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Ethos Urban

UTS Site Building 13-15 Master Plan - Ultimo Precinct, Haymarket Stage A - Public Domain

Access Review
Concept Design - Final

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REPORT REVISIONS		
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1. Executive Summary

This Access Review Report is a key element in the concept design development of the UTS Master Plan, Ultimo Precinct, Sydney NSW. It aims to provide appropriate access recommendations to the AS1428 series, Building Code of Australia (BCA), DDA Access to Premises Standards (including DDA Access Code) and ultimately the Commonwealth Disability Discrimination Act (DDA).

Morris Goding Access Consulting has prepared the Accessibility Report to provide recommendations and strategies to maximise reasonable provisions of access for people with disabilities.

This review will ensure that paths of travel, circulation areas, and relevant considerations are in line with current statutory guidelines and industry best practices, and in addition, with a higher level of accessibility and inclusiveness benchmarks set by the project.

This report should be read in conjunction to the marked plans as attached at the back of this report.

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2. Introduction

2.1 Background

This report has been prepared on behalf of University of Technology Sydney (UTS) in support of its Ultimo Haymarket Precinct Key Site Master Plan.

The Master Plan is being progressed under the framework established by the Pyrmont Peninsula Place Strategy (PPPS), where UTS is identified as one of four "key sites". The PPPS sets out the NSW Government's 20-year strategic direction and vision for Pyrmont, where Pyrmont's locational advantages in terms of its proximity to Central Sydney, context within the Innovation Corridor and delivery of a new metro station have been embraced as part of its next evolution as the Western Gateway to the CBD.

As an identified "key site" it is recognised that UTS has the greatest potential to deliver strategic growth and change across the Peninsula together with leveraging the delivery of broader public benefits and infrastructure.

The Master Plan ultimately seeks to inform updated planning controls in relation to UTS's short-term development plans for UTS Sites 13 -15, where it is planning deliver Australia's first Indigenous Residential College (IRC) including Indigenous Arts Centre and Library.

In particular this report provides an accessibility design review of Proposed Public Domain associated with site 13-15 of UTS Campus.

2.2 Pyrmont Peninsula Place Strategy (PPPS)

The Pyrmont Peninsula Place Strategy provides a 20-year framework that identifies areas that can accommodate future growth in order to support Pyrmont's evolution as the western gateway to the CBD and a hub for jobs in innovation, technology, creative industries, and media.

A balanced approach to growth has been established within the PPPS to ensure its local character and heritage is protected and it remains a great place to live, with the focus of strategic change occurring within four "key sites", including UTS (refer to **Figure 1**).

The first phase in implementing the PPPS is the preparation of master plans for each of the seven sub-precincts ("places") that make up the Peninsular (**Figure 2**). The master plans will provide the next level of detail, outlining the spatial components of the PPPS, which will be used to inform changes to land use zones, building height and density, and community infrastructure requirements etc.

As a "Key Site", UTS is progressing its own master plan for its "Key Site" which seeks to respond, inform and align with the sub-precinct master plan process and broader aspirations for the Peninsular.

