

## RANDWICK CAMPUS REDEVELOPMENT

#### **Construction Cranes Factsheet, April 2018**

## **Randwick Campus Redevelopment**

The NSW Government is investing \$720 million to redevelop the Prince of Wales Hospital and progress the vision of Randwick as a world-leading centre for health and wellbeing, research, education and teaching. An Acute Services Building will be built in Stage 1 including a new adult emergency department, extra beds, intensive care unit, and new operating theatres for the campus.

#### **Construction Cranes Factsheet**

This factsheet has been produced as a part of our commitment to provide proactive and relevant information to the local community and campus stakeholders about the Randwick Campus Redevelopment. It includes preliminary information about the type and location of the cranes that will be used during construction of the new Acute Services Building. It is written to allow you to understand the approach and to ask questions well in advance of construction activities.

### To find out more or subscribe to project updates, call 1800 571 866 or email <u>randwickcampusredevelopment@health.nsw.gov.au</u>.

#### **Tower cranes**

During construction of the new Acute Services Building, two tower cranes will be used:

- One adjacent the **northern** edge of the future building
- One adjacent the southern edge of the future building.

These two crane locations will allow materials to be efficiently and safely lifted over a large portion of the construction site.

Hammerhead cranes will be used on this construction site. Hammerhead cranes have a fixed horizontal jib arm. The jib arm can rotate 360 degrees around the tower.

# 5=2=3

For an interpreter, call 131 450 and ask them to call 02 9978 5402

#### Where will the cranes lift materials?

The cranes will only lift loads within the boundary of the site and only during construction hours.

When the cranes are not in use, they will be placed into 'weathervane' mode. 'Weathervane' allows the crane to rotate freely around the tower with the wind. The Indicative Site Establishment Plan on the following page shows the weathervane area.

If the cranes are not allowed to weathervane they would be forced to remain rigid, and during strong winds this would place increased pressure on the crane tower structure and associated footing system.

As a safety priority, the cranes must be allowed to weathervane 360 degrees around the crane towers.

If you need an interpreter, please call the Translating and Interpreting Service (TIS National) on 131 450 and ask them to phone Randwick Campus Redevelopment on 1800 571 866.

For more information visit www.randwickcampusredevelopment.health.nsw.gov.au Call 1800 571 866 Email randwickcampusredevelopment@health.nsw.gov.au



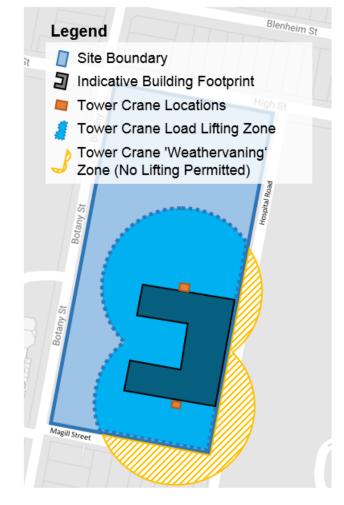
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#### Indicative Site Establishment Plan

The Indicative Site Establishment Plan below shows the proposed crane locations north and south of the indicative building footprint, as well as the area the crane will weathervane.

As can be seen in the Indicative Site Establishment Plan below, the cranes will weathervane over adjacent roads and properties.



#### Southern crane

The southern crane is proposed to be in operation for the shortest duration of the two cranes. The southern crane will be in operation for approximately 18 months from mid-2019.

#### **Electric or diesel?**

The cranes chosen for this redevelopment are electric cranes as opposed to conventional diesel cranes. Electric cranes produce less noise and pollution compared to diesel cranes providing an eco-friendly, community favourable, and sustainable solution.

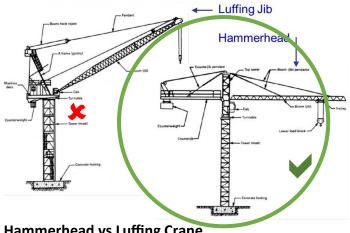
#### Why use hammerhead cranes?

Due to the site's proximity to Sydney Airport and surrounding flight paths hammerhead cranes must be used on this site.

The main difference between a luffing crane and hammerhead crane is that the luffing crane jib arm can pivot up while the hammerhead crane is horizontally fixed.

Although raising the jib arm of a luffing crane reduces the weathervane area (the area under the jib arm when the crane is not in use) it also means the jib arm intrudes further into protected airspace. For this reason hammerhead cranes must be used on this construction site.

The below graphic depicts the main differences between the two types of cranes.



Hammerhead vs Luffing Crane