Universal Design
“Applying the Principles to Community Sporting and Recreation Facilities”

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North West Metro Councils

- Significant population growth
- Demand for infrastructure and services
- Changing demographics
North West Metro Councils cont’d

• Diverse communities (new arrivals, non-english speaking background, ageing)

• Need for quality and accessible community sport and rec facilities
Snapshot: Wyndham

- 10,000 new residents 2013-14
- Fastest growing municipality in Victoria 2013-14 (5.6%)

Source: wyndham.vic.gov.au
Snapshot: Wyndham

- Largest age group 35 – 49 years, ageing population
- English is not main language for 25% of residents
- 53.9% population overweight or obese
Sport and Recreation Victoria

- Provides funding support in the form of grants to Local Government.
- Includes planning, building new and improving existing facilities.
- Focus on strategic need, participation, multi-use and optimal design outcomes.
Project Types
Project Types
Applying Principle Based Thinking

• The intent of Universal Design is to simplify life by making the built environment more usable and accessible by more people.

• It is a philosophy or ‘way of thinking’ that is based on a set of principles and is not linked to any specific standard or building code.
Applying Principle Based Thinking

UNIVERSAL DESIGN
Based on 7 key principles and philosophy
PROMOTES BEST PRACTICE

MINIMUM COMPLIANCE
ACCESSIBILITY REGULATIONS
- Disability and Discrimination Act
- Building Code of Australia

Design Innovation
Timing Is Everything

Project Stages

Universal Design Influence

Strategy / Master Plan

Design Development: Concept Plan & Schematic

Detailed Design

Construction

High

Low

HIGH

LOW

Cost Impact
Project Example: Craigieburn Park

- Total Project Cost: $48.5M
- SRV Commitment $3M (Better Pools)
- Federal Government $9M
- Construction to commence late 2015
Management identified need for ongoing involvement and support to Council as project progressed through design phase.

Application of Universal Design Principles a priority to help inform design outcomes.
How the Process Unfolded

• Four hours a week meeting with Council, Architect, Landscape Architect, Sub Consultants.

• Ongoing input into design via email, phone calls, other meetings etc.

• Focus on whole precinct including aquatic centre, athletics track, pavilion and events area.
Universal Design Workshops

- 1 x Internal
- 2 x Internal/External
- 1 x Colour
- 1 x Car Park
How the Process Unfolded

Reporting

• Formal report in response to Schematic Design.

How the Process Unfolded

CRAIGIEBURN PARK
SPORT & RECREATION VICTORIA
REVIEW OF SCHEMATIC DESIGN REPORT
DECEMBER 2014

DRAFT FOR DISCUSSION
Areas Discussed:

- Aquatic Centre layout, configuration, preferred placement of amenities, sightlines, accessible seating in grandstand.
- Athletics pavilion layout, proximity of entrance to car park, connectivity to track, location and proposed use of accessible amenities.
• Car park design and shared space opportunities.

• Park layout, connectivity with pathways, public transport options, destination points within park etc.

• Consideration of other design principles: ESD, CPTED, Safety.
Include ‘cut-out’ sections to accommodate wheelchair users, prams etc to help them be involved, part of the action.

Is this best location for party room? E.g. considerable distance to amenities and is within close proximity to program pool.

Insert “Changing Places” fit-out here.

Question: is this best use of this space which is proposed to include merchandise and public toilet?
Design Input

• Inclusion of ‘Changing Places’ high needs accessible change.

• Re-design of SW corner to open up sightlines, consolidate amenities, improve flow of large groups e.g. schools.

• Re-design of main reception desk to ensure lowered section visible to all visitors upon entry.
Design options

The Changing Places Consortium in Australia has developed three typical design options for use as follows.

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• Universal Design overlay to sanitary fixtures and fittings.
• Universal Design assessment of water play equipment as part of tender package.
• Preferred layout of amenities within the athletics pavilion.
• Desktop review of play space design.
Design Input

- Maintain an open concourse directly outside group change facilities.
- Consider increasing door width for large groups, emergency access.
- Remove accessible change as provision has already catered for in adjacent group change area. Pool office and first aid to sit side-by-side.
- Improved sightlines into facility. Great selling point for council.
Other Reporting Tools Used by SRV

Very Good

Sound achievement of the requirements specified in the application for the criterion. Some minor errors, risk weakness or omission which may be acceptable as offered.

SCORE 16-19

Total Principle Score

Total Principle Score (%)

16.73%

14.50%

14.50%

14.50%

13.33%

9.67%

9.67%
Other Reporting Tools Used by SRV

Main entrance: Key decision point/way finding. “Simple and Intuitive” will users be able to find their way from this point through the pavilion easily? Will signage be used?

Consider removing stairs at main entrance to ensure “Equitable Use” into pavilion by all users and not creating a separation point upon entry.

“Perceptible Information” Main entrance to facility needs to have strong presence and connectivity with surrounding areas and needs to be easily identifiable as the main point of entry by users.

“Size and Space for Approach and Use” Suggest rounding off sharp corners within pavilion to improve vision and line of site throughout pavilion.

The angled nature of the building and internal walls creates potential voids in the pavilion that will have limited use and will potentially be ‘wasted space’.
Design Reflections

• Workshops involving stakeholders are key to ensuring best design outcomes, however timing is important.

• A ‘user based’ approach needs to be applied at the front end of design, not as an after thought.

• Access Consultant input at front end of design.
Design Reflections

- SRV plays an important role as an independent design facilitator.
- Ongoing support of the process and guidance from management is crucial.
- UD Principles can be applied to more than infrastructure/buildings e.g. programming, technology.
Quick Wins
1: Equitable Use

The design is useful and marketable to people with diverse abilities.
2. Flexibility in Use

The design accommodates a wide range of individual preferences and abilities.
Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.
3. Simple and Intuitive
4. Perceptible Information

The design communicates necessary information effectively to the user, regardless of ambient conditions or sensory abilities.
4. Perceptible Information
5. Tolerance for Error

- Design minimizes hazards and the adverse consequences of accidental or unintended actions.
5. Tolerance for Error
6. Low Physical Effort

- Design can be used efficiently, comfortably and with minimum fatigue.
7. Size and Space for Approach and Use

• Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.
7. Size and Space for Approach and Use
7. Size and Space for Approach and Use
"A mind is like a parachute. It doesn't work if it is not open."
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