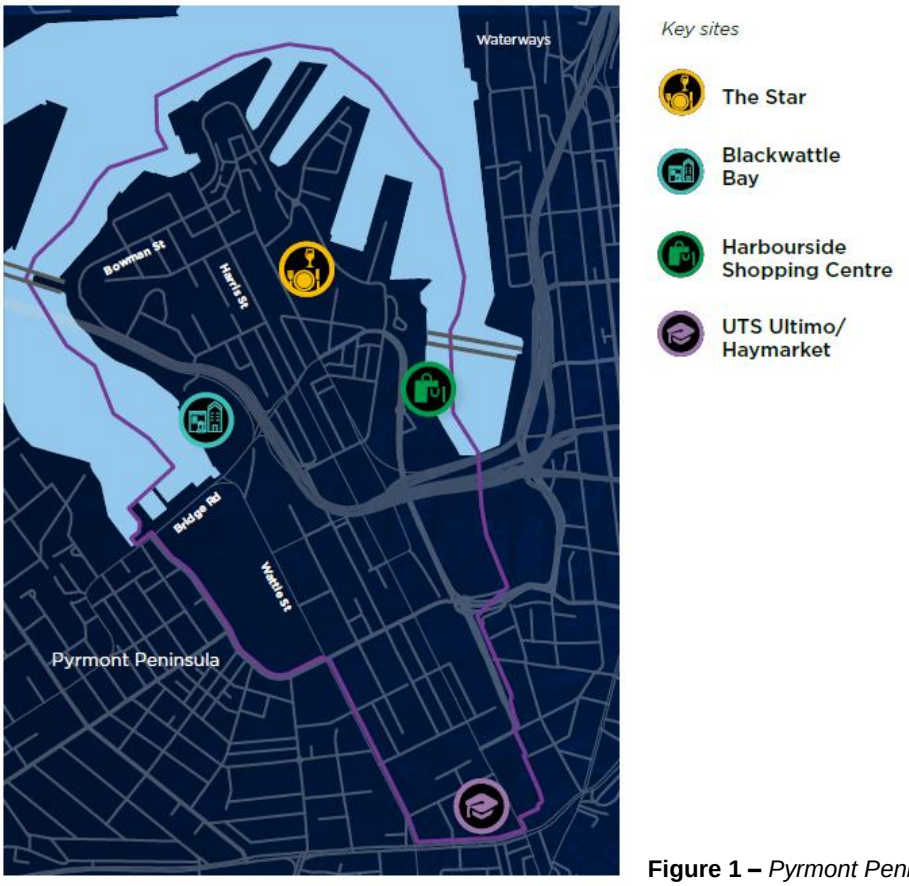

Figure 1 – *Pyrmont Peninsula and Key Sites*

Figure 2 – Pyrmont Peninsula Sub-Precincts

2.3 Background

UTS is a public university of technology committed to research, innovation and social justice, indigenous knowledge, and collaboration with industry. With a total enrolment of over 44,000 students, UTS is one of the largest universities in Australia. It has a culturally diverse campus next to Sydney's central business district (CBD).

UTS is an anchor institution within the Pyrmont Peninsula and plays an important role in the success of Sydney and NSW, with the Greater Sydney Commission's Sydney Regional and District plan acknowledging this importance and identifying the need to protect and support the growth of education activity within the Harbour CBD Innovation Corridor.

UTS has largely completed its $1 billion+ Broadway Precinct master plan and is now planning for its next growth phase at its Ultimo Haymarket Precinct, leveraging the opportunities and strategic planning focus on innovation, technology, creative industries and diverse housing (**Figure 3**). UTS's immediate short-term plans are focussed on the redevelopment of Sites 13-15 (CB13-15) into an Indigenous Residential College (IRC) including adaptive reuse of the local heritage listed building and public realm improvements. UTS redevelopment plans for its other significant site (Site 5 – CB05) are being progressed through a separate process with the City of Sydney and its Central Sydney planning framework.

