Property:	Corner Kenneth and Balgowlah Roads, Manly
DA No:	DA 177/2013
JRPP Ref. No.:	2013SYE078
Proposal:	Alterations and additions to the existing Andrew "Boy" Charlton Manly Swim Centre including construction of a new indoor recreation centre and associated on-site and on-street car parking
Owner:	Manly City Council
Applicant:	TompkinsMDA Architects

ADDENDUM REPORT

This report forms an addendum to the Development Assessment Report considered by the Sydney East Joint Regional Planning Panel on 26 November, 2013 in relation to DA 177/2013 for alterations and additions to the existing Andrew "Boy" Charlton Manly Swim Centre on the corner of Kenneth Road and Balgowlah Road, Manly. That report as well as this addendum has been prepared by Planning Ingenuity, independent consultant town planners.

BACKGROUND

At its meeting of 26 November 2012 the Sydney East Joint Regional Planning Panel made the following resolution in relation to DA177/2013:

" *1) The Panel unanimously concludes that it does not have sufficient information on the traffic and parking issues to determine the application.*

2) The Panel requests the applicant/council to provide by the 10 December 2013, an independent traffic and parking report that addresses the following:
a) the adequacy of the proposed parking having regard to the existing visitation of the pool and park as well as the increased facilities to be provided;
b) the adequacy and safety of Kenneth Road for 30-degree parking on both sides; and
c) any additional spaces required in the proposed conditions.

3) The Panel requests the applicant to respond to the proposed conditions ANS01-06 with amended drawings to the satisfaction of the independent assessment planner, so that those conditions become unnecessary;

4) The Panel requests the independent assessment planner to provide a supplementary report, by 13 December 2013, dealing with the traffic and parking report referred to in paragraph 2 and with the amended drawings referred to in paragraph 3.

5) Following receipt of the above material, the Panel will determine the application by communicating by electronic means."

The information required by (1) and (2) above was received by Planning Ingenuity Pty Limited on 10, 11, 12, 13 and 16 December 2013. This addendum report satisfies the requirements of (4) so that the Panel may determine the application.

This report provides an assessment of the traffic and parking issues and the amended plans and supporting information and recommends the application be supported subject to the Conditions of Development Consent included in Attachment 1.

Traffic and Parking

An independent assessment was conducted by Lyle Marshall of Lyle Marshall and Associates Pty Limited and provided in the form of a Traffic and Parking Assessment dated December 2013 and supporting information received on 12 December 2013 and 16 December 2013. This information is contained in Attachment 2 to this report.

The Traffic and Parking Assessment examines:

- existing patronage based on visitor data for the existing swim centre over 2013 and a survey of patrons, parking and traffic movements conducted on Saturday 7 December 2013;
- future patronage projections based on estimated increases in visitation and estimated expansion factors. Expansion factors were calculated using time series data of visitation for the Lane Cove Aquatic Centre which has been operating for the past 10 years, is a similar scale and contains similar features to the proposal and has similar catchment demographics. The visitation data and expansion factors are contained in the *Feasibility Study – Manly Swim Centre Final Report* which was assessed by the Division of Local Government as part of the application for funding assistance for the project. A copy of the *Feasibility Study* is Attachment 3;
- the use of on-site and on-street parking spaces, traffic movements entering and leaving the car park and the duration of stay for on-site parking spaces by survey on Saturday 7 December 2013;
- visitation to the existing swim centre in comparison to visits to LM Graham Reserve; and
- traffic volumes and speeds on Kenneth Road.

Future Parking Demand

The Assessment uses the data described above to estimate future parking demand. It concludes that the likely peak parking demand at the 85th percentile peak patronage is 187 spaces. This is the demand estimated to be generated by users of the swim centre and ancillary facilities as well as users of the LM Graham Reserve during the 85th percentile peak for the swim centre which has been demonstrated to be "*the 8th highest Saturday of the year*" which occurs in March. Note the 85th percentile is recommended by the *RMS Guide to Traffic Generating Development 2002* in the absence of long term traffic survey data and where typical traffic generation data is not available. It is a typically adopted approach to car parking demand generation assessment.

Future Parking Provision

The Assessment recommends the provision of on-site parking in a layout as shown in Attachment 1 which has capacity for 52 cars (including four spaces suitable for people with a disability and two spaces for parents with prams). The report verifies on-site parking can comply with User Class 3 in AS/NZS 2890.1-2004.

The Assessment also recommends on-street parking in Kenneth Road to achieve 119 spaces including parallel-to-kerb parking spaces on the northern side of Kenneth Road and spaces 30 degrees to the kerb

on the southern side of Kenneth Road. The 30 degree angle parking is recommended to be rear to kerb for safe access to loading/unloading items from the rear of a car. The report verifies on-street parking can comply with standard dimensions and safety requirements.

Therefore Kenneth Road provides a total of 119 on-street spaces (on the basis of the Lyle Marshall & Associates design) which in combination with the on-site parking achieves a total of 171 spaces.

Therefore, based on the 85th percentile demand for parking of 187 spaces, there is a shortfall of 16 spaces. This equates to an 8.6% shortfall. Lyle Marshall & Associates conclude that this shortfall is acceptable on the basis that further post occupancy study of use be undertaken in order to be able to refine operational aspects of the proposal based on accurate empirical data. The Report states that following:

" 4.1 Management Plan for Future Swim Centre
Over a *12 month period* after the *upgraded and enlarged Aquatic and Leisure Centre* has opened it is r*ecommended* that *Surveys be carried out* in summer and winter to determine *parking demand by visitors* to the JD Graham Reserve and *visitors to the Swim Centre*.

The visitors for each activity in the Swim Centre can be surveyed and a *Plan of Management* prepared to reduce the peak demand. The start and finish times of some activities may be altered. The proposed start and finish times of all activities and number of expected visits can be entered in a spread sheet when the Centre is initially opened. This will show the peak attendance. The *peak attendance* and *peak parking* can be monitored and the programme adjusted if necessary to ensure that the available parking is adequate except for infrequent occasions in February. Alternative forms of transport such as bicycles and walking should be encouraged."

Further discussions with Lyle Marshall & Associates confirm that at the "survey peak" there were programmed activities occurring at the facility including learn to swim classes for children. The peak did not occur at a time that only "free swim" was available. Accordingly, it is considered that there will be an ability to manipulate the peak operational times at the pool so as to best fit car parking supply to demand.

In light of the 8.6% shortfall, which occurs only at the absolute peak based on projected visitation, it is considered reasonable and prudent to further test the use post occupancy. It is our view that there is little to no likelihood that the operational aspects of the proposal could not be altered to provide fully compliant parking even at the peak. There would also be the opportunity to implement additional bicycle racks or other alternative travel management if necessary. Accordingly, an additional condition of development consent is recommended to address this matter.

Traffic Calming Works in Kenneth Road

Traffic calming is recommended in the form of rubber speed cushions in the vicinity of the entry and exit driveways to slow traffic for manoeuvring associated with the on-site car park and the 30 degree angle parking.

Pedestrian safety is recommended to be improved with the provision of a pedestrian refuge or kerb blisters in Kenneth Road. The provision of these features will not affect the total number of on-street parking spaces as advised by the Traffic Consultant.

Traffic calming and pedestrian safety features will have beneficial impacts on road and pedestrian safety without reducing on-street parking capacity.

Conclusion

The Traffic and Parking Assessment makes the following conclusions:

" 1. The estimated peak parking demand is for the busiest period on a Saturday morning, the busiest day of the week in March. This is equal to the 85th percentile *Saturday morning* in a *52 week period*.
2. The estimated peak parking demand is for the updated and enlarged Swim Centre is 168 parking spaces.
3. The estimated parking demand on the LM Graham Reserve on Saturday morning in Summer is 19 car spaces.
4. The total parking demand is estimated to be 187 spaces.
5. The total parking provision in the off-street car park and with *30 degree angle* parking in Kenneth Road is 171 spaces, a shortfall of 16 *spaces.*
6. A *Management Plan* is recommended that will require *surveys* to be conducted over a 12 month (52 week) period and enable the *peak attendance* and *peak parking demand to be monitored* and the Activity Programme adjusted if necessary to ensure that the available parking is adequate.
7. Adults and children should be encouraged to walk or cycle to the Swim Centre. Additional bicycle racks may be required."

Amended Drawings

Amended drawings and a Sample Board of colours and materials were submitted by the applicant and have been included in hard copy form with this report as well as forwarded electronically to the Panel. The following examines each proposed Condition ANS01 to ANS06 with reference to the amended drawings and sample board.

ANS01

ANS01 related to the external colours, materials, textures and finishes of the western façade of the swim centre building and all facades of the community centre building. The condition also required a glass block panel to the wall of the spa area fronting Balgowlah Road for natural light and visual interest. The glass block wall is indicated on amended plans.

The applicant submitted a Sample Board of external finishes and materials and this has been forwarded to the Panel accordingly.
The Sample Board is supported and is recommended to be referenced in Condition 1 as a document forming part of the Development Consent.

ANS02

ANS02 required the provision of four (4) car parking spaces suitable for accessible parking and two (2) spaces for parents with prams. A revised on-site car parking plan based on Option B of the Traffic and Parking Assessment and incorporated into amended plans has been provided and complies with this requirement.

ANS03

ANS03 required the provision of an all-weather awning for the full length of the access ramp. Plans prepared by the applicant Drawing No.1310 DA110 Entry Ramp dated 13 December 2013 show the details of the awning and demonstrate that the awning shall provide all-weather protection and shall be constructed of materials and finishes that are compatible with the proposed new buildings. The plans are considered satisfactory and are recommended to be listed in Condition 1.

ANS04

This condition required the provision of toilets, change rooms and showers including universally accessible facilities as part of, or close to, the southern side of the existing 50m pool. The applicant has advised that the existing buildings (originally proposed to be demolished) contain appropriate facilities to meet this condition and therefore has proposed that these existing buildings be retained. The plans and Statement of Environmental Effects submitted with the application have been amended accordingly. This is an acceptable solution and the original recommended condition has been deleted from the conditions in Attachment 1.

ANS05

This condition required a variety of minor amendments to the plans as recommended by the Access Review Report prepared by Morris Goding Accessibility Consulting dated 6 November 2013 and recommendations from Council's Access Committee. These have been incorporated into amended plans with the exception of:

(i) surface finishes and counter heights; and
(ii) a distinction between the uses of the universally accessible change rooms on Level 2.

To address (i) above, Condition ANS01 is recommended for these details to be shown on the plans submitted with the Construction Certificate.

To address (ii) above, an Operational Condition ANS02 is recommended to ensure that one of these rooms is to be suitably sign-marked for use by people with a disability.

ANS06

ANS06 required a new bicycle parking area with capacity for 20 bicycles close to the main entry to the swim centre. This bicycle storage area has been provided at the eastern end of the community facilities building and is considered acceptable.

Other matters

Statement of Environmental Effects

A revised Statement of Environmental Effects now includes a Hydrogeological Assessment, the Accessibility Report and a Waste Management Plan to ensure that these documents form part of the documents specifically referenced in Condition 1 of the Development Consent.

Late Submission

A letter of support for the development proposal was received by Manly Council on 5 December 2013. A copy of this letter is included in Attachment 4. The letter is from Swimming Australia (a Division of the Australian Sports Commission). The letter supports the proposal but does not raise any matters relevant to the assessment of the application in accordance with Section 79C to the *Environmental Planning and Assessment Act, 1979*.

Conclusion

The application has been assessed having regard to the Heads of Consideration under Section79C(1) of the *Environmental Planning and Assessment Act 1979*, the Manly Local Environmental Plan 2013 and the Manly Development Control Plan 2013 and is considered acceptable subject to the conditions contained in Attachment 1.

The Traffic and Parking Assessment and amended plans and supporting information have been assessed and determined to be satisfactory in addressing the outstanding matters of concern being:

- an independent assessment of the traffic and parking issues which recommends the proposal can provide adequate parking and traffic management arrangements (subject to condition requiring post occupancy monitoring); and
- plans and supporting documents demonstrate most matters in former draft Conditions ANS01 to ANS06 have been incorporated into the design of the proposal and that those minor matters which have not been addressed can be dealt with by recommended Conditions ANS01 and ANS02.

RECOMMENDATION

It is recommended that DA 177/2013 for alterations and additions to the existing Andrew "Boy" Charlton Manly Swim Centre including construction of an all-purpose aquatic centre comprising a twenty-five (25) metre, eight (8) lane lap pool, seating for one hundred and fifty (150) spectators, program pool, leisure pool, spa pool, sauna and steam room, administration rooms, plant rooms, gymnasium and group fitness/multipurpose space, kiosk, amenities, with the retention of the outdoor 50 metre pool, outdoor toddlers pool, outdoor twenty-five (25) metre pool and plant rooms, on-site parking for 58 cars, 144 car parking spaces in Kenneth Road and a separate community facilities building containing change rooms, amenities, storage, bike storage and a bus shelter at the corner of Kenneth and Balgowlah Roads by approved subject to conditions of consent.

Yours faithfully,
Planning Ingenuity Pty Ltd

J. Mead

Jeff Mead
DIRECTOR

Attachments:

Attachment 1 – Recommended Conditions of Development Consent DA177/2013
Attachment 2 – Parking and Traffic Assessment Report and Memo of Additional Information from Lyle Marshall and Associates Pty Limited
Attachment 3 - *Feasibility Study – Manly Swim Centre Final Report*
Attachment 4 - Letter of support received by Manly Council on 5 December 2013

ANNEXURE 1 – Conditions of Consent

DA1
The development, except where modified by the conditions of this consent, is to be carried out in accordance with the following plans and documentation

Plans prepared by TompkinsMDA Architects affixed with Council's stamp relating to Development Consent No. DA177/2013

Plan No. / Title	Issue/ Revision & Date	Date Received
Survey Plan	Drawing Number 1310 101 dated 13 December 2013	16 December 2013
On-site and Off Site Parking Plan	Drawing Number 1310 102 dated 16 December 2013	16 December 2013
Site Analysis Plan	Drawing Number 1310 103 dated 13 December 2013	16 December 2013
Level 1 Plan	Drawing Number 1310 104 dated 13 December 2013	16 December 2013
Level 2 Plan	Drawing Number 1310 105 dated 13 December 2013	16 December 2013
Level 3 and Roof Plan	Drawing Number 1310 106 dated 13 December 2013	16 December 2013
Sections and Elevations	Drawing Number 1310 107 dated 13 December 2013	16 December 2013
Entry Ramp	Drawing Number 1310 DA110 dated 13 December 2013	16 December 2013
Landscape Plan	Drawing Number 534 LD01 dated 26 July 2013	5 September 2013

Documentation affixed with Council's stamp relating to Development Consent No.DA177/2013

- *Statement of Environmental Effects Issue C dated 12 December 2013 prepared by TompkinsMDA Architects;*
- *Hydrogeological Assessment by JK Geotechnics dated 5 November 2013; and*
- *Stormwater Drainage Concept Design prepared by Geoff Ninnes, Fong and Partners Pty Limited Job Reference No. SN7718 Drawings No.C00 to C04 Issue B dated 29.07.2013*
- *Access Review Report prepared by Morris Goding Accessibilty Consulting and dated 6 November 2013*
- *Schedule of External Finishes and Materials Selection prepared by TompkinsMDA Architects*

In the event of any inconsistency between the approved plans and supplementary documentation, the plans will prevail.
Reason: To ensure that the form of the development undertaken is in accordance with the determination of Council

NON STANDARD CONDITIONS

ANS01
The following design details are required to be shown on the plans submitted with the application for a Construction Certificate to make appropriate provision for people with special access and movement needs:

(i) all common area floor surfaces to be suitably slip resistant and traversable by a wheelchair or walking frame, compliant with AS 1428.1:2009 and HB197/AS4856 (wet pendulum method).

(ii) Reception counters and servery counters will include a lower public counter section, no greater than 870mm height above FFL with suitable knee/toe clearance for wheelchair users, compliant with AS1428.2.

Reason: To ensure equitable access and to ensure compliance with legislation.

ANS02

Of the two universally accessible change rooms labelled USAC 1 and USAC 2 shown on the plan titled Level 2 Plan, one of these changerooms is to be suitably signmarked on the entry door for use by people with a disability.

Reason: To ensure equitable access and to ensure compliance with legislation.

ANS03

Written confirmation from a Building Code Australia (BCA) consultant is to be submitted with the application for a Construction Certificate as to the dimensions, grades and surface material requirements for the external egress/service ramp to ensure suitable transition/threshold at the Level 1 egress doorway.

Reason: To ensure compliance with legislation.

ANS04

The nature and content of material to be excavated is to be tested by a suitably qualified and experienced geotechnical consultant and a report submitted with the application for a Construction Certificate which includes recommendations for the management and disposal of all excavated material.

Reason: To ensure proper management of excavated material.

ANS05

An Operational Plan shall be submitted with the application for a Construction Certificate which includes management responsibilities for safe storage of goods and equipment and safe evacuation of people in the event of a flood incident.

Reason: To ensure the safety of people and safe storage of goods and equipment in the event of flood.

ANS06

A dilapidation survey for the existing 50m swimming pool shall be prepared and submitted with the application for the Construction Certificate and shall include details of inspections and report all defects prior to the commencement of site works.

Reason: To enable proper management of the works.

ANS07

A groundwater monitoring plan is to be prepared by a suitably qualified and experienced ground water consultant demonstrating the methods to be implemented during excavation and construction for monitoring of the depth, quality and quantity of ground water.

Reason: To reduce the impacts to the local environment.

ANS08

Mechanical Ventilation

Details of the proposed mechanical exhaust systems including details of compliance with the relevant requirements of Clause F4.12 of the Building Code of Australia and Australian Standard 1668 Parts 1 and 2 are to be submitted to the Principal Certifying Authority for approval prior to the issue of a Construction Certificate.

Reason: To ensure compliance with legislation and to protect public health and safety.

ANS09
Noise and Vibration Management Plan

Prior to the commencement of works, a Noise and Vibration Management Plan is to be prepared by a suitably qualified person addressing the likely noise and vibration from demolition, excavation and construction of the proposed development and provided to the Principal Certifying Authority.

The Plan is to identify amelioration measures to ensure the noise and vibration levels will be compliant with the relevant legislation and Australian Standards. The report should itemise equipment to be used for excavation works. The Plan shall address, but is not limited to, the following matters:

- **(a) Identification of activities carried out and associated noise sources;**
- **(b) Identification of potentially affected noise sensitive receivers, including residences, churches, commercial premises, schools and properties containing noise sensitive equipment;**
- **(c) Determination of appropriate noise and vibration objectives for each identified sensitive noise receiver;**
- **(d) Noise and vibration monitoring, reporting and response procedures;**
- **(e) Assessment of potential noise and vibration from the proposed demolition, excavation and construction activities, including noise from construction vehicles;**
- **(f) Description of specific mitigation treatments, management methods and procedures to be implemented to control noise and vibration during construction;**
- **(g) Construction timetabling to minimise noise impacts including timing and duration restrictions, respite periods and frequency;**
- **(h) Procedures for notifying residents of construction activities likely to affect their amenity through noise and vibration; and**
- **(i) Contingency plans to be implemented in the event of non-compliances and/or noise complaints. A register should be kept of complaints received and the action taken to remediate the issue (if required).**

Reason: To protect acoustic amenity of surrounding properties and the public.

ANS10
Outdoor Lighting

Prior to the issue of a Construction Certificate, the Certifying Authority must be satisfied that all outdoor lighting is designed and positioned to minimize any detrimental impact upon the amenity of other premises and adjacent dwellings and that outdoor lighting complies with the relevant provisions of the *Australian Standard 1588.3:2005 Pedestrian Area (Category P) lighting – Performance and design requirements* and Australian Standard 4282.:1997 Control of the obtrusive effects of outdoor lighting.
Reason: To protect public health and amenity.

ANS11
A Construction Traffic Management Plan is to be submitted with the application for a Construction Certificate.
Reason: To ensure traffic in and around the site during the demolition and construction phases does not unreasonably affect the safe movement of vehicles pedestrians and cyclists on the local road and footpath network.

ANS12
Approval for works including line marking within the public road reserve of Kenneth Road and reconfiguration works for the bus bay in Balgowlah Road must be obtained in accordance with Section 138 to the *Roads Act, 1993*. A copy of the approval shall be submitted with the application for a Construction Certificate.
Reason: To ensure additional approvals for ancillary works are obtained prior to the commencement of site works.

ANS13
Noise arising from the works must be controlled in accordance with the requirements of the *Protection of the Environment Operations Act, 1997* and guidelines contained in the *New South Wales Environment Protection Authority Environment Noise Control Manual*.
Reason: To ensure compliance with legislation and to prevent disturbance to the surrounding community.

ANS14
Rock Breaking / Concrete Slab breaking

The activity of rock-breaking/concrete slab breaking associated with the development of the site, must only occur between the following hours:
- **9.00am and 4.00pm Monday to Friday only.**

Rock-breaking and concrete slab breaking must not occur on Saturdays, Sundays or Public Holidays. Surrounding properties must be notified in writing of the times and days in which rock-breaking / concrete slab breaking activities will be carried out. Notices must be distributed at least seven (7) days before the activity is to occur.
Reason: To protect the acoustic amenity of neighbouing properties and the public.

ANS15
Asbestos Removal

Anyone who removes, repairs or disturbs bonded or friable asbestos material must hold a current removal license from WorkCover NSW. Before starting work, a work site-specific permit approving each asbestos project must be obtained from WorkCover NSW. All removal, repair or disturbance of or to asbestos material must comply with the requirements of WorkCover NSW and with the following:
- ***Work Health and Safety Act, 2011*;**
- ***Work Health and Safety Regulation, 2011*; and**
- **How to Safely Remove Asbestos Code of Practice (WorkCover NSW 2011).**

Reason: To ensure compliance with legislation and protect the health and safety of site workers and of the public.

ANS16
Trackable Wastes

Removal of trackable wastes from the site must comply with the *Protection of the Environment Operations (Waste) Regulation 2005* for the transportation, treatment and disposal of waste materials. Waste materials must not be disposed on land without permission of the landowner and compliance with the provisions of the *Protection of the Environment Operations Act, 1997.*
Reason: To ensure compliance with legislation.

ANS17
Mechanical Plant

Documentation prepared by a suitably qualified person must be submitted certifying noise levels emitted from the mechanical plant does not exceed 5dB(A) above the background noise level inclusive at the boundaries of the site. NOTE: This method of measurement of sound must be carried out in accordance with *Australian Standard 1055.1 – 1997*.
Reason: To protect public health and amenity.

ANS18
Air Quality

The construction and ongoing use of the premises, building services, equipment, machinery and ancillary fittings shall not give rise to air pollution. All works shall ensure air quality controls are in place and all activity is in accordance with the *Protection of the Environment Operations Act, 1997* and *Protection of the Environment Operations (Clean Air) Regulation 2002*.
Reason: To ensure compliance with legislation and to protect public health and amenity.

ANS19
Dangerous Goods Storage

WorkCover NSW must be notified for the storage of dangerous goods on site. All requirements imposed by WorkCover NSW must be implemented to ensure all dangerous goods are being stored and handled on site in a safe manner. The storage, handling and use of dangerous goods must be in accordance with the requirements of the *Work Health and Safety Act, 2011* and *Work Health and Safety Regulation 2011*.
Reason: To ensure compliance with legislation and to protect the health and safety of workers and of the public.

ANS20
Pool/Spa Water Management Plan

A plan of management for the pools and spa is to be prepared and implemented by a suitably qualified person which identifies the ongoing operation of these facilities to a safe and healthy standard. The plan should include (but not be limited to):

(a) Cleaning and maintenance of facilities and associated plant;
(b) Treatment/dosing of the facilities; and
(c) Response action plan for emergencies and incidents.

Records must be kept demonstrating compliance with the *Public Health Act, 2010* and *Public Health Regulation 2012*.
Reason: To ensure compliance with legislation and to protect public health and safety.

ANS21
The development is to be connected to all utilities and essential services including water, sewer, power and communications. The design and installation of all facilities/connections is to be in accordance with the relevant Authority Specification requirements and relevant Australian Standards.
Reason: To ensure safe and effective operation of the development.

ANS 22 Hours of operation
The premises shall operate in accordance with the following days and hours of operation: Monday to Friday inclusive 5.30am to 7.00pm, weekends 6.00am to 7.00pm and Public Holidays 6.00am to 6.00pm.
Reason: To ensure the hours and days of operation of the premises are compatible with the amenity of surrounding land uses.

ANS 23 Parking and Travel Management Plan
During the 12 month period after occupation of the upgraded and enlarged Aquatic and Leisure Centre, surveys are to be carried out by a qualified traffic engineer in summer and winter to analyse parking demand by visitors to the JD Graham Reserve and visitors to the Swim Centre. The survey methodology is to be developed with Council's Traffic Engineer and Deputy General Manager, Landuse & Sustainability.

The survey of Swim Centre patrons shall identify visitors by activity they attend and this data shall be compared with on-street parking occupancy. A Plan of Management shall be prepared to articulate measures to assist with reducing the peak demand. The start and finish times of programmed activities, and their capacity such as class size or duration, may be altered. The Plan of Management shall also analyse the opportunities for alternative forms of transport and should encourage bicycle use and walking.
Reason: To minimise impacts of car parking on surrounding residents.

CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF THE CONSTRUCTION CERTIFICATE

1 (2BS01)
The fit-out of the kiosk/café in the swim centre and the community facility building must comply with the following:

- *Food Act, 2003*;
- *Food Regulations 2004*;
- Australian Standard 4674-2004: Design, Construction and Fit-out of Food Premises; and
- Australian and New Zealand Food Standards Code 3.2.3: Food Premises and Equipment.

Reason: To ensure compliance with legislation and to protect public health and safety.

2 (2FP02)
Detailed drawings and specifications of all works (including but not limited to structures, road works, driveway crossings, footpaths and stormwater drainage) within existing roads, must be submitted to and approved by Council under the Roads Act 1993, before the issue of any Construction Certificate. Specific works include:

1) Vehicular crossings in accordance with the current policy of Council and Specifications for the construction of vehicle crossings; and
2) Longitudinal sections for both sides of the vehicular crossing and driveway commencing at the centre line of the road carriageway must be provided for assessment. Gradients and transitions must be in accordance with Australian Standard AS 2890.1 – 2004, Part 1 – Off-Street Car Parking. The driveway profile submitted to Council must be to scale at 1:25 (for template checking purposes) and contain all relevant details: reduced levels, proposed grades and distances.

Driveway to be designed to provide for existing or future footpaths across driveway, in accordance with Council's Specification for Civil Infrastructure Works, Developments &

Subdivisions 2003 and Australian Standard AS 1428.1:2001 - Design for access and mobility.
Reason: To facilitate suitable vehicular access to private sites.

3 (2FR01)
A Fire Safety Schedule specifying the fire safety measures (both current and proposed) which should be implemented in the building premises must be submitted with the Construction Certificate application, in accordance with Part 9 Clause 168 of the Environmental Planning and Assessment Regulation 2000.

Note: A Construction Certificate cannot be issued until a Fire Safety Schedule is received.
Reason: Compliance with the Environmental Planning and Assessment Act 1979.

4 (2MS01)
Where construction or excavation activity requires the disturbance of the soil surface and existing vegetation, details including drawings and specifications must be submitted to Council accompanying the Construction Certificate, which provide adequate measures for erosion and sediment control. As a minimum, control techniques are to be in accordance with Manly Council Guidelines on Erosion and Sediment Control, or a suitable and effective alternative method. The Sediment Control Plan must incorporate and disclose:

1) all details of drainage to protect and drain the site during the construction processes,
2) all sediment control devices, barriers and the like,
3) sedimentation tanks, ponds or the like,
4) covering materials and methods, and
5) a schedule and programme of the sequence of the sediment and erosion control works or devices to be installed and maintained.

Details from an appropriately qualified person showing these design requirements have been met must be submitted with the Construction Certificate and approved by the Council/Accredited Certifier prior to issuing of the Construction Certificate.
Reason: To protect the environment from the effects of sedimentation and erosion from development sites.

5 (2PT01)
The driveway/access ramp grades, access and car parking facilities must comply with the Australian/New Zealand Standard AS/NZS 2890.1:2004 - Parking facilities - Off-street car parking.
Reason: To ensure compliance with Australian Standards relating to manoeuvring, access and parking of vehicles.

6 (2PT02)
All driveways, car parking areas and pedestrian paths are to be surfaced and sealed. Details of treatment to these areas are to be submitted to the Council/Accredited Certifier prior to issue of the Construction Certificate.
Reason: To provide suitable stormwater disposal and to prevent soil erosion and runoff.

7 (2SP03)
The Construction Certificate drawings and specification required to be submitted pursuant to Clause 139 of the *Environmental Planning and Assessment Regulation 2000*, must detail the connection of backwash to Sydney Water's sewer in compliance with Australian/New Zealand Standard 3500.

The discharge of backwash water to any stormwater system is water pollution and an offence under the Protection of the Environment Operations Act, 1997.
Reason: To ensure compliance with legislation and Australian Standards and to protect

public health and amenity.

8 (2US05)
The applicant must consult with the energy provider to determine the need and location of any electrical enclosure for the development. Should an electrical enclosure be required, the location and dimensions of this structure are to be detailed prior to the issue of a Construction Certificate. In the event of the energy provider requiring a sub station, the applicant must consult with Council or its delegate with a view to dedication of the land for the sub station as public roadway.
Reason: To ensure services are in accordance with the requirements of Energy Australia.

9 (2US06)
All electrical and telecommunication services to the site are to be provided by underground cabling, with the details noted on the drawings prior to the issue of the Construction Certificate.
Reason: To provide infrastructure which improves the streetscape by locating cabling underground.

10 (2US07)
The design of water cooling systems, evaporative coolers and hot/warm water systems within the premises (including access to the system for maintenance) must comply with the following:

- Public Health Act 1991,
- Public Health (Microbial Control) Regulation 2000,
- Australian/New Zealand Standard AS/NZS 3666.1:2002 – Air Handling and Water Systems of Buildings – Microbial Control – Design, installation and commissioning,
- Australian/New Zealand Standard AS/NZS 3666.2:2002 – Air Handling and Water Systems of Buildings – Microbial Control – Operation and Maintenance, and
- Australian/New Zealand Standard AS/NZS 3666.3:2002 – Air Handling and Water Systems of Buildings – Microbial Control –Performance based maintenance of cooling water systems.

Reason: To comply with the provisions of the Public Health Act 1991 and to protect public health and amenity.

11 (2US08)
The design of the LPG facility must be in accordance with Australian/New Zealand Standard AS/NZS 1596:2008 - The Storage and Handling of LP Gas.
Reason: This condition has been imposed to protect public safety.

12 (2WM03)
Garbage rooms or grease arrester rooms must be constructed of solid material: cement rendered and steel trowelled to a smooth even surface. The door to the garbage room is to be designed and constructed to ensure the room is vermin proof and can be opened from the inside at all times. The garbage room is to be ventilated to the external air by natural ventilation or an approved air handling exhaust system.
Reason: To keep garbage rooms in a clean and sanitary condition to protect public health.

CONDITIONS TO BE SATISFIED PRIOR TO ANY COMMENCEMENT

13 (3BM01)
The floor surfaces of bathrooms, shower rooms, laundries and WC compartments are to be of an approved impervious material properly graded and drained and waterproofed in accordance with Australian Standard AS 3740. Certification is to be provided to the Principal Certifying Authority from a licensed applicator prior to the fixing of any wall or floor tiles.

Reason: To prevent the penetration of dampness through walls and floors.

14 (3FP01)
The applicant must complete an application form and pay applicable fees for an application to Council for the construction of a Vehicular Crossing, for the design, specification and inspection by Council. Applications are to be made a minimum of two (2) working days prior to commencement of proposed works on Council's property.
Reason: To provide suitable vehicular access to private sites, without disruption to pedestrian and vehicular traffic.

15 (3LD01)
All healthy trees and shrubs identified for retention on the submitted landscape drawing are to be suitably marked for protection before any construction works start.
Reason: To ensure the trees conditioned to stay on the site are suitably protected during any construction works .

16 (3LD02)
All trees on the site clear of the building are to be retained, and those trees within 7.5m of the building are to be provided with a tree guard and a notice on each guard reading: 'This tree is the subject of a Tree Preservation Order by Manly Council'. This notice is to be in position prior to any work being commenced on the site. This does not include trees which have Council approval to be removed.
Reason: To ensure trees clear of the building are retained and those within 7.5m of the building are protected.

17 (3LD03)
Where trees greater than 5 metres in height which are not within the proposed footprint (i.e. not directly affected by the development) and are proposed for removal, a tree permit is required subject to the Tree Preservation Order 2001 criteria.
Reason: Retain the number of existing trees on site which are protected by the Tree Preservation Order and not directly in the way of development.

