



breakfast point residents group

November 30, 2010

Major Project Assessments
Dept of Planning
PO Box 39
SYDNEY 2001

Attn: Chris Ritchie

Dear Sir

MP 07-0006 – KENDALL BAY MARINA

Please find enclosed 2 copies of our submission opposing the Commercial Public Marina in Kendall Bay.

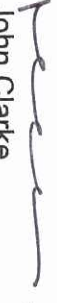
The document may contain errors and omissions because of the length of the Environmental Assessment (10 Volumes) submitted by the proponent, Breakfast Point Pty Ltd, and the very short time given for the lodging of objections. As a result, Breakfast Point Residents Group Inc reserves the right to make amendments and additions or deletions to its submission in accordance with advice provided by you at the public meeting held at the Massey Park Golf Club on Monday 1st November.

We would like to take this opportunity to register our concern at the lack of response from both the Minister for Planning and his Department to those who sought to have an extension of time to lodge. At no point did either the Minister or his Department acknowledge the requests for an extension OR advise those who made a request of the outcome of deliberations.

We have also been advised by the local member, Angela D'Amore, that a PAC panel will be hearing submissions on the application and making a report to the Minister. Again, there has been no advice provided on the timing, location or nature of the hearings despite verbal assurances to the contrary.

In all respects we would appreciate if you could acknowledge this submission and advise details of the proposed hearings.

Yours faithfully


John Clarke
Secretary

PO Box 3089
North Strathfield NSW 2137

Breakfast Point Residents Group Inc
www.bpresidents.com.au

OPPOSING SUBMISSION



Kendall Bay looking towards the area to be obscured by the proposed marina.

**OPPOSING SUBMISSION LODGED BY THE BREAKFAST POINT RESIDENTS GROUP INC. TO MP07-0006
November 2010**

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STATEMENT OF POSITION

THE BREAKFAST POINT RESIDENTS GROUP Inc IS OPPOSED TO THE PROPOSAL, BY BREAKFAST POINT PTY LTD FOR;

- REMEDIATION WORKS AND METHODOLOGY over part of Kendall Bay as set out in The Major Project Application MP 07-0006
- CONSTRUCTION OR OPERATION OF A PUBLIC MARINA in Kendall Bay as set out in The Major Project Application MP 07-0006
- CONSTRUCTION OR OPERATION OF ANY CAR PARKING FACILITIES associated with a public marina in Kendall Bay as set out in The Major Project Application MP 07-0006

THE BREAKFAST POINT RESIDENTS GROUP Inc. hereby formally lodges its objections to the Major Project Application MP 07-0006 on the grounds set out in the following chapters.

AN EXECUTIVE SUMMARY OF THIS SUBMISSION AND THE CONCLUSIONS REACHED ARE CONTAINED IN A SEPARATE VOLUME.

INTRODUCTION AND SCOPE



A composite view from the waters of Kendall Bay taken just east of the eastern most extremity of the proposed marina (25m this side of the buoy in the foreground) that clearly demonstrates the intense residential nature of the land within DP 270347 at Breakfast Point. It will be demonstrated in this submission that little regard has been taken of the impacts of the proposed remediation works or marina operations on the residents within Breakfast Point.

THE EXISTING ENVIRONMENT: "A SPECIAL PLACE"

Kendall Bay is a small bay on the Parramatta River. On its eastern arm it is bounded by Cabarita Wharf where (mostly) Rivercat style ferries pick up or drop off commuters going as far west as Parramatta and as far east as Circular Quay. Further south from here there is the western end of Cabarita Park and further south there is the residential development of Kendall Inlet made up of three storey apartments, a small sandy beach and a set of mangroves. Behind these mangroves and on the other side of a walkway there is the Admiralty strata that is part of the Breakfast Point residential development.

Continuing in a westerly direction one comes to the easterly part of the Waterfront Park that meets with the western side of the walkway. North of this part of the Waterfront Park there is a site for future three storey apartments. This site is currently an empty one. Further north from here, being on the western arm of the bay, there is a group of apartments called Hunters Wharf. This strata is made up of a front line of two and three story apartments and a second line just behind consisting of five story apartments. Next in line in a northerly direction there are eight houses and next to the most northerly of these houses is the dilapidated AGL Power House. Onwards from the Power House there is a mowed area and across from the walkway running along side of it is the geographical Breakfast Point.

The geographical Breakfast Point is of historical significance as the place where Captain John Hunter anchored the Sirius and had breakfast insight of a number of members of the Wangal people, met with them, left them some trinkets and a fire for them to cook mussels with and continued on with his exploration;

"According to historical records, the suburb name is derived from the first contact between Europeans and the traditional owners of the land, the Wangal Clan. The encounter took place on 5th of February, 1788 during Captain John Hunter's exploration of the Parramatta, while Hunter was having breakfast William Bradley, First Lieutenant on board HMS Sirius, recorded the following entry in the log:

We landed to cook breakfast on the opposite shore to them (Breakfast Pt.). We made signs to them to come over and waved green boughs. Soon after which 7 of them came over in 2 canoes and landed near our boats. They left their spears in the canoes and came to us. We tied beads etc. about them and left them our fire to dress their muscles (sic) which they went about as soon as our boats put off."

In the words of the proponent,

"When the First Fleet arrived in Sydney in 1788, Captain John Hunter set about charting the harbour. His records show that early on the fifth day he sailed west up to what is now the Parramatta River. After about 10 kilometers (sic) he put ashore to make tea and have refreshments. He made his first charting at this spot and so named it — Breakfast Point."

Kendall Bay itself is not a large bay, but it is a pleasant and mostly a calm body of water unobstructed by any object other than a single navigation buoy (Attachment 8.0). It is a pleasant place to look at and enjoy and is accessible to the general public and nearby residents who walk along the foreshore walkway that runs all around the bay or from the nearby Waterside Park or Cabarita Park. The pleasant views are also enjoyed from the privately owned Country Club and various adjacent apartments and homes. Such a scenic view makes the bay one of the few remaining "clear water" bays in Sydney Harbour. With so few "clear water" bays in the Harbour the aim should be to protect it so that there will be some sense of balance and equity between competing Harbour users. There is neither sense, balance nor equity in boat owners having the use of all the bays in the Harbour while users of "clear water" bays miss out. This is the ontological question.

A good place to start for an answer to this question is with Attachment 9.1 to 9.9 which is a series of Google Earth pictures. The first picture in the series is one taken in the Parramatta River from Meadowbank (there is no use going further west because of the narrowness and shallowness of the river) to the Harbour Bridge. The remaining pictures are close ups of the same stretch of the river but showing the bays and the boats moored in them.

On perusing these pictures the first thing that one sees is that there are boats moored all over the river. In some cases they are (not even in bays but) parallel to stretches of land e.g., at Henley's point and, west of Abbotsford and west of Birchgrove to mention but a few instances. Another thing one notices is that some bays have more than one marina, for example, Hen and Chicken Bay has two fixed berth marinas as well as swing moorings marinas. Some marinas are sparsely used while some are heavily used suggesting poor management and allocation. This is an aspect that should be investigated before any consideration is given to any new marina proposal. However, in so far as the point made in the previous paragraph is concerned the only truly "clear water" bay west of Meadowbank is Kendall Bay. Majors Bay is mostly empty but there are some moorings on the eastern side of the entrance and so does Yaralla Bay next to it. It is conceded that these two bays, with Brays Bay further west, are mostly empty one reason for this is clear from a close look at the different water colour – they are too shallow and useless without heavy dredging. Some of the bigger bays do have smaller bays that are empty of boats but these are too small for practical purposes, e.g., France Bay and Exile Bay, the bay east of Russell Lea (Half Moon Bay) and an even smaller one north east of Russell Lea (Sister Bay). Dobroyd Point and Rodd Point together would make a reasonable sized bay but the picture makes it problems fairly obvious.

Prior to 2002, when the City of Canada Bay council approved a Master Plan, for a residential development, the site now known as Breakfast Point had a life as the AGL gasworks. As part of the AGL works there was a large wharf where ship berthed to unload coal. This wharf was removed in about 2005 by order of the Waterways Authority. It has never been replaced. In its present form as a residential development Breakfast Point would be unrecognisable from its former industrial smelly self.

The developer of the Breakfast Point residential site is the current applicant for the commercial marina so that it should come as a surprise that, in its guise as a residential developer, the applicant waxed lyrical about,

"The ultimate harbourfront (sic) lifestyle created by Rose" (Attachment 10 & 63) .

The evolution of the AGL site, from an industrial to a residential one, is mirrored by a similar residential development in Kendall Inlet from a previous existence as a paint factory. Clearly, the nature of the land around the bay has undergone a profound change which, it is submitted, should not be disturbed by a reversion back into commercialism.

This short piece of historical and developmental history points to an obvious and significant change in the character and the style of the surrounding bay area and of Kendall Bay itself. A visitor from the days when Kendall Bay was surrounded by gasworks on one side, a paint factory on the other and a huge old timber wharf in the middle, would not recognise the place with the new, modern houses and a "clear water" bay. It would be a social, historical, geographical and environmental tragedy to see this bay spoiled by a commercial marina.

The applicant itself should recognise the irony in creating a fine residential development and accompanying life style it sold to the residents and to now set about to diminish, if not destroy it, by constructing a commercial marina next to it and making use the development for its own use at a cost to them. This might just explain why its promotional literature makes no reference to a marina. Let's not forget that the proponent had a number of opportunities

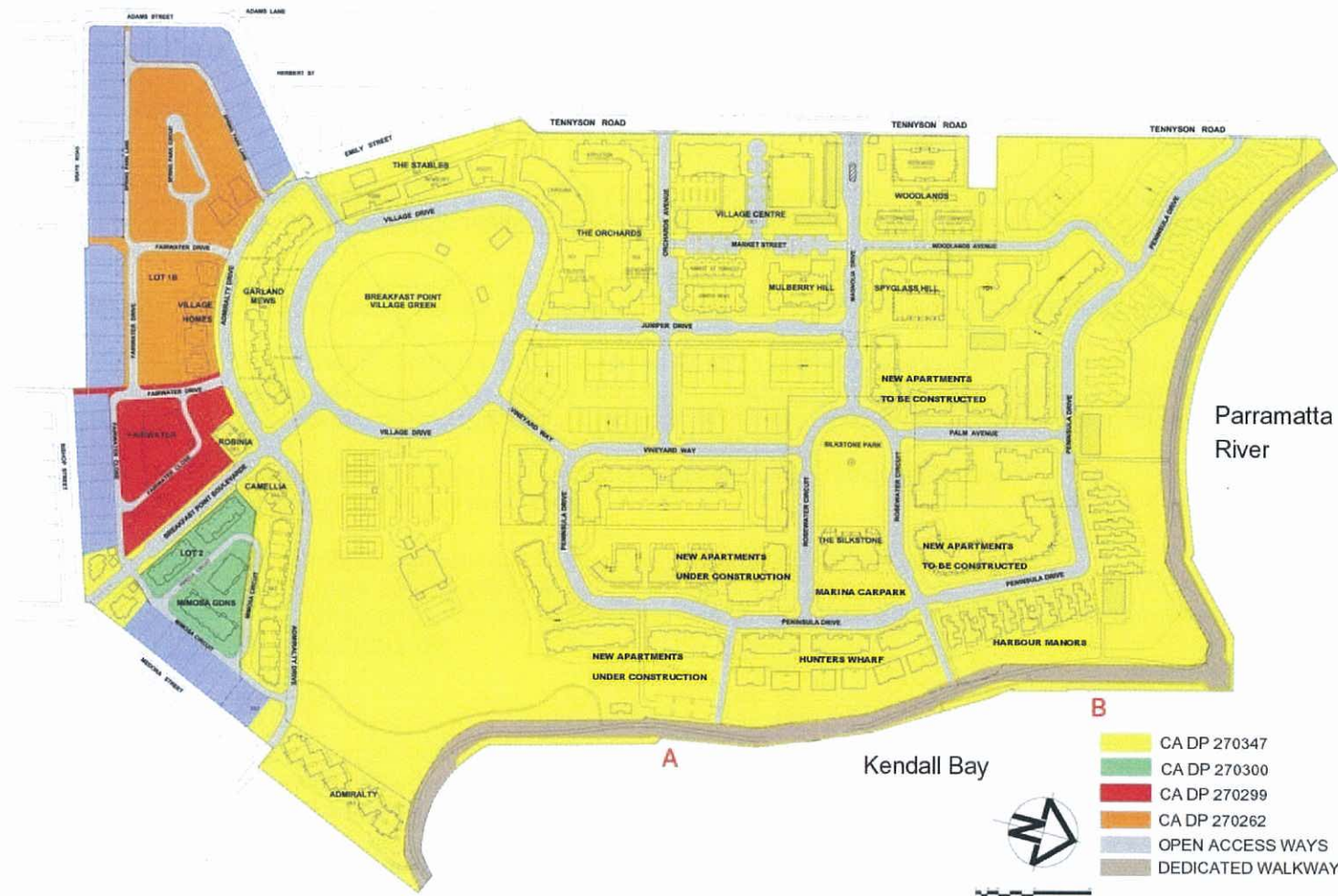
to promote the marina to potential residents but did not do so. One such opportunity would have been on the on the flip side of Attachment 10 which is a map of the site (Attachment 11 and see also 11.1). It does not show any outline of a proposed commercial marina, or make any mention of it. Neither does Attachment 12, (and for that matter neither does Attachment 13.0, 13.1 & 14) which carries a schedule headed,

"Timeline (sic) and Staging"

going from 1995 to 2013. There is not one reference to a commercial marina or to an intention to lodge the application for one. A similar lack of candor, if not disclosure, is found in the applicant's web site for Breakfast Point. Perhaps the absence of disclosure is a reflection of what the developer thought would happen to sales of apartments in Breakfast Point once potential purchasers became aware that they would be responsible for the maintenance costs of walkways and access ways relied on by the developer to promote its separate commercial activities from which they did not derive any benefit but stood to lose rights, title and interest over their property. Take a good look at Attachment 11 because just above the "Timeline and Staging" there is the heading:

"Land Title" and the words "All roads and major open spaces are open access to general public 24/7."





All coloured areas in the plan above are within the area known as Breakfast Point. Within Breakfast Point all Land, Buildings, Parks, Ovals AND Open Access Ways (roads) marked in 'yellow' or 'grey' are within Community Association DP 270347. The proposed marina is located in Kendall Bay and extends 400m along the front of residences between point "A" and "B" and then 200 metres out in the bay. The dedicated public walkway is shown (brown) along the whole of the waterfront of Breakfast Point.

The purpose of this part of the document is to introduce the party making this submission, to consider some preliminary aspects of the Major Project Application (*the MPA*) and the NSW Maritime consent and then bring into play some statutory provisions which will impact on the assessment process.

INTRODUCING THE PARTY MAKING THE SUBMISSION

The site for the proposed Kendall Bay marina is an area of interest to the *Breakfast Point Residents Group Inc*, in its representative capacity;

- (i) for the residents of Breakfast Point within DP 270347, DP 270299, DP 270300 and DP 270262 and on behalf of;
- (ii) the general public including;

residents of Kendall Inlet,
residents of the surrounding area such as Glades Bay,
users of the Parramatta River in general,
rowers and similar users of the Parramatta River
walkers and cyclists

THE MAJOR PROJECT APPLICATION

By an application dated 18 April 2007 Breakfast Point Pty Ltd (the developer/proponent) lodged an *MPA* (Major Project Application) for a commercial marina described in Part 3 of the *MPA* as being at,

“19-21 Tennyson Road Breakfast Point 2137 City of Canada Bay.”

In Part 4 of the same application it is said to be sited,

“in Kendal (sic) Bay **adjacent** to Breakfast Point Residential Development” (emphasis added).

The site known as “19-21 Tennyson Road” is about a kilometre away (as the crow flies) from the bay in question and, in fact, it is on a busy road. The misdescription has been carried forward onto the Department of Planning (DoP) web site, its Director’s General Requirements and by NSW Maritime who has given “land owner’s consent” over busy 19-21 Tennyson Road. If this wasn’t so serious it would be funny.

Leaving aside, for the time being, questions of description it would appear that the more accurate description for the site of the proposed marina would be
“In Kendall Bay, attached to lot 55 of DP270347.”

Notwithstanding the misdescription NSW Maritime gave its consent on 3 July 2008. This approval was given on the basis of a drawing/plan that is different to the one lodged with *the MPA* on 18 April, 2007 even though, as on the original, it is identified as “SK15B” rather than as “Amended SK15B” or by some other appropriate description.

As just mentioned the consent from NSW Maritime was based on drawing SK15B and on two other plans that did not form part of the documents lodged with *the MPA* of 18 April, 2007 or, to be more precise, that are not displayed as part of *the MAP* on the DoP web site. This is a worry. What happened to governance and transparency? What other documents, not on the DoP web site, were submitted to NSW Maritime or to DoP or both that have not been disclosed?

Governance questions aside there is need for greater precision in identifying the proposed site. It should be identified as per the description given in Part 4 of *the MAP* (together with its own misdescriptions),

“in Kendal (sic) Bay **adjacent** to Breakfast Point Residential Development” (emphasis added).

Drawing SK15B depicts a marina *mostly* adjacent to the Breakfast Point residential development¹ but also on part of the development itself and shows the proposed marina as making use of facilities, the ownership of which is in the hands of the Community Association DP No 270347 (*the Community Association*)² and not the applicant to *the MPA*. More on this later³.

Precision is imperative and the reason is obvious. A decision needs to be made on the correct facts. The relevant parties and interested persons must know exactly what case to meet. Imprecision can mislead and deceive and in the process misdirect the attention from the real

The assessor needs to be clear that the marina will directly use and impact on the private property, and not just NSW Maritime property, of individuals who are not party to the application so that the marina structure will,

- (i) **make use of private property as distinction from public property to use as a base from which to construct the marina on,**
- (ii) **encroach⁴ on Community Association property,**

the marina users will make use of private property to get onto and off the marina and

- (iv) **the marina, being a commercial undertaking, will impose financial and non financial costs on private property and individuals not a party to the application.**

1 This site was commonly known as Mortlake when it was the AGL Gasworks. It is now identified as a strategic site under the *Harbour REP*. See *Sheet 23*.

2 It's going to be tedious but the words 'community association' are going to appear constantly instead of simply referring to 'community'. The reason for this is to distinguish the 'community association property/parcel' from the wider "community."

3 Of course this may not be a misdescription at all but something else!

4 For the purpose of clarity if the proponent asserts that it has an easement to encroach (by putting part of the marina structure onto the community association parcel) this would be incorrect. The elements of an easement have to (all) be present at the time when the easement is supposed to have been created. In this instance no land in Kendall Bay was sufficiently identified –if at all–(either as a servient or dominant tenement) to be capable of being an element in an easement. Therefore, no easement for encroachment exists in so far as it touches on land in Kendall Bay.

Relevant statutory provisions

There are a number of statutory provisions that provide the context within which this submissions needs to be considered and the assessment process undertaken. The first to be noted are the Director's General Requirements pursuant to *the EP&A A s 75F issued in an amended form* on 14.01.2008 and some of these requirements will be explored in the chapter dealing with statutory instruments.

Interested Persons

Reference has already been made to the Community Association so it remains to establish its legal status. It is unnecessary to go into great detail but it suffices to say that the Community Association is a corporation constituted by force of the *Community Land Development Act 1989 s 25*⁵. The purpose of this Act is set out in the preamble as being,

"to facilitate the subdivision and development of land with *shared property*" (italics added)

The companion legislation to the *Community Land Development Act* is the *Community Land Management Act 1989 (the CLMA)*. *The CLMA s 5* sets out its management role and its membership⁶ and by *Schedule 1 cl 2* gives its management functions in the following terms,

"2 Management and maintenance of property

An association must control and manage its open access ways and private access ways, *and all other parts of its association property*, and must do so for the benefit of its members.

- (2) Subclause (1) does not authorise any action that would be inconsistent with:
- (a) an Act in so far as, under section 116, it applies to an access way, or
- (b) a function in so far as, under that section, it may be exercised on, or in relation to, an access way.

5 The section provided, inter alia,
"(1) The registration of a community plan operates to constitute a corporation with the corporation name "Community Association DP No. ...", the number to be inserted being that of the deposited plan registered as the community plan.
:
(4) The membership and the functions of the corporation are as stated in the Community Land Management Act 1989."

6 The section provides, inter alia,
(1)...
(2) The corporation has for its members:
(a) the proprietor of each community development lot in the community plan that has not become subject to a subsidiary scheme, and
(b) the precinct association constituted if such a development lot becomes subject to a precinct scheme, and
(c) the neighbourhood association constituted if such a development lot becomes subject to a neighbourhood scheme, and
(d) the strata corporation constituted if such a development lot becomes subject to a strata scheme."
(3)..."

An association must properly maintain, and keep in a good and serviceable state of repair, any part of its association property that is an access way.

(4) An association must inform the consent authority if any part of the association property is to be, or is, used for commercial purposes.

(5) In this clause: "**access way**" means an open access way or a private access way" (emphasis added).

Sub-clause (1) is of direct relevance to the application at hand. The application seeks to make use of open access ways and, by so doing it **explicitly** requires the consent of the Community Association. There is no doubt about this requirement. *The CLMA Sch 1 cl 2* imposes a duty on the community association to,

"control and manage...its association property, and must do so for the benefit of its members" (italics added)

It is not open to the proponent to treat community association property as a private fiefdom and it must have proper regard to the law, equity and the rights of the co-owners of the community/shared property. If you add to this the provisions of the *CLMA s 61* (the use and enjoyment of one lot must not unreasonably interfere with the use and enjoyment of another lot or obstruct the lawful use of community association property) and *s 110* (owners have mutual duties to each other in how they use and enjoy their lots so as not to cause any nuisance (by noise or otherwise) or hazard or, interfere with the use of access ways) it will be seen that the rights of lot owners is not unfettered; and as the developer is bound by these provisions it cannot take on itself to treat community association property as its own to do as it pleases. This issue will require more consideration when dealing with the rights of the "public" to use the access ways and this will be done later in the submission.

It is worth noting that the Community Association can impose restrictions on "users and uses" of Community Association property. Thus, the *CLMA s 17* provides,

"17 By-laws fixing details of development

(1) The by-laws for a scheme may relate to the control or preservation of the essence or theme of the development under the scheme by:

- (a) limiting occupancy under the scheme to persons of a particular description, or
- (b) fixing the architectural, building or landscaping styles to be permitted, or
- (c) limiting the kind of materials that may be used in buildings and other structures, or
- (d) requiring that specified association property be used only for particular purposes, or
- (e) **imposing any other kind of restriction (bold added).**

(2) If a by-law made in accordance with subsection (1) is identified in the by-laws as relating to the control and preservation of the essence or theme of the scheme to which it relates, it may be amended or revoked only by a unanimous resolution of the association, or the strata corporation, constituted under the scheme " .

These provisions can be used to prohibit,

- (i) berth owners from entering Community Association property,
- (ii) using any car/trailer parking facilities covered by the community scheme,
- (iii) require that any community association property, e.g., access ways, be used only for resident and guest parking only,

- (iv) impose any restriction that seems reasonably necessary to preserve the essence and theme of the development, and
- (v) it can erect gates on all entry points into community association parcel, or
- (vi) a boom gate at the marina,

because it would not be consistent with the essence or theme of a private residential development to allow strangers to use, and by their use to impose, costs and expenses on private individuals for the benefit of a stranger (the applicant).

A close reading of s 17(2) makes it clear that the Parliament intended to give the residents the power to “control and preserve” the essence or theme of the development scheme by taking the extraordinary step of authorising the making of by-laws that can be entrenched by requiring a unanimous resolution to amend or revoke. The power in this section prevails over any by-law that purports to impose a limit on the management power of the Community Association.⁷

On any reading of the present situation it is practically and legally impossible to describe the existing “tenure and management mechanism” required by the *Harbour REP cl 22 (c)* as capable and able to,

“safeguard public access to, and public use of, that land “.

The provisions in the *CLMA s 17(2)* are backed up by a number of by-laws that show that the “tenure” and “management” question is not in the developer’s hands to given or to control. If anything, the situation is one in which it is up to the Community Association alone (or in conjunction with the Council -which also opposes the marina) to determine. This is made clear by reference to *by-laws 74 and 91*.

By-law 74 gives the general power to the Community Association to,
“make and vary rules about the control, management, operation, use and enjoyment of the Community Parcel⁸ and, in particular, Community Property and any other part of it, including Foreshore Lot any (sic) Community Facility (Rules)”

There is a special provision in *by-law 74.3* affecting the making or the variation of rules affecting the *Foreshore Lot and the Public Access Easement Site*. The provision is that the Council must give its consent to any variation. The current position taken by the Council is one that suggests that it will co-operate with any change that is deemed necessary to uphold the access rights for the benefit of local residents but not for marina users.

By-law 91 deals with the use of the *Foreshore Lot*. The “*principal use*” of this Lot is as a,
“foreshore park, recreation area, access trail and landscaped area for the use and enjoyment of the general public and for the general public to pass and repass on foot or by bicycle”.

⁷ This is because by-laws, being “subsidiary” provisions of limited application must give way to provisions in the primary enactment (*Community Land Management Act or Community Land Development Act*) or other law.

⁸ The reference to the community parcel is important because it signifies an intention to cover the entire development and not just the community property within the development. In other words the power extends over lot 55, which is in the name of the developer, and so will be the marina jetty which will encroach (for which see footnote 4) on Community Association property.

To "pass and repass on foot or by bicycle"⁹ is not the same thing as by rubbish collection trucks, or boat trailers, vehicles or other means of transport (motorised or otherwise) nor to use it as a means of transit to and from a marina¹⁰. In fact it would amount to,

- (i) a change in the means used to derive the benefit of the easement,
- (ii) a change in the use to which the easement was put,

a change in the nature of the easement from public use to public and private commercial use and a consequential change in, the character of the neighbourhood or in the material circumstances surrounding the easement.

Such changes can form the basis for an application to the Supreme Court to vary or extinguish the easement pursuant to *the Conveyancing Act* s 89. Like *by-law 74.3 by-law 91* can only be varied with the consent of the council.

The *Foreshore Lot* is leased by the City Of Canada Bay Council to the Community Association and subject to any contrary intention appearing therein, *by-law 74.3* applies to the foreshore lot and the council needs to give consent to any rules affecting its usage. However, since the council is against the marina, it would be expected that it would not object to any variation designed to stop the marina from going ahead. The thing about the lease over the foreshore lot is that it contains a couple of clauses that would seem to restrain the community association and give rights to the developer and the users of the marina, for example, *clause 2.1 (d)* prohibits the community association from using the land for any purpose other than, "d) access across the Land to and from any development or other thing on the river side of the Land, for all lawful purposes with or without vehicles; and..."

This provision is likely to be in constraint of trade and in breach of the *Trades Practices Act 1974* because, it is in restraint of trade since it is unnecessary for the fundamental purpose of the lease,¹¹ it interferes with the proper management of non lease property as required by the Community Land Management Act, It affects property not part of the lease, it takes away rights of the lessee for the benefit not of the lessor but of a person not privy to the lease.

This may also be an appropriate point to refer to clause 2.4 of the lease. This says,

"The Lessee must not place or allow to remain on the Premises or any land adjacent to or nearby the Premises any sign or obstruction that may derogate from or limit Public Access."

On one reading this would seem to remove the right of the community association to place a fence or barrier or sign prohibiting entry onto community property from a marina. However, for the reasons given in the previous paragraph this is also likely to be in breach of the *Trade Practices Act 1974*. This clause needs to be read down so that it only applies to signs and obstructions that would derogate from the use of the foreshore walkway as a walkway and, it is arguable, it has no application to any steps taken for other purposes, e.g., to stop the walkway from being used as a transit point to and

9 This description, "on foot or by bicycle" is used regularly in this submission so, to save on repetition, the words "on foot" are found in the easement over Pt lot 1 (being item 15 in the Schedule under s 88B); the words "by bicycle" is found in the lease over lot 501 which is the foreshore walkway; and as indicated in this paragraph the phrase "on foot or by bicycle" is found in the by-law. Thus, from hereon the phrase "on foot or by bicycle" is used as a shorthand reference to all of these reference sources.

10 This would follow from the High Court's decision in *Westfield Management Limited v Perpetual Trustee Company Limited* (2007) 239 ALR 75; 81 ALJR 1887; [2007] HCA 45 (3 October 2007).

11 See the lease clause 2.3 and what it has to say about "public access" (it limits it to the land (lot) in question).

from a marina. It is worth bearing in mind that a commercial marina is not a public enterprise but a private one that itself limits access to and use of the facilities to berth owners.

What these provisions mean is that, other than the residents and occupiers, no one else has the right to use a vehicle on the open access ways in the Community Association parcel. The extent of the rights of the residents and owners to control access to the Community Association parcel can be gauged from the Court of Appeal decision in *State of New South Wales v Koumdjiev*¹² where the court had to decide whether the; had a right to enter on common (strata) property to arrest a person who had earlier refused them entry onto the common property but were later allowed entry by another unit owner. In finding against the police on charges for false arrest and false imprisonment the Court of Appeal held that,

"...subject to the by-laws of a relevant strata scheme, if one unit holder in a strata title building gives a licence to an acquaintance to enter the common property entrance foyer to visit the unit owner's unit, that licence cannot be revoked by another unit holder, but a unit holder cannot give a licence, irrevocable by another unit holder, which is not reasonable and incidental to the right of the grantor to possession and use and enjoyment of the common property" (italics and bold added)."

Save for this exception, and any other provided for under the CLMA, the by-laws and the easement no other individual (who is not a resident/occupier) has a right to use a vehicle on the open access ways and can legally be directed off the Community Association parcel.

Another statutory provision to be considered in the assessment process is the *Harbour REP. By s 22 (c)* the assessment process has to take into account if the foreshore land¹³ is,

"not in public ownership, development should provide appropriate **tenure** and management mechanisms to safeguard public access to, and public use of, that land (emphasis added)."

While the foreshore lot is in public ownership it is subject to a lease for 299 years in favour of the Community Association. The period of the lease is so long as to amount to "freehold title" and without Community Association land owner's consent this requirement (and that in *Schedule 1 cl 1*) cannot be satisfied.

CONCLUDING REMARKS

This is not your typical marina application. The typical public commercial marina sits on water adjoining land in public ownership such as parks and public roads or where the applicant owns sufficient adjoining land with access to public roads to house all the operations associated with the marina. This fact alone should be sufficient to defeat the application.

Let there be no doubt, nor any misunderstanding, that a proposal purporting to give the right to one person to use another person(s) property without that persons(s) consent is a fundamentally flawed exercise of power with consequences for the State's system of property title that

12 [[2005]] 63 NSWLR 353; *Kuru v State of New South Wales* [2008] HCA 26 (12 June 2008)

13 Part of the foreshore land is Community Association property and part (the walkway) is owned by the City of Canada Bay Council.

cannot ever be justified for a commercial marina.

Reference has been to the lease from council concerning the foreshore walkway and its provisions. Underlining this approach was the premise that the lease was a valid instrument and the validity or otherwise of the provisions in it had to be assessed within this context and the framework provided by the general law and statutory provisions. The result of this exercise is contained in the preceding paragraphs. It is now time to consider the premise itself.

The Community Association DP 270347 is the combined result of the *Community Land Development Act s 25* and the *Community Land Management Act s 5*. The *Community Land Management Act s 5 (3)* is in the following terms;
"Section 50 (1) (d) of the Interpretation Act 1987 does not apply to a community association."

The *Interpretation Act s 50 (1) (d)*, in so far as is relevant, is in the following terms;

"(1) A statutory corporation:

:

(d) may, for the purpose of enabling it to exercise its functions, purchase, exchange, *take on lease*, hold, dispose of and otherwise deal with property, and

:

This section applies to a statutory corporation *in addition to*, and without limiting the effect of, *any provision of the Act by or under which the corporation is constituted*" (italics added).

The resulting effect of these provisions is that the "usual" capacity of a statutory corporation found in the *Interpretation Act s 50 (1) (d)* to "take a lease" is **not** available to a community association. This is reinforced by the *Interpretation Act s 50(4)* which applies in addition to other statutory provisions under which the corporation is constituted. An examination of the constituting legislation do not make provisions empowering a community association to take up a lease in the circumstances that the lease in question finds itself. In fact the relevant provisions seem to go out of their way to omit such power. Thus, the *Community Land Development Act s16*, relevantly restricts the community association power to,
"add to its association property by ...registering...a lease to it of land that *is not part of, but* is contiguous to, the community *parcel*..." (italics added).

It is to be noted that the section imposes two conditions. The first is that the lease property must "**not be part**" of the community **parcel** and the second condition is that the lease property must be "*contiguous*" with the community parcel. The conjunction "*but*" clearly intends that both conditions, though apparently inconsistent, must be satisfied. In the present circumstances the land to which the walkway lease applies *is part* of the community parcel hence it does not satisfy the first condition but it does satisfy the second condition by being contiguous to the community parcel (in fact, being a stratum, it is completely surrounded by the community parcel) but it clearly does not satisfy both and so it fails.¹⁴

The resulting event is that the taking of the lease by the Community Association was beyond power and it is void.

REQUIREMENT FOR MASTER PLAN

The community parcel is defined in the Community Land Management Act s 3 as "land the subject of a community scheme". Without doubt the walkway is surrounded by community scheme property- to wit, the seawall and Pt lot 1 and development lots and strata lots and neighborhood lots.

We raise a query about whether Regulation 41 of the Harbour REP, which provides that a development consent “**must not**” be granted over a strategic foreshore site unless there is a master plan for the site and the consent authority has taken the master plan into account. Kendall bay is not a strategic foreshore site. The proposed marina will be mostly adjacent to a strategic site (the old AGL site which is now Breakfast Point) and an encroaching part will be on the old AGL strategic site (drawing SK15B). However, the regulation is silent about developments that are partly on a strategic site and partly not on such a site. Accordingly, since the purpose of the regulation is to give special attention to strategic sites, a master plan is required in order not to defeat the regulation by piece meal and subsidiary developments of strategic sites.



ENVIRONMENTAL ASSESSMENT EXECUTIVE SUMMARY

RE: INNER WEST MARINA - VOLUME 1 – Reviews by John Clarke and Greg McGrath
PROJECT APPLICATION
Executive Summary

(Note: Page Reference column provides Page, Clause Number (if applicable) from report plus appropriate Page Location; e.g. page 10.6 = 60% down page 10)

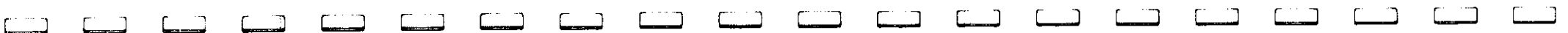
Page Reference	Report Statement	Comments	Director General's Requirement
1.8	Community consultation undertaken as part of the environmental assessment has identified the following key environmental planning issues as being associated with the proposal: • The marina should contribute to maintenance of landside community areas. • Existing contamination in Kendall Bay. • Public access to the marina. • Impacts on views.	No direct Community Consultation took place with local communities prior to the lodging of the Environmental Assessment (EA). Limited and misleading 'electronic consultation' is argued as having met the DG's requirements. A detailed argument supporting this statement is made in Chapter CONSULTATION Claims that 31 responses from a catchment of 339,000 people demonstrates just how ineffective and misleading the process was. Refer to Chapter "CONSULTATION" for additional comments. Since the Environmental Assessment went on exhibition the proponent (presumably) has advertised and carried out a series of 'WORKSHOPS'. These are claimed to be part of the CONSULTATION process. It should be pointed out here that the advertisements for the 'workshops' did not contain a single reference to the marina being in Kendall Bay not to the name of the proponent.	Consultation During the preparation of the Environmental Assessment, you should consult with the relevant local, State or Commonwealth government authorities, service providers, community groups or affected landowners. In particular you should consult with; City of Canada Bay Council;
2.1	Land Owners' Consents from NSW Maritime and Breakfast Point Pty. Ltd. have been obtained and accompany this Project Application ...	Access to the marina from nearby public roads and access between the marina and the marina car park is generally via privately owned land. Refer to Chapter 'LAND OWNERS' CONSENT'. Land Owners' Consent is required, but has not been obtained from; City of Canada Bay Community Association DP270347	KEY ISSUES Public Access;
2.1	The proposed Inner West Marina is a timely response	It will be shown that the Project does not demonstrate such demand. It incorrectly extrapolates demand figures to justify its position. Refer	The Environmental Assessment (EA) must include

	to the much sought after on-water vessel storage within Sydney Harbour.	to Chapter 'BERTH DEMAND'.	a detailed written and graphical description ... including the: need for the project; alternatives considered;
2.2	The Project Application demonstrates current and future demand for the proposed marina.	The Project does not demonstrate such demand. It incorrectly extrapolates demand figures to justify its position. Refer to Chapter 'BERTH DEMAND'.	Refer above DG
2.3	The Project is a positive contribution to the revitalisation of Kendall Bay	It will be demonstrated that rather than making a 'positive contribution' the activities of the proposed marina will alienate the public from using and enjoying the public walkway around the Bay. It will destroy the visual amenity. Refer to Chapter 'VISUAL IMPACT'. The proposed 'geotextile mat' will combine to add significant environmental, safety and hazard issues to Kendall Bay. These issues will be addressed in Chapters ; • CONTAMINATION AND REMEDIATION • AQUATIC FLORA, FAUNA AND AVIAN FAUNA • MARINA MANAGEMENT PLAN, NAVIGATION, SAFETY HAZARDS and RISKS It is argued that Kendall Bay needs to be remediated because of the levels of contaminants but to argue that a marina 'is a positive contribution to the revitalisation of Kendall Bay' defies logic. 'Revitalisation' requires proper remediation activities over the whole of the 200m foreshore area in Kendall Bay and The Parramatta River fronting Breakfast Point as set out in Remediation Order No.23022 Of June 2007.	
2.4	In addressing the environmental impacts of the proposed Project and the suitability of the site, the specialist reports have demonstrated that any environmental impacts of the	It will be demonstrated that the environmental impacts of the project cannot be suitably managed. These issues are addressed in Chapters; • CONTAMINATION AND REMEDIATION • AQUATIC FLORA, FAUNA AND AVIAN FAUNA • MARINA MANAGEMENT PLAN, NAVIGATION, SAFETY HAZARDS and RISKS	Contamination – including: a detailed assessment of the potential impacts on the disturbance of contaminated marine sediments. This shall take into account information from any previous investigations etc

	Project are minimal and can be suitably managed and mitigated.	Previous investigations by AGL (Jemena) have been largely ignored.	
2.5	In relation to the key issue of contaminated sediments, the proposed remediation approach ("geotextile blanket" over the bed of the proposed marina lease area) will ensure a significantly reduced level of contaminants will be disturbed.	It will be demonstrated that no such significantly reduced level of disturbance can be claimed. This issue will be addressed in Chapter; CONTAMINATION AND REMEDIATION	See above
2.6	The construction of the proposed marina will also reduce the wave energy reaching shallow water and subsequently reduce the disturbance of contaminated sediment, a situation which is not managed at present.	It will be demonstrated that no such claim can be made. This issue will be addressed in Chapter; CONTAMINATION AND REMEDIATION	See above
2.7	The site is easily accessible, has sufficient area and dimensions and is suitable to accommodate the Project.	The site is not 'easily accessible' to the public from the landside nor are its dimensions adequate to meet the needs of the project or to avoid alienation of nearby public lands. Refer to Chapters - ACCESS AND LANDOWNERS CONSENT - ALIENATION OF PUBLIC LAND - TRAFFIC AND PARKING Insufficient study has been undertaken to satisfy the DG's requirement that an assessment 'of the predicted impacts of this traffic on the safety and capacity of the surrounding road network' must be undertaken.	Traffic – including: details of the traffic volumes likely to be generated during construction and operation, and an assessment of the predicted impacts of this traffic on the safety and capacity of the surrounding road network. Details on site access, internal roadways and parking must also be provided;
2.8	The Project does not restrict the navigation channel for other waterway users or impact on the existing and future opportunities for public recreation.	It will be demonstrated that the project will severely impact on the navigation channels of Sydney Ferries (Rivercats) that use the immediately adjacent Cabarita Wharf. (Refer to Ferries letter included in EA.) It will be demonstrated that no account of the navigation channels for members of nearby rowing or sailing clubs has been undertaken	Navigation and safety – including: details of commuter ferry routes and an assessment of the impact of the construction and operation of the marina on these services; and an assessment of the impacts on

		(Refer to NSW Rowing letter included in EA) Refer to Chapters; MARINA MANAGEMENT PLAN, NAVIGATION, SAFETY AND RISKS	water based traffic and the existing users of the Parramatta River in the vicinity of the marina;
		This DG Requirement is not addressed in the proponent's Executive Summary. It will be demonstrated that the Visual Amenity has not been sufficiently considered nor described and that impacts are understated OR ignored. Refer to Chapter; VISUAL IMPACT	Visual Amenity – including: an assessment of the visual impact of the proposal (height, scale and lighting) on the local and regional area, particularly on: any adjoining land owners and land owners along the foreshore areas of Putney, Tennyson Point, Gladesville and Cabarita; water uses of Parramatta River; and significant vantage points in the public domain;
		This DG Requirement is not addressed in the proponent's Executive Summary. It will be demonstrated that noise during construction will exceed permissible levels and that no effective management processes are included to address the issue. Refer to Chapter; - CONTAMINATION AND REMEDIATION It will be demonstrated that operational noise from the marina and its traffic will have a detrimental impact on nearby residents, particularly at night. Refer to Chapter; - SOCIAL IMPACTS	Noise – including: construction, operation and traffic noise; and
		This DG Requirement is not addressed in the proponent's Executive Summary. The proponent has not undertaken any localised studies but has relied on some rudimentary sampling and desk studies. It will be demonstrated that these studies are significantly lacking and that Flora and Fauna will be adversely impacted to a degree not suggested by the proponent, Refer to Chapter; AQUATIC FLORA, FAUNA AND AVIAN FAUNA	Flora and Fauna – including: an assessment of any impacts on critical habitats, threatened species, populations or ecological communities and their habitats in the region.

STATUTORY CONTROLS AND DG REQUIREMENTS



**RE: INNER WEST MARINA - VOLUME 1 – Reviews by John Clarke and Greg McGrath
PROJECT APPLICATION**

Vol 1 Section 7 Statutory Controls

(Note: Page Reference column provides Page, Clause Number (if applicable) from report plus appropriate Page Location; e.g. page 10.6 = 60% down page 10)

Page Reference	Report Statement	Comments	Director General's Requirement
35.1	Section 7–Statutory Context of the EA has been prepared by Worley Parsons, the Project's environmental planning consultant, in accordance with the requirements of Part 3A of the Environmental Planning and Assessment Act, 1979 (the EP&A Act) and the Environmental Planning and Assessment Regulation, 2000 (the Regulation). The proposal has been assessed in the context of the relevant environmental planning instruments (EPIs) and the strategic planning direction for the locality and the region. The EPIs and related documents include the Deemed SEPP : Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (SREP 2005), the Sydney Harbour Foreshores and Waterways Area Development Control Plan	Statutory Consideration: The EP&A Act s 79C The objects of the EP&A Act The first piece of pertinent legislation to be considered is the EP&A Act s 5 which gives the objects of the EP&A Act as, (a) to encourage: (i) the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment, (ii) the promotion and co-ordination of the orderly and economic use and development of land., (iii) the protection, provision and co-ordination of communication and utility services, (iv) the provision of land for public purposes, (v) the provision and co-ordination of community services and facilities, and (vi) the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and (vii) ecologically sustainable development, and (viii) the provision and maintenance of affordable housing, and (b) to promote the sharing of the responsibility for environmental planning between the different levels of government in the State, and (c) to provide increased opportunity for public involvement and participation in environmental planning and assessment." Clause (a)(i) discloses an objective ,	The Environmental Assessment (EA) must include •; •; • consideration of any relevant statutory provisions including the consistency of the project with the objects of the Environmental Planning and Assessment Act 1979;

Page Reference	Report Statement	Comments	Director General's Requirement
	2005 (DCP 2005), Canada Bay Local Environmental Plan (LEP) 2008; the Breakfast Point Master Plan 2002, and Breakfast Point Concept Plan 2005.	"for the purpose of promoting the social and economic welfare of the community and a better environment" (emphasis added), by the proper management, development and conservation of natural and artificial resources." The Interpretation Act 1987 s 33 requires a statute to be given a purposive construction that promotes its objectives. In this context it is difficult to see how a commercial marina promotes social and economic welfare. In terms of social welfare a commercial marina benefits the few against the many so that there is no increase in the overall welfare of the community. In terms of promoting the economic welfare of the community again it is a case of the few (the proponent and the berths owners) benefiting at the expense of the many (the residents, the rowers and other users of the bay and the users of the walkways) who, as well, incur an ongoing economic burden in the shape of ongoing maintenance expenses. In terms of economic welfare these costs will have to be deducted from any claimed benefits when making the assessment. Clause (a) (ii)- (v), (viii) are not pertinent to the issue. This leaves clause (a) (vi) which deals with the protection of the environment. This will also be covered under another heading below but it suffices to say that the marina will not satisfy this objective simply because it will add to the existing pollution of the bay thus rendering the word "protection" meaningless. Note that the objective is not to improve the environment but to protect it (by keeping some things out of it?). One can make the same point about the clause's reference to the "protection" of animals and plants. For the purpose of clarity it is noted that the objective in clause (a)(vi) is not restricted to threatened species, populations, ecological communities and their habitats but is inclusive of them. Environmental impact: The "natural" and "built" environment from sight points around Kendall Bay.	

Page Reference	Report Statement	Comments	Director General's Requirement
		The EP&A Act s 79C(1) gives a set of mandatory considerations to be taken into account in the assessment process. One of these considerations is, “(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality” Firstly, it is noted that this is a wide criteria. The number of “impacts” suitable for consideration are only limited by the reference to “locality” and are otherwise unlimited.	

Environmental planning instruments

In addition to the matters already covered the *EP&A Act s 79C (a)* requires the assessment process to take into account the provisions of any applicable environmental planning instrument. A relevant planning instrument of this type is the *Sydney Regional Environmental Plan (Harbour REP)*.

Harbour REP : to recognise, protect, enhance and maintain

The *aims* of the *Harbour REP* is set out in *reg 2(1)(a)* and it is,

“To ensure that the catchment, foreshores, waterways and islands of Sydney Harbour are **recognised, protected, enhanced and maintained**:
as an outstanding natural asset, and
(ii) as a public asset of national and heritage significance, for existing and future generations” (emphasis added).

The emphasised words are a cumulative standard to be applied in the assessment process. They do not make grammatical sense as severable requirements. Is Kendall Bay an outstanding natural asset? The *Sydney Harbour Foreshores and Waterways Area Development Control Plan* (the *Harbour DCP*) applies to Kendall Bay and this regulation provides explicit recognition of Kendall Bay as something to be recognised, protected , enhanced and maintained.

In its present state Kendall Bay would satisfy *sub-reg (i)* because a “clear water” bay, by definition, emphasises the “natural” (not man made) aspect of the *sub-reg* while the fact that “clear water” bays are few and far in between emphasises the “outstanding” aspect of it. In this context it should not be without significance that the present “natural” state was achieved after (about) a 100 years as an industrial site so that for the bay to revert from its “natural” state to a commercial one would be inconsistent with the regulatory aim: *to recognise, protect and enhance*.

Because Kendall Bay is one of the last remaining “clear water” bays in Sydney Harbour its “natural” value is self-evident. Hyperbole aside, if Kendall Bay was a specie of flora or fauna existing in similar limited numbers it would not be an over statement to described it as being at the point of extinction and in need of preservation.

In its present state Kendall Bay is an unencumbered “public asset” (whether considered in its own right or as part of Sydney Harbour)¹⁵ but if a commercial marina is constructed on it a significant portion of the bay will be in private hands. It would be incongruous with the aims of the *Harbour REP* for it, on the one hand, to call for the recognition, protection, enhancement and maintenance of a natural asset and, on the other hand, to take a large portion of the same asset out of public hands and degrade its “natural” character by converting it into a commercial marina.

The words “natural and heritage” in clause (ii) unquestionably apply to Sydney Harbour and, by necessary implication, to Kendall Bay just as they applied to Rose Bay¹⁶ in *Addenbrooke Pty Ltd v Woollahra Municipal Council (the Rose Bay case)* where the court adopted the words used to describe Victoria Harbour in Hong Kong as,

“...undoubtedly a central part of Hong Kong’s identity. It is at the heart of the metropolis both physically and metaphorically...It is recognised not merely as a public asset but as a special one. It is something extraordinary. The recognition does not stop there. It is further acknowledged to be a natural heritage. *Natural* in that it was not created artificially by man but as part of nature. A *heritage* in that it is inherited as a legacy from previous generations and is to be transmitted from generation to generation. The harbour as a special public asset and natural heritage is declared to belong to Hong Kong people. This reinforces its character as a *public asset*”(at p 14).

From the self-evident significance of Sydney Harbour it follows that Kendall Bay, which the *Harbour REP* recognises as part of Sydney Harbour, has the status of a public asset of national and heritage significance. However, it is recognised that the *Harbour REP (and the Harbour DCP)* accept that parts of Sydney Harbour might be used for the construction of a marina after an assessment process has been undertaken. The importance of Sydney Harbour, as found in the *Rose Bay case* to exist, means that the starting point for any assessment of a marina application is, at first instance, one against a marina with the onus of proof being with the proponent to discharge.

Harbour REP: other aims

Other aims of the Harbour REP are;

- “(b) to ensure a healthy, sustainable environment on land and water,
- (c) to achieve a high quality and ecologically sustainable urban environment,”

A commercial marina in Kendall Bay will never satisfy *regulation 2(1)(b) and (c)*. The bay is already contaminated to an unhealthy level for humans and animals. A commercial marina will add to the pollutants and to the pollution level.

¹⁵ *Addenbrooke Pty Ltd v Woollahra Municipal Council* [2008] NSWLEC 1990.

¹⁶ Kendall Bay is part of the local government area of Canada Bay and it, like Rose Bay, are identified as having heritage items in the Parramatta River area.

(d) to ensure a prosperous working harbour and an effective transport corridor,

Sub-reg 1 (d) will not be satisfied because a marina does not constitute a “working” harbour (if anything it is pretty idle) and moreover, it will interfere with (reduce the operational area of) the existing transport corridor used by ferries, fishing boats and the occasional barge, large tourist and party ferries.

(e) to encourage a culturally rich and vibrant place for people,

Sub-reg 1(e) can only be satisfied if the bay retains its present character. In this regard it is noted that the sub-reg refers to “people” and not to “boats”.

(f) to ensure accessibility to and along Sydney Harbour and its foreshores,

Sub-reg 1(f) can only be fully satisfied if the current status of the bay is maintained. A commercial marina limits the use of the bay by taking a significant portion of its “clear water” space out of public access and places it in private hands. By doing this a commercial marina would reduce, by a significant amount, the area that would be available for recreation while simultaneously, increasing congestion and the potential for conflict between the users of the bay. In particular, reference should be made to the number of rowers that daily use the river. They occasionally reach a thousands in the one day and make safety and navigation important considerations.

(g) to ensure the protection, maintenance and rehabilitation of waterways, wetlands, riparian lands, remnant vegetation and ecological connectivity,

Sub-reg 1(g) is in the same category as *sub-reg 1(b)*. A commercial marina does nothing to protect, maintain and rehabilitate the bay. It does the opposite. A commercial marina does nothing to satisfy the “riparian” part of the *sub-reg* and may reasonably be expected to damage the mangroves and the vegetation existing along the southern and eastern side of Kendall Bay. Nor does a marina satisfy that part of the regulation calling for the “rehabilitation” of waterways. In fact the bay was rehabilitated from its industrial state into a “clear water” bay so that by introducing a commercial marina it will be a move inconsistent with its rehabilitation.

(h) to provide a consolidated, simplified and updated legislative framework for future planning.

Harbour REP and Planning principles for Harbour catchment area

The aims of the *Harbour REP* have just been discussed. It now remains to consider the planning principles to be applied. These distinguish between general principles (*reg 13*) and principles applicable to foreshores and waterways. Of the general principles the more pertinent ones are found in *reg 13 (a), (b), (c), (f) and (j)*.

In brief reg 13 (a) requires the development to *protect* and where practical to *improve* the hydrological, ecological and geomorphological processes on which the health of the catchment depends. It is hard to see how a commercial marina is going to protect or improve anything in the bay.

Regulation 13(b) requires the *natural assets* to be *maintained* and where feasible, *restored* for their scenic and cultural values and their biodiversity and geodiversity. It has been mentioned before that Kendall Bay is now a "clear water" bay and is in its natural state or as close to it as it has been possible to get it to and yet, the current proposal will see it revert to an "unnatural" state. It is impossible to see how this principle can be satisfied by the proposal but it is possible to find a tie between its present state and its pre-industrial state. For example, from a report written in 1890,

"Mr Ward's estate was close to Cabarita, and across the mouth of the little bay a fence was constructed, with an opening or gateway. By the closing of this opening, fish, prawns, etc. which were inside could not get out, and were easily caught when the tide ran out. Parties were made up in Sydney to go out to fish when a big haul was expected."¹⁷

It has been said,

"A township grew up around the gasworks, and in the 1920's an attractive park and swimming baths were situated on the river and weekends and school holidays found it crowded with people from surrounding areas. The pleasure ground has now disappeared and with it the laughter of those lost yesterdays at Mortlake"¹⁸.

Cabarita Park was dedicated as a public park in 1880¹⁹ and the way it was, at the time and for some time later, in an "undeveloped wilderness" state. With the building of the ferry wharf at Cabarita Point it came alive and became a favourite place from which to observe major sculling races held on the river. The establishment of the Sanders' boat shed in 1906 helped draw amateur rowers and fishermen to Cabarita and its popularity as a leisure spot increased after 1918 and the closure of adjoining Correys Gardens.²⁰

Amateur sculling has an important connection with the Parramatta River in general and Cabarita Park in particular. The Cabarita ferry wharf²¹ was the end point of the GPS Head of the River regatta between 1893 and 1935. It drew huge crowds. Later when professional sculling became popular, enormous crowds went to watch from the Park International Champions like Edward Trickett (in 1876) and William (Bill) Beach sculled there.²² The Sydney Rowing Club has been at Abbotsford since 1870 and daily and sometimes more than once per day has rowers going pass

17 _____ Coupe Sheena., op cit citation at p 113. The author does not identify Kendall Bay as the bay in question but there is no other bay in that vicinity that fits the description (the Ward estate first used the name Cabarita Point in its survey in 1856—see map at p 20) and, in any event, the culture of the surrounding area to Kendall Bay would serve to satisfy the requirement of the regulation.

18 _____ Pollon, Frances (ed)., The Book of Sydney Suburbs. 1988 Cornstalk Publishing Sydney at p 180.

19 Coupe S., op cit.

20 Coupe Shenea, op cit at pp 281, 282.

21 Not the current one but the one at Cabarita Point which can be viewed from the north west arm of Kendall Bay at the house north of Hunters Wharf and from the northern parts of Hunters Wharf.

22 Coupe, Sheena., op. cit., pp 264-266; Powell., Carol, op cit. p 11.

Kendall Bay. A monument to Beach is situated in Cabarita Park and will be obscured from site lines along the foreshore walkway near the house and the northern apartments of Hunters Wharf.²³

There are several features of cultural importance around Cabarita Point, for example, there is an Aboriginal midden, the William Beach Memorial, Cabarita Baths, Sanders Boat shed (now d'Albora Marina) and the Federation Pavilion. In the early days,

"Crowds were no novelty at Cabarita Park, and they gathered to watch the professional sculling,...the GPS rowing regattas ...[and] The sandy beaches on the river front and the hilly area behind provided excellent vantage points from which to view these aquatic events"²⁴ and,

"Correy's Pleasure Gardens had a water frontage to both Kendall Bay and Hen and Chicken Bay...on the Kendall Bay side, visitors could purchase fresh fruit, vegetables and cut flowers"²⁵.

The cultural connection is further strengthened by the vicinity of Kendall Bay to Glades Bay (right opposite). At Glades Bay there is evidence of Aboriginal open and sheltered occupation, open rock engravings, sheltered stencilled art site and axe grinding²⁶ and the views of Glades Bay from Kendall Bay will be significantly impacted upon as will the views from Glades Bay to Kendall Bay.

While the focus on Kendall Bay is important and unavoidable there is value in broadening the scope of attention to the general role of the Parramatta River itself. The river originally served the Aborigines as a source of food and possible pleasure for it is known that they built boats and fished the river and used its resources, such as shellfish (there is a midden at Cabarita Park)²⁷. Then, with the coming of white settlers, the river became the means by which the settlers went about searching for good agricultural land which they found at Rose Hill and surrounds and along the river bank, such as at Kissing Point. In its early history the river had a utilitarian character transporting agricultural produce, rocks and other resources to the growing City. In time farm houses gave way to suburban homes, agriculture to industry and eventually industry to services and the need to cater for passengers rather than goods and industrial needs. In fact, these days the River's major role has changed to a means of commuter travel to and from the City,

"The river highway was no more. Times had changed and the role of the river had changed with them. For some time its role was a negative one: it had become an important byway, something to be polluted, complained about or ignored. Eventually this situation also changed and a new, but this time positive, role was imposed on the Parramatta River."²⁸

23 _____ Blaxell G., The River Sydney Cove to Parramatta. Brush Farm Historical Society. Eastwood 2004. For a sample of current users see Attachment 65-67.

24 Blaxell G op cit at p 125.

25 Blaxell G., op cit at p 127

26 _____ Blaxell G., op cit. at p 138; Powell, Carol., A River Revived The Parramatta. NSW University Press. Kensington. 1987.

27 See generally, Blaxell G; Powell, C., and Coupe S.,

28 Powell. Carol., op cit at p 17

This evolution was brought about by the supplanting of industry by residential development. In the process one can see the neat connection between Kendall Bay now and its pre and early settlement form. A state which is incongruous with a commercial marina. This residential evolution may, in fact, have gone a bit too far and along the river one tends to find a wall of apartment blocks with little if any open space in between a process which a commercial marina would make more prominent by taking away valuable, natural scenic open waters. The river itself will benefit from this;

"The newly developed concern could not but benefit both the river itself and the people who might now learn to appreciate and enjoy this major resource. The Parramatta River was beginning to revive. There was still some pollution and there were still some ugly sites on its banks, but the signs of improvement are obvious. The parks on its banks had increased in number, the mangroves were visibly regenerating and local councils no longer suggested their removal. Dead fish were no longer found floating on the surface of the water and the offensive smells that had once plagued riverside residents do so no longer."²⁹

But this is not the end of the story. It remains to say that this bit of social cultural history identifies the Parramatta River and the area of Kendall Bay and its surrounds as one of recreation, rowing and spectator sport as well as family picnics and occasions for social engagement. An area for fishing, both by the Aborigines,³⁰ the colonists and the recreational fisherman of today who nightly gather at Cabarita Wharf. These characteristics have managed to survive, to some extent or another, to today despite the intrusion of the industrial period and now effect should be given to the principle *to protect, improve, maintain, restore and enhance*. To put in colloquial terms one might well hear the call to go "by the water"³¹ but not "by the commercial marina". The proposal is completely out of tune with the context of the direction that the locality is taking and with the direction that the proponent originally sold the residential development to the residents.

The next requirement (c) is for the assessment process to take into account the *cumulative environmental impact* of developments within the catchment area. Thus, the process must not consider the impact of this development in isolation but in its entire interdependency with other developments that have taken place in the catchment area. It has already been mentioned that Kendall Bay is one of a very few remaining clear water bays in Sydney Harbour so that the cumulative impact warns against any further intrusion of marinas in the catchment. As required by the *EP&A reg 2000 Sch 2 cl3* alternatives need to be considered eg., the better use of existing marinas, before a new one is constructed.

The principle embodied in *sub-reg (f)* is for developments that are visible from the waterways or foreshores is to *maintain, protect and enhance* the unique visual qualities of Sydney Harbour. The proposed development is visible from waterways (Parramatta River) and the foreshore of Kendall Bay. The proposal does not maintain, protect nor enhance the unique visual qualities of Sydney Harbour.³²

29 Powell. Carol., op cit at p 42. There is still some smell around!

30 _____ Blaxell G op cit writes (at p 139) that the Walumedegals clan occupied the site at Glades Bay. It may be reasonably be supposed that they may have also occupied the south side of the river.

31 The meaning of "Cabarita".

32 Even if the requirements were interpreted disjunctively) but instead seeks to change and diminish the unique visual qualities of the Harbour (for the visual qualities see *the Rose Bay Marina* case.

By sub-reg (j) the development is to protect and if practicable *rehabilitate* watercourses, wetlands, riparian corridors, remnant native vegetation and ecological connectivity within the catchment. It will do nothing to protect and rehabilitate native vegetation and ecological connectivity. Reference can be made to *Wetlands Protection Area Map Sheet 2 and 3 Harbour REP* to note the breaks in the wetlands protection areas near Cabarita Wharf on the eastern shore of Kendall Bay and the southern most area of Kendall Bay. The marina will disrupt the connectivity even further. Reference is also made to the *Harbour DCP* and *Map 3* showing the ecological communities and landscape characters of the area around Kendall Bay. This currently shows terrestrial and aquatic ecological communities all around Kendall Bay and where the proposed marina is supposed to go. It is submitted that the marina will disrupt the connectivity existing for these communities. See also *Harbour REP Part 6*.

The Harbour REP and Foreshores and waterways principles

There are specific principles applicable to foreshores and waterways areas. These are set out in *regulation 14*. The more pertinent ones are *sub-reg (a), (d) and (e)*. In *sub-reg (a)* it is provided that the ,

“(a) development should *protect, maintain and enhance the natural assets* and unique environmental qualities of Sydney Harbour and its islands and foreshores,” (emphasis added)

This is similar to provisions in reg 13 (a) & (b) and the same submission as was made there is made here.

reg 14 (d) requires,

“development along the foreshore and waterways should *maintain, protect and enhance* the unique visual qualities of Sydney Harbour and its islands and foreshores,” (emphasis added)

The principle in *reg 14 (d)* is similar to the one in *reg 13 (f)* and the same submission applies.

Regulation 14 (e) is an unusual one. It looks at future demand. It says that the principle of planning within foreshores and waterways should,

“(e) adequate provision should be made for the *retention* of foreshore land to meet existing and future demand for working harbour uses,” (emphasis added).

It has already been pointed out that Kendall Bay is one of a very few remaining “clear water” bays in Sydney Harbour. So the question for the assessment is how can this principle be given effect to by using up a limited resource now? In other words, what is going to be left for future generations if they are all used up now? Bays do not grow on trees. What you see is what you get. If Kendall Bay is used for a commercial marina now there will not be any left for meet future generations.

The Harbour REP and heritage conservation principles

The heritage conservation principles that underpin the *Harbour REP* are found in *reg 15*. There are six of them directly applicable to Kendall Bay. These are *sub-reg (a), (d) and (e)*.

Sub-reg (a) requires,

“(a) Sydney Harbour and its islands and foreshores should be *recognised and protected* as places of exceptional heritage significance,” (emphasis added)

The heritage significance of the foreshore of Sydney Harbour has already been mentioned under *reg 2 (1)(a)*. It remains to be said that, for this as for all other matters for consideration, the onus of proof is with the proponent to discharge. It needs to show that the marina will recognise the exceptional heritage significance of Sydney Harbour (Kendall Bay) and that it protects it. It is submitted that the marina does not do anything of the kind. In fact it will undermine it.

In terms of *sub-cl (d)* the requirement is ,

“(d) the *natural, scenic, environmental and cultural* qualities of the Foreshores and Waterways Area should be *protected*.”
(emphasis added)

By its very nature a commercial marina will reduce the “natural” state of the foreshore by introducing a man made structure on the natural one in a way that displaces it, covers it, obstructs it, pollutes it and otherwise diminish or destroys its natural state. It does the same thing in terms of its scenic qualities and aesthetics. In terms of environmental qualities a marina will increase the pollutants in the bay, will disturb the existing pollutants and will endanger the mangroves, vegetation and bird life around the bay.

In terms of *cultural qualities* it can be said that society these days places a significant value on the natural environment and does not readily embrace a reversion back of natural resources to commercial ones particularly when the expected benefit is limited to a (very) few. Culturally, the vicinity of the area was always identified with personal and team recreational pursuits even during its time as an industrial site. So that it would be truly ironical if , having survived what industry had to throw at it for over 100 years, and after the surrounding area and Breakfast Point in particular, has been rehabilitated from an its industrial state and the bay is covered by a remediation order, this cultural memory is lost to a commercial marina. The residents who were drawn here by the proponent on the basis of the natural and scenic qualities of the bay should not now loose out to the changed and incongruous vision of the proponent. The change in the character of the locality has been noted by others,

“From 1788 until the third quarter of the twentieth century the river was also used ...as a waste disposal area and in the later years many parts of the river banks were filled with industrial sites. This usage eventually resulted in the pollution and uglyfying of the local environment...During the last ten years the degenerative process has virtually stopped and the Parramatta River has begun to revive. Today the river is potentially a resource of a different kind. It has a positive role to play in a world which has just become aware of the desirability of preserving its natural and non-built heritage. It has a positive role to play in a world in which leisure time is fast becoming an enforced, rather than a chosen, part of life. The Parramatta River’s beauty, contrasts and historic sites offer opportunities for enjoyment and learning to anyone willing to take them up.”³³

Sub-reg (e) gives the planning principle as,

“(e) significant fabric, settings, relics and *views* associated with the heritage significance of heritage items should be conserved,” (emphasis added)

Forming part of the *Harbour REP* is a *Heritage Map* and a *Heritage Map Key* for the heritage items on the Sydney Harbour and the Parramatta River. By this principle the views associated with these heritage items need to be protected. The significant word here is “associated”. It is unidirectional, thus it catches views to and from the heritage items. The *Heritage Map* shows a number of heritage items for which “views” are

negatively impacted by the proposed development. This is *Heritage Item 27, 28 and 48, 49 and 50*³⁴

- (i) item 27 Former Cabarita Wharf
- (ii) item 28 Sanders Marina
- (iii) item 48 Scots College Boat Shed.
- (iv) item 49 Sydney Grammar School Boat sheds
- (v) item 50 Former Gladesville Wharf.

The commercial marina will obstruct the views from these *Heritage Items* and, in turn, the views of this Heritage item from Hunters Wharf, the houses north of Hunters Wharf and the apartments south of Hunters Wharf as built and to be built. Accordingly, the proposed commercial marina will be inconsistent with this *sub-regulation*.

A reasonable summation of the impact of a commercial marina in Kendall Bay, would be that it has an overall negative impact and it does not satisfy the aims and principles of the *Harbour REP*.

34 Views from item 27, 28 and 50 will be impacted from the second level of the two level apartments at Hunters Wharf and from the second levels from the houses north of Hunters Wharf.

BERTH DEMAND

RE: KENDALL BAY MARINA MARINA - VOLUME 8 – Reviews by Brian McDonald and Merrick Platter
PROJECT APPLICATION
Berth Demand

(Note: Page Reference column provides Page, Clause Number (if applicable) from report plus appropriate Page Location; e.g. page 10.6 = 60% down page 10)

Page Reference	Report Statement	Comments	Director General's Requirement
P3.6	No major Repair and Maintenance services will be offered on-site	Although not wanted at Kendall Bay this will nevertheless prove a disincentive to boat owners as lessees. Minor repairs will add to pollution in Kendall Bay.	The Environmental Assessment (EA) must include an executive summary; a detailed written and graphical description, including engineering and/or architectural plans, of the project including the: need for the project; alternatives considered;
P8 Table C	Occupancy rates for existing marinas are misleading	Commercial marinas carry large numbers of 'boats for sale' and 'boats for repairs'. These are not identified in the table but do inflate the stated Occupancy rates. Boat Brokers and Repairers are not planned and are not wanted at Kendall Bay marina. The absence of 'sales & repairs' helps to explain the lower Occupancy rates on existing Private marinas. The applicant should be made to re-submit Occupancy figures 'nett' of Brokers & Repairers leases	
P6.6	Management of West Sydney Commercial marinas state that demand is seasonal and is highest in Spring & Summer	This is when boats are moved from moorings to marinas for sales &/or repairs. It substantially inflates stated demand.	
P7 Table B	Moorings Waiting Lists	Over 78% of Applications are for East of Harbour Bridge indicating a very low desire for West Sydney storage. Demand for Southern Shore moorings is lowest due to the inadequate protection offered from weather into southern shore Bays.	

