

# Multi-Storey Car Park at The Children's Hospital at Westmead SSD-10434896

Preliminary Construction Management Plan

February 2021

Revision: A

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# 1 Introduction

This preliminary Construction Management Plan has been prepared for The Children's Hospital at Westmead (CHW) Stage 2 Redevelopment Multi-Storey Car Park (MSCP) SSD Application No. 10434896.

The preliminary Construction Management Plan will be replaced by the Contractor's Construction Management Plan once appointed. It is acknowledged that the Contractor's Construction Management Plan must be submitted to the NSW Department of Planning, Industry and Environment (**DPIE**) prior to Works commencing on site.

## 1.1 Background

The CHW Stage 2 Redevelopment will deliver further renewal and expansion of acute paediatric services to support contemporary models of care, further embed education and research into clinical practice and enhance the provision and quality of paediatric health care across Westerns Sydney, NSW, Australia and Internationally.

The vision for the CHW Stage 2 project is **Transforming Kids Health**, which is underpinned by the following key objectives:

- **For the community and family togetherness** - provide a positive environment that supports the needs of the whole family and is welcoming and open to the community
- **Integrated research and education** - enable the integration of research and education, by fostering and growing strategic partnerships, to achieve clinical excellence in paediatric care in Westmead
- **Specialist role of CHW** - enable the hospital to fulfil its tertiary and quaternary role of delivering health care which is responsive to outcomes that matter to children and their families
- **World leading** - furthering CHW as a world leading facility to train and attract the best at Westmead
- **Sustainability and future focused** - Sustainability and future focused providing infrastructure and services which are sustainable, agile and technology-enabled to support current and evolving models of care.

## 1.2 Proposed Development

The proposal seeks consent for the construction of a new Multi-Storey Car Park (MSCP) to be located on Labyrinth Way and Redbank Road, and on the site of the former Ronald McDonald House (known as The Lodge).

The scope of proposed Works includes:

- Demolition of The Lodge
- Construction of a new MSCP, approximately 8 car parking storeys, which is equivalent to the height of 5 storeys of the hospital:
  - Facilitating approximately 1000 car parking spaced for staff and visitors
  - Vehicular access from Labyrinth Way and/or Redbank Road
  - A split-level approach to the MSCP to respond to the natural ground level
- Ancillary retail facilities
- Road works:

➤ Realignment of Redbank Road

- Associated landscape works
- Tree removal to accommodate the construction of the MSCP

The MSCP is being designed to be constructed in a single stage yet car parking will be staged operationally to come on-line with parking demand across the Precinct:

- The first stage of car parking operation would provide replacement car parking for the demolished P17 car park. There would be no net increase of parking on site under this stage.
- The second stage of car parking operation will serve the growth in hospital activity associated with the future PSB (subject to a separate SSDA) and would only come on-line operationally with the PSB SSDA consent becoming operational, specifically at occupation. This would provide growth of around 280 additional spaces in line with hospital activity projection until 2031.
- The construction staging plan will be finalised as part of the crown certificate process.

### 1.3 SEARs Requirements

This report addresses the requirements outlined in the Planning Secretary’s Environmental Assessments Requirements (SEARs), issued 20 November 2020 for application SSD – 10434896 Multi-Storey Car Park at The Children’s Hospital at Westmead.

Item	Name	SEARs Description
	General Requirements	Detail any staging of the development. ..... Details of construction and decommissioning including timing. .....
14	Staging	Assess impacts of staging where it is proposed and detail how construction works and operations would be managed to ensure public safety and amenity on and surrounding the site.

Table 1: SEARs requirements

## 2 Phasing Program and Key Milestones

The indicative key milestones include:

Key Milestones	Date
Construction Commencement	Q4 2021
Construction Complete	Q2 2023
Operational Commence	Q2 2023

Table 2: Program

# 3 Construction Management Plan Components

This preliminary Construction Management Plan covers the following areas of management:

- The operations of site management when undertaking the Works including:
  - Legislative requirements
  - Hours of construction works
  - Staging
  - Public and property protection
  - Disruption notices
- Mitigation to minimise amenity and environmental impacts including:
  - Noise and vibration management
  - Dust management
  - Hazardous materials
  - Odour control
  - Protection of trees
  - Stormwater management and soil erosion.
- Traffic/pedestrian management throughout the duration of the Works
- Waste management including:
  - Construction waste management
  - Storage of hazardous goods
  - Hazardous materials management
- Services disconnections

# 4 Operations of Site Management

The Works will be undertaken by a Principal Contractor. The Principal Contractor will be selected through a competitive tender process that will commence in Q4 2020.

