



**Preliminary
Construction &
Demolition
Management Plan**

100-102 Walker Street, North Sydney Mixed Use
Commercial Development

Stage 2 Detailed DA

December 2021

Version Control

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Table of Contents

1.	Introduction	5
2.	Site Works and Constraints	5
2.1.	The Site	5
2.2.	Proposed Development	6
2.3.	Neighboring Properties	7
2.4.	Adjacent Roads	7
3.	Consultation Strategy.....	7
4.	Construction Management.....	8
4.1.	Project Delivery Methodology	8
4.2.	Site Establishment	9
4.2.1.	Deliveries	9
4.2.2.	Hoardings and Overhead Protection.....	10
4.2.3.	Lifting Equipment and Platforms	10
4.2.4.	Site Inductions	11
4.2.5.	Site Security.....	11
4.2.6.	Accommodation	12
4.3.	Construction Methodology	12
4.3.1.	Demolition	12
4.3.2.	Bulk Excavation and Earthworks	12
4.3.3.	Structure	13
4.3.4.	Façade.....	13
4.3.5.	Services	14
4.3.6.	Finishes	14
4.3.7.	Commissioning and Works Completion	14
4.3.8.	External Works.....	14
5.	Protection of Surroundings	15
5.1.	Dilapidation Survey	15
5.2.	Neighboring Properties	15
5.2.1.	Communication.....	15
5.2.2.	Emergency Contract Detail.....	15
5.2.3.	Complaints Management.....	15
6.	Safety, Security and Amenities.....	16
6.1.	Working Hours	16
6.2.	Public Safety	16
6.3.	Pedestrian Management.....	16
6.4.	Noise and Vibration Controls	16
7.	Construction Environmental Management.....	17
7.1.	Erosion and Sediment Control	17
7.2.	Hazardous Materials	17
7.3.	Discharge from Site	18
7.3.1.	Dewatering.....	18
7.3.2.	Truck Wash.....	18
7.4.	Dust suppression	18
7.5.	Waste Management.....	19
7.6.	Recycling Plan	19
8.	Construction Traffic Management.....	20
8.1.	Traffic and Pedestrian Management.....	20
8.2.	Site Access	21
8.3.	Street Closures	21
8.4.	Transport Authorities.....	22
	Appendix 1 – Proposed Site Plan (Preliminary)	23

Appendix 2 – Proposed Program (Preliminary).....	24
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1. Introduction

This Preliminary Construction and Demolition Management Plan (CDMP) has been prepared to accompany a development application (DA) for a proposed mixed use commercial development located at 100 Walker Street, North Sydney (the site).

The purpose of this document is to outline the key construction issues and expand on the following aspects of the project.

- Development of a construction methodology;
- Site setup requirements;
- Outline a delivery programme;
- Site safety management system requirements;
- Traffic and pedestrian management;
- Waste management;
- Environmental management, and;
- The community consultation process.

This document has been prepared by Tactical Group as a Preliminary CDMP as part of the Development Application (DA). The CDMP shall be further enhanced at later stages of design by a Principal Contractor (herein known as the “Contractor”) during the Design & Construct stage of the project, post DA consent, and prior to the application of Construction Certificate 1 (CC1). The contractor shall own, administer and maintain the detailed Construction Management Plan.

2. Site Works and Constraints

2.1. The Site and Proposed Development

The legal description of the site is Lot 1 in Deposited Plan 542915. The site is rectangular in shape with an area of approximately 1,392sqm, a primary frontage to Walker Street of 38.66m to the east and a secondary frontage to Little Spring Street of 38.45m to the west.

The aerial image and existing site plan below (figures 1 and 2) show the extent of the existing site;



Figure 1 Site aerial photo

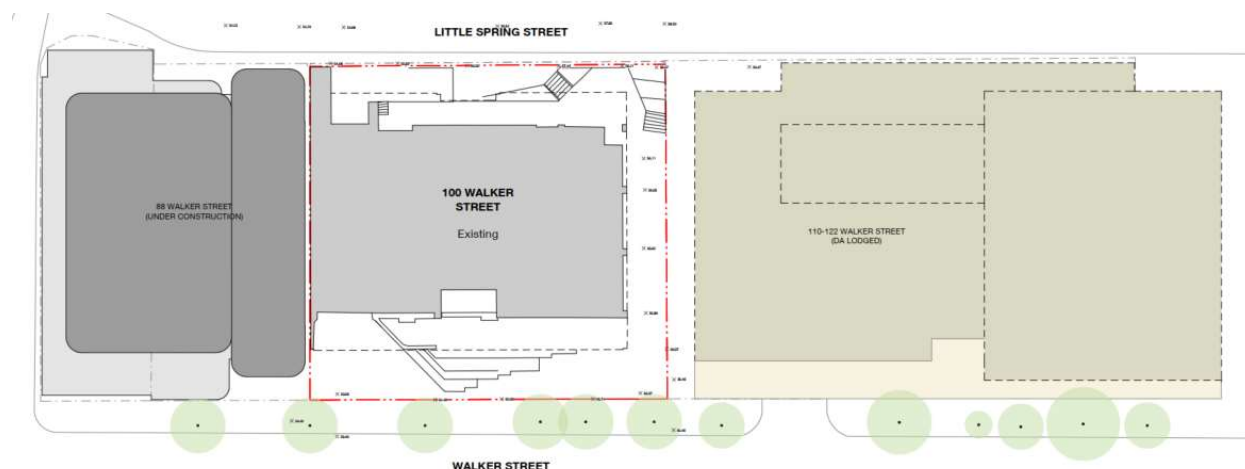


Figure 2 Existing site plan

The site is currently occupied by three low-scale commercial office buildings approximately seven storeys in height. Primarily, vehicle access to the site is provided via Little Spring Street.

The surrounding land to the north, south, east and west comprises mixed use commercial office developments, typically with ground level lobby areas and retail uses. The Alexander Apartments are located directly to the north-west of the site and is one of the few remaining residential land uses within the North Sydney commercial core.

