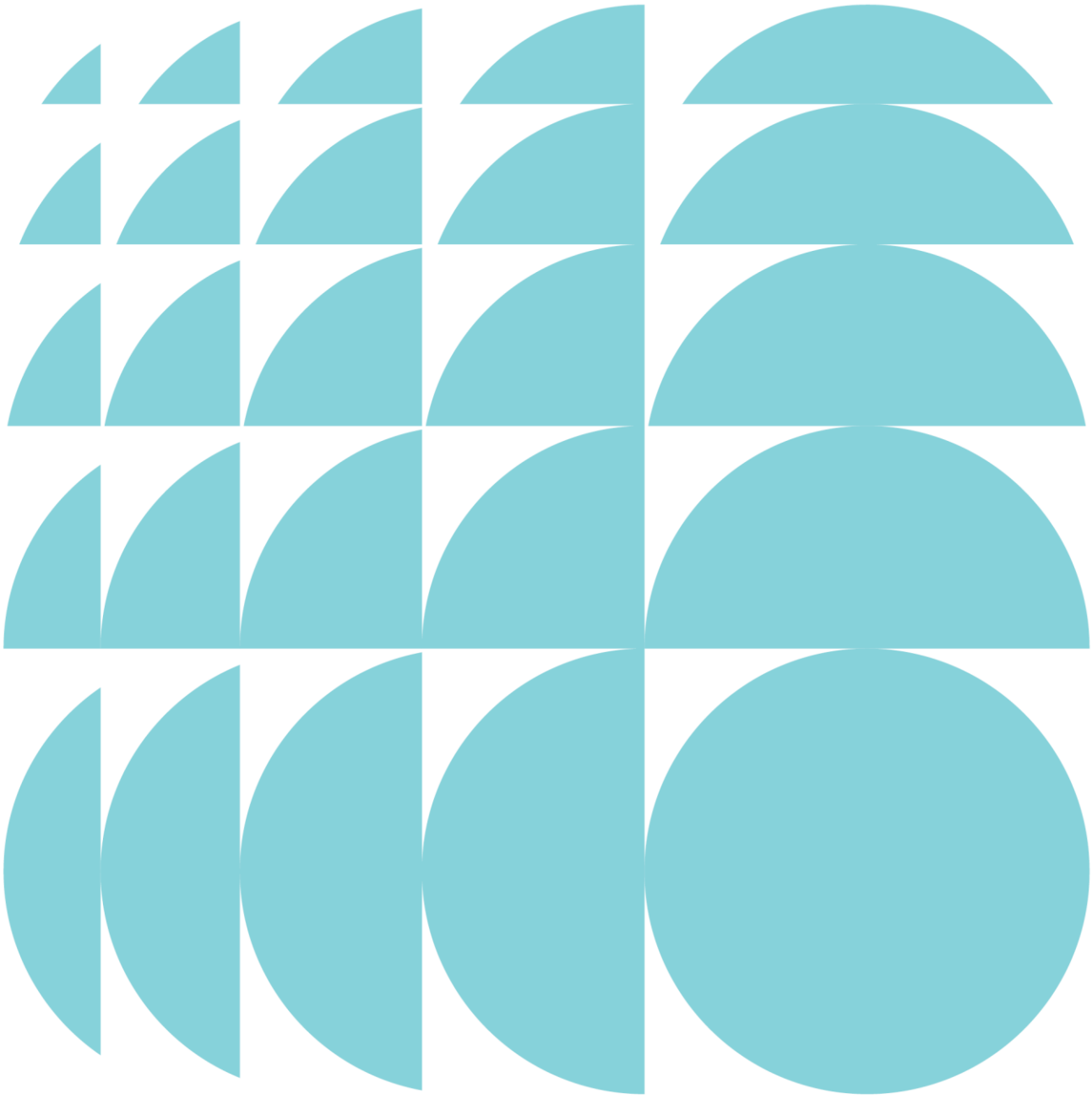
ETHOS URBAN

Statement of Environmental Effects

Wagga Wagga Base Hospital
Car Parking and Access Upgrades

Submitted to Wagga Wagga City Council
On behalf of Health Infrastructure NSW

26 November 2020 | 2200434



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1.0 Introduction

This Statement of Environmental Effects (SEE) is submitted to Wagga Wagga City Council (Council) in support of a Development Application (DA) for car parking works, including a new multi-storey car park (MSCP), two at-grade car parks and access upgrades at the Wagga Wagga Base Hospital (WWBH) campus.

The DA seeks approval for:

- Demolition of existing buildings and structures, relocation of demountable buildings and site preparation works;
- Tree removal;
- Provision of 441 new parking spaces on the campus across three areas, comprising:
  - a 6 level MSCP in the north-east of the campus.
  - an at-grade car park off Docker Street in the south-west of the campus.
  - an at-grade car park off Yathong Street in the south-east of the campus.
- Associated pedestrian and vehicular access upgrades;
- Upgrades to the existing loading dock, accessed off Docker Street;
- Installation of way finding signage;
- Landscape works;
- Service connections, including installation of a new substation; and
- Stormwater infrastructure works.

This SEE has been prepared by Ethos Urban on behalf of the Health Infrastructure NSW (HI NSW), and is based on the Architectural Plans prepared by Jacobs (see **Appendix A**) and other supporting technical information appended to the report (see Table of Contents).

This report describes the site, its environs and the proposed development, and provides an assessment of the environmental impacts and identifies the steps to be taken to protect or lessen the potential impacts on the environment. The application is recommended for approval for the following reasons:

- The proposed development is consistent with the aims and objectives of *Wagga Wagga Local Environmental Plan 2010* and Wagga Wagga Development Control Plan 2010, as well as the relevant State Environmental Planning Policies;
- The proposal will facilitate development that is compatible with the Wagga Wagga Health and Knowledge Precinct, as developed by Council;
- The proposed car parking and access works will support the development and ongoing use of the WWBH campus, providing improved facilities for patients, visitors and staff;
- The proposed works will relieve demand for on-street parking;
- Supporting technical studies which accompany this DA confirm that the environmental impacts associated with the proposal are generally positive and will not give rise to any adverse impacts; and
- The proposed development is suitable for the site and is in the public interest.

1.1 Crown Development

Clause 226(1) of the *Environmental Planning and Assessment Regulation 2000* provides that a development carried out by a public authority is a Crown development. HI NSW is a public authority and as HI is the applicant, the proposal is a Crown development for the purposes of Part 4, Division 4 of the EP&A Act.

Under the special provisions for Crown developments:

- The DA cannot be refused (except with the approval of the Minister for Planning and Public Spaces);
- The applicant has the opportunity to review the draft conditions; and

- Council cannot impose conditions of consent without the applicant's or Minister's agreement.

As the capital investment value (CIV) of the development exceeds $5 million and the proposed works are being carried out by the Crown, the application will be determined by the Southern Regional Planning Panel. A copy of the CIV Statement, prepared by MBM, is provided under separate cover.

2.0 Background

2.1 Pre-Lodgement Meeting

A pre-lodgement meeting was held with Council officers on 13 October 2020. Council was generally supportive of the proposal, however raised questions about the following specific matters, which have been addressed as part of this application:

- Whether or not works are required to the stormwater easement along the eastern boundary of the MSCP;
- The potential for the landscaped space to the east of the MSCP to be used for antisocial behaviour;
- Pedestrian safety on Lewis Drive;
- Acoustic impacts associated with the truck turning bay to the east of the MSCP;
- Justification for the left-in/left-out arrangement onto Docker Street for the Docker Street at-grade car park; and
- Justification for the left-out only arrangement onto Rawson Lane from the Yathong Street at-grade car park.

The above matters have been addressed in preparing this application.

Council also suggested that HI NSW consult with Council regarding the timing of the agreed intersection upgrades (associated with the broader hospital redevelopment) and the future masterplanning of the WWBH campus. HI NSW is keen to engage with Council on these matters, however these discussions are separate to the subject DA which seeks approval for car parking and access upgrades to meet existing and future demand.

2.2 Land Acquisition and Road Closure

There have been ongoing discussions between Council and HI NSW regarding the acquisition and closure of Doris Roy Lane. A submission was made to Council in October 2020 for the acquisition of the part of Doris Roy Lane that lies between the site's eastern boundary and Lewis Drive.

The proposed MSCP sits over this part of Doris Roy Lane. Land owner's consent has been obtained from Council for the works occurring on their land and is submitted under separate cover. A Title Creation and Road Closing plan has been prepared by Rivland Surveyors, and is provided at **Appendix B**.

3.0 Site Analysis

3.1 Site Location and Context

The WWBH campus is located at the corner of Edward and Docker Street, Wagga Wagga within the Wagga Wagga Local Government Area.

The WWBH is approximately 1 km south-west of the Wagga Wagga CBD. Wagga Wagga is a major regional city in the Riverina region of New South Wales with a population of approximately 55,000 people. Wagga Wagga is located approximately a 5 hour drive south west of Sydney and 2 hours, 45 minutes west of Canberra. The WWBH is one of three primary medical facilities in the Murrumbidgee Local Health District, serving four centres of population: Albury, Deniliquin, Griffith and Wagga Wagga. The hospital services a population of over 250,000 people.

The campus' locational context is shown at **Figure 1**.

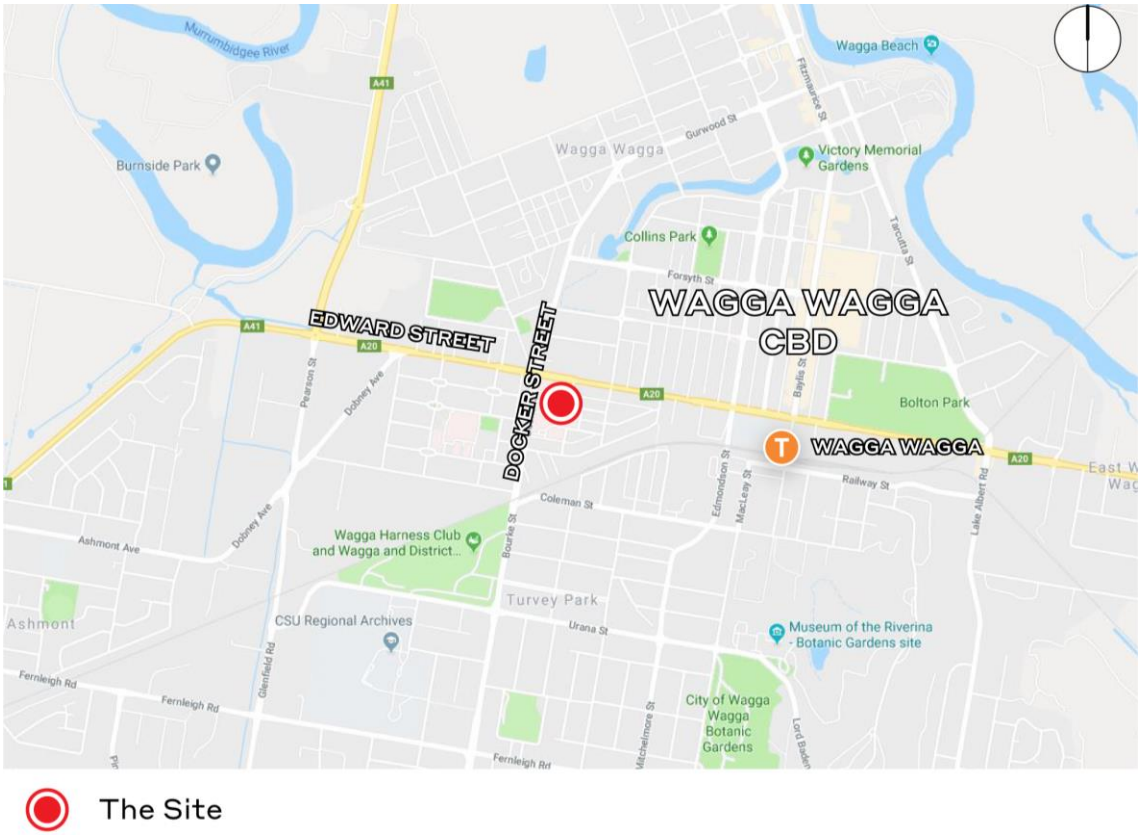

Figure 1 Locational Context

Source: Google Maps and Ethos Urban

3.2 Land Ownership

The WWBH campus is located across of four separate land parcels that are legally described as Lot 334 in DP 1190643. The land is owned by Health Administration Corporation.

Several Council-owned roads, including Doris Roy Lane, traverse the WWBH campus. As noted above, the section of Doris Roy Lane which forms part of the development site is in the process of being acquired by Health Administration Corporation.

3.3 Site Description

The WWBH campus has an area of approximately 4.2 hectares. The hospital campus is split across four separate land parcels and is generally bound by Edward Street to the north, Docker Street to the west and Rawson Lane to the south, and is otherwise surrounded by low-density residential dwellings.

The proposed car parking works are located on three separate sites within the WWBH campus, as follows:

- The MSCP is located in the north-east of the campus, directly to the south of the proposed UNSW Biomedical Science Centre (subject to DA 20/0409);
- The Docker Street at-grade car park is located in the south-west corner of the campus, at the corner of Docker Street and Rawson Lane; and
- The Yathong Street at-grade car park is located in the south-east of the campus, at the corner of Yathong Street and Rawson Lane.

A Survey Plan has been prepared by Rivland Surveyors and is provided at **Appendix C**. An aerial photograph of the WWBH campus, and the development site within it, is provided at **Figure 2**. Each development area is described in more detail below.