All statements and proposals documented in this preliminary Construction Management Plan will be reviewed at the time of contract award for the Works to ensure alignment with the proposed methodologies and construction staging of the preferred Contractor.

## 4.1 *Legislative Requirements*

The Works will be undertaken in accordance with the following legislative requirements and any others that must be complied with in carrying out of the works as required:

- Protection of the Environment Operations Act and Regulations;
- Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA)
- Environmentally Hazardous Chemicals Act 1985;
- Environmentally Hazardous Chemicals Regulation 2017;
- Protection of the Environment Administration Act and Regulations;
- Work Health and Safety Act 2011
- Occupational Health and Safety Regulation 2017 and relevant codes of practice and Standards;
- Australian Standard 2601-2001: Demolition of Structures;
- Code of Practice - How to Manage and Control Asbestos in the Workplace 2019
- Code of Practice – How to Safely Remove Asbestos 2019
- Code of Practice – How to Manage Work Health and Safety Risks 2019
- Waste Avoidance and Resource Recovery Act 2001;
- Environmental Planning and Assessment Act 1979;
- Heritage Act 1997;
- Local Government Act 1993;
- Soil Conservation Act 1938; and
- Australian Standard 4970-2009: Protection of Trees on Development Sites.



## **4.2 Hours of Construction Works**

Construction work would be undertaken in accordance with the construction hours set out in the conditions of approval for the Environmental Impact Statement. These are expected to be:

- Monday to Friday – 7.00am to 6.00pm
- Saturdays – 8.00am to 5.00pm

No works would be undertaken on Sundays or public holidays.

## **4.3 Staging**

The MSCP will be constructed in one stage with the potential of combining the MSCP and Paediatric Services Building's (subject of a separate planning application) civil works concurrently as one early works package. This is subject to market procurement assessment, providing budget and environmental controls de-risking the project and the campus.

It should be noted that the application does not seek approval for staging. Construction is anticipated to occur as per the below:

- Stage 1
  - Demolition
  - Earthworks, remediation and inground structure and infrastructure
  - Redbank Road construction
- Stage 2
  - Construction of the MSCP

## **4.4 Public and Property Protection**

The general principle is to separate construction areas of work from surrounding stakeholders and residents. Where there is a cross-over this will be managed to ensure safety of all persons and equipment.

The construction phasing will be developed to ensure continued hospital operations and distinct isolated construction zones which maximises separation between the hospital operation and construction work.

Appropriate site hoarding and fencing (as specified in Australian Standards and SafeWork NSW requirements) will be installed prior to commencement of Works to prevent public access and to maintain security for the various areas of the Works.

The potential construction vehicles routes include:

- to/from north and east via Redbank Road and Briens Road
- to/from south and west via Dragonfly Drive, Darcy Road and Cumberland Highway.

Redbank Road would be the preferred route, given that it provides a more direct access to/from the site from the north-east.

Traffic management at the site entry gates will be in place during site operation hours and will be locked shut when the site is closed. Traffic controllers will be used where required to manage the interface of construction vehicles with pedestrians and/or public vehicles.

These public and property protection measures will be reviewed at the time of Contract Award for the Works to ensure alignment with the proposed preferred methodologies and construction staging, to ensure that the safety of the public & staff is maintained at all times during the Works.

### **4.5     *Disruption Notices***

Any planned Disruptions to Hospital operations and services will be managed through the process of Disruption Notices (**DNs**). For such stoppages, the DN will describe the applicable Works, timetable, issues and contingency plans.

DNs will be submitted by the Contractor to the Project Manager and Hospital stakeholders for approval. Depending on the nature of the Works, these are required 10 days prior to commencement of Works, however this doesn't take into consideration the review and approval process, which depending on the scope of Works can take up to 4 weeks.

