HORSHAM AQUATIC CENTRE MASTERPLAN REPORT

HORSHAM AQUATIC CENTRE
53 HAMILTON ST. HORSHAM VIC 3400

PREPARED FOR

Horsham Rural City Council urban rural balance

FINAL REPORT
HORSHAM AQUATIC CENTRE

FINAL REPORT

H O R S H A M A Q U A T I C C E N T R E
5 3 H A M I L T O N S T , H O R S H A M V I C 3 4 0 0

TABLE OF CONTENTS

PRELUDE

This report has been prepared by Energy Architecture, Hames Sharley, Trento Fuller & FMG Engineering for Horsham Rural City Council and Horsham Aquatic Centre Master Plan Working Group. The purpose of this report is to summarise and document work undertaken during stages 1, 2, 3 and 4 of the Horsham Aquatic Centre Master Plan/ Concept Design Development. It forms the final project deliverable of stage 4 as outlined in the brief supplied by Horsham Rural City Council.

HORSHAM AQUATIC CENTRE ADVISORY COMMITTEE

Members as follows:

- Cr Les Power (HRCC)
- Dick Gill (Community Representative)
- Faye Smith (Community Representative)
- Roger Armstrong (Community Representative)
- YMCA (Scott Bryant, Sam Winter, Mark Meyer)
- Peter Walsgott/Deidre Harrington (Swimming Club Representative)
- Anne Richards (Wimmera Health Care Group)
- HRCC Director Community Services (Kevin O'Brien)
- HRCC Coordinator, Building and Asset Management (Brett Ellis and Tanya Hahne)
- HRCC Recreation and Sustainability Manager (Rhonda McNeil)

OTHER COUNCIL STAFF

- HRCC Sustainability and Recreation Project Officer (Mandy Kirsopp)
- HRCC Rural Access Worker (Wendy Lynch)

STATE GOVERNMENT

- Representative from Sport and Recreation Victoria (Michelle Anderson)

LEAD CONSULTANT COMMITEE

- Daniel Manno – Energy Architecture
- Cameron Macrow – Energy Architecture
- Stan Fuller – Trento Fuller
- Ashley Holmes – FMG Engineering
- Kym Fuss – Kym Fuss Cost Consulting
- Saralee Aufderheide – Hames Sharley

INTRODUCTION

The Horsham Outdoor War memorial Pool is owned by the Horsham Rural City Council and managed on their behalf by the YCMA group. The Aquatic centre is around 10years only and the main 50m outdoor is over 50yrs old and predominantly of the original design. In 2012 Council conducted a feasibility/investigation study of the Outdoor War Memorial pool to determine its long-term options for the main 50m pool and associated toddler pool and intermediate pool. The 2012 Horsham outdoor Pool Feasibility/investigation study provided council with options for future of the War Memorial Swimming Pool, together with an understanding from the of the views of the local community.

LOCATION

The Horsham Aquatic Centre is located at 53 Hamilton Street, Horsham, VIC, 3400. The aquatic centre grounds are bound by Hamilton St, Firebrace St, Urquhart St and O'Callaghan's Parade and comprise of around 1.8ha including the car park.

DISCLAIMER

The information contained in this report has been prepared with care by our Energy Architecture and other sub consultants, or it has been supplied to us by apparently reliable sources. In either case, we have no reason to doubt its completeness or accuracy. However, neither this company nor its employees guarantee the information, nor does it or is it intended to form part of any contract. Accordingly, all interested parties should make their own inquiries to verify the information, as well as any additional or supporting information supplied, and it is the responsibility of interested parties to satisfy themselves in all respects. This report is for the use only of the party to whom it is addressed and Energy Architecture and its consultants disclaim responsibility to any third party acting upon or using the whole or part of its contents. Energy Architecture and the engaged consulting team are not services engineers and cannot review the facilities current aging mechanical, electrical and hydraulic systems.

STAGE 1.0

HORSHAM AQUATIC CENTRE

- SUMMARY OF EXISTING 2012 FESIBILITY STUDY
- DDA ACCESS REVIEW
- AQUATIC CENTRE TRENDS
- SERVICES AND OPPORTUNITIES

SUMMARY OF EXISTING 2012 FEASIBILITY STUDY

In 2012 Horsham Rural City Council engaged Smart Connection Company to undertake a Feasibility and Investigation Study of the outdoor 50m pool and surrounding facilities.

Since the 2012 Horsham Outdoor Pool Feasibility Study was undertaken a number of minor improvements have been made on the 50m pool. These include replacing the chemical dosing controller, repairs to the expansion joints, painting the 50m pool, disconnection for the intermediate pools and a number of operational adjustments as per the recommendations.

Of the minor suggestions with the 2012 Feasibility Report; installations of shade structures, additional seating, BBQ picnic zones and water fountains have also not been installed.

Of the three significant recommendations to derive from the 2012 Horsham Outdoor Pool Feasibility Study, Option a) – Prefabricated Concrete shell, Option b) - Replace all existing pools and plant and Option c) – Replace the 50m pool, 'NIL' are yet to be implemented however early conversations with Horsham Council representatives indicated that Horsham Rural City Council concurrently engaging with a separate engineer for the option of installing a 'bladder' type device into the 50m outdoor pool in an effort to reduce the volume of water in the pool and minimise ongoing maintenance costs and chemical use. Further details of the current activities will need to be consulted with Horsham Rural City Council directly; we have not received a copy of the new engineer's report or directions.

Separate to the Feasibility Study, recently the pool has been re-painted and hydrostatic values have been installed in an attempted to maintain the ongoing use of the aging outdoor pool.

For further information regarding the engineering aspects carried out on the outdoor pool in particular what is contained in the 2012 Horsham Outdoor Pool Feasibility/Investigation Study and any subsequent reports Please refer to the attached FMG – Engineering Investigation Report FMG REF S31563 – 252359.

DDA ACCESS REVIEW

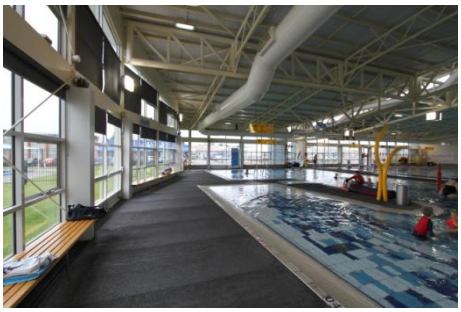
The following attachment prepare by Trento Fuller for the Horsham Aquatic Centre has been undertaken to provide an indication of compliance with statutory obligations required under the Building Code of Australia and the Commonwealth Disability Discrimination Act 1992.

Current legislation governing the design of buildings requires new building work to comply with the provisions of the Building Code of Australia 2016 and the referenced suite of Australian Standards for disability access for buildings and facilities (Appendix A). Areas that fall outside of the BCA defer to the Commonwealth Disability Discrimination Act 1992 (DDA).

The report has been assessed based on photographic evidence, liaison with the design team, and Architectural documentation.

Please refer to the attached Horsham Aquatic Centre DDA Access Review - Stage 1

General accessibility shortfalls above



General accessibility pool entiy issues above.

AQUATIC CENTRE TRENDS

Perhaps the most notable trend in leisure facility design is the importance of connectivity to the community. They are becoming community hubs, offering social integration opportunities and building social capital. The contemporary leisure facility now offers more than just a place to swim, they are now a destination; a place to gather and to socialise. This is being reflected in an increased attention to facility comfort and design, where comfortable cafes and meeting spaces are becoming the norm. Increasingly, facilities are designed to provide access to all ages and to all cultures. Facilities must be flexible to ensure capacity to offer new programs as they develop.

Leisure facilities must be enticing. They must be comfortable places for people of all ages and all cultures to relax and enjoy their recreation activities. They should encourage participation as a means to encourage community integration, well-being and social cohesion. Wet, dry and ancillary components of a facility are located with consideration of the intended operational / management model, with capability to control patron access to different components if required. Successful Aquatic halls are orientated for solar gain, and are planned to allow some degree of separation between active leisure spaces and more passive well-being and program spaces. Furthermore the ideal scenario for outdoor aquatic components are having them located for solar access and for protection from prevailing breezes.

Within facilities, demand for leisure water provision is growing rapidly. Traditionally, learn-to-swim programs and dry fitness have been revenue drivers for community facilities, but increasingly, participation is now being driven by aquatic play grounds and super slides for the younger users and indoor heated pools for hydrotherapy to cater for multiple users of all ages. Change facilities are evolving to reflect these trends with increased provision of family change villages. Community facilities are now competing with Health Clubs, offering a higher standard of programs, service and accommodation, particularly for dry fitness. There is a growing movement towards wellness / wellbeing, with the emergence of spa facilities including suites for massage, physiotherapy, and the like. The contemporary leisure facility now offers more than just a place to swim, they are now a destination; a place to gather and to socialise. This is being reflected in an increased attention to facility comfort and design, where comfortable cafes and meeting spaces are becoming the norm. Increasingly, facilities are designed to provide access to all ages and to all cultures.

Aquatic centres are most successful when they are easily navigable. Successful facilities are planned around a clear wayfinding strategy developed early in the design process. On approaching and entering a facility, the patron should have a sense of where they’re going because the architecture guides them through the building with subtle cues: they can see what they’re looking for. Not only does this strategy assist in providing a comfortable, safe, inclusive and welcoming experience for the patron, it serves to cross sell the activities and services offered.

SERVICES AND OPPORTUNITIES

The Horsham Aquatic centre at present is quite a diverse complex catering for many different activities including;

- General Swimming and Aquatic Leisure
- School swimming carnivals in the 25m and 50m pools
- Childcare facilities
- Dance Studio
- Gymnasium, weights, treadmills
- RPM, Pump and bicycle type classes.
- Adrenalin classes
- Pilates, mat work and ball works.
- Coffee and cafe facilities.

After several conversations and meetings with members of the Horsham Aquatic Centre Steering Committee to ascertain key council/and or other services that could be incorporated into the complete, the following list of potential services were canvassed;

- Better inclusion for people with disabilities, it was noted that the current aquatic centre had several hurdles to overcome to enable inclusion for those with acute and extreme disabilities. The entry into the facility, access into the pools, storage of scooters & lifting devices, consultation or flexible mutli-use rooms, change facilities and general hazards were all amongst the key elements that required upgraded

- Access for Community Health Providers and other allied health professionals, it was established that the current facility did not cater for the needs of external allied health professionals. The Master plan should consider how these services may expand under the recent National Disability Insurance Scheme (NDIS) rollout and what potential inclusion was possible.

- Community Lounge, providing flexible multiuse spaces to enhance the facilities that offered by Horsham Rural City Council. The Community lounge enables a separate space that could be booked by the community for events in a similar fashion to library resource centres.
- External Consultancy Rooms, by providing opportunity for private sector providers to establish a physiotherapy, massage, Pilates or simular type business would enhance the attraction for the Horsham aquatic centre and enable further income generation.

- Splashpark / Waterplay Activity, an emerging trend in aquatic centre design in the inclusion of purpose built splashpark or water play facilities to attract tourists from the wider region. BBQ areas, static playgrounds and open spaces would also be used to complement the current facilities of the aid in the creation of a regional level facility in attracting the younger generation and enable further income generation for the service agent and Horsham Rural City Council.

- Outdoor function spaces, enabling birthday parties or events to further strengthen the facilities provided.
- 50m pool, the master plan process will review with the Horsham aquatic centre steering committee the potential for additional events and carnivals to be hosted at the site. Throughout the PCG meetings, the Horsham Swimming club has raised concerns that regarding the limitations with the current 50m length knowing that it currently does not comply and will need to be modified to attract state level events.

- Regional level facility, consideration should also be given to what's required to create a regional level facility to support funding applications with Horsham Rural City Council.

ATTENDANCE PATTERNS

Attendance patterns are valuable in determining when best to target specific services. Below is a table of the attendance figures taken from Horsham Aquatic Centre over the past three years. The data shows that over a three year average the busiest month for attendance is November, followed by October and February.

People visited the centre the least in the months of April, June (two year average) and July.

	2014/2015	2015/2016	2016/2017	(Average)	
July	13008	13401	12032	12814	
August	15712	13500	13697	14303	
September	13241	13373	12128	12914	
October	14623	17641	16015	16093	
November	20024	13733	20,051	17936	
December	15357	15275	13852	14828	
January	13267	13000	15096	13788	
February	18200	15780	16072	16684	
March	13907	14,139	16854	14967	
April	11,282	10,775		11029	(2 year average)
May	15473	13,916		14695	(2 year average)
June	12973	9447		11210	(2 year average)
total	177067	163980	135797 (9 Months)		

Data provided by YMCA Victoria

STAGE 2.0

HORSHAM AQUATIC CENTRE

- MASTER PLAN DEVELOPMENT

MASTERPLAN DEVELOPMENT

After consultation with the Horsham Aquatic Centre – Steering Group Committee, the following desires were tabled as key design considerations for implementation/consideration into the Horsham Aquatic Centre Master plan, these included;

Outdoor Aquatic Facilities:

- Inclusion of family change facilities
- Inclusion of play equipment on the current landscaped space and play equipment in the pools by means of inflatable equipment were suggested.
- DDA compliant wet deck was required to be considered with the Master Plan.
- Outdoor shade devices should be considered over the pool and general areas
- Increase the amount of outdoor seating for general + events
- Consider a Waterpark / Spashpark / Slides / Big Buckets for increase facility use
- Include the option of BBQ zones for general use and birthdays / function space
- Review outdoor medium pool for integration into the splashpark
- Beach/Sand volleyball to be included into the design for teenage demographic+ others
- Sandpit, playground and outdoor play equipment to be included.
- Consider the external concourse and potential to upgrade (it was noted council was currently reviewing this item).
- Consider accessibility to all spaces, possible ramp/lift solution to the 50m pool.

Indoor Aquatic Facilities

- Review the availability increased seating around the indoor 25m pool (School Swimming)
- Scooter parking/Charge points were limited in the complex.
- Meeting room space was poorly located at present, consider relocating.
- Leisure pool had elements that were no longer functional, council were currently looking to rectify, but current no splashplay was active.
- Review access into both the 25m pool and leisure pool for people with disabilities.
- Consider location of lifeguard station in conjunction with new design

Change Area's/WC's

- Inadequate change facilities for parents/ people with disabilities, to be reviewed.
- Review extent of existing W/C's for integration of larger access toilets
- Consider lifting devices for the leisure pool and supplementary support offices.

Fitness Facilities

- It was noted that the gym layout was not conducive to people with disabilities. Open spaces was on the opposite side of the room to the entry point, no scooter/wheel chair parking.
- Consider requirement for Gym to have 24hr access.
- Outdoor space for PT is currently not available; review how this may take place.
- RPM has poor ventilation, consider how to improve.
- Consider consultation/ allied health services in connection with the current Gym.

Admin/Office

- Consider a new location for meeting room for better use by operators/others.
- Consider separate meeting rooms for the YMCA and or others
- Review entry/offices within the facility.

Cafe/Seating

- Café Seating was inadequate, review café and internal function space/RPM space.

- Review the external Kiosk

Crèche

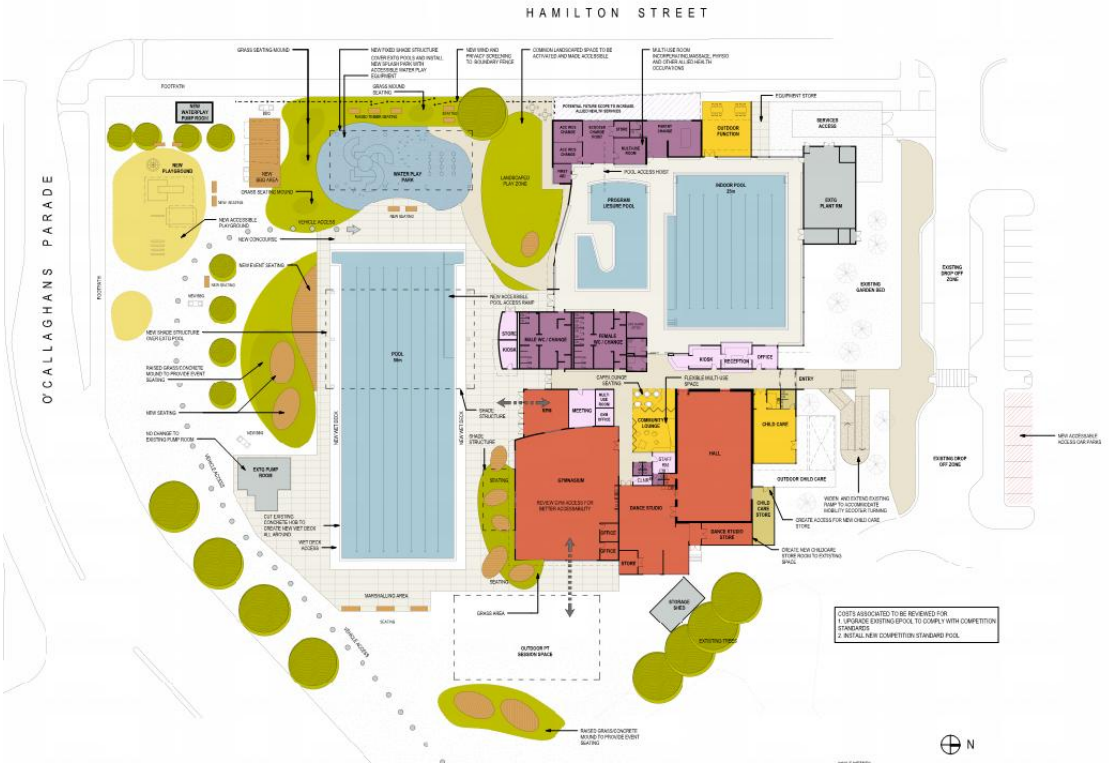
- No storage, consider additional storage onsite

Site Access, Surroundings

- Access to/from the facility was noted as inadequate, the ramp needed to be upgraded to allow for dual way access.
- Parking to be reviewed with consideration to priorities for people with disabilities.
- Review potential use of the road to the south of the site.

Other disability access considerations

- Review of the current entry/exit into the 50m (including lifting equipment vs. ramp)
- Review the current accessibility of the 25m and leisure pools, it was noted that getting in/out of the pools was an issue; 'scooter' parking onsite was an issue.
- Greater universal design was to be considered, i.e. consider charge points + parking for the aged.
- Change space for people with disabilities was inadequate,
- Access toilets were not suitable for people with significant mobility issues. New 'larger' toilets needed to be considered in a centralized location.
- It was raised that there was no rehabilitation pool at the local hospital or the aquatic centre. Increased 'respectful' accessibility to the current leisure pool was a key preference.
- Café needed to be reviewed for increased use by people with disabilities.
- Consider potential for additional 'aquatic programs/ rehab programs' to be run at the centre and possible multiple purposes rooms/spaces to facilitate.
- Storage of aquatic chairs/lifting equipment
- Review the 'Inclusion for all (internal and external)'



Masterplan – Option 1 was developed after consultation with the Horsham Aquatic Centre – Steering Group Committee.

STAGE 3.0

HORSHAM AQUATIC CENTRE

- COMMUNITY ENGAGEMENT PROCESS

COMMUNITY ENGAGEMENT PROCESS

Community consultation is valuable in determining the broader needs and expectations held by the public for major facilities such as the Horsham Aquatic Centre. During master plan design stage, information gathered from community engagement processes is instrumental in shaping the program and usage of the proposed development. As a part of the Horsham Aquatic Centre master plan/ concept design process, community feedback was sought in a number of ways to assist the facility's potential of meeting the needs as expressed by the community. A number of different engagement methodologies were chosen to maximise the input of different sections of Horsham's residents. These included:

- 2 information presentations followed by open Q&A sessions
- Questionnaire / feedback forms
- Online survey

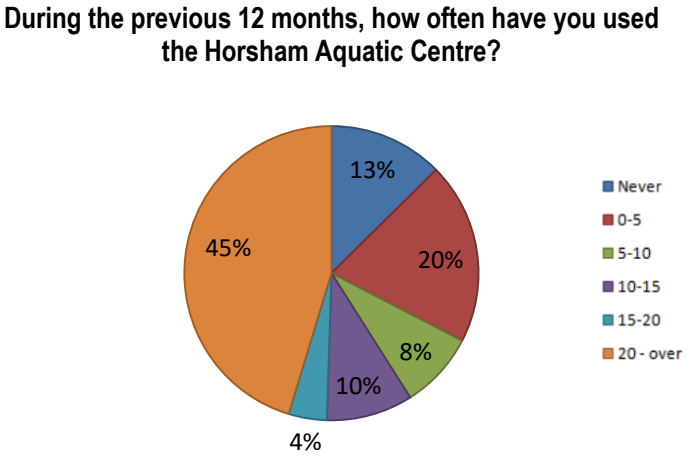
The consultation process was conducted between April 21st and mid-May, 2017 and collected 106 responses in total.

RESIDENT SURVEY

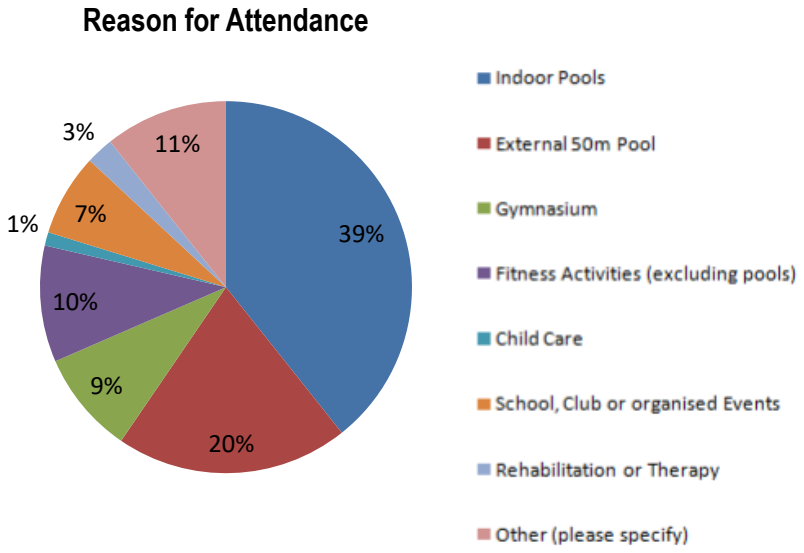
Survey questions were directed at gauging the community's opinion of both the current facility conditions and the desired outcomes for future upgrades. Of those that participated in the survey, 63% of the were from the locality of Horsham (3400 postcode), 14% from suburban Horsham areas (3401 postcode), 6% of respondents were from various other regions and 11% did not disclose.

Usage Patterns

The majority of aquatic centre users attended the centre 20 times or more within the past year (45.3%) while the second largest group have visited only occasionally 0-5 times (20%). 13.7% had visited between 10 – 20 times and 12.6% responded that they had not visited the centre at all.



Currently, the leading reason for attendance is for the indoor swimming pools (74.2%) followed by the outdoor 50m Pool (38.2%). Other reasons such as Gym and fitness activities drew between 17-19% of survey population while school, Club and other organised events made up 13.5%. The lowest ranking activity was rehabilitation/ Therapy (4.5%) and Child Care (2.2%).



Accessibility

Feedback was collected on whether the Horsham Aquatic Centre is meeting the needs of the community in terms of accessibility. This was broken into the following aspects:

- *Opening hours* -
  Respondents were divided about the suitability of opening hours. 45% of the 80 respondents express no need for change and 47.5% would like to see an increase in opening hours.
- *Access from the Carpark* –
  89.8% were satisfied that needs were being met, 5.1% felt improvement was necessary and 5.1% were undecided or did not respond.
- *Access by foot into the building* –
  89.3% were satisfied that needs were being met, 5.3% felt improvement was necessary and 5.3% were undecided or did not respond.
- *Accessibility into the pools* –
  82.2% were satisfied that needs were being met, 10.9% feet improvement was necessary and 6.8% were undecided or did not respond
- *Accessibility into Gym/ Fitness Rooms* –
  65.7% were satisfied that needs were being met, 8.2% felt improvement was necessary, and 26% either did not use the facilities or did not respond.

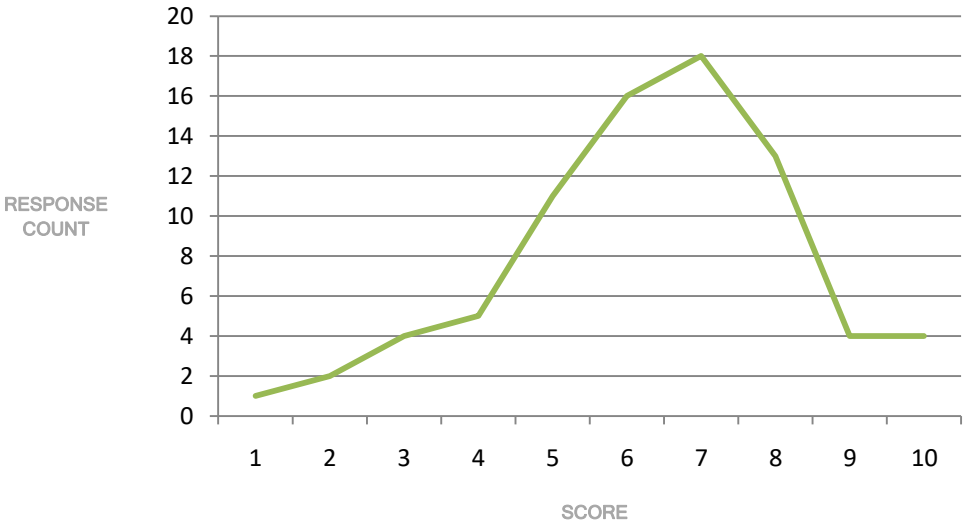
Pool Facilities

People were also asked to score the pool facilities in terms of their effectiveness in meeting needs. The area that ranked the highest in this regard was the Car Park, the 25m Indoor Pool and the Indoor Program & Leisure Pool (Beach Access Pool). The areas deemed most in need of improvement were the Toilets & Amenities and the Outdoor Grassed Areas. The Child Care, Main Gym and Fitness Rooms received the highest amount of NIL responses.

The facility areas were broken into the categories below and received the following ratings.

- *Indoor 25m Pool*
  60% felt satisfied that needs were being met, 20% felt improvement was necessary and 12% did not respond.
- *Indoor Program & Leisure Pool (Beach Access Pool)*
  58% felt satisfied that needs were being met, 15% felt improvement necessary and 27% did not respond.
- *Main Gym*
  42% felt satisfied that needs were being met, 11% felt improvement necessary and 47% did not respond.
- *Fitness Rooms*
  42% felt satisfied that needs were being met, 18% felt improvement necessary and 40% did not respond
- *Reception / Entry*
  74% felt satisfied that needs were being met, 22% felt improvement necessary and 4% did not respond.
- *Kiosk*
  70% felt satisfied that needs were being met, 14% felt improvement necessary and 16% did not respond
- *Toilets & Amenities*
  55% felt satisfied that needs were being met, 43% felt improvement necessary and 2% did not respond.
- *Car Park*
  81% felt satisfied that needs were being met, 19% felt improvement necessary
- *Outdoor Grassed Areas*
  43% felt satisfied that needs were being met, 42% felt improvement necessary and 15% did not respond.
- *Child Care*
  17% felt satisfied that needs were being met, 4% felt improvement necessary and 79% did not respond.

When asked to consider whether the overall needs of the community are being met by the Horsham Aquatic Centre in terms of the level of accessibility and the suitability of the facilities, the average score out of 10 was between 6 and 7. (78 responses in total)



The survey participants were asked to provide indication of what area they would prioritise the upgrades. The order of priority was as follows (75 respondents in total)

1. Improved outdoor shade, seating and amenities (74% of responses)
2. Waterplay / splash park (60% of responses)
3. Improved accessibility for the overall facility including toilet and change areas (48% of responses)
4. Outdoor Playground (44% of responses)
5. Outdoor BBQ and family zones (36% of responses)
6. Improved indoor Gym (31% of responses)
7. Inclusion of Allied Health services i.e. Physio consultations (19% of responses)
8. Outdoor Volleyball Facilities (9% of responses)

Participants were asked to elaborate further on what measures would improve the suitability of the Horsham Aquatic Centre in meeting the needs of the community. These ideas were grouped into the below categories depending on their response rate. (Refer appendix for the complete list of written responses.)

table a:

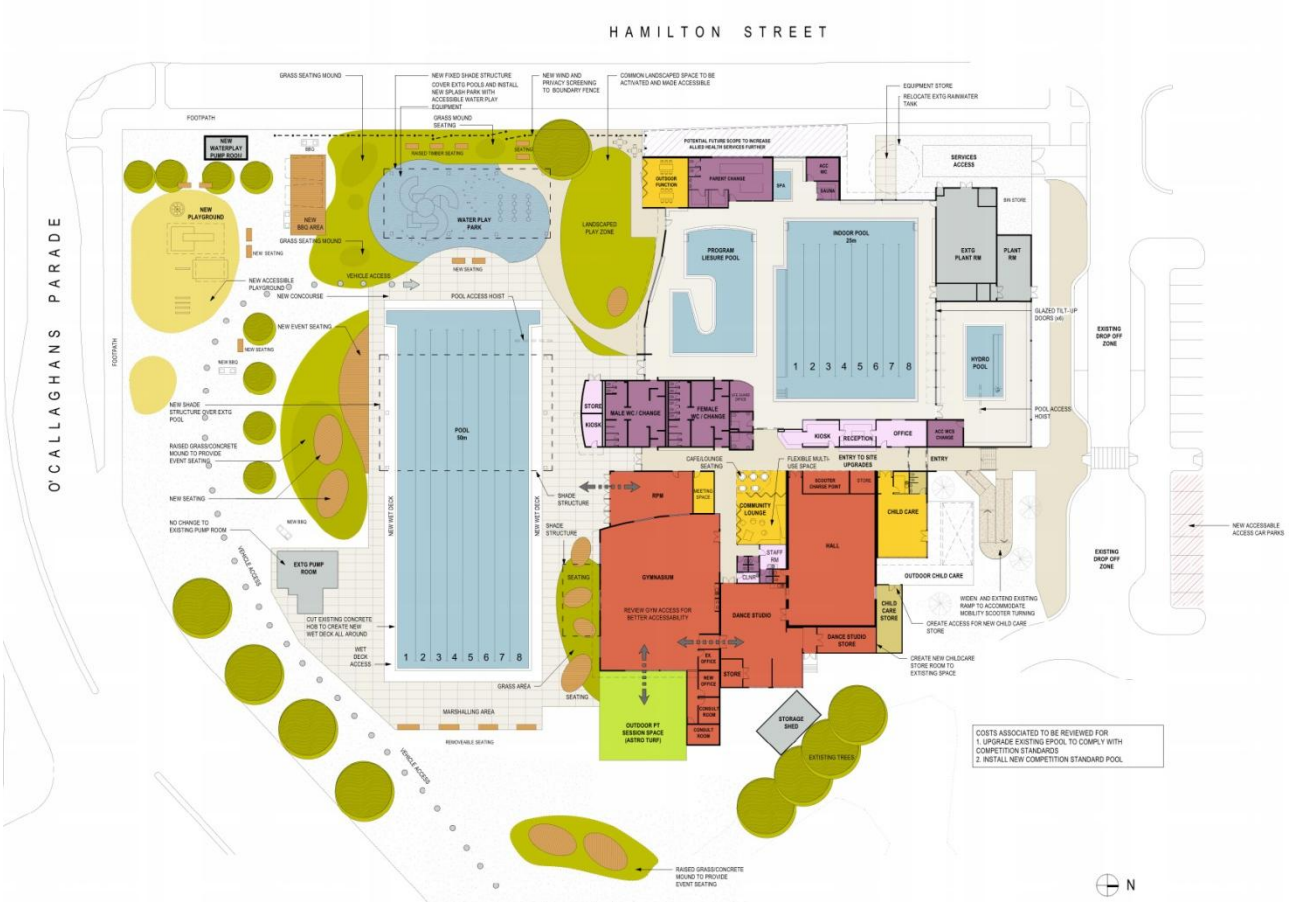
MOST RESPONSES: - Shaded areas / shaded seating - Water slide - Change rooms / Showers / Toilets upgrades - Family outdoor eating / BBQ + picnic areas - Improved accessibility - 50m pool standardised for competition/ school events
SOME RESPONSES: - Spa / Sauna - Other outdoor recreational – beach volleyball / trampolines etc. - Splash Park / children's pool - Existing 50m pool upgrades - Spectator seating for indoor pool - Gym + RMP room expansion / improvements - Hydrotherapy pool
FEW RESPONSES: - Diving board/pool - Master plan is over developed - Acoustic measures for sound sensitive children - Child Care facility upgrades - Allied health rooms - Outdoor kiosk - Passive heating to the outdoor pool

The data was reviewed alongside Master Plan - Option 1.

40% of the respondents felt that master plan option 1 was meeting their needs as it was. Further adjustments were made to the plan relating to the findings outlined in *table a*.

These adjustments included:

- Adding a mobile hoist entry to 50m pool in lieu of a ramp to maintain 8 lanes clear for competition standards.
- Inclusion of spa and sauna facilities
- Inclusion of a hydro therapy pool
- Tilt-up doors between hydro pool and indoor pool area for improved accessibility
- Reception wall re-aligned to free up walkway improving accessibility
- Astro turf to outdoor PT session space / flexible to accommodate a range of outdoor recreation activities described in survey comments.
- Increased marshalling area to improve conditions for competition/ school events
- Improvements to parent change area



Master plan – Option 2 was developed following the analysis of community feedback.

STAGE 4.0

HORSHAM AQUATIC CENTRE

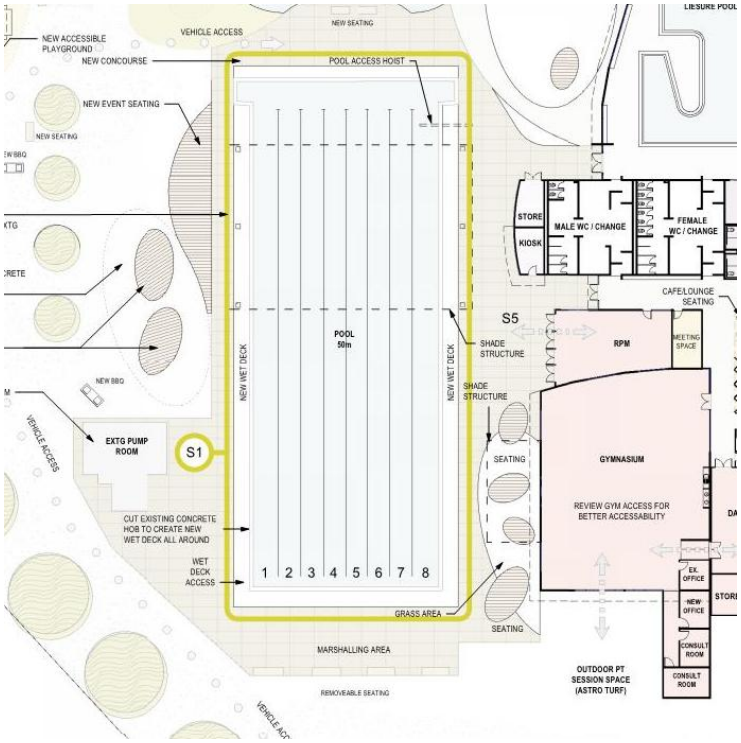
- RECOMMENDED REDEVELOPMENT STAGING PLAN

SUMMARY RECOMMENDED REDEVELOPMENT STAGING PLAN

The master plan has been separated into six stages of development, outlined as follows. With each stage of the development, it is recommended to review opportunities for upgrading the environmental performance of the facility. Energy Architecture and the consulting team are not services engineers and are unable to review the aging of existing equipment. It's recommended that a separate single ESD report be prepared to align with the staging options below and major construction works be undertaken at suitable times.

STAGE 1 - 50m Pool upgrades

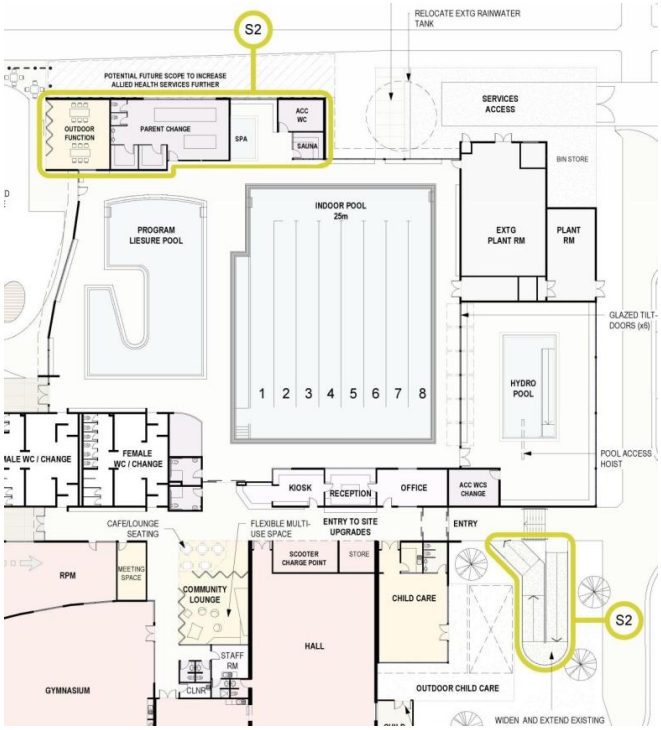
Works includes a new wet deck to the 50m outdoor pool perimeter, the new pool concourse including demolition of the existing concourse. Note: these works are being undertaken separately by council and cost estimates have been excluded from this report.



