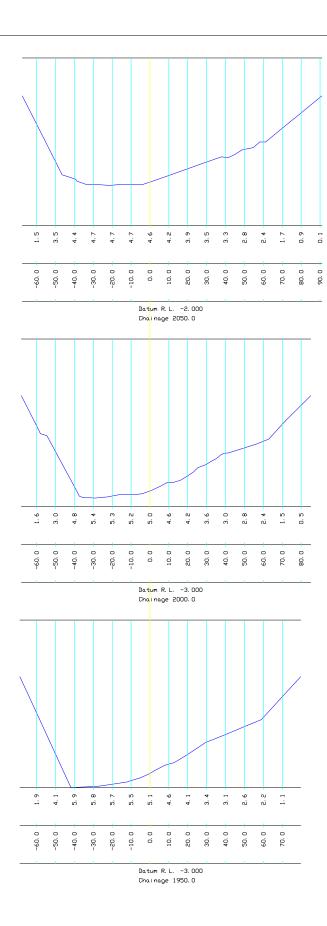


Sheet 4 of 5

VERT SCALE 1: 100

This sheet between 1650.0 and 2050.0

VERT DATUM AUSTRALIAN HEIGHT DATUM (AHD)



HYDROGRAPHIC SURVEYS PTY. LTD. ANN 21-114-568-759 21 LYNWOOD ST., BLAKEHURST, NSW, 2221. 11/39 DUKE ST., STUART PARK, NT, 0820 PH:61-2-95467536 FX:61-2-95464768 Mob:0412113921 PH:61-8-89422611 FX:61-8-89423611 DATE 24th DCTDBER, 2007. PROJECTION UNIVERSAL TRANSVERSE MERCATOR SPHEROID WORLD GEODETIC SYSTEM 1984. DATUM GDA94 - MGA94

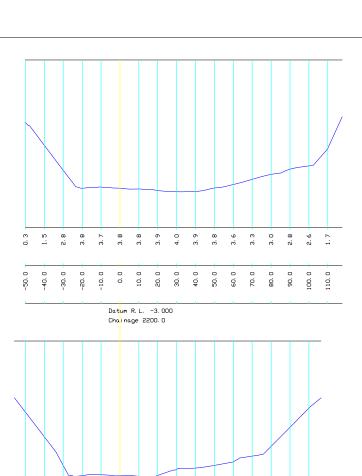
56. (CM 153°)

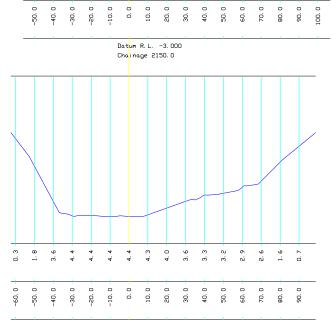
NEW SOUTH WALES MANNING RIVER PITT STREET MARITIME ASSESSMENT RIVER SURVEY MAUNSELL AUSTRALIA PTY LTD

DRAWING NO: H801-008SHEET 1 of 1.

REVISION NO CONTRACT NO:

BATHYMETRY &	RIVERBE	D CONTOURS
MANNIN	G RIVER – TA	REE



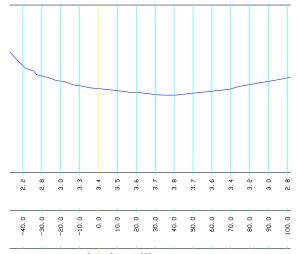


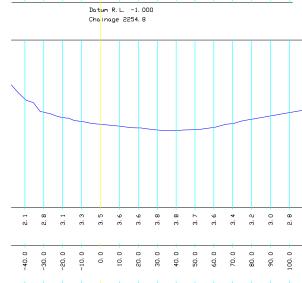
0 0 6 4 4 4 4 6 6 6 6 6 6 6 6 6 6

Datum R. L. -3,000 Chainage 2100.0

Sections of route 1 between 300.0 and 2254.8

Hz scale 1:1000 Vt scale 1:100





Datum R. L. -1.000 Chainage 2250.0

Sheet 5 of 5

This sheet between 2100.0 and 2254.8

1.	NAVIGATION SYSTEM TRIMBLE RTK/DIFFERENTIAL GPS  ORIGIN PM 79477 <450506. 199mE 6469859. 221mN 8. 289m AHD.	
2.	SDUNDINGS IN METRES & DECIMETRES REDUCED TO BELOW AUSTRALIAN HEIGHT DATUM (AHD). TIDAL DATA: OBSERVED TIDE POLE & RTKDGPS DATA.	
3.	CONTOURS AT 0.5m INTERVALS RELATIVE TO DATUM .	
4.		
5.		