# 5 Environment and Amenity

The Contractor undertaking the Works will be required to submit for approval to the Principal and DPIE a comprehensive Environmental Management Plan (EMP) to ensure that all elements of the plan meet all statutory requirements as well as NSW Health's requirements.

As a minimum, the erosion and sediment controls for the Works shall be designed, installed and maintained in accordance with the requirements provided by the Project Engineering Consultants.

The environmental performance of the Contractor will be monitored throughout the Works.

The following specific environmental management principles will be implemented on site:

## 5.1 *Noise and Vibration*

**Note: This section is to be read in conjunction with the Noise and Vibration Assessment Report prepared by Stantec.**

Management of noise emissions from the site will be consistent with requirements of the Interim Construction Noise Guideline, and relevant Australian Standards. A Construction Noise Management Plan will be prepared by the Contractor. No machine work will occur outside the normal working hours set unless approval has been given through a Disruption Notice process.

The noise and vibration from the use of any plant equipment and/or building services associated with the premises shall not give rise to an offensive noise as defined under the provisions of the Interim Construction Noise Guideline, EPA and Australian Standards.

As part of the noise mitigation treatment for the project, the Contractor will be responsible for the management, checking of compliant maintenance regimes and statutory supervision of all equipment, such as making sure all trucks and machinery involved in the Works are checked for defective exhaust systems and general servicing.

The Contractor will be responsible for producing a detailed Dilapidation Report of the adjoining buildings and surrounding infrastructure prior to the commencement of Works. **(If applicable)**

## 5.2 *Dust*

To control dust generation, water will be sprayed at the source of origin and surrounding areas to prevent airborne dust particles migrating into the surrounding environment.

Management of dust prevention is to be developed by the Contractor and agreed by the Project stakeholders.

The need for measures to prevent tracking of soil onto roadways outside of the site will be assessed by the Contractor and provided where necessary. Options available to the Contractor include:

- Wheel shaker
- Wheel wash
- Hosing
- Manual cleaning

Additional precautions that will be implemented during the Works include the covering of all haulage trucks with tarpaulins and monitoring of weather conditions (including wind). Management and contingency plans will be developed to prevent any foreseeable impacts from dust.

### **5.3 Hazardous Materials**

**Note: This section is to be read in conjunction with the Remedial Action Plan (RAP) prepared by JBS&G Australia Pty Ltd.**

All Works will be undertaken in strict accordance with the RAP submitted as part of the SSD. Any other control plans as required such as a Hazardous Materials Plan and Asbestos Removal Control Plan will be developed by the Contractor.

Specialist Class A licensed contractors will be used to remove material classified as hazardous. These materials will be removed separately first and disposed of in accordance with EPA and statutory requirements. Certification will be provided that identified hazardous materials have been removed.

### **5.4 Odour Control**

The scope for demolition activity for the Site includes the demolition of The Lodge. All plant and machinery involved in the Works will be regularly serviced and checked for exhaust emission and catalytic converters.

### **5.5 Protection of Trees**

**Note: This section is to be read in conjunction with the Arboricultural Impact Assessment Report prepared by Tree Management Systems.**

The Contractor undertaking the Works will be required to comply with Australian Standard 4970-2009: Protection of Trees on Development Sites to include tree management guidelines for the proper care and protection of trees retained and integrated into construction projects.

Where trees are required to be retained and are within proximity to the Works, the Contractor will be required to maintain procedures for their protection at every stage of the development process.

### **5.6 Stormwater Management**

**Note: This section is to be read in conjunction with the Civil Design Report and Integrated Water Management Report prepared by Arup Pty Ltd.**

Measures will be employed on the site overall, to control soil erosion during construction. These measures will be in accordance with requirements provided by the Project Engineering Consultants.

The site will be continually cleaned of rubble to minimise possible sediment flow during rainfall periods.

Stormwater kerbs and drainage lines will have sediment controls in the form of sedimentation socks or similar (to be approved by the project civil engineer).

Stormwater grate intakes surrounding Works will be covered with geotextile fabric to allow water to enter while retaining sediments.

