



Macarthur Memorial Park

Preliminary Construction Management Plan

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1.0 Introduction

This preliminary Construction Management Plan (CMP) has been prepared by NettCorp Pty Ltd on behalf of Catholic Metropolitan Cemeteries Trust (CMCT). This CMP supports a Development Application submitted to the Minister for Planning and Infrastructure pursuant to the *Environmental Planning and Assessment Act 1979* (EP&A Act). CMCT is seeking to secure development approval to for the construction of a cemetery at 166 -176 St Andrews Road, Varroville.

The purpose of this document is to define the construction management of the project, and ensure that the construction will be undertaken in a manner that seeks to minimise disturbance and impact on the surrounding environment.

CMCT and their selected contractors are committed to engaging with the local community, the City of Campbelltown, Government Agencies and stakeholders as they plan and deliver the Macarthur Memorial Park project.

Consultation will continue to be a key priority throughout the construction process to ensure the community and stakeholders receive regular updates and have the opportunity to provide feedback.

The final version of this Plan will ensure all construction is properly facilitated, integrated and coordinated thus guaranteeing the Project's objectives are met. It is intended that further detailed CMP's and works plans, for each Stage of the project, as outlined in this plan, will be prepared and relevant approvals secured prior to construction commencement.

1.1 Background

CMCT (the proponent) has submitted a development application for the construction of lawn cemetery, parklands and recreational space at 166-176 St Andrews Road, Varroville. The development application is currently being assessed by the Department of Planning and environment. Construction of the project is estimated to start within 3 months of development approval

The development when completed will alleviate the diminishing lack of available burial space in the greater Sydney Region for all religious cultural and community groups.

1.2 Overview of Proposed Development

The proposal relates to a development application for the construction of a lawn cemetery in four stages and seeks to establish a place of peaceful contemplation and enjoyment for visitors to the park.

The concept establishes the vision and planning for a world class cemetery and recreational space to accommodate for the future needs of Sydney in the interment of the deceased.

2. Works Description

2.1 Site Description

The site is located at 166-176 St Andrews Road, Varroville within the Campbelltown City Local Government Area. It is 113-hectare site with frontage to St Andrews Road, and bounded on the other three sides by private property. Access will only be from St Andrews Road.

The precinct is described as rural, with

- Residential development to the north.
- Vacant land and the M5 motorway to the south, and
- Privately owned farmland to the east.
- On the western side of St Andrews Road there is a high school and retreat centres.

2.2 Project Staging

The development application for the project will require authority approval. One development approval is achieved, further design development and documentation and construction planning will take place. This construction management plan will be an integral part of the construction works in stage 1.

The date of project commencement of construction is subject to development approval and design development. The Project is proposed to be constructed in four separate stages.

The approximate dates that the stages will be constructed are as follows:

- Stage One: 2019-2022
- Stage Two: 2131
- Stage Three: 2141
- Stage Four: 2156

The stages listed above are in approximate order of construction but may be revised by the cemetery operators. This construction management plan will only deal with stage one.

Stage 1 works

- Civil construction works.
- Construction of roadways.
- Construction of Buildings
- Restoration of Historic buildings
- Remediation of dams
- Vegetation Management
- Landscaping

2.3 Site Management – Organisations and Responsibilities

CMCT intends to appoint a number of experienced and capable contractors for the construction of the project works.

An indicative organisational and responsibilities chart is shown below.

Catholic Metropolitan Cemeteries Trust
Construction project manager: NettCorp Pty Ltd
Construction and Civil Contractors: to be advised

3. Physical Constraints of the Site

An understanding has been developed of the physical constraints that impact the Site. A summary of these constraints follows.

3.1 Varroville House

Varroville House is encapsulated by the subject site, and will not be impacted by construction activities, as the residence has its own driveway and access to St Andrews Road. Dust screens and security fencing will be erected in coordination with the owners

3.2 Topography, Flora, Fauna, Watercourses and Ecology

All natural habitats and watercourses will be managed through the ecological framework and documentation submitted as part of the development application. Site specific management plans will be developed and utilised during the course of all construction activities.