18 (3PT01)
In accordance with the Roads Act 1993, written consent from Council must be obtained and must be in hand prior to any track equipped plant being taken in or onto any roadway, kerb & gutter, footway, nature strip, or other property under Council's control.
Reason: To ensure appropriate protection of public infrastructure and facilitate access for public and vehicular traffic.

CONDITIONS TO BE COMPLIED WITH DURING DEMOLITION AND BUILDING WORK

19 (4AP01)
The recommendations detailed in the Geotechnical Appraisal: Preliminary Geotechnical Investigation Ref 26655ZHrpt by JK Geotechnics and dated 18 July, 2013 are to be complied with.
Reason: To ensure excavation is undertaken in an appropriate manner.

20 (4AP02)
A copy of all stamped approved drawings, specifications and documents (including the Construction Certificate if required for the work incorporating certification of conditions of approval) must be kept on site at all times so as to be readily available for perusal by any officer of Council or the Principal Certifying Authority.
Reason: To ensure the form of the development undertaken is in accordance with the determination of Council, public information and to ensure ongoing compliance.

21 (4BS01)
The construction of the food premises must comply with the following:

- Food Act 2003,
- Food Regulations 2004,
- Australian Standard AS 4674-2004: Construction and fit out of food premises,
- Australia and New Zealand Food Standards Code 3.2.3: Food Premises and Equipment.

Reason: To ensure compliance with legislation and to protect public health and safety.

22 (4CD02)
In order to maintain the amenity of adjoining properties, audible site works must be restricted to between 7.00am and 6.00pm, Monday to Friday and 7.00am to 1.00pm Saturday. No site works can be undertaken on Sundays or public holidays.

Unless otherwise approved within a Construction Traffic Management Plan, construction vehicles, machinery, goods or materials must not be delivered to the site outside the approved hours of site works.
Reason: To prevent disturbance to the surrounding community.

23 (4DS02)
Any de-watering from the excavation or construction site must comply with the *Protection of the Environment Operations Act, 1997* and the following:

1) Ground water or other water to be pumped from the site into Council's stormwater system must be sampled and analysed by a NATA accredited laboratory for compliance with ANZECC Water Quality Guidelines;
2) If tested by a NATA accredited laboratory, the certificate of analysis issued by the laboratory must be forwarded to Manly council as the appropriate regulatory authority under the *Protection of the Environment Operations Act, 1997*, prior to the commencement of de-watering activities;
3) Council will grant approval to commence site de-watering to the stormwater based on the water quality results received; and
4) It is the responsibility of the applicant to ensure during de-watering activities, the capacity of the stormwater system is not exceeded, there are no issues associated with erosion or scouring due to the volume of water pumped; and turbidity readings must not at any time exceed the ANZECC recommended 50ppm (parts per million) for receiving waters.

Reason: To ensure compliance with legislation and to protect the surrounding natural environment.

24 (4FP01)
The existing footpath level and grade at the street alignment of the property must be maintained.
Reason: To ensure appropriate access and infrastructure protection.

25 (4LD01)
Landscaping is to be carried out in accordance with the approved Landscape Plan Drawing Number 534 LD01 prepared by TompkinsMDA Architects dated 26 July 2013
Reason: To ensure appropriate landscaping is carried out on the development site.

26 (4LD02)
All healthy trees and shrubs identified for retention on the drawing are to be:
(a) suitably protected from damage during the construction process, and
(b) retained unless their removal has been approved by Council.

Reason: This is to ensure that the trees on the site which do not have approval to be removed on the site are suitably protected during any construction works.

27 (4LD03)
The felling, lopping, topping, ringbarking, wilful destruction or removal of any tree/s unless in conformity with this approval or subsequent approval is prohibited.
Reason: To prohibit the unnecessary damage or removal of trees without permission from Council during any construction.

28 (4LD04)
The following precautions must be taken when working near trees to be retained:

- harmful or bulk materials or spoil must not be stored under or near trees,
- prevent damage to bark and root system,
- mechanical methods must not be used to excavate within root zones,
- topsoil from under the drip line must not be added and or removed,
- ground under the drip line must not be compacted, and
- trees must be watered in dry conditions.

Reason: This is to ensure no damage is caused to trees from various methods of possible damage.

29 (4LD05)
Trees and shrubs liable to damage (including, but not limited to street trees) are to be protected with suitable temporary enclosures for the duration of the works. These enclosures are to only be removed when directed by the Principal Certifying Authority.

The enclosures are to be constructed out of F62 reinforcing mesh 1800mm high wired to 2400mm long star pickets, driven 600mm into the ground and spaced 1800mm apart at a minimum distance of 1000mm from the tree trunk.
Reason: To ensure protection of the trees on the site which could be damaged during any development works and to outline the type of protection.

30 (4LD06)
All disturbed surfaces on the land resulting from the building works authorised by this approval must be revegetated and stabilised to prevent erosion either on or adjacent to the land.
Reason: To prevent/contain erosion.

31 (4LD07)
Where development/construction necessitates the pruning of more than 10% of existing tree canopy, a permit application must be lodged with the Council's Civic Services Division, subject to the Tree Preservation Order 2001.
Reason: To ensure those trees are maintained appropriately and compliance with Australian Standard AS 4373:2007 – Pruning of Amenity Trees.

32 (4MS01)
Should you appoint Council as the Principal Certifying Authority (PCA) to undertake inspections during the course of construction, then the following inspection/certification are required:

- Silt control fences,
- Footing inspection - trench and steel,
- Reinforced concrete slab,
- Framework inspection,
- Wet area moisture barrier,
- Drainage inspection,

- Driveway crossing/kerb layback,
- Landscaping inspection,
- Swimming pool reinforcing steel inspection,
- Swimming pool safety fence inspection,
- Health inspection,
- Final inspection.

The cost of these inspections by Council is $3,540. (being $295 per inspection inclusive of GST). Payment of the above amount is required prior to the first inspection. Inspection appointments can be made by contacting the Environmental Services Division on 9976 1414.

At least 24 hours notice should be given for a request for an inspection and submission of the relevant inspection card. Any additional inspection required as a result of incomplete works will incur a fee of $165.
Reason: To ensure that the development is completed in accordance with the terms of the development consent and with the Building Code of Australia.

33 (4MS04)
The Sediment Control Plan is to be implemented from the commencement of works and maintained until completion of the development.
Reason: To protect the environment from the effects of sedimentation and erosion from development sites.

34 (4US01)
The installation of water cooling systems, evaporative coolers and hot/warm water systems within the premises (including access to the system for maintenance) must comply with:
- Public Health Act 1991,
- Public Health (Microbial Control) Regulation 2000,
- Australian/New Zealand Standard AS/NZS 3666.1:2002 – Air Handling and Water Systems of Buildings – Microbial Control – Design, installation and commissioning;
- Australian/New Zealand Standard AS/NZS 3666.2:2002 – Air Handling and Water Systems of Buildings – Microbial Control – Operation and Maintenance;
- Australian/New Zealand Standard AS/NZS 3666.3:2002 – Air Handling and Water Systems of Buildings – Microbial Control –Performance based maintenance of cooling water systems.

Water cooling systems must be maintained by a qualified person to ensure air born disease is prevented.
Reason: To comply with the provisions of the Public Health Act 1991 and to protect public health and amenity.

35 (4US02)
The installation of the LPG facility must be in accordance with Australian/New Zealand Standard AS/NZS 1596:2008 - The Storage and Handling of LP Gas.
Reason: This condition has been imposed to protect public safety.

36 (4WM03)
Hazardous waste must be contained, managed and disposed of in a responsible manner in accordance with the Protection of Environment and Operations Act 1997.
Reason: To ensure compliance with the legislation.

CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF THE OCCUPATION CERTIFICATE

37 (5BS01)
The premises requires an inspection from Environment and Health staff of Manly Council upon completion of works by Council prior to the issue of an Occupation Certificate.
Reason: To comply with legislation.

38 (5BS02)
Trading must not commence from the food premises until the proprietor of the food business formally registers their business details with the NSW Food Authority and Food Safety Information Systems (NAFSIS).
Reason: To ensure compliance with legislation and the Australian and New Zealand Food Standards Code.

39 (5FP01)
All surplus vehicular crossings and/or kerb laybacks must be removed and the kerb and nature strip reinstated prior to issue of the Occupation Certificate.
Reason: To provide on-street parking, suitable vehicular access to private sites, and infrastructure protection.

40 (5LD01)
A qualified Landscape Consultant is to submit a Certificate of Practical Completion to the Principal Certifying Authority prior to the issue of the Occupation Certificate, stating the work has been carried out in accordance with the approved Landscape Drawing and a maintenance program has been established.
Reason: This is to ensure the landscaping is planted in accordance with the drawing and maintained appropriately

41 (5LD02)
Evidence of an agreement for the maintenance of all plants for a period of twelve (12) months from the date of practical completion of the building is to be provided to the Principal Certifying Authority prior to issue of the final Occupation Certificate.
Reason: To ensure landscaping will be appropriately maintained.

42 (5MS01)
Documentation is to be supplied by a practising mechanical engineer certifying the mechanical exhaust ventilation system, as installed, complies with Australian Standard AS 1668 Parts 1 and 2 and must be provided to Council or the Principal Certifying Authority prior to the issue of the Occupation Certificate.
Reason: To ensure the mechanical exhaust ventilation system complies with Australian Standard AS 1668.

43 (5US01)
Any adjustment to a public utility service is to be carried out in compliance with its standards; where consent is required, with its concurrence; and with the full cost being borne by the applicant. Full documents of adjustments to any public utility service should be submitted to Council.
Reason: To ensure compliance with the terms of this consent.

44 (5WM01)
The applicant must contact Sydney Water (Tel.- 131110) to determine whether a Trade Waste Permit is required before discharging any trade waste to the sewerage system.
Reason: To comply with legislation.

ONGOING CONDITIONS RELATING TO THE OPERATION OF THE PREMISES OR DEVELOPMENT

45 (6AP04)
All towers, ventilation/ducting, exhaust fan structures, chillers and condensers for air-conditioning and any other structures on the roof are to be the subject of a separate Development Application.
Reason: To maintain the amenity of the surrounds.

46 (6AQ01)
The use of the premises must not give rise to air impurities in contravention of the Protection of the Environment Operations Act 1997 and must be controlled in accordance with the requirements of this Act.
Reason: To ensure compliance with legislation and to protect public health and amenity.

47 (6BS02)
The ongoing operation and fit out of the premises must be maintained in accordance with the following requirements:

- Food Act 2003
- Food Regulations 2004
- Australian Standard AS4674-2004: Construction and fit out of food premises
- Australia and New Zealand Food Standards Code 3.2.3: Food Premises and Equipment
- Australia and New Zealand Food Standards Code 3.2.2: Food Safety Practices and General Requirements

Reason: To ensure compliance with legislation and to protect public health and safety.

48 (6BS08)
Saturated and Trans Fats - General
To minimise the risk of cardiovascular disease to the community, the ongoing operation of the premises shall be in accordance with Council's Saturated and Trans Fats Reduction Policy.
Reason: To comply with Council Policy in minimising saturated and trans fats in the retail food industry in the interest of public health and safety.

49 (6FP01)
No sandwich boards, goods or the like are to be placed on Council's footpath.
Reason: To ensure pedestrian safety.

50 (6LP01)
No existing street trees can be removed without Council approval. Where such approval is granted, the trees must be replaced at full cost by the applicant with an advanced tree of a species nominated by Council's relevant officer.
Reason: To encourage the retention of street trees.

51 (6LP02)
No tree other than on land identified for the construction of buildings and works as shown on the building drawing can be felled, lopped, topped, ringbarked or otherwise wilfully destroyed or removed without the approval of Council.
Reason: To prevent the destruction of trees on other properties adjoining the development site.

52 (6LP03)
Landscaping is to be maintained in accordance with the approved Landscaping Drawing.
Reason: This is to ensure that landscaping is maintained appropriately.

53 (6LP04)
Leighton Green Cypress Cupressocyparis leylandii or any of its cultivars, must not be planted on the site for the life of the development. In the event of any inconsistency between this condition and the development application documents, this condition will prevail to the extent of the inconsistency.
Reason: To reduce the potential for adverse amenity effects such as overshadowing, loss of views, and loss of plant diversity.

54 (6NL03)
The ongoing use of the premises/property must not give rise to 'offensive noise' as defined under the provisions of the Protection of the Environment Operations Act 1997.
Reason: To ensure compliance with legislation and to protect public health and amenity.

55 (6NL04)
External sound amplification equipment or loud speakers must not be used for the announcement, broadcast, playing of music (including live music) or similar purposes.
Reason: To protect the acoustic amenity of neighbouring properties and the public.

56 (6US01)
The ongoing operation of water cooling systems, evaporative coolers and hot/warm water systems within the premises (including access to the system for maintenance) must comply with the following:

- Public Health Act 1991,
- Public Health (Microbial Control) Regulation 2000,
- NSW Health's NSW Code of Practice for the Control of Legionnaire's Disease.

Water cooling systems must be maintained by a qualified person to ensure air born disease is prevented.
Reason: To comply with the legislation and protect public health and amenity.

57 (6US02)
The operation of the LPG facility must be in accordance with Australian/New Zealand Standard AS/NZS 1596:2008 - The Storage and Handling of LP Gas.
Reason: This condition has been imposed to protect public safety.

ANNEXURE 2 – Parking Assessment

MANLY COUNCIL

TRAFFIC AND PARKING ASSESSMENT

FOR EXISTING AND PROPOSED REDEVELOPMENT

OF

ANDREW (BOY) CHARLTON SWIM CENTRE

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Job No.: **1147/13**

Report No: **34/13** **DECEMBER, 2013**

CONTENTS

1.0 INTRODUCTION

1.1 Background

Manly Council is proposing redevelopment of the existing Andrew (Boy) Charlton Swim Centre that will include construction of a new indoor aquatic and leisure centre.

The existing Swim Centre has an outdoor **50m** pool, an outdoor **25m** pool, shaded toddlers' pool, amenities building, entry pavilion, kiosk and Clubrooms and *off-street* car parking for **85** vehicles for visitors and **4** spaces for staff. The car park has vehicular access from Balgowlah Road and Kenneth Road.

The proposed indoor development will include:-

- 25 metre pool.
- Seating for 150 spectators.
- Programme Pool.
- Leisure pool.
- Spa pool.
- Sauna and Steam Room.
- Creché.
- Gymnasium.
- Group fitness/multi purpose space.
- Off-street parking for **46** vehicles (including **4 spaces** for persons with a disability and **2 spaces** for vehicles with prams).

On-street car parking spaces within *5 minute*s to *7 minutes* walk of the swim centre are located in Kenneth Road (**114** spaces) and Balgowlah Road (**12** spaces). There are **4** spaces near the pedestrian entrance to the Centre in Balgowlah Road that are signposted for staff.

1.2 Study Brief

At its meeting on *Tuesday 26th November 2013* to consider the proposed redevelopment of the Andrew (Boy) Charlton Swim Centre, the Joint Regional Planning Panel (**JRPP**) unanimously concluded that it does not have sufficient information on the parking and traffic issues to determine the application.

The Panel requests the applicant/Council to provide, by 10th December 2013, an independent traffic and parking report that addresses the following:-

a) the adequacy of the proposed parking having regard to the existing visitation of the pool and park as well as the increased facilities to be provided;
b) the adequacy and safety of Kenneth Road for 30-degree parking on both sides; and
c) any additional spaces required in the proposed conditions.

(1.2 (Continued)

Planning Ingenuity Pty Ltd, Town Planning Consultants for the project made the following request to Manly Council's Project Manager.

> *"Please ensure that the new traffic report includes fully dimensioned plans of the road reserve parking and footpath (for both sides of Kenneth Road) demonstrating compliance with the Australian Standards for on-street parking.*
>
> *The Panel members also suggested in their discussion that consideration be given to 'rear to kerb' on-street parking arrangement for safe unloading from the car boot and for adequate clearances to be provided between the driveway crossings to the swim centre, the bus stop and the new on-street parking arrangements. Can you please ensure that the Traffic Consultant is aware of these comments?*
>
> *Looking forward to receiving the revised plans and the Traffic Report by the 10th.*

This independent Traffic and Parking Assessment has been made at the request of Manly Council.

1.3 Reference Documents

1. Statement of Environmental Effects prepared by Tompkins MDA Architects, Issue B dated 25th October, 2013.
2. Traffic Assessment of the Andrew "Boy" Charlton Manly Swim Centre, October 2013 prepared by Manly Council's Traffic and Transport Manager, Ben Hubbard.
3. On-site and Off-site Parking Plan Drawing Number 1310 Sheet 102, prepared by Tompkins MDA Architects.
4. Traffic Volume, Vehicle Classifications and Speeds in Kenneth and Balgowlah Roads, March 2012 by Skyhigh ATC Ref N806.
5. Monthly Patronage Forecasts for the redeveloped Swim and Leisure Centre prepared by Manly Council.
6. Patronage Data for the month of February 2013, Hourly Patronage for the week Monday 4th February to Sunday 10th February 2013 from the Swim Centre Co-Ordinator, Jon Colwell, Manly Council.
7. Minutes of the Sydney East Joint Regional Planning Panel Meeting held on Tuesday 26th November at 10:30am.
8. Hourly Traffic Counts for 7 days commencing 3rd August 2007 by Centre for Excellence in Kenneth Road and Balgowlah Road, Manly.

1.3 (Continued)

9. Parking Facilities Part 5: On-Street Parking AS 2890.5 – 1993.

10. Parking Facilities Part 1: Off-Street Car Parking AS/NZS 2890.1-2004.

11. Guidelines for Road Safety Audit Practices: Roads and Traffic Authority Transport NSW, July 2011.

12. RTA Guide to Traffic Generating Development 2002.

13. Austroads Guide to Road Safety Part 6 Road Safety Audit 2009.

2.0 EXISTING AND FUTURE PATRONAGE AT ANDREW (BOY) CHARLTON SWIM CENTRE

2.1 Existing Patronage 2013

Daily visits to the existing aquatic centre for the *7 day period* ***4th February*** *2013* to ***10th February*** *2013* and for the *7 day period* ***10TH March*** *to* ***16TH March*** were provided by the Swim Centre Co-ordinator, Jon Colwell. The daily totals from **7:00am** to **7:00pm** were as follows:-

	FEBRUARY	MARCH
Monday	1008	871
Tuesday	1236	831
Wednesday	1264	1014
Thursday	1331	644
Friday	1236	882
Saturday	1731	1313
Sunday	1330	1079

Total Visits February : 32657. March : 28233

Saturday was the busiest day of the week in the peak summer month of February and also in March.

The daily visitors from **6:00am** to **6:00pm Saturday 7th December 2013** provided by Jon Colwell were **1174**.

The above data does not provide separate totals for adults and children under 16 and does not provide the number of persons in the Centre at any time.

2.2 Future Patronage Projections

Future monthly *patronage forecasts* have been provided by Manly Council based upon *statistical analysis over a five (5) year period of continuous time series operational data* from the *Lane Cove Aquatic* and *Leisure Centre.*

The **monthly visit forecast** is as follows:-

	ACQUATIC CENTRE		HEALTH CLUB	PROGRAMMES	CRECHÉ
	BASE YEAR	AFTER 5 YEARS			
January		43579	13509	493	396
February	51250	68000	13000	510	400
March	43750	62000	13000	510	400
April		50000	13000	510	400
May		49000	13000	510	400
June		49000	12000	510	400
July		31164	11836	636	382
August		33490	13718	395	397
September		35826	13612	623	352
October		40945	13299	708	396
November		53201	14286	716	415
December		37953	11697	693	301

2.2 (Continued)

The Health Club patrons generally attend 'before and after work' *Monday to Friday* and follow the same routine on *weekends*. Hence, attendance by this group will *not coincide* with the **10:15am** *peak attendance on Saturdays*.

The programme visits are also unlikely to occur during the **10:15am** *peak* on *Saturdays*.

The *expansion factors* for *February* and *March* for the *Aquatic Centre* are **1.3268** and **1.4171** respectively.

3.0 TRAFFIC, PARKING AND PATRONAGE SURVEYS

3.1 Patronage Survey

A Count of all adults and children entering and leaving the Boy Charlton Swim Centre was made from **6:00am** to **12 noon** on **Saturday 7th December**. The weather was sunny and the temperature reached ***29*** *degrees at midday*. The Count and number of persons in the pool Swim Centre at the *peak time* are shown in **Table 3.1**

TIME INTERVAL	ADULTS			CHILDREN			*TOTAL IN POOL*
	IN	OUT	IN POOL	IN	OUT	IN POOL	
6:00 – 6:30am	33	6	27	3	1	2	29
6:30 – 7:00am	16	14	29	2	0	4	33
7:00 – 7:30am	23	8	44	4	0	8	52
7:30 – 8:00am	35	24	55	17	4	21	76
8:00 – 8:30am	56	26	85	58	2	77	162
8:30 – 9:00am	98	27	156	131	15	193	349
9:00 – 9:30am	46	35	167	26	10	209	376
9:30 – 10:00am	31	11	187	19	5	223	410
10:00 – 10:15am	12	11	**188**	10	9	**224**	**412**
10:15 – 10:30am	16	27	177	8	21	211	388
10:30 – 11:00am	23	41	159	17	63	165	324
11:00 – 11:30am	31	64	126	24	70	119	245
11:30 – 12:00noon	24	33	117	16	37	98	215
TOTAL	444	327	117	335	237	98	215

3.2 Parking Accumulation Survey

The number of vehicles that *entered* and *exited* from the Swim Centre Car Park from Balgowlah Road and Kenneth Road, the *turning movement left* and *right*, the *time* of *entry* and *exit* and the *last 3 letters or digits* in the *vehicle registration number* were recorded on **Saturday 7th December** from **6:00am** until **12 noon**. Also recorded were the *number of vehicles* in the Swim Centre Car Park, in Balgowlah Road opposite the pedestrian entrance to the Swim Centre and in Kenneth Road at **6:00am**, at other times and at **12 noon**. The number of *entry* and *exit movements* recorded each *half hour* and from **10:00am** to **10:15am** are shown in **Table 3.2**

TABLE 3.2 Summary Traffic Movements IN and OUT of Car Park.

TIME INTERVAL	BALGOWLAH		KENNETH ROAD				Number of Cars In
	IN	OUT	IN		OUT		CAR PARK
5:50 – 6:00am	3	0	5	2	-	-	31
6:00 – 6:30	5	1	7	5	1	3	43
6:30 – 7:00	13	3	4	5	5	12	45
7:00 – 7:30	14	4	10	4	5	15	49
7:30 – 8:00	16	8	16	1	7	9	58
8:00 – 8:30	25	10	22	6	10	10	81
8:30 – 9:00	35	23	16	4	7	30	76
9:00 – 9:30	14	6	9	3	6	13	77
9:30 – 10:00	9	17	14	4	3	8	75
10:00 – 10:15	11	5	3	4	0	7	82
10:15 – 10:30	3	0	4	0	4	9	76
10:30 – 11:00	16	8	7	2	5	12	76
11:00 – 11:30	16	7	11	10	14	14	78
11:30 – 12:00 noon	17	5	9	4	7	24	72

3.2 (Continued)

At the peak time **10:15am**, there were **19 cars** parked *in Kenneth Road* by persons exercising or walking dogs in the LM Graham Reserve.

3.3 Duration of Stay

The *number plates* of *all vehicles* entering and *exiting* from the Swim Centre Car Park were *matched* using the Excel Computer Programme.

The length of stay varied considerably over each of the hours of entry as shown on diagram **Figure 3.1**. The average over the whole period from **6:40am** to **12:00 noon** was **0.74 hours.**

3.4 Traffic Generation

Vehicles *entering* and *exiting* from the car park by 'left' and 'right' *turning movements* were recorded in *15 minute intervals* at Balgowlah Road and Kenneth Road on **Saturday 7th December** from **6:00am** to **12 noon**. The **peak** occurred between **10:15** and **11:15am**. The peak hour *volumes* together with *volumes in Kenneth Road* are shown in **Figure 3.4.**

The **peak entry volume** was **55 vphr** and the **peak exit flow rate** was **58 vphr**.

3.5 Traffic Volumes in Kenneth Road

Kenneth Road carried a *two-way volume* of **1012 vphr** *west* of the car park driveway and **1005 vphr** *east* of the driveway.

These volumes are similar to the weekday **5:00 – 6:00pm** commuter peak hour recorded in the Survey by Skyhigh ATC in March 2012. These commuter peak hour volumes are shown below together with similar counts by Centre for Excellence in 2007.

	Peak Hour	YEAR		
		2007	2012	
Weekdays	5:00 – 6:00pm	790	1021	Two-Way
	8:00 – 9:00am	746	807	Two-Way
Saturday	11:00 – 12:00 noon	1066	1093	Two-Way

4.0 ESTIMATED FUTURE PARKING DEMAND

As shown in *Section 2.2*, the *two busiest months* of the year are *February and March*. It is not normal practice to design car parks for the busiest period of the year. The *RMS Guide to Traffic Generating Developments* requires parking demand to be based upon the *average maximum*. For the proposed Swim Centre the **85th percentile Saturday** which is generally the *busiest day of the week* (refer *Section 2.1*) has been adopted for calculation of *future parking* demand. The *85th percentile* Saturday is the ***8th highest Saturday*** in the year and this would fall in March.

The current daily patronage on **Saturday 15th march 2013** was **1313 persons**.

The *expansion factor* for the *upgraded and enlarged Aquatic and Leisure Centre* based upon a similar facility at Lane Cove is **1.4171** (Reference 5).

The estimated daily patronage for the future facility in **March** is **1861 persons** (1313 x 1.4171).

When the Patronage and Parking surveys were carried out on the **7th December 2013**, the *daily visits* recorded by the *Manly Swim Centre* administration were **1174**.

The survey results in *Section 3.1* showed that the *peak attendance* in the Swim Cetnre was **412** comprising **188** adults and **224** children at **10:15am**. The *estimated peak* car parking demand was **106 vehicles**. This total included **82** in the Swim Centre car park, **2** in Balgowlah Road and **22** in Kenneth Road. At **10:15am** there were **41** vehicles parked in Kenneth Road of which **19** were estimated to be parked by persons on the JD Graham Reserve (*20 adults and 4 children*).

In addition to the cars parked by visitors to the Swim Centre there were **3 vehicles** parked by staff in the *staff car park* which has a *separate entry* and *exit* from Balgowlah Road. There are ***4 unmarked spaces*** in this car park.

Peak patronage at 10:15am	= 412
Daily total of visitors on 7/12/13	= 1174
Peak patronage as percentage of daily total	= 412 / 1174
	= **35.1%**
Car Driver Travel Mode	= Peak Parking Demand = 106 x 100 / Peak Patronage 412
	= **25.73%**
Future Peak Patronage at 10:15am	= .351 x 1861
	= **653**
Future Peak Parking demand	= 653 x .2573
	= **168 cars** ……x
Total parking demand including visitors on Reserve	= 168 + 19 = **187**
Future parking provision:	
On Kenneth Road	119
Off Street car park	52
	171 spaces.
Estimated shortfall : 16 spaces	(8.6%)

4.0 (Continued)

In the winter months when soccer matches are played, the future patronage in June, July and August is much lower than March. The estimated *average daily patronage* (visits) in June (**1633**), July (**1005**) and August (**1080**) compared with March **1861**. Soccer spectators and players are expected to generate a *higher parking demand* than *visitors in summer months*.

4.1 Management Plan for Future Swim Centre

Over a *12 month period* after the *upgraded and enlarged Aquatic and Leisure Centre* has opened it is r*ecommended* that *Surveys be carried out* in summer and winter to determine *parking demand by visitors* to the JD Graham Reserve and *visitors to the Swim Centre*.

The visitors for each activity in the Swim Centre can be surveyed and a *Plan of Management* prepared to reduce the peak demand. The start and finish times of some activities may be altered. The proposed start and finish times of all activities and number of expected visits can be entered in a spread sheet when the Centre is initially opened. This will show the peak attendance.

The *peak attendance* and *peak parking* can be monitored and the programme adjusted if necessary to ensure that the available parking is adequate except for infrequent occasions in February. Alternative forms of transport such as bicycles and walking should be encouraged.

5.0 PROPOSED SCHEMES FOR OFF-STREET AND ON-STREET PARKING

5.1 Off-Street Parking Schemes

5.1.1 Current Off-Street Parking Proposal for Swim Centre

The proposed scheme prepared by Tompkins MDA for Council has **46**/*90 degree angle parking spaces* including **4** disabled spaces and **2 spaces** for vehicles with prams and **one**-**way** traffic circulation.

The parking bay width is **2.5 metres** and complies with **User Class 2** in **Figure 2.2 in AS/NZS 2890.1 – 2004**. The bays in the existing car park are **2.6 m** wide and the aisle is **6.0** metres wide and traffic circulation is **two way**. There are **85** linemarked and sealed parking bays. In busy periods ***3*** *staff vehicles* park near the pool entrance in the *staff car park*.

5.1.2 Alternative Scheme A – 60 Degree Angle

This Scheme requires a further strip of land, **2.4** metres in width and **24.2** metres long into the *swimming pool enclosure*. The scheme provides **60** *degree angle parking bays* **2.6m** wide by **5.4** metres long and complies with **User Class 3 in AS/NZS 2890.1 – 2004**. This arrangement is more suitable for **one way** *traffic circulation*, is *easier to park and unpark* and is more *convenient* for parents with children and provides **49 parking bays**. The proposal is shown on **Sheet 1** of **Drawing No. 1147-13**.

5.1.3 Alternative Scheme B – 90 Degree Angle

This Scheme requires a strip of land **4.4** metres wide by **23.9** metres long on the eastern side to be taken from the swimming pool enclosure. The Scheme provides **52**/*90 degree angle parking* bays each **2.6** metres wide by **5.4** metres long with aisles **6.0** metres wide. The traffic circulation is shown as **one-way**. This scheme complies with **User Class 3**. The **2** spaces for vehicles with prams are **3.2** metres wide. This is a *more efficient layout*. The Car Park layout is shown on **Sheet 1B** of **Drawing No. 1147-13.** This **Scheme** is **recommended.**

5.2 On-Street Parking in Kenneth Road

Weekday *average peak hour traffic volumes* from the Skyhigh ATC Traffic survey in March 2012, were **648 vphr** eastbound and **470 vphr** westbound. Kenneth Road currently has **2** *traffic lanes* and **2** *kerbside parking lanes*. The signposted speed limit is **50 km/hr**. There are **57** *parallel spaces* on the northern side and **58** *parallel spaces* on the southern side when *"Bus Zones"* and *"No Stopping*" zones are excluded from the kerb lengths.

5.2 (Continued)

Kenneth Road is **13.0** metres *wide* kerb to kerb. The main safety problem when there is 'overflow parking' in Kenneth Road from the Swim Centre is *children and parents crossing* Kenneth Road to *walk to the pool entrance* in Balgowlah Road.

5.2.1 Current Proposal with 30 Degree Angle

The current proposal prepared by Ben Hubbard, Council's Traffic and Transport Manager for Tompkins MDA has **64**/*30 degree angle spaces* on the southern side of Kenneth Road and **74** parallel spaces on the northern side. The proposal does *not show* the "Bus Zones" and "No Stopping" zones. When these are included, the number of parallel spaces is **57** and the number of **30** *degree angle spaces* is about **58** giving a total of **115 spaces**. This is **equal** to the *existing* **115** *parallel spaces*.

The standard layout for *30 degree angle parking on-street* is shown in **Figure 2.2 in AS 2890.5 – 1993**. For a bay width of **2.5** metres the bay depth **D** is **4.1** metres allowing for a **600mm** kerb overhang and **4.4** metres with *no overhang*. The manouvre space **M** is **2.9m** and allowable encroachment **J** is **2.5m**. The lane width **L** shown in **Figure 2.2 for 0-800** *vehicles / lane / hour is* **3.5** metres and the design speed is **60 km/hr**. Based upon these dimensions, the *minimum* width to the broken centerline is **8.3** metres (no overhang) or **8.0** metres with overhang. If parallel parking is to be retained **2.1m** and a second traffic lane (**3.5m**), the total width of road kerb to kerb is **13.9 metres** or **13.6 metres** with overhang.

The majority of the ***4*** *lane urban arterial roads in Sydney* are **13** metres wide kerb to kerb and have **4** *traffic lanes* each **3.25** metres wide. In *peak* hours, the traffic volumes are close to *1000 vehs/lane/hour*. In my opinion it is reasonable in Kenneth Road to provide a lane width of **3.0** metres where the percentage of *commercial vehicles is low*, volumes *much lower than **800 veh/hr*** and the signposted speed limit is **50 km/hr**. This would reduce the required road width to **13.0** metres. Hence, the proposal shown on **Sheet 2B** of **Drawing No. 1147-13** with *parallel parking* on the northern side and **30** *degree angle parking* on the southern side rear to kerb is *acceptable* with ***no kerb*** *overhang* on '*traffic safety grounds'*.