STAGE 1 WORKS

STAGE 2 - Indoor works B + Ramp:

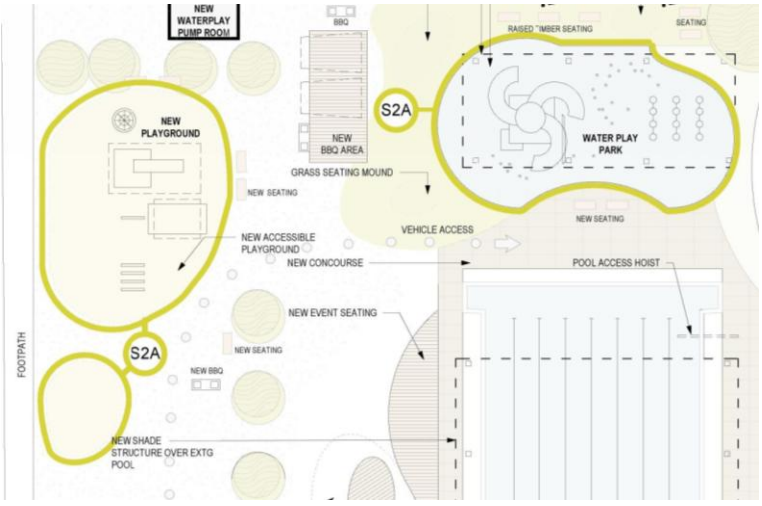
Works includes a new outdoor function area, parent change rooms, Spa & Sauna facilities, a new WC compliant with accessibility standards, and the widening/ extension of the existing front entry ramp (this will accommodate mobility scooter turning etc.)



STAGE 2 WORKS

STAGE 2A - Waterplay / Splash Park:

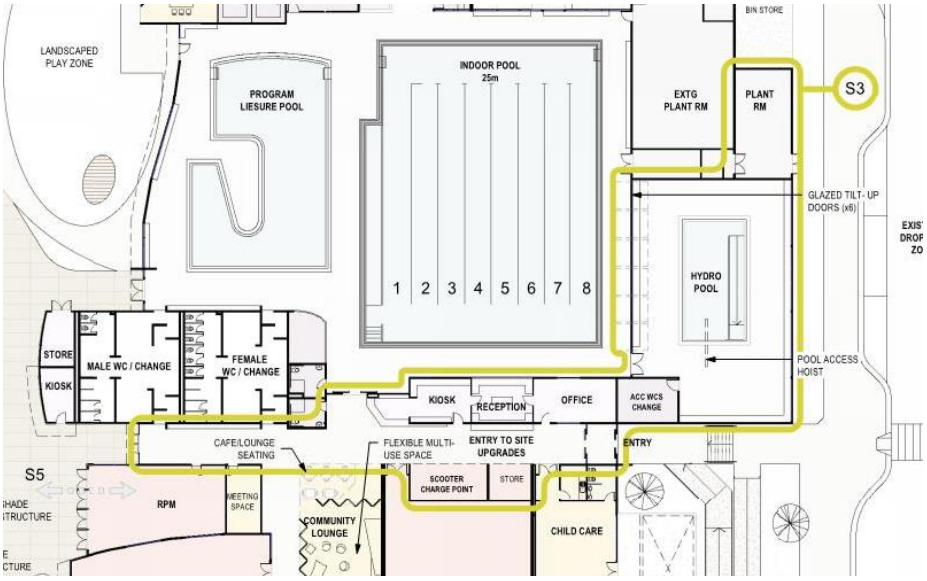
Works include the construction of the Waterplay and Splash Park and the new playground and play equipment. A tensioned UV resistant canopy constructed over the splash park area and the demolition of the existing pools in this area – backfill and excavations.



STAGE 2A WORKS

STAGE 3 - Indoor works A:

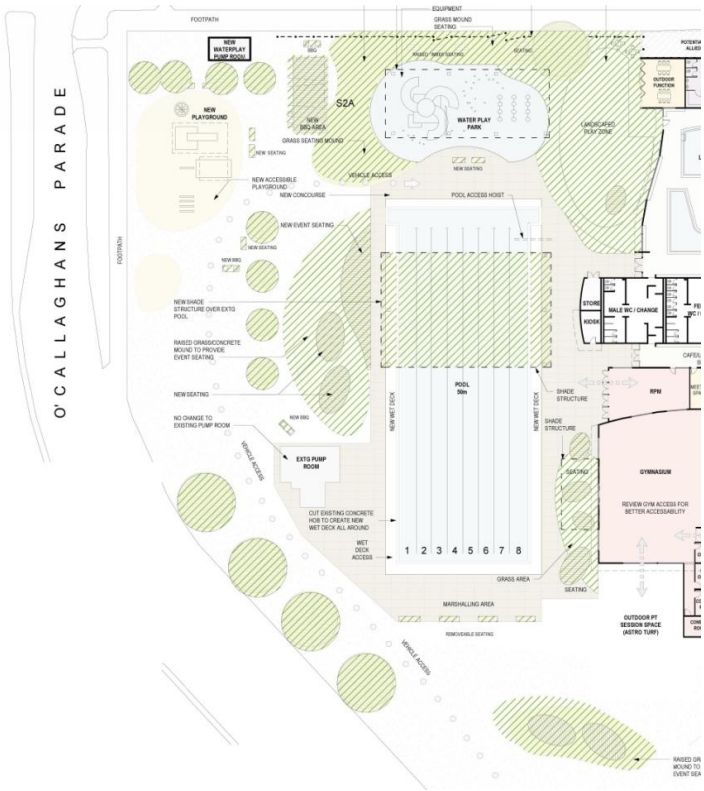
Works include indoor renovations to the corridor, kiosk, reception resize, office, accessible change, scooter charge bay, storeroom, including hydro pool equipment, hoist, hydro pool plant room, tilt up glass doors & single tier seating.



STAGE 3 WORKS

STAGE 4 - Outdoor landscaping:

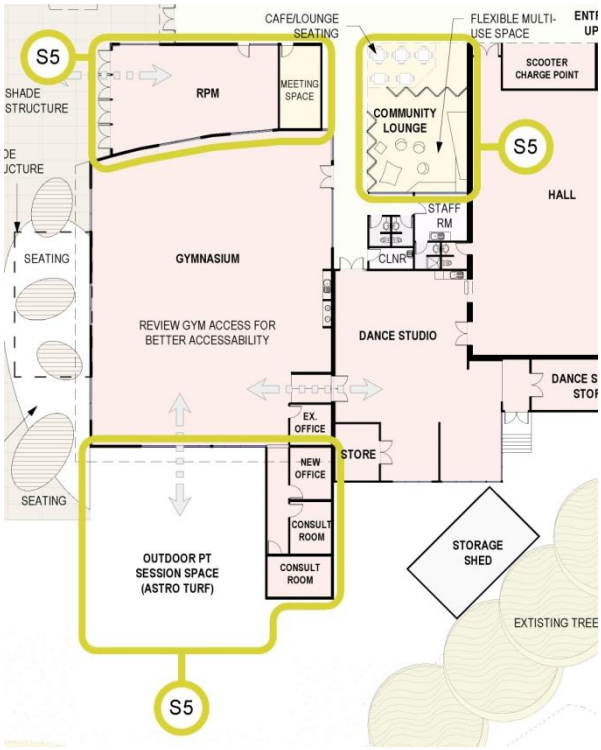
Generally includes all landscaped areas. Grass seating mounds in landscaped areas, new event seating, removable seating, 3 x new barbecues, shade over gym seating and new fencing. Stage 4 works will also include construction of a pool shad structure over the outdoor 50m pool.



STAGE 4 WORKS

STAGE 5 - Gym works + Community Lounge

The final stage will include gym and fitness associated items; modifying the existing entry to the gymnasium to have large operable doors, provision of new gym offices/ consult rooms, new outdoor personal training session space and revisions to the current RPM area. Upgrades to the community lounge include replacing floor coverings, installing folding door banks, new joinery and seating area.



STAGE 5 WORKS

SUMMARY COST BREAKDOWN

		(Cost estimate provided by cost manager separately engaged by Council)
STAGE 1 WORKS		
STAGE 2 WORKS - Indoor Works B		
Outdoor Function Area		53,768
Parent Change Rooms		341,424
SPA & Sauna Area		89,613
Accessible WC		76,171
Ramp Extension & Widening		17,923
STAGE 2 WORKS TOTAL		**578,897**
STAGE 2A WORKS		
Waterplay and Splash Park area		1,254,576
Demolish existing pools		53,768
Hoist to Hydro Pool		35,845
Canopy over SplashPark		350,385
Playground Area including Play Equipment		358,450
STAGE 2A WORKS TOTAL		**2,053,025**
STAGE 3 WORKS - Indoor Works A		
Hydro Pool Complete		621,911
Hydro Pool Plant Room		89,613
Tilt Up Glass Doors to Hydro Pool Wall		107,535
Other Areas		600,404
STAGE 3 WORKS TOTAL		**1,419,464**
STAGE 4 WORKS Outdoor Landscaping		
Landscaping		393,041
Pool Shade Structure		658,115
STAGE 4 WORKS TOTAL		**1,051,156**
STAGE 5 WORKS - Gym Works		**956,166**
'GENERALLY"- Sundries		**185,498**
Total (Excludes Stage 1):		**6,244,206**

Refer to the Horsham Aquatic Centre Master Plan Costing Report (Appendix D) and Horsham Aquatic Centre Master Plan Summary (Appendix E) for detailed breakdowns.

FUNDING OPPORTUNITY

The Community Sports Infrastructure Fund is a Victorian Government funding program that supports improvements in sport and active recreational infrastructure across Victoria. This aids in planning for new or redeveloping existing facilities.

Better Pools is one of the funding categories where grants are offered of up $3 million to provide high-quality, accessible aquatic leisure facilities.

The community sports infrastructure fund programs open in March with project proposals closing in June. Further information about this grant is available in the; Community Sports Infrastructure Fund Guidelines 2018-19 (PDF, 1.31 MB)

Found at; http://sport.vic.gov.au/grants-and-funding/our-grants/community-sports-infrastructure-fund/

EXISTING PHOTO SURVEY

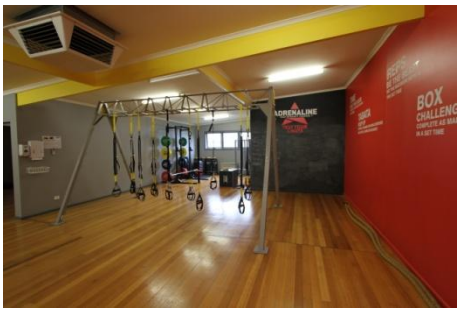
War Memorial Pool plaque

Original Filter & Pump room (still in use)

Existing toddler pool (Cracked)

Existing intermediate pool (Unused & Fenced)

50m outdoor pool (empty)

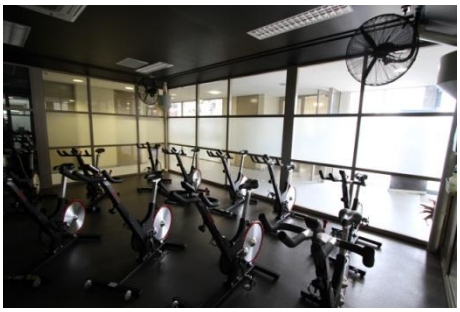


YCMA used of Dance Studio

Existing 50m Outdoor Pool

Existing 50m outdoor Pool

EXISTING PHOTO SURVEY



RPM room (Poor ventilation)

Existing Pump room (25m & Leisure Pools)

Rear service yard

Existing Pump room (25m & Leisure Pools)

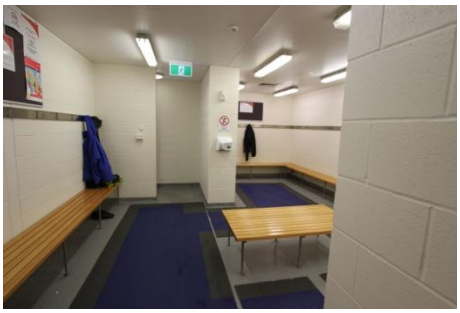
25m indoor heated pool

Central location – poor storage

Indoor Leisure pool + Beach Entry

In active water indoor water play

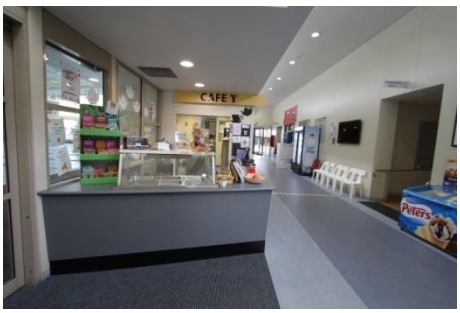
EXISTING PHOTO SURVEY



Current change facilities

Accessible Change Facilities

Access ramp into 25m indoor lap pool



Cafe & Common Corridor

Existing Cafe Seating

Existing Gym (From entry door)

Existing meeting room

Child Care (internal)

EXISTING PHOTO SURVEY

Child care (external)

Unused Courtyard

External Image

External image – External landscaped zone

Internal Hall

Existing Entry – Ramp requires upgrade

Main Entry

Existing Carpark

APPENDICES

HORSHAM AQUATIC CENTRE

Please refer to the attached:

A. Engineering Investigation Report FMG REF S31563 – 252359.
B. Horsham Aquatic Centre DDA Access Review - Stage 1
C. Horsham Aquatic Centre_ Urban Design Report_ Aug 08
D. Horsham Aquatic Centre Master Plan Costing Report
E. Horsham Aquatic Centre Master Plan Summary
F. Survey – Written responses
G. Survey data

APPENDIX A

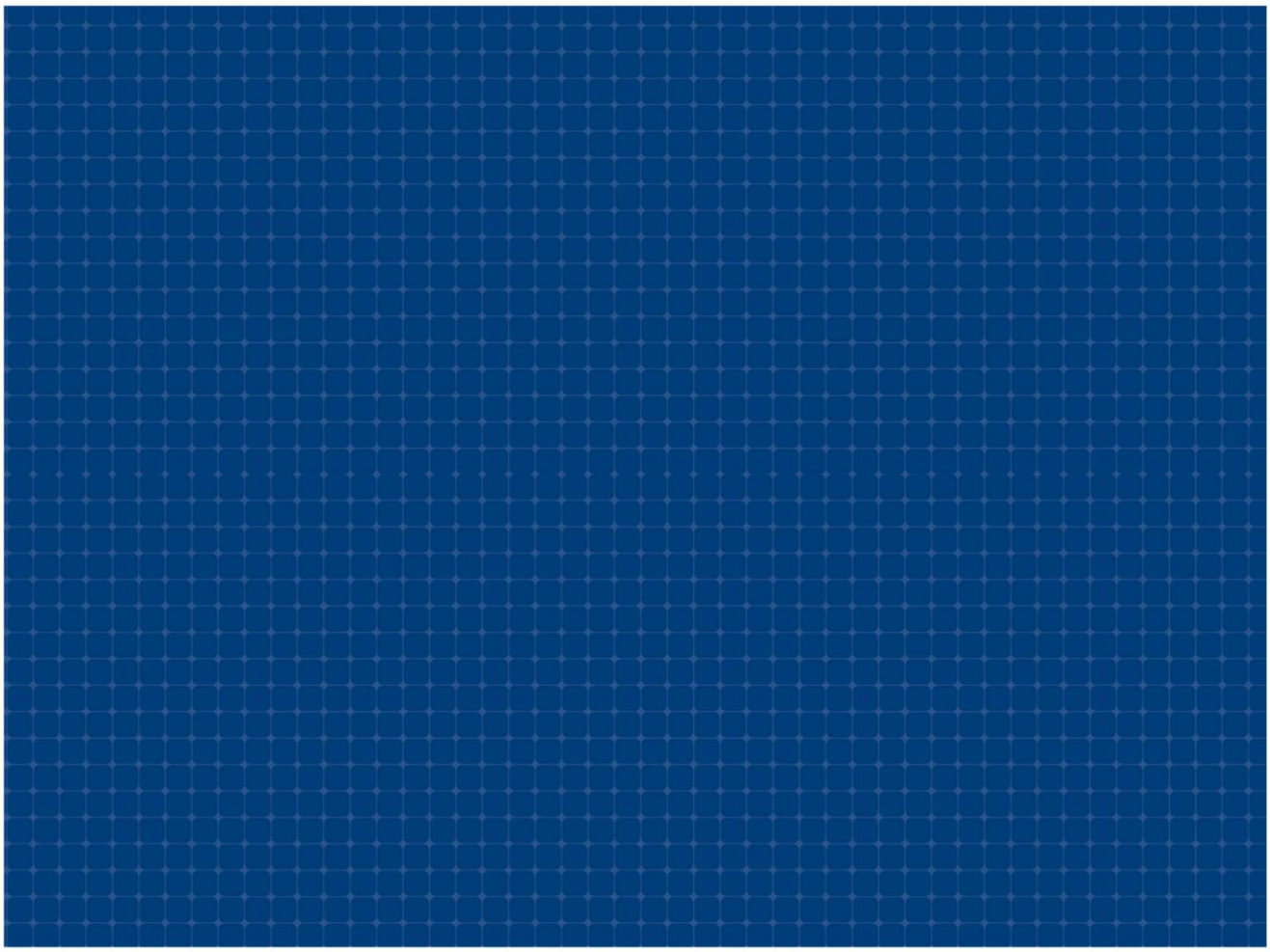
Engineering Investigation Report

ENGINEERING
incorporating
BURNS HAMILTON

ABN 58 083 071 185
fmgengineering.com.au

P 1300 975 878

CIVIL I STRUCTURAL I ENVIRONMENTAL I GEOTECHNICAL I
BUILDING ASSESSMENT & FORENSIC I SOIL & MATERIAL TESTING I
HOUSING I COMMERCIAL I PROJECT MANAGEMENT



FMG REF:	**S31563 - 252359**
ISSUE DATE:	**27 October 2016**
SITE ADDRESS:	**Horsham Aquatic Centre, 53 Hamilton Street, HORSHAM, VIC 3400**
CLIENT:	**Energy Architecture**

© Koukourou Pty Ltd trading as FMG Engineering

Document Status

Rev	Author	Reviewer	Issue Date
0	Ashley Holmes Senior Aquatic Engineer	John Goldfinch Principal Engineer (Partner)	27 October 2016

Adelaide
42 Fullarton Road
Norwood
SA 5067
P 08 8363 0222
E adl.forensic@fmgengineering.com.au

Melbourne
2 Domville Avenue
Hawthorn
VIC 3122
P 03 9815 7600
E mel.forensic@fmgengineering.com.au

Sydney
Suite 28, 38 Ricketty Street
Mascot
NSW 2020
P 1300 975 878
E syd.forensic@fmgengineering.com.au

TABLE OF CONTENTS

1.0 Introduction

1.1 FMG Engineering ('FMG') has been engaged by Energy Architecture to review previous engineering reports and to assess the condition of the existing outdoor aquatic facility based upon the findings of these reports. FMG has also been requested to advise any additional testing which may provide a better understanding of the existing facility's condition.

1.2 FMG has considered the following reports in order to formulate its opinion;

(1) CO-OP – Proposed Early Works – Consultant Advice Notice No. 001 – Date: 25 June 2016
(2) CO-OP – Outdoor Pool Plant Review – Revision A – Date: 16 August 2016
(3) CO-OP – Schematic Design Report revision – Consultant Advice Notice No. 003 – Date: 30 August 2016
(4) Horsham Rural City Council – Feasibility / Investigation Study – Date: June 2012
(5) Geoff Ninnes Fong and Partners ('GNFP') – Interim 50m Pool Works Recommendations – Pool and Tank Structures and Finishes, Filtration and Water Treatment – Date: 7 December 2012

1.3 FMG has also reviewed the original construction documentation for the outdoor 50m pool and toddler pool, photographs of the facility and a survey of the existing facility undertaken in July 2004.

1.4 The reports mention multiple defects in the filtration system of the outdoor facility as well as concerns with the structural efficacy of the 50m concrete pool shell. The learn-to-swim pool was found to be in relatively good condition but is hydraulically linked to the 50m pool and toddler pool. The toddler pool has been found to be unsalvageable.

2.0 Facility description

2.1 The facility currently incorporates 5 individual pools.

(1) An indoor 25m reinforced concrete pool constructed on reinforced concrete piles. This pool includes a disabled access ramp and is 900mm to 1600mm deep. It features a wet deck gutter collection on all sides to return soiled water to a balance tank.

(2) An indoor reinforced concrete leisure pool, also constructed on reinforced concrete piles. This pool includes a beach entry and is 0mm to 1400mm deep. It has a wet deck gutter system on all sides to return soiled water to a balance tank.

(3) An outdoor reinforced concrete 50m pool with an average depth of 1.67m.

(4) An outdoor reinforced concrete learn-to-swim pool with an average depth of 0.67m.

(5) An outdoor reinforced concrete toddler pool with an average depth of 0.15m.

2.2 The indoor pools are constructed on piles. The 50m pool is constructed over an extensive underdrain system. All of the outdoor pools share a common balance tank and filtration system. The indoor pools are reticulated separately from each other and have individual balance tanks.

3.0 Summary of investigations undertaken in the reviewed documents

3.1 In order to review whether or not sufficiently comprehensive investigative works have already been undertaken, FMG has summarised the past investigations. Other salient information has also been included in the summary. Please note that where the same information is repeated in multiple reports, then it is only included under one of the headings below, not all. Our summary is not set out in any particular chronological order.

Horsham Rural City Council – Feasibility / Investigation Study – Date: June 2012

(1) The 50m pool does not meet FINA standards.
(2) The drop in water level is in the order of 150mm to 200mm per day which equates to a volume loss of 135m^3 to 180m^3 per day.
(3) GNFP conducted a study in June 2011 which has not been provided to FMG. However, GNFP has included a summary in this feasibility study.
(4) Concrete cores were taken in 2002 which concluded the concrete strength varies from 40MPa to 53MPa.
(5) The movement control joints are in poor condition.
(6) A further life of at least 10 years was concluded, however, the control joints will continue to deteriorate.
(7) The tiles were in good condition however the tile joints are cracked and require replacement.
(8) There are cross sectional cracks in the learn-to-swim pool hobs similar to those in the 50m pool.
(9) The toddlers pool has numerous structural cracks.
(10) Reuse of backwash water was recommended by GNFP for reticulation in the pool, or for irrigation purposes depending on the quality of the water.
(11) The reticulation pipe network is constructed of asbestos pipework.
(12) No equipotential bonding (earthing) of metal objects such as steel reinforcement has been carried out.

Geoff Ninnes Fong and Partners (GNFP) – Interim 50m Pool Works Recommendations – Pool and Tank Structures and Finishes Filtration and Water Treatment – Date: 7 December 2012

(13) A CCTV inspection video of the scum gutter pipes and return-to-pool pipes with a sketch plan of the pipes, as prepared by Beckers Drain Cleaning Services was

viewed by GNFP. The CCTV inspection reported a number of breaks or blockages in the dropper pipes from the scum gutter to the longitudinal soiled water return pipes. The soiled water return pipe network was also pressure tested and found to be in sound condition. It is uncertain if the filtered water return pipe network had also been tested.

(14) A leak detection report and plan prepared by Bendigo Aquatic Services was viewed by GNFP. The leak detection noted a number of structural cracks in the concrete walls of the 50m pool as well as identifying six leak locations in the construction joints. The vacuum system was reported as faulty and permanent capping of these items was recommended.

CO-OP – Proposed Early Works – Consultant Advice Notice No. 001 – Date: 25 June 2016

(15) Recommendations regarding outdoor facility filter cell investigations.
(16) Recommendation to install a standpipe to check if the groundwater drainage system is functioning adequately.
(17) Recommendation to install hydrostatic valves in the existing pools as a secondary backup against pool shell buoyancy.

CO-OP – Outdoor Pool Plant Review – Revision A – Date: 16 August 2016

This report essentially sets out the findings of the recommended investigations in the earlier works proposals. It is limited to the pool filtration and sanitation systems.

(18) The filtration pump has been extensively repaired over the years and requires replacement.
(19) The toddler pool and learn-to-swim pool are not in use and have been isolated. The 50m pool is reportedly operating at a water turn-over rate between 5.5 hours and 8.5 hours.
(20) The 50m pool loses the order of 100mm of water level over a 24-hour period.
(21) The external concourse water is collected and directed to the balance tank.
(22) Groundwater is being collected and pumped into the balance tank. [Note: FMG has assumed that the water has been tested and found to be chlorinated and is hence water from the swimming pool leaks].
(23) Hydrostatic pressure relief valves have been installed.
(24) There are suction pipelines located in the pool walls near the floor which require Virigina Graeme Baker Pool and Spa Safety (VGB) compliant covers.

(25) There is no containment bund located at the sodium hypochlorite delivery area which is on Cameron Street just off O'Callaghan's Parade. The filling procedure requires a minimum of two people because of the distance between the fill point and the storage tank. Remedial options for compliance were outlined by CO-OP in section 11 of their report.

(26) There are a number of OWHS risks in the existing plant room. Essentially these risks include;

(a) An ill-fitting pit cover which requires replacement.

(b) Filter access is via a ladder which is not compliant with AS1657.

(c) The plant room does not include a sink for chemical testing.

(27) The report provided three options for increasing water quality.

(a) Maintain existing pool filter hydraulics.

(b) Maintain existing filters and provide new pipework to and from the pool.

(c) New filters and pool hydraulics.

(28) The scum gutter inverts vary by 37mm.

<u>CO-OP – Schematic Design Report revision – Consultant Advice Notice No. 003 – Date: 30 August 2016</u>

(29) The base of filter cells are constructed of a perforated corrugated asbestos sheet. Three separate recommendations for dealing with the asbestos sheet were provided within the report. It is unclear as to which of these options, if any, may have been undertaken.

(30) A Natare pool retrofit wet deck system was suggested as a potential solution to replacing filtered water return pipework under the 50m pool.

4.0 Possible additional testing

4.1 In order to ascertain what needs to be done to upgrade a facility of this nature, FMG would propose the undertaking of additional testing. Some relevant tests have already been undertaken and the results can still be relied upon in our opinion. Below is a summary of tests FMG would normally undertake when investigating an aged pool complex.

(1) Leak detection in the form of dye testing with a qualified diver + observer whilst the pool remains full. It is recommended that this be undertaken as soon as practically possible after the pool has been filled. Balance tanks are not typically tested in this manner because it is often too dark in the tank to give meaningful results.

FMG suggests that the dye test performed a number of years ago is no longer valid. Additional leaks in different locations may have now formed in the pool shell.

(2) Concrete coring of the pool shell in order to aid in the assessment of structural integrity.

FMG understands that concrete cores have been tested but it is uncertain as to the location of these cores. Regardless, the results indicated that the concrete was in excess of 40MPa and as such the concrete is relatively strong. However, chloride content was not measured in the concrete. As chlorides are absorbed into the concrete they progressively increase in concentration. At low concentrations, chlorides are effectively harmless, but once they surpass a critical level they can, and often do, cause significant corrosion of the steel reinforcement.

(3) Concrete cores from the balance tank to aid in the assessment of structural integrity

FMG do not believe this has yet been undertaken. If there is no sign of structural distress in the balance tank, then this could possibly be overlooked.

(4) Visual inspection of the pool shell in order to determine if there is any structural cracking.

Structural cracking has been noted in the pool shell. It is strongly recommended that a visual inspection of the pool shell be undertaken again by an experienced professional if a pool shell is to be retained and repaired.

(5) Visual inspection of the balance tank to determine if the tank has any structural cracking.

Due to the depth of the existing balance tank inspecting it will be relatively difficult. FMG would typically design a much shallower balance tank with a larger footprint area in order to more easily maintain the foot-valve and strainer assembly (assuming the pump system does have a foot-valve and strainer fitted) as well as cleaning off of any accumulated debris from within the balance tank. In circumstances such as this it would typically be FMG's recommendation that the existing balance tank be abandoned and a new purpose-built tank be constructed.

(6) Pressure testing of the pipework to determine if any of the pipe network is leaking. To a lesser extent CCTV may be relied upon to more accurately determine the position of leaks should any be found by the initial pressure testing.

This was undertaken a number of years ago now and it is currently unclear as to whether the leaks detected have been, or were, rectified. Should it be determined that sections of pipework are to remain in service, then FMG recommends that is the reticulation system be pressure tested again.

(7) Survey the pool to determine if it has been subjected to differential ground movement. Usually this is conducted along a scum gutter.

This was also done many years ago. Conducting another levels survey now and comparing it to the previous survey will provide an insight into the history of movement of the structure. Should the survey result be similar to the previous survey then a traditional wet deck system could be retrofitted onto the existing pool structure. If is found to be significantly different, then the reticulation system would either need to remain as a scum gutter collection for soiled water or have a new Natare wet deck system fitted. The Natare wet deck water reticulation system has additional benefits which will be discussed later in this report.

(8) Assess the facility for WHS issues. Particular attention is usually paid to the quality of the tiling, quality of the concourse and particularly to chemical storage / delivery locations, along with PPE and storage of MSDS literature.

[This has recently been addressed in the CO-OP report].

(9) Assess the disinfection and filtration system for efficiency, reliability, suitability for purpose and to determine if the facility complies with recommended public health guidelines.

[This has recently been addressed in the CO-OP report. FMG has provided some additional input into the 3 overall options put forward by CO-OP].

(10) FMG would potentially recommend the exposure of some steel reinforcement. In an aggressive environment, such as a pool, it is possible for the structural reinforcing steel to corrode in such a way that it does not cause spalling of the concrete (i.e. by electrolysis). It is FMG's opinion that the structural steel should be exposed in a minimum of two locations in the 50m pool shell to determine if this form of deterioration may be occurring. This is of most concern at points of high stress such as the base of pool walls, as such the investigation should be done at this location.

This has not been undertaken at any time in the past in so far as FMG can determine.

Summary of additional recommended testing

4.2 In summary FMG recommends the minimum amount of testing that should be contemplated before a final decision is made with regard to the possibility of retaining the existing 50m pool structure.

(1) Dye testing should be undertaken again as soon as practically possible after filling of the pool.
(2) A current visual inspection of the pool shell should be undertaken by an experienced professional. A scope of work, or the need for a more focused investigation of shell defects, will be identified during this inspection.
(3) If any pipework is to be retained without being relined (refer section 5 of this report) then it should be pressure tested to confirm that the pipework can be retained.
(4) The pool should be level surveyed again to determine if it is subject to periodic differential movement and to determine if a wet deck conversion is a viable option to consider.
(5) Exposure of steel reinforcement at locations of high stress (base of pool wall) is recommended in a minimum of two locations to check for chloride contamination in concrete and electrolysis attack of the reinforcement.

5.0 Options to be considered

5.1 CO-OP has provided the following three options in its report concerning the disinfection and filtration system;

(1) Option 1 – Maintain existing pool filter pool hydraulics. This option assumes the permanent shutting down of the toddler and learn-to-swim pools.
(2) Option 2 – Maintain existing filters and provide new pipework to and from the pool. This option assumes the permanent shutting down of the toddler and learn-to-swim pools.
(3) Option 3 – New filters and pool hydraulics. This option includes items 3a and 3b which relate to options available regarding the toddler and learn-to-swim pools. Options 3a and 3b in theory could be undertaken in conjunction with options 1 or 2.

5.2 *Option 1*, whilst this could be undertaken, is not recommended by FMG because the current water turnover rate exceeds that which is recommended for public health. CO-OP did not adjust all of their figures for a smaller filter cell than they had anticipated. This means the maximum achievable turnover rate for option 2 would not be 4.5 hours but rather 5.28 hours. As CO-OP has stated, a filtration rate of 15 $m^3/m^2/hr$ may not be achievable which means that they also may not achieve the required flow rate. Similarly to option 1, *option 2* is also not recommended as there is, in FMG's opinion, a strong chance that it will exceed the maximum water turnover rate recommended for public health.

5.3 In addition to *option 3* the following work would be required in order to salvage the 50m pool shell based upon the investigations which have been undertaken to date.

- Full construction joint retrofit repairs on all joints. FMG has assumed that this has not yet been undertaken.
- Repair of structural cracking noted within the GNFP report. This is typically undertaken using a hydro-reactive and permanently flexible resin injection process.
- Removal of all existing painted surfaces and any render that may exist on the pool shell. This will hopefully expose any concealed older cracking in order to allow repairs to be undertaken. FMG typically recommends that the pool shell be tilled. This entails, amongst other things, the provision of a high quality and flexible waterproof lining membrane to be installed which is protected by the tiles.

Painting the surface does not provide anywhere near the same level of protection.

- The installation of a new pipe network would be extremely intrusive. FMG would recommend, in this instance, that the centrally located filtered water return line be simply relined with a reinforced polymer lining sock. New pipework can then be installed around the exterior of the pool, along with new wall inlets. Similar to the Natare system this approach avoids concrete demolition. If a new survey determines that the pool is only being subjected to minimal differential soil movement, then FMG would recommend the installation of a new retrofitted wet deck system. If there is more than a small amount of movement, then FMG would recommend the installation of the Natare system. Due to the unique nature of the Natare system the same effect as a wet deck system can be achieved whilst it should allow for some minor ground movement.
- If a new survey determines that the pool is subjected to significant seasonal movement then it must be clearly understood from a structural efficacy perspective that the existing pool will continue to have issues with water leaks and it is highly unlikely that they can be permanently eliminated.
- FMG also recommends the installation of a dignity for disabled access ramp into the pool, should extensive works be contemplated for the outdoor facility. If any structural work is undertaken, then it is FMG's understanding that dignity for disabled (DDA) access *must* be addressed by the installation of either a ramp or a lifting device. A lifting device may be in place which FMG is not aware of at this time.

5.4 CO-OP has provided three options regarding *the chemical delivery system*. FMG agrees with the options put forward. The available options are summarised as;

(1) Provide a containment bund for a dedicated outdoor facility chemical delivery area within the site boundary.
(2) Increase the chemical storage capacity of the indoor facility and use this storage also for the outdoor facility.
(3) Convert the chemical disinfection system from sodium hypochlorite to calcium hypochlorite (granular chlorine)

6.0 Conclusion

6.1 There are still some remaining investigations which FMG strongly recommend should be undertaken prior to determination as to whether or not the 50m pool can be salvaged and to determine if the pool can have a wet deck conversion undertaken/considered.

6.2 It is FMG's opinion that the existing 50m pool, based on the information available, *could* be salvaged, however, extensive retrofit works will be required. There is also the potential that when the existing concrete surfaces are stripped of their paint coatings that some older concealed structural defects may be revealed which will result in unforeseen variations to the work.

6.3 FMG is of the opinion that an entirely new filtration system is required for the facility and that the existing filter system should be abandoned. Based on the information available there will be minimal work required on the learn-to-swim pool in order to retain it, but a new filtration system is required.

6.4 As stated in the CO-OP report there is some work required in order to make the chemical delivery area compliant.

APPENDIX B

TRENTO FULLER
Building Certifiers & Consultants

Trento Fuller Pty Ltd
Suite 410
147 Pirie Street
Adelaide SA 5000

+61 8 7071 7106 tel
+61 8 7071 7009 fax
ABN 47 160 056 397
www.trentofuller.com.au

Horsham Aquatic Centre

DDA Access Review (Stage 1)

Horsham Aquatic Centre
DDA Access Review
Stage 1

Prepared for

Mr Daniel Manno
Energy Architecture
109 Grote Street
Adelaide SA 5000

Prepared by

Trento Fuller Building Certifiers & Consultants
Suite 410 147 Pirie Street, Adelaide SA 5000, Australia
T 7071706 F 7100 6499 www.trentofuller.com.au
ABN 47 160 056 397

25 October 2016

Quality Information

Document	DDA Access Review – Stage 1
Ref	J167119
Date	25 October 2016
Prepared by	Luke Trento
Reviewed by	Stan Fuller

Revision History

Revision	Revision Date	Details	Authorised	
			Name/Position	Signature
1	25 October 2016	Issued for Client comment	Luke Trento	

Table of Contents

Introduction

The purpose of this DDA Access Review is to identify potential difficulties a person with a disability may face when accessing the Horsham Aquatic Centre. The objective is to ensure that all people are provided with safe, equitable and dignified access to buildings and premises. This assessment is based on the requirements of the Commonwealth Disability Discrimination Act 1992 (DDA), Disability (Access to Premises- Buildings) Standards 2010, and the referenced suite of Australian Standards for disability access for buildings and facilities (Appendix A).