		Kendall Bay is severely affected by high winds from almost all directions due to its open position. This makes boat manoeuvres & navigation extremely difficult & dangerous. There is surely double counting as boat owners await mooring OR marina options. No reference is made to this likely double counting. Sydney Harbour is full of moored boats in a state of disrepair & disuse. They are loosely described as 'mooring minders' retained by selfish lessees. NSW Govt. & Waterways should address this issue to release dormant moorings to active boat owners.	
P16/7	Latent Demand calculations are based upon Boat Licenses numbers. P16 Latent Demand calculations "The summary of vessel registrations shows that for the 5-year period 2004 – 2009 the average annual growth for NSW was 2.67% pa whilst for the same period the average annual growth for the Sydney Harbour sector was a lower 1.17%pa. of registered vessels at June 2009 for the Sydney Harbour sector by applying the NSW average annual growth rate of 2.67% to the Sydney Harbour sector 2004 base of 16,198 vessels. Registered Vessels - Sydney Harbour sector - June 2004 16,198 Applying NSW 5-year growth 2004-2009 (13.33%) 2,159 Notional Registered Vessels – Sydney Harbour – June 2009 18,357 Actual Registered Vessels – Sydney Harbour – June 2009	No factual base is provided to support this relationship and the proponent has used projections based on demand figures. The claimed 'latent demand' is nowhere near the claimed 1,213 vessels. The figures should read; The summary of vessel registrations shows that for the 5-year period 2004 – 2009 the average annual growth for NSW was 2.67% pa whilst for the same period the average annual growth for the Sydney Harbour sector was a lower 1.17%pa. Of registered vessels at June 2009 for the Sydney Harbour sector by applying the NSW Sydney Harbour average annual growth rate of 2.67% 1.17% to the Sydney Harbour sector 2004 base of 16,198 vessels. Registered Vessels - Sydney Harbour sector - June 2004 16,198 Applying NSW 5-year growth 2004-2009 (13.33%) 2,159 Sydney Harbour 5 year growth 2004-2009 (5.85%) 948 Notional Registered Vessels – Sydney Harbour – June 2009 18,357 17,146 Actual Registered Vessels – Sydney Harbour – June 2009 17,144 Potential Latent Demand – Vessels 4,213 2" NOT THE 1,213 CLAIMED BUT JUST 2	

	17,144 Potential Latent Demand -- Vessels 1,213"		
	Kendall Bay marina proposes 2272 lineal metres of let-able length marina	At say \$1000/metre/annum gives \$2.25mill annual income. Residents are offered around \$10K/annum from Kendall Bay marina for on-shore maintenance. This is clearly inadequate & inequitable.	
P36,37,38	Photos of nearby marinas	All photos are taken from elevated positions over LOW profile vessels. These are not representative when 31% of Kendall Bay marina leases are predicted to be HIGH profile vessels.	
	There is no reference to other new marinas	The proposal should state predicted impacts if Homebush Bay Marina \$??mill or Berry's Bay Marina \$40mill proceed	
P13	Vessel registrations	Sydney Harbour vessel registrations have decreased since 2004 when compared with State-wide totals. The proposal concludes this is due to a lack of suitable boat storage but does not support the assumption. We conclude that registrations are down due to available berths being too far from Sydney Harbour & are too expensive. Boat owners have opted for lower cost marinas away from Sydney Harbour.	
	Parking for boat owners & guests	58 spaces for 172 boat owners, crew and guests is clearly inadequate and will prove a disincentive for potential lessees.	
P11 Table E	Commercial Boatsheds	Clearly confuses demand for boat repairs as distinct from demand for boat storage. These should be omitted	
P11 Table F			
P25	Expresses Latent Demand based on demand for boat licences.	The rush for Boat Licenses in 2009 was not matched by boat sales/registrations. The licenses demand was 'crews' securing licenses, not boat owners.	
	What happens if Kendall Bay marina Marina is a commercial failure	Presumably NSW taxpayers will have to fund the ongoing costs of remediation controls.	
P25.1	Many new road networks were built for the Sydney 2000 Olympics held at Homebush Park	Yes. And this is where the Kendall Bay marina Marina should be sited as planned by the NSW Govt with its Marine Park at Homebush Bay	

RE: INNER WEST MARINA – VOL 8 – REVIEW BY ROD JEFFERY (BE, MSC, DIC, FIE AUST)

Appendix 11: “A Marina Berth Demand Assessment “

Author: Australian Marina Management Pty Ltd. Dated July 2009

FIR, FMR = Further Information Required for Meaningful Response

C of C = Suggested “Condition of Consent” if marina were approved.

CDGR= Contravenes Director General’s Requirements.

Note: The Author strongly believes the Marina D.A. should be rejected on numerous grounds submitted in the Breakfast Point Residents’ Group (BPRG) submission. This critique is provided to give further support to that submission and in no way should be interpreted as a conditional acceptance of the D.A.

<u>CLAUSE ETC REFERENCE</u>	<u>REPORT STATEMENT</u>	<u>COMMENT</u>	<u>QUESTION OR ACTION LIST</u>
Table C: Page 8.4	Table C “Commercial Marinas – West of Sydney Harbour Bridge” (June 2009)	<u>Table C confirms that at June 2009 there was NO LATENT DEMAND as 5.8% of the 584 available berths (i.e. 34 berths) were unused.</u> An identical vacancy percentage of 5.8% existed at the close by d’Albora Marina at Cabarita. In these tables there is no reference to the many dormant berths (holding “For Sale” vessels) which further indicate a lack of need/demand of further berths (they indicate the reverse).	CDGR (1.2)
Table D; Page 6	Table D “Residential/Private Marinas – West of Sydney Harbour Bridge”	Table D confirms that <u>at June 2009 there was NO LATENT DEMAND AS 41.0% or 152 Berths were not being utilised.</u>	CDGR (1.2)
Appendix 5	“Commercial Boatsheds – West of Sydney Harbour Bridge:	For the 10 reported boatsheds there is a <u>vacancy rate of 17.2% which again confirms on ABSENCE OF LATENT DEMAND</u>	CDGR (1.2)
Appendix 7 Last Drawing	“Sydney Harbour Mooring Areas”- NSW Maritime Mooring Map.	This map illustrates <u>the unlikely lack of high demand for berths at the proposed Inner West Marina because</u> 1. The map shows the “High Rate Area” is east of Sydney Harbour Bridge. While the IWM would be towards the west extreme of the “Medium Rate Area”. 2. About 80% of the moorings west of the Harbour Bridge are closer to the Harbour Bridge and hence more desirable as they have superior access to the Harbour and the ocean. 3. The approximate “dead time” of travel from IWM to the Harbour Bridge will be about ½ hour for moderate speed vessels given delays in exiting the Marina and giving way to Rivercat Ferries at the egress point etc.	



CONTAMINATION, REMEDIATION AND CONSTRUCTION AND OPERATIONS MANAGEMENT

This assessment has been prepared by Laurie Ihnativ, BE (Civil), MEngSc (Geotechnical), MBA. Laurie is a Fellow of the Institution of Engineers, Australia and has over 30 years experience in geotechnical investigations and contamination assessments.

This section of the assessment critically reviews Volume 6 "Estuary Hydrodynamics and Physical Sedimentary Environment Report Incorporating Turbidity Investigation". This volume looks at the existing environment then it's interaction with the proposed marina development and the mitigation measures proposed.

1. Prior to undertaking the review, some introductory comments are considered appropriate. In essence the proponent proposes to construct a marina and protect the contaminated sediment by using a rock layer underlain by a geotextile. Placing the geotextile and rock armour over the contaminated sediment is a site remediation process being undertaken prior to making a change in the site use. **Despite an exhaustive literature search not one single example can be found where subsequent to protecting the contaminated sediment construction of any kind has taken place that potentially impairs the functionality of the cap.** The two cases presented; Sheboygan and Eitheim Bay do not have a recreational or other facility built over the top. Throughout this presentation the words cap and ISC which are widely used in the USA mean the same and are interchangeable. They are also the same and are interchangeable with SPS used in the DA document.
2. The capping proposal is using a technique for isolating contaminated sediments and called Insitu Capping (ISC). ISC usually serves three main functions:
 - a) Physical isolation of the contaminated sediment from the benthic environment
 - b) Stabilizing the contaminated sediment preventing its re-suspension and movement to other areas, and
 - c) Reduction of the flux of dissolved contaminants.
3. In order to achieve these functions, an ISC must be treated as an engineering project that carefully considers design, construction and monitoring. Detailed guidelines covering these aspects of the remediation have been developed by the U.S Environmental Protection Agency (USEPA), 2005. The major activities associated with an ISC project are discussed in a later section.
4. Bathymetry (depth to bed), VOL 6 pg 15 (throughout the document this means the DA volume 5 page 15). The assessment relies on dated information provided by others. The information was collected for purposes other than on ISC exercise and is too broad. The successful laying of an ISC relies heavily on a level bottom. No data has been presented to confirm there is no debris or obstructions present that will cause damage to the geotextile or problems during the laying of the geotextile and rock armour. For example a large protrusion such as a car body, will pose significant problems. It will also be necessary to consider the disturbance to the contaminated sediment when removing any such debris. Side scan sonar or similar technique should be used to identify protrusions that may present and provide an accurate representation of the bathymetry.
5. Wave climate VOL 6pg 19. The wind waves have been calculated using a 50 year Average Reoccurrence Interval (ARI) as defined by Australian Standard AS 3962 for the design of marinas. This Standard provides no guidance on the design of an ISC. Given the consequences of the failure of the ISC it is considered more appropriate to assess the wave climate using at least a 100 year ARI or even a 200 year ARI would be appropriate (USEPA, 2005). Given the likely extremely low strengths of the sediments the effects of earthquakes causing liquefaction should also be examined (USEPA, 2005).

6. Physical Bed Sediment Characteristics VOL 6 pg 32. The bed sediment is discussed in terms of its physical nature and transport behavior. The particle size distribution of the sediment is an important component of ISC design. URS performed washed gradings only and AECOM full gradings including hydrometer tests. During the washed grading test the sample is washed over a 75 micron sieve and cannot distinguish between silt and clay. When hydrometer tests are carried out it is possible to distinguish between the amount of silt and clay. It is well known in soil testing that the presence of organic matter in the soils can affect the washed grading and hydrometer results. Bottom sediments like Kendall Bay contain organic matter. Since none of the test reports have been included in the report, it is not possible to verify that the correct test procedures have been followed or whether a NATA accredited testing facility was used to undertake the testing. The failure of presenting details of the test results is poor practice.
7. No discussion is given to the geotechnical nature of the sediments. It is the geotechnical nature of the sediments that will dictate the engineering solutions that are applicable. The contaminated sediment in Kendall Bay is what is described as normally consolidated clay or even underconsolidated clay. Normally consolidated clays are typically very soft. Normally consolidated soils can become underconsolidated by the activity of the benthic organisms and their interaction with the physical environment. Burrowing constructions processes and maintenance and bioirrigation of sediments during feeding and respiration lead to a decrease in strength of the normally consolidated clays because of the presence of voids and gases produced. In simple geotechnical terms, normally consolidated sediments/clays are of very low strength and more often than not cause engineering problems.
8. As noted by the report (VOL 6 pg 33) the sediment is made up of sands, silts, and clays. Using the Hjulstrom (pg 34) curve to select an erosion threshold velocity of 0.3 m/sec for the under consolidated sediment is erroneous. This is because the curve was developed for consolidated sediments. Sunborg (1956) modified Hjustroms curve to include unconsolidated sediments such as those present in Kendall Bay. A copy of this modified curve is attached as Figure I. **The Sunborg curve shows clearly that a threshold erosion velocity as low as 0.15m/sec applies.**
9. The proponent concedes (VOL 6 pg 35) the marina development potentially disturbs the contaminated sediments. The report considers this disturbance during constructions, post construction and marina operation. To mitigate the disturbance of the contaminated bed sediments it is proposed to use a geotextile and rock protection blanket. It is stated (VOL 6 pg 36) that the "upper 100 mm of very soft sediment would probably be disturbed" when the geotextile and rock blanket are laid. This estimated of 100mm is based on a report by Douglas Partners (DP). The DP report provides no basis or justification for this "estimate". The "estimate" appears to be based on the fact that the soil behaves as a highly viscous fluid. It is unclear why this would apply to a depth of 100mm only. The bioturbation of organisms will likely penetrate several hundred millimeters below the surface. Vol 3 pg 5, shows that bivalve shells are present below 1.5 metres. As consequence, it could equally be estimated that the disturbance depth will significantly exceed the 100mm. A value of 400 to 500mm is considered more likely.
10. The construction and long term performance of the blanket has clear geotechnical implications, yet no geotechnical in-situ or other factual data has been collected. The lack of factual geotechnical data at this stage is considered to be a serious omission. Because of its underconsolidated nature, the very soft contaminated sediments will experience significant displacement through localized bearing capacity failure when the rocks are placed. This will occur when the armour store is placed on the geotextile and it sinks and in the process move some of the material laterally after which the displaced sediment moves up vertically a short distance from the rock placed. This will result in a wavy surface not a horizontal surface as depicted on Diagram 3 of Figure 8 (Vol 6). The effect is illustrated on Figure A. This waviness could be up to several hundred millimeters USEPA (1998)

recommends increasing the blanket thickness by 50% to overcome the uncertainties with this type of construction when carried out under water. Therefore, to obtain an effective rock armour cover of 300mm, a minimum of 450 mm would be required. The proponent has failed to demonstrate that the proposal will not result in significant uncontrolled disturbance of the sediment during rock placement.

11. The proponent may argue that geotextiles are used as a reinforcing member in civil engineering projects to overcome the effects of low strength soils. This is correct, however, when using a geotextile for reinforcing purposes a woven fabric is usually used, not a non woven fabric as proposed at Kendall Bay. Woven fabrics have distinct fibres that act like the steel in reinforcing mesh. Woven fabrics are usually a very poor separator that is why the proponent is using a needle punched spun bound geotextile (Elcomax 1200 R). This type of geotextile has fibres that run in random directions and need to stretch a significant amount to take up load. Therefore they are not suitable to be used as a reinforcing element.
12. The proponent also concedes (Vol 6 pg 36) that "once the geotextile is laid and fixed in position by the overlying rock, further migration of fine sediment through the geotextile could be expected". Testing was carried out by Geotechnical Testing Services (GTS) in order to model the Kendall Bay situation. It is stated that "during the construction phase it would seem reasonable to consider that the static immersion test a more representative of the hydraulic loading environment than the hydrodynamic test. No justification is provided to substantiate this ascertainment. The static test (an in house test method of the laboratory) models nothing that resembles the conditions that will prevail in Kendall Bay. The actual situation will be dynamic due to continuous variation of the water levels due to tidal effects.
13. When reviewing the (GTS) test reports, the following comments can be made:
 - Two test methods were used; hydrodynamic test (Method NFG 38-017) (modified) and Static Immersion Test (in house test method)
 - NFG 38-017 has been replaced by ISO 12956. It is unclear why this more up to date test method was not used. RTA QA Specification R63, Geotextiles (separation and filtration) replaced NFG 38-017 with ISO 12956 in 2002.
 - It is unclear what, if anything, the static test is meant to measure. If the test was to measure the effect of 100mm of sand (a load) on the sediment, it achieved that only. How this can be extrapolated to 300mm of rock armour has not been explained. The sediment is a fine grained material which takes time to settle and consolidate. It is highly likely the sample had not concluded settling or consolidating in the 48 hours of the test.
 - The hydrodynamic test is at least a test method, even though it has also been replaced by other test methods.
 - GTS is not NATA (National Association of Testing Laboratories Australia) accredited for either of the test methods.
 - Virtually all government departments demand testing be completed by a NATA accredited laboratory.
 - With reference to NFG 38-017 the test reports provide the following comments.
 - Two test specimens instead of six were used
 - The samples were filtered removing some of the very fine particles.
 - The test was approximated to have a 29% error.
 - With reference to the static immersion test the test reports provide the following information:
 - 100mm of sand cover is used
 - The test was carried out for 48 hrs
 - The samples were filtered removing some of the very fine particles
 - The test was approximated to have a 29% error.
 - It is noted the very fine material was removed from both tests which means they do not simulate in-situ conditions.

- Any laboratory test should attempt to simulate the in-situ conditions. Both tests used modified soil types and are therefore not typical of Kendall Bay. The 100 mm of sand does not simulate the 300/400 mm of proposed basalt. The test times were miniscule compared to the actual life of the marina.

14. Two fabrics were tested, the Elcomax 1200R (the proposed geotextile) and TTF 750. Only the test results for the 1200 R geotextile are summarized below.

Lab Sample ID	Percent passing (%) 1200R Geotextile	
	Hydrodynamic Test	Static Test
2467-1A	5.78	0.51
2467-1B	36.26	0.36
2467-2A	31.90	1.31
2467-2B	39.00	0.72
2467-3A	32.83	0.86
2467-3B	38.45	0.33
2467-4A	6.32	0.21
2467-4B	7.70	0.20

It was not possible to correlate the sample ID's to their location in the field, however, it is worth noting that the Cardno Ecology Lab (CAL) have noted that the near shore samples are coarser than the offshore samples (Vol 3). Samples 1A, 4A and 4B are likely to be near shore samples and not representative of the majority of the area to be remediated. Therefore, it could be concluded that between 31.9% and 39.0% of the sediment could pass through the geotextile under hydrodynamic conditions in Kendall Bay (although the test results could be worse for the conditions previously discussed). The results of the hydrodynamic test have been discounted as being non representative. The proponent overlooks the fact that there are two changes of tide daily, i.e. 73,000 in 100 yrs, and each one represents a hydraulic load across the geotextile. Therefore, the 2335 cycles in the hydrodynamic test is not necessarily conservative. In the static head test there are no changes in hydraulic gradient across the geotextile. Therefore, this test does not model anything like reality in Kendall Bay. Between the northern most 2 arms of the marina there are 34 berths, assumed 0.3 of these are used daily (based on car parking usage), and this represents 20.4 boat passes per day or 744,600 in 100 yrs. If each pass creates a hydraulic gradient across the blanket, it can easily be deduced the hydrodynamic test models reality more than the static test.

15. The CAL results show that most of the samples tested have in excess of 80% their particles finer than 75 microns. The effective opening size of the fiber is about 75 microns. Therefore, to suggest 1mm of material will penetrate the fabric during construction can not be substantiated. It could easily be argued that the very soft sediment is 1.5 metres thick and that 30% could pass through the geotextile. This represents 450mm of sediment. It is not suggested that this will happen, however, it is possible. The real number is probably in between, but certainly significantly higher than 10mm.
16. The geotextile should be considered as only one part of a filter to reduce but not eliminate the ingress of contaminated sediment through the ISC.

17. A comparison to the current fast ferry traffic and the construction bed disturbance is made (Vol 6 pg 36). What the comparison fails to discuss is that even though the blanket covers some of the contaminated sediment, the reality is that there are large parts of the contaminated sediment that will remain unprotected after the construction of the blanket and this is the likely area of ferry traffic. Further more, the document implies that contaminated sediment miraculously stop at 200 metres from the shoreline. The contaminated sediment extends beyond this line. Therefore, the fast ferries will continue to disturb sediment in a similar quantity to that which currently takes place. To suggest that by placing the blanket some 2,200kg (this figure is in fact incorrect – discussed later) of PAH per year is no longer released from the sediment, is incorrect. The fast ferries will continue to run and continue to disturb similar amounts of contaminated sediments. Whilst the water over part of the route is deeper a significant amount of the disturbance would be similar. When the sediment disturbed by the additional marina traffic is added to that disturbed by the ferry traffic, the supposed reduction in sediment disturbance becomes illusionary.
18. Vol 6 pg 43 states “Having discussed the feasibility of blanket placement and construction tolerance with an experienced contractor, GBAC proposes a blanket concept design which generally comprises a 300mm thick rock profile, but is locally thickened to 400mm in critical zones”. Despite our best efforts we have been unable to find one example of where this type of blanket has been placed over contaminated sediment in Australia. Therefore, it is difficult to accept that there are contractors experienced in this type of construction where very soft underconsolidated sediments are present. Placing the rocks under water where tides etc will want to move the blanket around is a difficult exercise (USEPA, 1998).
19. Vol 6 pg 43 notes “Geotextile is therefore required to separate the blanket rock from the underlying bed sediments”. The Elcomax 1200R has been selected. This is a non woven fabric. PIANC (1987) has three main requirements with respect to geotextiles under rock armour. These are; retention, permeability and down slope migration. It is agreed that the assessment of the geotextile in accordance with Appendix B of PIANC showed non compliance. The proponent suggests this could be due to test methods. It is disagreed that the assessment of the geotextile is in some way related to various testing methods. The method in Appendix B applies to dynamic load conditions such as turbulent flow and wave action. **Therefore, the geotextile fails the retention test.** This in itself does not mean it should not be used, what it means is that the geotextile must be used as part of filter which will need to incorporate at least a sand layer. It is agreed that the geotextile meets the permeability requirements.
20. Vol 6 pg 47 states “It would appear that down slope migration is a potential issue for sloped revetments protecting muddy riverbanks. Because of the very flat bed gradients encountered under the blanket, this issue is avoided at the site”. The proponent fails to define what “very flat” means. PIANC (1987) indicates that the distinction between soils susceptible to down slope migration and those not, is a function of grain size. Firstly, some of the particles must be smaller than 0.06mm. In order to assist with this part of the assessment, the particle size distribution (PSD) of the samples given in Table T3 of VOL 9, have been plotted on graphs. These are attached as figures B to G, inclusive. All the samples have in excess of 90% of the sample finer than 0.06mm. Therefore, this condition is satisfied. Additionally, there are three other rules. The requirement is that one of these rules is satisfied. The first is that the coefficient of uniformity (CU) is less than 15. Where d60 represents the particle size which 60% of the sample is finer. Similarly with d10. The d60, and d10 sizes for each of the samples is determined from the PSD. The values are shown on the graphs, figures B to G, and summarized below and CU is defined as:

$$CU = d60/d10.$$

Sample ID	Size (millimeters)		CU
	d10	d60	
PC1	0.00019	0.028	142
PC2	0.00017	0.024	141
PC6	0.0006	0.003	5.0
PC9	0.0062	0.0052	8.4
PC10	0.0005	0.0032	6.4
PC29	0.00052	0.0033	6.3

It should be noted that in order to obtain the d10 size the graph was extrapolated beyond the test data due to the absence of relevant test data. The above shows that four of the six samples are susceptible to down slope migration. The second rule that applies is 50% or more of the particles be in the range of $0.02\text{mm} < d < 0.1\text{mm}$. These values for each sample are summarized below.

Sample ID	Percent $0.02\text{mm} < d < 0.1\text{mm}$
PC1	47
PC2	48
PC6	5
PC9	10
PC10	6
PC29	8

PC1 and PC2 are very close to the criterion which makes them marginally susceptible to down slope migration.

21. Using these above rules it is concluded that all the samples tested exhibit a susceptibility to down slope migration. Therefore, in its current state, the blanket design is inadequate. PIANC (1987) suggests that in order to overcome the deficiencies it would be necessary to provide a sub layer of 100 to 500mm of sand between the geotextile and rock armour. A thickness of 300mm is not uncommon. Figure H illustrates this requirement and was taken from PIANC.
22. Having stated (Vol 6, pg47) the bed gradients are very flat, no actual definition is provided. The bed slope in the marina area ranges between 1 (H) to 5 (V) around the proposed jetty area and southern extremities to 1 in 100 for a small section of the northern part. About half of the total area of the blanket area exceeds a slope of 1 in 60 (i.e. about 2%).
23. The matter of bathymetry is considered to be important for an ISC (USEPA 2005). It is stated that the flatter the bottom slope the better. This is to reduce the spreading of the capping material during placement. It is also stated that it is difficult to estimate the effects of slope alone, since bottom

roughness plays an equally important role in the mechanics of the spreading process. Given the normally and underconsolidated nature of the contaminated sediments, the bottom slope in Kendall Bay is considered to be a very important factor in the selection of the correct method of remediation. Palermo et al (2000) offers some insight into the issue of bottom slope. In this publication the issue of level bottom capping (LBC) is discussed with reference to dredged material capping. This is where dredged contaminated sediments require capping to mitigate the potential for toxicity or bioaccumulation in benthic organisms. These dredged sediments would be very soft similar to those in Kendall Bay. The following is from the document "... LBC projects ...have been executed at sites with slopes up to 1 to 60 ..." **Placement of material on steep bottom slopes (steeper than 1v on 100h) should generally be avoided for a capping project... because of the potential for a slope adjustment ...**". Using these criteria it can be concluded that the bottom slope at Kendall Bay is far too steep for the proposed ISC.

24. Vol 6 pg 47 notes "the feasibility of the scour blanket has been discussed with contractors". There is no indication that these discussions included methods to overcome the effects of the underconsolidated clays and steep bed slope. The proposed construction methodology also takes no account of any obstructions that may be present on the bed. There is little point in discussing a proposal with a contractor if they have never undertaken similar work in a similar environment in the past.
25. Vol 6 pg 47 discusses an alternative of a grout filled mattress. It is agreed that this option has the difficulties noted. One problem not mentioned is that the grout would be many more times stiffer than the underlying contaminated sediments and any differential settlement that occurs would result in significant cracking to the point where it could lose its functionality.
26. Vol 6 pg 48 discusses far field dispersion of disturbed bed sediment. It is stated that there is "10mm of disturbance to the surface bed sediments which occur over the constructions, post-construction and marina operation phases would amount to some 560m³ of material". On pg 36 Vol 6, it is stated that "it is estimated that the upper 10mm of sediment has been used as the basis of the calculations. If one accepts the 100mm figure, the disturbance amounts to 5600m³ (56,000 m² x 0.1 m) not 560m³. Therefore the volume is 1,000% higher. The argument used makes several assumptions without any justification. These assumptions are:
 - 50% of disturbed sediment moves to the south
 - Of the sediment that moves to the south only 15% moves into the 40,000m² of mangrove shallows.
 Using their assumptions it was calculated that 1mm of sediment settles on the mangrove area. The calculation is as follows.

$$56000 \times 0.01 \times 0.15 / 40,000 = 1\text{mm}, (40\text{m}^3)$$
 If we substitute 100mm of disturbance instead of 10mm, the calculation becomes

$$56000 \times 0.10 \times 0.15 / 40,000 = 10\text{mm}, (400\text{m}^3)$$
 If the disturbed depth is 300mm, the calculation becomes

$$56000 \times 0.30 \times 0.15 / 40,000 = 30\text{mm}, (1200\text{m}^3)$$
 If the disturbed depth is 500mm, the calculation becomes

$$56000 \times 0.50 \times 0.15 / 40,000 = 50\text{mm}, (2000\text{m}^3)$$
27. The conclusion drawn is that 40m³ of disturbed settlement in the mangrove area is considered to be "reasonable" by the proponent. Based on the above calculations, the amount deposited could be between 400 and 2000m³. Even 40m³ of sediment will result in 10.7kg of PAHs being deposited. This has been calculated using 22.3 mg/kg of PAH (Vol 9 pg 3). Using more realistic disturbance depths (ie 100 to 500 mm) between 107 and 535 kg of PAH may be deposited in the mangroves above the high water mark an issue not addressed is that some of the soils in Kendall Bay are Acid Sulfate Soils (ASS). Some of these sediments could be ASS which could have a negative impact on the flora and fauna when deposited above the

higher water mark. If the Jemena remediation does not take place this quantity of PAH will be additional to that which is currently present. If the Jemena remediation is carried out prior to construction of the marina, then the remediated area will be re-contaminated by the disturbed sediments.

28. It is interesting that the proponent has considered that effects of the marina construction on far field dispersion, yet has ignored the effect of continued river traffic outside the blanket having the same effect on the blanketed area itself. It is naïve to believe that there will be no disturbance of sediment outside the blanketed area by river traffic. Unlike the mangrove area, 100% of this disturbed sediment will settle below the high water mark, some on the blanket itself. The river traffic effect continues 365 days a year or 36,500 days over 100yrs. No attempt has been made to estimate the effect of this disturbance of the blanket.
29. Using the proponents own estimates, the fast ferries disturb 18,600 tonnes (Vol 9 pg 4) of sediment. If the marina is built the ferries will travel a slightly different route over deeper water. For the sake of making an estimate, lets assume the changed route reduces the sediment disturbed to 10,000 tonnes (8333m³ assuming a density of 1.2 tonnes/m³) some of this material moves over the blanket area. During marina operations, this material will in turn be disturbed and part deposited on the mangrove area, day after day.
30. Another far field effect ignored by the proponent is the recontamination of the blanket from the disturbance of the area between the blanket and the Breakfast Point seawall. This area will be unprotected and will continue to be disturbed by waves whether generated by wind, ferries or pleasure boats outside the blanket. The effect of these waves is magnified by the reflection from the wall. Part of the disturbed sediment will settle on the blanket. During marina operations, this sediment will in turn be disturbed and deposited on the mangrove area. Other disturbances to this SPS unprotected foreshore area will be related to tides, wind, construction work and subsequent use of the area by small boats and kayaks (including foot traffic when someone (eg learners) fall out.
31. Conceptual model of Disturbances and Protection. Vol6 pg48 presents this model. The proponent's model and comments are given.

1	Existing conditions	Near-bed wave-induced currents due to fast ferries disturb large areas within Kendall Bay including the proposed marina footprint area.	The number of ferry journeys does not reduce when the marina is in place, the route taken simply changes. The sediment disturbed is less however, the increased traffic from the marina probably equals the difference. Therefore the same amount of contaminated sediment will still be disturbed, just in a different location.
2	Commencement	Geotextile forming part of the blanket	This will not be straight forward.

	of construction	is lowered onto the bed.	This geotextile is spun bound and 5.7mm thick. A significant amount of air is trapped within the geotextile which will mean it will want to float. It will not simply fall onto the bed. Current velocities will make handling difficult. There is no evidence presented to show there are no obstructions on the bed and how they will be dealt with and the resulting sediment disturbance.
3	Geotextile located onto bed	The geotextile comes to rest on the bed and ballast is placed to temporarily secure the geotextile placement. In the process of coming into contact with the bed and being located to its correct position, disturbance of surface sediments commences. Upper 100 mm of bed sediments probably affected during construction of the blanket (<i>Douglas Partners, 2009</i>). Small proportion of the disturbed sediment passes through the geotextile (<10% of upper 100 mm over the duration of blanket construction)	Because the sediment is normally consolidated and underconsolidated in nature, the temporary ballast will cause local bearing capacity failures and disruption to the blanket. There has been no justification of the 100mm of disturbance; it is likely to be significantly greater. The hydrodynamic testing shows significantly greater amounts of sediment passes through the geotextile than the assumed 10%. There has been no justification of the 10mm used.
4	Construction completed	300 – 400 mm thick layer of rocks comprising the upper blanket is placed. Disturbance of surface sediments is complete when construction of the blanket is completed. Up to 10 mm of fine surface sediments now occupies the base interstices of the blanket.	Because of the very soft nature of the contaminated sediments, placing the rocks without causing significant localised displacement of the sediment will be very difficult. As a result the effective depth of the blanket in places could be as little as 100mm. See comments in 1 above regarding the sediment in the base of interstices of the blanket.

5	Post construction (up to 12 months)	Ambient currents, including the controlling wave-induced currents due to fast ferries, are insufficient to remobilise most of the 10 mm of fine sediments within the rock blanket.	Some of the sediments will be remobilised because there will be more than the 100mm present (see comments to 1 above). Because there will not be an effective cover of 300 to 400mm the wave reduced currents will disturb the sediments.
6	Marina operation phase commences (at 12 months)	Once vessels take up their berths within the marina, their propeller action is predicted to remobilise all of the 10 mm of fine sediments located within the rock blanket. This material is suspended into the water column, and dispersed elsewhere within Kendall Bay and beyond, under the action of ambient currents. Tidal flows and wind induced currents would be expected to dominate the dispersion process. The blanket geotextile itself reduces the penetration of ambient currents to the underlying bed sediments such that the velocities under the geotextile are insufficient to mobilize these sediments.	It is agreed that the vessels will remobilise all the sediment located in the rock blanket. Therefore, a significant larger amount of sediment will be redistributed elsewhere in Kendall Bay than calculated by the proponent as explained above. Because the effective thickness of the blanket may sometimes be less than the design thickness the ambient currents in the underlying bed sediments will be sufficient to mobilize the sediments.

7	Marina operation phase	During operation, minor disturbance of blanket rocks is predicted due to propeller action of vessels located within the marina. Based on the adopted blanket design methods, it is predicted that 0 – 5% of the rocks within the blanket may move over the life of the facility. This disturbance of the blanket rocks is readily addressed by routine maintenance. Any minor mobilisation of the blanket rocks during marina operation and any required maintenance would not be expected to disturb the bed of Kendall Bay under the blanket such that further sediment loss up through the blanket could occur.	Recontamination of the blanket from the far field disturbance has been ignored. Significant amounts of sediment will settle on the blanket which in turn will be remobilised by the vessels using the marina. In turn these will be remobilised to other parts of Kendall Bay. When this continued sediment disturbance is added to the continued disturbance by the fast ferries (and probably increased ferry numbers due to the Sydney Ferries identification of Cabarita wharf demand) and the increased pleasure craft, the total disturbance to sediment will remain unchanged to that which currently occurs.
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32. Design Reliability (Vol 6 pg 51). This section presents a position regarding conventional design practice for coastal and maritime engineering structures. The problem with designing for the “average” conditions is that the blanket, while an engineering structure, is also a remediation process. **Designing for average conditions is not suitable for a remediation project. USEPA 2005, suggests, using extreme conditions. A 200yr ARI and seismic conditions are noted.**

33. It is noted that the sizing of the rock blanket has been designed using USACE 1970 and PIANC 1997 yet the design completely ignores the requirements of USEPA, 2005 and USEPA, 1998. **Both of these documents provide details of the design requirements for a capping layer as a remediation process. The proponent has chosen to ignore this facet of the design requirements of a capping layer. By ignoring the remediation requirements of the blanket, the design is potentially severely compromised.**

This part of the assessment comments on the contents of Volume 9, “Sediment Management Report”.

34. Current conditions (Vol 9 pg 3). It is agreed that the sediment within Kendall Bay is mostly material with a particle size less than 75 microns. AECOM state "the 95% upper confidence limit (UCL) on the mean of the PAH concentrations, the driving contaminant was 22.3 mg/kg.
35. It is stated it is reasonable to adopt a disturbance (erosion) threshold velocity of 0.3 m/sec. This may be valid for consolidated clays and silts, however, for unconsolidated clay and silts the value could be 0.15 m/sec. This is from the work of Sundborg in 1956. Refer to paragraph 8.
36. The following scenario is presented (pg 4 Vol 9)
- Each fast ferry disturbs 0.62 m³ of sediment
 - 25000 ferries each year disturb 18,600 tonnes of sediment per year.
 - **The 95% UCL on the mean for PAH is 120.5 mg/kg (yet this has been previously stated as 22.3 mg/kg – see 34 above)**
 - The ferries disturb 2,200 kg of PAH annually (if 22.3 mg/kg is used instead of 120.5mg/kg, the value per year is 407 kg not 2,200 kg)
37. It was concluded that without the implementation of appropriate sediment protection, the proposed marine development would cause additional disturbance of bed sediments. This is agreed.
38. Proposed management (Vol 9 pg 7). In order to mitigate the effects of turbulence caused by the proposed marina boat movements etc, a Sediment Protection System (SPS) is to be placed over the full area of the marina.
39. The SPS comprises a geotextile blanket stabilized with 300-400 of basalt rock armour. The installation and management of the SPS is to be controlled by a construction environment management plan (CEMP) and an operational environmental management plan (OEMP). Details on the limitations and omissions of these plans are contained in separate Breakfast Point Residents Group documents.
40. Adequacy of SPS Design (Vol 9, pg 9) Design development of the SPS considered the following:
- i. Boat movement zones and controlling bed levels
 - ii. Design water level in Kendall Bay
 - iii. Screw race modeling and design bed velocities
 - iv. Protective rock requirements, rock size, blanket thickness and footprint
 - v. Geotextile filter
 - vi. Construction aspects
41. It is reported that the level of confidence attached to the design would be equivalent to that which generally applies in engineering practice. A 50 yr ARI has been used. The SPS is a remediation process and as such should be designed for extreme events with at least a 100 or 200 yr ARI. The benchmark could be that the Breakfast Point Community Association has a lease and responsibility for the waterfront walkway of 299 years. Seismic effects should also be considered (USEPA, 2005). See paragraph 5.

42. The first element of the SPS is a geotextile. It is postulated that the geotextile serve as a foundation load distributor for the rock armour. Because of the under consolidated nature of sediments there will be considerable displacement of the sediments due to localized bearing capacity failures. This will result in a very wavy geotextile profile very different to the conceptual model given in Figure 8 (Vol 6). Therefore, in order to obtain the effective cover of 300 and 400mm at all locations, a thicker rock layer will be required. Up to 450 and 600mm of rock will be required (USEPA,1998).
43. Along the edges of the SPS the basalt will be 500mm thick with a slope of 2(H) to 1 (V). This design is guesswork because no stability assessment has been carried out. Without a comprehensive geotechnical assessment of the underconsolidated sediment any such calculations would be based on speculation. The amount the basalt will consolidate in the long term is also speculation without comprehensive geotechnical assessment of the sediments. In addition using the argument above, this layer should be 750 mm thick.
44. Yet again the down slope migration of the geotextile is not considered relevant because of relatively flat bed gradients. This statement, as before, is made without any technical justification. Based on the PIANC (1987) assessment criteria the samples tested exhibited susceptibility for down slope migration. To mitigate against this susceptibility a granular sub layer between the geotextile and rock armour will be required. The sub layer required could be up to 500mm thick. Palermo (2000) suggests a steep slope is defined as 1(V) to 100(H), ie 1% gradient. In Kendall Bay parts of bed are as steep as 1 to 6, ie about 17% with about 50% of the marina area being steeper than 1 to 60. These bed slopes indicate the proposed SPS is not suitable for Kendall Bay.
45. Two previous projects are cited (Vol 9, pg 10) as this type of design in similar applications and environments. These are Sheboygan Falls, Wisconsin, USA and Eitheim Bay in Norway. At Sheboygan, there were two geotextile layers. The first was placed on the sediment, then there was a granular layer, another geotextile and finally the cobbles. This is considerably different to the proposed SPS. The Eitheim Bay project has one similarity to Kendall Bay, it used a geotextile. Other examples found during a literature survey are Convair Lagoon, California and Manistique, MI, USA (USEPA, 1997). Convair comprises 12 inches of gravel and 24 inches of sand over a geogrid. Manistique comprises 20 inches of sand over a geotextile. 12 inches of graded armour stone overlies the sand. These combined protection layers are 0.8 m (32 inches) and 0.9 m(36 inches) thick respectively, somewhat thicker and at least double the SPS thickness proposed for Kendall Bay.
46. Geotextile degradation, durability and chemical impact (Vol 9 pg 11). It is stated that the geotextile has a design life of greater than 100 yrs. Geotextiles have been available on the market for 30 to 40 years. Therefore, their long term (eg 100 year) durability is untested. It is noted that polyester geotextiles undergo degradation at high and low pH conditions. Since there are acid sulfate soils present in the Kendall Bay low pH conditions can not be discounted as being a possibility.
47. Geotextile Permeability and Sediment Retention (Vol 9, pg 11). This aspect is comprehensively discussed in paragraphs 18 and 19. **The geotextile does not have the required retention capacity. The susceptibility to down slope migration is conveniently not discussed in this section despite its critical importance in the successful performance of the SPS (ISC).** Paragraphs 20 to 22 provide a detailed discussion why the SPS option is unsuitable for the site. The notion that up to only 10 mm of sediment will pass through the geotextile has been shown to be incorrect as has the threshold velocity for erosion of the sediment. **It has been shown that the threshold velocity of the underconsolidated sediment is as low**

as **0.15 m/sec half of the 0.3 mm/sec value adopted by the proponent.** Despite the fact that the fabric, through its “filtration” designs, will account for the hydraulic gradients set up. There has been no justification of this statement.

48. Disturbance during construction (Vol 9 pg 13). The use of a boom and silt curtain to trap disturbed sediment is discussed. Vol 3 provides a very general discussion of the use of boom and silt curtain. The information provided is a general nature and lacks the necessary detail to ensure that it will prevent disturbed material escaping the construction area itself. A detailed discussion on silt curtains is given in Francingues, N.R and Palermo, M.R. (2005). The following is taken from the summary of this document.

“The term “silt curtain” is used to describe devices deployed in water to control suspected solids or turbidity.....Almost every silt curtain application has unique features that require site specific adaptations.....For cost considerations, logistical constraints, and performance expectations, **prevailing current velocities of 1 to 1 ½ knots effectively limit deployments.....Silt curtains should not be considered a “one solution fits all” type of best management practice.** They are highly specialized, temporary use devices that should be selected only after careful evaluation of the intended function and designed based on a detailed knowledge of the site where they will be used”.

A limiting current velocity of 1 to 1 ½ knots is equivalent 0.5 to 0.8 m/sec. The ebb tides produce current velocities of 0.7 m/sec (Vol 6 pg 28). The above document suggests using curtains where currents are greater than these values are problematic. There are many site specific design details that should be considered at this time because the performance of the silt curtain goes to whether remediation can be carried out without an increase to the sediment disturbance and distribution over a wider area. **Silt curtains are not designed to sit on the bed. No discussion is presented as to how sediment disturbance will be prevented from passing under the curtain and redistributing contaminated sediment over a wider area.** The depth of sediment disturbance during construction will be more than 100mm as discussed in paragraph 9. More than between 1 to 20mm of sediment can be expected to penetrate through the geotextile as discussed in paragraph 13. Therefore, the sediment that will be settled in the rock armour could be in excess of ten times the 560 m³ guessed by the proponent.

49. The approach to the installation of the SPS is discussed (Vol 9 pg 13). A generalized discussion is presented regarding the manner in which it will be constructed. No discussion is given on how a blanket that is full of trapped air is to be placed when battling currents and wind. **No discussion is provided on how the silt curtain will perform during windy periods and tidal currents in excess of 0.5 m/sec. No discussion is given to how bed obstructions that may be present are to be either investigated or handled. No discussion is given about how the waviness of the bed sediments will be allowed for when the rocks are placed. The amount of clay particles in the sediment ranges between 12 to 47% with an average of 28.7% (Table 13 Vol 9). If the near shore samples are ignored the average amount of clay present is 38.8%.** Clay particles are colloidal in nature and therefore subject to Stokes law with respect to settlement after disturbance. The suggestion that the colloidal clay particles will settle rapidly is highly questionable. No discussion is offered on colloidal particles passing under the silt curtain.

50. After completion of the SPS piles will be installed. (Vol9 pg 14). This will be done by removing the rock armour and holes will be cut on the geotextile. It is intended to fit a collar to the piles and to attach the geotextile to the collar. No details of the collar are provided nor the fixing mechanism. **Despite an exhaustive search of the literature on contaminated sediments no examples could be found where after the remediation by capping, neither on shore nor particularly below water level, where the integrity of the remediation is compromised by construction activity. The introduction of the piles through the capping introduces a significant risk to its long term performances as an isolation layer.**

51. Bed disturbance during marina operation (Vol 9 pg15). There is a discussion regarding bed disturbance during the first 12 months post construction. **The calculations are based on erroneous assumptions and calculation.** These are:

- 10mm of sediment passes through the geotextile. Paragraph 15 shows this is incorrect.
- 560m³ of sediment in the rock armour. Paragraph 27 shows the amount would be higher
- 15kg of PAH will be mobilised in the water columns. This figure depends on the two bullet points above being correct. If the amount of sediment that passes through the geotextile is 100mm, the amount of PAH increases to 150kg.

The amount is compared to the fast ferry disturbance of 2,200kg/year. Paragraph 37 shows this figure is incorrect and should be 407kg. The comparison also fails to take into account the far field effect of sediment settling in the rock armour. Paragraphs 29 and 30 discuss this issue. **This far field effect will continue every day of the year. When this is added to the correct amount of disturbance of sediment through the geotextiles it is doubtful that the impact of marina on water quality will be less than predicted and will not have a significant contribution to its improvement.**

52. Post construction subsequent to the first 12 months as discussed (Vol 9 pg15). It is noted that following placement of the SPC the greatest potential to generate turbidity and disturb bed sediments will be due to increased propeller action. The following points are made.

- It has not been shown that the SPS current bed velocities are 0.1 to 0.2 m/sec.
- The threshold value for unconsolidated sediment is 0.15 m/sec, half of the nominated value of 0.3 m/sec. See paragraph 8.

Therefore, it has not been demonstrated that the SPS mitigates erosion. Therefore, sediment will continue to be mobilised from below the blanket. In order ensure the threshold velocity is not exceeded a sand layer will be required between the geotextile and the armour. In any case the sand layer is required to mitigate down slope migration as discussed in paragraph 21. The collar connecting the geotextile to the piles is addressed and it is considered “unlikely” that there will be any migration of particle matter through the annulus around the piles. **The disturbed material due to repeated action of the piles moving (mainly laterally) is likely to be the colloidal particles which are smaller than 2 microns (the clay).** **Therefore, it is not possible to ensure that disturbance is “unlikely”. It is more probably “likely”.** The reported additional sediment from far field disturbance has not been considered in the discussion. As noted in the previous point the effect would not be insignificant.

53. It was been concluded (Vol 9 pg15) by the proponent that marina operations would not result in “further disturbance of the bed sediments and any disturbance of the bed sediments would be negligible when compared to present levels.” As noted above, the mitigating affects of the capping layer are overstated because the design is deficient and the far field effects of sediment disturbance are ignored.

54. Management Controls During Operation are discussed, Vol9 pg 17. Protection of the SPS is to be via key management procedures.

- Marina users will not necessarily use the nominated access and egress routes to and from the marina, particularly after hours when the marina management staff has left for the day. In any case there is no daytime proposal to have staff located at access egress points to ensure compliance.
- Training of staff about the location and purpose of the SPS will not prevent accidental damage by anchors dropped during a squall and deep hulled vessels.

- It is unclear how deep hulled vessels will be restricted from shallow water after hours.
- The management plan provides for no inspections of the SPS beyond 5 years. Should this disastrous SPS proposal proceed, the inspections should be yearly for ever. No management procedure has been presented to ensure who will monitor that the inspections have been carried out. No penalties have been proposed if the management procedure is not followed. Also it is unclear who would have the authority to impose the penalties.
- The OEMP would be implemented by the marina owner/operation (Vol 9 pg 17). It is incredulous to think that such an onerous task could be self administered.

55. Future remediation (Vol 9 pg 19). The “easy” removal of the marina and SPS if future remediation is required are discussed. It is stated that the “design” allows for this “easy” removal. The proponents own consultant Douglas Partners (Vol 6 App. I) state that the estuarine sediment behaves like a high viscosity fluid. Just how the SPS can be separated from this type of material without causing major disturbance to the contaminated sediment is unclear as are numerous other technical details of this project.

56. The Vol 9 conclusions. (pg 21) are discussed. Despite the statements made it has been shown that:

- **During construction there will be significantly more disturbance of the sediment than purported.**
- During marina operation because of the underestimate of the various factors discussed. **The mitigating effect of the as designed SPS is overstated. The statement that the SPS is a significant improvement on the current conditions has been overstated on technical and arithmetic grounds.**
- **Following 12 months it is stated that there will be no disturbance of the sediment from marina operations. For the as designed SPS, this has been shown to be incorrect. This conclusion also conveniently ignores far field contamination from the river traffic.**

The conclusion of Vol 9 presupposes that an SPS (ISC) is a suitable remediation procedure for Kendall Bay. As shown in the previous sections, the SPS is technically unsuitable.

57. **Interim Audit Advice has been provided by GHD Pty Ltd (Vol 9 last page). Only the first page has been provided.** Therefore, an informed discussion is not possible on the adequacy of the audit by the EPA Accredited Auditor. It should be noted **the Auditor stated at a public meeting on October 20, 2010 that he is not a geotechnical engineer and is unable to verify the geotechnical aspect of the project. Therefore, it is safe to assume there is no independent verification/sign off on the design and makeup of the SPS. Given the critical nature of the SPS in its role to remediate the marine site, this is considered a significant oversight by the proponent and totally unacceptable.**

58. SPS (ISC) Design. As noted above, the proponent has provided a design which is a normal civil engineering project. **Scant regard has been given to the fact that the project is a remediation project as well. From an exhaustive literature search it has not been possible to identify where a similar project has been carried out in Australia.** When designing these types of projects there appears to be no guidelines available from an Australian source, however international guidelines are available. Specifically, there is a specific guideline provided by USEPA (1998). Guidance for In situ subaqueous Contaminated Sediment, Great Lakes National Program Report. In addition there several other publications which are referred at

the end of this submission. There is no excuse for the proponent not to consider the information available. Detailed guidance is given in USEPA (1998) and outlined below.

- 1) **Clean up objective.**
- 2) Characterise the contaminated sediment site. This includes:
 - Waterway features (bathymetry, currents, waves)
 - Waterway use
 - **Geotechnical conditions (stratification of layers, depth to rock, physical properties of foundation soils, potential groundwater inflow)**
 - **advective processes present and the ability of the cap to control advective contaminant losses.**
- 3) Characterise the contaminated sediment. This includes physical, chemical and biological characteristics of the sediments.
- 4) **Make a preliminary determination of the feasibility of the SPS. If not feasible other options must be considered.**
- 5) Identify the capping material.
- 6) Design the cap composition and thickness. **The cap design must consider the need for effective short and long term chemical isolation of contaminants, bioturbation, consolidation, erosion and other pertinent processes.**
- 7) Select appropriate equipment and placement techniques.
- 8) **Develop an appropriate monitoring and management program both during and after construction. A site management plan should be provided.**
- 9) Develop cost estimates for the project including construction, monitoring and maintenance.

It is clear when reading the Environmental Assessment, the proponent has addressed many of the issues listed above, some very poorly, yet has not referenced the USEPA (1998) publication. This may be because as discussed above and highlighted below, the proposed SPS does not meet the necessary requirements. The different issues noted above are discussed in more detail below.

- 1) Clean up objectives. **Since this project has not been approached as a remediation project a clear clean up objective has not been stated.** The clean up objective has come about by way of the need to satisfy the EPA Remediation Order requirements.
- 2) Characterise the site.
 - "The site conditions more than any other consideration will dictate the feasibility on in situ capping...Only some limitations in site conditions can be accommodated in the ISC design. A thorough examination of site conditions should generally determine if further consideration of ISC is appropriate...**Because in-situ caps are intended to function for extended periods of time, if not in perpetuity, it is not sufficient to just examine the existing conditions.**...The evaluator must also consider future conditions that might significantly alter cap integrity or function..."
 - The feasibility of the SPS depends not only on bathymetry; **the proponent has not considered the effect of bed slope and obstructions see paragraph 4, 22, 23 and 24.**
 - Water column currents and more importantly tidal currents could cause re-suspension of the sediment. Paragraphs 5 and 8 note deficiencies in this area because **an appropriate AR1 and a threshold erosion velocity have not been chosen.**
 - **No consideration is given to decrease in depth and bottom geometry on current patterns and velocities after installation of the SPS.** Modeling studies may be required to assess such changes. **The geotechnical conditions at the site must be assessed. This information is needed to evaluate the potential for consolidation after cap placement. Geotechnical drilling and testing is also essential to ensure that the proposed piles are feasible 9eq is bedrock shallow?). The evaluation is also required to**

evaluate sediment behaviour during and after cap placement. The proponent has provided no site specific geotechnical information. The guesstimates by Douglas Partners are not sufficient when deciding on the feasibility of a significant remediation project such as that proposed for Kendall Bay. Their description of the soil behaving like a viscous fluid should have been a warning as the need to gather specific data. **This data must be available for the DA determination rather than construction certificate stage because it goes to the very feasibility of the project. SEPP55 notes that DA approval by a consent authority should not be given unless the remediation measures have been identified.**

- The physical characteristics of the contaminated sediment are important in developing the cap design, selecting appropriate equipment for cap placement, modeling and monitoring cap design. Testing should include; visual classification, water content, plasticity index, organic content, grains size distribution.
 - The descriptions of the sediments by AECOM personnel (Vol (9) is in error. The grained size distribution data given Table T3 shows the sediments are clayey silts rather than silts and sandy silts. If the contaminated sediment or the underlying layers are compressible, consolidations will occur due to cap placement. This time dependent settlement is best determined by piezocone readings carried out in the field or laboratory testing on undisturbed samples from the sediment. **The shear strength of the sediment needs to be evaluated to ensure bearing capacity failures or slope instability does not occur.** Paragraph 43 shows the problems that will be faced.
 - The waterway use plays a role. **"The ability to enforce use restrictions necessary to protect the integrity of an in-situ cap (eg vessel size limits, bans on anchors, etc) is an area with little or no operating experience. Voluntary restrictions on uses of public land and waters are often ineffective.** Compliance, enforcement, and the effectiveness of these measures as well as consequences of non compliance on ISC should be considered". **The proponent has failed to show how the proposed restrictions will be enforced.** Paragraph 55 provides some insight.
- 4) Make a preliminary determination of the feasibility of the SPS. **Because of the issue of bed slope, the SPS is not considered feasible for Kendall Bay.** See paragraph 19, 27, 23, 24 and 26.
- 5) Basalt rocks are proposed to provide armour protection.
- 6) Insitu Cap Design. "At present, the design of caps is based on a combination of laboratory tests and models of the various processes involved: advective/diffusive contaminant flux, bioturbation, consolidation and erosion) field experience and monitoring data. Since the number of carefully designed, constructed and monitored capping projects is limited, the design approach is based on the conservative premise that the cap components are additive. No dual function performed by cap components is considered... "

The general steps for in-situ cap design include:

1. Identify candidate capping materials and compatibility with contaminated sediment at the site.
2. Assess the bioturbation potential of indigenous benthos and design a cap component to physically isolate sediment contaminants from the benthic environment.
3. Evaluate potential erosion at the capping site due to currents, waves, propeller wash, and **design a cap component to stabilize the contaminated sediments** and other cap components.
4. Evaluate the potential flux of sediment contaminants and design a cap component to reduce the flux of dissolved contaminants into the water column.
5. Evaluate potential interactions and compatibility among cap components, including consolidation of compressible materials.

6. Evaluate operational considerations and determine restrictions or additional protective measures (eg, institutional controls) needed to assure cap integrity.”

- Basalt armour and geotextile are proposed as the cap. The physical and chemical characteristics of materials to be used in the cap should be determined. **There is no information regarding the characteristics of basalt.**
- **The poor ability of the geotextile for physical isolation of the contaminated sediments was demonstrated in paragraph 19. When its susceptibility to down slope migration is considered (paragraph 20 and 21) the cap design is deficient and needs a sub layer of sand to make it functional.**
- When considering the isolation function of a cap the reduction of contamination flux will be required. Consolidation of the sediments when loaded by the cap will likely result in advection of pore water upwards into the cap. This is a process in evaluating potential advective flux of contaminants. **An evaluation of the advective flux requires a consolidation evaluation. This important assessment has not been carried out as part of the cap design at Kendall Bay.**
- On the one hand the cap is intended to stabilize the contaminated sediments and to prevent them from being eroded and transported off site. The other function is to make the cap itself resistant to erosion. **The design of cap must consider the ability of the sediments to move vertically. At Kendall Bay the chosen geotextile fails the retention tests (Refer to paragraphs 12, 13, 14 and 15).** The provision of a sand sub layer as noted in paragraph 21 will also assist with preventing the vertical migration of the sediment. The hydrodynamic conditions that may cause erosion include bottom velocity forces due to tides, wave induced currents and propeller induced current velocities. **Paragraph 8 demonstrates that the incorrect erosion threshold velocity has been selected. Therefore, the as designed cap does not mitigate the erosion potential.**
- If a cap has a properly designed physical isolation component, contaminant migration associated with the movement of sediment particulates should be controlled. PAHs tend to remain bound to sediment particles. However, the movement of contaminants by advection (movement of pore water) can occur while movement by molecular diffusion over a long period is inevitable. Advection occurs as a result of consolidation of the sediments. **As the sediment consolidates pore water is expelled and moves upwards displacing the pore water in the cap. The cap should be designed to ensure that all the pore water from the sediment remains within the cap. The proponent has failed to show the SPS allows for this phenomenon. In fact, because of the extremely porous nature of the rock blanket, the contaminated pore water will be dispersed by the marina users, tidal effects, currents etc.** Diffusion is the process where by contaminants in areas of high concentration is transported by random molecular motion to areas of low concentration. This process is slow. As the pore water moves into the coarse rock blanket, it will be dispersed by marina users. **Since the desired function of the cap is to chemically isolate the contaminants in the long term or reduce long term flux of contaminants to ensure water quality is not diminished, both advective and diffusive processes need consideration when designing for isolation. The proponent has failed to do so and as such can not demonstrate that the proposed SPS will not lead to diminished water quality.** The USEPA has developed a model for predicting long term movements of contaminants into the cap due to advection and diffusion processes.
- The in-situ contaminated sediments to be capped at Kendall Bay are predominantly clayey silts of low shear strength. These types of material are compressible and will easily be displaced or re-suspended when disturbed during the cap placement. **The cap stability (displacement or sliding) and settlement due to consolidation have not been addressed by the proponent.** Refer to paragraph 10. The shear strength of the sediments influence their resistance to localized bearing capacity or sliding failures which can cause localized mixing of the capping and contaminated sediment.
- Liquefaction is a phenomenon in which a deposit of saturated sediment develops high pore pressure as a result of disturbance and progressively loses a large part of its shear strength and flows like a frictional liquid. **Liquefaction may be triggered by seismic activity, wave action or propeller washes from vessels. This has not been considered by the proponent.**

7. Equipment and Placement Technologies. The major consideration in selection of equipment and placement of the cap is the need for controlled accurate placement. The use of equipment or placement rates, which result in capping material mixing or displacing the contaminated material, must be avoided. **Because of the uncertainties associated with underwater placement of stone, USEPA recommend the erosion component i.e. the rock should increased by 50% . Accordingly, the armour stone thickness at Kendall Bay should be increased to 450 and 600 mm.** (on the erroneous assumption that the proponent's design of 300 and 400 mm of cap is accepted as correct) Refer to Paragraph 10.
8. Monitoring. A monitoring program should be required as a part of any capping project design. The main objectives of monitoring for ISC would normally be to insure that the cap is placed as intended and that the cap is performing the basic functions (physical isolation, sediment stabilization and chemical isolation) as required to meet the remedial objectives. Specific items or processes that may be monitored include cap integrity, thickness and consolidation, the need for cap nourishment, benthic recolonization and chemical migration potential. **Intensive monitoring is necessary at capping sites during and immediately after construction followed by long-term monitoring at less frequent intervals.** In all cases, the objectives of the monitoring effort and any management or additional remedial actions to be considered as a result of the monitoring should be clearly defined as a part of the overall project design.

59. Director Generals Requirements (DGR). The proposal is considered in terms of the DGR. The DGR that the proponent has failed to satisfy are noted below.

- description of the existing environment – fails to satisfy as noted below.
 - bathymetry, especially bed slope
 - wave climate, inadequate ARI
 - absence of measured geotechnical data, including that specified in AS3962
 - Threshold erosion velocity overstated
- potential impacts of project
 - Considerable disturbance of sediment of contaminated sediment during geotextile and rock armour
 - ongoing disturbance of sediment below the geotextile
 - continued recontamination of the blanket from far field disturbance and marina operations redistributing this sediment onto the mangroves
 - some of the redistributed sediments may be acid sulfate soil which have not been properly assessed
- minimize, mitigate, offset, manage and/or monitor impacts
 - the geotextile fails retention and down slope migration criteria tests
 - the SPS is too thin to mitigate erosion under the geotextile
 - the SPS is too thin to mitigate against accidental damage by anchors and deep hulled vessels
 - the bed slope is too steep for the proposed SPS
- the site is unsuitable for the proposed SPS

- remediation works required and justification for why the proposed remedial measures will work
 - the SPS is too thin and the blanket susceptible to down slope migration unless a sand sub layer about 300 mm thick is used
 - the bed slope is too steep for a SPS and a SPS will be required to protect the contaminated sediment
 - because of the potential impacts of anchors, the bed thickness should be at least 600 mm thick
 - because of the uncertainties when placing geotextiles and rocks over very soft sediments underwater, the design thickness should be increased by 50% which means that where 600mm thickness is provided for anchor safety, the thickness should be increased to 900mm
- site audit statement and site audit report by an Auditor accredited under the Contaminated Land Management Act 1997
 - at the public meeting on 20 October 2010, the Auditor stated he was not a geotechnical engineer meaning that he does not have the skills to determine the geotechnical issues related to the design of the SPS
- assessment of acid sulfate soils (ASS)
 - the proponent acknowledges some sediment will be redistributed in the mangrove area above the high water mark during marina operations, yet no management strategies are provided to mitigate the impact of the ASS on flora and fauna

61

DECC Requirements. The requirements of DECCW given in their letter dated 25 August 2009 are addressed with reference to the information supplied in the report

- geotextile life
 - the manufacturer claims the life exceeds 100 years. Even though there is some literature supporting this claim, the geotextile will be in place for ever. Therefore, the geotextile should only form a construction platform and not part of the SPS. A sand layer must be used as a filter. In this manner if the geotextile loses its integrity, it does not compromise the remediation function of the SPS.
- placement of blanket and piles
 - it is disagreed that only the top 100 mm of sediment will be disturbed. Because of the underconsolidated nature of the sediments, the disturbance depth will be significantly deeper than 100mm, potentially 400 to 500mm.
 - the hydrodynamic testing carried out on the geotextile shows up to 39% of the very soft sediment could pass through the geotextile
 - a sand layer could mitigate the sediment penetration of the geotextile
 - the incorrect erosion threshold velocity has been adopted to determine the required SPS thickness, a value of 0.15 m/sec should have been adopted instead of 0.3 m/sec.
 - since the propeller velocity creates a erosion velocity of 0.3 m/sec a thicker armour layer will be required
 - there are some doubts about the grain size analyses provide
- concern is expressed regarding laying of the geotextile
 - because there is no geotechnical information no assessment can be made regarding differential settlements, bearing capacity failures and slope instability
 - tidal velocities make placing the geotextile and armour difficult
- boating activities in the area
 - the proponent acknowledges that any sediment that passes through the geotextile will be disturbed by the propeller wash when the marina is operational, some of which will be deposited on the mangroves
 - it is logical that sediment disturbed by the ferries and other vessels will drift onto the SPS and in turn be disturbed by marina traffic and part will also end up on the mangroves, this will occur day after day

- environmental protection measures and monitoring
 - not only does the proponent fail to address the dissolved phase contamination during construction works, the proponent does not consider their release by advection and diffusion during and after consolidation of the sediment and their dispersion into the water column by boat propellers during marina operation
- additional information
 - the USEPA notes that to mitigate against accidental damage, the protective layer should be a minimum of 600 mm thick
 - based on an assessment of the site features, the proposed SPS is not feasible mainly because the bed slope is too steep
 - the SPS that is placed over the contaminated sediment needs to be at least 900 mm thick
- case studies
 - the proponent has offered instances where an SPS approach has been used
 - it is acknowledged that geotextiles have been used in an SPS in the past, however the case studies mentioned are situations different to that which prevails at Kendall Bay
 - San Diego Bay
 - o Prior to installation of the geotextile layer the contractor removed materials including debris rocks etc that could cause damage to the geotextile. At Kendall Bay no effort has even been made to determine the presence of these types of materials nor has this been considered for the construction stage.
 - o The geotextile was a woven fabric not spun bound. It was reported that it took a long time for the fabric to sink. The non woven fabric to be used at Kendall Bay is full of trapped air which will make it more difficult to place especially during ebb tides.
 - o The underlying sediment is sand, whereas at Kendall Bay the sediment is very soft clayey silt. This means sediment disturbance was a significantly lesser issue at San Diego
 - o The engineered cap comprised laying 2 ft (0.61 m) of sand over the geotextile for isolation of the contaminated sediments, 1 ft (0.3 m) of well graded gravel aggregate to act as filter and provided protection against bioturbation. The final layer comprised 2 ft (0.61 m) or armour stone for erosion protection. The cap is 5 ft (1.52 m) thick compared to 0.30 m at Kendall Bay
 - Port of Brisbane
 - o The project was for the construction of a sea wall not a remediation project. Therefore, to use it as an example is misleading.
 - o The bed sediment consisted of 0.5 to 2.0 m of sand underlain by very soft sediments not the very soft underconsolidated sediments at Kendall Bay. As a result contaminated sediment disturbance would not have been an issue as at Kendall Bay.
 - Convair Lagoon (USA) used a 0.9 m thick cap, paragraph 45
 - Manistique (USA) used a 0.8 m thick cap, paragraph 45
 - The above remediation projects have SPSs 1.52, 0.9, and 0.8 m thick
 - NONE of the remediation projects have a marina or any other facility over the top of the SPS.

62 EPA Remediation Order (RO)

The proponent has failed to meet with the requirements of the RO as outlined below.

- The RO ordered Maritime NSW to "refrain from carrying out ... permitting another person to carry out works or activities ... that would result in the disturbance or further disturbance, of the bed sediments in Kendall Bay.... Examples of the type of activities that may come within the scope of this Order include: construction and maintenance works such as ... boating facilities ... marinas..." The proposed marina construction is contrary to the RO.

- "Prior to commencing any such works or activities ... the person proposing to conduct the works or activities must prepare ... a written plan with specific measures directed at minimizing the disturbance and migration of the contaminants ..." Because the bed slope is too steep, the proposed SPS is not feasible. The "as designed" SPS is also too thin to mitigate ongoing sediment disturbance. The far field sediment disturbance by river traffic will result in sediment drifting onto the blanket. Marina traffic will in turn disturb this sediment and cause it migrate into the mangrove areas.
- "The person proposing to conduct the works or activities must have the plan audited by an accredited site auditor ..." At a public meeting the site auditor stated he was not a geotechnical engineer. This means he does not have the skills to determine the veracity of the SPS.
- "The EPA may approve the plan as submitted or approve the plan subject to a requirement that additional mitigation measures be implemented ..." The EPA should not approve the proposed works on the basis that in their current format, they will not mitigate the disturbance of contaminated sediments during and after construction of the marina. The design put forward by the proponent does not properly assess the existing sediment nor does it provide a proper design that allows mitigation. A search of similar remediation projects (ie ones that incorporate a geotextile) around the world show that the SPSs were 2.7 to 5 times thicker than the one proposed for Kendall Bay. Furthermore, they are all multilayered systems using sands, gravels and armour rock, far more complex than the simplistic approach being proposed at Kendall Bay. None of the examples provided by the proponent had a marina constructed on top of the SPS after completion of remediation.

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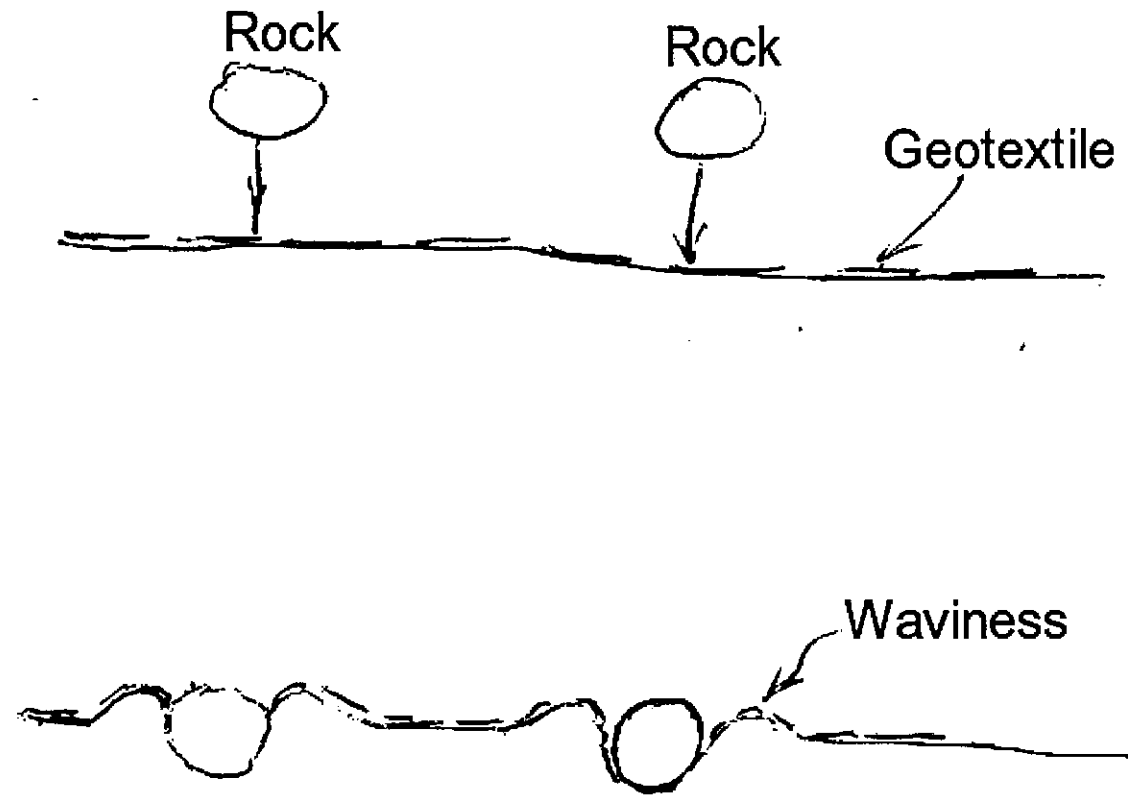
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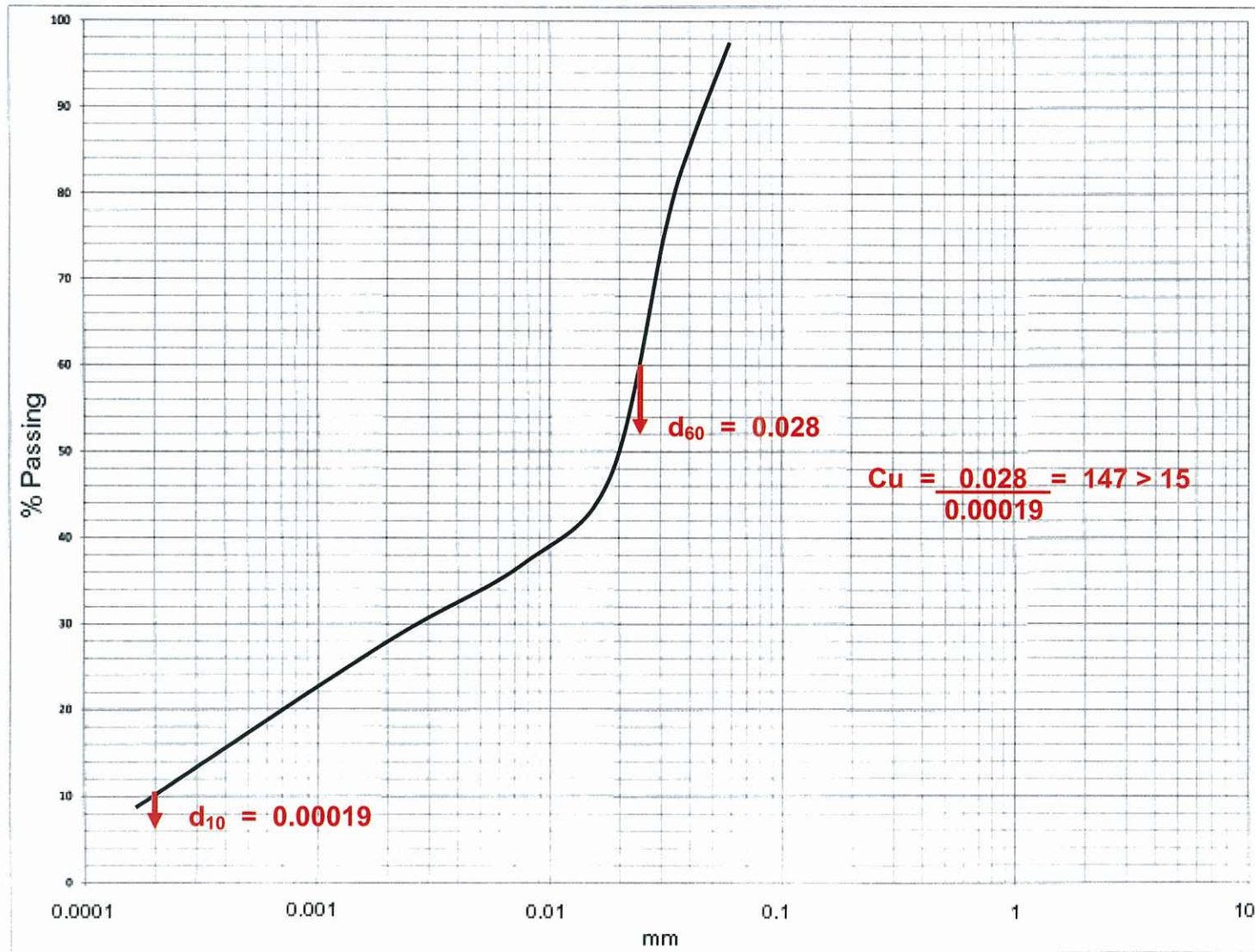
USEPA (2005) Contaminated Sediment Remediation. Guidance for Hazardous Waste Sites.