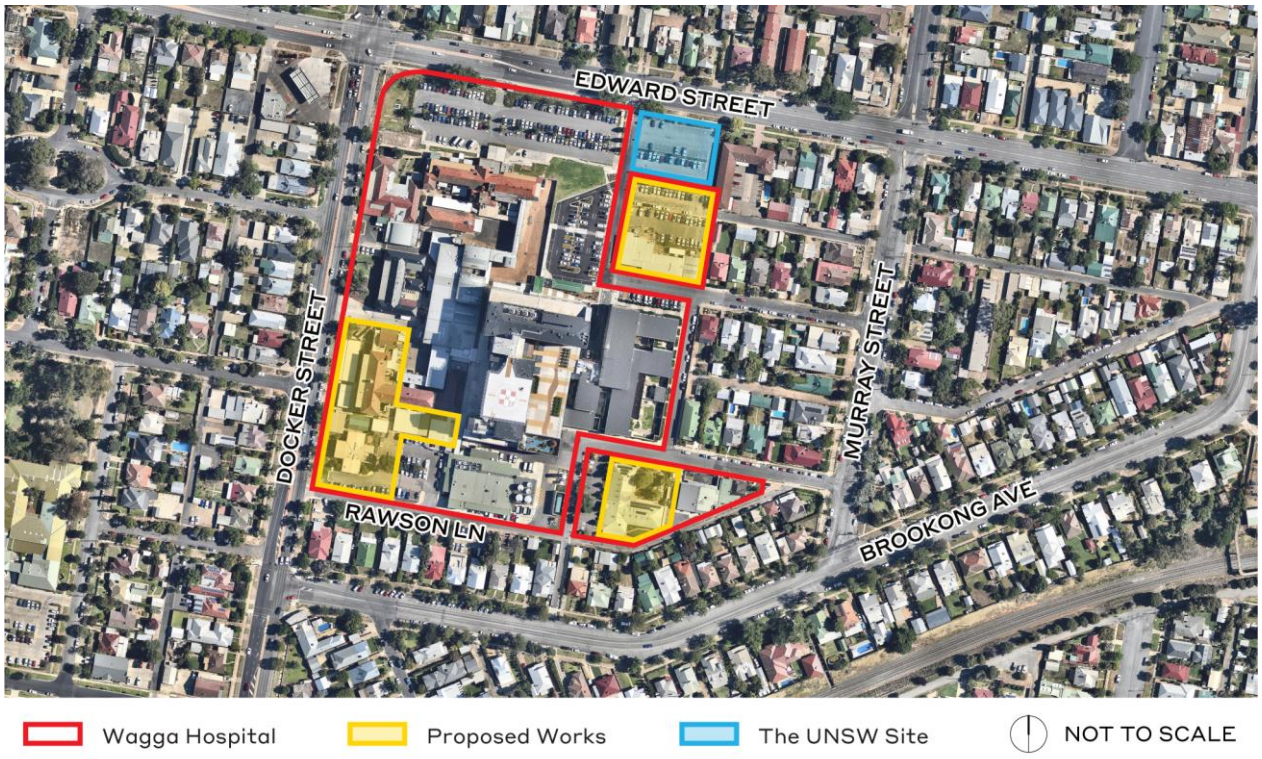

Figure 2 Aerial photograph of the site

Source: Nearmap and Ethos Urban

3.3.1 Multi-Storey Car Park

The site of the MSCP is generally flat, with a slight fall from north to south. The site currently accommodates 90 at-grade parking spaces and an existing temporary clinic, which will soon be relocated into the new Stage 3 Ambulatory Care Building (ACB). The MSCP site is free of any significant vegetation, however there are some scattered trees and shrubs within the existing at-grade car park.

There are also two existing stormwater lines running through the east of the site. Council is the beneficiary of both easements. The stormwater infrastructure is proposed to be relocated as part of the UNSW Biomedical Science Centre (subject to DA 20/0409) (refer to **Section 4.8**).

A photograph of the MSCP site is provided at **Figure 3**.

Figure 3 The MSCP site viewed from Lewis Drive (looking south-east)

Source: Ethos Urban

3.3.2 Docker Street Car Park

The site of the Docker Street at-grade car park site has a slight fall from north to south. The site currently accommodates a loading dock and 44 at-grade parking spaces. The Docker Street site also includes Lewis House and the Dental Clinic, and a number of demountable buildings. Lewis House is a predominantly 3-storey brick and tile building fronting Docker Street. The Dental Clinic is a single storey brick building located at the corner of Docker Street and Rawson Lane.

This site is also generally free of significant vegetation, however there are some scattered trees and shrubs within the existing car park.

Photographs of the Docker Street site are provided at **Figures 4** and **5**.

Figure 4 Aerial view over the loading dock, Lewis House and Dental Clinic (top left)

Source: Ethos Urban

Figure 5 The Docker Street car park, with the Dental Clinic (left) and Lewis House (behind)

Source: Weir Phillips

3.3.3 Yathong Street Car Park

The Yathong Street at-grade car park site has a slight fall from south to north. It currently accommodates 15 at-grade parking spaces, as well as Yathong Lodge. Yathong Lodge is a single storey brick building which is proposed to be demolished. The existing Renal Building will be retained.

Consistent with the other two sites, the Yathong Street site is generally free of significant vegetation, however there are some scattered trees and shrubs within the existing car park.

Photographs of the Yathong Street site are provided at **Figures 6** and **7**.

Figure 6 Existing Yathong Street car park looking north-west

Source: Jacobs

Figure 7 Yathong Lodge

Source: Weir Phillips

3.4 Heritage

The WWBH campus is listed on the NSW Department of Health's *Section 170 Register: "Wagga Wagga Base Hospital"*.

The Old Hospital Building is listed in *Wagga Wagga Local Environmental Plan 2010* (WWLEP 2010) as an item of local heritage being the 'Wagga Wagga Base Hospital (c. 1960 Building).' However, approval was granted for the demolition of the building under Part 5 of the EP&A Act. Whilst the building no longer exists, the LEP listing still remains.

The WWBH campus is also located in the vicinity of the Wagga Wagga Heritage Conservation Area as defined by WWLEP 2010.

Heritage impacts are assessed at **Section 5.11**.

3.5 Geotechnical and Contamination

Geotechnical

According to the 1:100,000 scale special geological map of the Wagga Wagga – Keaymba Region, the WWBH campus is underlain by Canozoic aged alluvium. The alluvium is associated with the Murrumbidgee River floodplain, of which the uppermost 6 - 10m is known to typically comprise grey silty clay, which overlies a deep alluvial succession of gravel layers with sand lenses.

Groundwater

Three groundwater monitoring wells were installed at the site. Groundwater was recorded in two of the wells and the depth to groundwater at the site was found to be between 5.7m and 7.3m below ground level. Given that no major excavation is required, the likelihood of encountering groundwater during construction works is low.

Contamination

A Detailed Site Investigation was conducted for the site, which involved the collection of soil and groundwater data. The contaminated land assessment identified the presence of one asbestos containing material (ACM) fragment at approximately 0.45 m below ground level within the Docker Street car park site. All other contaminants of potential concern that were analysed were reported below the adopted assessment criteria.

Soils and contamination are assessed at **Section 5.8**.

3.6 Surrounding Development

The land surrounding the campus is predominantly residential in nature. The area is characterised by predominantly low density, federation style dwellings, however a number of properties have been converted to medical suites.

The MSCP site is immediately to the south of the proposed Biomedical Science Centre (subject to DA 20/0409). The two developments are to be constructed independently of each other, and the land on which the proposed Biomedical Science Centre is located is to be transferred to UNSW.

Further detail regarding the development surrounding the WWBH campus is provided below:

- **To the north**: To the north of the WWBH campus is Edward Street, which is the primary highway running between Adelaide and the Hume Highway (junction is approximately 40km to the east) which connects Sydney to Melbourne. Across the highway is a residential area comprising of predominantly single storey detached housing. Murrumbidgee Turf Club is approximately 1km to the north, and the Murrumbidgee River is approximately 1.8km to the north-east.
- **To the south**: Two blocks of low density residential development separate the edge of the hospital campus from the Main South Railway Line that connects Sydney to Melbourne. Other uses further to the south include the Wagga Wagga Showground and Exhibition Complex (600m to the south west), Charles Sturt University (1.5km to the south-west) and generally residential development.
- **To the east**: Immediately to the east of the campus lies the Econo Lodge Heritage Inn Motel. Other development generally comprises low density residential development. The CBD of Wagga Wagga is approximately 1km to the east of the site. Wagga Wagga Airport is approximately 11km east of the site.
- **To the west**: Across Docker Street to the west is primarily low density residential development. Calvary Hospital, a private hospital specialising in surgery, maternity and rehabilitation is located 300m to the west of the campus.

Photographs of surrounding development are provided at **Figures 8** to **10**.

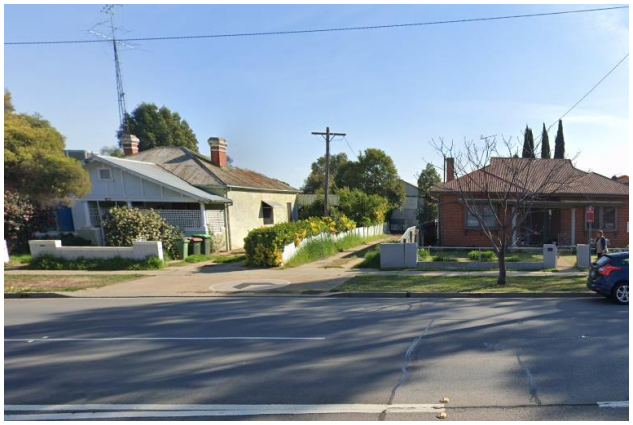

Figure 8 Residential dwellings (north)

Figure 9 Econo Lodge Heritage Inn Motel (east)

Figure 10 Typical residential development (west)

4.0 Description of Proposed Development

This application seeks approval for the following development:

- Demolition of existing buildings and structures, relocation of demountable buildings and site preparation works;
- Tree removal;
- Provision of 441 new parking spaces on the campus across three areas, comprising:
  - a 6 level MSCP in the north-east of the campus.
  - an at-grade car park off Docker Street in the south-west of the campus.
  - an at-grade car park off Yathong Street in the south-east of the campus.
- Associated pedestrian and vehicular access upgrades;
- Upgrades to the existing loading dock, accessed off Docker Street;
- Installation of way finding signage;
- Landscape works;
- Service connections, including installation of a new substation; and
- Stormwater infrastructure works.

Architectural Drawings illustrating the proposed development are included at **Appendix A**. A photomontage of the proposed development is shown at **Figure 11**.

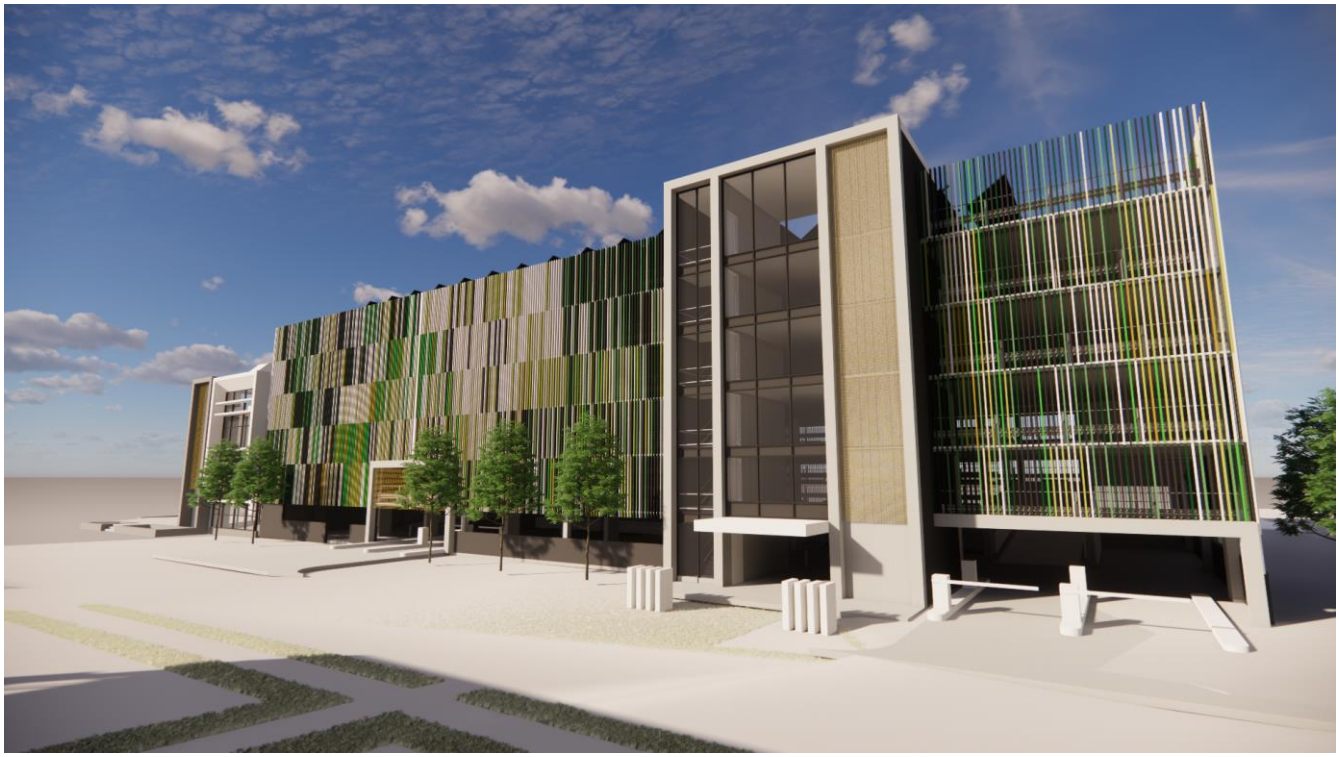

Figure 11 The proposed MSCP, as viewed from Lewis Drive

Source: Jacobs

4.1 Development and Urban Design Principles

The proposed building has been designed to respond to the following principles:

- To complete the hospital forecourt and arrival experience;
- The assist in meeting the existing and future parking demand of the WWMB campus;
- To improve access and wayfinding with the campus; and
- To minimise impacts on surrounding sensitive receivers.