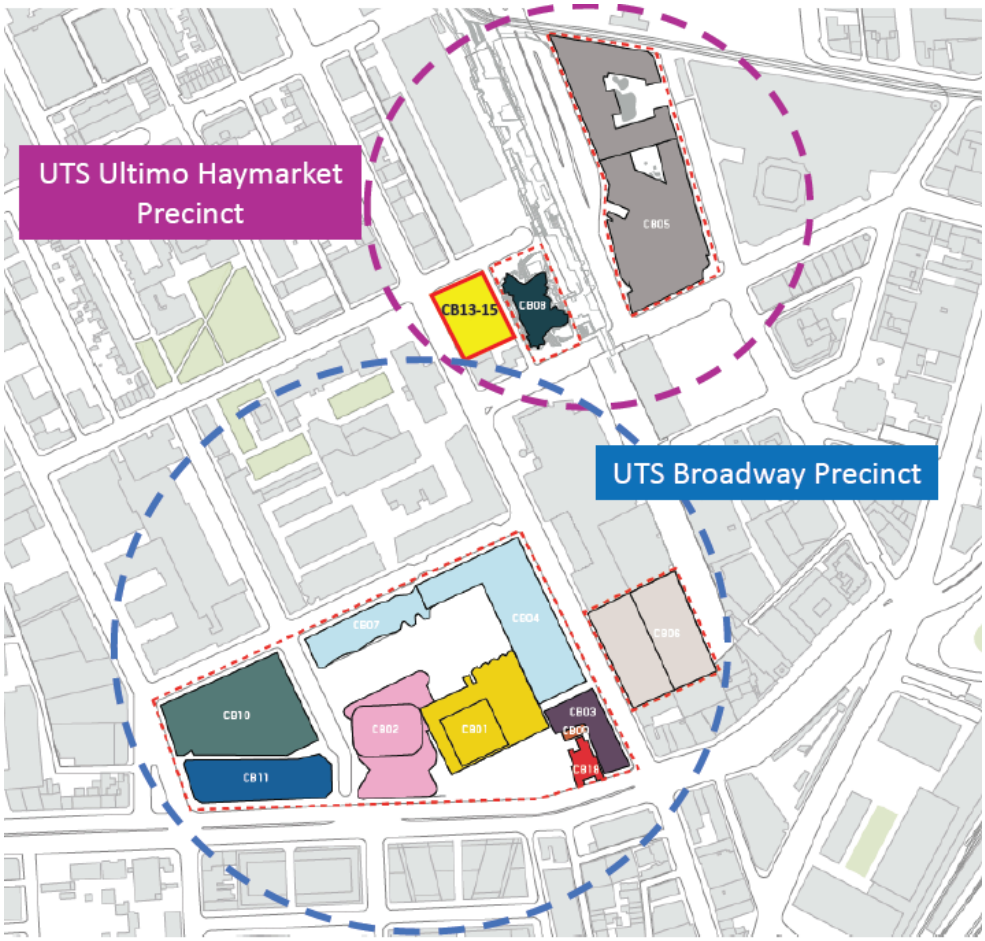

Figure 3 – UTS City Campus

2.4 The Proposal

The UTS Key Site Master Plan is proposing to "rezone" Sites 13-15 in order to establish new planning controls to enable its redevelopment as an Indigenous focussed Residential College, arts centre and library. Site 13-15 is more specifically is identified within **Figure 4**.

Figure 4 – UTS City Campus – Proposed Site

The rezoning and proposed planning controls is based on a concept and reference design that has been developed for the IRC project and has informed this report. The concept/reference design responds to the vision, strategic directions, big moves and place priorities established within the PPPS along with site specific opportunities and constraints informed through environmental, social and economic considerations.

The key development outcomes sought to be achieved for Site 13-15 from the Key Site Master Plan process include:

- A new 250 bed Indigenous Residential College and supporting arts centre and library
- Retention and adaptive re-use of a local heritage item accommodating a mix of uses, including teaching/university support space
- Creation of new open space
- Creation of a new pedestrian through-site link from Harris Street to Omnibus Lane
- Retention and protection of significant trees on Harris Street
- A country led design and landscape outcome

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Once new planning controls are in place, UTS will progress with the detailed design and planning of the IRC project, including progressing with a design competition and securing development approval for the winning design.

3 General Requirements

This report has been prepared with reference to the *General Requirements for Preparing Key Site Master Plans under the Pyrmont Peninsula Place Strategy* and the alignment review prepared by the Department of Planning, Industry and Environment (DPIE) dated 5 May 2021.

The requirements of the investigation are to:

- Review supplied information and drawings of the proposed public domain.
- Provide a report that will assess the provisions of disability design of the development, and
- Recommend solutions that will ensure the design considerations are in line with the intent of the Disability Discrimination Act (DDA).

3.1 Objectives

This report considers user groups who include generally members of the general public. The report attempts to deliver equality, independence and functionality to people with a disability inclusive of:

- People with a mobility impairment (ambulant and wheelchair);
- People with a sensory impairment (hearing and vision); and
- People with a dexterity impairment.

This report seeks to provide recommendations to meet the intent of the Disability Discrimination Act 1992. In doing so, the report attempts to eliminate, as far as possible, discrimination against persons on the grounds of disability.

3.2 Limitations

This report aims to provide access review comments holistically. It does not provide comments on detailed design issues that are commonly included in construction documentation.

3.3 Accessibility of Design

The proposed design have been assessed against relevant Codes, Standards, and guidelines in order to provide reasonable access provisions for people with disabilities.

The design will be developed to ensure the principles of the DDA are upheld. Under the DDA, it is unlawful to discriminate against people with disabilities in the provision of appropriate access, where the approach or access to and within a premise, makes it impossible or unreasonably difficult for people with disabilities to make use of a particular service or amenity.

3.4 Guidelines

The guidelines referenced in this report to ensure effective, appropriate and safe use by those with disabilities are:

- Federal Disability Discrimination Act (DDA);

- Disability Standards for Accessible Public Transport 2002 (DSAPT);
- Building Code of Australia (BCA);
- AS 1428.1:2009 - (General Requirement for Access) (AS 1428.1);
- AS 1428.2:1992 - Enhanced and Additional requirements;
- AS 1428.4.1:2009 - (Tactile Ground Surface Indicators) (AS 1428.4.1);
- Universal Design Principles;
- Advisory Note February 2013 on streetscape, public, outdoor areas, fixtures, fittings and furniture.
- City of Sydney Access DCP 2012 (Access DCP 2004).