BATHYMETRY & RIVERBED CONTOURS

MANNING RIVER - TAREE

	HYDROGRAPHIC SUR	VEYS PI	TY. LTD. ANN 21-114-569-759
	D ST., BLAKEHURST, NSW, 2221. 467536 FX:61-2-95464768 Mob:0412113921		ST., STUART PARK, NT, 0820. 61-8-89422611 FX:61-8-89423611
DATE	24th OCTOBER, 2007.	PROJECTION	UNIVERSAL TRANSVERSE MERCATOR
SURVEYOR	GVH	SPHEROID	WORLD GEODETIC SYSTEM 1984.
DRAWN	GWH	DATUM	GDA94 - MGA94
HOR SCALE	1: 1000	GRID	METRES
VERT SCALE	1: 100	ZONE	56. (CM 153*)
VERT DATUM	AUSTRALIAN HEIGHT DATUM (AHD)	2nd GRID	

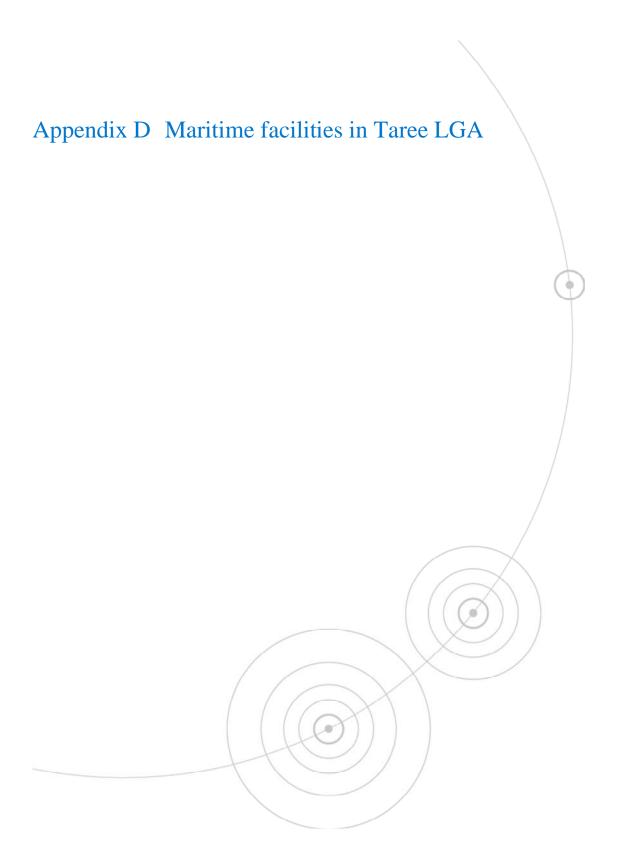
NEW SOUTH WALES

MANNING RIVER
PITT STREET MARITIME ASSESSMENT
RIVER SURVEY
FOR

DRAWING ND:  $\frac{H801-009}{\text{SHEET} \quad \text{1} \quad \text{of} \quad \text{1.} }$  REVISION No.

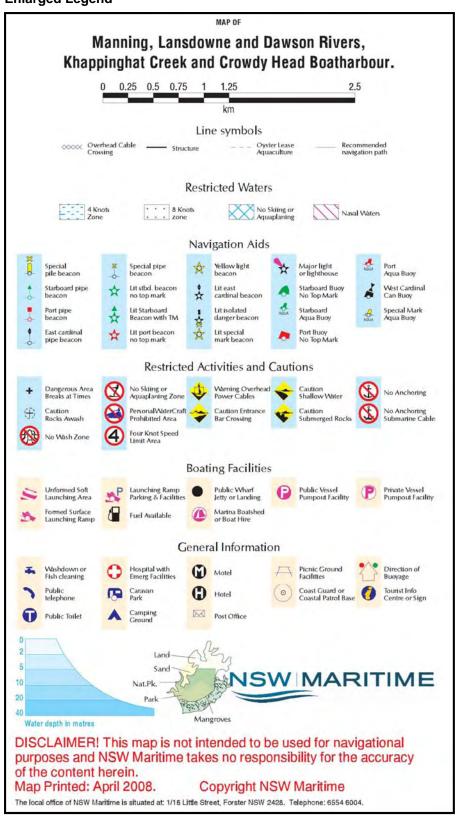
CONTRACT NO:

MAUNSELL AUSTRALIA PTY LTD



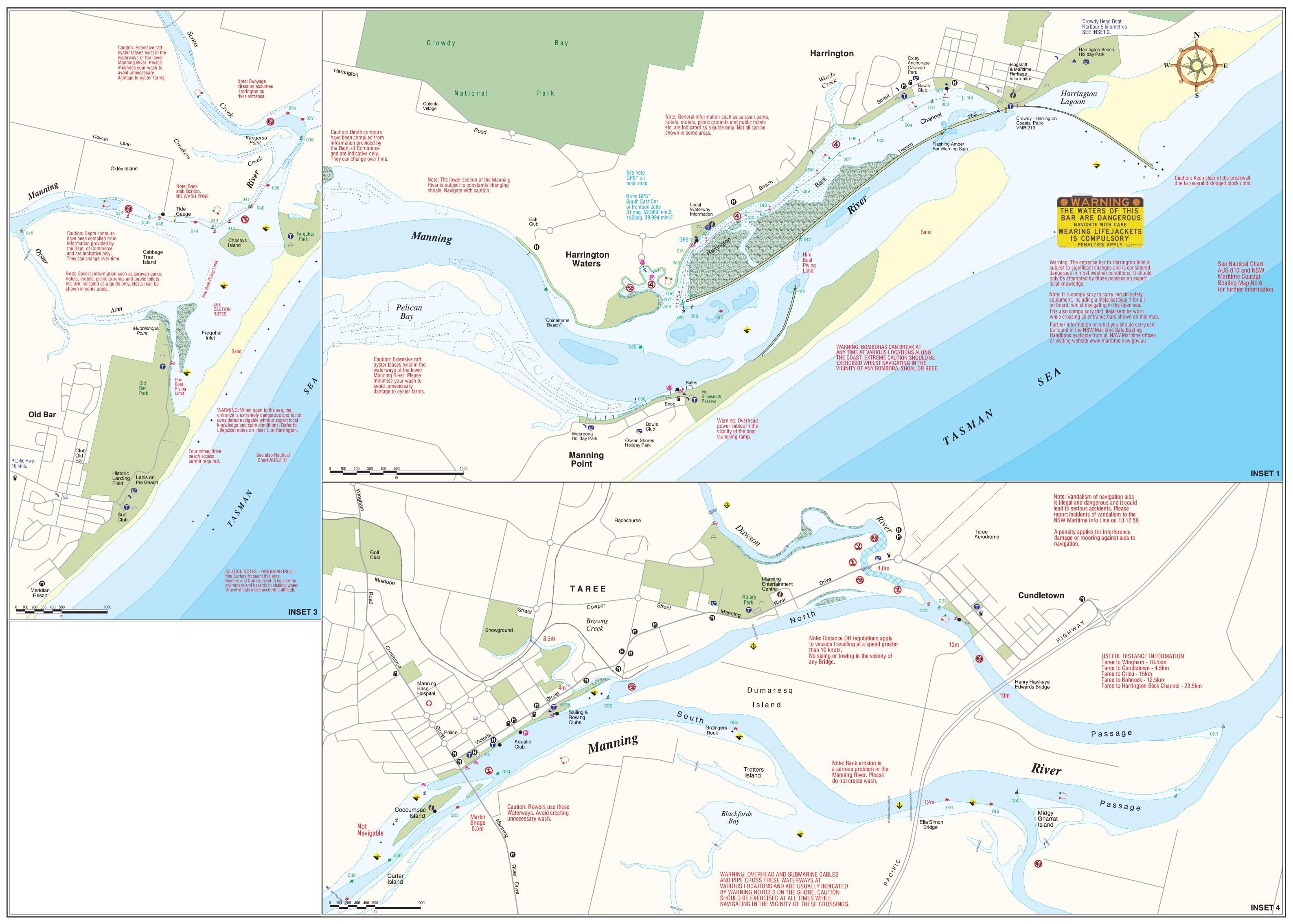
### Appendix D Maritime Facilities in Taree LGA