5.2.2 Alternative Scheme with 45 Degree Angle Parking

The alternative proposal shown on Sheet 2 of Drawing 1147-13 retains the **18** existing marked parallel parking bays on the northern side of Kenneth Road at the western end and provides a total of **20** parallel bays on the northern side, **14** parallel bays on the southern side at the western end and **56** / *45 degree angle parking bays* on the southern side, a *total of **90** bays*. This is ***24*** *less* than the **114** *existing parallel spaces*.

5.2.2 (Continued)

However, the advantage is that the bays that will be used by swim centre patrons *do not involve crossing* Kenneth Road and *are closer* to the swim centre.

The standard layout of *45 degree angle parking* on-street is shown in **Figure 2.3 in AS2890.5 – 1993**. For a bay of **2.5** metres the bay depth **D** is **4.8** metres allowing for **600**mm kerb overhang and **5.2** metres with no overhang. The manoeuvre space **M** is **3.7** metres and allowable encroachment **J** is **2.5** metres. The lane width **L** shown in **Figure 2.3** for **0-800** veh/lane/hour is **3.5** metres and the design speed is **60 km/hr**. Based upon these dimensions the *minimum width* to the broken centerline is **13.4** metres (no overhang) or **13.0** metres with **600 mm** overhang. If the lane width is *reduced to **3.3** metres* the overall width **W** kerb to kerb with **2** traffic lanes and no overhang is **13.0 metres**.

The *disadvantage* with the alternative scheme is there are **25 *fewer bays*** than with the *30* degree angle Scheme. *This Scheme is not recommended*.

5.3 Traffic Calming in Kenneth Road

Automatic Traffic Volume, Speed and Classification Surveys were carried out in Kenneth Road east of the driveway to the swimming pool over *7 days in March 2012 by Skyhigh ATC for Manly Council*. The **85th** percentile speed average over 7 days was **50.0 km/hr**. The *average daily* number of vehicles recorded in the **50-60 km/hr** speed range was **1880** and equalled **15.7%** of the average daily traffic volume in both directions. Some **0.6%** of average daily traffic (67 vehicles) were recorded in the **60-70 km/hr** speed range.

Irrespective of whether the existing parallel parking is retained or the 30 degree angle alternative, **'rubber speed cushions'** should be installed in ***two locations*** to *reduce the speed of vehicles* passing the *driveway entrance* and *exit* and the *angle parking for safer manoeuvring* and for *pedestrians crossing Kenneth Road*.

A *road narrowing with 'kerb blisters'* should also be installed in Kenneth Road as shown in Detail A. There is *no footpath* on the northern side of Kenneth Road and the width from the fence to the kerb is *too narrow* for a **1.2 metre** wide footpath.

The narrow footway on the northern side should be *cleared of vegetation* and an *asphalt surfaced footpath* constructed so that *pedestrians do not have to walk* along Kenneth Road *before crossing* to the southern side.

If the fence can be moved **500mm** north, a *standard width footpath* could be constructed. *It is recommended that this proposal be investigated.*

6.0 SUMMARY

1. The estimated peak parking demand is for the busiest period on a Saturday morning, the busiest day of the week in March. This is equal to the **85th percentile** *Saturday morning* in a *52 week period*.

2. The estimated peak parking demand is for the updated and enlarged Swim Centre is **168 parking spaces**.

3. The estimated parking demand on the LM Graham Reserve on Saturday morning in Summer is **19 car spaces**.

4. The total parking demand is estimated to be **187 spaces**.

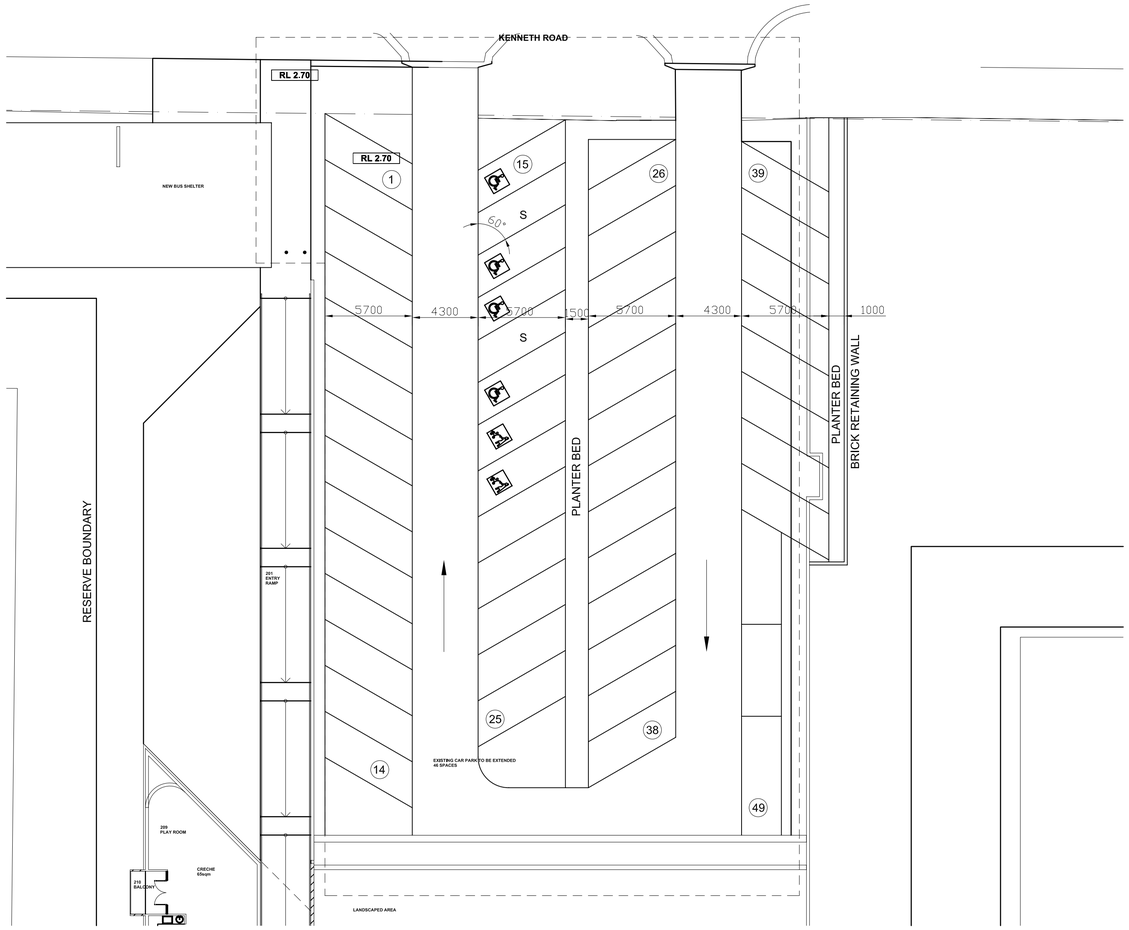
5. The total parking provision in the off-street car park and with *30 degree angle* parking in Kenneth Road is **171 spaces**, a shortfall of **16** *spaces.*

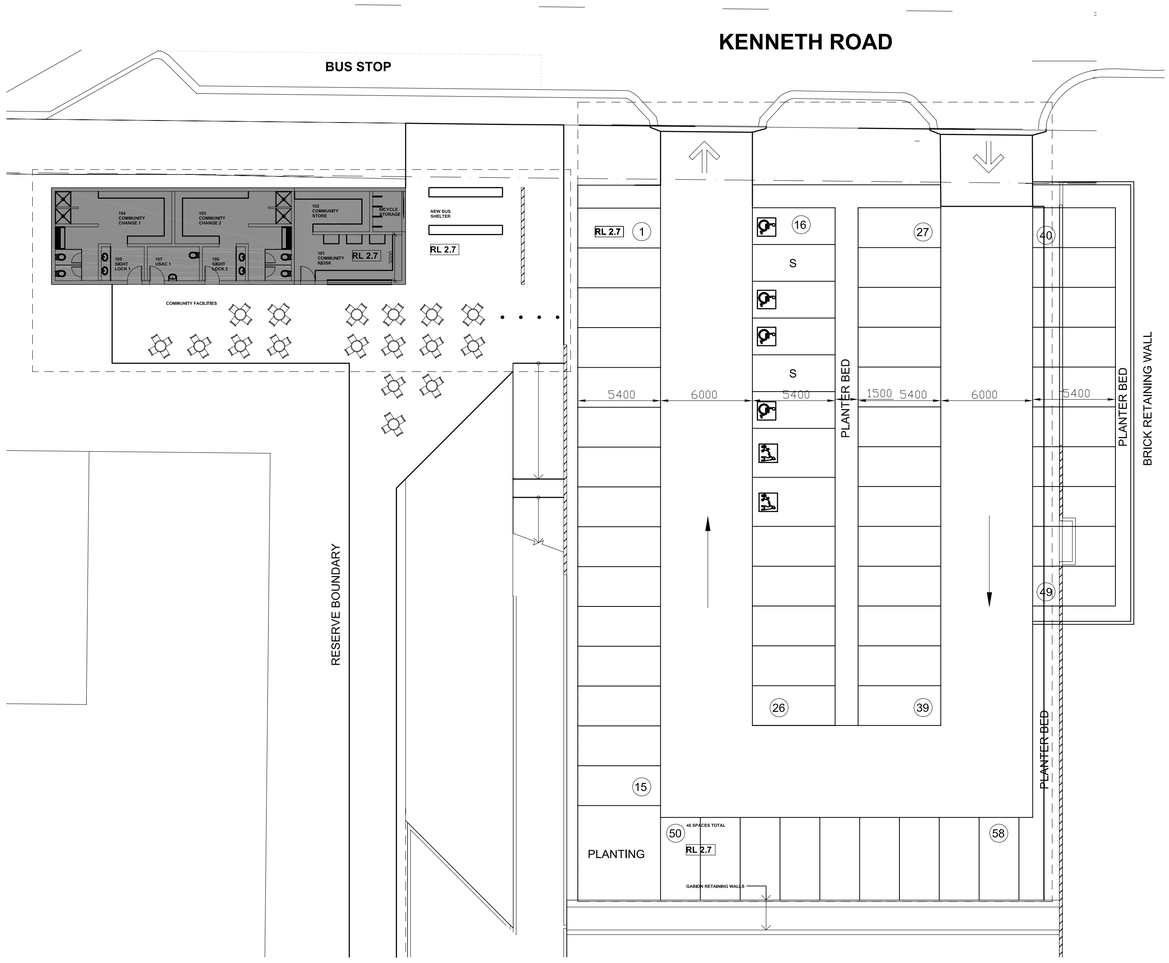
6. A *Management Plan* is recommended that will require *surveys* to be conducted over a 12 month (52 week) period and enable the *peak attendance* and *peak parking demand to be monitored* and the Activity Programme adjusted if necessary to **ensure** that the available parking is adequate.

7. Adults and children should be encouraged to walk or cycle to the Swim Centre. Additional bicycle racks may be required.

SCHEME A

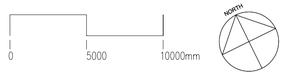
60° ANGLE PARKING BAYS
2.6M X 5.4M
AISLE 4.3M
USER CLASS 3
DISABLED BAYS 2.4M X 5.4M
WITH SHARED BAY
PRAM BAYS 2.6M X 5.4M
PARKING FRONT TO KERB
49 BAYS





SCHEME B

90° ANGLE PARKING BAYS
2.6M X 5.4M
AISLE 6M
USER CLASS 3
DISABLED BAYS 2.4M X 5.4M
WITH SHARED BAY
PRAM BAYS 3.2M X 5.4M
58 BAYS



No.	DATE	APPD	

SURVEY BY:

DATUM: A.H.D.

LYLE MARSHALL & ASSOCIATES PTY. LTD.
CONSULTING ENGINEERS, TRANSPORTATION, ENVIRONMENTAL PLANNERS & ARCHITECTS
SUITE 8
871 PACIFIC HIGHWAY
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phone: (02) 9419 8191
faxsimile: (02) 9419 8107
email: lylemarshall@ozemail.com.au

CLIENT: MAINLY COUNCIL

ALTERNATIVE 60 DEGREE AND 90 DEGREE ANGLE PARKING SCHEME
FOR OFF-STREET CAR PARK FOR BOY CHARLTON SWIM CENTRE

SCALE	PASSED	DATE FIRST ISSUED
1:200(A1)		DECEMBER 2013

DESIGN	LMA
DRAWN	KC
CHECKED	GLM

SHEET No. 1 OF

DRAWING No. 1147-13

APPENDICIES

APPENDIX A

D:
F: 99761400
PO Box 82 Manly NSW 1655
records@manly.nsw.gov.au

From: Justine Coady
Sent: Tuesday, 10 December 2013 11:18 AM
To: 'lylemarshall@ozemail.com.au'
Cc: Jon Colwell
Subject: Manly Swim Centre Attendance figures

Good morning Lyle

Please find below attendance figures as requested for March 2013:

3-9 March: 7888
10-16 March: 6634
17-23 March: 5673
24-30 March: 5660

Average for March 2013: 6464

Please let me know if you need further information.

Regards

Justine Coady
Bookings & Administration Officer
E: Justine.Coady@manly.nsw.gov.au
P: 99761500
1 Belgrave Street Manly NSW 2095
D:
F: 99761400
PO Box 82 Manly NSW 1655
records@manly.nsw.gov.au

Lyle Marshall

From: Justine Coady [Justine.Coady@manly.nsw.gov.au]
Sent: Tuesday, 10 December 2013 12:26 PM
To: lylemarshall@ozemail.com.au
Subject: FW: Manly Swim Centre Attendance figures - daily

Here is the week before with temperatures as requested:

Sun 10 Mar: 1079 (29)
Mon 11 Mar: 871 (29)
Tue 12 Mar: 831 (28)
Wed 13 Mar: 1014 (29)
Thu 14 Mar: 644 (24)
Fri 15 Mar: 882 (23)
Sat 16 Mar: 1313 (29)

Regards

Justine Coady
Bookings & Administration Officer
E: Justine.Coady@manly.nsw.gov.au P: 99761500 1 Belgrave Street Manly NSW 2095
D: F: 99761400 PO Box 82 Manly NSW 1655
records@manly.nsw.gov.au

From: Justine Coady
Sent: Tuesday, 10 December 2013 12:09 PM
To: 'lylemarshall@ozemail.com.au'
Cc: Jon Colwell
Subject: Manly Swim Centre Attendance figures - daily

Hi Lyle

Sun 17 March: 580 (temp 23)
Mon 18 March: 704 (temp 22)
Tue 19 March: 693 (temp 24)
Wed 20 March: 701 (temp 26)
Thu 21 March: 700 (temp 28)
Fri 22 March: 1246 (temp 33)
Sat 23 March: 1049 (temp 27)

I checked the temperature for these days – this probably explains the increase in attendance figures towards the end of the week.

Regards

Justine Coady
Bookings & Administration Officer
E: Justine.Coady@manly.nsw.gov.au P: 99761500 1 Belgrave Street Manly NSW 2095

Centre Attendance Breakdown Report
for customers attending between 4 FEB 2013 and 4 FEB 2013

MON

Memberships

Type	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	Visits
1/2 Season Pass Adult	1	1					1		1		2		6
1/2 Season Pass Family	2						1	1	21	18	5	2	50
Season Pass Adult	4	2	1	1		1		3			3	1	16
Season Pass Concession	6	5				1		3	1	3		1	20
Season Pass Family	10	4	4	4			1	2	18	15	23	4	85
swim school management			1						2				3
Swim School Staff			1									3	4
1/2 Season Pass Concession				1									1
1/2 Season Pass Concession					1					1			2
Life Pass								1		1			2
TPI Pensioner								1					1
Season Pass Concession									1				1
Total Visits per Hour	23	12	7	6	1	2	3	11	44	38	33	11	
Total Visits													191

Visit Passes

Type	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	Visits
10 Pass Adult	4	8	8		3	2	2	5	9	11	3	3	58
10 Pass Concession	5	7	3					3	20	10	11	4	63
20 Pass Adult	6	4	8	1		2	5	8	10	13	13	4	74
20 Pass Concession	9	6	2	3	2			6	34	31	17	18	128
Aqua Fitness 10 Pass Concession	3												3

Centre Attendance Breakdown Report
for customers attending between 4 FEB 2013 and 4 FEB 2013

Type	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	Visits
20 Pass Staff												1	1
Total Visits per Hour	27	25	21	4	5	4	7	22	73	65	44	30	
Total Visits													327

Services sold

Type	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	Visits
Aqua Fitness Concession Entry	1												1
Aqua Fitness Season Concession Pass Holder	3												3
Aqua Fitness Single Entry	1												1
Free Entry (Under 4)	1		4	1	1			2	7	1	1		18
Single Entry Adult	6	8	7	4	2	5		13	16	8	12	9	90
Single Entry Seniors Card	1				1	2		4	1	2	1		12
Single Entry Spectator		8	145	62	18	13	1	1	10	16	4		278
Single Entry Child 4-7yrs			3		3				19	19	7	5	56
Single Entry Concession							1						1
Single Entry Child 8-12yrs									4	9	3	1	17
Single Entry Family (4)									1				1
Single Entry Child 13-17yrs										1			1
Waterpolo Concession Entry												11	11
Total Visits per Hour	13	16	159	67	25	20	2	20	58	56	28	26	
Total Visits													490

Total visits: 1008

Time Breakdown option has been selected - From Time: 7:00 AM To Time: 7:00 PM

TUE

Centre Attendance Breakdown Report
for customers attending between 5 FEB 2013 and 5 FEB 2013

Memberships

Type	Visits
1/2 Season Pass Adult	8
1/2 Season Pass Concession	1
1/2 Season Pass Concession	2
1/2 Season Pass Family	53
Complimentary Swim Club Pass	1
Life Pass	4
Season Pass Adult	32
Season Pass Concession	17
Season Pass Concession	2
Season Pass Family	118
swim school management	4
Swim School Staff	3
Total Visits	245

Visit Passes

Type	Visits
10 Pass Adult	77
10 Pass Concession	47
20 Pass Adult	93
20 Pass Concession	108
20 Pass Staff	1
Total Visits	326

Services sold

TUES

Centre Attendance Breakdown Report
for customers attending between 5 FEB 2013 and 5 FEB 2013

Type	Visits
Free Entry (Under 4)	26
Single Entry Adult	92
Single Entry Child 13-17yrs	3
Single Entry Child 4-7yrs	68
Single Entry Child 8-12yrs	19
Single Entry Concession	2
Single Entry Family (4)	4
Single Entry Pensioner Card	1
Single Entry Seniors Card	4
Single Entry Spectator	391
Waterpolo Adult Entry	23
Waterpolo Concession Entry	18
Waterpolo Spectator Entry	14
Total Visits	665

Total visits: 1236

End of report.

Centre Attendance Breakdown Report
for customers attending between 6 FEB 2013 and 6 FEB 2013

WED

Memberships

Type	Visits
1/2 Season Pass Adult	10
1/2 Season Pass Concession	5
1/2 Season Pass Family	61
Complimentary Swim Club Pass	1
Life Pass	3
Season Pass Adult	29
Season Pass Concession	19
Season Pass Concession	3
Season Pass Family	142
Season Pass Staff	1
swim school management	3
Swim School Staff	3
TPI Pensioner	1
Total Visits	281

Visit Passes

Type	Visits
10 Pass Adult	120
10 Pass Concession	72
20 Pass Adult	121
20 Pass Concession	132
Aqua Fitness 10 Pass Concession	3
Total Visits	448

WED

Centre Attendance Breakdown Report
for customers attending between 6 FEB 2013 and 6 FEB 2013

Services sold

Type	Visits
Aqua Fitness Concession Entry	4
Free Entry (Under 4)	68
Single Entry Adult	145
Single Entry Child 13-17yrs	5
Single Entry Child 4-7yrs	66
Single Entry Child 8-12yrs	13
Single Entry Concession	7
Single Entry Family (4)	5
Single Entry Pensioner Card	1
Single Entry Seniors Card	18
Single Entry Spectator	181
Waterpolo Adult Entry	17
Waterpolo Concession Entry	4
Waterpolo Spectator Entry	1
Total Visits	535

Total visits: 1264

End of report.

Centre Attendance Breakdown Report
for customers attending between 7 FEB 2013 and 7 FEB 2013

TTCR

Memberships

Type	Visits
1/2 Season Pass Adult	9
1/2 Season Pass Concession	2
1/2 Season Pass Concession	8
1/2 Season Pass Family	68
Complimentary Swim Club Pass	1
Life Pass	2
Season Pass Adult	34
Season Pass Concession	24
Season Pass Concession	2
Season Pass Family	118
swim school management	3
Swim School Staff	5
Total Visits	276

Visit Passes

Type	Visits
10 Pass Adult	88
10 Pass Concession	64
20 Pass Adult	82
20 Pass Concession	142
20 Pass Staff	2
Aqua Fitness 10 Pass Adult	1
Total Visits	379

Centre Attendance Breakdown Report
for customers attending between 7 FEB 2013 and 7 FEB 2013

THUR

Services sold

Type	Visits
Aqua Fitness Concession Entry	1
Aqua Fitness Season Pass Holder	1
Aqua Fitness Single Entry	6
Free Entry (Under 4)	68
Free Entry Carer	1
Single Entry Adult	162
Single Entry Child 13-17yrs	3
Single Entry Child 4-7yrs	54
Single Entry Child 8-12yrs	54
Single Entry Concession	15
Single Entry Family (4)	8
Single Entry Pensioner Card	3
Single Entry Seniors Card	20
Single Entry Spectator	264
Ticket Entry Adult	1
Ticket Entry Concession	3
Waterpolo Adult Entry	3
Waterpolo Concession Entry	9
Total Visits	676

Total visits: 1331

End of report.

Centre Attendance Breakdown Report
for customers attending between 8 FEB 2013 and 8 FEB 2013

FRIDAY

Memberships

Type	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	Visits
1/2 Season Pass Adult	1				2					1		2	6
1/2 Season Pass Family	4	1	3	4	2		1	3		17	16	7	58
Season Pass Adult	5	5	2	1				1				4	18
Season Pass Concession	4	4	6			1		1		1	1	1	19
Season Pass Family	5	16	10	5		2		5	2	8	21	18	92
1/2 Season Pass Concession		1									1		2
Life Pass		1	1										2
1/2 Season Pass Concession				1									1
swim school management				1					1	1			3
Complimentary Swim Club Pass										1			1
Swim School Staff										1			1
Total Visits per Hour	19	28	22	12	4	3	1	10	3	30	39	32	
Total Visits													203

Visit Passes

Type	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	Visits
10 Pass Adult	13	9	4	4	11	10	3		7	13	17	14	105
10 Pass Concession	4	5	5	6	7	1			5	23	25	6	87
20 Pass Adult	7	3	5	2	4	2	1	2	5	14	14	9	68
20 Pass Concession	5	13	2	4	7			2	6	50	33	13	135
Aqua Fitness 10 Pass Concession	2	3											5

Centre Attendance Breakdown Report
for customers attending between 8 FEB 2013 and 8 FEB 2013 FRI

Type	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	Visits
Aqua Fitness 20 Pass Concession	1												1
Total Visits per Hour	32	33	16	16	29	13	4	4	23	100	89	42	
Total Visits													401

Services sold

Type	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	Visits
Aqua Fitness Concession Entry	5	2											7
Aqua Fitness Single Entry	3												3
Free Entry (Under 4)	1			9	13	16	7	4	6	31	12	2	101
Single Entry Adult	11	3	3	15	14	15	7	4	9	41	36	11	169
Single Entry Concession	4		5	8		1				3	3		24
Aqua Fitness Season Concession Pass Holder		1											1
Aqua Fitness Season Pass Holder		1											1
Single Entry Seniors Card		1	1	1	1		1	1	2	5		1	14
Single Entry Spectator		1	23	15	14	10	4	3	1	12	10	2	95
Single Entry Pensioner Card			1										1
Single Entry Child 4-7yrs				2	5	6	1	1	2	22	28	8	75
Single Entry Child 8-12yrs				2	3	1			6	14	12	2	40
Single Entry Family (4)					1		1			3	6	2	13
Ticket Entry Adult						3							3
Free Entry Teachers								80					80
Ticket Entry Concession								~~780~~					~~780~~
Single Entry Child 13-17yrs									2	2	1		5

School Swimming Carnival held on Friday and entered by mistake

Centre Attendance Breakdown Report
for customers attending between 8 FEB 2013 and 8 FEB 2013

Type	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	Visits
Total Visits per Hour	24	9	33	52	51	52	21	873	28	133	108	28	632
Total Visits													1412

Total visits: 2016

Time Breakdown option has been selected - From Time: 6:00 AM To Time: 6:00 PM

End of report.

Centre Attendance Breakdown Report
for customers attending between 9 FEB 2013 and 9 FEB 2013 SAT

Memberships

Type	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	Visits
1/2 Season Pass Adult	2	1		1		4
Season Pass Adult	5	8			1	14
Season Pass Concession	4	2	1			7
Season Pass Family	7	3	37	9	2	58
1/2 Season Pass Concession		2				2
1/2 Season Pass Family		6	35	18	14	73
Life Pass				1		1
Total Visits per Hour	18	22	73	29	17	
Total Visits						159

TOTAL VISITS FOR DAY:

1778 ✓

6 to 11am 745
11am to 7pm 986
1731 *

Visit Passes

Type	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	Visits
10 Pass Adult	2	6	14	12	14	48
10 Pass Concession	1	5	9	6	8	29
20 Pass Adult	9	14	32	14	16	85
20 Pass Concession	2	5	66	22	5	100
Total Visits per Hour	14	30	121	54	43	
Total Visits						262

Services sold

Centre Attendance Breakdown Report
for customers attending between 9 FEB 2013 and 9 FEB 2013

Type	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	Visits
Single Entry Adult	11	11	25	33	32	112
Single Entry Child 4-7yrs	1	1	17	14	20	53
Free Entry (Under 4)		2	7	13	16	38
Single Entry Child 8-12yrs		1	11	3	3	18
Single Entry Spectator		1	17	15	9	42
Single Entry Child 13-17yrs			2		1	3
Single Entry Concession			1		1	2
Single Entry Family (4)			8 x4	2 x4	2 x4	12
Single Entry Seniors Card			3	3	2	8
Total Visits per Hour	12	16	91	83	86	
Total Visits	44	68	285	166	146	~~288~~

x4 PEOPLE - 48

Total visits: ~~209~~ 757 ✓ 24 309 6 172 6 152 ~~336~~ 324

Time Breakdown option has been selected - From Time: 6:00 AM To Time: 12:00 PM

End of report.

by 10am 593/1731 = 34.25%

Centre Attendance Breakdown Report
for customers attending between 9 FEB 2013 and 9 FEB 2013

Memberships

Type	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	Visits
1/2 Season Pass Adult	2	2	1	3					8
1/2 Season Pass Family	9	17	9	4	15	10	3		67
Season Pass Adult	1				1	1	2	1	6
Season Pass Concession	1	1	2				1		5
Season Pass Family	1	3	6	4	3	2	4	2	25
1/2 Season Pass Concession			1						1
Total Visits per Hour	14	23	19	11	19	13	10	3	
Total Visits									112

Visit Passes

Type	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	Visits
10 Pass Adult	17	8	11	12	13	18	10		89
10 Pass Concession	4	7	6	10	4	1	9		41
20 Pass Adult	10	9	20	15	16	24	3		97
20 Pass Concession	16	11	9	10	7	32	1	2	88
20 Pass Staff				1					1
Total Visits per Hour	47	35	46	48	40	75	23	2	
Total Visits									316

Services sold

Centre Attendance Breakdown Report
for customers attending between 1 FEB 2013 and 28 FEB 2013

Memberships

Type	Visits
1/2 Season Pass Adult	254
1/2 Season Pass Concession	31
1/2 Season Pass Concession	90
1/2 Season Pass Family	1600
Complimentary Swim Club Pass	14
Life Pass	87
Season Pass Adult	739
Season Pass Concession	577
Season Pass Concession	35
Season Pass Family	2687
Season Pass Staff	10
swim school management	56
Swim School Staff	79
TPI Pensioner	2
Total Visits	6261

TOTAL VISITS FOR MONTH OF FEB:

32,959

6261
10251
16145
32657 *

Visit Passes

Type	Visits
10 Pass Adult	2389
10 Pass Concession	1627
10 Pass Staff	2
20 Pass Adult	2838
20 Pass Concession	3270
20 Pass Staff	53
Aqua Fitness 10 Pass Adult	12
Aqua Fitness 10 Pass Concession	52

Centre Attendance Breakdown Report
for customers attending between 9 FEB 2013 and 9 FEB 2013

SAT

Memberships

Type	Visits
1/2 Season Pass Adult	12
1/2 Season Pass Concession	3
1/2 Season Pass Family	140
Life Pass	1
Season Pass Adult	20
Season Pass Concession	12
Season Pass Family	83
Total Visits	271

Visit Passes

Type	Visits
10 Pass Adult	137
10 Pass Concession	70
20 Pass Adult	182
20 Pass Concession	188
20 Pass Staff	1
Total Visits	578

Services sold

Type	Visits
Free Entry (Under 4)	80
Single Entry Adult	286
Single Entry Child 13-17yrs	6

Centre Attendance Breakdown Report
for customers attending between 9 FEB 2013 and 9 FEB 2013

Type	Visits
Single Entry Child 4-7yrs	171
Single Entry Child 8-12yrs	55
Single Entry Concession	5
Single Entry Family (4)	47
Single Entry Pensioner Card	5
Single Entry Seniors Card	11
Single Entry Spectator	75
Total Visits	741

Total visits: 1590

End of report.

Centre Attendance Breakdown Report
for customers attending between 10 FEB 2013 and 10 FEB 2013 SUN

Memberships

Type	Visits
1/2 Season Pass Adult	9
1/2 Season Pass Concession	1
1/2 Season Pass Concession	2
1/2 Season Pass Family	66
Complimentary Swim Club Pass	1
Season Pass Adult	29
Season Pass Concession	10
Season Pass Family	42
Total Visits	160

Visit Passes

Type	Visits
10 Pass Adult	136
10 Pass Concession	85
20 Pass Adult	151
20 Pass Concession	66
20 Pass Staff	4
Total Visits	442

Services sold

Type	Visits
Free Entry (Under 4)	64
Free Entry Carer	1

Centre Attendance Breakdown Report
for customers attending between 10 FEB 2013 and 10 FEB 2013

Type	Visits
Single Entry Adult	310
Single Entry Child 13-17yrs	2
Single Entry Child 4-7yrs	157
Single Entry Child 8-12yrs	66
Single Entry Concession	8
Single Entry Family (4)	55
Single Entry Pensioner Card	2
Single Entry Seniors Card	9
Single Entry Spectator	50
Ticket Entry Adult	2
Ticket Entry Concession	2
Total Visits	728

Total visits: 1330

End of report.

Centre Attendance Breakdown Report
for customers attending between 1 FEB 2013 and 28 FEB 2013

Type	Visits
Aqua Fitness 20 Pass Concession	8
Total Visits	10251

Services sold

Type	Visits
Aqua Fitness Concession Entry	45
Aqua Fitness Season Concession Pass Holder	23
Aqua Fitness Season Pass Holder	6
Aqua Fitness Single Entry	28
Free Entry (Under 4)	1098
Free Entry Carer	6
Free Entry Teachers	80
Single Entry Adult	3843
Single Entry Child 13-17yrs	99
Single Entry Child 4-7yrs	1785
Single Entry Child 8-12yrs	999
Single Entry Concession	165
Single Entry Family (4)	302
Single Entry Pensioner Card	59
Single Entry School	2
Single Entry Seniors Card	283
Single Entry Spectator	4400
Ticket Entry Adult	12
Ticket Entry Concession	789
Waterpolo Adult Entry	165
Waterpolo Concession Entry	498
Waterpolo Spectator Entry	552
Total Visits	15239

Centre Attendance Breakdown Report
for customers attending between 7 DEC 2013 and 7 DEC 2013

Services sold

Type	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	Visits
Single Entry Adult	6	13	14	14	11	16	13	10	15	17	14	3	146
Single Entry Pensioner Card	1		2			1			1	4	1		10
Single Entry Child 4-7yrs		4	15	2	5	5	6	2	3	6	6		54
Single Entry Child 8-12yrs		1	10	5	3	3	2	10	3	12	2	3	54
Single Entry Student Pass Holder		1				1		1		1			4
Free Entry (Under 4)			1	2	1	4	5	4	4	10	6	1	38
Single Entry Family (4)			6	2	2	3	3	7	2	6	2		33 x4
Single Entry Seniors Card			2		1	1	2	1					7
Single Entry Spectator			14	14	2	2	6	4	4	8	2	1	57
Free Entry Carer						1					2		3
Single Entry Child 13-17yrs							1	1	4	2	1		9
Total Visits per Hour	7	19	64	39	25	37	38	40	36	66	36	8	
Total Visits	38	68	281	87	59	65	92	93	72	123	72	25	415

Total visits: 1075 1174

+ 99
514

Time Breakdown option has been selected - From Time: 6:00 AM To Time: 6:00 PM

End of report.