Figure A



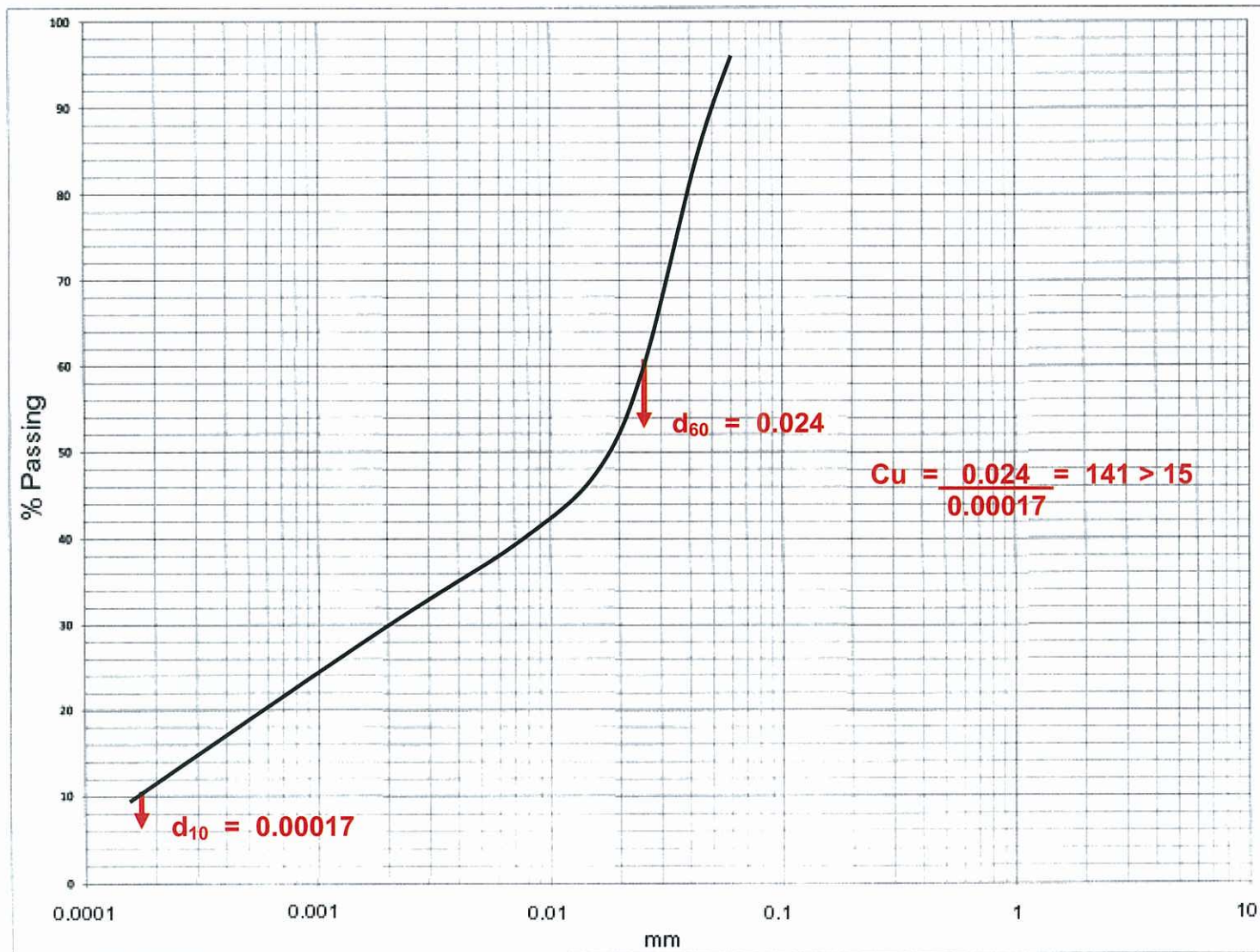
PC 1

Figure B



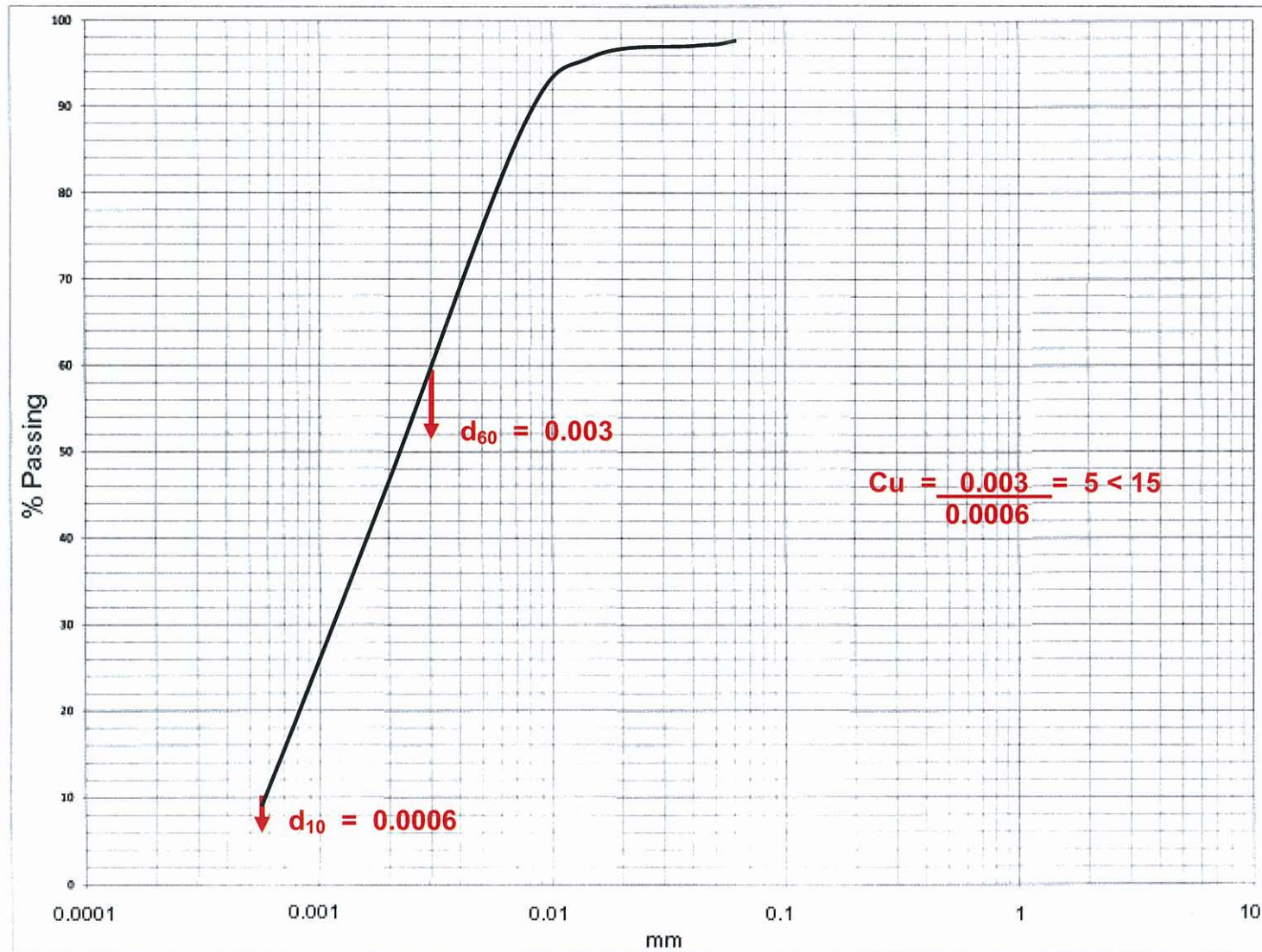
PC 2

Figure C



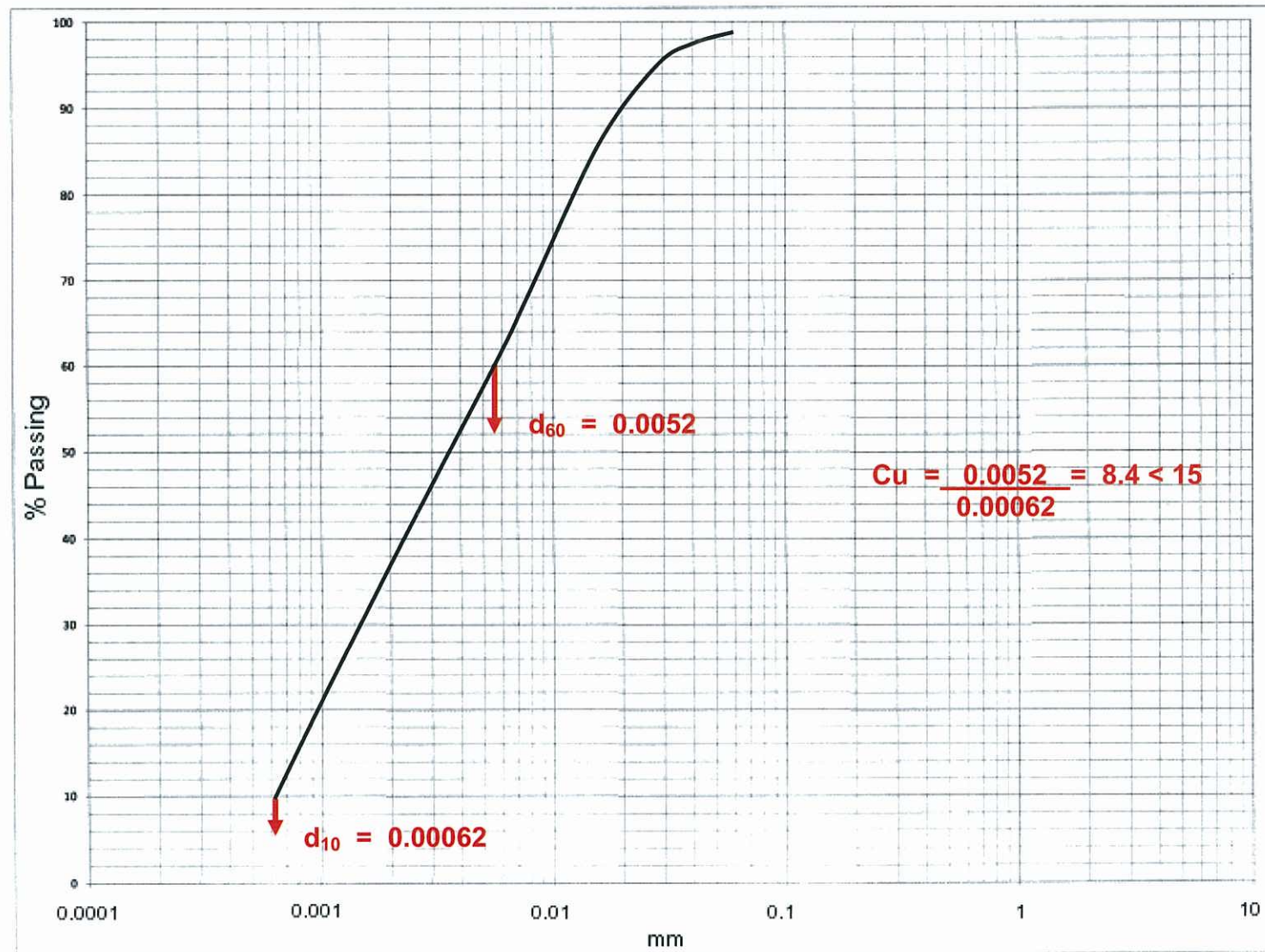
PC 6

Figure D



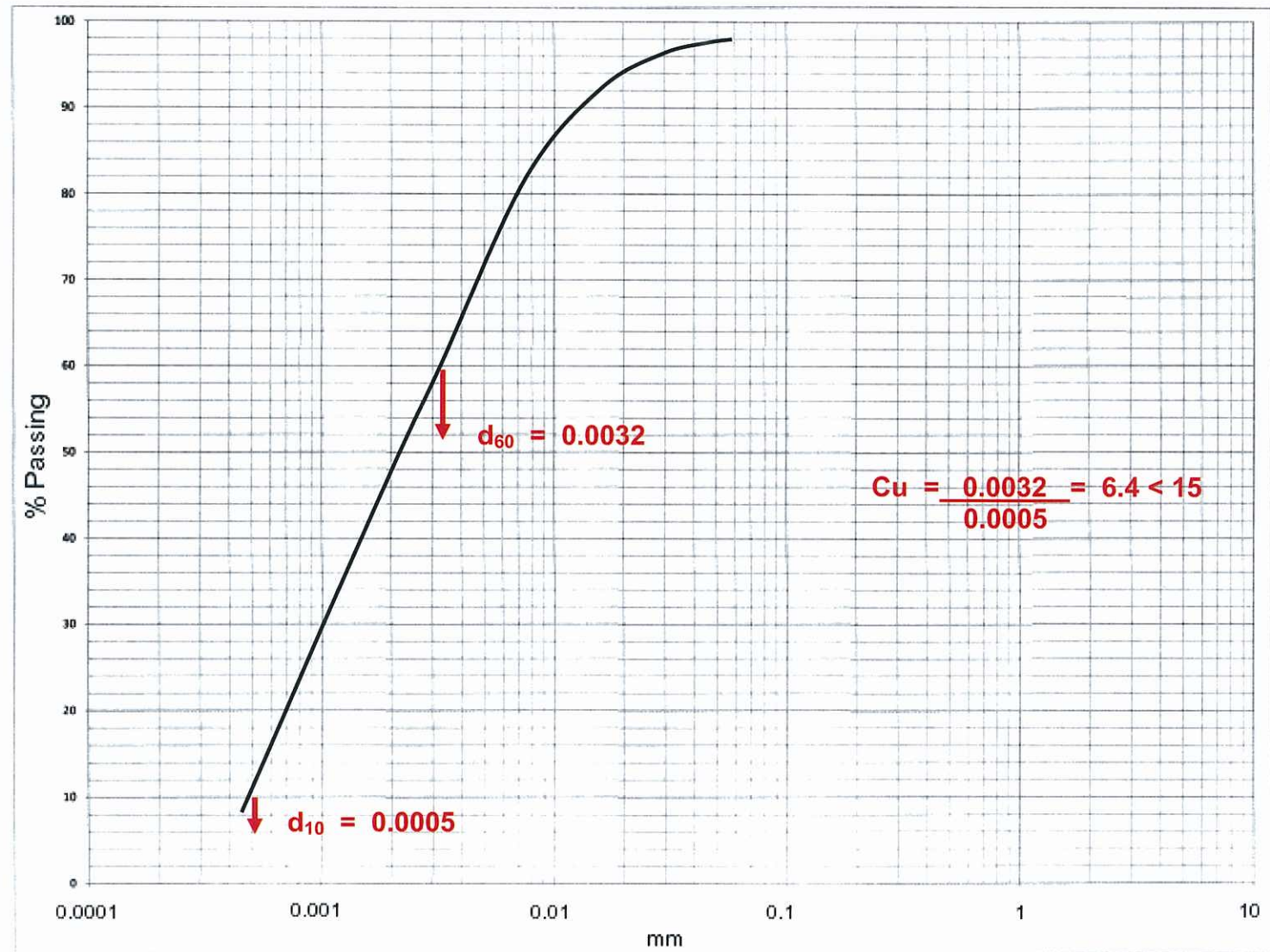
PC 9

Figure E



PC 10

Figure F



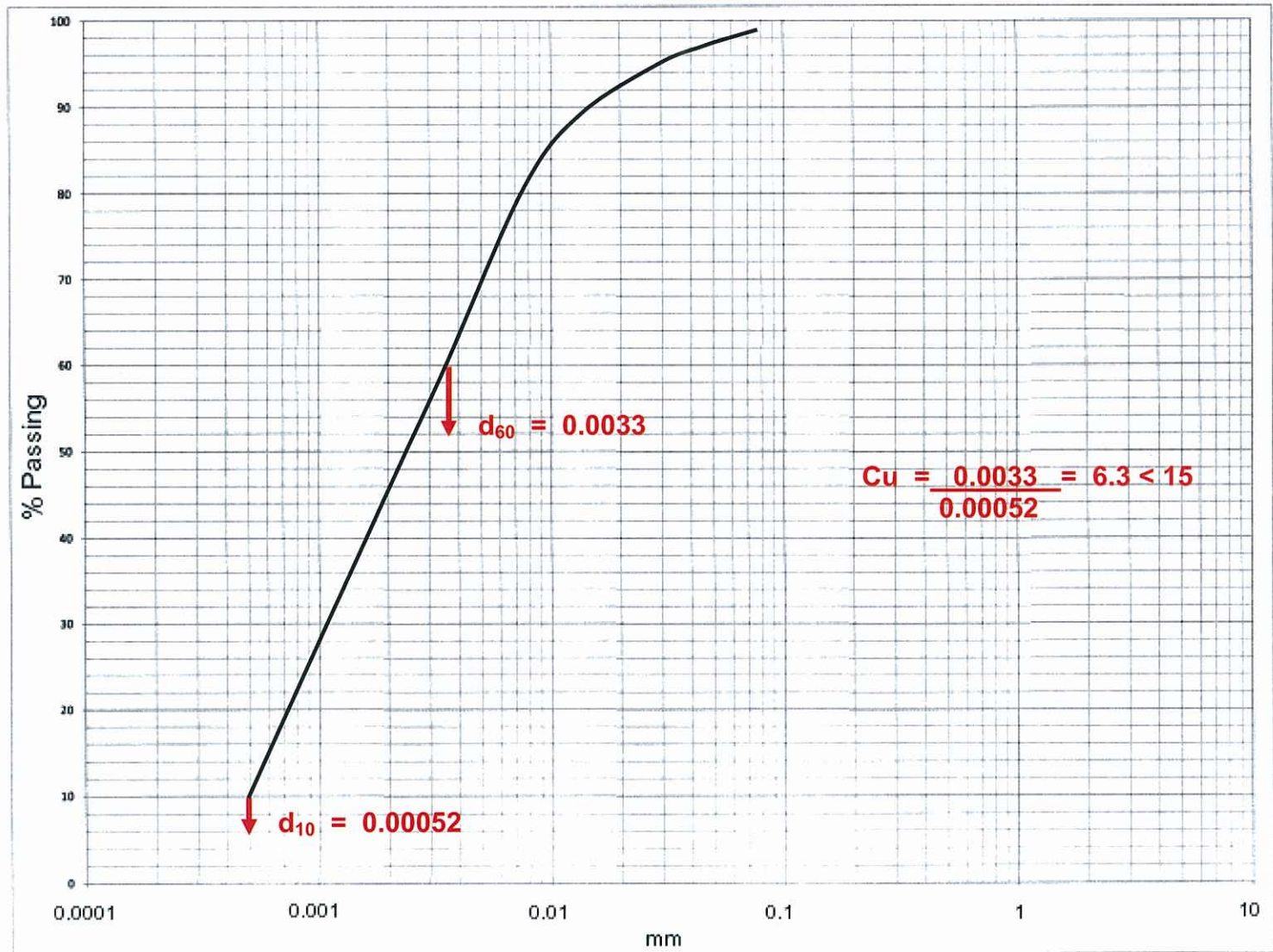


Figure H

Pianc (1987)

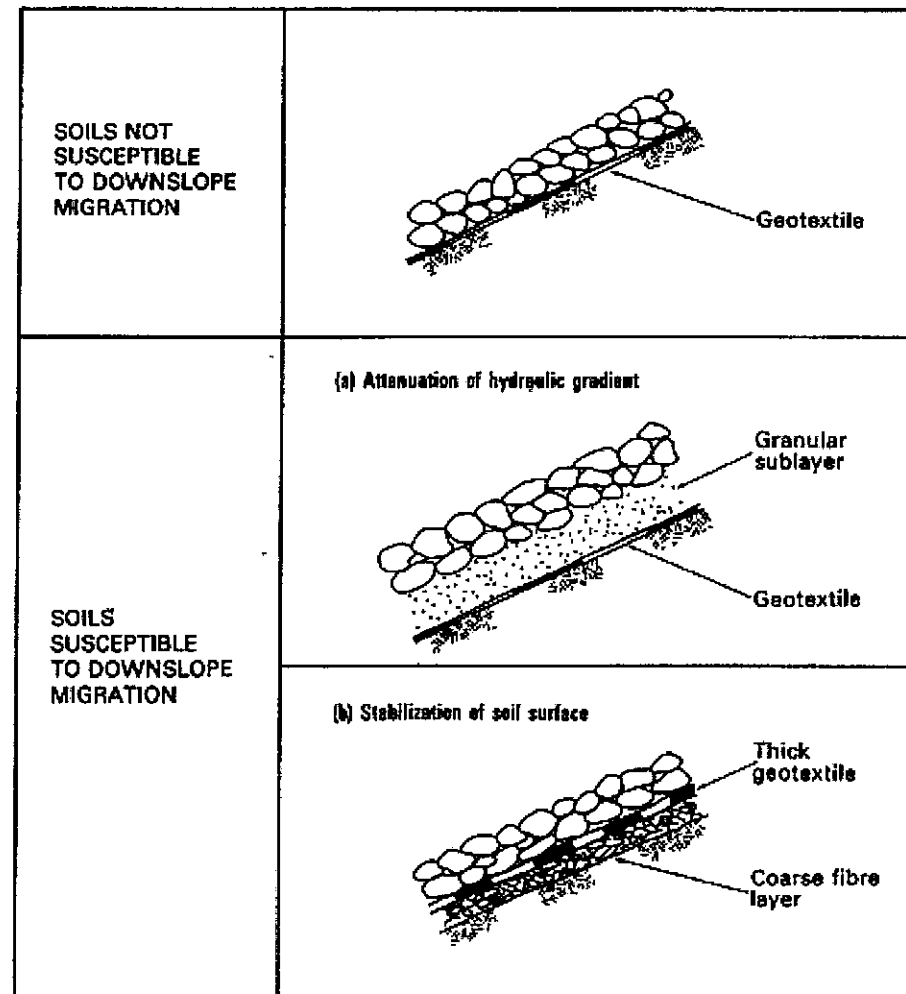


FIG. b4 : Recommended filter systems

Figure I

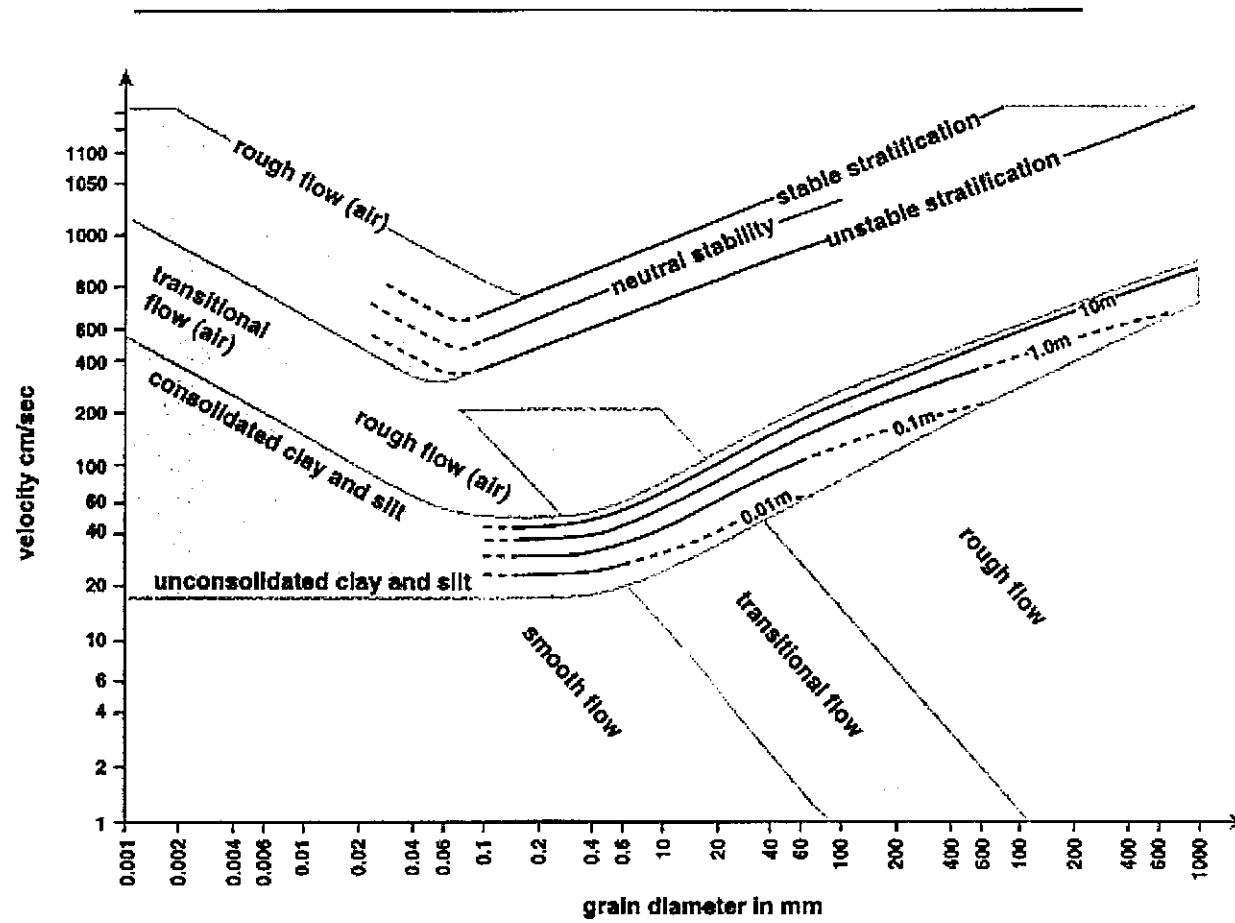


Figure 9-13. Sundborg's modification of the Hjulström diagram. (After Sundborg, 1956.)

RE; INNER WEST MARINA – VOL 7 – REVIEWS BY ROD JEFFERY (BE, MSC, DIC, FIE AUST)

Appendix 10: Construction Environmental Management Plan (CEMP)

Author: AECOM. Final Report Dated 30/9/09

Note: Reference Column provides clause No. from report and approximate monitor screen page location e.g. page 10.6 = 60% down page 10

FIR, FRM = Further information required for meaningful response

C of C = Suggested "Condition of Consent" if Marina were approved

CDGR = Contravenes Director General's Requirements (see attached numbered CDGR for quick reference)

Note: The Author strongly believes the Marina D.A. should be rejected on numerous grounds submitted in the Breakfast Point Residents' Group (BPRG) submission. This critique is provided to give further support to that submission and in no way should be interpreted as a conditional acceptance of the D.A.

DETAILED REVIEW

<u>CLAUSE ETC REFERENCE</u>	<u>REPORT STATEMENT</u>	<u>COMMENT</u>	<u>QUESTION OR ACTION LIST</u>
1.2.: page 1.5	"Previous testing . . .including the site... heavy oils, elevated levels of polycyclic aromatic hydrocarbons (PAH's) and heavy metals above the Interim Quality Guidelines (ANZECL & ARMCAN2 2000)"	Proponents own submission highlights the need to fully remediate the Bay. "Covering the problem with the SPS does not eliminate the problem and does not permanently remediate the site.	A Basic question is why locate an intensive boat movement Marina above such an environmentally sensitive area.
1.2.1. Page 1.9	"Some of the identified PAH's are classified as human carcinogens.	See Above	As above
1.2.1: Page 2.1	"It is likely that further development of the area would increase the risk of harm" and Disturbance of the containments would mobilise containments and hence increase the risk of harm"	See Above	As above
1.3 Page 2.9	"A Managers office and small amenity area"	No definition of scale etc.	CDGR (1.2) FIR, FMR Request copies of office & Kiosk drawings. Further details are required for

			meaningful review (FDR, FMR)
1.7 Page 4.1	Project Managers for CEMP = TLB Engineers P/L "Ensure all contractors comply with statutory and licence requirements" "Oversee Construction works and overall implementation of the CEMP" "Undertake monitoring and inspections of the site as required."	<u>TLB must be on site during all construction activities to ensure compliance of CEMP, minimise risk, "stop" or "hold" work as necessary and act as a communication conduit with residents.</u>	CDGR (1.7) FIR, FMR Request TLB full time presence on site and accessible to Community as a "condition of consent" if Marina were approved
1.7; Page 4.1 to 4.9	Roles and Responsibilities	No independent auditing of AECOM role. <u>Because of numerous CEMP omissions in AECOM CEMP this demands independent frequent auditing.</u> Many examples of such omissions listed in following pages.	CDGR (1.7) C of C to include progressive independent auditing
1.8 Page 6.1	"This CEMP applies to the following:- - The Site - Management of the contaminated sediments within the footprint of the proposed Marina"	Obviously, contrary to the AECOM defined area limits, <u>"Management of the containment sediments must be beyond the footprint of the Marina and include the whole lease area (i.e. 57,000 v's 20,000 m2) and adjacent potentially affected areas. (e.g. Impractical as current proposal of around 20m unprotected Bay floor deposits extending from seawall face)</u>	C of C CDGR (1.7) (Omission in proposed ECMP)
1.10; Page 6.9	"This CEMP may be reviewed as necessary. Therefore it is the responsibility of the reader of this document to ensure they have the current version of the CEMP".	As major stakeholders on the impacts of non-compliance it follows that the <u>Breakfast Point Residents Group and the BP Community Association should be promptly issued with revised CEMP's with any changes highlighted.</u>	C of C
2.3; Page 8.6	"Surface water monitoring results will be compared to ANZECC (2000) guide lines for fresh and marine quality water"	<u>1) Monitoring of deeper water than "surface water" is necessary (e.g. especially just above Basalt layer)".</u> <u>2) No conventional Quality Assurance (QA) "Stop" or "Hold" points are given for non compliant results (incredibly no "STOP" or "HOLD" points appear anywhere in the CEMP or OMP or CMP)</u> <u>3) There is no reference to mandatory testing by a National Association of Testing Authorities (NATA) laboratory nor sampling to follow NATA certified practices</u>	C of C CDGR (1.7) Major creditability question regarding AECOM
3.1.1; page 11.1	"Monitoring of baseline conditions of the water will be undertaken over period of 2 months (on a weekly basis)" "Additional monitoring of surface waters ..."	<u>Independent auditor "hands on" review is essential to ensure representative baseline data is recorded.</u> Auditor must have authority to request/nominate further baseline testing. <u>Additional monitoring also essential for below surface waters.</u>	C of C CDGR (1.7)

3.1.2; page 11.5	Frequent reference to dual silt curtains are schematic in figure F3	<u>Neither the AECOM words nor Figure F3 define that the silt curtains must extend to the Bay floor and seal at the floor level to be functional for their intended "containment" objective. No detailed section drawing or specification for this critical element is given.</u> See attached extracts from USA paper "Silt Curtains as a Dredging Project Management Practice". This paper highlights the limitations of silt curtains. Note also that AECOM are silent as to the environmental protection need to regularly inspect the silt curtains below water including confirmation of an effective floor seal.	CDGR (1.2) Further Details are Required for Meaningful Review of Proposal (FDR, FMR)
3.1.2. page 11.9	See Table 3	Motor cruiser size is not defined by surely must be at least 25m. Also no reference to commercial ferries and charter boats or the very large harbour jet cat pleasure boats which are seen in the Bay now and then doing "doughnuts"	FDR, FMR C of C
3.1.2.1. page 12.1	"The floating boom/silt curtain schematic is presented on drawings CMPO1,02 and 03 in Appendix A" and at p12.2 "The floating booms will be anchored to temporary piles."	Drawing CMP03 (and others) show the outer and inner boom/silt curtain not only fixed to temporary piles but also <u>apparently to the existing Community Association seawall with notation "Fixing Point Above MHW"</u> . See attached extracts from USA paper "Silt Curtains as a Dredging Project Management Practice". This paper highlights the limitations of silt curtains. Note also that AECOM are silent as to the environmental protection need to regularly inspect the silt curtains below water including confirmation of an effective floor seal.	FDR, FMR Unacceptable to BPRG and presumably CA " Unauthorised use of others land and improvements"
3.2.1. page 13.2	Regarding the "Placement and Installation of Sediment Protection System" (SPS) it states "Rock armour;- 300mm of grade Basalt rock"	Both here and later in the CEMP there is <u>not definition of the quality and grading of the Basalt rock.</u> The longevity of the Basalt in this marine environment surely must be proven to be well in excess of 100 years. It is <u>essential that rock/Basalt quality and durability tests are defined and then proven to comply by a NATA registered laboratory and further control testing be done progressively during construction.</u> <u>Independent or audit testing to that by quarry should be mandatory. A "HOLD" on all related activities should occur if a non-compliance is revealed.</u>	FDR, FMR CDGR (1.2)
3.2.1; Page 13.6	"The sheets will be laid continuously etc"	There is <u>no reference to prior cleaning of the Bay floor to remove all obstructive and sharp objects which of course could damage the SPS.</u> No investigation for this likely possibility and no contingency plan is documented by AECOM	FDR, FMR CDGR (1.2)
3.2.1;page 13.7	"The geotextile will be secured by placing Basalt rock gravel on top"	There is <u>no specification of the minimum insitu density of the Basalt, how it will be tested and how layer thickness will be</u>	FDR, FMR CDGR (1.2)

3.2.1; page 14.1	.. "the inner boom/silt curtain will be progressively moved south over the SPS.."	<u>tested.</u> <u>An ineffective floor seal will be created with an irregular Basalt layer which has only been dumped by the excavator. Furthermore the inner curtain will be dragged across the unprotected floor sediments and undoubtedly stir/release them into the water.</u>	FDR, FMR CDGR (1.2)
3.2.2.; page 14.4	"Piling for Marina Construction"	<u>No reference</u> is given in 3.2.2 or elsewhere as <u>to the methodology of withdrawing at least 13 temporary piles. Their removal will withdraw/suck up the contaminated sediments.</u> A critical element or consideration of the CEMP has been omitted by AECOM	CDGR (1.7) No consideration and/or no suitable solution for exposure and water distribution of the contaminants
3.2.3; page 14.9	.. "Barge moorings.." "four temporary piles will be installed" also figure CMP01 shows 9 outer silt fence/boom temporary piles.	See item above	See item above
3.3.2; Page 15.1	"Monitoring prior to removal of Boom/Silt Curtains"	Again <u>no "STOP" or "HOLD" QA demand for non-compliance</u> (typical omission throughout the AECOM report)	FDR, FMR CDGR (1.7)
4.0; Page 17.1	ENVIRONMENTAL MONITORING – throughout e.g @ page 17.7 "Any breaches or release of contaminant during the inspection will be reported to the Project Manager at the NSW Maritime Authority"	No immediate non compliance action. <u>No contingency plan</u>	FDR, FMR CDGR (1.7)
4.2; Page 18.1	WATER QUALITY MONITORING 4.2.1. Baseline Sampling 4.2.2. Ongoing Monitoring 4.2.3. Testing Requirements	<u>Again no "STOP" or "Hold" points for non compliance. No contingency plan.</u> <u>Again no requirement for sampling to NATA endorsed procedures and testing in a NATA laboratory</u> <u>Also no consideration of a CEMP plan for potential fresh water concentration in Kendall Bay south of Marina curtain due to two major stormwater pipe outlets to there and partial damming due to Marina silt curtain.</u> (e.g. silt curtain can block with silt deposits.) NO consideration of this issue or monitoring of it's potentially damaging effects to environment	CDGR (1.7) CELM total omission
5.3; Page 23.2	NOISE CONTROL PLAN - For a period of 4 weeks and under ... construction works must not exceed 75dB(A) and - For a period of 4 weeks and 26 weeks under ... construction works	We read these <u>CEMP noise limits as exceeding those specified in the Heggies Report 10-5800-R1 dated 23 July 2009</u>	FDR, FMR CDGR (1.7)

	must not exceed 65 d B(A)		
5.3; Page 23.3	All construction vehicles involved with the works will enter and leave the Breakfast Point property in accordance with any site entry requirements.	Regarding "site entry requirements" The report is silent as to "what are" or "who will define" those requirements.	FDR, FMR CDGR (1.2)
Table 5; Page 25	"Work and Management Requirements"	No reference is given to land based deliveries or materials or work etc. This is an obvious Environmental Consideration and is omitted. <u>A dilapidation report of all potentially affected Community Infrastructure is essential before works commence. (e.g. all trafficked roads, waterfront walkway, seawall, etc, etc).</u>	FDR, FMR CDGR (1.7) Dilapidation Report for Community used infrastructure omitted but is essential
6.0; Page 27.1 7.1; Page 29.1	"Site inspections"- Appendix B presents the Site Inspection Report 7.1 No.	No specific reference is made to environmental impacts on the adjacent residential areas except for dust and noise. <u>No reference to traffic impacts, hindrance to public access areas, O.H. & S etc. No direct link/action plan/response times regarding residents complaints. No issuing action reports to residents for relevant complaints.</u>	FDR, FMR CDGR (1.7)
7.1; Page 29.1	Non Conformance and corrective Action Reports	<u>No critical "STOP" or "HOLD" points for major environmental non compliances or catastrophes.</u> TLB as Project Manager should be on site full time to immediately react to non-conformances.	FDR, FMR CDGR (1.7)
7.3; Page 30.2	"All records should be retained ---- minimum of 3 years	Detention period of 3 years far too low for a project of substantial environmental risks. This may offer an offender an escape from legal liability given the slow speed of litigation. <u>Dismisses possible future litigation essentials.</u>	CDGR (1.7) C of C
8.0; Page 31.1	CEMP Audit and Review "The Contractor or a representative of the Contractor shall conduct an audit of the CEMP---"	<u>Any audit of creditability should be done by a party of independent to the Contractor</u> (e.g. at least by AECOM but desirably by another party given the many omissions in the CELM)	C of C CDGR (1.7)
10.1; Page 35.2	"An exclusion zone shall be enforced around the work site to assist in the safety of both on site personnel and the public"	<u>The exclusion zone needs precise defining.</u> It should not include any Community owned or managed land. The site is on/above water and the <u>exclusion zone should be limited to the water area only.</u>	C of C CDGR (1.2)
10.4; Page 36.7	"PROHIBITED ACTIVITIES""shall only be permitted in designated areas"	<u>The specification of "designated area" is required.</u>	C of C CDGR (1.2)
10.4; Page 40.4	"Site Traffic" --- "Site Traffic shall be diverted or the area barricaded prior to the commencement of the works"	<u>Definition of "barricaded area" location is necessary.</u> It cannot be on Community owned land without the necessary (but unlikely) approval. No discussion regarding such approval for any	C of C CDGR (1.2)

		land based activity (other than car parking) is referenced in the AECOM report. Activities related to the Marina site have no given right to use community land except where directly owned such as the proposed Car Park lot.	
12.6;Page 47.2	Table 9, Item 4 reads "Excavation pits and trenches (related shore work)" "Shoring all deep excavations. No entry into excavations deeper than 1.5 metres".	<u>This implies proposed works on Community Association land without any disclosure of what works, without notification whatsoever all without any Community approval.</u> It is others private land in Community ownership that is involved.	FDR, FMR CDGR (1.2)
13.8; Page 52.6	"Noise and Vibrations" "Should noise complaints arise, periodic testing of equipment used on the site will be undertaken to verify compliance with maximum permissible noise levels".	If a resident complaint occurs then (unless there is a track record of unfounded complaint from the individual) <u>same day noise monitoring should be completed</u> by an independent party [e.g. HEGGIES] and an <u>immediate "Stop that noise source" occur if there is a non compliance.</u>	FDR, FMR CDGR (1.7)
13.10; Page 53.3	Excessive Rain	There is no recognition of mangrove or ecological damage to water life if an excessively fresh water environment is created by the 3 major storm water discharges to the south end of Kendall Bay where the Marina silt curtain may create a salt/fresh water separation environment.	FDR, FMR CDGR (1.7)
Dwg CMPOO; Page 65	TLB drawing CMPOO (and other drawings) reference "Kiosk, outdoor area, waiting area and toilet. Ref to Dwg 0911 DA200C by Rose Structural Design" and "Marina Managers office with toilet. Refer to Dwg DA 100C by Rose Architectural Design."	<u>Neither of the reference drawings is included in any of the reports in Volume 7 and 8. The building layout etc. is essential to assess and consider environmental impacts especially for the operation of the Marina. The building drawings and proposed staff levels are essential to assess the minimum car park requirements</u>	FDR, FMR CDGR (1.7)
Dwg CMP02; Page67	The outline of the SPS is shown in red and is well clear of the foreshore and MHWL whereas the Remediation Order area (in yellow)abuts the MHWL. Many other drawings show the same detail with edge of SPS often around 20 to 30 metres from MHWL.	<u>The SPS needs to extend to MHWL as reported by AECOM (reference 1.3.1 of Volume 7)</u> <u>The most critical zone for containments protection is omitted from the SPS design. This is a major environmental issue.</u> The near shore zone is impacted by tidal variations, wave action, undoubtedly man movement (kayaks, small sailing vessels etc will use that area etc.) and disturbance of floor bed is highly likely yet no protection provided. <u>The URS environmental/contamination report to Jemena for Kendall Bay Remediation of "hot spots"(e.g. Dwg DA10) particularly highlight areas around the shore line (e.g. at end of old wharf)and elsewhere and hence the shoreline and close by is a very high risk area. AECOM have not recognised this as a hazard.</u>	MAJOR ENVIRONMENTAL PROTECTION OMISSION FDR, FMR CDGR (1.7)
Appendix C	Appendix C: "Non-Conformance and Corrective Action Reports".	<u>Again no reference to a "STOP WORK" or "HOLD" reaction if a non conformance occurs.</u>	CDGR (1.7)

VOLUME 7: REVIEWS BY ROD JEFFERY (BE, MSC, DIC, FIE AUST)
APPENDIX 10 ' OPERATIONAL ENVIRONMENTAL MANAGEMENT PLAN (OEMP) AUTHOR: AECOM DATED 30TH SEPTEMBER 2009

FIR, FRM = Further information required for meaningful response

C of C = Suggested "Condition of Consent" if Marina were approved

CDGR = Contravenes Director General's Requirements (see attached number CDGR for quick reference)

Note: The Author strongly believes the Marina D.A. should be rejected on numerous grounds submitted in the Breakfast Point Residents' Group (BPRG) submission. This critique is provided to give further support to that submission and in no way should be interpreted as a conditional acceptance of the D.A.

1.3.1; Page 2	SEDIMENT PROTECTION SYSTEM <u>"The SPS covers ----- and areas of potential sediment disturbance in shallow water between the floating pontoons and the mean high water mark.</u> The extent of the SPS is presented in drawings DA1 and DA10 in Appendix A."	<u>Dwg DA-01 and D10 show a wide strip from west edge of SPS (often in 20 – 25 m width range) and the MHW with no SPS. This is a potentially high disturbance zone due to wave action.</u> Also one can daily view <u>Rivercat ferry induced waves roll down the foreshore</u> from Breakfast Point, north of the proposed marina to well south of the marina; <u>also high winds affect the area together with tidal variations and proposed use of area for Kayaks, small vessels etc.</u> (with almost certain falls and <u>foot movement on sediments</u>). The D.A. Vol. 6 report by GBAC confirm very high current speeds due to propeller action where the water is shallower (.eg. table 5.7) Further the <u>U.R.S. contamination report</u> for Jemena and the AECOM "Sediment Manage Report", (e.g. figures F4, F5, F8 etc.) identified the <u>"Hot Spots" or contaminant concentrations</u> near the MHW. Frequency remediation by removal were such as at the shore end of the non demolished wharf	CDGR (1.7) The SPS extent fails the AECOM stated criteria. This is a MAJOR ENVIRONMENT PROTECTION OMISSION
1.3.1.; Page 2		Drawing DA01 refers to kiosk etc Dwg 100/ Prelim 02A and Managers Office etc Dwg 160/Prelim 03A (both by Rose Architectural Design	CDGR (1.2) Neither drawing included in AECOM report yet critical for OEMP.
1.3.1; Page 2.1	"Geotextile: Elcomax 1200R polyester staple fibre geotextile, with a design life of greater than 100 years"	<u>The design life</u> referred to is for the geotextile itself (i.e. in isolation) <u>as advised by the Manufacturer or it's agent.</u> It is <u>not a guarantee or warranty that the SPS</u> (i.e. Sediment Protection System) of Elcomax 1200R overlaid by 300/400 mm Basalt <u>will fulfil its function of 100% containment of the floor contaminants.</u> Such a guarantee needs to be endorsed by an	FIR, FMR CDGR (1.7)

		<u>unqualified guarantee by the designer of the SPS system and with the assurance of adequate Professional Indemnity</u> which specifically covers this SPS application. The P.I. cover must be \$50 million? \$100 M? \$200 M? to cover the catastrophe of a failure of the SPS to contain the contaminants. Further given the critical role of the SPS it would seem that possibly the underwritten guarantee or warrant for the SPS should possibly be 150 or 200 years or more – we defer to legal and other experts for consideration of this issue. (In this context the Community Association lease, the responsibility for the Waterfront Walkway is 299 years.)	
1.3.1; Page 2.1	"Rock armour, consisting of 300 mm of graded basalt rock."	As discussed in our comments in the CEMP <u>the long term (100 year? 200 year? Or more) durability of the Basalt needs proving by comprehensive NATA endorsed testing.</u> For those who do not know, the Sydney Prospect Quarries which were the major hard stone/ blue stone/ quarry stone provider for Sydney's development throughout the 20 th Century used "Dolerite" which is a comparable rock to "Basalt". The quarries ran out of appropriate rock due to similar looking but very much marginal quality Dolerite which rapidly broke down/degraded (i.e. within a few years) when used for engineering applications. Visual inspection by suitable experts could not necessarily identify the poor quality rock, <u>it required a suite of chemical and other durability tests yet no such tests are proposed or defined nor considered for the Basalt Armour Layer.</u> Also the section 1.3.1 wording says "graded basalt rock". No specification of the grading (i.e. particle size distribution is given.) <u>From a civil or geotechnical engineering aspect the definition of the necessary grading is essential.</u>	FIR,FMR CDGR (1.7)
	All soil, rock water etc testing related to Marina construction	The above discussed testing requirements are most conventional in civil and geotechnical engineering. For example an extensive and rigid set of tests is required by all competent road authorities (e.g. Councils, RTA etc) for road pavement layer materials. Such requirements also specify that <u>all testing must be by independent NATA registered laboratories.</u>	FIR,FMR C of C
1.5; Page 2.9	Scope of OEMP "Outline operational measures that will mitigate sediment disturbance and adverse effects on the environment and human health".	We agree with the quoted objective but claim <u>the AECOM OEMP</u> fails this objective in a number of ways. For example in Table 1 (page 4.2) of the OEMP they define responsibility of a Vessel Owner (Marina User) but <u>do not include a total ban on the use of anchors.</u> Note the CEMP demands no anchors to be used by	FIR,FMR CDGR (1.7)

		vessels during construction. This requirement is logical as anchors potentially destroy the functioning of the SPS. Apart from <u>the OEMP omission of an operational demand that the marina users must never use anchors within the marina lease and the larger nominated contaminated area such a demand is impractical</u> as : • <u>The boat crew may not know of the requirement.</u> • <u>Visiting boats certainly would not know of the demand.</u> • <u>It cannot be realistically enforced /policed.</u> • <u>If vessel motors fail or in high winds or if vessels are congested (e.g. waiting for entry/exit) there is an almost certainty that anchors would be used.</u> • <u>To eliminate the use of anchors in critical circumstances raises major OH&S risks.</u> • <u>In reality anchors will be used and the SPS integrity put at serious risk on such occasions.</u>	
1.6; Page 3.5 Table 1	Marina Owner/Operator – 10th bullet point • “Undertake regular monitoring of the SPS integrity”.	The use of the wording “regular monitoring” here and for many other issues is open to misinterpretation and/or abuse. An OEMP must specify that the maximum intervals that regular monitoring for as long as the marina is in operation.(100 years - 200 years??) and specify how it must be done. In the case of the SPS it would have to include diver inspections amongst other methods. A rigid inspection protocol must be defined. <u>It is irresponsible to leave the decision to the builder or the proponent or the operator.</u>	FIR,FMR CDGR (1.7)
1.7; Page 4.9	“The guideline and requirements presented in this OEMP are specific to the operation of the Marina and the associated SPS in the context of protecting the immediate environment.”	<u>The OEMP clearly fails this criterion especially with the lack of recognition of potential damage to the SPS by anchors plus the SPS not extending to the MHWM.</u>	CDGR (1.7)
3.6; Page 11.5	“Land Pollution”	The AECOM wording only refers to boat maintenance/repair aspects. It neglects to consider or address the risk of land pollution due to numerous persons and golf buggies transiting from the car park, on community land and along the public waterfront walkway. “In addition to the issue of alienation of public land”. <u>In addition to the issue of alienation of public land the risk of land pollution is obvious yet no control or regular clean up measures are considered or specified in the OEMP.</u>	FIR,FMR CDGR (1.7)
3.7; Page 12.1	“If hazardous liquids, such as paints and solvents are to be stored for use at the	The wording indicates <u>the storage of such pollutants is acceptable (we submit this should be banned by the OEMP).</u>	FIR,FMR CDGR (1.7)

	Marina, they will be stored in a properly maintained and operated bunded area with a roof that excludes rain".	In the alternative if they must be stored then <u>there is no marina drawing showing the "bunded area with a roof"</u> in the DA application.	CDGR (1.2)
3.8; Page 12.9	"...hazardous substances, fish waste, waste oil, oily mixture...."	Obviously such types of waste have been considered and expected. <u>These types of waste bins and indeed waste bins for boat usage should be placed on the marina arms and not the public access main wharf.</u> Indeed <u>all such bins should be say 20 or 30 m minimum from the seawall to prevent/limit improper use by land based persons and particularly to have waste storage with related dumping noise, smell etc .etc. well away from the Hunters Wharf residences</u>	FIR,FMR CDDR (1.2)
3.8; Page 12.9	"Solid waste bins (domestic waste and recyclable waste) will be placed at the street entrance to the property for pick-up on a weekly basis."	<u>Specific definition of location of bins is required.</u> The seawall alignment is unacceptable as the Waterfront Walkway is dedicated for pedestrians and cycles. "Pick up on a weekly basis" means <u>bins will be moved across Walkway regularly (OH & S risks!!)</u> plus the pick up point (not defined!) will cause <u>excessive noise concentration very close to residences</u> , without any OEMP consideration of this environmental issue. Also due to bins containing fish, food waste etc. it is necessary to remove waste almost daily to minimise smell, vermin and health problems. <u>The regular waste bin movement for over 200m along public walkways is a major and alienation of public space.</u>	FIR,FMR CDGR (1.4)
3.9; Page 13.5	Offensive Noise ..."Should noise complaints arise, periodic testing of equipment used at the Marina will be undertaken to verify compliance with maximum permissible noise levels."	Any resident currently has 24 hour access to the Police and /or Council Ranger for "Offensive Noise". <u>The Marina operator should provide the same rapid noise complaint response as it is a 24 hour facility</u> with almost certain offensive noise impacts (e.g. Boat revellers e.g. often moored boats are used for night parties!) and public can use the wharf 24 hours per day. Currently there is offensive night noise on occasions from Cabarita Wharf and close by areas which are around 200/300m away and impact Kendall Inlet and Admiralty Strata residents. Individual statements as to such offensive noise can be provided if required. Note there is no noise baffle between the marina and close by residences.	FIR,FMR CDGR (1.7)
3.10; Page 13.7	Vessel Access and Navigation ..."enter through the 50 m predetermined area to north east.." and .."egress through the navigational markers .."	This proposal <u>enforces concentration of Marina vessel movement with obvious queuing/waiting because of numbers and resultant obstruction to adjacent Rivercat ferry regular pathway (OH&S, risks, delays to public passengers, disruption of Sydney Ferry timetables etc.)</u> Also the proposal causes extreme concentration of vessel movement to local SPS cross over point with <u>no addition SPS design consideration for potential erosion of edge sediments etc. etc.</u>	CDGR (1.7) GDGR (3.2)

3.11.1; Page 14.1	Vessel Cleaning and Maintenance at the Marina.	The allowance of cleaning and maintenance will inevitably result in related materials entering the water. This is unacceptable as a general statement but in this environment much of the containments and refuse will almost certainly be transported to the Mangroves and beach end of Kendall Bay. Regular cleaning of flotsam and jetsam from the Mangroves is currently necessary and completed by "Waterways" and local residents, but a further source of such materials is unacceptable. <u>Hence boat cleaning and most forms of boat maintenance at the Marina should be banned.</u> In the alternative if they were to be approved then a Condition of Consent should be that the <u>Marina Operator cleans up the Mangrove and southern bay Beach etc area on a 1 or 2 weekly basis or as more frequently required by monitoring (by others than the Marina Operator) and with adjacent residents having an input as to acceptable frequency of cleanups.</u>	FIR,FMR CDGR (1.7) C of C
3.12; Page 14.9	"Marine Deck and Building Maintenance"	The guidelines are sensible but who will clean up or enforce guidelines. <u>A minimum requirement should be that a dedicated cleaner employed by the Marina Operator cleans all rubble, refuse, water etc etc. each morning and evening.</u> The cleaning should also include the section of Waterfront Walkway fronting the Marina lease extent and other marina user generated refuse (which may extend around the residences etc.etc).	FDR, FMR CDGR (1.7)
3.13; Page 15.3	"Damage to SPS"	The OEMP for the first time makes some reference to the use of anchors etc. However <u>no discussion or solution is given to the anchor risks we have raised in 1.5, page 2.19 discussions above.</u>	FDR, FMR CDGR (1.7)
3.14; Page 15.6	"Resource Efficiency"	Some motherhood or "wish list" issues are itemised in first three bullet points but description of how to meet these "wish lists" items is not given. AECOM fail to recognise that the <u>OEMP is a "PLAN" not a wish list</u> of items that may or may not be considered and implemented by undefined means.	FDR, FMR
3.15; Page 15.9	"Marina Decommissioning"	The OEMP is absolutely correct in considering the possible need to decommission. If its decommissioning is due to financial failure of the venture or the need to remediate the sediment below the Marina there is no proposed cost security safeguard to the Breakfast Point residents, the tax payers of NSW or the NSW Government. The only prudent <u>means of minimising this risk would be a monetary bond or security placed by the</u>	C of C CDGR (1.7)

		<u>Proponent/Marina Operator with the NSW Government.</u> The amount is for others to decide but obviously <u>must be many \$ millions.</u> Possibly a review of the need for the continued monetary security could occur if excellent performance of the SPS was confirmed by regular monitoring over say a decade or more.	
4.1; Page 17.1	4.0 General Inspection	OEMP criteria inspections are without doubt required but the proposal of "Quarterly inspections" is very slack or unrealistic. Surely for many operational OEMP criteria there should be daily inspections while others such as the SPS condition could be more widespread. The <u>OEMP "Plan" should schedule the frequency for all environmental or other monitoring inspections rather than leave it to "trust the undefined third party".</u>	FDR, FMR C of C CDGR (1.7)
4.2; Page 17.8	"Monitoring of SPS Condition".	<u>The SPS is to the writer's knowledge an unproven/untested below water contamination containment method for the condition of shallow water tidal variations and the concentration of boats above. The proponent has been unable to example one similar contamination containment SPS where a marina boat concentration occurs above it. The SPS failure would be catastrophic</u> in the context of continuing the operation of the Marina and worse regarding the environment. The proposed yearly inspections for the first five years are inadequate and irresponsible in the writer's opinion: <u>at least 3 or 4 monthly inspections up till Marina is fully operational for a minimum of 12 months or so would be prudent.</u> Possibly some adjustment could be made by progressive review if excellent performance was always confirmed. Regarding the AECOM proposed yearly SPS inspections if say progressive deterioration at higher risk locations had commenced at 1 month into any yearly inspection gap then it would be negligent and irrational to wait a further 11 months to discover that problem. A diver's inspection is only a visual inspection but as the Elcomax 1200R is advised as allowing sediment to migrate through its "pore" or "opening" size there is no OEMP monitoring method to assess this defect. Note the contaminants are not necessarily visible to a diver so another means of regular monitoring is essential.	FDR, FMR CDGR (1.7)
6.2; Page 21.3	"Emergency Response Equipment and Personnel".	The OEMP is void of detail regarding this section, e.g. it says "Fire fighting equipment to be appropriately placed within the Marina." <u>The obvious deficiencies are what equipment? At what locations or centres? What training? What regular validation?</u> Without this basic information it is impossible to complete even a	FDR, FMR CDGR (1.2 & 1.7)

		preliminary assessment of adequacy of the "Fire Fighting equipment and related response to events". The writers investigation of guidance as to Marina Fire Fighting Equipment found the NSW Fire Brigades do not have a detailed guideline document while the AS give little guidance. However <u>the Queensland Fire and Rescue Service have a detailed "Guideline for Fire Safety Systems in Marinas" and the BPRG proposes that this should be the minimum standard for the proposed Marina.</u> The Queensland proposals indicate the <u>likely need for closely land based improvements and facilities which would be an alienation of the public space of the foreshore walkway.</u> A similar lack of detail exists for "spill kits to be appropriate for the Operation."	
6.3.1; Page 22.3	"Spills and Leaks" – "Construction of retention basin, diversion drains, if the spill/leak occurs on land."	The wording implies that "hydraulic fluids, lubricants or fuel" may be transported across the land. This is unacceptable as <u>such supplies possibly should be available at the Marina but delivered only to it by water transport. This is a major OH & S and "alienation of public space" issue</u> that should be clarified and defined to allow the Breakfast Point residents to assess and respond. <u>It is evident that volatile fluids are expected by AECOM to be regularly transported through the close by community area (sometimes within 4 m)</u>	FDR, FMR C of C CDGR (1.7)
6.4; Page 22.1	"Damage to SPS" – "Damage to SPS will be repaired immediately. The damaged area will be initially inspected by the diver ..."	<u>This claim of "repaired immediately" is in total conflict with Clause 4.2 which proposes only yearly inspections.</u> It is obvious that from above water level it would be most difficult and probably impossible to know if damage to SPS occurred. Even diver inspection would be difficult due to the geotextile overlay of Basalt on sediment (which may occur after the damage event); the diver would have to be specifically trained and satisfy an independent auditor as to his competency. If say the damage was due to a large vessel anchor drag it may not be seen or known by the Marina Operator so he is unaware of the "hot spot" or risk area and hence <u>the OEMP claim of "Damage to SPS will be repaired immediately" is nonsense (unless virtually weekly inspections occur).</u>	FDR, FMR CDGR (1.7) Major OEMP omission
7.2; Page 25.3	"Complaints and Incident Reports". "The Marina operator will maintain a register of complaints from local residents, and other parties –" "Copies of incident and complaint reports will be provided to the NSW Maritime	<u>The weak link</u> in the proposed system is that many or all of the complaints or non compliances will be directed at the Marina Operator. Hence he has a <u>conflict of interest</u> and a possible incentive not to record or to inaccurately record issues. A means to reduce this risk is <u>for the register to be a public accessible</u>	FDR, FMR CDGR (1.7)

	Authority"	<u>document in the Marina Managers office (and on a web site)so that any party reporting a complaint or non compliance can check its correct recording together with the accuracy of reporting as to remedial action. If the public are not satisfied then they should have a direct access to the overall responsible person in the NSW Maritime.</u> (How else can NSW Maritime know of unrecorded or favourably recorded issues???) Further as the marina will be a privately owned facility on public water this further reinforces the need to rapidly communicate to NSW Maritime as to any form of non compliance.	
8.0; Page 27.1	"OEMP audit and review"	The words in this section clearly indicate that the AECOM, OEMP (as contained in Volume 7 of the DA Application) is the proposed final OEMP document but later audits during the marina operation may lead to modification of the OEMP. Hence the many critical comments in this review especially related to the <u>common OEMP "ABSENCE OF PRECISE CONTINGENCY PLANS" is not even considered by AECOM.</u> Hence where we have notated "FDR, FMR" i.e. "FURTHER DETAILS REQUIRED FOR MEANING FULL RESPONSE or CDGR – Conflict with Director Generals Requirements" is most justified.	FDR, FMR CDGR (1.7)
Pages 142 – 144;	"Inner West Environmental Policy" "3....Please pay particular attention to dust and paint chips"	This policy clearly allows sanding, scraping etc in preparation for painting. It is certain paint and dust flakes will enter the water. The concentration of 172 berths ensures substantial contamination from this cause. We propose such <u>maintenance work should be BANNED at the Marina</u> (e.g. go to River Quays maintenance area 600m away.) Also the <u>policy is inadequate and reckless in NOT BANNING THE USE OF ANCHORS IN THE MARINA LEASE AREA OR INDEED WITHIN THE WHOLE AREA DEFINED BY THE REMEDIATION ORDER</u>	FDR, FMR CDGR (1.7)
Appendix C;	Site Inspection Report "Are all fuels and chemicals stored correctly in appropriate bunded areas?"	<u>The OEMP drawings show no provided Bunded areas.</u> One would expect these say 20 or 30 m along all arms to encourage use rather than risk fuel and chemicals stored on boats!!	C of C CDGR (1.7) (Ask Ian Hope)
Appendix E:	Complaints and Environmental Incidences Register	<u>This Register should be a public accessible document 24 hours per day as the facility is open 24 hours per day.</u> Otherwise there is no Quality Assurance/Management Plan that a lodged complaint has been recorded/acted. The only parties who can meaningfully audit the Register is each of the complainant	C OF C



		parties (if they so wish.) <u>If The Marina Operator wishes to act in good faith he would embrace this public access,</u> but of course it should be the OEMP which demands it.	
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RE: INNER WEST MARINA D.A. VOL 8

Appendix 12

Construction Management Plan (CMP)

Author: TLB Engineers

Dated 23 October 2009

Review by Rod Jeffery (BE, MSC, DIC, FIE Aust, Licensed Builder No. 41597)

FIR,FMR = further Information required for meaningful response

C of C = Suggested "Condition of Consent" if marina were approved.

CDGR= Contravenes Director General's Requirements

Note: The Author strongly believes the Marina D.A. should be rejected on numerous grounds submitted in the Breakfast Point Residents' Group (BPRG) submission. This critique is provided to give further support to that submission and in no way should be interpreted as a conditional acceptance of the D.A.

<u>CLAUSE ETC REFERENCE</u>	<u>REPORT STATEMENT</u>	<u>COMMENT</u>	<u>QUESTION OR ACTION LIST</u>
2.3; Page 3.5	"Structures" 2. Blanket – "The basalt would be tested for suitability before being approved for delivery to site. The blanket has a design life of greater than 100 years..."	It is irresponsible for the critical quality (i.e the testing) of the Basalt to be determined by the Developer, Marina Builder or quarry supplier. The conflicts of interest are obvious. Conventional civil engineering has the designer specify <u>the necessary rock quality and durability tests, the frequency of tests and the need that testing be done by an independent NATA laboratory. The CMP fails to address any of these aspects.</u>	FIR, FMR CDGR (1.7)
Appendix 12:	Geotextile Information	The <u>A. Mathur</u> et al paper is old (1993) which is unusual as we suspect Elcomax 1200R possibly did not exist at that date. However the paper quotes "The blanket... designs life of 100 years..." It is also correct that Geofabrics Australia in Appendix 12 claim "a design life of greater than 100 years when submerged in saline water below a rock cover. Polyester is resistant to biological and hydrocarbon attack". However <u>the first question is whether 100 years is adequate</u> ; does the State Government or it's agencies then accept it will accept the responsibility/bill for remediation after 100 years?? <u>There is no warranty by Geofabrics Australia that the SPS will fully contain the contaminants for 100 years</u> (Contaminants can pass through the void or pore size of Elcomax 1200R!!) Note the comments on polyester resistance appear to neglect the conclusions of the technical paper in Appendix 12. At page 1.9 it states "...whereas polyester geotextiles show limited resistance to strong acids and alkalies" also "In contrast to polyester, polypropylene fibres are made up of non-polar hydrocarbon chains which are relatively inert to chemical attack." We also note that most of the Mathur et al testing	FIR, FMR CDGR (3.2)

		are for 26 weeks duration maximum which is well short (much less than 1%) of the required design life of Elcomax 1200R as part of the SPS. We are not making any claim as to the life of Elcomax 1200R or the SPS system, but we say from the provided technical papers there is reason for doubt. Most particularly <u>the guarantee or warranty should not be given or accepted from the product vendor (i.e. Geofabrics Australia) but should be provided by an established independent expert with appropriate PI insurance cover. The Guarantee should be for the longevity of the whole SPS design.</u> The writers' note the second Appendix 12 paper by G W Davis is dated 1986 which is again questioned in terms of current knowledge and the first date of Elcomax 1200R production. Again we hold that <u>the guarantee/warranty must be by a current independent geotextile expert.</u> Note the Davis paper under "Alkaline Resistance" states "In contrast to excellent acid resistance, polyester has somewhat limited resistance to alkalines as shown in Table 6". The writer notes that in a recent (Nov 2010) advertisement by Geofabrics they publish the results of "a recent study carried out by Parsons Brickenoff" on "Published data for Geotextiles Commercially Available in Australia." The results advise for "BIDIM" brand supplied by Geofabrics Australia "46% of results 0 – 25%below published typical Data" (document reference: 10-0073-03-2104089A by Parsons Brickerhoff). There was no specific reference to Elcomax 1200R but the results for Geofabrics (and more so, other suppliers who were tested) clearly indicate considerable doubts as to Vendor Published Information.	RPJ to check
2.3; Page 3.6	"All materials and equipment for the construction of the waterside works would be bought to site by barge."	The writers fully endorse this proposal but there is a distinct risk the statement CMP may not be followed. We recommend that it be <u>spelt out as a Condition of Consent and large signs quoting the same words be fixed in the proposed marina car park and at front of the Marina site when first entered from the land. This is a paramount issue regarding the protection of the environment OH & S</u> of the public (pedestrians and cyclists) who regularly traffic the Waterfront Walkway. <u>Access to the fixed wharf frontage should be secured and materials or equipment etc be prevented access by full time vetting.</u> There should be <u>a documented meaningful penalty for non compliance regarding this issue.</u>	FDR, FMR CDGR (1.7) C of C
2.4; Page 3.7	Work Method – Car Park	There is a major omission of no reference to construction of stormwater pipes, and outlets/pit connections to Community stormwater drains. These are obviously required!	CDGR (1.2)

2.4; Page 4.3	"...the basalt, rock would be placed on the geotextile using the excavator with GPS controlled bucket."	This methodology has the risk that along the edges of the Elcomax 1200R (i.e with unprotected sediment adjacent) it is <u>likely that there will be disturbance of the sediment such as by overspill or a local bearing capacity failure due to the load concentration</u> . This is possible as the sediments are described in reports as "very soft" etc however there is the <u>omission of no objective Geotechnical Insitu strength testing</u> . If a bucket full of basalt were dumped on the edge of the mat it is <u>highly likely a local bearing capacity failure would occur in the unprotected sediment contaminants thrust into the water and migrate away</u> .	FDR, FMR CDGR (1.7)
2.4; Page 4.8	"Piles"	There is <u>no CMP reference to or consideration of the most environmentally critical piling aspect which is the withdrawal of at least 13 proposed temporary piles</u> . (i.e. 4 proposed for barge mooring and 9 for boom/silt curtain fixing). <u>The withdrawal will lift sediment into the water above by both adhesion to the withdrawn pile and by suction. This unacceptable environmental impact also was not considered in the ECMP. It is a major omission and a major environmental risk and causes serious questions as to the competency of the ECMP or CMP.</u>	FIR, FMR CDGR (1.7) Credibility of CMP thoroughness in question.
2.4; Page 5.8	"Mooring of Barges" "3. Contractor personnel vehicles would temporarily park on the street near the site until such time as the car park is completed."	The contractor vehicles need not park on the Community Streets at any time. The current proponent (Breakfast Point Pty Ltd) parking provision for numerous buildings constructed in the past 7 years were to nominate and use their undeveloped sites for construction vehicle car parks. There are still many such sites available and this method should be adopted.	FIR, FMR C of C
3.1`Page 6.9	"Car Park Works"	<u>Again no consideration of the need to construct stormwater pipes etc in Community land.</u>	FIR,FMR CDGR (1.7)
5: Page 10.8	"Sedimentation and Erosion Control" "Two floating silt curtains and booms will be placed around each stage of the waterside works, including the areas of the blanket".	The effective functioning of the two silt curtains demands that they have <u>an effective cut off down to the SPS and hence they must seal at the variable and irregular floor level. The CMP and ECMP both provide no detail or section or description as to how this critical seal is achieved</u> . To leave that decision to the contractor (and without any definitive guidelines) is most remiss and raises credibility questions. See attached extracts from USA paper "Silt Curtains as a Dredging Project Management Practice". <u>This paper highlights the limitations of silt curtains</u> . Note also that AECOM are silent as to the environmental protection need to regularly inspect the silt curtains below water including confirmation of an effective floor seal.	FIR, FMR CDGR (1.7) Credibility of CMF thoroughness in question.
Appendix 12	Drawing CMP01	The top left corner of the drawing shows a large (about 70m) "Openable Section of Silt Curtain" and "Access Path for Barges, Construction vessels and Floating Structures." This <u>proposed</u>	FIR, FMR CDGR (1.7) Credibility of CMF

		<u>opening of the silt curtain to allow vessel access compromises or negates the objective of the curtain which is to contain the contaminated silt and sediment and prevent it passing through the curtain.</u> There would be numerous openings of the curtain for vessel access as all materials and equipment are to arrive and depart by water. Furthermore for <u>around half of each day there is an outrunning tide and hence water flow (and suspended silt and sediment and potentially contaminants) will flow into the open River. Hence at the very least no opening of the silt curtain should be permitted during an out flowing tide.</u> Due to the frequent construction and materials supply vessel movement, wind etc one cannot logically see the open curtain functioning as a "containment curtain". <u>In essence it will essentially act as an escape mechanism especially during outflowing tide.</u>	thoroughness in question.
	Drawing CMP01	Drawing CMP01 shows 9 numbered "TP" which refers to "Temporary Piles" which together with the 4 minimum Temporary mooring piles for the Barge will require <u>extraction/withdrawal with the pull out adherence and suction of the contaminant sediment. The CMP and ECMP is silent regarding this major environmental hazard.</u>	FIR, FMR CDGR (1.7)
	Drawing CMP01	The north west and south west ends of the silt curtain are shown as <u>"Fixing Point Above MHWM". This would require fixing to land owned by and the responsibility of others (being the Breakfast Point Community Association). Their permission has not been sought to the writers' knowledge.</u> Further even <u>if it were approved a substantial security deposit for potential damage</u> due to damage by the fixing or other causes should be <u>provided to the Community Association.</u> Such details should be embedded in a CMP.	FIR, FMR CDGR (1.7) This proposal is contrary to the Conveyancing Act 1919 clause 177.
	Drawing CMP01	Drawing CMP01 (and many others) show the western <u>limit of the SPS as often 10 to 20 metres or more from the MHWM. This is a major omission in the SPS design as it does not protect/contain the contaminated sediment in one of the most critical zones because:</u> 1. The Jemena proposed remediation (see drawing DA10) is substantially concentrated within the first 10 to 20 metres on the waterside of the MHWM. This essential <u>highlights that this area is a likely "hot spot area".</u> 2. There is <u>continuous tidal variation</u> in this area.	FIR, FMR CDGR (1.7) Credibility of CMP thoroughness in question.