2.2. Proposed Development

As part of the 100 Walker Street redevelopment project, the existing building located on the site shall be demolished to enable the construction of the new mixed-use development, detailed below.

The Project includes the following:

- Demolition of existing site and excavation to a depth of RL35 metres.
- The design, construction and operation of a 48-storey office building (inclusive of two levels of roof plant) with a maximum building height of RL239 metres (to the top of the rooftop feature) and a total gross floor area provision of 42,573sqm. The building will accommodate:
 - 40-storeys of commercial office space including terraces on the eastern elevation and building plant at the Low-rise Deck (Level 17), Mid-rise Deck (Level 31) and rooftop (Level 45 and 46).
 - Retail premises (including food and beverage premises and shops) accommodated on the Lower Ground Floor, Upper Ground Floor and Basement Level B1.
 - Pedestrian access to the site from several entries on Lower Ground and Upper Ground from the Walker Street, Little Spring Street and laneway frontages.
 - Repurposing existing vehicular access on Walker Street and construction of six (6) storey basement to accommodate a total of 74 car parking spaces, 2 loading bays, 4397 bicycle parking spaces, as well as associated end of trip facilities (EOTF), storage, back of house, services and substation.
 - Provision of a rooftop architectural feature to a total height of RL239.0 metres.
- Landscaping provision across the ground plane and commercial terraces.
- Public domain improvements to facilitate an improved pedestrian experience at ground plane, including activation of street frontages and provision of a 6m-wide open to the sky public pedestrian laneway (of which 100 Walker Street

Project contributes 50% of this 6m wide Laneway) along the full extent of the northern site boundary providing access from Walker Street through to Little Spring Street.

The addition of a public lift providing accessible access between Little Spring Street, the Laneway and Walker Street.

2.3. Neighboring Properties

The adjoining properties to the North and South of the site are as follows:

- North: 110-112 Walker Street (Existing Commercial Building, DA lodged)
- South: 88 Walker Street (Under Construction)

Nearby and surrounding properties include:

- 1 Denison Street (including Channel 9 recording studios)
- Victoria Cross Sydney Metro Station
- 77 – 81 Berry Street (Alexander Apartments)
- Various commercial buildings

2.4. Adjacent Roads

The proposed site is bound by Walker Street and Little Spring Street towards the east and west respectively.

3. Consultation Strategy

The projects successful delivery is contingent on a transparent and effective consultation and liaison process with the identified stakeholders. To this effect, the Contractor will be tasked with developing a Community and Stakeholder Management Strategy during the execution phase. The strategy will be building on past experiences attained from similar large-scale projects and will deliver a proactive communication program for the duration of the project.

The key objectives of the consultation will include the following (but not limited to):

- Generate general and public awareness;
- Develop and maintain a working relationship with the key stakeholders;
- Keep the key stakeholders informed of project progress, upcoming activities, impacts arising from unforeseen occurrences and actions to mitigate the impact as necessary;
- Mitigate the impact of the construction activities;
- Manage any complaints and concerns of the stakeholders and address in an expeditious manner;

The stakeholder groups will include the following:

- Adjoining property owners;
- Statutory and Utility Authorities;
- Key tenants;
- Pedestrians and users of the public domain and infrastructure;
- Contractor and subcontractors;
- Other parties including community, environmental, business groups who demonstrate an interest in the project;

Foreseeable issues of concern to stakeholders may include the following:

- Construction Hours and Site Management;
- Noise and dust control;
- Vibration from construction activities;
- Environmental remediation activities;
- Construction traffic generation including both personnel and vehicle;
- Temporary encroachment into air space over the adjoining properties for construction purposes;
- Protection of adjacent properties;
- Pedestrian traffic flow restrictions etc.
- Ground Anchors and Rock Bolts.

The Stakeholder Engagement team shall nominate personnel to act and engage as Liaison Officers to communicate with the stakeholders on all upcoming works or with issues that require clarification and/or resolution.

As part of the Stakeholder Engagement strategy, the key activities and initiatives to be undertaken are as follows:

- Introduction letters shall be sent to adjoining property owners. In the early phase of development, an initial consultation session will be held and prior to the commencement of any construction activities. The outcome is to communicate the key details of the project including commencement date, duration, contact details, safety programme, site protection and other areas deemed important and relevant.
- Correspondence with stakeholders as required to address concerns and enquiries. Furthermore, a register shall be established and maintained of all contact and correspondence with any stakeholders and reviewed at a monthly interval during the Project Control meetings;
- A monthly project progress report will be issued to the representatives of the adjoining property owners identifying upcoming activities;
- Conduct community and tenant meetings to provide a forum to discuss concerns and issues openly.

4. Construction Management

4.1. Project Delivery Methodology

The project delivery programme is included in Appendix B showing the key stages at a summary level. The key stages are as follows:

- Site Establishment, Demolition & Excavation (6 to 8 months)
- Sub-structure (6-8 months)
- Structure above ground (11-13 months)
- Progressive Façade, Fitout & Services (12 to 14 months)
- Completion and Final Works (including commissioning) (4 to 6 months)

Overall, the project is estimated to have a construction timeframe in the order of 31 to 34 months.

4.2. Site Establishment

4.2.1. Deliveries

The possible construction loading zone options will be investigated between the Contractor and North Sydney council to assess the most suitable method of receiving deliveries and handling heavy vehicle movements for the project during delivery.

The primary delivery method to site will be via the construction zones. The extent of the work zones will vary throughout the project to suit project needs for each construction phase.