3.5 **Public Domain Design**.

The design of the new public domain areas should provide a consistent accessible environment through the schematic design and planning to achieve “beyond compliance” standards with an accessible network of linkages. This will include the provision of appropriate continuous accessible paths of travel (CAPT), circulation areas, way finding signage, lighting, seating, suitable handrails, stairs, ramps, lifts, accessible services and amenities, and accessible pedestrian linkages.

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4. General Access Planning Considerations

The Disability Discrimination Act 1992 (DDA) is a legislative law that protects the rights of all people. The Act makes disability discrimination unlawful and promotes equal rights, equal opportunity and equal access for people with disabilities. The Australian Human Right Commission is the governing body who control and enforce DDA compliance.

Nevertheless, building elements and external areas that provide insufficient accessible provisions for people with disabilities remain subject to the DDA. Any improvement in these areas aiming to meet current access requirements will mitigate the risk of a DDA complaint made against the building owner.

Since 1st May 2011, the Commonwealth's Disability (Access to Premises – Buildings) Standards 2010 (DDA Premises Standards) apply to all new building works and to affected parts of existing buildings.

The DDA Premises Standards' requirements (DDA Access Code) are mirrored in the access provisions of the BCA. New building work and affected parts must comply with the DDA Premises Standards and AS1428.1-2009 in the same manner as they would comply with the BCA by meeting deemed-to-satisfy provisions or by adopting an alternative solution that achieves the relevant performance requirements.

By utilizing AS 1428 suite of Standards, the overall aim is to provide continuous accessible paths of travel to connect the proposed development to and through public domain areas and between associated accessible buildings in accordance with the DDA Access Code.

MGAC supports the use and consideration of universal design (UD) principles into the design to maximize access for all people. We will assist the design team to incorporate UD principles where possible within the project, while still meeting mandatory compliance requirements.

Universal design principles consider the needs of a broad range of people including older people, families with children and pushing prams, people from other cultures and language groups, visitors in transit and people with disability. By considering the diversity of users, the design will embed access into and within it, so that benefits can be maximised, without adding on specialised 'accessible' features that can be costly, visually unappealing and may perpetuate exclusion and potential stigma.

The seven key Universal design principles to consider in the on-going design include:

- Principle 1: Equitable Use
- Principle 2: Flexibility in Use
- Principle 3: Simple and Intuitive Use
- Principle 4: Perceptible Information
- Principle 5: Tolerance for Error
- Principle 6: Low Physical Effort

- Principle 7: Size and Space for Approach and use

We recommend that the proposed be designed and constructed in accordance with the following standards and guidelines:

- Advisory Note on streetscape, public outdoor areas, fixtures, fittings and furniture (2013).
- UTS Guidelines for Design & Constructions, Revision 16, Publication June 2020.
- BCA part D3 and H2.
- DSAPT.
- AS 1428.2 (1992).
- AS 1428.1 (2009).
- AS 1428.4.1 (2009).

5. General Accessibility Considerations

This following is considered for proposed alteration on existing pedestrian pathways and cycle connections:

Pedestrian link from Mary Ann Street through the Goods Line and Darling Drive to Quay Street