		3. There is common <u>Rivercat ferry (and other) wash</u> which runs down the seawall water line from Breakfast Point to the south <u>many times each day</u>. (i.e. wash disturbance of sediments.) 4. <u>It is inevitable that during construction there will be vessels and equipment in this area</u> (e.g. fixing silt curtains, for wharf construction etc.) 5. This strip is the proposed for completed Marina access and usage of kayaks, small sailing vessels etc, etc and hence has an <u>increased risk of humans walking in the near shore shallow water (due to spills, training juniors etc.)</u> 6. <u>It is inevitable that Marina boats or their small tenders, dinghies etc will use this area (e.g. safe area for children to operate small power boats.)</u> In the writers' opinion (and as stated in the ECMP by AECOM)the SPS should extend to the MHW. This would require major consideration of issues such as :- a) Removal of the substantial debris visible (at low tide) in the area. b) Potential change to the line of the MHW due to the SPS thickness. c) Damage to the toe of the seawall due to construction activities. None of the above issues have been considered in the CMP.	
	Drawing CMP02	Additional silt curtain "Fixing Point above MHW" shown and refer to comments above. Also <u>drawing CMP03 shows additional fixing points for inner silt curtain.</u>	Same comments above for drawing CMP01
Appendix 12	Geotextile Information	The Ameratunha et al paper is interesting from a Geotechnical aspect and a valid and functional application was tested. However the critical point is that <u>this Brisbane application had no relationship to the containment of sediments, it was for an engineering foundation strengthening purpose. Also they used a "stitched" joining of the geotextile rather than an overlap as proposed for the IWM.</u>	

CDGR INDEX OF REFERENCE NUMBERS

NSW PLANNING DEPARTMENT DIRECTOR GENERAL'S REQUIREMENTS KENDALL BAY MARINA

1. The Environmental Assessment (EA) must include

- 1.1 an executive summary;
- 1.2 a detailed written and graphical description, including engineering and/or architectural plans, of the project including the:
 - need for the project;
 - alternatives considered; and
 - various components and stages of the project;
- 1.3 consideration of any relevant statutory provisions including the consistency of the project with the objects of the *Environmental Planning and Assessment Act 1979*;
- 1.4 a general overview of the environmental impacts of the proposal, taking into consideration any issues raised during consultation;
- 1.5 a detailed assessment of the key issues specified below and any other significant issues identified in the general overview of the environmental impacts of the proposal (see above), which includes:
 - a) a description of the existing environment;
 - b) an assessment of the potential impacts of the project, including any
- 1.6 cumulative impacts from construction activities and from all water related craft that would utilise the marina;
 - c) a description of the measures that would be implemented to avoid,
- 1.7 minimise, mitigate, offset, manage, and/or monitor the impacts of the project;
- 1.8 a draft Statement of Commitments, outlining environmental management, mitigation and monitoring measures;
- 1.9 a conclusion justifying the project, taking into consideration the environmental impacts of the proposal, the suitability of the site, and the costs and benefits of the proposal; and
- 1.10 a signed statement from the author of the EA certifying that the information contained in the report is neither false nor misleading.

Key Issues

2. **Strategic Planning** - an assessment of the proposal in the context of the strategic direction of the locality and region with consideration of the *Breakfast Point Master Plan 2002*, the *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005*, and the *Sydney Harbour Foreshores and Waterways Area Development Control Plan 2005*. Any inconsistencies between the proposal and these plans must be justified;

3. **Contamination** – including:

- 3.1 a detailed assessment of the potential impacts on the disturbance of contaminated marine sediments. This shall take into account information from any previous investigations as well as any additional investigations as necessary and will need to include a thorough description of the methodology used in the assessment, and justification for the methodology used and predications made;
- 3.2 details of any proposed remediation works required and justification for why the proposed remediation measures will succeed;
- 3.3 a site audit statement and a site audit report by an auditor accredited under the *Contaminated Land Management Act 1997*.
- 3.4 with the assessment and recommendations of the investigations;

- 3.5 consideration of the impact of the proposed marina operations on possible future remediation actions;
- 3.6 details of compliance with any order issued under the *Contaminated Land Management Act 1997*.
- 4. **Visual Amenity - including**
 - 4.1 an assessment of the visual impact of the proposal (height, scale and lighting) on the local and regional area, particularly on:
 - 4.2 any adjoining land owners and land owners along the foreshore areas of Putney, Tennyson Point, Gladesville and Cabarita;
 - 4.3 water uses of Parramatta River; and significant vantage points in the public domain;
- 5. **Navigation and safety – including:**
 - 5.1 details of commuter ferry routes and an assessment of the impact
 - 5.2 of the construction and operation of the marina on these services;
 - 5.3 and
 - 5.4 an assessment of the impacts on water based traffic
 - 5.5 and the existing users of the Parramatta River in the vicinity of the marina;
- 6. **Public Access:**
- 7. **Soils, Sediments and Water – including**
 - 7.1 an assessment of surface water impacts on Kendall Bay and the Parramatta River. The assessment must include details of
 - 7.2 proposed erosion and sediment controls (during construction),
 - 7.3 the proposed stormwater management system (during operations) and
 - 7.4 management measures for the containment of pollutants (e.g. fuel
 - 7.5 and sewage); and
 - 7.6 an assessment of acid sulfate soils, including management measures and disposal strategies.
- 8. **Traffic – including:**
 - 8.1 details of the traffic volumes likely to be generated during construction and operation, and an assessment of the predicted impacts of this traffic on the safety and capacity of the surrounding road network.
 - 8.2 Details on site access, internal roadways and parking must also be provided;
- 9. **Noise – including:-**
 - 9.1 construction, operation and traffic noise; and
- 10. **Flora and Fauna – including:**
 - 10.1 an assessment of any impacts on critical habitats, threatened species, populations or ecological communities and their habitats in the region.

References

The environmental Assessment must take into account relevant State government technical and policy guidelines. While not exhaustive, guidelines which may be relevant to the project are included in the attached list.

11. **Consultation**

During the preparation of the Environmental Assessment, you should consult with the relevant local, State or Commonwealth government authorities, service providers, community groups or affected landowners.

In particular you should consult with:

- City of Canada Bay Council;
- Department of Environment and Climate Change;
- Roads and Traffic Authority;
- NSW Maritime Authority; and
- Sydney Ferries Corporation.

The consultation process and the issues raised should be described in the EA.

QUOTATIONS FROM THE USA DREDGING OPERATIONS AND ENVIRONMENTAL RESEARCH PAPER ERDC TN – DOEC – E21
OF SEPTEMBER 2005

“Silt Curtains as a Dredging Project Management Practice”

Note: Ref. 4.5 means 50% down page 4

Comments by “the writer” refers to Mr. R. P. JEFFERY (BE, MSC, DIC, FIE Aust)

Reference

“INTRODUCTION: One of the most frequently cited reasons for establishing an environmental window is impacts from 1.0 turbidity and suspended sediments (Reine, Dickerson, and Clarke 1998).
...**Silt or turbidity curtains have been designated a “best management practice (BMP)” by the Corps of Engineers...**
...**Effectiveness of silt curtains under different circumstances are poorly understood by dredging project regulators and the public alike.** Dredging contractors attest to the fact that, in their experience, **silt curtains do not work under many of the site conditions encountered in navigation and environmental dredging projects.**”

TYPICAL QUESTIONS ON SELECTION AND USE OF SILT CURTAINS

“What are the Components of Silt Curtains? Typically fabricated of flexible, polyester-reinforced thermoplastic (vinyl) fabric, the curtain is maintained in a vertical position by flotation material at the top and a ballast chain along the bottom. (Figure 1)”
“Curtains are generally deployed to extend to 1-2 ft above the bottom to allow mudflow to pass beneath them.”

“What Are the Functions of Silt Curtains? **Silt curtains are designed to contain or deflect suspended sediments or turbidity in the water column.** Sediment containment within a limited area is intended to provide residence time to allow soil particles to settle out of suspension and reduce flow to other areas where negative impacts could occur.”

Page 4.5

“What Processes Affect Silt Curtains? While the curtain provides an enclosure where some of the fine-grained material may flocculate and/or settle, **most of this fine-grained suspended material in the water column escapes with the flow of Water and fluid mud under the curtain.**”
“Whereas properly deployed and maintained silt curtains can effectively control the distribution of turbid water, **they are not designed to contain or control fluid mud.**”

Page 5.6

“How are Silt Curtains Deployed? The maze configuration (“A,” Figure 3) has been used on rivers where boat traffic is present, but **appears to be relatively ineffective due to direct flow through the aperture between the curtain sections.**”
[The writer advises that the proposed regular opening of the silt curtain to allow regular construction and materials supply to the IWM is a similar circumstance to the illustrated maze configuration at page 5.6.]

Page 6.8

“What is Known about the Effectiveness of Silt Curtains? Summarizing the JBF Scientific Corporation study, silt curtains effectiveness depends on many factors such as:

- Nature of the operation
- Quantity and type of material in suspension within or upstream of the curtain
- Characteristics, construction, and condition of the curtain as well as the area and configuration of the barrier enclosure

- Method of deployment.
- Hydrodynamic conditions (e.g strong currents, high winds [especially with long fetch areas.] fluctuating water levels [i.e., tides]."

["The writer notes that the last mentioned undesirable bullet point criteria for silt curtains exists at the Kendall Bay i.e. strong currents (greater than 1.5 m/sec) tidal fluctuations and high winds assisted by long fetch exposures"]

- Page 9.2 **"Where anchoring is inadequate and particularly at sites where tidal currents dominate the hydrodynamic regime and probably cause resuspension of the fluid mud as the curtain sweeps back and forth over the fluid mud with changes in the direction of the tidal currents, the turbidity levels outside the curtain can be higher (as much as 10 times) than the levels inside the curtain."**
[The writer notes that for the IWM there is no proposed silt curtains anchoring and hence this risk is exacerbated in strong currents.]
- Page 9.3 **"With respect to overall effectiveness and deployment considerations a current velocity of approximately 1 knot appears to be a practical limiting condition for silt curtain use." (BPRG note that 1 knot equals only about 0.5 m/sec)"**
- Page 9.7 **"The lack of flow through the curtain is probably attributable to the water taking the path of least resistance (ie. Under the piers or around the ends). Clogging of the curtain with suspended solids (either background or caused by dredging) would only aggravate this situation."**
- Page 9.8 **"Notably, a concern arose that enclosing the dredge with a silt curtain would create a settling basin for solids that could promote the concentration and release of oxygen-consuming suspended contaminants in violation of water quality standards. The exchange of water inside the curtain became a design topic and relief panels (flaps) were considered to allow a 25-percent exchange of basin volume over a 12 hour period."**
- Page 9.9 **"In 1994, the USEPA published a remediation guidance document as part of the Assessment and Remediation of Contaminated Sediments (ARCS) Program (USEPA 1994). They concluded, "As a generalization, silt curtains and screens are most effective in relatively shallow quiescent water. As the water depth increases and turbulence caused by currents and waves increases, it becomes increasingly difficult to effectively isolate the dredging operation from the ambient water. The St. Lawrence Centre (1993) advises against the use of silt curtains in water deeper than 6.5m or in currents greater than 50cm/sec (USEPA 1994."**
- Page 15.9 **"In applications where the curtain will be extended to the bottom of the waterway in tidal or moving water conditions, a heavy woven permeable filter fabric or tide flaps should be designed into the curtain to relieve pressure on the curtain wall." [The writer advises that the case of tide flaps contravenes the objective of containment of contaminants within the curtain.]**
- Page 15.9 **"Silt curtains should be used on slow to moderate currents."**
- Page 16.2 **"In high currents where sediment plumes disperse rapidly, silt curtains are very difficult to maintain properly and can easily become dysfunctional."[The writer advises that according to page 9.9 a high current would be greater than**

0.5m/sec. The D.A. Vol. 6 (i.e the GBAC report) frequently predicts current speed greater than 0.5m/sec (e.g. see Vol 6, Table 5.7 which lists speeds of 1.2 to 11.2 m/sec in 2 m of water or Table 5.12 which indicated design axial velocity at top of blanket at 1.6 or 2.2 m/sec) .Hence the silt curtains are almost certain to be ineffective in containing the contaminants.”]

Page 16.3 “In all but the slowest current flows, curtains will “billow out” in the downstream direction, allowing water to pass beneath the curtain, thereby reducing the effective skirt depth.” [The writer again advises this is a failure to contain the contaminants.]

Page 16.5 “High winds can lift large curtains out of the water like a sail.
Curtains can sink due to excessive biological fouling on the fabric.”

Page 16.6 “In tidal situations, where currents move in both directions, it is important to attach anchors on both sides of the curtain to hold the curtain in place and to not allow it to overrun the anchors and pull them out when the tide reverses. [The writer comments no anchors proposed for IWM due to likely damage to SPS hence this restricts the effectiveness of the containment by the silt curtains.]

Page 16.7 “Care should be taken during removal of silt curtains to avoid or minimize resuspension of settled solids.”

Page 16.9 “SILT CURTAINS CAN BE EFFECTIVE IN CONTAINING FLOATING DEBRIS, BUT NOT ALWAYS IN CONTAINING CONTAMINATION. Soluble Contaminants, particularly heavy metals, can flow through, around, or under the curtain.”

Page 17.4 “Unfortunately, few comprehensive studies are published on the actual performance of silt curtains under varying project conditions”.

[The writer notes that at page 10.4 and 17.4 the authors of the ERDC – TN – DOER – E21 September 2005 report advice that a qualification on their document is “A notable exception is monitoring of the curtain performance”. We also note the IWM D.A. is silent as to the need for regular daily?? weekly?? monitoring of the proposed Silt Curtain.]

Volume 4 – Construction and Operational Noise Assessment

Summary of Key Issues with respect to Noise Levels in the proponent's submission are:

Throughout this report the authors appear to focus their analysis and comment only in areas that essentially support the Marina and its operations. Little if any balance has been given to a professional analysis of impacts on the environment from the perspective of the community or the broader surrounding communities. The issue of noise and its deleterious effects have not been considered at all with respect to the impact of such noise and disturbance on the general public who currently enjoy the peaceful surroundings, bird habitat, quiet walks and undisturbed atmosphere of the public walkway.

Major issues of increased noise levels at night (sleep disturbance levels) are glossed over even though it is admitted that levels will exceed the maximum allowed levels by up to 9dba. The suggested solution is to limit noise from shouting and raised voices during the 10pm to 7am time periods, by asking boat owners not to raise their voices. How will this be achieved? Who will police such behaviours? Who will pay for continual policing? It is a general community view (i.e. government legislation and policing policy) that without effective policing and penalty systems in place the general public are unlikely to take rules seriously. Thus we contend that the current suggestions for noise abatement are totally inadequate.

The idea that bow thrusters on boats can be regulated to marine office hours is in our view inconsistent with observed practice and impractical as large boats require these thrusters for safe mooring, the only way that such a rule could be achieved is to prohibit boats with thrusters from leaving or returning to berth during time restrictions, this would of course defeat the purpose of a 24hr day marina. As any boat owner knows, bow thrusters will be used where fitted at any time a boat is positioning for mooring or leaving the marina. These are but 2 examples of the disregard that the proponent's report has given to supplying a fair and professional assessment of the noise pollution impacts on our environment.

Other issues in point form that are pertinent to the proponent's submission are:

- During construction, day time noise levels will exceed the recommended allowed by up to 33dba. Although not admitted in the report, these noise levels are likely to be of the worst type from a health perspective as they will be intermittent with no specific pattern or time tags associated. Intermittent noise at high levels is known to contribute to serious issues with psychological stress leading to physical and neurological health issues (refer Appendix A) ;
- The report recommends effective community consultation during the lead up to the construction and during the construction to involve the community (and presumably provide some sense of community empowerment). This is of course a standard suggestion, however over the 4 years of planning for this marina the developer has not once consulted directly with the community, despite many requests to do so over the past 2 years including invitations by the Residents Group to attend organised public meetings;
- Traffic noise and traffic congestion and parking issues are given scant regard in the experts report. They are almost dismissed as just a fact of development and operation of a marina. The facts however are that the traffic flows and associated noise levels and parking issues will have far greater impact than stated in this report. The traffic flows cited are extremely conservative and take no consideration of seasonal, or peak flows but seem to be some estimated average that bears no relevance to similar marina's such as in Rush Cutters Bay where traffic congestion has become intolerable and the local council is powerless to enforce restrictions due to lack of manpower and the high cost of continual policing. Also the RTA questions (shown in the proponents submission) regarding traffic flows and parking have not been adequately addressed.
- Visual issues are glossed over and an attempt to paint a favourable situation is scandalous. The fact is that residents from most areas of Breakfast Point will have views of the river and the bays significantly altered and in many cases obscured by large boats and trucks, trolleys and the movement of people and goods. This is unreasonable particularly as many purchased properties without any knowledge of a marina being planned (it was neither mentioned by the developer nor in any discoverable documentation other than at the very early stages of a suggestion that there might be a small private marina, operated and controlled by the community);

- Smells, fumes and discharge. Very little mention is made of the fact that this large marina will emit diesel, petrol, cooking, painting and other smells that are neither wanted nor enjoyed by local residents.
- Scant regard is made to the fact that spills of paint, effluent discharge, anti fouling chemicals etc will add to an existing pollution effected river;
- The public will be severely disadvantaged by this marina due to noise levels and types of noise, well above those currently within the environment. This will affect the growing quantity and types of bird and marine life that are currently enjoyed by the general public and local communities.

Conclusion

We strongly oppose this marina on many grounds. Elevated noise levels particularly at night will severely affect the peace of mind and sleep patterns of residents and also will reduce the enjoyment of the general public who currently enjoy a peaceful and wholesome river walk adjoined by the peaceful surrounds of Cabarita Park.

Analysis of data and comments from the Construction and Operational Noise Assessment *Volume 4*

The information below attempts to analyse and comment on the information shown with respect to noise and its affects from Vol 4 of the DA Environment Survey report. We have listed various statements and data made from the report and then commented on these. The numbered references are the page or paragraph numbers in the proponents report.

3.2.1 Intrusiveness Criterion

Given the inherent variable character of environmental noise, noise levels are quantified in terms of various statistical descriptors. An explanation of these descriptors and common acoustic terminology is contained within Appendix A for the purpose of reference.

In setting the "intrusive" noise goal, the ambient LA90 background noise level (in the absence of the noise source to be assessed) generally needs to be quantified at the nearest sensitive receivers. This noise level is termed the Rating Background Level (RBL). It is a single descriptor (based on ambient noise monitoring) for each INP defined daytime (7.00 am to 6.00 pm), evening (6.00 pm to 10.00 pm) and night-time (10.00 pm to 7.00 am) assessment period, representing the typical minimum background sound level within those periods.

The RBL is obtained by calculating the median value of all daytime/evening/night-time Assessment Background Levels (ABLs) for each valid day of an ambient noise survey. The ABL is the background noise level representing each assessment period (daytime, evening and night time) for each day of the survey. The ABL is determined by calculating the lower 10th percentile level of all the LA90(15minute) samples for each assessment period.

An "RBL plus 5 dBA" criterion is then applied to the 15-minute LAeq noise emissions of the industrial noise source in question at the receivers of interest (normally at their property boundary). This criterion is consistent with ensuring that industrial noise from any single source does not intrude greatly above the prevailing background noise level.



Comment:

The RBL if applied to the existing La90 levels (i.e. plus 5dba) would be a day time background noise of approx 47dba. This would mean that during construction that is outside of preferred hours, the dBA levels would be exceeded by up to 33dba and a minimum of 8dba. Whichever way you look at it the construction period of 27 months places a significant additional noise stress on residents that may lead to adverse health issues. In addition it is suggested that operating times on Saturday are to start at 7am despite DECC recommendations for a limit to 8am starts where there is any additional noise audible to the nearest resident.

7.2.1 Review of Noise Impacts

A review of Table 16 indicates that the daytime construction noise goals may be exceeded by up to 33 dBA at the closest residences in Breakfast Point, up to 27 dBA at the closest residences in Tennyson Point, up to 16 dBA at the closest residences in Gladesville and up to 20 dBA at the closest residences in Putney.

The noisiest scenarios are Scenarios 4, 5, 6 and 7 including Impact Piling Rig.

7.2.2 Noise Mitigation of Construction Activities

Significant exceedances of the design goals, by more than 33 dBA, may occur as a result of Impact Piling Rig. Feasible and reasonable noise mitigation strategies should therefore be implemented wherever possible during these construction works.

7.2.3 Noise Mitigation Strategies

AS 2436-1981 "*Guide to Noise Control on Construction, Maintenance and Demolition Sites*" sets out numerous practical recommendations to assist in mitigating construction noise emissions. Examples of strategies that could be implemented on the Marina project are listed below, including the typical noise reduction achieved, where applicable.

Operational Strategies

Conducting sheet piling only after 8.00 am, and include respite periods.

Regular compliance checks on the noise emissions of all plant and machinery used for the project would indicate whether noise emissions from plant items were higher than normal.

Ongoing noise monitoring during construction at sensitive receivers during critical periods (i.e. times when noise emissions are expected to be at their highest - e.g. piling) will assist in identifying and controlling high risk noise events.

Source Noise Control Strategies

Engines and exhausts are typically the dominant noise sources on mobile plant such as graders, excavators, trucks, etc. In order to minimise noise emissions, residential grade mufflers should be fitted on all mobile plant utilised on site.

Regular maintenance of all plant and machinery used for the project will assist in minimising noise emissions.

Installation of acoustic enclosures on plant items, where required.

Community Consultation

Active community consultation and the maintenance of positive relations with local residents and building owners would assist in alleviating concerns and thereby minimise complaint.

Comment

To suggest noise abatement strategies of the type shown above and which are voluntary is completely unacceptable to the community. The levels of noise that will exceed the acceptable levels suggested by DECC are simply too great to risk the health of residents, particularly as many residents are now of an age where such noise levels have been shown to cause neurological and psychological health issues.

8.2.3 Sleep Disturbance

The results for the sleep disturbance assessment together with the sleep disturbance criteria are presented in Table 22.

Table 22 Sleep Disturbance Assessment Results

Locations	Criteria (dBA)	Maximum Predicted LA1 (dBA)	Exceedance
Breakfast Point	50	53 to 59	Up to 9 dBA
Tennyson Point	49	48	Complies
Gladesville	49	42	Complies
Putney	49	42	Complies

Note 1: The 59 dBA noise level results from a bow thruster operation at berth close to the shore. This will reduce to 52 dBA for operation in an outer berth. The 48 dBA at Tennyson Point is from a bow thruster operating in an outer berth.

A review of Table 22 indicates that there is a potential for sleep disturbance at Breakfast Point if people are shouting close to the Marina, and also from the use of bow thrusters close to the shore.

It is recommended the Marina noise management plan address the potential issue of patrons shouting during the 10 pm to 7 am night-time period. The location of vessels with bow thrusters at the outer marina arms will reduce the potential to exceed the sleep disturbance criteria at the surrounding residences. It is recommended that Marina users are not to operate "bow-thrusters" during the 10 pm to 7 am night-time period, except in emergency. However, the likelihood of their frequent use beyond 10 pm is **probably small**.

Comment

Interrupted sleep and sleep patterns over a continuous period are recognised as major causes of stress and physical and mental health issues, particularly in an aging population. Most residents came to Breakfast Point to move away from the noise of inner city dwelling and this was a primary factor in the decisions to live here. The cost of health issues and perhaps early death caused by high levels of noise pollution can be significant and such a risk is unacceptable without at least first conducting a well researched study of impacts of a similar nature on populations of a similar age and type. Such studies have not been conducted as part of this DA application and therefore are an unacceptable risk factor. (refer Appendix A)

Community Consultation

Active community consultation and the maintenance of positive relations with local residents and building owners would assist in alleviating concerns and thereby minimise complaint.

Comment

Active consultation with the community might assist but it hasn't been done. We have been asking for meetings with the developer for 3 years on this and other issues and all requests have been refused. The only attempt was a weak web site used in the DA submission as having satisfied the consultation process, this is an insult to our community and to Australian's generally.

8.2.2 Noise Mitigation of Operational Activities

The following strategies can be used to reduce the noise at the closest residences:

- Reduce car idling in the carpark and general talking from the carpark to the Marina
- Limit the speed of the boats

It is recommended the Marina noise management plan address the potential issue of patrons shouting during the 10 pm to 7 am night-time period.

Comment

What mechanisms will be used to guarantee compliance? Penalties? This is another example of passing the buck. The fact is that without either a significant penalty system in place or a set large sum of money provided to the Community per annum to police pre agreed rules and pay for damage to community property and higher levels of wear and tear on roads and infrastructure, the Community will be left holding the bag whilst the Developer spends the profits. This is totally unacceptable at all levels and denies both natural justice and due process to the extent that the Community have never been engaged in discussions or decisions relating to either noise issues, maintenance issues, agreement on traffic regulation and noise regulation and the policing of such regulations. Until such time is allowed for exhaustive discussion and dialogue with all residents on these important issues it is both unfair and unjust that the community should be subjected to the potential health issues created by excessive noise levels and the safety issues associated with significantly higher traffic volumes.

ALIENATION OF PUBLIC LAND

RE: KENDALL BAY MARINA MARIN - Reviews by John Clarke and Greg McGrath

ALIENATION OF PUBLIC LAND

(Note: Page Reference column provides Page, Clause Number (if applicable) from report plus appropriate Page Location; e.g. page 10.6 = 60% down page 10)

Page Reference	Report Statement	Comments	Director General's Requirement
	The purpose of this section is to deal with the issue of Alienation of Public Land. The use and enjoyment of the foreshore walkway (a piece of public land) will be alienated from the public by marina users. The marina that does not have ownership of or access to any usable landside property.		
	PUBLIC LAND – Dedicated foreshore walk. Kendall Bay is a pleasant and mostly a calm body of water unobstructed by any object other than a single navigation buoy (Attachment 8.0). It is a most pleasant place to look at and enjoy and is accessible to the general public and nearby communities who walk along the foreshore walkway that runs all around the bay or from the nearby Waterside Park or Cabarita Park. The pleasant views are also enjoyed from the Community Country Club and various adjacent apartments and homes. Such a scenic view provides the public with one of the few remaining “clear water” bays in Sydney Harbour and makes it a very pleasant place to quietly walk or to enjoy more vigorous exercise such as jogging or cycling. The foreshore walkway was dedicated to the public for walking and cycling purposes only as an approval condition for the development of Breakfast Point. The <i>City of Canada Bay Council</i> has title to the foreshore walkway (subject to a lease to the Community Association). The land is described as lot 501 DP 1052824. Part lot 501 DP 1052824 is a stratum lot above pt lot 1 DP 270347. This is the foreshore walkway and is owned by the Council and leased to the Breakfast point Community Association for a period of 299 years. This means that the part of the seawall known as lot 55 is above the land known as Pt lot 1. On its western most boundary lot 55 is contiguous with Pt lot 501 (Community Association leasehold title. See Attachment 33) and below this it is contiguous with Pt lot 1 which, as already indicated, is Community Association property (freehold title). Clearly the Council envisaged preserving the uninhibited public access for at least 299 years which is most visionary. There are no competing interests using the foreshore walkway and today it is used as it was intended to be used by the public. Recent surveys by The City of Canada Bay Council and The Residents Group indicate that around 600 people use the walkway each day. That equates to around 4,200 each week and this number will increase as the public become more aware of the nature of the pleasant walk and as approximately 800 new nearby residences are completed. (It is estimated that the suburb of Breakfast Point is only about 60% occupied relative to its final population in 5 to 6 years time. The Breakfast Point Residents Group carried out a limited survey of use of the walkway by the public on Sunday 7 November. 628 walkers/cyclists/children used the walkway during this time, refer to the table below;		The Environmental Assessment (EA) must include; Key Issues Strategic Planning - an assessment of the proposal in the context of the strategic direction of the locality and region with consideration of the <i>Breakfast Point Master Plan 2002</i>, the <i>Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005</i>, and the <i>Sydney Harbour Foreshores and Waterways Area Development Control Plan 2005</i>. Any inconsistencies between the proposal and these plans must be justified; Public Access;
	8.30-11.30 am	3 - 5 pm	Day
Adults	260	159	419
Prams	22	30	52

Cycles	63	43	106
Children	25	26	51
TOTAL	370	258	628
Note that during this surveyin this survey that XXX, or xx% of those, were non-residents of Breakfast Point			
The City of Canada Bay Council has carried out independent surveys over a period of days in mid November and similar numbers were observed.			
The walkway is public land provided for the public good and is consistent with Government Policy.			
PRIVATE LAND – LOT 55 (See Attachment 33) It is at lot 55 that the proposed commercial marina joins up with the <i>Community Association</i> parcel (see Attachment 2 being sheet 9 DP 270347 and Note 1 and the “A”-“A” diagram). Interpreting the diagram and notation is not easy but it seems that the area below the seawall and the part of the seawall below the level plane at R.L. 0.5 is still part lot 1 DP 270347. <i>This “A”-“A” diagram and the notations on it show that the R.L. to the top of the seawall is 1.5 but lot 55 is limited to an R.L. of 0.5 which means that there is still a section of the seawall that is above lot 55 that is Community Association property. Support for this interpretation can be found in the MPA documentation at 5.6 where it says,</i> “The level of the jetty will be lower than the public access foreshore zone” It is important to note that Lot 55 has an area of 145.9m² (See Attachment 33). It is 88.58m long with a width of 1.12 m at its southern end and 2.11m at its northern end. Its average width is 1.65m (5’5”). As such, lot 55 is not capable of providing any practical ancillary storage or manoeuvring areas to the marina. .This narrow lot to which the marina is attached is constrained by the foreshore walkway on its western side and the face of the seawall on its eastern side.			
Paragraph 9, cl 2(2)(b) of the Sydney Harbour REP states that; “in the assessment of any proposed change for Sydney Harbour and its foreshores, <i>the public good has precedence over the private good.</i> ” In this case the Public good applies to; 600 walkers and cyclists daily (but likely to increase significantly over time as Breakfast Point is completed) 250 immediately adjacent residents			
The private good applies to; 172 marina berth owners and their guests (unlikely to increase over time because of depth and navigation constraints) Marina users with disability Up to 50 kiosk users 1 Developer			
Vol 1, P7.4			
The following is a direct quotation from the proponents EA; “The marina will consist of; 1. A floating marina structure to provide berths for 172 vessels (including five destination berths for the general boating public).			

2. A fixed jetty and pontoon on the site of the original wharf, as part of the interpretive reminder of the heritage of the site. The jetty and pontoon has been designed to enable a ferry stop should future demand show that this is desirable. The fixed jetty and ferry pontoon would be accessible 24 hours per day.
 3. A kiosk with seating for 50 people at the seaward end of the jetty.
 4. Installation of a blanket consisting of a geotextile and rock ballast, over the bed of the proposed marina lease area, to ensure sediments are not disturbed by propeller wash effects.
 5. A small manager's office, containing some facilities for use by marina patrons.
 6. A 58 space carpark located on Peninsula Drive, for use only by marina patrons.
- The vessels to be accommodated within the marina will range in size from less than 8 metres up to 25 metres, with the majority of the vessels being in the range 10 to 16 metres.
- The development will provide access for people with a disability and will provide publically available facilities for use by the general public, particularly residents of the local area, thus enhancing the experience of living within the Breakfast Point precinct and the surrounding locality."

ACCESS TO MARINA

Landside access to the marina can only be obtained via the **public foreshore walk** that is owned by Council.

Access from the carpark to the marina can only be gained over Community Association owned open access ways and then along the foreshore walk.

NON CONTIGUOUS CARPARK

The 58 carpark will be some 250 metres away from the landside access point to the marina. Between the marina and the carpark is a residential development known as Hunters Wharf.

Vol 1, P99.7

Three types of waste will be generated from the proposed Project:

- Solid waste from office activities and kiosk activities.
- Waste water from kiosk and vessels.
- Sewage from vessels and toilets in kiosk and manager's office.

The solid waste will be placed in sealed bins and removed by a waste removal contractor for disposal in an approved site. The bins will be stored on the fixed jetty at the kiosk and marina Manager's office, **then transferred by small vehicle to a location near the carpark** for collection by the waste removal contractor.

Note the use of the words "**then transferred by small vehicle to a location near the carpark** "

This activity can only be carried out by use of the foreshore walkway as there is no other means of access from the marina to the carpark.

The use of the public foreshore walkway for this purpose will cause a major change in the usage pattern and amenity of the public foreshore walkway. This is an alienation of this public space which is not in the public interest.

Vol1, P100.2 All oil and fridge gas waste will be collected and placed in sealed drums and removed by an approved contractor for disposal.	Note the reference to “and removed by an approved contractor for disposal”. There is no reference in the report as to how this will happen. This activity can only be carried out by use of the foreshore walkway as there is no other means of access from the marina to the carpark. The use of the foreshore walkway for this purpose will cause a change in the usage pattern and amenity of the foreshore walkway. We consider this to be an alienation of this public space which is not in the public interest.
Vol 1, P21.2 Waste Removal Three types of waste will be generated on the site: i. Solid waste from office activities and kiosk activities. ii. Waste water from kiosk and vessels. iii. Sewage from vessels and toilets in kiosk and manager’s office. The solid waste will be placed in sealed bins and removed by a waste removal contractor for disposal in an approved site. The bins will be on the fixed jetty at the kiosk and Marina Manager’s office, then moved by small vehicle (“golf buggy type”) to a location at the carpark for collection by the waste removal contractor.	Note the reference to “then moved by small vehicle (“golf buggy type”) to a location at the carpark” This activity can only be carried out by use of the foreshore walkway as there is no other means of access from the marina to the carpark. The use of the public foreshore walkway for this purpose will cause a major change in the usage pattern and amenity of the public foreshore walkway. This is an alienation of this public space which is not in the public interest.
Vol1. P21.6 Parking and Deliveries Parking for the proposed marina will be provided in a proposed carpark containing 58 spaces. Vehicles making deliveries to the Marina, will park in the carpark in dedicated loading spaces. All items unable to be easily carried from the carpark, will be transported in special small vehicles (“golf buggy type”) to the marina and kiosk.	Note the reference to “will be transported in special small vehicles (“golf buggy type”) to the marina and kiosk” This activity can only be carried out by use of the foreshore walkway as there is no other means of access from the marina to the carpark. The use of the public foreshore walkway for this purpose will cause a major change in the usage pattern and amenity of the public foreshore walkway. This is an alienation of this public space which is not in the public interest.
Vol1. P20.1 Vol 1, P7.4 Services	Provision of goods for these ‘services’ will need to be delivered, presumably from the carpark, to the marina along the public foreshore walkway. Maintenance which is capable of being carried out on a moored vessel includes; • Marine Batteries

The following services will be provided to vessel owners: • Vessel cleaning. • Maintenance which is capable of being carried out on the vessels. A kiosk with seating for 50 people at the seaward end of the jetty.	• Marine Paints • Engine parts • Replacement seats • Lifejackets • Sails and riggings etc Deliveries to the Kiosk will include; • Ice • Milk • Drinks and • Foodstuffs. The use of the public foreshore walkway for this purpose will cause a major change in the usage pattern and amenity of the public foreshore walkway. This is an alienation of this public space which is not in the public interest.
Vol 10, Appendix 15, Page 6 EMERGENCY AND ESSENTIAL SERVICES Fire In the event of fire and/or explosion, appropriate emergency control procedures will be activated. These include: a) Notify Management, fire authorities and emergency services immediately. b) Quickly evacuate all persons to an Evacuation Meeting Point at which a "muster" can be taken if required. c) Ensure all power is cut off and fuel lines isolated. d) Commence fire fighting activity in accordance with training instructions. e) Where necessary, remove all surrounding mobile property, vessels and other portable items to a safe location. DO NOT cut loose or release a burning vessel, as such action may cause further damage or fire to other vessels in its vicinity. f) Prevent the spread of fire water and fire water run-off by deployment of the booms onto the water to contain fire water area. 5.2 Evacuation	Note the use of the words; "b) Quickly evacuate all persons to an Evacuation Meeting Point at which a "muster" can be taken if required." and "e) Where necessary, remove all surrounding mobile property" and "Where a safe path off the Marina is available, all people on the Marina will be directed to go directly to the Emergency Meeting Point near the entry to the Marina on the foreshore." The use of the public foreshore walkway for this purpose will cause a major change in the usage pattern and amenity of the public foreshore walkway. This is an alienation of this public space which is not in the public interest. The use of the public foreshore walkway for this purpose will cause a major change in the usage pattern and amenity of the public foreshore walkway. This is an alienation of this public space which is not in the public interest.

Should a situation develop where emergency evacuation of people from the Marina is required, the Marina Manager will activate a sound alarm. Where a safe path off the Marina is available, all people on the Marina will be directed to go directly to the Emergency Meeting Point near the entry to the Marina on the foreshore.

ALIENATION OF PUBLIC LAND

The purpose of spelling out the activities associated with the marina and 'kiosk' and setting out the landownership issues surrounding the marina is to ensure that one understands the background from which the argument on 'alienation of public land' is to be mounted.

Around 600 people currently use the walkway each day and the number will increase in time as its whereabouts and beauty is spread and as the residential precinct of Breakfast Point is further developed.

The foreshore walkway was dedicated to the public for walking and cycling purposes only. We now have the proponent proposing to run "golf buggy" type vehicles over it to service a privately owned public commercial marina (for the benefit of 172 berth private berth owners/lessees) in contravention of the purpose of the dedication. This is an alienation of public lands.

In any event, even if the proponent agrees not to use 'golf buggy' type vehicles but rather 'trolleys' to service the marina the same argument applies. They will still be using dedicated public land for their own commercial purposes and this in our view amounts to an alienation of public lands.

Whether 'golf buggy' or 'trolleys' are used to deliver to and from the marina and kiosk is of little consequence. Something will need to be used and it will not be 'walkers' or 'cyclists'. It is important to note that many deliveries required at the marina or kiosk will be bulky and weigh significant amounts (batteries, ice, sails). It is our contention that it will not be practical to move these over the walkway in 'trolleys' and that 'golf buggy' type vehicles will always be used.

Whatever is used will inevitably be stored on the foreshore walkway as there is insufficient width (Ave 1.65 meters) in lot 55 for such a purpose. Trolleys and or buggies will not (and are not EA proposed to) be stored on the marina nor is there any practical way of ensuring that they are **never** stored on the foreshore walkway. The marina management plan argues that it can address all the 'social' issues that will arise from the marina operations but fails to properly recognise the fact that it cannot as the marina office is only staffed for a maximum of 10 hours per day. There is no practical way of enforcing 'rules' outside these hours.

It is easy to imagine that on the 15m wide foreshore walkway 'golf buggy' type vehicles or 'trolleys' will accumulate during a normal day and in the summertime evenings. These will interfere with and in many instances block the use and enjoyment of the walkway by the general public who use it for walking and cycling purposes. It will be an alienation of the public land.

The width of the main arm (jetty) of the marina at the access point from land is 5m (See Vol 2 Dwg. No. DA02).
The width of the north and south 'access' arms to the berths from the 'jetty' is 3.6m (See Vol 2 Dwg. No. DA03).
The width of the berth arms from the 'access' arms ranges from 2.2m to 3.8m (See Vol 2 Dwg. No. DA03).

Apart from some very limited manoeuvring capacity on the 5m jetty arm there is insufficient room to turn 'golf buggy' type vehicles and drive them back from whence they came. It is not practical or safe to 'back' them from berth locations. As a result they will be a danger if stored or left on the marina and thus must be 'stored' on the foreshore walkway having fulfilled their purpose of at least getting items from the carpark some 250m away to the edge of the marina.

In the New South Wales Land and Environment Court, Palmer and Anor v Mosman Municipal Council [2008] NSWLEC 1509 (30 December 2008), the Court, in part, ruled that;

*"37 Insofar as the Court accepts that properties adjoining a road reserve have a right to access the road reserve, nevertheless the proposal will most likely cause a change in the usage pattern and amenity of the unformed road reserve. As such, the council considers that there will be an **alienation** of this public space area, which is not in the public interest. Accordingly, the Court has considered the evidence on the merits of the proposed driveway construction.*

*38 In considering this question of whether the approval of the application will result in an unreasonable degree of **alienation** of the public open space, the Court has considered the following aspects:*

1 The location, context and usage of the public land; The road reserve, in conjunction with the adjoining open space area is prominently located on the waterfront near the Mosman South ferry wharf and has high visibility from the harbour. As such it apparently attracts regular local usage as both an active passive and active open area, particularly for children. The inclusion of the driveway would necessitate changing the nature of this area because the regular passage of vehicles would substantially reduce the active playing opportunities. In this regard, the court does not accept that active recreation opportunities are enhanced by the provision of the driveway, in this context.

*2 The degree of land use differentiation; This refers to the amount of land that is likely to be restricted from general public usage. In this case, the apparent change in usage is from 342 sq m to 117 sq m. The Court accepts these figures because they identify the components of the driveway, which will be predominantly for different purposes. The paved driveway is most likely to present to the average person in the street as private access way, likely inhibiting its use. Whilst the construction of a similar type driveway in a more isolated road reserve may be acceptable, the Court considers that in the subject context, this degree of **alienation** is not in the public interest."*

We respectfully suggest that the circumstances here are similar and if anything more acute. The property (Lot 55) adjoining the dedicated public foreshore walkway has a right of access to the public walkway however as shown above, the use of that access for the private commercial purposes set out above will cause a major change in the usage pattern and amenity of the foreshore walkway. We consider this to be an alienation of this public space which is not in the public interest.

ALIENATION OF PUBLIC WATERWAY USE AND AMENITY

In addition to the public foreshore walkway alienation we note that 60% of Kendall Bay within a line drawn from Breakfast Point to the land contact point of the Cabarita Ferry Wharf will be occupied by the marina lease. The marina will restrict the use of that area which is currently used by small ferries, rowers, sailors and other water craft. The marina will cause a major change in the usage pattern and amenity of Kendall Bay. This is an alienation of this public space which is not in the public interest.

CONSULTATION

COMMENTS ON THE COMMUNITY CONSULTATION PROCESS

Introduction

The pre-application consultation for the community was computer based and the web site presented some information and invited participation in the survey.

The only public consultation process was via a website and lacked public interaction.

The questions on the website were leading and biased.

Some of the information provided was misleading.

First Observation

The first page of the web site has the following section:

"Process

The *zoning of the waterway in the area permits the construction of marinas and associated works* pursuant to the Sydney Regional Environment Plan (SREP) Sydney Harbour Catchment 2005.

The proponent has been granted permission by the Maritime Authority of NSW to lodge an application with the Department of Planning to construct and operate a marina with 172 berths and *associated facilities....*"(italics added)

The words in italics are misleading. The zoning is a zoning of the waterways and in no way does it apply to land. The current proposal encroaches on land and at least to the extent of the encroachment the reference to the SREP is inappropriate. Furthermore,

- (i) **the zoning prohibits marinas with mooring pens** (which apply to this marina) , and
- (ii) the SREP does not permit any and all works that might be associated with a marina. **There are numerous prohibitions and some of these are covered in the Opposing Submission, for example, tourist facilities and water based restaurants (kiosk).**

It is thus, misleading and deceptive to make the type of broad assertions as are made in the web site.

Second Observation

The web site proceeds to refer to the location of the marina and says the following,

"Location

The proposed marina will be located *at Kendall Bay*, on the Parramatta River in the Canada Bay Local Government Area in Sydney's inner west." (italics added)

Third Observation

The web site contains another section headed:

"Proposal

"...The marina and jetty will provide *public access* and *enhance the foreshore experience* with the kiosk on the end of the jetty for *informal get togethers*. The development will *provide access for people with disabilities and facilities for use by the general public*." (italics added)

The reference to "*public access*" is misleading because access to the community parcel is not in the hands of the proponent. It fails to bring to the notice of the respondents that access is in the hands of the Community Association.

The reference to "*public access*" can be and is misleading because access to the community parcel is not in the hands of the proponent. It fails to bring to the notice of the respondents to the consultation the factual and legal restrictions on the use of the open access ways by non residents. See the Opposing Submission for details.

The reference to "*enhancing the foreshore experience*" is a subjective description designed to bias the result in favour of the proposal.

Similarly, the reference to *access for the disabled* and *the public* is in the nature of a "motherhood" statement designed to elicit biased responses rather than elicit the true thoughts and feelings of the persons completing the survey. At the very least the reference should have been balanced by noting the problems associated with the impact on private property to support a commercial activity of the developer. In any event, the fact that there is nothing in the design drawing approved by NSW Maritime that identifies any specific structure for these particular purposes is evidence of this misleading design of the consultation process. Further, the reference to *public access* is meaningless and misleading because the boats will be privately owned and it is further misleading and deceptive because it does not alert the respondents to the consultation to the restrictions on public access.

The reference to "*informal get togethers*" is trying to elicit an emotional response of friendships and fun activities which sits oddly with the prohibition, by the regulations, against water based restaurants. In any event an unqualified statement of the nature contained in the web site is biased.

Fourth Observation

The web site advises that,

"The construction of the marina development will provide the general and boating public with:

- Parking
- Toilets
- Access for Sailability Australia activities
- Enhanced access to the waterway through the provision of pick up and drop off berths
- Enhanced waterway experiences through the provision of day tripper berths
- Enhanced experience of the Breakfast Point foreshore and enhanced community experience through the provisions of the jetty and kiosk for informal get togethers
- Access for people with disabilities to vessels at public berths
- Vessel cleaning and maintenance, and
- Sewage and waste water pump out.

There will be no provision for refuelling of vessels, and no slip facilities to remove boats from the water for **major** repairs and maintenance.

The works proposed include:

- Construction of a floating structure to provide wet berths for 172 vessels, which will incorporate five destination/charter boat/day tripper berths for the general boating public; **to provide a point of interest** west of the Sydney Harbour Bridge.
- A fixed jetty with a **kiosk** at the seaward end; the jetty will be designed to incorporate a **ferry stop** should future demand show that this is desirable, as requested in the Canada Bay Local Environment Plan.
- Installation of a **"geotextile blanket"** over the area covered by the marina to ensure sediments are not disturbed by propeller wash effects.
- A **car park** for 58 vehicles in the area on the west of the existing residential foreshore buildings, which will be dedicated to the use of the marina.
- A small manager's office with some facilities for use by marina users.

The vessels which will be accommodated in the marina will range in size from less than 8 metres, up to 25 metres, with the majority of the vessels being in the range 10 to 16 metres in overall length. The Inner West Marina proposal has been **designed as a result of changing demand for storage of sea vessels in Sydney, and in particular, west of the Sydney Harbour Bridge**" (emphasis added).

Parking:

The reference to "parking" is misleading as it does not disclose that the requirement of the regulation is for the parking to be "on site". The failure to disclose this information leads respondents to the consultation to assume that "off site" parking satisfies the requirements and misleads them into incorrectly evaluating this part of the application and its associated detriments e.g., traffic and access to the open access ways. The carpark is some 250 metres away from the access point onto the marina.

Access for Sailability Australia activities.

This is another statement designed to bias the response. The fact is;

(a) that the design drawing approved by NSW Maritime does not identify any specific structure for this particular purpose is evidence of this misleading design of the consultation process.

(b) it duplicates the reference to access for people with

Enhanced access to the waterway through the provision of pick up and drop off berths

Enhanced waterway experiences through the provision of day tripper berths.

Enhanced experience of the Breakfast Point foreshore and enhanced community experience through the provisions of the jetty and kiosk for informal get togethers.

The same comments apply to these "enhanced" access and experiences as were made earlier in relation to other "enhanced experiences". There is a complete absence of balance; the "day tripper" berths do not add anything to the services currently available with Sydney Ferries and if they do not add to the service they do not "enhance" it. The reference to the *kiosk and jetty for informal get togethers* as enhancing the community experience is particularly galling for anyone living at Hunters Wharf, Manor Homes, the new constructions and walkway enjoyers and having to put up with the noise and, more than this, it could well be a hazard to berth generally and in case of emergency in particular. See also other comments regarding the prohibition against water based restaurants.

Access for people with disabilities to vessels at public berths

See previous comments on this issue.

To provide a point of interest west of the Sydney Harbour Bridge.

The prior comments apply.

Designed to incorporate a ferry stop

This and some of the other “facilities” identifies the very nature of the marina which is a commercial enterprise designed to further the commercial interests of the developer at the expense of the residents of Breakfast Point and the surrounding community. The old saying about dressing mutton up as lamb applies here. It is a commercial undertaking being dressed up as a public benefit hence the reference to disable access, enhanced experiences etc. If any evidence of this disguise is required just note that nowhere does the web site refer to a commercial marina.

Installation of a “geotextile blanket”

No approval has been given for this and this should have been made clear to potential respondents to the consultation.

A car park

Refer to previous comments and in particular to the requirement for the car park to be “on site” and the legal restriction on non residents bringing vehicles onto the community parcel.

Designed as a result of changing demand for storage of sea vessels in Sydney, and in particular, west of the Sydney Harbour Bridge.

This is an issue that is covered by the Sydney Harbour Boat Storage Policy and **the assertion made is factually incorrect.**

0.12 Another part of the consultation web site asks:

“... Which issues do you think should be examined as part of the Environmental Assessment?

- ☐ Views
- ☐ Remediation
- ☐ Economic Impact
- ☐ Public Access
- ☐ Water Safety
- ☐ Other “

What is noteworthy about this section is the limited issues that are specifically identified. Respondents to questionnaires will answer specific questions but are likely to avoid issues that are open ended. Some respondents want guidance on what to think about and some cannot be bothered to think about issues that are not specifically enumerated—if they were important they would have been singled out by the researcher! Hence this part of the consultation process is also a failure and, deliberately or otherwise, it reflects a biased design of the process.

Analysing the “issues” listed in 0.12 one finds that the consultation survey includes biased prompts for “economic impact”, “public access” , “water safety” and “Other issues”. Thus, for,

Economic impact

“There is a high demand for suitable berths in Sydney Harbour, especially west of the Harbour Bridge.”



This is inconsistent with the official data available in the *Boat Storage Policy*.

Public Access

"Access for members of the public to the jetty and foreshore are important..."

This is an odd proposition. The question of public access to the "foreshore" is not something that is dependent on a commercial marina. That issue is already covered by the easements and lease over the foreshore lot. In any event, a commercial marina is not going to affect access to the foreshore in any positive way. In fact it will do the opposite because it will increase the competition for access. The bias of the prompt is made apparent by the choice of words "are important" and by its suggestion that it will be greater with a commercial marina in place than without one. Prompts should be neutral. In so far as the jetty is concerned this was never an issue that depended on a commercial marina to discharge. There was a wharf in place and it was removed so, clearly, public access to a jetty was not an issue in the past and is not an issue for the proposed commercial marina.

for,

Water Safety:

"The safety of all water users is important to us and we've given consideration to this issue..."

This is another vague statement and carries the usual objections that attach to them.

For ,

Other;

"We believe we've identified the main issues, however, if you would like to raise any other matter, please do so here."

The submission was made earlier that "Other" discourages comment and discourse.

The main picture referred to in 0.15 is interesting in a number of ways;

- (i) one is that it is a mock up of the proposed marina as if viewed from Breakfast Point with a telescope lens so that it "stretches" the foreground to make the boats in the background look further away than they really are. In other words, consistently with the word bias already identified the picture continues the effort to present a misleading and deceptive appearance of the way the proposed marina will look like;
- (ii) another interesting observation is that all the boats represented in the mock ups are the same size (small ones) and do not give effect to the regulatory requirement to assess the visual and bulk effect by reference to the size of **the largest boat that will use the marina (25m)**; and
- (iii) a third interesting aspect is the time of the day that the picture was taken. Look at the seawall and note the dark mark in the bottom half of the seawall. This mark is the effect left by the MHW. The MHW is about 1.5m high so that at high tide the boats will be about 1.5m higher in the water than what they appear in the picture(s). What has happened here is that the mock up of the marina has been superimposed on a picture taken at MLWM and by this method significantly under-represent the visual impact to and from Hunters Wharf and the "bulk" impact of the boats (even allowing for the fact that only small boats are represented in the mock up).

The FAQs

The site has a section on FAQs . There are fourteen of these QAs and, for the most part, the answers continue to perpetrate the slanted nature of the consultation. The following questions and responses only add to the view that consultation via the web is biased. Face to face debate allows for discussion and clarification. Some of the more pertinent of these will be considered below, however, this should not be taken to be a concession as regards the other FAQs not directly dealt with here. They too show bias towards the proponent. Thus,

Q1. "What is the proposal?" contains the following;

"...The marina and jetty will provide public access and enhance the foreshore experience with the kiosk on the end of the existing jetty for informal get togethers.

The works proposed include:

- Construction of a floating structure to provide wet berths for 172 vessels, which will incorporate five destination berths for the general boating public; to provide a point of interest west of the Sydney Harbour Bridge.
- A fixed jetty with a kiosk at the seaward end; the jetty will be designed to incorporate a ferry stop should future demand show that this is desirable, as requested in the Canada Bay Local Environment Plan.
- Installation of a "geotextile blanket" over the area covered by the marina to ensure sediments are not disturbed by propeller wash effects..." (italics added)

Comments have already been made concerning most of the slanted commentary in italics but it remains to add that the statement concerning the geotextile blanket" suggests that a decision has already been made about approval of the marina because the proponent has not disclosed that it has made an application to remediate that part of Kendall Bay over which it is proposed to site the marina and covered by the remediation of 22/06/2007. In the absence of such an application or any information about the extent and nature of the contamination and other material in support of that type of proposal the consultation process is defective.

Q2. "Where will the proposed marina be?

The proposed marina will be located at Kendall Bay, on the Parramatta River in the Canada Bay Local Government "

This does not disclose that part of the jetty will be within the community association parcel and that the community association has not been consulted nor has it given its approval. Furthermore, it does not disclose the dependence of the marina on the use of community facilities and the impact of it on the community in a financial and non-financial sense.

Q4. "Why do we need a marina?

Inner West Marina has been designed as a result of changing demand for storage of sea vessels in Sydney, and in particular, west of the Sydney Harbour Bridge. There has been extensive renewal of harbourside land from industrial use to residential, increasing population and the subsequent demand for recreational use of the River and harbour. "

Comment was previously made on this and it suffices to say that the claim is at odd with the data in the *Boat Storage Policy* document.

Q8. "What will be done to remediate the impacts of previous industrial activity?

Director General's Requirements for the Environmental Assessment of a remediation proposed by Jemena Pty Ltd have been issued. That Assessment has not yet been lodged. Jemena is proposing to remediate parts of the bay. As part of the works for the Marina, and in addition to the works proposed by Jemena, *a geotextile blanket will be installed beneath the marina to ensure sediments are not disturbed by boating activities*. This blanket will be covered with bassalt to keep it anchored and prevent disturbance of sediments by currents, wave effects or marine activity. Also, the marina will result in a reduction of the wave effects which currently disturb the bed on the eastern and southern sides of the Bay. This will reduce the likelihood of disturbance of the bed by waves from vessels using the Parramatta River and from wind generated waves." (italics added)

Refer to Q1 where a similar reference is made. It is presumptuous to say that this aspect "*will be approved*" when no application has been lodged and no investigation of its suitability has been conducted and assessed by the authorities. It suggests that a decision has already been made and this consultation process is a mere formality. It is a further indication of the bias of the consultation process.

Q9. "Will entertainment or "party" boats operate from the marina?

No. The marina will not be used as a base or a location for the operation of such businesses.

The answer to this question needs close analysis. It does not say that party boats cannot use the temporary berths. What it says is that they will not be "based or located" here.

Q10. "Will the marina have an impact on the value of nearby properties?

Experience with marinas in other locations suggests that it is likely that the proposed marina could lead to an increase in the value of nearby properties. "The consultation process needs to be fair and reasonable. This is not. The answer given is so general that it only serves to mislead and deceive. No-one knows what experience the proponent has had with marinas and whether that experience was with private marinas or commercial ones and whether it is private marinas that add to value (because the berth attaches to the property) whereas commercial marinas do not attach to property and are separate and independent. There are aspects of the current proposal that are peculiar to this one and they are not covered by a bland assertion of the type made here (e.g., the impact and use of private property for the benefit of the developer). The statement serves no purpose other than to mislead and deceive, it is not evidence based.

Q11. "What is the layout of the proposed marina?

The design of the marina has been developed to:

- ...
- ii. Provide open spaces between lines of moored vessels such that when people walk along the foreshore, their views to the east have *minimal impact*.
- iii. *Accommodate the wave environment at the site, particularly as a result of vessels' waves, generated by vessels moving along the main Parramatta River channel.*
- iv. *Stand well clear of the notional navigation channel required for Sydney Ferries access to the public ferry wharf at Cabarita (italics added)*
- ..."

The layout has been based on the vessel characteristics specified in Australian Standard AS 3962:2001 Guidelines for the Design of Marinas and NSW Maritime Authority Guidance Note 8.3.02.³⁵ Minimum water depth required in berths and in the fairways has been based on the requirements of the NSW Maritime Authority as set out in Guidance Note 8.3.05, taking into account the wave attenuation effect of the floating structure. "

35 Inquiry with NSW Maritime brought the reply that this document is out of date!

These assertions have no place in a consultation process. They are opinions rather than facts and there is nothing to guide the respondents on how to evaluate them. They serve no purpose other than to force the respondent into thinking in a way favorable to the proponent. Look at the length of the marina and it will be seen to be greater than most skyscrapers in the whole world. They make no comment about the views that will be blocked from all directions other than those that "Provide open spaces between lines of moored vessels such that when people walk along the foreshore, their views to the east have *minimal impact*".

The references to standards are meant to add credibility to the statement rather than be a credible and neutral statement. As a bland statement without backup material it does not add to an evaluation of the proposal. It might as well have said that it complies with the A4 international standard for paper used in written submissions and with the standard for the particular font used.

In so far as the reference to the navigation channel is concerned that is a misleading "motherhood" statement. Mere observation of the turning circle of the ferries using Cabarita Wharf (see Attachment 51, 52, 53) shows that the preferred route will be interfered with by the marina.

Q12. "What services and benefits will be provided, and will they be available to the general public?"

The construction of the marina development will provide the *general and boating public* with:

- Parking
- Toilets
- Access for Sailability Australia activities
- Enhanced access to the waterway through the provision of pick up and drop off berths
- Enhanced waterway experiences through the provision of day tripper berths
- Enhanced experience of the foreshore and enhanced community experience through the provisions of the jetty and kiosk for informal get

togethers

- Access for people with disabilities to vessels at public berths
- Vessel cleaning and maintenance, and
- Sewage and waste water pump out.

There will be no provision for refueling of vessels, and no slip facilities to remove boats from the water for major repairs and maintenance. "

Comment has already been made about the bias inherent in the wording of this list.

Q13. "What parking will be provided for marina users?"

A car park for 58 vehicles in the area on the west of the existing residential foreshore buildings will be dedicated to the use of the marina. This car park will make levy contributions to the maintenance of roads and facilities within the Community Association, like all other property owners." It would make the contributions regardless of its use and this statement is designed to once again bias understanding. The car park does not provide any benefit to the community. Any levies it pays are still due and payable by the owner of the lot whether or not there is a car park there. Furthermore, if the car parking is dedicated for marina users (and it will be via a gated 'fob' accessed boom gate, then the statement in Q7 that the marina will provide the "general...public" with parking is not correct.

Q14 "What services will be provided at the proposed marina?"

As well as safe and secure berths, the services provided for boat owners will be sewage and waste water pump out and minor repairs and servicing. ..."

CONCLUSIONS

Not once does the survey (website) disclose that it is a commercial marina that is under consideration.

In conclusion the pre consultation process is,

- (i) a sham 'consultation' process and does not meet the DG's requirements meagre in scope,
- (ii) slanted to produce a desired result rather than elicit the true thoughts and feelings of the respondents,
- (iii) it fails as a neutral and independent process,
- (iv) it comes nowhere near at presenting both sides of the argument and in particular fails to address the impact on the residents of Breakfast Point, Kendall Inlet, local residents and river users such as rowers.
- (v) it fails to mention one negative impact of having a commercial marina encroaching on and entirely dependent on community association facilities,
- (vi) it fails to mention one negative financial impact on the residents of Breakfast Point who are members of the Community Association.,
- (vii) it fails to mention one negative non-financial impact on the residents of Breakfast Point, and
- (viii) it fails to consider that Kendall Bay is one of the few remaining unused bays west of the Harbour Bridge that does not have a marina in place.
- (x) and while trotting out all the benefits it perceives it fails to disclose, as it knows and as it should, that the by-laws do not allow for access by the public unless on foot or by bicycle and for the purpose of recreation rather than for transit to and from a marina
- (xi) is meagher in scope.

ACCESS AND LAND OWNERS CONSENT



The Director General's Requirements state that the 'Key Issue' of 'Public Access' is to be addressed in the EA. We will show that it has not been addressed.

INTRODUCTION

This section will take the submission into the area of land owner's consent and on to the impact on the rights, title and interest of persons not party to the marina application.

Land owner's consent

Land owner's consent is required from,

- (i) NSW Maritime,
- (ii) Community Association, and
- (iii) City of Canada Bay Council.
- (iv) Breakfast Point Pty Ltd

NSW MARITIME LAND OWNER'S CONSENT: INVALID

Land owner's consent is required from NSW Maritime. This consent has been given. NSW Maritime consent is necessary because it is the owner of the land in Kendall Bay. However, while this consent is a necessary precondition to the proposal being considered it is not a sufficient condition. A simple perusal of the drawings, that were before NSW Maritime at the time it gave its consent and that were relied on by it giving its consent, **clearly show** that part of the proposed marina structure extends (encroaches—for which see footnote 4) on to land that does not belong to NSW Maritime and that is part of the Community Association parcel. It is also **clear** from the same drawings³⁶ that the marina is entirely dependent on land, which NSW Maritime does not own, for parking facilities and access for berth and other users.³⁷ This is troublesome. On the one hand NSW Maritime was alert enough to impose a condition to its consent, to wit, for "land tenure arrangement" acceptable to it (more below) but, on the other hand, did not require the applicant to obtain other land owner's consent. **In circumstances where NSW Maritime was fully aware of the limit of its land (boundaries) and being fully aware, from the drawings it relied on to give its land owner's consent, of the interest of the Community Association and the absence of competitive tenders³⁸, it would be appropriate to ask why it engaged in conduct and/or participated in a process that purported to give apparent validity to and participated in a commercial undertaking (from which it stands to derive a direct financial benefit) that had the effect of alienating the rights, title and interests of a legal person that was not a party to the commercial proposal i.e., the Community Association DP No. 230347. It is an invalid consent.**

Pre-judgement of the application: the old Wharf

36 See, for example, paragraphs 1.08; 1.09, 1.11; 2.10; 3.161; 3.177; 3.219; 3.227; 3.228 and 3.229.

37 See Chapter 1.

38 Relevantly, it is rumoured that an option to buy has already been sold by the proponent which suggests that a competitive process could have been more financially rewarding for NSW Maritime. Competitive tendering would have been consistent with NSW Maritime's published commercial leasing policy.

A reference to the authorities is also required not only because of the issues raised in the previous paragraph but because of the removal of the old wharf. That wharf was removed by the proponent at the request or direction of NSW Maritime (as disclosed by the proponent in meetings of residents). This is odd. The old wharf was in Kendall Bay. The proponent was developing DP 270347 which is not in Kendall Bay thus, NSW Maritime had no right or authority to require the proponent to remove of old the wharf as part of the residential development since NSW Maritime has no power or authority over residential developments. Thus, the removal of the old wharf was,

- (1) unconnected with the residential development,
- (2) unnecessary for the residential development and,
- (3) was done for a purpose other than for the residential development.

Since NSW Maritime had no authority over the residential development its requirement for the removal of the old wharf and the proponent's consent or agreement to do it, had to be based on something else i.e., that, in so far as NSW Maritime and the proponent are concerned, there was some agreement/undertaking/or understanding that the marina would go ahead independently of what was happening within DP 270347³⁹. **In other words it was always intended that the consent for the lodging of the marina application be granted and the removal of the old wharf was just a preliminary step towards that end. There has been a pre-judgement of the consent process.** This would be consistent with the absence of competing tenders and the other matters mentioned in the previous paragraph. Furthermore, **because Maritime's consent is fundamental to the approval process, then if that is invalid then the MPA and any other application relying on the consent is based on an unsound foundation and must fail.**

In the event NSW Maritime land owner's consent restrains the applicant from commencing work on NSW Maritime's land unless:

- "(b) there is a land tenure arrangement in place which is suitable to NSW Maritime."

Presumably, the "land tenure arrangement" referred to in (b) is a land tenure arrangement over its own property. That's fair enough. It should look after its own interests. But on further consideration why would one go to the trouble to give its consent and not require "land tenure arrangements" over other affected land without which its own consent would be negated? In any event no such tenure arrangement has been disclosed and the assessment

39 The removal of the old wharf was not part of the Part 3A approval for the 2005 Concept Plan (nor the 2002 Masterplan for that matter) and, realistically , it could not form part of it because DP 270347 does not extend into Kendall Bay. However, the summary of the 2005 Concept Plan prepared by the development's architects has the following entry under the heading "Public Transport":

"Bus/Ferry Interchange

LEP 91 objective Clause 41B (e) encourages the establishment of a ferry wharf, and Clause (f) encourages integrated public transport systems to service the land and adjoining neighbourhoods.

The planning of Breakfast Point makes allowance for the provision of these objectives". To assess the possible impact on the estate see Attachment 68.

This 'planning' is consistent with the removal of the old wharf –a removal that could not go ahead without Maritime's consent. A consent (and removal) that would not have been necessary unless there was some agreement or understanding that the consent to lodge the MPA and associated lease would be forthcoming. The proponent would be unlikely to have incurred the significant expense of removing the old wharf unless it was "on a promise" regarding the marina. This 'planning' goes back to the time in 2005/6 when the old wharf was removed an act which is, incidentally, consistent with the pre-application consultation web page statement that the marina design complied with NSW Maritime Guidelines (see Chapter 0 at Q 11) that are currently out of date but, presumably, were current at the time all of this 'planning' was taking place.

process should not be undertaken without it (a suitable land tenure arrangements might never be reached).

The absence of a comprehensive land owner's consent from NSW Maritime should not obscure or deflect the attention from an obvious defect in the consent itself. The consent is a conditional on an acceptable "land tenure arrangement" being negotiated but the *EP&A Reg 2000 Sc 1 Pt 1 cl 1(i)*⁴⁰, under which the consent was given, specifies a "consent" not a "conditional consent". To have it otherwise would require the DoP, in assessing the application, to go behind the (qualified) consent and investigate whether it has been complied with or not complied with. That is not its function. Were it for the DoP to go behind the consent, it would implicitly abdicate its role as assessor and enter the arena of an advocate. The qualified consent seeks to impose this function on it. **It is submitted that the NSW Maritime consent is a nullity.**

For the record, it is noted in passing, that the drawings/plan(s), on which NSW Maritime gave its consent, indicate a reduced number of berths (172 down from 177) for the marina.

RIGHTS TITLE AND INTERESTS TO AREA NOT OWNED BY NSW MARITIME

Leaving aside the question of validity or otherwise of NSW Maritime's consent the submission will now consider the need for land owner's consent as it applies,

- (i) to the Community Association and
- (ii) as it applies to the City of Canada Bay Council.

This calls for a consideration of the title to the area affected that lies outside the land owned by NSW Maritime.

It will be recalled that *the MPA* sites the Marina "**adjacent to**" the residential development known as Breakfast Point. Thus, if one were to "take a walk" from the western most boundary of the Parramatta River what would one encounter? Firstly, there would be,

- (i) the seawall (and lot 55 which is a section of the seawall currently in the name of the developer and is limited in depth and over/below this lot Pt lot 1 is found).
- (ii) Pt lot 501 DP 1052824 being the foreshore walkway (limited in depth and below this stratum there is Pt lot 1 DP 270347).
- (iii) a narrow strip (1m wide) being Pt lot 1 DP 270347 in front of the Hunters Wharf strata.
- (iv) Hunters Wharf SP 75666 boundary, and
- (v) Hunters Wharf apartments.

40 The *EP&A Reg 2000 Sch 1 Pt 1 cl 1(i)* says:

"(i) if the applicant is not the owner of the land, a statement signed by the owner of the land to the effect that the owner consents to the making of the application".

You either give consent or you don't. There is no half measure. Pursuant to the provisions of the *Interpretation Act s 8* the singular "owner" needs the plural sense as well.

For most of its length the seawall is part lot 1 DP 270347. For part of its length (in front of Hunters Wharf), a part of it limited in depth and length is identified as lot 55 DP No 270347⁴¹. Lot 55 is in the name of the developer.⁴² It is at lot 55 the proposed commercial marina joins up with the *Community Association* parcel (see Attachment 2 being sheet 9 DP 270347 and Note 1 and the "A"- "A" diagram). Interpreting the diagram and notation is not easy but it seems that the area below the seawall and the part of the seawall below the level plane at R.L. 0.5 is still part lot 1 DP 270347. *This "A"- "A" diagram and the notations on it show that the R.L. to the top of the seawall is 1.5 but lot 55 is limited to an R.L. of 0.5 which means that there is still a section of the seawall that is above lot 55 that is Community Association property. Support for this interpretation can be found in the MPA documentation at 5.6 where it says,*

"The level of the jetty will be lower than the public access foreshore zone"

It will be recalled that drawing SK15B clearly shows that part of the marina structure will be on the seawall and extend (encroach—for which see footnote 4) past the western side seawall i.e. on Community Association property or property over which the Community Association has a leasehold title. *Accordingly, the Community Association needs to give its land owner's consent and it has not done so.*

Part lot 501 DP 1052824 is a stratum lot above pt lot 1 DP 270347. This is the foreshore walkway and is owned by the Council and leased to the Community Association for a period of 299 years. This means that the part of the seawall known as lot 55 is above the land known as Pt lot 1. On its western most boundary lot 55 is contiguous with Pt lot 501 (Community Association leasehold title) and below this it is contiguous with Pt lot 1 which, as already indicated, is Community Association property (freehold title). The practical effect of this is that, because the ordinary meaning of land is *"that in respect of which you have a right from the centre of the earth to the heaven above"*⁴³, lot 55 is a stratum lot identified by and limited to its physical boundaries and the air space above it - "to the heavens"- remains part of Lot 1 DP 270347 and similarly, the part lot 1 DP 270347 below lot 55 - "to the centre of the earth"- also belongs to the Community Association (see Attachment 3. which is sheet 12 of DP 270347 and the "A"- "A" diagram)⁴⁴.

