CONSTRUCTION MANAGEMENT PLAN FOR DEVELOPMENT AT

12-38 AND 40 BONAR STREET AND 5 LOFTUS STREET, ARNCLIFFE

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1. BUILDING STRUCTURE

The development at 12-40 Bonar Street and 5 Lotus Street, Arncliffe is a concrete framed structure with below ground parking levels and above ground buildings up to 7-storeys in height.

Suspended slabs are post tensioned reinforced concrete slabs supported off concrete columns with infill construction being of either precast concrete, hebel walls panels or gyprock lined stud walls.

2. CRANES

Two tower cranes will facilitate construction of the development. Upon the completion of the basement, an area on the podium level will be dedicated for the purpose of unloading the major loads. This will assist in minimising inconvenience to the public by limiting the use of mobile cranes.

3. FORKLIFTS

The use of forklifts will enable the expedient transfer of smaller supplies from the basement and the works zone to the materials hoists.

4. CONSTRUCTION ZONES AND MATERIAL LOADING AREAS

There is sufficient space on site for the setting down and picking up of goods being taken to or from a construction site. Therefore the Works zone is not proposed to be installed at this development.

It is not anticipated that any road closures will be required during the construction period of the development. However, shall the temporary closures be required then the relevant applications for approval will be made.

5. CONSTRUCTION NOISE AND VIBRATION MANAGEMENT

5.1 Noise Criteria

The criteria for noise from construction activities on this project are aimed at maintaining comfort levels within the surrounding commercial and residential/hotel buildings and will be controlled in accordance with the E.P.A. Industrial Noise Policy. The criteria are outlined as follows:

- Residential area – “Background + 20 dB(A)”; and
- Retail and Commercial areas – “Background + 25 dB(A)”.

All work to be carried out in accordance with AS 2436 1981 “Guide to Noise Control on Construction, Maintenance and Demolition Sites”.

5.2 Vibration Criteria

Australian Standard 2187-1993, "SAA Explosives Code, Part 2 – Use of Explosives" stipulates in Section 11 acceptable levels of ground vibration to limit the probability of structural damage and human discomfort. The criteria presented in this Standard are summarised below.

Table 1 – AS2187 Recommend Peak Particle Velocity

TYPE OF BUILDING OR STRUCTURE	PEAK PARTICLE VELOCITY (V_p) mm/s
1. Historical buildings and monuments, and buildings of special value and significance.	2
2. House and low rise residential buildings. Commercial buildings not included in item 3 below	10
3. Commercial and industrial buildings or structures of reinforced concrete or steel construction.	25

5.3 Noise and Vibration Control Methods

The determination of appropriate noise control measures will be dependant on the particular activities and construction appliances.

5.3.1 Alternate Appliance or Process

Where a particular activity or construction appliance is found to generate excessive noise levels, it may be possible to select an alternative approach or appliance. For example; the use of a hydraulic hammer on certain areas of the site may potentially generate high levels of noise. By carrying this activity by use of pneumatic hammers, bulldozers ripping and/or milling machines lower levels of noise will result.

5.3.2 Acoustic Barrier

Barriers or screens can be an effective means of reducing noise. Barriers can be located either at the source or receiver.

The placement of barriers at the source is generally only effective for static plant (tower cranes). Equipment which is on the move or working in rough or undulating terrain cannot be effectively attenuated by placing barriers at the source.

Barriers can also be placed between the source and the receiver.

The degree of noise reduction provided by barriers is dependant on the amount by which line of sight can be blocked by the barrier. If the receiver is totally shielded from the noise source reductions of up to 15

dB(A) can be effected. Where only partial obstruction of line of sight occurs, noise reductions of 5 to 8 dB(A) may be achieved. Where no line of sight is obstructed by the barrier, generally no noise reduction will occur.

As barriers are used to provide shielding and do not act as an enclosure, the material they are constructed from should have a noise reduction performance which is approximately 10d(B(A) greater than the maximum reduction provided by the barrier. In this case the use of a material such as 10 or 15mm plywood would be acceptable for the barriers.

5.3.3 Silencing Devices

Where construction process or appliances are noisy, the use of silencing devices may be possible. These may take the form of engine shrouding, or special industrial silencers fitted to exhausts.

We do not anticipate any significantly noisy activities as conventional methods of construction are to be used.

6. CONTACT DETAILS AND SITE ACCOMMODATION

The site supervisor is housed in a shed located at the entrance to the construction site. The shed will be marked accordingly.

In approximately four months, additional site accommodation will be constructed within the basement. Additional site accommodation will be available in future units once the structure has been completed and windows have been installed.

7. HOURS OF WORK

The hours of construction, including delivery of materials to and from the site, will be in accordance with the development consent.

8. WASTE MANAGEMENT REPORT

Meriton has engaged licensed contractor for the removal of trade waste during the construction.

9. EROSION AND SEDIMENT CONTROL

All waste and stormwater will be directed to the lowest point at the site. At this point a pump out pit will be located. The pit will be surrounded by a mound of blue metal and filter fabric. All waste and stormwater will pass through the filter fabric and blue metal prior to entering the pump-out pit. All pollution control devices will be regularly maintained. Any liquid wastes such as paints or similar chemicals will be retained for recycling and other liquids will be disposed in accordance with the requirements of Sydney Water

Siltation barriers will be installed where necessary to prevent the generation of erosion and sediment during the construction period.

10. SAFETY

A safety committee has already been set up on site and comprises the main trades including an electrician, plumber, steel fixer and formworker. Weekly walks are carried out by the Safety Committee and any safety issues are promptly addressed within a 24 hour period.

A noticeboard is onsite and displays important safety notices.

Our full time safety manager inspects all Meriton's sites and arranges for all the necessary safety and first aid courses.

11. DUST CONTROL MEASURES

Temporary garbage chute will be used in construction. At the base of chutes bulk bin will collect the waste. The chutes will be fitted with devices that hose down the garbage as it is dropped in to the chutes.

Whenever possible, wet processes will be used during cutting, drilling and grinding to limit dust emissions.

For the dust control measures during the excavation process Environmental Site Management Plan prepared by excavation contractor.