4.2 Demolition, Tree Removal and Site Preparation

4.2.1 Demolition and Demountable Relocation

The proposed works require the demolition of several buildings and structures and the removal and relocation of existing demountable buildings. The proposed demolition and demountable relocation works are shown in **Figure 12**.

Buildings to be demolished include Lewis House, the Dental Clinic and Yathong Lodge, as well as existing hardscape and at-grade car parking.

Existing demountable buildings in the south-west of the campus, as well as the temporary clinic precinct in the north-east of the campus, will either be relocated elsewhere on the campus or removed (where services are to be accommodated within the new Stage 3 ACB).

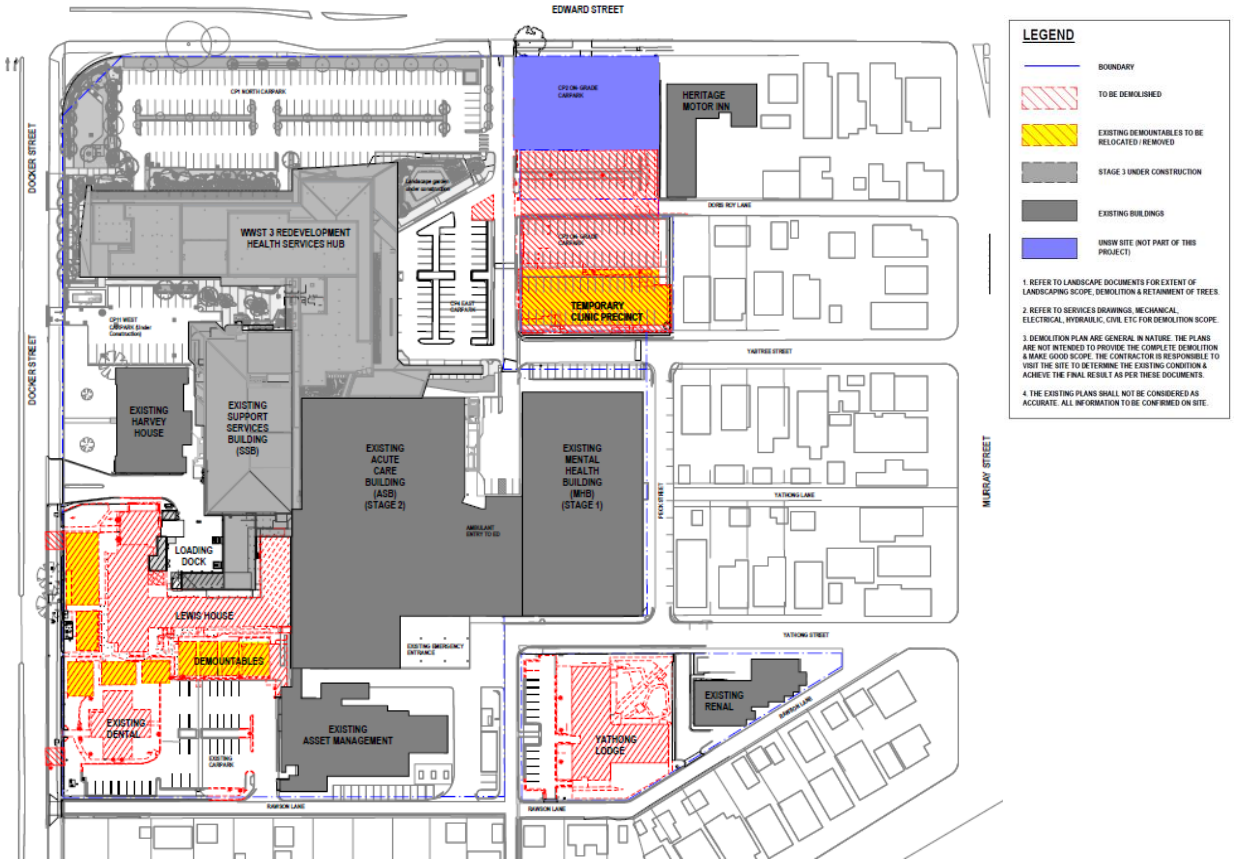

Figure 12 Demolition and make good site plan

Source: Jacobs

4.2.2 Tree Removal

The proposal requires the removal of 26 trees and shrubs, as identified on the Tree Removal Plan at **Appendix D**. In addition, it is proposed that three (3) street trees on Docker Street be removed due to their poor condition. Two (2) existing Chinese Windmill Palms within the Docker Street car park will be transplanted elsewhere within the WWBH campus.

Of the trees and shrubs being removed, only three (3) are of sufficient size and maturity (i.e. equal to or exceeding 8m) to warrant consideration under Wagga Wagga Development Control Plan 2010. Notwithstanding, all trees have been considered as part of the Tree Survey, and tree removal is assessed further at **Section 5.7** and **Appendix E**.

4.2.3 Site Preparation

Minor earth works will be required to accommodate the proposed development. Meinhardt Bonacci has identified the following cut and fill volumes across the three sites:

1. MSCP
- Total cut volume (existing fill to be disposed off-site/under suspended slab) - 2,200m^3
- Volume of fill to be imported- 800m^3

2. Docker Street At-grade car park
- Total cut volume (existing fill to be disposed off-site/under suspended slab) - 2,800m^3
- Volume of fill to be imported - 1,100m^3

3. Yathong Street at-grade car park
- Total cut volume (existing fill to be disposed of off-site) – 1,600m^3
- Volume of fill to be imported - 180m^3

Excess fill will be disposed of on-site, where possible. This may include under the suspended slab beneath the eastern aisle of the MSCP, which has an available volume of approximately 1,577m^3.

4.3 Car Parking, Vehicular and Pedestrian Access

The application seeks approval for 441 new parking spaces on the WWBH campus, resulting in a total of 590 parking spaces within the three parking areas, and 944 spaces across the campus. A site layout plan is provided at **Figure 13**.

Table 1 provides a breakdown of existing and proposed parking numbers within the three car parks, as well as the total across the WWBH campus. A more detailed description of each area, including pedestrian and vehicular access arrangements, is provided in the following sections.

An assessment of the proposed traffic and access arrangements is provided at **Section 5.5** and the Transport Impact Assessment **Appendix F**.

Table 1 Car parking summary

Component	Existing (end of Stage 3)	Proposed Net Increase	Total
Multi-Storey Car Park	90	268	358 spaces (incl. 8 accessible)
Docker Street	44	114	158 spaces (incl. 4 accessible)
Yathong Street	15	59	74 spaces (incl. 2 accessible)
PROJECT TOTAL	**149**	**441****	**590**
WWBH CAMPUS TOTAL	**503**	**441**	**944**

** *whilst the DA submission totals a 441 net increase, there may be a variance across the campus of up to 5 additional spaces due to finalisation of landscaping, services, minor amendments to access/egress that will be resolved in design finalisation stage.*

Figure 13 Site layout plan

Source: Jacobs

4.3.1 Multi-Storey Car Park

A numerical overview of the MSCP is provided in **Table 2**.

Table 2 MSCP Summary

Component	Proposal
Spaces	358 spaces (incl. 8 accessible)
Height	RL 200850 (18.9m)
Storeys	6 storeys (12 split levels of parking)
Setbacks	North – 0m (adjoins UNSW proposal) East – 6.06m - 11.01m South – 4.46m West – 5.14m – 7.57m

The MSCP is a six level (12 split levels of parking) structure accommodating 358 visitor parking spaces (268 additional spaces including 8 accessible spaces). It is located on the site of the existing CP2/CP3 car parks and sits directly to the south of the proposed UNSW Biomedical Sciences Centre. A fire wall will provide fire separation between the two buildings.

The MSCP has a maximum height of approximately 19m. The car park is naturally ventilated, with an open façade comprising vertical aluminium battens. At roof level, the vertical batten system extends 2.7m above the upper deck to ensure public safety. Provision has also been made for the installation of solar panels, which will be supported on a steel structure. This structure will also provide shading for most cars on the rooftop.

The ground floor layout of the MSCP is shown at **Figure 14**. The proposed built form and materiality is considered further at **Section 5.3**.

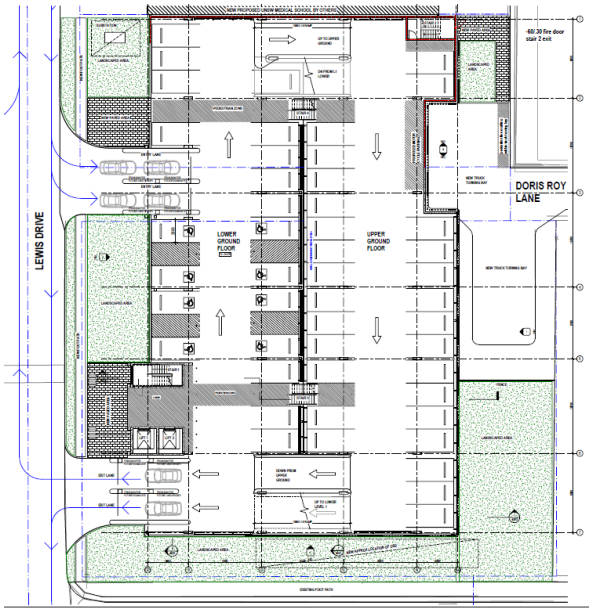

Figure 14 MSCP ground level layout

Source: Jacobs

Vehicular Access

Vehicular access arrangements for the MSCP are shown at **Figure 15**. Separate entry and exit points are provided directly from Lewis Drive. The entry has been positioned to align with the exit from CP4 and the hospital's main drop-off area (on the western side of Lewis Drive) to provide direct access from CP4 to the MSCP. As part of the project, the access to the northern end of CP4 will be widened to align with the entry to the MSCP.

Two entry lanes and two exit lanes are provided to the MSCP in accordance with the Sustainable Hospital Car Parking Investment Program (SHCPIP) Hospital Car Park Design Guidelines. Further, allowance has been made for the future installation of boom gates. This includes 3 metre entry and exit lanes with a 300-500mm central median for boom gate infrastructure.

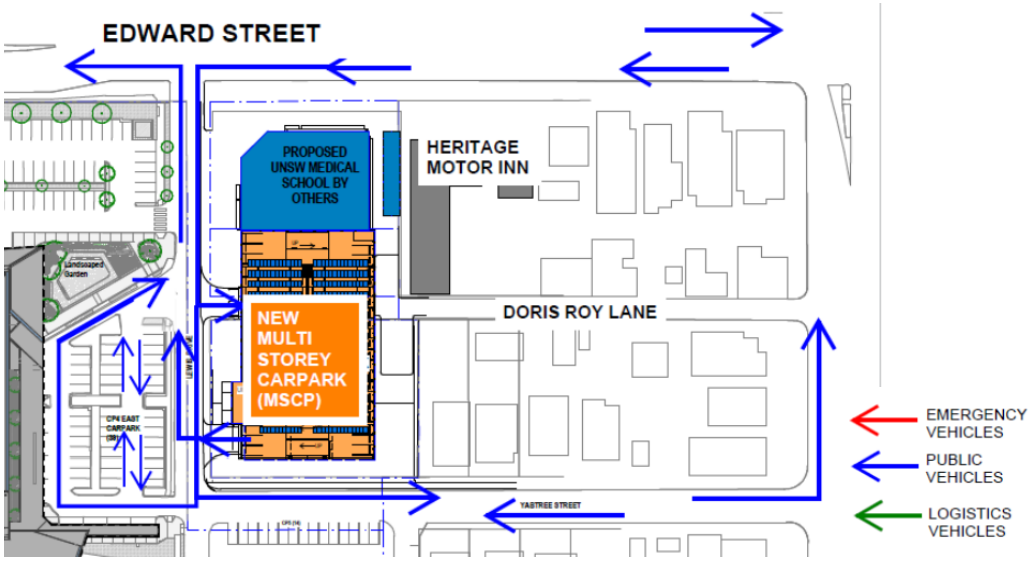

Figure 15 MSCP vehicular access arrangements

Source: Jacobs

Pedestrian Access

Pedestrian safety and access across Lewis Drive has been a key consideration. As part of the Stage 3 redevelopment, Lewis Drive has been permanently converted to a 10 kilometre per hour shared zone. This provides improved connectivity and pedestrian safety between the MSCP and the hospital, as drivers must give way to pedestrians at all times, as per NSW Road Rule 83 for shared zones.

Within the MSCP, lifts are located in the south of the car park as part of the main entry lobby. In addition, there are two fire stairs and two centralised stairs in both the north and south of the MSCP which all act as circulation stairs.

4.3.2 Docker Street Car Park

The existing CP10 will be expanded to accommodate a 158 space (114 additional spaces including 4 accessible spaces) at-grade car park. The Docker Street car park will be available to staff and visitors. The proposed layout is shown in **Figure 16**. Existing landscaping and kerbs will be retained, where possible.