Continuing the walk one next comes across a strip of land known as part lot 1 DP 270347 which, at this point is 1m wide and then continuing further in a westerly direction, one comes to the boundary of the Hunter Wharf. Strata.

Lot 55 has a mysterious history. Sheet 9 of DP 270347 is dated 6.06.2003 and describes the same area as Pt lot 1 and Pt lot 3. There is a note on sheet 10 of DP 270347 (dated 18.07.2003) which describes these part lots as stratum lots limited in height and depth (Attachment 4). Part lot 1 is community property and lot pt 3 is part of Hunters Wharf strata property. Sheet 3 of DP 270347 is dated 29.03.2005 (Attachment 5) and this describes this same area part lots Pt lot 41. Later this part lot 41 changed to lot 55 (Attachment 6 is sheet 2 DP 270347 of 21.07.2005). The mysterious aspect of this lot is that it went from being part of a lot that was community property (Pt lot 1) and part of a lot that was strata property (Pt lot 3) to being a lot (lot 55) that is in private hands in circumstances where the *Community Land Development Act s 31 (1)* provides that, "On registration of the plan or dealing by which it is created, association property vests in the relevant association".

41 The lot had at least two previous lot numbers before becoming lot 55 on 9.09. 2005 (see sheet 9 of DP No 270347).

42 Attachment 1.

43 *Commonwealth v New South Wales* (1923) 33 CLR 1; [1923] HCA 34 (9 August 1923) . The actual maxim is given in Butt Peter., *Land Law* . 5th ed Thomson LBC. Sydney 2006.: "*cuius est solum eius est usque ad coelum et ad inferos*" which translates into "the person who owns land owns it from the heavens above to the centre of the earth below" at [205].

44 Note the reference to "MC9" which is to an easement for support and attachment.

If title to this lot is with the Community Association, then the Community Association has to give land owner's consent to its land becoming part of a commercial marina. If title to the lot remains is the developer then the Community Association consent is still required, as an incident of its authority over any **"works"**⁴⁵,

"carried out or [that] remains in the Community Parcel".

The applicant for the "works" has to comply with all by-laws^{46 47}. These by-laws are binding on the developer⁴⁸ but lest the developer argues that, as a developer, by-law 8.16⁴⁹ and 8.17⁵⁰ excuse it from having to obtain Community Association approval for any "works" then, such a submission would be without merit because the developer's rights contained in by-law 8.16 and 8.17 have no application to the present circumstances. This is because, by force of the definition of "development activities" in by-law 93.2, the rights are confined to,

"...anything to be done **in connection with development** in the Community Parcel as from time to time determined by the Developer,..." (emphasis added).

However, the construction of the proposed marina is not **"in connection with a development in"** the Community parcel. For the developer to be excused under these provisions there would have to be a development "in" the Community Parcel and the "works" have to be "in connection with the development (which is in the Community Parcel). Thus, the marina does not come anywhere near being a development that would satisfy by-law 93.2. The Community Association has not given its approval for any "works" and is not likely to give it in the foreseeable future.

For abundance caution it is mentioned that lot 55, in its precursor existence as lot Part lot 1 and Part lot 3, is shown as being subject to an "easement for support & attachment" (see Attachment 3 which is sheet 12 DP 270347) and the s 88B schedule item 9 provides that lot 3 is benefited by such an easement while lot 1 is burdened by it⁵¹. The thing to note about this is that the "easement for support and attachment" has both the servient and the dominant lots within DP 270347. Consequently, the proposed marina structure cannot rely on this easement for "support" and "attachment". Whatever easements rights are claimed for lot 55 (or any other lot for that matter) they are only relevant so long as they are,

- (i) appurtenant to another lot in DP No. 270347, and
- (ii) "accommodate" the dominant tenement and,

NB the seawall is not the subject of an easement for access so that any person having a right of access to the open access ways and to the foreshore walkway cannot exercise such a right (assuming it exists) by going "over the wall" and cross onto the walkway or open access ways.

In so far as Pt lot 1 and Pt lot 3 (lot 55) are concerned if it is asserted that lot 55 (or any other lot) has easement rights connected to land in Kendall Bay the

45 Works is defined in by-law 93.2 as including (a) the **erection of a new structure**, (b) **changing the appearance** of an existing structure, (c) the instillation or attachment of...**any other item that is visible outside a lot.**

46 By-law 8.2

47 By-laws 7 and 8 which are generally known as the Architectural and Landscape Standards.

48 The *Community Land Management Act s 13* provides for the binding effect of the *Community Management Statement*.

49 By-law 8.16 gives the developer all rights necessary to carry out "the Development Activities"

50 By-law 8.17 says that by-law does not affect the developer's rights to carry out Development Activities or require it to obtain approval for them under this by-law.

51 If lot 1 is burdened in favour of lot 3 this does not make lot 1 burdened in favour of other lots eg., land in Kendall Bay.

circumstances do not give rise to an easement because the part of the land in Kendall Bay that will ultimately be affected was not, at the time the alleged easement was purportedly created, was nowhere definitively identified. Nor is it now definitely identified. You cannot “reserve” or create an easement by establishing one element of it now and waiting for the day when another constituent element of the easement lot becomes available. To be clear, an easement affecting land in Kendall Bay, for support and attachment, and whether as a dominant tenement or servient tenement to land in Kendall Bay has to be complete in all of its element **at the time of creation. For this reason there cannot, at this time, be any legally effective easement in place affecting land in Kendall Bay.** In any event it is doubtful that an easement for “attachment” is recognised by law and found, on the facts of this case, to exist for land in Kendall Bay. This is because the land in Kendall Bay is not defined nor are the details of the “attachment” specified. Furthermore, there is no way that such an easement can be said to “accommodates” the dominant tenement (as distinct from giving a mere commercial advantage). In other words the alleged easement does not add to the normal enjoyment of the lot as a seawall.⁵² See also the part of the submission dealing with “easements in gross” which this seems to exemplify.

Community Association Land Owner’s Consent

The drawings/plans that formed the basis for the consent of NSW Maritime show that the proposed structure will extend past the eastern most boundary of the seawall and onto property forming part of the Community Association parcel. The Community Association parcel includes the seawall and the Community Association property includes the areas identified in the drawings/plans that are “open access ways”. These “open access ways” are not roads or streets to which the *Roads Act* applies and conditional access to them is currently (there is no justification for concluding the access is unlimited as to time) limited to persons “on foot”⁵³ and subject to conditions imposed by the Community Association.

In addition the Community Association has leasehold tenure over the foreshore walkway. There are conditions on the use of the foreshore walkway but these are not material to the requirement to give consent because “privity” and the right to enforce any condition of the lease does not extend to any one other than the parties to the lease. The important point to make is that neither the lessor nor the lessee has given land owner’s consent nor are they likely to give it in the foreseeable future.

So far the focus of the submission has been on the “marina” but, in doing so, no one, particularly the assessor, should lose sight of the fact that there is an implied application for a “Skid” that is getting a piggy back ride on the “marina” application. The drawings/plans previously referred to (see also sheet 32 of DP 270347) show this Skid as clearly being on Community Association property and the submissions made regarding the marina application apply equally, and with greater strength, to the proposal for the Skid.

Accordingly, it is submitted that the Community Association needs to give land owner’s consent for the marina and for the Skid. To date, only NSW Maritime has given its consent, and for this reason, the consent of NSW Maritime, even if valid-a point which is not conceded, is **not sufficient** for the application to proceed to assessment.

City Of Canada Bay Land Owner’s Consent

52 *Clos Farming Estates P/L (Rec & Man. Appt) v Easton & anor* [2001] NSWSC 525; upheld on appeal [2002] NSWCA 389.

53 See note under footnote 10.

In so far as the *City of Canada Bay Council* is concerned its land owner's consent is required because, it has title to that part of the proposed marina known as the foreshore walkway (subject to a lease to the Community Association) and, it would appear from the drawings/plans relied on by NSW Maritime, that part of the marina structure extend (encroaches—for which see footnote 4) past the seawall and on to this lot and attracts its land owner's consent.

Practical considerations

Reference has been made to the need for the City of Canada Bay Council to give its consent as land owner. There is another sense by which the Council will need to give its consent and that is as the consent authority for that part of the marina structure that extends past (encroaches—for which see footnote 4) the eastern most boundary of the seawall i.e., that falls outside the boundary of NSW Maritime land⁵⁴ and for the Skid as well..

If the *Part 3A* approval (which the *MPA* seeks) is given on the basis that the proposed marina will be “**adjacent to**” the Breakfast Point residential development and not “and partly on DP No 270347” than the City of Canada Bay Council has to give its approval for that part of the structure that falls in DP No. 270347 and the previous *Part 3A* approval given over DP 270347 will not be relevant because that approval is limited to a residential development a fact that the applicant to the *MPA* implicitly recognises by seeking a new **Part 3A** approval.

The next practical consideration is that the marina is supposed to be in Kendall Bay “**adjacent to**” the Breakfast Point residential development which means that the marina owners/users cannot get on and off the marina without crossing the boundary line and onto the *Community Association* parcel.

The process of getting on and off the marina is subject to the Community Association control. Some control measures are found in the *Community Land Management Act s 117*.⁵⁵ This section provides that the *Dividing Fences Act 1951* has effect:

“(a) in relation to a community scheme and an owner of land outside the community parcel—as if the community association were the owner of the community parcel, and
(b) ...”

The Community Association can require a fence to be put in place along the boundary of lot 55 and the marina and/or along the entire length of the seawall from Kendall Bay to River Quays. *Section 117* makes the title to lot 55 immaterial because the fence is between land (Kendall Bay) that is outside the community association parcel and a lot within the parcel. The cautionary note is that a statutory authority, the owner of Kendall Bay, cannot have a liability for a fence imposed on it (although it can agree to contribute)⁵⁶ In other words, if the community association wants a fence, subject to meeting any

54 One can envisage an argument that since the community association parcel is a Part 3A development the Minister's approval suffices but since that approval was given before the marina application was lodged the Minister can hardly be said to have approved something that was not in existence.

55 Refer also to the *CLMA Sc 1 cl 2* wherein it is provided that the Community Association must control and manage the access ways for the benefit of all members. Another perspective would have it that the boat users/owners and their guests could create a nuisance (by noise or otherwise) and/or hazard (with their cars and trailers) and this would breach the mutual duties of co-owners (the developer and the residents) *CLMA s 110*; as well as unreasonably interfere with the use of other lots or obstruct the lawful use of the common property by other owners.

56 *Dividing Fences Act s 25*.

other requirements, it can have one at its own expense.⁵⁷

For the purpose of completeness a couple of additional issues will be dealt with regarding the dividing fence. On one reading of the DP sheet showing lot 55 it appears that the lot's boundary is from the top of the seawall downwards but on another reading the boundary runs from the bottom of the seawall upwards and finishing below the top of the seawall. In so far as a fence is concerned the following would be the situation. For the first reading the fence could be constructed like any other dividing fence i.e., straddling the boundary of lot 55 and the NSW Maritime land or, in view of clause (a) above, it could be constructed entirely on lot 55 at the option of the community association. If the situation is as described in the second scenario then lot 55 would be irrelevant as the fence could be constructed above its boundary line (as if that lot did not exist and that part of the seawall was community association property).⁵⁸

Another option is for the Community Association on its own or in conjunction with the City of Canada Bay Council (because of the lease over the foreshore walkway)⁵⁹, would be to deny the developer the use of walkway and facilities for the construction (and later use of the commercial marina). In this regard, it is to be noted that any provisions in the *Community Management Statement* purporting to give the developer the right to use community property for development purposes cannot, on any reasonable interpretation, extend to making them available for development outside DP No 270347. An interpretation of that nature would fail the reasonableness test -it cannot be that the property of the Community Association should be made available for development activities outside the community parcel e.g., Catherine Hill Bay!⁶⁰

Another possibility would be for an application to the Supreme Court under the *Community Land Development Act s 70*⁶¹ for a variation of the development scheme on the basis that a commercial marina was never part of the Masterplan. An argument based on the Masterplan would find support in the *Community Land Management Act s 15*. This section provides that the development contract has effect as if it had been included in an agreement under seal with covenants to the effect of those set out in *Schedule 2 Part 1*. These covenants are that,

"...the original proprietor of the land the subject of the community scheme covenants:

57 This control function is strengthened by the condition attached to the easement over Pt lot 1 which purports to grant the public a right to enter for the "purpose of recreation". Consistently with the High Court's decision in *Westfield Management Limited v Perpetual Trustee Company Limited op cit*. It is submitted that entry for the purpose of recreation is not the same as entry for the purpose of going to and from a marina.

58 This "control function" is strengthened by the easement over Pt lot 1 purporting to grant access to members of the public for the purpose of "recreation". It is argued that to use Pt lot 1 as a means of transit to get to the marina does not amount to using the purported easement right for "recreation". This would follow from the decision in *Westfield Management Limited v Perpetual Trustee Company Limited* (2007) 239 ALR 75; 81 ALJR 1887; [2007] HCA 45 (3 October 2007)

59 It should be noted that any potential restrictions imposed by the lease for the walkway are vested in the lessor (the Council) and since the Council's on 18.11.2008 unanimously resolved to oppose the marina one can reasonably expect its co-operation rather than opposition to any reasonable restrictions on the use of the walkway for construction purposes or for its use by berth owners and marina users. *Furthermore, to the extent that the proponent for the marina purports to rely on conditions in the lease it is pointed out that there is no "privity" between it and the parties to the lease*— and the lease can be set aside at any time by agreement between the parties or by the courts so that it does not provide the necessary security of tenure. In any event all of this depends on there being a valid lease which, for the reasons stated in paragraph 1.36 – 1.38, this is not conceded.

60 What distinguishes an act or regulation from a by-law is that a by-law is limited in operation to a particular geographical area, which in this instance, is the area covered by DP 270347. Since the marina is outside the DP any provisions in the CMS that the developer seeks to rely on to help it with the construction of the marina is not, for this reason, available to it.

61 See *Neighbourhood Association DP 285249 v Watson* [2008] NSWSC 876.

- (a) with the subsidiary bodies jointly and with each of them severally, and
(b) with the subsequent proprietors jointly and with each of them severally,
that the land will be developed in accordance with the development contract and the development consent.⁶²

These provisions are tied up nicely by s 15(4) that says that,

"Any attempt to exclude, modify or restrict the operation of the covenants is void".

The essence of these covenants is that the construction of a commercial marina adjacent to the Community Association parcel; and/or encroaching on the Community Association parcel (for which see footnote 4); and/or imposing on the Community Association the burden to maintain property and facilities for the benefit of the marina users would be inconsistent with the covenants. This could lead to an action for breach of the covenant in which the Community Association might argue that a commercial marina and a car park for commercial marina users (as distinct from a car park for resident and visitors use) were never part of the and their existence would be inconsistent with the essence and theme of the development.

To remove doubt, reference is made to the 2002 Master Plan, 2005 Concept Plan and to the drawings on which NSW Maritime based its land owner's consent on. The latter show a car park having an area twice the size of the lot available for it but both the Master Plan and the Concept Plan shows development lots/town houses. Thus, there is a contradiction both in terms of what is to be located there and its size.

The 2002 Master Plan and the 2005 Concept Plan gave the proponent ample opportunity to disclose the intention to seek to develop a commercial marina adjoining to the Breakfast Point residential development and encroaching (for which see footnote 4) and on and making use of Community Association parcel but did not do so. Instead the 2002 Master Plan makes reference to, at p 10, "Water Based Activities Includes the refurbished pier, ferry terminal, marina and mooring facilities, rowing/skiff club ramps and other uses outside the subject land subject to Waterways consent" and, on the same page,

it describes the 'Waterfront Activity Precinct' as being,

"Waterfront related activities related to the water 'Gateway' pier, ferry wharf⁶³ and boating facilities. Limited shops, restaurants, cafes, an amphitheatre, some offices at upper levels, boutique hotel/conference centre..."

Reading this one would be forgiven for concluding it was referring to something incorporated within the Community Association parcel –it is only the 'Club ramps and other uses' that are said to be 'outside the subject land'- and nor a commercial marina and with something associated with the "pier" (which no longer exists).

The objectives of the 2002 Master Plan, inter alia,

62 There is a corresponding covenant from the subsidiary bodies and subsequent proprietors.

63 See Attachment 68.

“To provide a long- term planning framework for Breakfast Point, and facilitate its orderly staged development.
To assist the public to understand the future character of the area.”

None of these objectives are satisfied by the current proposal. For one thing the “long-term” plan did not disclose a commercial marina so, to that extent, it was not much of a plan. For another thing whatever was disclosed about a “marina” was not carried forward in the Concept Plan and any reader of it would have rightly concluded that it was no longer part of the ‘long-term” plan⁶⁴.

Similarly, no one, the public included, would be assisted by a Master Plan that, at best, makes a salesman’s reference to a facility that has no details or plan with it (as the other proposals in the Master Plan have) and, as before, is not carried forward in the 2005 Concept Plan. The plans in the Master Plan and the Concept Plan would give an entirely “different picture” of the development if a commercial marina was drawn next to the development from the picture is gives without it. If you want to disclose the “long-term” framework fro Breakfast Point you do not keep half of the plan out of sight in your back pocket.

The Concept Plan is *silent* about a marina and, it should be pointed out, that the Concept Plan is the plan that covers all of the undeveloped part of the scheme so it has more relevance that the 2002 Master Plan in terms of disclosing the thinking of the developer. In any event the Concept Plan had the opportunity to disclose a commercial marina at 2.04 where it specifically referred to the “Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 and did not do so. It had another opportunity at 13.05 where it mentioned a “Boat Shed” and said,

“Subject to necessary authority approval, a low -level water access facility (skid) is proposed within the foreshore park. Council development consent has been granted for a small boat shed.”⁶⁵

The proponent thought it reasonable and prudent to mention a “low-level” water access facility but remained silent about the commercial marina. Indeed the word “marina”, commercial or otherwise, does not appear in the 2005 Concept Plan. None of the plans forming part of the Concept Plan show any marina or car park for a marina. In fact there are a number of references to the seawall as being community property but no mention is made of the fact that Lot 55 is in the name of the developer. Thus, at 6.04 and the accompanying plan,

“A 15m wide open space extending the full length of the water frontage of the site is to be dedicated for public foreshore access. This area is immediately behind the sea wall which is owned and maintained under the Community Scheme,”

and at 8.01 and the accompanying plan,

-
- 64 The 2002 Master Plan, at p27, has a “Phasing Plan” which shows the construction period for “waterfront Activities” as being 2002-2005. That period has come and gone and what was envisaged under “water front activities” has not taken place. It is noted that the specified period preceded the 2005 Concept Plan.
- 65 This is similar to the statement in the Master Plan, p 24, which mentions waterfront skiff/sailing and/or rowing facilities as “being considered in association with...”a marina in association with the pier.” The “pier” has been removed and no longer exists and the “waterfront precinct’ which was to include “commercial uses at low level; and to provide interest, variety and counter-balance the scale of the pier” does not exist either and since the pier has been removed the is no need for it to “counter-balance” it. 2002 Master Plan p 17.

"A 15 metre wide portion (Lot DP 1052824) extending full extent the water frontage, behind the sea wall is to be in public ownership⁶⁶, with maintenance and upkeep the responsibility of the community association under Community Scheme DP 270347."

Perhaps the silence of the proponent regarding the commercial marina may be attributable to the incongruity between a commercial marina and the concept it was trying to sell to the approving authority,

"To ensure the creation, retention and enhancement of significant vistas to and from the site, and to and from the Parramatta River.

To maximise views, access and connection to the waterfront.

To ensure that the views of the site from the street and the harbour should form a harmonious vista which includes vegetation in harmony with the buildings and view corridors to and from the water.

To recognise the unique characteristics, opportunities and constraints of different precincts."⁶⁷

These remarks are similar to the ones in the 2002 Master Plan. For the purpose of this submission the attention is drawn to the words "highly visible" and "extensive views to the River & the City". The Master Plan proposed a number of "view corridors" to Kendall Bay and the Parramatta River⁶⁸ and describes the "Parramatta River Visual Catchment" and talks about "water visual connection points"⁶⁹. The irony of these laudable positive picture words is that the "view corridors" and the "water visual connection points" (on the western side of the bay) are, in fact, placed where the views and the visuals run into significant obstruction by the marina. In fact, no matter where these view corridors and water visual connection points are placed there is no running away from obstruction from the marina. The Master Plan should have said something about this.

There is little that need be said about these objectives of the 2002 Master Plan and the Concept Plan 2005 save that,

(a) a commercial marina does not create, retain and enhance the significant vistas to and from the Parramatta River. This said, it is good to see the proponent concede that the existence of "significant vistas".

(b) neither does a commercial marina maximise the views, access and connection to the waterfront by putting most of the bay under a "car park" for boats and denying most of the bay for the users for individual users and denying all residents and users of the foreshore lot of a "clear water" bay. There is nothing inherently good about a marina (except to a mariner!) But there is something inherently good about a "clear water" bay for everyone (including a mariner!).

(c) similarly, it is impossible to see any harmonious vistas from the water. Whatever vistas may be created they are more likely to jar the vision and insult the mind than be in harmony with the buildings hidden by it and from them.

(d) finally, it is next to impossible to give effect to the "unique characteristics, opportunities and constraints" of Hunters Wharf and the foreshore houses by a commercial marina.

All these lead to the conclusion that the proposal is inconsistent with the Master Plan⁷⁰ and with the Concept Plan.

66 It is now subject to a lease to the Community Association.

67 Concept Plan 2005 at 4.00. These are the same "Site Planning Objectives" of the 2002 Master Plan at 4.00.

68 Master Plan: "Site Planning Objectives" at 4.00 .

69 At p 18.

70 The 2002 Master Plan is relevant in showing what was the intention at the time but it is the 2005 Concept Plan that is more pertinent because it is the Concept Plan that represents the updated vision of the developer.

For the purpose of removing any doubts about this part of the submission it is stated clearly and unambiguously that, because the proposed marina and its associated services structures and facilities must cross the boundary line (encroach) into the *Community Association* parcel and/or property,

- (i) the *Community Association* will need to be an applicant to the proposal.
- (ii) because the Community Association is not an applicant the consent of NSW Maritime does not cover the entire proposal and is insufficient for the proposal to succeed.
- (iii) the City of Canada Bay Council needs to give land owner's consent because the proposed structure encroaches on the foreshore walkway over which it has title and without this consent the consent of NSW Maritime is insufficient for the proposal to succeed.
- (iv) the City of Canada Bay Council needs to give its consent as the consent authority over that part of the marina that crosses (encroaches) the Community Association parcel boundary line because that part is not covered by the previous **Part 3A** approval nor by the current Part 3A and since it has not given this consent the proposal cannot succeed.
- (v) the Minister, in general, and under *Part 3A* in particular, does not have the power to give to the developer access to, or use of or in any way interfere with the rights, title and interests of property owners covered by the *Community Association* without their consent. The argument here is very simple. The Minister cannot give development rights to person A over the rights title and interests in the property of person B without person's B consent or without going through the process of acquisition or resumption to first take away the rights, title and interest of person B and then transferring them to person A.

For the purpose of removing further doubt arising from the inconsistent description of the site for the proposed commercial marina and skid contained in the MPA a short comment needs to be made. If the developer claims that the proposed commercial marina is part of the development of DP No. 270347⁷¹ then, it is submitted, that it cannot escape the issue of consent by the Community Association.

Although it has not been specifically touched on, it goes without saying, that to use the seawall for anything other than as a seawall is contrary to its zoning and its function. So that to put a structure on it, as shown in the drawings submitted to NSW Maritime, would breach both of these.

It is further noted that the seawall, at the point where, so it appears, the central arm of the marina would attach/connect/rest encroach (for which see footnote 4) has three buttresses on which, it is assumed, it is intended that the central arm would rest. These buttresses are not shown on any plan as being structures separate from the seawall and as belonging to NSW Maritime or anyone else. This being the case they are part of the Community

71 Some time in 2007, early 2008, the writer inspected the proposed marina application on the web site for the Department of Planning. There were 5 pages to the application. One of those pages made reference to the proposed marina being a development of DP 270347. I printed the application but did not check the number of pages. At a later date I noticed that the page with that statement was missing. On revisiting the web site that page was no longer there, however by perusing the bottom of the pages that were available it was noted that each page is numbered as being one of five pages even though only four pages are shown and only four pages will print. Draw your own conclusion!. Further, at para 3 of this application there is a reference to a "detailed description of the land " being attached but there is no such attachment to the application on the web site.

Association parcel and attract the same submissions as made about the seawall itself.⁷²

Provisions in the contract of sale

A short reference should be made to the *Contract for Sale* that residents of Breakfast Point entered into and the easements it refers to that were created under the *Conveyancing Act*. Of the easements the *Contract for Sale* identifies there is one for public access which carries a number of conditions (Attachment 7.0 & 7.1). Because this is an important easement a few details should be provided. The conditions imposed by the easement are shown in the "*Schedule of easements and profit a prendre*" created pursuant to the *Conveyancing Act 1919 s 88B*. By item 15 of this *Schedule* the lot burdened is identified as,

"Lot 1" and the "Lot/s benefited , Prescribed authority benefited "

is shown as "City of Canada Bay Council".

Thus, no "authority" is prescribed other than the City of Canada Bay Council. The *Schedule under s 88B, item No 15* limits the use to, inter alia,

- (i) being **on foot**⁷³ and with wheelchairs or other disabled access aids; and
- (ii) without animals (except guide dogs or hearing dogs) (emphasis added).

These users " **must not**",

- (i) park or stand a motor vehicle or trailer on the burdened lot unless expressly permitted to do so or
- (ii) obstruct the use of the lot burdened.

On the basis of condition (a) and (b) the by-laws can prohibit any user of the marina from bringing a vehicle, trailer or construction vehicles and material on the community property unless "*expressly permitted*" and currently there are no by-laws in place to this effect.

The *Schedule* does not identify the "lot benefited" but does refer to the "prescribed authority " to be benefited as the City Of Canada Bay Council but throughout clause 15 of the *Schedule* there is repeated reference to "the Council and Authorised Users" and at cl 15.6 the *Schedule* defines "authorised users" as the Council's invitees and other persons authorised by it and "members of the public". In fact , by this process, the developer seeks to cascade rights from the council's rights under an easement in gross to others not capable of attaining rights by way of an easement in gross. In attempting to do this the developer has devolved unlawful rights to "members of the public".

There is no issue (as far as the Council and its servants and agents are concerned) because they might have a need to enter for Council's purposes. The

72 For the purpose of completeness at these three points the seawall is 175cm, 180 cm and 190 cm high (going in a northerly direction). The difference may be due to the uneven bottom of the bay.

73 See note under footnote 10.

problem arises with the purported extension (“assurance”) to “members of the public”. To appreciate the point it needs to be noted that a defining characteristic of an easement is that there needs to be a “servient” tenement and a “dominant” tenement (lot benefited). In the existing situation there is no dominant tenement. Where there is no dominant tenement one talks about an “**easement in gross**”.^{74, 75}

An “easement in gross” is limited to the Crown, a local or public authority and to a prescribed corporation (e.g., electricity providers, water provides, telecommunication etc.) as set out in the *Conveyancing Act s 88A*. These types of easements are for limited purposes and are to give the bodies identified in s 88A the means to enter and carry out appropriate functions. What the developer has attempted to do here is not permissible. It has tried, through the back door, to create an “easement in gross” in favour of an entity, (members of the public), who is not the Crown, local or public authority or prescribed corporation. **Extensions (“assurances”) of this type are not available even if there is a lot benefited⁷⁶ and they are not available when there is no dominant tenement. In summary, the extension (“assurance”) is not permitted because there is no dominant tenement and because such extension is unnecessary for the Council to be able to exercise its easements rights.** The exercise of such boundless creativity by the proponent's legal representatives should go unrewarded.

It is important to keep in mind that the function of the easement is to give a limited right to the Council as against the owners of the servient tenement and not to diminish the proprietary rights of the owners of the that tenement which is what happens if the easement rights are expanded outside the ambit of the “authority benefited”. This will give due regard to the importance of the principle of indefeasibility of title under the Torrens system^{77, 78}.

This is the only reasonable interpretation to give to the provision and, for practical purposes, users of the marina, whether as owners of berths or otherwise, cannot rely on the provisions in the easement to gain access to and use of community association property covered by DP No 270347.

Under the easement the Community Association retains the power to,

“make rules about the use of the site of this easement “

74 For what it is worth the present easement started off a s 94 contribution before the council gave it back in return for the easement. The section says:
“(1) If a consent authority is satisfied that development for which development consent is sought will or is likely to require the provision of or increase the demand for public amenities and public services **within the area**, the consent authority may grant the development consent subject to a condition requiring:

(a) the dedication of land free of cost, or

(b) the payment of a monetary contribution, or both” (emphasis added).

75 *Bonvale Enterprises Pty Ltd v Halfpenny Investments Pty Ltd* [(2005)] 62 NSWLR 698; *Trevlind v BMP Manufacturing* [2008] NSWSC 603 (19 June 2008); Butt, Peter. *Land Law*. Thomson Lawbook Co. Sydney 2006.

76 *Trevlind v BMP Manufacturing* [2008] NSWSC 603 (19 June 2008); *Woodman R & Nettle K., The Torrens System in NSW*. 2nd Ed LBC Sydney 2003. In those cases were an extension (assurance) of the rights over the easement in favour of “members of the public” and others, they involved both a servient and a dominant tenement. Also note that by the *Conveyancing Act s 88A(1A)* it is possible for one prescribed authority to “assure” to another prescribed authority but there is silence about an assurance to non authorities. Consider also the effect of the *Conveyancing Act Schedule 4A* and the limits it imposes on “Rights of access” and “Right of Footway”

77 *Westfield Management Limited v Perpetual Trustee Company Limited* (2007) 239 ALR 75; 81 ALJR 1887; [2007] HCA 45 (3 October 2007)

78 *Trevlind v BMP Manufacturing* [2008] NSWSC 603 (19 June 2008)

and pursuant to the *Community Management Statement* the,

"Council and Authorised Users must comply with any Rules".

*The importance of this is that there is no security of tenure for marina users because, at any time, the Council and the Community Association may agree to change the easement rights or do away with them altogether or the courts might similarly order.*⁷⁹

It is relevant to mention some further wording of the s88B instrument. It authorises the Council and authorised users to,

"pass and repass over the site of this easement:...[and] to remain for the **purpose of recreation...**" (emphasis added)

Words used to expressly grant an easement are construed fairly narrowly. Thus,

- (i) an easement to "pass and repass" between two lots does not extend to going "to and from and across"⁸⁰ ;
- (ii) while the limitation imposed by the words for the "purpose of recreation" **do not permit entry for the purpose of transit to and from a marina;**
- (iii) "right to access" does not include the right to park⁸¹ ; and
- (iv) if the terms of the easement do not indicate an access point and a concluding point (as here)⁸² **the easement does not give the right to enter the servient tenement at any point along the easement** so that the owner of the servient tenement can fence the land along the easement provided the fence does not prevent reasonable access.⁸³

In the present case the proponent (who is not a party to the creation of the easement) is attempting to create an entry point along the easement at Hunters Wharf from land that is not part of a dominant tenement and along which, pursuant to the *Community Land Management Act s 116*, there should be a dividing fence. On the authorities this is not permissible. It amounts to a substantial interference with the rights of the servient lot owner and an excessive use by a non party to the easement.⁸⁴ The use proposed by the developer is "in substance" a use for the benefit of non-dominant land and this is contrary to the very notion of an easement.⁸⁵

Note that the purpose of the easement is for "**recreation**" which is entirely different to using for a commercial activity. Moreover, at the juncture with the marina, access to the easement cannot be had without first committing a trespass (going over the seawall) into the community association parcel because the seawall itself is not part of the easement. **The word "recreation" is important from another perspective. It is a word of limitation. The proponent is a corporation i.e., it is not a natural person. As a corporation it cannot engage in "recreation" and by necessary implication it cannot use the easement nor, a fortiori, rely on any purported rights under it.**⁸⁶ Furthermore, the word "recreation" imposes an unassailable restriction on

79 See also the submission in paragraph 1.36- 1.38.

80 *Westfield Management Ltd v Perpetual Trustee Company Ltd* (above)

81 *Moncrieff v Jamieson* [2007] 1 WLR 2620.

82 These are identifying characteristics of easements having a servient and a dominant tenement. *Boglari v Steiner School* [2007] VSCA 58.

83 *Gale On Easements*, 18th edition. Sweet & Maxwell London 2008; *Boglari v Steiner School* [2007] VSCA 58 at [26].

84 *Boglari v Steiner School* (above).

85 *Gale on Easements*. op cit.

86 It is submitted that this is the case even if, as a corporation i.e., not as a natural person, it qualifies as a "member of the public", a point which is not conceded.

the owners/users of the marina. They do not make use of or rely on the easement right to “pass and repass” for the purpose of “recreation”. What they do is “go to and from” the marina. This is not the same as to pass and repass for the purpose of recreation. In this context it is worth bearing in mind that the High Court has held that a right in an easement “to go, pass and repass for all purposes” is not the same thing as a right to pass and “go to and from and across”⁸⁷. In other words the easement rights will be strictly construed.

The *Conveyancing Act s 88(1)* provides that an easement created by an instrument after 1 January 1931 against a person who was not a party to its creation to clearly indicate a number of things e.g., the person whose consent is required to release, vary or modify the easement, however, by *s 88(4)* these requirements,

“do not apply to an easement without a dominant tenement **acquired by or for a prescribed authority** referred to in section 88A, nor to any restriction on the use of land in relation to any such easement.”

The relevance of the exemption is that it is limited to *s 88A* easements and any “easement in gross” purportedly created in favour of “members of the public” i.e., not the “authority benefited” will have to comply with *s 88(1)*. The instrument in the *Contract for Sale* does not comply with *s 88(1)* and to the extent that it purports to create an “easement in gross” in favour of “members of the public” it is void.⁸⁸

Thus, there are no apparent reasons why the Community Association cannot enact by-laws to impose restrictions on the use of the sea wall⁸⁹, walkway or the open access ways that may be used to construct and/or service a commercial marina e.g., it could install a boom gate⁹⁰ at the wharf and charge a fee to get on or off; it could charge a fee for trucks or cars going to the marina and set the hours when this could happen and other associated conditions. At the very least any un-authorised crossing of the seawall, without the consent of the Community Association, could amount to a trespass.

For the purpose of removing doubt it is stated that there is no easement for access over the open access ways and/or over the foreshore walkway that includes the seawall; and the easements over the open access ways and the foreshore walkways are limited in their use for the purpose of recreation and for anyone to claim or assert a greater right e.g., to use it for the purpose of a commercial marina would be inconsistent with the proprietorship and possession of the servient land because it would be giving more than a limited right to use it⁹¹.

87 *Westfield Management Limited v Perpetual Trustee Company Limited* (2007) 239 ALR 75; 81 ALJR 1887; [2007] HCA 45 (3 October 2007).

88 If the easement is the usual “house and garden” variety the person (read the Canada Bay Council and others) who have the benefit of the easement would have a legal duty to maintain the easement. The Council makes no contribution to the maintenance of the open access ways,, the parks and the walkway along the foreshore.

89 The **seawall** is not an open access way to which the public could claim access rights under the easement.

90 It should be noted that the Community Association charges a fee for the use of the Village Green, Community Hall, Country Club and does so without objection by the developer. In any event see, for example, *Neighbourhood Association DP 285249 v Watson* [2008] NSWSC 876. The boom gate was installed by the developer, who sold lots in the scheme on the basis that residents could have access to the marina then who proceeded to charge a fee and in some instances threatened to sue users for trespass. The validity of these steps were not in issue but its existence was a factor in the court finding that the development scheme was “impractical” and could be varied under the *Community Land Development Act s 70*.

91 Butt. Peter, *Land Law*. op cit.



SOCIAL IMPACTS

**RE: INNER WEST MARINA - VOLUME 10 – Reviews by John Clarke and Greg McGrath
PROJECT APPLICATION**

Social Impact

(Note: Page Reference column provides Page, Clause Number (if applicable) from report plus appropriate Page Location; e.g. page 10.6 = 60% down page 10)

SOCIAL IMPACT

The DG has stated that;

The Environmental Assessment (EA) must include

-
- **consideration of any relevant statutory provisions including the consistency of the project with the objects of the Environmental Planning and Assessment Act 1979;**

The DG has not called directly for a Social Impact Statement to be prepared for the marina application. The EP&A Act s 79C(1)(b) calls for consideration of the “social” environment and this issue will be taken up here.

BACKGROUND

By the time the residential development of Breakfast Point is completed it will provide residences for something like 5,000 people. This is a lot of people to be directly affected by a commercial marina in Kendall Bay and one can reasonably expect it to produce a significant impact on the social integrity, cohesion and well-being of the residents of Breakfast Point and adjoining Kendall Inlet with a “spill over” affect on the residents of Mortlake, Cabarita Junction, River Quays.

The locality of Breakfast Point represents a close, quite, cohesive village type residential area. A commercial marina will be a significant disruptive intrusion into the day to day lives of these residents. What is now a quite area for the residents to enjoy, and was sold to them as such by the proponent, will be lost in the din of commercialism and the users of the marina.

The brunt of the social impact will fall mainly on the users of the public walkway, residents of Hunters Wharf, the residents of the houses north of them and the future residents to the south of Hunters Wharf and to a lesser extent on other residents of Breakfast Point. It is these residents that will have to put up with the intrusiveness that the users, of what is a separate and distinct commercial undertaking, will make on their lives and their pocket book. These can be expected to be instrumental in reducing their enjoyment of life at Breakfast Point.

Some of the demands that can be expected to follow on the backwash of a commercial marina will be,

- (i) on pedestrian traffic on the foreshore walkways, the parks (including Silkstone Park which is not available for use by non-residents/owners),
- (ii) on the open access ways ,

- (iii) on the cars, trucks and trailers serving or using the marina;
- (iv) on car parking on the open access ways. Their use by berth owners, their friends and guests and their use by individuals attracted by or connected with the marina will directly effect the availability of car parking spaces for use by visitors of residents and owners.
- (v) on the levies of residents to meet higher maintenance costs, cleaning and security to mention a few.

Let there be no doubt that the negative impact of these and other demands that are sure to follow a commercial marina there will be an increase in social issues that will far outweigh any imaginable positive benefit to the public or the residents of Breakfast Point. The outcome of such issues will be a loss of social cohesion that may well see a reduction in the number of owner/residents and an associated increase in the number of renters and all the implications that carries for the building of social bonds that go towards creating a strong, cohesive, happy and productive village community. If this turns out to be the case, as it most likely it will be, then it will be an outright ironic if not an outright perverse outcome for 5,000 or so residents to lose out for the benefit of 172 berths in a commercial marina. Say good bye to;

"Breakfast Point is a world in itself. You come home and you're surrounded by vibrant open space, beautiful buildings and sparkling harbour. Everyone here is passionate about the place. Why wouldn't we be? This is the lifestyle you dream about" (*italics added*). (Attachment 63)

and ,

"Breakfast Point is a setting that takes your breath away. From the parks and trails lining the foreshore we have so much space to enjoy our private view over Sydney Harbour." (Attachment 8.0).

There will not be any private views with a commercial marina in Kendall Bay.

POLLUTION IMPACT

Kendall Bay is polluted. There is no dispute about this. There is still a Remediation Order in place (dated 25 May 2005) and waiting to be given effect. This order was made because it was found that the bay is contaminated with polycyclic aromatic hydrocarbons and total petroleum hydrocarbons and that these,

"pose a significant risk of harm (SRoH)"

Some of these contaminants are classified as "human carcinogens" and,

"It is likely that further development of the area would increase the risk of harm"

and the,

"Disturbance of the sediments would mobilise contaminants and hence increase the risk of harm"

The Remediation Order provides that until it is complied with the Maritime Authority of NSW is to,

“Refrain from carrying out or causing, permitting or allowing another person to carry out any works or activities at the site that would result in the disturbance, or further disturbance, of the bed sediment of Kendall Bay and the Parramatta River...Examples of the type of works or activities that may come within the scope of this Order include:...boating facilities (for piers, wharves, slipways or marinas)...”

To the existing pollutants one must add for consideration those pollutants that the boats themselves will bring along, such as diesel, anti-fouling agents and treatments, oils or chemicals used by boats and sea creatures not native to the area being brought into the Bay by the boats and/or their users. Some of the pollutants will give off revolting smells. The smell from pollutants released from the water is apparent at present and, if anything, it is likely to increase once a commercial marina is in place. The constant movement of motor boats will serve to continuously churn over and spread the pollutants.

There is a danger that comes from the popularity and fashionable use of words like “pollution.” The danger is that people become inured to its meaning and significance in the particular circumstances of this case. So let there be no doubt that the evidence accumulated in relation to the investigation of the remediation of Kendall Bay show that the existing pollutants are a danger to man and animals and this being the case the approval process should be adjourned until all remedial work on the Bay is completed to the required standard. Until then it is a waste of time and resources for all concerned to proceed with the application.

PRIVACY IMPACT

The residential development of Breakfast Point has been designed, for the most part, to offer privacy without the intrusiveness of “obvious” fences. Mostly, this is provided by low hedges and open grass spaces with some fencing here and there. The houses north of Hunters Wharf do have fencing to delineate individually owned private property but not to delineate that property from community association property (there is landscaping for this). The two and three storey apartments of Hunters Wharf do not have fences (as such) but there are hedges and landscaping to differentiate private property from strata property and from community association property. The absence of obvious fences or the absence of fences delineating the community association property from strata and private property will encourage marina users to wonder onto places where they should not do so. Many residents will find this prospect unsettling, uncomfortable and outright disturbing. It will help it destroy the peace and quiet that draw them to the development in the first place and will do nothing to engender a sense of security.

The marina will see an increase in the number of persons who access the community association parcel. Some of them will be the owners and guests of the owners and some will be passengers from ferries who are attracted to the area by the presence of the marina. Some others will be workers and service providers for the marina. They will be walking on and making use of facilities which they would not do if the marina was not there.

Reference has previously been made to the document from TLB Engineers lodged with the MPA. That document is relevant in the context of the impact on privacy because it claims (at para. 3.10) that ,

“For a distance of 15m landward of the mean high water mark, is a zone of landscaped public open space which extends around the whole of Kendal (sic) Bay. West of the public open space, medium density residential buildings have been constructed” (emphasis added).

This statement is important for three reasons. Firstly, it is incorrect. The mean high water mark is in an easterly direction from the seawall. The seawall is private property/private community association property and any "open space" does not commence until one goes past the seawall in a landward direction and the reference to the mean high water mark is incorrect. Secondly, the statement is an admission that the space between the marina and the private community association surface property is 15m. . Thirdly, it is important because of the assertion about "public open space". In so far as the 'public open space' is concerned the statement is incorrect. The 'space' is neither "public" nor "open". It is in fact land now subject to a lease to the Community Association and while the public has limited right to use it this does not make it "public" nor "open". The public does not have an interest in land that "public open space" would have. The Dictionary to the Harbour REP defines "public open space" in the following terms,

" public open space" means:

- (a) any part of the public domain that is set aside for public recreation, or for a temporary use, and to which public access is unrestricted, or
- (b) any part of the public domain that is unfenced and that is set aside for commercial seating associated with restaurants, cafes or the like, but does not include land on which any building (other than a temporary structure) is situated" (emphasis added).

The word "and" in clause (a) is conjunctive so that in order to satisfy the definition of "public open space" the land must be part of the public domain and afford unrestricted access to the public. There is no property, that forms part of the Community Association parcel, that is in the "public domain" or, for that matter, any property to which the "public" has "unrestricted" access. All access to the community property by no-residents/occupiers is subject to conditions imposed in the by-laws and there is no limitation on what may be imposed.

Similarly, the word "and" in clause (b) is conjunctive and for that clause to satisfy the definition of "public open space" the land must

- (a) be part of the public domain,
- (b) be unfenced and
- (c) be set aside for commercial seating and not have permanent buildings on it.

Furthermore, no part of the community association parcel on the foreshore has been set aside,

"for commercial seating associated with restaurants..."

The clincher to the definition in clause (b) is that all of the land in the community association parcel has a building on it. All of the community association parcel either has,

- (i) a town house e.g., like on development lots, or
- (ii) apartments as on strata lots, or
- (iii) homes or town houses in neighbourhood lots, or
- (iv) is part of lot 1 DP No 270347 and, as such it has on it the country club, the Village Green and the associated buildings, or Silkstone Park and the associated structures.

For the purpose of further clarity, it is to be noted that some parts of the community association parcel "appear" to be vacant e.g., the Waterfront Park, but are not, in fact, vacant because it is part of the same Pt lot 1 DP 270347 that has the country club (and the other structures on it), or the Village Green (and

the associated structures) and Silkstone Park (and the structures on it). In other words the Community Association property consists of only one lot (Pt lot 1) although parts of it have been given distinguishing names. The open access ways are also part of Pt lot 1. They are part of the same Pt lot 1 that has the country club, village green etc. This state of affairs is one that would have been known to the developer. It is inconsistent with any notion of "public domain" . In any event each and every area of open space to which there is a access to the council (and all who take from it) is open to change at any time by agreement between the council and the community association and or by order of the courts so that there is no security of tenure as required for users of the marina.

The use of the words "public open space" in the document from TLB Engineers is remiss in another aspect. It does not mention that there are hedges and an "embankment" (there are steps leading up to the boundary of the Hunters Wharf strata) between the so called "public open space" and the residential buildings. For the purpose of the Dividing Fences Act these amount to a fence and serve to tighten the definition of "public open space" in clause (b).

To this point the question of the impact on privacy has been approached from the perspective of the residents. However, there is another way to look at it and this is from the point of view of the boat owners. They too need privacy. They might not like to be watched by the residents. They may just want to party in privacy, however, knew before they bought berths that this was a likely outcome for them in a way that the apartment could not know.

The final point to make on this topic is that the impact on privacy will not be a transient one. It will last the life time of the marina.

SECURITY IMPACT

All persons going to and leaving the marina represent a security risk for the residents of Breakfast Point. Similarly, all persons who are attracted by the marina and find their way onto the Community Association parcel represents an increased risk to the person and property within the parcel. Already, there are regular security incidents in the community association parcel involving larceny from the person, apartments and cars. There are regular acts of vandalism. All of these will be likely to increase with a commercial marina adjoining the site.

To meet the increased security risk to person and property could prove costly for the residents and owners to bear and will have to do it for no direct benefit to them. Early experience of the community association is that a limited security presence covering only a small part of the community association property and operating only at night was costing about \$100,000 pa. A reasonable level of security that a commercial marina would mandate i.e., one taking in all of the community association parcel for 24 hrs. a day would require at least five security officers and easily cost \$500,000 pa.

At present many persons gather at night time to fish from Cabarita Wharf. Commuters using the wharf daily find it dirty, littered with fishing lines, food scraps, empty bottles, fish bait, torn newspapers, damaged seats, damaged drinking fountain, damaged life preserver and similar effects of vandalism. A commercial marina would multiply the opportunity for vandalism on that wharf and draw vandals to itself. Such an outcome can reasonably be expected to have a negative security impact on the residents of Breakfast Point, Kendall Inlet and others living in the vicinity of Kendall Bay.

Security should not be narrowly interpreted. The seawall on the eastern side of the bay does not have any security railings. Persons have been seen walking on the rocks that make up part of the seawall. It does not take much imagination to predict that some serious accident will occur. The probability of such an event will increase exponentially with a commercial marina that attracts sightseers, fishermen, and others.

It is noted that Sydney Ferries regularly displays a security presence, and cameras all over the place, at Circular Quay.

EMERGENCY PROVISIONS

The drawings from TLB Engineers do not disclose any structure or facilities for use by the police, fire and ambulance services in case of emergencies. There is no structure or facility that individuals either working on the marina, or using it can rely on in case of emergency e.g., to escape to a safe place in the event of, oil and/or chemical spillages, oil and/or chemical fires or indeed from accidents between wharf and vessels, vessels and vessels and vessels and other users of the bay.

Presumably, the proponent, is betting on using facilities on private community association parcel. This would not be surprising seeing the whole enterprise is founded on a reliance on that premises. Emergency facilities should be contained "on-site".

To the extent that the proponent is relying on police patrols of the community association parcel as a security measure for its marina, it needs to be noted that this is not likely to happen because the police do not have a right of entry onto private (or on the community association parcel) property. At common law police will be trespassing if they enter without consent, or enter for a purpose other than to make an arrest or prevent a serious indictable offence. If they do they can be directed off the parcel by any unit entitlement holder or one having the right to possession to property within the parcel. The Community Land Management Act s 116 gives the police a limited right to the "open access ways" but it does not give them the right to step off the open access ways and onto the community parcel.

To the extent that the proponent might seeks to rely on fire trucks having access to community association parcel for access to the marina it is to be noted that there are no hydrant booster valves on the foreshore lot and in any event the marina should have its own. Moreover, for this purpose, the proponent cannot even rely on the limited right that the police have under s116.

In terms of ambulance access the point is repeated that the community association parcel is private property and while no one would be mindful of refusing an ambulance entry to the parcel the proponent should not take it for granted. Ambulances cannot even claim the limited right that police can.

SUITABILITY OF THE SITE

The EP&A Act s 79C(1)(c) also calls for consideration of the "suitability" of the site. This issue will be taken up here.

Once upon a time, when the surrounding area consisted of industrial factories, it would have been difficult to argue against a commercial marina. It would have been an improvement on the use of Kendall Bay. This argument is no longer available. This is now an established residential area suitable for individual and family enjoyment, of scenic views and the occasional yachting trip or motor boat ride that can make use of Cabarita Wharf. This much would seem to be conceded by the proponent in Attachment 13 where it says,

" I still can't quite believe we live on Sydney Harbour. It's pretty special to be able to stroll down to the water to watch the sun rise or set."

The site does not have many things going for it as a potential commercial marina site. It is contaminated. It is too small and narrow so that the marina structure takes up too much of the bay. Look at the Google Attachments. The site is very constrained as the land component is only 1 m wide. The d'Albora Marina which is at Cabarita Point is a readily available comparison. That marina is much smaller. It consists of four arms whereas the proposed one has seven arms and a Skiff. Cognitively compare its apparent size to the size of Kendall Bay and it will be seen that d'Albora would be a very tight fit for Kendall Bay without even making allowance for the turning circle that boats have to do to get in and out of the actual marina structure. Alternatively, the d'Albora structure on to Kendall Bay and get the same answer.

It is not self contained in terms of car and trailer parking and emergency facilities. As already discussed, and without repeating them, the site cannot satisfy many of the requirements of the EP&A Act, Harbour REP and the Harbour DCP as well as the local DCP. See also at para 3.169 and 3.170.

The site is not suitable because it adjoins a private residential development and, independently of this, it is too close to residential property. Also, it is unsuitable because it cannot provide secure long term access to the access ways and to the community association property it needs in order to give practical effect to the concept.

There is no reasonable way of constructing it without making use of private property or park land.

PUBLIC INTEREST

The next mandatory issue required to be taken into account in the assessment process is found in the EP&A Act s 79C(1)(e). This calls for consideration of the "public interest".

It is very difficult to measure public interest. On the one hand one can count numbers and say that because more people will be negatively effected (the 5,000 or so residents and the thousands of others made up of the residents of Kendall Inlet, the users of Cabarita Park and the hundreds of daily rowers in the river to mention a few) then the majority should prevail but sometimes the public interest is best served helping a minority (the 172 berths users or to the developer and Cbus). Is it not in the public interest for the developer and Cbus to prevail.

The proponent took a commercial risk in setting things up so that the proposed marina would feed off the property rights and well-being of residents of Breakfast Point and impose financial burdens of them for the life of the marina. Indeed the whole set up gives valuable rights away, over what should have been wholly private property, in the guise of easements which have the potential to undermine the concept behind community development schemes. If the open access ways and walkways are like public roads, and public parks, there is nothing to distinguish community development schemes from ordinary developments except that there is a shift in the maintenance burden from the public to private residents. It cannot be in the public interest to undermine the legislative intention behind community development schemes. It cannot be in the public interest to impose an additional burden (maintenance costs) on the residents of community development schemes for the benefit of the proponent in particular.

At present many individuals make use of Cabarita Wharf as a place from which to fish during the night. This is a nightly occurrence. A commercial marina can be expected to draw more fishermen to this Wharf and draw them along the seawall in the expectation that more and bigger fish would be attracted



there by the cover provided and food and litter finding its way there. However, the fish in the bay are contaminated and not suitable for eating. Thus, it is not in the public interest to draw attention to the existence of and the taking of contaminated fish.

If the proponent is correct concerning the meaning and implications of the easements then the residents of Breakfast Point get no benefit whatsoever from being part of a community development scheme over what they would have got by living outside the scheme. On the other hand they get the privilege to pay for the separate and independent commercial undertakings of the developer. This cannot be legal, equitable or in the public interest.

The area that the proposed commercial marina will take up is not just the space taken up by the boats while they are moored there but includes space for them to steer in and out of their berths. It is noted that "day trippers" will not be coming on small boats. They will be more like ships than boats. It is not in the public interest to take up so much of what is a "clear water" bay and turn it into a commercial bay with no redeeming features but with many negative ones, for the sole purpose of enriching a few individuals. Nor is it in the public interest to reduce recreational area available for public use and replacing it with a "car park" for boats.

Consideration needs to also be given to the interplay of the area taken up by boats using the marina and the area the boats take up as they all manoeuvre to get in and out of the marina. Together, these will take up a sizeable chunk of the bay which other members of the public will be deprived from using whether as passive recreation or by using small crafts such as canoes, kayaks and other small boats.

It is not in the public interest to impose major running costs on private property owners who do not want a commercial marina and do not stand to gain anything from having a commercial marina on their front door for the benefit of the commercial marina owner.

It is not in the public interest to interfere with the rights title and interest of private property owners (the Community Association DP No 270347) who are not party to the application for the single and primary purpose of giving a developer a financial benefit. The public interest will best be served by allowing the Bay to remain as it is so that it can be enjoyed by the public.

The "public interest" formula needs to take cognizance of the potential conflict between boat users and others using the bay and river as well as the potential conflict between boat users and day trippers and local residents. Of course it is theoretically possible to set up a management plan to control for these but experience would suggest that once on its way the authorities would lose interest and/or would be too slow to act to make this a suitable solution.

Consideration of the public interest also calls for reference to the risk imposed to navigation because of crowding and from the effect that the wash from boat users will have on the safety of rowers.

High Intensity Use	Findings
Will the proposal involve a change of use of Kendall Bay? Will the development involve the removal or disturbance of structures or natural features of community significance? Is the proposed development unsympathetic with the areas?	Yes, the marina will affect the general public who use the foreshore for walking, bird watching, cycling, and all passive enjoyment of Kendall Bay. Views will be altered dramatically for much of the foreshore obscuring river life. Rowers will be compromised as will daily sailors. Yes There has never been a commercial marina adjacent to private residential property. There is a danger of establishing legal precedent. Yes. It is one of the last unused bays in greater Sydney Harbour. Only the elite can afford a boat and marina berth. This walkway is there for all to enjoy and if a commercial marina with 172 boats is added with all the noise, smells and congestion that goes with that the quality of life if lost from the public that is of great importance. The intensity of use this will bring to the foreshore will affect all residents and users of the public walkway, Cabarita Park and walks to the ferry Yes. Quality of leisure time will be adversely affected which includes families with young children, the young and fit and oldies, some who drive from out of this area to enjoy the peaceful/flat walk. These activities increase at the weekends which would coincide with peak use of the marina
Consultations with Stakeholders	Findings
Demographics of Breakfast Point Residents	Findings
Does the population, age profile, employment status, location, values etc. of local residents need to be assessed?	Yes but there is no reference to this in the DA. Breakfast Point is a mixed population with differing needs. There are many residents who are home most days including retired people, people who work from home and stay-at-home mothers with children.

	The 24/7 nature of a commercial marina will disrupt their lifestyle and marginalise their abilities to stroll along the public walkway, have picnics in Cabarita Park and meet in quiet places on the foreshore. It is estimated that approximately 4000 pedestrian and cycle movements occur in the walkway each week. This has steadily increased over the last two years and will continue as more people from other areas become aware of it and as more people move into Breakfast Point and. This walkway will be compromised with a noisy marina and cross traffic over the cycle way. As an example, on one weekend day on November 7,2010 there were a total of 628 users of the foreshore walk made up as follows; <table><tr><td></td><td>8.30-11.30 am</td><td>3 - 5 pm</td><td>Day</td></tr><tr><td>Adults</td><td>260</td><td>159</td><td>419</td></tr><tr><td>Prams</td><td>22</td><td>30</td><td>52</td></tr><tr><td>Cycles</td><td>63</td><td>43</td><td>106</td></tr><tr><td>Children</td><td>25</td><td>26</td><td>51</td></tr><tr><td>Total</td><td>370</td><td>258</td><td>628</td></tr></table> <table><tr><td>Petitions</td><td>Owners</td><td>Users</td><td>Total</td></tr></table> Since undertaking this limited survey the proponent, aware of The Resident Group activity, has engaged consultants to count the pedestrian traffic using the walkway. It is curious to note that until then they considered that no survey was required. There are no figures in the EA on pedestrian use and there is no real consideration of the impact of a marina on them.		8.30-11.30 am	3 - 5 pm	Day	Adults	260	159	419	Prams	22	30	52	Cycles	63	43	106	Children	25	26	51	Total	370	258	628	Petitions	Owners	Users	Total
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Petitions	Owners	Users	Total																										
Displacement of Residents	Findings																												
Will the proposal disadvantage and benefit any particular group?	Yes. Benefits will accrue to Breakfast Point Pty Ltd and their marina																												

Are local residents who cannot afford a commercial marina berth disadvantaged?	investors, the commercial businesses proposed for the marina and berth owners and revenues for the NSW government. Local residents will be disadvantaged as they will lose the ambiance of a suburban community and will be responsible for roads and public walkways. Yes, Very few local residents will afford a marina berth. Many residents are only 70 metres from the foreshore. The tranquil and peaceful setting that is currently available will be changed into a noisy bustling marina with commercial businesses such as a chandlery, boat maintenance, a kiosk and fish cleaning facilities and a proposed new wharf for visiting boats.
<i>Amenity</i>	Findings
Will the proposal impact on existing community facilities and give rise to an increased demand for community facilities or services in the locality?	Yes. We make reference to the financial burden this will place on this community. The Developer has added many more front doors and has changed the mix of units to include 1 bedroom units with 1 car space. The Developer has not added any visitor car parking spaces or any new roads to cope with additional traffic and parking needs with existing residents, let alone space for visitor parking to the marina. Are those who buy/lease a berth to be given membership to our Club and associated facilities? The developer has refused to answer this query. If it is true then the residents should be advised as this will add additional load to existing facilities. In addition these possible new members will have no affiliation with the Community. How will the Breakfast Point residents be compensated for the overuse of their facilities and roads by Marina traffic? The paltry sum of \$207.70 and \$8,723.40 respectively for the attachment land and car park land use is totally inadequate when compared with a Community annual budget of %2.77m. A sum of \$1-2 million per year would be more appropriate.
Have opportunities for surveillance of public places been enhanced/restricted?	Yes, restricted Views - a currently open, peaceful vista from both sides

Is the proposal likely to detract from the cultural life of residents in the Breakfast Point Community?	of the river will be turned into a bustling commercial operation. Because the Marina is so large, current views from the public walkway and many buildings within the precinct will be affected and most will be forced to look at boats and marina activity with associated activity and not Kendall Bay or the Parramatta River. This is not just a foreshore issue. The general public who stroll along the foreshore will not see the river or the mangroves or the rowers, or the ferries because of the Marina spread across the Bay. The issues here are very similar to those at Rose Bay Yes Overall quality of life for a large number of residents will be adversely affected Noise, 24/7 boats noises, human voices, marina deliveries Smells, garbage collection points, fish cleaning and debris from boats Concerns about anti social behaviour similar to that experienced on Cabarita Wharf will be in their front yard of many residents.
Safety and Security	Findings
Is there a risk potential for accident, injury anti-social behaviour and crime? <i>Fire</i> Is the proposal likely to give rise to increased community concern regarding public safety? Statistics were gathered from *Club Marine Boat Insurance Australia	There are no articulated procedures for rules and regulations, for monitoring and for penalties proposed for managing berth owners, traffic, parking, garbage, noise and anti-social behaviour in this DA. This is unacceptable. Putting up signs to ward off liability will add to visual pollution and there would still be no mechanisms for monitoring and enforcing rules and regulations. The Marina Manager will not be on the premises 24/7. Relying on good will is insufficient where public safety is concerned. Given the number of fires/explosions on marinas this is a very real fear for those residents close to the proposed site of this Application. The prevailing wind, the north easterly, would blow the fire towards the Manor House East Precinct and the Wharf Precinct. Remembering that the marina will be unattended for approximately 13 hours of every 24 hours. Club Marine reports having received about 200 fire related claims worth over \$6m in the last three years. There can be no guarantees of resident safety in the event of a major fire. Risks:

	The following is quoted from the marinesafety.vic.gov.au site "Fire on a boat can be the most terrifying and potentially lethal situation on the water." "The reason that petrol is so potentially dangerous is because it is highly volatile, with the fumes capable of ignition up to almost 4m away from a pooled source. This inherent danger is further multiplied by its explosive potential. Petrol vapour is highly explosive and may ignite as a fireball, with seating temperatures of up to 8300 degrees C. And because petrol vapour is heavier than air, it will settle in the lowest areas of a boat, usually the bilges. At concentrations as little as one part in 70 to air, it can form lethal mixture that will explode violently when ignited. In fact, a litre of vaporised gasoline has about the same explosive power as a stick of dynamite." "Of particular concern to Club Marine are craft that are used primarily on a seasonal basis and have spent long periods of time inactive or in storage. Minor fuel leaks, and subsequent vapour pockets in bilges and other hard-to-detect areas, can result in catastrophic fires, damage and serious injury to occupants."
Will Marina management guarantee the safety of nearby residents? Will Marina management be held accountable for boat owners who put others at risk through ignorance, lack of experience and disregard for the safety of others	"Many boat owners don't realise that fuel vapour can build up undetected on their boats over time." "Something as simple as a minor fuel spill when refuelling can produce a pocket of vapour in a boat. Then, all it takes is a spark or naked flame and in a split second the boat is engulfed in flames." Too many accidents occur due to the owner's unfamiliarity with their new craft and the excitement of trading up or changing from an outboard or stern drive craft to an inboard cruiser can overwhelm good judgement in the rush to experience the new toy." Recent accidents with pleasure boats and Sydney ferries on the Parramatta River is paramount in residents' minds.. Residents would like 'yes' answers to these questions but have been

	give no assurance from the Applicant
Public Health Risks	Findings
Are there any public health risks associated within the development or activities occurring within it?	Yes, There are psychological and physiological factors that should be considered. Noise above standard causing sleep disturbances, anxieties over loss of privacy for foreshore residents and fears that anti-social behaviour will cause problems are prominent. There are also real concerns over residents' shared public liability* for the walkway, landside accidents on private property and pedestrian marina traffic over public walkways. Another concern expressed by many is about the possibility of fires in the marina. Another important concern expressed by residents is about how this marina will cause further pollution and stirring of sediments in the Parramatta River. Local medical services do report a higher incidence of depression amongst Breakfast Point residents in the past year.. Most resident interviewed believe the Bay should be remediated in its entirety before any thought of a commercial marina be considered. Sweeping pollutants under an untested blanket does not calm concerned among anxious residents. *Residents may be someone comforted if the developer should indemnify the residents of Breakfast Point against and public liability. The lack of consultation with residents have left many with feelings of having lost control over their general quality of life at Breakfast Point. This commercial marina is happening to them without their permission or agreement. The loss of trust among residents who feel deceived by RoseCorp and Breakfast Point Pty Ltd. marketing tactics in hiding their intention to put a 172 berth commercial marina adjacent to their private property is causing a lot of distress in the community. They are turning to the State government to get appropriate redress and consideration.

Traffic and Parking	Findings Traffic and Parking
If significant change is expected to residential area or other visitor populations arising from the proposal, is there a problem with spare capacity on existing roads and parking to meet the likely increase in the demand/needs for services and facilities?	Yes bona fide traffic studies should be required through the Council and the RTA. The local feeder roads and the roads within Breakfast Point are narrow and not equipped to cope with the increased traffic. Construction traffic on Tennyson and Cabarita road is already heavy and constant. It needs to be remembered that Breakfast Point is still very much 'under construction'. This issue needs to be assessed looking at the long term. Parking on existing streets is already overcrowded on weekends. The parking for Marina berth owners and staff in this Application proposes is completely inadequate because: Insufficient spaces All the parking (other than street parking) in Breakfast point is underground - this marina car park should be underground and will be a real eyesore. Visitors to boat owners will not have access to the allocated parking, so they will compete for parks on our roads and in our visitor parking There is no parking allocation for the public pontoon/wharf, and they will park, on our roads, in our visitor parking There will be no parking allocation for the proposed Kiosk - with outdoor seating for 50, so they will park, on our roads, in our visitor parking 'Boat Hopefuls" love to visit marinas and have a look - they will park, on our roads, in our visitor parking Of Major concern is safety of children. With marina parking on private roads, views will be blocked and children will be at risk if they chase a ball into the street or enter roads between parked cars. There are many young children in Breakfast Point who play on the verge as buildings have been built close to the roads. There are not fences and increased traffic and a large car park near residences will cause concern.

Noise Findings	Findings
Will the construction noise and extended working hours impact walkway users and residents?	Yes
Will noise from the Marina, including boat owners, maintenance and kiosk patrons impact residents?	Yes The impact on those living on the foreshore will be major and permanent .
Cumulative Impacts	Findings
How significant is the impact of this commercial marina?	Major The extent of the impact is enormous –in quality of life issues, financial issues and in the loss of trust in contractual arrangements made and broken by this developer.
What is the extent of the impact?	For this Application to be approved without a Social Impact Assessment commissioned by the Applicant would be to ignore the reality residents will face. The community deserves appropriate consideration by the various government authorities and a fair hearing by those who are community minded and not politically motivated.
Who may be negatively affected by it?	The entire Breakfast Point community and the local community who will experience safety issues because of increased traffic, particularly children The broader community who drive to this area to enjoy the wonderful access to the River and a flat walk. All rowers, sailors, kayakers, the general public. The residents of Breakfast Point. will lose what this unique Community was supposed to provide- for retirees, for young families, for singles and for their families.

VISUAL IMPACT

Visual Impact

In considering the visual impact the *Harbour DCP* requires that,

“any visual analysis shall consider the impact of the **largest motor vessel(s) capable of being berthed at the marina**” (at p 39) (emphasis added).

The supporting documentation lodged with *the MPA* carries a table showing that the marina will make provision for boats up to 25m. However, because the marina makes provision for day tripper vessels to berth at it and because these vessels are generally the size of a ship (i.e., greater than 25m), it means that the visual impact should be based on the basis of these larger vessels. Using these larger vessels as the basis for assessment would produce *an adverse visual impact of significant proportion as the largest of these vessels would be several stories high.*⁹²

The most obvious landscape characteristic of the area is the scenery presented by the bay, the uninterrupted view of the “clear water” that is the bay and the Parramatta River that combined to create a pristine picture of Harbour and river beauty that is pleasing to the senses and to the eye. It would be, without doubt, this piece of natural Harbour and river scenery that drew residents to Breakfast Point and Kendall Inlet. The nature of the proposal, a 172 berth commercial marina, will overwhelm the aesthetic value and significance of the landscape while providing a significant obstruction of the landscape from every vision point on the compass that one might like to take. A commercial marina would replace the beauty of this landscape with a “car park” for boats.

While the loss of the natural landscape, to a “car park” for boats represents a particular loss to those residents and owners of Breakfast Point and Kendall Inlet who have properties with views of this natural landscape it goes without saying, that the same landscape is enjoyed by other residents and owners who live nearby and experience it from a number of vantage points, for example,

1. while walking along the foreshore walkway at Breakfast Point, or
2. from Cabarita Park, or
3. from the mangroves on the southern end of the bay (which *the Harbour DCP* identifies as “*Landscape Character Type 15*”(at p 33) and are to be preserved so as to reduce “the stark contrast of built elements behind these natural features.” The problem, of course, is that the sheer size of the commercial marina will completely overwhelm the mangroves and diminish its capacity to satisfy the very reason for their preservation.
4. while walking from Kendall Inlet which adjoins the local heritage listed Cabarita Park, or
5. from the Parramatta River when, for example, commuters are waiting on Cabarita Wharf for the ferry⁹³.

From whatever point on the compass one looks at *towards* the marina one will be met by an *almost solid wall* consisting of,

- (i) boats,
- (ii) toilet blocks,
- (iii) waste facilities,
- (iv) fuel pumps,
- (v) office,

⁹² For example see Vol 2 Attachment 50-50.4.

⁹³ This wharf seems to be outside the Bay and on the river.

- (vi) storage facilities, and
- (vii) kiosk, and
- (viii) sewage pump out

The fact that the shape of the Bay has a narrow width it will make the marina a big eyesore and difficult to escape its intrusion into the visual field of anyone from anywhere on the compass. The marina, with allowance for space for boats to manoeuvre to get in and out of the berths, will take up most of the bay which, on any reckoning amounts to big loss of “clear water”. The number of large boats, with their flying bridges, masts, radar and communication antennas, fishing roads sticking up in the air and yachts with big masts⁹⁴ create a huge blot in the visual field because of their length, their height and their width (see Attachment 53.1 – 53.4 also see Attachment 69 – 70 to gain a perspective of typical boat configurations and height).

Hunters Wharf, the houses to the north from it and the proposed apartments to the south, would be particularly affected by this massive and intrusive wall of smelly, noisy boats disgorging people day and night. This is because this residential set of apartment blocks and the homes north of them are quite close to the seawall and hence, to the marina which is almost at eye level with the first two levels of apartments. In fact some of the larger boats will be higher than the two story apartment blocks nearest to the seawall.