Centre Attendance Breakdown Report
for customers attending between 7 DEC 2013 and 7 DEC 2013

Memberships

Type	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	Visits
1/2 Season Pass Adult	5	1					2	1		1	1		11
Season Pass Adult	4	6	1	3		1	3	1		2			21
Season Pass Concession	2	4	1			1					1	1	10
Season Pass Family	8	14	29	6	11	5	9	1	2	6	2	3	96
1/2 Season Pass Family		6	90	15	2		14	19	8	8	5		167
1/2 Season Pass Concession			2					1					3
Life Pass			2	1									3
Season Pass Staff							1						1
Total Visits per Hour	19	31	125	25	13	7	29	23	10	17	9	4	
Total Visits													312

Visit Passes

Type	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM -1	1:00 PM -2	2:00 PM -3	3:00 PM -4	4:00 PM -5	5:00 PM -6	Visits
10 Pass Adult	4	5	16	7	6	9	6	5	7	11	3	4	83
10 Pass Concession	1		8	3	6	1	4	5	4	9	8	1	50
20 Pass Adult	5	10	16	3	5	7	11	9	9	14	10	5	104
20 Pass Concession	2	3	52	10	4	4	4	11	6	6	6	3	111
Total Visits per Hour	12	18	92	23	21	21	25	30	26	40	27	13	
Total Visits													348

09 Dec 2013 11:15:26 AM

APPENDIX B

(1)

BOY CHARLTON SWIM CENTRE

DATE 7-12-13. DAY. SATURDAY

OBSERVER EMADEY WEATHER FINE

ENTRY			EXIT		
TIME INTERVAL	NUMBER OF PERSONS		TIME INTERVAL	NUMBER OF PERSONS	
	ADULTS	CHILDREN		ADULTS	CHILDREN
6.00-6.15	31	2	6.00-6.15	—	—
6.15-6.30	2	1	6.15-6.30	6	1
6.30-6.45	7	—	6.30-6.45	1	—
6.45-7.00	9	2	6.45-7.00	13	—
7.00-7.15	10	—	7.00-7.15	3	
7.15-7.30	13	4	7.15-7.30	5	
7.30-7.45	21	6	7.30-7.45	10	4
7.45-8.00	14	11	7.45-8.00	14	
8.00-8.15	26	28	8.00-8.15	13	1
8.15-8.30	30	30	8.15-8.30	13	1
8.30-8.45	58	76	8.30-8.45	10	7
8.45-9.00	40	55	8.45-9.00	17	8
9.00-9.15	25	14	9.00-9.15	15	7
9.15-9.30	21	12	9.15-9.30	20	3
9.30-9.45	19	9	9.30-9.45	6	3

BOY CHARLTON SWIM CENTRE

DATE 7-12-13 DAY SATURDAY

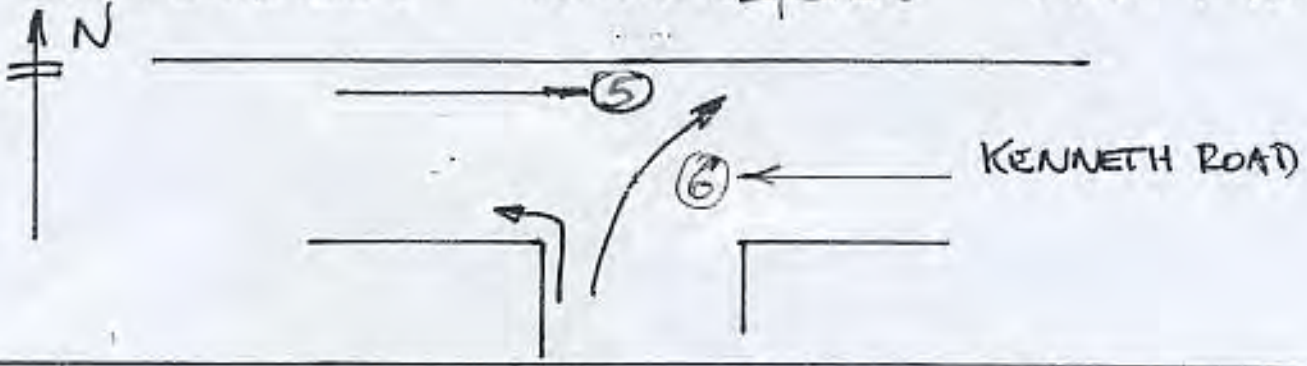
OBSERVER E HALDEY. WEATHER FINE

ENTRY			EXIT		
TIME INTERVAL	NUMBER OF PERSONS ADULTS	CHILDREN	TIME INTERVAL	NUMBER OF PERSONS ADULTS	CHILDREN
9.45-10.00	12	10	9.45-10.00	5	2
10.00-10.15	12	10	10.00-10.15	11	9
10.15-10.30	16	8	10.15-10.30	27	21
10.30-10.45	13	9	10.30-10.45	16	22
10.45-11.00	10	8	10.45-11.00	25	41
11.00-11.15	20	17	11.00-11.15	38	43
11.15-11.30	11	7	11.15-11.30	26	27
11.30-11.45	13	9	11.30-11.45	9	10
11.45-12.00	11	7	11.45-12.00	24	27

(5)

INTERSECTION COUNT — DAY · SAT

OBSERVER A. Machnevitch. WEATHER fine. — DATE: 7-12-13



TIME INTERVAL	MOVEMENT (5) →		TIME INTERVAL	← (6) MOVEMENT		
6:00-6:15	30		6:00-6:15	35		
6:15-6:30	35		6:15-6:30	39		
6:30-6:45	30		6:30-6:45	35		
6:45-7:00	36	131	6:45-7:00	52	161	
7:00-7:15	50		7:00-7:15	42		
7:15-7:30	62		7:15-7:30	68		
7:30-7:45	71		7:30-7:45	75		
7:45-8:00	80	263	7:45-8:00	70	255	
8:00-8:15	75		8:00-8:15	82		
8:15-8:30	86		8:15-8:30	87		
8:30-8:45	70		8:30-8:45	92		
8:45-9:00	90	321	8:45-9:00	94	355	
9:00-9:15	82		9:00-9:15	104		
9:15-9:30	91		9:15-9:30	113		
9:30-9:45	89		9:30-9:45	96		
9:45-10:00	97	359	9:45-10:00	102	415	
10:00-10:15	117		10:00-10:15	109		
10:15-10:30	133		10:15-10:30	126		
10:30-10:45	119		10:30-10:45	99		
10:45-11:00	118	487	10:45-11:00	116	450	
11:00-11:15	129	499	11:00-11:15	134	475	Peak
11:15-11:30	102		11:15-11:30	90		
11:30-11:45	116		11:30-11:45	112		
11:45-12:00	122	469	11:45-12:00	102	438	

Length of Stay, Number Plate Survey, Entry / Exit and Length of Stay

SWIM CENTRE MANLY

SATURDAY 7.12.13

Notes: Notes:

BALG1 entry eastbound into Car park from Balgowlah Road

Ken1 Entry from eastbound into car park from Kenneth Rd, Ken 2 westbound Entry into Car park from Kenneth Road.

BALG2 Exit from car park into Balgowlah Rd eastbound

Ken 3, Exit from car park into Kenneth Road eastbound.

Ken 4 Exit from car park into Kenneth Road westbound

Observer R Rabinovitch

Drop off and Pick Up Areas.

	Numberplate	Adults	Children	TIME Length Of Stay IN	IN 2		Numberplate	OUT	OUT	OUT	Time Decimal
				BALG1	Ken 1	Ken 2		BALG 2	KEN 3	KEN 4	
1	L05W			5:40:00			L05W			7:27:00	1.78
2	S937			5:40:00							
3	87FM			5:40:00			87FM		6:27:00		0.78
4	103I			5:40:00							
5	5SCA			5:40:00			5SCA	8:21:00			2.68
6	G468			5:40:00			G468	9:46:00			4.10
7	W999			5:40:00			W999	7:55:00			2.25
8	T48A			5:40:00							
9	32HM			5:40:00							
10	47NO			5:40:00							
11	O273			5:40:00			O273		6:37:00		0.95
12	U27R			5:40:00			U27R			6:38:00	0.97
13	Z27C			5:40:00			Z27C			7:15:00	1.58
14	F55J			5:40:00							
15	B27D			5:40:00							
16	T54X			5:40:00							
17	X66Y			5:40:00			X66Y			6:46:00	1.10
18	T54X			5:40:00			T54X	6:25:00			0.75
19	X66Y			5:40:00							
20	L975			5:50:00			L975		6:27:00		0.62
21	C45G			5:50:00							
23	97P	2	0	5:50:00			97P		6:52:00		1.03
22	C45G			5:55:00							
23	94U	1	0	5:55:00			94U	6:46:00			0.85
24	54Y	1	0	5:55:00			54Y	7:44:00			1.82
25	Y59F			5:58:00			Y59F			7:31:00	1.55
26	534	1		6:00:00			534	9:44:00			3.73
	I29	1		6:00:00			I29	7:55:00			1.92
	46X	1		6:00:00			46X		9:06:00		3.10
	11W	1			6:02:00		11W		6:26:00		0.40
	7JI				6:02:00						
	333	1				6:02:00	333		7:41:00		1.65
	2AX	1	2		6:03:00		2AX	7:44:00			1.68
	54R	1			6:03:00		54R			6:30:00	0.45
	422	1		6:04:00			422		7:37:00		1.55
	48Q	1				6:05:00	48Q		6:57:00		0.87
	49R	1			6:08:00		49R			8:11:00	2.05
	111	1			6:10:00		111		6:59:00		0.82
	17T	1			6:10:00		17T			7:09:00	0.98
	924	1				6:12:00					
	04B	1				6:12:00	04B		6:45:00		0.55
	620	1				6:20:00					
	35S	1			6:29:00		35S			6:44:00	0.25
	71F	1				6:31:00	71F		7:49:00		1.30
	26T	1				6:32:00	26T		7:06:00		0.57
	32S	1				6:33:00	32S		6:58:00		0.42
	95G	1		6:35:00			95G	7:16:00			0.68

94L	1		6:36:00			94L	7:37:00			1.02
7UU	1			6:42:00		7UU	7:21:00			0.65
20X	1			6:43:00					7:19:00	0.60
34T	1			6:45:00		34T		7:16:00		0.52
0VW	1		6:45:00			0VW	7:28:00			0.72
54F	1		6:46:00			54F	8:06:00			1.33
02U	1				6:48:00	02U	8:00:00			1.20
49L	1		6:50:00			49L		8:01:00		1.18
55L	1		6:50:00			55L		8:07:00		1.28
30B	1		6:52:00			30B			6:54:00	0.03
4NZ	1		6:53:00			4NZ		7:25:00		0.53
33J	1		6:53:00			33J		7:48:00		0.92
6XL	1		6:54:00			6XL		6:55:00		0.02
2JR	1		6:55:00			2JR		10:40:00		3.75
370	1		6:55:00			370	8:06:00			1.18
4VP	1				6:55:00	4VP		8:17:00		1.37
97Y	1		6:56:00			97Y		7:37:00		0.68
64Y	1			6:58:00		64Y	7:00:00			0.03
721	1		7:01:00			721		7:26:00		0.42
68L	1		7:01:00							
92F	1		7:04:00			92F		8:25:00		1.35
66F	1			7:04:00		66F			7:59:00	0.92
70T	1			7:05:00		70T		8:17:00		1.20
75E	2		7:05:00			75E	8:07:00			1.03
TAXI 592	1+DRIVER		7:05:00			592			7:08:00	0.05
826	1			7:06:00		826			7:50:00	0.73
67L	1			7:06:00		67L		11:07:00		4.02
52C	1			7:08:00		52C			7:58:00	0.83
36T	1				7:08:00	36T	7:08:00			0.00
8NX	1		7:10:00			8NX		7:12:00		0.03
OO8	1				7:10:00	OO8			8:30:00	1.33
96T	1		7:13:00			96T		7:56:00		0.72
21F	1		7:15:00			21F	8:05:00			0.83
999	1		7:20:00			999		7:21:00		0.02
81Q	1			7:22:00		81Q			7:53:00	0.52
4SB	1				7:24:00			8:24:00		1.00
79D	2		7:25:00			79D		8:00:00		0.58
76Y	1		7:25:00			76Y		8:47:00		1.37
4KR	3	2	7:25:00			4KR			8:46:00	1.35
85V	1		7:27:00			85V	9:25:00			1.97
93G	1			7:27:00		93G			8:16:00	0.82
888	1			7:28:00						
44T	1			7:29:00		44T			9:15:00	1.77
02F	1			7:29:00		02F			8:27:00	0.97
29K	1			7:29:00		29K		7:43:00		0.23
75U	1				7:30:00	75U		9:13:00		1.72
6NU	1		7:31:00			6NU		9:08:00		1.62
5FG	1		7:31:00			5FG		8:51:00		1.33
777	1			7:31:00		777			8:18:00	0.78
04G	1		7:32:00			04G			8:31:00	0.98
0DH	1		7:32:00			0DH		8:15:00		0.72
164	1			7:33:00		164	7:33:00			0.00
180	1			7:33:00		180			8:21:00	0.80
08Z	1	1			7:33:00	08Z			7:57:00	0.40
23P	1		7:35:00			23P	8:15:00			0.67
77B	1		7:35:00			77B		8:35:00		1.00
10E	1		7:40:00			10E		9:14:00		1.57
730	1			7:40:00		730			9:02:00	1.37
625	1			7:40:00						
512	1			7:40:00						
80B	1	1	7:42:00			80B		7:43:00		0.02
74X	1		7:42:00							
73B	1			7:42:00		73B			8:40:00	0.97
38H	2		7:43:00			38H	8:59:00			1.27

803	1	2	7:44:00							
256	1		7:45:00							
468	1			7:45:00		468			8:18:00	0.55
54V	1			7:46:00		54V		9:02:00		1.27
141	1	2		7:48:00		141		11:34:00		3.77
7JB	1			7:49:00		7JB			8:30:00	0.68
61Y	1		7:50:00			61Y	9:41:00			1.85
093	1	2		7:53:00		093		11:19:00		3.43
21U	1		7:54:00			21U		9:01:00		1.12
04H	1			7:54:00						
0DX	1	1		7:54:00						
98Y	2		7:56:00			98Y			8:17:00	0.35
2GG	1		7:56:00			2GG		9:09:00		1.22
64B	1		7:59:00							
22X	1			8:00:00		22X		9:04:00		1.07
0XK	2		8:01:00			0XK		9:22:00		1.35
333	1			8:01:00		333	9:00:00			0.98
19B	1	1		8:01:00						
85F	1	2	8:02:00							
19Q	1	2	8:02:00							
96F	1			8:02:00		96F		9:28:00		1.43
14Z	1			8:03:00		14Z			9:12:00	1.15
45L	1		8:05:00			45L	8:54:00			0.82
91H	1	2	8:06:00							
83F	1	1		8:06:00		83F		8:22:00		0.27
LRT	1		8:07:00			LRT	8:37:00			0.50
5CR	3		8:07:00			5CR		9:26:00		
2XL	2		8:08:00							
167	1		8:09:00							
143	1	3	8:10:00							
4JY	1		8:10:00							
42K	1	2	8:12:00			42K		11:35:00		1.32
IHV	1			8:12:00						
38C	1				8:12:00	38C		11:35:00		3.38
5GJ	2		8:13:00			5GJ			8:52:00	0.65
36H	1				8:13:00	36H			10:24:00	2.18
389	1			8:14:00		389	8:18:00			0.07
47B	1				8:14:00					
86M	1	3	8:15:00			86M		11:24:00		3.15
49Z	1			8:16:00						
8PG	1			8:16:00						
96V	2			8:17:00		96V	9:27:00			1.17
49L	1	2			8:18:00					
17G	1	3		8:19:00		17G	11:03:00			2.73
380	1		8:20:00			380		11:23:00		3.05
018	1	2	8:20:00			018		11:26:00		3.10
33G	1	3		8:20:00						
33P	1	1			8:21:00					
13Q	2	2	8:22:00			13Q			11:25:00	3.05
4WH	1	1	8:22:00			4WH		8:24:00		0.03
83W	1		8:22:00			83W			9:19:00	0.95
38X	1		8:22:00			38X	8:32:00			0.17
43F	1	2		8:25:00		43F			10:55:00	2.50
C59E	1		8:26:00			C59E	8:26:00			0.00
67X	1	2		8:26:00		67X			11:24:00	2.97
46F	1			8:26:00						
78G	1	1		8:26:00		78G	10:11:00			1.75
77K	1			8:26:00		77K			9:21:00	0.92
42V	1	1	8:27:00			42V	8:27:00			0.00
7TD	1		8:27:00							
2NX	1	1		8:27:00						
35D	1			8:27:00		35D		10:10:00		1.72
202	1			8:28:00		202	8:31:00			0.05
6VV	1				8:28:00	6VV	8:31:00			0.05

Y15S	1	1	8:29:00			Y15S	10:49:00			2.33
9ZH	1			8:29:00		9ZH	8:31:00			0.03
30B		PASS THROUGH	8:30:00			30B	8:31:00			0.02
98Z	1	1		8:30:00		98Z	8:57:00			0.45
86E	1	1	8:32:00			86E		8:33:00		0.02
98X	1	3	8:32:00			98X		8:34:00		0.03
46T	2	2	8:32:00			46T		8:34:00		0.03
TBU	1		8:33:00			TBU			8:41:00	0.13
2EK	2	PASS THROUGH	8:33:00			2EK		8:34:00		0.02
20L	1	3		8:33:00		20L	8:35:00			0.03
179	1				8:33:00	179	8:38:00			0.08
O7Y	1		8:35:00			O7Y		8:36:00		0.02
5MG	1	2	8:35:00							
44L	1	1	8:35:00			44L		11:00:00		2.42
3EU	1	2		8:35:00		3EU		8:41:00		0.10
8NL	1	1	8:36:00			8NL		8:37:00		0.02
13F	1	1	8:36:00			13F		10:29:00		1.88
835	1	1	8:36:00			835		8:38:00		0.03
8HJ	1			8:36:00		8HJ	8:36:00			0.00
O2L	1	3		8:36:00		O2L	8:37:00			0.02
41F	1	1			8:36:00	41F		10:33:00		1.95
JLB	1			8:37:00		JLB	8:37:00			0.00
39C	1	2	8:38:00			39C		8:40:00		0.03
1HE	1	1		8:38:00		1HE	8:39:00			0.02
166	1		8:39:00			166		8:42:00		0.05
275	1	1		8:39:00						
24W	1	2	8:40:00			24W		8:42:00		0.03
66F	3			8:40:00		66F	8:44:00			0.07
OHB	1				8:40:00					
4MS	1	3	8:42:00							
6HP	1		8:43:00			6HP		8:44:00		0.02
86R	2	2	8:44:00			86R		8:44:00		0.00
59T	1	2	8:45:00			59T		8:45:00		0.00
2TB	1	2	8:45:00			2TB		8:46:00		0.02
40P	2	4		8:45:00		40P		10:29:00		1.73
111	1	2	8:46:00			111			8:47:00	0.02
83L	1		8:46:00			83L		8:46:00		0.00
86L	1	1		8:46:00		86L	8:47:00			0.02
16Q	1		8:47:00			16Q		8:48:00		0.02
10G	1	2	8:47:00			10G		11:06:00		2.32
83H	1	2	8:47:00			83H		8:49:00		0.03
62E	3			8:48:00		62E	8:48:00			0.00
111	1		8:49:00			111		10:17:00		1.47
61S	1	3	8:50:00			61S		11:06:00		2.27
9RP	1			8:50:00		9RP	8:50:00			0.00
67F	1			8:50:00		67F	8:50:00			0.00
68W	1	3	8:51:00			68W		10:36:00		1.75
84D	1	3		8:51:00		84D	8:53:00			0.03
45B	1		8:52:00			45B		8:53:00		0.02
28T	1		8:52:00			28T		8:54:00		0.03
35L	1		8:53:00			35L		8:54:00		0.02
43D	2		8:53:00			43D		8:54:00		0.02
12Q	1			8:53:00		12Q	8:53:00			0.00
Y96	2		8:54:00			Y96	8:55:00			0.02
O7Y	1	1	8:55:00			O7Y	9:32:00			0.62
56W	2		8:56:00			56W		8:59:00		0.05
34J	2	1	8:57:00			34J		8:59:00		0.03
36S	1				8:58:00	36S	11:08:00			2.17
36H	1	1		8:59:00		36H			9:12:00	0.22
32L	1		9:00:00			32L		9:00:00		0.00
91Z	1		9:02:00			91Z		10:00:00		0.97
24O	2	3	9:03:00			24O	10:32:00			1.48

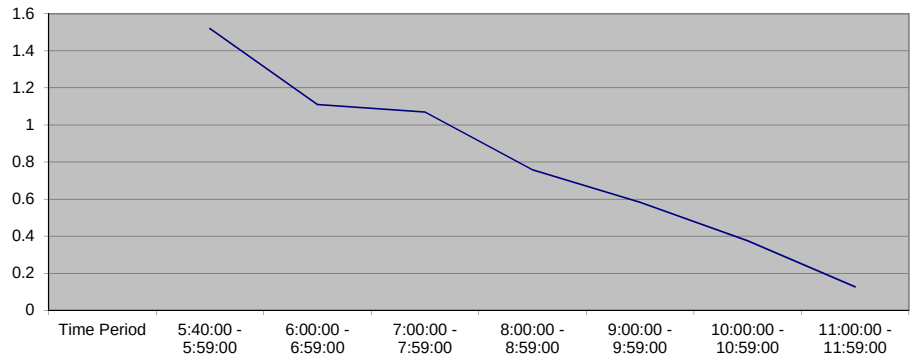
11D	4				9:03:00	11D	9:04:00			0.02
47M	1		9:04:00			47M	9:05:00			0.02
87O	1		9:05:00			87O	10:14:00			1.15
O1C	1				9:08:00	O1C	9:09:00			0.02
57U	1			9:09:00		57U		9:23:00		0.23
51W	1		9:10:00			51W	10:12:00			1.03
843	1		9:11:00			843	9:59:00			0.80
211	1		9:12:00			211		9:14:00		0.03
COY	1	1		9:15:00						
73N	1	2	9:17:00			73N		11:15:00		1.97
38X	1			9:17:00		38X			11:06:00	1.82
68Q	1	1		9:17:00		68Q		10:35:00		1.30
90P	2	3	9:18:00							
RZV	1	1	9:18:00			RZV		11:33:00		2.25
18U	1			9:18:00		18U		10:26:00		1.13
56T	1		9:23:00							
8CK	1			9:23:00		8CK			10:29:00	1.10
47T	1			9:24:00		47T	11:08:00			1.73
52E	1			9:24:00		52E		9:50:00		0.43
65S	1	2	9:26:00			65S		9:35:00		0.15
7QU	2	1	9:27:00							
92H	1	1			9:27:00	92H	11:19:00			1.87
14X	1			9:30:00		14X		9:57:00		0.45
89F	2	4	9:31:00							
29L	1			9:31:00		29L		10:28:00		0.95
3EU	1		9:32:00			3EU		9:35:00		0.05
2QS	1			9:32:00		2QS	9:32:00			0.00
O7Y	1				9:32:00	O7Y		11:32:00		2.00
OO7	1	2		9:33:00		OO7	9:33:00			0.00
O8P	1			9:34:00		O8P	9:34:00			0.00
5AU	1			9:35:00		5AU	9:35:00			0.00
O3V	1			9:37:00		O3V	9:37:00			0.00
46U	1		9:38:00			46U		10:23:00		0.75
31H	1			9:38:00		31H		9:40:00		0.03
O6N	1	1		9:39:00		O6N	9:40:00			0.02
70T	1	1		9:40:00		70T	9:40:00			0.00
62H	1			9:43:00		62H		10:43:00		1.00
9Y8	2		9:45:00			9Y8		9:46:00		0.02
5MH	1			9:48:00		5MH	9:49:00			0.02
52A	1			9:48:00		52A			10:37:00	0.82
43Y	1		9:50:00			43Y		9:51:00		0.02
O1O	1			9:50:00		O1O	9:50:00			0.00
82F	1	1			9:52:00	82F		10:05:00		0.22
5MH	1				9:52:00	5MH	9:54:00			0.03
TAXI 861	1				9:54:00	TAXI 861	9:55:00			0.02
9KF	1		9:55:00			9KF			11:14:00	1.32
86B	3	1	9:56:00			86B		9:56:00		0.00
27R	1		9:56:00			27R	10:39:00			0.72
93G	1			9:57:00		93G	9:58:00			0.02
21S	1		9:58:00			21S		9:59:00		0.02
10W	2		10:01:00			10W			11:40:00	1.65
34N	1		10:03:00			34N		10:04:00		0.02
816	2			10:03:00						
78C	1				10:04:00					
24X	2				10:04:00	24X	10:08:00			0.07
24X	2		10:05:00			24X		10:06:00		0.02
68W	1		10:05:00			68W	10:18:00			0.22
61G	1			10:05:00		61G	10:07:00			0.03
22M	1		10:06:00							
79R	1	2	10:07:00			79R		10:08:00		0.02
23Q	1	1			10:08:00	23Q	10:09:00			0.02
4EC	1		10:09:00			4EC			10:18:00	0.15
24X	2			10:10:00		24X	10:11:00			0.02
95V	1		10:11:00			95V		10:13:00		0.03

12G	1		10:12:00			12G	11:25:00			1.22
06F	1		10:13:00			06F		10:21:00		0.13
39C	1				10:14:00					
43W	1		10:15:00			43W		10:17:00		0.03
80X	1		10:17:00			80X		10:19:00		0.03
888	1		10:20:00							
4VP	1			10:20:00		4VP			11:27:00	1.12
89D	1	3		10:21:00		89D	11:52:00			1.52
9OO	1			10:23:00		9OO			10:27:00	0.07
66U	1		10:25:00			66U	10:33:00			0.13
45E	1			10:25:00		45E	11:07:00			0.70
3ZP	1	1	10:32:00							
62L	1	2	10:32:00			62L		11:51:00		1.32
999	1		10:32:00			999		10:34:00		0.03
O2U	2			10:33:00		O2U	10:38:00			0.08
0HS	3		10:37:00			0HS		11:27:00		0.83
1QC	1	1		10:38:00		1QC	10:40:00			0.03
OPB	2		10:39:00			OPB		10:40:00		0.02
52N	1		10:40:00							
500	2	3	10:40:00			500		10:46:00		0.10
H13	1		10:40:00							
111	1		10:41:00			111		11:47:00		1.10
44Z	1		10:42:00			44Z		10:44:00		0.03
36Y	2	1		10:44:00		36Y			11:25:00	0.68
2KV	1			10:45:00						
47Q	1		10:46:00			47Q	11:42:00			0.93
8ZW	1		10:46:00							
80B	2		10:48:00			80B		10:54:00		0.10
90P	2	2			10:48:00	90P	10:48:00			0.00
180	1			10:52:00		180			11:59:00	1.12
21K	2	1	10:54:00			21K			10:56:00	0.03
146	1			10:55:00		146	10:57:00			0.03
94Z	1		10:56:00			94Z			10:57:00	0.02
72M	2	2	10:56:00			72M		10:57:00		0.02
26X	1			10:58:00		26X		11:55:00		0.95
479	1		11:00:00			479		11:02:00		0.03
37C	2	1			11:00:00					
64D	1				11:01:00	64D		11:56:00		0.92
8BF	1			11:02:00						
60N	1		11:03:00			60N			11:04:00	0.02
389	2			11:03:00		389	11:09:00			0.10
09E	2				11:03:00					
88Z	1				11:03:00	88Z			11:07:00	0.07
245	1				11:05:00					
TAXI 569	1		11:06:00							
38W	1	2	11:06:00			38W		11:08:00		0.03
9MD	1	1		11:06:00		9MD			11:52:00	0.77
9DS	2	2			11:06:00					
68D	1		11:07:00			68D			11:09:00	0.03
93D	1		11:08:00			93D			11:10:00	0.03
28X	2	2			11:08:00					
87V	2		11:09:00			87V			11:11:00	0.03
46D	2		11:10:00			46D		11:12:00		0.03
71S	1		11:11:00							
45Q	1	3		11:11:00		45Q		11:16:00		0.08
543	1	2			11:12:00					
46S	1		11:14:00							
32L	1				11:14:00	32L	11:48:00			0.57
71G	2		11:16:00			71G		11:18:00		0.03
26R	1			11:16:00		26R			11:50:00	0.57
57A	1			11:19:00						
LSS	2			11:20:00		LSS			11:22:00	0.03
89F	2	1	11:24:00							
88B	2			11:24:00						

1GA	1		11:25:00			1GA			11:28:00	0.05
60E	1			11:25:00						
76Y	1		11:26:00							
4QS	2			11:26:00						
74T	2				11:28:00	74T		11:53:00		0.42
20Q	1	2	11:30:00							
774	1	1	11:30:00			774		11:32:00		0.03
1HZ	1			11:30:00						
48L	1				11:30:00					
345	1		11:31:00			345		11:33:00		0.03
39S	2		11:31:00			39S		11:34:00		0.05
O5R	1			11:32:00		O5R	11:33:00			0.02
554	1	2			11:33:00	554			11:49:00	0.27
71S	2			11:34:00						
45W	1		11:35:00			45W		11:36:00		0.02
31X	1			11:35:00						
59M	1			11:37:00						
162	2				11:38:00					
3NQ	1			11:39:00						
98F	1		11:40:00			98F		11:41:00		0.02
65M	1		11:40:00			65M		11:41:00		0.02
1UJ	1	1	11:40:00			1UJ		11:42:00		0.03
3QB	1	1		11:40:00						
76T	1		11:41:00			76T		11:42:00		0.02
61N	1		11:43:00			61N		11:43:00		0.00
219	1	2		11:43:00						
273	1		11:47:00			273		11:47:00		0.00
52P	1		11:48:00			52P			11:50:00	0.03
72L	2		11:50:00			72L		11:52:00		0.03
67O	1				11:52:00					
57L	1		11:53:00			57L		11:54:00		0.02
9EG	1			11:53:00						
86U	1		11:54:00							
104	1		11:54:00			104		11:55:00		0.02
88A	3		11:55:00							
723	1		11:57:00							
98G	1	1	11:59:00							
19B	2			11:59:00		19B	11:59:00			0.00

Time Period	Average length of stay in hours
5:40:00 - 5:59:00	1.52
6:00:00 - 6:59:00	1.11
7:00:00 - 7:59:00	1.07
8:00:00 - 8:59:00	0.76
9:00:00 - 9:59:00	0.58
10:00:00 - 10:59:00	0.37
11:00:00 - 11:59:00	0.13