The proposal also retains access to the existing Docker Street loading dock. As part of the proposal, a new hardstand area will be provided to the south of the existing loading dock (circled in red) to provide an area for diesel refuelling without obstructing access to the loading dock. A perimeter fence will be provided to separate the car park from the loading dock and refuelling area.

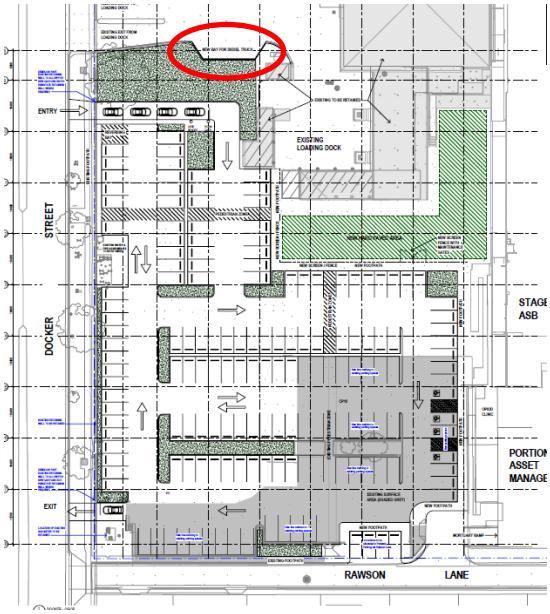

Figure 16 Docker Street car park layout with the new diesel refuelling area shown in red

Source: Jacobs

Vehicular Access

The car park will be accessed by a separated entry and exit directly to/from Docker Street, with entry via the northern access and exit via the southern access. The Docker Street car park will be restricted to left-in/ left-out and the existing access to the car park, via Rawson Lane, will be removed. Access to the mortuary, via Rawson Lane, will be maintained (refer to **Figure 17**).

The proposed vehicular access off Docker Street is considered more appropriate than retaining the existing access off Rawson Lane for the following reasons:

- Rawson Lane has geometry constraints, with the carriageway being approximately 5 metres wide to accommodate two-way traffic flow;
- There is limited opportunity to widen Rawson Lane, as this would impact the available footpath width on the northern side of the road and reduce pedestrian amenity;
- Converting Rawson Lane to one-way would adversely impact existing emergency vehicle access arrangements; and
- The proposed increase in car parking supply in this location would increase the number of vehicles accessing Rawson Lane, which would impact on emergency vehicle access and response times.

Considering the above, the two new driveways along Docker Street are considered appropriate. The new driveway locations are expected to result in the loss of four (4) on-street parking spaces on Docker Street. These spaces currently have 2P parking restrictions and would likely primarily accommodate visitor parking demand for the hospital. As a result, the loss of these four (4) spaces would be offset by the increased visitor parking supply being provided in the MSCP.

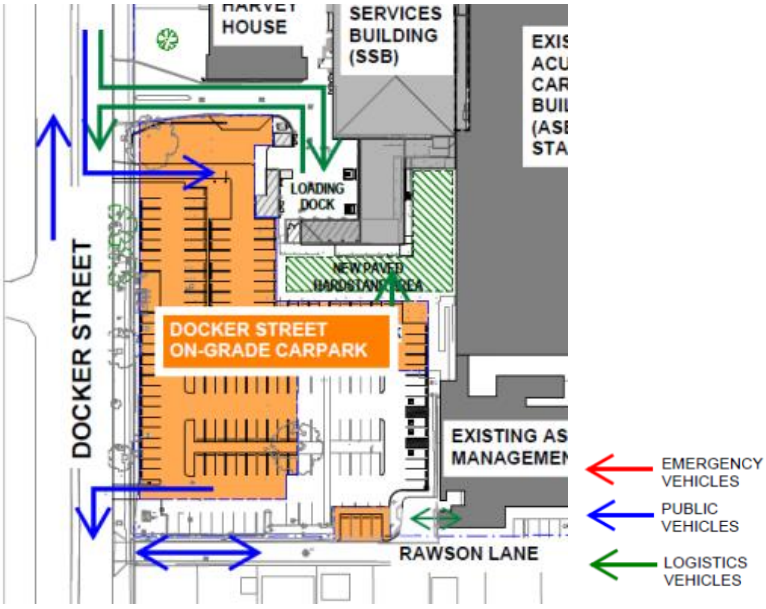

Figure 17 Docker Street car park vehicular access arrangements

Source: Jacobs

Pedestrian Access

The Docker Street car park will be used by staff and visitors. The car park can be accessed from the Stage 2 Acute Services Building to the east, or directly from Docker Street.

4.3.3 Yathong Street Car Park

The existing CP8 will be expanded to provide a 74 space (59 additional spaces including 2 accessible spaces) at- grade car park. The Yathong Street car park will also be used by staff and visitors. The proposed layout is shown at **Figure 18**. Existing landscaping and kerbs will be retained, where possible.

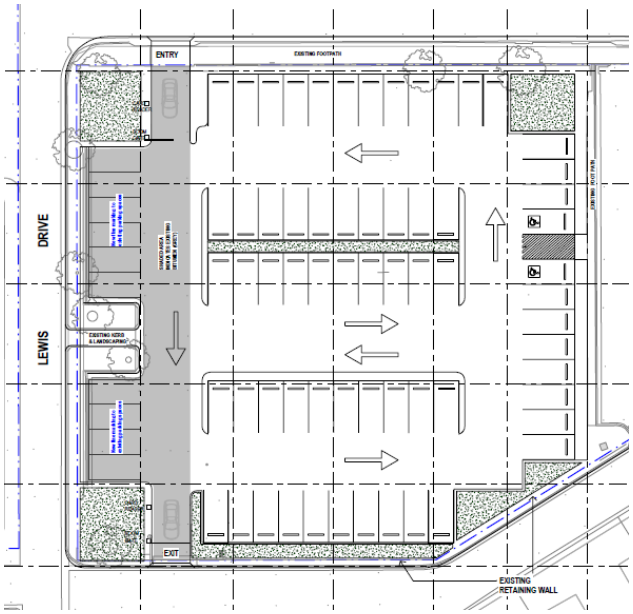

Figure 18 Yathong Street car park layout

Source: Jacobs

Vehicular Access

The car park will be entered from Yathong Street, with exit onto Rawson Lane under a left-out only arrangement. Both the entry and exit points are in the same location as the existing accesses to the car park. The left-out only movement onto Rawson Lane will minimise traffic movements near the emergency vehicle access route at Lewis Drive and will improve traffic circulation to Yabtree Street and Lewis Drive. The proposed access arrangements are shown at **Figure 19**.

In addition to restricting exit movements onto Rawson Lane to left-out only, management improvements are recommended at the intersection of Rawson Lane and Lewis Drive to ensure that ambulances have priority, as shown in **Figure 20**.

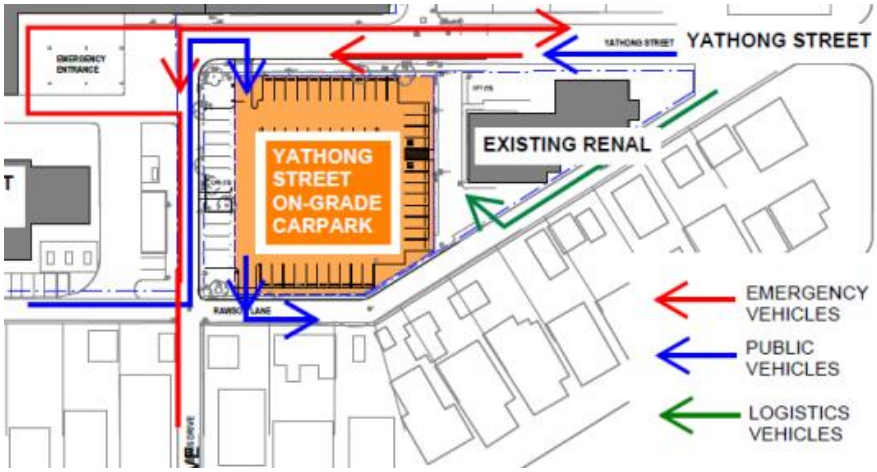

Figure 19 Yathong Street car park vehicular access arrangements

Source: Jacobs

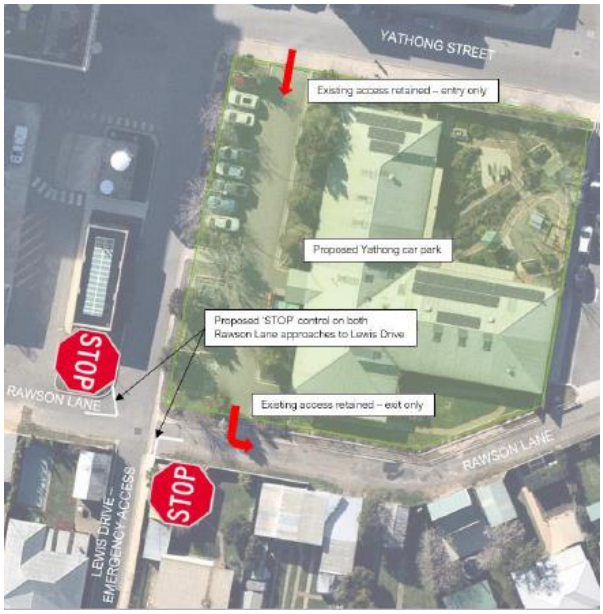

Figure 20 Rawson Lane/Lewis Drive traffic improvements

Source: GTA Consultants

Pedestrian Access

The Yathong Street car park will be used by staff and visitors. Users will be able to access the car park from Yathong Street and Lewis Drive.

4.4 Loading and Truck Access to Doris Roy Lane

No changes are proposed to existing truck access or loading arrangements within the WWBH campus.

However, construction of the MSCP requires a section of Doris Roy Lane to be closed and the laneway will be terminated on the eastern side of the MSCP. To allow waste vehicle access to Doris Roy Lane, a turning bay is proposed to the east of the MSCP, within the WWBH campus. A swept path review is provided at **Figure 21**, showing that Council's waste collection vehicle will be able to turn around at the end of Doris Roy Lane.

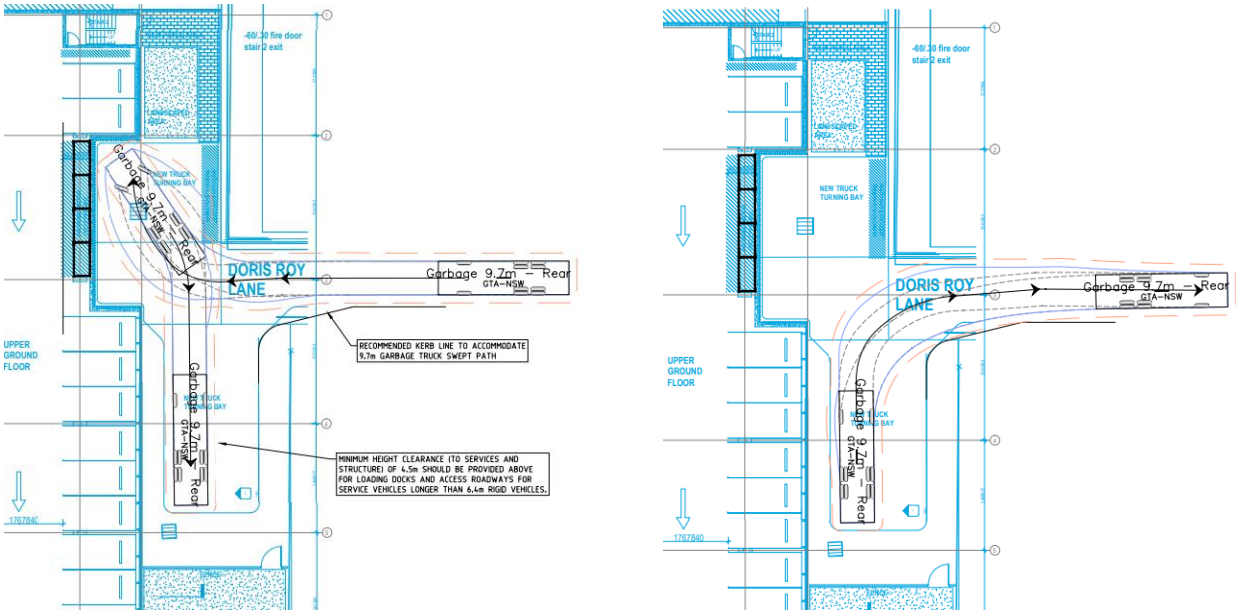

Figure 21 Waste vehicle swept path review

Source: GTA Consultants

4.5 Signage

No building signage is proposed, however a series of wayfinding signs are required to direct visitors and staff to and around the proposed car parks.

Approval is sought for five (5) wayfinding signs, as outlined at **Table 2**. The proposed signage is identified on the Wayfinding and Signage Drawings at **Appendix G**. It is noted that a number of other internal signs are shown as part of the package, however these are capable of being installed as Exempt Development under Schedule 1 of *State Environmental Planning Policy (Infrastructure) 2007*.

An assessment of the proposed signage against the provisions of *State Environmental Planning Policy No 64—Advertising and Signage* is provided at **Section 5.2**.

Table 3 Proposed signage

Sign Type	Sign Location	Sign Dimensions	Illuminated
Pylon signage	Docker Street at-grade car park entry	420W x 1400H x 80D	No
Pylon signage	Docker Street at-grade car park exit	420W x 1400H x 80D	No
Pylon signage	Yathong Street at-grade car park entry	420W x 1400H x 80D	No
Pylon signage	Yathong Street at-grade car park exit (on Rawson Lane)	420W x 1400H x 80D	No
Pylon signage	Rawson Lane (at clinic parking)	260W x 1400H x 80D	No

4.6 Landscape Works

Landscape Plans prepared by Site Image (**Appendix D**) show the proposed landscape works for the MSCP, as well as the Docker and Yathong Street at-grade car parks.

