



RANDWICK CITY COUNCIL

Randwick Education and Health Specialised Centre Discussion Paper

PART B: PLANNING DIRECTIONS



8 Investigation Areas

This Section looks at the planning implications of the Vision and Strategies expressed in Part A on specific areas and sites within the Centre.

Investigation Areas

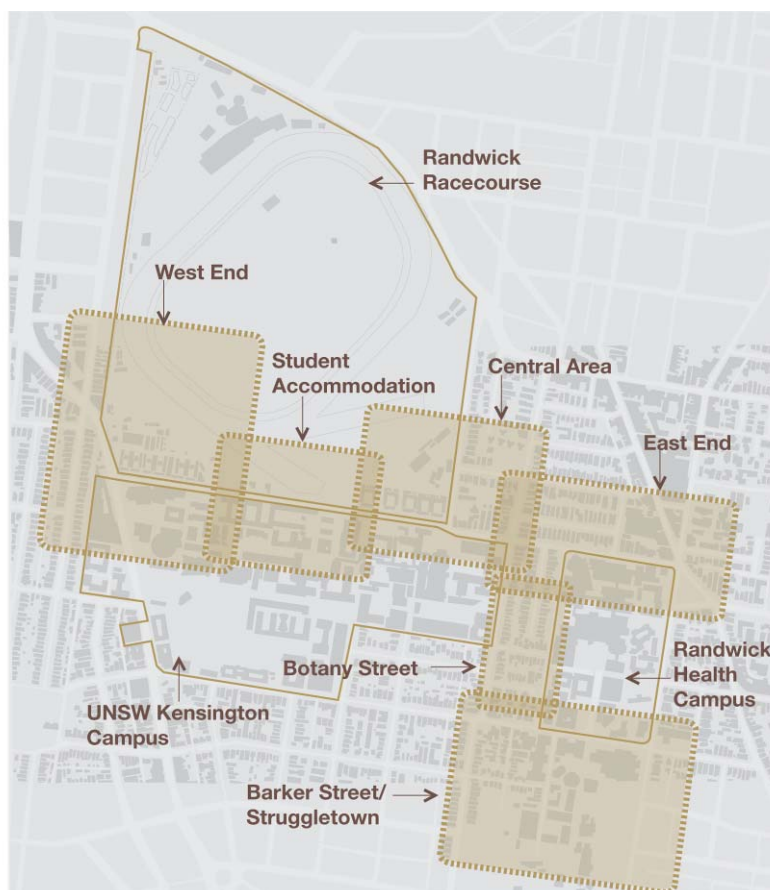
Investigation areas have been identified based on their critical role in contributing to the Centre's growth and its character and identity. Specifically, these areas include a combination of:

- Land with a frontage to High Street
- Land that provides a bridge between institutions and established town centres
- Land in close proximity to public transport
- Major redevelopment sites and key institutions

The potential for residential growth outside these areas, such as in and around Kingsford town centre, are not investigated further here. They will be included, where relevant, in the Residential and Commercial/Town Centres Discussion Papers.

This Section contains principles for land use, built form and character for the areas shown in the map below.

Diagrams and illustrations for each area apply the principles and illustrate possible outcomes. The illustrations are not intended as a resolved master-plan or to suggest individual building designs, but as a basis for discussion and a platform from which to develop Comprehensive LEP/DCP provisions.



Illustrations identify possible block outlines and building envelopes. These have been derived from a combination of elements including relationships with adjacent developments, established existing built form controls, and the envelopes needed to facilitate economically feasible redevelopment (based on Council research).

They also respond to the desire for small blocks to maximise walkability, and slim building forms to provide positive internal amenity, including solar access and natural ventilation, and to protect the amenity of public and open spaces.

Heights are suggested, relating to established street building heights existing on the UNSW Campus and to a lesser extent the Health Campus, being 24 metres generally (equating to 5-6 health/education storeys or 7-8 residential storeys) The heights exclude roof forms and plant equipment.

These are broad suggestions only at this stage, and are expected to be further refined for inclusion in statutory planning documents.

UNSW Kensington Campus

UNSW's campus vision is of a welcoming, collaborative and vibrant place that provides a positive experience for students, staff and the wider community. It aims for its campus to integrate and engage with its surrounds to enhance its role as a major landholder, employer and service provider in the Centre.

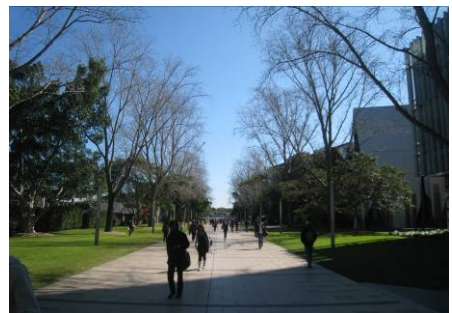
Planning for UNSW must address an additional 25% growth in education floor space requirements to 2031. The Kensington campus will remain the major campus and the focus of the majority of anticipated growth, but its constrained site will require ongoing careful planning, and attention to detailed guidelines to provide a positive campus experience and relationship with its surroundings. Other University properties, including its Randwick campus, High Street and Daceyville sites, should be included in UNSW ongoing planning activities.

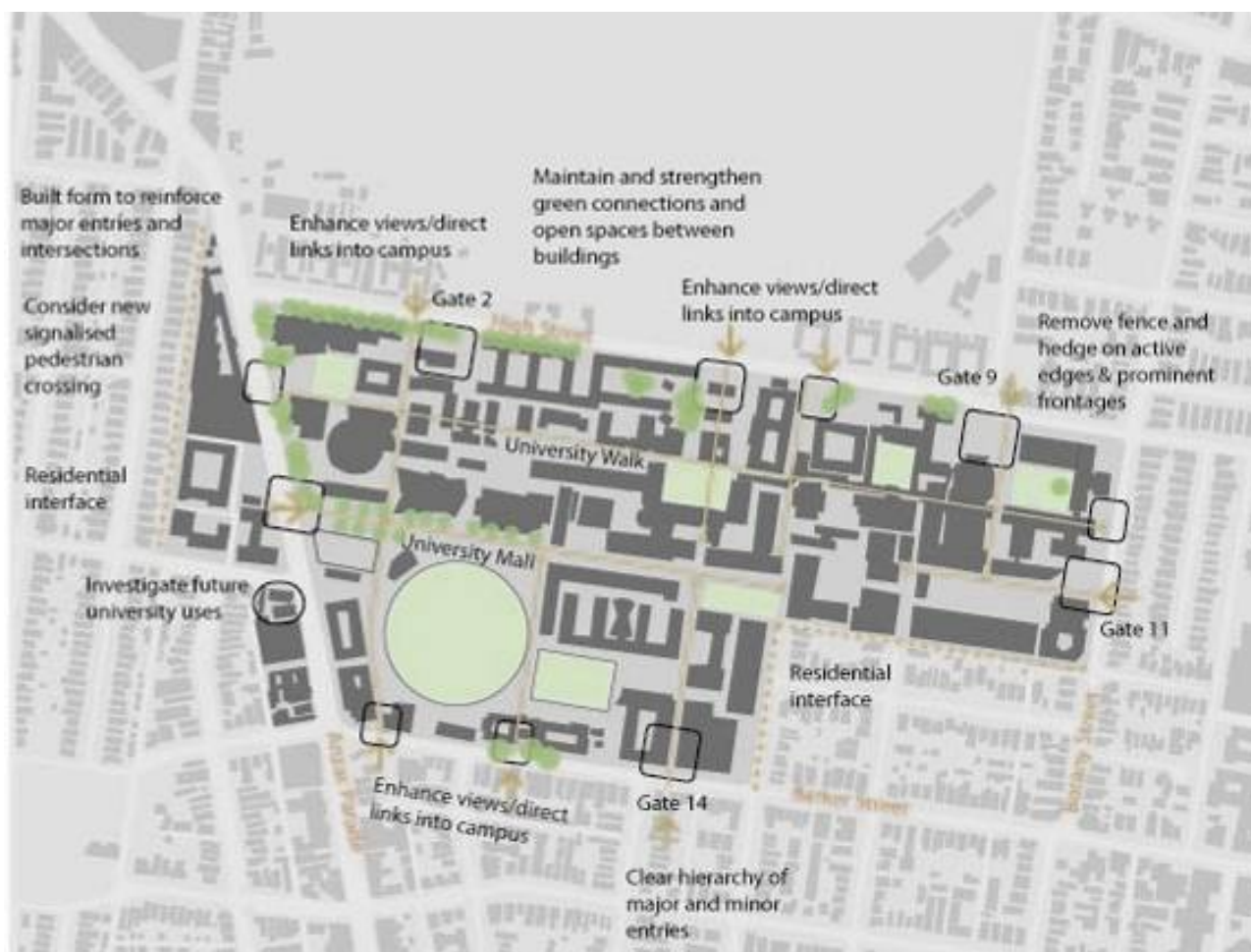
Uses

- Retain the campus as an educational establishment, allowing for teaching activities and associated services, student housing, and related recreation, cultural and functions activities. Prioritise campus space for core educational activities. Locate small scale/footprint ancillary uses (e.g.: childcare) in nearby off-campus locations.
- Limit retail uses on campus to those that are needed to support the primary educational use, and that are complementary to and do not compete with uses in nearby town centres.
- Consider future shared parking facilities as part of a precinct-wide approach to parking.
- Provide for open spaces to support a range of activities, including active recreation, gathering and more intimate contemplative spaces. Provide gathering/circulation spaces at major entries and public transport stops.
- Locate student housing at the campus perimeter. Focus on the High Street frontage and opportunities to consolidate student accommodation in existing locations, rather than expansion across the campus.
- Locate student services, retail and other active uses in "hubs" linked to the circulation network, major entries and public transport stops

Built Form and Character

- Provide a more outward-looking character at campus boundaries through removal of fence and hedge, strengthening major entries, and providing perimeter buildings/entries that orient towards the street, and contain active ground level uses. Provide direct connections and views into the core of the campus from major entries and student hubs.
- Provide consistent setbacks and building alignments to street frontages, and built form that responds to the identified role and character of the Centre's streets, gateways and nodes
- Preserve and recognise significant trees as a strong contributor to campus and streetscape character on Anzac Parade and High Street
- Establish principles for design excellence governing all major buildings on campus and buildings fronting the street, and buildings over 4 storeys in the core of the campus.





Summary of suggested development controls	
Preferred uses	Educational establishment, ancillary uses with a direct link to education
Building heights/envelopes	- Retain 14-24m for buildings located on campus perimeter, as per existing controls (lower heights at residential interfaces or to minimise overshadowing of important open spaces) - Allow flexible heights in central areas subject to demonstrating design excellence - Slim building envelopes for structures over 4 storeys, with higher elements oriented north-south to minimize overshadowing - Maintain and extend the linked courtyard-style building typology
Setbacks	- High Street: minimum 7.5m (to match existing setback at Lowy Cancer Centre/Wallace Wurth building). West End setbacks on High Street may increase, subject to detailed assessment of significant tree locations - Anzac Parade (west) to match NIDA (main building) - Anzac Parade (east) setbacks subject to detailed assessment of location of significant trees, and provision of pedestrian footpath to east of the tree line within UNSW site. - Barker Street: to match existing setback at Gate 14 - Botany Street: minimum 7.5m (to match existing setback at Wallace Wurth building)
Other Provisions	- Precinct-wide approach to parking - See also West End and Central investigation areas

Randwick Health Campus

Randwick Health Campus will strengthen its role as a centre of excellence in health services with strong teaching and research links. It will maintain and enhance its state-wide specialised areas of leadership and its comprehensive health care services to the local community.

The campus will need to plan for an additional 21% growth in floor space requirements for health services to 2031. While the campus has capacity to accommodate future floor space demands, development is often unpredictable and piecemeal. It is important that development on campus is not ad-hoc, to ensure optimum use of available space, to provide for flexibility and adaptability, to reserve space for important activities and connections, and to achieve a legible, pleasant, safe, healthy and user-friendly environment.

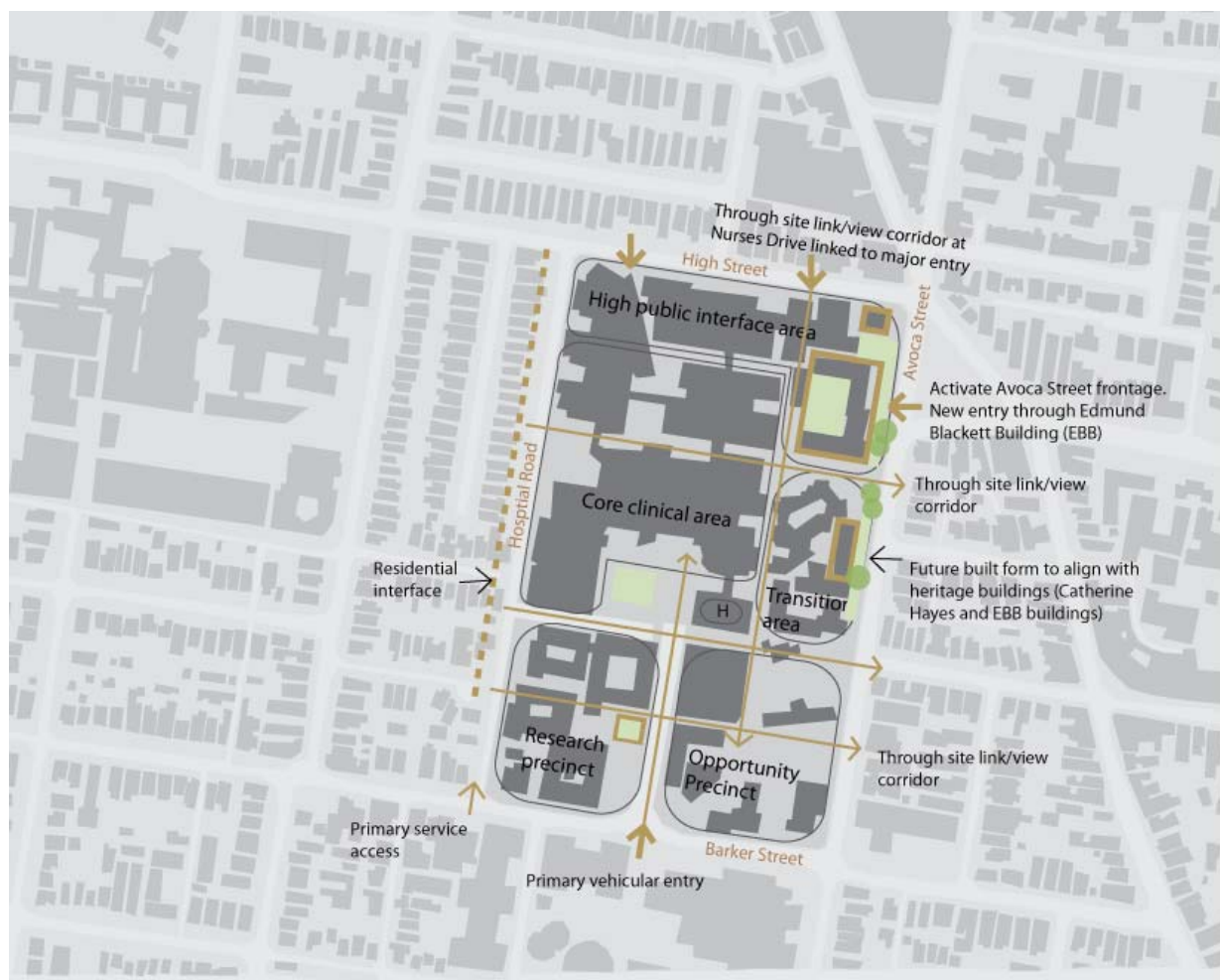
Uses

- Retain the campus as a health services facility, allowing for hospitals, community health services, research, accommodation for staff, patients and carers, and ancillary related activities.
- Define precincts within the campus according to function, as shown on the diagram. Plan for a future mental health precinct and for staff, patient and carer accommodation within the “opportunity precinct”.
- Consider future pooled parking facilities as part of a precinct-wide approach to parking.
- Limit retail uses on campus to those that support the primary health services uses, and that are complementary to and do not compete with uses in nearby town centres.
- Plan for through site links and open spaces, including a landscaped frontage to Avoca Street and future east-west connections, and a north-south circulation spine along Nurses Drive.