#### **Enlarged Legend**

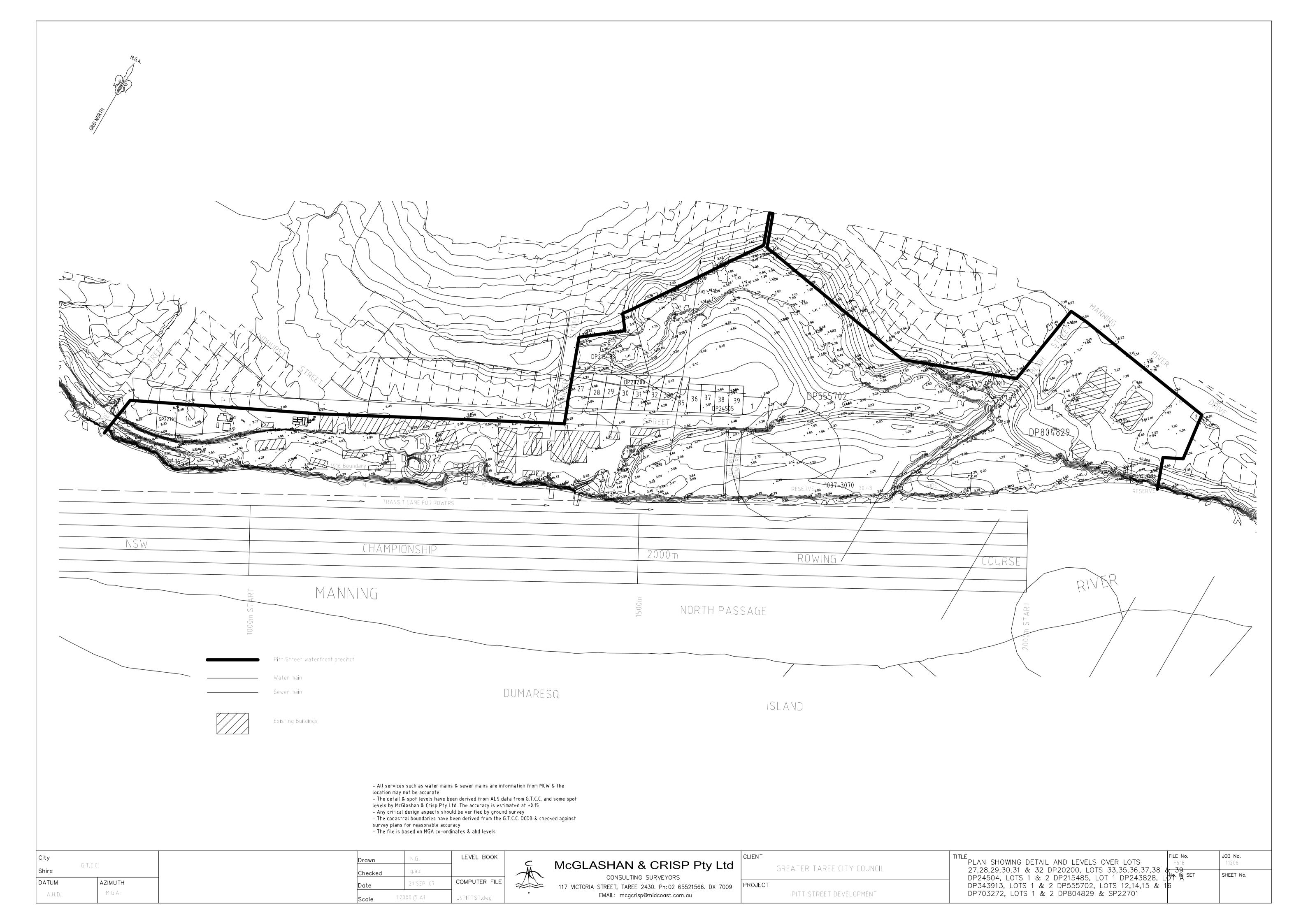


Map source: http://www.waterways.nsw.gov.au/maps.html





# Appendix E Pitt Street survey



# Appendix F 1978 flood images



PETERS WHARF AND PUMP STATION LOOKING UPSTREAM

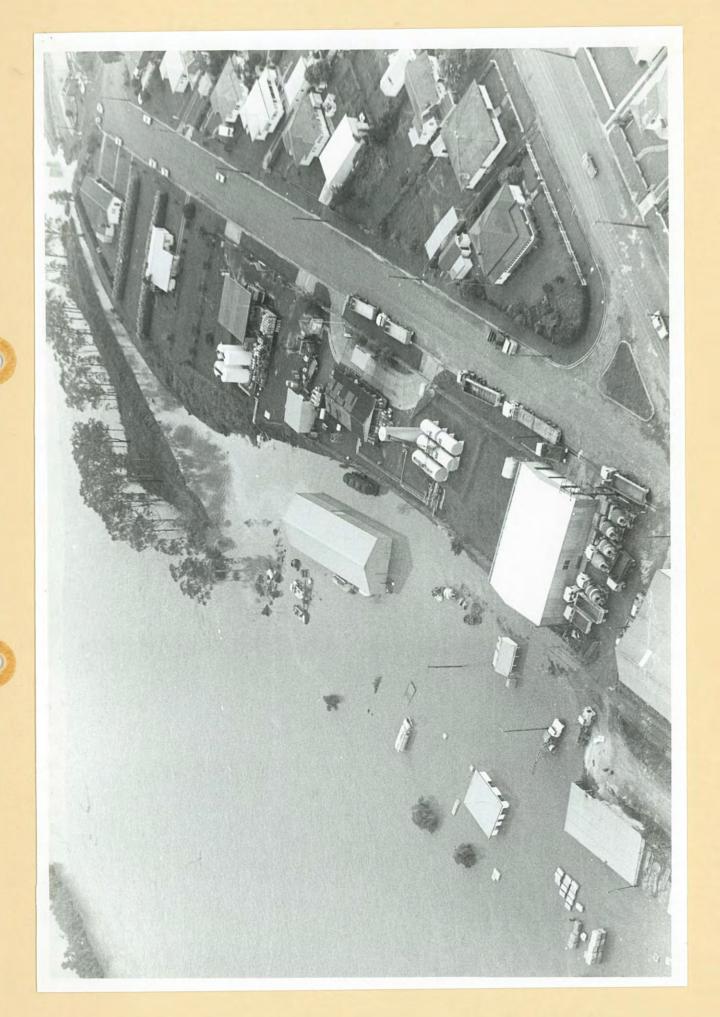


NORTHERN END OF PITT STREET



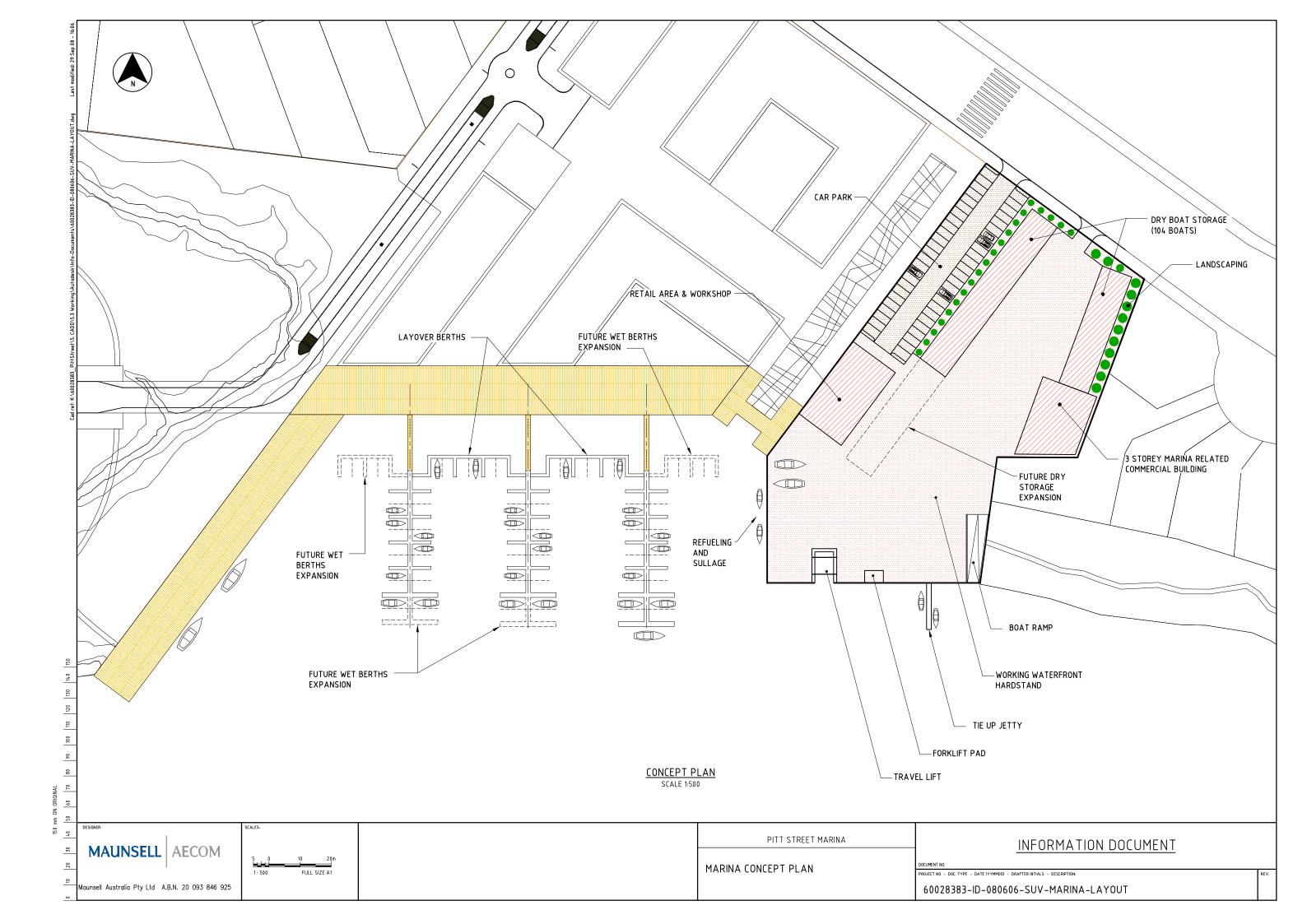


L.A. DRURY HAULAGE CONTRACTOR'S DEPOT & CALTEX DEPOT, PITT STREET.

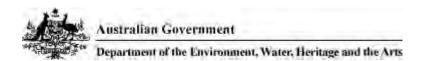


L.A. DRURY HAULAGE CONTRACTOR'S DEPOT & CALTEX DEPOT, PITT STREET.

# Appendix G Concept design plan



# Appendix H EPBC Act Search (September 2008)



#### **Protected Matters Search Tool**

You are here: Environment Home > EPBC Act > Search

26 September 2008 13:40

# **EPBC Act Protected Matters Report**

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Information on the coverage of this report and qualifications on data supporting this report are contained in the <u>caveat</u> at the end of the report.

You may wish to print this report for reference before moving to other pages or websites.

The Australian Natural Resources Atlas at <a href="http://www.environment.gov.au/atlas">http://www.environment.gov.au/atlas</a> may provide further environmental information relevant to your selected area. Information about the EPBC Act including significance guidelines, forms and application process details can be found at <a href="http://www.environment.gov.au/epbc/assessmentsapprovals/index.html">http://www.environment.gov.au/epbc/assessmentsapprovals/index.html</a>

Search Type: Point
Buffer: 10 km

Coordinates: -31.90076,152.48834

Report Contents: Summary