FIGURE 3.1 Average length of stay in hours



APPENDIX D

Actual Lane Cove Data from 2001 to 2012

Lane Cove

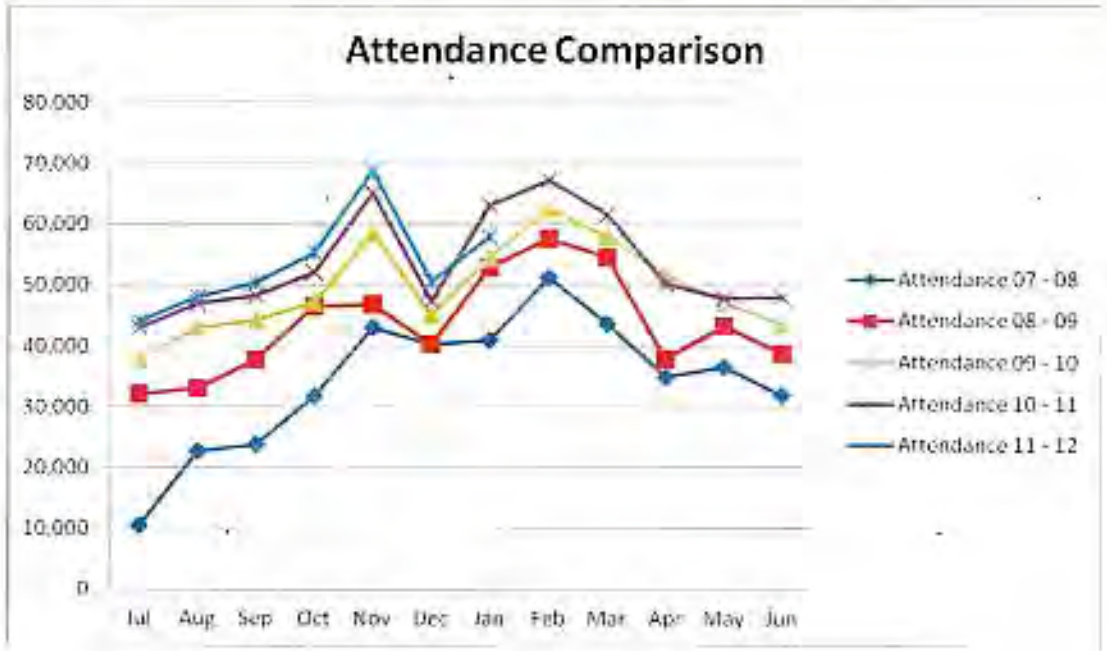
Estimated Facility Attendance	Total	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Aquatic										
Casual Swim	44,754	3,793	3,163	4,413	5,608	8,431	8,679	10,667	15,550	14,178
Squad	7,425	992	1,117	1,079	1,105	1,198	968	966	1,734	1,581
Spectator	1,652	52	79	148	230	274	516	353	925	843
Visit Pass	38,741	4,731	4,862	4,917	5,899	6,297	5,159	6,876	9,243	8,428
Learn to Swim	74,225	9,351	10,565	11,008	11,534	12,365	8,398	11,004	15,047	13,719
Learn to Swim Parents	89,071	11,221	12,678	13,210	13,841	14,838	10,078	13,205	18,057	16,463
School Entry	14,740	140	200	200	1,800	8,900	3,500	0	6,271	5,718
Aqua Classes	5,550	884	826	851	928	898	655	508	1,174	1,070
Total Aquatic	**554,158**	**31,164**	**33,490**	**35,826**	**40,945**	**53,201**	**37,953**	**43,579**	**68,000**	**62,000**
Health Club										
Member	75,605	9,548	11,414	11,309	10,885	11,785	9,437	11,227	10,488	10,488
Visit Pass	1,212	170	180	130	146	185	171	230	190	190
Casual	1,556	223	160	232	236	214	224	267	249	249
Group Fitness	13,644	1,895	1,964	1,941	2,032	2,102	1,865	1,845	2,073	2,073
Total Health Club	**156,017**	**11,836**	**13,718**	**13,612**	**13,299**	**14,286**	**11,697**	**13,569**	**13,000**	**13,000**
Programs										
Holiday Programs	413	221	0	98	94	0	0	0	90	90
Birthday parties	2,101	165	145	275	364	466	443	243	230	230
Other bookings	1,400	200	200	200	200	200	200	200	180	180
Training Courses	350	50	50	50	50	50	50	50	10	10
Programs Total	**6,814**	**636**	**395**	**623**	**708**	**716**	**693**	**493**	**510**	**510**
Creche										
Casual	2,639	382	397	352	396	415	301	396	400	400
Creche Total	**4,639**	**382**	**397**	**352**	**396**	**415**	**301**	**396**	**400**	**400**

Aquatic Total Feb 2013 38750 / 3265

Lane Cove + 2012 5125 Feb 4375.0

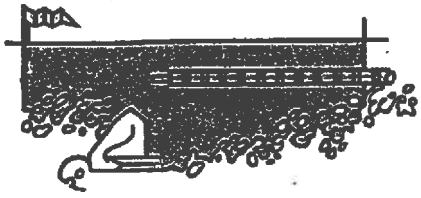
Apr	May	Jun
11,434	11,205	11,205
1,275	1,250	1,250
680	666	666
6,797	6,661	6,661
11,064	10,842	10,842
13,277	13,011	13,011
4,611	4,519	4,519
863	846	846
50,000	**49,000**	**49,000**
10,488	10,488	9,681
190	190	175
249	249	230
2,073	2,073	1,913
13,000	**13,000**	**12,000**
90	90	90
230	230	230
180	180	180
10	10	10
510	**510**	**510**
400	400	400
400	**400**	**400**

Facility Total	721,628	44,018	48,000	50,413	55,348	68,618	50,644	58,037	81,910	75,910



63,910	62,910	61,910

ANNEXURE 3 – Feasibility Study



J. A. NICHOLAS
& ASSOCIATES PTY LTD

RECREATION MANAGEMENT CONSULTANTS

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DARYL JACKSON ROBIN DYKE PTY LTD

GEOFF NINNES, FONG AND PARTNERS

FEASIBILITY STUDY

Manly Swimming Centre
Final Report - November 1997

Contents

1. Executive Summary and Recommendations

Review of Existing Operations

- The swimming centre operates on a lean budget with minimum staffing and has been operating in this mode for most of its life. The centre nevertheless is well maintained and apart from specific problems is in remarkable good condition.
- The heating system is inefficient and is likely to result in high energy costs post 1999. Consideration should be given to converting the heating system to heat pumps.
- The facilities are well supported by the community and has a solid base of regular users.
- As an outdoor facility the centre performs exceptionally well and is regularly achieving positive financial outcomes.
- The management structure is efficient and providing high quality services to the users of the centre.
- It is anticipated that it will become increasingly more difficult to maintain the present financial performance due to issues outside of the control of management.
- Although basic in terms of comfort and provision the buildings, plant and pool structures are generally in sound condition.
- Management although has identified opportunities for improving the centre and its performance the most significant limiting factor is the lack of indoor heated water space. It will be difficult for management to enhance performance in the future without appropriate facilities.
- The industry as a whole will become more competitive as more indoor facilities become available in metropolitan Sydney and customer expectations increase as a result.

Demographic Analysis

- There exists a sizeable market in the Manly region to support expanded facilities.
- Population projections indicate a slight decline over a period of years which leads us to conclude that market demand will remain relatively constant over a long period of time.
- Based on the Income distribution analysis affordability of services is not a critical issue and is better placed than the average metropolitan Sydney area.
- The age distribution indicates usage patterns will be consistent with Australian trends.
- The profile of Place of Birth of residents in the Manly catchment area suggests that the usage patterns will be similar to research findings in other parts of Australia.

Market Potential

- The market potential of the Manly Facilities is in the order of 700,000. With the current attendances averaging 250,000 per annum there is considerable untapped market available.

- Because of the location of the Manly facilities which is somewhat isolated geographically from the surrounding areas, the consultants have taken a conservative approach to the market potential of any new redevelopment. A dilution factor has been applied to the secondary catchment zone and predictions have been based on 500,000 user visits per annum.

- The design of the facilities proposed in the concept designs while not able to provide the same level of opportunities as a major state facility, it will provide a regional focus for a broad range of activities.

Competing Facilities

- Apart from the North Sydney Olympic Pool located on the fringe of the Secondary Catchment, Manly Swimming Centre is the only outdoor 50m facility available to North Shore Residents. It finds itself to be a popular target for not only residents located in both catchments but for residents further afield.

- Pools that currently pose the greatest threat to the Manly Swimming Centre include the Warringah Aquatic Centre and the North Sydney Olympic Pool, purely because of their proximity to the Manly Swimming Centre and the fact that they are both operational all year round.

- Warringah Aquatic Centre (approximately 6 kilometres away) is at times seen as a reluctant alternative for users of the Manly Swimming Centre when water space for competing users is limited. The all year operational status of the Warringah Aquatic Centre is its greatest asset.

- North Sydney Olympic Pool, with its ability to operate an outdoor facility throughout Summer and cover the pool during Winter is also considered a competitor of the Manly Swimming Centre. Although located just within the secondary catchment, its 50m pool component and its all year operational status is its greatest strength.

Community Consultation

- The main concerns arising from the community consultation process in relation to the existing facilities were:
    - they were seasonally operated and during peak periods lacked sufficient water space;
    - car parking was often difficult and sometimes dangerous; and
    - there was a lack of protection from the elements in terms of cover and shade

- The preferred development for the Manly facilities included:
    - increased water space
    - indoor facilities; and
    - all year round operation

- There was a very strong view amongst the community that the existing 50m pool and grass surrounds should be maintained as an outdoor facility.

Existing Pool and Upgrading Opportunities

- The study has examined options of upgrading Manly Swimming Centre to provide a year round facility, that builds on its existing assets. It responds to the community consultation by way of improving the level of public amenity. (option 1.) The cost of such an undertaking would be in the region of $600,000, for an end result that does not provide any additional water space. Therefore only a marginal increase in the potential earning capacity is possible.

- The study recommends the addition of an arcade, pergola and spectator seating structure to protect the 50m pool area from the westerly winds and provide additional shelter. The upgrading of the change facilities would also help develop the centre into an attractive outdoor facility serving the immediate community and the peak summer load for school carnivals and the like.

- The study also explores other potential developments which could be undertaken to meet the present demands. These could be implemented in stages and thought has gone into avoiding any duplication of work over the staged completion.

- The swimming centre is centrally located within Manly, and is readily accessible by both public transport and private vehicles. It is located adjacent to a large site that could accommodate new indoor facilities while maintaining the use of the existing open air pools at the centre.

- The swimming centre also has the opportunity to work in conjunction with the other facilities in LM Graham Reserve. All could benefit from the cross fertilisation of visitors and creating a significant sporting facility within the Manly area.

- A range of development options have been developed to explore a mix of opportunities and expenditure requirements. The development of the swimming centre is dependent on the re-evaluation of the present use of the LM Graham Reserve. We have examined two possible schemes for consolidating the present requirement of the playing fields.

- The preferred scheme Master Plan : Option 1 utilises the old road reserve of Suwarrow Street to relocate the playing field and allow for additional parking to be provided between this and the swimming centre. The major benefit of this scheme is in the central location of the parking and the potential to access this from both Balgowlah Road and Kenneth Road.
    - Option 1 considers a minimal upgrade to the centre to solve immediate difficulties and to respond to user's concerns, particularly addressing an extended opening season and providing additional shelter.
    - Option 2 considers a low scale development of Manly Swimming Centre to enclose the 25m pool as a short term solution.
    - Option 3 considers replacing the current 25m pool and enclosing it. In this option two separate locations are presented.
    - Option 4 considers a significant development of Manly Swimming Centre with a new facility capable of 500,000 users per year.

- Only option 4 provides the opportunity for significantly increased patronage and revenue, that could be used to offset the capital cost of upgrading. It is recommended that option 4 will provide the best response to community needs and provide Council with the most cost effective operating solution.

2. Introduction

In February 1996, J.A. Nicholas & Associates Pty Ltd, Daryl Jackson Robin Dyke Pty Ltd and Geoff Ninnes, Fong and Partners were commissioned by Manly Council to undertake a review of the possible upgrading of its Swimming Centre and enhance its integration with the L.M. Graham Reserve.

Study Aims & Objectives

The aims and objectives of this study were to:

- review the current operation of the facility;
- assess the market and determine the potential of additional facilities;
- identify market opportunities which will enable the complex to better meet the needs of the community;
- assess the proposed designs, component mix and layout of the facilities in terms of the potential market;
- undertake a financial analysis for the operation of the aquatic facilities;
- identify key issues which need to be addressed in the provision and management of the facilities.

Study Methodology

In order to achieve the above study aims a series of tasks were undertaken. They are as follows:

Participation Trends A review has been undertaken of national user trends in the aquatics industry including current reports from Victoria and South Australia.

Community Profile An analysis of the demographics of the Manly region has been compared with demographics of the Sydney Metropolitan area to identify any significant differences that may be relevant to the project.

Community Consultation Consultations were held with various community groups to provide opportunities for input into design and planning of the proposed facilities.

Existing Provision A review of existing provision was undertaken to determine the level of aquatic services provisions in the area.

Facility Design Following investigations, designs were developed which best meets the expressed demand and the potential of the area.

Financial Analysis A detailed financial analysis was completed with information on expected outcomes, levels of usage, hours of operation and fees and charges.

Management Options A summary of the management options available to the Council has been provided in order to identify the model best suited to the Council and the Community.

Study Assumptions

The basis of the consultants analysis has relied on the accuracy of the research conducted by previous studies. Assumptions have been made in terms of the population estimates for the region.

3. Review of Previous Studies

As the first stage of this project the consultants undertook a review of literature and reports that were available from the council .

This information included:

- Financial and attendance records
- Manly Swimming Centre User Swimming Result
- Manly Swimming Centre Draft Plan of Management

In addition to the above, several meetings were held with officers of the Council to discuss a range of issues regarding the Centre's limitations, technical efficiencies / deficiencies and management practices. The most significant reports that have been prepared for the centre were conducted by the Council staff and include the user survey for 1996 -97. The draft management plans include a detailed SWOT analysis while the survey has provided a great deal of information on users, their attitudes and usage patterns. Both of these reports were well prepared and it is considered by the consultant team that there was no point in repeating this work. What has been useful is to compare the results with industry standards and other significant benchmark reports in Australia.

Industry Trends

Over the past ten years there has been a great deal of research conducted in Australia which detail a profile of user patterns of indoor pools and fitness facilities. Much of this research is consistent in terms of findings and the variations that do occur tend to be the result of individual centres deciding to position their market orientation in a specific direction.

In 1987 a study was conducted for the Victorian Department of Sport and Recreation examining the Usage Patterns of Ten Indoor Swimming Centres in Victoria.[1] This study is of particular relevance because the sample was very large, (19 000 users.) It covered both metropolitan and country centres and results reflected what seemed to be happening throughout the rest of Australia.

In 1995 a further study was commissioned (Aquatic Leisure Centre Visitors Survey 1994-95[2]) with the prime aim being to update the findings of previous research, identifying any changes and to provide comparative data for the future. In this case fourteen centres were surveyed (not including those in the 1987 work) and included a more balanced mixture between metropolitan and country centres. Although the research techniques and methodology differed between the two studies the results indicate that very little has changed over the past few years.

Two noticeable differences in the results that were evident is that the use by females of these centres is increasing and the level of usage by people in the secondary catchment (beyond 5km of the centre) is also increasing. Research also conducted in WA, SA and NSW also indicate very similar trends to the Victorian Studies.

When examining the user survey results of the Manly study there were striking similarities with usage patterns of indoor pools though Manly consists of outdoor facilities.

[1] Usage Patterns of the Ten Indoor Swimming Centres in Victoria, Martin Hole and Stewart Elkington 1987.
[2] Aquatic Leisure Centre Visitors Survey 1994-95, Hepper Marriot and Associates Pty Ltd 1996

An obvious difference occurs in the winter months when Manly is subjected to cooler weather conditions. Indoor pools can expect a higher level of stability in attendance patterns throughout the course of the year irrespective of weather condition.

Some of these similarities include the following.

1. There is a very high proportion of users that visit the centre on a regular basis. Approximately 92% of Manly users visits between 1-4 times per week compared to the Victorian studies of 80.3%

2. Although indoor facilities provide a far greater opportunity for the development of programmes and user options it is interesting to note that the purpose for visitation is similar to industry trends. The majority of the users that visit do so for "lap Swimming" (Manly 55%) followed by recreational swimming (19%.) The next largest market in the industry is swimming education programmes 13.2% compared to Manly attendances for this purpose of only 4%. A probable reason for this difference is the lower water temperatures and the exposed nature of the facilities to the elements.

3. Comparisons of usage patterns and the time of the day also indicate that Manly has very similar patterns with the industry as a whole. There appears to be two very distinct peak periods on a daily basis. The first occurs early morning from 5.30am - 10.00am (35%) and the second late afternoon / early evening (30%.) Industry standards indicate 23.3% (early morning) and 38% (late afternoon / early evening) respectively.

4. The majority of users (84%) that visit the Manly facility are over the age of 24 years while only 16% represent the age groups from 1-24 years. Although it is recognised that the sample in the Manly study under represents the 16-24 age group the results are again similar with what is happening throughout Australia. There is no doubt that there is a mistaken belief that community swimming pools are essentially for children. Research consistently indicates that adults are by far the majority of users of these types of facilities.

4. Review of Existing Facilities

The review team inspected the Council's Swimming Centre to ascertain the provision of facilities and the standard of construction and maintenance.

General Comments

Manly Pool was constructed in 1974. It was designed by Figgs and Jefferson Pty Ltd Architects and is similar in design to numerous municipal pools of the post 1956 Olympics period. The 25m, learners and wading pools were added by Crystal Pools Pty Ltd.

The season is being extended this year to the end of June, due to public demand. Its success will indicate the popularity for a year round centre, although unless improvements to patrons amenities, such as heated, enclosed change rooms and provision of wind breaks, the lack of appropriate facilities will deter all but the hearty in bad weather.

The pool is typical of outdoor municipal pools of the time with an 8 lane, 50 metre competition style pool supported by a smaller learn to swim and toddlers pool. The change facilities are located at the Eastern end of the complex and are only partially roofed. They could be described as rudimentary, with only basic finishes and furniture provided. Hot water is provided to the showers by means of coin operated, timed switches. A dedicated change facility for disabled users was recently provided.

The swimming centre was built approximately 2 metres above natural ground level. The land was once a wetland area prone to flooding, and it is assumed that this, combined with an anticipated high ground water level lead to the elevated solution. This has resulted in areas of retaining wall and banks to the present boundaries. This restricts the opportunities for circulation and barrier free access for visitors to the centre.

The landscaped area to the North and West of the pools is formed with grassed mounds which are raised above the level of the pool concourse to provide spectator seating. It then banks down steeply to Kenneth Road, with a mixture of established native planting to the perimeter.

This area to the North western corner is quite shaded and it is no doubt difficult to keep a good cover of grass. The overall amount of grassed area for informal children's play or sun baking is limited. Adjacent to the learners pool is a small fenced children's play area. Five picnic type shelters are dotted around the landscaped area, which appear to be out of place within a pool environment although are utilised as an area of seating under shade. An informal area of stepped seating with shade cover exists on the northern side of the deep end of the 50m pool.

The main pool has eight lanes which makes it ideal for school organisers who use eight lanes to minimise the number of heats required in carnivals. The depth of 2.0 metres at the deep end is suitable for water polo, although the lack of movable boom prevents the separation of the water area to enable the shallow end to be utilised for lap swimming.

The open areas around the pool have limited enclosure or shade, which provides school organisers with difficulties in adequately protecting children from the sun, or protecting them from rain during carnivals. The street furniture (benches, bins, tables and chairs), that presently exists is a combination of different styles, collected over the years. The area is illuminated by seven light towers, for night use. The pool area is enclosed to the North and Western Boundaries by a 2m high cyclone wire fence, to which has attached shade cloth to reduce the wind entering the grounds. This is only partially successful due to the low height of the fence in relation to the height of the pool surround.

The pool water quality is very good. The concrete pool concourse is approximately 5 metres wide and has experienced differential settlement particularly in the North-Western corner, this has lead to some cracking which requires regular maintenance. The pool concourse is separated from the grass area by a 300mm high face brick retaining wall.

Parking adjacent to the pool is adequate for the present facility. This is shared by users of L.M. Graham Reserve and experiences peak periods of demand. Access to the existing parking is off Balgowlah Road and this intersection becomes congested at peak times. The car park was originally connected to Kenneth Road until it was widened. The swimming centre is near Pittwater Road which is the arterial road connecting Manly and the Northern Beaches, and therefore has good accessibility from the surrounding suburbs.

Public transport to the pool is reasonable, although no routes pass directly by the centre. The location of the centre is not particularly well known, especially from the residents outside the local area. Increased signage from the major roads and on the building itself, would help raise its profile.

The kiosk comprises of a store room and small servery area which opens out to the covered area. It is leased to a commercial operator and its small floor area and location away from the entrance limits its potential earning capacity.

The clubroom, located between the entry and the plant room, was constructed some time later than the main building. The fitout of the clubroom is utilitarian and offers only the basic facilities for the members of the swimming clubs. It is also used as an office for carnivals and as general storage for the swimming clubs.

The swimming centre is situated at the Eastern end of the L.M. Graham Reserve. This reserve is located within a large area of recreational open space with numerous well established native trees. The area to the South and East of Balgowlah Road contains a mixture of detached dwellings and low rise apartment blocks. The sporting facilities within the L.M. Graham Reserve include a cricket pitch with a turf wicket, 2 football ovals (one with limited spectator seating around three sides,) three tennis courts and cricket nets.

In the South Western corner of the reserve the Council runs a long term day care facility. Adjacent to this a bowling club associated with the golf club. The grouping of such a number of different community clubs could benefit an upgraded swimming facility in terms of cross fertilisation of facilities.

The Manly Swimming Centre comprises of:

Outdoor 50 metre x 21 metre - 8 lane pool	Tiled, Pool depth: 1.07m to 2.0m Starting blocks at deep end Exposed aggregate raised pool edge with wetdeck return water channel
Training Pool	Fibreglass lined concrete tank 25.0m x 10.5m, 5 lanes x 2.0m wide 1.0 - 1.05m deep
Learners Pool	10.5m long x 300 mm deep, tiled pool basin
Wading Pool	8 metre diameter x 175 to 375 mm deep water, shade structure over tiled pool basin
Clubroom	This is a simple but adequate clubroom, 65m^2
Kiosk	The kiosk is located at the northern end of the amenities block, it has a direct delivery entry off the street
Change Rooms	The change rooms are basic and appear adequate in size. They are open to the weather. A disabled change room has recently been provided.
Staff Room	14m^2
Staff Amenities	24m^2
Office	A good sized office is located over the entrance and has views over most of the pool area. It is air conditioned.
Entry Pavilion	The reception area is limited in space. There is insufficient space for groups to wait before entering the facility. There is little available space for notices and no retail outlet.
First Aid Room	This is adequate though has poor visual contact with the pool area.
Pool Blankets	Stored on mobile trolleys at the end of the pools.
Storage	There is a small store located behind the front counter. There also exists a small garden shed for maintenance equipment.
Plant Rooms	The exterior of the plant room is in good condition, there is direct access to the plant room from the street, an emergency shower is installed. *For plant condition refer to Geoff Ninnes Report.*

Constraints and Opportunities

Constraints

Manly pool has some constraints to future development. The principle difficulties are the amount of available land adjacent to the existing facilities and the present arrangement of the playing fields on the L.M. Graham Reserve. The location of the Swimming centre at the Eastern end of the reserve near the busy junction of Kenneth and Balgowlah Roads, limits the possibilities for expansion and an alternative entry point into the complex.

The present location of the patron entry is restricted in space. There is insufficient distance between the entry stairs and the drop-off area for the movement of school groups. This is seen as a safety risk which should be alleviated. The present configuration of the car park to the Western boundary would need to be reorganised to allow expansion in this direction.

The level difference between the pool deck area and the surrounding parkland would appear to raise some concerns in terms of disabled access. The value of numerous established trees around the site would also have to be considered in the planning of any future expansion.

An anticipated high water table would have to be addressed in the determination of the proposed levels of any new pools. As the area was once a wetland, the foundation requirements could increase the cost of a new development.

The external appearance of the pool buildings is utilitarian and the angular roof forms are difficult to adapt as might be required to enclose the change rooms. The change rooms are presently open to the elements, and both male and female facilities are rudimentary. Users complain that these facilities are cold in winter.

The condition of the 25m pool appears to suggest that it has a limited life span unless extensive repair work is carried out. The fibreglass lining also requires regular maintenance and it's replacement with ceramic tiles should be considered if the pool life is to be extended.

Opportunities

The present buildings are confined to the South-Eastern corner of the site which provides the opportunity of including additional buildings without encroachment on the existing pools or their services. The relationship between the buildings and the 50m pool is good, with a Northerly orientation allowing good solar access to the pool area and the bulk of the building shielding the pool from cold, Southerly winds.

The pool has the great benefit of having a large amount of land to the West, which is controlled by Council and could be used to develop additional facilities, making it a significant all-purpose aquatic centre. This development opportunity is only present if there is a flexibility in the replanning of the present car park and playing fields adjacent to the swimming centre. There is also the possibility of integrating the old Suwarrow Street Road Reserve into the L.M. Graham Reserve to offset any loss of parkland.

Integration of the sporting facilities of the L.M. Graham Reserve and the swimming centre would enhance the potential cross fertilisation of user visits to both ventures. If the swimming centre were to expand space could be allocated for modern change facilities and toilets for the playing fields. Security and maintenance could be managed by the swimming centre to reduce ongoing costs. There would also be the opportunity for the sporting teams to use the swimming centres facilities for training and fitness if dry facilities

were also included into an expanded centre. This would allow the removal of the existing toilet block and change rooms for the playing fields, thus adding to the amenity of the Reserve. There also would be demand for an expanded kiosk/café which could service both the pool complex and visitors to the Reserve. The optimum location of such a facility would be within an entry foyer with an outlook over the pools.

The present centre is in good condition and is well maintained. The water quality in the pools is maintained at a high level. Parking at the pool is adequate, although on some occasions when there is a major event being held on the adjacent oval, the parking on the site is at a premium. If the centre were to expand, additional spaces would be required.

The width of the concourse to the 50m pool lends itself to the possibility of extension to 51.5 metres to accommodate a 1.5 metre wide pool bulkhead, which can be used as a programming tool for dividing the pool tank into two, 25 metre water spaces. Such an arrangement would permit two clubs to train at the same time, or the deep end could be configured for Waterpolo and still provide 8, 25m lanes for lap swimming or water space for casual swimmers.

Financial Performance

The financial performance of the centre in recent years has indicated a modest annual operating surplus. Recent events however may threaten this position with the advent of higher energy costs from 1999 onwards. There is also concern that the extension of the operating period to almost 10 months of the year could add to the difficulties of achieving a balanced operating budget, even though there is significant demand from users.

The financial success of the centre is highly dependent on weather patterns and any increases in seasonal inclement weather could adversely effect attendances.

Essentially the centre has established a very strong user base for a centre of this type and is currently performing much better than most outdoor swimming pools in Australia. Management is clearly well respected by patrons and is providing an efficient and effective service. It is unusual however for successful centres to achieve a high level of performance by adapting a facility management role that exists at Manly. The relationship with the providers of service is essentially as a "hirer of facilities" rather than the initiation development and service delivery role that has evolved in those successful indoor facilities in Australia. Not withstanding this, the system of service delivery should not be changed if it is successfully meeting the needs of its customers and is working well for the Council.

Usage patterns that have been identified in other sections of this report and previous studies have illustrated that there is a very high demand on water space particularly at peak periods of the day. This demand is somewhat less intensive during the cooler months of the year.

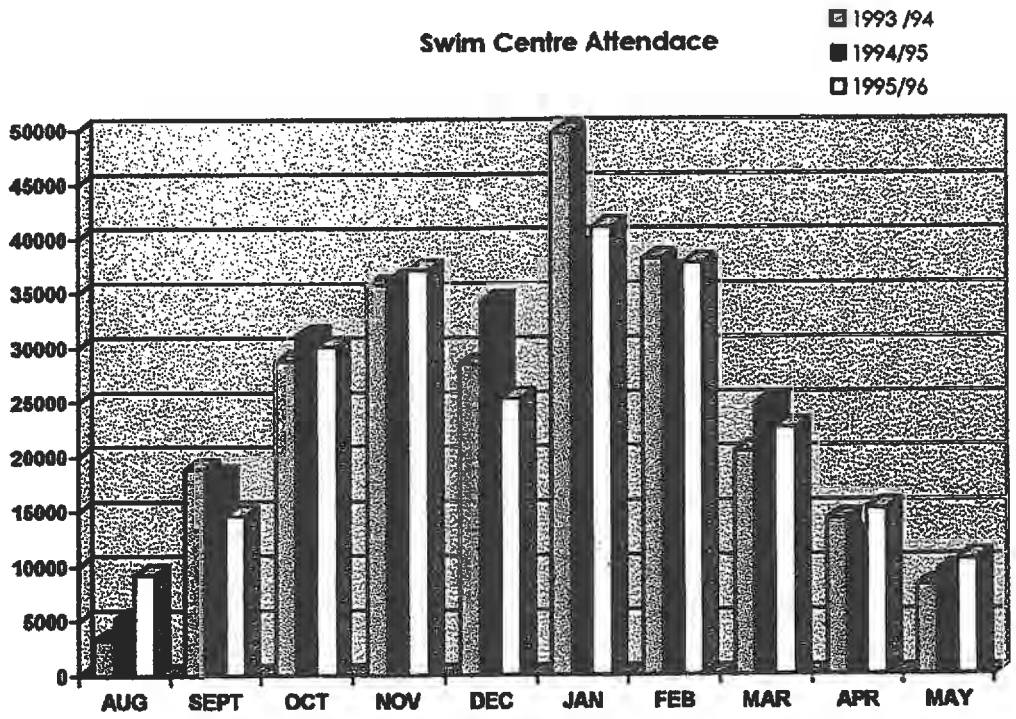
Clearly the market positioning of the centre is focused on adult lap swimming, recreational swimming and to a lesser extents sports and educational use. This position is the result of demand and available facilities. The centre, by providing only outdoor facilities is severely limited in both the range of programmes and consistency of service to enable broader opportunities.

If sufficient space was available there would be a noticeable increase in sports use. It is normal for teaching programmes, aquarobics and a wide range of other aquatic programmes to be conducted in spaces that have higher water temperature. It can best be illustrated in the figure overpage that there is a significant drop off in users during the cooler months of the year. Although some groups of users are happy to continue supporting the centre during the cooler months the conditions are not conducive for a wide range of activities. It is not uncommon that water spaces for learn to swim, fitness for the elderly, aquarobics, rehabilitation programmes to be heated to 30°C and are usually enclosed.

If the appropriate facilities and conditions are provided there would be increased usage and opportunities which are currently not possible with the present facility.

Swim Centre Attendance

	1993 /94	1994/95	1995/96
AUG	3261	5157	9220
SEPT	18841	18321	14576
OCT	28795	31084	30046
NOV	35680	36197	37086
DEC	28458	34213	25308
JAN	49633	39105	41016
FEB	38094	36838	37690
MAR	20398	24794	22530
APR	14186	12534	15141
MAY	8130	9500	10521



Technical

A technical review was carried out by Geoff Ninnes Fong and Partners to determine alternative heating options and to examine both the structural condition and hydraulic systems at the centre.

This report is included as appendix 1 of this report for detailed information. In general it concludes that the existing plant and pool structures are in a sound condition and only minor repairs are required. As the existing heating system is inefficient and is likely to result in high energy cost post 1999 when electricity supply rates are reviewed consideration should be given to converting the heating system to heat pumps. Details of operating costs are included in the technical report.

Other recommendations include:

- Take the children's pools and 25m pool off the general circulation system.
- Separately filter and heat each of these two pool systems (25 metre only if retained.)

Summary

In reviewing the existing facilities, operation and performance the following summarises the consultants findings.

- The facilities are well supported by the community and has a solid base of regular users.
- As an outdoor facility the centre performs exceptionally well and is regularly achieving positive financial outcomes.
- The management structure is efficient and providing high quality services to the users of the centre.
- It is anticipated that it will become increasingly more difficult to maintain the present financial performance due to issues outside of the control of management.
- Although basic in terms of comfort and provision the buildings, plant and pool structures are generally in sound condition.
- Management although has identified opportunities for improving the centre and its performance the most significant limiting factor is the lack of indoor heated water space. It will be difficult for management to enhance performance in the future without appropriate facilities.
- The industry as a whole will become more competitive as more indoor facilities become available in metropolitan Sydney and customer expectations increase as a result.

5. Demographic Analysis

Catchment Population

The potential catchment area for the proposed centre is described as (a) the primary catchment and (b) as the secondary catchment. This has been calculated by analysing the populations by postcodes as recorded in the 1991 Census. Changes may have occurred over the past five years but it is considered that any changes would not significantly impact on the overall results of our analysis. An analysis was also completed of future population trends in the region to 2012.

Primary Catchment The primary catchment includes those postcodes within a 5km radius of the proposed centre. The following table shows the breakdown of populations by postcode and the primary catchment population figure.

It is important to point out some postcodes extend across the primary and secondary catchment. To overcome the possibility of doubling population figures, percentages of these postcodes were used to arrive at an estimated population for each catchment.

Table 1: Primary Catchment Population by Postcode

Postcode	Resident Population	% in Catchment	Estimated Population
2087	12019	10%	1202
2088	23456	10%	2346
2092	5023	100%	5023
2093	18345	100%	18345
2094	5217	100%	5217
2095	13701	100%	13701
2096	12909	100%	12909
2099	28957	60%	17374
2100	15959	50%	7980
		Total	84,097

Secondary Catchment The secondary catchment is defined as the area within a 5km - 10km radius. Table two calculates the secondary catchment.