3.3 Roads

Access to and from the site will be through points on St Andrews Road to be determined to suit the construction methodology. Considerations of the natural physical attributes of the property will be made for

- The location of Cumberland plain woodland.
- Safe entry and egress for trucks and construction vehicles so as not to impact private vehicles travelling along St Andrews Road.
- Traffic management will be introduced to ensure safe passage to and from the site
- Installation of traffic management signage to notify vehicles of the presence of construction vehicles.
- Pedestrian management measures to be introduced to ensure safe passage of pedestrians, cyclists and others along St Andrews Road during construction activities.
- The interaction of the construction activities with the surrounding roads will be discussed with the relevant authorities, including DPE, CCC and RMS.
- Regular communiques will be issued during the construction period to ensure adequate notice is provided to the general public

The M5 is a state road managed by RMS and is an elevated overpass in this area that does not have access to and from St Andrews Road. This will have an impact on construction vehicles coming to site and leaving the area.

Designated traffic pathways will be established, monitored and maintained to avoid heavy construction vehicles using lightweight roads. Similarly, traffic speed limits will be enforced, and notification to all contractors and suppliers will be made via contractual documents, e.g. purchase orders will have designated pathways detailed on the paperwork.

4.0 Major Work Items

4.1 Excavation and Civil Works

The excavation and civil works will be completed in a manner appropriate for the rural location. Noise, dust and vibration levels will be controlled in accordance with good practice to minimise impacts to adjacent neighbours and residents, as well as the general public and amenity of Varroville.

A project specific Excavation and Civil works Plan will be developed following further design development and selection of contractor. Truck movements for excavation works will subject to further analysis depending onto cut to fill volumes and remediation of the dams. Volumes of materials brought to site as construction materials have not been calculated yet, but will be incorporated in the traffic management plans. There will be minor demolition works associated with the restoration of the historic buildings.

A dilapidation report will be conducted and all adjoining properties, kerbs, gutters, roadways as deemed to be required by DPE. Detailed work methods are yet to be determined, however it is envisaged that the Contractor will utilise large excavation machinery and road building equipment to execute the works.

The remediation action plan (RAP) and hazardous materials survey will be undertaken in accordance with the conditions of the consent to ensure that the hazardous materials are disposed of in an environmentally appropriate manner.

4.2 Construction of Buildings

The contractor for the construction of the built forms has not been selected yet.

The construction management plan to be devised for the construction of the built forms will consider the following:

- Access and egress to the site for construction deliveries
- Access, Egress and parking of construction vehicles.
- Designated travel pathways for on site traffic
- Volume of materials required for the construction process
- Dust noise and vibration from construction vehicles
- Silt, sedimentation and erosion measure as defined in the site specific environmental management plan.
- Site safety and protection of the general public
- Site security.

4.3 External Works

Works external to the site boundaries have not been considered in the development application. Works outside the property boundary will require the formulation of a comprehensive construction management plan that will include:

- Traffic Management
- Environmental management
- Tree management
- Safety management
- Pedestrian Management.

5. Construction Traffic and Materials Handling

5.1 Construction Traffic Management Plan

The construction management plan will address the following:

- Traffic volumes travelling on St Andrews Road and surrounding streets and estimated number of construction vehicle movements
- Enabling works such as temporary construction road and accommodation.
- Hours of work
- Truck routes to major arterial roads.
- Principles of construction traffic management
- Traffic management by licenced companies.
- Construction site entries.
- Location of the proposed work zone.
- Construction vehicle access arrangements
- Construction program
- Any potential impacts to pedestrians, cyclists, bus services, and general traffic within the vicinity of the site from construction vehicles during the construction of the proposed works

It is anticipated that the construction works will comprise the following building and civil works

- Chapel building
- Function centre
- Café
- Admin building
- Gatehouse
- Plant & Machinery building
- Construction of approximately 5 kilometres of roads
- Three “on grade” car park adjacent to chapel, function centre and café

- Bulk excavation - not a great volume as excavated materials are to be used for remediation of dams etc.

It is assumed the construction program would be broadly as follows

- Assuming an approval by 31 March 2019.
- Construction commencement: 1 July 2019
- Construction completion: 31 December 2021.
- Construction duration: 30 Months

It is presumed that any approval will have a planning condition similar to that below *“Prior to the commencement of any works on site, the applicant must submit a Construction Pedestrian Traffic Management Plan (CPTMP) in consultation with TfNSW, Roads and Maritime Services and Campbelltown Council. Cumulative construction impacts of other projects to ensure that coordination of work activities is managed to minimise impacts on the road network; and*

Should any impacts be identified, the duration of the impacts and measures proposed to mitigate any associated general traffic, public transport, pedestrian and cyclist impacts should be clearly identified and included in the CPTMP. Whilst it is not possible to provide detail on all of these matters at this stage, some guidance has been given below.