Built Form and Character

- Provide a primary pedestrian “front door” character to buildings fronting High Street. Include a minimum 8m setback, with a 4 m articulation zone to allow for canopies, outdoor circulation and building expression
- Provide and improve secondary pedestrian entries on Avoca Street, with building heights and alignments along the Avoca Street frontage consistent with the heritage buildings (Edmund Blackett and Catherine Hayes buildings).
- Retain Barker Street as the primary vehicular entry to the hospitals and front door to the research precinct.
- Establish an urban design framework for the “opportunity precinct” that incorporates mental health, accommodation, and landscape/open space areas. Locate perimeter uses that can address and activate the street and public domain. Provide for lower scale, more inward-looking uses (e.g.: mental health) in the centre of this zone.
- Preserve and reinforce the heritage values on campus, including significant trees, Children’s Memorial Garden, and listed heritage buildings/items. Investigate possible state significance of the Destitute Children’s Asylum (Edmund Blackett Building), Catherine Hayes building and Superintendent’s Cottage.
- Establish a campus-wide circulation framework to improve legibility and permeability, and to separate different modes of movement. Incorporate Nurses Drive with a link to High Street as a primary circulation spine.





Summary of suggested development controls	
Preferred uses	Health services facility, research precinct, staff/patient/carers accommodation
Building heights	- High Street: 24m (consistent with existing height controls on UNSW campus at High Street) - Avoca Street: 18-24m (based on complementing the Edmund Blackett Building and sloping sites) - Barker Street: 24m (consistent with existing maximum height controls on Barker Street at UNSW campus) - Central/core areas: heights flexible subject to design excellence and aircraft/helicopter restrictions
Setbacks	- High Street: 8m, minimum, excluding a 4m articulation zone - Avoca Street: 10-18m (based on alignment with Edmund Blackett Building) - Barker Street: 6m - Hospital Road: provide continuous footpath width of minimum 2.8m on eastern side
Other Provisions	- Precinct-wide approach to parking. - See also East End and Barker Street/Struggletown investigation areas, and Section 9

Royal Randwick Racecourse

Royal Randwick Racecourse is a cultural landscape of heritage significance for thoroughbred racing in Australia. It will continue as Sydney's premier thoroughbred racetrack and preferred destination for training and stabling, with significant regional economic, open space and recreational benefits.

This traditionally inward-looking site is progressively opening its boundaries and including a broader range of uses of the site. Future additional uses that contribute to the site's viability can be considered for parts not required for the long term needs of racing-related activities, where they can better integrate with adjacent land uses, and/or contribute to the activities of the Centre, while respecting the site's iconic landscape status. This also provides an opportunity to investigate how the racecourse, with its long southern boundary to High Street can provide a more open frontage, and improve the activation and amenity of the Centre's spine.

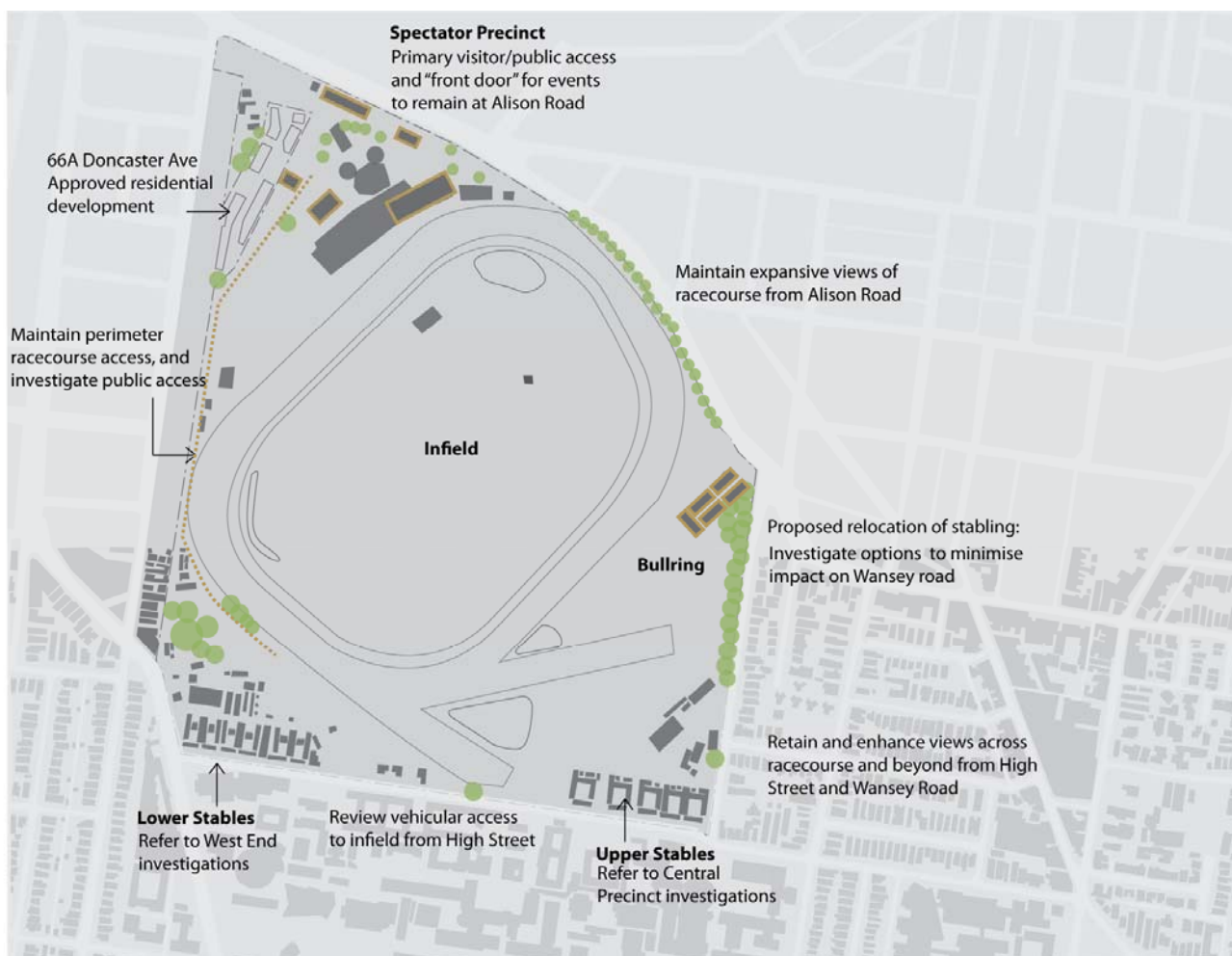
Uses

- Retain the primary role of the site for recreation activities, allowing for horse-racing, stabling and training and associated activities. Other large/small scale events can be considered based on site suitability and amenity impacts.
- Consider additional recreation uses (e.g.: indoor multi-purpose sport facility), cultural uses, educational uses, affordable housing, conference facilities and accommodation that suitably broaden the racecourse activities and support its long term viability, and contribute to the activities in the Centre.
- As part of any additional uses or significant redevelopment, require publicly accessible open space, and consider innovative uses of existing open space, such as active recreation on the infield, and informal enjoyment of the site through public/cycle access.
- Retain the potential for rail-based public transport infrastructure in areas fronting Anzac Parade & High Street. Incorporate plans for public transport improvements with any significant intensification of use on the site.
- Provide a clear delineation between event-based and other activities in terms of location, access, parking and servicing, and review High Street infield access with proposed relocation of stabling/training facilities. Parking for non-event uses to be considered in a precinct-wide approach to parking.
- Recognise the approved residential development at 66A Doncaster Ave (privately owned, but within the site).

Built Form and Character

- Retain the expansive, grand scale landscape character of the site, while allowing for development only on the site boundaries (Alison Road and High Street).
- Review and confirm specific heritage listings/guidelines for built and landscape elements contributing to the racecourse Conservation Area, including adaptive re-use potential.
- Preserve views and vistas across the racecourse to Sydney CBD, and the surrounding district. Future built form should not impinge on public views to the Kensington ridgeline and Sacred Heart monastery tower.
- Maintain low scale built form and filtered racecourse views in the central and sloping section of the site's High Street frontage, with higher densities possible at south-west and south-east boundaries to integrate with surrounding land uses.
- Provide a setback/dedication along the High Street frontage for footpath widening and a dedicated cycle path.
- Retain the primary public access and front door character in the Spectator Precinct. Future development fronting Alison Road should enhance this landmark presence, preserve the wide views from the street into the racecourse, and views of contributory buildings/elements.





Summary of suggested development controls	
Preferred uses	- Recreation, thoroughbred racing, stabling and training and related activities - Residential (66A Doncaster Avenue) - Additional uses on High Street boundary that integrate with surrounds: educational, cultural, recreational, conference, accommodation and affordable housing
Open Space	Provide new public open space with any redevelopment on south western and south eastern parts of the site. Consider options to incorporate significant trees into open space
Building heights	- High Street frontage: 18m at west and eastern ends (up to 24m with an additional 6m setback); 10m in sloping section (student accommodation investigation area) - Alison Road: flexible based on design excellence and consideration of views, heritage and amenity factors
Setbacks	- High Street: 4m setback/dedication for footpath widening and - Wansey Road: minimum 4m setback. Provide larger setback at locations of significant trees, subject to detailed location study.
Other	See also East End and Central investigation areas

West End

The West End lies at the western gateway to the Centre, fronting High Street, and is bound by Royal Randwick Racecourse, UNSW and NIDA, with links to Kensington Town Centre. It can evolve into a strong cultural and recreational precinct to support the Centre's residents, students and workers.

The intersection of Anzac Parade and High Street is currently unobtrusive and modest, framed by low scale, inward-looking buildings. With the proposed relocation of existing stabling and training activities from here to the north-eastern part of the racecourse site, this corner can contribute to the Centre through better integrating with surrounding uses and providing an active, vibrant gateway and spine to the Centre.

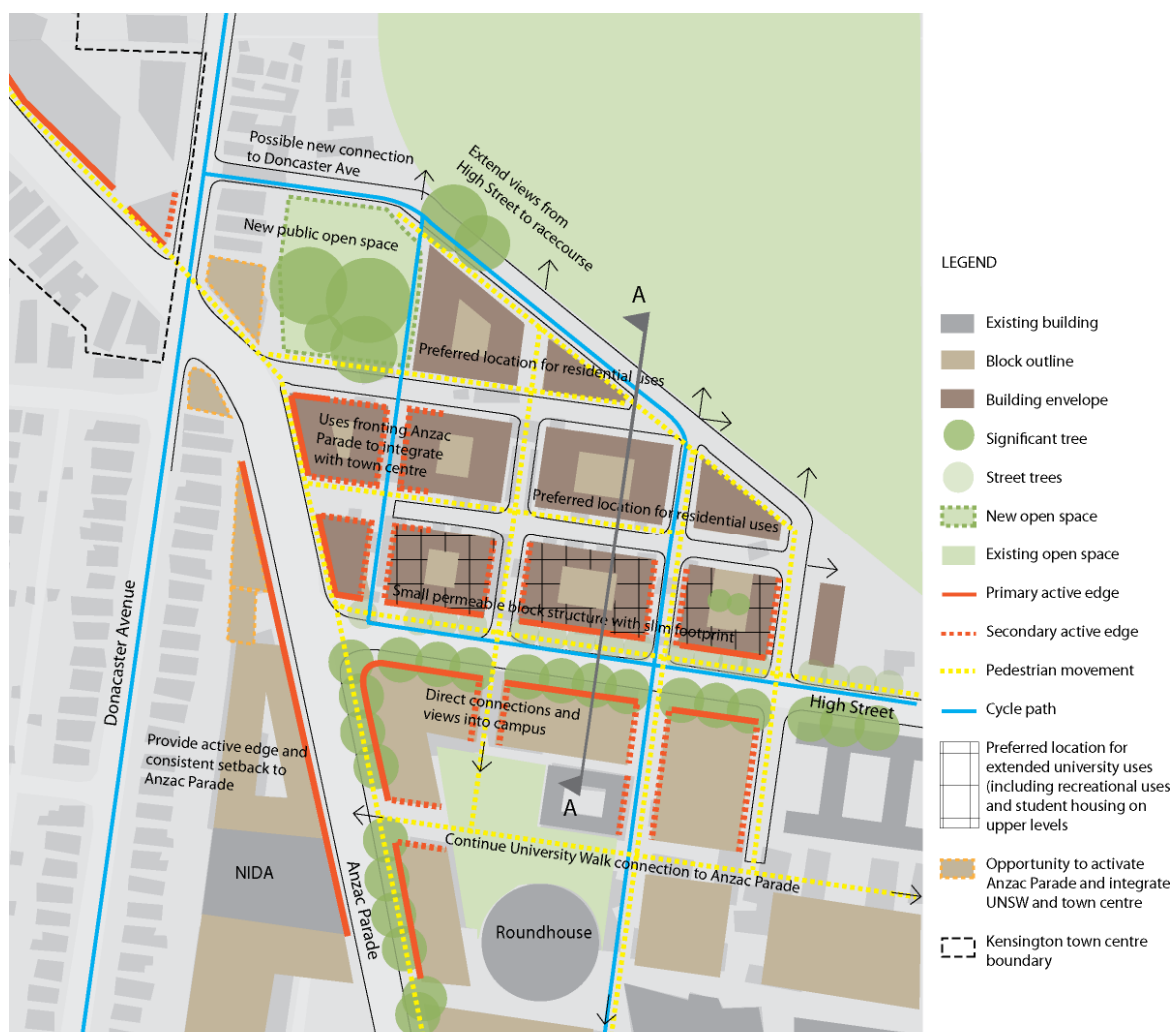
Uses

- Provide for potential expansion of university uses to this racecourse frontage to High Street, including teaching, recreation and cultural facilities to support the increasing student population living close by.
- Retain and strengthen the cluster of cultural and entertainment uses, such as the Roundhouse, Squarehouse, NIDA and nearby leisure/dining activities in Kensington Town Centre. Retain and strengthen recreation facilities including Unigym and swimming pool.
- Permit some commercial/retail uses, to integrate with and enhance the role of Kensington Town Centre, and improve the activation of this part of Anzac Parade. A standalone new retail/commercial centre in close proximity to established centres is not warranted.
- Provide a diverse mix of housing, predominantly for key workers and students. Consider parking restrictions, or other incentives for affordable housing.
- Provide new public open space and informal public access within the racecourse boundary, including a possible new connection to Doncaster Avenue. Review the opportunities for active recreational uses on the infield, with access from High Street, and review the location for infield access for events.
- Any intensification of uses and increased density should be accompanied by major public transport infrastructure improvements, and address the need to avoid significant traffic generation in this pedestrian/cycle-based area.
- Incorporate the potential to accommodate a future rail mass transit station in the medium-long term, while providing for increased bus stop capacity on High St & Anzac Parade in the short term.