The definition of 'premises' in the DDA is broader than the Access to Premises Standard and BCA. A 'premises' includes service counter heights, fixtures and fittings, common area facilities, public outdoor eating areas and furniture and safe egress from a building, which are all subject to the existing DDA provisions and potential complaints system. The complaints that may arise have been listed under the heading Disability & Discrimination Act (DDA) 1992 Review (Risk Response). Since a complaint is subjective and there may be different levels of risk in regards to whether a complaint will be upheld by the Courts we will, following development of the Stage 2 Masterplan, complete a DDA risk assessment (in accordance with AS/NZS ISO 31000:2009) to inform the team and the client on any perceived risk exposure.

The mandatory requirements for disability access to be provided to buildings is regulated in the

National Construction Code (BCA Volume 1 - 2016 edition) Part D3 Requirements for Access for People with a Disability. The items that are either non-compliant with the BCA or requiring further review are listed under the heading BCA Requirements for Access for People with a Disability Review (Compliance Query).

Building and Site Details

The Aquatic Centre is an existing 2,800 m2 single storey Class 9b building located within the regional City of Horsham, Victoria. The site is bound by a roadway to the West and North with a carpark located between the building and road. The building is fenced so that the external pool area cannot be accessed. The main entry point is the Northern entry from Hamilton Street both for vehicles accessing the carpark and for pedestrian movement along the pathway to the building entrance. Retaining walls surround the site which is built up higher than the adjacent footpaths.

Australian Bureau of Statistics (ABS) data suggests that the demographic makeup of Horsham includes a higher percentile of people over the age of 70 years in comparison to the National and Victorian average. There are also a number of retirement communities and aged care buildings nearby that we would assume make use the Aquatic facilities for rehabilitation, therapy, and relaxation.

In light of the above we have considered the likelihood that the Aquatic Centre will be used by a person with a disability as greater than if the same facility was located in another city or large township. Access provisions should, as a result, address not only the BCA non-compliances but also the potential for a DDA complaint.

Executive Summary

The following report has been undertaken to provide an indication of compliance with statutory obligations required under the Building Code of Australia and the Commonwealth Disability Discrimination Act 1992.

Current legislation governing the design of buildings requires new building work to comply with the provisions of the Building Code of Australia 2016 and the referenced suite of Australian Standards for disability access for buildings and facilities (Appendix A). Areas that fall outside of the BCA defer to the Commonwealth Disability Discrimination Act 1992 (DDA).

The report has been assessed based on photographic evidence, liaison with the design team, and Architectural documentation. We note that no building audit was undertaken by Trento Fuller or consultation with any of the user groups. If further analysis is required we are more than willing to undertake a details building audit and discuss our findings with the City Council, Disability groups, and other stakeholders for additional feedback.

BCA Query Items

The following queries have been identified following review of the Architectural documentation and site photos:

(a) Further clarification is required on the location and number of the accessible carparking bays, including compliance with shared zone, bollard, etc;

(b) There is insufficient detail on the plan to confirm compliance requirements of the entrance ramps, however we note:
   1. Non-compliant turning for wheelchairs onto the zig-zag ramp at the base, mid landing and top;
   2. Tactiles non-compliant (only 300 mm) to the top of the ramp adjacent the main entry auto-door;

(c) Most doors appear to only have a clear opening width (scaled from plan) of 800 mm;

(d) Signage required to indicate the location of accessible toilets (to other facilities) and signage to accessible changeroom to indicate either left handed or right handed toilet facility;

(e) Hearing Augmentation may need to be provided depending on what information is provided over the Public Address system;

(f) Tactiles Ground Surface Indicators may be required at path from the footpath to the accessible carpark;

(g) No handrail provided to the program/leisure zero depth entry pool and no access for people with disabilities identified to within the external 50 m pool;

(h) Based on 140 participants (carnivals, etc) a further 2 showers and 1 toilet pan for Males is required;

(i) Ambulant facilities have not been provided;

(j) No backrest with luminance contrast provided to the accessible Toilet Pans;

(k) No access for people with disabilities is provided to the external 50 m pool.

DDA Query Items

The following queries have been identified from the review of the aforementioned drawings as not meeting the spirt and intent of the DDA – these items will be included in the Risk Assessment as part of Stage 4 and can be discussed further in due course;

(a) The footpath at the intersection of Hamilton Road and Urqhart Road (north-east corner) does not provide an accessible pathway surface, only a grassed path, to the main entry point to the building on Hamilton Street;

(b) Four ramps are required on the accessible path of travel to enter the building. This presents undue fatigue to elderly occupants or those with a disability attempting to access the Aquatic Centre facilities. A large crowd of elderly occupants or people with disabilities have limited room to navigate the ramps and once near the entrance there is also no open area or landing or an internal lobby space for rest;

(c) Access from the street to the building entrance is also a long distance. In addition to the above difficulties, seating should be provided (sheltered from the sun, rain, and prevailing wind) at the base of the stair. Drinking fountains could also be provided;

(d) Access from the carpark to the building entrance requires accessible pathway past the road crossing which may be unsafe for people with a vision or hearing impairment. Consider installing bollards to the widened path adjacent the road as well as tactiles. Warning signs and slow speed signs could also be provided to reduce risk of any accidents at the crossing;

(e) Provide signage to direct vehicles at the street entrance to the accessible carparking bays;

(f) An additional accessible parking bay should be provided (3 total with 3 shared zones);

(g) Adequate distance is provided between the pool filtration grates and side walls however any storage including signage boards and equipment shall be removed to allow wheelchair users to pass;

(h) Skirtings have poor contrast to the floor material. Also consider using contrast in the central part of the floor to provide visual ques for access into main parts of the building including the control room, café and pool area;

(i) Enhanced access seating should be provided to allow wheelchair users to manoeuvre from their wheelchair onto seating and then to an aquatic wheelchair;

(j) General seating in the pool area should include arm and backrests as well as lowered seat heights;

(k) Escape from the building to be by way of a hearing augmentation system that is connected to the occupant warning, or visual and tactile vibration signals, or a buddy system to alert hearing impaired or deaf occupants. Further discussion required with staff / employees;

(l) Change room / changing place facilities should be provided (and have emergency call buttons installed). Refer http://changingplaces.org.au/;

(m) Consider additional Unisex accessible sanitary facilities adjacent Hall, Gymnasium and Creche sanitary facilities;

(n) Incorporate signage perpendicular to the control room and pool area so that they can be viewed from the building entrance;

(o) Location for aquatic wheelchairs should be provided in a position that is readily available. Management of the wheelchairs may require lifeguards to retrieve and then assist people with disabilities back onto the wheelchair;

(p) The entry method into the pool (fixed ramp and zero-depth) have their drawbacks however both comply with the Building Code requirements. A person can lodge a complaint however it is unlikely to be supported. The method of entry depends on the user group and their specific preference. Further discussion required;

(q) Provide accessible lockers within the required reach ranges.

Definitions

Accessible - means having features to enable use by people with disabilities.

Accessway - means a continuous accessible path of travel to, into or within a building.

Alternative Solution - means a *Building Solution* which complies with the *Performance Requirements* other than by reason of satisfying the *Deemed-to-Satisfy Provisions*.

Braille - a system of touch reading for the blind or vision impaired which employs raised dots, evenly arranged in quadrangular letter spaces or cells.

Continuous accessible path of travel - an uninterrupted path of travel to, from or within a building, providing access to all required facilities. A continuous accessible path of travel should not incorporate any step, stairway, turnstile, revolving door, escalator or other impediment that would prevent it from being safely negotiated by people with disabilities.

Disability - a condition or state of being, which is covered by the broad Disability Discrimination Act 1992 definition. The term includes physical, sensory, psychiatric, intellectual and neurological disabilities, physical disfigurement and the presence in the body causing, or capable of causing, disease.

Disability Action Plan - a disability action plan or DAP, is a document that organisations prepare and use in order to reduce and remove barriers experienced by people with a disability.

Grabrail – A rail used to give a steadying or stabilising assistance to a person engaged in a particular function.

Kerb - a side barrier to a trafficable or accessible pedestrian surface.

Handrail - a rail used in circulation areas such as corridors, passageways, ramps and stairways to assist in continuous movement.

Luminance contrast - the light reflected from one surface or component, compared to the light reflected from another surface or component.

Ramp - an inclined surface on a continuous accessible path of travel between two landings with a gradient steeper than 1 in 20 but not steeper than 1 in 14.

Ramp, kerb - an inclined surface on a continuous accessible path of travel with a maximum rise of 190 mm, a length not greater than 1520 mm and a gradient not steeper than 1 in 8, located within or attached to a kerb.

Ramp, threshold - an inclined surface on a continuous accessible path of travel with a maximum rise of 35 mm, length not greater than 280 mm and a gradient not steeper than 1 in 8.

Required – means *required* to satisfy *Performance Requirement* or a *Deemed-to-Satisfy Provision* of the BCA as appropriate.

Tactile ground surface indicators - truncated cones and/or bars installed on the ground or floor surface, designed to provide pedestrians who are blind or vision-impaired with warning or directional orientation information.

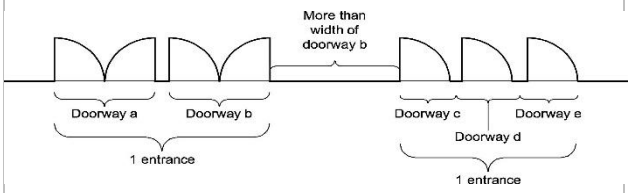
Tactile signs- signage incorporating raised text, and/or symbols and Braille to enable touch reading by people who are blind or who are vision-impaired.

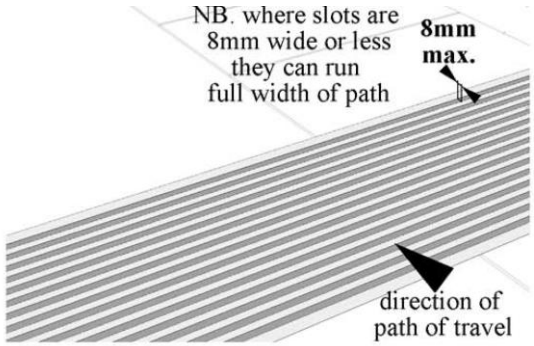
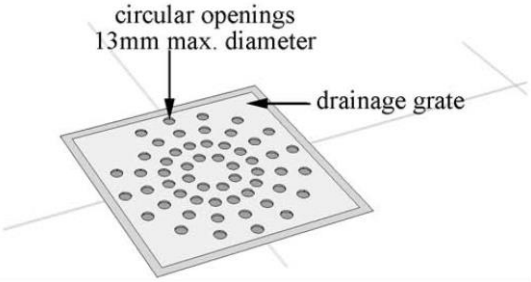
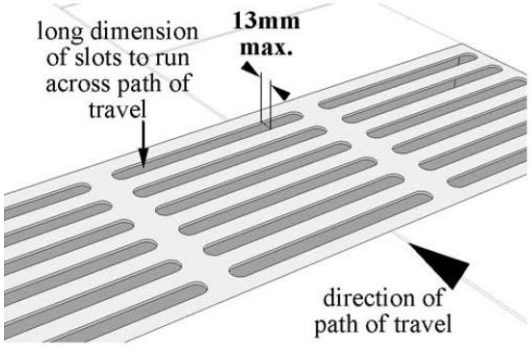
Walkway – any surface on a continuous accessible path of travel with a gradient not steeper than 1 in 20.

BCA Requirements for Access for People with a Disability Review

BCA Clause No. / Compliance Requirement	Compliance Query
Part D3 – Access for People with Disabilities	
D3.1 General building access requirements Buildings and parts of buildings must be *accessible* as *required* by Table D3.1, unless exempted by D3.4.	
Class 1b (a) Dwellings located on one allotment(1) and used for short-term holiday accommodation, consisting of: i. 4 to 10 dwellings to and within 1 dwelling i. 11 to 40 dwellings to and within 2 dwellings ii. 41 to 60 dwellings to and within 3 dwellings iii. 61 to 80 dwellings to and within 4 dwellings iv. 81 to 100 dwellings to and within 5 dwellings v. more than 100 dwellings to and within 5 dwellings plus 1 additional dwelling for each additional 30 dwellings or part thereof in excess of 100 dwellings. (1) A community or strata-type subdivision or development is considered to be on a single allotment. (a) A boarding house, bed & breakfast, associated breakfast, guest house, hostel or the like, other than those described in (a): To and within 1 bedroom and assoc, sanitary facilities: and not less than 1 of each type of room or space for use in common by the residents or guests, inc a cooking facility, sauna, gym, swimming pool, laundry, games room, eating area or the like: and rooms or spaces for use in common by all residents on a floor to which access by way of a ramp complying with AS1428.1 or a passenger lift is provided.	
Class 2, 3 & 9c Common areas: From a pedestrian entrance *required* to be *accessible* to at least 1 floor containing sole-occupancy units and to the entrance doorway of each sole-occupancy unit located on that level. To and within not less than 1 of each type of room or space for use in common by the residents, including a cooking facility, sauna, gymnasium, swimming pool, common laundry, games room, TV room, individual shop, dining room, public viewing area, ticket purchasing service, lunch room, lounge room, or the like. Where a ramp complying with AS1428.1 or a passenger lift is installed— (a) to the entrance doorway of each sole-occupancy unit; and (a) to and within rooms or spaces for use in common by the residents, located on the levels served by the lift or ramp.	
Class 3 Sole-occupancy units: Not more than 2 *required accessible* sole-occupancy units may be located adjacent to each other.	
Class 3 & 9c Where more than 2 *accessible* sole-occupancy units are	

BCA Clause No. / Compliance Requirement	Compliance Query
required, they must be representative of the range of rooms available. If the building or group of buildings contain: i. 1 to 10 sole-occupancy units to and within 1 *accessible* sole-occupancy unit. i. 11 to 40 sole-occupancy units to and within 2 *accessible* sole-occupancy units. ii. 41 to 60 sole-occupancy units to and within 3 *accessible* sole-occupancy units. iii. 61 to 80 sole-occupancy units to and within 4 *accessible* sole-occupancy units. iv. 81 to 100 sole-occupancy units to and within 5 *accessible* sole-occupancy units. v. 101 to 200 sole-occupancy units to and within 5 *accessible* sole-occupancy units plus 1 additional *accessible* sole-occupancy unit for every 25 units or part thereof in excess of 100. vi. 201 to 500 sole-occupancy units to and within 9 *accessible* sole-occupancy units plus 1 additional *accessible* sole-occupancy unit for every 30 units or part thereof in excess of 200. vii. more than 500 sole-occupancy units to and within 19 *accessible* sole-occupancy units plus 1 additional *accessible* sole-occupancy unit for every 50 units or part thereof in excess of 500.	
Class 5, 6, 7b, 8, 9a, 9b Access is required to and within all areas	
Class 7a Access is required to and within any level containing accessible carparking spaces.	
Class 9b Schools and early childhood centres: To and within all areas normally used by the occupants. An assembly building not being a school or an early childhood centre: To wheelchair seating spaces provided in accordance with D3.9. To and within all other areas normally used by the occupants, except that access need not be provided to tiers or platforms of seating areas that do not contain wheelchair seating spaces.	**All Areas** Access is required to and within all areas. Any areas that are inaccessible are provided in the following sections.
Class 10a Non-habitable building located in an *accessible* area intended for use by the public and containing a sanitary facility, change room facility or shelter. To and within (a) an *accessible* sanitary facility; and (a) a change room facility; and (b) a public shelter or the like.	
Class 10b Swimming pool: To and into swimming pools with a total perimeter greater than 40 m, associated with a Class 1b, 2, 3, 5, 6, 7, 8 or 9 building that is *required* to be *accessible*, but not swimming pools for the exclusive use of occupants of a Class 1b building or a *sole-*occupancy unit in a Class 2 or Class 3 building.	
D3.2 Access to buildings (a) An *accessway* must be provided to a building *required* to be *accessible* — i. from the main points of a pedestrian entry at the	**Street Entry Points** The main points of pedestrian entry are the carpark entrance on Hamilton Street and Urqhart Street.

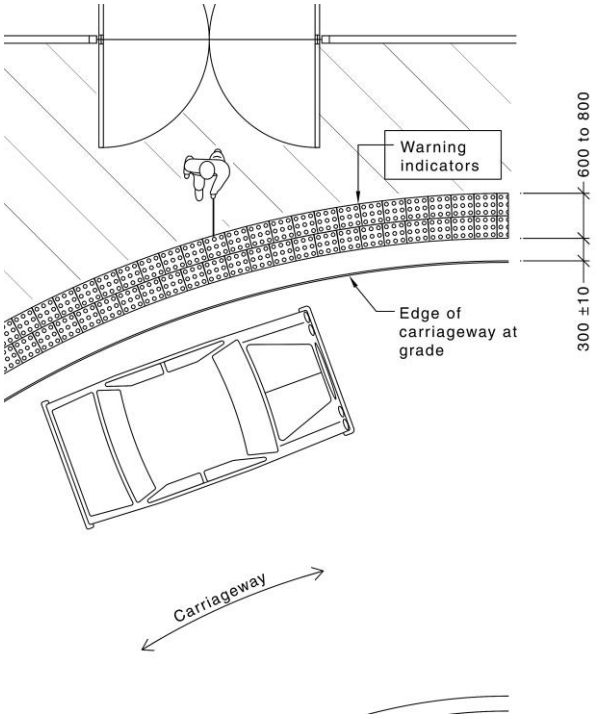
BCA Clause No. / Compliance Requirement	Compliance Query
allotment boundary; and i. from another *accessible* building connected by a pedestrian link; ii. and from any *required accessible* carparking space on the allotment. (b) In a building *required* to be *accessible*, an *accessway* must be provided through the principal pedestrian entrance, and— i. through not less than 50% of all pedestrian entrances including the principal pedestrian entrance; and i. in a building with a total floor area more than 500 m^2, a pedestrian entrance which is not *accessible* must not be located more than 50 m from an *accessible* pedestrian entrance, except for pedestrian entrances serving only areas exempted by D3.4. (c) Where a pedestrian entrance *required* to be *accessible* has multiple doorways— i. if the pedestrian entrance consists of not more than 3 doorways — not less than 1 of those doorways must be *accessible*; and ii. if a pedestrian entrance consists of more than 3 doorways — not less than 50% of those doorways must be *accessible*. (d) (d) For the purposes of (c)— i. an *accessible* pedestrian entrance with multiple doorways is considered to be one pedestrian entrance where— (A) all doorways serve the same part or parts of the building; and (A) the distance between each doorway is not more than the width of the widest doorway at that pedestrian entrance (see Figure D3.2); and i. a doorway is considered to be the clear, unobstructed opening created by the opening of one or more door leaves (see Figure D3.2). (e) Where a doorway on an *accessway* has multiple leaves, (except an automatic opening door) one of those leaves must have a clear opening width of not less than 850 mm in accordance with AS1428.1. Figure D3.2 Doorways and pedestrian entrances for access purposes  **AS1428.1-2009** Part 6 – Continuous Accessible Paths of Travel Part 7 – Floor or Ground Surfaces on Continuous Accessible Paths of Travel and Circulation Spaces Part 12 – Handrails Part 13 – Doorways, Doors and Circulation Space at Doors	**Carpark** The location of the accessible carpark is not shown on plan however appears to be 4 wide parks that appear wider on the location plan. Unknown whether shared zones are provided. **Principal Pedestrian Entrance** Due to the nature of the building, for security purposes we would only designate one entrance as the Principal Pedestrian Entrance. Entry is by way of a compliant air-lock with auto-doors. **Ramp to Entrance** There is a 1.45 metre difference in level from the footpath to the entrance doors. This relies on access being provided by 4 x 6 metre length 1:16.5 ramps. The location of handrail extensions to the 1:16.4 ramps stop short to provide room for patrons to turn onto the second ramp. There is insufficient information in regard to the location of the handrails to determine all non-compliances however there is definitely insufficient room for wheelchair users to turn into the ramp at the base, the curved mid-landing and the top of the ramp. The tactiles adjacent the entrance auto-doors also appear to be only 300 mm rather than 600 mm. Without photo's it could not be confirmed whether the stairs and ramp provide suitable slip rating, noting that they are open to the weather.
D3.3 Parts of buildings to be accessible	**Doors (General)**

BCA Clause No. / Compliance Requirement	Compliance Query
In a building *required* to be *accessible*— (a) every ramp and stairway, except for ramps and stairways in areas exempted by D3.4, must comply with— i. for a ramp, except a fire-isolated ramp, clause 10 of AS1428.1; and i. for a stairway, except a fire-isolated stairway, clause 11 of AS1428.1; and ii. for a fire-isolated stairway, clause 11.1(f) and (g) of AS1428.1; and (a) every passenger lift must comply with E3.6; and (b) *accessways* must have— i. passing spaces complying with AS1428.1 at maximum 20 m intervals on those parts of an *accessway* where a direct line of sight is not available; and i. turning spaces complying with AS1428.1— (A) within 2 m of the end of *accessways* where it is not possible to continue travelling along the *accessway*; and (A) at maximum 20 m intervals along the *accessway*; and (d) an intersection of *accessways* satisfies the spatial requirements for a passing and turning space; and (e) a passing space may serve as a turning space; and (f) a ramp complying with AS1428.1 or a passenger lift need not be provided to serve a storey or level other than the entrance storey in a Class 5, 6, 7b or 8 building— i. containing not more than 3 storeys; and i. with a floor area for each storey, excluding the entrance storey, of not more than 200 m²; and (g) clause 7.4.1(a) of AS1428.1 does not apply and is replaced with 'the pile height or pile thickness shall not exceed 11 mm and the carpet backing thickness shall not exceed 4 mm'; and (h) the carpet pile height 11 mm, pile thickness dimension 4 mm, carpet backing thickness dimension 15 mm. **AS1428.1-2009** Part 6 – Continuous Accessible Paths of Travel Part 7 – Floor or Ground Surfaces on Continuous Accessible Paths of Travel and Circulation Spaces Part 12 – Handrails Part 13 – Doorways, Doors and Circulation Space at Doors Part 14 – Switches and General Purpose Outlets (Power Points) Part 17 - Grabrails	Doors (including double doors) scale less than 850 mm in width. In particular the doors into accessible change rooms / facilities scales as 800 mm. **Drainage Grates** Some grates were identified on photos. Not know whether the openings comply with requirements (see below).   
D3.4 Exemptions The following areas are not *required* to be *accessible*: (r) An area where access would be inappropriate because of the particular purpose for which the area is used. (s) An area that would pose a health or safety risk for people with a *disability*.	**Exempt Areas** The Kiosk, life guard, and staff rooms can be considered areas where employees are required to be able-bodied. Access is not required to these rooms.

BCA Clause No. / Compliance Requirement	Compliance Query
(t) Any path of travel providing access only to an area exempted by (a) or (b).	
D3.5 Car Parking *Accessible* carparking spaces— (u) subject to (b), must be provided in accordance with Table D3.5 in— i. a Class 7a building *required* to be *accessible*; and i. a carparking area on the same allotment as a building *required* to be *accessible*; and (v) need not be provided in a Class 7a building or a carparking area where a parking service is provided and direct access to any of the carparking spaces is not available to the public; and (w) subject to (d), must comply with AS/NZS2890.6; and (x) need not be designated where there is a total of not more than 5 carparking spaces, so as to restrict the use of the carparking space only for people with a disability.	**On-Site Carpark Area** There appears to be 94 carparks and 4 wide carparking bays. Assuming two shared zones the 2 accessible parking bays comply with the required numbers from BCA Table D3.5. Shared zones with bollard should be provided if they are not already.
Table D3.5 **Carparking spaces for people with a *disability*** Class of building to which the carpark or carparking area is associated: Number of *accessible* carparking spaces *required* :	
Class 1b and 3 (a) Boarding house, guest house, hostel, house, backpackers accommodation, or the residential part of a hotel or motel: To be calculated by multiplying the total of carparking spaces by the percentage of i. *accessible* sole-occupancy units to the total number of sole-occupancy units; or i. *accessible* bedrooms to the total number of bedrooms; and the calculated number is to be taken to the next whole figure. (a) Residential part of a school, accommodation for the aged, disabled or children, residential part of a healthcare building which accommodates members of staff or the residential part of a detention centre: 1 space for every 100 carparking spaces or part	
Class 5,7, 8 or 9c 1 space for every 100 carparking spaces or part thereof	
Class 6 (a) Up to 1000 carparking spaces; and thereof: 1 space for every 50 carparking spaces or part thereof (a) for each additional 100 carparking spaces or part thereof in excess of 1000 carparking spaces: 1 space.	
Class 9a (a) Hospital (non-outpatient area): 1 space for every 100 carparking spaces or part thereof (a) Hospital (outpatient area): i. up to 1000 carparking spaces: 1 space for every 50 carparking spaces or part and thereof i. for each additional 100 carparking spaces or part thereof in excess of 1000 carparking	

BCA Clause No. / Compliance Requirement	Compliance Query
spaces: 1 space (b) Nursing home: 1 space for every 100 carparking spaces or part thereof (c) Clinic or day surgery not forming part of a hospital: 1 space for every 50 carparking spaces or part thereof.	
Class 9b (a) School: 1 space for every 100 carparking spaces or part thereof (a) Other assembly building— i. up to 1000 carparking spaces: 1 space for every 50 carparking spaces or part thereof i. for each additional 100 carparking spaces or part thereof in excess of 1000 carparking spaces: 1 space	**Carpark** Total of 94 parks requires two to be accessible.
D3.6 Signage In a building *required* to be *accessible*— (y) *Braille* and tactile signage complying with Specification D3.6 must— i. incorporate the international symbol of access or deafness, as appropriate, in accordance with AS1428.1 and identify each— (A) sanitary facility, except a sanitary facility within a sole-occupancy unit in a Class 1b or Class 3 building; and (A) space with a hearing augmentation system; and i. identify each door *required* by E4.5 to be provided with an exit sign and state— (A) "Exit"; and (A) "Level" ; and either (aa) the floor level number; or (bb) a floor level descriptor; or (cc) a combination of (aa) and (bb); and (z) signage including the international symbol for deafness in accordance with AS1428.1 must be provided within a room containing a hearing augmentation system identifying— i. the type of hearing augmentation; and i. the area covered within the room; and ii. if receivers are being used and where the receivers can be obtained; and (aa) signage in accordance with AS1428.1 must be provided for *accessible* unisex sanitary facilities to identify if the facility is suitable for left or right handed use; and (bb) signage to identify an ambulant *accessible* sanitary facility in accordance with AS1428.1 must be located on the door of the facility; and (cc) where a pedestrian entrance is not *accessible*, directional signage incorporating the international symbol of access, in accordance with AS1428.1 must be provided to direct a person to the location of the nearest *accessible* pedestrian entrance; and (dd) where a bank of sanitary facilities is not provided with an *accessible* unisex sanitary facility, directional signage incorporating the international symbol of access in accordance with AS1428.1 must be placed at the location of the sanitary facilities that are not *accessible*, to direct a person to the location of the nearest *accessible* unisex sanitary facility.	**Change Facilities** Signage from photos did not confirm whether left handed or right handed facilities were identified. **Directional Signage** The toilets to the crèche/meeting area to be provided with signage indicating the location of the accessible change room/sanitary facility.

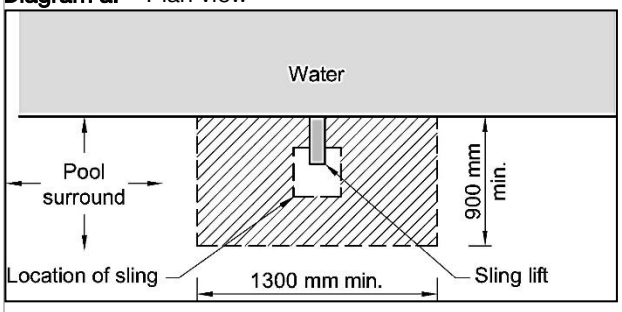
BCA Clause No. / Compliance Requirement	Compliance Query
D3.7 Hearing Augmentation (ee) A hearing augmentation system must be provided where an inbuilt amplification system, other than one used only for emergency warning, is installed— i. in a room in a Class 9b building; or i. in an auditorium, conference room, meeting room or room for judicatory purposes; or ii. at any ticket office, teller's booth, reception area or the like, where the public is screened from the service provider. (ff) If a hearing augmentation system *required* by (a) is— i. an induction loop, it must be provided to not less than 80% of the floor area of the room or space served by the inbuilt amplification system; or i. a system requiring the use of receivers or the like, it must be available to not less than 95% of the floor area of the room or space served by the inbuilt amplification system, and the number of receivers provided must not be less than— (A) if the room or space accommodates up to 500 persons, 1 receiver for every 25 persons or part thereof, or 2 receivers, whichever is the greater; and (A) if the room or space accommodates more than 500 persons but not more than 1000 persons, 20 receivers plus 1 receiver for every 33 persons or part thereof in excess of 500 persons; and (B) if the room or space accommodates more than 1000 persons but not more than 2000 persons, 35 receivers plus 1 receiver for every 50 persons or part thereof in excess of 1000 persons; and (C) if the room or space accommodates more than 2000 persons, 55 receivers plus 1 receiver for every 100 persons or part thereof in excess of 2000 persons. (gg) The number of persons accommodated in the room or space served by an inbuilt amplification system must be calculated according to D1.13. (hh) Any screen or scoreboard associated with a Class 9b building and capable of displaying public announcements must be capable of supplementing any public address system, other than a public address system used for emergency warning purposes only.	**Swimming / Leisure Pool Area** If the area has a PA system that provides communication to patrons for entertainment or other purpose (apart from emergency warning) the space is required to be provided with a Hearing Augmentation System.
D3.8 Tactile Indicators (a) For a building *required* to be *accessible*, tactile ground surface indicators must be provided to warn people who are blind or have a vision impairment that they are approaching— i. a stairway, other than a fire-isolated stairway; and i. an escalator; and ii. a passenger conveyor or moving walk; and iii. a ramp other than a fire-isolated ramp, step ramp, kerb ramp or swimming pool ramp; and iv. in the absence of a suitable barrier— (A) an overhead obstruction less than 2 m above floor level, other than a doorway; and (A) an *accessway* meeting a vehicular way adjacent to any pedestrian entrance to a	**Carpark** Unsure as to whether the roadway is at the same level as the footpath. If so tactiles to be provided adjacent the roadway (up to where kerbs commence).

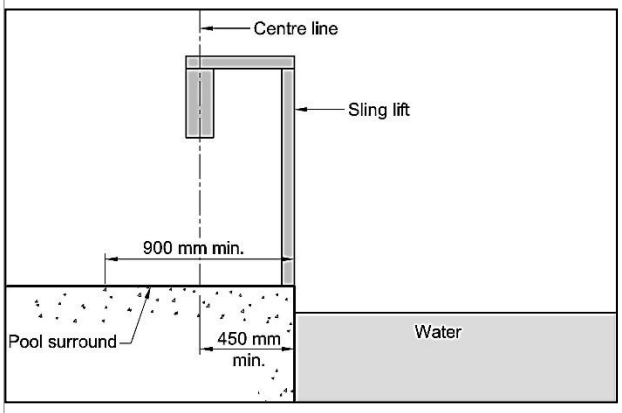
BCA Clause No. / Compliance Requirement	Compliance Query
building, excluding a pedestrian entrance serving an area referred to in D3.4, if there is no kerb or kerb ramp at that point, except for areas exempted by D3.4. (a) Tactile ground surface indicators *required* by (a) must comply with sections 1 and 2 of AS/NZS1428.4.1. (b) A hostel for the aged, nursing home for the aged, a residential aged care building Class 3 accommodation for the aged, Class 9a health-care building or a Class 9c building need not comply with (a)(i) and (iv) if handrails incorporating a raised dome button in accordance with the requirements for stairway handrails in AS 1428.1 are provided to warn people who are blind or have a vision impairment that they are approaching a stairway or ramp.	
D3.9 Wheelchair seating spaces in Class 9b assembly buildings (a) Where fixed seating is provided in a Class 9b assembly building, wheelchair seating spaces complying with AS1428.1 must be provided in accordance with the following: (a) The number and grouping of wheelchair seating spaces must be in accordance with Table D3.9 (b) In a cinema – i. with not more than 300 seats — wheelchair seating spaces must not be located in the front row of seats; and i. with more than 300 seats — not less than 75% of required wheelchair seating spaces must be located in rows other than the front row of seats; and ii. the location of wheelchair seating is to be representative of the range of seating provided.	**General** Confirmed that no fixed seating provided.
Table D3.9 **Wheelchair seating spaces in Class 9b Assembly Buildings** Number of fixed seats in a room or space: Number of wheelchair seating spaces: Group and location i. Up to 150: 3 spaces: 1 single space; and 1 group of 2 spaces. i. 151 to 800: 3 spaces; Not less than 1 single space ii. plus 1 additional space for each additional 50 seats or part thereof in excess of 150 seats: Not less than 1 group of 2 spaces; and not more than 5 spaces in any other group. iii. 801 to 10,000: 16 spaces; Not less than 2 single spaces; iv. plus 1 additional space for each additional 100 seats or part thereof in excess of 800 seats: Not less than 2 groups of 2 spaces; and not more	

BCA Clause No. / Compliance Requirement	Compliance Query
than 5 spaces in any other group; and the location of spaces is to be representative of the range of seating provided. v. More than 10,000: 108 spaces; Not less than 5 single spaces; vi. plus 1 additional space for each additional 200 seats or part thereof in excess of 10,000 seats: Not less than 5 groups of 2 spaces; and not more than 10 spaces in any other group; and the location of spaces is to be representative of the range of seating provided.	
D3.10 Swimming Pools (a) Not less than 1 means of *accessible* water entry/exit in accordance with Specification D3.10 must be provided for each swimming pool *required* by Table D3.1 to be *accessible*. (a) An *accessible* entry/exit must be by means of— i. a fixed or movable ramp and an aquatic wheelchair; or i. a zero depth entry at a maximum gradient of 1:14 and an aquatic wheelchair; or ii. a platform swimming pool lift and an aquatic wheelchair; or iii. a sling-style swimming pool lift. (b) Where a swimming pool has a perimeter of more than 70 m in length, at least one *accessible* water entry/exit must be provided by a means specified in (b)(i), (ii) or (iii). (c) Latching devices on gates and doors forming part of a swimming pool safety barrier need not comply with AS1428.1.	**Swimming Pool** The lane pool exceeds 70 m in perimeter and has a fixed ramp entrance located on the westerns side. **Program / Leisure Pool** The program / leisure pool also has a pool perimeter exceeding 70 m. The pool has a zero depth entry at 1:14 gradient. **50 m Outdoor Pool** The pool did not appear to have any entrance points for people with disabilities.
D3.11 Ramps On an *accessway*— (a) a series of connected ramps must not have a combined vertical rise of more than 3.6 m; and (a) a landing for a step ramp must not overlap a landing for another step ramp or ramp.	Noted
D3.12 Glazing on an accessway On an *accessway*, where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights and any glazing capable of being mistaken for a doorway or opening, must be clearly marked in accordance with AS1428.1.	Noted
Specification D3.6 - Braille and Tactile Signs	
2. Location of braille and tactile signs Signs including symbols, numbering and lettering must be designed and installed as follows: (ii) *Braille* and tactile components of a sign must be located not less than 1200 mm and not higher than 1600 mm above the floor or ground surface. (jj) Signs with single lines of characters must have the line of tactile characters not less than 1250 mm and not higher than 1350 mm above the floor or ground surface. (kk) Signs identifying rooms containing features or	Noted

BCA Clause No. / Compliance Requirement	Compliance Query
facilities listed in D3.6 must be located— i. on the wall on the latch side of the door with the leading edge of the sign located between 50 mm and 300 mm from the architrave; and i. where (i) is not possible, the sign may be placed on the door itself. (ll) Signs identifying a door *required* by E4.5 to be provided with an exit sign must be located— i. on the side that faces a person seeking egress; and i. on the wall on the latch side of the door with the leading edge of the sign located between 50 mm and 300 mm from the architrave; and ii. where (ii) is not possible, the sign may be placed on the door itself.	
3. Braille and tactile sign specification (mm) Tactile characters must be raised or embossed to a height of not less than 1 mm and not more than 1.5 mm. (nn) Sentence case (upper case for the first letter of each main word and lower case for all other letters) must be used for all tactile characters, and— i. upper case tactile characters must have a height of not less than 15 mm and not more than 55 mm, except that the upper case tactile characters on a sign identifying a door *required* by E4.5 to be provided with an exit sign must have a height of not less than 20 mm and not more than 55 mm; and i. lower case tactile characters must have a height of 50% of the related upper case characters. (oo) Tactile characters, symbols, and the like, must have rounded edges. (pp) The entire sign, including any frame, must have all edges rounded. (qq) The background, negative space or fill of signs must be of matt or low sheen finish. (rr) The characters, symbols, logos and other features on signs must be matt or low sheen finish. (ss) The minimum letter spacing of tactile characters on signs must be 2 mm. (tt) The minimum word spacing of tactile characters on signs must be 10 mm. (uu) The thickness of letter strokes must be not less than 2 mm and not more than 7 mm. (vv) Tactile text must be left justified, except that single words may be centre justified. (ww) Tactile text must be Arial typeface.	Noted
4. Luminance contrast The following applies to *luminance contrast*: (xx) The background, negative space, fill of a sign or border with a minimum width of 5 mm must have a *luminance contrast* with the surface on which it is mounted of not less than 30%. (yy) Tactile characters, icons and symbols must have a minimum *luminance contrast* of 30% to the surface on which the characters are mounted. (zz) *Luminance contrasts* must be met under the lighting conditions in which the sign is to be located.	Noted