Construction vehicles likely to be generated by the proposed construction activities include:

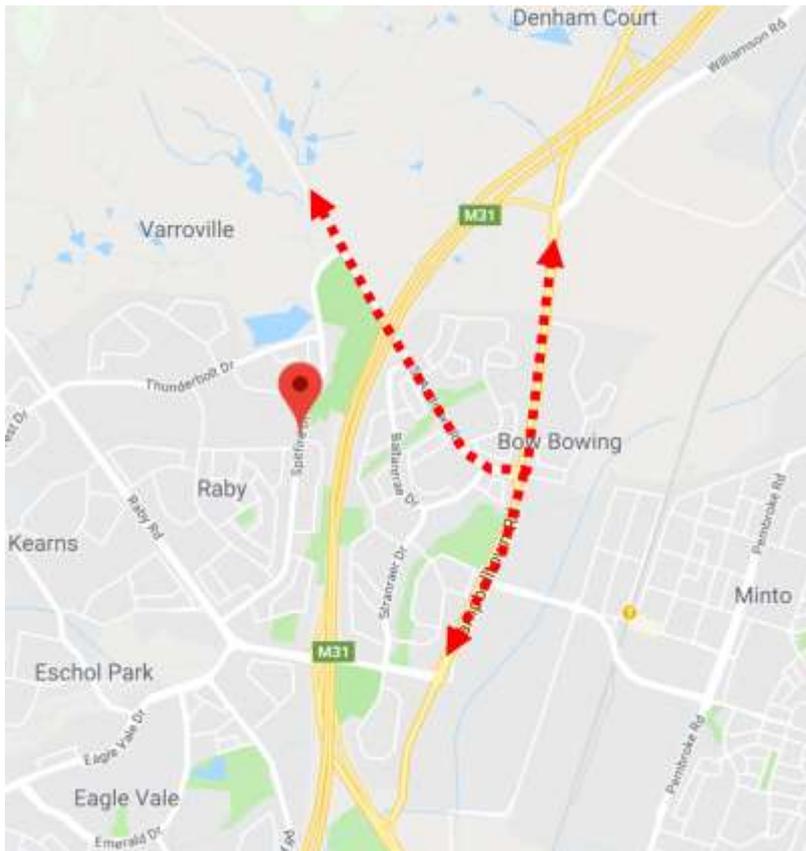
- 19m articulated trucks for larger deliveries of oversized plant and machinery, structural steel, concrete, blockwork and precast panels
- 8.8m long trucks (medium rigid vehicles) for construction activities
- 6.4m small rigid vehicles, vans and couriers for smaller deliveries.

It is expected that the majority of construction vehicles will be rigid commercial delivery vehicles. All construction vehicles will enter and exit the site in a forward direction at all times.

On-site car parking will be provided during construction within the extent of the works area. All materials handling equipment will be wholly stored on-site within the works site. Potential material and spoil storage location will be proposed. Access to the site will be provided from St Andrews Road via the proposed intersection improvement being provided for the development.

Generally, construction vehicles would have origins and destinations throughout Sydney. Dedicated construction vehicle routes have been developed to provide the shortest distances to/from the arterial road network, whilst minimising the impact of construction traffic on local streets within the vicinity of the site.

All truck drivers will be advised of the designated truck routes to/from the site and be required to adhere to the nominated routes. This will be primarily by the use of St Andrews Road onto Campbelltown Road and the Hume Highway. Figure 1: Construction Vehicle Approach Routes



Due to the size of the site, it is unlikely that any off-site truck layover areas will be necessary

Construction works are generally expected to generate up to twenty vehicle movements per day. Assuming a standard 10-hour work day, this would equate to around than two vehicle movements per hour (which comprises one arrival and one departure movement). This is considered negligible.

Peak traffic periods will generally occur during concrete pours, which will be intermittent throughout the duration of works.

Concrete pours are expected to generate up to 50 vehicle movements per day for larger pours and up to 20 vehicle movements per day for smaller pours. Concrete pours are to be actively managed by the contractor to ensure that there are no adverse impacts on the road network. Over the construction period, there may be 15 or so pours, which is one every 2 months on average.

