMBER : 2938

International Marina Consultants
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Email : inc@imc-marinas.com

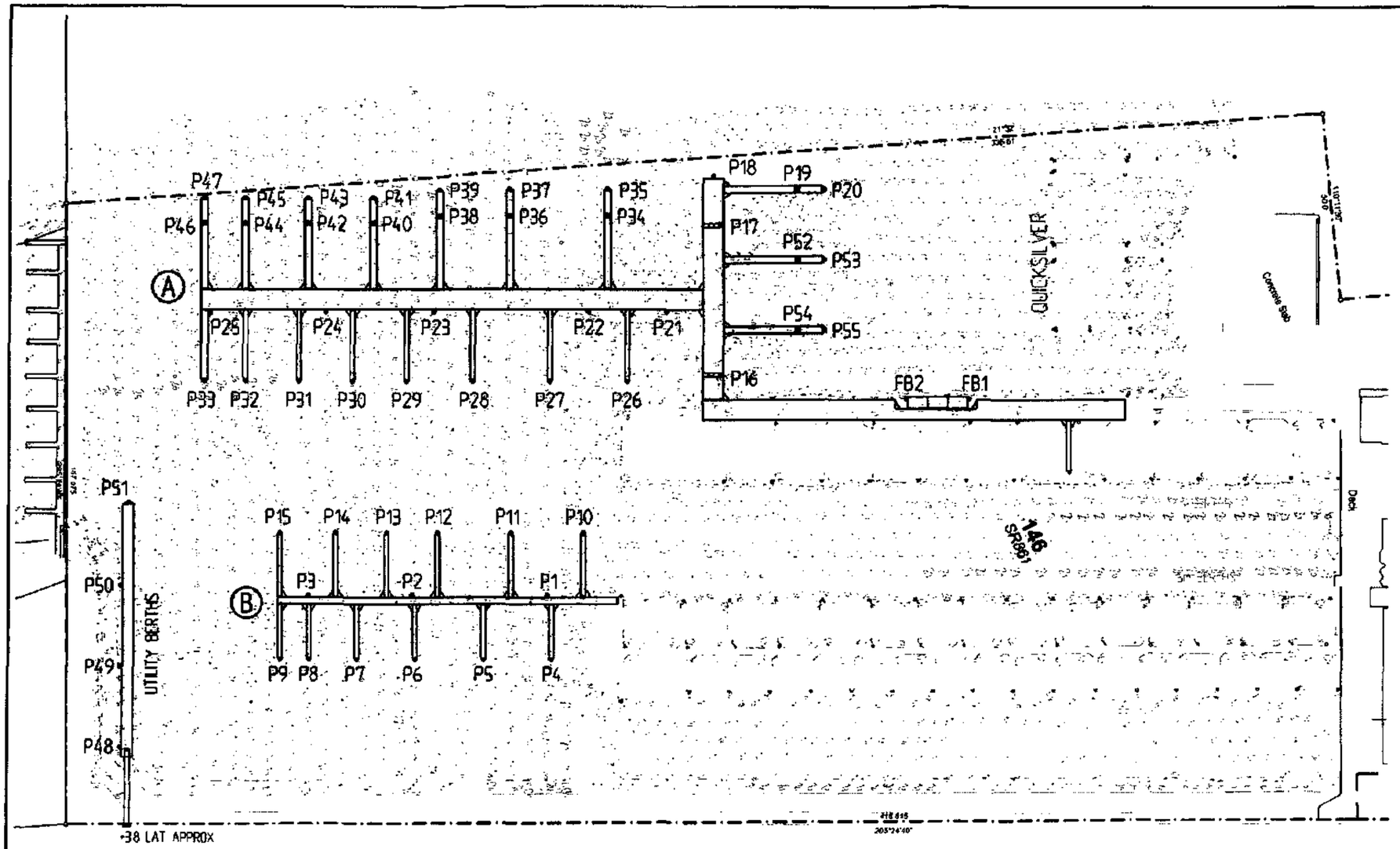
Client: THE REEF MARINA PTY. LTD.