Table 2: Secondary Catchment Population by Postcode

Postcode	Resident Population	% In Catchment	Estimated Population
2060	12248	100%	12248
2062	4353	100%	4353
2063	3475	100%	5475
2064	7877	100%	7877
2065	19441	80%	15553
2067	14856	50%	7428
2068	14231	100%	14231
2069	12832	100%	12832
2070	10696	40%	4278
2071	11233	10%	1123
2085	10449	50%	5225
2086	12983	100%	12983
2087	12019	90%	10817
2088	23456	90%	21110
2089	7690	100%	7690
2090	13741	100%	13741
2097	12546	100%	12546
2099	28957	40%	11583
2100	15959	50%	7980
2101	15425	40%	6170
		Total	195 243

Although the primary and secondary catchments are based on radius distances from the centre the presence of physical barriers, namely the Sydney Harbour decrease the true 10km radii. Areas south of the Sydney Harbour Bridge have been excluded - (postcodes 2000, 2028, 2027, 2029 and 2030) Aquatic centres such as Andrew Boy Charlton and Prince Alfred Park Pool would be more accessible for these residents.

As a result the population figures described above are a more accurate indication of market potential.

Population Projections

The Region An analysis of future population trends was completed for area, spanning from 30 June 1994 to 2012, and classified by sex and five - year age groups.

This analysis was by postcodes relevant to the project rather than Statistical Local Areas to enable a higher level of accuracy and validity.

These estimates are specific to the area earlier identified as the defined catchments for the centre.

The Projections The techniques employed for the projections was the cohort-component method, widely accepted as the most accurate. It involves applying fertility and mortality rates and migration levels to the base population to produce a projected population, which in turn becomes the base for projecting the next year, and so on.

Naturally, normal fluctuations in population dynamics make it hazardous to place too much reliance on any particular figure in the table of results, especially age groups with only small populations. The unpredictability of migration trends, at least from year to year, should also be remembered when considering the projection results.

Fertility and Mortality Assumptions The fertility assumptions were based on average age-specific fertility rates observed in the specified regions between 1987 and 1994. Mortality rates for the regions were based on the projected NSW age-specific mortality rates used in the latest ABS population projections. These were calculated using NSW historical short-term rate of mortality decline up to 2000, after that according to the Australian long-term rate of mortality decline. The regions were ascribed the State projected mortality rates, then adjusted to reflect any differences in their mortality patterns to NSW in recent years.

Migration Assumptions The migration assumptions used for the projections were based on historical trends of net migration in the regions. Anticipated future levels on interstate and overseas migration, together with any recent State Government population projections, have also been considered in framing the assumptions.

The age/sex distribution for these assumptions were based on overseas and inter-regional migration rates used in the calculation of published ABS SLA age/sex population estimates, which originally derived from 1986 and 1991 Population Census migration data.

Statistical Local Area (SLA) to postcode conversions To calculate postcode projections from SLA projections, conversion results to 1991 SLA boundaries where necessary. This is to allow the use of the SLA to Postcode Concordance which is compiled using 1991 Census data. These almost entirely correspond with Australia Post boundaries, and do not necessarily correspond to Census Collection Districts.

The concordance was updated from 1991 to 1995 using ABS building approvals data as an indicator of population change. This allows for cases where postcodes within SLAs have populations growing at different rates. Furthermore, the building approvals data was modelled for future years, allowing concordance to be extended to the projection horizon.

The concordance was then used to convert projections of total persons in SLAs to postcodes.

The results for each postcode were then summed to obtain a single projection.

It is important to recognise that the projection results essentially reflect the assumptions made about future fertility, mortality and migration trends. While the assumptions are formulated on the basis of an objective assessment of demographic trends over the past decade and their likely future dynamics, there can be no certainty that they will be realised.

The following three tables displays the results of the population projection analysis with a breakdown of females, males and the total of the two combined.

TABLE 3: PROJECTED POPULATION BY SEX AND 5-YEAR AGE GROUP - MALES
Manly Region June 1994 - June 2012

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
0-4	8836	8741	8707	8706	8693	8689	8657	8593	8518	8439	8355	8272	8194	8099	8012	7921	7836	7758	7679
5-9	8021	7955	7924	7891	7875	7830	7771	7744	7747	7732	7737	7710	7648	7580	7511	7434	7363	7276	7195
10-14	8691	8646	8566	8496	8419	8359	8332	8327	8305	8290	8243	8195	8161	8174	8164	8169	8144	8078	8013
15-19	9861	9660	9606	9548	9532	9512	9510	9443	9375	9309	9268	9237	9225	9210	9200	9156	9110	9073	9079
20-24	14646	14478	13973	13417	12976	12645	12399	12344	12304	12324	12322	12336	12276	12208	12133	12079	12059	12057	12053
25-29	14090	14173	14547	14917	15099	15120	14922	14410	13892	13487	13186	12966	12943	12901	12918	12911	12914	12851	12773
30-34	14046	13742	13385	13079	12838	12676	12791	13092	13403	13555	13567	13393	12954	12499	12137	11857	11661	11621	11562
35-39	12208	12322	12495	12595	12603	12616	12383	12061	11802	11587	11448	11531	11782	12060	12195	12191	12028	11627	11210
40-44	11917	11882	11809	11841	11904	11938	12069	12234	12354	12385	12409	12201	11899	11635	11423	11265	11334	11571	11824
45-49	12270	12417	12557	12373	12230	12116	12097	12053	12097	12196	12240	12375	12561	12686	12719	12744	12545	1240	11971
50-54	9459	9776	10092	10595	11087	11331	11470	11602	11458	11339	11253	11247	11212	11263	11347	11398	11536	11713	11836
55-59	7177	7317	7441	7541	7610	7839	8108	8388	8821	9234	9462	9587	9704	9580	9486	9414	9409	9386	9419
60-64	6378	6211	6129	6161	6256	6379	6517	6653	6748	6818	7035	7274	7535	7927	8294	8507	8610	8709	8596
65-69	6219	6146	6025	5878	5704	5551	5428	5364	5404	5489	5603	5734	5854	5947	6012	6203	6419	6635	6981
70-74	5280	5348	5387	5384	5422	5416	5380	5301	5187	5042	4920	4820	4781	4831	4914	5019	5132	5247	5347
75-79	3755	3803	3934	4074	4227	4387	4453	4517	4545	4580	4599	4586	4524	4438	4324	4223	4146	4109	4153
80-84	2395	2501	2569	2621	2631	2636	2687	2798	2918	3043	3162	31230	3280	3303	3344	3356	3357	3324	3266
85+	1382	1460	1530	1609	1693	1783	1877	1951	2012	2052	2091	2173	2281	2378	2452	2537	2605	2692	2750
Total	156431	156578	156676	156726	156799	156823	156851	156875	156890	156891	156900	156867	156814	156719	156585	156384	156208	155967	156707

TABLE 4: PROJECTED POPULATION BY SEX AND 5-YEAR AGE GROUP - FEMALES
Manly Region June 1994 - June 2012

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
0-4	8235	8147	8116	8121	8108	8107	8088	8024	7952	7871	7801	7725	7651	7564	7480	7400	7313	7241	7170
5-9	7788	7724	7702	7671	7632	7573	7511	7483	7483	7473	7485	7475	7407	7340	7270	7203	7122	7045	6967
10-14	8154	8135	8086	8020	7966	7933	7899	7889	7868	7839	7799	7736	7710	7712	7703	7703	7703	7637	7566
15-19	9939	9709	9614	9556	9532	9506	9544	9497	9450	9410	9373	9356	9343	9329	9302	9257	9191	9161	9177
20-24	14998	14822	14335	13831	13442	13132	12867	12775	12734	12736	12752	12791	12769	12711	12667	12637	12620	12627	12625
25-29	14312	14397	14751	15062	15190	15144	14940	14463	13994	13651	13358	13116	13035	12993	12994	12995	13026	12975	12913
30-34	13663	13413	13060	12758	12509	12391	12466	12743	12983	13087	13051	12871	12472	12075	11767	11516	11293	11210	11153
35-39	12627	12723	12883	12977	12984	12980	12784	12464	12191	11954	11839	11900	12132	12357	12464	12442	12279	11891	11505
40-44	12831	12844	12786	12827	12911	12967	13086	13265	13388	13410	13416	13236	12907	12629	12387	12260	12321	12558	12791
45-49	12746	12950	13159	13047	13006	12993	13031	13001	13063	13174	13244	13372	13563	13697	13733	13736	13541	13201	12925
50-54	9277	9632	9968	10522	11020	11315	11507	11706	11621	11606	11603	11642	11634	11686	11785	11857	11971	12165	12280
55-59	7386	7444	7564	7639	7700	7934	8247	8536	9014	9454	9707	9885	10053	9979	9961	9965	9989	9973	10018
60-64	6813	6664	6538	6570	6657	6766	6827	6951	7030	7102	7324	7615	7880	8321	8732	8964	9129	9286	9212
65-69	7611	7465	7325	7134	6891	6686	6562	6431	6488	6584	6691	6771	6888	6982	7044	7259	7563	7819	8255
70-74	7562	7627	7575	7505	7480	7388	7267	7166	6988	6765	6574	6457	6361	6415	6510	6630	6705	6848	6926
75-79	6161	6193	6372	6512	6659	6837	6913	6902	6844	6853	6774	6691	6604	6453	6257	6084	5988	5897	5959
80-84	4776	4887	4973	5040	5053	5017	5057	5230	5385	5531	5695	5765	5774	5759	5768	5724	5646	5599	5474
85+	3994	4160	4342	4492	4649	4840	5012	5172	5299	5389	5472	5605	5840	6019	6158	6318	6437	6594	6671
Total	168873	168936	169149	169284	169389	169509	169608	169698	169775	169889	169958	170009	170023	170021	169982	169950	169837	169727	169587

TABLE 5: PROJECTED POPULATION BY SEX AND 5-YEAR AGE GROUP - COMBINED MALE & FEMALE
Manly Region June 1994 - June 2012

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
0-4	17071	16888	16823	16827	16801	16796	16745	16617	16470	16310	16156	15997	15845	15663	15492	15321	15149	14999	14849
5-9	15809	15679	15626	15562	15507	15403	15282	15227	15230	15205	15222	15185	15055	14920	14781	14637	14485	14321	14162
10-14	16845	16781	16652	16516	16385	16292	16231	16216	16173	16129	16042	15931	15871	15886	15867	15872	15847	15715	15579
15-19	19800	19369	19220	19104	19064	19018	19054	18940	18825	18719	18641	18593	18568	18539	18502	18413	18301	18234	18256
20-24	29644	29300	28308	27248	26418	25777	25266	25119	25038	25060	25074	25127	25045	24919	24800	24716	24679	24684	24678
25-29	28402	28570	29298	29979	30289	30264	29862	28873	27886	27138	26544	26082	25978	25894	25912	25906	25940	25826	25686
30-34	27709	27155	26445	25837	25347	25067	25257	25835	26386	26642	26618	26264	25426	24574	23904	23373	22954	22831	22715
35-39	24835	25045	25378	25572	25587	25596	25167	24525	23993	23541	23287	23431	23914	24417	24659	24633	24307	23518	22715
40-44	24748	24726	24595	24668	24815	24905	25155	25499	25742	25795	25825	25437	24806	24264	23810	23525	23655	24129	24615
45-49	25016	25367	25716	25420	25236	25109	25128	25054	25160	25360	25484	25747	26124	26383	26452	26480	26086	25441	24896
50-54	18736	19408	20060	21117	22107	22646	22977	23308	23079	22945	22856	22889	22846	22949	23132	23255	23507	23878	24116
55-59	14563	14761	15005	15180	15310	15773	16355	16924	17835	18688	19169	19472	19757	19559	19447	19379	19398	19359	19437
60-64	13191	12875	12667	12731	12903	13145	13344	13604	13778	13920	14359	14889	15415	16248	17026	17471	17739	17995	17808
65-69	13830	13611	13350	13012	12595	12237	11990	11795	11892	12073	12294	12505	12742	12929	13056	13462	13982	14454	15236
70-74	12842	12975	12962	12889	12902	12804	12647	12467	12175	11807	11494	11277	11142	11246	11424	11649	11837	12095	12273
75-79	9916	9996	10306	10586	10886	11224	11366	11419	11389	11433	11373	11277	11128	10891	10581	10307	10134	10006	10112
80-84	7171	7388	7542	7661	7684	7653	7744	8028	8303	8574	8857	8995	9054	9062	9112	9080	9003	8923	8740
85+	5376	5620	5872	6101	6342	6623	6889	7123	7311	7441	7563	7778	8121	8397	8610	8855	9042	9286	9421
Total	325504	325514	325825	326010	326188	326332	326459	326573	326665	326760	326858	326876	326837	326740	326567	326334	326045	325694	325294

As indicated in Table 5, the population figure in 1996 for the catchment area was calculated at approximately 326,000. Our earlier calculations show a population figure of 279,340. We believe our initial figure gives a more accurate picture of the region's population as we have taken into account man made and physical barriers and observing that a portion of some postcodes fall outside the catchment zones, thus decreasing the figure of 326,000. Adjustments have been made purely because portions of some postcodes fall outside the catchment zones.

Growth Estimates In order to assess the projection figures fairly, percentages of population growth/decline will be used for the following periods: 1994 - 1996, 1996 - 2000 and 2000-2012.

For the years 1994 - 1996: $\frac{325\,825 - 325\,504}{325\,504} \times 100 = \mathbf{0.10\%}$

For the years 1996 - 2000: $\frac{326\,459 - 325\,825}{325\,825} \times 100 = \mathbf{0.19\%}$

For the years 2000 - 2012: $\frac{325\,294 - 326\,459}{326\,459} \times 100 = \mathbf{-0.36\%}$

The figures illustrate a slow decline over several years which leads us to assume that demand for facilities will remain relatively constant over a period of time.

Age Distribution

The following table compares the age distribution of the primary and secondary catchment zones to that of the remaining Sydney Metropolitan residents.

Table 6: Age distribution

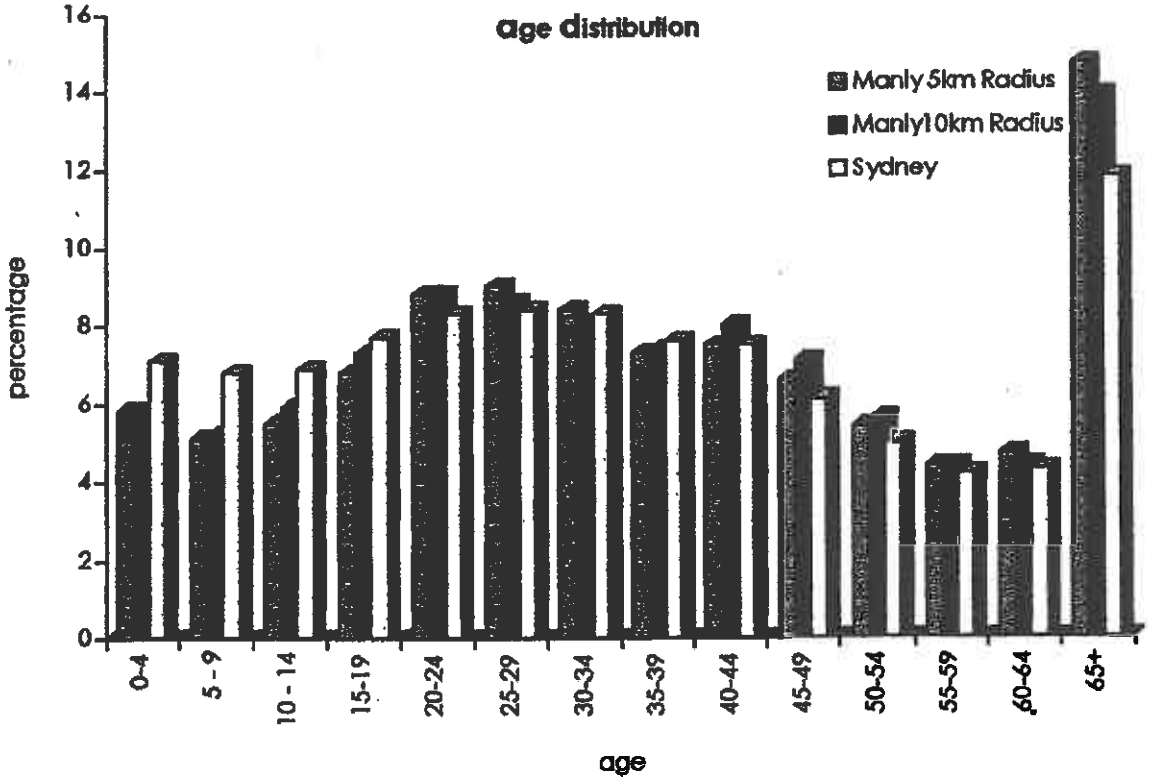
Age	Manly 5km Radius	Manly 10km Radius	Sydney
0-4	5.8%	5.3%	7.1%
5-9	5.1%	5.2%	6.8%
10-14	5.5%	5.9%	6.95
15-19	6.8%	7.3%	7.7%
20-24	8.8%	8.8%	8.3%
25-29	9.0%	8.6%	8.4%
30-34	8.4%	8.1%	8.3%
35-39	7.3%	7.4%	7.6%
40-44	7.5%	8.0%	7.5%
45-49	6.6%	7.1%	6.1%
50-54	5.4%	5.6%	5.0%
55-59	4.4%	4.4%	4.2%
60-64	4.7%	4.4%	4.3%
65+	14.7%	13.9%	11.8%
Total	100%	100%	100%

A study conducted in 1995 for the Victorian Department of Sport & recreation examining the Usage Patterns of fourteen Indoor Swimming Centres, reveal that over 50% of visitors to aquatic centres were aged 20-39 years and that more visitors were in their 30's than in any other age group.

33.5% & 32.6% of the primary and secondary catchments zones respectively is represented by people aged 20 -39 years, a heavy user group of aquatic centres identified in the above mentioned study.

The Victorian study also suggested a substantial move towards adult use of indoor aquatic centres and that proportionally fewer young people are now visiting them.

The Manly region is heavily populated with elderly residents with almost 40% aged greater than 40 years of age. At the other end of the scale only approximately 24% of the catchment is represented by young people (age 0 - 19) compared to the Sydney average of almost 21%. These figures strongly support a large potential market.



Income Distribution

Table 7: Income Distribution

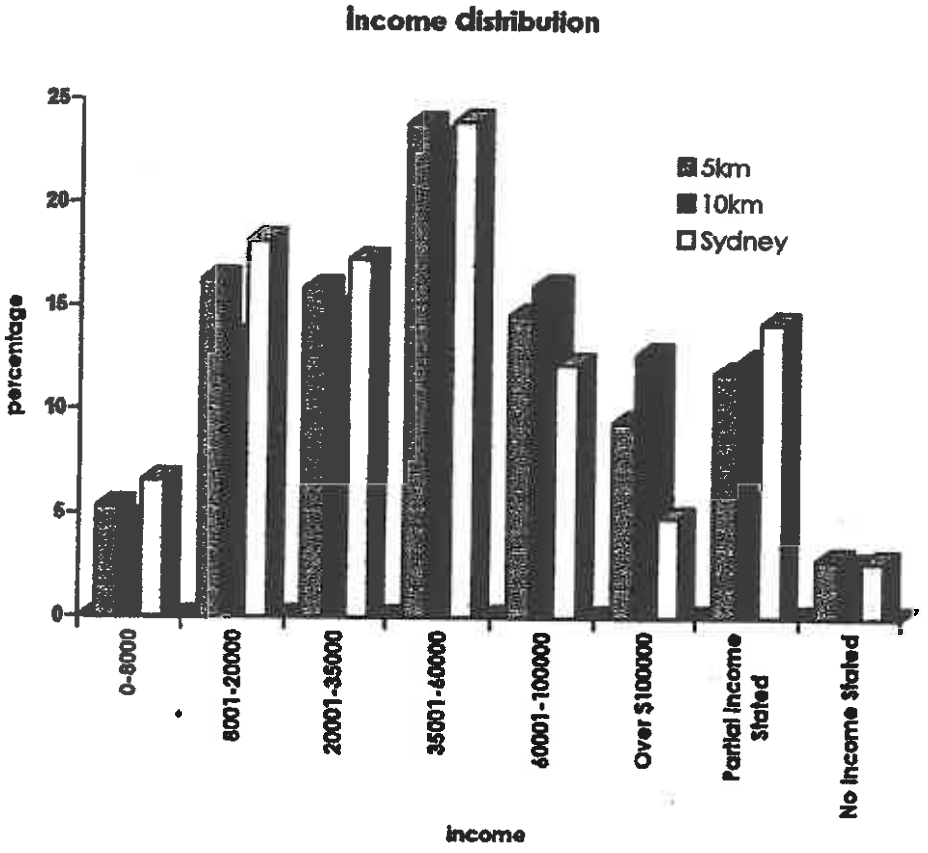
Annual Household Income	% of Families 5km Catchment	% of Families 10km Catchment	Sydney
$0-$3000	0.7%	0.8%	0.7%
$3001-$5000	0.4%	0.4%	0.4%
$5001-$8000	4.2%	3.5%	5.5%
$8001-$12000	5.3%	4.4%	5.1%
$12001-$16000	5.6%	4.6%	7.3%
$16001-$20000	5.4%	4.5%	5.8%
$20001-$25000	5.0%	4.6%	5.8%
$25001-$30000	5.8%	5.5%	6.3%
$30001-$35000	5.1%	4.8%	5.2%
$35001-$40000	5.3%	5.0%	5.5%
$40001-$50000	10.2%	9.7%	10.4%
$50001-$60000	8.4%	8.5%	8.1%
$60001-$70000	5.5%	5.7%	4.8%
$70001-$80000	4.4%	4.7%	3.7%
$80000-$100000	4.7%	5.6%	3.7%
$100001-$120000	4.6%	6.0%	2.4%
$120001-$150000	2.9%	3.9%	1.5%
Over $150 000	1.9%	2.8%	0.9%
Partial Y Stated	11.8%	12.4%	14.2%
No Y Stated	2.8%	2.6%	2.7%
Total	100%	100%	100%

Table 7 highlights differences found between the residents surrounding the Manly swimming centre and those remaining Sydney residents.

The table shows that a greater number of Manly residents fall into a higher income bracket than the Sydney Metropolitan averages. 32.4% of residents residing in the primary catchment and 37.2% of residents residing in the secondary catchment fall into a high income bracket (> $50,000) compared to the Sydney average of 25.1%

Another significant difference lies in the over $100,000 income bracket. 9.4% and 12.7% of the primary and secondary catchment zones respectively, earn over $100,000 per annum compared to a Sydney average of only 4.8%

From this information we can conclude that there are no significant differences which would suggest that usage patterns would differ from the usage patterns throughout Australia. In fact, these figures indicate the affordability of services is better positioned than the Sydney Metropolitan Averages.



Place of Birth

Another useful demographic characteristic lies in examining the birthplace of users of recreational aquatic centres. Research (based on CERM - performance indicators) shows that 84% of customers are Australian born, 14% of customers are born overseas in mainly English speaking countries and 2% are born overseas in non-English speaking countries.

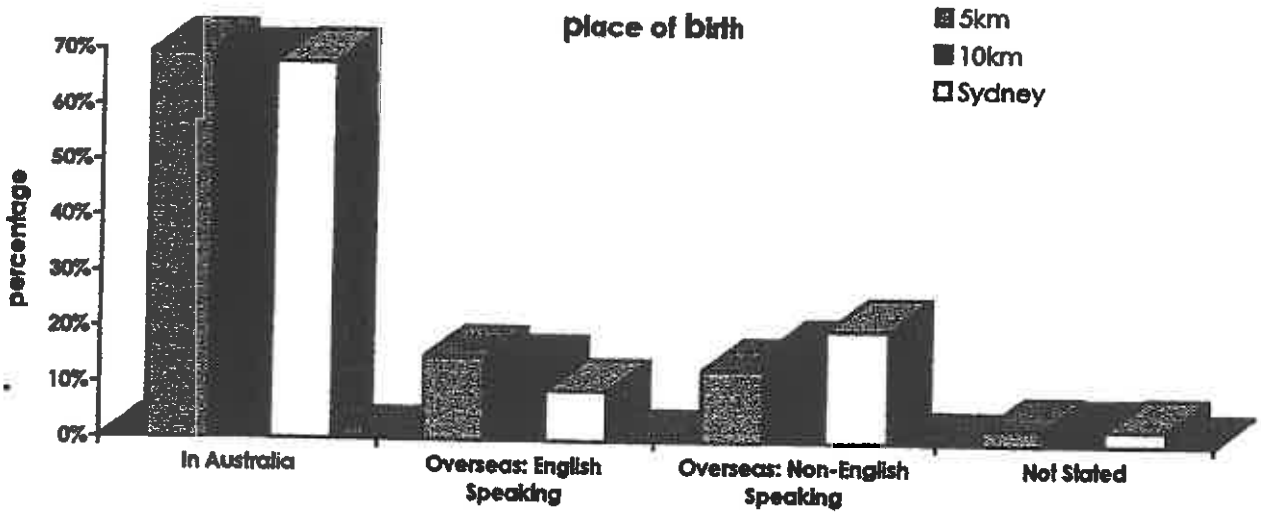
The following table summarises the birthplace of the residents in the primary and secondary catchment zones and gives a comparison to Sydney Metropolitan average.

Table 8: Place of birth

Born	5km Catchment	10km Catchment	Sydney
In Australia	69.5%	67.8%	68.0%
Overseas: English Speaking	14.9%	13.4%	9.0%
Overseas: Non-English Speaking	12.9%	16.3%	20.3%
Not Stated	2.7%	2.5%	2.7%
Total	100%	100%	100%

The above table illustrates that the Manly region has a high percentage of Australian born residents, residents born overseas in English Speaking countries, and a significantly lower proportion of residents born overseas in non English Speaking countries.

Statistics show that the majority of the population fall into the higher user category supporting a large potential market.



Summary of Demographic Analysis

The demographic analysis is one where the results contribute to the overall assessment of a region and a proposed centre.

Catchment population and projection figures combined with Income, Age, Place of Birth and Education Levels were all utilised for a thorough demographic analysis.

The following is a summary of this analysis.

- There exists a sizeable market in the Manly region to support expanded facilities.
- Population projections indicate a slight decline over a period of years which leads us to conclude that market demand will remain relatively constant over a long period of time;
- Based on the Income distribution analysis affordability of services is not a critical issue and is better placed than the average metropolitan Sydney area;
- The age distribution indicates usage patterns will be consistent with Australian trends;
- The profile of Place of Birth of residents in the Manly catchment area suggests that the usage patterns will be similar to research findings in other parts of Australia;

6. Estimated Market Potential

One key issue in the redevelopment of the Manly Swimming Pool is to accurately estimate annual attendance's and usage patterns.

There are several models that can be applied which are based on historical data and actual known performance of centres both in Australia and Overseas

The Cerm Model

The research conducted by the Centre for Environmental and Recreation Management (Adelaide University), reveals some interesting trends. For the past four years this organisation has been developing performance indicators with the assistance of more than ninety centres throughout Australia. These centres have now been surveyed three times in the past four years, with the results based on actual performance.

This research indicates that indoor pools which have combined dry facilities attract a medium catchment multiple of between 3.9 and 10.4 based on a population base within a 5km radius, (the catchment multiple is defined as the TOTAL ANNUAL ATTENDANCE'S ÷ POPULATION WITHIN 5KM OF THE CENTRE). The median of the top eight centres in Australia is 7.6

It would be reasonable to expect that with an expanded facility with indoor heated pools and an appropriate mix of dry facilities the potential market for a facility would be a conservative multiple of 5.0. With a population of 84,097 residing within the 5km zone, this represents a **potential of approximately 420, 485** users per annum.

The Dassett Model

It has been our experience that the most reliable method of estimating projected market is by combining:

- Participation rates derived from the recreation participation surveys undertaken by the Commonwealth Department for Arts, Sports, the Environment, Tourism and Territories, (DASSETT). This study investigated participation in recreation activities over four quarters during the period 1985/1986.

- Data from "Usage patterns for Ten Indoor Swimming Centres in Victoria." This study was undertaken by the department of Sport & Recreation, (Victoria), of Metropolitan and country pools in 1987.

Based on the above, the Dassett participation rates shows that 3.8% of males and 4.3% of females made use of public swimming pools in the week prior to the four quarterly survey periods.

Using this information it has been assumed that 4% of the population within the primary catchment area will use the facilities.

That is: 4% of 84, 097 = 3, 364 users

The Victorian study found that 51.4% of users will come from the primary catchment and 48.6% will come from the secondary catchment. This translates to a market potential of 6,728 regular users.

The Victorian study also identified that:

7.2% of participants visit every day
38.3% visit 3 times per week
34.8% visit once per week
19.7% visit once per fortnight

Therefore based on the Victorian Study:

7.2%	x	6,728	=	484	x 7	x 52	=	176,327
38.3%	x	6,728	=	2,577	x 3	x 52	=	401,985
34.8%	x	6,728	=	2,341	x 1	x 52	=	121,750
19.7%	x	6,728	=	1,325	x 0.5	x 52	=	34,461

This translates to a **potential market of 734,523 users** per annum for the region.

The market potential of the Manly Facilities is in the order of 700,000. With the current attendances averaging 250,000 per annum there is considerable untapped market available.

Because of the location of the Manly facilities which is somewhat isolated geographically from the surrounding areas, the consultants have taken a conservative approach to the market potential of any new redevelopment. A dilution factor has been applied to the secondary catchment zone and predictions have been based on 500,000 user visits per annum.

Competing Facilities

An analysis of both existing and proposed facilities was completed to determine an oversupply or under supply situation for the region. Dilution of the market is an important consideration in the determination of the size of the facilities proposed and the component mix to be included.

The following inventory and map was developed in order to illustrate the range of facilities within a 5km radius of the Manly Swimming Centre. Also included is a list of pools situated in the secondary catchment zone. Both lists will help us identify those aquatic centres which are currently competing and any centre which may compete with Manly in the future.

Aquatic facilities / Swimming pools situated in the primary and secondary catchment are listed as follows.

Inside 5km radius:

1. Freshwater Swim Centre
2. Harbord Diggers
3. Manly Leagues Club

5km - 10km:

1. Castle Cove
2. Kerry Johnston Swim School - 90 Pringle Ave, Belrose
3. Killarney Heights
4. NSW Academy of sport
5. North Sydney Olympic Pool
6. Unlimited Fitness
7. Willoughby Leisure Centre
8. Warringah Aquatic Centre

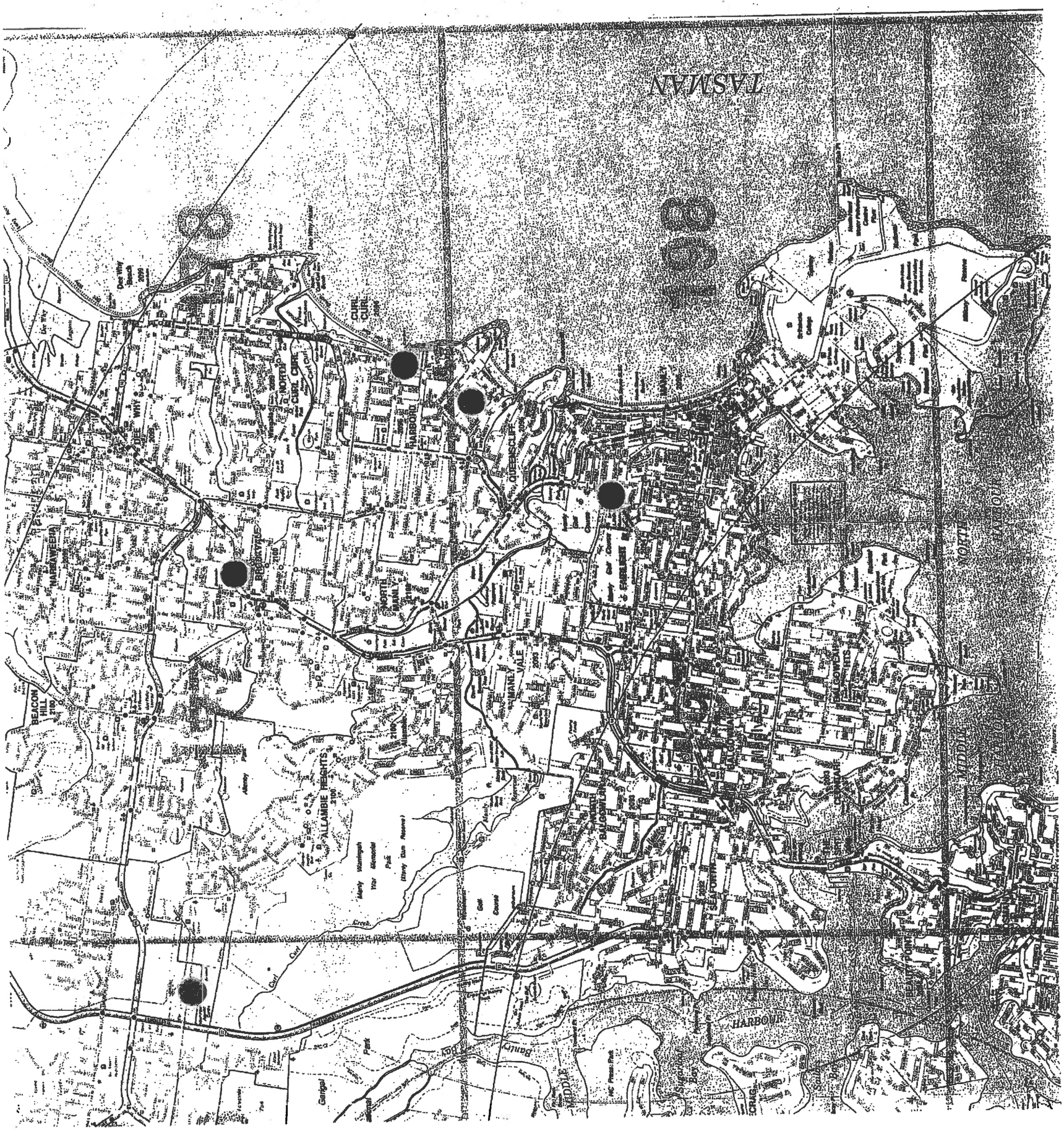
1. Freshwater Swim Centre: 12 Kolloora Ave Harbord: This centre consists of an indoor 15m - 3 lane pool and is utilised for private learn to swim only.