For the MSCP, the proposed works comprise a street tree avenue along Lewis Drive with shrub and grass plantings below. Additional tree plantings are proposed along Yabtree Street to the south of the MSCP and a 'grove' of trees is proposed along the site's south-eastern boundary to provide visual and acoustic separation to adjoining sensitive uses. To address Council's concerns regarding misuse of this area, a 1,800mm fence is proposed to prevent access to this space from Doris Roy Lane. Pedestrians will still be able to access this space from within the WWBH campus.

Pedestrian infrastructure will also be improved, with a pedestrian path and bench seating along the MSCP's Lewis Drive frontage. The existing footpath along Yabtree Street will be enhanced with bench seating. Benches are also proposed within the eastern landscaped setback to encourage use of this space for passive surveillance.

Landscaping within the Docker and Yathong Street at-grade car parks comprises shade and feature tree plantings with understory planting. Existing trees and landscaping will be retained, where possible.

Extracts from the Landscape Plans are shown at **Figure 22**.

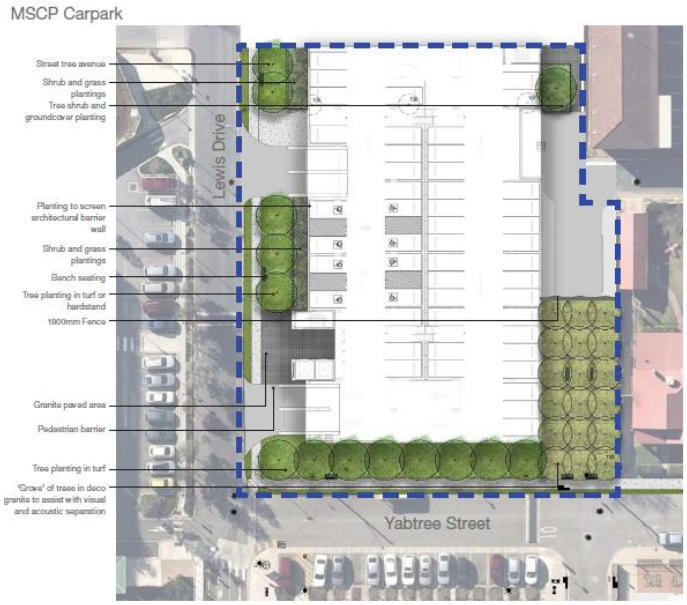

Figure 22 Proposed landscaping - MSCP

Source: Site Image

Figure 23 Proposed landscaping - Docker Street (left) and Yathong Street (right) at-grade car parks

Source: Site Image

4.7 Water Cycle Management

Stormwater Infrastructure

The stormwater system has been designed to ensure that stormwater flows are reduced to pre-development flows. Existing impervious areas have been compared with proposed impervious areas, and underground on-site detention tanks have been proposed to cater for additional flows from the proposed development.

The proposed stormwater system is described in the Civil Report and Civil Drawings prepared by Meinhardt Bonacci at **Appendix H**. In summary:

- MSCP – The MSCP's roof is directed to 3 downpipes which are then connected to the proposed OSD which is replacing an existing OSD. The proposed OSD has been located to avoid the columns of the MSCP from falling within the OSD footprint. The outlet of the OSD is also proposed to be relocated outside the footprint of proposed MSCP to prevent risk of internal flooding due to any overland flow/surcharge.
- Docker Street car park - The proposed stormwater network is comprised of a number of stormwater pits to capture runoff from locally created depressions. The collected stormwater is proposed to be conveyed to the existing street drainage network on Docker Street.
- Yathong Street car park - A network of pits and pipes is proposed to capture any stormwater runoff from the at-grade car park and convey it into the existing street drainage network post detention. An OSD is proposed in the north-east of the site due to increased imperviousness following the proposed development.

Relocation of Stormwater Infrastructure

There are two existing stormwater lines in separate easements running through the east of the MSCP site and into the UNSW site. The easements join into one towards the northern boundary of the site. Council is the beneficiary of both easements.

It is proposed to replace the two easements on the site with a single, larger diameter pipe and easement to the east of the MSCP and the UNSW building. Relocation of the two existing stormwater easements on the MSCP site is proposed to align with the relocation on the UNSW site to the north. The proposed set out is shown on the Civil Drawings that form part of this application (**Appendix H**). Separate easement applications will be made to Land and Property Information (LPI) for both the MSCP and UNSW sites following development consent for the subdivision of the UNSW site from the WWBH campus.

The proposed stormwater solution has been sized to manage the capacity of the existing hard paved area of Lot 12. As the Health Administration Corporation is in the process of obtaining part of Doris Roy Lane from Council, it is understood that HAC and Council will become joint beneficiaries of the easement.

The extent of the proposed easement is shown at **Figure 24**. The easement will be registered on title following approval of the subdivision and project applications, but prior to the registration of the new lot.

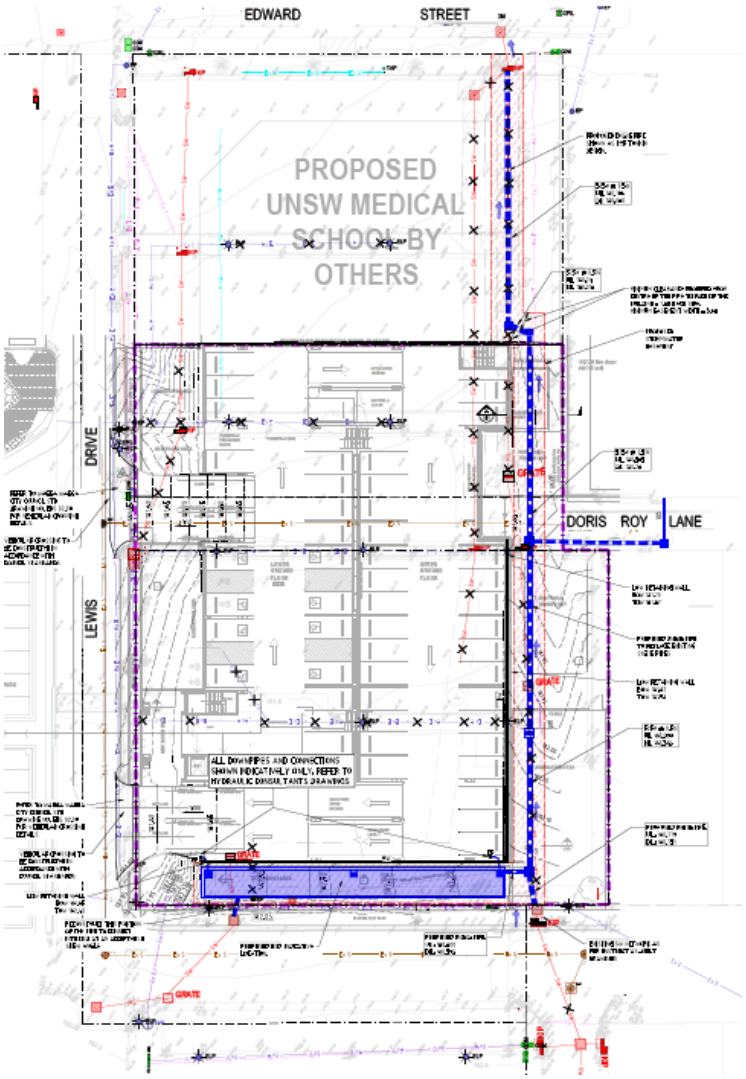

Figure 24 Proposed stormwater infrastructure, including the location of existing infrastructure

Source: Meinhardt Bonacci

Erosion and Sediment Control

Erosion and sediment control measures will be installed prior to the commencement of any earthworks and comprise:

- A sediment fence/catch drain (or diversion bund) around the site;
- Sandbag/Geotextile pit filters to be placed at stormwater inlet pits;
- Temporary access to site with shaker pad; and
- An indicative stockpile area with sediment fence around it during construction. The stockpile must be located out of water flow paths (and be protected by earth banks/drains as required).

4.8 Infrastructure Services

Acor Consultants have prepared a Multidisciplinary Services Design Statement (**Appendix I**) which confirms that the proposed services meet the relevant Standards and Codes for the following services:

- Electricity Services;
- Fire Services; and
- Hydraulic Services.

As the MSCP is an open deck car park, no mechanical ventilation or exhaust is required.

4.8.1 Substation

A 315kVA padmount substation is proposed to the west of the MSCP, in the setback to Lewis Drive. The substation will be fed by a new HV line within the road reserve of Edward Street/Lewis Drive/Yabtree Street. Initial design advice has been provided by Essential Energy. The final design is subject to engaging a Level 3 ASP designer.

4.9 Development Contributions

The relevant contributions plan for the site is the *Wagga Wagga Section 94A Levy Contribution Plan 2006*. The purpose of the Plan is to enable Council to require a contribution towards the provision, extension or augmentation of public amenities and public services that will, or are likely to be, required as a consequence of development within the LGA.

The following planning policies support the best practice of exempting social infrastructure from paying contributions:

Circular D6 – Crown Development Applications and Conditions or Consent

Exemption from contributions is supported by Planning Circular (Circular D6) relating to Crown Development Applications, issued by the then Department of Urban Affairs and Planning. Circular D6 sets out the circumstances in which it is appropriate for a consent authority to seek the approval of the applicant or the Minister to impose conditions of consent. Circular D6 notes that where a consent authority intends to levy contributions on Crown Development, they must be justified, and consideration should be given to the Crown's role in providing a community service, the cost of which is accountable to all taxpayers in the State.

The currency of Circular D6 is confirmed in the Draft Development Contributions Practice Note – July 2005, which states "the current limitation on imposition of levies on Crown Developments as outlined in Circulate D6…remain in force."

HI NSW is a Crown Authority which relies on government grants to provide new facilities for the community. The proposed car park and access upgrades are being delivered using government funding.

The levying of a development contribution would divert a portion of these public funds, which have been specifically provided to fund ongoing upgrades to the hospital, to local services without any direct nexus to the impact on those services.

The inherent public character of the proposed development contrasts with a commercial development where a full levy might be considered reasonable. The nature of the development means that the infrastructure which Council typically seeks to levy for will largely be provided by the HI NSW for use by patients, visitors and staff.

5.0 Planning Assessment

Under Section 4.15(1) of the EP&A Act, in determining a development application the consent authority must take into account a range of matters relevant to the development including the provisions of environmental planning instruments, impacts of the built and natural environment, the social and economic impacts of the development, the suitability of the site and whether the public interest would be served by the development.

The assessment includes only those matters under Section 4.15(1) that are relevant to the proposal. The planning issues associated with the proposed development are assessed below.

5.1 Environmental Planning Instruments

The application's consistency and compliance with the relevant environmental planning instruments is considered in the sections below. The key standards and guidelines highlighted in the tables are discussed in the following sections of this environmental assessment.

5.1.1 State Legislation

The relevant State legislation is assessed in **Table 4** below.

Table 4 Summary of consistency with State Legislation

Act	Assessment
EP&A Act 1979	The proposed development is consistent with the objects of the EP&A Act for the following reasons: • It allows the orderly and economic use and development of land. • It exhibits good design. • It supports the ongoing operation of health facilities. • The proposed development is consistent with Division 4.3 of the EP&A Act, particularly for the following reasons: - The development promotes the effective operation of health services and stimulates social welfare of the community; and - The development has been evaluated and assessed against the relevant heads of consideration under Section 4.15.

5.1.2 State Environmental Planning Policies

The relevant State Environmental Planning Policies are assessed in **Table 5** below.

Table 5 Summary of consistency with State Environmental Planning Polices

Plan	Comments
State Environmental Planning Policies	
SEPP (Infrastructure) 2007	The aim of this SEPP is to facilitate the effective delivery of infrastructure across the State, including providing for consultation with relevant public authorities about certain development during the assessment process. Schedule 3 of the SEPP outlines the threshold for traffic generating development that is to be referred to RMS. The threshold for car parks is 200 or more parking spaces with access to a road and 50 or more car parking spaces with access to a classified road. Given the number of parking spaces proposed, the development will require referral to RMS.
SEPP (State and Regional Development)	Under the *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP), a Crown Development is classified as Regional Development if it has a capital investment value (CIV) of $5 million or more. The proposed works have a CIV of approximately $25 million and is therefore Regional Development. Refer to the CIV Statement submitted under separate cover.
SEPP 55	This policy requires potential site contamination to be considered in the assessment of development applications.

Plan	Comments
	Jacobs has undertaken a Contamination Investigation for the site. Whilst no chemical contaminants were identified above human health criteria, an ACM fragment was identified on the Docker Street at-grade car park site. Groundwater results reported exceedances for arsenic, chromium and TDS above the adopted human health assessment criteria. These are not considered to pose a risk to existing and future onsite users due to the proposed use of the project areas as above-ground car parks. For the development and future use, Jacobs has developed a Remediation Action Plan (provided at **Appendix J**) to outline the suitable options for asbestos remediation and/or management with relation to the proposed re-development works. Contamination and remediation are discussed in **Section 5.8** below.
SEPP 64	Signage is identified on the Signage and Wayfinding Plans (see **Appendix G**). An assessment of proposed signage against the requirements of SEPP 64 is provided at **Section 5.2**.
Draft SEPP (Remediation of Land)	The proposal remains consistent with the Draft SEPP as the proposed assessment has been undertaken in accordance with SEPP 55.
Draft SEPP (Environment)	The Draft SEPP Environment was released for public exhibition in October 2017 and aims to repeal and replace a number of SEPPs and SREPs that currently apply in NSW. Under the Draft SEPP, the site is identified as being within an area of 'Urban Bushland' and as such would be subject to controls relating to the protection of land that is reserved for public open space. No part of the site is zoned for this purpose at this time, and as such these provisions of the Draft SEPP do not apply.