**Details** 

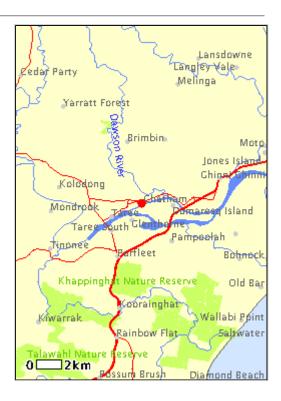
- Matters of NES
- Other matters protected by the

**EPBC** Act

Extra Information

Caveat

**Acknowledgments** 



This map may contain data which are © Commonwealth of Australia (Geoscience Australia) © 2007 MapData Sciences Pty Ltd, PSMA

## **Summary**

## **Matters of National Environmental Significance**

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail

part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the Administrative Guidelines on Significance - see

1

http://www.environment.gov.au/epbc/assessmentsapprovals/guidelines/index.html.

World Heritage Properties: None
National Heritage Places: None

Wetlands of International Significance:

(Ramsar Sites)

Commonwealth Marine Areas:NoneThreatened Ecological Communities:NoneThreatened Species:13Migratory Species:15

## Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place and the heritage values of a place on the Register of the National Estate. Information on the new heritage laws can be found at <a href="https://www.environment.gov.au/heritage/index.html">https://www.environment.gov.au/heritage/index.html</a>.

Please note that the current dataset on Commonwealth land is not complete. Further information on Commonwealth land would need to be obtained from relevant sources including Commonwealth agencies, local agencies, and land tenure maps.

A permit may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species. Information on EPBC Act permit requirements and application forms can be found at <a href="http://www.environment.gov.au/epbc/permits/index.html">http://www.environment.gov.au/epbc/permits/index.html</a>.

