

Appendix 10: Review of Access

Review of Access

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St John of God Hospital Subiaco Redevelopment

OHA

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INTENT OF REVIEW

For this report, a review has been undertaken of the access strategies available to pedestrians arriving at the redeveloped St John of God Hospital (SJGH) main entry from Cambridge Street. In preparing this report, reference has been made to the Updated Development Application Appendix 2 Plans.

The National Construction Code (NCC) Part D3.2(a) and (b) respectively state:

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 allotment boundary**; and
 - (ii) from another accessible building connected by a pedestrian link; and
 - (iii) 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
 - (ii) in a building with a total floor area more than 500 m², 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 clause D3.4.

For the purposes of this report, access through the principal pedestrian entrance [NCC D3.2(b)] from the main points of a pedestrian entry at the allotment boundary [NCC(a)(i)] has been investigated.

REFERENCES

- Disability (Access to Premises – Buildings) Standard 2010 (Amendment 1, 1 May 2011)
- Disability (Access to Premises – Buildings) Standards Guidelines 2013
- National Construction Code Series Volume One. Building Code of Australia 2019 Class 2 to Class 9 Buildings (Amendment 1)
- AS1428.1 2009 – Design for Access and Mobility – General Requirements for Access – New Building Works
- AS1428.4.1 2009 – Design for Access and Mobility – Means to assist the orientation of people with a vision impairment - Tactile ground surface indicators



REPORT PREPARATION

This report has been prepared by Anita Harrop, of O'Brien Harrop Access.

ANITA HARROP

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KEY CAPABILITIES

Access Consultant **Anita Harrop** is an Occupational Therapist with over 30 years' of experience working in acute, community and rehabilitation settings within the health context. Anita gained experience both locally and in the UK and in 2000 commenced working as a Disability Access Consultant with Ann O'Brien (retired) at the Independent Living Centre of WA (Inc) (now Indigo). Since 2004 Anita has worked as a private Disability Access Consultant and in May 2010 formed a partnership with Ann O'Brien and together commenced trading as O'Brien Harrop Access. Anita is sole director of O'Brien Harrop Access since Ann's retirement.

As an Accredited Member of the ACAA, Anita is required to undertake a comprehensive program of CPD through each membership year. Attendance at relevant conferences including the biennial ACAA conference and Universal Design Conference ensures Anita is cognisant of contemporary approaches to ensuring the built environment is accessible and inclusive to all, regardless of their age or ability. Anita has a detailed approach to the intent and technical detail of Australian Standards and other international and local Universal Design, Inclusive Design and best practice resources.

Anita is an Accredited member of the Association of Consultants in Access, Australia (Inc) (ACAA) and a member of Occupational Therapy Australia Limited (WA).

Anita has extended her Access Consulting offering by participating in additional upskilling opportunities as they arise, and to this end holds a Diploma of Access Consulting and is a Changing Places and Livable Housing Assessor and an Accredited SDA (Specialist Disability Accommodation) Assessor.

1. ACCESS TO BUILDINGS

1.1 INTRODUCTION

The National Construction Code (NCC) Part D3.2(a), in regard to access to a building required to be accessible, necessitates that access is achieved from the main points of pedestrian entry at the allotment boundary. The focus of this report is the pedestrian access from the Cambridge Street level in response to design review queries raised in relation to the equity of the access proposal to the main entrance of the hospital from this level for persons with disability.

1.1.1 Current condition

The existing pedestrian access route from Cambridge Street to the hospital entrance comprises a footpath that has a gradient of approximately 1:12 and the upper section towards the entrance has a gradient of 1:15.

When assessed against the requirements of a walkway¹, the path is far in excess of the maximum allowable 1:20 gradient for a walkway. In addition, flat landings have not been provided at the required intervals of every 15 metres where the gradient is 1:20 and the path width would not allow for wheelchair passing.

If assessed against the requirements for a pedestrian ramp², the section of the path with a 1:12 gradient is not compliant, as the maximum allowable gradient for a ramp is 1:14. In addition, a 1:14 pedestrian ramp requires flat landings where a change of direction is required and at a minimum 9 metre intervals. Plus, warning tactile ground surface indicators (TGSIs) are required to be installed at the top and base and handrails and a kerb edge or kerb rail to both sides of the ramp.

1.1.2 Proposal

The proposal; to provide stair, walkway and ramp and lift access between Cambridge Street level and the main entrance is commended, as this addresses the topographical challenges of the site in a manner compliant with the current NCC and referenced Australian Standards on access and mobility.