The following construction zones will likely be required throughout the individual phases of the works:

- Work Zone on Walker Street
- Work Zone on Little Spring Street

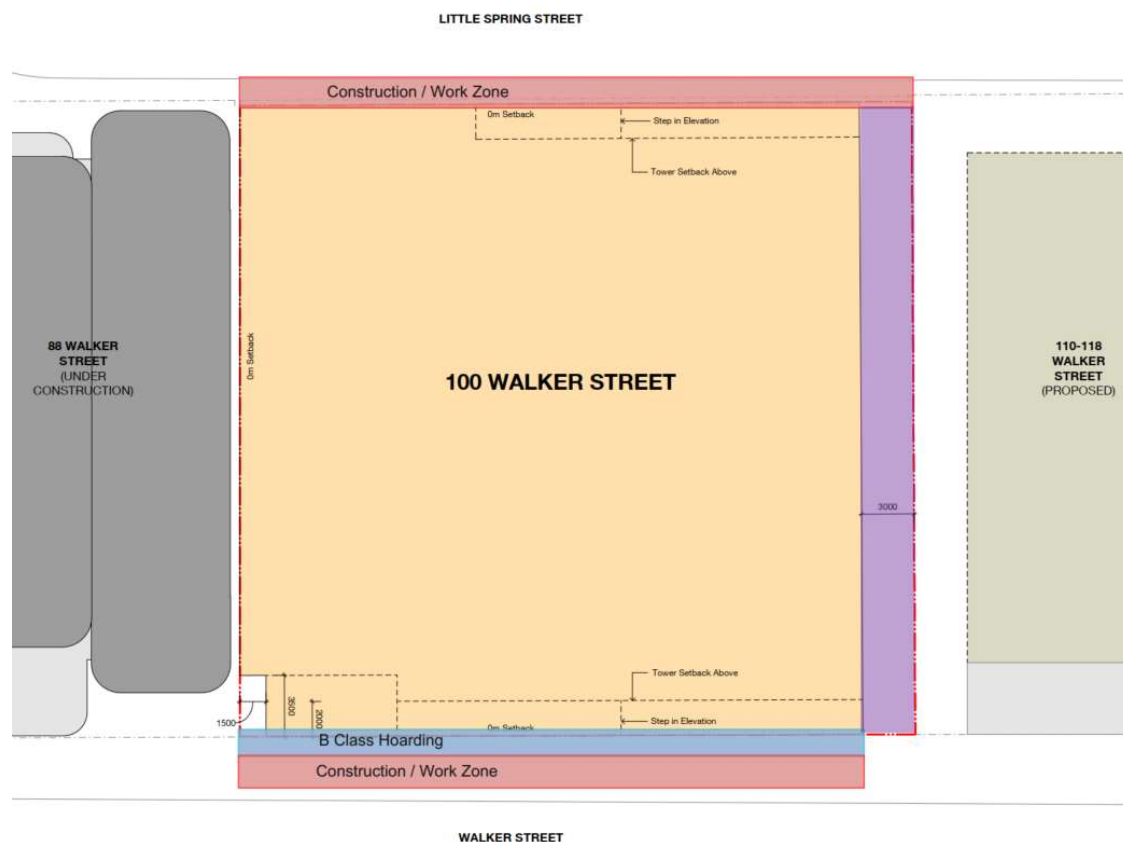


Figure 3 Construction Zone Locations (Indicative Only)

There will be a requirement to establish crossovers and work zones and both traffic and pedestrian management will be implemented upon the establishment of the construction work zones. To ensure that there is sufficient public protection between the construction site and public roads, hoardings and barriers will be utilized.

The works specified above will be closely coordinated with North Sydney Council to ensure appropriate approvals are in place prior to commencing construction works.

4.2.2. Hoardings and Overhead Protection

In order to establish a security and safe barrier between the construction site and the general public, appropriate hoardings will be installed.

In advance of installation, the following will take place:

- Where necessary, services will be relocated or protected, in particular essential service and life safety systems;
- Routine maintenance undertaken along with access provision made for emergency or maintenance access;
- Locations to be coordinated with North Sydney Council and other relevant stakeholders and consultants;
- Final locations and wall types will be detailed on revised plans and approved.

The various modes of protection are detailed as follows:

4.2.2.1. External Hoardings

During the works execution, external hoardings will be setup on both external street frontages.

Hoardings of standard plywood type construction known as “A” class hoardings and complying with North Sydney Council’s hoarding policy will be installed to establish a secure barrier between the construction site and external frontages.

In advance of tower crane installation or demolition works, “B” class hoarding of structural steel construction complying with North Sydney Council’s policy, and the project specific requirements, will be installed to facilitate the protection of the general public. The extent of hoarding will mirror the extent of constriction zone required, where pedestrian access is to be maintained.

This is detailed in figure 3.

It is noted that the Contractor will explore opportunities to remove the pedestrian zone from the rear of the building on Little Spring Street and endeavour to operate the construction zone with a series of A class hoardings and gates dependent on discussions and reviews with North Sydney Council requirements.

4.2.2.2. Load Bearing Protection Structures (over 10kPa)

Specialised overhead protection structures will be provided for either temporary structural support or for rated overhead protection of the public, tenants and work force.

The load bearing/overhead protective structures will be:

- Designed and constructed using specialised modular scaffold type component;
- Installed where appropriate to allow for aesthetic cladding if required;
- Used on Council property to protect pedestrians using the footpaths.

4.2.2.3. Scaffold and Screens

A combination of perimeter screen systems and scaffolds will be utilised for form of edge protection for the structures above the ground floor. The screens will provide perimeter protection coverage for approximately 4 levels, progressing upwards from the structure.

4.2.3. Lifting Equipment and Platforms

Tower crane(s) will be utilised for the construction phase with supplement crange provided by mobile cranes as required. The types and locations of the tower cranes are yet to be determined; however indicative layouts are shown on the preliminary Site Establishment Plans in Appendix A. These locations have been suggested as they provide sufficient access across the floor plate, access the construction zones effectively and are also outside of the floorplate which will result in the minimization of infill works following their removal.

The Contractor shall make the crane selection based on reach, lifting capacity and speed. The installation and removal will be undertaken via series of recovery cranes and a mobile crane on Walker Street which will require North Sydney Council

approval at that time. The tower crane and occasional mobile cranes will have the capability to swing over adjacent properties throughout the construction period however this will only occur without any loads fixed to the cranes.