5.1.3 Local Planning Strategies and Controls

Wagga Wagga Health and Knowledge Precinct

The site forms part of Wagga Wagga's Health and Knowledge Precinct. A revised Master Plan and Structure Plan for the precinct was released by Council in December 2019. The Master Plan outlines the 25-30 year vision for the area around Wagga Wagga's two major hospitals to develop a central activity hub to enhance current and new health services in Wagga Wagga and the Riverina, and to support local employment in this key industry.

The proposal will facilitate development that is compatible with the Wagga Wagga Health and Knowledge Precinct, as developed by Council. In particular, the provision of upgraded parking facilities at WWBH campus:

- Provides new and expanded parking choices, including decked parking choices, within the precinct;
- Locates the MSCP within the campus, so as not to detract from the ability to active key street frontages;
- Locates the MSCP behind the proposed UNSW Biomedical Science Centre, which will provide a welcoming arrival experience and an attractive streetscape;
- Does not prevent the future construction of a Health Research Innovation Precinct at the corner of Docker Street; and
- Provides for spaces that are sociable, healthy and inclusive.

Local Environmental Plan

The relevant provisions of *Wagga Wagga Local Environmental Plan 2010* (WWLEP 2010) are considered in **Table 6** below.

Table 6 Assessment against WWLEP 2010

Clause	Proposal
Clause 2.1 – Zone	SP2 Infrastructure (Hospital)
Permissibility	The proposed car parking is ancillary to the existing hospital use on the WWBH campus, and is permissible with development consent in the SP2 Infrastructure (Hospital) zone.
Clause 4.3 – Height of Buildings	There is no prescribed Height of Buildings standard identified for the site.
Clause 4.4 – Floor Space Ratio	There is no prescribed Floor Space Ratio standard identified for the site.

Clause	Proposal
Clause 5.10 – Heritage Conservation	The WWBH campus is identified as containing a heritage item under WWLEP 2010. Item I261 refers to Wagga Wagga Base Hospital (c1960 building). It is noted that the heritage item I261 was demolished in 2018, however the listing remains. Notwithstanding, a Heritage Impact Statement has been prepared (refer to **Section 5.11** and **Appendix K**).

Development Control Plan

As required under Section 4.15(3A) of the EP&A Act, a consent authority is required to apply DCP provisions flexibly and allow reasonable alternative solutions that achieve the objects of those standards.

The Wagga Wagga Development Control Plan 2010 (the DCP) provides detailed guidance for development in the Wagga Wagga LGA. It is noted that there are no specific controls to guide the built form of car parks, nor are there specific DCP controls for the WWBH campus.

With respect to parking, whilst the DCP provides parking rates for hospitals, the proposed development does not generate any demand for additional parking, rather the project aims to maximise the available parking on the campus. The proposed parking provision has been based on a Parking Demand Study that was prepared for the hospital in 2018. A detailed assessment of traffic and parking is provided at **Section 5.5**.

5.2 State Environmental Planning Policy No 64 – Advertising and Signage

SEPP 64 applies to all signage that, under an environmental planning instrument, can be displayed with or without development consent and is visible from any public space or public reserve.

The proposal seeks approval for five (5) wayfinding signs, as outlined at **Section 4.5**. None of these signs fall into the category of 'Advertising Signage'. Advertising signage is considered to be any sign which does not fall into the following categories:

a) *Building identification signs, and*
b) *Business identification signs, and*
c) *Signage that, or the display of which, is exempt development under an environmental planning instrument that applies to it,*
d) *Signage on vehicles.*

The proposed signs are best classified as 'building identification signs' under SEPP 64, and therefore the controls in Part 3 of SEPP 64 do not apply to this application. Accordingly, only the objectives of SEPP 64 and the criteria in Schedule 1 – Assessment Criteria of SEPP 64 are required to be considered.

All of the proposed signs are consistent with the objectives of SEPP 64 and satisfy the criteria specified in Schedule 1 of SEPP 64 as outlined below.

Clause 3 states the aims and objectives of SEPP 64 which are:

a) *To ensure that signage (including advertising):*
    i. *Is compatible with the desired amenity and future character of the area, and*
    ii. *Provides effective communication in suitable locations, and*
    iii. *Is of high quality design and finish,*
b) *To regulate signage (but not content) under Part 4 of the Act, and*
c) *To provide time-limited consents for the display of certain advertisements.*
d) *To regulate the display of advertisements in transport corridors, and*
e) *To ensure that public benefits may be derived from advertising in and adjacent to transport corridors.*

The proposal is consistent with the above objectives, as the proposed signage will facilitate the provision of high quality signage, consistent with the proposal's location within the WWBH campus, as well as the proposed car park use.

Schedule 1 of SEPP 64 contains a range of assessment criteria which are matters for consideration by the consent authority in assessing applications incorporating signage. The way in which the proposed development meets the assessment criteria is set out in **Table 7** below.

Table 7 SEPP 64 – Schedule 1 – Assessment Criteria

SEPP 64	Comment	Consistent
1 Character of the area		
Is the proposal compatible with the existing or desired future character of the area or locality in which it is proposed to be located?	The car parks are within the WWBH campus, which forms part of an identified health and education precinct. In light of this, it is considered that the proposed signage is consistent and compatible with the existing and future character for business and building identification signage.	✓
Is the proposal consistent with a particular theme for outdoor advertising in the area or locality?	No advertising is proposed.	N/A
2 Special areas		
Does the proposal detract from the amenity or visual quality of any environmentally sensitive areas, heritage areas, natural or other conservation areas, open space areas, waterways, rural landscapes or residential areas?	The site is not located within an environmentally sensitive area and will not impact on the nearby heritage conservation area. It is scaled appropriately for its wayfinding purpose and is of a high-quality design. Accordingly, the proposal will not detract from the visual quality of any environmentally sensitive area, heritage areas, natural or conservation areas, open space, waterways, rural landscape, or residential areas.	✓
3 Views and vistas		
Does the proposal obscure or compromise important views?	The signage is of a low scale and does not obscure or compromise important views.	✓
Does the proposal dominate the skyline and reduce the quality of vistas?	The signage is low in scale and will not dominate the skyline or reduce the quality of any vistas.	✓
Does the proposal respect the viewing rights of other advertisers?	The proposal will not impact views to other signage in the locality, including hospital entry/wayfinding signage at the corner of Lewis Drive.	✓
4 Streetscape, setting or landscape		
Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape?	The signs have been designed so that they are comparable in size and scale to the existing signs in and around the WWBH campus. The signs will provide practical way finding information and are appropriate for the streetscape, setting and landscape.	✓
Does the proposal contribute to the visual interest of the streetscape, setting or landscape?	The proposed signage has a utilitarian, way finding function. Notwithstanding, it has a simple aesthetic which is appropriate for the streetscape setting.	✓
Does the proposal reduce clutter by rationalising and simplifying existing advertising?	N/A	N/A
Does the proposal screen unsightliness?	The signage is of a high-quality design and finish. It does not screen unsightliness.	✓
Does the proposal protrude above buildings, structures or tree canopies in the area or locality?	The signage will not protrude beyond any surrounding buildings, structures of tree canopies.	✓
Does the proposal require ongoing vegetation management?	No ongoing vegetation management will be required.	N/A
5 Site and building		
Is the proposal compatible with the scale, proportion and other characteristics of the site or building, or both, on which the proposed signage is to be located?	The signage is of a scale and character which corresponds to its wayfinding purpose, and will appropriately integrate with the car park design.	✓
Does the proposal respect important features of the site or building, or both?	The proposed signage will not obscure any important features of the site. The signage is of a high-quality design and will contribute to wayfinding and visual interest.	✓

SEPP 64	Comment	Consistent
Does the proposal show innovation and imagination in its relationship to the site or building, or both?	The proposed signage is well designed and carefully positioned for wayfinding purposes.	✓
6 Associated devices and logos with advertisements and advertising structures		
Have any safety devices, platforms, lighting devices or logos been designed as an integral part of the signage or structure on which it is to be displayed?	No safety devices or platforms are required.	N/A
7 Illumination		
Would illumination result in unacceptable glare?	The signs are not proposed to be illuminated.	N/A
Would illumination affect safety for pedestrians, vehicles or aircraft?	The signs are not proposed to be illuminated.	N/A
Would illumination detract from the amenity of any residence or other form of accommodation?	N/A	N/A
Can the intensity of the illumination be adjusted, if necessary?	The signs are not proposed to be illuminated.	N/A
8 Safety		
Would the proposal reduce the safety for any public road?	Due to the scale, design and location of the signage in relation to the built form, the proposal will not have any impact on safety.	✓
Would the proposal reduce safety for pedestrians/cyclists?	The signage will have no impact on the safety of pedestrians and cyclists. The signage is of an appropriate scale to direct and provide information to motorists and cyclists, while not reducing safety for pedestrians or cyclists.	✓
Would the proposal reduce safety for pedestrians, particularly children, by obscuring sightlines from public areas?	The signage will not reduce safety for pedestrians by obscuring sightlines. The proposed signage serves an important wayfinding function, and is considered appropriate.	✓

5.3 Urban Design and Built Form

The site does not have a height or FSR limit under WWLEP 2010, and the DCP does not provide guidance on the setbacks required for car parks or health services facilities. Accordingly, the design has been shaped with consideration to neighbouring developments and urban design principles, as outlined below and in the Architectural Design Statement at **Appendix A**.

The new MSCP can be viewed from the main arrival point on Edward Street, thereby contributing to the initial impression of the campus and identification of the carpark. Given its prominence within the site, the MSCP has been designed to complement the existing Stage 1 and Stage 2 buildings, and the future Stage 3 ACB (currently under construction). As shown in **Figure 25**, the MSCP effectively completes the eastern side of the WWBH campus arrival forecourt.

The intent is that the completed campus will read as a family of related buildings that are friendly, welcoming, non-institutional and inspiring. To achieve this, the massing of the new MSCP has been articulated to minimise its bulk and scale. As a result, the MSCP will appear open and light and will provide a connection to the surrounding community and fabric of the city.

The new shared public space formed by the Stage 2 and 3 buildings and the new MSCP creates a formal new main entry to the hospital. The design concept for the façade of the MSCP, which is described further below, reflects the principles of these key buildings and the wayfinding devices that have already been employed on the campus.

The proposed expansions of the at-grade car parks integrate with the existing surrounds and retain existing parking spaces, landscaping and kerbs where possible. The proposed planning provides new landscaped areas as well as new pedestrian zones to ensure safety and circulation to and through the at-grade carparks.

Figure 25 MSCP (left) and Stage 3 ACB (right)

Source: Jacobs

Height

The MSCP has a maximum height of approximately 19m (6 levels). This includes the extension of the vertical batten system at roof level, which extends 2.7m above the upper deck to ensure public safety. Provision has also been made for the installation of solar panels, which will be supported on a steel structure. This structure will also provide shading for most cars on the rooftop.

The scale of the building responds to development within the WWBH campus, completing the arrival forecourt on Lewis Drive. The height, in conjunction with the proposed setbacks, also seek to minimise impacts on residential properties to the east.

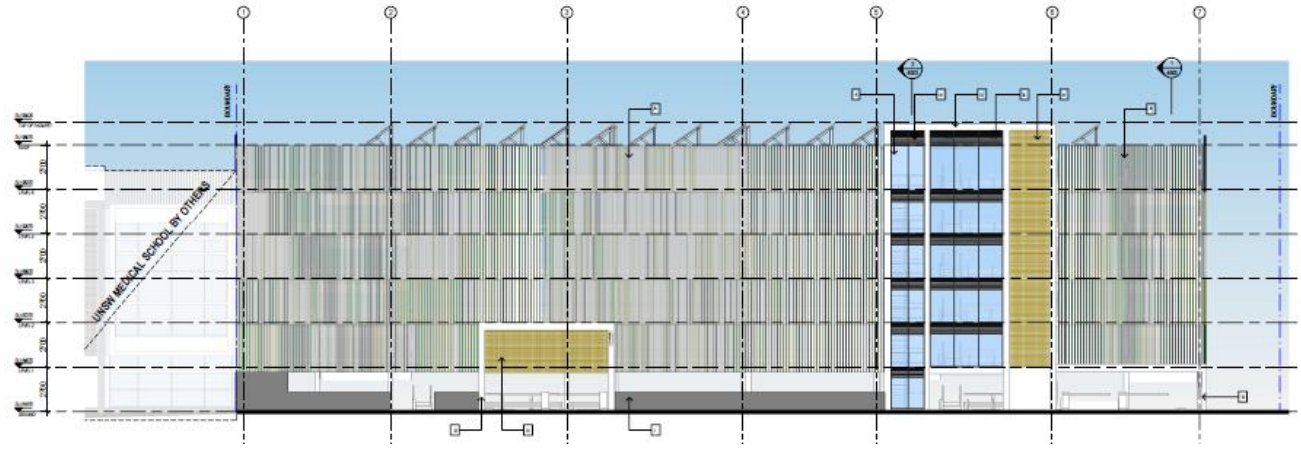

Figure 26 MSCP Western Elevation

Source: Jacobs

Setbacks

The MSCP effectively completes the eastern side of the WWBH campus arrival forecourt. The building has been sited to respond to this context and to minimise impacts on surrounding development to the east.