BCA Clause No. / Compliance Requirement	Compliance Query
5. Lighting *Braille* and *tactile signs* must be illuminated to ensure *luminance contrast* requirements are met at all times during which the sign is required to be read.	Noted
6. Braille The following applies to *Braille*: (aaa) *Braille* must be grade 1 braille (uncontracted) in accordance with the criteria set out by the Australian Braille Authority. (bbb) *Braille* must be raised and domed. (ccc) *Braille* must be located 8 mm below the bottom line of text (not including descenders). (ddd) *Braille* must be left justified. (eee) Where an arrow is used in the tactile sign, a solid arrow must be provided for braille readers. (fff) On signs with multiple lines of text and characters, a semicircular braille locator at the left margin must be horizontally aligned with the first line of *Braille* text.	Noted
Specification D3.10 – Accessible Water Entry/Exit for Swimming Pools	
2. Fixed or moveable ramp A fixed or moveable ramp must— (ggg) have a slip-resistant surface; and (hhh) have a maximum gradient of 1:14; and (iii) have handrails complying with the requirements for ramps in AS 1428.1, installed on both sides of the ramp; and (jjj) have kerbs in accordance with the requirements for ramps in AS 1428.1; and (kkk) extend to a depth of not less than 900 mm and not more than 1100 mm below the stationary water level; and (lll) have landings in accordance with the requirements for ramps in AS 1428.1, with a landing located at the bottom and top of each ramp and a landing must be located at a level between 900 mm and 1100 mm below the stationary water level.	**Swimming Pool Ramp** Complies with requirements however slip rating of tiles not known.
3. Zero depth entry A zero depth entry must have – (a) have slip-resistant surface; and (a) have a maximum gradient of 1:14; and (b) a single handrail complying with the requirements for handrails in AS 1428.1, from the top of the entry point continuous to the bottom level area; and (c) a level area— i. 1500 mm long for the width of the zero depth entry at the entry point; and i. located at the bottom of the zero depth entry at a level between 900 mm and 1100 mm below the stationary water level.	**Program / Leisure Pool** Surface to be confirmed as slip resistant. Single handrail not provided.
4. Platform swimming pool lift A platform swimming pool lift must be— (mmm) capable of being operated from the swimming pool surround, within the swimming	Noted

BCA Clause No. / Compliance Requirement	Compliance Query
pool, and on the platform; and (nnn) located where the water depth is not more than 1300 mm; and (ooo) designed to withstand a weight capacity of not less than 160 kg and be capable of sustaining a static load of not less than 1.5 times the rated load.	
5. Sling-style swimming pool lift A sling lift must comply with the following: (ppp) A sling lift must be located where the water depth is not more than 1300 mm. (qqq) When the sling is in the raised position and in the transfer position, the centreline of the sling must be located over the swimming pool surround and not less than 450 mm from the swimming pool edge. (rrr) The surface of the swimming pool surround between the centreline of the sling and the swimming pool edge must have a gradient of not more than 1:50 and must be slip-resistant. (sss) A clear space— i. not less than 900 mm x 1300 mm; and i. with a gradient of not more than 1:50; and ii. having a slip-resistant surface; and iii. located so that the centreline of the space is directly below the lifting point for the sling, must be provided on the swimming pool surround parallel with the swimming pool edge on the side remote from the water (see Figure 5). (ttt) A sling lift must be capable of being operated from the swimming pool surround, within the swimming pool and from the sling. (uuu) A sling must be designed so that it will submerge to a water depth of not less than 500 mm below the stationary water level. (vvv) A sling lift must be designed to withstand a weight of not less than 136 kg and be capable of sustaining a static load not less than 1.5 times the rated load.	Noted
Figure 5 Clear swimming pool surround space for sling lift **Clear pool surround space for sling lift** **Diagram a.** Plan view  **Clear space for sling lift in the transfer position** **Diagram b.** Sectional elevation	Noted

BCA Clause No. / Compliance Requirement	Compliance Query
	
6. Aquatic wheelchair An aquatic wheelchair must comply with the following: (www) The height of the top surface of the seat must be not less than 430 mm. (xxx) The seat width must not be not less than 480 mm. (yyy) A footrest must be provided. (zzz) Armrests must be located on both sides of the seat and must be capable of being moved away from the side of the chair to allow a person to transfer on and off the seat.	Noted
SECTION F: HEALTH AND AMENITY	
Part F2 – Sanitary and Other Facilities	
F2.2 Calculation of number of occupants and facilities (a) The number of persons accommodated must be calculated according to D1.13 if it cannot be more accurately determined by other means. (b) Unless the premises are used predominantly by one sex, sanitary facilities must be provided on the basis of equal numbers of males and females. (c) In calculating the number of sanitary facilities to be provided under F2.1 and F2.3, a unisex facility *required* for people with a *disability* may be counted once for each sex. (d) For the purposes of this Part, a unisex facility comprises one closet pan, one washbasin and means for the disposal of sanitary towels.	**Occupant Numbers** 190 to swimming pool and program / leisure pool and 160 to other areas based on BCA Table D1.13 (total = 350 occupants) – please seek guidance from the Certificate of Occupancy in regard to maximum occupant numbers permitted.
F2.3 Facilities in Class 3 to 9 buildings (a) Except where permitted by (b), (c), (f), F2.4(a) and F2.4(b), separate sanitary facilities for males and females must be provided for Class 3, 5, 6, 7, 8 or 9 buildings in accordance with Table F2.3. (b) If not more than 10 people are employed, a unisex facility may be provided instead of separate facilities for each sex. (c) If the majority of employees are of one sex, not more than 2 employees of the other sex may share toilet facilities if the facilities are separated by means of walls, partitions and doors to afford privacy. (d) Employees and the public may share the same	**Facilities (showers)** One shower is required for 10 participants. This will require 14 showers to be provided however only 12 have been.

BCA Clause No. / Compliance Requirement	Compliance Query
facilities in a Class 6 and 9b building (other than a school or early childhood centre) provided the number of facilities provided is not less than the total number of facilities *required* for employees plus those *required* for the public. (e) Adequate means of disposal of sanitary towels must be provided in sanitary facilities for use by females. (f) Separate sanitary facilities for males and females need not be provided for patients in a ward area of a Class 9a building. (g) A Class 9a health-care building must be provided with— i. one kitchen or other adequate facility for the preparation and cooking or reheating of food including a kitchen sink and washbasin; and i. laundry facilities for the cleansing and drying of linen and clothing or adequate facilities for holding and dispatch or treatment of soiled linen and clothing, sanitary towels and the like and the receipt and storage of clean linen; and ii. one shower for each 8 patients or part thereof; and iii. one island-type plunge bath in each storey containing a ward area. (h) A Class 9b early childhood centre must be provided with— i. a kitchen or food preparation area with a kitchen sink, separate hand washing facilities, space for a refrigerator and space for cooking facilities, with— (A) the facilities protected by a door or gate with child proof latches to prevent unsupervised access to the facilities by children younger than 5 years old; and (B) the ability to facilitate supervision of children from the facilities if the early childhood centre accommodates children younger than 2 years old; and ii. one bath, shower or shower-bath; and iii. if the centre accommodates children younger than 3 years old— (A) a laundry facility comprising a washtub and space in the same room for a washing machine; and (B) a bench type baby bath, which is within 1m of the nappy change bench; and (C) a nappy changing bench which— (aa) is within 1 m of separate adult hand washing facilities and bench type baby bath; and (bb) must be not less than 0.9 m^2 in area and at a height of not less than 850 mm, but not more than 900 mm above the finished floor level; and (cc) must have a space not less than 800 mm high, 500 mm wide and 800 mm deep for the storage of steps; and (dd) is positioned to permit a staff member changing a nappy to have visibility of the play area at all times. (i) Class 9b theatres and sporting venues must be provided with one shower for each 10 participants or part thereof.	

<table>
<tr><th>BCA Clause No. / Compliance Requirement</th><th>Compliance Query</th></tr>
<tr><td>(j) Not less than one washbasin must be provided where closet pans or urinals are provided.</td><td></td></tr>
<tr><td>Table F2.3
Sanitary facilities in Class 3, 5, 6, 7, 8 or 9 buildings</td><td></td></tr>
<tr><td>Class 9b – sports venues or the like
User Group | Closet Pans | Urinals | Washbasins
Male participants | 1-20: 1 >20:+1/20 | 1-10: 1 >10: +1/10 | 1-10: 1 >10:+1/10
Female Participants | 1-10: 1 >10:+1/10 | | 1-10: 1 >10:+1/10
Male patrons spectators | 1-250: 1 251-500: 2 >500:+1/500 | 1-100: 1 >100:+1/100 | 1-150: 1 >150:+1/150
Female patrons spectators | 1-15: 1 16-60: 2 61-120: 3 >120:+1/70 | | 1-60: 1 61-200: 2 201-350: 3 >350:+1/150</td><td>Sanitary Facilities
Facilities are only required to Aquatic Centre's if they also are used for competition. Using this type of venue as a guide the following facilities are required.

Based on 140 participants:

<table><tr><th>Closet Pans</th><th>Urinals</th><th>Wash Basins</th></tr><tr><td>4 Male</td><td>7 Male</td><td>7 Male</td></tr><tr><td>7 Female</td><td>-</td><td>7 Female</td></tr></table>
Note that current facilities are suitable for females however males would require an additional toilet pan.</td></tr>
<tr><td>NOTES:
Number: means the number of facilities required.
> : means greater than
Employees: a reference to employees includes owners and managers using the building.
A reference to "+1/100 (add 1 per 100) or 150, 250, 500" etc. includes any part of that number.</td><td></td></tr>
<tr><td>F2.4 Accessible Sanitary Facilities

In a building required to be accessible—
(a) accessible unisex sanitary compartments must be provided in accessible parts of the building in accordance with Table F2.4(a);
(b) accessible unisex showers must be provided in accordance with Table F2.4(b); and
(c) at each bank of toilets where there is one or more toilets in addition to an accessible unisex sanitary compartment at that bank of toilets, a sanitary compartment suitable for a person with an ambulant disability in accordance with AS 1428.1 must be provided for use by males and females; and
(d) an accessible unisex sanitary compartment must contain a closet pan, washbasin, shelf or bench top and adequate means of disposal of sanitary towels; and
(e) the circulation spaces, fixtures and fittings of all accessible sanitary facilities provided in accordance with Table F2.4(a) and Table F2.4(b) must comply with the requirements of AS1428.1; and
(f) an accessible unisex sanitary facility must be located so that it can be entered without crossing an area reserved for one sex only; and
(g) where two or more of each type of accessible unisex sanitary facility are provided, the number of left and right handed mirror image facilities must be provided as evenly as possible; and
(h) where male sanitary facilities are provided at a separate location to female sanitary facilities, accessible unisex sanitary facilities are only</td><td>Accessible Sanitary Facilities
Two accessible sanitary facilities are provided which is compliant. Note that the toilet pans have no backrest with luminance contrast.

Ambulant facilities
No ambulant facilities have been provided.</td></tr>
</table>

BCA Clause No. / Compliance Requirement	Compliance Query
required at one of those locations; and (i) an *accessible* unisex sanitary compartment or an *accessible* unisex shower need not be provided on a storey or level that is not *required* by D3.3(f) to be provided with a passenger lift or ramp complying with AS1428.1.	
Table 2.49(a) **Minimum accessible unisex sanitary compartments to be provided**	
Class 1b (a) Not less than 1; and (b) where private *accessible* unisex sanitary compartments are provided for every *accessible* bedroom, common *accessible* unisex sanitary compartments need not be provided.	
Class 2 Where sanitary compartments are provided in common areas, not less than 1.	
Class 3 and 9c (a) In every *accessible* sole-occupancy unit provided with sanitary compartments within the *accessible* sole-occupancy unit, not less than 1; and (b) at each bank of sanitary compartments containing male and female sanitary compartments provided in common areas, not less than 1.	
Class 5, 6, 7, 8 or 9 – except for within a ward area of a Class 9a health-care building Where F2.3 requires closet pans— (a) on every storey containing sanitary compartments; and (b) where a storey has more than 1 bank of sanitary compartments containing male and female sanitary compartments, at not less than 50% of those banks.	
Class 10a – except (a) a Class 10a appurtenant to another Class of building; and (b) a sanitary compartments dedicated to a single caravan/camping site At each bank of sanitary compartments containing male and female sanitary compartments, not less than 1.	
Table 2.49(b) **Minimum accessible unisex showers to be provided**	
Class 1b (a) Not less than 1; and (b) where private *accessible* unisex showers are provided for every *accessible* bedroom, common *accessible* unisex showers need not be provided.	
Class 2 Where showers are provided in common areas, not less than 1	
Class 3 and 9c (a) In every *accessible* sole-occupancy unit provided with showers within the *accessible* sole-occupancy unit, not less than 1; and	

BCA Clause No. / Compliance Requirement	Compliance Query
(b) 1 for every 10 showers or part thereof provided in common areas.	
Class 5, 6, 7, 8 or 9 – except for within a ward area of a Class 9a health-care building Where F2.3 requires 1 or more showers, not less than 1 for every 10 showers or part thereof.	**Showers** Two accessible showers provided which is compliant.
Class 10a – except (a) a Class 10a appurtenant to another Class of building; and (b) a sanitary compartments dedicated to a single caravan/camping site Where showers are provided, 1 for every 10 showers or part thereof.	

Disability & Discrimination Act (DDA) 1992 Review

The following items may expose Horsham Aquatic Centre to the possibility of a DDA complaint. Although the complaints may not be upheld, the consequence of a complaint may have significant detrimental effect on the social, financial and health standards that are expected to and within public buildings.

Risk Area	Risk Response
External	
1. Paths of Travel & Pedestrian Links to Other Buildings (a) All main paths of travel must be provided with a clear width of not less than 1500mm to allow a wheelchair and ambulant person to pass (1800mm preferred to allow two wheelchairs to pass). Ensure a clear width on secondary paths of travel of not less than 1200mm. (a) The intervals between landings may be increased by 30% where a wall and handrail, kerb and handrail, or kerb rail and handrail are provided on one side of the *walkway*. (b) External path surfaces shall be constructed for all weather usage and possess a slip resistant finish, in accordance with standards outlined in HB 197. For example: concrete with abrasive or texture finish, concrete with exposed aggregate or bituminous finish. (c) Soft surfaces, such as gravel, crushed rock or sand must be appropriately stabilised ensure the surface is traversable for wheelchair users. (d) Irregular path surfaces, such as cobblestones, gravel and wood discs should be avoided. Variable surfaces are difficult for wheelchair users to traverse, and gaps can trap canes, crutches and heels. (e) Ensure gaps between timber battens are no less than 6mm and no greater than 10mm. Battens should be laid perpendicular to the path of travel. (f) Trees and shrubs, garden seating and display boards should be located a minimum of 600mm from the edge of the path of travel and highlighted in a contrasting colour or designated by a kerb (g) All accessible paths of travel must be defined for people with vision impairments. This may include the use of borders, planter boxes or garden edging with appropriate texture and colour contrast or implementing a path of travel with an appropriate texture and colour contrast. (h) Where there is a drop-off or hazard adjacent to the path of travel (walkway) which may place people at risk of injury, a suitable barrier must be provided. (i) Pedestrian crossings across major vehicular thoroughfares should be highlighted by indicative marking and warning signage for both pedestrians and drivers.	**Building Site Area** The main points of pedestrian entry are the carpark entrances from Hamilton Street and Urqhart Street. The documentation includes a path from the road junction between Hamilton and Urqhart. If arriving by wheelchair from the north-east there is no accessible path of travel, only a grassed path, to the main entry point on Hamilton Street. The location plan indicates that a path was to be provided however Google street view confirms these works did not proceed. **Ramp Entrance** The 4x 6 m, 1:16.5 would provide some fatigue for manual wheelchair users or patrons with walking aids to reach the main entrance. Handrails do not appear to comply, meaning patrons are required to let go of the rail prior to standing on a flat surface. The excessive change in height does not provide the most appealing entrance for people with disabilities into the Aquatic Centre having to navigate four ramps that have a number of pinch points and no passing points. The portico covers the ramp adjacent the entrance however on days of poor weather the travel required for wheelchair users, in particular since the ramp width is narrow and can only be used one at a time, would be significant prior to reaching a covered area. The slip rating of the ramp and stairs should also be assessed further. **Travel to the Building Entrance** There is a significant distance to travel from the street entrance to the building entry including a series of ramps which provide limited room at the air-lock entrance for rest. Consider seating adjacent the entrance as well as near the footpath. **Carpark** Consider installing bollards to the widened path adjacent the road. Warning signs and slow speeds also should be considered to reduce risk of any accidents at the crossing. Tactiles also provided to both sides of the road crossing.
2. Street Furniture & Rubbish Bins (a) Street furniture should be located along main paths of travel adjacent to entrances, major crossover areas and no more than 60 metres apart. (a) Where furniture is provided along a streetscape, all	**Rest Seating & Drinking Fountain** As per the above, rest seating should be provided near the drop off zone. A drinking fountain would also be of some benefit.

Risk Area	Risk Response
items should be grouped together and located on the kerb side without obstructing the clear path of travel. (b) Rest seating must be designed for access by all at an appropriate height and with provision of a backrest and armrests. (c) Seating should be located a minimum of 600mm from the edge of the path of travel to allow leg room without obstructing the path of travel. (d) Where drinking fountains are provided, at least one should be designed for access, in accordance with the following: i. Provision of knee clearance of no less than 640 - 650mm (680mm preferred) in height for a minimum depth of 300mm. i. Provision of foot clearance of not less than 280 - 290mm in height for a depth of 200mm. (e) Operational button to be located at the front or side of the unit within 180mm from the front edge of the drinking fountain and must be operable by one hand. (f) Controls must be operable by one hand only with an operating force of not more than 19.5N. Where this is not achieved, an electronic touch control with minimum 6 seconds of adjustable flow is recommended. (g) Unobstructed circulation space must be provided in front of the accessible drinking fountain of 800mm by 1300mm, with maximum grade of 1:40. (h) Where the unit is recessed, a clear width of no less than 900mm must be provided. (i) Where a cup dispenser is provided, the height of the dispensing component must be no more than 1100mm above the finished floor level. (j) The height of the arc of the bubbler should not exceed maximum height of 125mm and must be 60mm – 80mm from the front edge of the fountain. (k) Provide rubbish bins at a height between 700mm – 1200mm (900mm preferred). (l) Rubbish bins designed to be continuous to the floor are preferred. (m) Where different recycling areas are located together, provide a colour contrast on the receptacles. (n) Where a cover is provided, the design must allow disposal of rubbish with one hand in a single motion with limited operating force.	
3. Carparking Car parking spaces for people with disabilities must be provided as per the following percentiles: Commercial 1 – 2% Retail 2 – 3% Transport 1 – 3% Community/Recreation 2 – 3% Education Facilities 2 – 3% Entertainment 3 – 4% Medical 3 – 4% Residential Total number of car parking spaces x % of accessible units **Off-street parking** (a) Bollards shall be at least 1300mm in height and possess a surface 30% luminance contrast to the	**Parking** If only 2 accessible carparks are provided there should be consideration for a third accessible parking bay keeping in mind the demographics of occupants. Signage at the street entrance points should also direct vehicles wishing to use the accessible carparking bays to their location.

Risk Area	Risk Response
surrounding surfaces. (a) Appropriate kerb ramps must be provided at the top of each shared area linking the continuous accessible path of travel. The kerb ramp may not encroach on the shared area (refer External Paths of Travel – Kerb ramp design). (b) Where parking bays for people with disabilities are on the opposite side of a traffic thoroughfare a pedestrian crossing marked in indicative colour should be installed. (c) Vertical signage indicating terms of parking in a bay for people with disabilities incorporating the international symbol of access. Where vertical signage is not visible from the carpark entrance, additional signage indicating the direction of the parking spaces for people with disabilities must be provided. **On-street parking** (a) The shared area may be at a higher level than the dedicated space in which case it shall be separated by a kerb (150mm high preferred) however the path of travel must be increased in width to accommodate kerb ramps and landings (approx 2530mm).	
4. Transport Drop-off Areas (a) The maximum crossfall for a set-down area should be 1:40. (a) A small seating area for waiting and resting should be provided next to set-down areas, sheltered from sun, rain, and prevailing winds. (b) Provide a minimum of 900mm space within the shelter at the end of the seating area to accommodate wheelchairs or prams. (c) Ensure a clear circulation space in front of and at the rear of the shelter of no less than 1200mm in width. If this cannot be achieved, ensure a clear circulation space is provided at the approaching end of the shelter, ensuring sightlines for waiting passengers are not obscured. (d) A continuous accessible path of travel must be provided from the drop off area to the accessible building entrances. (e) Provide a kerb ramp at each public and private transport drop off area, with one kerb ramp to be located centrally and a further ramp to be provided at the rear of the drop-off area to aid rear loading. (f) Where the roadway and adjacent path of travel are provided at the same level, bollards and warning tactile ground surface indicators shall be provided to define the pedestrian path of travel for the length of the set-down area. (g) Warning tactile ground surface indicators to be set back 300mm from the kerb edge or footpath face of the bollards with an overall tactile indicator width of 600mm for the length of the set-down area. (h) The tactile ground surface indicators must possess a 30% (45% for individual nodes or for discrete dots of two colours or materials 60% for the top section) luminance contrast to the surrounding surface. (i) Bollards shall be provided with minimum clear width of 1000mm (1200mm preferred) between them.	**Seating** Seating for drop off can also be used for general pedestrian movement from the street boundary. The seating should be sheltered from sun, rain and prevailing wind.

Risk Area	Risk Response
(j) Bollards shall be at least 1300mm in height and possess a surface 30% luminance contrast to the surrounding surfaces.	
5. Lighting For external locations a person should be able to move around the designated path of travel with the provision of consistent lighting that avoids shadows and dark areas.	**Carpark** Lighting should be provided adjacent accessible parking bays and the road crossing.
6. External Wayfinding Signage **Shorelines** Continuous Accessible Path of Travel (CAPT) located: (a) adjacent building wall or partitioning, raised garden wall, raised kerb and (b) adjacent horizontal surfaces; grade element (i.e. lawn soft fall etc.) have a textual surface between 100 mm – 300mm wide with a minimum 30% luminance contrast with the adjacent pedestrian surface. Shoreline surface material: ○ soft dense planting or grass ○ permeable paving system with pebbles ○ flagstones (heavy textured) ○ stone ○ large grass or sawn timber edging **Pathway incorporating a Textural Surface** Textural contrast is defined as the ration of the mean profile depth (MPD) or the mean texture depth (MTD) of the shoreline surface to the MPD or the MTD of the wayfinding path surface. (a) Minimum width 600 mm if no shoreline (b) Vertical surface shall have a skirting with minimum height of 200 mm ≤ 300mm with a minimum 30% luminance contrast with the horizontal pedestrian surface. **Wayfinding information points** (when more than a sole occupancy) (a) Braille and tactile signs/visual non tactile signs (b) A reception (c) Concierge or volunteers desk	Noted
Internal	
7. Paths of Travel (a) A continuous accessible path of travel shall be provided to all accessible required spaces within a building. This should include multiple paths of travel or as a minimum quickest and most convenient access paths. (b) Ensure a minimum clear width on arterial paths of travel of not less than 1800mm, main paths of travel 1500mm, and secondary paths of travel 1200mm. (c) For paths of travel less than 1800mm passing areas of a width of 1800mm must be provided of a length of 2000mm every nine metres. (d) Internal displays must be kept a minimum of 500mm off paths of travel and not provide barriers (i.e. advertising, tables and general displays). (e) Lateral extremities of paths of travel skirting boards and / or architraves should be a contrasting colour	**Pool Surround** Although 1.8 metres is provided between walls and pool filtration grates (which is considered adequate) any storage along these paths will prohibit wheelchair users from passing. Noted that photo's indicate signage boards and equipment encroaching into this space. **General** The skirtings do not provide a great deal of contrast to the floor and doors to their adjacent walls. The central floor does draw patrons along the corridor however perhaps it should also return to the control table and main entrance into the pool area.

Risk Area	Risk Response
to the general path of travel colour. This may be achieved by a different wall and floor colour. (f) Ensure columns do not protrude into the path of travel and possess a 30% luminance contrast to the surrounding surfaces. (g) All accessible entrances must be at grade. If a threshold is present a threshold ramp must be provided however best to avoid. (h) Where an entrance is located within an external wall, consider protecting the entrance from wind forces, which may contribute to the operating force of the door, by means of a sliding door, airlock or other.	
8. Stairs (a) Stair treads and nosings must not overhang beyond the face of the riser. An angled riser with a maximum set back of 25mm may be provided. (b) A tread width of 275mm – 300mm and riser height of 150mm – 165mm is preferred. **Facilities for Children** Where a high proportion of users are children or adolescents with physical disabilities, dual height handrails are to be provided.	
9. Lifts / Elevators (a) A through car is the preferred platform type, as a wheelchair user is not required to reverse to exit the lift. (b) Controls to enable independent operation of the platform controls. That is, key operation not preferred. (c) Any operating instructions to be provided with *Braille* and tactile features which achieve appropriate luminance contrast of no less than 30% to the background to which it is viewed.	
10. Ramps **Step Ramps (1:8)** (a) Provision of two or more consecutive step ramps is not preferred; however where more than two step ramps are provided, then a minimum distance of 6m must be provided between the top of the second ramp and the bottom of the third ramp. **Ramps (1:14 – 1:19)** (a) Ramps to have a minimum clear width of 1200mm (1500mm preferred). (b) The minimum width of a curved ramp must be no less than 1500mm. (c) Exposed edges and corners of handrails shall be finished with a safety radius (no less than 5mm). (d) Ensure a minimum clearance above the handrail of no less than 600mm.	Noted

Risk Area	Risk Response
11. Doors (a) Where glazed viewing panels are provided in doors, they must be installed to comply with the following: i. The lower edge of the glazing must be no greater than 1000mm above finished floor level; i. The upper edge of the glazing must be no less than 1600mm above finished floor level; and ii. The glazed panel must be no less than 150mm in width and be located no more than 200mm from the latch edge of the door. (b) All manual and automatic doors shall possess direction of swing signage (push/pull or slide) at a height of 1000mm both internally and externally. Signage lettering to be 50mm in height.	Noted
12. Floor Surfaces (a) All floor surfaces must be traversable by a person who uses a wheelchair. (b) All floor surfaces should not contain a gloss surface and a carpet pile height that creates a "grain effect". (c) The carpet edge trim must not create a ridge on the floor surface higher than 3mm. (d) On any carpeted ramps, no underlay shall be provided to ensure decreased rolling friction for wheelchairs. (e) Bold patterned floor surfaces should be avoided as these can be confused with changes in level by people with vision impairment.	Noted
13. Seating and tables (a) Seating for people with disabilities and loose seating must be provided where seating for ambulant people is provided. (b) Where possible a range of seating should be provided, including seating with and without armrests and backrests. This will allow wheelchair users to transfer between their wheelchair and the seat and also accommodate people of larger stature. (c) Seats should be located adjacent to pathways, set back at least 600mm to allow leg room without obstructing the path. (d) Heel space of at least 150mm with a minimum width of 350mm should be provided under seats to assist in rearward adjustments of feet when rising. (e) Provide a minimum of 900mm space between seats or at either end to accommodate wheelchairs or prams. (f) Provide a seating height of 450mm, with side arms that extend a further 260mm +/- 40mm in height and a back height of 750mm – 790mm. (g) A seating height of 520mm is preferred where there is likely to be a high proportion of elderly users. Seats at lower heights may represent a hazard to people with vision impairments and older persons who may experience difficulty when lowering to the seated position. (h) Armrests must not extend beyond the perimeter of the base or legs of the seat to ensure stability of the chair when rising with use of only one armrest. (i) A minimum radius of 30mm should be provided to	Control Room The table has a low work bench (850 mm) and also appears to be clear beneath. Pool Area Fixed bench seats are provided to the program/leisure pool while the program/leisure pool has removal seats. Seating should be provided with arm and backrests for elderly to both pools and at lowered and varying heights. Enhanced access seating should also be considered which provides an additional half seating width of free. This seating should possess removable or flexible arm rests to allow ease of maneuver off and back onto a wheelchair. The access seating should be provided in a range of areas and covered by a hearing augmentation system.

Risk Area	Risk Response
the front edge of the seat. (j) When located outdoors, the top surface of seats should be angled appropriately (maximum slope of 100° - 105°) to enable adequate water run-off. (k) Seat walls of between 600mm and 700mm high are suitable for half-sitting and resting packages. Seat walls should be at least 300mm wide with an overhang of 100mm. (l) Where seats are associated with tables, seats should be no more than 320mm beneath the upper surface of the table, with at least 200mm knee clearance provided between the seat and the underside of the table. (m) Where a single table is provided, ensure a height of no less than 850mm +/- 20mm with the provision of knee clearance of not less than 820mm. Supports must be provided at least 630mm ± 10mm back from the edge of the table. (n) Where more than one table is provided, an even proportion of tables must be provided per the following: i. At a height of 850mm ± 20mm with the provision of knee clearance of no less than 820mm ± 20mm for a minimum depth of 630mm ± 10mm. i. At a height of 750mm ± 20mm with the provision of knee clearance of no less than 730mm ± 20mm for a minimum depth of 630mm ± 10mm. (o) A minimum width of 800mm must be provided between supports or other fixtures beneath the table. (p) Unobstructed circulation space must be provided in front of the table of 1550mm by 2040mm, with maximum grade of 1:40. (q) A path of travel of 910mm must be maintained between tables. The surface of the table shall be a matte or satin finish. (r) The surface of the table must achieve minimum 30% luminance contrast with the background surface to which it is viewed (i.e. wall and floor finishes), to aide detection of the table edge. **Enhanced Amenity Seating (EAS)** (a) An additional 0.25% of total seating shall be enhanced access seating (EAS). (b) EAS seating will be standard width seating with an additional half seating width of free space and should be located at the ends of rows, up or down as few steps as possible (Accessibility Standards for Sports and Leisure Facilities, IPC). (c) These seating areas should possess removable or flexible arm rests. (d) The wheelchair seating and EAS areas must be provided in a range of areas and levels and price ranges and be as adjacent to entries, lifts, toilet and food and beverage facilities as is possible. (e) A number of the EAS areas must be covered by a hearing augmentation listening system.	
14. Emergency Safe Havens (Refuge Area) A Safe Haven must be: • provided on every level of the building, • include sufficient space for people using	**Pool Area** Unclear what the existing strategy is for escape in an emergency. If the building is provided with smoke detection and occupant warning, they should be supplemented with a hearing augmentation system,

Risk Area	Risk Response
wheelchairs, • have appropriate lighting and signage, • constructed within fire resisting compartment and adjoin fire escape stairways, • located on route to an exit or evacuation lift, • fitted with an accessible, suitably located, reliable two-way communication system with a direct line to the building emergency control room. (a) Ensure alarms and warning systems are supplemented with a hearing augmentation system, visual signal or tactile vibration, or a buddy system to alert hearing impaired or deaf occupants served by a required audible alarm or warning system in all public access areas. (b) Provide an audible alarm in accordance with AS 2220.2 and be not less that 75dB (A). (c) Ensure a clear path of travel of not less than 1200mm to the emergency egress areas and also to the accessible emergency evacuation areas or location of the smoke safe areas. (d) If provided fire extinguishers should be at a height of not greater than 1000mm to operable handle for ease of usage in case of a fire. (e) If a first aid kit is provided it should be located in a central and accessible location (e.g. a Manager's Office), at an upper level height of not greater than 1200mm in a location with a circulation space of 1330mm x 800mm (frontal approach). **Multi Storey Buildings** For multi storey buildings it is not always achievable to provide ramped egress, therefore generally the most functional means of egress from these building for people with disabilities is through the use of the lifts i.e. a designated Fireman's lifts. In addition to the above, the following points should be considered: (a) In an emergency, people with disabilities, whose disability is such that they require assistance, should be assembled in a safe place, and attended by at least one member of the Emergency Control Organisation. (b) The Emergency Control Organisation personnel should be familiar with the number, location and means of assistance for people with disabilities on their floor or in their area. (c) Where practicable, an up-to-date list of the names, workplaces and other necessary information about people with disabilities should be kept at the location from where the chief warden exercised control. The means of acquiring the information necessary to produce the list shall be incorporated as a function of the procedure. The strategies for helping people with disabilities should be discussed with the individuals concerned. (d) The safe assembly area must be designed to protect evacuating occupants from a fire or emergency and maintain tenability for the period of time it takes to evacuate. (e) A buddy system may be developed so as a companion is allocated with each person with a disability. Each buddy to be aware and conscious of each individual's needs in regard to assistance. Each person with a disability to meet with his or her	visual signal and/or tactile vibration, and/or a buddy system to alert hearing impaired or deaf occupants. The noise levels at high occupancy and use of the pool during an emergency adds to the likelihood that people with disabilities may not be able to escape an emergency in a timely manner.

Risk Area	Risk Response
buddy on a regular basis as part of the ongoing process. (f) A dedicated Floor Warden to co-ordinate the evacuation of persons with a disability via the allocated fireman's lift as soon as possible. (g) The dedicated Floor Warden is to inform emergency teams of the locations of people with disabilities on each level of the building. (h) In addition to general skills maintenance on general emergency procedures, sessions should include methods of assisting person with disabilities and behaviour of people during emergencies.	
15. Accessible Toilets and Showers Refer to BCA F2.3 and F2.4 for details To provide an emergency call push button minimum 25 mm in diameter, located no less than 300 mm and not more than 1100 mm above the finish floor level and not less than 500 mm from internal corner, connected to an audible & visual alarm located outside sanitary facility and to a point that is continually staffed when building is occupied.	**Change Rooms & Changing Place** The potential for falls in areas subject to wet conditions may result in occupants not being able to call for assistance particularly because of sound levels within the Aquatic Centre. Emergency call buttons should be provided in these rooms and linked to the life guard / first aid room.
16. Changing Place Facility Should be provide in building facilities that public access in large numbers i.e.; shopping centres, class 9b for entertainment or sporting facilities. (a) Minimum room size width 4000 mm x 3500 mm ceiling height minimum 2100 mm preferred 2400 mm, with 1000 mm clear opening power door. • With accessible pan for assisted transfer fold down grab rails • Adjustable height changing table, 1800 mm long with side safety rail. • Hand basin • Hand drier • Disposal bin for change table covers • Wall grab rails 800 (L) 2 off located 800 mm and 1000 above the finish floor level. • Overhead room coverage hoist (b) Minimum room size width 4360 m x 3500 m ceiling height minimum 2100 mm preferred 2400 mm, with 1000 mm clear opening power door. • With accessible pan for assisted transfer fold down grab rails • Adjustable height changing table, 1800 mm long with side safety rail. • Hand basin • Hand drier • Disposal bin for change table covers • Wall grab rails 800 (L) 2 off located 800 mm and 1000 above the finish floor level. • Accessible shower • Overhead room coverage hoist For details of design refer to below link, http://changingplaces.org.au/	**Pool Area** 2x changing Place facilities should be encouraged to be provided with accessible shower located within. We would however suggest that storage lockers are provided adjacent rather than within these facilities.
17. Accommodation **Bedrooms** (a) At least one bedroom should be capable of accommodating a queen size bed and a wardrobe.	