The delivery of oversize plant, machinery and materials and removal of waste bins are expected to generate up to three vehicle movements per day. There would generally be no more than 100 workers at the site who even if they all drive would generate no more than 100 movements.

The proposed construction activities are expected to generate up to 100 car movements per peak hour in terms of staff and around 2 truck movements per peak hour (although this might increase to 5 trucks movements per hour when large concrete pours occur. This level of traffic would be less than the operational traffic from the site should be awarded development approval.

It should be noted that all construction traffic movements joining the site from the road network would be managed under appropriate traffic control to manage vehicle, cyclist and pedestrian interactions within the immediate vicinity and to ensure the safety of all road users during the construction works.

No special provisions for emergency service vehicles or heavy vehicles are required as part of the proposed construction works. Emergency and heavy vehicle access shall be maintained as per existing conditions.

Any site-specific Traffic Control Plans (TCPs) would be prepared and designed in accordance with Roads and Maritime Traffic Control at Works Sites manual. All advisory road signage shall be installed in accordance with AS1742.3 *Manual of uniform traffic control devices - Traffic control devices for works on roads* and the RMS *Traffic Control at Worksites Manual*. Signs shall be installed and maintained throughout the construction period.

Any temporary traffic controls will be regularly inspected by the contractor to identify potential safety hazards to enable implementation of corrective solutions. Daily inspections and maintenance of controls will be undertaken by the contractor and maintenance will be recorded. The Site Supervisor will check all relevant traffic control management measures on-site prior to commencement of works each day.

The construction works will be monitored to ensure that it proceeds as set out in the CMP. A daily inspection before the start of construction activity shall take place to ensure that conditions accord with those stipulated in the plan and that there are no potential hazards. Any possible adverse impacts shall be recorded and dealt with as they arise. Monitoring of the CMP would be undertaken by the contractor during weekly inspections of construction activities to monitor conformance with the requirements of the Council and this plan. Weekly inspections will focus on the following key issues:

- Safe movement of traffic
- Signage and barriers are clearly visible
- Construction roads support safe working and driving
- Safety of persons and property in and around the worksite.

Traffic will be monitored on the road networks including traffic entering and departing the works site and at key areas impacted by the works.

All construction vehicles will enter and exit the site in a forward direction. Loading and unloading shall be undertaken within the site during the approved work hours. If there are any materials spilt onto the road, site personnel and equipment shall rectify the issue accordingly, subject to appropriate OH&S provision.

Driver/Staff/Contractor Protocols

Protocols will be in place to ensure:

- site induction shall include procedures for accessing the site
- drivers shall adhere to the nominated truck routes
- drivers shall be advised to minimise construction vehicle movements during peak hours
- drivers shall be aware of any existing height limits
- drivers shall be aware of pedestrians and cyclists in the vicinity of the site
- drivers shall be aware of existing sign posted speed limits.

All staff employed on the site by the Principal Contractor shall be required to undergo a site induction. The induction shall include permitted access routes to and from the works site for site staff and delivery vehicles as well as standard environmental, OH&S, driver protocols and emergency procedures. The workers are to be informed to use public transport to access the site during the induction.

A truck driver code of conduct would encourage truck drivers to be actively responsible for maintaining safe operation practices. Such a code of conduct would include the following:

- Heavy vehicle drivers delivering to and from the subject site must:
- Have undertaken a Site Induction carried out by an approved member of the project staff or suitably qualified person under the direction of the construction management

- Hold a valid driver's license and carry while on duty for the class of vehicle operated
- Operate a vehicle in a safe manner within and external to the subject site. This includes abiding with Roads and Maritime Services road rules and driving without being under the influence of drugs or alcohol
- Comply with the direction of authorised site personnel when within the site
- Participate in the health screen program as detailed in the TruckSafe standards prior to commencing work

The Contractor must:

- Maintain a commitment to ongoing training for heavy vehicle drivers as outlined in the standards
- Conduct business in a safe, professional and legal manner
- Address their duty of care requirements in accordance with NSW Work Health and Safety legislation
- Ensure vehicles are appropriate loaded
- Allow heavy vehicle drivers sufficient time to conduct trips in a legal, compliant and safe manner.