The tower crane installation will provide safe:

- Removal of structural demolition elements and existing plant;
- Erection of new structure;
- Loading in of new structure and finishing materials required within the existing structure;
- Trade waste removal via rubbish skips;
- New plant installation.

When utilising the tower crane during the demolition process, all materials will be lifted directly from the existing floor and into awaiting trucks in the construction zones or into areas created by the demolition of existing buildings. Lifting of demolition materials will be carried out where possible using crane liftable rubbish skips.

Man and materials hoists will be required to service all levels of the existing and new buildings. The exact sizes and locations of the hoists are yet to be determined. Use of existing lifts as man hoists will also be investigated particularly at the early stages of site establishment.

Loading platforms will progressively be erected on each floor for the loading of materials, plant and equipment. These will be removed as façade works progress up the building.

4.2.4. Site Inductions

The Contractor will prepare and operate a specific site induction for all employees working on the project, and ensure that every individual on the project attends a site-specific induction before he or she is allowed to start work. This induction will be a requirement under the Occupational Health & Safety Plan to be formulated for the project. The site induction sessions will be held on a regular basis and where possible subcontractors will be requested to attend the week prior to the date they are due to start.

All employees will be educated on the behavioural and security requirements for the project. Any employee found to be repeatedly disregarding these requirements will be removed from site.

4.2.5. Site Security

A licensed security provider will be engaged to provide security services on the project. Indicative details of the proposed site security methodology are suggested below:

- **Static Guarding** – A fully compliant and professional static security officer to be located at all entry and exit points during construction working hours.
- **Compliance Management** – The security contractor will provide a compliance operator to operate the electronic compliance system that will be commissioned onsite.
- **Access Control** – Security guards stationed at the entry points to the site provide access control to the site. Each individual entering the site will have their ID card scanned by the electronic compliance system. This system provides a record of every employee onsite and ensures that all subcontractors onsite have current and acceptable insurances, are bona-fide companies, and have all appropriate OH&S documentation in place.
- **Occupational Health & Safety** – The security guards at the entry gate control the entry of subcontractors and check that those entering site are wearing the appropriate PPE for working on a construction site.

This will also be a control point to manage any of the ongoing COVID safe requirements that may be in place during the project.

- **Regular Patrols** - The security guards will also complete regular patrols of the site and will contact the Site Manager should any issues of concern be identified

4.2.6. Accommodation

Standard amenities will be provided for the construction workers including facilities for lunch, change, ablution, first aid and wash down.

Various possibilities exist for housing project personnel and include:

- On the 'B' class hoardings on the site or boundaries
- Within the new basements and podium structures once these are completed

4.3. Construction Methodology

4.3.1. Demolition

The scope of the project requires that the construction methodology reflect a logical demolition/construction process that is capable of being expedited in an efficient and safe manner. Therefore, the building will need to be scaffolded on all available elevations and appropriate shade cloth enclosure to be undertaken prior to any hard demolition works.

Upper floor internal strip out will be progressively undertaken prior to removal of the existing façade. The existing facade elements will be retained to act as an encapsulation perimeter for the removal of materials. Following the clearing of the internal floors and making safe, the existing structure will be demolished commencing at the top floor and proceeding down the building. A demolition crane will assist with the removal of debris and complemented with a series of drop zones to load trucks at the ground level.

The demolition approach is to create a single work face for safety purposes and commence from the top of the building and progressively work down to ground level and then to the basement.

Demolition will include the following activities:

- Terminate all redundant services and make safe;
- Strip out and disposal of redundant finishes fittings and services;
- Creation of void and safety rail for materials handling down the building to point of collection;
- Demolition and removal of the existing service core including amenities and stairs;
- Removal of Façade;
- Structural demolition;
- Make good and retain the sub surface perimeter at the boundary;

4.3.2. Bulk Excavation and Earthworks

Following completion of demolition works to the existing basement levels and provision of a suitable access for personnel and equipment, bulk excavation will be undertaken to the new basement levels.

A combination of rock ripping machinery with excavator-mounted rock saws and hammers will be used to break up the material which will be placed in trucks and loaded out of the site via ramps and/or long arm load out machinery. Spoil removal will take place into the work zones and required rock anchors will occur as excavation progresses.

The following areas will require bulk and detailed excavation:

- Whole of site to create the new lower basement levels;
- New lift pits and footings for the proposed service core;
- New sub surface storage facilities;
- Provision of service trenches for temporary, and future, drainage and services;

4.3.3. Structure

Structural works will commence at the lowest level in the new basement and progressively work upwards in a planned sequence that seeks to construct the building in a logical manner for reasons of safety, protection of personnel and adjacent properties.

The following activities will form part of the structural works:

- Shoring of sub surface perimeter, piling and retention to consolidate the boundary and ensure the integrity of the perimeter enclosure and adjacent property;
- Rough-in of in-ground services in the basement and areas dedicated to future installation of plant and the utility authorities;
- Construction of the lift pit and service core base
- Erection of the liftcore jumpform and progressive works to the lift core
- Continuation of the detailed excavation, footings and in-ground services on the basement floors;
- Construction of the basement floor levels;
- Construction of new multi storey levels;

The proposed preliminary design is a conventional concrete post tensioned design. The final design will dictate the number of likely pours per slab during the design and construction phase. The formwork subcontractor will be required to install a formwork hoist to lift formwork materials.

4.3.4. Façade

The installation of the Façade will follow approximately 7 floors behind structure and will be undertaken via the use of floor cranes from 2 levels above. This will be part of the stripping methodology for the structure.

Figure 4 provides an indication of the façade installation sequencing.

