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29th October 2015

Kerry Hill Architects Pty Ltd 30 Mouat St Fremantle WA, 6160

Attn: Mr Gertjan Groen

Dear Gertjan

### RE: 1 Alfred St, Sydney (Goldfields House) for Wanda Group Amending DA 2015\_882 (CoS Ref D/2015/1049) CMP Responses to JLL Queries dated 14<sup>th</sup> September 2015

In response to your request of 26<sup>th</sup> October 2015, outlined below is a response to specific queries raised during the Public Notification process.

The items specifically to be addressed include:-

24.6 Cranes over Jacksons on George

- The Tower Cranes 1 and 2 as indicated on the Wanda (Built) CMP accompanying SSD 2015\_7101 and the Amending DA 2015\_882 have potential to both swing above and drop materials onto Jacksons on George and must be prevented at all times from swinging and lifting loads above the Jacksons on George premises.
- Wanda should provide more details regarding the nature, size, radii, position, erection, dismantle and operation of
  construction cranes in accordance with the SEARs for both Tower A and the Hotel.
- JLL recommend that a condition of development consent be imposed upon Wanda requiring that the Tower A Tower
  cranes as indicated above be prevented at all times from swinging and lifting loads above the Jacksons on George
  premises and immediate surrounds and that any operation or swinging of the tower cranes over land owned by others
  at any time during the Wanda redevelopment works must only be undertaken with the written approval of the adjacent
  landowner.

24.10 Failing debris from construction

- JLL recommend conditions of development consent to be imposed on Wanda regarding potential falling debris from the Jacksons on George site as a result of vibration from Wanda construction.
- JLL recommend that a condition of development consent be imposed upon Wanda requiring that no Temporary Construction Related Systems, Plant and Equipment TCRPSE (and TCRPSE debris) be permitted at any time to be installed, operated, swung, jumped, dismantled or operated above the Jacksons on George premises. That TCRPSE be designed and enclosed such that the potential to drop debris onto Jacksons on George is eliminated.

### 24.6 Cranes Over Jacksons on George

#### Crane Operation, Positions, Radii, Load Movements etc:-

Two tower cranes will be required to service Tower A during construction. These have initially been proposed to be located with one crane in the central core and the other on the eastern side of the tower as indicated in the CMP and extract below.

As noted in the CMP unloading of trucks would be from within the site, with vehicle entry being gained from Pitt St as shown below. A work zone on George St has been ruled out due to the Sydney Light Rail and restrictions to vehicle access and workzones on George St.



Luffing jib type cranes will be utilised for the project which enables the jib/mast to be raised and lowered in a vertical direction thereby avoiding the need to pass directly over public property, including footpaths and the Jacksons on George building. This type of crane is commonplace in built-up and CBD areas and is specifically designed to be agile in terms of its ability to avoid swinging in restricted locations.

The sketch above indicates the crane radii and notionally shows it swinging over Jacksons on George. Please note that this is diagrammatic and in actual fact, the crane will be restricted from swinging over adjoining properties. % Best practice+is to totally avoid swinging beyond the boundary and the Contractorsq management plans should be written to address this prior to commencement. Furthermore, should there be a need for over sailing Jacksons on George, approval should be sought from the owners and appropriate management plans and measure put in place by the Contractor.

As with all projects, the contractor undertaking the works will have a crane management plan in place and crane drivers suitably trained/skilled to ensure that no loads are passed over Jackson on George and public areas. Covered %2+Class gantry style hoardings will be in place over the public footway for additional protection as indicated in the CMP and the building is set back approx 3m from the boundary and behind safety protection screens which will ensure no debris falls onto adjoining properties.

Below is a typical Luffing type crane to be utilised on this project indicating the ability to manoeuvre the jib in a vertical direction.



#### Crane Erection:-

Erection of cranes is commonplace in CBD areas and the erection (&/or dismantle) process usually takes 1 day to complete.

Strict processes and controls are put in place in terms of safety, pedestrian and traffic management and in Sydney is highly regulated by the City of Sydney, RTA & Sydney Buses. All submissions must be made at least 3 months in advance to the City of Sydney for approval by the traffic committee and referral to other authorities.

The Contractor will be required to prepare a detailed submission addressing all issues and risks including likely affects to public and property. At this stage, it is likely that the first crane will be erected either from within the site or from the northwest side of the site on George St. The latter would subject to approval by the Light Rail Contractors/operators at a point in time in the future.

The proposed locations of the cranes are a minimum of 15m away from the southern boundary and substantially away from Jacksons on George. Processes, procedures and control measures will be put in place by the Contractor to safeguard adjoining properties and eliminate any risk to public and property.



# 24.10 Falling Debris from Construction

### Falling Debris from Jacksons on George:-

Jacksons on George has a mix of facade types including both face masonry and rendered substrate to the northern facade and pebblecrete render to the eastern facade. We understand that JLL have recently taken steps to address areas of aged facade render that has become un-adhered from their respective substrate.

Prior to commencement the Contractor will prepare a full structural and visual dilapidation report that will detail as a baseline the existing condition of public property in the immediate vicinity including Jacksons on George. This survey will form the basis of a risk assessment and would be read in conjunction with the preparation of work method statements for demolition, excavation and construction works.

From this information, suitable work methods will be established by the Contractor and its subcontractors undertaking the works so as vibration arising from demolition and bulk excavation works and equipment operating directly adjacent will be minimised to avoid damage to surrounding properties.

Depending upon the engineer's review of the likely risk of damage to adjoining properties, vibration (& noise) sensors, along with fixed survey points may be installed in various locations including positions on the southern boundary. These sensors will log data and depending upon the prior assessed risk of damage, may have visual alarms that sensor vibrations which exceed acceptable limits and provide a visual and audible alarm to the machine operator enable works to stop and re-assess the work method being undertaken.



## Temporary Constructed Related Systems, Operation, Jumping etc:-

As noted on pages above, crane locations and swinging has been addressed so as to minimise risk to swing and movements above Jacksons on George.

The Contractor as part of its works will prepare risk assessments, work method statements and be required to implement practices that ensure no materials become dislodged or have the potential to fall from heights and pose a safety risk to public and property.

During demolition and as noted in the CMP, Goldfields House will be demolished using a top-down demolition. All hazmat will be removed utilising recognised methods in accordance with WorkCover requirements and in advance of the hard demolition activities. Buffer zones for the hazmat removal between floors will be created ensure no risk of contamination across work areas.

The external of the building will be fully scaffolded and enclosed with shade cloth and acoustic buffer material (carpet). This method is employed on the majority of CBD demolition projects and as indicated below. This method

of protection ensures that demolition material is contained within the scaffold and building footprint, thereby ensure no material falls outside the scaffold protection.

The photo below provides an indication of the proximity between the existing Goldfields House and Jacksons on George which proves an adequate safety buffer between the buildings during demolition works.



During the construction phase, the building will be constructed utilising a full perimeter safety screen system which encloses the entire building footprint and over approx 5 floors. As the construction of floors is completed and the screens are jumped, installation of windows are completed and the building becomes fully enclosed prior to movement of the screen from that workface. This ensures full enclosure of the building at all time, thereby avoiding the risk of any falling debris. Refer diagram below.



It is important to note that from Level 2 and above the Wanda project is approximately 2.5m inside of the boundary and any jumping of screens and plant will always be contained within the building site and not beyond the boundary. Materials loading platforms will be situated on either the north, east or west elevations which will enable equipment that is lifted by the crane to landed/loaded on the appropriate level. At no time will loading bays be situated on the southern elevation, over Jacksons on George.

The photo below is of typical perimeter safety protection screens fully enclosing the building perimeter and are fully engineered to ensure they are suitable for the application.



Please feel free to contact me if you have further questions and look forward to being involved in this exciting project.

Yours Faithfully

Peter Whyte General Manager NSW Construction