## Environment and Amenity

Should external surface run-off flow into Works areas, it may need to be diverted to reduce sediment transportation using sedimentation socks or similar (to be approved by the project civil engineer).

All drainage control devices will be maintained regularly during and following heavy rainfall periods. Any remedial works required to these controls will be undertaken as a priority.

# 6 Traffic Management

**Note:** This section is to be read in conjunction with the Construction Traffic Management Plan prepared by WSP.

As part of the Construction Management Plan, the Contractor will be required to submit a Traffic and Pedestrian Management Plan (TMP) for approval prior to commencement of the Works.

## 6.1 Construction Entry & Exit

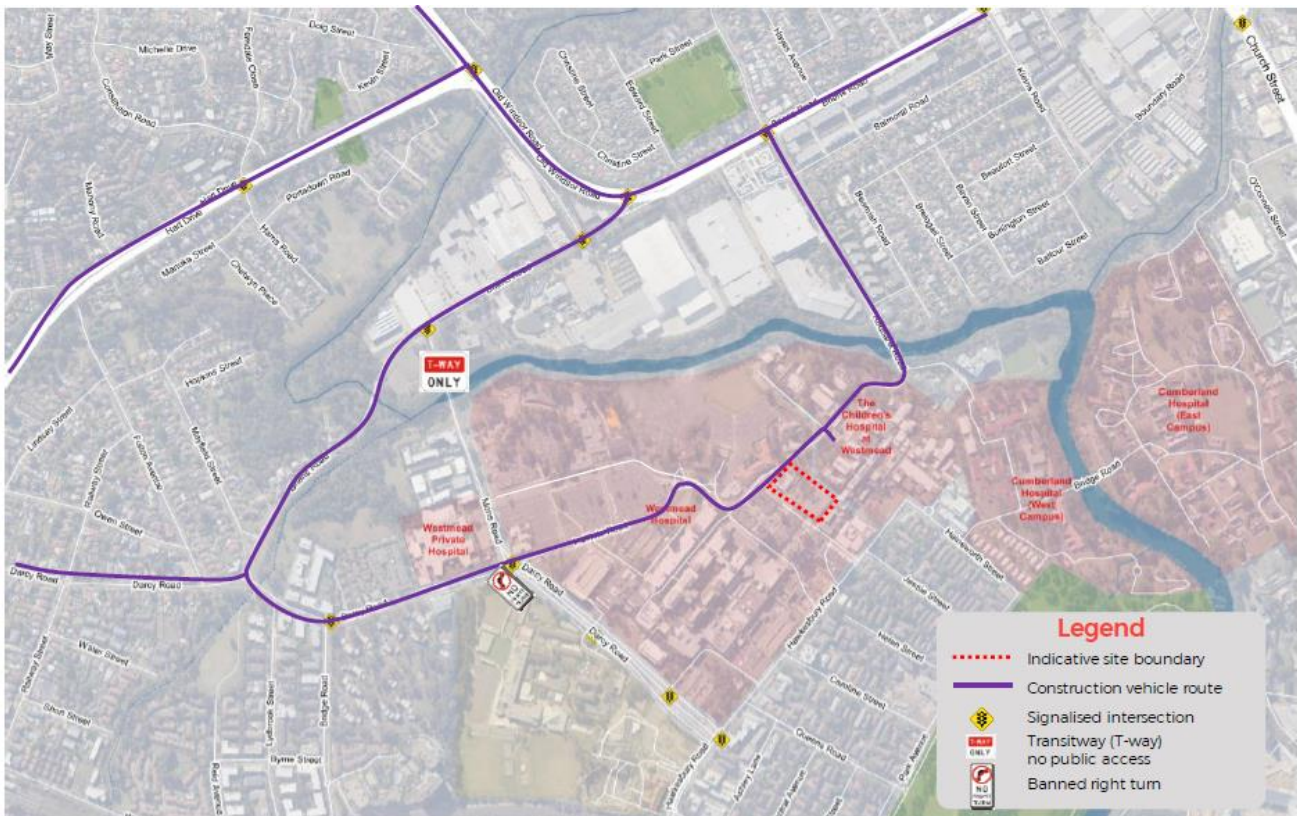
Generally, construction vehicles will have origins and destinations from a wide variety of locations throughout Sydney. However, all construction vehicles will be restricted to the arterial road network, where possible.