Project: THE REEF MARINA

Title: PILE SCHEDULE

Revision:
A 16/09/14 PILE SCHEDULE UPDATED
B 18/09/14 PILES PS2 ~ PS7 ADDED

Date: 25/07/2014
Drawing No.: 4577-106/B
Scale: NIL
Drawn By: J.C.
Designed By:
Approved By:



PLAN
SCALE 1 1250 (A3)

NOTES:

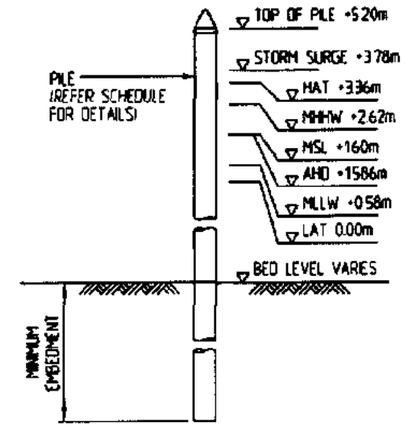
1 FOR GENERAL NOTES REFER TO DRAWING No 4577-100

2 ALL LEVELS ARE SHOWN IN METRES AND ARE REDUCED TO LOWEST ASTRONOMICAL TIDE (LAT)
(AHD IS +1584 ABOVE LAT)

3 HYDROGRAPHIC INFORMATION IS BASED ON GPS & HYDROGRAPHIC SERVICES DRAWING REFERENCE 1996-05
DRAWING FILE : 1996-05 The Reef Marina Post Dredge Survey.DWG

4 PILES
- TOLERANCE FOR DRIVING IN PLAN +/- 50 mm, MEASURED AS THE WORST COMBINATION OF PLAN DEVIATION AND OUT OF PLUMB OVER FULL TIDAL RANGE
VERTICAL = 1 IN 200 MAX OUT OF PLUMB
- CONTRACTOR TO ADVISE ENGINEER IF BED LEVEL DIFFERS FROM DESIGN LEVEL BY MORE THAN 300mm

5 ALL STEEL PILES SHALL BE CORROSION PROTECTED WITH HDPE SLEEVES. THE SLEEVE TO BE APPLIED FROM TOP OF PILE TO 1m BELOW BED LEVEL AND SEALED AT THE TOP AFTER INSTALLATION.



PILE PROFILE
SCALE 1 200

WHARF

STREET

FOR APPROVAL

J. M. LEMAN
REGISTERED PROFESSIONAL ENGINEER
OF QUEENSLAND NUMBER : 2938

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Email : imc@imc-marinas.com

Client: THE REEF MARINA PTY. LTD.

