

## **PRELIMINARY CONSTRUCTION MANAGEMENT PLAN**

### **INTRODUCTION**

This Construction Management Plan for the redevelopment of Kareena Hospital has been compiled to support the Project Application for the upgrade of the Hospital. It is envisaged that a more detailed plan will be developed by the Contractor assigned to the construction phase of the redevelopment.

This Plan addresses the following key issues in relation to the construction phase of the project:

- Public Safety, Amenity and Site Security
- Operating Hours, Noise and Vibration Controls
- Air and Dust Management
- Stormwater and Sediment Control
- Waste and Materials Re-use
- Traffic Management

### **PUBLIC SAFETY, AMENITY & SITE SECURITY**

One of the key priorities of the construction phase for the Kareena Redevelopment Project will be to ensure the general public is adequately protected from activities occurring on building sites and where required outside the perimeter of the construction zone. Consultation will be undertaken with relevant stakeholders in the area as to what impact if any will the proposed works will have on their amenity during the construction phase.

Where applicable the following application will be made to Council or other relevant authorities:

- Permit to erect a gantry, overhead protective awning over the road or footpath.
- Permit for a vehicular crossing (permanent or temporary).
- Permit to Occupy space on road or footpath.
- Permit to erect a hoarding (where it occupies Council space outside of an allotment whilst construction work is undertaken).
- Permit for a road opening.
- Permit for a road closure.
- Permit for a construction zone.
- Permit to use a mobile crane, travel tower or lift on or above a road.
- Permit for a rubbish skip to be placed on public reserves.
- Permit for legal point(s) of discharge and approval for modifications to street lighting.

#### **Site Fencing & Hoarding**

The site will be secured by a fence, hoarding or other suitable barrier constructed in accordance with the relevant standard and appropriate type of construction undertaken. All hoardings, perimeter fencing or other site barrier systems will be constructed to prevent climbing or unauthorised entry into the construction site.

Hoardings will be designed to reduce the likelihood of unauthorised bill postings and graffiti through the use of wire mesh guards, warning notices and/or public art.

Before and during building work, all excavations will be fenced so they do not pose a danger to life or property to the satisfaction of the relevant authority. Hoardings, barriers and other perimeter fencing will be suitably lined to limit public viewing to designated viewing areas. This will ensure pedestrian flow is not impeded and adequate site-public interaction is accommodated

### **Safety and Security**

Adequate lighting, safety signage and traffic controls will be provided in accordance to relevant authority requirements. Traffic controls and a traffic management will comply with AS 1742.

At all times, occupants of existing buildings on the redevelopment site will be prevented from accessing the building site through adequate security measures to the satisfaction of the relevant Authority. Security measures will be in place at all times when the site is not in operation. Security measures will be provided to prevent construction work or protective measures from facilitating unauthorised access to an adjoining building(s) and to safeguard site materials and equipment.

All dangerous chemicals will be properly stored in secure areas located away from emergency exits, safety measures or stormwater pits, with procedures in place to address any occurrence of spillage.

### **Signage**

Signage specifying any security measures and key contact details will be erected on the perimeter of the building site. A 24 hour contact name and phone number will be provided.

Any sign, road markings, street furniture, parking meters, etc, affected by the works will be relocated or protected and, or, kept in good repair. When installing hoardings, attention shall be paid to the effects that such items may have on pedestrian travel paths at intersections. This may mean installing temporary pedestrian ramps, tactiles, etc. Approval shall be sought from ESG to install temporary indents or pedestrian ramps, etc.

### **Public Domain**

Damage to the footpath, road, kerb and channel, stormwater drains and street furniture that results from excavation, demolition and building work will be the responsibility of the contractor. Any impact which may impact on pedestrians, cyclists and motorists' safety will be repaired immediately.

The contractor will ensure there are no tripping hazards from the hoarding or perimeter fencing on nearby footpaths. Electrical, plumbing and other services extending over footpaths will be covered over, and pedestrian and disability access facilitated by a ramp. Ramps will have a non-slip surface, a handrail, and a maximum gradient of 1:14 unless the existing topography of the street or road requires some variation to this ratio.