2. Harbord Diggers: Evans Street, Harbord: The Harbord Diggers Club offers a 25m - 6 lane indoor swimming pool and spa. Dry facilities on offer include large weights room consisting of pin loaded weights, air pressure machines, and free weights. Also located at the club are multi functional aerobics room, cardio boxing facilities, super circuit facilities and cardio equipment. The greatest advantage that the Harbord Diggers has over the Manly Swimming Centre is the dry facilities and programmes on offer. However, it does not compete in terms of water space offered and associated programmes with the Manly Swimming Centre.

3. Manly Warringah Leagues Club: 563 Pittwater Rd, Brookvale: Manly Warringah Leagues Club is similar the Harbord Diggers in terms of facilities offered. It consists of an indoor 25m - 6 lane pool, spa, circuit room, aerobics room, weights room including cardio equipment and creche. Again the fact that the Club offers dry facilities and programmes is beneficial, however the Leagues Club caters to a different market than the Manly swimming centre in terms of swimming facilities offered.

Pools located within primary catchment

	Freshwater Swim Centre	Harbord Diggers	Manly Leagues Club
Pool Type			
Indoor:			
50m			
25m		6lanes	6 lanes
<25m	15m - 3 lane		
Leisure Pool			
Toddlers Pool			
Diving Pool			
Other			
Outdoor:			
50m			
25m			
<25m			
Leisure Pool			
Toddlers Pool			
Diving			
Other			
Other			
Aerobics Circuit		✓	✓
Weights		✓	✓
Sauna			
Spa		✓	✓
Creche			✓
Kiosk		catering facilities	catering facilities
Sports Shop			
Gym		✓	✓
Aquarobics			
Hours			
All year	✓	✓	✓
Seasonal			
Market			
Fitness		✓	✓
Sport			✓
Education	✓		
Recreational			


TASMAN
CURL CURL
NORTH CURL CURL
MARKWELL
BROOKVALE
NORTH MANLY
MANLY
QUEENSCLIFF
NORTH HARBOUR
BEACON HILL
ALLAMBIE HEIGHTS
MANLY VALE
CURL CURL
HARBOUR
BEAUTY POINT
MIDDLE HARBOUR
CRAIG

Castle Cove Swim School: 26 Holly Street, Castle Cove Castle Cove Swim School is primarily a private learn to swim operation. It consists of two indoor heated swimming pools, a 18m - 4 lane pool and a 10m pool. The 10m pool is again used primarily for learn to swim classes and the occasional aqua-aerobic group.

Castle Cove swim school is open throughout the entire year with a two week break over the Christmas Holidays.

Castle Cove Swim School has extremely limited and 'awkward' parking available.

Kelly Johnston Swim School: 90 Pringle Ave, Belrose: This learn to swim operation is based in a private 12m 'backyard' outdoor pool and again poses no threat to Manly Swimming Centre.

Killarney Heights Pool: Trail Ave, Killarney Heights Killarney Heights indoor pool consists of one 25m - 6 lane pool. It is primarily used for private learn to swim classes, the education market and for aquarobics.

The swim centre is open all year round with a two week break over Christmas.

NSW Academy of Sport - Narrabeen Sport & Rec Wakehurst Parkway An 8 lane 25 metre indoor pool, utilised primarily by two swimming squads. This pool is not open for public use.

North Sydney Olympic Pool: Alfred South Street, North Sydney North Sydney Olympic Pool, now 60 years old has begun to show its age and has been experiencing a slow decline for some years now.

The pool currently operates as an outdoor pool from September to April, and is covered by an air supported dome from April through to September to allow for winter swimming. The pool is also closed for three weeks in April and two weeks in September. There are currently two pools:

50m - 8 lane pool, and
Toddlers pool.

North Sydney Olympic Pool also has a small creche which is operational Tuesday, Wednesday, and Thursday Mornings. It runs a small cafe outside which doubles as a swim/sports shop.

Other facilities include an exercise bike room with limited equipment and saunas available in change rooms.

Lap swimming, aqua-aerobics, school coaching and training make up the majority of the user groups.

In the near future major extensions and redevelopment's are planned.

Unlimited Fitness: Christie Street, St Leonards Unlimited Fitness is primarily a 'dry fitness' centre. Numerous facilities are available which include a cardio studio (bikes, steppers, treadmills & rowers), aerobics room, weights room, circuit room, and a tennis / basketball court.

The swimming pool at the centre is an indoor heated 25m - 5 lane pool and is used for squad training and lap swimming.

Other facilities include a creche (operational Mon - Fri 6am - 9pm and Sat - Sun 8am - 7pm) and a conference room.

Casual rates at this centre per visit are as follows:

swim:	$4.00
gym:	$10.00
aqua:	$6.00
aerobic:	$10.00

The centre is open all year round and provides undercover parking.

Warringah Aquatic Centre: Aquatic Drive, Frenchs Forest Warringah Aquatic Centre has combination indoor and outdoor facilities. Now in its seventeenth year of operation the centre has one indoor 50m - 8 lane pool, and a diving pool with this same water space. This pool utilises a boom to form two separate 25m water spaces.

Two pools are outdoor. These include another 50m - 4 lane pool which is half covered and a toddlers pool.

The centre also has a creche which is operational Monday through to Friday 9am - 12noon. Other facilities include a gymnasium, kiosk and sports / swim shop. The centre does not have any spas or saunas and is open all year round.

Willoughby Leisure Centre: Small Street, Willoughby Willoughby Leisure Centre was opened in July 1990 and has numerous facilities. The centre contains an indoor 25m - 8 lane pool, two leisure pools sharing the same water which are situated at different levels, a spa adjacent to the 25 m pool, a sauna and a second larger spa. The centre also boasts a fully equipped hi-tech gymnasium, a multi-purpose sports hall and a generous sized creche.

Other facilities also include a kiosk known as the "Flat rock Cafe" complemented with a spacious eating area.

Pools located within the Secondary Catchment

	Castle Cove	Kelly Johnston	Killarney Heights	Narrabeen
Pool Type				
Indoor:				
50m				
25m			6 lane	8 lane
<25m	x 2			
Leisure Pool				
Toddlers Pool				
Diving Pool				
Other				
Outdoor:				
50m				
25m				
<25m		12m		
Leisure Pool				
Toddlers Pool				
Diving				
Other				
Other				
Aerobics Circuit				
Weights				
Sauna				
Spa				
Creche				
Kiosk				
Sports Shop				
Gym				
Aquarobics	✓		✓	
Hours				
All year	✓	✓	✓	✓
Seasonal				
Market				
Fitness			✓	
Sport				✓
Education	✓	✓	✓	
Recreational				

	North Sydney	Unlimited Fitness	Warringah	Willoughby
Pool Type				
Indoor:				
50m			8 lane	
25m		5 lane		8 lane
<25m				
Leisure Pool				x 2
Toddlers Pool				
Diving Pool			✓	
Other				
Outdoor:				
50m	8 lane		4 lane	
25m				
<25m				
Leisure Pool				
Toddlers Pool	✓		✓	
Diving				
Other				
Other				
Aerobics Circuit		✓		✓
Weights		✓		✓
Sauna				✓
Spa				x 2
Creche	✓	✓	✓	✓
Kiosk	✓		✓	✓
Sports Shop	✓		✓	
Gym	limited	✓	✓	✓
Aquarobics	✓			✓
Other				multi - purpose hall
Hours				
All year		✓	✓	
Seasonal				
Market				
Fitness	✓	✓	✓	
Sport			✓	
Education	✓		✓	
Recreational			✓	

Future Proposals / Developments

Information was also sought from neighbouring councils and other organisations to identify any future proposals which may impact on the Manly Swimming Centre and any plans it may have for the future.

The following is a summary of this investigation:

Lane Cove Olympic Pool: (approx. 11km away) Lane Cove Council are close to final negotiations regarding the redevelopment of the current Olympic Pool. The plans include a centre which will provide an indoor 25m pool and leisure pool, which will complement their already existing 50m outdoor pool.

North Sydney: (approx. 9km away) The North Sydney Olympic Pool has been earmarked for development for several years. Exact details are unknown but plans are likely to be initiated prior to the year 2000.

Chatswood: (approx. 8km away) Willoughby City Council have initiated studies for the development of an indoor fitness centre in the Chatswood CBD which includes an indoor 25m pool plus additional dry facilities.

Summary

It can be seen from the inventory of pools completed for both the primary and secondary catchments that the Manly Swimming Centre is only 1 of 3 facilities that offer a 50m Olympic Pool.

Apart from the North Sydney Olympic Pool located on the fringe of the Secondary Catchment, Manly Swimming Centre is the only outdoor 50m facility available to North Shore Residents. It finds itself to be a popular target for not only residents located in both catchments but for residents further afield.

Pools that currently pose the greatest threat to the Manly Swimming Centre include the Warringah Aquatic Centre and the North Sydney Olympic Pool, purely because of their proximity to the Manly Swimming Centre and the fact that they are both operational all year round.

Warringah Aquatic Centre (approximately 6 kilometres away) is at times seen as a reluctant alternative for users of the Manly Swimming Centre when water space for competing users is limited. The all year operational status of the Warringah Aquatic Centre is its greatest asset.

North Sydney Olympic Pool, with its ability to operate an outdoor facility throughout Summer and cover the pool during Winter is also considered a competitor of the Manly Swimming Centre. Although located just within the secondary catchment, its 50m pool component and its all year operational status is its greatest strength.

7. Community Consultation

Community Consultation was scheduled over three nights (15th, 16th, 17th April 1997) with five separate community groups identified as being vital to the preliminary consultation process. These groups included:

- Swimming / Sports Clubs
- Swimming Coach + Selected Squad Representatives
- Schools;
- General Community Groups; and
- Season Pass Holders

The response to the community consultation meetings with the swimming / sports clubs, swimming coach and season pass holders was extremely positive. However, only one school was represented (with J.A Nicholas & Associates receiving two written submissions), and no one attending the set meeting for general community groups.

The Process Members of the identified groups were invited to discuss several aspects of the Manly Swimming Centre and input was considered essential in determining relevant local needs and establishing functional requirements. The process used was designed to gather as much information in a short period of time and then consolidate this information into key issues or findings.

Summary The community consultation process was intended to be a 'preliminary' one. It was extremely effective is satisfying our objectives to gather as much information, quickly and effectively.

As a result relevant local needs and establishing functional requirements were reached with major trends emerging. Very strong views were expressed from the select members of the community often with a common ground established. Details of the community consultation process is contained in Appendix 1.

The following summarises the major points gained as a result of community consultation.

Negatives

Seasonal Operation
Limited Water Space
Car Parking
Lack of cover and shade facilities

Preferred Development Options

Increased water space - additional 50m
Indoor facilities
All year operation

The above preferred development options are a result of consulting with the major user groups. Short term and long term strategic plans have been developed as a result of these meetings and can be found in section 10 of this report.

8. Market Positioning

Marketing

There are four core market segments using aquatic centres:

- Recreation
- Fitness
- Education
- Sport

While it is not possible to meet the needs of the whole market segment all of the time there needs to be an understanding of the opportunities available that best suit the facilities. This is called "Market Positioning". The current market position was identified earlier in this report.

Although some centres place a different emphasis on their market direction the most significant demand appears to be the fitness and recreation markets. The sports and education markets, although smaller are capable of high "repeat visit" patterns and should not be under estimated in contributing to income. Evidence shows that the greatest single contributor to income is generated from the fitness market segment.

The market positioning of any new facilities should be as a multipurpose sports, fitness and teaching centre where opportunities for competitive aquatic sports will assume some significance, but will not be allowed to dominate use of the facilities.

Principle usage themes should be:

- Learn to swim and water confidence;
- Fitness and health;
- Organised aquatic sporting activities; and
- to a lesser extent, recreation activities.

The design of the facilities proposed in the concept designs while not able to provide the same level of opportunities as a major state facility, it will provide a regional focus for a broad range of activities.

9. Facility Design

The efficiency of a centre will largely be determined by the size and component mix of the facility to meet market demand comfortably. If a centre greatly exceeds market requirements, operating efficiency is reduced. The larger the facility, the higher the operating costs and if market is unable to fully utilise the range and extent of provision the likelihood of operating deficits increases.

If a facility is undersized there is a danger of placing the facilities under excessive load demands which has a tendency of frustrating users and will impact on usage patterns of the facility.

The objective in facility design is to provide an appropriate size and mix of facility that can accommodate a broad range of market segments in the most efficient and effective way.

There is a direct relationship between the size of facility (expressed as square metres of water space), and capacity in terms of annual user visits. Obviously the larger the facility the greater the capacity while smaller facilities have limitations to programme a wide range of activities.

As a guideline, a factor of 0.003 square metres per visit is used to determine both the size of facility required or the capacity of facilities.

SIZE OF FACILITY REQUIRED = ANNUAL USER VISITS PER ANNUM X 0.003
CAPACITY OF FACILITY = TOTAL WATER SPACE (sq. metres) ÷ 0.003

This calculation is indicative only. There are many examples of facilities that exceed capacity levels and likewise there are many examples of facilities that cannot achieve anywhere near it's design capacity. It is, however, a useful gauge to determine whether a facility or proposed facility is grossly undersized or oversized for a particular community

Pool Capacities

Pool capacities have been designed as a guide to determine the appropriate population catchments to support a specific facility and the capacity of that facility in user visits per annum.

	Type/Description	Population Catchment Required		Size in Sq. metres	User Capacity in Visits Per Annum
		Primary	Secondary		
Level 1	International FINA/State	150,000	150,000	3,000 +	700,000 -1,000,000+
Level 2	Regional Sport/Leisure	100,000	100,000	1600 - 2300	530,000 -770,000
Level 3	Large Dist Metro/Country	80,000	75,000	1625 - 2100	540,000 -700,000
Level 4	Medium/Large Dist/Country	70,000	60,000	1150 - 1650	380,000 -550,000
Level 5	Medium Dist Metro/Country	65,000	50,000	750 - 1250	265,000 -400,000
Level 6	Small District/Country	45,000	20,000	775 - 1200	300,000 -400,000
Level 7	Small Country	30,000	20,000	675 - 900	225,000 -300,000
Level 8	Neighbourhood/Small Country	20,000	10,000	375 - 500	125,000 -165,000
Level 9	Small Rural	10,000-	-	500 and <	up to 125,000

Note: A standard factor of 0.003 is used to determine approximate user capacity of facilities.
With the exception of a level 1 State facility the primary catchment is defined as a five kilometre radius and the secondary catchment within a 5 - 10km radius of the centre. In country districts catchments should also consider travel time as a method of determining population densities.

Core Components

Core components are illustrations of the type and mix of facilities required to meet broad market needs.

	Lanes	Sq. mts	L1	L2	L3	L4	L5	L6	L7	L8	L9
Main 50m pool	6 - 10	750 - 1250	•	•	•	•	•				
Diving/Utility Pool	8 - 10	600 - 840	•								
Short Course Pool (25m)	6 - 10	375 - 625	•	•				•		•	
Combined Leisure/Short Course	6 - 10	400 - 600			•	•			•		
Separate Leisure	-	400 - 600	•	•				•			
Non Standard Small Pools											•

Note: It is also possible to combine other water spaces to the above core aquatic components depending on need. These could include hydrotherapy pools, small teaching pools and spa pools.

Pool Types

Pool Type	Size		Lanes	Features
Main Pool	50 x 25 metre	1250 sq. metres	10 Lane	Either constant depth, variable depth or depth controlled by movable floors.
	50 x 21 metre	1050 sq. metres	8 Lane	
	50 x 18 metre	900 sq. metres	7 Lane	
	50 x 15 metre	750 sq. metres	6 Lane	
Diving / Utility Pool	33.3 x 25 metre	840 sq. metres	10 Lane	Usually deep water pools
	33.3 x 21 metre	700 sq. metres	8 Lane	
	33.3 x 18 metre	600 sq. metres	7 Lane	
Short Course Pool	25 x 25 metre	625 sq. metres	10 Lane	Usually shallow water pools with variable depth
	25 x 21 metre	525 sq. metres	8 Lane	
	25 x 18 metres	450 sq. metres	7 Lane	
	25 x 15 metres	375 sq. metres	6 Lane	
Separate Leisure	Free formed pool, can include straight edge for teaching	400 - 600 sqm	nil	Various. Usually shallow water with beach entry
Combined Leisure	25 metre pool plus free formed leisure in one water body	775 - 1125 sqm	6 - 8 Lanes	Multi purpose pool, mainly shallow water

Manly Facilities

To design an aquatic centre that will meet the demands of it's customers efficiently there is a need to determine the appropriate level of facility required in terms of market potential. This decision needs also to address the financial objectives of full cost recovery in terms of operating costs. Over sizing of this facility could incur a level of operating cost beyond the ability of the market to support.

What has been proposed in the options for pool development is a strategy that is aimed ultimately at providing indoor water space which compliments the present facilities.

There is clearly a message from the initial community consultation that residents would prefer that the existing outdoor 50 metre pool is to be retained in its present form. This is seen by users as a major positive of the centre. There was also a similar view in retaining the landscaped area adjacent to the pools.

There are concerns about the life of the small teaching pool which may require major maintenance in years to come. The most logical proposal is to provide a completely new development linked to the sports fields adjacent to the complex as outlined in option 4. It is recognised that this is the most costly scenario and Council may prefer to consider a cheaper alternative.

10. Options for Pool Development

A range of development options have been prepared illustrating a range of opportunities for Council to consider. Most of these options are self explanatory but it is essential to note a separate issue relating to what is considered external works. These items relate to the existing water heating system which will, in the next few years will be uneconomical and result in considerably higher operating costs.

Replacement of this system is essential. In association with these works are other elements that should be done at the same time namely, improving the protection from the wind and replacing the surface of the 25 metre pool (if it is not replaced.)

This report also provides details of new designs entered in relation to pool hydraulics and water treatment of children's pool. While new centres are required to confirm with theses codes, older centres are exempt. At the present stage the Manly facilities do not comply and while it is not formally required to change the present system consideration should be given to modifying the children's pool and teaching pool.

OPTION 1
UPGRADE EXISTING FACILITIES

Strategy

In this strategy, the existing outdoor pools at Manly would be upgraded in response to the communities needs. In doing so, it is accepted that there could be further development and we do not propose to upgrade facilities that might soon be replaced. The upgrading would respond to the proposed extended opening season and include measures to improve bather comfort in the cooler months such as wind breaks and improved change rooms.

Option 1A

Option A has been included in the options presented to Council as a basic no frills option. It does consist of the essential works and improving bather comfort with windbreaks and the upgrading of the change room facilities.

Option 1B

This option includes a general facelift to improve the aesthetics of the centre.

This option also provides a low cost proposal that appeals to the fitness market, elite athletes and swim clubs market, however it has the least opportunity to change the nature of the Council's pool operation from a passive service to pro-active service at a higher value to the community.

It would not generate significant extra income, as it would only be upgrading current outdoor facilities to current user expectations and not provide any new features to attract new users and income.

Existing Facilities

Building Work

- Enclose and upgrade change rooms, providing all weather heated change facilities appropriate to a modern facility. Replacement of dated fixtures and fittings.
- Provide minor upgrade to entry areas and reception to indicate an improved facility and provide a safer and more protected entry.
- Provision of shelter between change facilities and pool, the addition of a covered arcade along the northern facade of the club room / plant room would create an opportunity to upgrade and unify the appearance of the pool buildings while providing a protected space to be used by swimmers before entering and after swimming.
- Replace the inappropriate shelter outside the change room entrances and kiosk to match the other proposed structures. This would provide a pleasant space where patrons could shelter from the elements.
- Provision for 64 extra car spaces adjacent to existing car spaces.
- Provide a minor upgrade to kiosk to allow better presentation and service.
- Install windbreaks along western end of the 50m pool. This could be in the form of a pergola to match the proposed arcade. In winter this would have panels added to eliminate the strong westerly winds.
- Upgrade the terrace seating with sun / rain shelter. This again would benefit the overall image of the centre by incorporating this structure into the proposed framework of the enclosing arcade and pergola structures.
- Work to pool concourse and paths to improve disabled access.
- Install wind breaks to the North and East of the 25m pool at the edge of the pool concourse.
- Minor upgrade to external appearance, render brickwork and allow some work to roofs, addition of new signage to building.

Pool Work

- General maintenance to pools, repairs to tiling.
- Upgrade heating to pool.
- Upgrade toddlers pool with water features.

Landscape Work

- Preparation of a detailed landscape plan to consolidate the existing perimeter planting and the provision of intermediate planning to soften the extent of hard surfaces.

- Develop an overall strategy for the provision of shade structures including examining removal and or relocation of the present shade structures and picnic shelters.
- Pave the existing spectator area and provide 1m deep seating steps.
- Reorient the approach to the entry and provide a larger marshalling and congregating area away from the edge of Balgowlah Road.
- Provide safety fencing to the edge of the road to restrict access Balgowlah Road at the blind corner.
- Provision has been made for the inclusion of a children's playground to the centre.

New Work

Provide roof to change rooms	130m^2
Refurbish change rooms with new furniture and heating	
Arcade	90m^2
Pergola	180m^2
Spectator seating	150m^2
Renew roof of covered area	165m^2
Refurbish front counter	50m^2
Refurbish Kiosk	15m^2
Wind break to 25m pool	45 lm

POOL HEATING

In addition to the above we have been asked to consider further the heating to the Manly Pool. There are two ways of approaching the heating:
a) Heat Pump solely;
b) Heat Pump (smaller than (a) plus gas booster)

We have considered both options and the results are as follows, excluding mains upgrade.

A) Heat Pumps Only

I.	Outdoor 50m 2-200kw carrier	$155,000
II.	Outdoor 25m 1-200kw carrier	$90,000
III.	Outdoor Childrens 1-50kw carrier	$24,000
	Total	**$269,000**

Heating Costs Per Year

I. $16,000/year
II. $10,000/year
III. $2,000/year

Total running cost **$28,000**/year

B) Heat Pumps With Gas Boost

I.	Outdoor 50m	1-250kw carrier	$95,000
		1-972mj gas heater	$21,000
		Total	$116,000
II.	Outdoor 25m + childrens pool		
		1-125kw carrier	$65,000
		1-658mj gas heater	$18,600
		Total	$83,600
		Total	**$199,600**

Operating Costs

I.	Heat pump	$12,662
	Gas	$8,520
		$21,182
II.	Heat Pump	$8,905
	Gas	$4,737
		$13,642
Total Heating Cost		**$34,824**

In Summary

A heat pump with gas boost system for all outdoor pools is some $69,000 cheaper in base cost excluding electrical and gas upgrade but some $6,000 more expensive to run on the assumed tariffs.

Thus there is an advantage in the combined system as it will take 11 ½ years of saving in pure heat pump to pay for the extra cost of them.

Location

While it is possible to strengthen the plantroom roof structure and place the heat pumps on the roof we believe this to be not a good idea due to noise and visual pollution.

We consider the best place for the 50m pool heat pumps to be either in the existing services entry or excavated into the back on the other side of the service entry.

The 25m outdoor pool heating should be adjacent to a new plantroom beside the 25m pool possibly to cut into the bank near the kiosk.

The gas heaters for all schemes would be in the plant rooms.

We do see an advantage for a heat pump gas boost system in its flexibility for cold winters where a heat pump may be incapable of providing the necessary additional heat.

OPTION 2
UPGRADE 25m TO ALLOW YEAR ROUND USE

Strategy

The strategy in this option is to upgrade the existing 25m pool as an indoor facility, and provide improved year round facilities for teaching and general fitness users. In this option, access around the pool concourse would be improved, change rooms would be upgraded as per Option 1.

The key aspect in providing year round facilities is protection from the wind. In this strategy a lightweight structure would be erected over the existing 25m pool to allow protection from the elements, particularly wind and rain in winter and sun in summer. The enclosure would be designed to allow for natural ventilation in summer and allow passive solar heat gain in winter. The restrictions of the option are the limited size of the existing pool, the remote location of the pool in relation to entry and the limited life span of the pool tank. Essentially this option would only be seen as a low cost solution.

This option would require significant investment without providing the range of facilities that would generate significant additional income and should be viewed as a short term proposition.

Facilities as for Option 1 and New Work

Provide low cost enclosure to 25m pool	600m²
Tile 25m pool	

OPTION 3A
REPLACE AND ENCLOSE THE 25 METRE POOL

Strategy

This strategy is to replace the existing 25 metre pool with a 8 lane facility enclosed with an appropriate building. This would enable all year round access for the core swimming activities and in particular would provide significantly improved facilities for the teaching programme.

OPTION 3B

This option provides an alternative location for a new indoor 25m pool. This location is better positioned if the project becomes a staged development and option 4 is chosen with the costs associated with adding other components lower.

OPTION 4
SIGNIFICANT DEVELOPMENT
NEW INDOOR SWIMMING FACILITY

Strategy

The strategy that is adopted by this option is the formation of a local/regional indoor/outdoor aquatic centre at Manly, which has the following natural advantages:

- An existing 50 metre x 8 lane outdoor pool can be reused.
- An existing outdoor toddlers pool can be reused.
- There is adequate land for expansion to accommodate a new pool and associated fitness centre activities.
- The present site is centrally located within the Council's boundaries.
- It is located within easy reach of Condamine Street and Pittwater Road with good access from Pittwater, Warringah, Mosman and North Sydney municipalties.
- It has adequate space for parking.
- Opportunities for joint sporting activities with other sports at L.M. Graham Reserve.

Given these advantages, it is considered that these can be enhanced by an expansion of the present centre to provide year round aquatic and fitness facilities for the whole of the Manly City area for neighbouring municipalities.

To meet the needs of the Manly Community and provide a viable facility, a regional all weather centre must provide facilities for:

- Children's Learn to Swim programmes
- Department of Education Learn to Swim programmes
- Adult Learn to Swim programmes
- Squad training for one or more existing swimming clubs
- Swimming for AUSSI
- Recreational lap swimming for children and adults
- Recreation aquatic activity for families
- Therapeutic swimming for disabled children and people with disabilities such as arthritis
- Swimming training for schools
- Competition and training for Waterpolo
- Competition swimming carnivals for schools
- Aqua-fitness
- Spectator facilities
- Fitness activities, aerobics, aerobic theatre and weight machines for adults
- Child minding

With facilities serving these needs the aquatic centre would provide a combined indoor/outdoor facilities that would be available year round. It would also outshine other facilities in the region, such as North Sydney and Warringah by providing a diversity of facilities that would appeal to a wide range of the community. The centre should still be able to retain it's local character and level of service, dependent on the management structure.

The size proposed does not include a full indoor 50 metre pool, but will provide a facility that is realistic in size and capital cost, and therefore a facility that can be readily managed to make an operating surplus.

Option 4 Facilities

Further investigation and market analysis would be required to prepare a detailed brief for a development of this nature. Therefore, the areas and sizes given should only be given as a guide.

Existing Facilities
as per Option 1, but add

New Indoor Facilities
New 25m x 8 lane pool with wet deck all round 1.1 to 1.4m deep
New free form leisure pool with wet deck - 400m² of water, with 4 x 20 metre teaching lanes, beach entry, and stepped sides
Additional features such as a Water Slide, Rapid River, Spa's, Steam Rooms and other water features could also be included and would increase it's market potential
Male and female change rooms - 120m²
Family/disabled persons change rooms - 10m²

The development costs for the options can be found in the following table.

The summary of costs was compiled from estimates prepared by PAGE KIRKLAND PARTNERSHIP and GEOFF NINNES FONG PARTNERS for this report.

The costs were derived from 1:500 sketch plans for the various options and information provided by the consultancy team.
The figures represent only a broad order of costs and are subject to the development of a more detailed brief.
Furniture, fitout and equipment have been excluded for the new buildings.
Work outside the pool area (landscaping, relocation of existing services, relocation of playing fields and the carparking) have been excluded.

MANLY SWIMMING CENTRE	BASE COST		OPTION 1		OPTION 2	OPTION 3		OPTION 4
Upgrade Existing Facilities	Essential Works	Base Costs	1A Upgrade and Repairs to existing centre Basic No Frills	1B Upgrade and repairs to existing centre and Grandstand seating	Upgrade and repairs to existing centre and enclose the 25m pool - repair lining	3A New 25m Indoor Pool 8 lane	3B New 25m Indoor Pool 8 lane Alternative Location	Upgrade and repairs to existing centre and New entry building indoor 25m pool - indoor leisure pool
Upgrade external facade and signage		$10,500	$10,500	$10,500	$10,500	$10,500	$10,500	$10,500
Upgrade existing kiosk		$8,000		$8,000	$8,000	$8,000	$8,000	
Upgrade existing change rooms		$45,800	$45,800	$45,800	$45,800	$45,800	$45,800	
Arcade		$30,000		$30,000	$30,000	$30,000	$30,000	$30,000
Pergola and Wind Break		$17,800	$17,800	$17,800	$17,800	$17,800	$17,800	$17,800
Renew exist , covered area		$23,900		$23,900	$23,900	$23,900	$23,900	$23,900
Upgrade spectator seating		$43,400		$43,400	$43,400	$43,400	$43,400	
Replace ext. furniture / structures		$25,000		$25,000	$25,000	$25,000	$25,000	$25,000
New Playground		$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000
Upgrade Existing Pools								
50m pool, heat pumps + gas boost	$116,000	$116,000	$116,000	$116,000	$116,000	$116,000	$116,000	$116,000
Children's Pool, add water feature		$15,000		$15,000	$15,000	$15,000	$15,000	
Children's Pool, Filtration & Balance Tank		$27,000						
25m Pool filtration and balance tanks		$235,000						
Children's Pool, Heat Pumps	(see 25m heat)							
25m pool, add windbreak	$7,100	$7,100	$7,100	$7,100				
25m pool, resurface (retibreglass)	$25,000	$25,000	$25,000	$25,000	$25,000			
New Work								
25m pool, tiled surface		$450,000				$450,000	$450,000	
25m new filtration & balance tank		$515,000				$515,000	$515,000	
25m pool + childrens pool, heat pumps +gas boost		$83,600			$83,600	$83,600	$83,600	
25m pool, enclosure		$1,560,250				$1,560,250	$1,560,250	
Allowance for demolition & landscaping		$35,000				$35,000	$35,000	$35,000
Light Weight Enclosure		$120,000			$120,000			
Entry Building		$587,250						$587,250
Indoor 25m & leisure pool		$2,740,400						$2,740,400
Change rooms		$464,400						$464,400
Plant		$1,160,750						$1,160,750
Entry canopy		$42,000						$42,000
Sub Total			$252,200	$397,500	$594,000	$3,009,250	$3,009,250	$5,283,000
Contingency 5%			$12,610	$19,875	$29,700	$150,462	$150,462	$264,150
Total			$264,810	$417,375	$623,700	$3,159,712	$3,159,712	$5,547,150
Preliminaries & Margins - assume 20%			$52,962	$83,475	$124,740	$631,943	$631,943	$1,109,430
Total Construction Costs			$317,772	$500,850	$748,440	$3,791,655	$3,791,655	$6,656,580
Consultants Fees - assume 10%			$31,772	$50,085	$74,844	$379,165	$379,165	$665,658
TOTAL DEVELOPMENT COST			$349,549	$550,935	$823,284	$4,170,820	$4,170,820	$7,322,238

Note: It is assumed that any upgrade / development will implement Heat Pumps with Gas Boost. The above table reflects these costs.

RECOMMENDATIONS

From our assessment described in detail in the study report, we consider that the Option that will provide the best responses to community needs and provide Council with the most cost effective operating solution is contained in Option 4.