It is hard to see how a commercial marina would be in harmony with the surrounding of Cabarita Park, the mangroves and the bushy and palm fringed foreshore walkway that bounds the bay. By its sheer size and proximity it will dominate the bay and the nearby walkway, parks and buildings. **There is no buffer zone between the marina and the residential and this absence makes the marina incompatible with adjoining residential developments let alone the high quality residential development of Breakfast Point and Kendall Inlet.** See the attachments representing the “sales pitch” of the proponent for the Breakfast Point residential development.

A final point on this factor is that *the Harbour DCP, in Appendix D, has Figure “D1”*. This is a unidimensional scale to measure the “*Indicative Potential Visual Impact of Various Developmental Scenarios*”. The range goes from low impact on one end of the scale to high impact on the other end. On this scale a “new or extended marina in front of existing residential development” is towards the *high end for visual impact*. The proposed marina would fall on the same *high visual impact end of the scale*.

Another way to measure the visual impact of the proposed marina is to make use of “*Figure D2: Indicative Contribution to Potential Visual Impact*” found at page 70 of the *Harbour DCP* There are six criteria in the figure D2. They are,

- i. Location of the viewer,
- ii. Distance of view,
- iii. Period of view,
- iv. Scale or relative size,
- v. Spatial relationship and,
- vi. Motion of Objects.

There is no doubt over the outcome using this set of criteria. The proposed marina will score in the “**high visual impact**” area for all of the factors except

94 These will easily add 4 metres to the superstructure of the boats. Note that about 64% of the proposed berths are suitable for use by yachts (see table and legend in SK15B).

scale or relative size. This is because,

[i] when the viewer is level with the marina eg., from the seawall the marina and boats would block the view; a similar outcome would be found for the distance effect

[ii] at a point less than 100m; for the period of view criteria,

[iii] the same high visual impact outcome would be obtained because the residents of Hunters Wharf, the harbour side houses to the north and the residents of the yet to be erected apartments to the south, would be affected most of the day; in terms of the scale or relative size criteria

[iv] the impact would be a medium visual impact one because the size of the boats would mostly fall in the range of 10-30m; in terms of spacial relationships

[v] there would be a visual impact because the marina will be situated in a narrow enclosed bay; and the same high visual impact outcome would be obtained for the motion of objects criteria

[vi] because of the high wind speed which would ensure the wind generators would be at full speed and flags would be fully extended and changing regularly and the noise would travel further.

[vii] **because of the absence of any buffer zone between the marina and private property and the residential homes and apartments.**

**RE: INNER WEST MARINA - VOLUME 5 – Reviews by John Clarke and Greg McGrath
PROJECT APPLICATION**

Volume 5 - Appendix 8: - Visual Assessment Report

(Note: Page Reference column provides Page, Clause Number (if applicable) from report plus appropriate Page Location; e.g. page 10.6 = 60% down page 10)

Page Reference	Report Statement	Comments	Director General's Requirement	Required Action List
4.6	6. The visual character of the site is constituted by a constructed western shoreline, foreshore walkway, medium to high density residential backdrop to the west and southwest on a former AGL industrial site and a relatively natural southern shoreline consisting of intertidal beach and mangroves, Cabarita Park, Cabarita Rivercat Ferry Wharf and waters of Kendall Bay and Parramatta River. The wider visual context consists of some private and commercial marinas, Putney Point vehicular ferry, swing moorings in small bays, far shoreline, foreshore reserves along the far shoreline and residential context of Putney, Tennyson Point and Gladesville.	By way of explanation the “constructed western shoreline” in the immediate vicinity of the proposed marina consists (or will consist shortly) of approximately 150 private residences. The marina will extend across the eastern view plane of these residences. The “foreshore walkway” is used by around 600 people each day (628 in a 5 hour period on Sunday, Nov 7, 2010) who enjoy the visually unspoilt and uncluttered nature of Kendall Bay. Of the 628 walkers only 9 were in favour of cluttering the bay's views to the East and North with a marina. The applicant has constantly sought to contrast the prior “industrial nature” of the bay and the surrounding area from the present “clear water” nature of the bay and residential surroundings. Needless to say, in its former state as an industrial bay, many coal ships played their way in and out of it. However, that old industrial status has come and gone and one has to take the bay as it is now. In its restored state the bay gives an unobstructed view. It now remains to be remediated by AGL (Jemena) of the pollution that was caused by their former industrial use. Extended and unobstructed views across this part of Sydney Harbour are rare. Healthy and growing stands of Mangroves are also rare.	NSW PLANNING DEPARTMENT DIRECTOR GENERAL'S REQUIREMENTS KENDALL BAY MARINA The Environmental Assessment (EA) must include Visual Amenity – including: an assessment of the visual impact of the proposal (height, scale and lighting) on the local and regional area, particularly on: any adjoining land owners and land owners along the foreshore areas of Putney, Tennyson Point, Gladesville and Cabarita; water uses of Parramatta River; and significant vantage points in the public domain;	
4.7	The intrinsic scenic quality of	This is a totally subjective judgment and we dispute it. Kendall		

Page Reference	Report Statement	Comments	Director General's Requirement	Required Action List
	the site and its surrounding context is analysed to be of a low to moderate rating. 9.8	Bay is one of the last unused bays in Sydney Harbour (Parramatta River) and is vegetated on its Southern end by a stance of growing and expanding mangroves and on its east by a public park. Despite the residential development on its western side it is still one of the last places on the harbour that, for the most part, presents visually today as it did prior to white occupation. It does not need to be used to house the boats of just 172 boat owners at the expense of the wider community of Sydney, NSW and Australia. The proponent constantly refers to the past industrial nature of Breakfast Point and offers the old wharf, with its build up of spilt coal, as the excuse to ruin the vistas and views. The proponent argues that the governing factor determining a satisfactory mass/area of the marina is apparently the old wharf and the size of ships using the wharf that would have impacted on views! If one accepts this then we should argue that the size should be directly related to the boat used by Hunter when he dropped in for breakfast! Today, Kendall Bay is as it stands and offers vistas that in the industrial past did not exist. This, however, is no excuse for once again obliterating the views that now exist (refer to cover page for photo).		
4.9	9. There would be no significant visual exposure of the proposed development from roads with the exception of the southern terminus of Pellisier Road (Putney), Tennyson Road (Tennyson Point), Ross Street (Gladesville) and Wharf Road (Gladesville).	It is claimed that there would be "no significant visual exposure from roads with the exception of" by definition the applicant is conceding that there will be significant exposure (whilst trying to avoid making the statement) of the proposed development "from the southern terminus of Pellisier Road (Putney), Tennyson Road (Tennyson Point), Ross Street (Gladesville) and Wharf Road (Gladesville). The proposed development would be visible from the foreshore reserves located below the southern termini of these streets. It would be visible from the foreshore walkway adjacent to the western and southern shoreline of Kendall Bay,		

Page Reference	Report Statement	Comments	Director General's Requirement	Required Action List
		The obstruction of the sight lines from here will be similar to the obstruction level from Admiralty but it will depend on the actual position from which the sightings are taken as part of the park extends to the foreshore walkway and some is set further back and on higher plane. One would easily see the coming and going of the day trippers and boat owners. Users of the Foreshore Walkway (Attachment 32; 36; 38—41; 44—50 & 59). For various points of its length users of the foreshore walkway have a clear vision across the bay to Morrison Bay, Raven Point, Glades Bay, to the Point, to Scot College Boat Shed, SGS Boat Shed, Looking Glass Point, Gladesville and the Sydney skyline, to Cabarita Wharf, Cabarita Point, Sanders, William Beach Monument, Cabarita Park, Kendall Inlet and to the mangroves near Kendall Inlet and the southern end of the walkway . For the users of the foreshore walkway a marina will cause an obstruction that would encompass all of the obstructions previously mentioned but their scope will vary with the speed of travel and the location of the walkers. From some sight points one will get a two dimensional view e.g., length x height and an obstruction of the remaining "clear water" part of the bay behind it. From some other sight points there will be a three dimensional impact i.e., length x breath x height and an obstruction of the remaining "clear water" part of the bay. The effect of the tides will add about 1.5m and needs to be taken into account as well. From Parramatta River (Attachment 16-17 & 51-54). When one now looks at the visual field from the northern side of the Parramatta River one now gets an uninterrupted view of the bay and the palm tree lined foreshore walkway, the houses north of Hunters Wharf, Hunters Wharf itself, the mangroves and the little beach at Kendall Inlet. As one approaches from the		

Page Reference	Report Statement	Comments	Director General's Requirement	Required Action List
		City there is an unobstructed view of Hunters Wharf, the homes north of them, the area to the south of them and the landscaped foreshore walkway. Travelling east towards the City these same views are available as the ferry turns around the Point into the bay or as it is going past it. Reference is made to the historical role and importance of the river to the development of the colony and in particular to its recreational role it played at this very site. The river is a significant and busy corridor for commuter transport. The marina will obstruct the views listed (about 1.5 m more at times of high tides) and will be noticeably "in your face" as the ferry comes closer into the bay and the traveller will not get any respite except as the ferry travels further and further away from it. Other users will be similarly affected. It is also a significant and important asset used daily by rowers from several schools and clubs in the vicinity and they, like kayaks users, canoe users, small boat users and ferries will be herded together into a central part of the river with an increased level of risk to their safety (for examples of river and bay users see Attachment 65-67). From Glades Bay (Attachment 55). There is an unobstructed view of Kendall Bay, of the mangroves, of the foreshore walkway in front of Hunters Wharf and the homes north of it. The marina will impact on the vista from Glades Bay by obstructing the views mentioned in (vii). It will also do something quite particular to it. It was mentioned earlier that Glades Bay is the site of Aboriginal drawings and remnants and this should call for special attention being given to maintaining a clear line of sight. But there is something else. Glades Bay has a swing mooring marina. At present the "clear water" of Kendall Bay provides a much needed visual break from the boats in Glades Bay. Next to Glades bay there is Morrison Bay and this too is a swing mooring marina. A commercial marina will do away with this much needed visual break. Three marinas next to and		

Page Reference	Report Statement	Comments	Director General's Requirement	Required Action List
		opposite each other is too much! From Morrison Bay (Attachment 44; 56 & 57). There is an unobstructed view of Kendall Bay, of the mangroves, of the foreshore walkway in front of Hunters Wharf and the homes north of it. The marina will impact on the vista from Morrison Bay by obstructing the views mentioned in (vii) and like Glades Bay, it also has a swing mooring marina and opposite Morrison Bay there is the River Quay marina. For Morrison Bay, just like for Glades Bay, the "clear water" of Kendall Bay provides much needed visual relief from moored boats in Morrison Bay, Glades Bay and River Quays. A commercial marina in Kendall Bay will do away with it. Together, Morrison Bay, Glades Bay and Kendall Bay will take up almost 240 of the 360 degrees on the compass. Looked at in another way three of the four bays around Breakfast Point are currently with marinas. If Kendall Bay joins the group four out of four bays around Breakfast Point will have a marina. With d'Albora Marina at Cabarita Point four out of five bays next to/opposite each other will have marinas and this will increase to five out of five bays if Kendall bay joins the group. An outcome like this shows that there is no 'equity' in the use of scarce natural assets on the Harbour. Consistently with the requirements of the EP&A reg 2000 Sch 2 cl 3 alternatives need to be considered, eg., the more effective use of existing marinas, before a new one is constructed. From Raven Point, & Putney (Attachment 57). As for Glades Bay there is an unobstructed view of Kendall Bay, of the mangroves, of the foreshore walkway in front of Hunters Wharf and the homes north of it and on towards the mangroves, Kendall Inlet and Cabarita Park. The marina obstruction will have a similar impact from here as there is from the sight lines from Glades Bay.		

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		From Scots College Boat Shed & SGS Boat Shed & Looking Glass Point (Attachment 22; 34; 35, 54-55; 58 & 59). The Scots Boat Shed is a heritage listed item in the local DCP. From this and from the SGS Boat Shed and Looking Glass Point there is an unobstructed line of sight from these locations to the foreshore walkway, the Hunters Wharf apartments, to the homes to the north and to the proposed apartments to the south and to the mangroves on the south of the bay. The marina will obstruct the vista to and from this heritage listed item. From Cabarita Wharf and Cabarita Park (and walkway in front of it) (Attachment 15-16; 23-24; 49-53 & 59). From these points one gets clear views of the landscaped gardens and palm tree lined foreshore walkway, the seawall, Hunters Wharf, the homes north of it and to the area proposed for future apartments to the south. Conclusion: A marina will cause a significant level of obstruction of the points listed. Kendall Bay is a fairly small narrow bay so that there is a proximity factor that causes the marina to impact in a way that a larger bay would not. From the southern end of the bay there will also be an obstruction of Breakfast Point itself and of Morrison Point.		
5.6	13. The overall effects and impacts rating for the high view sensitivity zone in the private domain were also assessed to be high. Highest individual levels of effects and impacts were found for close views from the townhouses and apartments in Manors Precinct East and	We agree that the impact within the 100m zone will be high from the private domain. We would argue that the "close range zone" should extend to 500m and that the "medium range zone" should be between 501 and 1000 metres. Such a slight change, ("subjective" though it is) would have a significant effect on the overall visual impact of the marina and the assessment of 'high', 'medium' and 'low' impact. FROM THE PRIVATE DOMAIN From the Manor Homes south of the Point (Attachment 16-24)		

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	Wharf Precinct at ground level, decreasing for higher floor levels.	there is the AGL Power House, and are eight two storey houses forming part the Manors Neighborhood. The neighborhood houses have a fence delineating its private boundary and fronting them is a landscaped area and hedges that set the neighborhood property apart from the community association property and the walkway. A resident of these houses and a viewer on the walkway now gets a clear and unobstructed view towards Morrison Point, Morrison Bay, Raven Point, Glades Bay, Scot College Boat Shed, SGS Boat Shed, Gladesville, Looking Glass Point, Cabarita Wharf, Cabarita Park, William Beach monument, Cabarita Point, Sander's, Kendall Inlet, the sandy beach and mangroves and of course the Sydney skyline. The proposed marina will significantly obstruct the line of sight to these reference points. It is of particular relevance and importance to be aware of the fact that , (a) the marina will be more "in your face" from these homes (and from the walkway in front of them) than from the sight line taken from the Point because, from here, the marina is closer to the homes than it is from the Point. The actual distance has been measured at 32.5m from the seawall to the front fence line of these homes and only 17m from the neighborhood boundary to the front fence. One effect of being so close to the marina is that the marina will obscure a larger part of the visual field. (b) the architecture of the homes aimed at giving the residents the full benefit of an easterly aspect and of all of the sights mentioned by constructing the frontage, for both levels, almost entirely of glass. This means that the residents will be deprived of their privacy whenever they are in the front rooms of the house. To get privacy they will have to draw the curtains or pull the blinds or abandon them altogether and move to a back room. (c) The effect of the high tides will be to make the boats float about 1.5 metres higher so that they will dwarf the homes.		

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		From Hunters Wharf apartments (Attachment 11.0, 11.1; 13.0 & 13.1; 15 & 15.1; 17; 25.0 -36; 44; 46; 48-51; 53- -59). This strata is made up of two lines of apartment blocks. The first line apartments consist of two and three level blocks. These are the closest residential apartments to the proposed marina. The second line of apartments is sited behind the first and consists of five storey blocks. Like the homes the architecture of Hunters Wharf aims to take full advantage of the views across the bay and most of the sight points mentioned in (ii)- the exception being Looking Glass Point and the William Beach Monument. However, when taken from the five storey blocks the sight lines are obviously elevated and more extensive. They now include (as far as relevant) views to d'Albora Marina, Cabarita Point, the Aboriginal middens and the William Beach Monument. From here there is (almost) the same clear and unobstructed view as that from the homes. The difference is that there will be an additional obstruction when looking towards Morrison Bay and Raven Point. Under point (a) reference was made to the "in your face" (proximity) effect the marina will have for residents and users of the foreshore walkway. This "proximity" factor will also be present for Hunters Wharf. The first line of apartments are 39.5m from the seawall and 23.5m from eastern boundary of the Hunters Wharf strata boundary. For the two and three storey apartments the obstruction will, obviously, be greater than for residents and users of the walkway than for the residents of the five storey apartments but will be the same as for the residents of the houses to the north. However, the residents of the five storey apartments will get a birds' eye view of the marina. The privacy issue identified for the house residents will impact on the residents of the first line Hunters Wharf apartments and to a lesser extent to the residents of the five storey apartments. This is because the architectural design sought to take full advantage		

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		of the views and floor to ceiling glass front walls have been used. The residents of Hunters Wharf would get the full impact of the obstruction caused by the marina because they will see its length, width and height - a gigantic cubic structure - in all of its glory because the central arm of the marina is centred on Hunters Wharf. For the residents (and users of the foreshore walkway) to get unobstructed water views they will have to walk past the full length of the marina. This effect will be greater at high tide because it will add another 1.5 metre to the level the boats will be floating at. Those residents living on elevated parts of the development e.g., level 4 and over at Hunters Wharf, will get the three dimensional obstruction but will see what is left of the bay as "clear water" which is something residents at ground and second (and possibly third levels) will miss out on . Hunters Wharf will suffer an additional impact that all of the other residents will escape. This is the impact from being right opposite the central arm of the marina. This will be the point where all users of the marina will end up whether to get on the boats or to get off. Whether they are there as owners or as guests or as service providers or as commuters; whether simply walking or dragging trolleys ; whether walking quietly or with loud music or laughter or under the influence. From future apartments south of Hunters Wharf (Attachment 37-41; 47-49). There is planning provision for two blocks of three storey apartments to be erected south from Hunters Wharf and from them there would be similar clear sight lines as from Hunter Wharf. Once the marina is constructed the residents of these apartment blocks will experience similar obstructions as do the residents of Hunters Wharf , with the exception that the proximity factor		

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		would be reduced for the most southerly of the apartments because of a bend in the seawall in a westerly direction and a bend away from the seawall by the last arm of the marina. On the other hand the proximity factor would be the same as Hunters Wharf for the block nearest to Hunters Wharf. Both blocks would be expected to have a greater level obstruction towards Morrison Bay and Raven Point and both would get the full impact of the area covered by the marina because of the perspective of length when looking towards the Point, and the width when looking across the bay and the height when looking towards the sky. The effect of the tide, making the boats float higher in the water, will add about 1.5 metre to the obstruction impact. Common issues for Hunters Wharf and from future apartments south of Hunters Wharf Applying specifically to Hunters Wharf and the proposed apartments south of Hunters Wharf (because of the siting of the central arm of the marina), and slightly less so for the homes north of Hunters Wharf (because there is a wider gap between them and the marina) there will be a significant level of obstruction, if not obliteration of the visual field, for the residents when the sight line is taken from ground level and from the first level. One reason for this extensive level of obstruction is that the height of the boats with their flying bridges, masts, radar and communication antennas, and fishing rods can be as high if not higher than a 2 storey apartment . So that a person (1.7m male and 1.6m female) standing on his/her front door will be looking up at persons on the boats and, a person on the boats will be looking down in residents while residents on the second level will be (at least) at the same level as persons on the boats. The validity of the submission in the previous paragraph can be gauged from the supporting document from TLB Engineers		

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		lodged with the MPA entitled a " Commercial Marina at Kendal (sic) Bay" which says, at paragraph 2.6, that the vessels using the marina will vary in size from 8 metres to 25 metres and they would, "generally not [be] more than 4m in height" (emphasis added) . With the average height of an adult Australian male at 1.75m and an adult Australian female at 1.61m a resident standing on its front door/balcony will be significant below the eye sight level of a person on a 25m boat in the marina. Indeed the same thing can be said for a resident standing on its balcony on the second level of his apartment at Hunters Wharf or of the proposed apartments south of Hunters Wharf or from one of the houses. Refer to Attachments Such an outcome will be truly ironic because the developer went to print saying, "Hunters Wharf is inspired by Sydney's maritime heritage. Calm blue water and palm trees swaying in the sun- these are the things that make life feel more balanced at Breakfast Point". There will be little "calm water" to be seen from around these localities, or when coming up the river on a Rivercat, or from across Kendall Inlet, Cabarita Part, Cabarita Wharf and the mangroves on the south end of the bay, from Scot College Boat Shed, from Glades Bay, from Morrison Bay and from Raven Point. Looking a few years ahead one can expect global warming to play a part in all of this because, in the life time of the marina, the sea level will force the boats to float higher in comparison to the static level of these residences and sight lines. Currently, the		

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		tide will add about 1.5 metre to the level of the water in the bay which means that boats will float an extra metre higher. The effect of the tides and its future level will also have a bearing on the extent of the obstruction from these same points. From Admiralty. (Attachment 38—38.2) These are three storey apartments located on an elevated site South of the bay. There is an unobstructed view of the entire bay towards the western side of the bay, the foreshore walkway, the future apartments, Hunters Wharf and the house north of it, the Point, to Morrison Bay and to Putney. From Admiralty the sight lines mentioned will be obstructed and because these apartments are on a high point the marina would be seen in terms of its length, width and height. Because of the high location the residents will also get to see the 'day trippers' make their way along the foreshore and fan out in all directions. From Kendall Inlet (Attachment 48). This is a group of three and four storey apartments directly in front of the southern end of Kendall bay. There is a small sandy beach on the other side of the seawall and next to it there is a small stand of mangroves. From here one gets a clear view of the landscaped gardens and palm tree lined foreshore walkway, the seawall, Hunters Wharf, the homes north of it and to the area proposed for future apartments to the south, to Breakfast Point, to Morrison Point and Bay and to part of Glades Bay. From Kendall Inlet there will be obstruction of most of the palm tree lined foreshore walkway, the seawall, Hunters Wharf, the houses north of Hunters Wharf, of Breakfast Point itself, of Putney and part of Morrison Bay. Paragraph 9, cl2(2)(b) of the Sydney harbor REP it states that "in the assessment of any proposed change for Sydney Harbour		

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		and its foreshores, the public good has precedence over the private good." From the Country Club (Attachment 10.0 ; 11.0 & 11.1; 13 & 13.1; 25; 41 to 43). This is situated on a relatively high elevation and has unobstructed views of the foreshore walkway, Hunters Wharf, the homes north of it, the proposed apartments south of it, to the Point, the entire bay, Morrison Point and Bay, Raven Point and Glades Bay. There is a "cognitive" link between the blue pool of the country club and the blue waters of the bay. The marina would break this link. The bay will no longer be a "clear water" one and it will be seen for what it is - a "car park" for boats. The coming and goings seen from the Waterfront Park would be seen from here as well. The marina will be seen in its entire glory, i.e., length x breath x height. From this vantage point the vista one gets of Kendall Bay in its present natural state is pretty close to that glimpsed by the developer when it was trying to sell residential apartments at Breakfast Point and wrote, "From the Country Club's wide decks looking over breathtaking harbour and city views, you'll find it easy enough to believe that there is nowhere else like this in all Australia" (Attachment 43), and, on the same page, "Over a glass of wine, we soaked in the views. In front of us were so may shades of blue, I felt like I was sitting on a luxury liner heading out into the harbour" (Attachment 43) further, "As the afternoon lengthened, we left the Country Club and took a shortcut down the grassy hill to the harbour. We were met at the bottom by a magical scene of sculls skimming across the water as the first tinges of pink started to colour the sky over		

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		the city" (Attachment 25 –quotation just under the pictures). With the current proposal in play this vision has proved to be a very short sighted one. Within the space of a couple of years the 'rose coloured glasses' are off and the new vision is of a 172 berths commercial marina. By now significant inroad has been made in the sale of the residential apartments this picture is quite incongruous with the "in your face" commercial marina and the financial impost on the residents for the benefit of the commercial undertakings of the developer.		
		OF THE CAR PARK. There are no "on-site" parking facilities shown on the plans for the marina. The car park is located some 250 metres from the land access point onto the marina. Question of the availability of parking spaces for trailers (there aren't any) and of additional parking for cars aside, would add to the visual impact. In particular trailers would be an incongruous sight in a residential development. But it has to be stressed that there are no "on-site" parking spaces for trailers and cars on the marina. The plans do show an intention to construct a car parking facility on the community association parcel but it would be a truly perverse use of the English language to equate that with "on site" and, in any event, to get to the car park, the marina users/owners will have to use the open access ways which they cannot do without breaching the by-law requiring the access to be "on foot or by bicycle" and for the purpose of recreation rather than as a means of transit to and from the marina.		
6.3	22. The proposed development was found to be generally consistent with the provisions of the Planning Instruments relevant to visual	General impact on natural and built environment. Such will be the extent of the obstruction by the marina that there will be more obstructed views than there was when an industrial wharf was in place and ships played the waters of the		

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	impacts.	bay. At least then the ships were not there all of the time nor did they present a continuous and mostly a static presence as a 172 berth marina will have. A marina will represent a reversal in the enhancement process that was initiated by the closure of the gasworks, the removal of the old wharf and the paint factory. The environmental enhancement of the bay will take a step backwards to a lower level of functioning. The construction of a commercial marina will make matters worse by , (i) disturbing and circulating the pollutants already in the bay, and (ii) by increasing the number of pollutants. For example, there will be toxins from anti fouling agents used on boats, motor oils, chemicals and diesel to just a mention a few. The final point to make about the "built" environment is that the walkway around the bay is illuminated by low level lights in bollards which makes for a pretty sight at night. Needless to say this will be lost with a commercial marina which would add its own lights for residents to contend with and that would be unlikely to make for an experience that would lead one to say, " I still can't quite believe we live on Sydney Harbour. It's pretty special to be able to stroll down to the water to watch the sun rise or set." (Attachment 13.0 - the caption in quotations on top left side of the picture).		
58.1	The private views affected are from residences bought by people who had a reasonable expectation that there would be a marina constructed in the general	Claims from the Developer and their Consultants (presumably at the Developers suggestion) that such is the case is misleading. The facts are that a small private marina was all that Breakfast Point PL (BPPL) and their sales staff ever talked about to original purchasers. To back this, their contracts AND the Community Management Statement (CMS) state that;		

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	vicinity of the proposal. The form and the scale of the marina was not known to them	56. Marina 56.1 The construction of a marina adjacent to the Community Parcel that will be the subject of a lease from Waterways Authority is being considered (Marina). 56.2 At the date of registration of the Community Plan no final decision has been made about the Marina. 56.3 If the Marina is to be constructed, it is possible that the lessee from Waterways Authority will wish to enter into arrangements with the Community Association (CA) in connection with the marina. The statement is made suggesting that a marina was always proposed at BP and that everyone knew of this. Statements about a marina in the contracts of sale are stated to support this claim. Evidence from sales brochures and the lack of comment by sales staff during inspections demonstrate how much trouble the developer went to hide the marina proposal (Attachments 42 – 42.3) .		
58.2	I have acknowledged that there are visual impacts ranging from medium, medium to high and high on all of the close range and some medium range viewing locations mostly due to the change in the foreground of the views that would be caused by the proposal and due to its large extent.	We agree with these comments and once again suggest that the 'close' range visual impacts should include land within 500m not the meagre 100m used. We note that these comments and the visual assessments undertaken for the proponent were made by Dr R Lamb who argued unsuccessfully about the degree of impact on nearby residences before the Land and Environment Court (Double Bay Marina v Woollahra Council (2009) Para 39). We also note that Dr lamb supported the 1st Rose Bay marina application.		
		5 key public benefits are listed, none of which concern the		

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		owners of DP270347. The local residents of Breakfast Point, the owners of the roads and footpaths that provide access and of the apartments nearby should have been given more consideration by the proponent.		
		The submission makes the point that the assessment of visual impacts requires a degree of subjective judgment and is not completely objective. No surveys have been undertaken of nearby residents or foreshore walkers to support or reject the subjective judgements made in the application.		
		The view point analysis provided in the application does not include an analysis from existing Breakfast Point residences other than the Manors Precinct East and the Wharf Precinct AND Future Residences in Silkstone and other future locations. Existing residences, other than the few listed, have not be considered in the view point analysis. The precincts considered account for 93 of an existing 1200 (+-) within BP.		
		The application constantly refers to the quality of views that will be provided as one looks down through the 'arms' of the marina in attempts to convince a reader that the effects of it will be minimal. No effective regard has been given to all other aspects of views across or down the marina. (Attachments 69 – 70.3 provide examples of the scale and nature of vessels that will be using the marina.)		
		Of the 33 locations used to assess the overall visual effects and impacts of the marina (33) 42% were considered to have a high impact (and this is in spite of the lack of assessment from within BP where there will eventually be 2200 residences housing around 5,000 people)		
		It is claimed that the development will not have any negative		

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		impacts on existing accessibility to and from the Parramatta River and that it would not affect the (river's) navigation channel. No assessment on safety impacts has been offered to support this claim. No evidence of any studies on the impacts on rowers and local small sailing craft has been either commented upon or made.		



MARINA MANAGEMENT PLAN, NAVIGATION, SAFETY HAZARDS and RISKS

THIS SECTION IS PROVIDED ONLY FOR THE PURPOSE OF A FULL ASSESSMENT OF THE EA. LET THERE BE NO DOUBT THAT WE ARE TOTALLY OPPOSED TO THE MARINA IN ANY SHAPE OR FORM.

**RE: INNER WEST MARINA - VOLUME 10 – Reviews by John Clarke and Greg McGrath
PROJECT APPLICATION**

Marina Management Plan – Appendix 15

(Note: Page Reference column provides Page, Clause Number (if applicable) from report plus appropriate Page Location; e.g. page 10.6 = 60% down page 10)

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3.2	1.2 Hours of Operation The marina berths will be accessible to vessel owners 24 hours per day. The Marina office will operate during the following hours: Office Summer 8.00 am to 6.00 pm 7 days per week Winter 9.00 am to 5.00 pm 7 days per week Kiosk All Year 7.00 am to 6.00 pm 7 days per week	AMENITY The marina will be a 24/7 operation with limited Office hours being a maximum of 10 hrs in summer and 9 in winter. Outside office hours, when most of the noise and behavioural issues will arise and annoy nearby residents and the larger community of Breakfast Point there will be no direct avenue for complaint OR rectification. The Breakfast Point residents will be left to their own devices which amount to no more than adding to the ever increasing workload of local police. The marina makes provision for day trippers, charter boats and casual berths. This means that the residents of Breakfast Point will get no respite from any of various impacts mentioned in this submission. In particular visiting vessels can be expected to be arriving and departing at all hours of the day and night. The large cruising vessels will be well lit and can be expected, especially those using the berths at night, to be playing loud music and party noise (see below). This impact is just not appropriate adjacent to the residential developments that are Breakfast Point and Kendall Inlet. Weekends when public can be expected to use the foreshore walkways and adjoining parks would, instead, be sidelined by the needs of day trippers and party goers. Recent surveys indicate that around 600 people walk along the edges of Kendall Bay each day. Many of these have stated their	The Environmental Assessment (EA) must include consideration of any relevant statutory provisions.... with the objects of the <i>Environmental Planning and Assessment Act 1979</i>; a general overview of the environmental impacts of the proposal ... consideration any issues raised during consultation; a detailed assessment of the key issues specified below and any other significant issues identified ... which includes: a description of the existing environment an assessment of the potential impacts of the project a description of the measures that would be implemented to avoid, minimise, mitigate, offset, manage, and/or monitor the impacts of the project; Public Access;	Plan depicting residences and marina/car park to be included

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		joy at the beauty and peacefulness of the expanse of water that is Kendall Bay. The Harbour DCP states that (at p 39) , "commercial marinas are to provide benefits to both the general public and boating public".	Noise – including: • construction, operation and traffic noise; and	
3.0	1.3.4 Contact person (phone number) Marina Manager – telephone number to be advised.	The manager will be in attendance only 10 of 24 hours a day. Any suggestion that a "Contact person", outside these limited hours, is the solution to issues and problems does not pay due regard to the impacts that the marina will have on the public. It is suggested that the Manager will keep a 'complaints register' and that it will be used to help manage complaints from residents. The manager will surely have a conflict of interests here. His remit will be to fill the marina and keep the boat owners happy. It will not be to ensure that complaints of residents are taken up, and sufficiently prosecuted, with boat owners. It is suggested that the use CCTV (refer 8.7 below) will somehow allow the manager to identify 'offending' boat owners so that the breaking of rules will be managed and that the 'three strikes and you're out' rule will solve all problems. The use of CCTV during twilight and evening hours, the most likely time for complaints about noise and behaviour, will be ineffective and will capture nothing because of the use of low impact 'downlights' throughout the marina.	The Environmental Assessment (EA) must include consideration of any relevant statutory provisions.... with the objects of the <i>Environmental Planning and Assessment Act 1979</i>; a general overview of the environmental impacts of the proposal, taking into consideration any issues raised during consultation; etc etc REFER PAGE 1 OF THIS TABLE	
3.1	2. Noise 2.1 Rigging Marina berth users are to observe the Marina Rules requiring them to secure all lines, rigging and halyards so	NOISE IMPACT Noise cannot be controlled by edict or rule. There will be noise caused by a number of sources originating and solely attributable to the existence of a commercial marina.	The Environmental Assessment (EA) must include consideration of any relevant statutory provisions.... with the objects of the <i>Environmental</i>	

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	as to minimise the risk of noise from rigging slap and the like. In the event of rigging and halyard noise occurring upon an unattended vessel, Marina staff may board the offending vessel for the purpose of attenuating the cause of the noise.	Some of the noise will be from boats starting, idling their engines and from cruising. The importance of this cannot be underestimated. At present the Bay is so quiet that the instructions called out to rowers using the river can be heard across the bay and while this activity is mainly restricted to early mornings and afternoons the same cannot be said for the users of a commercial marina and visiting vessels who come and go at all times of the day and night. At night and early in the morning the noise will be more obvious and therefore more intrusive because other ambient noise is lower and residents will, consequently, be more aware of it and will reduce the enjoyment they presently derive from living near the bay. For greater clarity, it is mentioned that night time use of a commercial marina is not restricted to berth owners but may and will include other commercial vessels that tour the river and drop off and pick up party goers and others. The noise that commercial marinas generate is not restricted to engine noise but will include the noise from generators, activities, and others from the rocking motion caused by waves as riggings hit against metal masts and as the boats hit against the berths. Over and above the constant noise from these and similar sources there are loud noises that marinas in general and commercial marinas in particular, are notorious for, e.g., from social activities users engage in. The suggestion that 'rigging and halyard' noise will be dealt with by marina staff cannot be as effective as it needs to be in such close proximity to residences because of the limited hours that staff will be at the marina. If a yacht ties up after 6 any evening and does not attend to its rigging the nearby residents will need to wait until the next morning for the matter to be attended to. Of course, noise comes not just from boats and boat users but also from others they attract and who can reasonably be expected to make use of the walkways and then wander off in	<i>Planning and Assessment Act 1979</i>; a general overview of the environmental impacts of the proposal, taking into consideration any issues raised during consultation; etc etc REFER PAGE 1 OF THIS TABLE	

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		the direction of the residential part of Breakfast Point and Kendall Inlet. Furthermore, many of the users of a commercial marina will drive onto what are the private residential developments of Breakfast Point and Kendall Inlet to get to their berths and to get onto the boats (whether as owners or as visitors/guests of the owners). One may argue that most boats do not move from their berths for weeks or months at a time but if this is the case it is hard to see how "parking a boat" in the bay will "enhance" the site as required by regulation 2(1)(a) of the Harbour REP.		
4.3	2.2 Engines, Power Tools and Equipment While vessels are moored in the Marina, the use of generators, or the running of engines, will not be permissible for purposes other than preparing the vessels for departure and checking that boat equipment is functioning. The running of generators and engines for checking boat equipment, are only permitted between 7.00am and 6.00pm. The use of power tools by boat owners will be permitted only between 9.00am and 6.00pm Monday to Friday and 9.00am and 12.00pm on Saturdays. Unless required for safe	REFER ABOVE	The Environmental Assessment (EA) must include consideration of any relevant statutory provisions.... with the objects of the <i>Environmental Planning and Assessment Act 1979</i>; a general overview of the environmental impacts of the proposal, taking into consideration any issues raised during consultation; etc etc REFER PAGE 1 OF THIS TABLE	

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	navigation, "bow thrusters" are not to be used in the Marina or the approaches between 10.00pm and 7.00am.			
4.7	2.3 Neighbourhood Amenity Marina users will be directed to preserve the amenity of the Marina and surrounding area. Signs will be erected to remind Marina users to consider the neighbours, in particular when moving between the car parking area and the Marina. The following activities are not permitted on vessels mooring in the marina: 1. No loud music. 2. No drinking on vessels. 3. No overnight stays on vessels. 4. No parties on vessels.	REFER ABOVE NOTE ALSO that there is no reference here to the movement of people or their rubbish between the marina and carpark. Nor is there any recognition of the fact that all access between the carpark and the marina will be immediately beside or along private residences.	The Environmental Assessment (EA) must include consideration of any relevant statutory provisions.... with the objects of the <i>Environmental Planning and Assessment Act 1979</i> ; a general overview of the environmental impacts of the proposal, taking into consideration any issues raised during consultation; etc etc REFER PAGE 1 OF THIS TABLE	
5.2	4. Parking and Loading 4.1 Parking A public parking area for Marina users is located near the Marina. The walking distance from the carpark to the Marina entry point on the designated pedestrian path is 250m. Access to the carpark will be controlled by a boom gate,	The carpark will be used 24/7 by marina users. It is some 250 metres from the land access point to the marina. It will house industrial rubbish bins for collection of the general marina and kiosk rubbish. These will be regularly emptied during the early hours of the day. The carpark will also be used for loading and unloading associated with marina and kiosk activities. The carpark will have access controlled via a boom gate. Commercial garbage is usually collected in the small hours of the morning and it is a very noisy operation. No consideration has been given at all to the effects of such an operation on adjacent and nearby residents.	The Environmental Assessment (EA) must include consideration of any relevant statutory provisions.... with the objects of the <i>Environmental Planning and Assessment Act 1979</i> ; a general overview of the environmental impacts of the proposal, taking into consideration	Check act

Page Reference	Report Statement	Comments	Director General's Requirement	Required Action List
	activated by a card key or similar provided to vessel owners, and designated delivery organisations. Small trolleys will be provided at the carpark for the transfer of goods to and from the Marina. 4.2 Deliveries to Marina The Marina will arrange for deliveries to the Marina by vehicle to be in light commercial vehicles or smaller. The Marina will direct that all delivery vehicles to park in the marina car park (Lot 53 in DP 270347) in spaces dedicated to delivery vehicles and couriers.	The carpark is some 250 metres from the marina entrance. Between the carpark and the marina but across the road from the car park on its eastern side is the residential complex known as Hunters Wharf. Immediately to the west of the carpark on land adjoining it construction has commenced on a five storey apartment complex known as The Silkstone. Across the road from the carpark on both its north and south sides there are (or are planned to be) further five storey apartment blocks. In all, more than 130 apartments will immediately adjoin the carpark. The act of driving and parking into this carpark amongst private residential developments will be generate noise at all times of the day and night and it can reasonably be expected that the people that will be disgorged by these vehicles will themselves generate their own noise. At night time such noise would cause constant disturbance to residents, often whilst they are trying to sleep. It will be particularly disturbing also because carpark users would be making use of the residents' private property. Deliveries to the marina will include ice, drinks and foodstuffs to the kiosk and batteries, paints, engine parts, replacement seats, lifejackets, sails, riggings and the like to boats. The Chapter on Parking and Traffic will deal with these issues in much greater detail. It is claimed that deliveries to the marina will be made in light commercial vehicles via the carpark. To suggest that such 'time hungry' operators will always comply and travel on foot the 250m to the marina edge (and then on to boats for deliveries) or 400 metres to the kiosk is again laughable. It is not realistic to expect that ALL delivery drivers will be given a 'fob'.	any issues raised during consultation; etc etc REFER PAGE 1 OF THIS TABLE	

Page Reference	Report Statement	Comments	Director General's Requirement	Required Action List
5.7	5. Emergency and Essential Services 5.1 Fire Vessel owners, staff and other users are to attend education and induction sessions in fire fighting techniques and the use of fire fighting equipment. Training and induction sessions shall be arranged by the Marina.	Education and Induction sessions will not solve the fire risk. Nowhere in the EA is there any mention of, or care taken to protect, nearby residents from emergencies that will happen on the marina.	The Environmental Assessment (EA) must include consideration of any relevant statutory provisions.... with the objects of the <i>Environmental Planning and Assessment Act 1979</i> ; a general overview of the environmental impacts of the proposal, taking into consideration any issues raised during consultation; etc etc REFER PAGE 1 OF THIS TABLE	
6.4	5. Emergency and Essential Services 5.1 Fire In the event of fire and/or explosion, appropriate emergency control procedures will be activated. These include: a) Notify Management, fire authorities and emergency services immediately. b) Quickly evacuate all persons to an Evacuation Meeting Point at which a "muster" can be taken if required. c) Ensure all power is cut off and fuel lines isolated. d) Commence fire fighting activity in accordance with training instructions.	Comments about this have been made in section 5.7 above. The procedures "include" a series of activities but do not address the possible effects on nearby residents or walkway users. Most of whom will be closer to any incident than the majority of boat /marina users. What happens if the incident is out of "office hours"? There is no effective way to take a "muster" in such cases and it is arguable if one is possible during them. Who will take control and "ensure all power is cut off"? How will the general public or marina users gain access to the power board to cut the power off? The suggestion that "fuel lines" will be "isolated" is of particular concern. In other parts of the EA the proponent states that there will be no fuel storage or availability for marina users. There is no mention of where "surrounding mobile property" will	The Environmental Assessment (EA) must include consideration of any relevant statutory provisions.... with the objects of the <i>Environmental Planning and Assessment Act 1979</i> ; a general overview of the environmental impacts of the proposal, taking into consideration any issues raised during consultation; etc etc REFER PAGE 1 OF THIS TABLE	

Page Reference	Report Statement	Comments	Director General's Requirement	Required Action List
	e) Where necessary, remove all surrounding mobile property, vessels.	be moved to. Presumably it will be on to the dedicated foreshore walkway which is owned by the public or on to privately owned adjacent property owned by SP75666 or DP270347. Management of emergencies, especially fire, on the marina adjoining residential property requires more than inclusion in a marina management statement.		
7.2	5.3 Spills Sinking of Vessel In the event of a vessel sinking, Marina staff will deploy the floating boom to ensure containment of any fuel and oil released. Salvage operations will be overviewed by Marina management to ensure proper containment of any fuel/oil spillage or other solid/liquid pollutants.	The same type of comment as has been made in sections 5.7 and 6.2 above apply here. Sludge from the boating activities will inevitably wash onto the seawall around Kendall Bay. The seawall is owned and maintained by The Community Association and it will incur additional costs to clean and maintain the seawall.	The Environmental Assessment (EA) must include consideration of any relevant statutory provisions.... with the objects of the <i>Environmental Planning and Assessment Act 1979</i> ; a general overview of the environmental impacts of the proposal, taking into consideration any issues raised during consultation; etc etc REFER PAGE 1 OF THIS TABLE	
7.3	5.3 Spills Discharge of Sewage, Bilge Water and Toxic Waste No sewage or bilge pump-out shall be permitted to be activated in the Parramatta River. In the event of a leak or line rupture during sewage pump-out activities, the pump will be stopped	The same type of comment as has been made in sections 5.7, 6.2 and 7.2 above apply here. The same comments apply here as they do in 7.2 for the build up of sludge and other substances on seawall.	The Environmental Assessment (EA) must include consideration of any relevant statutory provisions.... with the objects of the <i>Environmental Planning and Assessment Act 1979</i> ; a general overview of the environmental impacts of the proposal, taking into consideration any issues raised during	

Page Reference	Report Statement	Comments	Director General's Requirement	Required Action List
	immediately and any spillage cleaned up by or under supervision of Marina staff.		consultation; etc etc REFER PAGE 1 OF THIS TABLE	
8.2	6.2 Mooring In the event of extreme wind and wave conditions (storms), Marina staff will check the mooring lines and, where considered necessary, add storm mooring lines.	The same type of comment as has been made in sections 5.7, 6.2, 7.2 and 7.3 above apply here.	The Environmental Assessment (EA) must include consideration of any relevant statutory provisions.... with the objects of the <i>Environmental Planning and Assessment Act 1979</i> ; a general overview of the environmental impacts of the proposal, taking into consideration any issues raised during consultation; etc etc REFER PAGE 1 OF THIS TABLE	
8.3	6.3 Navigation All vessel owners will be given a plan of the Marina setting out the navigation channels to and from the Marina. All vessels will be required to depart from the Marina by remaining close to the marina before turning east in the zone of deep water between arms 3 and 4. Conversely, all vessels will be required to approach the Marina from the north, north west on a line close to the	It is suggested here (by inference) that giving all vessel owners a plan setting out the navigation channels will ensure that the contaminated sediments in immediately adjoining and other parts of Kendall Bay and the Parramatta River will not be disturbed. By necessity, in particular weather and wave conditions, other channels will be safer to use and these might include over contaminated sediments. The proposed exit and approach channels are directly across proposed Rivercat travel lanes and will add significantly to the risks and hazards associated with this marina. (See Vol 10, Appendix 17, Dwg. No. N01) No account has been taken of the process or means of controlling the approach or exit channels used by day trippers and others who are not "given" a plan setting out the channels.	The Environmental Assessment (EA) must include consideration of any relevant statutory provisions.... with the objects of the <i>Environmental Planning and Assessment Act 1979</i> ; a general overview of the environmental impacts of the proposal, taking into consideration any issues raised during consultation; etc etc REFER PAGE 1 OF THIS TABLE	

Page Reference	Report Statement	Comments	Director General's Requirement	Required Action List
	ends of the Marina arms.	Again, such users pose a significant risk of stirring up contaminated sediments from the adjacent "non blanketed" parts of the Bay and River floor and spreading them further into the harbour, down Kendall Bay and under the boats at the marina. The proposed 4 knot speed limit will be almost impossible to hold in windy conditions and if it could be, the effective thrust from propellers would exceed that created at 4 knots. The north south layout of most arms of the marina will require boats to moor in the same direction. The predominant winds are from the east in this section of the bay which means that boats will need to moor with the wind at their sides. Anchors and bow thrusters, particularly on larger vessels, will need to be used in windy conditions and no 'rules' will overcome this problem. The operational plan of management cannot be applied to 'day trippers'.		
8.7	7. Security and CCTV There are eight security cameras placed on small masts at the ends of each arm. These security cameras will monitor the arms 24 hours a day / 365 days a year and recorded on a hard drive computer. The Security cameras will assist in monitoring vessel movements, weather and patrons activities. During normal Marina hours, there will be at least one marina staff member on site.	CCTV will be ineffective and will provide no realistic monitoring tool during twilight and evening hours. The impracticality of the limited hours that the marina will be managed has already been dealt with in the above sections. The statement here that "at least one marina staff member" will be on site is designed to do nothing more than to allay the fears of the unsuspecting. Even if CCTV was an effective night time security and surveillance tool (which it will not be due to low lighting) there is no way that it can be used to prove where noise emanates from and there is therefore no effective tool to identify noise sources and protect nearby residents from it.	The Environmental Assessment (EA) must include consideration of any relevant statutory provisions.... with the objects of the <i>Environmental Planning and Assessment Act 1979</i>; a general overview of the environmental impacts of the proposal, taking into consideration any issues raised during consultation; etc etc REFER PAGE 1 OF THIS TABLE	

Page Reference	Report Statement	Comments	Director General's Requirement	Required Action List
8.9	8. Waste and Rubbish 8.1 Solid Waste Clearly identifiable garbage disposal bins will be provided in the precincts of the Marina and the buildings on the jetty. A garbage collection service will be provided by a licensed garbage contractor for the regular removal of the content of the garbage bins. Bins will be moved by Marina personnel to the carpark area for garbage collection.	The removal of waste to the carpark which is surrounded by either existing or approved future residential is of great concern. Rubbish in the volumes that will be generated by a 172 berth marina and a 50 seat 'kiosk' (cafe) will require significant receptacles. They will need to be collected by large commercial vehicles with heavy lifting apparatus. This activity will likely be carried out in the early hours of the morning thus disturbing nearby residents. These vehicles, like marina users will be using privately owned community property for access. The movement of 'bins' from the marina to the carpark will be noisy. Garbage of the type and volume collected from a marina (fish eating boat owners and fisherman) and the 50 seat 'kiosk' (cafe) will be of particularly objectionable odours all year but especially in the warmer months. Nearby residents should not be exposed to such conditions. Rodents, seagulls, Ibis and other vermin will be attracted to the rubbish (smells) and will inevitably impact directly on nearby residents and their properties.	The Environmental Assessment (EA) must include consideration of any relevant statutory provisions.... with the objects of the <i>Environmental Planning and Assessment Act 1979</i>; a general overview of the environmental impacts of the proposal, taking into consideration any issues raised during consultation; etc etc REFER PAGE 1 OF THIS TABLE	

Page Reference	Report Statement	Comments	Director General's Requirement	Required Action List
9.3	8.1 Solid Waste Cleaning of fish within the Marina or on the Marina walkways and berth fingers will not be in accordance with the Regulations for Marina Usage.	It is difficult to understand what this statement means. Presumably the 'Regulations for Marina Use' set out the processes that must be followed for cleaning of fish on a marina. Presumably these regulations have been designed to provide some level of cleanliness and to prohibit waste from being thrown into nearby waters. It is of great concern that this marina operator proposes to ignore such regulations.	The Environmental Assessment (EA) must include consideration of any relevant statutory provisions.... with the objects of the <i>Environmental Planning and Assessment Act 1979</i>; a general overview of the environmental impacts of the proposal, taking into consideration any issues raised during consultation; etc etc REFER PAGE 1 OF THIS TABLE	
9.4	8.2 Liquid Waste – including Oils, Bilge, Fluids All vessels shall be inspected on arrival by Marina staff to ensure that all vessel toilets conform with Australian Standards. Marina staff will undertake regular inspections of the waterway for detection of waste, debris, oil slicks, coloured dye and other matter. They will trace the source thereof where possible and report to management.	Enough comment has already been made about the hours during which the marina will be 'managed'. At all other times there will be no means for quickly dealing with the waste, debris, oil slicks, coloured dye and other matter that (it seems) are likely to emanate from vessels moored at the marina. Even if they are able to 'trace the source thereof' it will only be reported to management. There is no suggestion of management taking any actions even if they are on site. More than likely the waste, debris, oil slicks, coloured dye and other matter that is discharged from vessels will add to the pollution already in Kendall Bay and the nearby Parramatta River.	The Environmental Assessment (EA) must include consideration of any relevant statutory provisions.... with the objects of the <i>Environmental Planning and Assessment Act 1979</i>; a general overview of the environmental impacts of the proposal, taking into consideration any issues raised during consultation; etc etc REFER PAGE 1 OF THIS TABLE	

Page Reference	Report Statement	Comments	Director General's Requirement	Required Action List
9.7	9. Public Benefits 9.1 Public Access Public access is allowed through and around the Marina during hours of operation.	To suggest that the 'Public Benefits' of the marina are that it will allow 'public access through and around the marina' adds nothing at all to the public benefits that exist for the public using the dedicated foreshore walkway. The marina will detract from the experience that the public currently have from the walkway. Access to the marina adds little to the experience. (See Section XX Alienation of Public Land) The matter of 'public access' has been dealt with elsewhere in this objection document but suffice it to say that the public do not have any right of access across Community Association property. Nowhere in the EA are their details of the rights or routes that will be used for access to the carpark and marina from nearby streets nor between the carpark and the marina.	The Environmental Assessment (EA) must include consideration of any relevant statutory provisions.... with the objects of the <i>Environmental Planning and Assessment Act 1979</i> ; a general overview of the environmental impacts of the proposal, taking into consideration any issues raised during consultation; etc etc REFER PAGE 1 OF THIS TABLE Key Issues Access	
10.3	9.4 Emergency Access Point In the event of an emergency on Parramatta River which requires the transfer of personnel or equipment to or from a vessel, there are emergency access points for vessels at the ends of Arms 1, 2, 3 and 7. There is an emergency access point for vehicles at the foreshore access to the Marina.	There is NOT "an emergency access point for vehicles at the foreshore access to the Marina". The point at which the marina meets the foreshore is part of a 'dedicated foreshore walkway' owned by The City of Canada Bay Council. It is leased to the Community Association who are required to maintain it for the next 299 years. The walkway was dedicated for 'walking and cycling' purposes only. The marina operator cannot claim that it has any right to move traffic along this dedicated foreshore walkway.	The Environmental Assessment (EA) must include consideration of any relevant statutory provisions.... with the objects of the <i>Environmental Planning and Assessment Act 1979</i> ; a general overview of the environmental impacts of the proposal, taking into consideration any issues raised during consultation; etc etc	

Page Reference	Report Statement	Comments	Director General's Requirement	Required Action List
			REFER PAGE 1 OF THIS TABLE	
10.5	10. Complaints 10.1 Register The manager will make him/herself available to the public for feedback and discussion about the Marina access, operations and functions during business hours. A suggestions box is located on the Marina office door entrance for the Marina to collect feedback from the public. Outside normal operating hours, complainants will be able to call a designated number to advise of their matter. An onsite manager will deal with all complaints and in particular, but not limited to, out of hours noise complaints. All complaints will be recorded in a register which will include a record of the action taken to resolve the matters raised.	Comment has already been made about the conflict of interests that will exist for the marina manager. There is no guarantee in the management plan that the public interest will be maintained and protected. The marina manager will have no requirement, nor legal rights, to carry out any activity on the Community Association property, whether owned or leased, to protect the rights of residents. Even of such rights were conferred somehow, during the hours that he/she is not on site (14 per day during summer), there will be no CCTV coverage beyond the marina and it will be impossible to deal effectively with complaints, especially from belligerent marina users or residents. Outside normal operating hours residents and foreshore walkway users will be able to call a 'designated number' to 'advise of their matter'. There is no undertaking here to deal with the matter (if indeed that is possible) and, in any event, only 'out of hours noise complaints' are proposed to be dealt with by the manager. No suggestion that the manager will provide feedback to complainant and in fact, those that complain often, are likely to be the most ignored. The CA has no legal rights to deal directly with complaints about activities between the marina and the carpark nor does the marina operator.		
10.7	11. Enforcement 11.1 Marina Rules Marina users will be given a copy of the Marina Rules. It will be a condition of the use	Users of the marina will include 'day trippers' who will access the marina any time of the day or night 7 days a week, 52 weeks a year. Whether the marina is manned or not during the time that they call in they will not be given a copy of the rules and it is therefore not possible to ensure enforcement for all situations.		

Page Reference	Report Statement	Comments	Director General's Requirement	Required Action List
	of the Marina that users comply with the Marina Rules.	Users of the marina will also include commercial 'party' boats and ferries designed for partying and 'bucks' and 'hens' nights. It will not be possible to enforce rules here either. The behaviour of such users who may well be dropped off and met by buses will add the problems that the public and the residents of Breakfast Point will face. Loutish behaviour, urinating, graffiti, fighting and the like are probably outcomes on occasions.		
11.2	11.3 Three strikes and You're Out Marina users that do not comply with the second warning letter will have their lease terminated and they will be required to leave the marina. A notice will be posted on the Marina notice board and a final letter will be served to the user.	We have already addressed the complete inadequacies of the enforcement of 'management rules' at the marina due to the very restricted hours and the lack of surveillance at areas other than upon the actual marina. The proponent claims that action will be taken against anyone who receives a 'second warning letter' but they may have transgressed many times and not been caught. It will be almost impossible for residents to absolutely identify any particular vessel as the one causing a complaint. Residents will not have access to the arms that house the vessels for this purpose and, even if they did, it is impractical to suggest that they might venture out onto the marina (particularly at night) to ensure correct identification or to confront those creating the disturbance.		
		Faced with so many negative issues for the residents of the private residential developments of Breakfast Point and Kendall Inlet one may reasonably ask and expect a reasonable answer to the question: Why should so many residents/owners have to give so much for the benefit of so few i.e. for the benefit of one developer and 172 berth owners? Where is the equity?		

RE: INNER WEST MARINA - VOLUME 10 – Reviews by John Clarke and Greg McGrath
PROJECT APPLICATION

Navigation Information – Appendix 17

(Note: Page Reference column provides Page, Clause Number (if applicable) from report plus appropriate Page Location; e.g. page 10.6 = 60% down page 10)

Page Reference	Report Statement	Comments	Director General's Requirement
Page 82 Appendix 17; Drawing No 1	The plan shows that there is a "notional entry path to the marina" and a "notional exit path from marina".	These 'NOTIONAL' paths are in direct opposition to the Marina Management Plan that states on Page 8 ; "6.3 Navigation All vessel owners will be given a plan of the Marina setting out the navigation channels to and from the Marina." In such an environmentally sensitive area 'near enough is NOT good enough". No impact statement or study has been done on the effects of the marina on other river traffic including rowers and sailors. They are significant users of the waters in and around Kendall Bay. (See Attachments XXX)	The Environmental Assessment (EA) must include • an executive summary; • • consideration of any relevant statutory provisions including the consistency of the project with the objects of the Environmental Planning and Assessment Act 1979; • a general overview of the environmental impacts of the proposal, taking into consideration any issues raised during consultation;
Page 82 Appendix 17; Drawing No 1	The plan shows that the existing Rivercat path needs to be altered to allow the marina to be constructed and operated. (Refer blue and red dotted lines on plan)	Sydney Ferries stated upon becoming aware of the marina proposal on the 29th of June 2007 that: Sydney Ferries Corporation have stated that "a new development on such a large scale would increase the risk of accidents." It is proposed that the Rivercats will travel in a (generally) northerly direction when approaching and departing Cabarita Wharf. It is proposed that the Rivercats will pass, at speed, within approximately 80 metres of the majority of the marina. Sydney Ferries state that the marina would increase the risk of accidents.	

Page Reference	Report Statement	Comments	Director General's Requirement
		There is no evidence in the EA of meaningful consultation with Sydney Ferries.	
		It is proposed that both entry and exit traffic to the marina will follow a 'notional path' that is at right angles to the Rivercat path which is a far sharper access route that that which is currently taken. More often than not a Rivercat approaches Cabarita Wharf as one departs. Refer to section "Ferry Timetable". On these occasions one ferry stands off Kendall Bay away from the traffic route awaiting wharf clearance before docking. It is likely that on many occasions, especially on weekends and public holidays, there will be simultaneous movement to and from the Cabarita Wharf and to and from the marina. The marina will therefore introduce a raft of significant safety hazards needlessly to Sydney harbour for the private benefit of a few marina owners.	
		No mention is made in Appendix 17 "Navigation Information" about the use of the Bay and adjoining River by the local rowing and sailing clubs. No plans depict the proximity of local rowing and sailing clubs to the proposed development. NSW Rowing stated upon becoming aware of the marina proposal on the 7th of January 2008 that: "NSW Rowing wishes to register its total objection to the project, and express the greatest concern that such a project is being considered in this area of the River." No survey has been undertaken on the use of Kendall Bay and the adjoining Parramatta River by local rowing and	

Page Reference	Report Statement	Comments	Director General's Requirement
		sailing clubs. Mr Michael Morgan, representing part of the rowing fraternity stated at a recent public meeting organized by The City of Canada Bay Council to consider the marina that: "On any given Saturday over summer, there is something like a 1,000 school boys, school girls, recreational rowers that use the Parramatta River. This is something that at times I do believe gets forgotten by waterways authorities, gets forgotten by the ferries and gets forgotten by planning authorities. These 1,000 people that use it on a Saturday are also active on the other days of the week." (See attachments 65 – 67.1) The public good must include the needs and safety of the rowers. The impact of the proposed development upon rowing and sailing clubs and their activities cannot be assessed from the EA. No consultation ever took place with NSW Rowing nor with any of the 12 small boat, passive recreation clubs within 2 kms of the proposed development that cater for school rowing, sailing and girl guides.	

TRAFFIC and PARKING

REVIEW OF TRAFFIC AND PARKING ISSUES

FOR THE PROPOSED INNER WEST MARINA

1. **The report and plan provided fail to address many of the Director General's requirements, the requirements of other authorities, and provide insufficient detail for assessment – in the following respects:**
 - a) Access between the carpark and marina is not adequately documented
 - b) Parking required for the proposed ferry wharf and small launching ramps is not calculated or provided.
 - c) Estimates of final daily vehicle movements in affected streets and roads are not provided – no detailed traffic study has been undertaken.
 - d) Assessment of traffic impacts – on safety, amenity, road capacity etc – are largely omitted. The scanty traffic numbers provided are completely unsubstantiated.
 - e) The application is based on incorrect governing legislation – ie AS3962, rather than the specified RTA guidelines.
 - f) The documents are riddled with inconsistencies – regarding the use of vehicles between the marina and carpark, proposed loading bay, garbage facilities, etc.
 - g) No bicycle parking provided
2. **These deficiencies are so fundamental that they cannot be resolved by further traffic studies – at the least, a complete re-planning of the whole development is required.**

INTRODUCTION

The purpose of this review is to assess the traffic and parking arrangements and design in the application – and specifically to identify any areas of non-compliance of the proposal, with:

- The stated "Requirements of the Director General"
- State Government Legislation
- Other relevant legislation
- Usual good practice

In view of the location of the marina within a public space, the primary focus of this review is public safety and amenity. The secondary focus is safety and amenity for residents and visitors to Breakfast Point.

This has involved a detailed review of the "Traffic and Parking Report..." by Colston, Budd et al, which is included as Appendix 7, Volume 4, of the proposal (hereinafter referred to as "the Report"), as well as a general review of all matters relating to traffic and parking throughout the whole proposal. I have concentrated primarily on the operational phase, but there is some reference to obvious omissions from the construction phase.

I note that there are concerns regarding whether certain vehicles connected with the marina have legal access to Breakfast Point roads (which are private roads), or access pathways to the foreshore, or to the foreshore walkway itself. Obviously these issues should be resolved first. This review is written assuming that access is permitted. However, if certain classes of vehicle are not permitted, the traffic and parking impacts relating to those vehicles may be ignored, and the remainder of this review will still apply.

DIRECTOR-GENERAL'S REQUIREMENTS

The proposal blatantly fails to address many of the Director-General's requirements, as follows:

DG Requirement	Omission	Discussion
"details of the traffic volumes likely to be generated during construction and operation"	Movements from carpark to marina not mentioned (believed to be "golf buggies", and some other unspecified vehicles to transfer garbage.) Movements for ferry station and launching ramps not mentioned. Estimate of "20 vehicles per hour" (page 9) is not substantiated, and no daily totals provided	See further discussion below
"an assessment of the predicted impacts of this traffic on the safety and capacity of the surrounding road network"	Impact of traffic from carpark to marina not mentioned in report– ie what route is to be taken, clash of vehicles with pedestrians and bicycles etc Impacts on safety only briefly considered – with no mention of pedestrian safety.	See further discussion below.
"Details on site access, internal roadways... must also be provided"	No details of "site access" or "internal roadways" between the carpark and marina in the report, or anywhere in the proposal – except for two green arrows, barely visible, on drawing number DA01 (Volume 2, page 5) – denoted "pedestrian public access".	The only current access between the proposed carpark and marina sites is via pedestrian walkways – refer discussion below.
"Details on ... parking must also be provided"	Parking has been omitted for the following classes of vehicles: • Patrons using the proposed ferry wharf and ramps • Vehicles to transfer goods and people between carpark and marina – at either the carpark or the marina	Parking for other classes is also inadequate – see further discussion below.
"The environmental assessment must take into account relevant State government technical and policy guidelines. While not	There has been no assessment against either of these guides – or any reference to them in the Report.	The parking and traffic arrangements also fail to comply with requirements of these documents – see

exhaustive, guidelines which may be relevant to the project are included in the attached list." The list includes: "Traffic and Transport: • Guide to traffic generating development (RTA 2002) • Road design guide (RTA 1996)"		below.
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COMPLIANCE WITH RELEVANT LEGISLATION

The proposal fails to comply with many aspects of the relevant legislation, and requirements of relevant authorities. These are summarised as follows:

Requirement and Legislation	Non-compliance	Discussion
RTA "Guide to Traffic Generating Development"		
Car Parking numbers: 0.6 per wet berth x 172 = 103 0.5 per employee x say 4 = 2 Kiosk – 1/3 x 50 seats = 17 Proposed ferry terminal and ramps - ?? (needs to be determined by study) Total – 122 spaces, plus those for ferry terminal and launching ramps.	Only 58 spaces provided – less than half of those required	Parking for launching ramps should also allow for trailers – for canoes, kayaks, small sailboats etc. See further discussion below.
Unloading bays must be provided.	None provided	
Parking for all vehicles - including "golf buggies" – presumably at both the marina and the carpark	None provided	

Daily traffic numbers – peak and average – should be estimated. Impacts on safety and amenity – including noise – should be considered	No assessment of these numbers included, and no assessment of the impact of these movements on the safety or amenity of existing roads.	Numbers and impacts are believed to be excessive on several streets - see further discussion below.
RTA Letter of 2 June 2009 (appendix to Traffic Report)		
“consideration should be given to providing bus, pedestrian and bicycle facilities”	No bus facilities provided. No bicycle parking provided. Pedestrian routes not shown.	The current ferry station at Cabarita operates in conjunction with a bus stop. Hence, it is obvious that if the new wharf is to incorporate a ferry station, a bus stop is desirable. However, bus access within Breakfast Point has recently been prevented. These inconsistencies need to be resolved and explained.
“the proposed means of vehicular access to/from the site ... should be provided”	Access between carpark and marina not mentioned	Refer further discussion below
“facilities for heavy vehicle loading/unloading should be provided”	No facilities provided – indeed no mention of trucks at all in the parking plan, or traffic report	Refer further discussion below

Governing Legislation

Further to the summary above, I note that the applicant's calculation of required parking numbers, as expressed in the Colston Budd report, is based on Australian Standard AS3962-2001: Guidelines for Design of Marinas”. However, it is clear that the RTA guides mentioned above should take precedence over this standard, because the RTA guidelines are referred-to by the Director-General, and for two other reasons, as follows:

1. AS3962 states the following:

“1.1 SCOPE

“....NOTES:

1. This document is intended for use as a guideline and should not be used as a design specification.
2. The environmental impact of marinas should be assessed according to the requirements of the relevant authority.”

In this case, the “relevant authority” is without doubt the RTA.

2. The RTA guides (with many pages relating to parking, vehicles and traffic at marinas) are much more detailed than AS3962 (with 1.5 pages total)

With regard to parking for the kiosk:

- AS3962 states:
“S8.2.1(b) Car parking for activities ancillary to marina activities (eg ... restaurants... or other uses) should comply with the existing planning codes or standards of the relevant authority”
- In this case the “relevant code” and “authority” is the RTA Guide
- The kiosk clearly falls under the definition of “Restaurant” given in the RTA Guide – and guidance on parking numbers is provided therein.

Hence the RTA guide should clearly be used to calculate parking requirements for the kiosk.

Both AS3962 and the RTA Traffic Guide encourage the use of specific studies to determine expected vehicle numbers. In the absence of any such study, the RTA Traffic Guide should have been used.

GOOD PRACTICE AND METHODOLOGY

The proposal fails to comply with good practice in the following respects:

Issue	Deficiency	Discussion
Extent of the traffic study		
A project of this size and complexity should have been the subject of a more detailed traffic study.	No detailed study undertaken	I have studied several other recent and current marina applications, accessible on the internet, which have included such studies.
Inconsistencies of the report with other sections of the application Other sections of the document refer to the following:		
“dedicated loading spaces” (Vol 1, s4.6, ...)	No loading spaces provided on plan	
“The (garbage) bins ... moved by small vehicle to a location at the carpark, for collection by the waste removal contractor” (Vol 1, s4.5)	No description of what this vehicle is. No garbage storage space, or access for a garbage truck provided.	

"small trolleys will be provided at the carpark for the transfer of goods to and from the marina"	No trolley storage space provided	There is also no adequate explanation of how this could work. For example – if the trolleys are unsecured, they might be stolen, but if secured, how will a casual delivery driver have access to them?
"Golf buggies" used to transfer goods and people between the carpark and marina.	No parking provided, or discussion of routes, numbers, etc.	See discussion below.
Separation of Carpark and Marina not adequately addressed		
It is a critical feature of the proposal, that the proposed carpark is remote from the marina – separated by a distance of approximately 250 metres - with a residential apartment block (Hunters Wharf), and a public foreshore walk, right in the middle.	This fact gives rise to all sorts of problems, which have not been adequately addressed – including traffic conflicts, parking conflicts, amenity, etc.	See discussion below.
Control of access by boom gate		
Parking and loading facilities should be provided for drivers without boom gate keys, eg: • Deliveries • Garbage trucks • Maintenance vehicles • Visitors, guests, staff on larger boats • The public – utilising the ferry wharf and launching	No access provided for these classes of vehicles – presumably they will all have to park on the street?	

ramps (including trailers for canoes or rowboats).		
Close proximity of boom gate to road	Is too close to road: • Vehicles unable to enter will have to reverse onto the road – causing a safety hazard • Delays will cause stacking onto roads	A longer and wider entry and exit are required – similar, for example, to the nearby entry and exit to the Hunters Wharf development.
Assessment of traffic numbers		
Traffic numbers should be based on the completed development of Breakfast Point	Have been based on numbers surveyed on an unspecified Sunday, prior to August 2009. Breakfast Point is still under development – perhaps only 50-60% of total relevant residences were occupied at that time.	Final traffic numbers may well be double or triple those measured. (Even by the time that the marina might be complete, several more buildings in the vicinity would be complete).
Impacts of the parking / loading / garbage area on amenity of surrounding residential buildings		
Impacts should have been considered – noise, visual, odours etc. (If the proposal goes ahead, the parking / loading / garbage area will be closely overlooked on 4 sides by multi-storey residential buildings.)	There will obviously be substantial, negative, impacts – that have been ignored. At the least, more significant screening and separation should have been provided. (A small amount of landscaping has been referred-to, but no landscape plan has been provided)	This would establish an ugly precedent. Currently, there are two open, non-residential carparks in Breakfast Point – behind the supermarket, and at the Country Club. Both of these have significant screening, and setbacks from residences.

Parking controls and conflicts		
How will it be ensured that vehicles accessing the marina will park in the carpark (which is 250m from the marina), and not in a closer position on the street, in front of other buildings (eg Hunters Wharf), or in the entry and exit driveways to Hunters Wharf?	No controls provided – and no discussion of how this might work.	Parking conflicts are unavoidable – see discussion below.
Miscellaneous		
Signage plan shows no safety signage around carpark, and no directions from carpark to marina.	Should obviously have been included.	