Commonwealth Lands:5Commonwealth Heritage Places:NonePlaces on the RNE:2Listed Marine Species:13Whales and Other Cetaceans:NoneCritical Habitats:NoneCommonwealth Reserves:None

## **Extra Information**

This part of the report provides information that may also be relevant to the area you have nominated.

4 **State and Territory Reserves:** 

Other Commonwealth Reserves: None

1 **Regional Forest Agreements:** 

#### **Details**

## **Matters of National Environmental Significance**

Wetlands of International Significance [ Dataset Information ] (Ramsar Sites)

**MYALL LAKES** Within same catchment as Ramsar

site

occur within area

Threatened Species [ Dataset Information ] Status Type of Presence

**Birds** 

Lathamus discolor Endangered Species or species habitat may

Swift Parrot occur within area

Vulnerable Species or species habitat may Rostratula australis

Australian Painted Snipe occur within area

Endangered Species or species habitat may Xanthomyza phrygia

Regent Honeyeater occur within area

Frogs

Vulnerable Species or species habitat likely to Litoria aurea

occur within area Green and Golden Bell Frog

Vulnerable Species or species habitat likely to Mixophyes balbus

Stuttering Frog, Southern Barred Frog (in occur within area

Victoria)

Mixophyes iteratus Endangered Species or species habitat likely to

Southern Barred Frog, Giant Barred Frog occur within area

**Mammals** 

Chalinolobus dwyeri Vulnerable Species or species habitat may

Large-eared Pied Bat, Large Pied Bat occur within area

Dasyurus maculatus maculatus (SE mainland Endangered Species or species habitat may

population) Spot-tailed Quoll, Spotted-tail Quoll, Tiger

Quoll (southeastern mainland population)

Potorous tridactylus tridactylus Vulnerable Species or species habitat may

Long-nosed Potoroo (SE mainland) occur within area

Pseudomys oralis Endangered Species or species habitat likely to

occur within area Hastings River Mouse

Pteropus poliocephalus Vulnerable Roosting known to occur within area

Grey-headed Flying-fox

**Plants** 

Cryptostylis hunteriana Vulnerable Species or species habitat may

Leafless Tongue-orchid occur within area

Endangered	Species or species habitat likely to occur within area
Status	Type of Presence
Migratory	Species or species habitat likely to occur within area
Migratory	Species or species habitat may occur within area
Migratory	Species or species habitat may occur within area
Migratory	Breeding may occur within area
Migratory	Breeding likely to occur within area
Migratory	Breeding likely to occur within area
Migratory	Breeding may occur within area
Migratory	Species or species habitat may occur within area
Migratory	Species or species habitat may occur within area
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Migratory	Species or species habitat may occur within area
Migratory	Species or species habitat may occur within area
Migratory	Species or species habitat may occur within area
Migratory	Species or species habitat may occur within area
EPBC A	ct
	Type of Presence
	Species or species habitat may occur within area
	Migratory

Great Egret, White Egret	overfly marine area	within area
Ardea ibis Cattle Egret	Listed - overfly marine area	Species or species habitat may occur within area
Gallinago hardwickii Latham's Snipe, Japanese Snipe	Listed - overfly marine area	Species or species habitat may occur within area
Haliaeetus leucogaster White-bellied Sea-Eagle	Listed	Species or species habitat likely to occur within area
Hirundapus caudacutus White-throated Needletail	Listed - overfly marine area	Species or species habitat may occur within area
<u>Lathamus discolor</u> Swift Parrot	Listed - overfly marine area	Species or species habitat may occur within area
Merops ornatus Rainbow Bee-eater	Listed - overfly marine area	Species or species habitat may occur within area
Monarcha melanopsis Black-faced Monarch	Listed - overfly marine area	Breeding may occur within area
Monarcha trivirgatus Spectacled Monarch	Listed - overfly marine area	Breeding likely to occur within area
Myiagra cyanoleuca Satin Flycatcher	Listed - overfly marine area	Breeding likely to occur within area
Rhipidura rufifrons Rufous Fantail	Listed - overfly marine area	Breeding may occur within area
Rostratula benghalensis s. lat. Painted Snipe	Listed - overfly marine area	Species or species habitat may occur within area
Commonwealth Lands [ Dataset Information ]		
Commonwealth Trading Bank of Australia		

Communications, Information Technology and the Arts - Australian Postal Corporation

Communications, Information Technology and the Arts - Telstra Corporation Limited

Defence

Defence - Defence Housing Authority

Places on the RNE [ Dataset Information ]

Note that not all Indigenous sites may be listed.

**Historic** 

Taree Courthouse NSW

**Natural** 

Coocumbac Island Nature Reserve NSW

#### Extra Information

State and Territory Reserves [ Dataset Information ]

Brimbin Nature Reserve, NSW

Coocumbac Island Nature Reserve, NSW

Khappinghat Nature Reserve, NSW

Talawahl Nature Reserve, NSW

Regional Forest Agreements [ Dataset Information ]

Note that all RFA areas including those still under consideration have been included.