Project: THE REEF MARINA

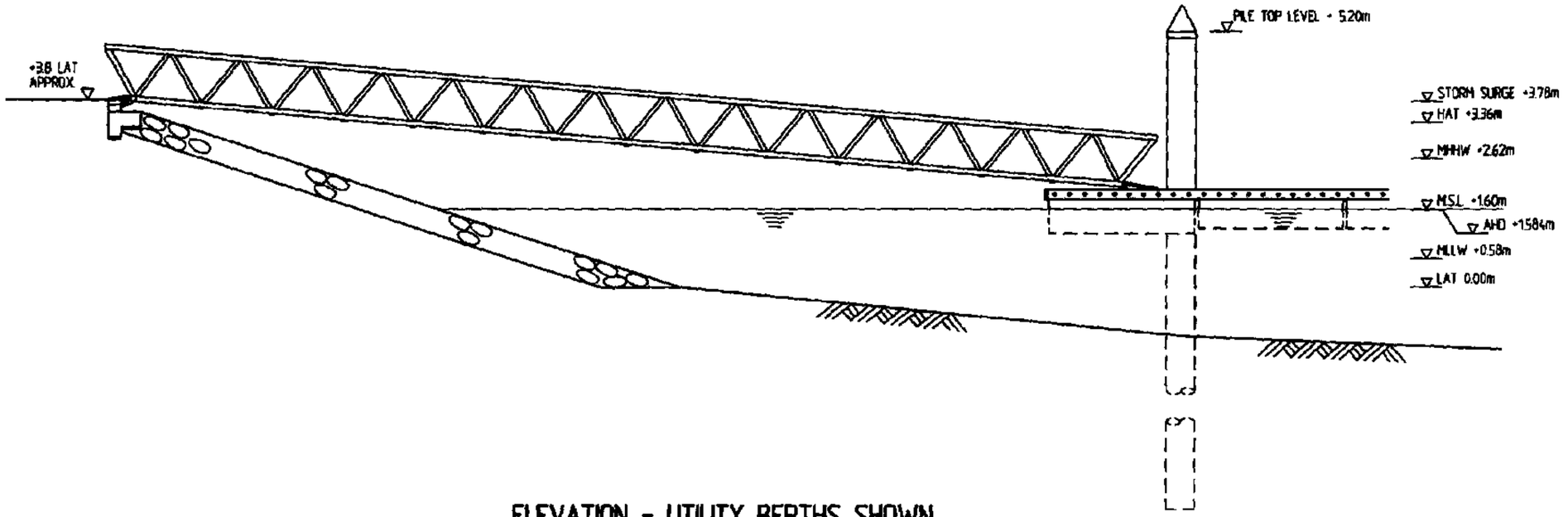
Title: PILE LAYOUT AND PROFILE

Revision:
A 12/08/14 MARINA LAYOUT UPDATED
B 16/09/14 MARINA LAYOUT UPDATED, PILE No REVISED
C 18/09/14 ARM A LAYOUT UPDATED, PILES No 52 - 57 ADDED

Date: 25/07/2014
Drawing No.: 4577-105/C
Scale: AS SHOWN
Drawn By: J.C.
Designed By:
Approved By:

NOTES:

1. FOR GENERAL NOTES REFER TO DRAWING No. 4577-100.