We therefore recommend Option 4 be adopted, though it is possible to stage the development over a number of years to enable Council to distribute the capital costs. It would also be advisable to implement the reorganisation of the L.M.Graham Reserve as soon as possible , so as not to lose the opportunity for development.

11. Financial Projections - Option 4

Financial performances will be determined by the location of the Centre, component mix of facilities, method of operation, programming policies, fees and charges, the market positioning of the Centre in terms of demand in the catchment area and how the operator interprets user trends in the industry.

For the purposes of estimating the financial projections the consultants have developed a profile of users based on industry standards and form the analysis of the existing users of the Manly centre. This process is representative only and is used to develop income estimates.

Assumptions are based on the potential demand and are detailed as follows

- Male and female will be equally represented
- Age distribution is likely to be
  - 0-15 years 30% (inc teaching programme)
  - 15-25 years 25%
  - 25-40 years 35%
  - 40 + years 10%
- The strongest demand is likely to occur between 5am - 10.30am (25%) and 4pm - 8pm (40%)
- It can be expected that more than 85% will travel to the centre by car
- The majority of users 70%+ are lily to stay at the centre between 30-90 minutes
- The strongest demand can be expected from the fitness market (50%) followed by recreation market (20%) learn to swim / education markets (15%) sports use 7% and others making up the remainder (families etc)

The annual attendance assumes patronage of 500,000 visits and takes into account the market positioning of the centre and the usage patterns described in this report. Attendances for the first year have been reduced by 20% to reflect establishment of programmes and services post construction.

The breakdown of users is in broad categories only and should not be viewed as being representative of the depth of programming proposed for the centre. It is acknowledged that there could be enormous diversity of activities related to the aquatic facilities that may eventually be provided.

Projected Annual Attendances

		Year 1	Year 2	Year 3
Adults	32%	128,000	160,000	160,000
Students	10%	40,000	50,000	50,000
Family (15,000 x 5)	15%	60,000	75,000	75,000
Adult 20 Visit (2,500 x 20)	10%	40,000	50,000	50,000
Student 20 Visit (500 x 20)	2%	8,000	10,000	10,000
Fitness Centre				
Adult	6.5%	25,600	32,000	32,000
Student	1.5%	6,400	8,000	8,000
Programmes				
Swimming Lessons	8%	32,000	40,000	40,000
School Programmes	10%	40,000	50,000	50,000
Aquarobics	2.5%	10,000	12,500	12,500
Fitness Classes	2.5%	10,000	12,500	12,500
Creche				
Total	100%	400,000	500,000	500,000

Fees and Charges

Based on current market rates a fee structure has been devised for the purpose of estimating income. The schedule covers a general range of fees and is not intended to reflect a final recommendation fee structure.

	Year 1	Year 2	Year 3
General Entry			
Adults	$3.00	$3.50	$3.75
Students	$2.00	$2.70	$3.00
Family	$9.00	$10.00	$10.50
Adult 20 Visit	$48.00	$56.00	$60.00
Student 20 Visit	$32.00	$43.00	$48.00
Fitness Centre			
Adult	$7.50	$8.00	$8.50
Student	$5.50	$6.00	$6.50
Programmes			
Swimming Lessons	$7.00	$7.50	$8.00
School Programmes	$2.00	$2.70	$3.00
Aquarobics	$6.00	$6.50	$7.00
Fitness Classes	$6.00	$6.50	$7.00

Income Estimates

Income estimates have been calculated using the data on projected attendances and the fee structure.

	Year 1	Year 2	Year 3
General Entry			
Adults	$384,000	$560,000	$600,000
Students	$80,000	$125,000	$137,500
Families	$108,000	$150,000	$157,500
Adult 20 Visit	$96,000	$140,000	$150,000
Student 20 Visit	$10,240	$20,000	$22,000
Fitness Centre			
Adult	$192,000	$256,000	$272,000
Student	$35,200	$48,000	$52,000
Programmes			
Swimming Lessons	$224,000	$300,000	$320,000
School Programmes	$80,000	$125,000	$137,500
Aquarobics	$60,000	$81,250	$87,500
Fitness Classes	$60,000	$81,250	$87,500
Other			
Catering Facilities	$40,000	$50,000	$50,000
Sports Shop	$10,000	$12,000	$12,000
Pubic Phone	$5,000	$7,500	$7,500
Lockers	$10,000	$12,000	$12,000
Total	**$1,394,440**	**$1,908,000**	**$2,105,000**

Note: Income estimates for the swimming teaching programme should be reduced if Council continues to contract these services out in the future implications in year 1 are less $160 000, year 2 less $200,000 and year 3 less $210,000.

The net losses after adjustments for labor costs for this programme are $2,764 in year 1, $32,354 Year 2, and $37,325 in year 3.

Expenditure Estimates

	Year 1	Year 2	Year 3
Salaries and Wages	$1,119,717	$1,153,308	$1,187,907
Energy Costs	$240,000	$260,000	$265,000
Chemicals / Water Treatment	$40,000	$42,500	$45,000
Rates and Taxes (Water)	$3,500	$4,000	$4,500
Maintenance and Repairs		$35,000	$45,000
Grounds Maintenance	$17,000	$18,000	$19,000
Telephone	$9,000	$9,500	$9,500
Advertising	$20,000	$22,500	$25,000
Printing and Stationary	$25,000	$27,000	$28,000
Cleaning / Consumables	$18,000	$19,000	$20,000
Security Services	$3,500	$4,000	$4,500
Uniforms / Staff Development	$7,500	$10,000	$10,500
Insurance	$15,000	$18,000	$19,000
Provision for Building & Plant Refurbishment	$30,000	$50,000	$50,000
Total	$1,548,217	$1,672,608	$1,732,907

Notes on Expenditure

1. Operating Hours

The operating hours for the Centre have been based on the assumption that the indoor facilities would be opened from 6.00am - 9.00pm, Monday to Friday and from 6.00am - 8.00pm, Saturday and Sunday, all year round.

The outdoor pool would remain a seasonal operation opening in September of each year and closing in May. Operating hours of the outdoor pool should remain flexible and be opened or closed depending on prevailing conditions, programme bookings and bather loadings.

2. Swimming Teaching Programme

Cost of the swimming teaching programme should be reduced if these services are contracted. Cost should be adjusted down by $162,700 in year 1, $167,500 in year 2 and $172,672 in year 3.

Total Staff Requirements

Full Time	$468,066
Part Time/Casual	$361,354
Sub Total	**$829,420**
On costs 35%	$290,297
Total	**$1,119,717**

Wage costs have been increased by 3% in years 2 and 3 to reflect CPI increases.

4. Energy

Energy costs are based on the assumption that the new facilities would utilise heat pump technology for heating. The estimated annual costs less recoverables would be in the vacinity of $180,000 maintaining main pool water temperatures at 28°C indoors and 24°C outdoors

A provisional sum of $60,000 has been added for the heating of the outdoor pool during summer periods.

5. Chemicals/Water Treatment

Water treatment costs are based on the use of an ozone/chlorine water treatment plant for the new facilities and the maintenance of the existing chlorine system for the outdoor pool.

6. Rates and Taxes

A provisional sum has been allocated for water rates and have been based on other centres in NSW.

7. Maintenance

In the first year of operation the proposed centre would be under a defects liability period and no provision has been made for general maintenance. In years 2 and 3 a provisional sum has been allocated.

8. Telephone

A provisional sum has been allocated for telephone services and are based on other centres experiences in terms of operating costs.

9. Advertising and Marketing

A provisional sum has been allocated for advertising costs for the Centre. This does not include the costs of preparing brochures for the Centre which are included in other cost centres.

10. Printing/Stationary/Postage

A provisional sum has been allocated for these costs and are based on the experience of similar centres in NSW.

11. Cleaning Materials

Funds for these items have been based on other centres and includes all cleaning materials and stores and consumable items.

12. Insurance

The anticipated cost for public liability, professional indemnity and building insurance has been provided and is based on other facilities of this type and nature.

13. Note

The budgets illustrated do not take into account depreciation costs, interest on loans or capital repayments. As each local government authority treats these issues differently only the operating costs have been shown.

Should it be necessary to apply these costs the net figures need to be adjusted accordingly.

Summary of Income and Expenditure

It could be expected that the operating performance of a Centre as described in this report would be as follows:

	Year 1	Year 2	Year 3
Income	$1,394,440	$1,908,000	$2,105,000
Expenditure	$1,548,217	$1,672,808	$1,732,907
Surplus/(Deficit)	($153,777)	$235,192	$372,093

Based on a capital cost of approximately $7.0 Million which assumes no State or Federal Government grants and the funding secured from borrowing's at 8% per annum, it can be seen that the Centre would usually achieve a commercial return.

If funds are raised from State and Federal Governments together with Council contribution from Section 94 funds and / or capital works programmes and assuming borrowing's of 50% of the project costs it can be seen from the illustration overpage that it would be many years before debt could be retired based on an operating surplus of $300,000 per annum.

Year	Opening Balance	Interest Rate	Interest Payable	Capital Repayment	Total Payment
1.	$3,500,000	8%	$280,000	$20,000	$300,000
2.	$3,480,000	8%	$278,400	$21,600	$300,000
3.	$3,458,400	8%	$276,672	$23,328	$300,000
4.	$3,435,072	8%	$274,806	$25,194	$300,000
5.	$3,409,878	8%	$272,791	$27,209	$300,000
6.	$3,382,669	8%	$270,614	$29,386	$300,000
7.	$3,353,283	8%	$268,263	$31,737	$300,000
8.	$3,321,546	8%	$265,724	$34,276	$300,000
9.	$3,287,270	8%	$262,982	$37,018	$300,000
10.	$3,250,252	8%	$260,020	$39,980	$300,000
11.	$3,210,272	8%	$256,822	$43,178	$300,000
12.	$3,167,094	8%	$253,368	$46,632	$300,000
13.	$3,120,462	8%	$249,637	$50,363	$300,000
14.	$3,070,099	8%	$245,608	$54,392	$300,000
15.	$3,015,707	8%	$241,257	$58,743	$300,000
16.	$2,956,964	8%	$236,657	$63,343	$300,000
17.	$2,893,621	8%	$231,489	$68,511	$300,000
18.	$2,825,110	8%	$226,008	$73,992	$300,000
19.	$2,751,118	8%	$220,090	$79,910	$300,000
20.	$2,671,208	8%	$213,697	$86,303	$300,000
21.	$2,584,905	8%	$206,793	$93,207	$300,000
22.	$2,491,698	8%	$199,336	$100,664	$300,000
23.	$2,391,034	8%	$191,282	$108,718	$300,000
24.	$2,282,316	8%	$182,585	$117,415	$300,000
25.	$2,164,901	8%	$173,192	$126,808	$300,000
26.	$2,038,093	8%	$163,047	$136,953	$300,000
27.	$1,901,140	8%	$152,091	$147,909	$300,000
28.	$1,753,231	8%	$140,258	$159,742	$300,000
29.	$1,593,489	8%	$127,479	$172,521	$300,000
30.	$1,420,968	8%	$113,678	$186,322	$300,000
31.	$1,234,646	8%	$98,771	$201,229	$300,000
32.	$1,033,417	8%	$82,674	$217,326	$300,000
33.	$816,091	8%	$65,288	$234,712	$300,000
34.	$581,379	8%	$46,510	$253,490	$300,000
35.	$327,889	8%	$26,232	$273,768	$300,000
36.	$54,121	8%	$4,329	$295,671	$300,000
37.	NIL			$241,550	

12. Key Issues

The estimates and predictions outlined in the previous sections illustrate the potential of the Manly facility post redevelopment. While it is possible to predict outcome with a reasonable level of confidence and certainty the actual performance of the centre will be dependant on the operators ability to control a range of variables which will impact on usage.

In the mid eighties there would have been only a few pools in Australia that recovered full operating costs. Five years ago there were several centres that had achieved full cost recovery. Today there are many examples of centres achieving this milestone with some achieving a commercial return.

The reasons why some centres have been able to record outstanding performance lies in the way in which core issues are managed. This section discusses a range of strategic issues that have a direct relationship to financial outcomes which need to be resolved in the early stages of project development.

Planning It has long been recognised that appropriate management planning will provide a clear and concise direction of the management of community facilities.

Usually expressed as vision, goals, aims and objectives, planning is a management tool that defines the boundaries under which the Centre can operate with an agreed common purpose and performance.

It is important that broad aims and objectives are developed for the proposed aquatic facilities at an early stage. This will enable key stakeholders, the community and the operators to fully understand the purpose and direction of the services provided.

Officers of the Council have taken the initial step in the direction by the preparation of a detailed business plan in 1996. This plan should be reviewed and include an integrated strategy or medium term facility development.

Design Design issues are intrinsically linked to the ability to programme facilities effectively. The balance between shallow and deep, informal and formal water spaces together with the provision of complementary components like gymnasium facilities, aerobics rooms, catering and sports retailing, all have a direct relationship to the ultimate performance of the centres.

Evidence shows the indoor centres have a distinct advantage in providing a greater range of services on a consistent basis which is reflected in annual attendances and usage patterns.

The design of the facilities proposed provides a wide range of programming potential and is suitable for most aquatic activities.

Marketing There are four core market segments using aquatic centres:

- Recreation
- Fitness
- Education
- Sport

While it is not possible to meet the needs of the whole market segments all of the time there needs to be an understanding of the opportunities available that best suit the facilities. The redevelopment should seek to broaden its market thrust and build on the present strong position it enjoys. Particularly in the education and sports markets which are limited at present because of facilities.

Programming Although the concept of programming has been applied to "dry" centres for many years, it is a relatively new concept for swimming facilities.

- Programming is the mechanism which enables the orderly allocation of space.
- It is a valuable management tool that is often ignored in the industry.
- It is a legitimated method of accommodating demand and helps to achieve optimum utilisation of facilities.
- Programming policies should be documented and clearly understood by user groups.

It is essential that the concepts of programming become an integral part of management if the proposed facility is to realise it's full potential. This can include a management role as both "a hirer of facilities" and as an "initiator and developer of services" where the opportunity exists.

Pricing Research conducted by CERM throughout Australia and overseas has consistently identified that customers place greater emphasis on safe and secure car parking, facility cleanliness, and quality services rather than pricing issues.

One of the factors causing high operating deficits at local government swimming pools has been the reluctance on the part of councils to regularly review and increase entry fees. In many cases fees have not been reviewed in accordance with CPI and bear little relationship to cost recovery or the value of the service provided.

It is interesting to note that the top eight performing centres in Australia identified in the CERM research have:

- substantially higher attendance rates and
- charge twice as much in entrance fees.

The introduction of new and different types of facilities will enable the pricing strategy to be more aligned to full cost recovery. It is important that the fee structure applied are set at an appropriate level if the financial objectives of the Centre are to be met.

Management In an industry which is highly market oriented there is a need for management to be flexible and responsive to user needs. Traditionally, local government has shown a reluctance to divert authority to facility managers and the marketing momentum can be lost due to the bureaucratic processes that are in place.

In this environment, decision making can be confusing and inconsistent, causing a lack of direction for management. This can result in staff adopting a "caretaker" management role instead of the dynamic and creative direction required if performance expectations are to be met. Under these conditions there becomes a pre-occupation with servicing the organisation rather than the customers.

It is important that Council recognise the importance of day to day management and provide a framework which allows a reasonable degree of freedom and autonomy.

Factors Which Attract People To Aquatic Centres

Research undertaken by CERM to determine factors which attract the user to aquatic centres identified a range of variables and are ranked in the following order:

- adequate and secure car parking;
- cleanliness of the centre;
- quality of equipment;
- availability of water space;
- friendly and competent staff;
- value for money;
- good design;
- user comforts, eg. water and air quality; and
- other amenities and variation, eg. gym, spa, sauna, etc.

It also compared the top eight performing and the eight bottom performing centres. The following points summarise how the top and bottom centres compare.

The Top Centres

- have substantially higher attendance rates;
- operated with budgets of over a million dollars per annum;
- provide a much wider range of programmes;
- are well staffed, spending over four times as much on employing qualified staff;
- charge twice as much in entrance fees;
- recoup substantially less money from the kiosk etc. (which could suggest that users of the bottom centres have more money to spend given the low entrance fees);
- spend three times as much on energy;
- spend more than twice as much on presentation, (cleaning and maintenance); and
- have equipment valued at five times the amount of poorer performing centres.

In addition to the above, in 1994 the South Australia Division of Recreation, Sport and Racing commissioned a report to examine the Provision of Public Aquatic Facilities.[1] This study reported on the hallmarks of successful centres and current best practice in the industry. These findings were summarised as follows:

- Of the successful centres interviewed all had established clear and predetermined directions with documented management policies.

- The Centres had a very good understanding of the market and were meeting the needs of their targets efficiently and effectively.

- All of the successful centres were heavily programmed offering a wide range of quality services to the public.

- All of the successful centres had realistic and affordable pricing structures which relate to full cost recovery.

- The management of these facilities had flexibility to respond to demand in the market place and were relatively free of rigid or political structures.

- All of the more successful centres had a good mix of facilities which enable a wide range of activities.

[1] The Provision of Public Aquatic Facilities, Hassell & J.A. Nicholas & Associates Pty Ltd, 1995

13. Management Models

The management of community swimming facilities in Australia has essentially taken three distinct directions and are simply described as follows:

Direct Management	Independent Management	Indirect Management
• owner operator • contract manager	• commercial lease	• committee of management • community recreation assoc. • contract services

Direct Management

Owner Operator As inferred, this model refers to a structure where the Local Government Authority undertakes to provide and operate public facilities in it's community. This is the most common form of management of swimming facilities throughout Australia. The owner takes full responsibility for all aspects of management of the Centre and:

- Retains control over the centre;
- Maintains control over all policy issues;
- Ensures social equity objectives are met;
- Sets fees; and
- Employs and assumes responsibility for all staff.

Contract Manager This form of management has been used extensively in country centres by local government authorities for many years. Various arrangements have developed but key points include:

- The owner usually retains responsibility for all operating costs excluding labour;
- The owner determines operating policies;
- The manager is usually contracted to manage the centre for a fixed fee;
- The manager may or may not be responsible for all staffing;
- The manager may or may not be granted rights to conduct programmes or operate the kiosk;
- The owner may or may not retain all income; and
- The owner has the discretion to determine the contract responsibilities of the respective parties.

Indirect Management

Indirect management is a model that enables varying degrees of control over the policy and direction of the Centre but places the day-to-day management outside government control and interference.

Committee of Management Under the Local Government Act, the Council has the authority to establish committees with delegated powers with predetermined limits. Usually the committee is specifically formed to oversee the management of a facility and can have representatives from the community actively involved.

- Ultimately, responsibility for the actions of the committee rests with the owner of the centre.
- The owner retains some control over the operation of the centre whilst not involved in the day to day operation.
- Terms of Reference are usually drawn up which establishes the limit of their authority.
- The committee is usually required to report regularly to the owner.
- Committees of Management have to rely on the parent authority for formal resolution of issues.
- The Parent Organisation which establishes the committee usually has to underwrite in terms of operating costs.
- Staff employed in the operation are under the auspice of the owner and there is therefore a dual reporting mechanism.

Community Recreation Association A Community Recreation Association is an independent, legally incorporated body which manages a recreation centre on behalf of the owner for the community.

- The association consists of representatives or various groups.
- All decisions are delegated to the association.
- A legal agreement between the owner and the association is formulated.
- Owners have little or no control over the day to day management of the centre.
- Profits from the centre are retained within the community association.
- The owner usually underwrites the association by annual agreement.
- The individual community associations usually require some funding in the short term to enable it to function.
- Individual user groups may over time, come to exert a high degree of influence over the operation of the centre.
- Some associations employ professional contract management groups, eg. YMCA, Leisure Australia, and RLSS.

Contract Management This model is where a management body is contracted to undertake management responsibilities for the owner for a set period of time for an agreed fee. It is a management model that is mainly used where the owner recognises that it does not have the necessary recreation management skills to effectively operate the facilities.

- The owner does not have involvement in the day to day running of the centre.
- There is usually a licence agreement between the owner and the management agency.
- The management agency negotiates with the owner a budget and performance objectives.
- The owner retains control over strategic issues.

Independent Management

It is not uncommon for public authorities to provide land and buildings to serve a community purpose and to lease the management responsibility to either a community body or private operator.

For example, sporting clubs, community clubs or similar organisations are often vested with the responsibility of public owned facilities to conduct activities for the benefit of the whole community. This of course in some cases is an appropriate course of action and provides the community with the opportunity to manage their own affairs at a local level.

It is usual that a lease is in place between an incorporated community body and the Council.

Commercial Lease In some instances, public facilities are leased to the private sector to manage and operate.

The basic elements of a lease agreement is that a legally binding document is prepared between the owner of the building (the lessor) and the manager of the building (the lessee).

- A lease is between two legal entities, ie. the parties must be incorporated or individuals.
- The Lessee has rights over the facility for a specific time in return for a rent.
- The owner has no control of policy and direction and forfeits all involvement in day to day management except in breach of terms.
- The lease is usually for a long period with an option for renewal. Most commercial leases in Australia provide the lessee with right for a five year term.
- It is difficult for the Lessor to withdraw from a lease without the approval of the Lessee. Within the terms of the lease, the Lessee has the freedom to manage the centre as he sees fit.
- Once the lease has been signed, the terms cannot be changed without the consent of both parties except where expressly stated in the terms.

The success of the Independent Management Model depends on the objectives of the leasing body which more often than not are related to generating profits rather than meeting broad community needs.

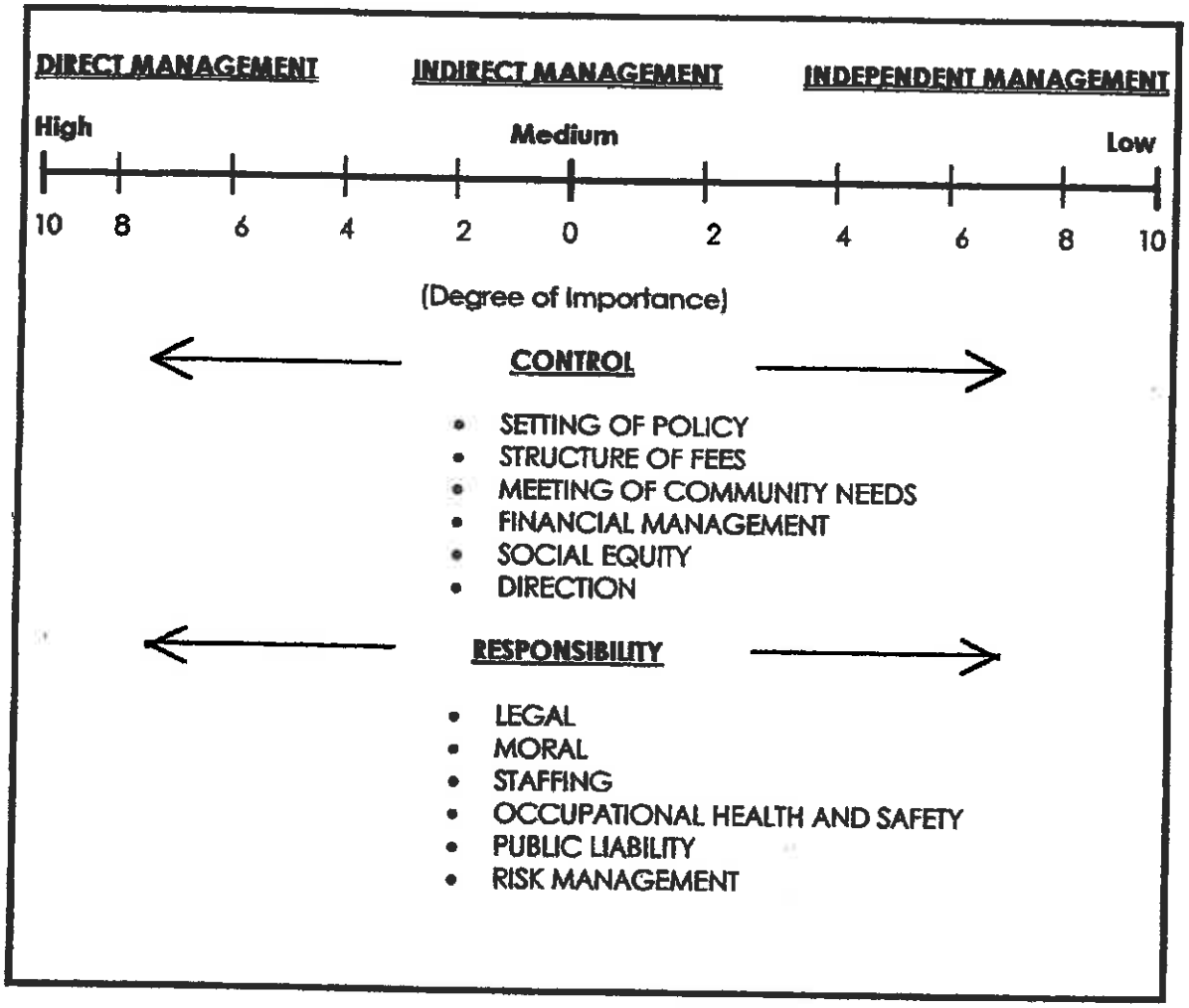
While facility management is recognised as a key issue by local authorities it is generally conceded that swimming facilities are a highly specialised component of the leisure industry and lacks widespread experienced and professionally trained operators to meet current demand.

This combined with other issues already discussed has resulted in increased levels of outsourcing of management and in particular the use of the indirect management model.

Selecting a Model

It is important to recognise that every local government authority has it's own agenda and unique set of circumstances in selecting a model.

The figure below illustrates in diagrammatic form, a continuum on which an authority may place a different emphasis on each key issue. The weighting of these key issues will ultimately determine the most suitable management model.



To assist in this process there needs to be clarification of three fundamental questions which should then be weighted in terms of priority.

Level of Control

What level of control does the Council want in terms of

- Policy Decision Making
- Fee Structures
- Social Equity Issues and
- Accountability

Level of Responsibility

What level of responsibility does the Council want to accept in regards to

- Day to Day Management
- Employment of Staff
- Public Liability
- Occupational Health and Safety and
- Risk Management

Level of Performance

What expectations does the Council have in regard to

- Financial Performance
- Usage of Facilities
- Access of Users

Summary

- Currently the Council operates under the direct management model in terms of its swimming pool
- With the centre currently operating effectively and efficiently there are no obvious reasons for this to change in the future. It is important however that Council recognise the management elements which contribute to a successful operation and adopt appropriate policies and procedures to facilitate the management processes.
- there is no evidence in the industry that suggests that one model is more effective than another.
- While management and service delivery is an issue which will impact on the financial outcomes of the centre, the Council should select a model which best suits its needs and which maximises overall benefit to the community.

14. Funding

Funding

In the past decade a wave of forces have swept across the Australian Public Sector that have produced changes in the role, function and operation of government.

Key among these changes is the tight budgetary position of all levels of government and a reappraisal of the public sectors responsible in the provision of funds for major sporting developments.

At a Federal Government level a range of schemes previously available for the provision of sports and recreation facilities have been dismantled. Although assistance programmes have continued for the Olympic 2000 Games effort, by and large no formal grant schemes exist for local or regional development of facilities. Some funds however are available for infrastructure development.

State Government Resources

The NSW State Government has historically played a role in the provision of funds for the development of sporting and recreation facilities. At the present time, however, there is a focus again on the Olympic facilities and the commitment to complete the various venues of the Games before the year 2000.

There are two schemes that are currently available for limited funding.

The Regional facilities programme and
The Capital Assistance Programme

Regional Facilities Programme

At the present time approximately $2.5 Million has been allocated for the development of major facilities throughout NSW. There are 73 pending applications for facility development which includes a backlog of projects for the past 2 ½ years. In addition a further $4.0 Million has been allocated for the 1997 / 98 financial year. The maximum grant is $300,000 and has to be matched on a dollar for dollar basis. Recent approvals of funding tends to favour country and regional facilities rather than metropolitan areas.

Capital Assistance Fund

The capital assistance fund receives an annual allocation specifically aimed at upgrading or improving facilities. Approximately $4.0 Million has been allocated for the 1997 / 98 financial year which is to be spread equally across the 100 or so state electorates. On this basis the maximum grant available is $40,000 depending on the number of applications received per electorate and the nature and type of requests made.

The state position of funding is expected to continue in to the foreseeable future due to two main factors:
continuing budgetary constraints
the continuing demand for funds for facilities associated with the Olympic 2000 Games.

In the Years beyond the Games there could be some easing of the present situation and further funds could be available.

Local Government Sources

Local Government has traditionally funded the provision of community projects from three main sources: general rates received, loan borrowing and non rate revenue. Pressures on these sources is increasing making it more difficult for local government. The following profiles the older and newer methods of securing funding for development.

Rate Revenue

Under the local government structure reform process, the general rate base of a local authority is restricted in real terms. Local government in NSW now have to apply to increase rates beyond annually assessed reviews by the State Government.

In this environment competition for general rate revenue will intensify. Local authorities will increasingly prioritise projects and recurrent spending needs. Projects seeking capital funding will need to demonstrate a business and political case that indicates a high or quick payback and / or evidence of strong community support.

Many projects will ultimately be decided on the revenue base of the Council and the capacity for discretionary spending.

Loan Borrowing

Loan Borrowing is an accepted method for local government to secure funding for projects.

The historical approach to borrowing involved accessing funds from a local government financing authority where interest rates were well below those of the commercial market. This position has changed in recent years with commercial lenders seeking local government business and Council's responding with a reappraisal of these new funding sources. The ability of a Council to raise loans for project development is limited by its current level of debt (which is controlled by law) and the fiscal policies that have been self imposed by each local government authority.

Asset Sales

The use of revenue generated by asset sales (land and buildings) is a method that a number of local authorities use in funding capital works initiatives.

In these circumstances funds gained from asset sales are set aside in a capital fund for discretionary use. Whether this fund is used in part for broader recreations plan is subject of consideration by the council and community.

Section 94 Funds

Monies raised as a result of section 94 levies can and have been used in the past for recreation capital development. It is now a requirement to develop section 94 plans for the expenditure of these monies which includes the upgrading and / or provision of new recreation facilities.

The extent of funding available is usually dependent on the particular local authority where new and developing regions clearly have an advantage over the older established metropolitan areas.

Non Government Sources

The private sector has historically played a limited role in the provision of community facilities in Australia. Although Leagues Clubs, the RSL and other similar community organisations have made a substantial contribution towards facility development these have been somewhat narrow in their community focus.

The attitude generally adopted by the private sector has been that the role of local government is:
to provide what are generally perceived to be community services and facilities;
the provision of facilities for non economic reasons such as access to services, economic development, social and community development;
the private sector view is that sports facilities, aquatic facilities and the like are on the whole uneconomic ventures.

This scenario has the potential to change significantly in the coming years due to policy changes that are encouraging the role of the private sector in the funding and delivery of community goods and services.

Summary

The present outlook for development funding of improved or new additional facilities for the Manly Swimming Centre currently looks bleak. With only limited council resources there is unlikely to be major funding available for several years. The traditional sources of grants through Federal and State governments are currently limited and is likely to remain so until after the Olympic Games in 2000. The period post the Olympic Games is not clear but there is every possibility that increased level of funding will be available for significant sport and recreation development.

The best scenario at this point is to flag the major components of the project on the council's capital development programme and prepare submissions to both the Federal and State Governments should funding opportunities become available.

ANNEXURE 4 – Late Submission

2 December 2013

Mr Jon Colwell
Centre Co-ordinator
Manly Swim Centre
PO Box 82
MANLY NSW 1655

Dear Mr Colwell,

The Manly Andrew "Boy" Charlton Swim Centre

I am writing in regard to the proposed redevelopment of the Manly Andrew 'Boy' Charlton Swim Centre. Firstly I wish to congratulate Manly Council on the extensive planning and feasibility analysis it has undertaken in preparation to update this facility.

As an organisation interested in the on-going development and preservation of aquatic space and usage Swimming Australia would like to congratulate Council on designing a facility that will service the whole community, providing opportunities for aquatic education and water safety, aquatic sports, recreation and leisure as well as general health and fitness for the public. Building a new indoor 25m pool above the car park will also allow greater flexibility for public use of the facility year round and demonstrates an efficient use of space.

As a Council with proud links to community sporting success we are sure you can appreciate the importance having access to an Olympic sized 50m competition pool has on the development of athletes. It is hoped that the Centre's upgrade will allow for the establishment of a positive on-going relationship between Council and local swimming clubs, allowing local athletes to develop to their full potential.

We appreciate that the cost of such a project is significant. In this regard Swimming Australia would like to express our willingness to provide letters of support for any state or federal funding programs that Manly Council is preparing to apply for. If Swimming Australia can be of any assistance please do not hesitate to contact me at graeme.stephenson@swimming.org.au.

Sincerely,

Graeme Stephenson
General Manager – Aquatic Strategy

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