This proposal will also enable access for all people through the north-south axis of the campus, between Cambridge Street and Salvado Road.

¹ A **walkway** means any surface on a continuous accessible path of travel with a gradient not steeper than 1 in 20 [AS1428.1 2009 Definition 4.24]

² A **ramp** means 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 AS1428.1 2009 Definition 4.15].

1.2 LEVEL CHANGE LIMITATION

1.2.1 Level change limitation of 3.6 metres

It is understood the change in level between Cambridge Street level and the main entrance is 4.0 metres. This is in excess of the 3.6 metre level change limitation for *ramps* as expressed in the NCC Part D3.11(a), which reads as follows:

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
- (b) a landing for a step ramp must not overlap a landing for another step ramp or ramp.

In the context of a pedestrian ramp or walkway, whilst defined in the NCC referenced AS1428.1 2009, ramps and walkways are not defined in the NCC. Thus it is assumed the term *ramp* is used in the NCC in its more generic form of an *inclined surface*, and it is on this basis that this report, which will address ramp and walkway access, has been prepared.

1.2.2 Background to level change limitation

The **Guideline on the Application of the Premises Standards** was developed by the Australian Human Rights Commission to assist building professionals, and those concerned with access to better understand how the **Premises Standards** apply to new and upgraded public buildings.

As the D3.11(a) requirement of the **Disability (Access to Premises - Buildings) Standards** is replicated as NCC D3.11(a), I have considered the reasoning for the 3.6 metre vertical rise limitation within the Guideline on the Premises Standards for connected pedestrian ramps as applicable to this report. The Guideline document reads as follows:

Clause D3.11 Ramps

This clause sets out a limit to the maximum distance of vertical rise for ramps allowable under the Access Code.

Ramps may be used as part of an accessway where there is a change in level and must comply with the requirements specified in AS 1428.1 including a maximum gradient, landings, TGSIs, handrails and kerbing.

This clause states that a series of ramps cannot be used on an accessway to connect one level to another if the vertical rise is greater than 3.6 metres.

This is to ensure that the overall distance required to negotiate a series of ramps does not cause undue fatigue for a user to the point where the ramp becomes unusable.

It is my understanding that the 3.6m vertical rise limit for ramps was the result of negotiation when the Premises Standards were under development. The 3.6-metre limit was considered sufficient to allow a ramp to be installed to connect two building storeys, but not enough to enable a ramp to connect three storeys.

1.3 VERTICAL ACCESS PROPOSAL

1.3.1 Proposal

On review of the Updated Development Application Appendix 2 Development Plans, the vertical access proposal to address the 4.0 metre change in level between the Cambridge Street footpath (*the allotment boundary*) and the hospital main entrance (*the principal pedestrian entrance*) is summarised as:

- North-south axis with access via steps. Where steps are provided, an alternate route is also provided via ramps/walkways, ensuring equitable access options for all.
- Ramped access from the central spine to the main entrance and chapel/lift entrance. This route facilitates pedestrians to access the hospital via the lifts should the external walkway/ramp route not be suitable for the pedestrian(s).
- Access between the emergency department, chapel, main entrance and medical suites to the terraces and private landscape spaces within the public forecourt.
- Access to the new medical suites from the entry and public forecourts, with the accessible central spine providing an interconnection between these forecourt spaces.

1.3.2 Equitable access

The proposed accessible routes, as expressed in the Updated Development Application Appendix 2 Development Plans, provide, in my opinion, equitable access opportunities for people who cannot negotiate steps. Accessible routes are achieved between:

- Cambridge Street and the new medical suites to the main entrance via the lifts.
- Cambridge Street and the new medical suites to the main entrance via a ramp (near the chapel), ramp through the terraces and a ramp to the main entrance, landing in the same foyer space as the lifts.
- The upper entry forecourt via a ramp to the footpath adjacent Darcy Lane to the small car park (to the rear of the new medical suites) provides an accessible route to Cambridge Street and the Station Street footpath.
- The main entrance / upper entry forecourt and the multistorey car park.

As the access route through the landscape is integrated and set immediately adjacent to the stairway access, this ensures that access is achieved to every level and **Universal Design Principles and Guidelines** are achieved, for example:

Principle 1: Equitable Use

The guidelines pertaining to the Universal Design Principle of equitable use, which, in my opinion, are achieved with the proposed design include:

- Provide the same means of use for all users: identical whenever possible; equivalent when not.