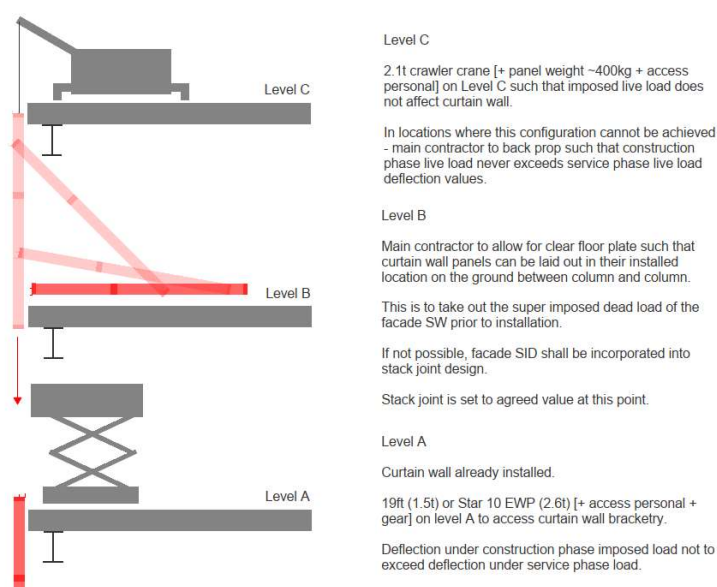


Figure 4 Sequence for Façade installation

As the structure progresses, the façade installation will follow full floor by floor where all elevations will be installed at the same time. The fit-out works will be coordinated closely with this activity.

4.3.5. Services

Access provision for utility services and placement of respective plant and equipment will commence once floors are sufficiently clear of back propping from the structural works to provide a safe, clear, approved environment. Emphasis will also be placed on the pursuit of permanent power as soon as possible.

Similarly, services rough-in and wet trades to the base building will commence concurrently at the basement level and first typical commercial level in the tower and podium as soon as the floors are sufficiently clear.

Closure of the façade will minimise exposure to inclement weather and allow the dry trades, including major installation of major plant and equipment, to follow the wet trades progressively up the building.

4.3.6. Finishes

Due to construction requirements, the basement fit-out, ground floor lobby and podium level, and amenities, will be back ended. This will allow the basement to be used for materials storage during the project.

The quality and expectations for the installation of fit out to the “front of house” and public areas necessitates early commencement to ensure installation is executed in accordance with the design.

4.3.7. Commissioning and Works Completion

The Contractor will develop a detailed commissioning plan to ensure that all services and functions are witnessed, tested, commissioned prior to handover, and effectively integrated with on-going building finetuning to ensure efficiency and effectiveness in the occupied and fully operational building. As part of the handover procedure, training for the facility management team or other people nominated by the Principal or Project Manager will be programmed and provided before the building is handed over. The operation of all the services will be included in the training plan and the function of all the building facilities and any other requirements as needed.

Progressive site inspections will be undertaken to confirm that works have been carried out in accordance with the design documentation during the completion phase of the project. Monthly inspections will be carried out by the Architect and the Design Consultants throughout the project with the Consultant team issuing reports outlining findings, reoccurring issues, potential design issues and required rectification and reinspection as required

4.3.8. External Works

The external works will be completed at the final stages of the project and include not only the site through link and the lobby entrance areas, as well as street finalisation and public domain works.

Therefore, the external works cannot be completed until all hoardings are removed. These works will be undertaken in accordance with the North Sydney Council Hoarding Construction Guidelines and Requirements.

5. Protection of Surroundings

5.1. Dilapidation Survey

A full Pre-Construction Dilapidation Report will be completed by a Dilapidation Survey Consultant for adjoining buildings and Council public domain prior to commencing works onsite. This detailed survey will encompass current structural, architectural and services conditions of the key existing adjacent neighbouring properties. These surveys will be issued to all adjoining neighbours and a post completion survey will also be compiled for comparison.

5.2. Neighboring Properties

Of highest importance is the careful site management which will minimise disruption and inconvenience to neighbouring buildings and their occupants. The Contractor will provide a Community Liaison Officer to work with neighbours, understand their needs and requirements, and, where possible, adjust construction works methodologies accordingly. The adjoining properties and neighbours specifically identified for consultation include as follows :

- 110-112 Walker Street (Existing Commercial Building, DA lodged)
- 88 Walker Street (Under Construction)
- 1 Denison Street (Channel 9 recording studios)

5.2.1. Communication

The Contractor will undertake a communication meeting with the stakeholders and surrounding tenants/residents prior to commencement of works. This briefing will involve an outline of the construction sequence, together with an overview of the staging and timing of the works. This initial meeting will provide an opportunity for input from the stakeholders before finalising methodology, including:

- To ensure ease of communication between all parties;
- Define lines of communication and appoint a single point of contact for neighbours;
- Specific dates for regular communication meetings.

It is essential that the stakeholder team is aware of current and future construction activities within the premises and how these could impact on tenants and residents.

Points of contact between the Contractor's project team and stakeholders will be agreed for various scenarios, with stakeholders provided with 24 hour contact numbers.

Key personnel from the Contractor's project team will be available to attend stakeholder internal briefings if required to communicate details of the proposed works to their respective team members.

5.2.2. Emergency Contract Detail

As nominated in the Work Zone permit to be submitted and approved by North Sydney Council, the initial point of contact for the Project for complaints will be the Project Manager and the Site Manager

5.2.3. Complaints Management

The complaints response process for the 100 Walker Street project will be outlined in the Communication Plan when it is developed. This Plan will describe the Contractor's approach and procedures for communication with internal and external stakeholders, relevant authorities, government agencies and the public.

6. Safety, Security and Amenities

6.1. Working Hours

The demolition and construction works will be undertaken within the permitted hours under the development approval. After-hours permits may be sought from the relevant authorities from time to time where special requirements exist, such as oversized deliveries.

The general working hours will be Monday to Saturday, in line with North Sydney Council approvals. No works will be undertaken on Public Holidays or Sundays.

6.2. Public Safety

Works will be undertaken with public safety as a significant consideration. Class A and B type hoardings will generally be erected around the site perimeter and where construction is occurring over or adjacent to public thoroughfares. Formwork screens will be utilised to secure leading edges during construction of structural elements. General safety measures will be undertaken as standard practice such as scaffolding around demolition works, adequate lighting, safety signage, provision of site security, flashing lights at vehicle cross overs, physical barriers between construction works areas, and public access areas.