Where the street or footpath or part thereof needs to be occupied by the contractor, above or below the public domain, the general public will be protected from construction activities including vehicle loading and off-loading within the public domain.

The use of cranes or mobile lifting equipment, will take the following steps to prevent disruption to public areas:

- Ensure equipment does not restrict public thoroughfares and pedestrian access or, where restricted access is unavoidable, use gantries or other overhead protection
- Determine lifting zones for medium to long term use of the equipment
- Protect pavements and streets and conduct dilapidation surveys before and after works have taken place
- Implement procedures and lifting techniques to ensure safety on adjoining streets and footpaths
- Use traffic management controls and signage.

Unless otherwise permitted, obstructions will not protrude from the construction site causing interference with pedestrians or traffic in a public place.

Unless otherwise permitted, all construction materials will be stored onsite and not in the street or public space.

### **Street Space Occupation**

All necessary permits will be obtained from the relevant authority to occupy and use the space on the footpath.

Pedestrian access areas will have a minimum width of 1.2m clear on the footpaths. Where possible, two way passing bays 1.8m wide will be provided at not more than 20m intervals.

### **Excavation**

Excavations adjacent to or in close proximity to a road or pathway will be designed to support the road or pathway in accordance with the requirements of the relevant Authorities.

The location and extent of excavations on a site will be specified and the means of containing sediment, especially in wet weather, will be detailed. The area of land to be cleared will also be minimised. All required consents and permits will be obtained from Council and/or other relevant authorities for excavations and shoring, where excavations occur within 3m of a road or within a 45 degree angle.

Excavations adjacent to existing adjoining buildings will comply with the requirements of the relevant authorities.

### **Site Management**

Materials stored on the site will be adequately secured to prevent unnecessary dispersal of the materials around the site and public areas (streets and footpaths).

Trucks leaving the site will be adequately cleaned to ensure soil, mud and other site debris is prevented from spilling onto adjoining roads and footpaths. Roads and footpaths will be cleaned on a regular basis with consideration to water efficiency.

All trees not designated to be removed will be protected where they are near the proposed demolition, excavation and construction works.

## **OPERATING HOURS, NOISE AND VIBRATION CONTROLS**

Construction hours - The hours of construction, including the delivery of materials to and from the site, will be restricted as follows:

- Between 7:00 am and 6:00 pm, Mondays to Fridays inclusive;
- Between 8:00 am and 1:00 pm, Saturdays;
- No work on Sundays and public holidays.

Site operating hours will at all times be maintained and work outside these times will not be undertaken without prior approval from the relevant Authority except in the following circumstances:

- The delivery of materials is required outside these hours by the Police or other authorities;
- It is required in an emergency to avoid the loss of life, damage to property and/or to prevent environmental harm;
- Residents likely to be affected by the works are notified of the timing and duration of these works at least 48 hours prior to the commencement of the works.

To enable noise and nuisance complaints to be managed onsite in the first instance, signage specifying any security measures and key contact details will be erected on the perimeter of the building site. A 24 hour contact name and phone number will be provided.

Construction noise on site during construction will meet the limits set by the EPA and relevant authorities. Construction Vibration will meet relevant authority and Australian Standards.

## **AIR AND DUST MANAGEMENT**

Details of any equipment and activities that may cause excessive dust or otherwise effect air quality will be provided. Dust suppression techniques/equipment will be utilised to address conditions related to:

- Weather and wind conditions
- Exposure/proximity to the public and surrounding buildings
- Proximity to air intake vents on adjacent buildings. Intake from these vents must be prevented through the installation of adequate filters or other approved measures.

Airborne dust arising from trucks and other vehicles entering and leaving the site will be minimised through the watering down of driveways and trucks with consideration to water efficiency.

Perimeter site fencing will be designed to minimise the impact of dust on the public and adjacent areas.

Equipment powered by internal combustion engines will be properly maintained and regularly serviced to prevent the discharge of excessive pollutants, including smoke and/or toxic fumes or odours, and will meet acceptable noise levels.

Exhausts and ductwork from equipment will be located away from air intakes, windows, enclosed areas and public areas.

Materials will only be cut in designated areas set away from boundaries and public areas, with adequate dust (and noise) suppression. Where cutting needs to occur in situ, localised dust suppression measures will be used.

Specific locations for site entry(s) and traffic paths will be established which will be stabilised with crushed rock, bitumen or similar. Install rumble grids or similar to collect mud from the wheels of trucks leaving the site. Rumble grids will be cleaned daily with consideration given to water saving measures including recycling. Water run-off from cleaning the grid will be filtered prior to entering the legal point of discharge.

## **STORMWATER AND SEDIMENT CONTROL**

An Erosion and Sediment Control Plan will be prepared and implemented in accordance with the requirements of the relevant guidelines.

A stormwater plan will be developed detailing the following:

- Site water retention will not cause structural damage to excavations or retaining walls
- Drainage of the site to the legal point of discharge throughout construction
- Prevention of stormwater entering adjoining properties or into the sewerage system
- Capture and filtering of stormwater in sediment control points before entering the legal point of discharge.

Natural rainwater run-off will be controlled to prevent sediment draining into the stormwater system. Upslope water will be diverted to prevent it from travelling through the site. Downpipes will be connected as soon as a roof is installed on the site. Natural falls of the site will be identified and sediment filters such as straw bales filters, gravel surface barriers, sandbags, pit baskets or geo-textile mesh screens at runoff points will be established. Straw bales/geo-textile mesh screens will be replaced on a regular basis so they remain effective.

Sediment traps or filters will be placed around any drain affected by construction works to prevent sediment entering the stormwater system.

Water collected at the bottom of excavation sites will be pumped out. If the water contains only sediments, it will be filtered and pumped to stormwater. Polluted water will not be allowed to enter the stormwater system and may be pumped to the sewer system with the appropriate approvals from the relevant authority.

Waste material, including liquid wastes such as paint, concrete slurries and chemicals, will not be discharged into a stormwater drain.

## **WASTE AND MATERIALS REUSE MANAGEMENT**

A resource recovery and waste management plan will be developed, detailing the following:

- Efforts to minimise waste on site by avoiding over-estimation of purchasing requirements, minimising packaging materials, and buying environmentally approved and recycled content products
- Procedures for the collection and sorting of recyclable construction materials
- The type and quantity of materials that are to be re-used or recycled
- Provision of containers for recyclable materials including cardboard, glass, metal, and plastic; and green waste
- The re-use of timber, glass and other materials
- The recycling of asphalt, metal, bricks, tiles, masonry, concrete, plasterboard, plastic, batteries, cardboard, carpet and other materials
- Provisions for collection of daily rubbish from workers
- Procedures for removal of waste (materials that cannot be reused or recycled) from the site
- Procedures for removal of hazardous or dangerous materials from the site.
- Buy environmentally approved and recycled content products.

Removal of hazardous or dangerous materials from the site will be in accordance with State and Federal legislation.

Litter and debris 'trapped' against site fencing will be regularly cleaned.

Burning off will not be carried out on site.

## **TRAFFIC MANAGEMENT**

A construction phase Traffic Management Plan (TMP) will be developed to cover all vehicle, pedestrian and cyclist access around the site and all other roads where the impact of the construction work will impact. The extent to which works will affect pedestrian and cycling access around the site and traffic on adjoining roads will be outlined. This may include the location of cranes, hoardings, perimeter fencing, storage areas, hoisting zones, and management of construction vehicles to prevent queuing on roads.

The TMP will outline the following issues:

- Location and extent of the proposed works
- Staging and timing of the proposed works
- Requirements of any Site Security and Safety Plan
- Emergency arrangements
- Public transport
- Traffic flows and movements

The traffic management of the site will be managed throughout the construction phase

Parking and traffic controls around building sites will be complied with. Adequate provisions will be made for contractor/worker vehicles in a manner that minimises disruption to the precinct.

Access to existing waste bins or skips by waste collection contractors will be maintained. Adequate provisions will be made for contractor vehicles in a manner that minimises disruption to the precinct. Where access for waste collection vehicles cannot be maintained, assistance be provided by relocating bins and skips to an accessible