This is achieved with the opportunity for all users to access:

- seating areas
- places for rest and reflection
- to the variety of garden spaces and turf
- shaded and sheltered seating and dining
- the children's play space

- Avoid segregating or stigmatising any users.

This is achieved with the collocation of the stairways with the walkways and ramps, allowing movement to all levels of the terraces and ensuring people walking together are not segregated in order to reach their intended destination. Routes have sufficient width to enable small groups to traverse together.

The access routes to the lift and the main entry both provide an enhanced amenity on approach (one is not more favourable than the other) and are available to all people, ensuring no one is stigmatised or segregated by needing to undertake a different or more complex route to reach their intended destination.

Providing people with the opportunity to choose their preferred means of access into the hospital (internal lifts versus external walkways and ramps or stairs) by the provision and appropriate placement and orientation of clear and legible hierarchical wayfinding signage and campus maps will ensure that visitors easily and without additional effort, successfully navigate their way to their intended destination.

- Provisions for privacy, security, and safety should be equally available to all users.

The proposed design demonstrates private spaces within the terraced levels, with access to the chapel and the reflection gardens associated with the new landscaping. It is understood the evolved design has also addressed sight lines to ensure safety and security for all users, a key Universal Design principle.

- Make the design appealing to all users.

The evolved design has facilitated pedestrian access for all users to all levels of the new landscaping and terraces and the entrances to the buildings (new medical suites, the chapel, the main entrance to the hospital). In addition to achieving a compliant access route equitable for all users, the journey via the gardens and terraces provides an appealing destination in its own right.

Principle 2: Flexibility in use

The design accommodates a wide range of individual preferences and abilities. The principles of flexibility in use include:

- Providing choice in the vertical access options available.
- Accommodating right- or left-handed access and use, by providing handrails to both sides of stairs and ramps, as per AS1428.1 2009 requirements.
- Provide adaptability to the user's pace, with a choice as to whether the lift, stair or walkway/ramped access routes are selected.
- As discussed above, the terraces and seating and garden spaces within the terraces provide both an access route and an appealing destination in their own right, demonstrating flexibility in the use of the space.

Principle 3: Simple and intuitive use

The use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level. The design eliminates unnecessary complexity and locates access routes logically and consistently with user expectations and intuition. The sight lines through the precinct strengthen wayfinding and orientation to the site.

Principle 5: Tolerance for error

The design minimises hazards with the alternate routes directly aligned and clearly visible, which can be further reinforced with a clear and legible wayfinding signage package.

Hazards, in accordance with AS1428.1 2009 and AS1428.4.1 2009, will be treated with warning tactile ground surface indicators, notably at the top and base of each of the short stairway runs.

Principle 6: Low physical effort

The design can be used efficiently and comfortably and with a minimum of fatigue. To reduce physical effort in accessing the hospital, the design includes:

- Regular rest landings on, and handrails to both sides of, the ramps as per AS1428.1 2009 requirements.
- The opportunity for pedestrians to leave the walkways/ramps to access the landscaped alcoves, with seating, turfed spaces, shade, and gardens, enabling rest and respite from the physical effort of accessing the site. Alternatively, the internal lift option is available if this is the individual(s) preference.

2. CONCLUSION

Considering the proposal to provide ramp, walkway and stairway access through the landscaped terraces of the hospital, plus an internal lift option provides equitable and dignified choice and amenity for pedestrians traversing between the Cambridge Street level (*the allotment boundary*) to the main hospital entrance (*the principal pedestrian entrance*).

It is my opinion that the routes, whether by the internal lifts or the external walkways or stairs, provide choice to pedestrians. This ensures that regardless of their physical, sensory or cognitive abilities, access through the precinct and to the main entrance of the hospital and other buildings (e.g., the chapel and new medical suites) is achievable without undue effort or complexity.

When supported by a clear and legible wayfinding signage package, it is my considered opinion that the provision of internal lifts and the external ramp, walkway and stairway options to address vertical access between the Cambridge Street footpath and the main hospital entrance is appropriate, is not discriminatory to persons with disability. Further, I believe the design has progressed significantly to now incorporate many Universal Design principles, which is commended.

Should you require any further information, I would be pleased to assist,

Yours sincerely

A handwritten signature in black ink, appearing to read 'A Harrop'.

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