Risk Area	Risk Response
(b) The height of the space between the base of a bed and the finished floor shall be not less than 150mm. (c) The height of the mattress top shall be not less than 480mm and not more than 500mm above the finished floor when compressed by a weight of 90kg. (d) Windowsills in sleeping areas should be at a maximum of 600mm above floor level. (e) A minimum of two double socket general socket general-purpose outlets should be provided on the walls of the bedroom where the bed head is likely to be located. GPO's should be provided to opposite wall in the main bedroom. (f) Two-way light switches should be provided, one located near the planned bed position. (g) A telephone outlet should be provided in each bedroom next to the bed on the side closest to the door. (h) A television outlet should be provided in each bedroom on the opposite wall to the bed head, adjacent the double GPO. (i) Wardrobe sliding doors are desirable, with a full-length mirror on the most accessible door. **Living Areas** (a) Windowsills in the living area should be at a maximum of 730mm above floor level desirable. (b) A minimum of four double GPO's should be provided desirable. (c) A telephone outlet should be provided in the living-dining room area, adjacent to a GPO. (d) Two television outlets should be provided in the living room area, one location to enable viewing from dining and kitchen. Locate television outlets adjacent to GPO's desirable. (e) Wardrobe sliding doors are desirable, with a full-length mirror on the most accessible door. **Kitchens** (a) A minimum clear floor space of 1500mm x 820mm that allows either a forward or parallel approach by a person in a wheelchair shall be provided at the sink and all appliances in the kitchen. (b) The sink should be located at a height between 850mm – 870mm above the finished floor. (c) The design should allow knee and foot clearance of a height of 680mm under the bowl. (d) Lever action tapware or sensor plate controls shall be provided. Taps or their operating handles shall be within 300mm from the front of the sink to allow for ease of operation. (e) Where hot water is provided, the water should be delivered via mixer (For water temperature see AS 3500.4). (f) Hot water units shall be located on the bench within 300mm from the front of the sink to allow for ease of operation. (g) Any exposed water pipes should be insulated. (h) The maximum depth of the sink should be 150mm. This would apply to the main bowl of a double sink. (i) Microwave ovens should be installed or replaced at any height between 750mm and 1200mm above the floor. (j) Cabinets, drawers and shelf storage areas should be as follows: depth of shelving up to 800mm	

Risk Area	Risk Response
above the floor should not exceed 600mm; shelving from 800mm up to 1500mm should not exceed 450mm deep; shelving above 1500mm from the floor should not exceed 300mm deep. Shelving should be adjustable. (k) D-type pull handles for cupboards should be provided with a minimum of 50mm clearance between handle and any obstruction. (l) At least one double general purpose outlet shall be located with a horizontally accessible reach over a work surface at a maximum of 300mm from the front of the work surface. (m) Paper towel dispensers/towel rails to be placed at a height of 1000mm (n) An electric cook top with front controls is preferred due to reduced risk of accidents from naked flames with knee and foot clearance provided under the bench as for a sink. Ensure insulation is provided under the bench. (o) Side opening wall oven mounted at 760mm above finished floor level to lower edge of the door so that the bottom shelf is the same level as adjacent work surface. Controls should be located to the side or bottom of the door. (p) Provide an 800mm long work bench adjacent to and horizontally aligned with the cook top and side opening oven to allow for set down space for hot items. **Laundry** (a) Provision should be made for an automatic washing machine, preferably a top-loader machine desirable. (b) Provision should be made for a clothes drier mounted at a suitable height, preferably a floor-mounted drier. (c) A double GPO should be provided as a minimum. (d) A shelf should be provided at a maximum of 1200mm above the floor. **Floor Surfaces** (a) Floor surfaces including bathrooms, laundries, toilets and all external paved surfaces should be slip-resistant. (b) If carpets are installed, they should have a short pile and be easily cleanable. (c) Bold patterned floor surfaces should be avoided as people with vision impairment can confuse these with changes of level. **Ancillary** (a) Where appropriate, light switches, telephones, and controls for operating air – conditioning, and the like shall be located at a height between 900mm – 1100mm from the finished floor. (b) Clothes –hanging rods or hooks shall be a maximum of 1350mm from the floor. (c) A clear floor space of not less than 800mm x 1300mm that allows either a forward or parallel approach by a person using a wheelchair shall be provided at accessible storage facilities.	
18. Food and Beverage Areas (a) Each food and beverage area must have an accessible entry for people with disabilities (not turnstiles). (b) An entry gate / door of not less than 850mm must be provided with appropriate circulation space	Noted

Risk Area	Risk Response
before and after the gate / door. (c) The provision of a lower section of the counter of not more than 850mm be provided where written tasks will be undertaken. (d) A hearing augmentation listening system should also be provided at the counter (registers) to assist communication for people with hearing impairments. (e) Seating for people with disabilities and loose seating must be provided where seating for ambulant people is provided as part of any Food and Beverage Area.	
19. Functions Rooms, Halls, Corporate Boxes, Dining Rooms (a) Provide appropriate door opening widths into all function rooms, corporate boxes and dining rooms of a minimum of 850mm clear opening. (b) Appropriate circulation space must be provided at all manual doors (refer Door mechanisms). (c) Manual doors must have an operating force of not more than 19.5N and a swing force of 6N. (d) Provide appropriate circulation space between airlock doors of 1350mm unless the doors encroach into the airlock. Should this be the case then the distance shall not be less than 1350mm plus the door width. (e) Provide a path of travel of a minimum width of 1200mm to all facilities provided within the Function rooms, Corporate Boxes and Dining rooms. (f) Provide accessible unisex toilet facilities adjacent to all gender facilities within the Function rooms, Corporate and Dining rooms.	**Hall, Gymnasium & Creche** No accessible sanitary facilities are provided for occupants of the Gymnasium, Hall and Creche noting that sanitary facilities are located nearby for patrons who do not have a disability.
20. Internal Wayfinding Signage **Shorelines** Continuous Accessible Path of Travel (CAPT) located: (a) adjacent building wall or partitioning, (b) adjacent horizontal surfaces; grade element (i.e. lawn soft fall etc.) have a textual surface between 100 mm – 300mm wide with a minimum 30% luminance contrast with the adjacent pedestrian surface. **Pathway incorporating a Textural Surface** Textural contrast is defined as the ration of the mean profile depth (MPD) or the mean texture depth (MTD) of the shoreline surface to the MPD or the MTD of the wayfinding path surface. (a) Minimum width 600 mm if no shoreline (b) Vertical surface shall have a skirting with minimum height of 200 mm ≤ 300mm with a minimum 30% luminance contrast with the horizontal pedestrian surface. **Wayfinding information points** (when more than a sole occupancy) (a) Braille and tactile signs/visual non tactile signs (b) A reception (c) Concierge or volunteers desk **Sign types** (a) Information signs include floor plans, maps, directories or building identification. (b) Secondary signs shall be provided at all levels for lifts etc	**Entry** Occupants who have not been to the Aquatic Centre may find it difficult to navigate to the control desk and find the change rooms and swimming pool. The control desk has been located 6 metres away from the entrance and also does not face the entranceway. Recommend for signage to be installed perpendicular to the control room and pool entrance so that it can be viewed from the building entrance. Signage to identify what the areas are and Signage located within 2 metres from the entrance should direct patrons to the control desk. For symbols consider 60 mm x 60 mm size and lettering to be 25mm in height.

Risk Area	Risk Response
(c) Main information signs shall be positioned within 2m on the left hand side of the CAPT on entering the building entrance or site (d) Directional signs (combination of words and arrows) show location of major features, facilities and services and are to be provided at principal pedestrian entrances, wayfinding decision points and wayfinding destinations **Braille and Tactile Maps** (a) Where used, Raised Tactile and *Braille* Maps must be located along the path of travel, within 2 metres of either the principal entry point to the property or the principal public entrance to the building and in other locations deemed appropriate by an accredited access consultant. These must be positioned within 1 metre of the continuous accessible path of travel on the left hand side as you approach the entry point. If this is not possible, locating on the right hand side is acceptable. The use of Tactile Ground Surface Indicators to assist in the location of Raised Tactile and *Braille* Maps must be considered. (a) Raised Tactile and *Braille* Maps must be positioned between 1000mm and 1700mm above the ground or floor level and be mounted on an angle of no more than 30° from vertical to allow comfortable reading by touch. (b) All the Raised Tactile information on the Map component must be described in a legend. (c) The map component can be Raised Tactile only, however all information in the legend must include an explanation in *Braille*. (d) Symbol size shall be the following according to viewing distance: < 7 metres 60mm X 60mm > 7 < 18 metres 110 X 110mm > 18 metres 200 X 200mm > 18 metres 450 X 450mm (e) Letter heights shall be the following according to viewing distance: 2 metres 6mm 4 metres 12mm 6 metres 20mm 8 metres 25mm 12 metres 40 mm 15 metres 50mm 25 metres 80mm 35 metres 100mm 40 metres 130mm 50 metres 150mm	
21. Swimming Pools / Spa Pools (a) Ensure all surfaces around pool areas are slip-resistant and non-abrasive. (b) Ensure luminance contrasting edge and /or textural cues are used to mark edges of pools and other potentially dangerous areas. The path immediately adjacent to the pool edge should be a different texture to all other paths. (c) The gradient around the pool concourse must be no greater that 1:40.	**Pool Area** A location for aquatic wheelchairs should be provided that is readily available. Management of the wheelchairs may require lifeguards to retrieve and then assist people with disabilities back onto the wheelchair. The path adjacent the pool provides a suitable contrasting edge.

Risk Area	Risk Response
	

Internal Fixtures and Fittings

22. Counters / Check in Desks **High Level Interaction** (a) Provide a lower section of counter at a height between 830mm and 870mm above the finished floor (b) Where the counter requires a high level of interaction or worktop function, provide knee and foot clearance in accordance with the following i. Provision of knee clearance of no less than 800mm in height for a minimum depth of 350mm. i. Provision of foot clearance of not less than 300mm in height for a depth of 650mm. **Minimal Interaction** (a) Provide a lower section of counter at a maximum height of 870mm above the finished floor (b) Where the counter requires brief or minimal interaction, knee and foot clearance shall be provided in accordance with the following, to enable a wheelchair user to reach the counter top at an angled approach without injury to knees or feet: i. Provision of knee clearance of no less than 750mm in height for a minimum depth of 350mm. i. Provision of foot clearance of not less than 300mm in height for a depth of 400mm. **Verbal / Visual Interaction Only** (a) Where only verbal or visual information is exchanged, provide a lower section of counter at a maximum height of 870mm above the finished floor. There is no requirement for the provision of knee and foot clearance (b) Provide a minimum depth to the counter of 480mm **General** Where the counter is provided for general use, the length of the counter must be no less than 900mm. Unobstructed circulation space must be provided in front of the lower height counter of 1540mm by 2070mm, with maximum grade of 1:40. (a) The surface of the counter shall be a matte or satin finish. (b) The counter surface must achieve minimum 30% luminance contrast with the counter face and the background surface to which it is viewed (i.e. wall and floor finishes), to aid the detection of the	**Check in Desk** Is provided with a lower section counter with knee clearance.

Risk Area	Risk Response
counter edge (c) Provide the counter face with minimum 30% luminance contrast with the surrounding floor finish (d) Provide a hearing augmentation listening system to the counter, inclusive of appropriate tactile and Braille signage incorporating the international symbol for hearing impairment. Where multiple counters are provided, including one accessible counter for people with disabilities, a hearing augmentation listening system should be provided to service the accessible counter and one high counter. (e) Unobstructed sightlines between counter staff and visitor shall be provided. Therefore any opaque structures between both parties shall be limited in height, per the following: i. 1000mm in height where the staff member is seated at a standard height (450mm). i. 1100mm where the staff member is standing or seated on a high stool. (f) The staff side of counter areas should be ergonomically designed in accordance with occupational health and safety workstation requirements (refer recommendations for workstations and reach ranges). **Lighting** Appropriate lighting levels at the counter areas must be provided. Generally, a task lighting of no less than 320lx must be provided with environmental lighting of no less than 160lx. That is: (a) where general lighting only is provided to provide both task and environmental lighting, the illuminance throughout the area shall be no less than 320lx; or (b) where a system of local lighting is provided for tasks in combination with reduced environmental lighting, this may be provided as noted above.	
23. Kitchenettes & Tea Rooms (a) A minimum clear floor space of 1500mm x 820mm that allows either a forward or parallel approach by a person in a wheelchair shall be provided at the sink and all appliances in the kitchen. (b) The sink should be located at a height between 850mm – 870mm above the finished floor. (c) The design should allow knee and foot clearance of a height of 680mm under the bowl. (d) Lever action tapware or sensor plate controls shall be provided. Taps or their operating handles shall be within 300mm from the front of the sink to allow for ease of operation. (e) Where hot water is provided, the water should be delivered via mixer (For water temperature see AS 3500.4). (f) Hot water units shall be located on the bench within 300mm from the front of the sink to allow for ease of operation. (g) Any exposed water pipes should be insulated. (h) The maximum depth of the sink should be 150mm. This would apply to the main bowl of a double sink. (i) Microwave ovens should be installed or replaced at any height between 750mm and 1200mm above the floor. (j) Cabinets, drawers and shelf storage areas should	Noted

Risk Area	Risk Response
be as follows: depth of shelving up to 800mm above the floor should not exceed 600mm; shelving from 800mm up to 1500mm should not exceed 450mm deep; shelving above 1500mm from the floor should not exceed 300mm deep. Shelving should be adjustable. (k) D-type pull handles for cupboards should be provided with a minimum of 50mm clearance between handle and any obstruction. (l) At least one double general purpose outlet shall be located with a horizontally accessible reach over a work surface at a maximum of 300mm from the front of the work surface. (m) Paper towel dispensers/towel rails to be placed at a height of 1000mm (n) An electric cook top with front controls is preferred due to reduced risk of accidents from naked flames with knee and foot clearance provided under the bench as for a sink. Ensure insulation is provided under the bench. (o) Side opening wall oven mounted at 760mm above finished floor level to lower edge of the door so that the bottom shelf is the same level as adjacent work surface. Controls should be located to the side or bottom of the door. (p) Provide an 800mm long work bench adjacent to and horizontally aligned with the cook top and side opening oven to allow for set down space for hot items.	
24. Utility Areas (a) Provide a counter with a lower section at a height of 850mm with knee and foot clearance of 820mm to accommodate printer/faxes and copiers. (b) Ensure the counter has a depth of 550mm allows full utilisation by wheelchair users (front approach) and a width of a minimum of 820mm between legs. (c) Pigeon holes should be at any height between 750mm and 1200mm above the finished floor, with minimum shelf depth of 300mm for a side approach. (d) Ensure a clear floor space of not less than 1500mm x 800mm that allows a forward approach by a person using a wheelchair is achieved at the front of the utility.	Noted
25. Reach Ranges **Office Space** (a) Ensure a minimum turning circulation space for a wheelchair to make a 180 degrees turn shall be not less than 2070mm in the direction of travel and not less than 1540mm wide. **Reach Ranges** (a) Provide a side reach maximum height of 1350mm to shelving. (b) Provide a lower side reach minimum of 230mm from ground level. (c) Provide a side reach shelf depth of 300mm. (d) Provide a maximum of 1220mm height to shelving for front approach. (e) Provide a minimum of 380mm height to shelving for front approach. **Cabinets** (a) Provide a clear circulation space in front of a	**Lockers** Accessible lockers should be provided with appropriate reach ranges.

Risk Area	Risk Response
display area of minimum of: Frontal approach - 1300mm X 800mm. **Desk Height** (a) Provide clear circulation space in front of desks of minimum of: Frontal approach - 1300mm X 800mm. (b) Accessible desk depth of 550mm allows full utilisation by wheelchair users (front approach) and a width of a minimum of 800mm between legs. (c) Ensure a desk height of 750mm with a knee clearance of not less than 680mm and where a second desk is provided a height of 850mm with a knee & foot clearance of 820mm.	
26. Lighting The internal lighting provisions for safe movement within buildings are to comply with the requirements set out in AS 1680.2 Appendix 2.1 Table E1, Column 2 Maintenance luminance. Entrances 150lx - 300lx Passageways & walkways 150lx Stairs 150lx Ramps 150lx Toilets and locker rooms 200lx Counter tops 250lx General displays 200lx - 300lx Telephones 200lx Kitchens 300lx Living Areas 160lx Work Rooms 300lx Recreation Areas 300lx Note: For people with a hearing impairment, a level of illumination of not less than 150Lx, without glare is needed to allow for lip reading.	Noted
27. Hearing Augmentation Audio visual systems should to be provided with a hearing assistance system.	See BCA
28. Accessible Showers Refer to BCA F2.4	As Above
29. Public Telephones (a) Contact Telstra Payphone Services to gain the appropriate accessible telephone provisions for people with disabilities. (b) In every pod of two or more phones one should be at an accessible height. (c) Ensure a clear circulation space of 1300mm x 800mm (frontal approach). (d) Provide tactile dial buttons. (e) Provide at least one Telephone typewriter (TTY) for the hearing impaired.	Noted
30. ATM's (a) Ensure a 1:40 landing of 2070mm x 1540mm is provided to the front of the ATMs. (b) The user interface of the ATM should be located within a zone which is not less than 685mm and not more than 1370mm above finished floor, and not	Noted

Risk Area	Risk Response
less than 500mm from an internal corner. (c) Design automatic teller machines in accordance with AS3769 Clause 6.	
31. Sanitary Area for Assisted and Companion Animals Consider the installation of suitable facilities on terraces and balconies through the provision of companion trays.	Noted

Appendix A – Referenced Standards

The following documents were utilised/referenced during the review process:

(aaaa) Disability Discrimination Act (DDA) 1992 including physical, social and culturally appropriate access and access support guidelines.

(bbbb) State and Federal Equal Opportunity Legislation.

(cccc) Disability (Access to Premises- Buildings) Standards 2010

(dddd) National Construction Code; Building Code of Australia 2016

(eeee) Australian Standards:

i. AS 1428.1 – 2009 Design for access and mobility

ii. AS 1428.2 - 1992 Enhanced and additional requirements – building and facilities

iii. AS 1428.4.1 - 2009 Means to Assist the orientation of people with vision impairment- Tactile ground surface indicators Tactile indicators.

iv. AS 1735.12 - 1994 Facilities for people with disabilities controlled

v. AS 2890 - 2009 Parking facilities Off street parking for people with disabilities

Summary Requirements of DDA Access Code / NNC Reference Clauses & Australian Standards:

Description	Building Code of Australia (Clause ref)	Australian Standard
Continuous Accessible Pathways	Part A1 Definitions	AS 1428 Part 1-2009; Section 6
Tactile indicators	D3.8	AS 1428 Part 1-2009; Section 14 AS1428.4.1-2009
Signage	D3.6	AS 1428 Part 1-2009; Section 8
Sanitary and other facilities	F2.4 & Table F2.4	AS 1428 Part 1-2009; Section 15

APPENDIX C

ARCHITECTURE
INTERIORS
URBAN DESIGN
PLANNING
LANDSCAPE

HORSHAM AQUATIC CENTRE

53 HAMILTON ST, HORSHAM VIC 3400

Hames Sharley

AUGUST 2017

Contact

HAMES SHARLEY

Saralee Aufderheide
Project Architect
S.Aufderheide@hamessharley.com.au

Level 15, 19 Grenfell Street
Adelaide SA 5000 Australia

T +61 8 8112 3400
F +61 8 8112 3499

www.hamessharley.com.au

Revision Letter	Date	Reason for Issue
A	02/12/2016	DRAFT issue to Client
B	01/03/2017	Issue to Client
C	02/08/2017	Revised Issue to Client

Table of Contents

Introduction

This report has been prepared by Hames Sharley for *Horsham Rural City Council* and *Horsham Aquatic Centre Master Plan Working Group*. The purpose of this report is to outline the present and future development potential of the site at 53 Hamilton Street, Horsham, Vic 3400.

The report is designed as a base document to be used to inform further investigation of potential development of the site. The document has been divided into sections for Stages 1 and 2. Currently at Stage 1 outline the site context through a number of desktop investigations including urban analysis, gap analysis and a survey of site conditions. This data is then compared with surrounding townships in the Wimmera, through the process of benchmarking.

This report will utilise the knowledge gained to develop a set of development principles to guide and inform a number of development scenarios in Sections 3 and 4, during Stage 2 of project development.

Source 'NearMaps' 2016

N

SITE CONTEXT

1.0 TOWARD DEVELOPMENT SCENARIOS

1.1 Study Area

LOCATION

The Study Area, Horsham Aquatic Centre, covers approximately 1.8ha and is located in the rural township of Horsham (3400), approximately 850m north of Wimmera River, 1km south-east of Horsham Racecourse and Recreation Reserve, and 550m south of Horsham Rural City Council. At a regional scale, the Study Area is located within the Horsham Rural City Council district, which is situated approximately 300 kilometres north-west of Melbourne in the heart of the Wimmera region of Victoria. The municipality has a population of 19,774 and covers an area of 4,267 km^2.

Representing a 'Recreation and Leisure' site, the **Horsham Aquatic Centre is a well used facility with strong membership numbers,** that accommodates all users including those who require rehabilitation to restore physical strength, cognition and mobility. **The facility has won and been nominated for numerous Statewide YMCA Awards, one of which for exceptional customer service, and has as a consequence, seen a significant increase in young people learning to swim,** and local community members seeking a more active and social lifestyle.

The Study Area is well serviced by public transport and accommodates users with off-street car parking in Bolton Car Park, entered from Urquhart Street to the east. The primary frontage and main pedestrian entrance is from Hamilton Street. Significant landmarks surrounding the Study Area are Capital Bistro, Peach's Fruit Market, Harvey Norman, Barengi Gadjin Land Council Aboriginal, PETstock Horsham, Horsham Botanical Gardens and Wimmera River.

1.2 Gap Analysis

SERVICES

Emergency
1. Horsham Ambulance Station
2. Vic State Emergency Services Office
3. Vic State Emergency Services Site
4. Horsham Police Station
5. Country Fire Authority
6. State Emergency Service - Mid West Region

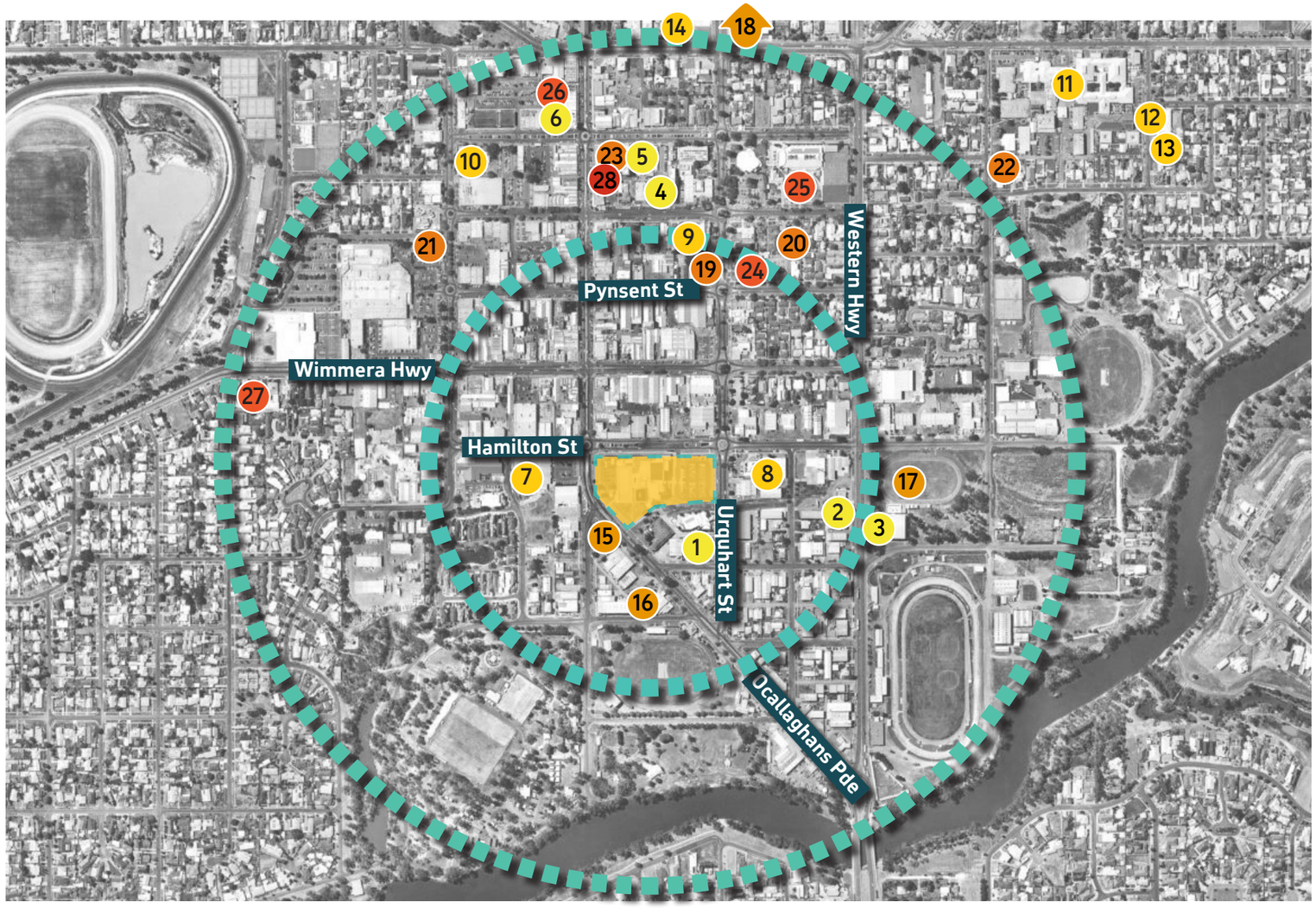
Health
7. Tristar Medical Group
8. Goolum Community Health Centre
9. Maternal and Child Health Centre
10. Centrelink and Medicare Centre
11. Wimmera Health Care Group
12. Wimmera Medical Centre
13. Read Street Medical Centre
14. Lister House Medical Clinic

Transport
15. Hentry Highway Coach PTY Ltd.
16. VicRoads - Horsham Customer Service Centre
17. Horsham Cycling Track
18. Horsham Railway Station (1.5km north of site)

Community
19. NEXUS (Youth Social Services)
20. Horsham Rural City Council
21. EW Tipping Foundation (Disability Support)
22. Wimmera Community Options (Health Club)
23. Horsham Community Correctional Services

Religion
24. Horsham Uniting Church
25. Catholic Diocese of Ballarat
26. Christian Emergency Food Centre
27. Horsham Seventh-day Adventist Church

Other
28. Australian Post - Horsham Post Office



The Study Area is surrounded by a variety of services, including health services such as Lister House Medical Clinic, Emergency services such as Horsham Ambulance Station, Transport services such as Hentry Highway Coach, and general services such as Horsham Post Office. There appears to be a gap in religious and community services within 800m/10minutes walk of the Study Area.

COMMERCIAL

Entertainment

1. Horsham Visitor Centre
2. Horsham Country Music Festival
3. Centre Cinema Horsham
4. Horsham Town Hall
5. Wesley Performing Arts Centre
6. West Side Horsham (Sports Bar)

Home and Office

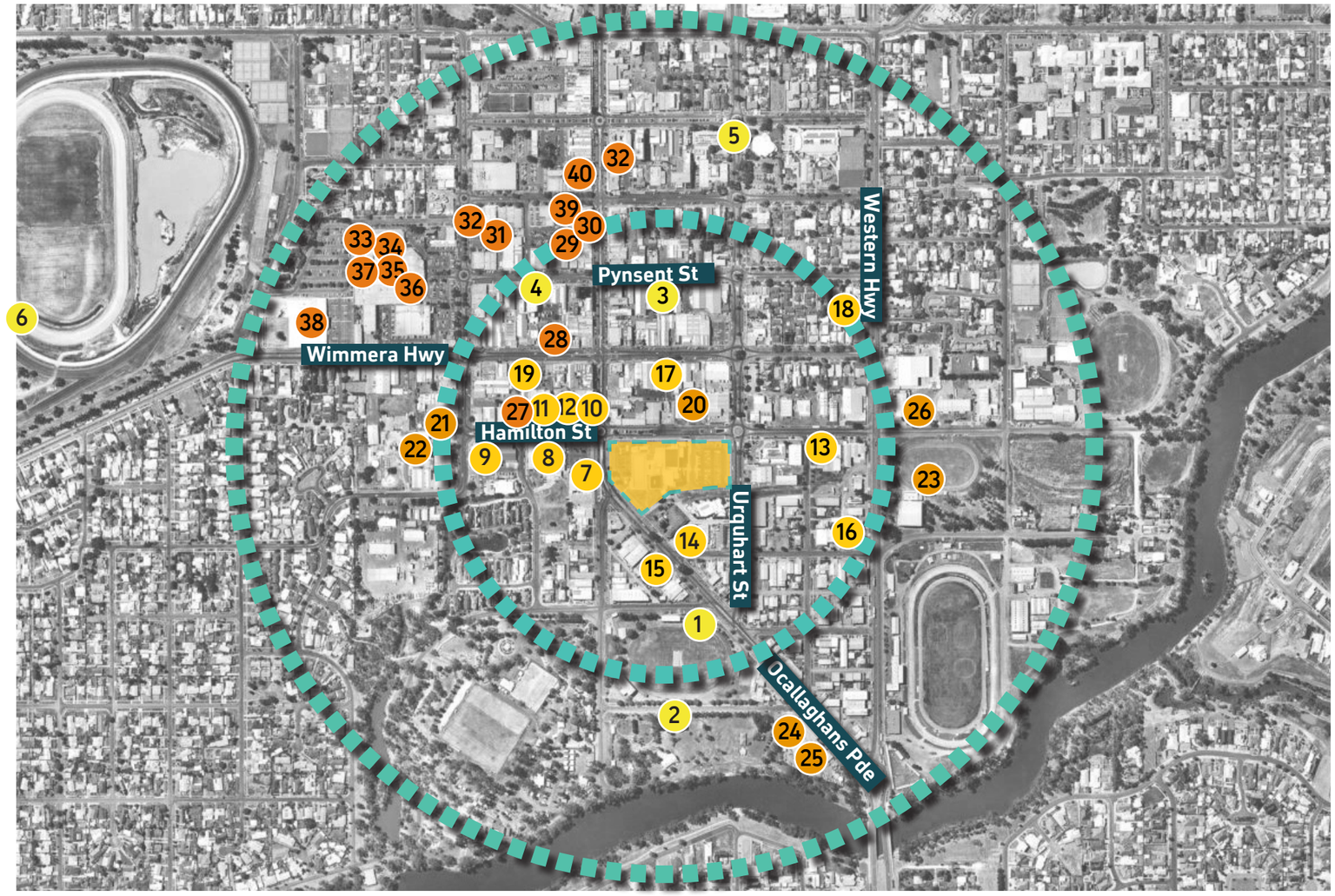
7. Horsham Betta Home Living
8. Harvey Norman
9. Aussie Horsham
10. JG King Homes
11. Rural Finance Horsham
12. First National Real Estate
13. Reece Plumbing
14. Samios Plumbing Supplies
15. Horsham Lawnmower centre
16. L&H Horsham (Electrical Supply)
17. Horsham Carpet Court
18. Wimmera Floorworld Horsham
19. Wimmera Office Equipment

Industry

20. Bunnings Warehouse
21. Horsham Bearings & Industrial Supplies
22. Supercheap Auto Horsham
23. Horsham Agricultural Society
24. Wilson Bolton Mitsubishi
25. Wilson Bolton Holden
26. Horsham Tyre and Battery Service

Retail

27. Cheap as Chips
28. Leading Edge Electronics
29. Camera House
30. Miss Horsham Shop
31. Horsham Menswear
32. Chisholm Hi-Fi & TV Centre
33. Horsham Plaza
34. Autograph Fashion
35. Cotton On
36. Kmart
37. Spotlight
38. Horsham Gateway Centre
39. Telstra Shop
40. Showcase Jewellers



The Study Area is surrounded by a variety of commercial options, including entertainment facilities such as the Horsham Cinema, home and office options such as Horsham Betta Home Living, and industry options such as Bunnings Warehouse and Horsham Bearings & Industrial Supplies. Retail options are limited within 800m/10min of the Study Area, but become more abundant to the north-west of the 1600m catchment, with options of Kmart, Spotlight and Cotton On at Horsham Plaza.

HOSPITALITY

Cafe / Deli / Bakery

1. Cafe Red
2. Rockin' Robin's
3. Conways
4. Bakers Delight Horsham
5. Cafe Chickpea
6. Cafe Jas
7. Thipatiy Coffee Lounge
8. The Fig Tree Cafe
9. Waack's Bakery
10. Nourish Eatery
11. Funkalicious Cakery
12. The Oven Door Bakery
13. Cheeky Fox
14. Wimmera Cake Centre
15. Brumby's Bakery

Fast Food / Takeaway

16. Horsham Charcoal Chicken
17. Bonnie and Clyde's Pizzeria
18. Horsham Palace
19. Jade Lantern
20. Tasty Express
21. Subway
22. Domino's Pizza
23. Chicken Express
24. Damena's Pizza & Pasta Cafe

Hotel / Bar

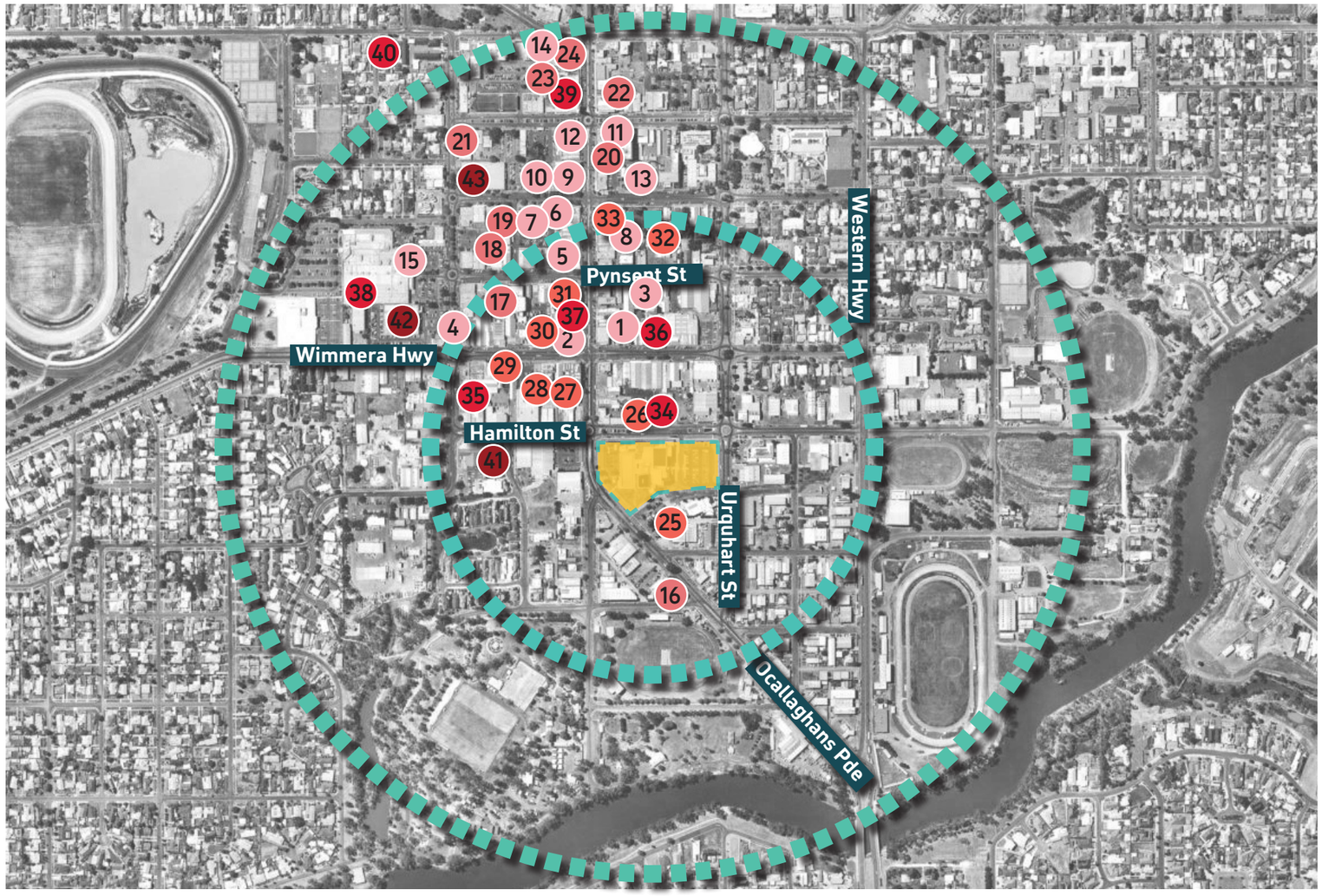
25. Country City Motor Inn
26. Comfort Inn
27. Royal Hotel
28. Locarno Hotel
29. Bull & Mouth Hotel
30. Commercial Hotel - Bar 68
31. Exchange Hotel
32. White Hart Hotel
33. Horsham House Bed & Breakfast

Restaurant

34. Capital Bistro
35. Thai Basil
36. Oasis of Wellbeing
37. Moe's Mexican Bar & Grill
38. Ginger Chilli - Asian Cuisine
39. Horsham Masala Indian
40. Horsham Sport Club

Supermarket

41. Aldi
42. Woolworths
43. Coles



There is an abundance of cafe and restaurant offerings existing within 800m/10minutes walking distance of the Study Area, with limited offerings of fast food and fine dining. Of note is the close proximity of Aldi supermarket to the west of the site, and two hotels, the Comfort Inn to the north and Country City Motor Inn to the south. There appears to be a gap in juice bars, grocery markets and takeaway stores within the Study Area's catchment.