FURTHER DISCUSSION OF KEY OMISSIONS

Access between Carpark and Marina

The only current access between the proposed carpark and marina sites is via pedestrian walkways – one on private land (property of “Hunters Wharf”), two (to the east and west of the Hunters Wharf building) on Community Association land, and partly on the public foreshore walkway (the latter also being a cycleway). These walkways are regularly used by families with children in prams and on bikes, etc.

The walkway through Hunters Wharf is a completely private route, with no easements or rights of way – so it is assumed that access would be denied to marina patrons. Hence, this walkway is not discussed further.

These walkways have obviously not been designed or constructed to carry regular traffic – golf buggies or anything else. They are not of adequate width, not structurally adequate, have no traffic control devices, and have no separation between traffic, pedestrians and bicycles. Furthermore, the walkway to the east of Hunters Wharf is already unsafe – as the walkway stops prematurely at the end of the entry driveway to Hunters Wharf, rather than continuing on to meet the footpath on Peninsula Drive. It thus leads pedestrians directly into the path of vehicles.

It is clearly not safe or appropriate to regularly drive vehicles on these walkways – but no alternative has been included in the proposal. It is also not clear whether vehicles have any right to drive in these locations (as mentioned earlier).

I do not believe that it would be possible to upgrade these walkways to carry marina traffic, pedestrians and cyclists, all in a safe manner – given the following difficulties:

- The complicated crossing of routes
- The main wharf of the marina is of insufficient width to turn vehicles – they would need to reverse off the wharf, onto the foreshore walk – which is obviously unsafe
- The requirements of the different user groups – ie vehicles, pedestrians and cyclists, and a mixture of public, local residents, and the proposed commercial usage
- The restricted space available
- The need to minimise amenity impacts on the waterside precinct and adjoining residences.

However, if this is being proposed, the proposal should include, at the least, a detailed study of the proposed access routes, including:

- Plans showing proposed vehicle and pedestrian routes – including trolleys etc
- Detailed road / path design – widening, structural improvements, one-way or two-way traffic, final widths etc
- Substantiated forecasts of traffic, cyclist and pedestrian numbers
- Safety measures to be implemented – eg pedestrian crossings, separation of vehicles from pedestrians, etc
- Disabled access

Traffic volumes and impacts on safety and amenity

Referring to the RTA Guide, daily traffic numbers (vehicles per day, or vpd) for the marina, can be estimated as follows:

- Restaurant (p3-11) $60/100\text{sq.m} \times 170 = 102$
- Marina $2.7/\text{berth} \times 172 = 464$
- Ferry wharf and launching ramps – study required
- Total – 566 plus requirements for wharf and ramps.

Based on this, when the numbers are determined for the ferry wharf and launching ramps, the total vpd for the marina may be somewhere between 800 and 1200. This needs to be added to the vehicle movements arising from the completed current residential development, to assess the traffic volumes in each street.

By my calculations, approximate total vpd for some affected streets are:

- Magnolia Drive – between 4300 and 4700
- Rosewater Circuit (northern arm) – between 2100 and 2500

This should be compared to the RTA Guide target (section 7.3) of 1500vpd for streets fronting a minimum 85% of homes in new developments (like Rosewater Circuit), and a suggested maximum of 2000vpd for internal collector roads (like Magnolia Drive). **On this basis, I believe that traffic from the marina will cause unacceptable amenity impacts on several affected streets.**

All of the assessment of traffic impacts, in the Budd-Colston report, is based on an estimated peak of 20 vehicles per hour – which has not been explained or substantiated. This can easily be shown to be an under-estimate, by a simple approximate calculation, as follows:

- Using the 566 vpd above (leaving off the ferry wharf and launching ramps for the moment)
- 50% would be arrivals, and say 70% of these would occur during about 3 hours in each morning – total 198 movements / 3 hours = 66 vehicles per hour
- 50% would be departures, and say only 10% would occur in those three hours in the morning – total 28 movements / 3 hours = 9 vehicles per hour
- Adding these together – 75 vehicles per hour
- When the ferry wharfs and launching ramps are factored in, the numbers will be higher – perhaps 50 to 100% greater.

Hence, on a vehicles per hour basis, estimated traffic movements are likely to be at least three times, and possibly up to six times, greater than the estimate of 20 per hour in the report. This means that all of the conclusions regarding traffic volumes, drawn in the Budd Colston report, must be considered to be unsubstantiated.

There has been no discussion of Tennyson Road in the report – which will be the main access road, outside Breakfast Point, for traffic to and from the marina. This road is inadequate – and unsafe - to serve its present function – as a collector road. The major deficiencies are:

- **Insufficient width – at least 1.5 metres narrower than it should be:**
 - Measured width 9.9 metres (between kerbs), in the straight sections
 - RTA requirement – for 2 traffic lanes, plus two parking lanes, incorporating a bus route, on an existing road:

- Minimum 11.4 metres, and wider on curves
 - Desirable – 13.5 metres
 - Inadequate sight distances – partly a result of the narrow carriageway, compounded by buildings, walls and trees close to the road edges.
 - Inadequate pedestrian crossings (see below).
- I believe that these deficiencies may already have contributed to several accidents in recent years. Traffic from the marina will make this situation worse.

Pedestrian Safety

As noted above, pedestrian safety, on affected roads, is a crucial issue that has been largely overlooked. The marina will generate a lot of additional traffic on the surrounding streets. Some of these streets are busy pedestrian thoroughfares – to shops, restaurants, transport, the bay, parks etc – for both the general public, and Breakfast Point residents. However, no provision has been made for appropriate safety measures – eg pedestrian crossings, signs, traffic calming devices, pedestrian refuges, etc.

Again – the existing arrangements on many of these roads are not adequate. I summarise some key points:

- Tennyson Road has no pedestrian crossings in the vicinity of bus stops, a hotel, the supermarket or the shopping precinct at the edge of Breakfast Point
- Magnolia Drive has no pedestrian crossings leading towards the supermarket and shopping precinct, or the commercial building near the corner of Tennyson Road
- Rosewater Circuit has no pedestrian crossings leading to Silkstone Park (a popular place for families, young children, weddings etc) or towards the foreshore pathway, or the ferry stop at Cabarita
- All of these roads are experiencing a great deal of construction traffic – which is likely to continue for some years.

The proposed marina traffic will further increase the hazards at these locations – particularly because the peak times for marina traffic (Saturdays, Sundays and holidays) will often coincide with peak pedestrian use for shopping and leisure activities.

Heavy vehicles / loading etc

In the report, the whole issue of heavy vehicles and unloading facilities has been glossed-over with the statement on p9 “The development is expected to generate a small number of service vehicles. These would primarily be vans, utilities, and courier style vehicles which will be able to use the on-site parking area.” However, it is completely unrealistic to think that all deliveries to a large kiosk and to the marina will all be made by small vehicles (what about crates of soft drinks, bags of ice, deliveries direct to boats, etc?). And there is no mention of garbage trucks to remove the large volumes of garbage that would be generated by a large marina and 50 seat kiosk.

There is also no explanation of how carpark users contact marina staff for assistance, and the amenity impacts of this. For example, will there be an intercom or bell – with obvious noise implications?

Car Parking Numbers – Further Discussion

Observations at the nearby Cabarita ferry stop reveal that a substantial number of ferry travellers park in the adjoining carpark, or are picked-up by car. This proposed wharf may be worse than Cabarita wharf, because it may provide a stop for both ferries and commercial cruise boats (the latter not being permitted at Cabarita). Hence, the demand for parking may be greater than for the current Cabarita Wharf. As noted above, these numbers need to be determined by a detailed study.

With regard to required parking numbers for marinas – I note that there has been considerable discussion in various studies. Those studies that I have read indicate that the ratio of parking spaces to berths fluctuates approximately between the figures referred-to in AS3962 – ie 0.3 to 0.6 spaces per berth. Parking numbers have been shown to vary depending on many factors – type of boats (power vs sail), size of boats, formation of a sailing or boating club, location of the marina (proximity to public transport etc), proximity of the homes of boat owners, etc.

I believe that, even if further studies are done, the parking ratio selected for this marina should be 0.6 spaces per berth, for the following reasons:

- It is the legislated requirement from RTA guidelines – as explained above.
- The factors affecting parking, including those mentioned above, can all vary over time – so even if a current study pointed to (say) 0.4 as the correct factor, that could still change to 0.6 over time.
- If the factor selected is too low, and there is a net shortage of parking for the marina, there will be no way to make up that shortage, and it will inevitably cause parking conflicts. As explained above, there is no reserve capacity in the nearby streets (the street parking is mostly taken up with allocated residential visitor parking), and there will be no spare land to construct further parking facilities.

Parking Conflicts

There is a systemic fault in the design of Breakfast Point – the allocation of most on-street parking as allocated visitor parking, for most unit blocks. While this might seem to comply with relevant standards, it results in there being very little spare or overflow parking along roadways (for social occasions, building works etc), and prevents the placing or enforcing of parking restrictions on most of the streets. (And I do not believe that it complies with the intent of the RTA Guidelines, which refer to “off street visitor parking”) This problem is becoming obvious in many developed areas of Breakfast Point – where it can be seen that most of these visitor parks are occupied most of the time, and there is little or no overflow parking available.

The Hunters Wharf building is a good example:

- Required visitor parking – RTA Guidelines – $1/5 \text{ units} \times 87 = 18$
- Off-street visitor parking provided - nil
- Available on street (adjacent to Hunters Wharf) – 14
- The shortfall of 4 must be made up across the road – ie adjacent to the new carpark, where there are:
 - 8 spaces on Peninsula Drive
 - 2 on the southern arm of Rosewater Circuit
- Thus there might be $10-4 = 6$ spaces available for marina or other carparking, on a typical day.

This agrees quite well with my site observations in recent times.

This is of special significance for the marina. Because the marina carpark is remote from the marina, many marina users will prefer to park on the street, closer to the marina, if they are not prevented from doing so. In fact, with the current carpark design – with access restricted by boomgate – many users will have no option but to park on the street. This would mean that the marina users would occupy visitor spaces for adjoining buildings – specifically

Hunters Wharf and the proposed new buildings under construction on either side.

For deliveries and drop-offs, it would be a similar story. The entry and exit driveways to Hunters Wharf are much closer to the marina than the carpark is – around half the distance. These would be very attractive places to pull-up, and it is inevitable that they would be utilised.

Can marina users be prevented from parking on the street? Considering different classes of users and vehicles:

- Those regular users, contractually involved – ie berth owners, regular delivery drivers, marina and kiosk staff:
 - It may be possible to guide or educate the majority of these, if the management of the marina makes an effort to do so.
 - However, it is likely that there will always be some new or uncooperative users who do not comply.
- Less regular users, with no contractual connection – ie visitors to boats, kiosk patrons, ferry wharf patrons, casual delivery drivers, launching ramp users (perhaps with trailers):
 - It will be impossible to guide or educate the majority of these people.
 - Many could be expected to obey official parking restrictions – for example “1 hour parking, residents vehicles excepted.” Many could also be deterred by installing parking meters on the streets (exempting residents).
 - However, such parking restrictions cannot be applied or enforced, because visitors to the units are entitled to park in these spaces, and the different vehicles / users cannot be identified.
 - The strongest message that could be used on signs would be something like: “Hunters Wharf Visitor Parking Only” – but that would be unlikely to deter many people.
 - Furthermore, as noted above, most of these users will not have access to the carpark boomgate – so will be prevented from entering the carpark anyway.
 - Hence, many of the irregular users could be expected to park on nearby streets.

Clearly, the outcome of this will be that, on days when the marina is busy, many marina users will occupy on-street parking spaces as a first preference, until the adjoining streets are full – and only then will the carpark tend to be fully utilised. Using the parking numbers calculated above – this could easily be 50 to 100 vehicles attempting to park on the street – compared to the 6 street carparks available in Peninsula Drive.

A similar problem is being experienced at the recent development at Rhodes, where shopping centre users regularly park in adjoining residential streets – presumably because it is often more convenient than parking in the centre carpark.

CONCLUSION

It is thus concluded that:

1. The proposed arrangements, for parking and traffic, are seriously deficient, in the following respects:

a) Unacceptable impacts on public safety:

a. Safety for pedestrians and cyclists:

- i. It is proposed to drive golf buggies and other vehicles on the existing pedestrian walkways and foreshore walk/cycleway, between the proposed carpark and marina – which is blatantly unsafe (and if it is planned to upgrade these, no information has been provided)
- ii. Pedestrian safety in the surrounding roads (Tennyson Road, Magnolia Drive and Rosewater Circuit) is already grossly inadequate, and will be made worse by the addition of marina traffic.

b. Safety for road users – Tennyson Road is of insufficient width (by at least 1.5 metres) to perform its current function, and will be made more unsafe by the addition of marina traffic

b) Insufficient and poorly-designed parking – which will inevitably cause significant parking and traffic conflicts:

- a. Insufficient parking provided – less than half of the numbers required (a shortfall of at least 64 spaces, plus parking for the proposed ferry wharf and launching ramps)
- b. No parking provided, in the carpark, for many classes of vehicles – visitors, “golf buggies”, the public accessing the proposed ferry wharf and launching ramps.
- c. The carpark is 250 metres away from the marina, with a residential building in the middle. Serious parking conflicts, with existing residential visitor parking, are inevitable.
- d. The carpark entry and exit are restricted by boom gates, without provision for casual access, or stacking zones for waiting vehicles.
- e. No parking provided at the marina for “golf buggies” or garbage removal vehicles.

c) The carpark design fails to provide essential facilities (in spite of claims to the contrary)

- a. Loading / unloading areas for large or small vehicles, including garbage trucks.
- b. Storage areas for garbage or trolleys

d) The carpark location will result in unacceptable amenity impacts for surrounding residents (being surrounded on 4 sides by medium density residential development, with minimal screening)

e) Traffic from the marina will cause unacceptable amenity impacts on several affected streets within Breakfast Point – affecting several hundred residents.

2. The report and plan provided fail to address many of the Director General's requirements, the requirements of other authorities, and provide insufficient detail for assessment – in the following respects:

- h) Access between the carpark and marina is not adequately documented
- i) Parking required for the proposed ferry wharf and small launching ramps is not calculated or provided.
- j) Estimates of final daily vehicle movements in affected streets and roads are not provided – no detailed traffic study has been undertaken.
- k) Assessment of traffic impacts – on safety, amenity, road capacity etc – are largely omitted. The scanty traffic numbers provided are completely unsubstantiated.
- l) The application is based on incorrect governing legislation – ie AS3962, rather than the specified RTA guidelines.

- m) The documents are riddled with inconsistencies – regarding the use of vehicles between the marina and carpark, proposed loading bay, garbage facilities, etc.
 - n) No bicycle parking provided
3. **These deficiencies are so fundamental that they cannot be resolved by further traffic studies – at the least, a complete re-planning of the whole development is required.**

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APPENDIX

REFERENCES

Australian Standards – AS2890.1, AS3962

RTA NSW:

- Guide to Traffic Generating Developments
- Road Design Guide

BACKGROUND OF THE AUTHOR, AND TAYLOR CIVIL & STRUCTURAL

Wayne Taylor

- A Chartered Professional Civil Engineer, with 25 years experience
- Qualifications – BE (Hons.I) – University of Sydney, MBA – University of NSW, CPEng
- Registrations held:
 - Both Civil and Structural Engineering:
 - The National Professional Engineers Register
 - The NSW Building Professionals Board as an Accredited Certifier
 - The Victorian Builders Practitioners Board
 - The Queensland Board of Engineers
 - The Tasmanian Building Professionals Board
 - Geotechnical Engineering
 - The NSW Building Professionals Board, as an Accredited Certifier
- Director and Principal Engineer of Taylor Civil and Structural for 20 years.
- Experience with numerous relevant projects throughout Australia, including:
 - Design of hundreds of commercial and industrial carparks
 - Design of roadworks associated with numerous developments – commercial, residential and industrial
 - Design of traffic management and toll collection systems and structures at numerous sites (including Sydney Airport, Cross City Tunnel, Sydney Harbour Bridge, Sydney Harbour Tunnel)

Taylor Civil & Structural

- Consulting Engineers – Civil and Structural
- Operating for 20 years (initially as Ramakers & Taylor Pty Ltd)

9 Traffic Noise Assessment – Construction and Operational Noise Assessment Volume 4

The Marina is accessed via Magnolia Drive and Rosewater Circuit. It is assumed that no heavy vehicles will be travelling on those routes.

The offset distances of existing and proposed residences adjacent to the proposed transport route (Magnolia Drive and Rosewater Circuit) have been estimated from Google Earth and the Concept Plan 2005 to range between 14 m and 33 m.

The cumulative peak hour flows on the transport route when the Marina is operational are presented in Table 25.

Table 25 Cumulative Peak Hourly Traffic Movements on Magnolia Drive and Rosewater Circuit

Road	Cumulative Peak Hour Traffic Movements (percentage increase of traffic)					
	Day		Evening	Night		
	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2
Magnolia Drive		110 (22.2%)	80 (33.3%)	40 (33.3%)	30 (50%)	15 (25%)
Rosewater Circuit						11 (37.5%)
	65 to 85	50 to 63	25 to 35	20 to 27	08 to 11	6 to 8
	(66.7% to 46.5%)	(44.4% to 30.8%)	(66.7% to 40%)	(100% to 58.8%)	(60% to 37.5%)	(100% to 60%)

The calculated peak hourly daytime, evening and night-time traffic noise levels for both the transport routes are presented in Table 26, Table 27 and Table 28 respectively.

The ECRTN states that in any case where the nominated criteria are already exceeded (or are within 2 dBA of the criteria), traffic associated with the project **should not lead to an increase in the existing traffic noise levels of more than 2 dBA. As a general rule**, traffic noise associated with the project would not increase the existing traffic noise levels by more than 2 dBA so long as the percentage increase in vehicles movements for the project is no greater than 60%.

Comment

There are several problems with this argument. First is the assumption that no heavy traffic will exist. Evidence with every Marina that we have visited indicates the contrary. Tourist buses and day tripper buses abound at Marina locations within Sydney. As soon as large pleasure craft are permitted to pick-up and put down at the Marina (which is going to occur) then buses of various types and sizes will become the norm. Our roads are private and not equipped to handle continuous heavy traffic of this type and the noise levels would significantly exceed the 2dba levels allowed. We find these assumption spurious and without foundation and are not referenced to any reliable data of similar community settings.

The second problem is the estimate of assumed traffic flow. At best these figures are guesses and do not appear to be based on comparative data of like communities. In addition they are averages and do not take into account peaks at particular times of the year such as public holidays, Christmas etc. Bottleneck peaks even if these only occur 4 times per year can cause significant frustration and become a danger to small children with speeding and limited parking availability and much higher noise levels than indicated here, i.e. raised voices, horns blowing etc.



AQUATIC FLORA, FAUNA AND AVIAN FAUNA

**Response to Inner West Marina Project Application:
Review of Impacts on Marine Environment and Biodiversity (Volume 3 of the application)**

By Dr. Ann Goeth, November 2010

I. DETAILS

The purpose of this review is to assess the impacts on the marine environment and biodiversity in Kendall Bay, and to compare these impacts with A) the relevant Director-General's Requirement; and B) the Remediation Order issued by the EPA in June 2006.

The relevant DG's requirement is: "To conduct an Environmental Assessment that includes

- a detailed assessment of the environmental impacts of the proposal, taking into consideration any issues raised during consultation;
- a detailed assessment of the key issues specified below and any other significant issues identified in the general overview of the environmental impacts of the proposal, which includes:
 - a description of the existing environment
 - an assessment of the potential impact of the project, including any cumulative impacts from construction activities and from all water related craft that would utilise the marina;
 - a description of the measures that would be implemented to avoid, minimise, mitigate, offset, manage, and/or monitor the impacts of the project."

This review is aimed at the two key issues of a) Soils, Sediments and Water, and b) Flora and Fauna.
It identifies numerous points of non-compliance with the DG's requirements above, detailed below.

Details in brackets refer to the respective section of the Project Application (eg page number = p, and Volume Number = V). Sections in *italics* are sections taken from the Project Application

A) IMPACTS ON ACQUATIC BIODIVERSITY (Vol. 3)

- 1) It is misleading to state in the summary of project impacts that "*given that the organisms found by Cardno were generally not typical of the area and that there are extensive areas of these habitats elsewhere in the estuary, these were not considered of significant ecological value*" (p. 72, Vol 1). This summary is a false interpretation of the detailed information provided by Cardno, which is as follows:
 - Kendall Bay does have a diverse range of infauna, despite the contamination of the sediment (see p.iii, Vol 3).
 - The epibenthic fauna found was similar to that of two reference points elsewhere in the estuary and thus appears typical of that region (p. iii, Vol 3).
 - The mean number of taxa found within the bay is similar to that in reference location.
 - The Infauna was different to two reference locations, but no results for tests of significance were given to see how significant this is. Also, this needs to be interpreted in terms of the different microhabitats and biotic as well as abiotic factors impacting on the infauna at

- these different locations, which was not done. A difference in assemblage at such a small number of sample points does not mean that the infauna at Kendall Bay is not typical for this area of the estuary!
- Mobile fish and invertebrate assemblage did not appear to be typical for the area, but again, Cardno compares this with a reference point that is positioned in an area of the estuary that is exposed to different biotic and abiotic factors.
 - Cardno admits that some differences in sampling intensity can explain the difference in the number of taxa at different locations (p 7, Vol. 3). Hence, how reliable is the comparison with the reference points in terms of sampling intensity?
 - Four different species of fish protected under the *FM Act* could occur in the area (p. 10, Vol. 3). There has been insufficient survey to confirm the presence or absence of these fish in Kendall Bay. Also, a protected fish (Harry Pipefish) was found here in 1988, but not during surveys in 1996 and 2009. This may, however, be explained by lack of survey efforts or surveys being conducted during the wrong time of year or day.

Also, the statement above ignores the fact that there are protected wetlands at the southern end of Kendall Bay and around Cabarita Wharf and Cabarita Point as well as a patch of protected seagrass *Halophita ovalis* (p. IV, Vol.3). There is too little discussion on the potential impacts on these biodiversity assets.

- 2) **The geotextile blanket does not meet the requirements of the Remediation Order.** This blanket will not completely cover the area and thus remediate the area, as per the Remediation Order, as fine sediment particles will still pass through the blanket (p.v, Vol. 3). The application downplays the significance of this and compares it with the existing situation (p.v, Vol 3), e.g this is better than what we have now. It also ignores the fact that now, we do not have 172 motor boats coming and going in and out of the bay. Instead, it should be compared with a proper remediation of the bay!
- 3) **High levels of contaminants and further increase of these levels:** Kendall Bay is contaminated with measureable levels of Total Petroleum Hydrocarbons (TPH) and Polycyclic Aromatic Hydrocarbons (PAH), and the PAH concentrations exceed the Interim Sediment Quality Guidelines (ISQG). Also, the levels of Arsenic, Chromium and Copper are in excess of the lower, but not their higher ISQG values. Most importantly, the levels of Zinc, Mercury and Lead are above their higher ISQG values (p. iii, Vol 3).
 - More such contaminants would be released into the surrounding sediment and water by pile driving (including for support structures during construction), laying the geotextile blanket (over at least 30 weeks) and resuspension of sediments after laying the blanket. This would push the levels of these contaminants even more closer to, or above, the higher ISQB values. The application downplays the impact of this increase on biodiversity considerably.
 - More such contaminants would also be released from oxidation of deeper sediments and decomposition of organic matter trapped under the blanket (p. VI, Vol. 3).
 - Cardno recommends that elutriate tests be done to determine the concentration that might be released during all of the above these processes. This type of testing also needs to be done long after the construction phase, as oxidation of deeper sediments will continue for a prolonged period of time. This has been omitted in the report.
 - Even if elutriate tests are being conducted, what will be the threshold at which construction works will be put on hold? Will this ever be the case, given the amount of money involved? Who will determine when and if construction will be put on hold?

- 4) **Release of Acid Sulphate Soils:** Kendall Bay contains Acid Sulphate Soils at depths of 0.2-0.4 m in the subsurface sediment (p. iii, Vol. 4). The project application says this is of no significance as these will not be excavated. Clearly such soils will be released to the surface during pile driving, including for the support piles during construction? This needs to be investigated by an engineer.

Point 2-4 above clearly demonstrate that the application fails to meet the requirements of the Remediation Order! The Remediation Order requires that prior to commencing any works or activities that would result in the disturbance, or further disturbance, of the bed sediment of Kendall Bay, the person proposing to conduct the works or activities must prepare and submit for the EPA's approval a written plan with specific measures directed at minimising the disturbance and migration of the contaminants in the bed sediment of the site. The geotextile blanket will not minimise the disturbance and migration of contaminants, and it will not stop contaminants from entering the water during pile driving.

During the consultation phase, DECCW raised concerns about the type of remediation proposed, in particular the release of contaminants during placement of the blanket and piles, the potential impacts on the environment as well as estuary hydrodynamics and water levels. In addition, DECCW raised concerns about the ongoing maintenance of the blanket. These concerns still stand now, as the application fails to provide evidence that any of these concerns are not justified, especially if Points 2-4 above are considered.

- 5) **Significant increase in copper contamination.** The copper concentration in the waters of Kendall Bay exceeded the ANZECC 95% trigger values at all sites measured by Cardno (in 2009). The majority of boats will be treated with copper-based antifouling paints and the inevitable release of these paints into the water would push the copper concentration even higher. The only mitigation proposed is an education of boat owners to not use these type of paints. This is unrealistic, especially given that the boats attracted to this marina will be very expensive and boat owners would want to only use the best paint available. Copper-based paints are regarded as the best paints.
- 6) **Pollution of bay water from the boats' sewage and bilge water.** The report confirms that such pollution is likely (p vii, Vol. 3) but claims that boat owners should be prohibited to discharge sewage and bilge water. Who will control this and what would be the fines? Again, it is an unrealistic assumption that this can be prevented.
- 7) **Pollution of bay water via engine exhausts.** The report confirms that boat engine exhausts will introduce hydrocarbon contaminants and heavy metals into the water of Kendall Bay (p3, Vol. 3). Levels of these substances are already too high (see above) and such an increase should be avoided at all costs.
- 8) **Accidental spills of sewage and organic pollutants.** With such a high number of boats frequenting the proposed marina, there would be a high chance of accidental spills of sewage or organic pollutants, such as fuel, motor or other oils (p. 3, Vol. 3).
- 9) **Introduction of non-indigenous fish and marine vegetation is listed as a Key Threatening Process (KTP) under the TSC Act.** The application acknowledges the considerable danger of such introduction and the only mitigation measure proposed is the education of boat owners. It will be impossible to avoid the introduction of such non-indigenous species in the long-term, especially with the high number of boats proposed to use this area. Also, there seems to have been no study on which non-indigenous species occur in the bay at present, the report only recommends that such a study takes place before the marina starts its operation (p.viii, Vol. 3). Such a study should have been part of the project application!

- 10) **Destruction of food chain:** Most organisms within or on the surface of the soft sediment would perish shortly after the geotextile blanket will be laid (p V, Vol 3). The resuspension of sediment and increased turbidity during laying of the geotextile blanket would likely have adverse effects on the pelagic and epibenthic flora. Such combined loss of this habitat and associated biota would significantly reduce the amount of food for epibenthic and pelagic organisms, as well as the fauna higher in the food chain, such as shorebirds and sea eagles. There is not enough data to predict if, and when, the basalt rock above the geotextile blanket would ever be colonised by organisms similar to those occurring in the sediment today.
- 11) **There are not enough areas elsewhere in the estuary to make up for the loss of habitat.** The application downplays the impacts on organisms under 5) above by stating that there are extensive areas of these habitats elsewhere in the estuary. This ignores the fact that the laying of the geotextile blanket will disturb a very large (57000 square metre) area of bed sediment over a prolonged period (30 weeks), and that there are very few bays left within the estuary that are not yet used for mooring boats. The applicant has to demonstrate which other areas he refers to.
- 12) **Impacts on mangroves and protected areas through changes in water circulation and sedimentation patterns.** The report suggests that such impacts are likely (p3, Vol. 3) but does not discuss this any further. With the large size of the marina, and one jetty being close to, and parallel to, the southern end of Kendall Bay, where the mangroves are found, such impacts will be even more severe. A proper assessment of the environmental impacts needs to discuss this in more detail. Discussions should also focus on the reduced dilution of stormwater entering the bay at the southern end, as reduced water circulation means that stormwater won't be removed from this area as quickly as before. This, in turn, will mean increased accumulation of pollutants and trash entering the bay through the several stormwater pipes found in this area.
- 13) **The provisioning of novel habitat in the form of new pillars, jetties etc should not be used as an argument in favour of the marina.** Cardno's review states clearly that while these structures will provide novel habitat, this will not offset the impacts on soft-bottom assemblages resulting from their introduction (p. V, Vol. 3 and p. 14, Vol. 3).
- 14) **The application does not consider the impacts on climate change.** It has been acknowledged that photosynthesis of marine algae and other organisms considerably reduces the amount of CO₂ in the atmosphere. The proposed marina would reduce the amount of algae and thus photosynthesis in Kendall bay. The geotextile blanket will completely destroy all benthic algae, of which several different species occur in the bay (see p. 7, Vol. 3). Also, the various structures will shade floating algae and foliose algae (p. 9, Vol. 3), also reducing their photosynthetic activity. In addition, substantial amount of methane (a greenhouse gas) will be produced when organisms decay under the geotextile blanket.
- 15) **The proposed silt curtains propose a risk for free swimming fauna and won't completely stop contaminated matter leaving the area.** The applicant proposes a row of two silt curtains (inner and outer) to stop the spread of sediment and turbidity into nearby protected wetlands and other areas of Kendall Bay and the estuary. These will be present for the duration of construction, e.g. at least 30 weeks. Daily opening of panels in the curtains are supposed to allow movement of boats and mobile organisms. During such openings, contaminated material will also exit the enclosed area. In addition, mobile organisms are unlikely to wait for the daily opening. Instead, they are likely to get caught in the net and die, or suffer

considerably from the lack of food within the area they are trapped in. In addition, the applicant needs to prove that such types of silt curtains will be efficient in stopping the spread of sediment and turbidity, and whether this has been applied elsewhere before.

- 16) **The application wrongly claims there would be no removal or destruction of marine vegetation** (p. 13, Vol. 3). This is incorrect if marine algae are also considered marine vegetation. There will be significant impact on marine algae and reduction of the number of species present.
- 17) **Insufficient survey efforts.** The aquatic assessment by Cardno was conducted during May 2009 and not repeated at any other month of the year. This survey effort is insufficient, given the gravity of impacts on the aquatic ecology of the region. No discussion is provided on the seasonal change of flora and fauna assemblage, given that May is close to the colder months of the year and this assemblage may change during the warmer months. Some comparisons are made with two earlier studies but no discussion is provided on how similar in methodology these other studies were and thus how comparable they are.
- In addition, the Protected Matters Report has only been conducted for Canada Bay LGA, not for Ryde City LGA on the other side of Parramatta River. Some species are likely to swim or migrate across the river into Kendall Bay, and this LGA should thus also have been included.

II. QUALIFICATIONS

This report was prepared by Dr. Ann Goeth (PhD), an ecologist with a range of experience, including:

- Two years as lecturer at Macquarie University, in subjects such as Conservation Biology and Biology of Australian Mammals (2004-2005).
- Working as Senior Threatened Species Officer for the Department of Environment, Climate Change and Water (DECCW, Biodiversity Conservation Branch) since 2005.
- Own consulting firm, providing Seven-Part-tests and environmental assessments for the company "Urban Tree Management".
- A broad training in ecology, including water ecology, at the University of Innsbruck, Austria (Masters), and Griffith University, Brisbane (PhD).

She has lived in Hunters Wharf, Breakfast Point, since 2005 and has thus gained extensive insights into the ecology of Kendall Bay on an every-day basis.

Response to Inner West Marina Project Application
Review of Impacts on Avian Fauna (Volume 10 of the application)

By Ann Goeth, November 2010

I. DETAILS

The purpose of this review is to assess the impacts on the avian fauna in Kendall Bay, and to compare these impacts with the following Director-General's Requirement:

To conduct an Environmental Assessment that includes

- a detailed assessment of the environmental impacts of the proposal, taking into consideration any issues raised during consultation;
- a detailed assessment of the key issues specified below and any other significant issues identified in the general overview of the environmental impacts of the proposal, which includes:
 - a description of the existing environment
 - an assessment of the potential impact of the project, including any cumulative impacts from construction activities and from all water related craft that would utilise the marina;
 - a description of the measures that would be implemented to avoid, minimise, mitigate, offset, manage, and/or monitor the impacts of the project.

This review is aimed at the key issues of Flora and Fauna, including an assessment of any impacts on critical habitats, threatened species, populations or ecological communities and their habitats in the region. It identifies numerous points of non-compliance with the DG's requirements above, as follows:

1) The desktop study by Aquenal did not result in the correct assemblage of bird species visiting the tidal mudflats in Kendall Bay.

Aquenal did consult the correct sources for identifying birds that are likely to use tidal mudflat habitat in Canada Bay LGA and Kendall Bay (see page 9, Vol. 10). This search resulted in 15 such bird species (p.10/11, Vol. 10). Aquenal then downplayed the importance of this result by stating that *"the more specific search of survey location (Birds Australia 2005-2007) showed that none had been recorded within 1km of the proposed development site and that the closest recorded location for most of them was Homebush Bay"*. This argument is questionable for the following reasons:

- a) It is unclear why proof of a record for Kendall Bay (as provided in the report) is not enough proof for a record at the proposed development site, given the relatively small size of Kendall Bay. How can birds that occur within Kendall Bay not occur within a 1 km circle around the proposed development site? This is especially questionable given that the proposed marina would be very close to the tidal mudflats at the southern end of the bay, where many birds are found.
- b) The small number of bird records in the Birds Australia database for the mudflats in Kendall Bay does not mean that the area is not deemed of high importance for birds (p. 15, Vol. 10). The lack of surveys could alternatively be explained by the fact that there are larger bays with larger mudflats nearby and that the few people conducting surveys focused on these areas. More importantly, the site was long used as an industrial site with limited access for the public, including birdwatchers. The applicant should have engaged an ecological consultant to make up for the lack of bird data for this area, rather than conducting a desktop study only!

- c) The application ignores the fact that even if Aquenal could not obtain specific bird lists from Breakfast Point or Kendall Bay, good survey results exists for nearby tidal mudflats in the estuary, especially for Hen and Chicken Bay and the Olympic Park. All species listed in **Appendix 1** visit these areas for feeding. Kendall Bay lies in-between these two areas and is thus an important corridor for these species.
- d) The author of this submission (A. Goeth) obtained additional bird records for the tidal mudflats at the southern end of Kendall Bay since 2005. Additional bird data was also obtained from Phil Straw, specialist on shorebirds and owner of Avifauna Research, a consulting firm. He regularly counts shorebirds in nearby Hen and Chicken Bay and Olympic Park and stated that several species seen in these nearby bays are also likely to visit Kendall Bay for feeding.

Appendix 1 gives a list of birds that visit the tidal mudflats in Kendal Bay for feeding, resulting from the discussion under points a-d) above.
Given the incomplete list of birds visiting Kendall Bay, the proposal does not meet the DG's requirement to assess the environmental impacts of the proposal.

2) Two bird species visiting the mudflats listed in Appendix 1) are protected by Commonwealth legislation (EPBC Act) and this is not mentioned in the report.

The report mentions that the Terek Sandpiper is listed as Vulnerable under the TSC Act but fails to mention that it is also listed as vulnerable under the EPBC Act.

The report lists the Painted Snipe *Rostratula benghalensis s. lat.* in a table, but fails to mention that it is listed as Vulnerable under the EPBC Act.

The only species shown as being listed is the Australian Painted Snipe (Vulnerable).

There is no discussion provided on the impact of the proposed development on these three species, rather than the incorrect statement "*The proposal will not have a significant impact on matters of national `environmental significance as listed in the EPBC Act or a significant environmental impact on Commonwealth land and, accordingly, a referral is not required to the Commonwealth Minister for the Environment.*" (p. 60, V.1)."

Given these points, the proposal does not meet the DG's requirement of an assessment of any impacts on threatened species and their habitats in the region.

3) Two bird species visiting the mudflats listed in Appendix 1) are protected by NSW legislation (TSC Act) but not mentioned in the report. Two others listed under the TSC Act are mentioned, but not discussed further.

The report contains a major mistake because two species listed in the reports' table (p. 10-11, Vol. 10) are not mentioned as being listed under the TSC Act (in Section 2.2.2. of Vol. 10): The Painted Snipe is listed as Endangered, the Black-tailed Godwit as Vulnerable under the TSC Act.

The report does mention two other avian species listed under the TSC Act, the Pied Oystercatcher and Terek Sandpiper, both listed as Vulnerable.

Strangely, these two species are not listed in Table 1 (Bird species potentially occurring in Kendall Bay), even though one of these (Terek Sandpiper) is even listed on the EPBC Act List.

The report contains no discussion whatsoever on the impacts on these listed species.

Given these points, the proposal does not meet the DG's requirement of an assessment of any impacts on threatened species and their habitats in the region.

4) The value of the mangrove area and adjacent mudflats as bird habitat is not valued in the application.

This is already evident from Figure1, in which Aquenal chose a site map for the proposed marina that does not even show these areas! Both areas are close to the proposed marina and would be under the influence of noise, pollution, disturbance ect. from the marina (see Point 6. below). Volume 3 of the application also states that impacts on mangrove through changes in water circulation and sedimentation patterns are likely (p. 3, Vol. 3). The mangroves

as bird habitat are not at all mentioned in the report, including the bird species likely to occur there (e.g Black Bittern, listed as vulnerable under the TSC Act) and the potential impacts of noise, pollution, disturbance etc on these birds. Similarly, there is little mention of the mudflats and the fact that during low tide, they do provide substantial feeding areas for shorebirds. Instead, the report concludes for each species listed that there *"is unlikely to be suitable foraging habitat at the proposed development site"*, even though the species descriptions demonstrate that the majority of species feed on mudflats (p. 12-14, Vol. 10).

Hence, the proposal does not meet the DG's requirement of an assessment of any impacts on threatened species and their habitats in the region, as there is no discussion on the impacts on their habitat, especially the tidal mudflats.

- 5) **Eighteen of the bird species listed in Appendix 1 are protected by international agreements for the protection of migrating birds. These agreements receive no mentioning at all in the application.**

Australia has signed these agreements and has an obligation to contribute to the protection of these birds and their habitat. The mudflats in Kendall Bay do provide important feeding habitat for these birds, especially during low tide and in autumn/spring, when these birds migrate through the area.

Hence, the proposal does not meet the DG's requirement to take into account relevant State government technical and policy guidelines.

- 6) **The proposal downplays, or even ignores, several impacts on birds visiting the tidal mudflats.**

Aquenal describes the following potential impacts on birds in Kendall Bay:

- a) Loss of habitat: Aquenal concludes that the structures associated with the marina will not cause any loss of habitat to birds using the proposed development area. This is incorrect, for the following reasons, all not mentioned in the proposal:
- A large area of the bay would be covered by structures and boats, and these areas can thus not be used by the many birds who hunt for fish in open water (e.g. white-bellied sea-eagles, pelicans, terns, cormorants, etc, see Appendix 1).
 - Mudflats need mud, and the geotextile blanket would stop the release of mud from the bay to the mudflat areas, thus considerably changing both the quantity and quality of the mud substrate the birds could feed in.
 - At the southern end, the marina would be very close to the tidal mudflats. The proponent has to demonstrate that the southernmost jetty would not destroy mudflat habitat at low tide.
- b) Change of habitat through wave action: Aquenal concludes that the existing Rivercat ferry waves affect the whole bay and that the proposed development will not significantly impact any avian habitats through changes in wave action. This is incorrect as the boat traffic to the area would increase considerably and there is no evidence to state that because there already is some wave impact from ferries, more wave impact would not matter. Also, the boats accessing the southernmost part of the proposed marina would get much closer to the tidal mudflats than the existing rivercats now do.
- c) Increase in vessel movements and noise: Aquenal concludes that there would be no significant increase in impacts on the local avian fauna because there already exists a smaller marina on the eastern side of Cabarita Park, and because the area is currently extensively used by pleasure craft and commuter ferries. These arguments can be rejected as follows:
- The existing marina (Westport Marina) is geographically well separated from Kendall Bay and sticks out into a broad area of water, avoiding tidal mudflats and mangroves (in contrast to the proposed marina). It has no impacts on the birds visiting Kendall Bay for feeding.

- The number of boats, and the frequency with which they would visit Kendall Bay, would be much higher than what is currently observed, and it can be anticipated that both the higher number and frequency would have a significant impact on birds.
 - The increase in noise, both at day and night, would be considerable and the report does not discuss the cumulative effect of many boats accessing the bay at the same time, especially during weekends and other “peak hours”. Many shorebirds are known to be very sensitive to boat engine noise. The increase of noise after dark, in particular, would be significant, and many shorebirds visit mudflats after dark. Surveys at the Olympic Park have shown that some birds are easily disturbed by low level activity after dark, even if they tolerate moderate amount of boat traffic during the day.
 - The report contains no discussion of construction noise on birds, which may be significant given the long period of construction and blanket laying proposed.
 - There would also be a considerable increase in light disturbance, e.g. more lights on the water and shore. The report omits to discuss this impact on birds.
- d) Increased risk of collisions: Aquenal concludes that this risk is low because the area has a substantial amount of existing development and there is a large amount of existing boat traffic in Kendall Bay. However:
- The existing development is on shore, and many of the boats, especially larger boats with tall masts, will be new structures on water, often far from existing buildings as backdrop. Birds flying over water for hunting could collide with these masts, especially if there are so many of them.
 - The amount of existing traffic is far less than what is proposed for the new development.
- e) Reduction in the quality of foraging habitat: Aquenal covers this important topic in just one paragraph stating that Kendall Bay does not appear to have any significant habitat for birds. This is incorrect, as outlined above, and the proponent thus needs to provide a better assessment of the reduction of habitat quality. Such an assessment also needs to consider the change in mud quantity reaching the mudflats, the changes in invertebrate assemblage (e.g. food for birds), the pollution of the bay through engine exhausts and other pollutants coming from boats, and the stirring up of toxic sediments and how these can find their way into the foodchain and thus birds in the long term.
- f) Increased risk of sewerage and/or fuel contamination: Aquenal states that the mitigation measures proposed (management prescriptions and action plan) will minimise any potential impacts to avian species from such an event. There is no mentioning of the much higher chance of such contamination to occur given the high number of boats frequenting the proposed marina. The report also omits to discuss the increased chance of rubbish dumping, as it is known that seabirds die when getting caught in rubbish and fishing line.

In summary, the proposal does not meet the DG's requirement of an assessment of any impacts on threatened species and their habitats in the region.

7) The proposal ignores several other bird species that visit the open waters of Kendall Bay for feeding.

The proposal also does not consider other species of native birds which visit Kendall Bay for feeding, that is birds which are not listed under TSC Act, EPBC Act or International Agreements. The populations of some of these birds may have to be considered of local significance, due to the rarity of these species in the wider area. A proper fauna survey and species impact assessment could establish whether this is the case. Table 3 shows a number of such species which Ann Goeth, resident biologist, observed between 2005 and 2010.

Table 1
List of other bird species visiting Kendall Bay for feeding

Species	Latin name
Grey Teal	<i>Anas gracilis</i>
Chestnut Teal	<i>Anas castanea</i>
Pacific Black Duck	<i>Anas superciliosa</i>
Darter	<i>Anhinga melanogaster</i>
Pied Cormorant	<i>Phalacrocorax varius</i>
Little Pied Cormorant	<i>Phalacrocorax melanoleuco</i>
Great Cormorant	<i>Phalacrocorax carbo</i>
Little Black cormorant	<i>Phalacrocorax sulcirostris</i>
Australian Pelican	<i>Pelecanus conspicillatus</i>
White-faced Heron	<i>Ardea novaehollandiae</i>
Striated Heron	<i>Butorides striatus</i>
Royal Spoonbill	<i>Platalea regia</i>
White Ibis	<i>Threskiornis molucca</i>
Black-fronted Dotterel	<i>Euseiornis melanops</i>
Silver Gull	<i>Larus novaehollandiae</i>
Crested Tern	<i>Sterna bergii</i>

- 8) **The survey effort for birds is insufficient, a desktop study is not enough.**
 Points 1-5 above show that the desktop study did not identify the correct assemblage of birds visiting Kendall Bay. A field survey by an independent consultant should be conducted to confirm the presence of these bird species at different times of the year, and especially during low tide. Why did the applicant choose to obtain quantitative field data for aquatic organisms, such as infauna, epibenthic fauna and mobile fish (p.16, Vol. 1) but not for birds, which would equally be affected by the proposed marina?
- 9) **The cumulative impact of habitat destruction in several bays along the Parramatta river on migrating shorebirds has not been considered** (eg under point 11.17, Vol 1). It is not acceptable to state that if the mudflats in Kendall Bay are rendered unsuitable as feeding

grounds for birds, these birds can go elsewhere along the river. First, there are very few undisturbed bays of this sort left along the river, and second, these other areas will already be occupied by other individuals of these species. Hence inter-specific competition will often make it impossible for further individuals to feed in these other areas.

- 10) Choice of consultant questionable.** It has to be asked why the applicant chose to use Aquenal Pty Ltd as a consultant, given that this consultant is based in Tasmania, never seems to have visited the area and has no local knowledge of the area. While any qualified consultant can carry out a desktop study, local knowledge, or at least a field visit, is important to determine the radius within which a search of data on avifauna should be conducted, and to assess the importance of Kendall Bay as habitat and corridor in relation to surrounding areas containing mudflats or mangroves in the estuary.

III. QUALIFICATIONS

This report was prepared by Dr. Ann Goeth (PhD), an ecologist with a range of experience, including:

- Two years as lecturer at Macquarie University, in subjects such as Conservation Biology and Biology of Australian Mammals (2004-2005).
- Working as Senior Threatened Species Officer for the Department of Environment, Climate Change and Water (DECCW, Biodiversity Conservation Branch) since 2005.
- Own consulting firm, providing Seven-Part-tests and environmental assessments for the company "Urban Tree Management".
- A broad training in ecology at the University of Innsbruck, Austria (Masters), and Griffith University, Brisbane (PhD).

She has lived in Hunters Wharf, Breakfast Point, since 2005 and has thus gained extensive insights into the ecology and birdlife of Kendall Bay on an every-day basis.

Appendix 1. Bird species that are known to visit the tidal mudflats in Kendall Bay for feeding or roosting, detailing the type of proof of evidence as well as their listing under either the *NSW Threatened Species Conservation Act 1995*, the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) or one of the following four international agreements:

- 1) CAMBA: China-Australia Migratory Bird Agreement
- 2) JAMBA: Japan-Australia Migratory Bird Agreement text (JAMBA)
- 3) ROKAMBA: Republic of Korea - Australia Migratory Bird Agreement
- 4) BONN: Convention on the Conservation of Migratory Species of Wild Animals

Details for these international agreements can be found on the following webpage: <http://www.cms.int/>, details for listings under <http://www.environment.gov.au/cgi-bin/sprat/public/publicshowmigratory.pl>

Common name	Scientific name	Proof of record provided by the applicant (Aquenal) for : a = Kendall Bay b=Kendall Bay & Bird Atlas1998-2007	Other proof of record: Personal observation A. Goeth at tidal mudflats in Kendall Bay	Likely occurrence based on records from nearby Hen and Chicken bay and Olympic Park, provided by P. Straw	TSC Act listing	EPBC Act List	Listed under International Agreements
Great Egret	<i>Ardea alba</i>	a	Yes		No	Migratory, Marine	JAMBA CAMBA
Cattle Egret	<i>Ardea ibis</i>	b	Yes		No	Migratory, Marine	JAMBA CAMBA
White-bellied Sea Eagle ¹	<i>Haliaeetus leucogaster</i>	b	Yes		No	Migratory, Marine	CAMBA
Painted Snipe	<i>Rostratula benghalensis s. lat.</i>	a			Endangered	Vulnerable Migratory, Marine	CAMBA
Australian Painted Snipe	<i>Rostratula australis</i>	b			No	Vulnerable Migratory, Marine	No
Black-winged Stilt	<i>Himantopus himantopus</i>	b	Yes		No	Marine	No
Red-necked Avocet	<i>Recurvirostra novaehollandiae</i>	b			No	Marine	No
Pacific Golden Plover	<i>Pluvialis fulva</i>	b			no	Migratory, Marine	BONN JAMBA CAMBA ROKAMBA
Red-capped	<i>Charadrius</i>	b			No	Marine	BONN

Plover	<i>ruficapillus</i>						JAMBA CAMBA ROKAMBA
Common name	Scientific name	Proof of record provided by the applicant (Aqueal) for : a = Kendall Bay only b=Kendall Bay and Bird Atlas1998-2007	Other proof of record: Personal observation A. Goeth at tidal mudflats in Kendall Bay	Likely occurrence based on records from nearby Hen and Chicken bay and Olympic Park, provided by P. Straw and A. Silcocks	TSC Act listing	EPBC Act List	Listed under International Agreements
Latham's Snipe	<i>Gallinago hardwickii</i>	b			No	Migratory, Marine	CAMBA, JAMBA, ROKAMBA, BONN
Black-tailed Godwit	<i>Limosa limosa</i>	a			Vulnerable	Migratory, Marine	CAMBA, JAMBA, ROKAMBA, BONN
Common Greenshank	<i>Tringa nebularia</i>	b	Yes		No	Migratory, Marine	CAMBA, JAMBA, ROKAMBA, BONN
Asian Dowitcher	<i>Limnodromus semiplamatus</i>	a			No	Marine	No
Pectoral Sandpiper	<i>Limicola falcinellus</i>	b			no	Marine	CAMBA, JAMBA, ROKAMBA, BONN
Terek Sandpipler	<i>Xenus cinereus</i>	b			Vulnerable	Vulnerable, Migratory, Marine	CAMBA, JAMBA, ROKAMBA, BONN
Pied Oystercatcher	<i>Haematopus longirostris</i>	b			Vulnerable	Migratory, Marine	No
Ruff	<i>Philomachus pugnax</i>	a			no	Marine	CAMBA, JAMBA, ROKAMBA, BONN
Bar-tailed Godwit ²	<i>Limosa lapponica</i>		Yes	Yes	no	Migratory, Marine	CAMBA, JAMBA, ROKAMBA,

BONN							
Common name	Scientific name	Proof of record provided by the applicant (Aquenal) for : a = Kendall Bay only b=Kendall Bay and Bird Atlas1998-2007	Other proof of record: Personal observation A. Goeth at tidal mudflats in Kendall Bay	Likely occurrence based on records from nearby Hen and Chicken bay and Olympic Park, provided by P. Straw and A. Silcocks	TSC Act listing	EPBC Act List	Listed under International Agreements
Red Knot	<i>Calidris canutus</i>			Yes	no	Migratory, Marine	CAMBA, JAMBA, ROKAMBA, BONN
Curlew Sandpiper	<i>Calidris ferruginea</i>		Yes	Yes	no	Migratory, Marine	CAMBA, JAMBA, ROKAMBA, BONN
Sharp-tailed Sandpiper	<i>Calidris acuminata</i>		Yes	Yes	no	Migratory, Marine	CAMBA, JAMBA, ROKAMBA, BONN
Common Tern ³	<i>Sterna hirundo</i>		Yes	Yes	no	Migratory, Marine	JAMBA, ROKAMBA, BONN
White-winged Black Tern ³	<i>Chlidonias leucopterus</i>		Yes	Yes	no	Migratory, Marine	CAMBA, JAMBA, ROKAMBA,
Black Bittern ⁴	<i>Ixobrychus flavicollis</i>			Yes	Vulnerable	Not listed	No

¹ White-bellied Sea eagles breed in the Homebush Olympic Park and are frequently observed flying over Kendall Bay. A. Goeth has observed these hunting for fish in Kendall Bay and surroundings

² Recent counts, conducted for Canada Bay Council, revealed that up to 350 Bar-tailed Godwits visit Kendall bay and surrounding bays during summer, which makes it the largest known population in Sydney.

³ Both species of tern do not visit the mudflats, but hunt for fish in Kendall Bay

⁴ Black Bitterns are likely to visit the mangroves at the southern end of Kendall Bay (P. Straw, personal communication).
See Attachment 60 for photos of visiting bird species.

ATTACHMENTS

Attachment 1

CT for Lot 55. Note item 18 being an easement for support and attachment.

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 55/270347

SEARCH DATE -----	TIME ----	EDITION NO -----	DATE ----
21/2/2009	6:25 PM	3	21/10/2008

LAND

LOT 55 IN COMMUNITY PLAN DP270347
AT BREAKFAST POINT
LOCAL GOVERNMENT AREA CANADA BAY
PARISH OF CONCORD COUNTY OF CUMBERLAND
TITLE DIAGRAM DP270347

FIRST SCHEDULE

BREAKFAST POINT PTY LIMITED

SECOND SCHEDULE (18 NOTIFICATIONS)

- 1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
- 2 INTERESTS RECORDED ON REGISTER FOLIO 1/270347
- 3 ATTENTION IS DIRECTED TO THE MANAGEMENT STATEMENT OF THE COMMUNITY SCHEME FILED WITH THE COMMUNITY PLAN
- 4 THE LAND ABOVE DESCRIBED IS LIMITED IN STRATUM IN THE MANNER DESCRIBED IN THE TITLE DIAGRAM
- 5 9229851 MORTGAGE TO CAPITAL FINANCE AUSTRALIA LIMITED
- 6 LAND EXCLUDES MINERALS - SEE CROWN GRANT(S)
- 7 DP1025319 EASEMENT FOR OVERLAND FLOW PATH APPURTENANT TO THE LAND ABOVE DESCRIBED
- 8 DP1025319 EASEMENT FOR SERVICES (D) APPURTENANT TO THE LAND ABOVE DESCRIBED
- 9 DP1025319 RIGHT OF WAY VARIABLE WIDTH (B) APPURTENANT TO THE LAND ABOVE DESCRIBED
- 10 DP1028070 EASEMENT FOR OVERLAND FLOW PATH APPURTENANT TO THE LAND ABOVE DESCRIBED
- 11 DP1047145 RESTRICTION(S) ON THE USE OF LAND (C) REFERRED TO AND NUMBERED (3) IN THE S.88B INSTRUMENT
- 12 DP1047145 RESTRICTION(S) ON THE USE OF LAND (D) REFERRED TO AND NUMBERED (4) IN THE S.88B INSTRUMENT
- 13 DP1047145 POSITIVE COVENANT REFERRED TO AND NUMBERED (6) IN THE S.88B INSTRUMENT
- 14 DP1047145 POSITIVE COVENANT REFERRED TO AND NUMBERED (8) IN THE S.88B INSTRUMENT
- 15 DP1052824 EASEMENT FOR SERVICES APPURTENANT TO THE LAND ABOVE DESCRIBED
- 16 DP270347 EASEMENT FOR ENCROACHMENT APPURTENANT TO THE LAND ABOVE DESCRIBED (DOC.1)

Cont'd

17 DP270347 EASEMENT FOR SERVICES APPURTENANT TO THE LAND ABOVE

END OF PAGE 1 - CONTINUED OVER

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* ANY ENTRIES PRECEDED BY AN ASTERISK DO NOT APPEAR ON THE CURRENT EDITION OF THE
CERTIFICATE OF TITLE.

WARNING: THE INFORMATION APPEARING UNDER NOTATIONS HAS NOT BEEN FORMALLY RECORDED IN
THE REGISTER.

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 55/270347

PAGE 2

SECOND SCHEDULE (18 NOTIFICATIONS) (CONTINUED)

DESCRIBED (DOC.1)

18 DP270347 EASEMENT FOR SUPPORT & ATTACHMENT APPURTENANT TO THE
LAND ABOVE DESCRIBED (DOC.1)

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

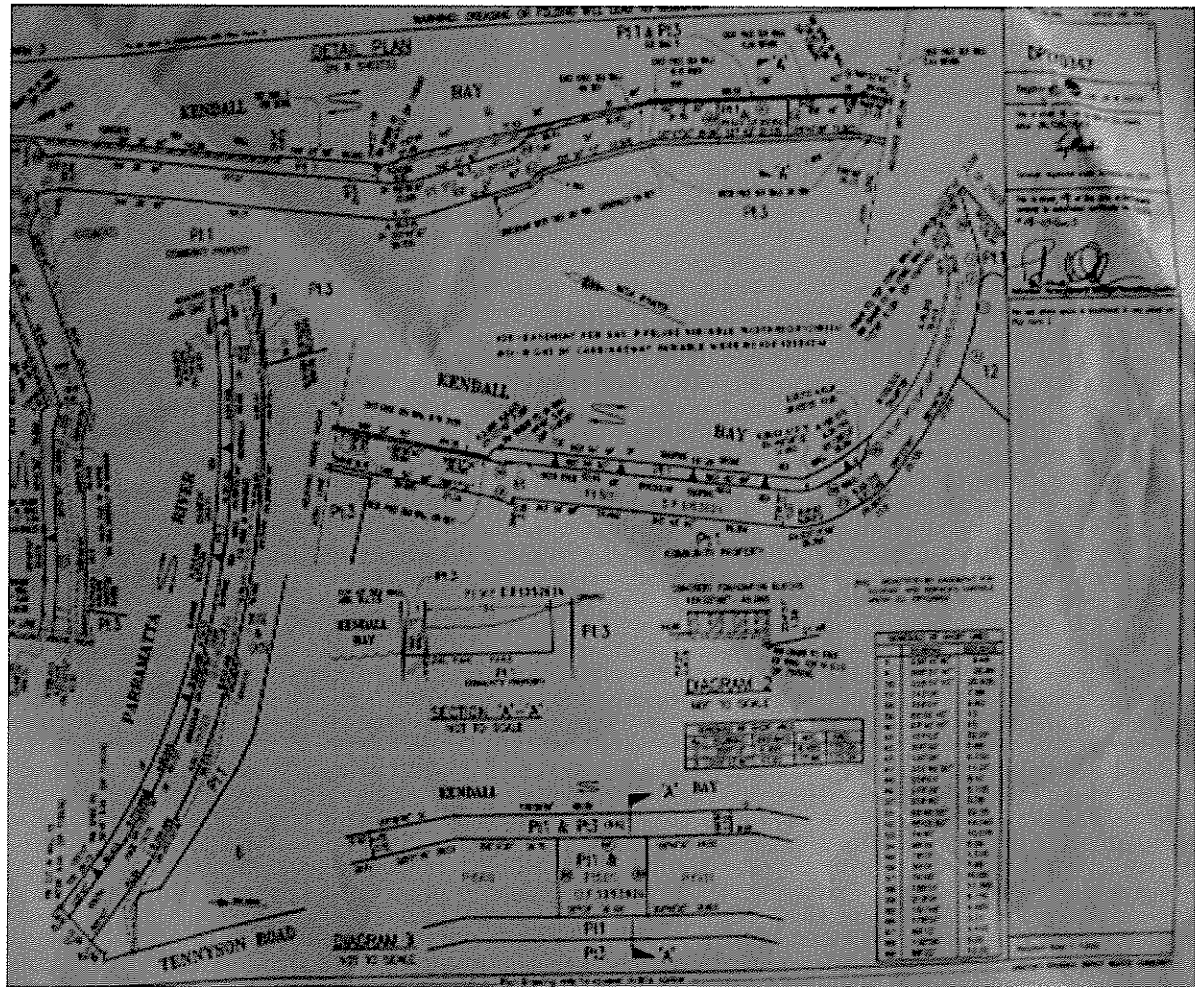
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ATTACHMENT 2



Sheet 9, DP 270347 showing the precursor of Lot 55 as Part Lot 1 and Part Lot 3

PLAN FORM 3
 1. This form is required only for plats.

COMMUNITY PROPERTY PLAT
COMMUNITY PROPERTY LOT 101
ON 10 SHEETS
CONTAINS FROM SHEETS 101 & 102

NOTE - EXAMINE THE PLAN FOR THE PURPOSES OF THE FOLLOWING:
 1. TO BE SURE OF THE LOCATION OF THE PROPERTY.
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DIAGRAM 1
 101.1

DIAGRAM 2
 101.2

DIAGRAM 3
 101.3

DIAGRAM 4
 101.4

DIAGRAM 5
 101.5

DIAGRAM 6
 101.6

DIAGRAM 7
 101.7

DIAGRAM 8
 101.8

DIAGRAM 9
 101.9

DIAGRAM 10
 101.10

SECTION 'A-A'
 101.11

TENNYSON ROAD

EMERY STREET

101.12

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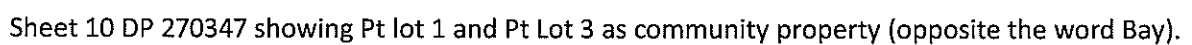
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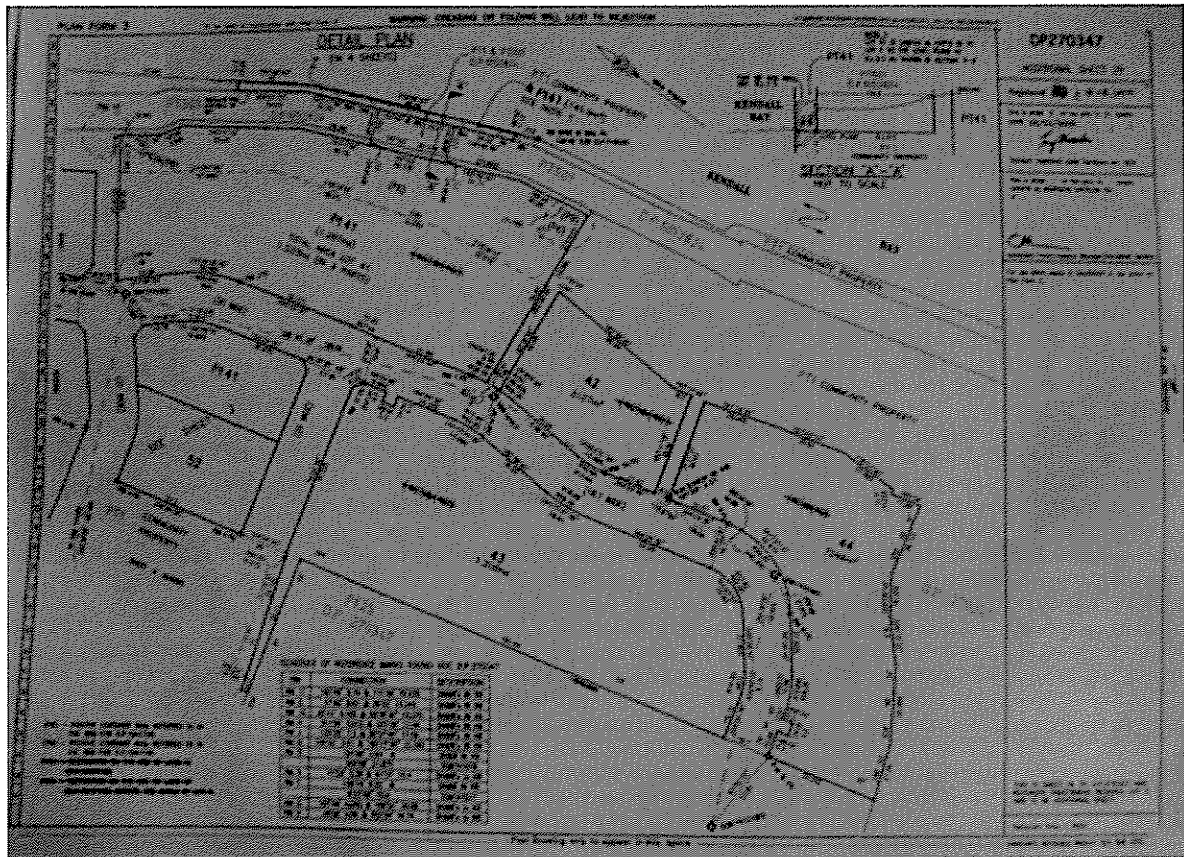
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Sheet 12 DP 20347 showing Pt lot 1 and Pt lot 3 in diagram 5 and see sectional view in "A"- "A" diagram which also shows "MC9" notation which is a reference to an easement for "support & attachment."

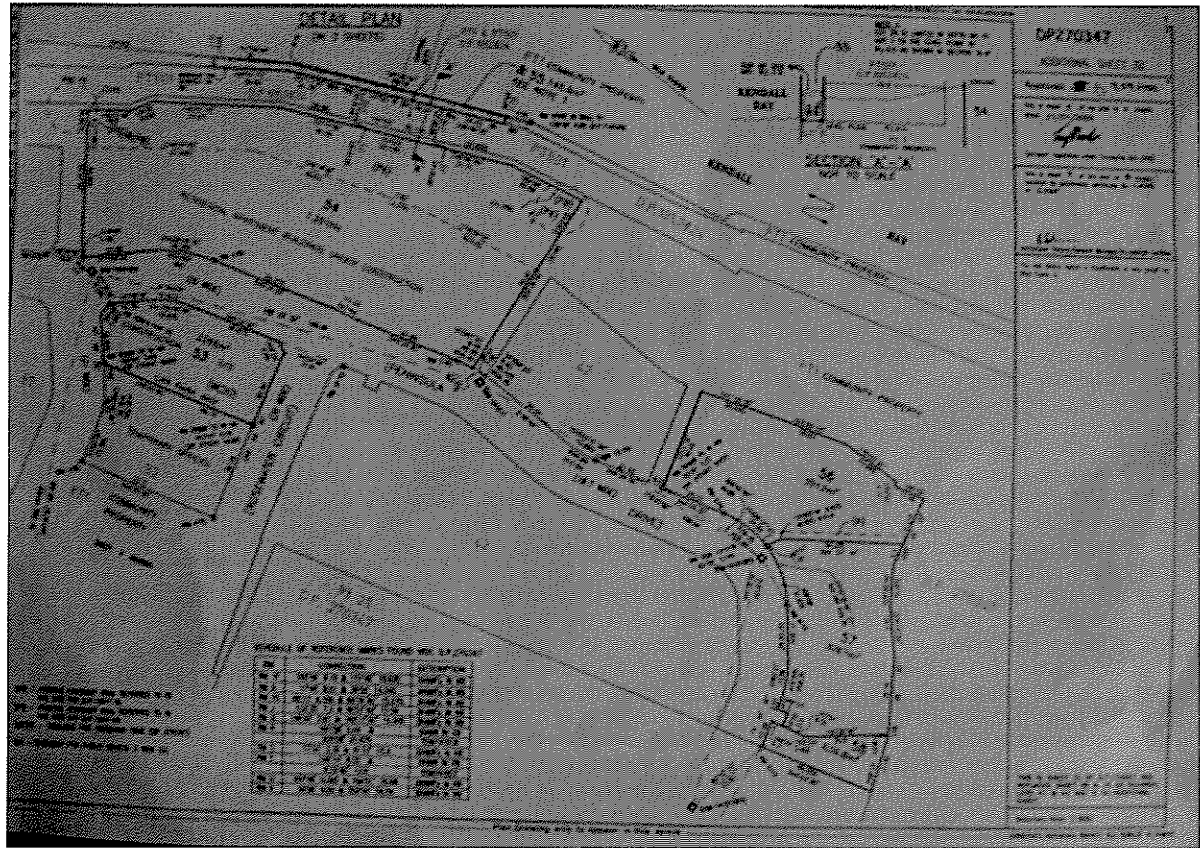
[illegible]

ATTACHMENT 5



Sheet 3 DP 270347 showing lot PT 41 and "A"-A diagram where Pt lot 1 and Pt lot 3 were previously shown (top of picture).

ATTACHMENT 6



Sheet 2 DP 270347 showing lot 55 where previously Pt lot 1 and Pt lot 3 and later Pt lot 41 appeared. See note on "A"- "A" diagram.

ATTACHMENT 7

(c) cause as little inconvenience as is practicable to the owner and any occupier of the lot burdened; and

(d) restore the lot burdened as nearly as is practicable to its former condition; and

(e) make good any collateral damage.

14.3 The owner of the lot burdened must not do or allow anything to be done to damage or interfere with the Letterbox.

15. **Terms of Easement for Public Access to be created numbered 15 in the plan** ✓

15.1 The City of Canada Bay Council (Council) and Authorised Users have the right:

(a) to pass and repass over the site of this easement:

(i) on foot (and not using rollerblades, skateboards, scooters or similar items of equipment); and

(ii) with wheelchairs or other disabled access aids; and

(iii) without animals (except for guide dogs or hearing dogs for the visually or hearing impaired); and

(b) to remain for the purposes of recreation on those parts of the site of this easement that are intended to be and are capable of being used for the purposes of recreation.

15.2 The Council and Authorised Users must not:

Breakfast Point Mower Community Scheme
88B Instrument

© Holding Endlich 2015

Section 88B instrument. See item 15 being conditions on users of Pt lot 1. Note restriction on use "on foot" and for compliance with Rules imposed by the community association and for the use to be restricted to "recreational purposes" and not for transit or for commercial purposes.

ATTACHMENT 7.1

DP270347

Subdivision of Lot 50 in
DP 1040487, Lot 6 in DP 1047145,
Lot 31 in DP 1048035, Lot 21 in
DP 1028070 and Lots 500 and 502
in DP 1052824
Covered by Subdivision Certificate
No. 145606 18.7.2003

(a) park or stand a motor vehicle or trailer on the lot burdened, except where expressly permitted, or

(b) obstruct the use of the lot burdened.

15.3 The Council and Authorised Users must cause as little inconvenience as practicable to the owner and any occupier of the lot burdened when they exercise their rights under this easement.

15.4 The owner of the lot burdened may make rules about the use of the site of this easement in accordance with the community management statement registered with the plan (Rules).

15.5 The Council and Authorised Users must comply with any Rules.

15.6 For the purposes of this Easement Authorised Users means the Council's invitees and other persons authorised by it and members of the public.