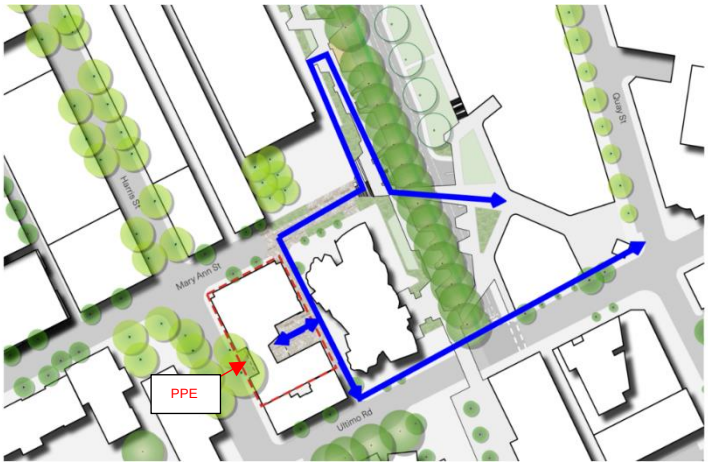

Figure 5 – Linkage from Mary Ann St. to Quay Street

Figure 6. Existing Bitumen Walkway

- Paths in general - including path width, path circulation, turning space considerations, gradients and crossfalls.
- The ground surfaces in general - including the smooth transition between two surfaces along paths of travel.
- General ramp access - including requirements for side treatments, top and bottom landings.
- General luminance contrast.
- Simplification of levels interface where possible, this in accordance with AS1428.1 Clause 7.
- Existing bitumen ramp/walkway adjacent to existing carparking is to be maintained as this links Mary Ann Street and Goods Line.

New shared zone at the end of Mary Ann Street branching into a continuous pedestrian boulevard to Omnibus Lane leading to Site 13-15 (Entry Plaza/Precinct Heart) and the Goods Line

- The ground surface in general - including the smooth transition between two surfaces along paths of travel
- General luminance contrast.

- Simplification of levels interface where possible.

Ultimo Road existing pathways junctions and kerb ramps at Omnibus Lane, Darling Drive and Quay Street are to be considered for an upgrade to comply with AS1428.1.

- Principal Pedestrian Entrance (PPE) of Precinct Heart on Harris Street provides door threshold level. This indicates that level access is provided at the doorway.
- The ground surface in general - including the smooth transition between two surfaces along paths of travel. This in accordance with AS1428.1 Clause 7.
- Paths in general - including path width, path circulation, turning space considerations, gradients and crossfalls.
- General luminance contrast.
- Simplification of levels interface where possible.

Arts Centre – Outdoor area via Omnibus Lane of Precinct Heart

- Entrances of Precinct Heart is to provides door threshold level. This indicates that level access is provided at the doorway.
- Seating/rest area has been proposed in the perimeter of the Plaza along the elevated footpath. For inclusive design, consider allocating negative spaces to include a wheelchair footprint of 800 x 1300mm to bleachers.
- Simplification of levels interface where possible.
- The ground surfaces in general - including the smooth transition between two surfaces along paths of travel. This in accordance with AS1428.1 Clause 7.
- Platform lift doors are to provide compliant circulation in accordance with AS1428.1.

5.1 Accessways

The following should be considered:

- A continuous accessible path of travel should be the most commonly used and direct path of travel. If for any reason this is not possible, clear signage of the alternative route should be provided.
- Features such as stairways, street furniture, landscaping and moving pathways, should be located adjacent to and should not obstruct the pathway.
- 1200mm min. clear path width is to be provided clear of obstacles and fixtures throughout. Generally, and if applicable, where paths are less than 1800mm wide, consider passing areas at every 6 metres (Clause 6.5 of AS 1428.2, DSAPT).

  On one side of the path – 1600 L x 1800 W.

  On both sides of path – 2000 L x 1800 W.

- Where a wheelchair requires making a 90 degree angle turn, provide 1500 x 1500mm turning space.
- Where applicable, provision of turning spaces at least 1540mm W x 2070mm L within 2m of end of accessways. This is required for wheelchairs to make a 180 degree turn, compliant with AS1428.1:2009.
- Hardstand paths of travel to be provided to all unique experiences within the public domain for wheelchair users.

Assessment

The following is recommended for paths of travel and circulation requirements for the use of persons with disabilities:

- Ensure minimum 1200mm clear path width is provided clear of obstacles and fixtures throughout. Generally, and if applicable, where paths are less than 1800mm wide, consider passing areas at every 6 metres (Clause 6.5 of AS 1428.2, DSAPT)
    - on one side of the path – 1600 L x 1800 W
    - on both sides of path – 2000 L x 1800 W.

5.2 Paths of Travel

The following should be considered:

- Shading and weather protection to be considered to outdoor pathways and gathering areas.
- Landings and external pathways, exposed to weather, to have a minimum fall of 1:80 (to prevent ponding).

Assessment

Ensure passing bays are provided where no line of sight is provided.

5.3 Ground and Floor Surfaces

The following should be considered:

Ground and floor surfaces generally, to be designed and constructed in accordance with AS 1428.1 (2009), AS 1428.2 (1992) and DSAPT.

Assessment

Ensure the following:

Smooth material level transitions needed and all floor finishes to comply with AS 1428.1:2009 (Clause 7.2).

When level difference occurs, ensure cross falls are 1:40 max. gradient.