To maintain courtesy to individuals and promote positive driver behaviour, drivers must:

- Notify the Contractor if they are not fit for duty prior to commencing work
- Notify management immediately should their status or conditions of their driver's license change in the any way
- Not engage with individuals through providing information regarding the project operation beyond providing them with the suitable contact details at the subject site
- Minimise idling of engines
- Ensure that they do not dump litter on haulage routes or on site
- Maintain trucks in a good working order and in a clean and tidy condition
- Not block residential driveways or any other access points.

All heavy vehicles entering or exiting the site are to do so in a forward motion to promote road safety and reduce the risk of crashes.

Heavy Vehicles travelling in close proximity on single lane public roads can be of concern to light vehicle drivers. To alleviate public concern and increase road safety, heavy vehicles leaving the subject site should be separated by a minimum five-minute interval.

It is difficult to schedule arrivals to the subject site (except at the commencement of work for the day) due to the different directions of approach from external jobs and the varying job completion times, however, when a driver becomes aware, through visual contact that they will arrive at approximately the same time then they are to ensure that there is a suitable gap between vehicles.

There is to be no overtaking of road registered vehicles by heavy vehicle drivers once exiting the site or before entering the Hume Highway. Drivers will also be required to note the following

- Wet Weather safety – drivers should adjust their driving speed to suit prevailing wet weather conditions encountered on the designated haul routes.
- Fog Weather safety – drivers should turn on headlights/fog lights & adjust their driving speed to suit prevailing foggy weather conditions encountered on the designated haul routes.
- Windy Weather conditions safety – drivers should adjust their driving speed/turning movements to suit prevailing weather conditions encountered on the designated haul routes.

Heavy vehicle drivers must adhere to the approved nominated routes and all drivers will be required to adhere with the posted vehicle load limits on all roads and not overload vehicles beyond its maximum loading limits and/or relevant approvals.

Fatigue is one of the biggest causes of crashes for heavy vehicle drivers. The Heavy Vehicle Driver Fatigue Reform was therefore developed by the National Transport Commission (NTC) and approved by Ministers from all States and Territories in February 2007. The heavy vehicle driver fatigue law commenced in NSW on 28 September 2008 and applies to trucks and truck combinations over 12 tonne GVM (however there are Ministerial Exemption Notices that can apply).

Under the law, industry has the choice of operating under three fatigue management schemes:

- Standard Hours of Operation
- Basic Fatigue Management (BFM)
- Advanced Fatigue Management (AFM)

All heavy vehicle drivers operating out of the subject site are to be made aware of their adopted fatigue management scheme and operate within its requirements.

The following best practices shall be adopted by all truck drivers hauling from the subject site:

- Implement best management practice, to minimise the construction, operational and traffic noise of the truck
- Apply and enforce a speed limit of 10 km/hour for all vehicles on site
- Ensure that trucks slowing to use intersections between the site and Campbelltown Road do not use engine or compression braking systems unless in an emergency situation.
- Ensure that waiting trucks do not block the entry to the carpark.
- At commencement of the working day, it may be that drivers arrive early. If this occurs drivers are to wait with engines off
- All truck vehicles must be operated and maintained in a safe and roadworthy condition as outlined in the TruckSafe standards and vehicle standards regulations. This includes compliance to the appropriate Australian Vehicle Standards and Design Rules.

These conditions do not apply in the event of a direction from police or other relevant authority for safety or emergency reasons regarding works, which may need to be undertaken to avoid loss of life, property loss and/or to prevent environmental harm.

Breakdowns

In the case of a breakdown, the vehicle must be towed to nearest breakdown point as soon as possible. All breakdowns must be reported to the Contractor and the vehicle protected to minimise the effect as a hazard to traffic. Rapid response from the company is required and drivers must contact the Construction Manager as soon as he stranded vehicle and load and safely secured.

- If there is a product spill while loading/unloading or en-route the driver must:
- Immediately warn persons in the area who may be at risk
- The Construction Manager must immediately be informed so that emergency services can be contacted, and a clean-up initiated
- All spills must be adequately cleaned up and waste disposed of in an appropriate and environmental manner
- Put out warning triangles where it is safe to do so.

Drivers are to ensure that when passing pedestrians/cyclists a safe separation distance exists between trucks and pedestrians as well as a reduction in speed if appropriate. An action plan has been prepared to manage the identified potential incidents / breakdowns as a result of the construction works. This is provided in Table 2.