2. ALL LEVELS ARE SHOWN IN METRES AND ARE REDUCED TO LOWEST ASTRONOMICAL TIDE (LAT).
   (AHD IS +1.584 ABOVE LAT.)



ELEVATION - UTILITY BERTHS SHOWN
SCALE 1 : 100

FOR APPROVAL

J. M. LEMAN
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OF QUEENSLAND NUMBER : 2938

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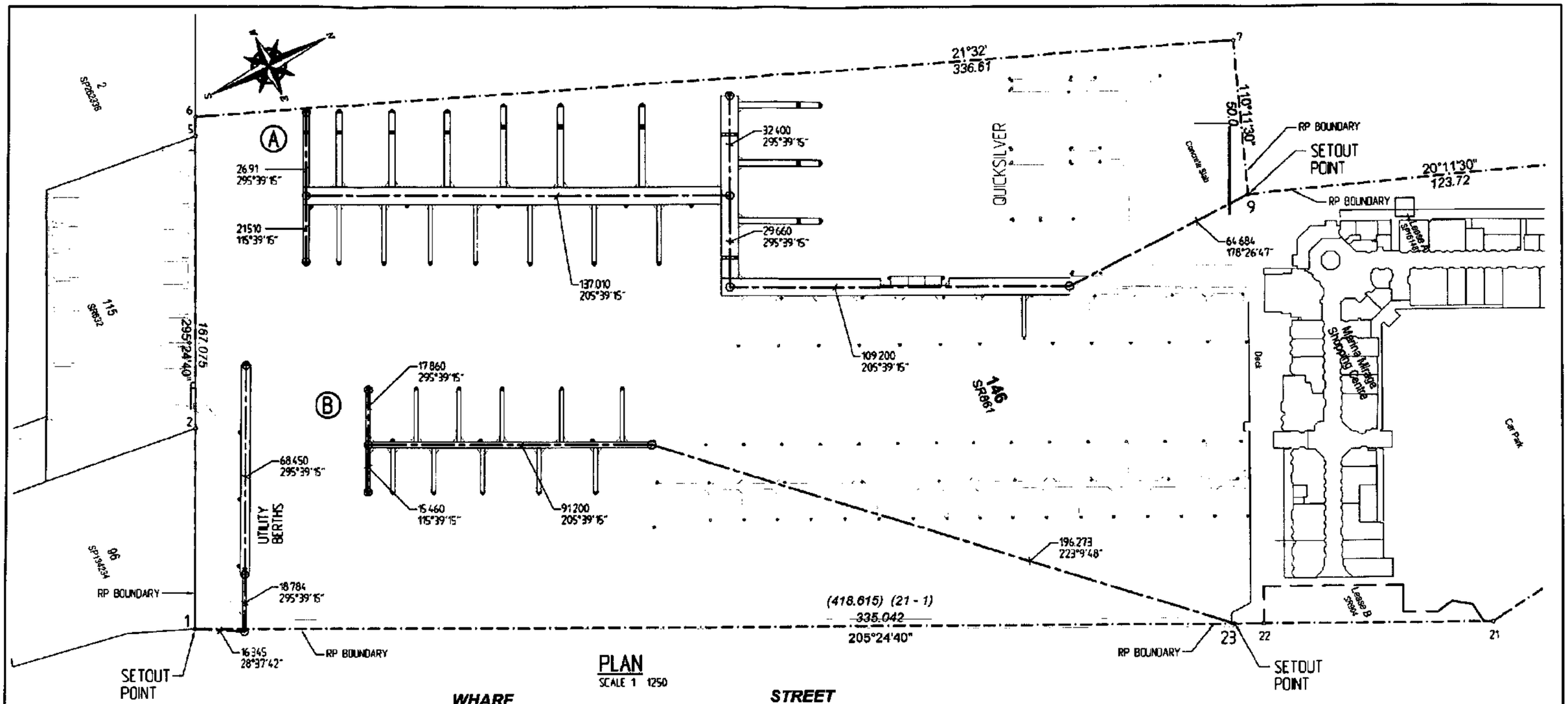
Client: THE REEF MARINA PTY. LTD.