As the project is effectively divided into four stages, the various methods and extent of the public and tenant access protection has been considered. Key elements of protection access provided to comply with the North Sydney Council Hoarding Policy guidelines are:

- “A” class hoarding erection of standard plywood type construction
- “B” class hoarding installation where tower-crane-lifting is proposed to take place.

6.3. Pedestrian Management

To establish and maintain pedestrian safe routes through the site, it is proposed that pedestrians on Walker Street will pass under a B-class hoarding on the footpath however, on Little Spring Street, a crossover will be implemented to direct pedestrians to use the western side of the footpath.

Wayfinding signage clearly indicating footpath arrangements and directing pedestrians appropriately will be provided. The North Sydney Council Coordination Office will approve this signage prior to installation.

Vehicles entering and exiting the construction zones will do so in a controlled and planned manner with minimal disruption to local vehicular and pedestrian traffic. To sustain this, focus the Contractor will manage construction, pedestrian and vehicular interactions on these public roads with traffic and pedestrian control.

At all times the Contractor will be mindful of any work being undertaken by local authorities adjacent to and/or surrounding the site.

6.4. Noise and Vibration Controls

In accordance with the relevant DA Conditions a “Construction Noise and Vibration Assessment” report will be undertaken and submitted to North Sydney Council for their review and approval. This report will detail the Noise & Vibration mitigation measures that will be implemented on the project.

This will be developed in line with the Acoustic Logic Acoustic report and based on NSW DECC Interim Construction Guideline (2009 and Australian Standard 2436-2010 Guide to Noise and Vibration Control on Construction, Demolition and Maintenance Sites).

7. Construction Environmental Management

7.1. Erosion and Sediment Control

The erosion and sediment control measures adopted for the development during the construction phase will be designed in accordance with Council guidelines and Soils and Construction – Managing Urban Stormwater – Landcom and Civil Engineering advice.

Due to excavation requirements, a sediment and erosion control plan outlining how sediment and contaminants from construction will be contained and managed will be prepared for the site works and will be provided as part of the civil drawing set. The plan will include measures such as location of site boundaries, grades and direction of ground fall for overland flow, locations of vegetated areas and impervious areas and specific erosion and sediment controls such as fences surrounding disturbed areas and sandbags around constructed pits.

The Contractor will take into account the site works staging including the preferred site access points, site shed locations and temporary stockpile locations in developing and implementing these requirements but will be ultimately responsible for managing temporary stormwater and sediment and erosion control during construction.

Erosion and sediment control will also be further addressed during detailed design and construction of this development.

7.2. Hazardous Materials

Survey works are required to establish existing site conditions and identify any remediation works that may be required. This investigation would include:

- Hazardous material (Hazmat) survey of the existing structures
- Any additional requirements for soil classification, sampling and analysis works
- Community liaison plan to be established and contact made with relevant authorities.

If hazardous materials are uncovered once site works have commenced, the following procedures and principles will be followed; this would be consistent for expected and unexpected hazardous materials:

- Notification to client and project stakeholders
- The Contractor to develop a remediation management plan adhering to industry best practice standards
- Agree strategy and commence implementation.

With asbestos for example, all employees need to be trained in the recognition of asbestos and synthetic mineral fibre (SMF) as part of their employers Safe Work Method Statements (SWMS). Employees would cease work on discovering any Hazmat not identified in the report and then inform their supervisor who would arrange for the appropriate action to be taken.

General procedures for hazardous materials removal (including asbestos) will usually be carried-out as follows, but often specific details and procedures will be developed upon material identification. Detailed work method statements will be produced identifying processors such as:

- The area to be decontaminated to be sectioned off at a minimum 10 metre radius;
- Asbestos warning signage to be erected to inform people of the nature of the work being carried out;
- 'No unauthorised access' signage to be erected;
- Water points to be established;
- Personal Protective Equipment (PPE) including but not limited to Hard Hat, Safety Boots, Disposable Coveralls, Gloves, Masks and Glasses to be worn at all times when in the Hazmat removal zone;
- All personnel involved in the removal of asbestos to have attended and completed the approved Work cover courses and to be the holders of valid, Work Cover approved;
- asbestos removal licenses;
- Tools and equipment appropriate to the type of asbestos containing material to be used for its removal in order to minimise the disturbance of the material thus preventing the release of fibres;
- Where appropriate, water to be used to keep the material slightly damp thus minimizing the chances of dust and fibres being released;

- All asbestos waste to be wrapped in 200µm plastic and tightly secured All asbestos waste to be removed from site and disposed at a licensed EPA asbestos disposal facilities;
- Asbestos waste to be removed at the end of each shift. Stockpiling of asbestos will not be permitted;
- Clearance certificates to be provided on completion of Hazmat Removal.

7.3. Discharge from Site

Site discharges will be strictly controlled to ensure hazardous materials and contaminants are contained to authority requirements and do not pollute the council storm water system. The Contractor will have within its standard procedures, the requirement of spill kits for hazardous materials also including environmental audits that review the usage and storage of hazardous materials onsite.

7.3.1. Dewatering

Effective management of water discharge from the site throughout the duration of the project will be managed and ensued by the Contractor. For this purpose, a 'Water Quality Management Plan' as a sub-plan to the Environmental Management Plan will be implemented.

Key management strategies include:

- Objective – Avoid the release of contaminants to waterways / drainage systems
- Target – All water discharged complies with the Healthy Waters State Planning Policy
- Measure – Water Quality records confirming compliance with pre-discharge limits. These and other water quality aspects at site will be controlled by:
 - Weekly environmental inspections
 - Water quality recording
 - Training for responsible staff
 - Tool Box talks for trade staff
 - Subcontractor Environmental Work Method Statements.

7.3.2. Truck Wash

A truck wash facility will be required onsite at truck access/egress points. Construction zones will be kept clean at all times to ensure tyres of trucks and vehicles exit in the same condition that they have entered.

7.4. Dust suppression

The Contractor will establish and manage dust control measures which will be implemented in areas of all active demolition and construction. Dust control will also be implemented within the construction zone as determined by the Contractor, and as required for the health and safety of employees.