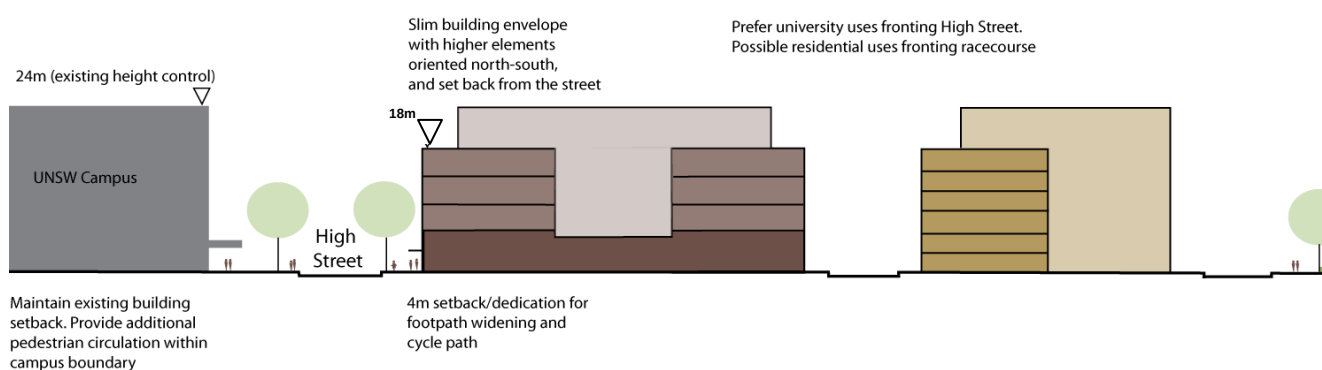
Built Form and Character

- Built form should reference the established controls in Kensington Town Centre and UNSW, with a small, permeable block structure and slim building envelopes. Explore variations for key gateway/corner elements, and orient buildings to provide high levels of amenity, including solar access to public spaces.
- Establish consistent street setbacks, active ground level uses, and entries oriented to the street. Incorporate setback and/or land dedication for footpath widening and a dedicated cycle path on the north side of High St.
- Strengthen direct pedestrian connections and public views to UNSW and the racecourse from High Street and Anzac Parade. Provide a generous pedestrian and cycle-oriented public domain network, with high quality public space at key entries, public transport stops and gathering points on High Street and Anzac Parade.
- Protect and enhance key landscape elements, including significant trees, and the canopied avenue character of High St. Recognise the built/landscape heritage, and historic and aboriginal archaeological significance of the racecourse site as identified in the site's Conservation Management Plan (2006).





West End: Plan



Section A-A through High Street

Summary of suggested development controls	
Building heights	- UNSW: maintain existing height controls (14-24m) on perimeter - Racecourse: 18-24m; based on orientation, streetscape and solar access
Setbacks	- High Street: (north) 4m setback/dedication - High Street (south) 7.5m minimum (may increase, subject to tree locations) - Slim building envelopes and short block lengths

Student Accommodation

This student area is established to a large extent through the existing cluster of student accommodation on the UNSW campus. This area can further evolve and engage more strongly with the High Street pedestrian network.

The existing older colleges in this area are generally inward-looking, and set away from High Street, in contrast with the recently completed adjacent UNSW Campus Village. This location can support additional student accommodation on campus, in preference to other space on campus needed for core educational uses.

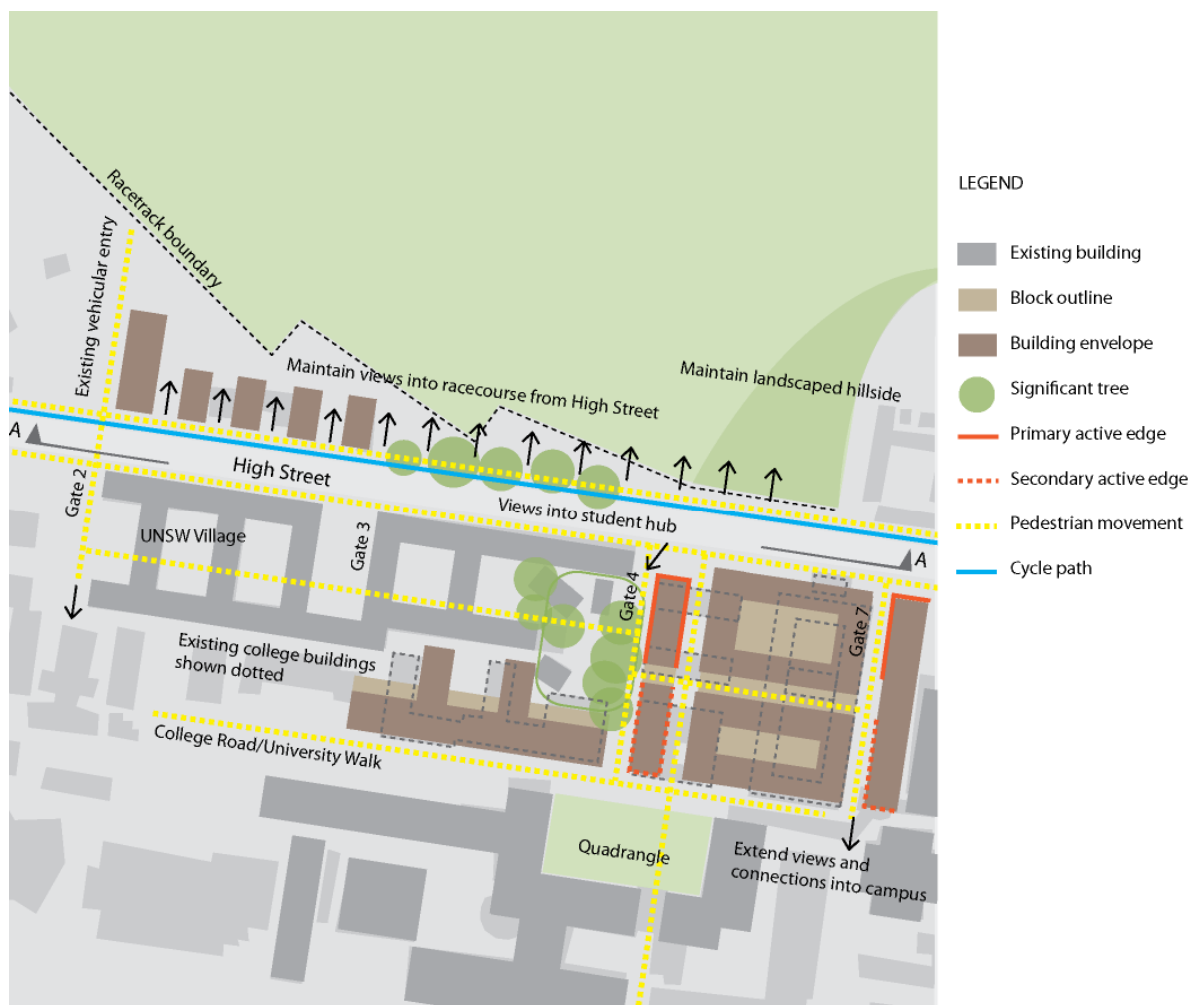
Uses

- Investigate the potential for increased student beds through redevelopment of older colleges on UNSW campus fronting High Street.
- Provide for potential student facilities and gathering spaces in a “hub” based around the Old Tote and Figtree Theatre buildings, including uses such as a student lounge, internet services and small scale food/retail uses that support the student population, but do not compete with town centres. The student hub should be accessible and visible from High Street.
- Investigate possible student and/or key worker accommodation/facilities on the north side of High Street on the Racecourse site, at the location of existing residential buildings. Investigations should confirm the racecourse’s access and boundary requirements in this area, where the track lies close to High Street.
- Minimise the provision of car parking with new student/key worker accommodation and facilities. Consider provision of parking spaces as part of a precinct wide approach with centralised parking facilities that reflect complementary demand patterns and availability of public transport.

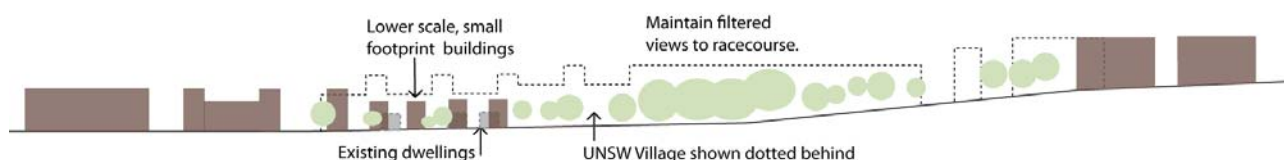
Built Form and Character

- Maintain filtered views through trees into the racecourse from High Street. Avoid a street wall effect on the north side of High Street, and retain a low scale, narrow footprint built form.
- Provide an unbroken footpath on the north side of High Street, with any vehicular access to the racecourse site provided through the existing signalised intersection opposite UNSW Gate 2.
- Reinforce and extend direct views and pedestrian connections into the core of UNSW campus through new built form and alignment.
- Built form and scale on UNSW campus should maintain existing height controls, and comprise slim building envelopes oriented to minimize overshadowing of the public domain and open spaces.
- Establish consistent street setbacks. Buildings and entries should be oriented towards High Street and major internal campus connections, with active ground level uses framing the student “hub”.
- Investigate the social and architectural significance of the existing older colleges in any redevelopment considerations.





Student Accommodation: Plan



Elevation A-A along High Street

Summary of suggested development controls	
Building heights	- UNSW campus: 24m - Racecourse site 10m, with taller option up to 24m adjacent to racecourse vehicular entry
Setbacks	- UNSW: alignment to establish direct north-south connections in to campus and reinforce College Road. Minimum 7.5m setback – subject to detailed study of tree locations to provide consistent street alignment to Gate 9. - Racecourse: 4m setback/dedication for footpath widening and dedicated cycle path

Central Area

The central area sits at the crest of the High Street hill, and signals the beginning of the intensified educational, health, medical and research uses clustered further east along High Street. It should evolve as a hub of university activity with pedestrian priority.

This area contains a formal entry to UNSW, and the location of the Chancellery and ceremonial and public uses such as graduations and performances. It also houses a cluster of education and research uses with strong links to the Health Campus. It will remain a major access point to UNSW, and the location of bus stops generating a high level of pedestrian activity. With the proposed relocation of stabling and training activities on the racecourse, and possible redevelopment on the block bound by Wansey Road, Botany and High Streets (much of which is owned by UNSW), this area can make a stronger and more active contribution to the Centre.

Uses

- Retain and enhance this part of the University as a formal entry, and focus for formal ceremonial, administration and public activities around the Michael Birt Gardens, Chancellor's offices, John Clancy Auditorium and related conference/dining facilities.
- Provide potential to extend university functions to the racecourse High Street frontage, focusing on research, academic and conference/accommodation uses needing a larger floor plate than is available on existing university properties. Include a diverse range of housing, focusing on affordable options for students and key workers.
- Incorporate setbacks and/or dedication of land to provide for footpath widening and a dedicated cycle path on the north side of High Street, linking to Wansey Road and Randwick Junction.
- Provide new public open space and public pedestrian/cycle access with redevelopment on the racecourse.
- Any intensification of use and increased density must consider the existing public transport capacity and the need to avoid significant traffic generation in this high pedestrian/cycle-based area. Significant intensification should be accompanied by major public transport infrastructure improvements. Incorporate the potential to accommodate a future rail mass transit station (e.g.: metro/standard rail) in the medium-long term, while providing for increased bus stop capacity on High Street in the short term.

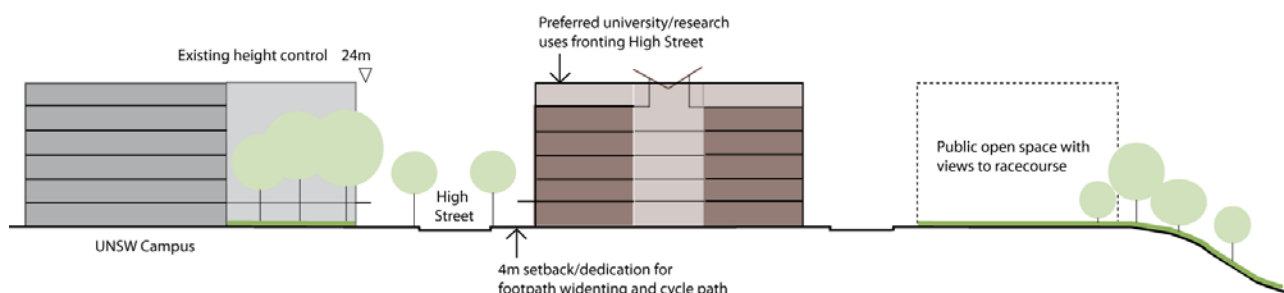
Built Form and Character

- Preserve and enhance key public views to the surrounding districts, the racecourse and Sydney CBD from this elevated area. Extend direct views and connections into the core of the university campus and racecourse from High Street.
- Protect and enhance key landscape elements, including significant trees.
- Built form should reference the established controls in Kensington Town Centre and UNSW, with a short, permeable block structure and slim building envelopes. Explore variations for key nodes (such as the prominent corner of Wansey Road and High Street) and to respond to sloping sites. Orient buildings to provide high levels of amenity, including solar access to public spaces.
- Establish consistent setbacks, with active ground level uses, and entries oriented to the street for sites fronting High Street, Wansey Road and Botany Street.
- Recognise the built and landscape heritage, and historic and aboriginal archaeological significance of the racecourse site as identified in the Racecourse Conservation Management Plan (2006).





Central Area: Plan



Section A-A through High Street

Summary of suggested development controls	
Building heights	- UNSW: 24m (existing control at this location) - Racecourse site: 18-24m fronting High Street based on streetscape, solar access and alignment. 15m fronting Wansley Road - High St/Wansley Road block: max 24m fronting High Street; 15m fronting Arthur Street
Setbacks	- High Street (south): min 7.5m setback (consistent with Wallace Wurth building) - High Street (north): 4m setback/dedication for footpath widening/cycle path - Wansley Road: 4m minimum (may increase at locations of significant trees)

East End

The East End contains the Centre's eastern gateway, and bridges Randwick Junction, the Spot and the Randwick Health Campus. This area will evolve into a more integrated, vibrant location for health-related services and the dining, shopping and commercial needs of the Centre's workforce and community.

Planning for this area should address growth in health related uses outside the Health Campus of up to 30,000sqm to 2031. Many existing health and medical services are located in Randwick Junction and surrounding residential areas. Capacity should be retained in Randwick Junction for a range of retail and other local services, with planning for adjoining areas to accommodate growth in health, medical and related functions. The East End is well-connected to the Health Campus and Randwick Junction, and can be enhanced as a vibrant mixed use precinct, more strongly activated and integrated with the Centre's activities.

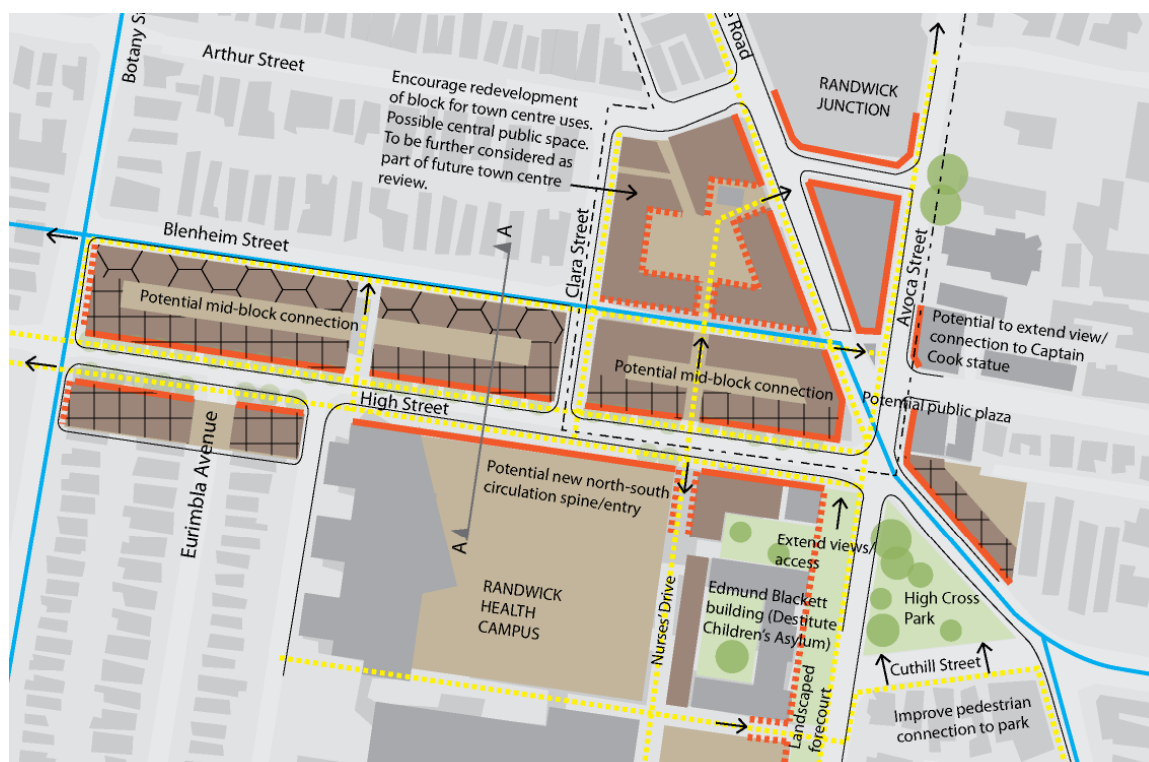
Uses

- Cluster health, medical and related uses fronting High Street adjacent to the Health Campus, and preserve and support Randwick Junction's core town centre role.
- The Health Campus should retain and reinforce its primary pedestrian "front door" on High Street, and the location of high volume activities such as ambulatory care and outpatient clinics.
- New development on the north side of High Street should incorporate residential uses above ground and first floors, with a focus on affordable accommodation for students and key workers. Consider options/incentives such as reduced parking requirements and floor space bonuses for provision of affordable housing.
- Identify potential public space to reduce block lengths and link to pedestrian desire lines, considering incentives for mid-block connections and open spaces linking High Street, town centres and institutions.
- Any intensification of use should include a detailed traffic impact assessment to minimise increased use of vehicles and promote sustainable transport. Consider reduced on-site parking provisions with proximity to public transport, town centre facilities and shared parking, as part of a precinct-wide approach to parking.