RECREATION AND LEISURE

Passive Recreation

1. Horsham Botanical Gardens
2. Sawyer Park
3. Wimmera River Reserve
4. Dog Track
5. Coughlin Park
6. May Park
7. Horsham Recreation Reserve

Active Recreation Indoor

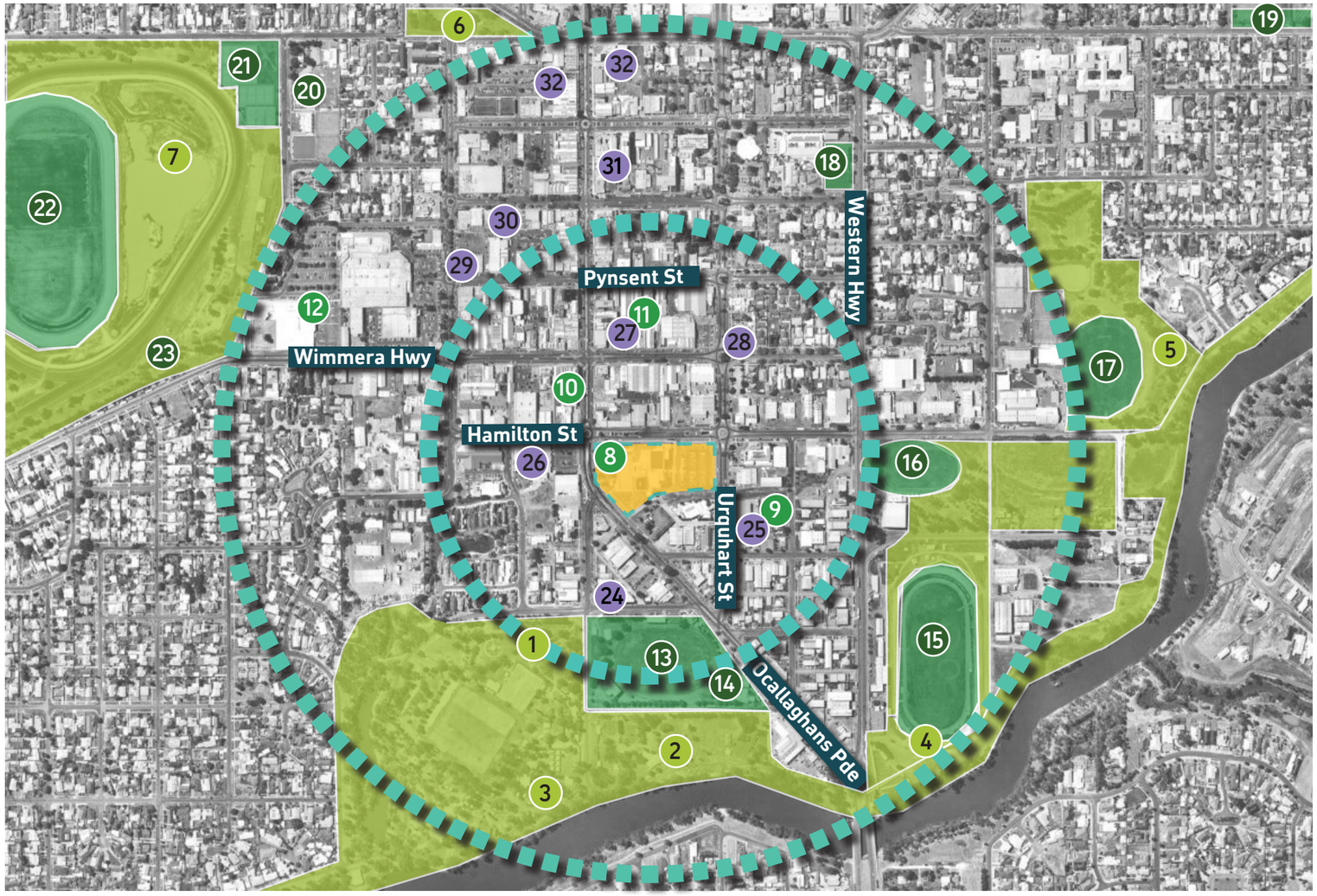
8. Horsham Aquatic Centre
9. Fuzion Fitness Horsham
10. Curves Gym Horsham
11. Anytime Fitness
12. Snap Fitness

Active Recreation Outdoor

13. Horsham City Oval
14. Horsham City Tennis Courts
15. Horsham Showground
16. Horsham Cycling Track
17. St Brigid's College Sporting Oval
18. St Michaels and John's Sporting Grounds
19. Sunnyside Horsham Bowling Club
20. Scout & Guide Recreation Reserve
21. Central Park Tennis Courts
22. Horsham Racecourse and Harness Track
23. Horsham Horse Track

Leisure / Wellness Centre

24. Back 4 Life Wellness Centre
25. Bubble & Snip Pet Spa & Salon
26. Salon Mode Spa & Beauty
27. Sassie Beauty Bar & Hair
28. Wimmera Spas & Pools
29. Equipt Physiotherapy
30. Ella Blache Horsham
31. Sirs & Hers Hair Salon
32. Amour Beauty Boutique
33. Horsham Physiotherapy and Podiatry



There are two recreational open space offering (Horsham Botanical Gardens and Horsham City Oval) existing within 800m/10min walking distance of the Study Area. The variety of offerings increases in the 1600m catchment along Wimmera River. These offerings include Sawyer Park to the south, one dog park to the south-east, and a cycling track and Coughlin Park to the east. There is an abundance of leisure facilities within 800m/10min walking distance of the Study Area, including Back 4 Life Wellness Centre and Salon Mode Spa & Beauty. Similarly, there are four indoor active recreation facilities within the catchment, including Curves Gym, Fuzion Fitness and Anytime Fitness.

EDUCATION + COMMUNITY

Child Care / Early Learning Centre

1. Goodstart Early Learning Horsham
2. Horsham & District Kindergarten
3. Maternal & Child Health Centres
4. Roberts Ave Kindergarten
5. Horsham Community Child Care Centre
6. Horsham 'Out of School Hours' Care
7. Wimmera Uniting Care

Primary School

8. St Michael and John's Primary School
9. Horsham Primary School

Secondary School

10. St Brigid's College

Community Centre

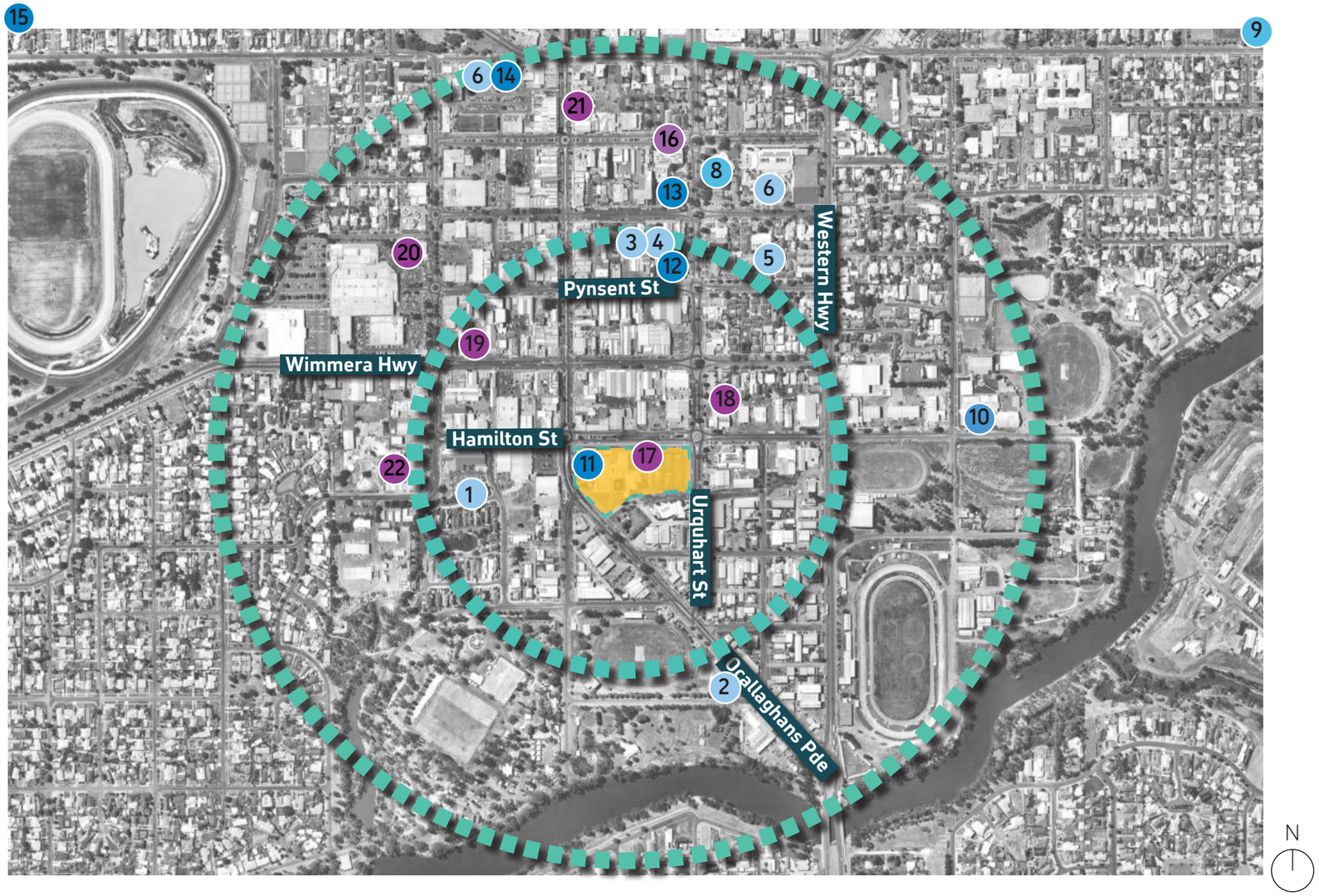
11. Horsham Aquatic Centre
12. Nexus Youth Social Services
13. Horsham Rural City Council
14. Horsham Sports & Community Club
15. Wimmera Community Care

Library

16. Wimmera regional Library Corporation

Training Facility

17. Australian Institute of Personal Trainers
18. Wimmera Huh Inc
19. Advanced Career Training
20. Sureway Employment and Training
21. MEGT Horsham
22. Wimmera Business Centre



There are moderate education and community options within 800m/10min of the Study Area. These include three training facilities, two community centres and three child care / early learning centres. Options expand to the north of the Study Area within 1600m/20min walking distance, however, there are still limited education offerings with only one primary school (St Michael and John's Primary) and one secondary school (St Brigid's College). There appears to be a gap in online learning centres and physical learning centres such as libraries. Similarly, with the close proximity of St Michael and John's Primary and St Brigid's College, there may be potential to host off-site educational activities within the Study Area.

1.3 Community Profile

COMMUNITY ANALYSIS

In order to gain an understanding of the existing and potential future demographic of the Study Area, Horsham has been examined using the ABS 2011 census data and Realestate Australia property prices.

The Study Area resides within the Horsham Rural City Council. Almost three quarters of residents live in the urban area of Horsham. The median property price for the Study Area is $240,000 to buy, with $175,250 for two bedrooms, $237,500 for three bedrooms and $338,000 for four bedrooms. The median property rent per week is $255, with $195 for two bedrooms, $250 for three bedrooms and $340 for four bedrooms. Townships that have a similar realestate condition to Horsham include Hamilton, with a median house price of $253,000 and Mildura, with a median house price of $256,758. Surrounding townships of Warracknabeal and Nhill have a significantly lower realestate value, with median house prices of $117,500 and $129,750.

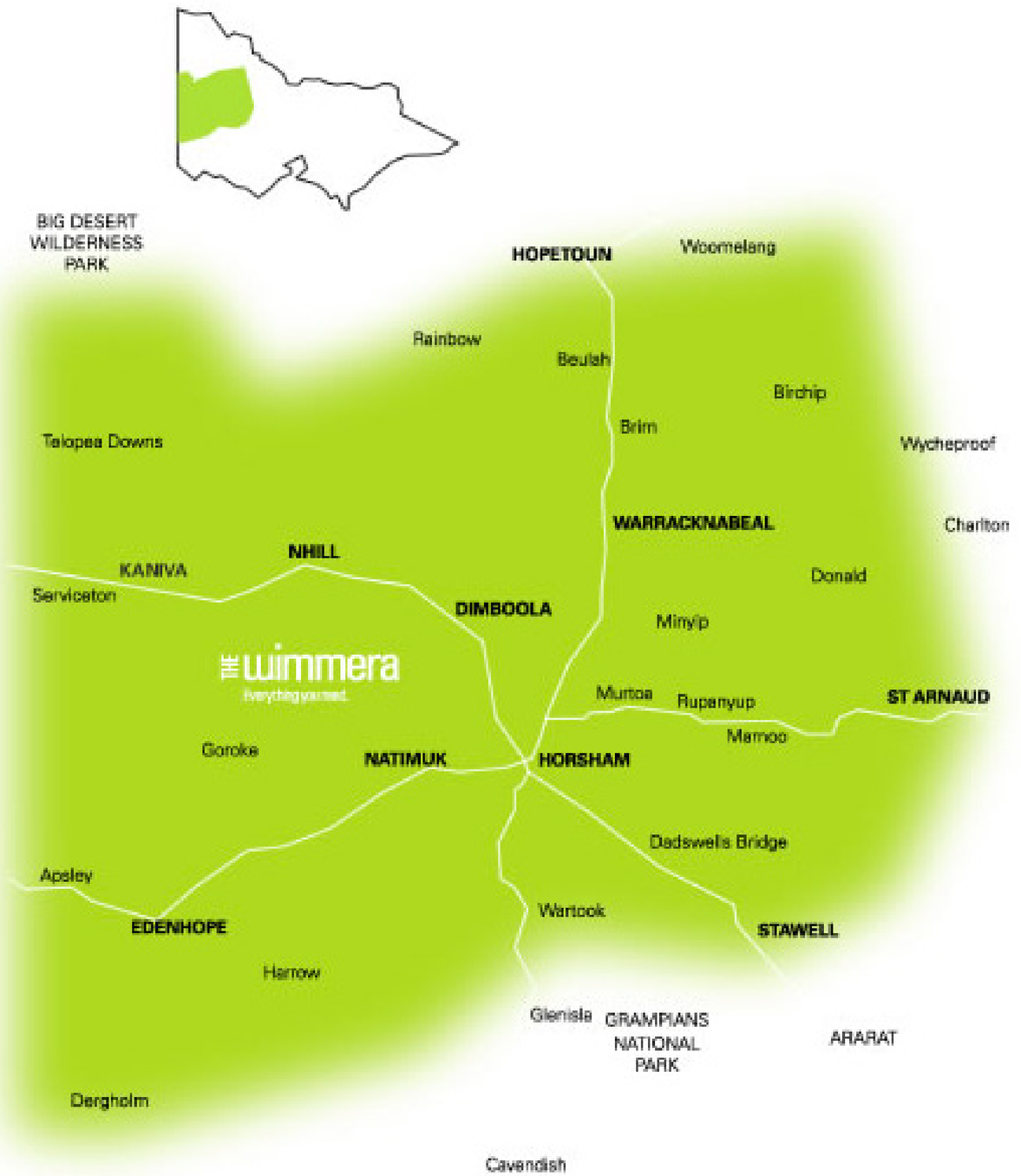
The Study Area shows a population slightly younger than the Horsham Rural City Council catchment, with a median age of approximately 39 versus 40. This median is likely affected due to the highest population of people living in Horsham being aged 0-4 years old. This indicates a strong presence of young families. Looking to the lifestyle of the township, 20.3% of residents are older couples and families, 14.9% are established couples and families, and 11.8% are single people. Moreover, there are 8% more people who own their home outright in Horsham when compared with the Horsham Rural City Council catchment: (46.1% vs 38.5% respectively).

GREATER STUDY AREA

In order to gain an understanding of the regional demographic that the Study Area sites within, Horsham and five surrounding townships have been examined using the ABS 2011 census data, including population density, age, dwelling type, housing tenure, housing circumstance and vehicle ownership.

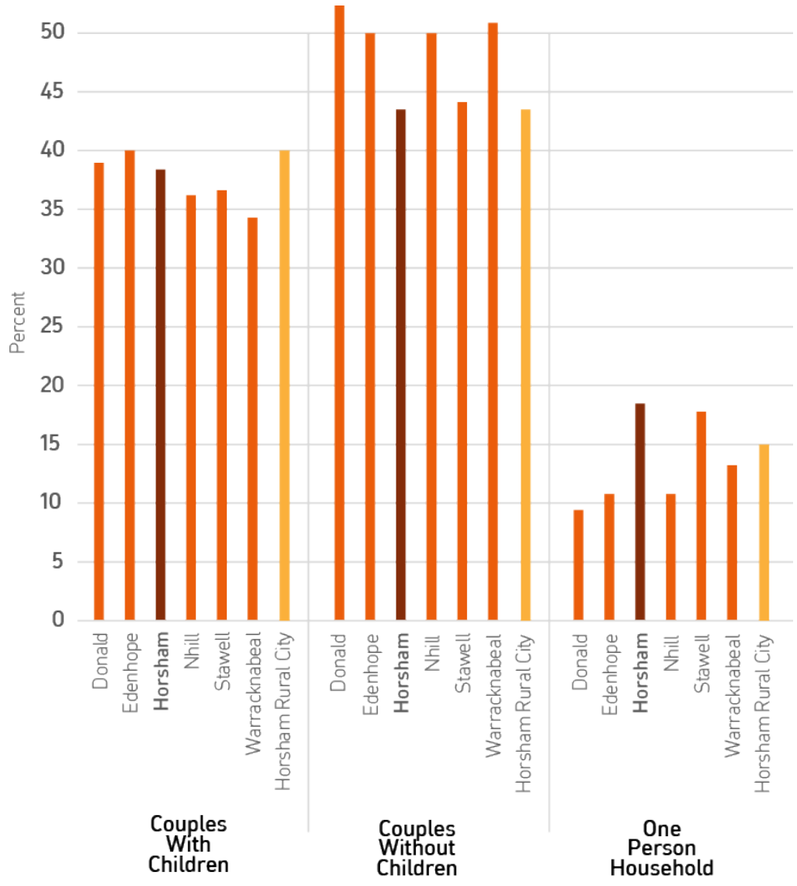
The townships included in the set are; **Donald, Edenhope, Horsham, Nhill, Stawell** and **Warracknabeal.** The townships included are referred to as the Greater Study Area. The townships chosen in the Greater Study Area have been selected both by their proximity to Horsham, as well as the character of the areas - similar development typologies and/or population densities.

The Greater Study Area has then been compared with the Horsham Rural City Council catchment, to gain an understanding of the current and future demographic of the region.



	residential population		largest age group
2.3	Donald 1,693		10-14
2.1	Edenhope 976		50-54
2.3	**Horsham** 14,285		**0-4**
2.3	Nhill 2,278		50-54
2.3	Stawell 6,150		60-64
2.2	Warracknabeal 2,745		50-54
2.4	Horsham Rural City Council 19,279		50-54

persons per household



363 NEW OCCUPANCIES IN DWELLINGS IN HORSHAM

DENSITY

2011

Mean gross occupied dwellings (per km) for the Horsham Rural City Council

Horsham Rural City Council Area: 4,249 km²

1.8

BEDROOMS PER DWELLING

2011

	Greater Study Area	Horsham R.C.C.
	4%	3.3% ↓
	16.7%	15.8% ↓
	55.7%	52.6% ↓

HOUSING TENURE

2011

	Greater Study Area	Horsham R.C.C.
Dwellings Rented	22.8%	25.6% ↑
Dwellings Mortgaged	26.8%	32.4% ↑
Dwellings Owned	46.1%	38.5% ↓

VEHICLE OWNERSHIP

2011

	Greater Study Area	Horsham R.C.C.
	35.3%	33.3% ↓
	35.1%	36.5% ↑
+	17.6%	19.6% ↑

HOUSING TYPE

2011

	Greater Study Area	Horsham R.C.C.
Detached	90.9%	87.5% ↓
Semi-attached	3%	5.1% ↑
Attached	5.2%	6.8% ↑

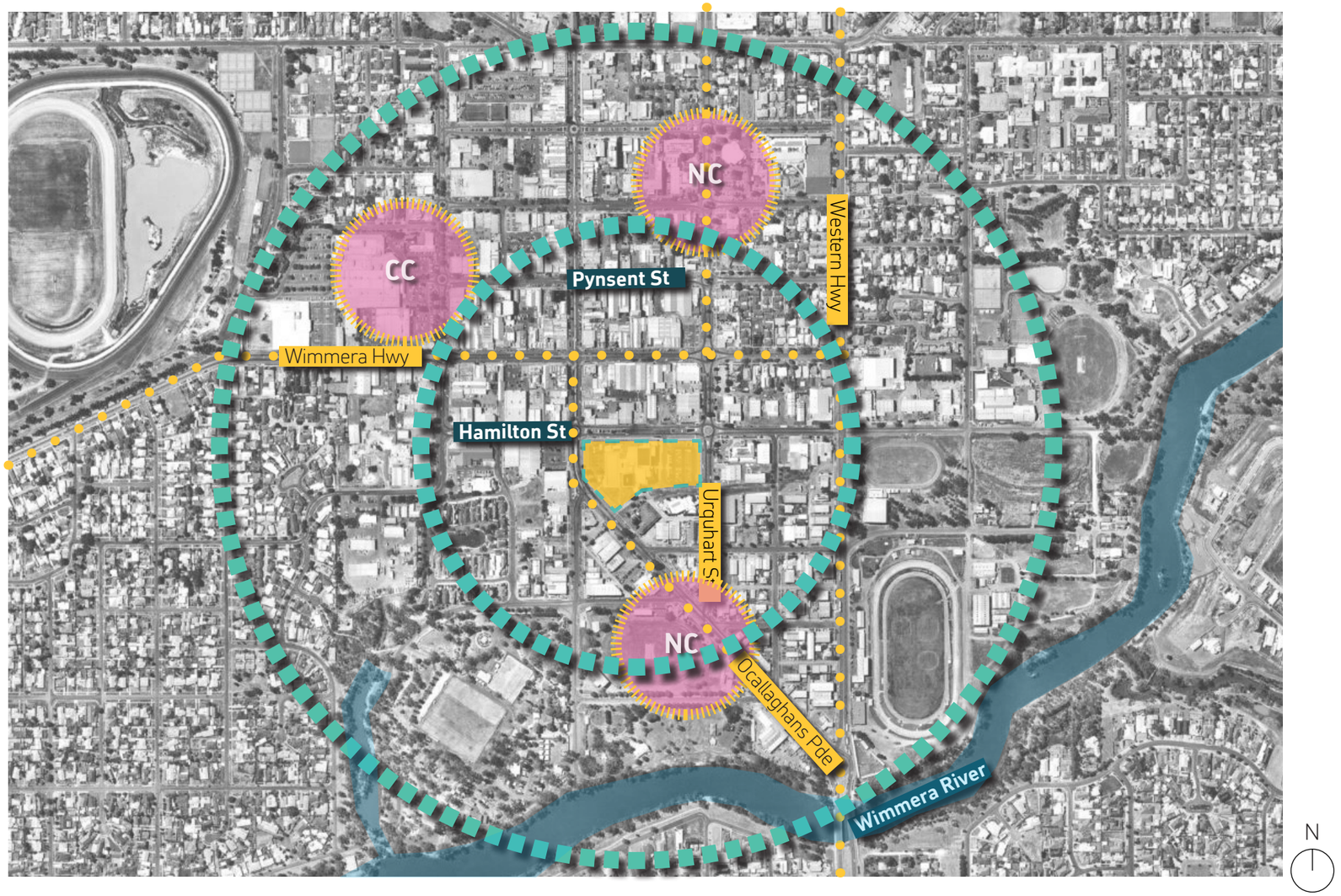
1.4 Urban Analysis

STUDY AREA AND CONTEXT

The Horsham Aquatic Centre is located at 53 Hamilton Street, Horsham Victoria, 3400 within the township of Horsham. Neighbouring townships to Horsham include Stawell and Hamilton to the south, Edenhope and Nhill to the west, Warracknabeal and Donald to the north and Murtoa and St Arnaud to the east.

Surrounding the Study Area is a mixture of Medium Density Commercial, which increases in density along Hamilton Street, Ocallaghans Parade, Wimmera Highway and the Western Highway. 800m to the south and south-east of the Study Area are reserves and public open space along Wimmera River, and to the south-west is low to medium density residential areas.

The township's Commercial Centre is to the north of the site along Firebrace Street and Darlot Street, with Neighbourhood Centres located along major intersections with Western Highway, Wimmera Highway, Firebrace Street / Ocallaghans Parade and Urquhart Street.



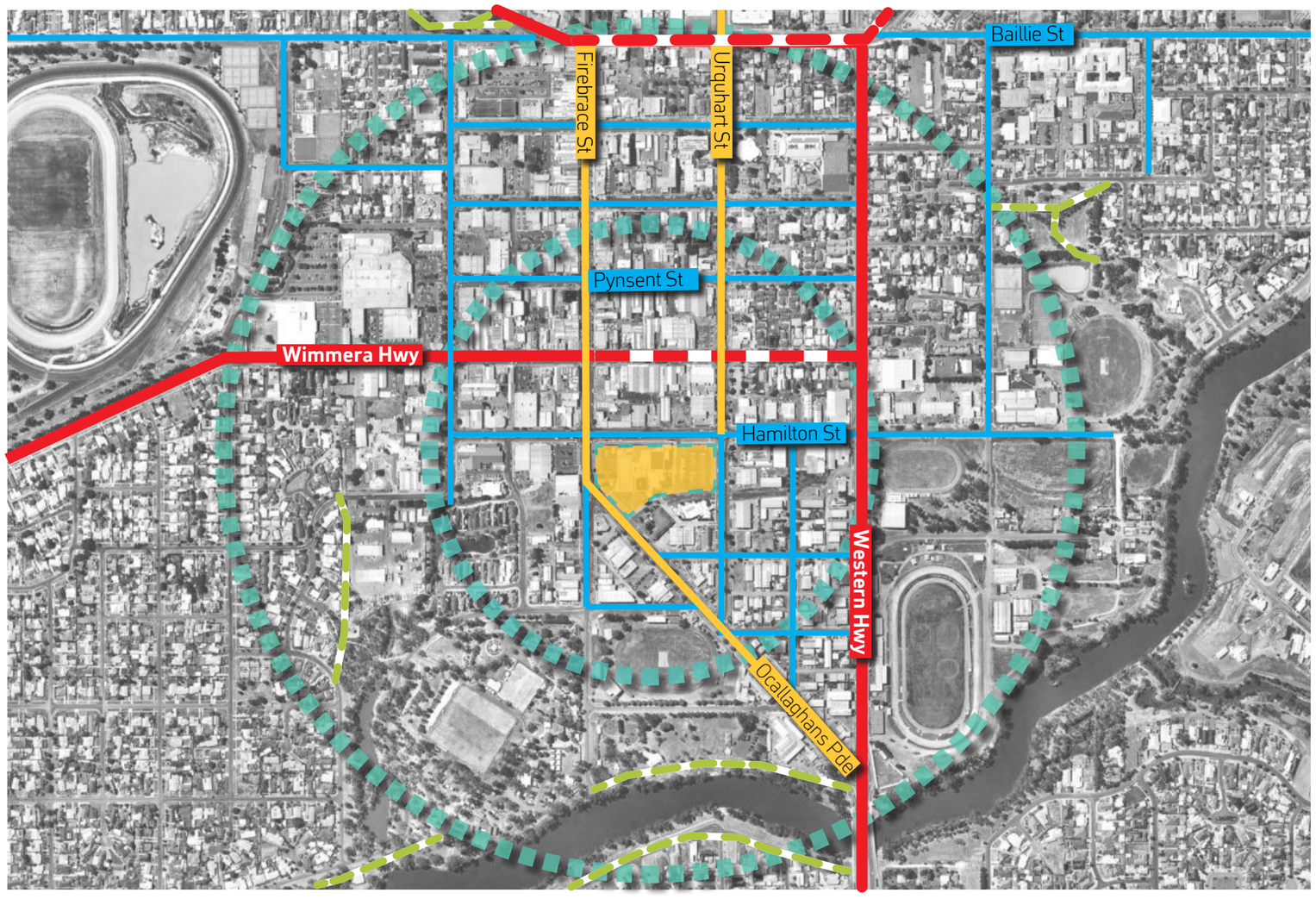
CONNECTIVITY:- ROAD HIERARCHY, CYCLE AND PEDESTRIAN NETWORKS

The Study Area is well connected to the greater Victorian road network. There is easy access to the Western Highway north-south corridor (via Hamilton Street), eastern districts (via the Western Highway to Baillie Street), northern and southern districts (via the Western Highway) and western districts (via Hamilton Street).

On-road shoulder bike lanes are limited surrounding the Study Area, with lanes only appearing on Wimmera Highway and Western Highway in areas near the township's centre.

Pedestrians have paved footpaths to each side of Hamilton Street and Firebrace Street. Local streets adjacent the site similarly have paved footpaths approximately 1200mm wide.

- Primary Arterial Road
- Primary Arterial Road with Bike Lane
- Secondary Arterial Road
- Secondary Arterial Road with Bike Lane
- Secondary Road
- Secondary Road with Bike Lane
- Off-Road Sealed Path (incl Bike Lane)



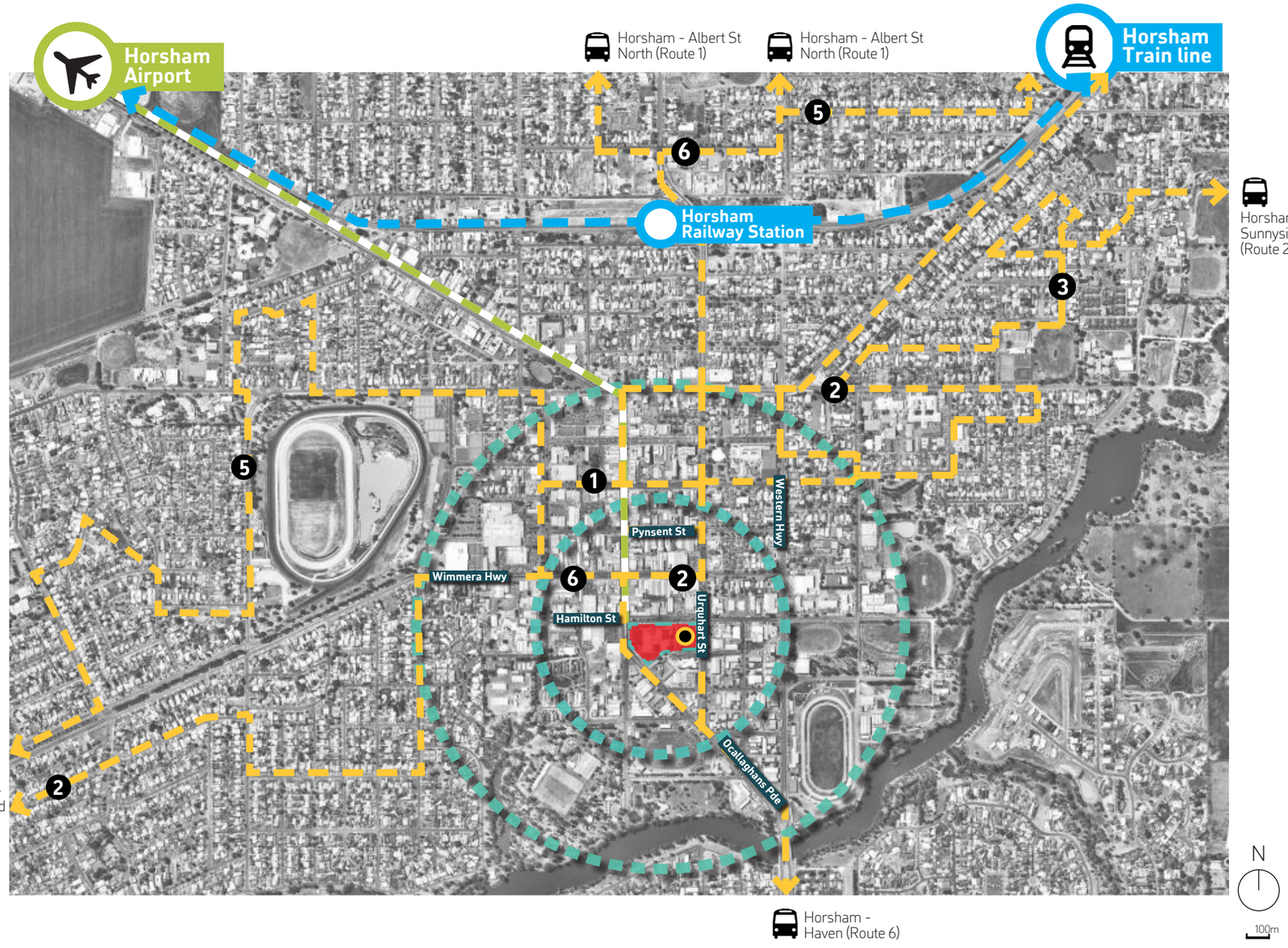
PUBLIC TRANSIT NETWORKS

The Study Area is well serviced by Horsham's public transport network and is accessible from Horsham Airport via the Western Highway.

Bus routes pass along Urquhart Street, Firebrace Street and Ocallaghans Parade, servicing the Study Area's eastern and western boundaries, with one stop located within Bolton Car Park directly adjacent the Study Area.

Access to train links is via Urquhart Street, with the closest stop located 1.5 kilometres north of the site at Horsham Railway Station.

Additionally, Horsham Airport is located 7.1 kilometres or an approximate 12 minute drive north-west from the Study Area.



Bus Route
Major Stops
Closest Stop to the Study Area
Train Line
Airport
Study Area
800m / 10min walk
1600m / 20min walk

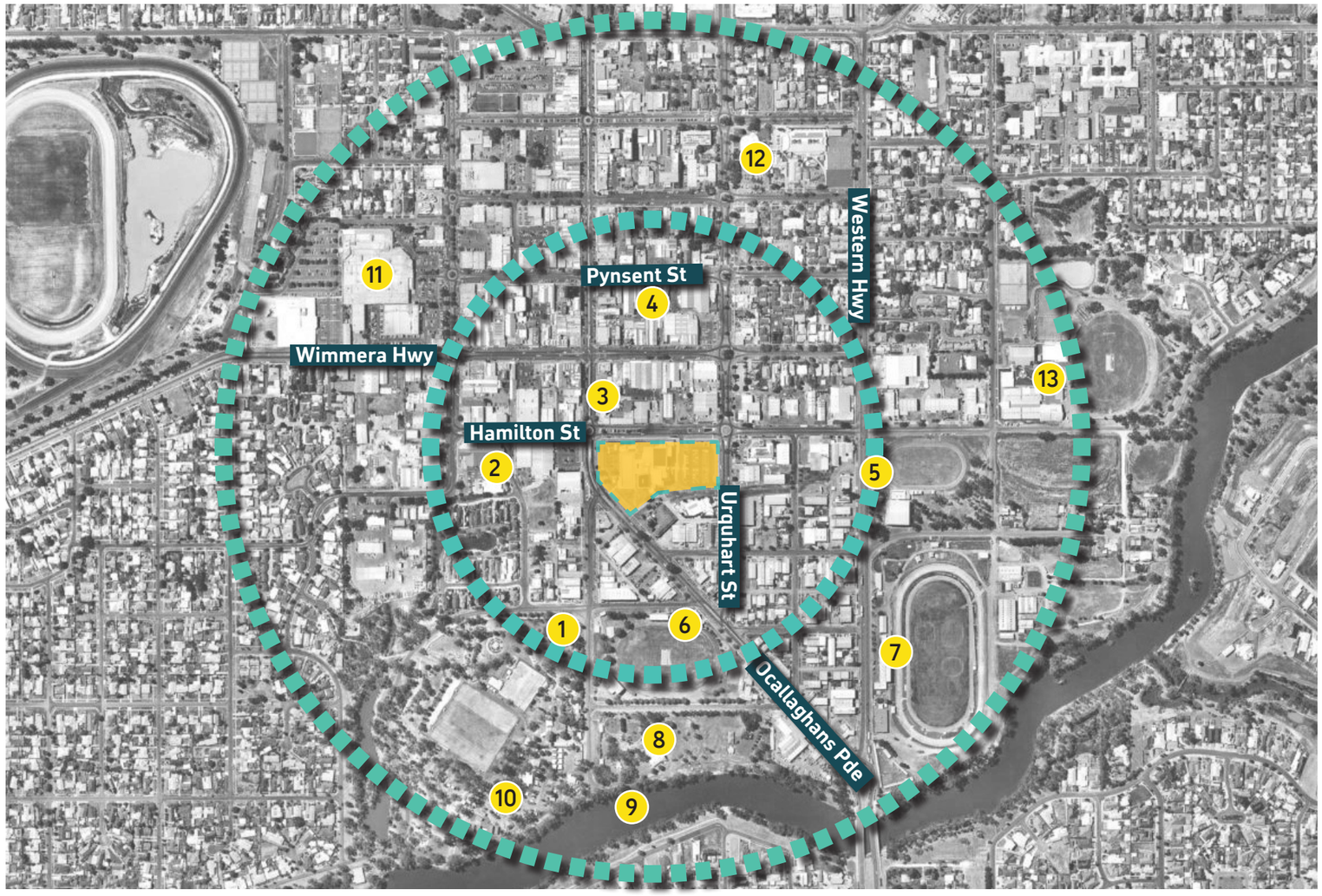
PUBLIC REALM:
SURROUNDING POINTS OF INTEREST

Key features within a 10 minute walk / 800 metre distance from the Study Area:

1. Horsham Botanical Gardens
2. Aldi Supermarket, Harvey Norman and Salon Mode Spa & Beauty
3. Centre Cinema Horsham
4. Curves Gym Horsham
5. Horsham Agricultural Society
6. Horsham Visitor Centre

Key features within a 20 minute walk / 1600 metre distance from the Study Area:

7. Horsham Showgrounds
8. Sawyer Park
9. Wimmera River
10. Horsham Riverside Caravan Park
11. Horsham Plaza
12. Wesley Performing Arts Centre
13. St Brigid's College and Sporting Grounds



Points of interest to the west of the Study Area include Aldi Shopping Centre, Harvey Norman and Salon Mode Spa and Beauty. To the south is the Ocallaghans Parade Commercial District, which leads to Horsham Botanical Gardens, Sawyer Park and Wimmera River. Points of interest to the east include the Urquhart Street Commercial District and the Horsham Showgrounds, and to the north is the township's Community and Commercial Centre, bordered by the Western Highway.