Lower North East NSW RFA, New South Wales

#### Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the *Environment Protection and Biodiversity Conservation Act 1999*. It holds mapped locations of World Heritage and Register of National Estate properties, Wetlands of International Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

For species where the distributions are well known, maps are digitised from sources such as recovery plans and detailed habitat studies. Where appropriate, core breeding, foraging and roosting areas are indicated under "type of presence". For species whose distributions are less well known, point locations are collated from government wildlife authorities, museums, and non-government organisations; bioclimatic distribution models are generated and these validated by experts. In some cases, the distribution maps are based solely on expert knowledge.

Only selected species covered by the migratory and marine provisions of the Act have been

mapped.

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as <u>extinct or considered as vagrants</u>
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- non-threatened seabirds which have only been mapped for recorded breeding sites;
- seals which have only been mapped for breeding sites near the Australian continent.

Such breeding sites may be important for the protection of the Commonwealth Marine environment.

## **Acknowledgments**

This database has been compiled from a range of data sources. The Department acknowledges the following custodians who have contributed valuable data and advice:

- New South Wales National Parks and Wildlife Service
- Department of Sustainability and Environment, Victoria
- Department of Primary Industries, Water and Environment, Tasmania
- Department of Environment and Heritage, South Australia Planning SA
- Parks and Wildlife Commission of the Northern Territory
- Environmental Protection Agency, Queensland
- Birds Australia
- Australian Bird and Bat Banding Scheme
- Australian National Wildlife Collection
- · Natural history museums of Australia
- Queensland Herbarium
- National Herbarium of NSW
- Royal Botanic Gardens and National Herbarium of Victoria
- Tasmanian Herbarium
- State Herbarium of South Australia
- Northern Territory Herbarium
- Western Australian Herbarium
- Australian National Herbarium, Atherton and Canberra
- University of New England
- Other groups and individuals

ANUCIIM Version 1.8, Centre for Resource and Environmental Studies, Australian National University was used extensively for the production of draft maps of species distribution. Environment Australia is extremely grateful to the many organisations and individuals who provided

expert advice and information on numerous draft distributions.

Last updated: Monday, 21-Jul-2008 10:56:50 EST

Department of the Environment, Water, Heritage and the Arts

GPO Box 787 Canberra ACT 2601 Australia

Telephone: +61 (0)2 6274 1111

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Greater Taree City Council PO Box 482 Taree NSW 2430

Attention: Richard Pamplin - Manager Environmental and Strategic Planning

3 September 2009

Dear Richard

RE: Adequacy of the Pitt Street Waterfront Rezoning – Maritime Assessment report submitted in support of the Environmental Assessment of the Pitt Street, Taree Waterfront Precinct Concept Plan

The maritime assessment of the proposed marina at the Pitt Street Waterfront site (now known as 'Figtrees on the Manning') entitled 'Pitt Street Waterfront Rezoning – Maritime Assessment' (the Maritime Assessment) dated 2 October 2008 prepared by Maunsell Australia Pty Ltd (now AECOM Australia Pty Ltd) was originally prepared in support of the Figtrees on the Manning Taree, New South Wales – Local Area Plan / Master Plan (Suters Architects), dated June 2008, as shown in the Maritime Assessment.

As the author of the assessment, I have reviewed it in detail to determine:

- 1) Whether its scope and findings adequately address the issues presented by the Concept Plan (as the plan exists on the date of this letter, with the reference: Figtrees on the Manning Taree, New South Wales Local Area Plan / Master Plan, Final Draft, prepared by Suters Architects, received by AECOM via email dated 14 July 2009); and
- 2) Whether any findings in the assessment are out of date.

**Table 1** below outlines any additional issues identified as a result of my review of the assessment and how these issues have been, or may be addressed through the planning process.

Table 1 Additional issues/recommendations arising out of Concept Plan

Issue	Recommendation
General Comment	The Maritime Assessment does not consider non-maritime related matters.
DGR – General Requirements:  Item 3. A thorough site analysis including constraints mapping and description of the existing environment.  Item 7. An assessment of the potential impacts of the project and a draft Statement of Commitments, outlining environmental management, mitigation and monitoring measures to be implemented to minimise any potential impacts of the proposal.	Maritime Assessment provides strategic analysis of site in terms of maritime site issues only, including overview analysis of hydrological and geotechnical. Guidance is provided regarding further assessment required. Assessment is sufficient to demonstrate the site is generally suitable for such development, but further design is required to adequately demonstrate the impacts can be managed appropriately. It is recommended that development of the marina basin and berthing be subject to detailed