To the north, there is a zero setback where the building will adjoin the UNSW Biomedical Sciences Building.

To the south and west, the building has been setback between 4.46m and 7.57m to respond to surrounding development, and to enable the installation of pedestrian paths and landscaping.

The MSCP is set back between 6.06m and 11.01m from the eastern boundary. The generous setback will facilitate the relocation of the existing stormwater infrastructure, as well as the installation of a new truck turning bay. It will also facilitate a landscape buffer to the south-east of the car park, where it interfaces with neighbouring residential properties. This will assist in minimising any overshadowing and privacy impacts on the neighbouring properties (refer to **Section 5.4**).

Façade and Materials

The façade of the MSCP reflects the colour scheme of the Stage 3 ACB, which is inspired by the Murrumbidgee River around which Wagga Wagga has developed, and which is an integral and iconic part of the history and character of the district.

The key component of the MSCP façade is the vertical aluminium batten system, which has also been designed to complement the façade of the Stage 3 Building. The vertical battens are also highly responsive to the variations of natural light, providing a distinctive architectural identity and further integrating and reinforcing the campus appearance as a unified and contemporary hospital facility.

On the western façade, the main lift and stair cores have been articulated to assist in wayfinding by highlighting the main entry. The use of full height glazing to the main public lobby also provides a clear view of the adjacent buildings to assist with orientation and wayfinding. For motorists, vertical white banding identifies the separate entry and exit lanes and reflects the language of the ACB.

The indicative material selections are shown at **Figure 27**.

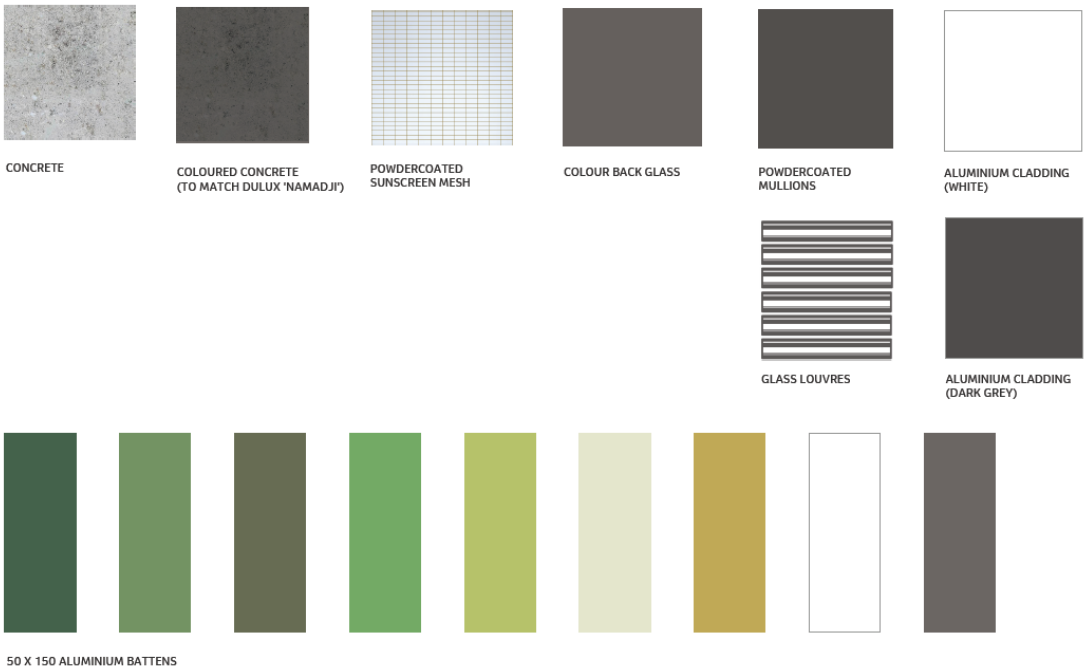

Figure 27 Indicative materials and finishes palette

Source: Jacobs

Visual Impact

As outlined above, the building has been designed to complete the eastern side of the campus forecourt and sits comfortably within the context of the WWBH campus.

From Edward Street to the north, the MSCP will be partially screened by the UNSW's proposed Biomedical Science Centre. From the east, the proposed façade composition, together with the boundary setbacks which provide for significant building separation and landscaping opportunities, will help to break-down and soften the appearance of the building.

Safety and Security

As noted above, the façade screen extends 2.7m above roof level to ensure public safety.

In addition, the MSCP incorporates Crime Prevention Through Environmental Design (CPTED) measures including CCTV cameras and intercom connectivity to the campus security. Further, a fence has been provided to the east of the MSCP to prevent access between the campus and Doris Roy Lane.

5.4 Overshadowing Impacts

Shadow diagrams have been prepared by Jacobs (**Appendix A**). The diagrams (refer to **Figure 28**) show that shadows associated with the proposed MSCP are largely contained within the WWBH campus, with shadows falling on the at-grade parking area to the west and the existing Acute Care and Mental Health Buildings to the south and south-west.

In the afternoon on the winter solstice, there will be some overshadowing of two residential properties to the east of the WWBH campus. However, these properties will continue to receive 3 hours of sunlight across the morning and early afternoon, and so the shadow impact is considered acceptable.

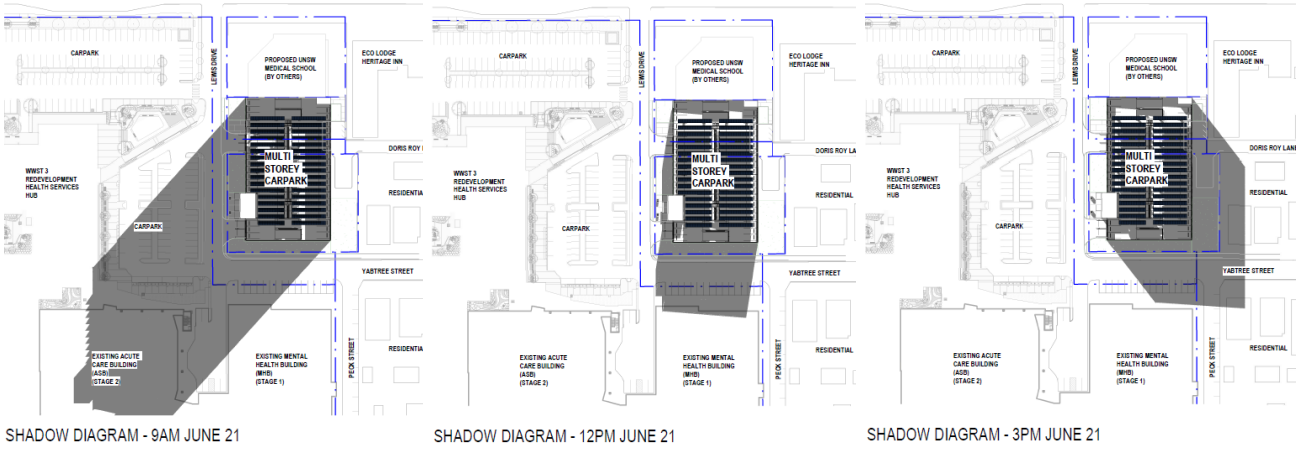

Figure 28 Shadow Diagrams – 21 June at 9.00am, 12.00pm and 3.00pm

Source: Jacobs

5.5 Traffic and Parking

A Transport Impact Assessment has been prepared by GTA Consultants (**Appendix F**). A summary of the key findings is provided below.

5.5.1 Car Parking Demand

A separate Parking Demand Study was prepared for the hospital in 2018 which identified a current and projected shortfall in parking.

The existing shortfall is currently being met by surrounding on-street parking, however the Parking Demand Study identified that the projected parking demand shortfall in the future years of 2026/27 and 2031/32 cannot be fully met by on-street parking supply within the Relevant Parking Zone (RPZ). The RPZ for the hospital has been measured

using a radius of 400 metres from the centre of the campus. This identified on-street parking locations suitable to be utilised by the hospital. At the time of the Parking Demand Study, it was identified that there were approximately 643 on-street spaces within the RPZ. At completion of Stage 3, with the known intersection improvements, there is expected to be approximately 578 spaces within the RPZ.

The Parking Demand Study acknowledges the current reliance on on-street parking within the RPZ, outlining that based on the existing parking demand, approximately 411 spaces are accommodated on-street and projecting there to be a campus shortfall of around 677 spaces in the future 2031/ 32 scenario.

The proposed scope of works seeks to increase off-street parking at the WWBH campus by 441 parking spaces to address existing shortfalls, and accommodate the potential increase in parking demand driven by future population growth and service expansions. The proposal does not generate a parking requirement in itself.

It is noted that the proposed increase in car parking spaces on the WWBH campus will also offset the proposed loss of four (4) on-street parking spaces on Docker Street to accommodate the new Docker Street car park accesses, with these spaces likely to currently be used by hospital visitors. The increased on-site car parking supply will also seek to accommodate staff and visitor parking demand currently occurring in locations on-street that will be removed as a result of proposed future road upgrades.

5.5.2 Car Parking Layout

The car park layout has been reviewed against the requirements of the Australian Standard for Off Street Car Parking (AS/NZS2890.1:2004 and AS/NZS2890.6:2009) and Health Infrastructure's Sustainable Hospital Car Park Investment Program (SHCPIP) Hospital Car Park Design Guidelines.

The review of the above elements indicates that the proposed car parks are generally consistent with the abovementioned Australian Standards and Guidelines and are expected to operate satisfactorily.

5.5.3 Traffic Generation

The Traffic Analysis Report prepared by ptc. in 2019 included a SIDRA analysis of the surrounding intersections which included an assessment of the Stage 3 redevelopment in a 2031 future design year.

After the ptc. Traffic Analysis Report was prepared, an additional 32 parking spaces were added as part of the Stage 3 redevelopment which were not assessed as part of the SIDRA analysis. The ptc. Report estimated the traffic associated with the Stage 3 redevelopment based on a rate of 0.4 trips per car parking space in the AM and PM peak hours. As such, the additional 32 parking spaces that were provided for the Stage 3 redevelopment are expected to generate an additional 13 vehicle trips in both the AM and PM peak hours, above what was modelled in the Traffic Analysis Report prepared by ptc.

The development proposed as part of this DA is not expected to result in an increase in traffic generation for the site above the Stage 3 redevelopment, but rather seeks to accommodate some of the parking demand that currently occurs on-street as a result of existing shortfalls on the campus. Notwithstanding, there is expected to be some redistribution of existing traffic associated with staff and visitors who currently park on surrounding streets, who will now park within the hospital campus.

Considering the net increase of 441 car parking spaces on the campus, and a traffic generation rate of 0.4 trips per parking space, it is anticipated that approximately 176 existing trips on the surrounding road network would be diverted to the campus access points that provide connection to the proposed MSCP, Docker Street car park and Yathong Street car park.

Distribution and Assignment

GTA Consultants have assessed the directional distribution and assignment of traffic generated by the proposed development. Based on existing assumptions around directional distribution and split, as well as the proposed proportional increase in car parking supply in the various locations on the hospital campus, a redistribution of existing traffic has been assessed at the Sturt Highway/Lewis Drive, Docker Street/ Rawson Lane, Murray Street/ Yabtree and Murray Street/ Yathong Street intersections. Specifically:

- The MSCP is expected to accommodate 61% of the redistributed traffic;
- The Docker Street car park is expected to accommodate 26% of the redistributed traffic; and
- The Yathong Street car park is expected to accommodate the remaining 13% of redistributed traffic.

It is noted that the redistribution of existing traffic is largely expected to occur at the intersections providing connection to these car parks. Any redistribution of existing traffic at other surrounding intersections further afield is expected to be minor and within daily fluctuations of turning movements at these intersections.

As outlined in the ptc. Traffic Analysis Report, some surrounding intersections are expected to operate at/over- capacity in 2031 with the proposed background growth of 2% per annum and therefore require upgrades to increase capacity. HI and TfNSW are in consultation to finalise the design and construction of upgrades to the intersections of Docker/Edward Street, signalisation of Murray/Edward Street and traffic calming works at Brookong/Murray Street. These upgrades are due to take place in 2021, pending TfNSW and Council decisions around sequencing of the works.

Traffic Impact

The ptc. Traffic Analysis Report notes that the Stage 3 redevelopment will have a minimal impact on the road network. The upgraded intersections are expected to operate at a Level of Service C or better in both peak periods, with the Stage 3 traffic. The Report also acknowledges that it is unlikely that the signalisation of Sturt Highway (Edward Street)/Murray Street will have any negative impacts on the adjoining signalised intersections. A summary of the anticipated 2031 intersection operation of the key intersections surrounding the hospital following the proposed road upgrades is provided at Section 4.4 of GTA's Assessment (**Appendix F**).

The 2031 SIDRA model has been updated to assess the incremental increase in traffic generated by the additional 32 parking spaces provided as part of the Stage 3 redevelopment, as well as the anticipated redistribution of existing traffic on the surrounding road network as a result of the WWBH car park project.

A comparison indicates that the average delay and 95th percentile queues at the surrounding intersections are generally expected to remain the same when considering the redistribution of existing traffic resulting from the WWBH car park works. The largest increase in average delay occurs at the Sturt Highway/Lewis Drive intersection which is around 4 – 5 seconds and is considered minor, noting that the intersection is still expected to operate at a Level of Service A overall.