BENCHMARKING

2.0 TOWARD DEVELOPMENT SCENARIOS

2.1 Benchmarking

WIMMERA REGION

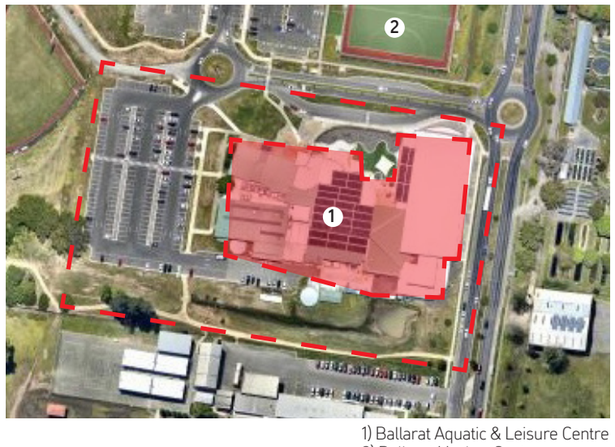
This section of township facilities within and in close proximity to the Wimmera region, has been benchmarked against Horsham Aquatic Centre to highlight key opportunities to explore.

The earlier appraisal of the current condition of Horsham's existing facilities and conditions should be considered together with this picture of provision.

Building Facilities	Horsham Aquatic Centre	Edenhope Aquatic Centre / Sports Stadium	Ballarat Aquatic & Lifestyle Centre	Bendigo Aquatic Centre	Warracknabeal Leisure Centre
Swimming Pool	✓	✓	✓	✓	×
- Outdoor / Seasonal	✓ 50m	✓	✓ 25m	✓ 50m	×
- Heated / Leisure	✓	✓ Solar	✓	✓	×
- Lap / Diving Pool	✓ 25m	✓ 50m	✓ 50m	✓ 50m	×
- Spa	✓	×	✓ 24 Seat	×	×
- Kids Pool	✓	✓	✓	✓	×
- Water Slide	×	×	×	✓	×
Swimming Classes	✓	✓	✓	✓	×
Sport Court Surfaces	×	✓ Adjacent Squash and Soccer Courts hired out through Edenhope College	× Adjacent Sports facilities including Alexandra Croquet Club and Ballarat Hockey Centre	×	✓ Basketball, Netball, Hockey, Soccer, Volleyball, Squash, Cricket, Badminton
Steam Room	×	×	✓	×	×
Health Club	✓	×	✓	×	×
Gymnasium	✓	✓ Adjacent Stadium hired out through Edenhope College	✓	×	✓
Cycle Studio	✓	×	×	×	×
Fitness Rooms / Classes	✓	×	✓ 2 x Studios	×	✓
Change Rooms	✓	×	✓	✓	✓
Toilets	✓	×	✓	✓	✓
Creche / Child Care	✓	×	✓	×	×
Eateries (cafe, restaurant)	✓	✓	✓	✓	✓
Outdoor BBQ Area	✓	✓	✓	✓	×
Function Space	✓	✓	✓	×	✓
Car Parking	✓	✓	✓	✓	✓
Educational Program in collaboration with Schools	✓	✓	✓	✓	✓
Land Size (approx.)	1.8 ha	0.4 ha	2.9 ha	1.1 ha	0.6 ha
Building Size (approx.)	3,130 m^2	1,315 m^2	8,705 m^2	1,226 m^2	2,386 m^2
Site Address:	53 Hamilton St, Horsham Vic 3400	40-46 Lake St, Edenhope Vic 3318	Prince of Wales Recreation Reserve, Gillies St North, Lake Gardens Vic 3350	161-167 Barnard St, Bendigo Vic 3550	33 Anderson St, Warracknabeal, Vic 3393

1) Horsham Aquatic Centre

1) Edenhope Aquatic Centre
2) Edenhope Sports Centre



1) Ballarat Aquatic & Leisure Centre
2) Ballarat Hockey Centre

1) Bendigo Aquatic Centre
2) Queen Elizabeth Oval

1) Warracknabeal
Leisure Centre

N

SMALL TOWNSHIP FACILITIES

Outdoor Swimming Pool, Dimboola:

Facilities include a solar heated 50m, six lane pool, toddlers pool, shaded picnic areas, showers and locker rooms.

Health and Fitness Centre, Dimboola:

The Centre is a modern, multi-purpose complex opened in 2012. Facilities include a fully equipped gym, a synthetic sports field with competition standard lighting for night play, a versatile function room along with two change rooms, separate umpires' room and well equipped kitchen.

Kowree Sports Centre, Edenhope:

The facility offers badminton, basketball, gymnasium, squash, swimming with solar heated outdoor pool.

Outdoor Swimming Pool, Goroke:

Facilities include a seasonal solar heated 25m outdoor pool, with a wading pool to cater for younger children.

Outdoor Swimming Pool, Hopetoun:

Facilities include a seasonal solar heated 25m outdoor pool, with a wading pool to cater for younger children and open picnic space.

Hopetoun Gymnasium, Hopetoun:

The recently opened faculty offers a range of cardio equipment including treadmills, bikes, x trainers and rowers as well as machine weights and free weights

Salon Mode Spa and Beauty, Horsham:

The facility offers treatments such as facials, massages, waxing, make up, tanning, pregnancy massage, body, hand, foot and skin treatments.

Equip Physiotherapy, Horsham:

The facility is a private physiotherapy practice providing high quality, hands-on service, covering a wide range of health and wellbeing issues.

Kanvia Memorial Swimming Pool, Kanvia:

Facilities include a seasonal, solar heated outdoor pool, with spacious grounds for seating and barbecues. Open from November to March.

Lowan Sports Centre & Swimming Pool, Nhill:

The sports centre is located directly adjacent Nhill College, servicing the school and local community. The facility offers badminton, basketball, a gymnasium, squash and a solar heated outdoor pool. The pool area offers a play pool, lap pool and shaded picnic area.

Outdoor Swimming Pool, St Arnaud:

Facilities include a seasonal, seven-lane, 50m solar heated pool, toddlers' wading pool, one metre diving board and three metre diving board. Additionally, there is shaded seating and open lawn space for picnics and barbecues.

Health and Fitness Centre, St Arnaud:

Facilities include a fully equipped gym with change rooms and toilets.

Outdoor Swimming Pool, Warracknabeal:

Facilities include a seasonal solar heated outdoor Olympic Pool, with a wading pool to cater for younger children and open picnic space.

Horsham Aquatic Centre Stage 2 Works

Job Name : 2 INDOOR WORKS B
Client's Name: ENERGY ARCHITECTURE

Job Description
STAGE 2 Horsham Aquatic Cre - Indoor Works - B

Trd No.	Trade Description	Trade %	Cost/m2	Sub Total	Mark Up %	Trade Total
1	NEW INDOOR WORKS ADJACENT INDOOR POOL, PROGRAM LEISURE POOL, RAMP WIDENING	100.00		322,850		322,850
		100.00		**322,850**		**322,850**

Final Total : $ 322,850

Horsham Aquatic Centre Stage 2 Works

Job Name : 2 INDOOR WORKS B **Job Description**

Client's Name: ENERGY ARCHITECTURE STAGE 2 Horsham Aquatic Cre - Indoor Works - B

Item No.	Item Description	Quantity	Unit	Rate	Mark Up %	Amount
Trade : 1	***NEW INDOOR WORKS ADJACENT INDOOR POOL, PROGRAM LEISURE POOL, RAMP WIDENING***					
1	Outdoor function area	48.00	m2	625.00		30,000.00
2	Parent change rooms	81.00	m2	2,350.00		190,350.00
3	Spa & Sauna area	42.00	m2	1,190.48		50,000.00
4	Accessible WC	17.00	m2	2,500.00		42,500.00
5	Widen & extend existing ramp to accommodate mobility scooter turning etc		Item			10,000.00
	NEW INDOOR WORKS ADJACENT INDOOR POOL, PROGRAM LEISURE POOL, RAMP WIDENING				**Total :**	**322,850.00**

Horsham Aquatic Centre Stage 2A Works

Job Name : 2A WATERPLAY SPLASHP
Client's Name: ENERGY ARCHITECTURE

Job Description
STAGE 2A Horsham Aquatic Cre - WaterPlay / SplashPark

Trd No.	Trade Description	Trade %	Cost/m2	Sub Total	Mark Up %	Trade Total
1	WATERPLAY & SPLASH PARK	80.79		925,500		925,500
2	PLAYGROUND	17.46		200,000		200,000
3	HOIST TO HYDRO POOL	1.75		20,000		20,000
		100.00		**1,145,500**		**1,145,500**

Final Total : $ 1,145,500

Horsham Aquatic Centre Stage 2A Works

Job Name : 2A WATERPLAY SPLASHP
Client's Name: ENERGY ARCHITECTURE
Job Description
STAGE 2A Horsham Aquatic Cre - WaterPlay / SplashPark

Item No.	Item Description	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**1 *WATERPLAY & SPLASH PARK***					
	Waterplay and Splash Park					
1	Allowance for construction of Waterplay and Splash Park area		Item			700,000.00
2	Demolish existing pools in the area & backfill excavations		Item			30,000.00
	Canopy over SplashPark					
3	Tensioned UV resistant canopy over splashpark	230.00	m2	850.00		195,500.00
	WATERPLAY & SPLASH PARK				**Total :**	**925,500.00**
Trade :	**2 *PLAYGROUND***					
1	Allowance for creating new playground area including play equipment		Item			200,000.00
	PLAYGROUND				**Total :**	**200,000.00**
Trade :	**3 *HOIST TO HYDRO POOL***					
1	Allowance for Hydro Pool Hoist		Item			20,000.00
	HOIST TO HYDRO POOL				**Total :**	**20,000.00**

Horsham Aquatic Centre Stage 3 Works

Job Name :	3 INDOOR WORKS A	**Job Description**	
Client's Name:	ENERGY ARCHITECTURE	STAGE 3 Horsham Aquatic Cre - Indoor Works - A	

Trd No.	Trade Description	Trade %	Cost/m2	Sub Total	Mark Up %	Trade Total
1	Indoor Works to Corridor, Kiosk, Reception, Office, Accessible change, Scooter Charge, Storeroom, including Hydro Pool, equipment, plant room etc	92.27		712,000		712,000
2	Tilt Up Glass Doors to Hydro Pool Wall	7.73		59,650		59,650
		100.00		**771,650**		**771,650**

Final Total : $ 771,650

Horsham Aquatic Centre Stage 3 Works

Job Name : 3 INDOOR WORKS A **Job Description**

Client's Name: ENERGY ARCHITECTURE STAGE 3 Horsham Aquatic Cre - Indoor Works - A

Item No.	Item Description	Quantity	Unit	Rate	Mark Up %	Amount
Trade : **1**	***Indoor Works to Corridor, Kiosk, Reception, Office, Accessible change, Scooter Charge, Storeroom, including Hydro Pool, equipment, plant room etc***					
1	Indoor Works to Corridor, Kiosk, Reception, Office, Accessible change, Hydro Pool, Scooter Charge, Storeroom	268.00	m2	1,250.00		335,000.00
2	Hydro Pool Plant Room	50.00	m2	1,000.00		50,000.00
3	Allowance for Hydro Pool incl. enclosure, single tier seating, etc	1.00	Item	327,000.00		327,000.00
	Indoor Works to Corridor, Kiosk, Reception, Office, Accessible change, Scooter Charge, Storeroom, including Hydro Pool, equipment, plant room etc				**Total :**	**712,000.00**
Trade : **2**	***Tilt Up Glass Doors to Hydro Pool Wall***					
1	Tilt Up Glass Doors to Hydro Pool Wall, approx 2.40 wide x 2.70 high	6.00	no	8,100.00		48,600.00
2	Steel columns & beams structure to support doors	1.30	t	8,500.00		11,050.00
	Tilt Up Glass Doors to Hydro Pool Wall				**Total :**	**59,650.00**

Horsham Aquatic Centre Stage 4 Works

Job Name :	4 OUTDR LNDSCP	**Job Description**	
Client's Name:	ENERGY ARCHITECTURE	STAGE 4 Horsham Aquatic Cre - Outdoor Landscaping	

Trd No.	Trade Description	Trade %	Cost/m2	Sub Total	Mark Up %	Trade Total
1	OUTDOOR LANDSCAPING WORKS, MAIN POOL SHADE STRUCTURE	100.00		586,365		586,365
		100.00		**586,365**		**586,365**

Final Total : $ 586,365

Horsham Aquatic Centre Stage 4 Works

Job Name : 4 OUTDR LNDSCP **Job Description**

Client's Name: ENERGY ARCHITECTURE STAGE 4 Horsham Aquatic Cre - Outdoor Landscaping

Item No.	Item Description	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**1 *OUTDOOR LANDSCAPING WORKS, MAIN POOL SHADE STRUCTURE***					
1	Landscaped areas generally	1,650.00	M2	45.00		74,250.00
2	Additional Allowance for Grass Seating Mounds in landscaped areas	110.00	M2	60.00		6,600.00
3	Raised grass/concrete mound to provide event seating	55.00	M2	125.00		6,875.00
4	New event seating	60.00	M2	300.00		18,000.00
5	Removeable seating	4.00	no	1,500.00		6,000.00
6	New barbecues	3.00	no	5,000.00		15,000.00
7	Barbecue Area assumed under cover	65.00	m2	500.00		32,500.00
8	Sundry small seating areas	3.00	sets	1,000.00		3,000.00
9	Shade structure over seating at Gym	55.00	m2	600.00		33,000.00
10	Metal Screen Fencing x 2.0m high?	48.00	m	500.00		24,000.00
11	Subtotal					*219,225.00*
	Pool Shade Structure					
12	Columns & Pads					
13	Imperite-finished columns, 300UCs	3.90	t	10,000.00		39,000.00
14	Pads incl demo existing paving	8.00	no	2,730.00		21,840.00
15	Reinstate paving	18.00	m2	125.00		2,250.00
16	Steel Trusses and Purlins					
17	Imperite-finished curved trusses, 2.7t each	10.00	t	11,500.00		115,000.00
18	125*75 RHS purlins 1500ccs Imperite coated	4.90	t	10,000.00		49,000.00
19	Danpalon/Equivalent Roof Covering, Gutters, Down Pipes, etc					
20	Danpalon/Equivalent Roof Covering, Gutters, Down Pipes, etc --- approx figure from Alien Roofing	404.00	m2	250.00		101,000.00
21	Roof Water Disposal					
22	Gutters & downpipes included in roofing figure		Note			**INCL**
23	Allowance for underground stormwater system	1.00	Item	39,050.00		39,050.00
24	Subtotal					*367,140.00*
	OUTDOOR LANDSCAPING WORKS, MAIN POOL SHADE STRUCTURE				**Total :**	**586,365.00**

Horsham Aquatic Centre Stage 5 Works

Job Name : 5 GYM WORKS ETC
Client's Name: ENERGY ARCHITECTURE

Job Description
STAGE 5 Horsham Aquatic Cre - Gym Works & Community Lounge

Trd No.	Trade Description	Trade %	Cost/m2	Sub Total	Mark Up %	Trade Total
1	"GYM WORKS" and Associated Items	100.00		533,440		533,440
		100.00		**533,440**		**533,440**

Final Total : $ 533,440

Horsham Aquatic Centre Stage 5 Works

Job Name : 5 GYM WORKS ETC

Client's Name: ENERGY ARCHITECTURE

Job Description

STAGE 5 Horsham Aquatic Cre - Gym Works & Community Lounge

Item No.	Item Description	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**1** ***"GYM WORKS" and Associated Items***					
1	Larger entry to Gymnasium, demolish existing office etc		Item			15,000.00
2	Accessibility to gym from outdoor area (folding cafe style doors?)		Item			50,000.00
3	New office, consulting rooms etc	50.00	m2	2,250.00		112,500.00
4	Outdoor PT session space	160.00	m2	250.00		40,000.00
5	Revisions to RPM area	140.00	m2	1,500.00		210,000.00
	Revisions Community Lounge					
6	Demo existing door babk		Item			1,500.00
7	Demo walls		Item			1,440.00
8	Replace floor coverings		Item			5,200.00
9	Cafe style folding door banks		Item			45,000.00
10	Sundry joinery, allowance		Item			15,000.00
11	Cafe lounge seating area		Item			15,000.00
12	Create meeting space		Item			22,800.00
	"GYM WORKS" and Associated Items				**Total :**	**533,440.00**

Horsham Aquatic Centre "Sundry" Works

Job Name : GENERALLY
Client's Name: ENERGY ARCHITECTURE

Job Description
Horsham Aquatic Cre - General Areas to Be Refurbished

Trd No.	Trade Description	Trade %	Cost/m2	Sub Total	Mark Up %	Trade Total
1	FEMALE TOILETS	7.73		8,000		8,000
2	CHILDCARE AREA	54.11		56,000		56,000
3	RELOCATION EXISTING RAINWATER TANK	14.49		15,000		15,000
4	EQUIPMENT STORE	23.67		24,500		24,500
		100.00		**103,500**		**103,500**

Final Total : $ 103,500

Horsham Aquatic Centre "Sundry" Works

Job Name : GENERALLY
Client's Name: ENERGY ARCHITECTURE

Job Description
Horsham Aquatic Cre - General Areas to Be Refurbished

Item No.	Item Description	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**1 *FEMALE TOILETS***					
1	Remove cubicle curtains & rails, supply and install doors c/- furniture & hardware, prefinished to match doors	10.00	no	800.00		8,000.00
	FEMALE TOILETS				**Total :**	**8,000.00**
Trade :	**2 *CHILDCARE AREA***					
1	Create opening into Childcare store, pair of doors, making good etc		Item			5,000.00
2	Covered play area canopy	40.00	m2	650.00		26,000.00
3	Create new childcare storeroom from existing space incl new pair doors, steps, altered lobby etc, pair external doors		Item			25,000.00
	CHILDCARE AREA				**Total :**	**56,000.00**
Trade :	**3 *RELOCATION EXISTING RAINWATER TANK***					
1	Allowance for relocation of existing rainwater tank including installation new reticulation route, basecourse, connection to roof and to stormawter disposal etc		Item			15,000.00
	RELOCATION EXISTING RAINWATER TANK				**Total :**	**15,000.00**
Trade :	**4 *EQUIPMENT STORE***					
1	New (assumed) heavy duty mesh equipment store, lockable	1.00	Item	24,500.00		24,500.00
	EQUIPMENT STORE				**Total :**	**24,500.00**

HORSHAM AQUATIC CENTRE REDEVELOPMENT

Master Plan Order of Opinion of Costs Summary - REVB

3/08/2017

Client: Energy Architecture

SECTION	Net Costs Figures rounded	Design Contingency	Contractor's Preliminaries	Locality Allowance	Construction Contingency	Total Excl GST	Total Budget OOC excl GST	10% GST	Total Budget OOC incl GST
		15%	12.0%	10%	15%			10%	
STAGE 1 WORKS	Estimate by Others								By Others - NOTE
STAGE 2 WORKS - Indoor Works B									
Outdoor Function Area	30,000	4,500	4,140	3,864	6,376	48,880	48,880	4,888	53,768
Parent Change Rooms	190,500	28,575	26,289	24,536	40,485	310,385	310,385	31,039	341,424
SPA & Sauna Area	50,000	7,500	6,900	6,440	10,626	81,466	81,466	8,147	89,613
Accessible WC	42,500	6,375	5,865	5,474	9,032	69,246	69,246	6,925	76,171
Ramp Extension & Widening	10,000	1,500	1,380	1,288	2,125	16,293	16,293	1,629	17,923
STAGE 2 WORKS TOTAL	323,000	48,450	44,574	41,602	68,644	526,270	526,270	52,627	**578,897**
STAGE 2A WORKS									
Waterplay and Splash Park area	700,000	105,000	96,600	90,160	148,764	1,140,524	1,140,524	114,052	1,254,576
Demolish existing pools	30,000	4,500	4,140	3,864	6,376	48,880	48,880	4,888	53,768
Hoist to Hydro Pool	20,000	3,000	2,760	2,576	4,250	32,586	32,586	3,259	35,845
Canopy over SplashPark	195,500	29,325	26,979	25,180	41,548	318,532	318,532	31,853	350,385
Playground Area including Play Equipment	200,000	30,000	27,600	25,760	42,504	325,864	325,864	32,586	358,450
STAGE 2A WORKS TOTAL	1,145,500	171,825	158,079	147,540	243,442	1,866,386	1,866,386	186,639	**2,053,025**
STAGE 3 WORKS - Indoor Works A									
Hydro Pool Complete	347,000	52,050	47,886	44,694	73,744	565,374	565,374	56,537	621,911
Hydro Pool Plant Room	50,000	7,500	6,900	6,440	10,626	81,466	81,466	8,147	89,613
Tilt Up Glass Doors	60,000	9,000	8,280	7,728	12,751	97,759	97,759	9,776	107,535
Other Areas	335,000	50,250	46,230	43,148	71,194	545,822	545,822	54,582	600,404
STAGE 3 WORKS TOTAL	791,700	118,800	109,296	102,010	168,316	1,290,421	1,290,421	129,042	**1,419,464**
STAGE 4 WORKS Outdoor Landscaping									
Landscaping	219,300	32,895	30,263	28,246	46,606	357,310	357,310	35,731	393,041
Pool Shade Structure	367,200	55,080	50,674	47,295	78,037	598,286	598,286	59,829	658,115
STAGE 4 WORKS TOTAL	586,500	87,975	80,937	75,541	124,643	955,596	955,596	95,560	**1,051,156**
STAGE 5 WORKS - Gym Works	533,500	80,025	73,623	68,715	113,379	869,242	869,242	86,924	**956,166**
'GENERALLY"- Sundries	103,500	15,525	14,283	13,331	21,996	168,635	168,635	16,863	**185,498**
	3,483,700	**522,600**	**480,792**	**448,739**	**740,420**	**5,676,551**	**5,676,551**	**567,655**	**6,244,206**

WILDE AND WOOLLARD
Construction Cost Consultants
LEES CADMAN P/L T/A WILDE AND WOOLLARD (SA) ABN: 49 056 864 432 (ADELAIDE)
7 Birdwood Avenue FREWVILLE 5063
(08) 82319994
E: mail@wwadelaide.com
0412 412 749

NOTES:

Exclusions: The following are excluded from this estimate

Costs for Upgrading of existing power supply or transformer;
Professional Fees and Disbursements;
Council costs;
Legal costs.

Red text = responding to the proposed master plan
Grey text = responding to existing facilities

Improved accessibility (7)

- more disability access/areas for family time
- more access for disabilities
- No wheel chair change room big enough or hoist a spa and sauna could be useful
- Addition, revamp of outdoor areas. Additional entry/ exit for pool users.
- Access to the outdoor pool without having to go through the main building
- 1. Contrast on floor finishes, better use of tactile indictors 2. Lighting around the pool needs to be considered (DDA compliance)
- 1. Hydrotherapy pool to be included for people with disabilities 2. More staffing around the pool

Hydrotherapy pool (4)

- Hydrotherapy pools must be included
- Hydrotherapy pool is a must, can also be used for children to learn to swim
- 1. Requires a Rehabilitation Pool 2. Leisure pool is not sufficient 3. Acute needs are not catered for
- Hydrotherapy pool to be included for people with disabilities 2. More staffing around the pool

Existing 50m outdoor pool upgrades (5)

- improvement outdoor pool area and a good music system for the water aerobics, some ladies would not be able to hear the music at the present time
- Outdoor pool needs upgrading
- Outdoor pool needs to be made deeper at shallow end, heating in outdoor pool needs to improve and permanent shade structures need to be erected.
- Large sized impressive outdoor water splash park. Outdoor 50m pool to be completely refurbished and modernised including options to heat via solar.
- Fix and modernise outdoor 50 m pool, add a playground, install two spiral water slides (different heights)

Energy Architecture Pty Ltd
www.energyarchitecture.com.au
ABN 24 161 144 001
109 Grote Street Adelaide SA 5000
T 08 8410 4999 F 08 8410 2566
info@energyarchitecture.com

-

Spectator seating for indoor pool (4)

- Adding seating around the 25m outdoor pool for events
- Indoor area around 25 pool be extended to enable tiered seating for spectators to encourage the use of the pool for sports, events, games and swim meets
- 2. Adding seating around the 25m outdoor pool for events
- Larger indoor pools, tiered seating, indoor water play/features for children, expansion of fitness rooms and better toilet and change facilities. Expansion and upgrade overall

Water slide (10)

- Fix and modernise outdoor 50 m pool, add a playground, install two spiral water slides (different heights)
- More aquatic play equipment - slides etc, suitable for older children/ teens
- 7. Add a slide outside
- Install a water slide to bring the teenagers to the pool instead of river
- Horsham is a hub for the region and its climate is hot over Summer it would be great to have splashdowns slides and a spa or 2 would be great too. For the size of our city and distance from beach I think we should have the latest facilities. There are great facilities at Waurn Ponds in Geelong and suburbs throughout Melbourne.
- More aquatic play equipment - slides etc, suitable for older children/ teens
- Would add a water slide
- No. Indoor splash park, water slides. Aquanation in Ringwood is good example.
- I like it but I would add water slides on the 50 m pool.
- Add a spa, sauna, water slide

Outdoor eating / BBQ + picnic (8)

- Create a great family vibe on weekends over summer in the outdoor pool area. Open in the evenings on the weekend, activities in the 50m pool, BBQ's, live music/DJ's to create a 'party atmosphere' for teens, a playground is great, bring back 'night swimming' occasionally (there used to be lights in the 50m pool)
- More family areas for eating, longer hours for accessibility after hours. Would benefit from greater flexibility in family areas.
- Make the outdoor pool more appealing for families. Add a playground, outdoor kiosk and more shade

Energy architecture
Energy Architecture Pty Ltd
www.energyarchitecture.com.au
ABN 24 161 144 001
109 Grote Street Adelaide SA 5000
T 08 8410 4999 F 08 8410 2566
info@energyarchitecture.com

- Some of the master plan addresses this. Outdoor water play, more shaded areas, better opening hours, needs to be more flexible around opening later into evenings when it is hot. Create a family hangout atmosphere during the hot summer evenings. Better pool surrounds creates better supervision of swimmers. Warmer water in the outdoor pool. Not hot, just more inviting.

- Non-tokenistic infrastructure to promote summer fun at the outdoor pool. There are kids swimming in the river. Why? Swing ropes, big jumps etc. Better to have them in a better environment.

- would be great to have more outside in the way of picnic tables, water play area, bbqs to make the most of the hot summer nights. These are nice things and not imperative but it would be great for this facility to be better suited to family picnics on warm nights.

- more disability access/areas for family time

- Make the outdoor pool more appealing for families. Add a playground, outdoor kiosk and more shade

Outdoor kiosk (2)

- More children's facilities, better crèche for parents to access gym/pool. Proper kiosk so we can purchase lunch etc there to avoid having to leave if we come down for the day.

- Make the outdoor pool more appealing for families. Add a playground, outdoor kiosk and more shade

Splashpark / children's pools (6)

- Splash park needs to be bigger and the largest investment and a large development of an impressive 'regional best ever nature' including a large water slide similar to Bendigo. It will also act as a tourism drawcard for the entire Wimmera Mallee region as well as western highway travellers bringing an economic boost to the city and act as another tick to encourage new residents to the city and new users of the facility. If done properly and an impressive scale it will be a social and economic winner. Too small and it will get boring real quick.

- A kids outdoor play area and splash park

- The baby pools need to be opened so parents can be with their younger and older children.

- Update the 2 small pools outside and create more shade with new trees on this area around these pools and the 50m pool. Bring back the diving board at the 10ft end.

- Larger indoor pools, tiered seating, indoor water play/features for children, expansion of fitness rooms and better toilet and change facilities. Expansion and upgrade overall

- No. Indoor splash park, water slides. Aquanation in Ringwood is good example.

50m pool standardisation (8)

- Cater more to swimming clubs. We want to encourage swimming as an elite sport in his district, but we have nowhere to do that.

Energy Architecture Pty Ltd
www.energyarchitecture.com.au
ABN 24 161 144 001
109 Grote Street Adelaide SA 5000
T 08 8410 4999 F 08 8410 2566
info@energyarchitecture.com

- It needs to be on par with other centers so as to enable hosting of majors comps (such as the countries in Jan) which would bring revenue into the district for swimming clubs and businesses.
- Competition standard outdoor 50m pool
- 5. Move the ramp outside the 8 lanes of the outdoor pool
- Fix and modernise outdoor 50 m pool, add a playground, install two spiral water slides (different heights)
- It really does need to be 8 lanes, deep enough for competitive diving at both ends, and be a wetdeck in order to comply with swimming Victoria's requirement for a championship event pool.
- No the loss of an eighth lane in the outdoor pool is problematic for swim comps. The depth of the pools are problematic (too shallow), insufficient shade.
- I like the proposed changes provided - however a few things need to be considered. The access ramp being added will reduce this 8 lane pool to 7 lanes for swim meets. The pool depth at the shallow end needs to be increased to 1.2 metres as a minimum to allow dive entry for events at swim meets. The marshalling area needs to be wider to meet the width of the pool. The proposed right hand side of marshalling area needs to be the same as the proposed left hand side. Permanent shade structures need to be erected over marshalling and seating areas. These modifications would make this facility up to the standard which would be required to host Victorian LC Country Championships which would bring in huge financial benefits to the region. If the access ramp is put in then Wimmera District 12 would have no hope of hosting such an event with just 7 lanes and no diving at the shallow end.
-

Other outdoor recreational – beach volleyball / trampolines etc. (7)

- Trampolines in the outdoor area for additional fitness and recreational choices

- More activities for young people like beach volleyball or games

- More activities for young people, like beach volleyball courts outside and maybe other fun activities like in some of the caravan parks- there is a bouncy ground thing too and playground equipment

- Trampolines

- Something like beach volleyball but I like the bbq area and playground. Must keep the outdoor pool.

- An outdoor play area that includes beach volleyball, badminton, totem tennis etc would be fun, not just formal volley ball. The toilets and change rooms are fine for current usage. Having used the family disability rooms the only issue is lack of dry seat bench and clothes hooks. It would be a nightmare having 3 kids in there... just some basic thought put into the how do people use the area rather than total remodelling

- More casual outdoor activities like Croquet, quoits mini golf... anything that encourages a longer stay. I wouldn't call it volleyball, so whilst I've put volleyball as important... I'm meaning a variety of activities. I'm not sure that a community lounge would work, unless it is more incorporated into the cafe area.

Gym + RMP rooms (4)

- 24 hour gym in order to compete with other gyms in Horsham and create more business

Energy Architecture Pty Ltd
www.energyarchitecture.com.au
ABN 24 161 144 001
109 Grote Street Adelaide SA 5000
T 08 8410 4999 F 08 8410 2566
info@energyarchitecture.com

- 1. RPM rooms is not large enough 2. Requires some type of outdoor PT Space 3. 24hr access to the Gym

- 1. RPM rooms needs to be larger, maybe with tiered bikes 3. Add consulting rooms for allied health to the bottom of the site 6. 24/7 Gym

- Larger indoor pools, tiered seating, indoor water play/features for children, expansion of fitness rooms and better toilet and change facilities. Expansion and upgrade overall

-

Changerooms / Showers / Toilets upgrades (9)

- An update on the outside is definitely due, the proposed plan looks good. My only thought was as a mother of a toddler that used to attend swimming lessons there on a weekly basis, is that either a few more showers be installed in the parents room or they still have a change table in the male and female bathrooms as most of the parents take their kids in for a rinse off and then dress them after swimming lessons

- Longer opening hours in summer. More showers

- More change rooms for when dads take young children swimming- family change areas

- 1. Upgrading the showers in the female toilets, curtains are not acceptable. Using cubicles. 2. Upgrading the change rooms 3. Replace all curtains with doors. 4. Adding hooks to the change rooms for towels.

- 4. Female showers need to be reviewed

- Larger indoor pools, tiered seating, indoor water play/features for children, expansion of fitness rooms and better toilet and change facilities. Expansion and upgrade overall

- More showers and water warmer in showers in winter
- There needs to be more family/private change room options for pool users.
- Many more showers needed. Also allied health rooms AMUST!

-

Spa / Sauna (7)

- Spa/sauna, bigger warm pool as often go with kids but can have multiple classes going and can access pool very well if not involved

- Horsham is a hub for the region and its climate is hot over Summer it would be great to have splashdowns slides and a spa or 2 would be great too. For the size of our city and distance from beach I think we should have the latest facilities. There are great facilities at Waurn Ponds in Geelong and suburbs throughout Melbourne.

- No wheel chair change room big enough or hoist a spa and sauna could be useful

- Spa/sauna

- Spa and slides. Check out other leisure centres for ideas too.

Energy Architecture Pty Ltd
ABN 24 161 144 001
www.energyarchitecture.com.au
109 Grote Street Adelaide SA 5000
T 08 8410 4999 F 08 8410 2566
info@energyarchitecture.com

- Add a spa, sauna, water slides
- No. Add a spa and a sauna/steam room.

Shade (8)

- Outdoor pool needs to be made deeper at shallow end, heating in outdoor pool needs to improve and permanent shade structures need to be erected.
- Outdoor shade req

- Update the 2 small pools outside and create more shade with new trees on this area around these pools and the 50m pool. Bring back the diving board at the 10ft end.
- Make the outdoor pool more appealing for families. Add a playground, outdoor kiosk and more shade
- Some of the master plan addresses this. Outdoor water play, more shaded areas, better opening hours, needs to be more flexible around opening later into evenings when it is hot. Create a family hangout atmosphere during the hot summer evenings. Better pool surrounds creates better supervision of swimmers. Warmer water in the outdoor pool. Not hot, just more inviting
- More shaded outdoor grassed areas- we don't need to fry ourselves. And some passive pool heating outdoor pool.....pool soooo... cold once weather changes...use all year!!!
- 1. Shade over the outdoor door is a great idea
- Grass area, lack of potential for burnt feet on scalding summer days
- Shade in the car park and entrance.
- outdoor shaded spaces and seating

Warmer water – passive heating (2)

- More shaded outdoor grassed areas- we don't need to fry ourselves. And some passive pool heating outdoor pool.....pool soooo... cold once weather changes...use all year!!!
- Some of the master plan addresses this. Outdoor water play, more shaded areas, better opening hours, needs to be more flexible around opening later into evenings when it is hot. Create a family hangout atmosphere during the hot summer evenings. Better pool surrounds creates better supervision of swimmers. Warmer water in the outdoor pool. Not hot, just more inviting

Other suggestions

- Keep up with technology, social media and top quality equipment and services
- I believe this centre has the scope to include more water activity for all aged children - eg water slide for older and improved area for toddlers. I also believe that the dance hall could be used for more older adult's activities, and perhaps could also include activities for those with other disabilities. I noticed that there were some activities listed on the Horsham Indoor Sports Stadium survey, that I believe should be kept at the Aquatic Centre for a number of reasons. Pryme mover membership could include additional activities making additional activities affordable for older adults, things like "chance to dance", tai Chi Quigong, walking to music, etc. The Aquatic Centre is central to town, has central access for those with gophers, and walking. I also believe that the membership rules/costs could be improved to encourage more membership. Eg pryme movers often go away on extended holidays, but suspension of membership without cost is only for 30 days - I cancelled my membership due to this and know others who also have. I would really like to see something like "happy hour" with an applicable "low rate" which would be from say 3.45-4.45 for an after school swim - grandparents/parents could bring children after school for some exercise and if it was affordable. I looked into doing this with my grandchildren and it was going to cost me $18 a visit - so obviously I didn't bring them. If community members see something as "great value" they are more likely to take up the offer. Maybe even have "monthly advertised specials" that would encourage people to trial a certain activity or area to expose them to it, then a membership offer at the conclusion of the month.