16 Terms of Easement for Street Lighting to be created numbered 16 in the plan.

16.1 In the terms of this Easement for Street Lighting, unless the context otherwise requires:

"the Act" means the Electricity Supply Act 1995 and any amendment to or Act replacing the Electricity Supply Act 1995 and includes any regulations or orders made

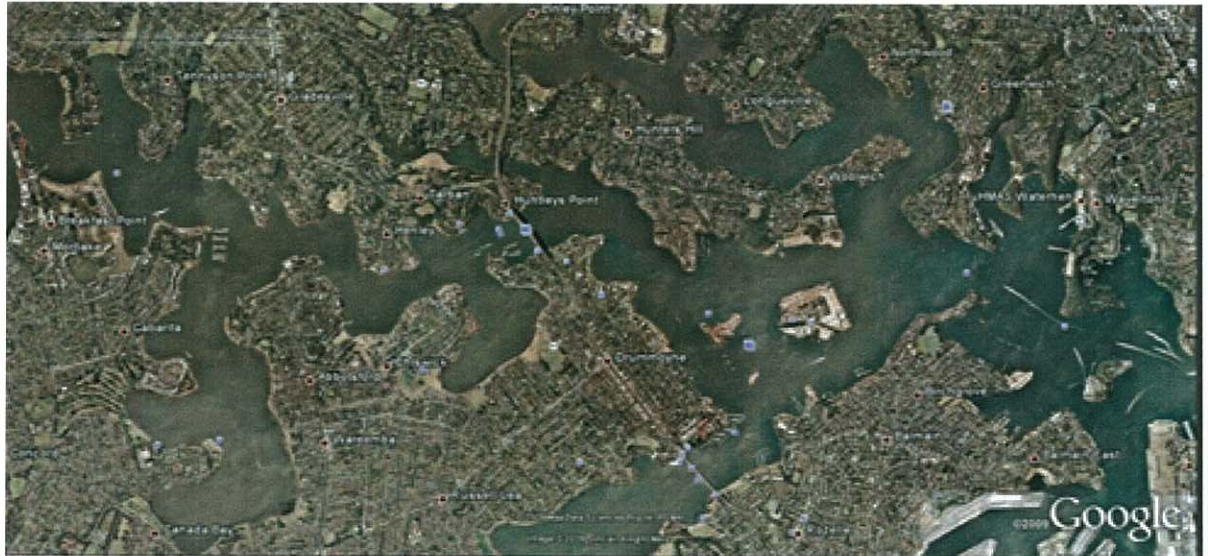
Continuation of Attachment 7.0.

ATTACHMENT 8



Kendall Bay looking East. Other than the marker buoy it is a normally calm and peaceful bay with a public walkway around its edges. It is also viewed from Cabarita Park (Right middle of picture).

ATTACHMENT 9.1



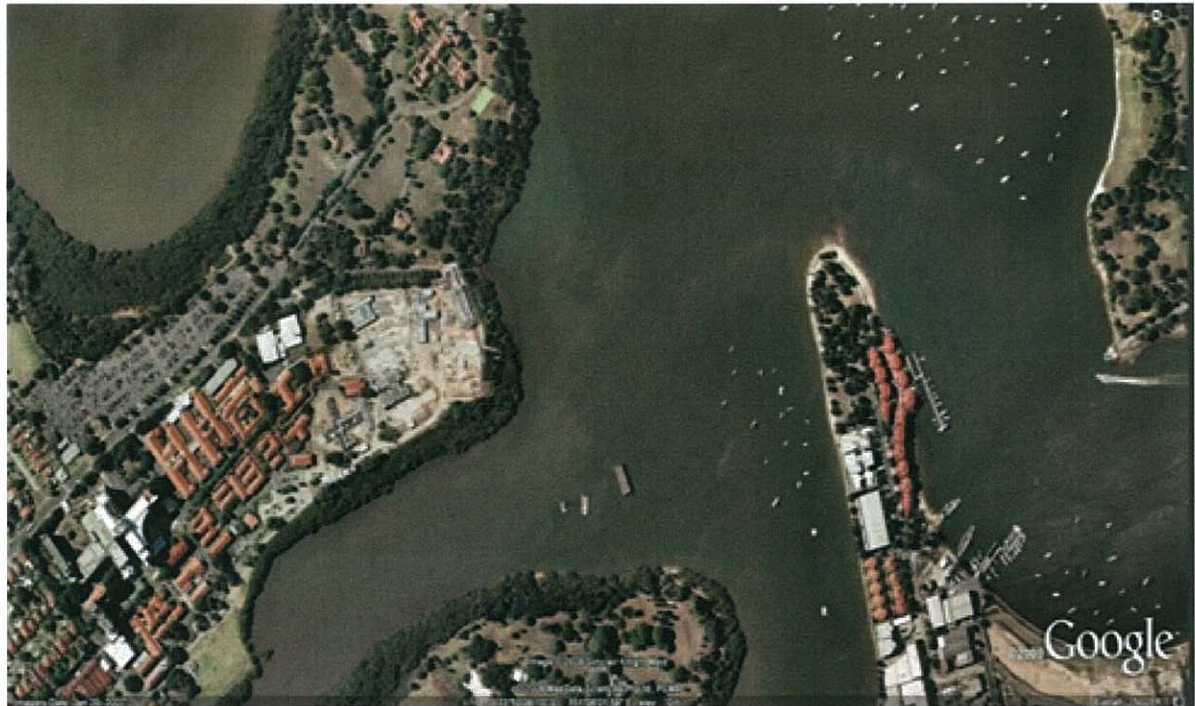
Google Earth showing Parramatta River and bays with marinas from Ryde Bridge to Harbour Bridge.

ATTACHMENT 9.2



From Ryde Bridge to Brays Bay.

ATTACHMENT 9.3



Brays Bay top left corner; Yaralla Bay bottom left; Majors Bay bottom right; Mortlake Point in centre with houses with red roofs and marina; River Quays marina bottom right.

ATTACHMENT 9.4



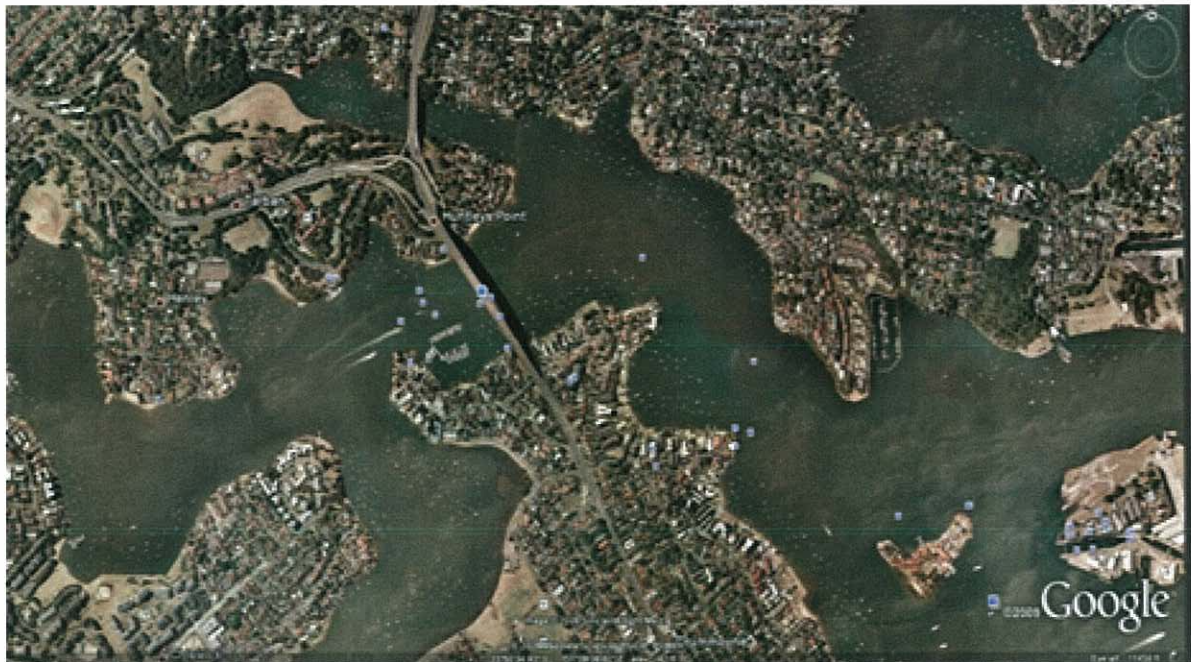
Kissing Point (top left) to Henley (bottom right); Breakfast Point (cleared land bottom left), with River Quays marina to the west of the Point; Kendall Bay next to it; d'Albora Marinas (Sanders) bottom centre; Putney opposite Majors Bay; Morrison Bay, Tennyson Point, Glades Bay, Raven Point, Looking Glass Point opposite marina etc. NB all the marinas surrounding Kendall Bay.

ATTACHMENT 9.5



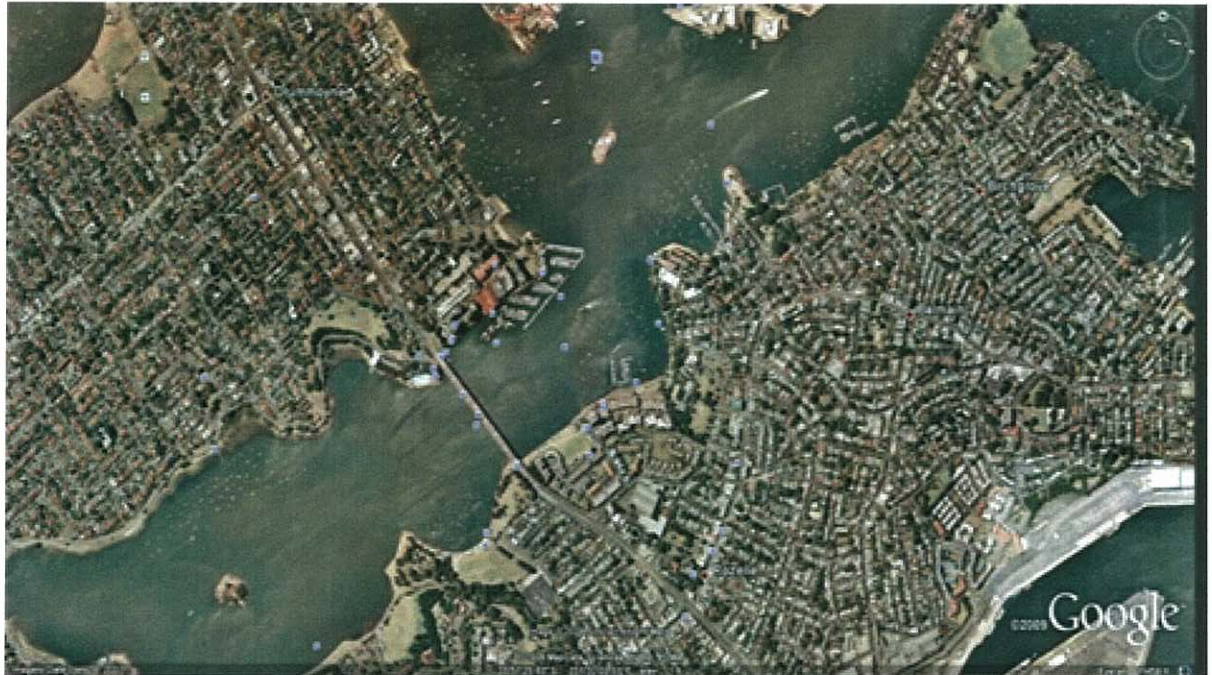
From south of d'Albora Marinas to Hen and Chicken Bay.

ATTACHMENT 9.6



From Henley to Spectacle Island and Cockatoo Island (on the right).

ATTACHMENT 9.7



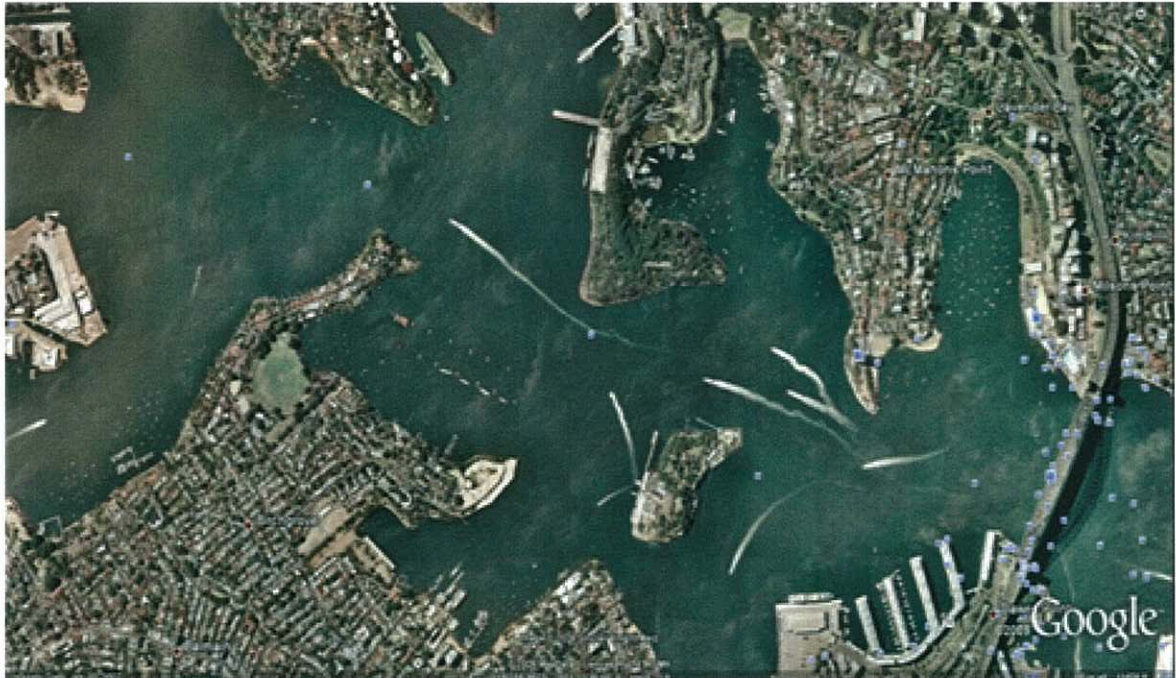
Iron Cove and Iron Cove Bridge.

ATTACHMENT 9.8



Cockatoo Island to Darling Harbour.

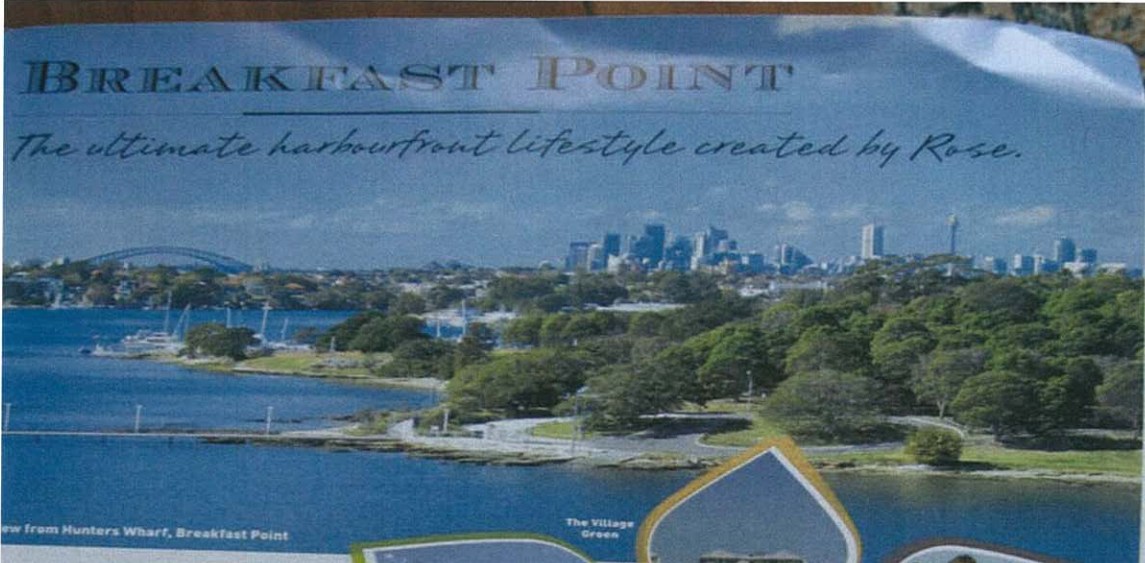
ATTACHMENT 9.9



Cockatoo Island to Harbour Bridge.

BREAKFAST POINT

The ultimate harbourfront lifestyle created by Rose.



View from Hunters Wharf, Breakfast Point

Twenty years, Rose has been creating natural environments and communities. The intimate feel of a traditional village with the benefits of modern city living. Breakfast Point is a community set amongst manicured lawns and gardens on the edge of Sydney Harbour. Industry awards for Breakfast Point are a testament to the company's expertise in the highly specialised field of integrated communities and urban development.

In the upper reaches of Sydney Harbour in a setting your breath away, Breakfast Point combines elegantly designed environments together with a diverse range of community amenities. Stylish apartments, freestanding mansions, architecturally designed outdoor living, space and outdoor living, are just a twenty minute scenic cruise from Sydney's CBD.

Breakfast Point is proof of Rose's commitment to 'creating a sense of living'. You can be guaranteed that this harbourfront community will provide you with a wonderful sense of community and your home will be the best part of your day.







The judges said...

2005 UDIA National President's Award for Excellence in Urban Development
 Breakfast Point is a community of style and elegance. It is a place where you can enjoy the best of both worlds. It is a place where you can enjoy the best of both worlds. It is a place where you can enjoy the best of both worlds.

2004 UDIA Award for Best Lifestyle Development
 This is a master-planned project which will settle in one place and develop into a high quality residential estate providing a range of housing options. It will be a place where you can enjoy the best of both worlds. It is a place where you can enjoy the best of both worlds.

2004 NSW Urban Taskforce Development Excellence Award for a Masterplanned Community
 Breakfast Point is masterplanned as a self-contained multi-use neighbourhood. It is a place where you can enjoy the best of both worlds. It is a place where you can enjoy the best of both worlds.

00 888 325 to find out more or visit the Sales and Information Centre

From developer's brochure: "The ultimate harbourfront (sic) lifestyle created by Rose." Note absence of any reference to or any representation of a marina.

ATTACHMENT 11



From the developer's brochure. Note absence of any reference to or any representation of a marina.

Case Caliente, presented the new way of community living and premium lifestyle-oriented lifestyle on the site.

Land Title

Opened 3000 and 7000000 Title within a Master Community Agreement. All roads and major open spaces are open access to general public 24/7.

Development Statistics

Site area:	51.42 ha (14 ha open space)
Density:	40 dwellings/ha
FZS:	0.7:1
Dwellings numbers:	2,065
Estimated population:	5,000
Construction duration:	13 years

Timeline and Staging

1995-1997	Rezoning, demolition
1998	Tender acquisition
1999	Master Plan
1999-2000	Remediation
2000-2001	Lots 1 & 2 released, 200 dwellings
2002	Revised Master Plan
2003	500 dwellings
2004	Infrastructure (roads & parks)
2005	Village Centre
2006	Community Hall
2006	Country Club
2006	Ph 3A Concept Plan
2007	1,000 dwellings
2013	2,065 dwellings

Housing Variety and Choice

Single dwelling, Terrace 1st, Attached duplex dwellings, Terrace 1st, Terrace/lowhouse dwellings, Terrace 1st, Garden apartments, 3rd, Single level apartments 1, 2, 3+ bed, 3rd, Double level penthouses 3 and 4 bed, 5th, Adaptable apartments 3rd, 4th, Shop top apartments, 3rd, Fine work-live terraces, Terrace, Vacant land, Terrace.

Community Facilities

- Multi-million sports/leisure facility of the Coast
- Full-sized sports oval of the Village Green
- Community Hall
- Formal gardens of Seaside Park
- Waterfront Park
- Extensive informal gardens
- 1.4km harbour front walking/cycling trails

Commercial and Retail

Village Centre to include:

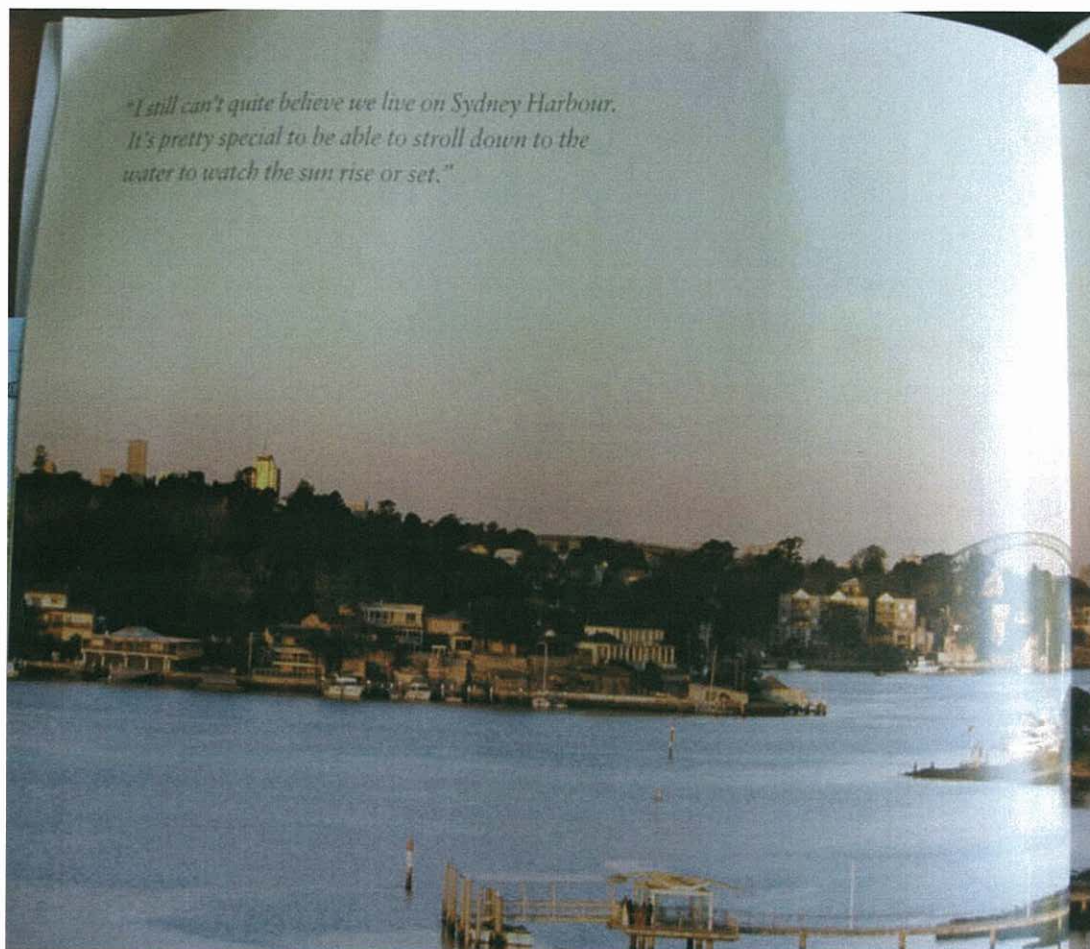
- Supermarket 1,400sqm
- Nine specialty shops including cafe, pizzeria, butchery, hairdresser, clothing store, dental, optometrist, chi, boutique and child care centre (all places)

Sustainability

- Passive measures
- Extensive underground rainwater tanks for communal landscaped areas
- Water conservation

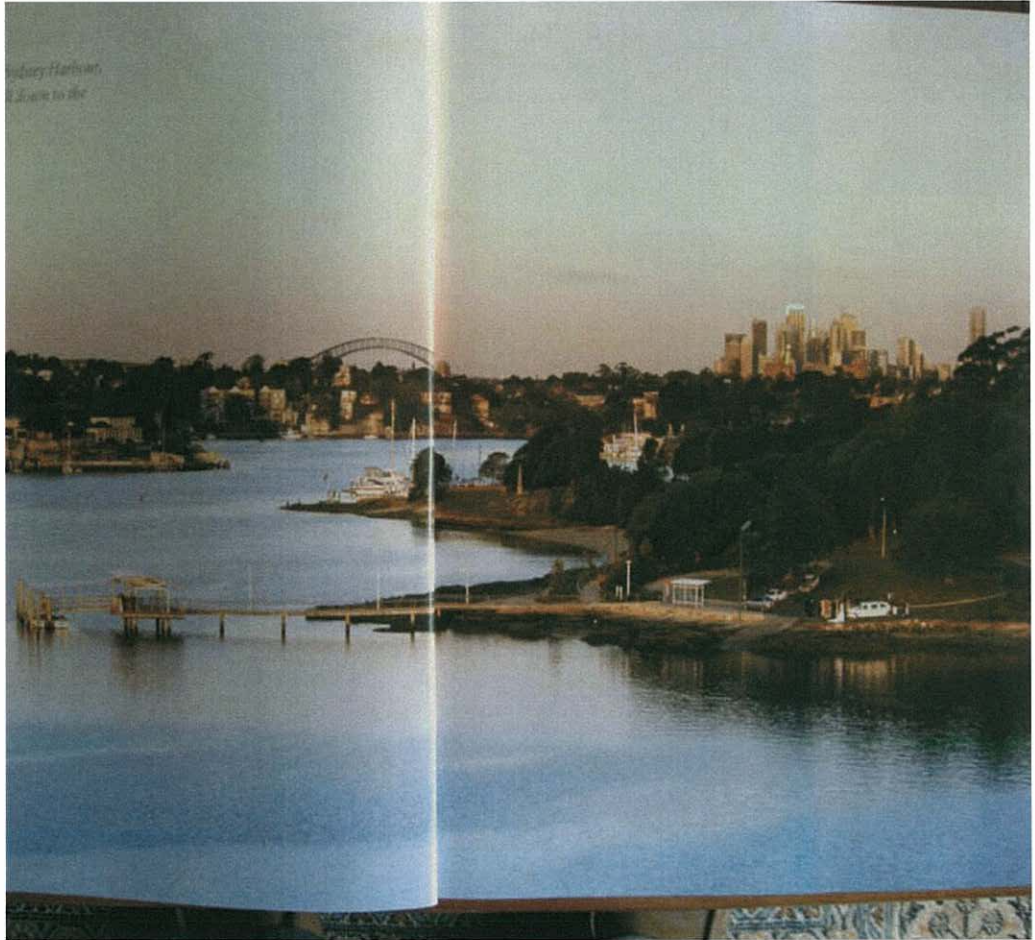
From the developer's brochure. Note under the heading the "Timeline (sic) and staging" there is no reference to a marina. Under the heading "Land Title" it says "...All roads and major open spaces are open access to general public 24/7." There are no "roads" within the estate and there are restrictions on public access to the open access ways and open spaces but these are not mentioned.

ATTACHMENT 13



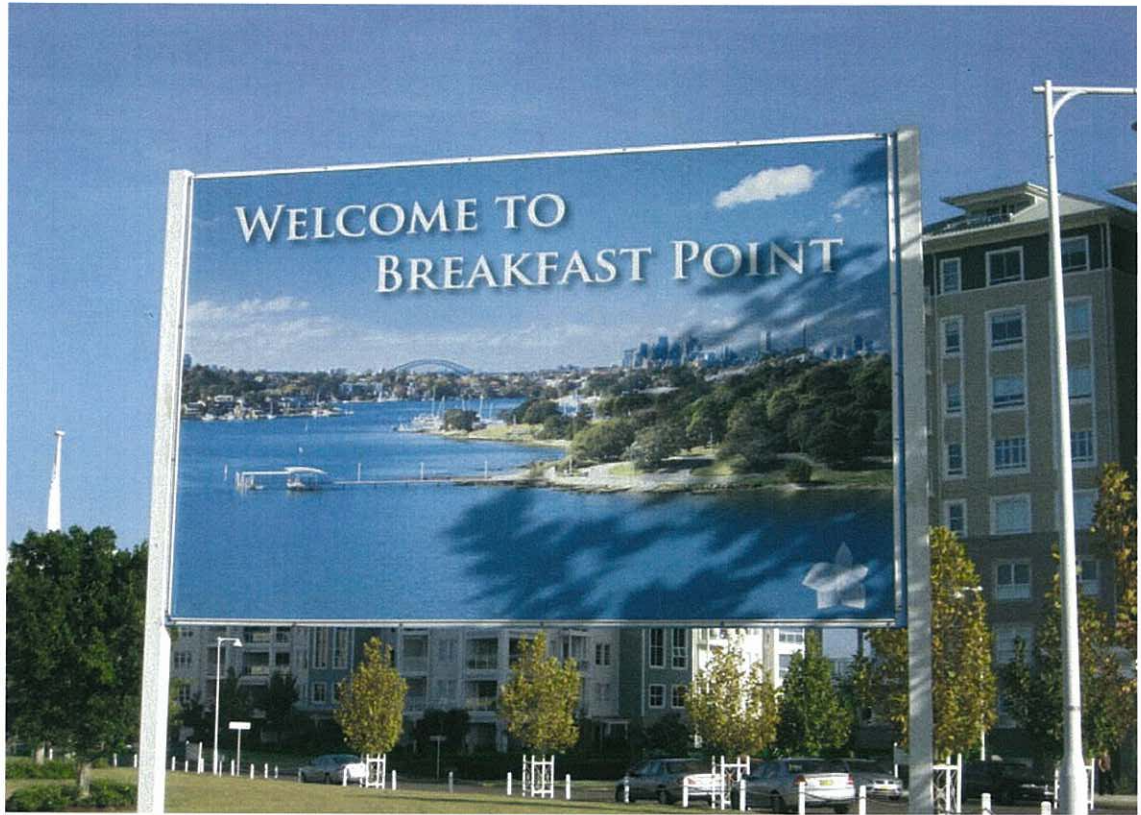
From developer's brochure: Hunters Wharf. **Note caption.** Cabarita Wharf in foreground; SGS Boat Shed on left. No mention of a marina.

ATTACHMENT 13.1



Adjoining page to Attachment 13.0. No mention of a marina.

ATTACHMENT 14

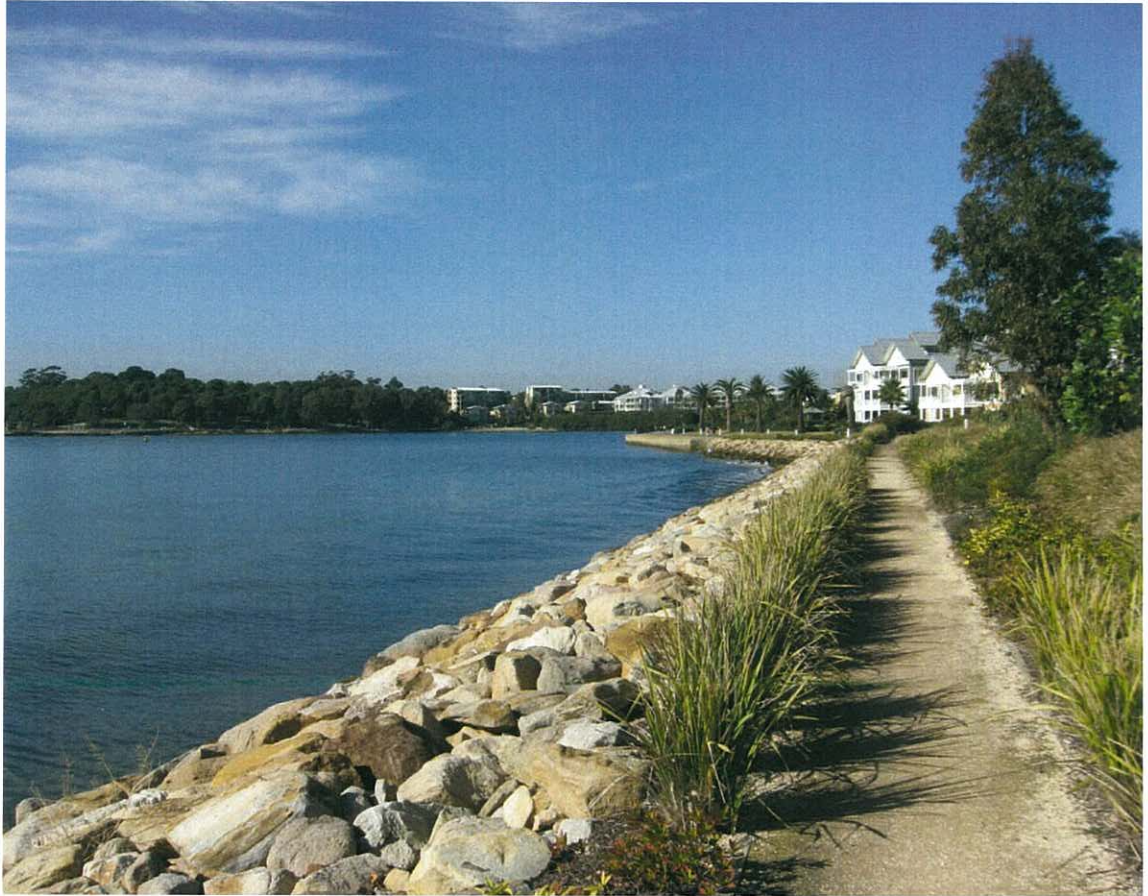


Proponent's advertising sign for the residential development of Breakfast Point as at 29/3/2009. Note absence of any mention of or representation of a marina.



From Breakfast Point looking south towards Kendall Inlet and Admiralty (off centre); Cabarita Park in the centre; Cabarita Wharf on the left. Hunters Wharf can be seen near the bend in the seawall. From this bend in the seawall the marina will reach from one third to one quarter of the way towards BP from where this picture was taken. **By enlarging this picture the marker buoy will be visible in front of Cabarita Park 6.5 cm from the left edge of the picture (only just visible in this small attachment) and between the end of the main wharf and the proposed ferry wharf. The marina structure will be about 40m east from the buoy ie., about 30m closer to Cabarita Park walkway (see drawing SK15B) . Imagine the marina right in the middle of this! Than compare that image with the laudatory words used by the proponent to sell the residential development eg., Attachment 10, 13, 25, 25.1, 42, 43, 63 and see Vol 1 para 4.21 for an example of the developer working in the background to undermine these positive attributes.**

ATTACHMENT 15.1



The proposed marina will extend up to (about) the green tree on the right (i.e., the tree in front of the taller darker tree) i.e. about 2/3 of the way up from the foreground of the picture. **By enlarging this picture the marker buoy will be visible in front of Cabarita Park 2cm from the edge of the picture (just visible in this small attachment).** The marina structure will extend some 40m to the east of the buoy (see drawing SK15B) as measured from the most southern of the proposed piers (near the proposed Skiff) i.e., about 45m closer to Cabarita Park. Boats turning into or out off a berth on this pier will be expected to get even closer to Cabarita Park to make a safe turning arc and this will give the marina structure an operational size greater than its physical size.

ATTACHMENT 16



From the proponent's brochure. Boat approaching Manor Houses north of Hunters Wharf. **Imagine the marina interposed between the boat and the houses.**

ATTACHMENT 16.1



Picture of a boat about 15m long and 3.5 to 4m high excluding radar dome and antennas which will add 1.5- 2m to the height. The proposed marina has berths for **25m boats** and under the Harbour DCP a **25m boat would be the minimum size against which the visual impact has to be assessed, however, in fact since it is proposed that day tripper ferries use the marina the standard can be greater as in Attachment 50-50.4.**

ATTACHMENT 17



Visual impact caused by a 15m boat in front of Hunters Wharf. **Legislation requires the assessment to be based on a 25m boat as that is the biggest boat for which provision is made in the marina.**

ATTACHMENT 18



By following an imaginary line from the top of the boat's antennas (abt 1.5 – 2m higher that the boat itself) the visual impact on the house can be seen. **Note the legislation requires the assessment to be based on the largest boat that can use the marina (25m).**

ATTACHMENT 19



Manor Homes. About 32m from seawall. Note use of wall to wall and floor to ceiling glass and the impact on privacy.

ATTACHMENT 19.1



From seawall. Note use of hedges in place of fences. Note wall to wall and floor to ceiling glass area. With a marina about 32m away the residents will not have any privacy from the boat owners and vice versa.

ATTACHMENT 20



From seawall. Note use of hedges in place of fences. Note wall to wall and floor to ceiling glass area. See comment under Attachment 19. This architectural standard is completely negated by having a marina as close as 32m away as well as creating a detriment for the residents because of the loss of privacy.

ATTACHMENT 21



From seawall. Note use of hedges in place of fences. Note wall to wall and floor to ceiling glass area. See comment under Attachment 20.

ATTACHMENT 22



Sight line from in front Manor Houses looking towards Scots College Boat Shed (reflecting roof in the centre). Distance from seawall to front fences of these houses measured at 32.5m.

ATTACHMENT 23



Sight line towards Cabarita Wharf, Cabarita Park and Kendall Inlet from in front of Manor Houses. From this point the proposed marina will obscure almost the entire water views.

ATTACHMENT 24

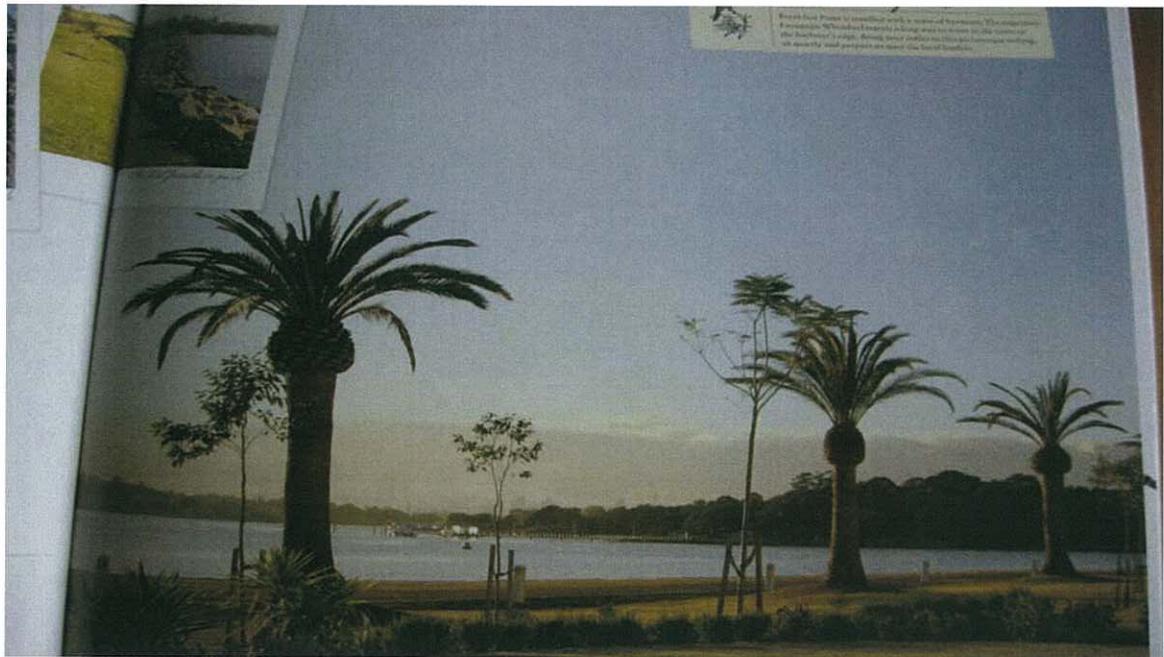


From front of Manor Houses looking towards Cabarita Wharf, Cabarita Park and Kendall Inlet. **From ground level the proposed marina will obscure almost the entire water views from this point.**



The words in the second column read: "Hunters Wharf inspired by Sydney's maritime heritage. Calm blue water and palm trees swaying in the sun these are the things that make life feel more balanced at Breakfast Point." Also note the caption in quotation marks just below the pictures--a marina will put an end to that vision!

ATTACHMENT 25.1



From developer's brochure. Hunters Wharf and Cabarita Park in background. Note reference to the European Whimbrel on the right hand corner. The note reads:

"The harbourfront (sic) Breakfast Point is instilled with a sense of harmony. The migratory European Whimbrel travel's a long way to roost in the trees on the harbour's edge. Bring your coffee to this picturesque setting, or sit quietly and prepare to meet the local birdlife (sic)."

ATTACHMENT 26



Hunters Wharf. Walkway in foreground. Note how close the private property (hedge) is from the walkway. Note extensive use of glass and the implications in terms of loss of privacy. The palm tree is just within **15m from the seawall** and this is followed by a 1m community association property and then strata property.

ATTACHMENT 27



From seawall. Hunters Wharf with walkway in foreground. Hedge is boundary of private strata property. Note extensive use of glass and the proximity to the walkway. See also the comment under Attachment 26.

ATTACHMENT 28



From seawall. Hunters Wharf with walkway in foreground. Note extensive use of glass and the proximity of the walkway. See comment under Attachment 26.

ATTACHMENT 29



From seawall. See note under Attachment 26.



From seawall Hunters Wharf. Community association property starts at the second palm tree (15m from seawall to this point) which is 1m wide . This is followed by Hunter Wharf strata property and then by privately owned strata property

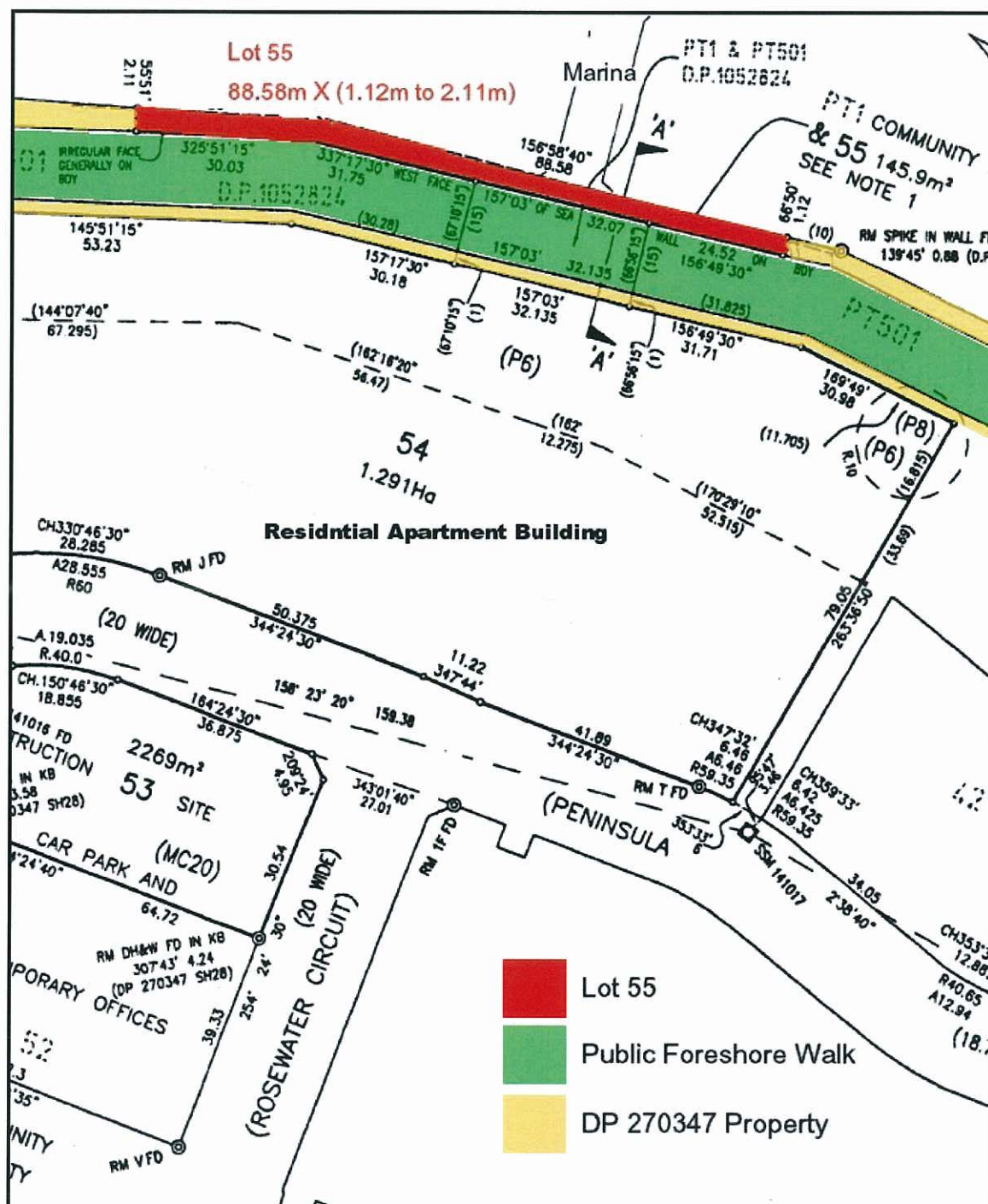
ATTACHMENT 31



From seawall. Hunters Wharf. Walkway in foreground. The fence/and hedge in the background is strata property. The community association property is a strip 1m wide from this fence going towards the walkway and from that point to the seawall is 15m wide.



Looking towards Kendall Inlet. Hunters Wharf on the right. Distance from seawall to the front of the apartments is 39.5m. The palm tree is within this 15m area. This 15m distance is followed by a 1m strip which is community association property and thereafter is strata property. From this point the proposed marina will obscure the entire water views from this point.



Note the shape and width of Lot 55 to which the marina is to be attached (connected). Note its proximity to the Public Foreshore Walkway.



From side of boundary of private apartment at Hunters Wharf to seawall (39.5m away). Scots College Boat Shed in centre (reflecting roof). From ground level the proposed marina will obscure almost the entire water views from this point.

ATTACHMENT 35



Hunters Wharf from level 4 apartment. Cabarita Wharf to the right , d'Albora Marinas, William Beach Monument and Aboriginal middens. Towards the centre to the left SGS Boat Shed and Looking Glass Point. To the left off centre is Scots College Boat Shed (reflecting roof) and further to the left Glades Bay and Aboriginal carvings. The proposed marina will have a visual impact up to Cabarita Wharf (COULD VERY WELL BE OBSCURED).



From level 5 apartment at Hunters Wharf. Cabarita Park across the bay with Kendall Inlet to the right. The proposed marina would have a visual impact to a point past the palm tree on the right. **From here the proposed marina will obscure almost the entire water views with the possible exception of the area south & east of the south palm tree.**

ATTACHMENT 37



From the seawall. Behind the fence site of future apartments. Skiff on the seawall about here.

ATTACHMENT 38.1



From Admiralty (level 3). Most of this view from the two trees on the left behind the wire mesh fence (the proposed skiff is about here) will be obscured by the proposed marina.

ATTACHMENT 38.2



From Admiralty (level 3): late afternoon scene of Kendall Bay looking north with Hunters Wharf on the left. The proposed marina will obscure most of this scene from the left of the balcony post and from about half way from the dark area on the west side of the seawall and south from Hunters Wharf (about the point where the proposed Skiff is to be located). There would also be a negative impact towards Tennyson Point.



From Admiralty (level 3): late afternoon scene of Kendall Bay looking north with Hunters Wharf on the left. The proposed marina will obscure most of this scene from the left of the balcony post and from about half way from the dark area on the west side of the seawall and south from Hunters Wharf (about the point where the proposed Skiff is to be located). There would also be a negative impact towards Tennyson Point.

ATTACHMENT 39



From Waterfront park. **From here the proposed marina will obscure almost the entire water views with the exception of the area just north of the small tree on the right.**

ATTACHMENT 40



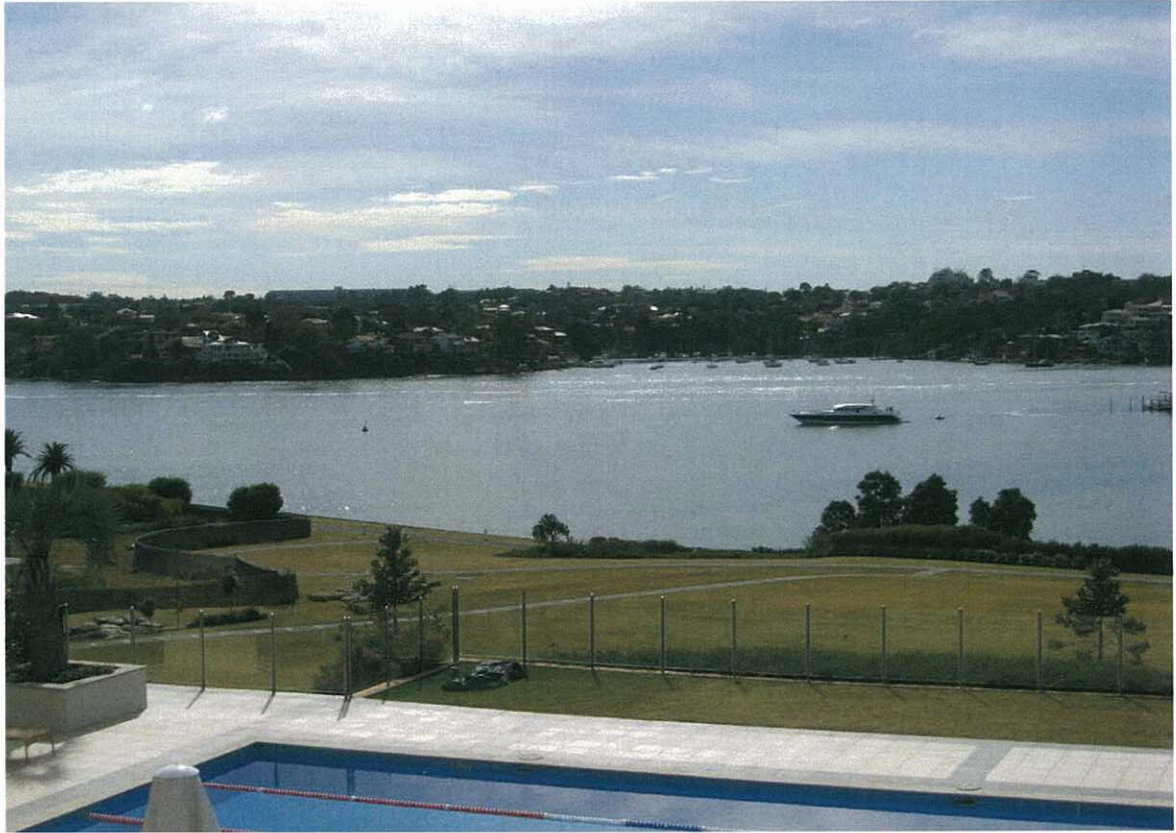
From Waterfront Park. The proposed marina will impact on the Bay from around the bend in the seawall to about mid-way between the second and third bollard counting from the left of the tree

ATTACHMENT 41



From country club. The proposed marina will extend to just east of the marker buoy and as far south as the second tree from the right within the dark fence.

ATTACHMENT 41.1



From the Country Club. The boat in the picture is about 15m long. The proposed marina structure would extend **about 40m to the right of the buoy** and to that distance would need to be added the width of the turning channel for boats to get in and out of the berths.

ATTACHMENT 42



From the developer's brochure. The note on the right corner reads:

"The Country Club From the gentle splash of a morning swim with the harbour outstretched before you to a friendly tennis match with your neighbour, an active hour or two is the best way to start your day. Welcome to the Breakfast Point Country Club."

to which one might add "not with a commercial marina in front of it".

ATTACHMENT 42.1



Attachment 42.1 (see also Attachment 42.0 and 42.2 and 42.3)

From the proponent's brochure. Imagine the visual impact of a commercial marina to this set of pictures.

ATTACHMENT 42.2



From the proponent's brochure. Scene from Country Club. Imagine the visual impact of a commercial marina to this set of pictures.

here is fantastic, and they were right. Over a glass of wine, we soaked in the views. In front of us were so many shades of blue, I felt like I was sitting on a luxury liner heading out into the harbour."



Enjoying lunch with the family on the deck

Putting up the side of pool

A COUNTRY CLUB LIKE NO OTHER

More than a great facility, the Breakfast Point Country Club is a place where people have fun. Every person of every age will find so many reasons to love coming here, whether it's to try out one of many fitness classes, to practice on the putting green or to get dressed up for an evening soiree. This is your home away from home to enjoy as you choose.

This prestigious facility is complete with a stunning 25-metre heated lap pool overlooking the harbour, sauna, steam room, spa and luxurious lagoon pool that transports you instantly to a tropical oasis. Enjoy a tennis match on one of the five finely groomed courts, including a championship court where a private coach will have you playing like the pros.

From the Country Club's wide decks looking over breathtaking harbour and city views, you'll find it easy enough to believe that there is nowhere else like this in all Australia."

Note the caption on top of the picture ("Over a glass of wine, we soaked the views. In front of us were so many shades of blue, I felt like I was sitting on a luxury liner heading out into the harbour" and the one in the third column ("From the Country Club's wide decks looking over breathtaking harbour and city views, you'll find it easy enough to believe that there is nowhere else like this in all Australia.").

ATTACHMENT 44



From seawall looking towards **Morrison Bay**. Note "protrusions" . Foreshore walkway to the left of the slippers.

ATTACHMENT 46



From seawall** looking towards the southern end of Kendall Bay (Hunters Wharf on the right of the paved area) , mangroves, Admiralty, Kendall Inlet to the right. To the right of this point on the seawall are the Manor Houses just **32.5 m away

ATTACHMENT 47



***From Hunters Wharf** looking across to Cabarita Park and Cabarita Wharf. To the right and south of this point future apartment are planned.*

ATTACHMENT 48



From eastern side of mangroves and opposite Kendall Inlet. Hunters Wharf in the centre. Future apartment south from Hunters Wharf. Putney and Morrison Point to the north of old Power House (dark building on right).

ATTACHMENT 49

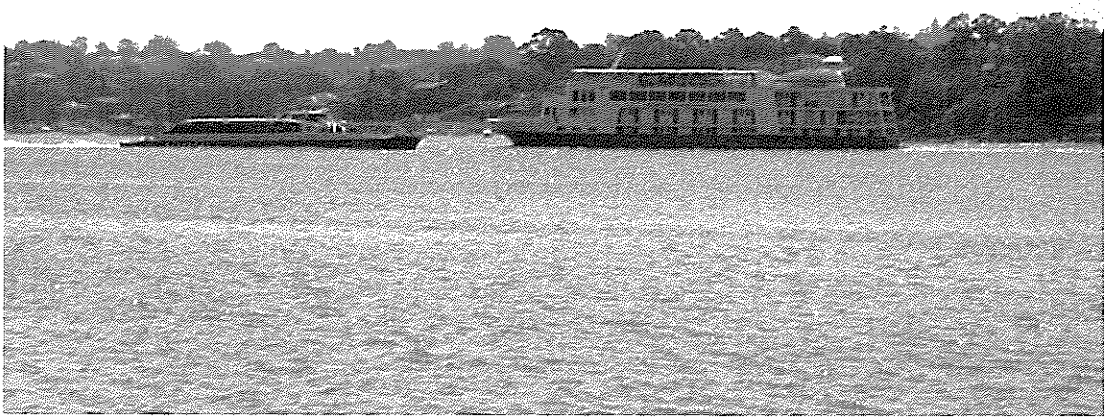


From walkway opposite Cabarita Park looking towards Hunters Wharf and Manor Houses.



From opposite Cabarita Park. Note height of the ferry on the right. Such vessels can be expected to dock at the proposed marina. **Note visual impact that this size vessel would have on Hunters Wharf and the manor houses.** Note also the dark line on the seawall which represents the high water mark left by the tide. The level of this line indicates that the picture was taken at low tide and that the visual impact attributable to the vessel would be more dramatic if the picture had been taken at high tide. See also Attachment 51-52.

ATTACHMENT 50.1



Picture of the same ferry as in Attachment 50 but on a different day. Note the relative size to the Rivercat.

ATTACHMENT 50.2



Picture of same ferry as in Attachment 50.1 taken on the same day. **Note relative height compared to the seawall. Note the rocks at the bottom of the seawall which attest to the picture having been taken at low tide. Where it otherwise the rocks would be obscured as high tide is about 1.5m higher.**

ATTACHMENT 50.3



Picture of same ferry as in Attachment 50.1 taken on the same day. **Note relative height compared to “the Point” and the flag pole on extreme left of the picture. Note the dark line along the seawall left by the tide which attests that the picture was taken at low tide. At high tide the ferry would float about 1.5m higher.**

ATTACHMENT 50.4



Picture of same ferry as in Attachment 50.1 taken on the same day. **The height of the boat is about 8mm. If a measurement of 8mm is taken in front of the houses on the left and the Hunters Wharf apartments on the extreme left it will reach up to the lower part of the roof line for the houses and the to the top of the windows of the apartment. NB buoy on extreme left of picture just beside the pylon. The proposed marina structure will be about 40m from the buoy (and towards the foreground), however, if the 8mm measurement is taken from this point there will not be any significant difference to the visual impact just described.** Note that this Attachment and 50.1- 50.3 were taken at low tide –see dark line along the seawall. If the pictures were taken at high tide the line would be obscured as the water level would be about 1.5m higher.

ATTACHMENT 51



From Cabarita Wharf. **Note the size of the Rivercat and the visual impact and how far south from the manor houses the turning arc of the ferry reaches. These Rivercats are not as high as a 25m motor boat or yacht. Note the dark line on the seawall left by the tide and consider the greater visual impact of the ferry if the picture had been taken at high tide (see Attachment 51.1) . Notice the visual impact vis-a-vis the two individuals standing in the boat and consider the similar visual impact on any individual on the walkway and on the first two levels of the apartments at Hunters Wharf.**

ATTACHMENT 51.1



Looking towards Hunters Wharf at high tide. Note absence of dark tide marking on the seawall (as compared to Attachment 51).

ATTACHMENT 52



The proposed marina would extend up to the second house from the old AGL Power House (dark building) on the right. **Note the visual impact on the houses that a boat of such low height as a Rivercat produces and imagine a 25m motor boat or yacht in its place.**

ATTACHMENT 53



Note the turning arc of the Rivercat shown as the wake and note how far it extends past the houses.

ATTACHMENT 53.1



From Cabarita Wharf. Boat is about 15m long. Height of the boat is about 3.5 to 4m to which should be added the height of the radar dome and antennas of about 1.5 – 2m. Note visual impact on Hunters Wharf and follow the line towards the houses. Imagine the scene with a **25m** boat as required by the Harbour DCP when assessing the visual impact.

ATTACHMENT 53.2



From Cabarita Wharf. Note visual impact on the houses and Hunters Wharf. Note height of the radar dome and antennas. This is the direction in which the boats would sit in the berths. Imagine the scene with a **25m** boat as required by the Harbour DCP (or greater since it is also proposed that ferries use the facilities and some of them are larger than 25m: see Attachment 50-50.4).

ATTACHMENT 53.3



From Cabarita Wharf. Note visual impact. Note location of buoy. Boats would sit in the berth in a parallel position to Hunters Wharf. **Imagine the scene with a 25m boat as required by the Harbour DCP (or greater as per Vol 2 Attachment 50-50.4).** The marina structure extends about 40m from the buoy (and towards the front of the picture) and to this needs to be added the space for the turning arc for boats going into and out of a berth).



From Cabarita Wharf. Note visual impact and height of radar dome and antennas. Imagine scene with a **25m** boat as required under the Harbour DCP for the assessment of the visual impact. However, since it is proposed that ferries also use the facilities and some of these are bigger than 25m that is the size against which the visual impact needs to be measured. For this see, for example, Attachment 50-50.4.

ATTACHMENT 54



From Looking Glass on the right (not shown) looking towards Breakfast Point.

ATTACHMENT 55



From Glades Bay. Kendall Inlet to the left of Admiralty (behind mangroves), Cabarita Park and Cabarita Wharf to the left; country Club on the hill off centre to the right.

ATTACHMENT 56



From Morrison Bay . AGL Power House on the right (dark buildings on right); Houses to the left of Power House, Hunters Wharf in centre, space for future apartments off centre on left

ATTACHMENT 57



From Putney looking towards Breakfast Point (geographical point); note seawall (to the left of the Point and at right angle to it); Admiralty in the centre; mangroves, Kendall Inlet, Cabarita Park and Cabarita Wharf on the left.

ATTACHMENT 58



From Scots College Boat Shed.

ATTACHMENT 59



From Cabarita Park looking towards Hunters Wharf, Manor Houses and AGL power building. Note William Beach Memorial on the left.



Superb Blue Wren just off the seawall at BP.



Masked Lapwing on eastern shore of Kendall Bay.



Banded Lapwing on the seawall at BP



Honey Eater on walkway at BP



Lorikeets on palm trees at BP.



Cormorant in Kendall Bay



Pelicans over Kendall Bay



Kookaburra at Hunters Wharf balcony



European goldfinch on Fairmile Cove side of Breakfast Point.



White Faced Heron on seawall at BP



Swallow at BP



Galah on proposed marina users car park



Yellow Wattlebird near Point and AGL Power House



Restless Flycatcher on construction site at BP



Sandpiper on sandy beach north of Hunters Wharf

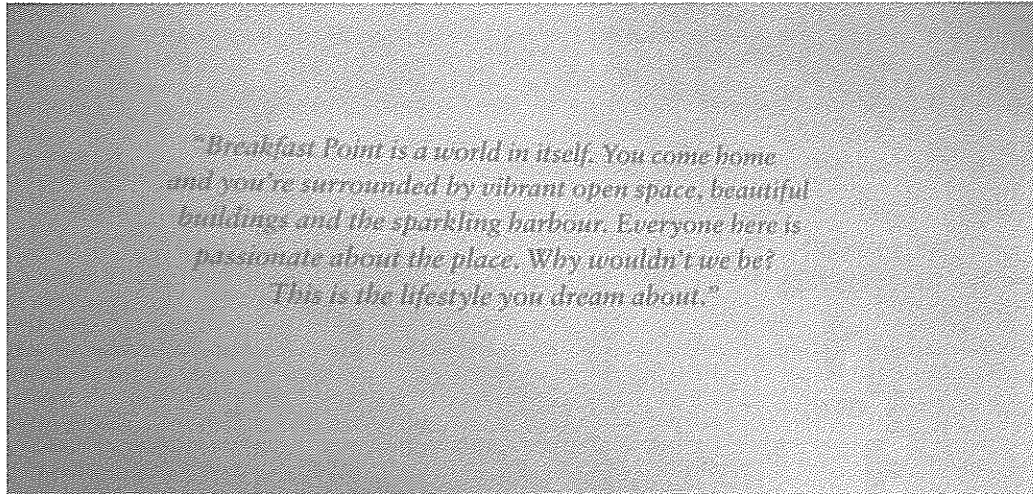


Godwits. Internet picture



Black-shouldered Kite near Silkstone Park.

ATTACHMENT 63



From the developer's brochure. Note the reference to "the sparkling harbour" and to "This is the lifestyle you dream about".

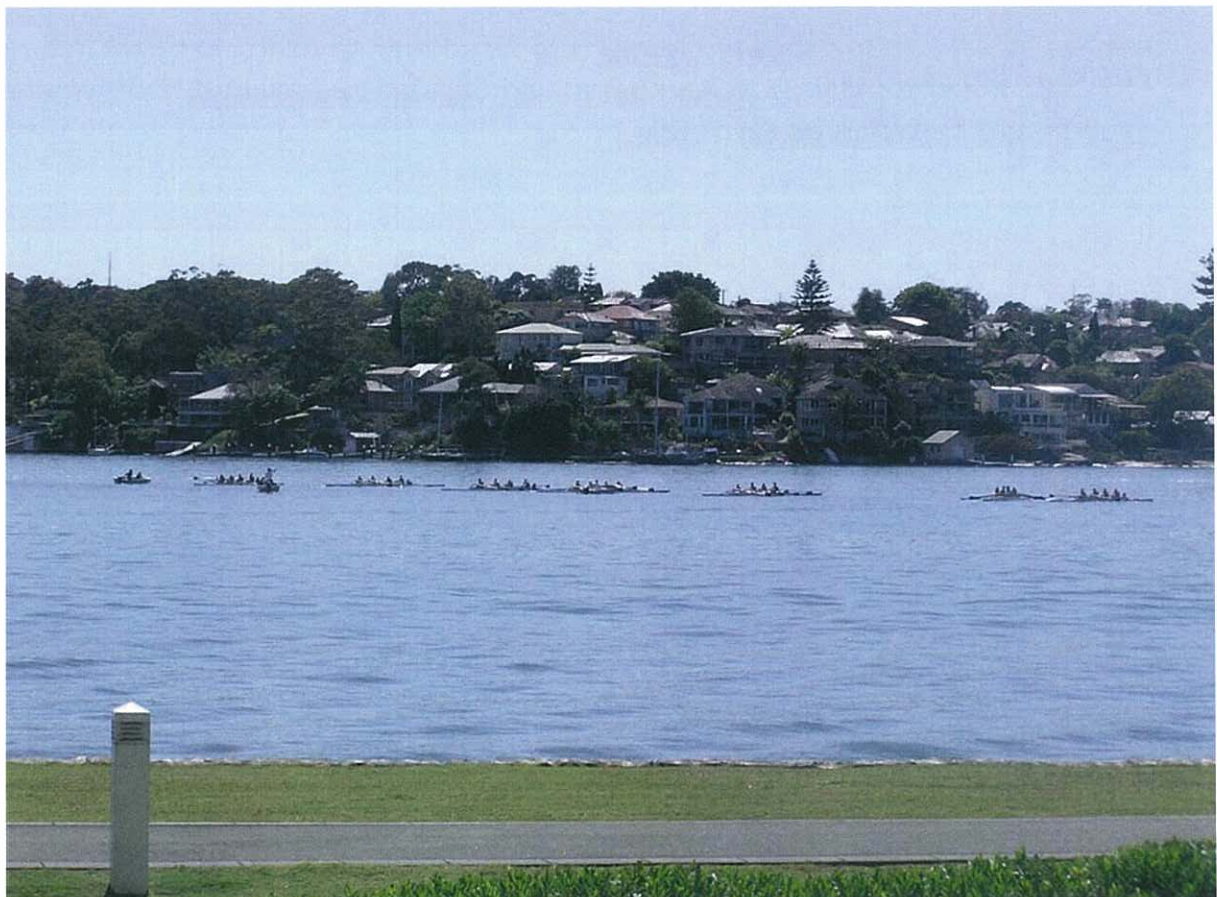


ATTACHMENT 65



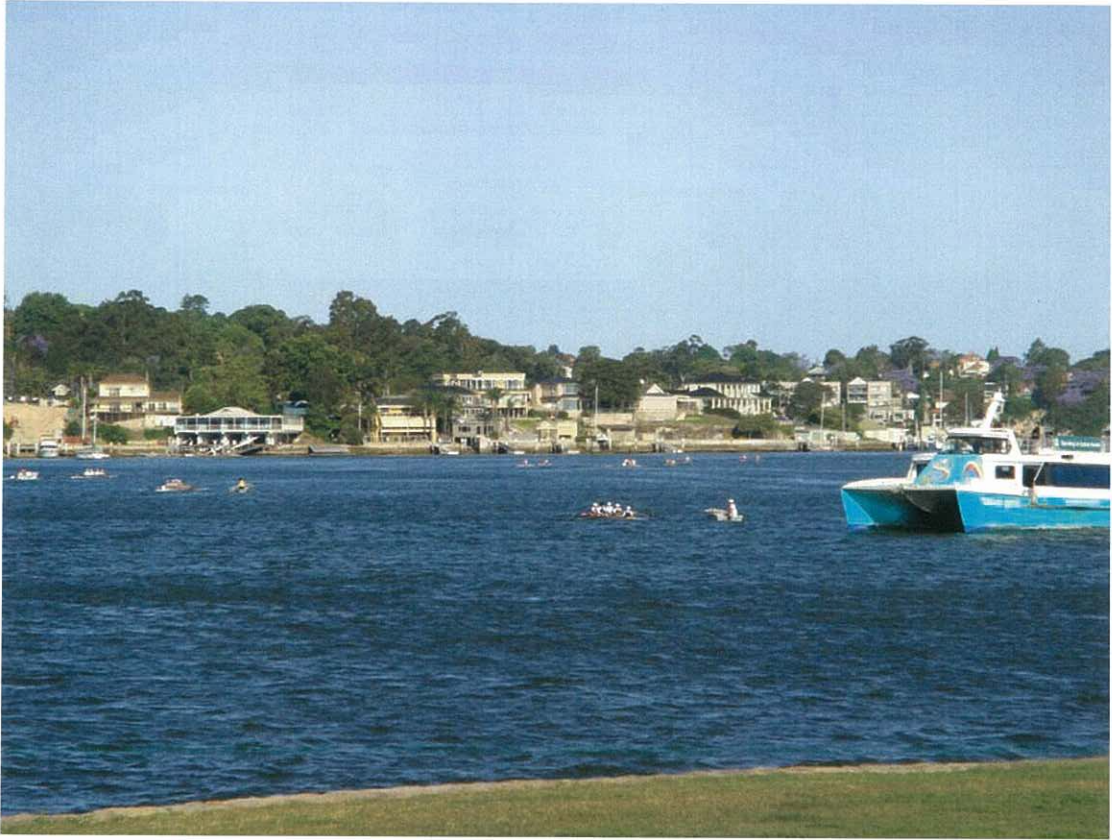
Rowers in Kendall Bay

ATTACHMENT 65.1



Rowers on River near Kendall Bay.

ATTACHMENT 65.2



ATTACHMENT 66



Canoeists in Kendall Bay taken from the foreshore walkway. Note the sandy beach at the southern end of the Bay.

ATTACHMENT 67



Rowers off Raven Point.

ATTACHMENTS 67.1



Rowers in the Parramatta River just off Kendall Bay.



Morning passengers waiting for the Rivercat at Cabarita Wharf. If the marina proposal goes ahead with the ferry/bus interchange (see [Vol 1 Chapter 0 at Q 1, 10, 11; and para 2.36](#) and footnote 21 and bear in mind the attempts by the developer to get a bus route through the estate without Community Association consultation or approval and with full knowledge of the restrictions imposed by the easement) then imagine these passengers going through the estate and the impact on the open access ways in terms of parking and other impacts several times/day and on weekends.

APPENDIX 69



View of the size and scale of a 10m vessel from a ground floor apartment at Hunters Wharf. Imagine this outlook being filled with boats from slightly smaller than this (8 M) in the foreground to 25m in the immediate background.

APPENDIX 69.1



Enlarged view of the size and scale of a 10m vessel from the private garden of a ground floor apartment at Hunters Wharf.

APPENDIX 69.2



View of the size and scale of a 10m vessel from the dedicated Foreshore Walkway in front of a ground floor apartment at Hunters Wharf.

ATTACHMENT 70

PHOTOS OF A SELECTION OF THE TYPICAL TYPE OF BOAT TO BE HOUSED AT THE PROPOSED MARINA. NOTE THAT THEY ALL RANGE IN SIZE FROM 8 TO 25m. NOTE THE DIFFERENT HEIGHT PROFILES TO THOSE OF THE VESSELS USED IN THE MONTAGES PROVIDED WITH THE EA.

27' (8.25m)		
28' and 29' (8.8m)		
31' and 32' (9.75m)		
33' and 36' (10 & 11m)		

45' and 50' (13 & 15m)		
55' (16.75 m)		
62' and 70' (19 & 21m)		
72' and 80' (22 & 24m)		

ATTACHMENT 70.1



Note the height of this 52' (15.8m) vessel against the height of the 1.85m person standing alongside. Also note the totally blocked views of the Parramatta River caused by the row of vessels behind the foreground vessel.

ATTACHMENT 70.2



Note the height of this 61' (18.6m) vessel against the height of the 1.85m person standing alongside.

ATTACHMENT 70.3



A typical view along the arm of a marina.