5.4 Kerb Ramps

The following should be considered:

All ramps should be designed and constructed in accordance with AS 1428.1 (2009) and AS 1428.2 (1992) requirements.

Comments

Ensure the following:

- The provision of top and bottom landing requirements of either 1200mm for forward approach or 1500mm for 90 degree turns.
- Kerb ramps have 1:8 gradient, 190mm max. height, 1000mm min. width and 1520mm max. length, compliant with AS1428.1 fig. 23 and 24.

  NB. Under AS1428.4.1 kerb ramps with gradients less steep than 1:8 are not generally detectable by people with vision impairment.

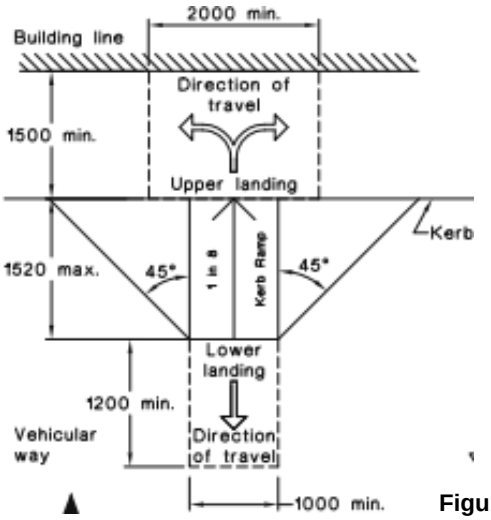

Figure 7. Kerb Ramp

5.5 Stairways

The following should be considered:

The BCA, AS 1428.1, and AS 1428.2 contain requirements for stairs for the use of persons with disabilities. These requirements can be summarised as follows but not limited to:

- Stair to have opaque risers.
- Stair handrails be provided on both sides in accordance with AS1428.1 including handrail extensions.
- Stairs to be set back minimum 900mm to prevent handrail intrusion into the transverse path of travel.
- Provision of contrasting nosing strips.
- Provision of tactile indicators.

- Provision of a dome button at handrail terminations.
- Stairways at the Arts Centre – outdoor space is to have handrails that do not impede on pedestrian pathways between the steps and seating.

Assessment

Proposed first set of stairs are wrapping around the outdoor space. Consider rationalising the stair corner where there is a change of direction as this is considered hazardous given the stairs cannot be navigated instinctively.

We recommend existing stairways leading to Goods Lane meet the above requirements where possible and practicable. All new stairs are to comply with AS1428.1. Allow suitable space for TGSI's and handrail extensions to be incorporated during a further stage.

5.6 Wheelchair Occupied Footprint

The following should be considered:

Allowance for a clear floor area or ground space for a stationary occupied wheelchair stated in AS 1428.1 and AS 1428.2 is:

740 x 1250 for 80th percentile
800 x 1300mm for 90th percentile.