In summary, traffic modelling results indicate that the project will have a negligible impact on the function of the surrounding road network, with key intersections near the hospital expected to operate satisfactorily during both the AM and PM weekday peak periods in 2031, following planned road upgrades.

5.6 Operational and Construction Noise

A Noise Impact Assessment has been prepared by Acoustic Logic to consider the operational impacts of the proposed development (refer to **Appendix L**). A preliminary assessment of construction noise has also been undertaken.

5.6.1 Operational Noise

Acoustic Logic has assessed operational noise emissions from the following noise sources:

- Noise from cars circulating within the car park building (average noise emissions);
- Trucks using the eastern turning/reversing bay during the daytime hours;
- Noise from cars starting/doors closing (peak noise events/sleep disturbance analysis);
- Noise created on public roads as a result of traffic generated by the site; and
- A preliminary assessment of noise from mechanical plant, noting minimal plant is proposed.

Based on an assessment against the relevant noise emission criteria, Acoustic Logic has confirmed that noise from the use of the three car parks, as well as noise generated by additional traffic on surrounding public roads, will

comply with the relevant criteria. The Assessment also confirms that the use of the car parks at night will comply with the Road Noise Policy Sleep Disturbance Guidelines. Further, mechanical plant is capable of complying with the EPA Industrial Noise Policy.

Notwithstanding compliance with the relevant noise emissions criteria, Acoustic Logic has recommended the following treatments/management controls to minimise noise generation:

- Polished concrete surfaces must be avoided in the MSCP to prevent tyre squeal. Broom or float finish or other similar finishes should be adopted.
- Speed in the car park itself is to be limited to 10km/h to minimise noise generation.
- The car park pavement shall be smooth and level to ensure minimal vertical displacement and potential for noise generated by wheel to concrete impacts.
- Speed humps, if used, should either be concrete or plastic type, and should be fixed to avoid any impact noise when cars drive over them.
- Noise absorptive lining should be installed to the underside of the slab soffit over the natural ventilation openings on the eastern façade of the MSCP. This treatment should extend 2,100mm back from the façade slab edge. The absorptive material is to be 50mm thick Echosoft or similar material with NRC no less than 0.8.
- Acoustic review of any boom-gate or inter-com systems should be conducted at detailed design stage, if required.
- Grates and any cover plates are to be fixed flush and tight.
- Trucks using the eastern turning bay/reversing bay of the MSCP are to be fitted with white noise type reversing beacons. Tonal reversing alarms are not permitted.

5.6.2 Construction Noise

Acoustic Logic has undertaken a preliminary assessment of construction noise impacts based on likely construction activities. Potential mitigation measures are outlined below. With the adoption of these measures, noise impacts on nearby receivers can be managed to prevent unreasonable impact.

- Use of augured rather than driven or vibratory piling should be considered if feasible.
- Static plant (concrete pumps, cranes) should be located as far as practicable away from the boundaries to maximise the distance to the residences.
- Use of electric, as oppose to diesel, cranes should be adopted if practicable. In the event that diesel cranes are proposed, it is likely that acoustic treatment of the crane engine will be required.
- Letter box drops or similar to advise residents on activities with the potential to result in noise levels reaching the ‘Highly Noise Affected’ noise level (rock excavation within 20m of property boundary).
- Preparation of a detailed construction noise and vibration management plan, prior to commencement of construction.

5.7 Tree Removal

A Tree Survey has been prepared by Mark McCrone Landscape Architect (**Appendix E**).

As noted at **Section 4.2.2**, the proposal requires the removal of 26 trees and shrubs, as identified on the Tree Removal Plan at **Appendix D**. In addition, it is proposed that three (3) street trees on Docker Street be removed due to their poor health and condition. Two existing Chinese Windmill Palms within the Docker Street car park will be transplanted elsewhere within the WWBH campus.

It is noted that only three (3) trees proposed for removal are of sufficient size and maturity (i.e. having a height equal to or exceeding 8m) to warrant consideration under Wagga Wagga Development Control Plan 2010. These are trees 16 (Docker Street) and trees 30 and 34 (Yathong Street). Notwithstanding, all trees have been considered as part of the Tree Survey and it is noted that there are some notable specimens with good form, health and vigour which offer amenity opportunities for the altered landscape of the proposed car park facilities.

In summary:

- Whilst tree 16 is capable of being retained, poor pruning has resulted in structural weakness and compromised safety. The removal and replacement of this tree is the most sensible management approach.
- A number of documented trees are Council street trees. This includes six (6) street trees on Docker Street. Due to their current condition, it is recommended that three (3) of these (trees nos 10, 13 and 15) be removed and replaced.
- Trees 9, 17 and 18 within the Docker Street site have been recommended for retention due to their size, scenic and environment value. These three (3) trees are identified for retention.
- Trees 19, 23 – 26, 38 – 40 within the Yathong Street site have been recommended for retention due to their size, scenic and environmental value. These eight (8) trees are identified for retention.
- There are two specimens of Chinese Windmill Palms (Trachycarpus fortunei) within the Docker Street car park. These trees are recommended for relocation.

Mark McCrone Landscape Architect concludes that the landscape design prepared by Site Image shows existing trees being retained where possible, and a range of new tree plantings and complementary shrub and groundcover species to provide amenity and amelioration to the altered landscape, and is therefore considered appropriate.

All trees proposed for retention should be given full and adequate protection during any future construction works (in accordance with *AS4970-2009; Protection of trees on development sites*) and all necessary work undertaken on them should be carried out in accordance with *AS4373-2007; Pruning of amenity trees and WorkCover NSW Code of Practice 'Amenity Tree Industry'* (2007).

5.8 Soils and Contamination

Jacobs has prepared a Remediation Action Plan (RAP) for the proposed development. The report is provided at **Appendix J** and is summarised below.

5.8.1 Groundwater

Jacobs has confirmed that it is unlikely that groundwater will be encountered within the depth of excavation required to construct the carpark, which is not envisaged to require any major excavation greater than 1m below the existing ground surface.

5.8.2 Salinity

An assessment of soil salinity based on laboratory test results has shown that the soils tested are non-saline.

5.8.3 Contamination and Remediation

The Desktop Assessment identified the potential for soil and groundwater contamination within four areas of environmental concern (AECs) on the site relating to historical activities. These included potential filling, historical demolition of old buildings, a diesel above ground storage tank, and former underground storage tanks. In addition to this, during demolition of the former hospital in 2016, friable and bonded asbestos materials were identified within soils in this area.

Due to the potential risk to construction workers and surrounding current and potential future users of the site, a combined Preliminary Site Investigation/Detailed Site Investigation was conducted which involved the collection of soil and groundwater data. The contaminated land assessment identified the presence of one asbestos containing material (ACM) fragment at approximately 0.45 m below ground level (BGL) at BH318 within the Docker Street car park site. All other contaminants of potential concern that were analysed were reported below the adopted assessment criteria.

Based on the site history and the positive identification of ACM within the Docker Street car park site, a Remediation Action Plan (RAP) has been prepared to ensure the suitability of the three car park sites for their desired end uses as car parking facilities.

During construction works, the aim is to minimise soil disturbance and excavation as much as possible, and manage the ACM impacted soils in-situ given that the site will largely be covered in hardstand. However, it is anticipated that some potentially impacted soil excavation may be required for the installation of services, pilings, and other car park features therefore some incidental remediation is likely. Consequently, the objectives of the asbestos management and remediation works are as follows:

- To minimise disruption to actually or potentially ACM impacted soils during the construction works to the extent practicable;
- Manage the majority of actually and potentially ACM impacted soils in-situ to the extent that the three Project Areas are considered suitable for the proposed future land use as car parks (commercial/industrial use) under the SEPP 55; and
- Incidental remediation of any actually or potentially ACM impacted soils that are required for excavation and disposal in order to achieve the required design levels for the proposed car park redevelopment works.

The RAP goes on to outline the approach to management and remediation of the ACM, including site mobilisation, excavation of on-site fill material, material transport, unexpected finds, waste classification, remedial validation and reinstatement. It is noted that the remediation works would be classified as Category 2 remediation, and therefore development consent is not required.

Jacobs concludes that if management works and remediation activities are undertaken in accordance with the methodologies and protocols outlined the RAP, the site can be made suitable (from an asbestos perspective) in accordance with SEPP 55 for commercial/industrial land use as an above-ground multistorey and on-grade hardstand car parks with no access to underlaying soils.

5.9 Site Suitability

The site is suitable for the proposed development for the following reasons:

- The development will expand and enhance the provision of parking facilities at the WWBH campus to meet existing and future demand;
- The site does not have any environmental constraints which would prevent the proposed car parking and access works; and
- The site is capable of being developed without any adverse impacts on the environment or adjoining properties.

5.10 Public Interest

The proposed development is in the public interest as it will provide parking facilities to meet existing and future demand at the WWBH campus, without resulting in any adverse impacts on the environment or neighbouring properties. The proposal will also reduce demand for on-street parking.

Further, the proposed development will have a positive social and economic impact through the creation of temporary job opportunities in manufacturing, construction and construction management for the residents of the wider Wagga Wagga LGA.

Finally, the development will foster the development of WWBH and surrounds as a specialised Health and Knowledge Precinct, consistent with Council's Master Plan and Structure Plan for the area. This will deliver economic and social benefits to the broader community.

5.11 Other Impacts of the Development

An assessment of the other impacts of the development have been undertaken by the relevant specialist consultants and are appended to this SEE as set out in **Table 8** below.

Table 8 Summary of other technical assessments

Consideration	Consultant	Summary	Reference
Heritage	Weir Phillips	The Heritage Impact Statement prepared by Weir Phillips confirms that Wagga Wagga Base Hospital is listed on the s170 Register of NSW Health. Part of the site (not including the site of the proposed works) is listed as a heritage item by *the Wagga Wagga LEP 2010*. The site also lies within the vicinity of the Wagga Wagga Conservation Area listed by the *Wagga Wagga LEP 2010*. Wagga Wagga Hospital has undergone significant redevelopment over the past 10 years. Its primary significance now lies in its social significance as a long serving local health care facility. Only one historically and architecturally significant building still stands, being Harvey House. The proposed works support the social significance of the site by facilitating its function as a hospital and will have no impact on significant fabric. The MSCP will read as one of a number of contemporary structures of a similar massing and scale on the site. The works are sufficiently separated from Harvey House and the nearby Conservation Areas to have no impact on direct view corridors to/from these items and no addition impact on the setting of these items/area over and above the recently constructed buildings on the site. The two proposed at-grade car parks lie within the immediate vicinity of Harvey House and the southern part of the Wagga Wagga Conservation Area. Their impact on the setting of Harvey House and Conservation Area is minimal and acceptable because they are located at grade, will not block significant view corridors and will include landscaping.	**Appendix K**
Geotechnical	Jacobs	A Geotechnical Investigation Report has been prepared by Jacobs to inform the design and construction. The Report provides recommendations with respect to structure foundations, earthworks and salinity which will be incorporated into the detailed design of the development.	**Appendix M**
BCA	Philip Chun Building Code Consulting	The multi storey carpark will be constructed as Type A Construction in accordance with the requirements of Clause C1.1 of the BCA. Philip Chun Building Code Consulting has reviewed the plans and has confirmed that the works proposed will be capable of achieving compliance with the Building Code of Australia 2019 (BCA) Amendment 1. This is subject to normal design development and assessment required at the next stage of documentation.	**Appendix N**
Access	Philip Chun Accessibility	Philip Chun Accessibility has assessed the proposal against the Building Code of Australia 2019 (BCA) Amendment 1, as it relates to accessibility and statutory obligations imposed by the *Disability Discrimination Act 1992* (DDA), including the Disability (Access to premises – Buildings) Amendment Standards 2010 (No 1) and relevant Australian Standards. Philip Chun has confirmed that the proposed development is considered capable of compliance with the above-mentioned accessibility legislation, subject to normal design development and assessment required during subsequent design development and construction phases.	**Appendix O**
Fire Engineering	Warringtonfire	Warringtonfire has undertaken a preliminary fire safety engineering review of the proposed design for the DA.	**Appendix P**

Consideration	Consultant	Summary	Reference
		Warringtonfire has confirmed that it is possible to develop performance solutions for the issues identified to demonstrate compliance with the relevant performance requirements of the NCC without major changes to the proposed design. The performance solutions for the building will be developed as part of the ongoing design and development process and documented in a format suitable for submission to the relevant approval authorities.	
Waste Collection and Management	-	The proposed development will not general any waste. As noted in **Section 4.4**, the design incorporates a truck turning bay on the site's eastern boundary to enable Council's waste truck to continue servicing Doris Roy Lane.	-

6.0 Conclusion

The proposed development seeks approval for car parking works, including a new MSCP, at-grade car parks and access upgrades at Wagga Wagga Base Hospital. The new car parking will meet existing and future demand, and will relieve pressure on on-street parking.

This SEE has provided a detailed assessment of the proposal against the relevant matters under Section 4.15(1) of the EP&A Act. The application is recommended for approval given the following reasons:

- The proposed development is consistent with the aims and objectives of *Wagga Wagga Local Environmental Plan 2010* and Wagga Wagga Development Control Plan 2010, as well as the relevant State Environmental Planning Policies;
- The proposal will facilitate development that is compatible with the Wagga Wagga Health and Knowledge Precinct, as developed by Council;
- The proposed car parking and access works will support the development and ongoing use of the WWBH campus, providing improved facilities for patients, visitors and staff;
- The proposed works will relieve demand for on-street parking;
- Supporting technical studies which accompany this DA confirm that the environmental impacts associated with the proposal are generally positive and will not give rise to any adverse impacts; and
- The proposed development is suitable for the site and is in the public interest.