All works will be undertaken in accordance with a 'Construction Air Quality' sub-plan as part of the Environmental Management Plan. Dust control measures will be implemented as required, and in accordance with Protection of the New South Wales Environment Operations Act. Dust management will be most critical during the demolition and excavation phases of the project. All subcontractors involved with these works will be required to provide Environmental Work Method Statements that specifically address dust management.

Methods of reducing dust that will be implemented are:

- Reduce quantum of demolition "breaker" work by cutting structural demolition elements into larger sections for removal by tower crane;
- Encapsulating work zones through the construction of engineer designed full height dust proof structures / hoardings;
- Reviewing tool and plant selection in an attempt to select plant with superior acoustic performance;
- Utilising concrete saw cutting techniques to reduce dust generation;

- Continuous cleaning throughout dust generating work activities;
- Ensuring demolition debris skips are covered at all times;
- Site perimeter – Solid panel hoarding will be provided on the boundary during the overall construction phase and perimeter scaffolds clad in shade cloth will be provided during demolition to minimise the escape of dust;
- Demolition and excavation – Working surfaces will be watered down as required with stock piling of material minimized;
- Plant movement within the basement will be minimised with all loads covered before exiting the site and a stabilized driveway maintained;
- Construction – A high level of housekeeping to minimise the likelihood of windblown dust and the banning of any dry grinding will be maintained.

7.5. Waste Management

The Contractor will commit to a tidy and safe site throughout the construction phase duration. Rubbish bins / skips will be provided at strategic positions around the site, where all subcontractors will be required to clear their rubbish as it accumulates. These bins will be brought down the building in the construction hoists / builders lifts and loaded via forklift into the large skips for removal from site.

A site specific Waste Minimisation Plan will be developed in accordance with the Contractor's Environmental Management System to ensure optimum waste management initiatives are implemented.

The Contractor will develop a Waste Minimisation Plan that is included as a sub plan of the Environmental Management Plan for the 100 Walker Street project. The aim of this plan is to work at best practice in minimising the amount of waste produced during the development and manage that waste to reduce the amount going to landfill.

The Waste Minimisation Plan (WMP) will be required to exceed regulatory requirements and meet compliance with potential Green Star benchmarks set for the 100 Walker Street project.

In setting such high standards and to achieve waste re-use and recycling onsite, the site- specific Waste Minimisation Plan will be implemented. The Contractor's project team will be trained in the WMP and the subcontractors will be informed and expected to meet the variations to the required changes from the industry 'business-as-usual' approach.

Subcontract trade packages will be prepared and tendered to ensure optimum recycling through Waste Management achieves the required Green Star targets.

All rubbish will be removed from site daily via wheelie bins and deposited in bins/skips which will be provided at strategic positions onsite. Where space permits, the Contractor will also provide specifically labeled recycling bins for materials such as, cardboard and plasterboard to maximise the amount of material able to be recycled.

In addition, all subcontractors are responsible for removing their own packaging and other re-usable items such as pallets from site. Adopting this policy:

- Promotes recycling by subcontractors and suppliers
- Removes unnecessary packaging at the source rather than at site
- Reduces the amount of rubbish being sent to land fill.

7.6. Recycling Plan

Detailed recycling programs will be developed for both demolition and construction phases of the works in addition to requirements under section 7.5. The site subcontractors will be required to report on extent of recycling achieved and be subject to Environmental Audits.

8. Construction Traffic Management

In general, traffic management will occur as follows:

- Construction access points will be designed to allow trucks to enter and leave the site in a forward direction;
- Construction access points will be managed and controlled by site personnel;
- Safety for works and the public in the vicinity of the worksite is maintained;
- Designated truck routes for all access points will be developed that minimises the impacts on the traffic and transport network;
- A safe, convenient and appropriate environment will be established for pedestrians and cyclists at all times;
- Truck movements will be staged and coordinated to prevent trucks circulating North Sydney CBD streets whilst awaiting access to the site
- Construction vehicles will approach the site from areas outside the North Sydney CBD using major arterial routes. Once called, there will be room for trucks to be stored in the construction zones, with no queuing on North Sydney CBD roads to occur as a result of the construction.
- Truck loads would be covered during transportation off-site
- Neighbouring properties will be notified of construction works and timing. Any comments would be recorded and taken into consideration when planning construction activities.
- All activities, including the delivery of materials will not impede traffic flow along local roads
- Materials would be delivered and spoil removed during standard construction hours
- Avoid idling trucks alongside sensitive receivers
- Deliveries would be planned to ensure a consistent and minimal number of trucks arriving at site at any one time, particularly during commuter peak hours

8.1. Traffic and Pedestrian Management

A Construction Pedestrian and Traffic Management Plan (CPTMP) will be developed prior to commencement of Construction or Demolition Works with the assistance of the Traffic and Pedestrian Consultant, Arup, that will include measures proposed to ameliorate the impacts of the construction work. These could include:

- Erection of hoardings and scaffold to protect surrounding footpaths
- Coordination with adjacent developments and authorities; and
- Traffic control with qualified TfNSW accredited traffic controllers
- All construction vehicles entering and exiting the site in forward gear under managed conditions

Additionally, drivers wishing to access the site for any reason will need to report to the traffic controllers and receive instructions and guidance. Scheduling will be the main management method in ensuring minimal multi-vehicle arrivals. No queuing or marshalling of trucks will be permitted within the public roads. A radio set-up will manage multiple vehicle arrivals advising when the site is clear for the next arriving vehicles.

Contractors are not yet appointed for the construction works.

Traffic control plans for the management of the site will be developed and submitted as required. Surrounding traffic will not be impacted by entry or exit of construction vehicles. These temporary road closures would be obtained through the normal approvals process with Sydney Coordination

Office (SCO) and North Sydney Council.