As such, dedicated construction vehicle routes have been developed with the aim to provide the shortest distances to/from the arterial road network, whilst minimising the impact of construction traffic on the local road network in the vicinity of the site. Alternative routes would not be used without specific prior approval from the appropriate stakeholders.

The potential construction vehicle routes are shown in Figure 1.1 and include:

- to/from north and east via Redbank Road and Briens Road
- to/from south and west via Dragonfly Drive, Darcy Road and Cumberland Highway.

Redbank Road would be the preferred route, given that it provides a more direct access to/from the site from the north-east.



Source: WSP Traffic Impact Assessment

Figure 1: Construction vehicle routes

Construction vehicles would access the site via Redbank Road. However, specific details of the site access arrangements will need to be developed in conjunction with the appointed Contractor and their construction methodology. The selected construction vehicle access would need to allow for all vehicles to enter and exit the site in a forward direction and would need to minimise any vehicle queuing on Redbank Road, which could affect emergency vehicle access or the precinct traffic operations.

### **6.2 Construction Vehicle Types**

Construction vehicles likely to be generated by the proposed construction activities would generally include rigid vehicles (6.4m-12.5m), 18m truck-and-dog vehicles and/or 19m semi-trailers and vans and utes depending on the construction activities. Additional construction equipment may include:

- Articulated vehicles for delivery of heavy plant and equipment;
- Heavy and medium rigid trucks for construction material delivery;
- Heavy rigid tankers for fuel delivery for compacting and excavation machinery;
- Rigid trucks for removal of excavated material;
- Mobile cranes;
- Fixed cranes;
- Piling Rigs;
- Concrete delivery trucks & concrete pumps; and
- Light vehicles.

A vehicle wash-down area where required will also be placed at vehicle entry points to prevent construction vehicles tracking dust/mud onto public roads.

### **6.3 Pedestrian Protection**

Pedestrian and vehicle passage to and around the site will be maintained, or alternate routes determined where necessary and be defined by clear signage.

Temporary hoarding appropriate to the interaction between pedestrians and construction works (as per WorkCover requirements and Australian Standards) will be constructed to prevent unauthorised access to the site. These hoardings and fences will be staged to allow access to in-use areas during the Works.

### **6.4 Parking**

All Contractor vehicles will be located within the confines of the work area. There will be no parking made available on other areas of the hospital campus.

# 7 Waste Management

**Note:** This section is to be read in conjunction with the Waste Management Plan prepared by JBS&G Australia Pty Ltd.

## **7.1 Waste Management and Recycling Principles**

The Contractor will be required to prepare a Waste Management and Recycling plan specific to the Works. This will be in line with the Waste Management Plan prepared by JBS&G Pty Ltd. The Contractor will be required to reuse and recycle where possible, and all material that cannot be recycled / reused will be disposed of at an approved landfill facility.

Once the MSCP is operational, all waste produced will be managed in accordance with the Sydney Children's Hospitals Network's (**SCHN**) relevant Waste Management Policy. This policy will be reviewed and updated as required to suit the operation of the development.

## **7.2 Storage of Dangerous Goods and Hazardous Materials**

Dangerous goods (such as petrol, diesel, oxy-acetylene, oils, etc.) will be stored in a lockable compound with sufficient ventilation in accordance with relevant codes of practice and standards.

Material safety data sheets on all flammable and potentially harmful liquids will be provided by the Contractor undertaking the Works.



## 8 Services Disconnections

As part of the MSCP development, there is a potential for service disconnections to the existing campus services.

In general terms the following principles will be adopted when disconnecting services; Services impacts on the existing Westmead Health Precinct facilities will be done with full coordination and input with relevant hospital and authority stakeholders and will only proceed with approval via a DN process.

All service authorities will be consulted prior to the Works commencing to ascertain lead times and correct termination locations. All termination works will be undertaken in accordance with project design engineers' specifications and instructions. All termination works will be undertaken by suitably licensed Contractor.

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