Project: THE REEF MARINA

Title: ELEVATION

Revision:
A 12/08/14 FISHERMAN BERTHS RENAMED AS UTILITY BERTHS

Date:	28/07/2014
Drawing No.:	4577-104/A
Scale:	AS SHOWN
Drawn By:	J.C.
Designed By:	
Approved By:	



PLAN
SCALE 1 1250

NOTES:

1. FOR GENERAL NOTES REFER TO DRAWING No 4577-100

LEGEND:

RP BOUNDARY

FOR APPROVAL

J. M. LEMAN
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OF QUEENSLAND NUMBER : 2938

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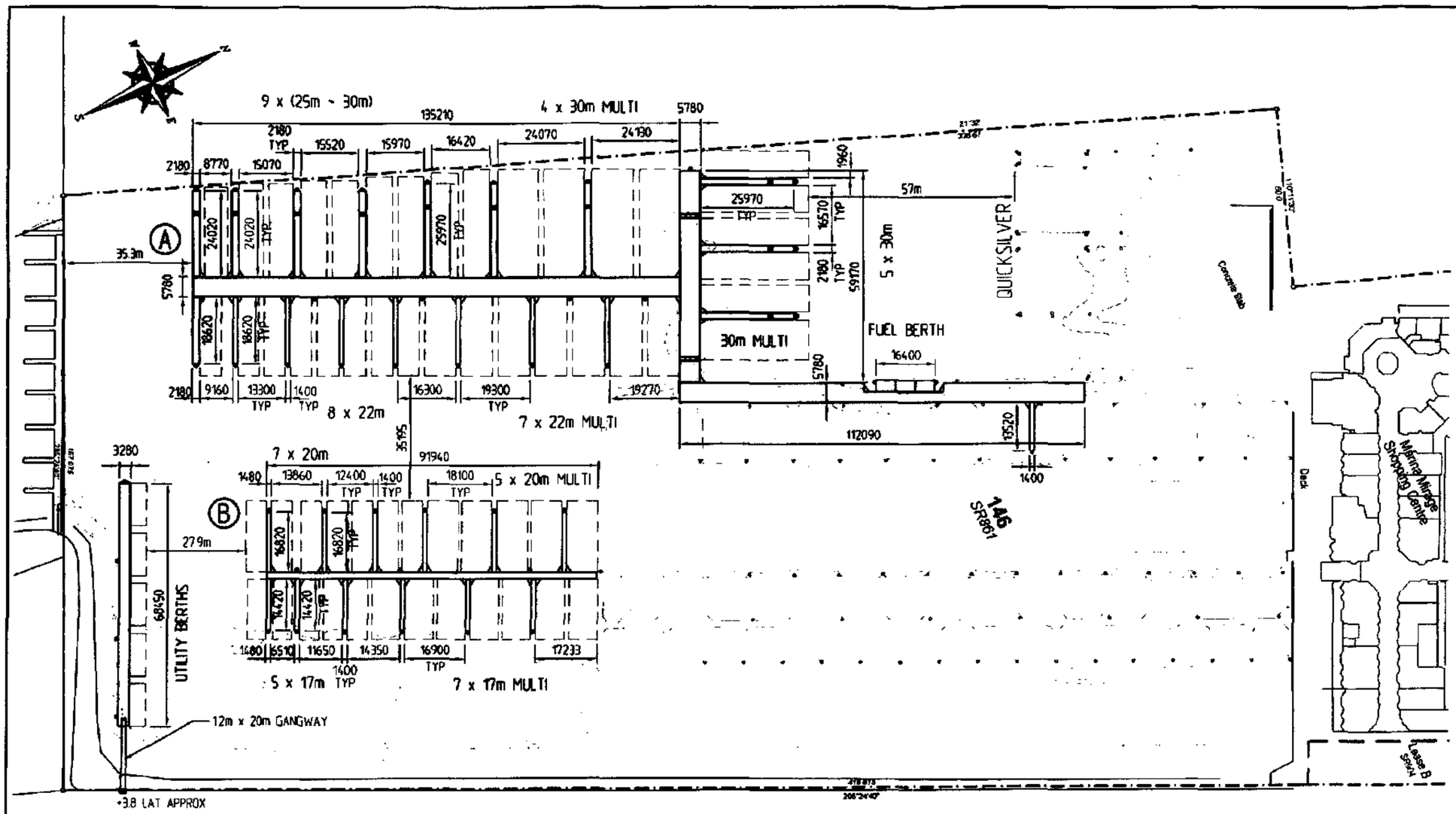
Client: THE REEF MARINA PTY. LTD.

Project: THE REEF MARINA

Title: MARINA SETOUT

Revision:
A 12/08/14 MARINA LAYOUT UPDATED, ARM A T-HEAD SETOUT REVISED
B 16/09/14 MARINA LAYOUT UPDATED, ARMS A & B SETOUT REVISED
C 18/09/14 ARM A LAYOUT UPDATED AND SETOUT REVISED

Date: 28/07/2014
Drawing No.: 4577-103/C
Scale: AS SHOWN
Drawn By: JC.
Designed By:
Approved By:



NOTES:

1. FOR GENERAL NOTES REFER TO DRAWING No 4577-100
2. ON SHORE LAYOUT AND WATER LEASE BOUNDARY ARE BASED ON RPS DRAWING No PR122724-1 DRAWING FILE : PR122724-1DWG
3. HYDROGRAPHIC INFORMATION IS BASED ON GPS & HYDROGRAPHIC SERVICES DRAWING REFERENCE 1196-05 DRAWING FILE : 1196-05 The Reef Marina Post Dredge Survey.DWG

LEGEND:

RP BOUNDARY

PLAN

0 25 50 75 100m

SCALE 1 : 1250 (A3)

WHARF ***STREET***

FOR APPROVAL

J. M. LEMAN
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OF QUEENSLAND NUMBER : 2938

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Client: THE REEF MARINA PTY. LTD.

Project: THE REEF MARINA

Title: GENERAL ARRANGEMENT

Revision:
A 25/07/14 ISSUED FOR APPROVAL
MARINA LAYOUT REVISED
B 12/08/14 REVISED AS PER CLIENT'S COMMENT
C 16/09/14 ARMS A & B, FUEL BERTH LAYOUT REVISED
D 18/09/14 ROW A 60m BERTH CHANGED TO 30m BERTHS

Date: 25/07/2014
Drawing No.: 4577-102/D
Scale: AS SHOWN
Drawn By: J.C
Designed By:
Approved By: