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2<sup>nd</sup> July 2015

Bob Smale Crone Partners Level 2, 364 Kent St Sydney, NSW 2000

Dear Bob

# RE: Sydney One Project, Circular Quay (Stage 1 DA) Proposed Construction Works – Potential Impact on Infrastructure.

In response to your request, we have undertaken a preliminary review of the proposed construction works and its' potential impact on adjoining infrastructure/public assets and provide the following information regarding compliance. This should be read in conjunction with the Construction Management Statement dated 12<sup>th</sup> June 2015 (attached).

Prior to commencement, the construction process will be carefully planned and consultation with Council and all other authorities will be undertaken to obtain a detailed understanding of constraints associated with the site and with a view of eliminating or minimising impact on adjacent infrastructure.

It is important to note that the construction works will be generally contained within the site and that access to the site will to be gained via a driveway crossing in Pitt St. A WorkZone will be required for lifting/concrete pumping also on Pitt Street as shown in the attached skecth.

Where there is a risk of "over-swing" from tower cranes on site, the cranes will be fitted with automated "lock out" guidance systems to avoid them from slewing across the light rail in George St, and the Cahill Expressway/Sydney Trains overpass.

To date our planning has anticipated a number of probable constraints and the head contractor will be required to implement detailed processes to address the following:-

# Light Rail (George St)

We are aware of the timing of the light rail and its impact on George St and as noted above and in the attached Construction Management Statement would propose to contain site access and lifting/concrete pumping from Pitt Street workzone and from with the site confines. This will eliminate the dependence of site access and a workzone from George Street that would ordinarily by the time construction commences, clash with the light rail construction or its ongoing operation.

## Underground infrastructure - Herald Square & adjoining streets (power, water, gas, comms etc)

Prior to commencement, "dial before you dig" and potholing will be undertake to establish details of all infrastructure adjacent to site and appropriate protection measures put in place as required.

Building services and mains services will require connection to existing street infrastructure and appropriate points of connection will be determined by the designers/Authorities based upon the investigations outlined above. The connections will require excavation outside the site boundary and be undertaken with the approval of Authorities/City of Sydney in terms of opening up, construction permits and connection standards.

No major plant and equipment will be placed on surrounding infrastructure (eg streets/footpaths) without approval and appropriate protection/load-spreading.

# Cahill Expressway, Alfred St & Circular Quay Station/elevated rail overpass

The location of on-site tower cranes are unlikely to reach near the Cahill Expressway and Sydney Trains elevated overpass, nor will the works being undertaken directly impact on these assets. As a typical contingency measure, noise and vibration monitors will be installed to ensure the works being undertaken have no impact on these assets.

Consultation with RMS & Sydney Trains will be required during the design phase and well in advance of the construction works to ensure that their requirements are known and addressed as part of the design.

Trusting this addresses the requirements of the Stage 1 DA submission. Should you have any questions, please feel free to contact the undersigned.

Yours Faithfully

Peter Whyte General Manager NSW Construction

# One Alfred St Sydney Construction Management Statement



Rev 1 – 12<sup>th</sup> June 2015

# 1. Introduction

This Construction management Plan has been prepared for the Amending Stage 2 DA submission to be lodged in June 2015 comprising modifications to the original Tower A floor plate. Essentially, the amended DA is for a building of similar height and orientation on the site and hence the majority of the information contained in the original CMP submitted in November 2010 remains applicable, with minor amendments incorporated herein.

One Alfred Street development is a complete redevelopment of the existing Gold Fields House site. The existing 25 level commercial office building will be demolished to make way for a new residential apartment building. The tower is located to the west of the site (known as Tower A) and will be some 50 storeys above ground.

The shared podium areas will adjoin Herald Square and will provide a pedestrian through site link to the lane way network encompassing Rugby Place behind the proposed development.

#### 2. Construction Overview & Process

The following document has been prepared in advance of the proponent carrying out a detailed procurement strategy for both major works packages of demolition and new building works. As such the following document is subject to change dependent upon the preferred methodology of the delivery partner for demolition and new building works.

The current construction methodology is based around the premise that once demolition is completed, the new works will proceed immediately.

## 2.1 Demolition Plan

The existing Gold Fields House office building was completed in 1964 and is constructed primarily of a reinforced concrete core with a structural steel column and beam arrangements supporting the tower floors and facade. The facade is a pre-cast concrete panel system with aluminium windows. The building has been refurbished several times during its life and was the subject of a complete asbestos removal program during the late 1990's. The building owner is in possession of asbestos clearance reports in respect to that asbestos removal work.

Demolition works will be subject to Work Cover approvals which must be lodged by the demolition contractor. The demolition contractor will be responsible for erection of all hoardings and pedestrian safety devises prior to demolition commencing. Due to the location of the existing building footprint relative to the boundary, B Class hoardings (with sheds) will be required on public footpaths and applications for these will be made to Council. Some area of Herald Square may be required to accommodate aspects of site establishment, material and equipment, and could continue during the reconstruction works. The demolition contractor will also be responsible for the installation and maintenance of plant and equipment and site accommodation for their workforce.

The process of demolition of the building will take in the order of 12 months to complete once the building has been vacated and hoardings erected. The building will be demolished using conventional industry methodology. A demolition plan will be prepared to maximise the re-use and re-cycling opportunities for all items embedded in the existing building

A tower crane will be erected and the building will be completely scaffolded. All pieces of major plant will be decommissioned and removed. A sub-station located in the basement of the building must be decommissioned and removed by the supply authority prior to demolition commencing.

Once the building has been stripped internally a large hydraulic excavator will be hoisted to the roof to commence the process of demolishing the concrete elements. Temporary propping of existing structures may be required if directed by the structural engineer.

Demolished material may be lifted to the street via the tower crane or may be tipped down the now empty lift shafts and loaded from the ground floor onto trucks. Structural steel items will be removed by oxyacetylene cutting and lifted to an area within the site directly onto awaiting trucks for transport offsite. During this phase of work, all materials handling will be untaken within the site with trucks entering & exiting in a forward direction off Pitt St. In addition a work zone may be required in Pitt St and application will be made to Council at that time if required.

Dust and noise suppression systems will be employed by the demolition contractor. Waste water filtration and collection systems will also be employed for all water used in association with the site. As floors are progressively demolished, scaffolding will be removed and the crane will move itself down the tower.

#### 2.2 New Construction Plan

Once demolition has been completed, excavation will commence for the basement floors below the existing 2 basement levels of the Gold Fields building. These basement floors will be excavated using large excavators and bull dozers. Large hydraulic saws may also be used to cut difficult areas. The walls to the excavation will need to be supported by combined structural systems of rock bolting and shotcreting. Spoil from the excavation will be removed from the site by trucks.

As the site is relatively close to Circular Quay, ingress of water will be monitored. If leakage is incurred, pumping systems will be employed to keep the site drained. The removal and / or discharge of water from the site will be strictly controlled. Silt traps will be put in place as part of the overall management plan to ensure contaminates does not enter the environment.

The proposed removal of spoil from the lower levels will require loading platforms and hoisting equipment located within the site boundary, and as with demolition, trucks will enter & exit in a forward direction off Pitt St. The presence of the workzone on Pitt St is likely to continue throughout the majority of the construction period. Temporary platforms and installations will be the subject of specialist engineering designs and WorkCover control.

The entire new development is designed as a reinforced concrete structure. The basement levels, all cores, columns and floors are designed as reinforced concrete. The facade is predominantly glass and is made up predominantly of both panelised glass sections and site fitted glass pieces such as sliding windows, doors and louvre sections.

Tower A will be serviced by its own concrete pumping and placing infrastructure and will be serviced by a tower crane(s) to manage the delivery of materials and removal of waste produced in the construction process again, with all loading either contained within the site or from the Pitt St Workzone.

Man and material hoists are also provided to facilitate safe and efficient vertical transport. The attached plan shows the location of major pieces of plant required for the works.

# 3. Traffic Management

The site is bounded by Pitt St to the east and George St to the west. Herald Square separates the site from Alfred St. As noted above, trucks will enter & exit in a forward direction off Pitt St. The presence of the workzone on Pitt St will be required.

Due to the upcoming works on the Light Rail and potential disruption on George St, a Workszone on George St is unlikely to be feasible and materials handling will be undertaken as described above. However, dependent upon the timing of the project and the intended traffic management procedures to be adopted in, and around the Light Rail system, it may be possible in the future to reassess the feasibility of implementing a workzone on George St.

Where possible, concrete pumping plant will be located within the site such that trucks can enter and leave the site from Pitt St.

Full time staff will be engaged to manage and co-ordinate the safe and efficient delivery of materials with trucks either entering or leaving the site.

#### 4. Noise Management

Demolition and construction noise controls will be in accordance with both Council and Work Cover guidelines. Due to the proximity of hotels and other residential properties it may be necessary to provide additional attenuation devices to pieces of plant and equipment.

#### 5. Waste Management

A full waste management plan will be provided by both demolition contractor and building contractor. A high importance will be placed on recycling of both demolition and waste materials from the new build works.

#### 6. Safety Management

A detailed safety management plan and various work method statements will form part of the management policy to ensure the safety of workers and general community engaged in or in proximity to the works. These plans will deal with all facets of the works and will include risk assessments for all parts of the works with management plans devised to manage and mitigate risks to workers and the wider community.

#### 7. Site Management

As part of the broader management of the project, site management plans for both demolition and new construction will be developed. Site management plans will deal not only with processes in respect to the works but will also detail responsibilities for various levels of management and their accountability for those various elements. Plans will clearly detail contact details for compliant handling and emergency matters.

## 8. Appendix

Site Plan. Includes hoarding plan, materials handling area and location of major plant and equipment