8.1.1 Construction vehicle movements

Mitigation measures would be adopted during the construction phase to ensure traffic movements have minimal impact on surrounding land uses and the community in general, and would include the following:

- All truck loads will be covered during transportation off-site for sensitive loads.
- Establishment and enforcement of appropriate on-site vehicle speed limits (20km/h), which would be reviewed depending on weather conditions or safety requirements.
- Neighbouring properties would be notified of construction works and timing.
- Materials would be delivered, and spoil removed during approved construction hours.
- Avoid idling trucks alongside sensitive receivers; and
- Deliveries would be planned to ensure a consistent and minimal number of trucks arriving at site at any one time.

The contractor will ensure sufficient traffic control is in place to assist in large heavy vehicle movements on Lee Street if and when this affects regular and safe traffic movements. This will not be an ongoing and full-time measure, but rather a measure that will be assessed and if deemed necessary implemented due to the particular activities happening on a particular day.

8.1.2 Driver code of conduct

To manage driver conduct, the following measures are to be implemented:

- All deliveries are to be pre booked.
- All deliveries are to check in at the site office.
- Drivers are to give way to pedestrians; and
- All loads have traceability point of load and unload.

No queuing or marshalling of trucks is permitted on a public road. TfNSW accredited traffic controllers will be used to manage construction traffic on the public street(s) to manage trucks entering or leaving the site.

At all times, vehicles must wait until a suitable gap in traffic allows them to enter or exit the site. The Roads Act does not give any special treatment to trucks leaving a construction site – the vehicles already on the road have right-of-way. Vehicles entering, exiting, and driving around the site will be required to give way to pedestrians.

The selected Contractor for the project will finalise the Construction Traffic Management Plan. The Contractor will manage traffic associated with the site to minimise the impact on the local area. The Construction Traffic Management Plan will be incorporated in subcontractor agreements and the key points communicated to the workforce through the site induction procedures.

8.2. Site Access

Site access will be available at various times via the existing street frontage access ways and construction zone to be created.

Deliveries will be carefully controlled for access reasons, and to minimise traffic disruptions to the surrounding road network. Materials will predominantly be delivered via the construction zones.

Heavy and wide loads will be coordinated with the relevant authorities and stakeholders for approval, to minimise traffic impact during work hours.

Onsite traffic management will be finalised with each stage of the works, as appropriate. Ongoing liaison with the relevant authorities will occur throughout.

8.3. Street Closures

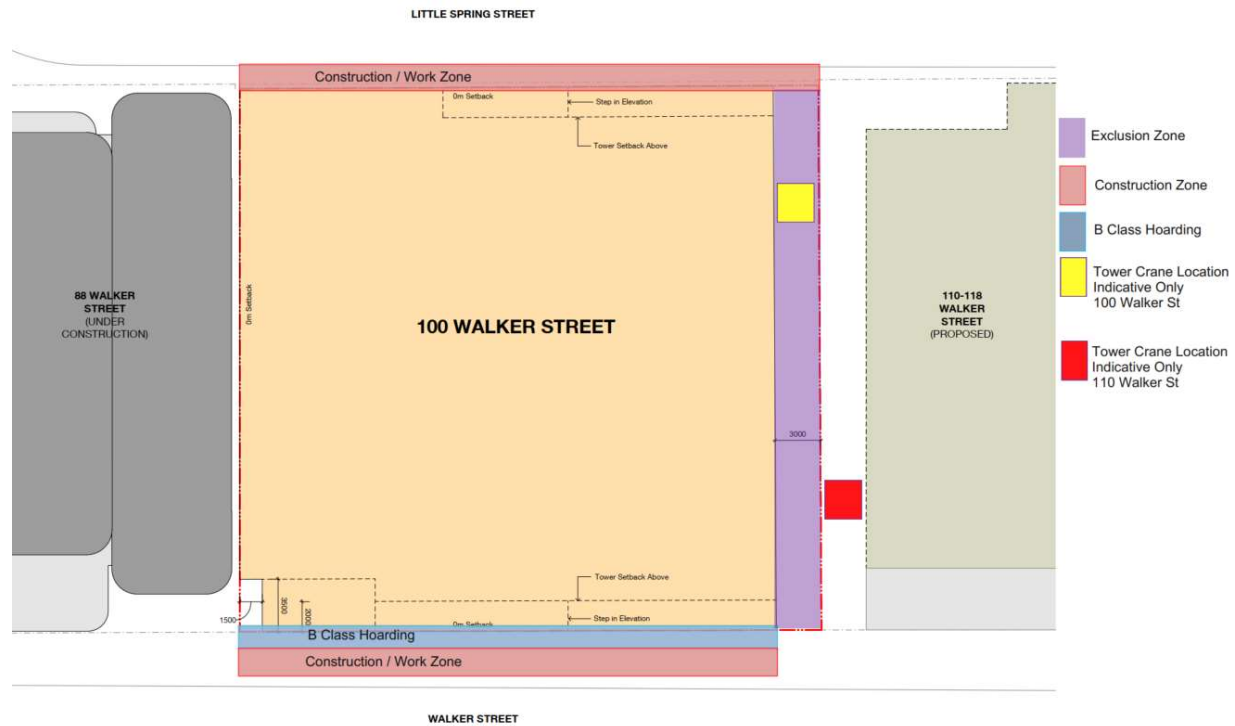
To ensure safe execution of works, some temporary street closures may be required. Such closures will be carefully planned in advance, with approvals sought from relevant authorities including the North Sydney Traffic Works coordinator. Activities that may require a street closure include tower crane erection and dismantling, and installation of major plant and structure.

Wherever possible these closures will be scheduled for nonpeak times. A specific management plan will be established to ensure the best possible outcome.

8.4. Transport Authorities

The Contractor will liaise with TfNSW, Sydney Buses, Sydney Metro and other relevant government agencies to devise a strategy and plan in consideration for the general North Sydney transport strategies in regard to issues such as bus routes, public parking and the like.

Appendix 1 – Proposed Site Plan (Preliminary)



Appendix 2 – Proposed Program (Preliminary)

Critical Task Non-critical Milestone Project Summary Summary

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