Energy Architecture Pty Ltd
www.energyarchitecture.com.au
ABN 24 161 144 001
109 Grote Street Adelaide SA 5000
T 08 8410 4999 F 08 8410 2566
info@energyarchitecture.com

Too much (2)

- The new proposal I feel is an over estimate of what is required. Do some landscaping and fix the 2 small pools outside and we're done. Why after a new building gets put in do we have to widen the access ramp? Should this not be thought of already. I don't believe all of what is proposed is needed. Who will pay for this? How much is the total cost (accurate cost)? Horsham ratepayers cannot afford to cover this when we are all still paying for the town hall. Our rates are extremely high compared to other municipalities, where is the funding coming from?

- The long ramp entry into the outdoor pool seems a huge effort for very limited use when the indoor pools have this access. The level of disability that requires that length of access ramp would also require a warm water pool. The two requirements essentially cancel each other out. Short ramp entry around the current step entry extended should suffice instead of taking up a whole lane. Once you are in about 60cm of water you are floating, even if you are entering via a wheelchair, so there should be no need for a long ramp.

Acoustic measures? (1)

- Plan looks great - very loud & difficult with sound sensitive child

Child care Store (1)

- Child Care Store: This is currently used by the Hall exercise classes, where would their equipment go? The proposed accessible pool ramp intrudes on the 8 lane pool, for swim meets (the only one with 8 lanes in the wimmera area), the marshalling area needs to cover the width of the pool area

Diving pool (2)

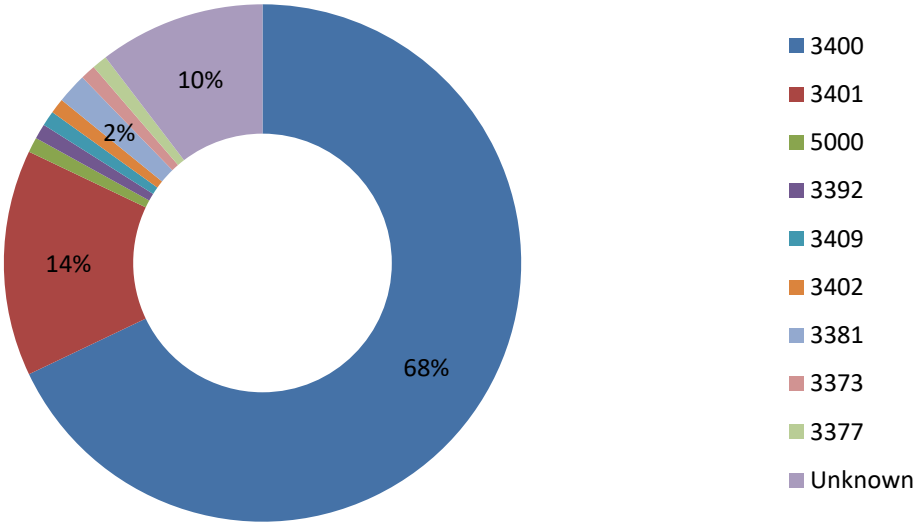
- Diving pool, sick of people jumping into indoor pool
- A dive board should be an option to encourage diving as a sport which is offered in other larger regional cities but non existent here
- Update the 2 small pools outside and create more shade with new trees on this area around these pools and the 50m pool. Bring back the diving board at the 10ft end.

Energy Architecture Pty Ltd
www.energyarchitecture.com.au
ABN 24 161 144 001
109 Grote Street Adelaide SA 5000
T 08 8410 4999 F 08 8410 2566
info@energyarchitecture.com

Horsham Aquatic Centre - Proposed Master Plan - Community Survey Data

Question 1.
(personal details)

Postal Code of survey participants:



Question 2.

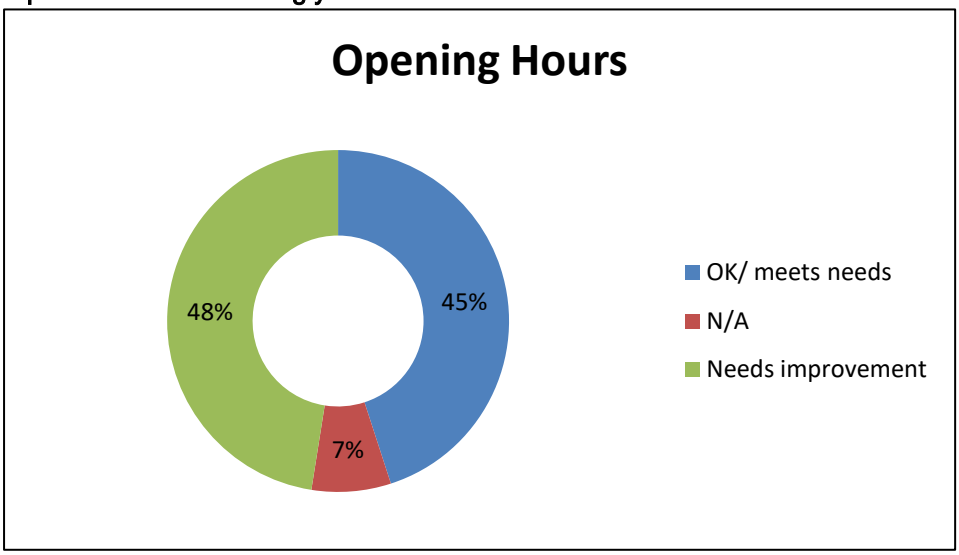
During the previous 12 months, how often have you used the Horsham Aquatic Centre?		
Answer Options	**Response Percent**	**Response Count**
Never	12.6%	12
0-5	20.0%	19
5-10	8.4%	8
10-15	9.5%	9
15-20	4.2%	4
20 - over	45.3%	43
	answered question	95
	skipped question	3

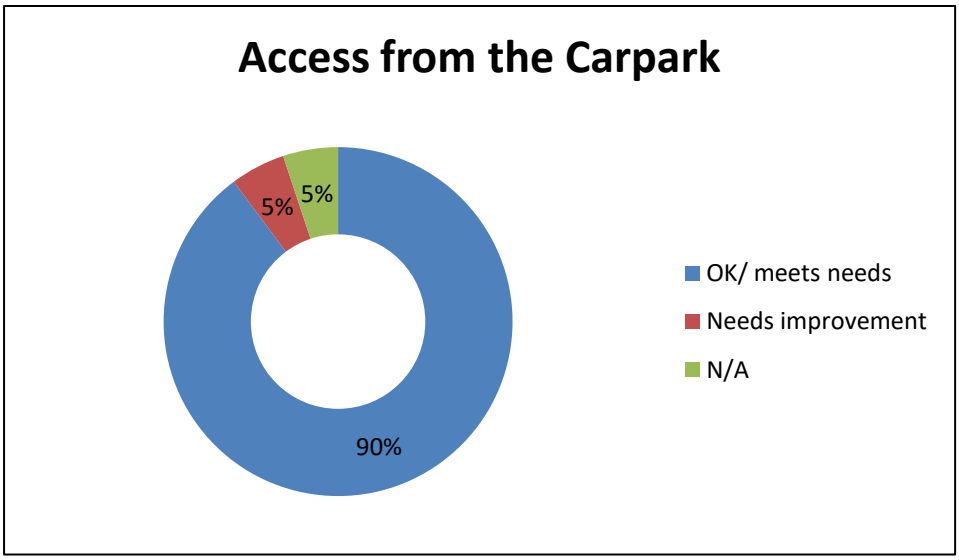
Question 3.

What is the main reason you attended the Horsham Aquatic Centre?		
Answer Options	**Response Percent**	**Response Count**
Indoor Pools	74.2%	66
External 50m Pool	38.2%	34
Gymnasium	16.9%	15
Fitness Activities (excluding pools)	19.1%	17
Child Care	2.2%	2
School, Club or organised Events	13.5%	12
Rehabilitation or Therapy	4.5%	4
Other (please specify)	20.2%	18
	answered question	89
	skipped question	9

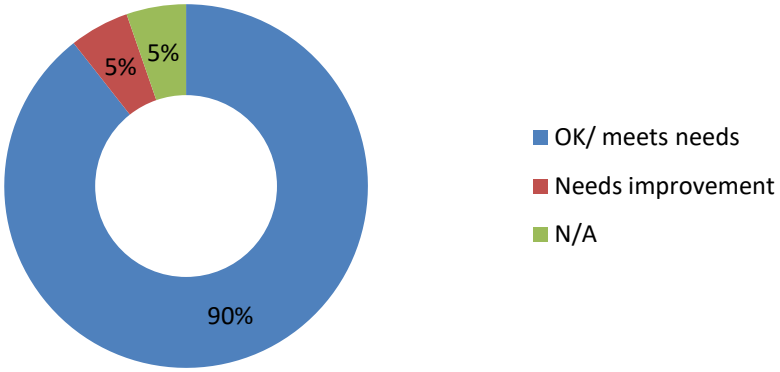
Question 4.

Please comment on the level of accessibility (for each of the following options) of the Horsham Aquatic Centre in meeting your needs?

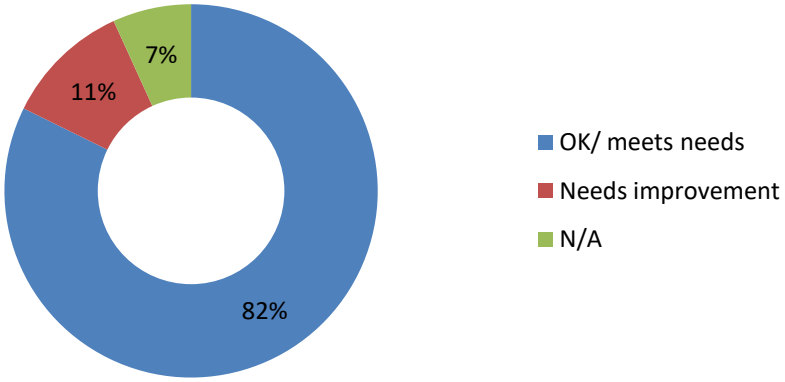




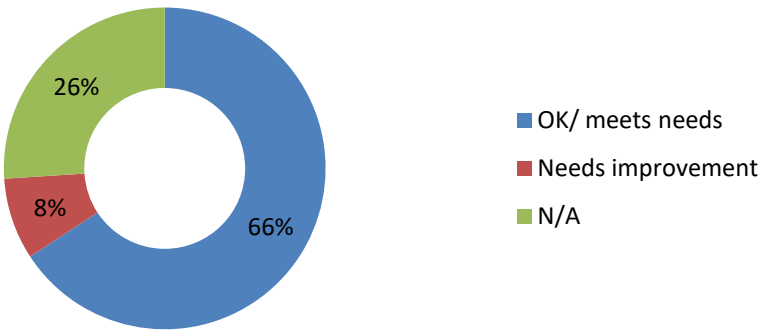
Access by foot into the building



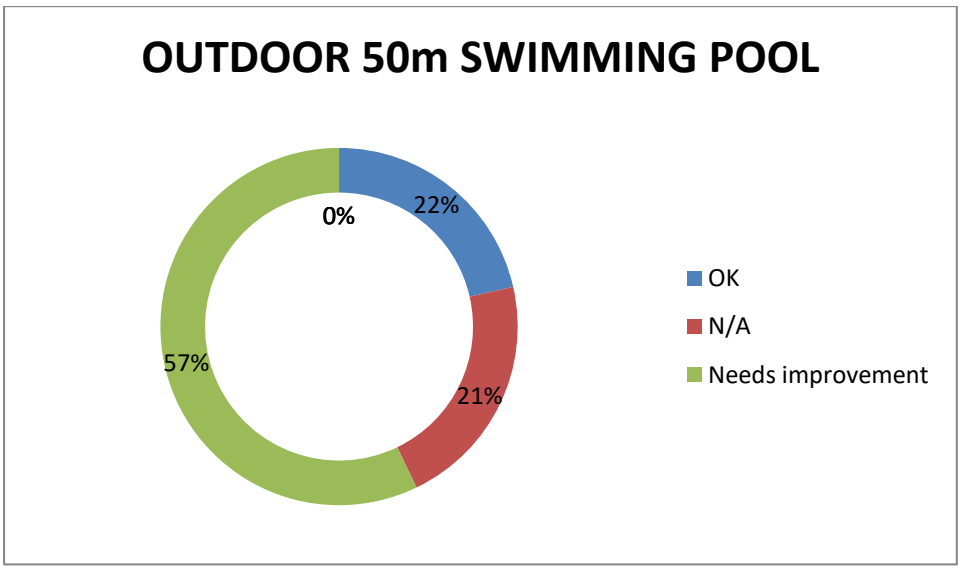
Accessibility into the Pools

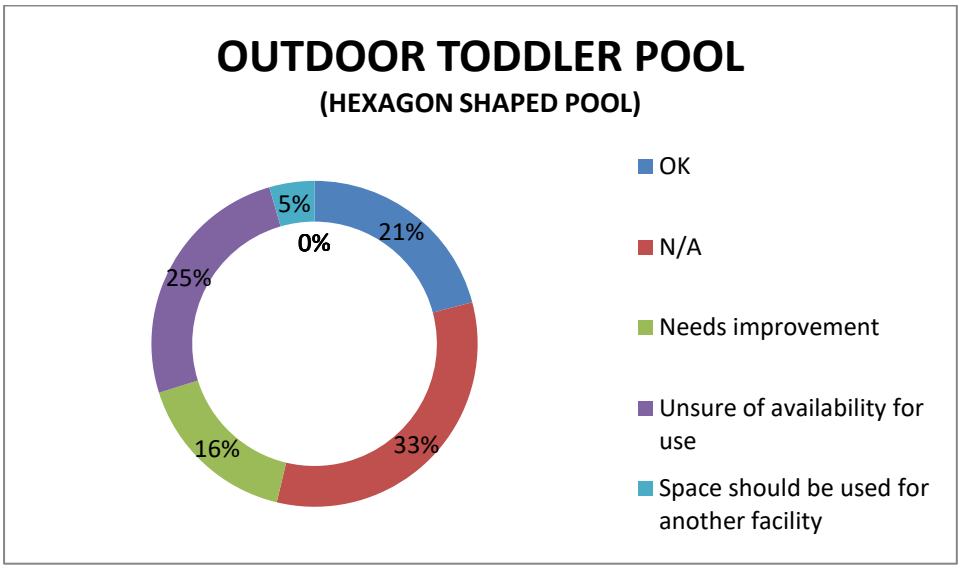


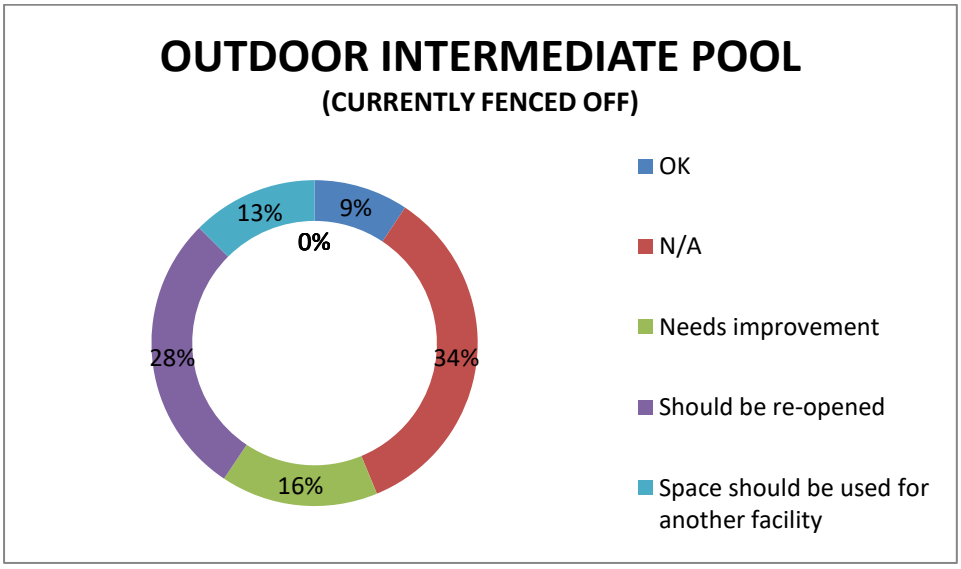
Accessibility into Gym/ Fitness Rooms

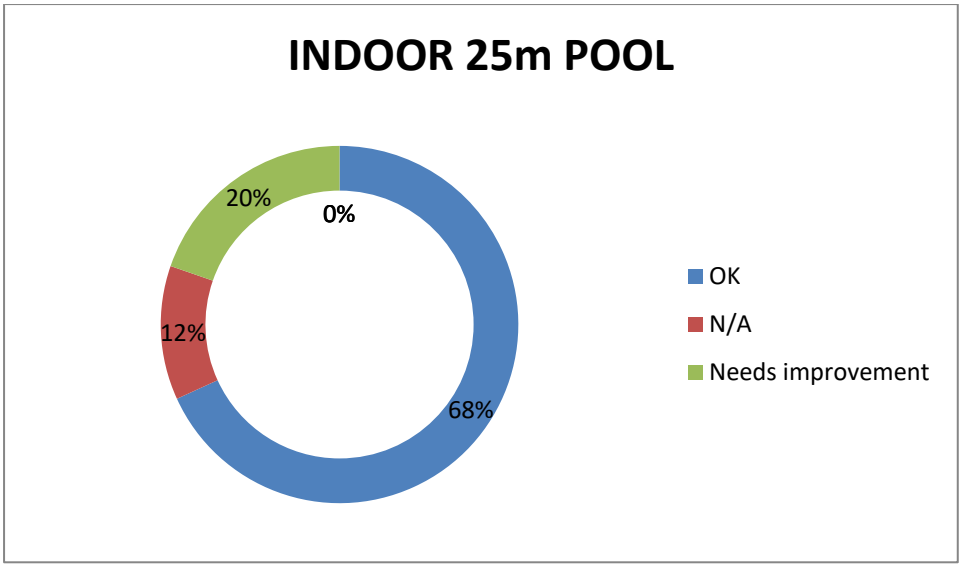


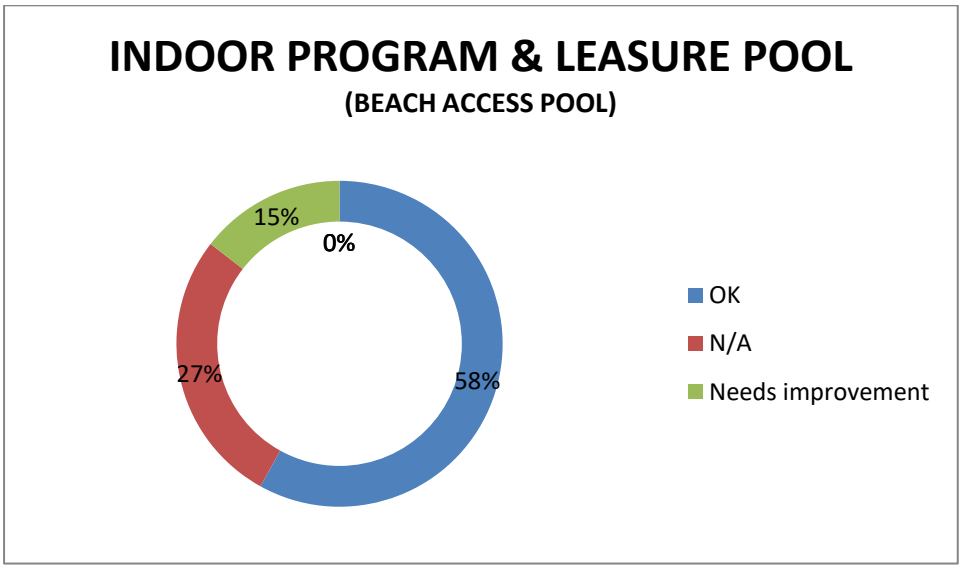
Question 5. Please comment on the suitability of the facilities at the Horsham Aquatic Centre in meeting your needs?

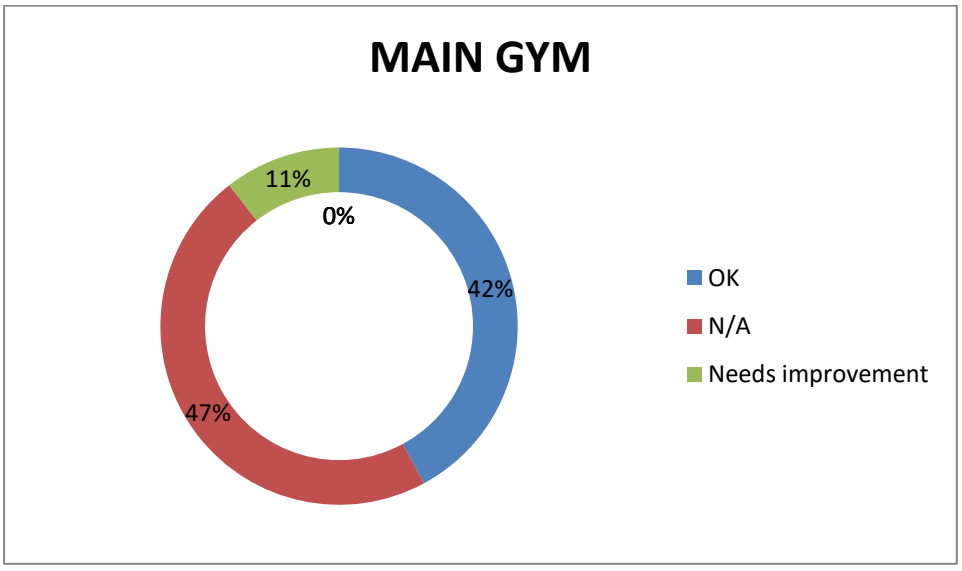


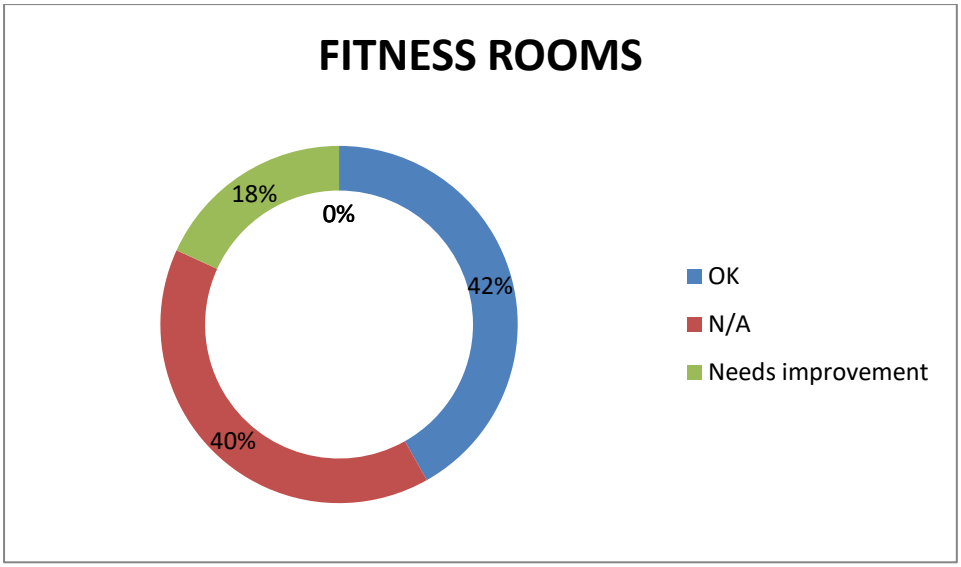


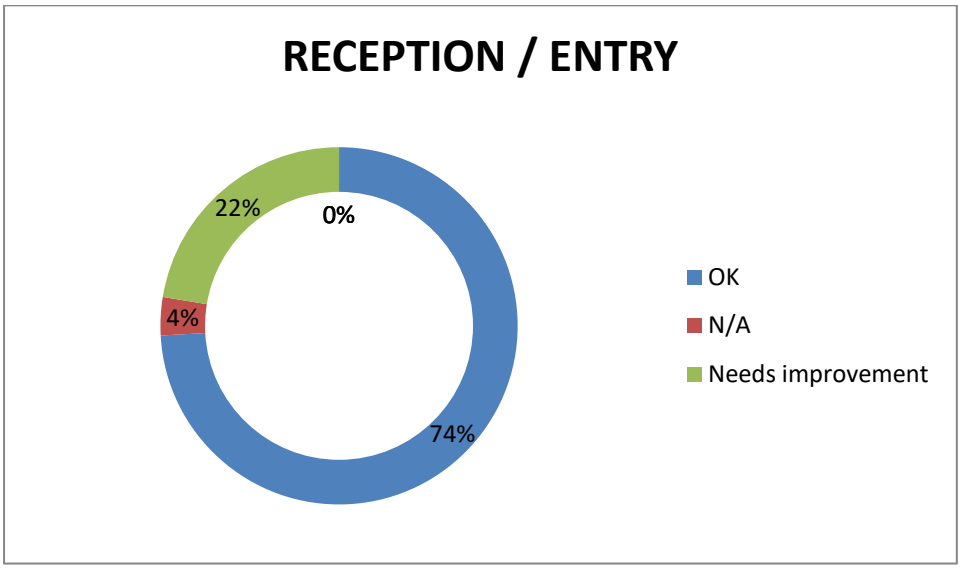


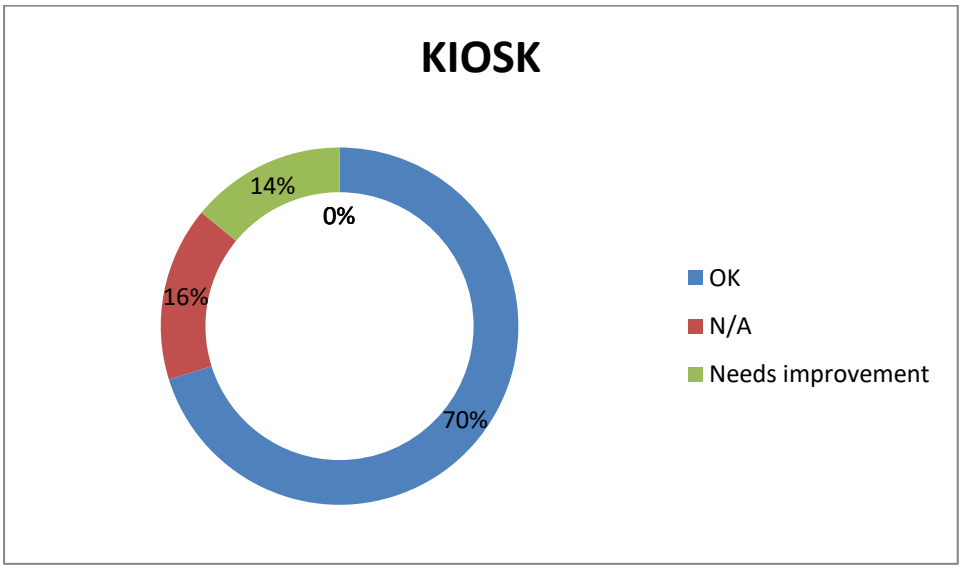

INDOOR 25m POOL
20%
0%
12%
68%
OK
N/A
Needs improvement

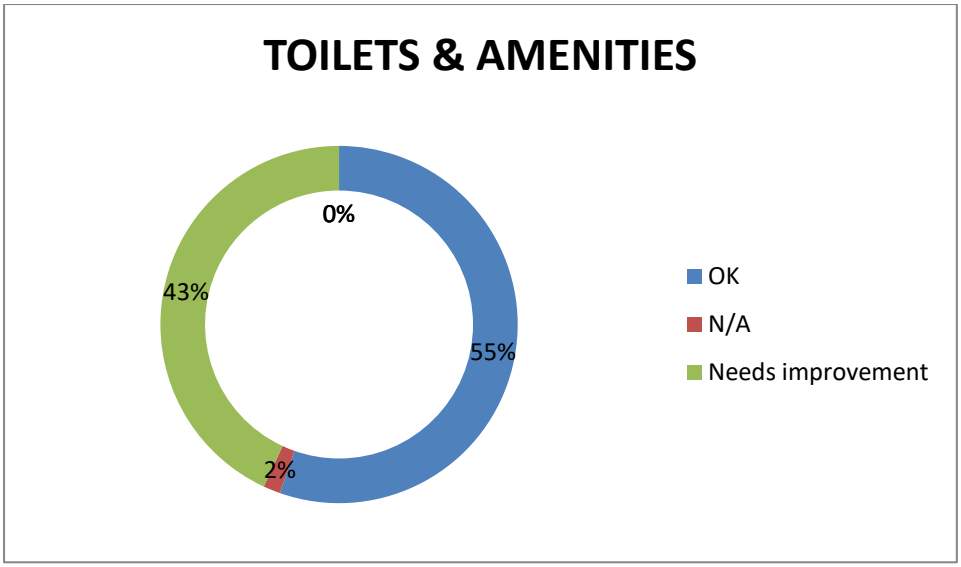

INDOOR PROGRAM & LEASURE POOL
(BEACH ACCESS POOL)
15%
0%
27%
58%
OK
N/A
Needs improvement

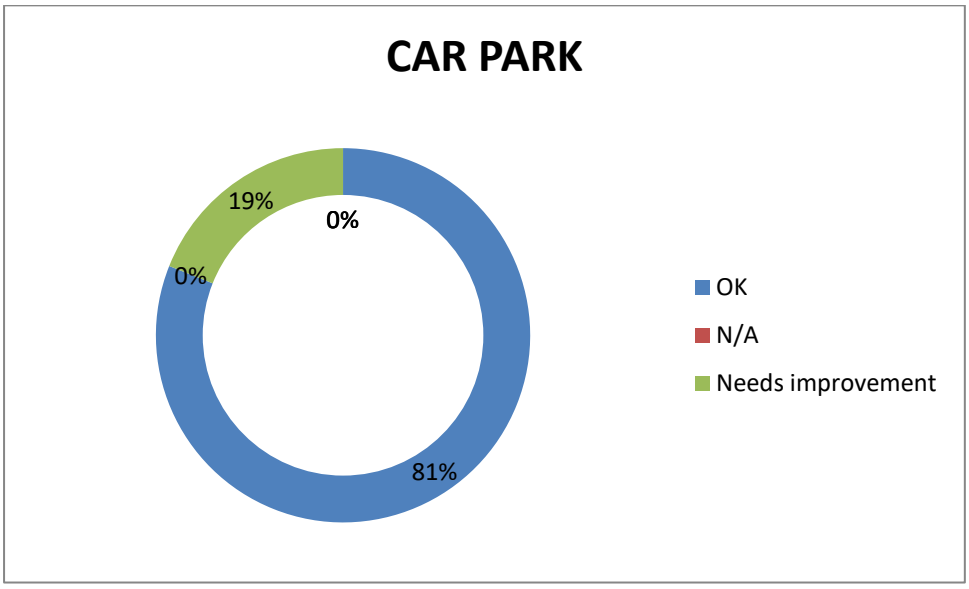

MAIN GYM
11%
0%
42%
47%
OK
N/A
Needs improvement

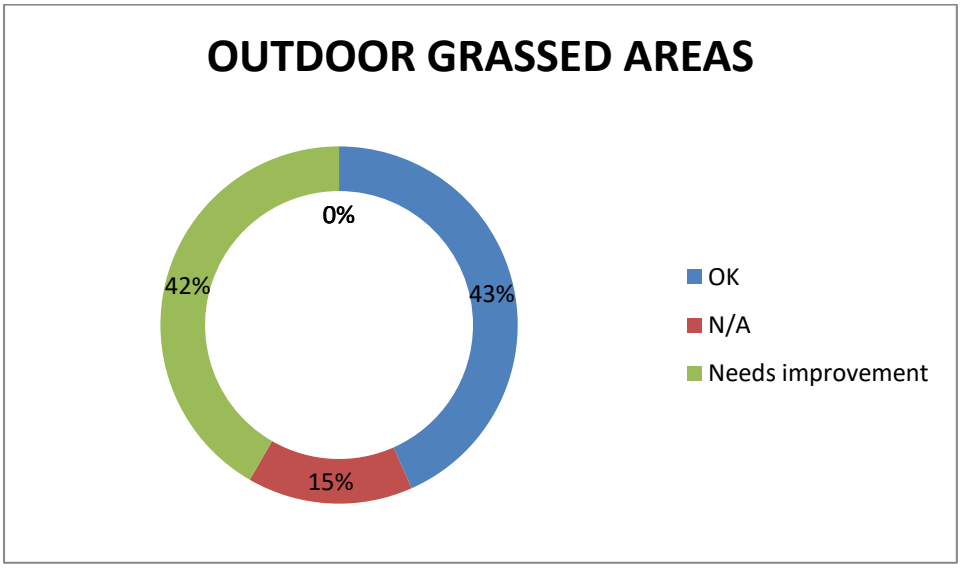

FITNESS ROOMS
18%
0%
42%
40%
OK
N/A
Needs improvement

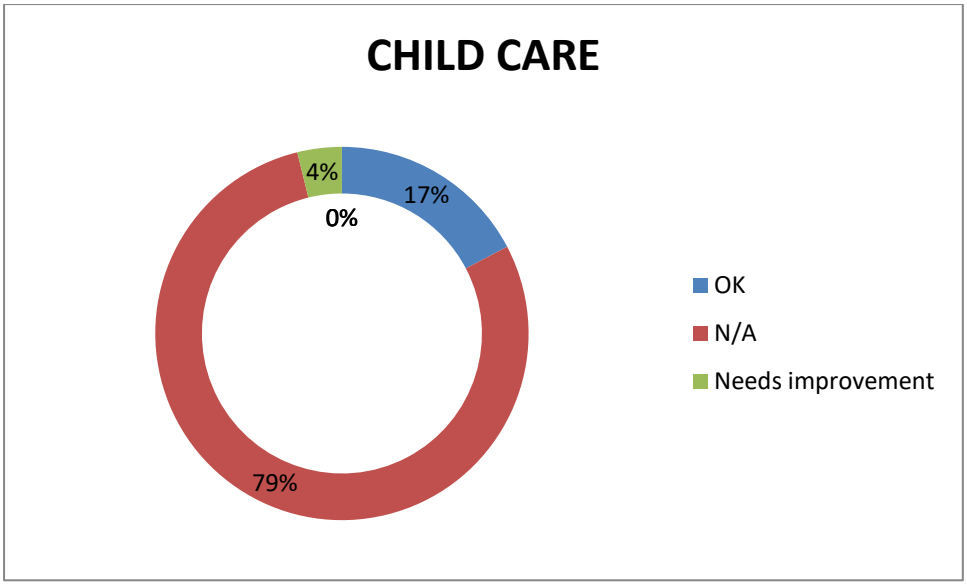

RECEPTION / ENTRY
22%
0%
4%
74%
OK
N/A
Needs improvement


KIOSK
14%
0%
16%
70%
OK
N/A
Needs improvement


TOILETS & AMENITIES
0%
43%
55%
2%
OK
N/A
Needs improvement


CAR PARK
19%
0%
0%
81%
OK
N/A
Needs improvement


OUTDOOR GRASSED AREAS
0%
42%
43%
15%
OK
N/A
Needs improvement



Question 6

Overall, would you say that the Horsham Aquatic Centre is meeting the needs of the community?												
Answer Options	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Rating Average**	**Response Count**
	1	2	4	5	11	16	18	13	4	4	6.33	78
											answered question	78
											skipped question	20

.....

Questions 7, 8 and 10 are written response questions. Please refer separate attachment.

.....

Question 9

How do you rate the importance of the following proposed facilities at the Horsham Aquatic Centre?							
Answer Options	**Not Important**		**Moderate Importanc**		**Important**	**Rating Average**	**Respons e Count**
Waterplay / Splash Park	2	0	12	16	45	4.36	75
Outdoor Playground	10	5	14	13	33	3.72	75
Improved accessibility for the overall facility (including	3	3	21	12	36	4.00	75
Outdoor Volleyball Facilities	25	5	28	10	7	2.59	75
Outdoor BBQ and family zones	7	6	15	19	27	3.72	74
Improved outdoor shade, seating and amenities	0	0	6	13	56	4.67	75
Improved indoor Gym	12	7	22	9	23	3.33	73
Inclusions of Community Lounge	14	14	21	11	13	2.93	73
Inclusion of Allied Heath services (i.e. Physio	21	10	14	15	14	2.88	74
						answered question	75
						skipped question	23