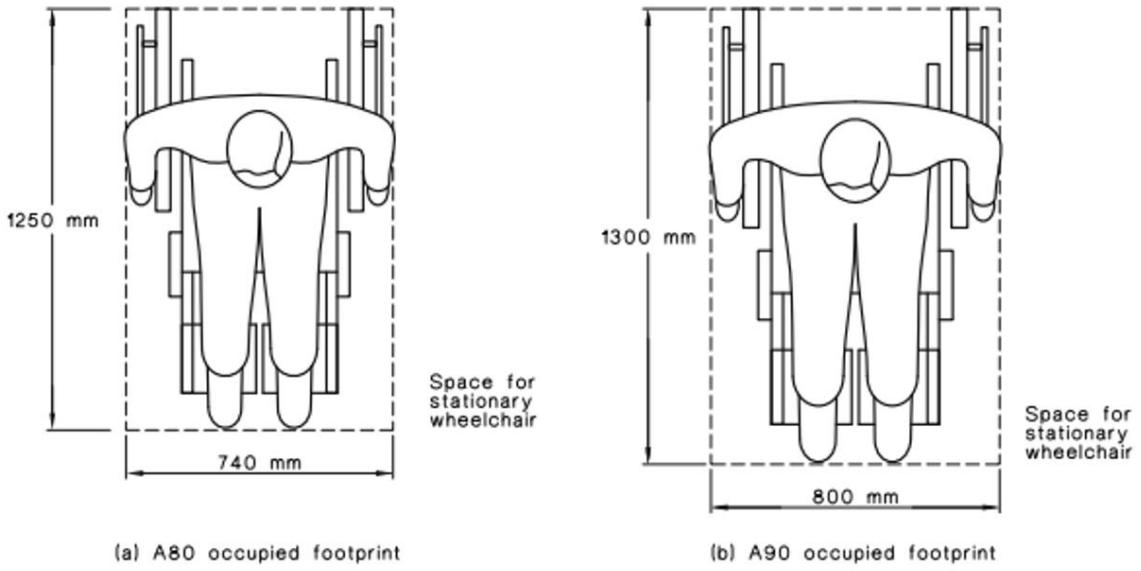

Figure 8. Footprint for an Occupied Wheelchair

The 80th percentile are generally adopted by AS1428.1 and the 90th percentile is adopted by AS1428.2 for enhanced and additional requirements. This applies to publicly accessible places.

Comments

As the proposal is public domain, it is recommended that the 90th percentile footprint for wheelchairs be considered in the upgrade works for inclusive design. Especially where seating is provided, consider including and incorporating the 90th percentile wheelchair footprints into the design.

- We recommend considerations for wheelchair occupied footprint to be addressed during further design developmental stages. E.q. bleaches provided at the entry Precinct Heart (Art Centre - Outdoor Space).

5.7 Platform Lift

The following should be considered:

The BCA and DDA Premises Standards contain requirements and limitations for Passenger lifts for the use of persons with disabilities. These requirements can be summarised as follows:

- Lift car internal dimension of 1100mm W x 1400mm L min. compliant with BCA Part E3.6.
- Doors are to provide latch in accordance with AS1428.1 (manual operation).
- Maximum travel distance of travel 1000mm height variation maximum.

Comments:

Consider the provision of shelter for the platform lift. This to protect the integrity of the platform lift from weather.

A ramp or walkway is recommended to be provided instead of a platform lift as it achieves full compliance with a cost-effective solution and low maintenance.

It should also be considered that the platform lift will be subject to vandalism and abuse – resulting in it having extended outages and/or being locked off by the centre management – denying safety, equity and dignity.

5.8 On-Grade crossings

The following should be considered:

- On-grade crossings to provide tactile indicators where pedestrian and roadways meet. Refer to AS1428.4.1:2009 Clause 2.5.

Comments:

Ensure walkways provide landings no greater than 1:40 max. gradient.

5.9 Luminance Contrast

The following should be considered:

Any obstacles that abut an accessway generally should be provided with a contrast that is detectable to assist a person with vision impairment.

Comments

Ensure the following generally:

- Poles, columns stanchions, bollards and fixtures do not protrude into an accessway.
- Any obstacles that abut an accessway to have a minimum luminance contrast of 30% to its background.
- Furniture should provide contrast generally to its background.