Built Form and Character

- Enhance the corner of High Street, Belmore Road and Avoca Street as the Eastern gateway to the Centre. Consider options to encourage redevelopment of the block bounded by High & Clara Streets, and Belmore Road to better frame this prominent corner, providing public open space and an active pedestrian-friendly gateway to the Centre. Review heritage items and possible contributory items within the block.
- Maintain a consistent setback to the south side of High Street, with buildings addressing High Street, and providing a scale transition to higher institutional buildings, and lower residential buildings to the south.
- Provide a strong street edge character to the north side of High Street, with active ground floor uses. Built form should consider the transition between institutional, town centre and medium density residential scales.
- Provide a permeable, pedestrian-friendly circulation network, improving the links between the Health Campus, Randwick Junction and the Spot, with potential new mid-block connections and through-site links. Investigate a share way on Cuthill Street to improve pedestrian connection to High Cross Park.
- Maintain and extend views to heritage items including High Cross Park, Captain Cook statue and heritage items on the Health Campus.





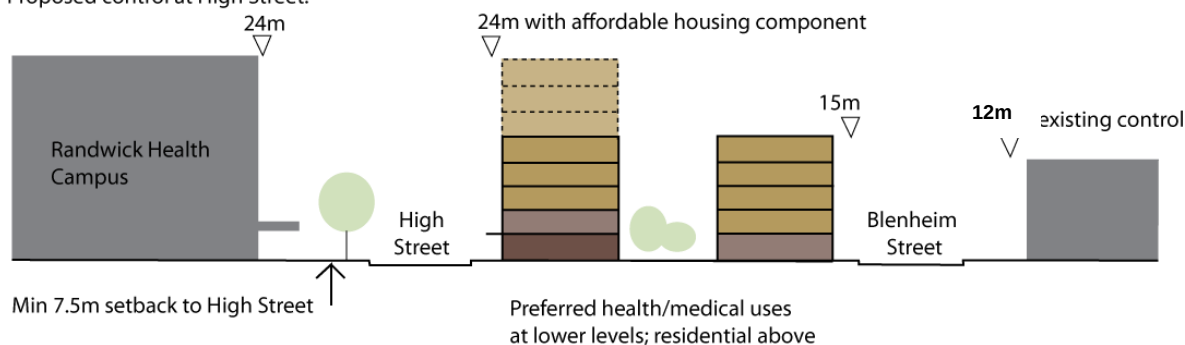
LEGEND

Existing building	New open space	Pedestrian movement
Block outline	Existing open space	Cycle path
Building envelope	Primary active edge	Preferred location for health/medical uses (possible residential above)
Significant tree	Secondary active edge	Preferred location for residential uses
Street trees	Town Centre boundary	

East End: Plan

Varying existing heights.

Proposed control at High Street:



Section A-A through High Street

Summary of suggested development controls	
Building heights	- High Street (north): 15m, with additional 9m for affordable housing fronting High Street - High Street (south): 15m (Eurimbla Ave block) - High Street (south): 24m (Health Campus)
Setbacks	High Street (north): zero street setback, High Street (south): 7.5m

Botany Street

This area comprises the block between UNSW and the Health Campus, excluding the frontages to High Street or Barker Street. Its strategic location between the two major institutions warrants further investigation.

Existing uses in this area are predominantly single residences, with some used for health related purposes such as consulting rooms, and some owned by UNSW. Lot sizes are generally small, varying from 200 – 400sqm in the blocks north of Magill Street, and a greater variation in the blocks to the south, with a small number of blocks over 600sqm. Although UNSW and Randwick Health Campus have close and strengthening ties to each other and share additional floor space needs, the fine grain residential nature of this area makes it less suitable for accommodating the Centre's future needs.

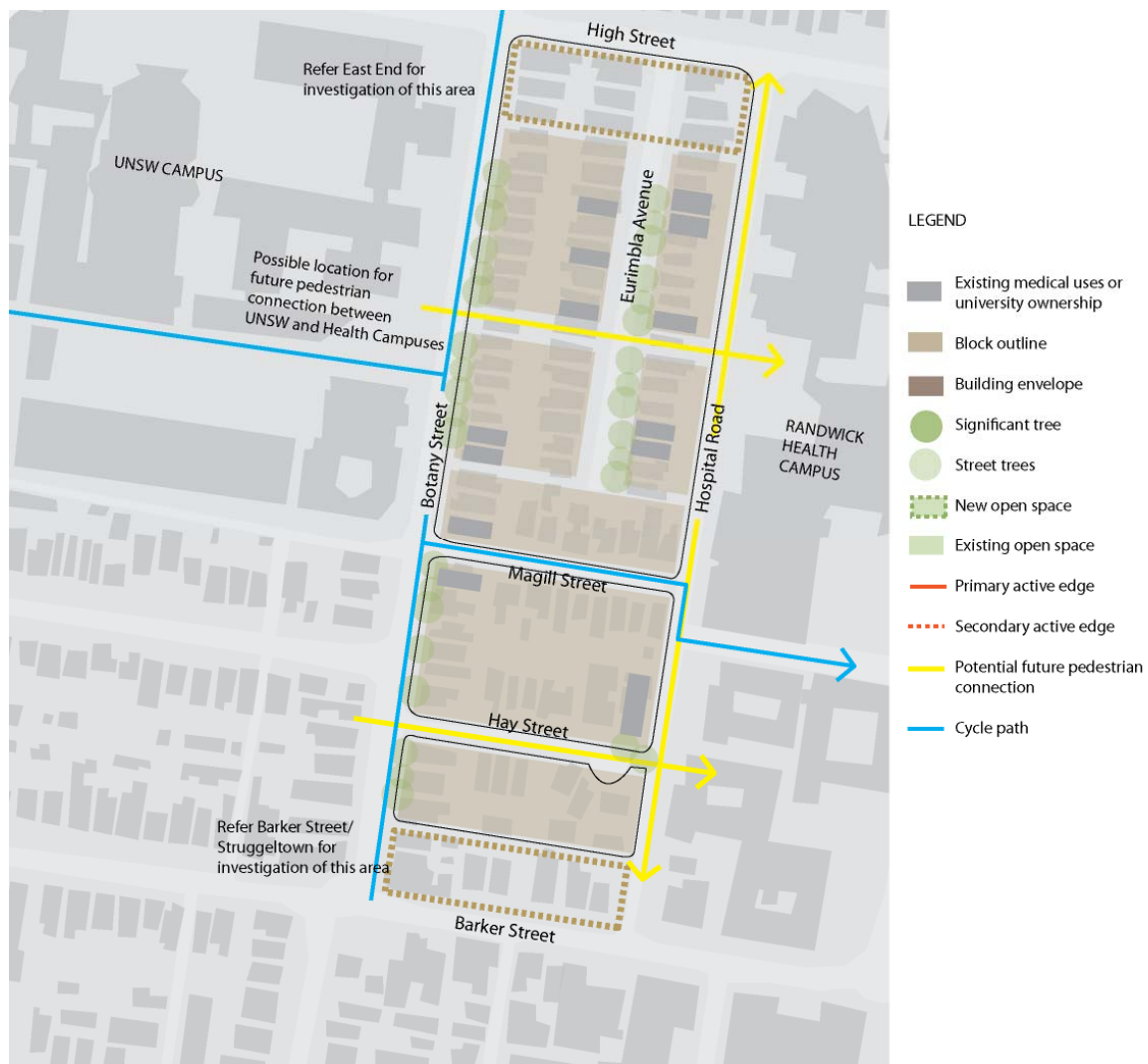
Uses

- Possible long term future uses could include the extension of educational, research and/or medical uses which would strengthen the connection between the Health and University campuses. However such uses would require site amalgamation and larger floor plates, which is likely to occur slowly and in an ad-hoc manner unless the State Government intervenes to acquire sites in a targeted approach.
- The projected demand for additional floor space for the Centre's key uses is proposed to be largely accommodated within other areas in the Centre, with a focus on High Street. This area is therefore suggested to retain its existing residential uses, and continue to allow health related uses such as consulting rooms.
- Flexibility to facilitate health/medical uses within existing development in this area should be provided via a precinct-wide approach to parking to avoid pressure on local streets and existing available parking.
- Long term future uses should retain the potential for a new mid-block connection/through site link and public open space to provide accessible and permeable connections between the University and Health campuses, to promote walking and cycling as the primary way of getting around, and to provide open space for the increasing residential and working population.

Built Form and Character

- Future built form and character is expected to remain consistent within this (20 – 25 year) planning horizon.
- Consider developing design guidelines for adaptation of residential properties for health related uses such as consulting rooms.
- Botany Street will retain its role as an important local collector road. Investigate improvements to the public domain, key intersections and crossing points to better accommodate pedestrian movements between institutions.





Barker Street/Struggletown

This area surrounds the eastern end of Barker Street and is bordered by the Health Campus and Randwick Girls High School, and includes the Struggletown Heritage Conservation Area and Inglis Newmarket site. It can evolve into a local scale mixed use neighbourhood, supporting health/medical uses and diverse housing forms consistent with the area's heritage values.

Planned redevelopments in this area are likely to increase the working and residential population, with the proposed rezoning of the Newmarket site, and construction of a major new Neurosciences Research precinct on the Health Campus. Barker Street is an important secondary entry to the Centre, and will remain a local collector road and the main vehicular entry to the Health Campus. The future of this area must consider the important heritage values in Struggletown, and state listed heritage items in the Inglis Newmarket site.

Uses

- Planning for south-east segment of the Health Campus should include accommodation for staff and patients and their carers, particularly along street frontages.
- Recognise the evolving neighbourhood centre on the south side of Barker Street. Allow health/medical related uses fronting Barker Street, including upper levels of neighbourhood retail uses and services. Continue to permit health/medical related uses along Avoca Street, including the car showroom site.
- Include a diverse range of housing, including affordable options for key workers and students, and live/work opportunities with any redevelopment of the Newmarket site and the car showroom site.
- Provide for public open space with any redevelopment of the Newmarket site, reflecting and connecting the heritage values and elements of the site, including significant trees, the Big Stable and Newmarket House.
- Consider a precinct-wide approach to parking, which can include reduced on-site parking provision based on proximity to public transport, employment & services, and shared parking based on complementary demands.
- Proposed intensification of the Newmarket site must carefully consider traffic generation impacts, and demonstrate measures to minimise car reliance and promote sustainable travel (public transport, walking and cycling). Investigate using the existing access road within the high schools for vehicular access to a redeveloped Newmarket site, to manage access to Barker Street and traffic generation within Struggletown and Young Street.

Built Form and Character

- Future character must carefully manage the scale transition from the larger institutional buildings to the single storey cottages within Struggletown, and heritage items within Newmarket. Retain the fine grain subdivision pattern of narrow streets and laneways, and low scale residential character within Struggletown, and reflect this in adjacent development. Higher density residential uses can be investigated for areas fronting Barker Street, Paine Reserve and Botany Street.
- Buildings fronting Barker Street should have street-front alignment, with entries and ground level activities addressing and activating the street.
- Celebrate the heritage values of the Newmarket site and Struggletown, with suitable curtilages to be provided around heritage items, and interpretation of the area's equestrian history.
- Retain the potential for long term pedestrian connections through the existing high schools to Avoca Street.

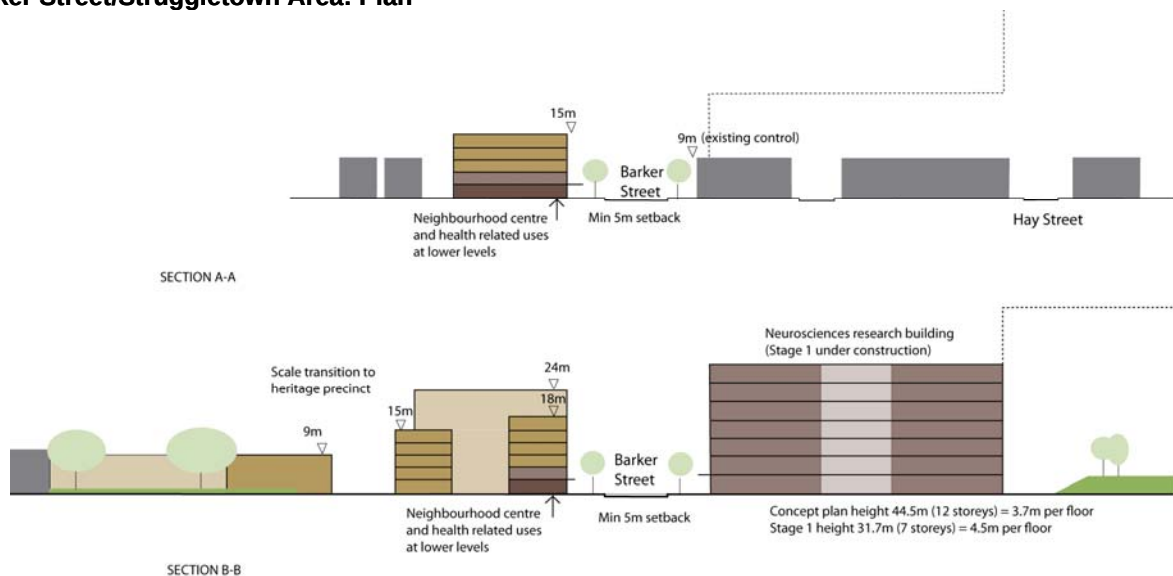




LEGEND

Existing building	New open space	Pedestrian movement	Preferred Neighbourhood Centre uses
Block/site outline	Existing open space	Cycle path	Lower scale, fine grain built form
Building envelope	Primary active edge	Heritage Item	
Significant tree	Secondary active edge	Preferred location for health/medical uses (possible residential above)	
Street trees	Heritage Conservation Area boundary		

Barker Street/Struggletown Area: Plan



9 Planning Controls and Guidelines

This Section makes recommendations for the Council's planning controls and guidelines to implement the vision and strategies for the Centre.