hydrodynamic modelling to determine the final basin design. Maritime Assessment does not provide DGR - Key Issues: Item 7.3 geotechnical assessment of the 'to be Determine whether contaminated soils are extracted' material in the marina basin. likely to be disturbed during the proposed AECOM understands that this issue has been works. If contaminated soils are likely to be addressed in the Coffey Geotechnical Report disturbed, the EA should detail the measures prepared as part of the rezoning application. to be adopted to protect human health and the environment and, if necessary, remediate or dispose of the contaminated material. Maritime Assessment does not address these DGR - Key Issues: Item 5.5 matters. Protocols exist for effective Identify strategies for the management of management of these matters, which could be sewerage (sic) waste from vessels and other applied to the proposed marina. Typically, sections of the facility, including: these elements are determined by operator as Pump out facilities and holding tanks; part of subsequent design stage and would be Connections to sewerage assessed as part of the more detailed Project systems operated by MidCoast Water, or options Application. for waste water treatment, including examination of re-use options: Spill management and containment; and Management of privately owned vessels at the marina. Flood studies for Manning River have been DGR - Key Issues: Item 7.1 completed by others. The wave climate at the Address coastal hazards and the provision of site and climate change predictions have been the Coastline Management Manual. addressed. Other issues indicated in the particular, consider impacts associated with Coastline Management Manual are not wave and wind action, coastal erosion, sea applicable to this site. level rise, and more frequent and intense storms. No assessment of ASS has been made. The DGR - Key Issues: Item 7.4 Maritime Assessment, based on available Identify presence and extent of acid sulphate information, identifies ASS as an important soils on the site and, where relevant, issue to be addressed. appropriate mitigation measures. Identify the AECOM understands an ASS assessment is need for an Acid Sulfate Management Plan provided in the Coffey ASS report and we (prepared in accordance with ASSMAC understand recommendations are included Guidelines). within the Concept Plan Application Statement of Commitments. The Maritime Assessment identifies that the DGR - Key Issues: Item 7.5 marina site may be shallowly underlain by Provide a detailed assessment of any bedrock. AECOM understands that geotechnical limitations that may occur on the geotechnical issues for the marina site and, if necessary, appropriate design development have been addressed in the considerations addressing the limitations. Coffey Geotechnical Report prepared as part of the rezoning application. A flood study for the site has been prepared by DGR - Key Issues: Item 7.6 - 7.8 others and the flood risk for site has been Flooding quantified. The Maritime Assessment does not provide a flood assessment. The objective of the Maritime Assessment was DGR - Key Issues: Item 8.1 to address the suitability of the site for a Provide an assessment of the marina and its marina, based on existing known physical potential impacts. Undertake an analysis of constraints, along with justifying the size of the the need for the marina facilities and justify marina.

the suitability of the site for a marina

development. Address the cumulative impact Cumulative impacts of the marina are not on increased boating activities in the locality explicitly addressed. However, we note that including the provision of appropriate boating based on information presented in the Maritime infrastructure. Assessment, the marina and associated boat ramp/maintenance area would enhance the availability of boating facilities in the area to meet forecast demand. Hydrographic survey provided. Need for DGR - Key Issues: Item 8.2 dredging and maintenance at site is described Provide hydrographic survey and modelling in the Maritime Assessment. details, the need for dredging both on-site and Need for dredging in other parts of the Manning for access from other parts of the Manning River is not described in the Maritime River, impacts and on-going maintenance Assessment. issues. It is understood that principles of Crown land DGR - Key Issues: Item 8.3 management or land assessment provisions Address the principles of Crown lands are addressed elsewhere in the Environmental management under section 11 Crown Lands Assessment prepared as part of the Concept Act 1989 (NSW), and the land assessment Plan Application. provisions in Part 3 of that Act. Maritime Assessment demonstrates suitability of land for marina and related uses. Maritime Assessment provides economic DGR - Key Issues: Item 8.4 assessment that provides justification for the Provide an economic feasibility report, size of the marina and facilities as shown in the prepared by an appropriately qualified Maritime Assessment report. consultant, addressed the proposed marina The proposed 'working waterfront' area shown size. in the Local Area Plan / Master Plan is inconsistent with the recommendations of the Maritime Assessment. In particular: The landside area identified for use as a 'working waterfront' is of an insufficient size for boat repairs, dry storage of larger vessels, hardstand for boat manoeuvring, or associated maritime activities (administration, boat repair workshops, chandlery, marina retail and the like). Definition of mixed use (applies to building adjacent to 'working waterfront' area) does not appear to provide for dry storage building. The Local Area Plan / Master Plan does not depict the number of dry storage facilities recommended in the Maritime Assessment. AECOM is advised that the Master Plan has considered / adopted the general principles of the Maritime Assessment. However, specific consideration of dry storage facilities will be explored and confirmed when an operator is available and refines the commercial operations, which will occur at the Project Application stage. The recommendations contained in the Maritime Assessment report, with respect to facilities and viability of a marina at the subject site, remain valid. The Maritime Assessment does not address DGR - Key Issues: Item 8.5 these matters. Protocols exist for effective Identify any fuel or chemical storage areas to management of these matters, which could be be established on the site, and describe

applied to the proposed marina. Typically,

proposed measures to minimise the potential for leakage or the migration of pollutants into the soil/waters into or from the site. Discuss spill prevention, and protocols for fuel dispensing, and the development and implementation of a fuel avoidance plan.

these elements are determined by operator as part of subsequent design stage. AECOM understands that these matters will be addressed as part of the subsequent Project Application stage.

It is considered that, subject to matters outlined in the **Table 1** above, the scope, findings and conclusions in the assessment remain relevant and valid. While there may be minor matters which arise from the detailed development of the Concept Plan, no substantial changes have occurred which would warrant updating of the study. Where conditions / standards etc. have changed these will be addressed either through a Preferred Project Report (PPR) after exhibition of the Part 3A Concept Plan, or through the subsequent Project Application Process. Accordingly, it is considered that the attached assessment remains valid for the Concept Plan and is suitable in its current form for public exhibition.

Yours faithfully

Craig Niles

Associate Director - Environmental Management and Planning

craig.niles@aecom.com Mobile: +61 412 155 955 Direct Dial: +61 2 8295 5714 Direct Fax: +61 2 9262 5060

Owviter