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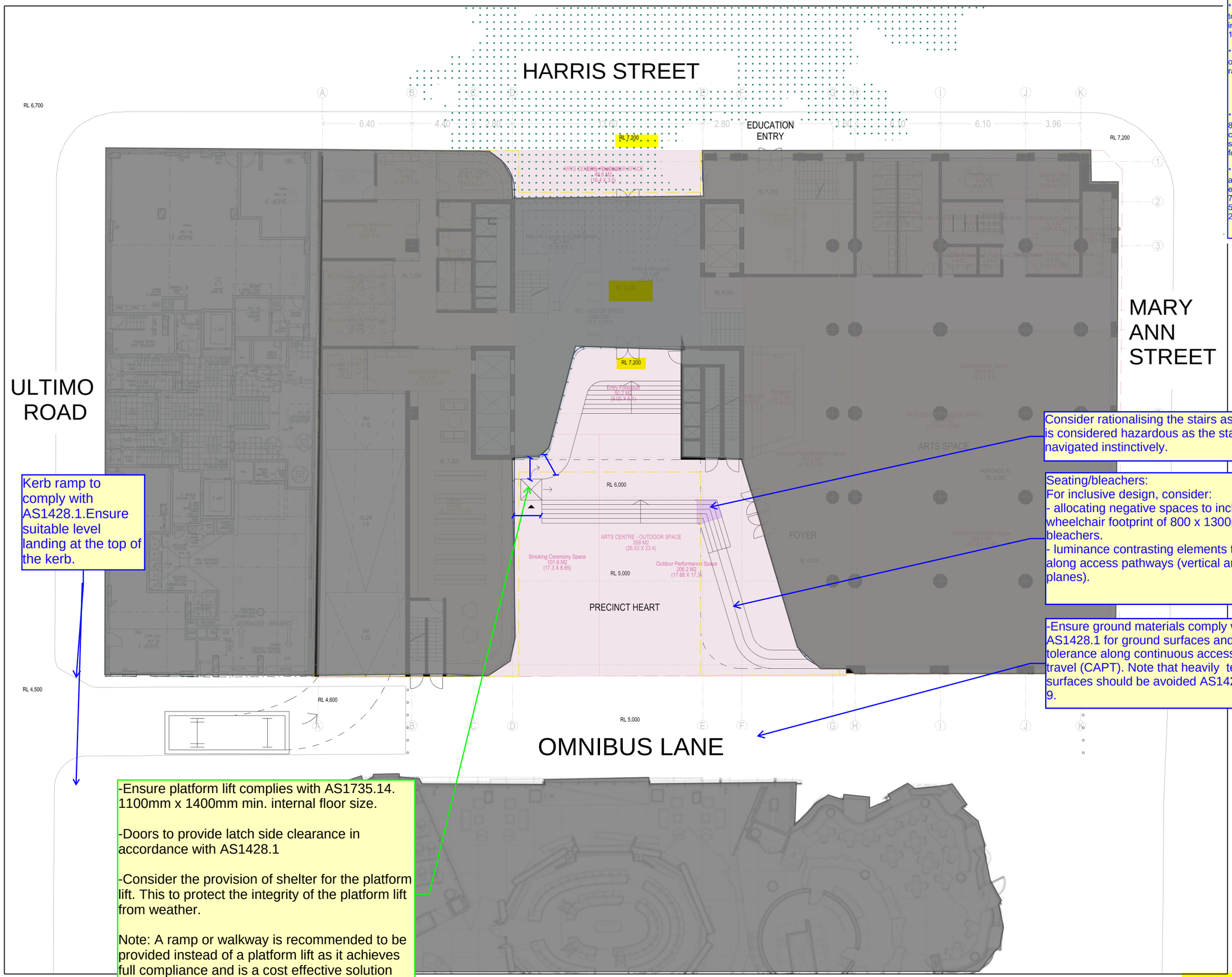
6. Conclusion

MGAC has assessed the proposed concept schemes based on the provided information and local DCP. The proposed drawings of Proposed Public Domain associated with site 13-15 of UTS Campus indicate that accessibility requirements, pertaining to site linkages and circulations spaces can be readily achieved.

It is advised that MGAC will work with the project team as the scheme progresses to ensure appropriate outcomes are achieved in the external domain design.



General Notes

* Blue notes are access recommendations to meet the intent of the DDA and for industry best practice. It references the AS 1428 suite and DSAPT.

* Refer AS 1428.2-1992 for suggested range of seating heights / table heights/reach ranges etc:
  Clause 22 – reach ranges
  Clause 24 – furniture and fitments
  Clause 27 – street furniture

* Consideration of wheelchair footprint of 800 x 1300mm recommended for any spatial considerations e.g. inclusion of wheelchair spaces next to fixed seating – this is to cater for the 90th percentile of users (AS 1428.1).

* Resting spots – recommend shady areas along accessible path if walking distance exceeds 60 metres (refer AS 1428.2 Clause 7, DSAPT), place fixed seatings at least 500mm away from the path of travel (clause 27.1).

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Consider rationalising the stairs as this corner is considered hazardous as the stair cannot be navigated instinctively.

Seating/bleachers:
For inclusive design, consider:
- allocating negative spaces to include a wheelchair footprint of 800 x 1300mm to bleachers.
- luminance contrasting elements to obstacles along access pathways (vertical and horizontal planes).

-Ensure ground materials comply with AS1428.1 for ground surfaces and vertical tolerance along continuous accessible path of travel (CAPT). Note that heavily textured surfaces should be avoided AS1428.2 Clause 9.

Kerb ramp to comply with AS1428.1.Ensure suitable level landing at the top of the kerb.

-Ensure platform lift complies with AS1735.14. 1100mm x 1400mm min. internal floor size.

-Doors to provide latch side clearance in accordance with AS1428.1

-Consider the provision of shelter for the platform lift. This to protect the integrity of the platform lift from weather.

Note: A ramp or walkway is recommended to be provided instead of a platform lift as it achieves full compliance and is a cost effective solution with low maintenance.

6/7/2021

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STATUS

DRAWING

GA PLAN
GROUND LEVEL

DRAWING NUMBER	ISSUE
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