Planning Control Hierarchy

The local planning framework contains a hierarchy of plans which progress from broad land use and zoning provisions through to detailed design guidelines. They typically consist of:

- Local Environmental Plans (LEPs)
- Development Control Plans (DCPs)
- Design and technical policies and strategies (e.g.: Public Domain Strategy)

Comprehensive LEP

Recommendations for the Comprehensive LEP will include options for land use zones in the Centre, their objectives and permissible uses. It will also address objectives for the Centre, and major development standards.

Comprehensive DCP

The Comprehensive DCP will outline specific design controls for key sites and uses within the Centre. These can include objectives and requirements for building envelopes, character, landscaping, and parking.

Public Domain Strategy

A suggested structure, scope and set of principles are outlined for developing a public domain strategy for the Centre addressing public land such as streets and public open spaces. A Public Domain Strategy also provides a platform to prioritise the Council's works program and identify possible works under a Development Contributions Plan.

9.1 LEP Drafting Considerations

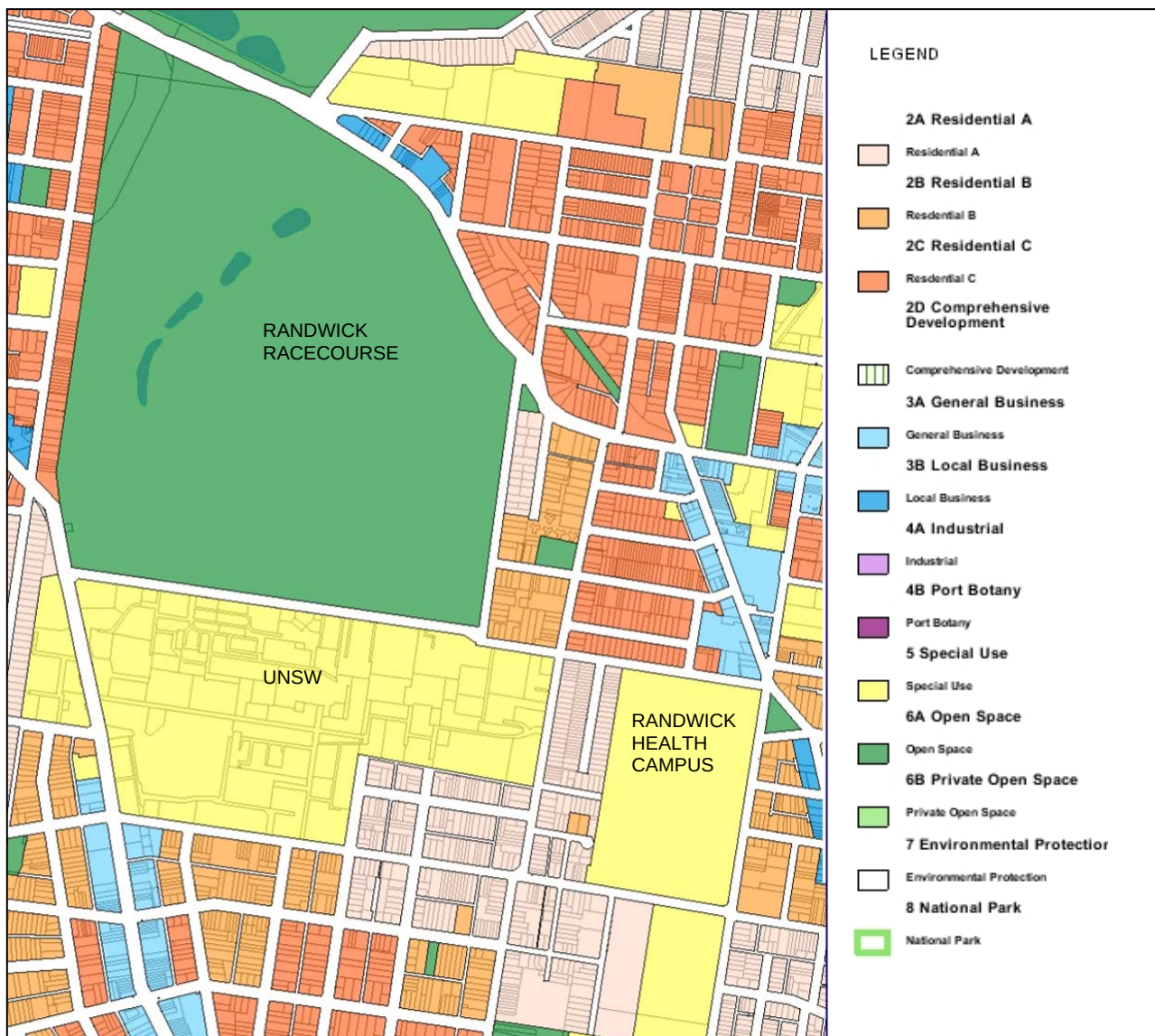
This Section investigates the key directions for the Centre affecting the drafting of the comprehensive LEP, and makes suggestions for land use zones, objectives for the Centre and principal development standards.

Existing Provisions

Local Provisions

Randwick LEP 1998 (Consolidation)

Randwick Local Environmental Plan 1998 (Consolidation) (RLEP) is the statutory local planning instrument that currently applies to Randwick City. It defines different land use zones applying across Randwick City, and contains development objectives and permissible uses for each zone. The RLEP also sets out principal development standards such as floor space ratios, building heights, minimum allotment sizes and heritage provisions.



Randwick LEP 1998 (Consolidation): Existing Land Use Zones

Existing RLEP Zone	Locations	Description
5 Special Uses	- UNSW - Randwick Health Campus - TAFE	Allows development by public authorities on publicly owned land such as education, religious, public transport uses and similar purposes.
6A Open Space	Royal Randwick Racecourse	Publicly owned land used or capable of being used for public recreational purposes.
3A General Business	- Randwick Junction - Kingsford	Commercial, retail, residential and community purposes.
3B Local Business	- The Spot - Kensington	Commercial, retail, residential and community purposes.
2A, 2B, 2C Residential	Various residential areas	Allows a range of housing types and densities. Some non residential uses also permissible such as educational establishments, health consulting rooms.

Randwick LEP 1998 (Consolidation): Description of Existing Zones

Federal Legislation

Civil Aviation (Building Control) Regulations 1988

These Regulations are administered by the Civil Aviation Safety Authority (CASA) and contain Schedules limiting the heights of structures that may be built above ground in certain locations. Structures exceeding the heights require formal approval from CASA, to ensure development does not interfere with radar requirements.

In the Centre, any proposed structure of the following heights or above must be referred to CASA:

Schedule	Height	Applicable areas
Schedule 3	15.24m	UNSW, Health Campus, the Spot, Struggletown
Schedule 4	45.72m	Racecourse, Randwick Junction

State Provisions

Standard Instrument (Local Environment Plan) Order 2006

The State Government has introduced the Standard Instrument LEP (the Standard Template) as a template for all councils to use as the basis for their comprehensive LEP reviews.

Introduced as part of the State Government's planning reforms in 2006, the Standard Template aims to give uniformity to all new comprehensive LEPs in New South Wales. It specifies the structure for a comprehensive LEP, including standard definitions, land use zones and zone objectives, mandates certain uses as permitted or prohibited in various zones, and identifies compulsory and optional development control provisions. Councils must adopt the Standard Template as the basis to prepare their own LEPs, but are able to add other local provisions relevant to local circumstances.

This Discussion Paper investigates possible Standard Template zones and provisions for the Centre, with particular attention to health, medical, education and research uses. Detailed discussion on possible zones and provisions for residential uses will be contained in separate Residential and Town Centres Discussion Papers.

State Environmental Planning Policies (SEPPs)

SEPPs deal with environmental planning issues that have state-wide relevance, and they override local planning instruments. The table below summarises the implications of the most relevant SEPPs for the Centre.

SEPP	Description and Implications
SEPP (Infrastructure) 2007	The SEPP outlines a planning regime for specific kinds of infrastructure and facilities, including permissible uses, expanded exempt and complying provisions, and requirements for local consultation. Facilities include educational establishments and health services facilities.
Educational Establishments (includes schools, tertiary institutions such as universities and TAFE)	- Exempt Development: minor works including tree lopping, and awnings - Permitted without consent: construction or maintenance greater than 5m from any property boundary, single storey libraries, classrooms, portable classrooms, cafeterias, sport fields. - Permitted with consent: educational establishments, expansion of educational establishments (includes universities), use of facilities for a community purpose
Health Services Facilities (includes day surgeries, community health facilities, consulting rooms, patient transport facilities, hospitals)	- Permitted without consent: minor alterations/additions to an existing hospital (provided there is no increase in patients or staff by 10%), demolition of building in connection with a health services facility - Permitted with consent (in certain zones including medium density residential, commercial and special uses): health services facilities - Permitted with consent (on state owned land zoned for a health services facility): biotechnology research and development, business/retail premises for staff/patients, multi-dwelling housing – subject to a site compatibility certificate
Recent Review	A recent review of the infrastructure SEPP was undertaken in March 2010. Suggested amendments included permitting health services facilities in low density residential zones, and a new definition of student housing, with additional provisions to permit certain student housing close to universities as complying development. At the time of writing, these changes have not yet been introduced to the SEPP.
	This SEPP has specific application to the Randwick Specialised Centre, particularly in relation to UNSW and Randwick Health Campus whereby a number of types of development may be carried out without consent. In addition Anzac Parade is a major classified road running through the Centre which has implications in terms of traffic generating development. The Comprehensive LEP cannot be made more restrictive than the provisions of this SEPP.
SEPP (Major Development) 2005	This SEPP defines certain developments that are major projects to be assessed under Part 3A of the Environmental Planning and Assessment Act 1979, and determined by the Minister for Planning.
Categories of Major Projects	- Hospitals over \$15 million - Medical research and development and universities over \$15 million or employing over 100 people - Educational facilities over \$30 million - Residential, commercial or retail projects over \$100 million - Tourist, convention and entertainment facilities over \$100 million, or employing over 100 people - Major sporting facilities over \$30 million

SEPP	Description and Implications
	- Many development proposals in the Specialised Centre fall under the Major Projects SEPP, and are assessed under Part 3A of the EPA Act. Council and the community are able to make submissions on these proposals. - A strong precinct planning framework for the Centre will provide a sound basis on which these applications can be assessed
SEPP (Affordable Rental Housing)	This SEPP provides incentives for new affordable rental housing and facilitates the retention of existing affordable rental stock. It aims to support local centres by providing housing choices close to places of work and public transport.
Applicable land use zones	The SEPP allows development for affordable rental housing in all residential zones provided public transport is accessible via a walking radius.
Incentives	- Floor Space Ratio (FSR) incentives are given above existing LEP provisions. The incentive depends on the percentage of dwellings to be used as affordable housing - Secondary dwellings (commonly known as granny flats) are considered complying development subject to a number of standards including a maximum floor area of 60 sqm and restrictions on subdivision.
	- The SEPP is significant to the Centre due to the high levels of students and hospital workers who are key drivers for affordable housing. - SEPP provisions pertaining to granny flat development can facilitate additional density without having to rezone low density areas therefore maintaining streetscape character and neighbourhood amenity of low density areas. - As the SEPP relates solely to residential zones, should affordable housing provision be pursued in other zones (for example key redevelopment sites on the periphery of the race course fronting High Street), additional local provisions which permit such uses are required to be incorporated into the Comprehensive LEP.
SEPP 65: Design Quality of Residential Flat Development	This SEPP aims to improve the design quality of residential flat development through better built form and aesthetics of buildings, streetscapes and public buildings. It sets out design quality principles for residential flat development (3 or more storeys).
	This Paper is consistent with the objectives of <i>SEPP 65</i> by aiming to improve the design outcome of residential development. Council's established Design Review Panel will continue to ensure a high degree of design scrutiny for significant projects in the Centre.
SEPP 55: Remediation of Land	This SEPP and associated guidelines provide planning controls and directions for the remediation of contaminated land. It provides that in preparing a LEP, the consent authority must consider if any land subject to a change in zones may be contaminated, and therefore whether the land requires remediation to suit the proposed new land use.
	In preparing the draft comprehensive LEP, council needs to be satisfied that any land affected by a change in land use zones is suitable in its current state or will be suitable after remediation for the uses permitted under the proposed zones.

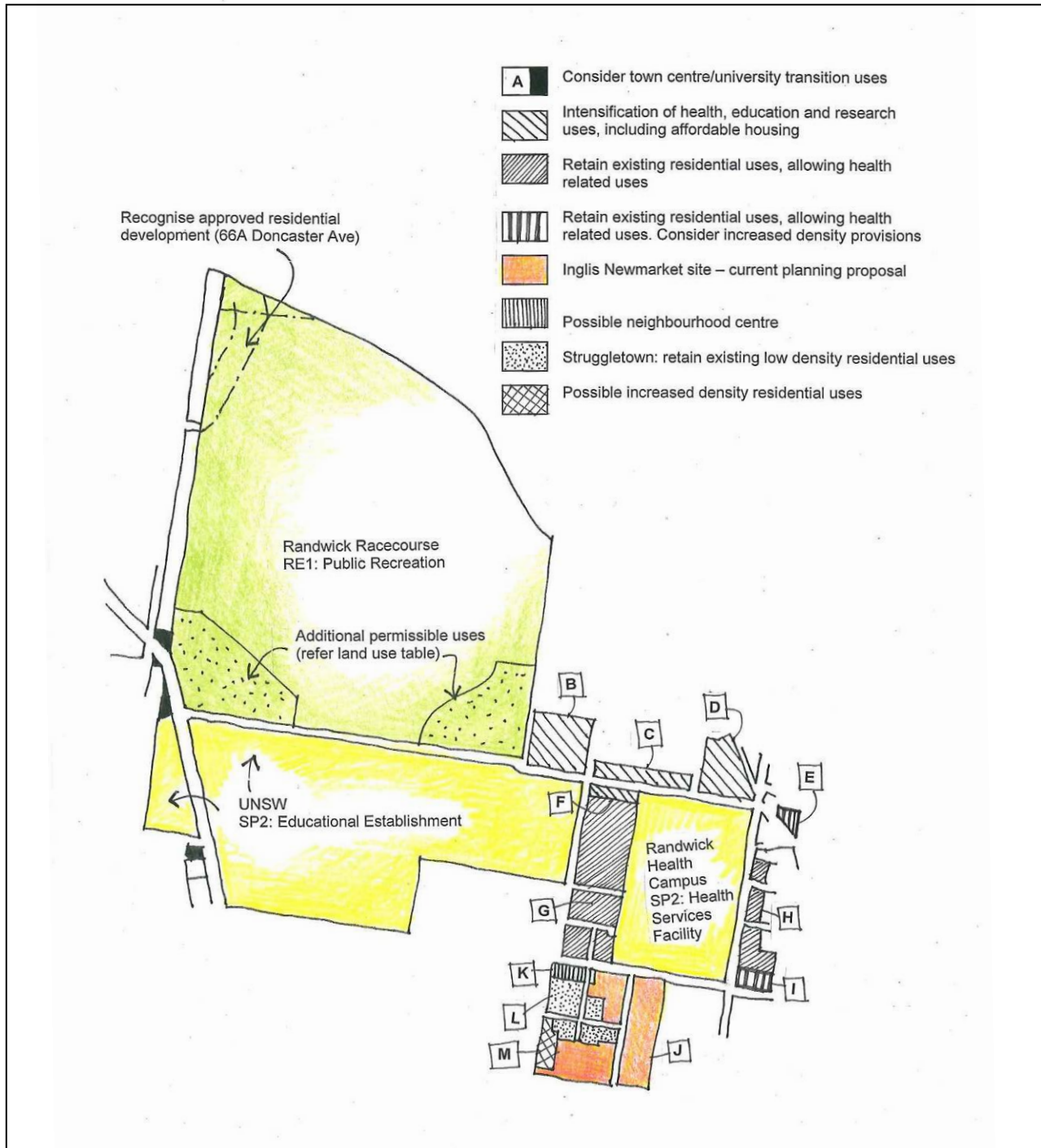
Ministerial Directions

Under section 117(2) of the Environmental Planning and Assessment Act 1979, the Minister may issue Directions in relation to preparation of LEPs. The following Directions are relevant for any land within the Centre:

Direction	Description and Implications
1.1 Business Zones	This direction is to support the viability of identified strategic centres.
Comment	The viability of the Centre is supported by retaining areas and locations of existing business zones, and allowing for additional floor space to accommodate employment growth in health and education in suitable locations.
2.2 Heritage Conservation	This direction is to conserve items, areas, objects and places of environmental heritage significance and indigenous heritage significance.
Comment	This Paper maintains the existing heritage conservation areas and items within the Centre that have heritage significance. It also suggests elements for review and additional investigation.
3.1 Residential Zones	The objectives of this direction are: (a) to encourage a variety of housing to provide for existing & future housing needs (b) to make efficient use of existing infrastructure and services and ensure that new housing has appropriate access to infrastructure and services (c) To minimise the impact of residential development on the environment.
Comment	This Paper proposes to retain and broaden the diversity of housing choice in the Centre, especially to suit key workers and students, with suggested incentives to facilitate affordable housing provision. It proposes that housing will make more efficient use of existing infrastructure and services including public transport.
3.4 Integrating Land use and Transport	The objective of this direction is to achieve: - improved access to housing, jobs & services by walking, cycling & public transport - increasing the choice of available transport and reducing dependence on cars - reduced travel demand, number of trips & distances travelled, especially by car - support for the efficient and viable operation of public transport services - provision for the efficient movement of freight.
Comment	This Paper identifies future development potential in relation to the most accessible locations to public transport in the Centre. It aims to increase sustainable travel and reduce reliance on private vehicle use through measures such as a precinct-wide approach to parking. The Paper also calls for the introduction of rail mass transit to suit the current and future demands of the Centre.
6.3 Site Specific Provisions	The objective of this direction is to discourage unnecessarily restrictive site specific planning controls.
Comment	This Paper will not introduce unnecessarily restrictive planning controls for sites in the Centre. It proposes to introduce a level of flexibility into planning controls to accommodate demand and adapt to changing requirements.
7.1 Implementation of Metropolitan Strategy	The objective of this direction is to give legal effect to the vision, land use strategy, policies outcomes and actions contained in the Metropolitan Strategy.
Comment	This Paper has been prepared in response to the draft East Subregional Strategy directions to consolidate and strengthen the whole Centre. It maintains the vision, land use, policy outcomes and actions within the Metropolitan Strategy to ensure that the Centre retains its significance as a major contributor to health, education and research.

Comprehensive LEP Drafting Recommendations – Land Uses

The map and table below make land use recommendations for key areas and sites in the Centre for consideration when drafting the comprehensive LEP. Specific Standard Template zones are suggested for the major institutions and racecourse sites, and options are suggested for the surrounding areas.



Map showing proposed land uses

Table of Proposed Land Uses

Map Ref/Location	Approach	Recommendations/Options – Land Uses
UNSW Campus	Translate existing zone to equivalent Standard Template zone	SP2: Educational Establishment
Randwick Health Campus	Translate existing zone to equivalent Standard Template zone	SP2: Health Services Facility
Royal Randwick Racecourse	Translate existing zone to equivalent Standard Template zone, and consider options for additional permitted uses in selected areas (refer map)	- Option 1: allow additional permitted uses on defined parts of the site - Option 2: show split zoning of the site (not preferred by Department of Planning)
A. West End	Consider options to facilitate a transition between university and town centre uses (refer map)	Allow additional permitted uses within existing zone
B. Central Area	Consider appropriate Standard Template zone for intensification of uses for educational, health, research and key worker/student housing purposes.	- Option 1: retain medium density residential zone, allowing additional permitted uses - Option 2: apply a mixed use zone - Option 3: apply a Special Use zone (although not all lots are owned by UNSW)
C. East End	Consider appropriate Standard Template zone for intensification of uses for educational, health, research and key worker/student housing purposes	- Option 1: retain medium density residential zone, with increased density - Option 2: apply a mixed use zone - Option 3: extend commercial zoning of Randwick Junction
D. East End	Consider appropriate zone to retain role as part of Randwick Junction, with options to encourage redevelopment	- Option 1: retain current commercial zone - Option 2: consider mixed use zone
E. East End	Consider options to facilitate intensification of health/medical uses and transition between town centres	Recommendation: retain existing medium density residential zone, which allows health related uses
F. East End	Consider options for allowing intensification of uses fronting High Street for health, medical and key worker/student housing purposes	- Option 1: apply medium density residential zone, which allows health related uses - Option 2: apply a mixed use zone
G. Botany Street	Translate existing zone into equivalent Standard Template zone. Consider provisions to facilitate medical services facilities	Recommendation: retain existing low density residential zone
H. Avoca Street	Translate existing zone into equivalent zone. Consider provisions to facilitate medical services facilities	Recommendation: retain existing medium density residential zone

Map Ref/Location	Approach	Recommendations/Options – Land Uses
I. Car Showroom	Consider options to facilitate redevelopment including a diverse range of housing types & live/work opportunities, including health related uses suitable for ground floor uses	- Recommendation: retain existing medium density residential zone, which allows health-related uses - Apply site-specific height/density provisions recognising the larger site area
J. Newmarket site	Consider appropriate Standard Template zone for redevelopment for medium density housing, with health, medical, research uses fronting Barker Street (subject to outcome of current planning proposal/rezoning process)	- Option 1: apply equivalent residential Standard Template zone to current proposed residential 2D zone (planning proposal) - Option 2: apply specific block by block residential and neighbourhood centre zones (according to site specific DCP)
K. Barker Street	Consider appropriate Standard Template zone to recognise neighbourhood centre role, and potential for some health/medical uses	- Option 1: apply neighbourhood centre zone - Option 2: incorporate into considerations for Newmarket site (i.e.: include in proposed Residential 2D zone, which allows for identification of an “activity strip”)
L. Struggletown	Protect the scale, character and heritage values of the area	Recommendation: Retain existing low density residential zone
M. Barker Street/ Struggletown	Consider appropriate standard template zone to transition between Newmarket and existing medium density residential uses to the west	- Option 1: apply medium density residential zone - Option 2: retain existing low density residential zone

Notes

- Any change in a land use zone is subject to investigation and compliance with SEPP 55: Remediation of Land
- A mixed use zone is one that provides for a combination of commercial (retail, business, offices) and residential uses.
- Options for residential and business zones will be further discussed in the respective Residential and Town Centres/Commercial Uses Discussion Papers. The recommendations of these Papers may affect the draft comprehensive LEP zoning for the residential and commercial uses within this Paper's study area.

Comprehensive LEP Drafting Recommendations - Provisions

The Comprehensive LEP will contain provisions such as principal development standards, exempt and complying provisions, and specific provisions related to different uses and locations. Recommended key provisions applying to the Centre are described below:

Principal Development Standards

Height

Currently building height controls for sites within the Centre are covered partly in the RLEP and partly in site specific DCPs. Under the Standard Template, building heights are an optional development standard and may be expressed on a map which provides flexibility to allow a range of building heights within one land use zone, and/or for individual lots. State government preference is for height controls to be included in the LEP, rather than a DCP, especially in important centres. It is generally recommended that height provisions be expressed in the Comprehensive LEP.

The recommended approach for expressing height controls for major sites and areas within the Centre is listed in the table below. Refer to the Proposed Land Use Map for identification of specific locations.

Map Ref/Location	Existing Controls	Proposed Height Controls (excludes roof forms and plant)	
UNSW	DCP: 14 - 24m	LEP	Establish perimeter zone with height controls in LEP and more flexible central core, subject to a design excellence process. Heights of buildings on perimeter to be consistent with current DCP controls.
Health Campus	None	LEP	Establish perimeter zone with height controls in LEP and more flexible central core, subject to a design excellence process. Perimeter heights:18-24m
Racecourse	DCP (existing controls generally limited to Spectator Precinct)	LEP	High Street/Anzac Parade: 18-24m. Consider flexibility for non-street front buildings, subject to design excellence and consideration of site topography, access, heritage, landscape and views
B. Central Area	RLEP: 9m	LEP	15 - 24m
C. East End	RLEP: 12m	LEP	15 - 24m. Incentives to facilitate affordable housing
D. East End	RLEP: 12m	LEP	12 – 24m. Incentives to facilitate redevelopment
E. East End	RLEP: 9m	LEP	12 – 15m
F. East End	DCP: 9m	LEP	12 – 15m. To be consistent with surrounding area.
I. Car showroom	RLEP: 9m	LEP	12 - 15m.
J. Newmarket	DCP: 9m	LEP	Varying heights informed by detailed studies as part of planning proposal. Indicative height range: 9 – 24m
K. Barker Street	DCP: 9m	LEP	12-15m
L. Struggletown	DCP: 9m	DCP	9m (no change)

Floor Space Ratio (FSR)

Currently floor space ratio controls for sites within the Centre are covered partly in the RLEP and partly in DCPs. Under the Standard Template, FSRs are an optional development standard, and may be expressed on a LEP map, which provides flexibility to specify desired FSRs on a lot-by-lot basis. State Government preference is for FSR controls to be included in the Standard Template LEP, rather than a DCP, especially in important centres.

Randwick City's recent town centre reviews have used a building envelope approach in preference to floor space ratios, to support improved urban design outcomes. This approach is supported for the Centre's major sites, and the options for how this can be reflected in the Comprehensive LEP/DCP will be discussed in detail in the Town Centres/Commercial Uses Discussion Paper. The recommended approach to applying density controls for the Centre is:

Location	Approach
• Institutions	Include building location/envelope controls in DCP
• Racecourse	Include building location/envelope controls in DCP
• Other areas	Include FSRs in LEP, or provide building envelope guidelines in a DCP; similar to recent town centre approaches

Following feedback from public consultation, the suggested building envelopes will be refined, and floor space potential can be calculated to ensure that the estimated growth demands for the centre can be met. This could enable FSR measures to be included in the LEP.

Lot Sizes

Given a high variation in lot sizes, configuration and fragmented ownership patterns for sites within the Centre (outside the institutions and racecourse) it is difficult to achieve amalgamation of sites to support larger building floor plates. Different approaches will therefore be investigated to facilitate development on existing individual lots, while achieving acceptable built form and consistent streetscape outcomes.

Site Specific Provisions

A specific provision outlining the overall objectives for the Centre is proposed in the Comprehensive LEP to clarify the intentions for a vibrant, well designed mixed use area. LEP objectives may specify that development in the Centre must address the following:

- Provide for diverse, affordable, adaptable and accessible housing to meet the needs of student and key workers.
- Support the growth of education, health and research activities both on and off campuses in accessible locations.
- Demonstrate best practice and innovation in environmentally sustainable development, in minimising energy, water and waste, and increasing use of sustainable transport
- Achieve design excellence in new buildings and major refurbishments

Specific Local Provisions

Health/Medical Uses

Planning provisions for the Centre should support the expected growth of health, medical and related uses outside the Health Campus, while ensuring that these uses do not detract from Randwick Junction's and other town centres' core retail and services functions. These provisions should also be flexible, to respond to the unpredictable nature of this growth. These could include:

- Specific provisions to encourage redevelopment and ground floor and first floor health, medical and related uses within the East End investigation area, adjacent to Randwick Junction. Greater flexibility in design of first floor areas to allow conversion to health/medical/research uses when viable.
- Discouraging strata subdivision of existing development by providing incentives to redevelop.
- Allowing access to a precinct-wide parking scheme that reduces requirements for on-site parking

Affordable Housing

Affordable housing across Randwick City will be addressed in more detail in the Residential Uses Discussion Paper. In the Centre, this issue is critical and additional specific clauses could be developed to encourage affordable housing for key workers and students as an integral component of redevelopment on key sites. Proposed clauses could include:

- Site-specific inclusionary zoning provisions and floor space incentives to provide affordable housing beyond the SEPP on residential zoned land, and specific local clauses for non-residential land (e.g. Racecourse).
- Encourage affordable housing on the Randwick Health Campus for staff, remote patients and carers, through DCP provisions (e.g. location criteria).

Contamination

Land contamination must be addressed with any change of use or development proposal. Clause 42B of RLEP requires that land is remediated to a suitable level for any new proposed use. The Standard Instrument has no equivalent standard clause. Although contamination is addressed in SEPP 55 and Council's own Contaminated Land Policy, a local provision similar to the existing LEP clause could be included in the Comprehensive LEP.

Site Specific Development Control Plans (DCP)

Clause 40A of RLEP requires a site specific DCP to be prepared for development applications for sites over 10,000 sqm. This clause would apply to several sites/institutions within the Centre. It is recommended that this clause be retained in the Comprehensive LEP.

Design Excellence

The Comprehensive LEP could consider a provision that requires a design excellence process for large development proposals. This process could include measures such as a requirement for a design competition, inclusion of a detailed urban design framework, and/or referral to the Council's Design Review Panel. While the State Government may not agree to such a provision in an LEP, it could alternatively be incorporated into the Comprehensive DCP.

Heritage

Heritage Review

Existing heritage items and elements for possible listing within the Centre will be reviewed for potential inclusion in the comprehensive LEP, as noted in the table below. These items were identified either as their current statements of significance required justification of listing, raised questions about their significance, or that the level of significance (e.g.: local or state) needed to be clarified. Descriptions and guidelines for development within existing Heritage Conservation Areas (HCA) will be addressed in the Comprehensive DCP.

Location	Description	Status	Review
17 – 19 Clara St, Randwick	Edwardian semi-detached residences	Existing heritage items	Potential de-listing
4 Hay St Randwick (note 1)	Late Victorian cottage	Within Struggletown conservation area;	Clarify contribution to the HCA
21 Jane St, Randwick (note 1)	Victorian cottage	Within Struggletown conservation area;	Clarify contribution to the HCA
Randwick Health campus (note 2)	Children's memorial garden	Not in a HCA, and not a heritage item	Potential listing
Randwick Health campus (note 2)	Edmund Blackett (EBB) and Catherine Hayes (CH) Buildings, Superintendent Cottage, fence/gates	Individual heritage items, also within High Cross Conservation area	Potential for state listing and adaptive reuse guidelines
Randwick Health campus (note 2)	Various archaeological sites	Not in a HCA, and not heritage items	Potential listing
UNSW Randwick Campus	Former Tramways Workshop Repair Shop	Not in a HCA, and not heritage item	Potential listing
Royal Randwick Racecourse	Whole site	Heritage Conservation area, one heritage item (grandstand)	Potential listing of contributory items in Racecourse Conservation Management Plan

Notes

1. These properties are owned by Inglis and Sons, and are included in a parcel of lots that are the subject of the current Newmarket Planning Proposal for rezoning.
2. These parts of the Health Campus are likely to change in the short-medium term, with future redevelopment of surrounding buildings. Investigations should consider guidelines about curtilage and appropriate design guidelines for future development near these buildings/elements

Exempt and Complying Provisions

Schedules 2 and 3 of the Standard Template LEP address exempt and complying development. Currently these provisions are covered by a combination of the Randwick Exempt and Complying DCP, and the state-wide Exempt and Complying Code SEPP and Infrastructure SEPP. The Comprehensive LEP will include exempt and complying provisions for development categories not covered by these state policies, and the Exempt and Complying DCP will be repealed.

UNSW has proposed that certain types of lower-impact development on the Kensington Campus should be permitted as exempt or complying development. Draft provisions for UNSW were included in the exhibited draft Randwick Local Environmental Plan, but not in the final gazetted RLEP (Consolidation) 1998 due to the introduction of the state-wide policies (SEPPs) that included further exempt and complying development provisions.

UNSW seeks to have exempt and complying categories not covered by the SEPPs to be addressed in the Comprehensive LEP. The draft provisions previously exhibited for UNSW exempt and complying development are summarised below. These are generally considered suitable to include and will be reviewed again through the Comprehensive LEP drafting process.

Exempt development

- Minor changes of use from one university use to another
- Awnings, canopies, roof and wall re-cladding
- Demolition up to one storey
- External works including walls, fences, paths, landscaping
- Internal non-structural alterations
- Signage

Complying Development

- Minor changes of use from one university use to another involving a change in class under the BCA
- External alterations to existing buildings
- Internal alterations to existing buildings
- Demolition up to 3 storeys
- New buildings up to 4 storeys, and not within 60m of a surrounding street

9.2 DCP Drafting Considerations

Development Control Plans (DCPs) work in coordination with the LEP, with more detailed requirements including principles, performance standards and detailed controls to guide the design of different kinds of development.

Existing DCPs

Currently Randwick City Council has a number of separate DCPs that provide guidance for developments based either on issues, land use type or specific sites. There are 6 site specific DCPs affecting the Centre, in addition to city-wide DCPs that cover broader aspects such as parking and residential uses.

Site specific DCPs include:

- UNSW Kensington Campus (2007)
- Royal Randwick Racecourse (2007)
- Randwick Junction (1999)
- Kingsford Commercial Centre (1996)
- Kensington Town Centre (2002)
- The Spot and Surrounds (1995)

The Comprehensive DCP

State government planning reforms require that only one DCP apply to any one site. In response to this Randwick City Council will be preparing a Comprehensive DCP in parallel with the Comprehensive LEP review, that consolidates the existing DCPs into a streamlined document.

Development guidelines for the Centre will be incorporated into the Comprehensive DCP. There are two broad options:

- a) Maintain site-specific guidelines for the major sites in the Centre as separate chapters in the comprehensive DCP, including a new chapter for the Health Campus; and incorporate guidelines for areas outside the major sites into the relevant land use or issues-based sections of the Comprehensive DCP.

This approach allows easy adaptation of the existing DCPs into a Comprehensive DCP structure, while recognising the different needs, priorities and requirements of the individual major sites. A disadvantage is that the overall objectives and strategies for the Specialised Centre could be dispersed, and it would be more complex to monitor and coordinate common desired outcomes.

- b) Develop a single site-specific DCP for the whole Centre.

The advantage if this approach is that it provides greater visibility of the Centre, and a better opportunity for coordination of strategies. However, the Centre is a large complex area with an imprecise boundary, different land use zones and large sites with different development priorities and drivers.

Option (a) is suggested as the more appropriate choice, provided each relevant DCP section refers to the overall strategic directions and strategies for the Centre.

DCP Recommendations - UNSW Kensington Campus

Background

The UNSW Kensington Campus DCP is based on an adopted master-plan for the site. A master-planning process has been in place at UNSW since 1976, and as a result the campus has a strong and legible ordering framework. Generally, UNSW reviews its campus development plan every 5 years, with a major review to be completed in detail following the finalisation of this Paper and in parallel with Council's Comprehensive LEP/ DCP preparation.

The following table suggests a range of subjects for review into the UNSW Kensington Campus DCP to reflect the strategies for the Centre and to help streamline its incorporation into the Comprehensive DCP.

General DCP Recommendations

Reflecting the Centre's vision and strategies

- Refer to the overall vision and strategies of the Centre at the forefront of the DCP.

Format and structure

- Refine the existing DCP structure to reflect a standardised site-specific DCP structure.
- Provide new graphics and maps to suit this structure, and improve their legibility

Providing appropriate detail

- Clarify and simplify the existing objectives and provisions. Ensure there is a clear link between an objective and its relevant provision, and that collectively they establish clear design guidelines.
- The current DCP intends that individual development proposals will be further informed by a more detailed urban framework plan for the part of the campus in which the proposal is located, in order to establish specific, empirical design parameters. In practice this has not occurred, and the current DCP does not provide sufficiently clear or detailed information.
- To address this, the DCP should either incorporate this additional level of clarity and detail, or alternatively be more stringent in requiring a detailed urban framework plan to accompany a development proposal for a new building or external alterations to an existing building.

Detailed Recommendations for Section 5: Campus Design Provisions and Principles

Section	Comments / Recommendations
5.1 Sustainability	• Achieve a 5-star Greenstar design certification for new buildings and major refurbishments. Consider as-built certification for landmark buildings
5.2 Sense of Place	• Develop specific objectives and provisions for important spaces, entries, street-front buildings, campus interface and landmarks. See also comments below • Support removal of [perimeter fence and hedge, and provide design guidelines which encourage a more permeable, active campus edge.
5.3 Legibility	• Provide specific design principles and guidelines for a hierarchy of entries and connection types • Identify view corridors and connections clearly • Include design criteria that define the desired characters of entries, open spaces and circulation elements. Include critical dimensions and alignments to preserve space and establish setbacks for surrounding buildings
5.4 Knowledge Clusters and Hubs	• Cluster active uses at ground levels around key entry points and major circulation corridors, close to public transport to provide good passive surveillance • Establish a stronger relationship between hub locations and campus entries and major connections that includes clear sight lines to hubs from the public domain • Provide guidelines for a student hub around the Old Tote/Fig Tree theatre that

Section	Comments / Recommendations
	recognizes and preserves its heritage values. • Provide guidelines for clustering cultural, recreational and entertainment uses around the West End character area. • Allow for flexibility in clustering academic uses to respond to changing needs
5.5 Landscape	• Add objectives and provisions for preservation of major open spaces such as the Village Green and Physics Lawn, the Quadrangle and Library Lawn • Clearly identify spatial and landscape requirements for open space and landscaping at entries, and circulation elements
5.6 Buildings	• Strengthen objectives and provisions for design excellence • Provide clear building alignment criteria, including street setbacks • Retain existing building height guidelines
5.7 Housing	• Focus student accommodation on the perimeter of campus • Provide an active street address
5.8 Retail and Services	• Relate retail and services locations to hubs • Retail and commercial uses to complement surrounding town centre uses
5.9 Recreation and cultural facilities and Events	• Clarify parameters of events, including types, suitable locations and operational criteria • Cluster recreation and cultural facilities in the West End character area • Ensure any future loss of existing recreation facilities/space is offset by provision elsewhere on or near campus
5.10 Transport and Parking	• Provide clear criteria for calculating parking requirements for new developments, and clear requirements for submissions of traffic/parking studies with individual development proposals

DCP Recommendations - Randwick Health Campus

Background

While no DCP has previously existed for the Randwick Health Campus, the outcomes of this Plan, and the concurrent master-planning principles review undertaken by SESIAHS provide a strong basis for establishment of site specific guidelines that are appropriate to reflect in a DCP.

SESIAS undertakes a 3-yearly clinical and asset planning process that informs the campus' strategic direction, and this can provide a framework for periodic review and update of the DCP.

DCP Drafting Recommendations

The following table suggests a possible format for DCP guidelines applying to the Health Campus, and recommends where specific design principles and development controls can be developed in response to the overall directions for the Centre, and for the Health Campus itself. The DCP should have a consistent format with those of Royal Randwick Racecourse and UNSW, with common objectives/provisions where they apply across the Centre.

Input to the DCP will be drawn from the recommendations of this Paper, the Randwick Health Campus Masterplan Principles Review, and SESIAHS strategic policies and plans. The detailed contents of the DCP will be developed in conjunction with Randwick Health Campus representatives and other stakeholders during the drafting stages of the Comprehensive DCP, and will involve a further specific consultation and feedback process.

Suggested DCP Contents

Section	Comments / Recommendations
Introduction	
SESIAS	Identify the role and activities of SESIAHS and NSW Health in the planning and functions of the Randwick Health Campus. Identify separate occupants/activities on the campus, such as Prince of Wales Private Hospital and POWMRI
Context	- Discuss the locational and planning context of the campus and the role of the health campus within Randwick Specialised Centre, including the key directions/strategies for the Centre - Include a site description and analysis
Issues and Opportunities	- Identify the broad directions in healthcare, and the challenges faced for the health campus to effectively respond. - Identify opportunities and constraints for the physical campus, and its role within the Randwick Specialised Centre
Strategic Direction/vision	- Refer to NSW Health 7 strategic directions, and discuss their implications for planning and development on the health campus - Identify the overall role of and vision for the campus as a whole, its 4 hospitals, the role of research and other major activities.
Design Principles	
Patient experience	- Discuss the importance of health facilities in contributing to a healing environment, and identify opportunities to provide pleasure, interest and delight. - Identify priorities and strategies in planning for the overall campus and its specific spaces and functions in terms of: - access to open spaces, fresh air, daylight, views and landscaping, - opportunities to apply colour, art and creative interpretation
Campus activities and functional zones	- Define the key campus functional zones, their roles and relationships: - High public interface zone and clinical core - Research precinct - Heritage precinct - Opportunity precinct - Provide principles for clustering related activities
Access and circulation	- Provide strong logic and legibility for the overall campus, including defined functional zones and a clear hierarchy of entries and circulation - Provide a clear structure for different categories of movement, including service, emergency, staff, patient and visitor access and circulation
Planning approach and future character	Apply principles for how the campus should relate to its surrounds, including its

Section	Comments / Recommendations
	role within the community, the public domain interface, safety and security • Build in flexibility and robustness to individual developments to provide a long life/loose fit approach, which adapts to changing needs and allows for incremental contribution a long term vision.
Development Controls	
Legibility	• Develop objectives and provisions for a circulation framework that supports the above principles, and provide a safe and effective movement network
Built Form	Develop objectives and provisions for; • Main entry points, building alignments and setbacks, building heights in relation to heritage features, open space and surrounding neighbourhoods • Encourage design excellence
Heritage	• General heritage provisions will be covered in a separate specific DCP heritage chapter, which will provide guidelines for the High Cross Conservation Area. The Health Campus DCP could include additional guidelines relating to individual heritage features and items on campus, such as the Edmund Blackett building and Children's Memorial Garden
Public domain and landscape	Develop objectives and provisions for • Public access areas and public domain design at entries and key internal elements such as Hospital Road, Easy Street, Francis Martin Drive and Nurses Drive • Identification of open space and landscaped areas • Safety/security/CPTED Note that significant trees on campus will be addressed in a separate Landscape section of the Comprehensive DCP
Transport and Parking	• Develop a strategy for parking on campus responding to a precinct-wide approach to parking • Include a strategy to reduce/restrict surface parking in high pedestrian areas and where open space is preferred for use by people.
Sustainability	• The Comprehensive DCP will contain a separate specific section on environmentally sustainable development. There is an option to include specific objectives and controls for sustainability in health facilities in this section, or alternatively include applicable controls within the health campus DCP. • Such controls could link to the criteria established in existing tools, such as the Greenstar tool for health facilities.

DCP Recommendations - Royal Randwick Racecourse

Background

The existing Royal Randwick Racecourse DCP was adopted in 2007, based on a master plan prepared for part of the site. RLEP requires a master plan to be prepared for development on large sites (over 10,000sqm), which applies to Randwick Racecourse. The DCP was prepared to inform a program of improvements to the Spectator Precinct, in the north-western part of the site, and was intended to be updated and expanded in the future to address planning and design guidelines for the remainder of the racecourse.

The EPA Act now allows for a site specific DCP or staged development application (DA) to be prepared for large sites. Where development proposals fall under the criteria of the Major Project SEPP it is common for a staged DA to be prepared instead of a site specific DCP. Such an application should address the master plan requirements of RLEP, and the provisions of the racecourse DCP.

DCP Drafting Recommendations

Recommendations for additions/amendments to the racecourse DCP are outlined in the table below:

Section	Comments / Recommendations
Introduction	
Context	Include the role of the racecourse in the context of the Randwick Specialised Centre
Issues and Opportunities	- Clarify the future role and needs of stabling and training on the racecourse - Include issues and opportunities arising from a site analysis of the whole racecourse, including the south-west and south-eastern areas
Strategic Direction/vision	- Clarify the intention for the racecourse, including range and mix of uses - Add vision and directions for the south-west and south-eastern areas of the racecourse, that is coordinated with the racecourse's long term needs for training, stabling and racing
Design Principles	
Events and experiences	Provide clear delineation/clustering of event-based and other precincts (e.g.: training, service areas)
Uses/precincts	- Identify the roles and characters of each precinct in the racecourse - Any proposed changes to existing precincts/uses should be informed by a detailed study (including benchmark analysis) on the long term needs of this eminent racing facility to ensure racing, training and stabling needs are given priority over other uses.
Circulation and access	Reflect the delineation of uses through clear circulation and access provisions which separate incompatible uses, and identify event and non-event movement systems.
Future character	- Identify how the desired future character of the overall site and its precincts will contribute to the vision for the racecourse, preserve and enhance its iconic heritage status. - Identify intentions for its role and relationship with the activities of the Randwick Specialised Centre.

Section	Comments / Recommendations
Development Controls	Expand development controls to provide detailed objectives and requirements for all precincts within the racecourse, including updates to reflect the current status of development on the site (e.g.: adding work undertaken as part of the world youth day activities)
Legibility	Provide controls that clarify event-based and other functions, including expression of entries, activation, and provision of adequate separation of major activity areas from quiet and private areas, and adjoining properties.
Built Form	Elaborate on existing controls, and provide built form maps that address the relationship of built form with surrounds, ensuring the amenity of public spaces, the public domain and surrounding areas is respected
Heritage/archaeology	- Identify contributory buildings and elements to be retained (based on the existing conservation management plan), and provide design guidelines for surrounding development. Provide interpretation guidelines for buildings and elements intended for removal. - Provide controls for preservation of the landscape significance of the site and individual components - Identify possible areas of European and aboriginal archaeological significance, and include provisions to undertake further investigation
Public domain and landscape	Identify publicly accessible areas, and provide controls for the relationship between the site, development on/near its boundaries and the public domain
Transport and Parking	- Provide controls requiring a TMAP with any significant development proposals, addressing measures to promote sustainable transport mode share. - Require that any significant intensification/change of use on the site only be considered in conjunction with key public transport improvements to avoid increased traffic generation
Sustainability	- Include controls for incorporation of WSUD in infrastructure and open areas - Encourage sustainable design through achievement of 5 star Greenstar rating for new/redeveloped buildings - The Comprehensive DCP will contain a separate specific section on environmentally sustainable development. There is an option to include specific objectives and controls for the racecourse in this section, or alternatively include applicable controls within the racecourse DCP. - Such controls could link to the criteria established in existing and emerging tools, such as the Greenstar rating tool for communities.
Hydrology/engineering and infrastructure	Require appropriate flood studies to be undertaken with any new use or significant development

DCP Recommendations - Environmentally Sustainable Development

Background

Randwick City Council seeks to achieve leadership in sustainability through the Randwick City Plan. The Comprehensive DCP provides an opportunity to establish specific design principles and provisions for Environmentally Sustainable Development (ESD) across Randwick City. It also provides an opportunity to provide guidelines specific to the Centre.

The environmental performance of residential buildings (both single and multi-unit dwellings) is currently assessed through a state-wide ratings tool called BASIX, which covers water, energy use and thermal performance, and overrides local provisions.

Beyond BASIX, there are a number of ESD ratings tools applied to different development types, such as the Australian Green Building Council (ABGR) Greenstar system, a commonly used ratings tool which offers design and as-built environmental performance certification. It covers a range of building types including commercial and educational buildings, and in 2009 introduced a Greenstar tool for health buildings.

Pilot programs are also underway for measuring environmental performance of complex sites and precincts, beyond individual buildings, including Greenstar for Communities and Landcom's PRECINCX tool.

DCP Drafting Recommendations

The Comprehensive DCP can provide local environmental performance requirements for health, educational, commercial and infrastructure types of development, as well as residential development criteria not covered by BASIX, and incentives for performance standards achieved beyond the standard requirements. It can also encourage sustainable transport (walking, cycling and public transport use) through a review of on-site parking controls.

It is recommended specific ESD provisions be developed for different building types within the Centre (and across Randwick City), that are consistent with established ratings tools to encourage building owners to achieve certification of environmental performance. The DCP can also consider incentives to encourage higher performance ratings for individual buildings, and commitment to precinct-wide targets.

These recommendations will be further developed as part of a citywide review of sustainability provisions in the Comprehensive LEP/DCP.

DCP Recommendations - Car Parking

Background

The existing Randwick City Parking DCP was adopted in 1998. It was prepared to facilitate a coordinated and consistent approach for parking within the Randwick City Council area. The DCP provides standards and guidelines to achieve adequate provision of vehicle parking, service and delivery areas and bicycle parking based on design and access principles. A timely review of the DCP has been earmarked under the Randwick City Plan to introduce updated car parking controls that reflect current best practice and innovative approaches, reduce reliance on car use and better align with car ownership rates in Randwick City.

The Parking Review is a component of the overall Comprehensive LEP/DCP project. Car parking provisions specific to the Centre will either be included in each dedicated chapter for the major sites or incorporated into a general car-parking chapter with a notation referring to the Centre.

DCP Drafting Recommendations

A precinct-wide approach to parking is suggested for the Centre, based on its proximity to public transport, clustering of related uses and existence of complementary parking demand patterns. Such an approach would consider opportunities for a coordinated approach to parking supply and management, including provision of pooled parking to support the Centre's key uses.

This can help reduce the cost of development through reduced parking provision on individual sites, and thereby support more affordable housing and employment floor space. Further investigation into this approach will occur with the Parking Review, and in consultation with the Centre's Network Body.

A review of on-site parking controls for the Centre could include:

- Benchmarking of best practice approaches to car parking provision
- Review of innovative alternatives to traditional car parking, such as car share schemes
- Opportunities to provide pooled parking locations as an alternative to car parking on individual sites
- Consideration of travel-demand management schemes and workplace travel plans
- Review of requirements for traffic and parking studies, TMAPs, and use of mode share targets for developments that significantly increase the working, residential or student population.
- Opportunities to reduce parking due to proximity to public transport, services town centres and the potential for multiple purposes within one trip to the Centre.
- Promotion of cycling, including provision of end-of-trip facilities

9.3 Public Domain Strategy Considerations

Several strategies and actions identified in the first part of this Paper will be realised through a Public Domain Strategy for the Centre.

Overview

A Public Domain Strategy for the Centre will articulate an overall concept for the design and treatment of its streets and public spaces that works in coordination with the land use planning framework, and provides a platform for Council and stakeholders to determine priorities for resource allocation, funding and advocacy.

This Section summarises the strategies and actions of this Paper that are relevant to include in a Public Domain Strategy. It suggests a structure and some key principles to be considered and incorporated into the Strategy itself. Some concepts and examples are included to illustrate the principles, but detailed investigations will follow during the development of the Public Domain Strategy to test, refine and further articulate specific ideas.

Proposed Structure

A. Movement Systems

- Public transport
- Cycle ways
- Pedestrians
- Traffic and Parking

B. Design Elements

- Sustainability
- Footpaths and Paving
- Landscaping
- Urban Elements
- Lighting
- Interpretation
- Infrastructure/services

C. Structure Plans/Street sections

- Transport corridors
- High Street
- Local Roads (collector and smaller roads)
- Lanes and share ways

Study Area



A. Movement Systems

Public Transport

Principle

Ensure the public domain and infrastructure in the Centre retains the capacity to accommodate future public transport improvements, including rail-based mass transit

Concepts / Examples

- Increase capacity and amenity at major bus stops
- Light rail or metro/standard on Anzac Parade/High Street
- Station criteria



Example: Light rail/trams incorporated into a proposed redesign of Swanston Street, Melbourne



Concept for a new metro station entrance in Rozelle:

Cycle ways

Principle

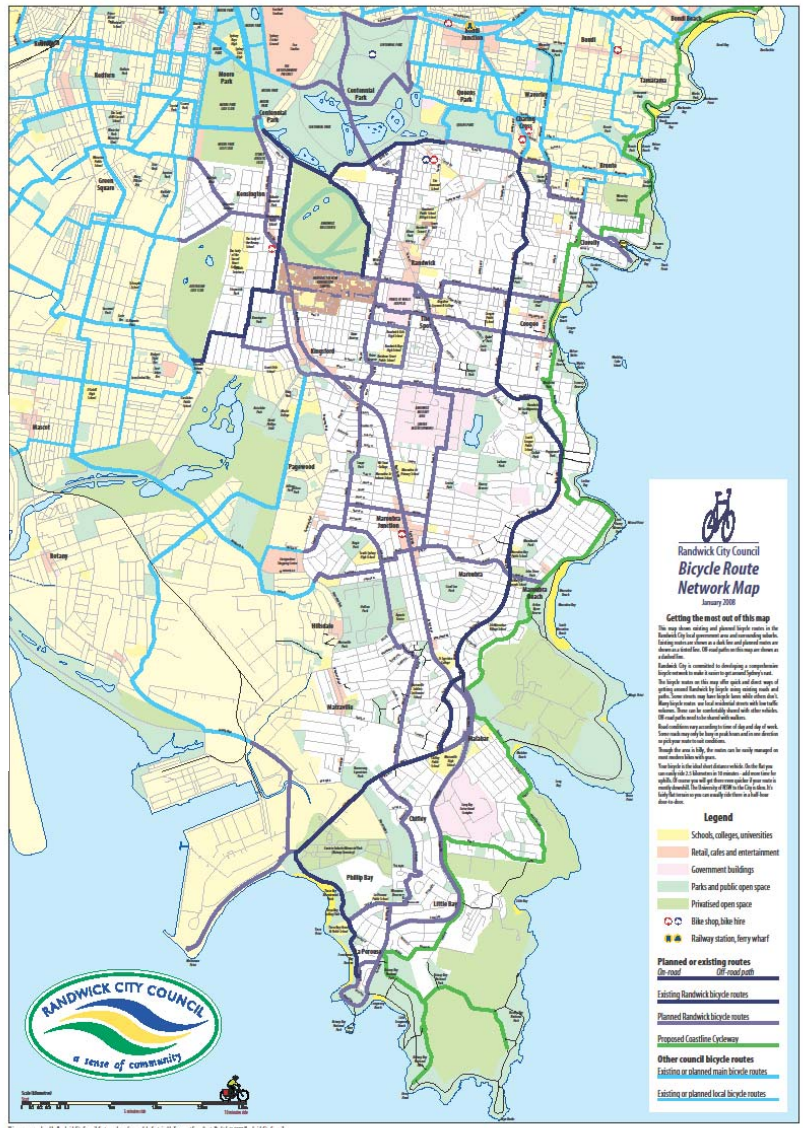
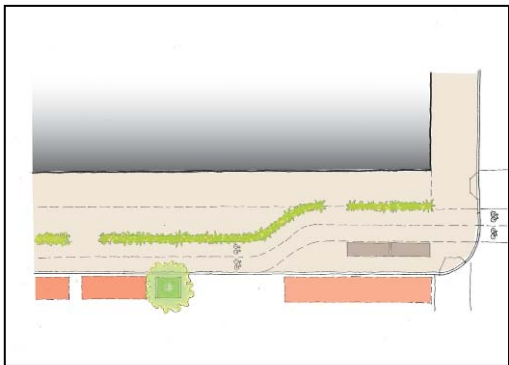
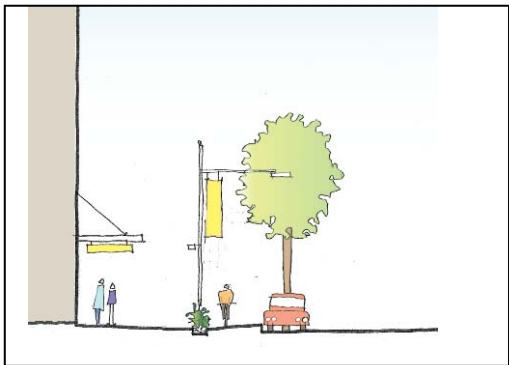
Provide a network of cycle paths from residential areas within 5km of the Centre, and a dense, interconnected network of cycle-friendly routes within 800m of the Centre to encourage cycling to various local destinations, linked to high quality end of trip facilities

Concepts / Examples

- Prioritisation of existing planned routes, including High Street, and routes to Green Square and Daceyville
- North-south links through UNSW campus connecting High Street to Barker Street
- Additional routes on streets within/surrounding the Centre

Cycle friendly routes should increase in closer proximity to the centre, and note that most cyclists will be students/workers – so not necessarily the fast commuter cyclists – therefore consider an emphasis on the less busy roads, and where the street section permits dedicated cycle paths, and link to high quality end of trip facilities

- Barker Street (west)
- Forsythe Street/Harbourne Road connecting Barker Street to Rainbow Street (south of the Centre)
- Easy Street (Health Campus)



Example: Conceptual options for dedicated cycle-ways: City of Sydney

Pedestrians

Principle

Ensure the footpaths and public spaces in the Centre provide appropriate capacity, safety and amenity to support and encourage walking

Concepts / Examples

- Footpath widening to High Street and Anzac Parade
- Footpath upgrades
- Pedestrian crossing points
- Additional connections (see lanes, share ways and through site links)



Example: pedestrian-friendly share-way in Zurich, Switzerland



Example: laneway revitalization, Albion place: City of Sydney

Traffic and Parking

Principle

Manage vehicular traffic on local roads to balance the needs of pedestrians and cyclists

Concepts / Examples

- Pedestrian priority areas (e.g.: Barker Street west)
- Traffic calming measures (e.g.: speed limitation, share ways, surface treatments)



Example: granite setts threshold treatment to local roads

B. Design Elements

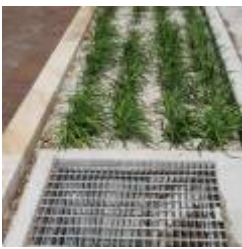
Sustainability

Principle

Incorporate sustainable design techniques wherever possible into the design and infrastructure of the public domain

Concepts / Examples

- Water Sensitive Urban Design/stormwater management
- Street Lighting
- Street Trees
- Materials



Example: street retrofit



Example: grass swale



Example: permeable paving

Footpaths and Paving

Principle

Develop a simple, high quality and durable base palette of paving materials to unify the Centre's footpaths, while allowing for variations to respond to specific localised conditions and opportunities for interpretation

Concept/examples

- Refer to the Council's Urban Elements Manual
- Explore sustainable/experimental options-partnership with UNSW

Landscaping

Principle

Provide street tree planting and landscaping for the Centre that responds to its role and characters, contributes to a sense of cohesion and improves pedestrian amenity

Concept/examples

- Explore variation to street tree masterplan to provide consistent planting pattern
- Tree pit/grate detail

Urban Elements

Principle

Select street furniture that is simple, consistent, unobtrusive and high quality

Concept/examples

- Refer to the Council's Urban Elements Manual

Lighting

Principle

Incorporate sustainable design techniques into the design and infrastructure of the public domain. Adopt suitable higher street lighting levels in key pedestrian areas.

Concept/examples

- Solar powered street lighting
- Supplementary pedestrian lighting



Example: Smartpole pedestrian lighting

Interpretation

Principle

Incorporate opportunities for interpretation in the public domain

Concept/examples

- Public art
- Heritage walk
- Paving treatment
- Decorative lighting



Examples: decorative paving and lighting

Signage

Principle

Limit unnecessary signage in the public domain and coordinate signage placement to avoid clutter and visual confusion

Concept/examples

- Consolidate signage on fewer poles
- Consistent spacing, height guidelines

Infrastructure/services

Principle

Incorporate sustainable design techniques into the design and infrastructure of the public domain. Minimise visual clutter

Concept/examples

- Undergrounding of power
- Water sensitive urban design applied to stormwater quality and quantity management



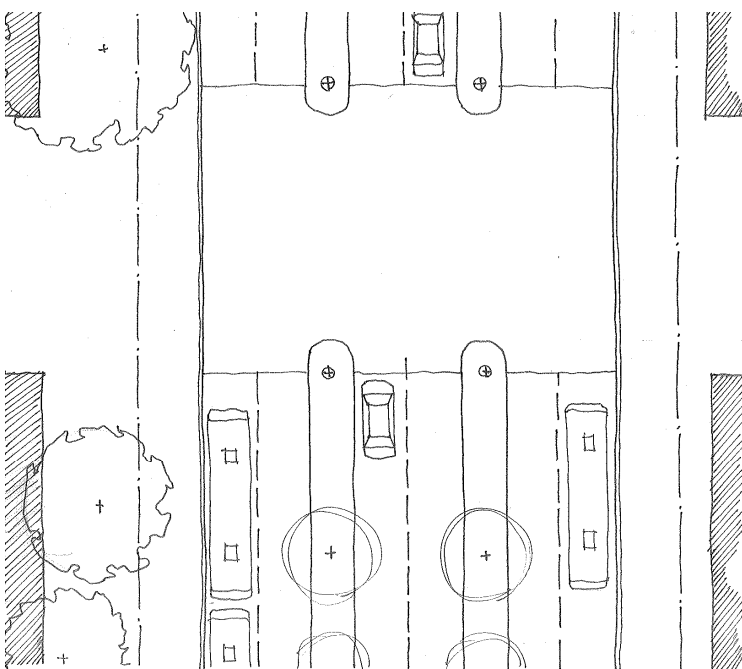
Overhead power lines at the corner of High Street and Anzac Parade

C. Structure Plans/Street Sections

This Section looks at specific key roads and streets in the Centre, and their role as part of the overall traffic network, their local and regional significance, and their role in contributing to the Centre's character and identity.

It considers the movement systems and design elements of the previous sections, and suggests some examples and concepts of how they may be applied.

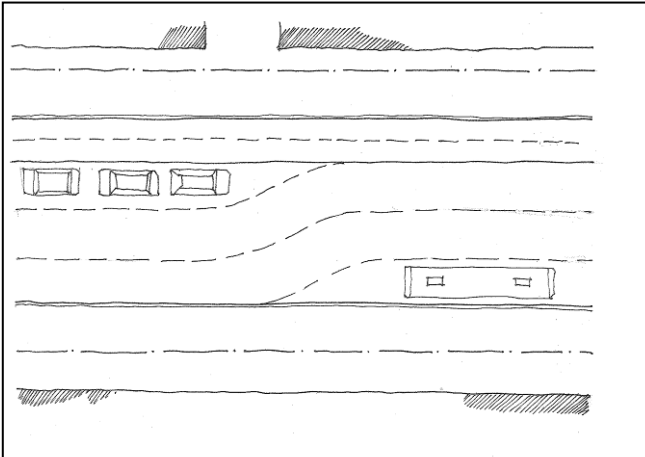
Anzac Parade



Multiway Boulevard Concept

- Existing carriageway width maintained
- 2 central medians separate through traffic from local traffic
- Local traffic lanes can be dedicated public transport lanes in front of UNSW
- Opportunity to strengthen visibility of pedestrian crossings
- Future adaptation for light rail possible

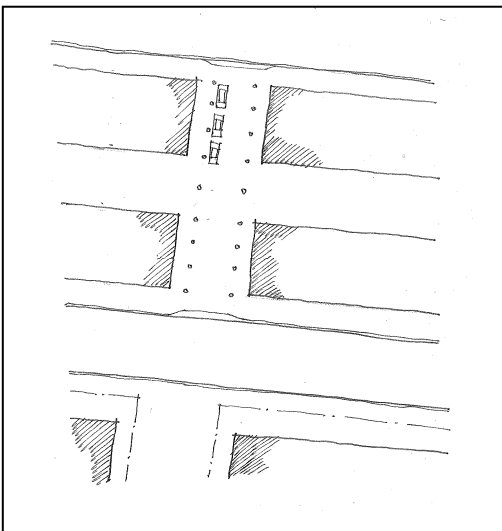
High Street: Dedicated cycleway option



High street (opposite UNSW)

- Footpath widening on north and south sides
- Dedicated two-way cycle path on north side
- Retention of bus stop and one lane of parking

Share ways and mid-block connections



Example: High Street (opposite hospital)

- Mid-block location reduces block length and increases permeability
- Width 10m
- Share way permits vehicles for loading and service access and parking
- Shared cycle path
- Protected pedestrian zone can accommodate footpath dining
- Surface treatment indicates pedestrian-friendly nature