It is noted that for all incidents/breakdowns that affect the road network, the contractor will notify Transport Management Centre (TMC) immediately and install traffic control as necessary to maintain safety and bus operations at all times.

Table 2: Contingency Plans

Potential Incident	Action Plan
Equipment Breakdown	Notify TMC immediately. Cease work and modify and/or install traffic control as necessary. Replace equipment and make safe. Continually monitor traffic flows and ensure safe pedestrian access through the works site and/or alternate pedestrian diversions are in place at all times.
Work Vehicle Breakdown	Notify TMC immediately. A tow truck will be called up by the traffic manager if required. Cease work and install traffic control if necessary and continually monitor traffic flows.
Poor Weather Conditions	Assess all possible risk / hazards, if necessary, postpone and reprogram works. Notify and update the TMC. If decide to proceed works, enhance safety by updating TCP and source additional equipment where required. Continually monitor working and traffic conditions, and if necessary, cease work.
Unplanned Incidents on Road Network	Notify the TMC immediately and ensure the area is safe. Where possible, cease work and modify and/or install traffic control. Manage site until emergency services / Roads and Maritime Services arrive. Support emergency services / Roads and Maritime Services, as required. When instructed by the TMC, recommence works.

In summary, it is concluded that the proposed traffic management measures would adequately address any potential traffic impacts associated with proposed construction activities.

5.2 Material Deliveries and removal of materials off site.

The site is constrained by access only from St Andrews Road, and this road will be the only feasible construction access and materials delivery route for the Project. To ensure that there is sufficient public protection between the construction site and public roads, hoardings, signage, barricades and barriers will be utilised. Vehicles entering and exiting the St Andrews Roads construction entrance will do so in a controlled and planned manner with minimal disruption to local vehicular and pedestrian traffic.

To sustain this focus the appointed Principal Contractor will manage construction, pedestrian and vehicular interactions on all 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 our site, and will cooperate with other contractors on adjacent developments to combine traffic control plans if necessary. In order to minimise traffic on St Andrews Road, a 'Just in Time' strategy will be utilised to ensure maximum efficiency whereby materials are only delivered to site when they are required. This also provides a safe and efficient flow of construction vehicles in and out of the site onto St Andrews Road.

5.3 Fences

Fences will be installed to establish a secure barrier between the construction site and the general public. During the site establishment and mobilisation period, external fencing will be erected on all external frontages.

5.4 Accommodation

In order to complete the construction works it is necessary to provide site amenities for the workers that include lunch, change, ablution, first aid and wash down facilities. The location of the site accommodation will be determined at the time construction starts, but will be located in an area that provides least impact to the neighbours and general public.

5.5 Site Induction

The Principal 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 starting 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 that 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.

5.6 Site Security

A licensed security provider will be engaged to provide security services on the project. Preliminary details of the proposed site security methodology may include the following:

- **Static Guarding** – A fully compliant and professional static security officer will be located at all entry and exit points during construction working hours.
- **Access Control** – Security guard stationed at the entry points to the site will provide access control to the site.
- **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.
- **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.

6. Protection of Heritage Items and Surrounding Properties

Heavy construction works and general access will be directed away from areas of heritage significance as much as possible. Wherever required, heritage components will be protected with appropriate panelling, barriers and fencing. In general, heritage items that are to remain and/or be refurbished will be identified and protected. Details of the refurbishment will be developed in conjunction with design consultants, the Heritage Architect and the Conservation Plan.

Site inductions and toolbox talks will be held by the Contractor to inform site personnel and visitors of the location of heritage items and the requirements for their protection. Work method statements will be developed specifically for works in close proximity to heritage items. There are areas on the site where demolition and excavation will occur adjacent to the heritage buildings that are to remain. These may require temporary protection measures to be implemented.

6.1 Dilapidation Survey

Prior to commencing work onsite, a full Pre-Construction Dilapidation Report will be completed by a Dilapidation Survey Consultant for adjacent structures, for example Varroville House, and St Andrews Road. The dilapidation report will cover all areas where construction

works are occurring and to which the construction certificate applies. A post completion survey will also be compiled for comparison.

6.2 Adjoining and Adjacent Neighbours

Careful site management, which will minimise disruption and inconvenience to neighbouring buildings and their occupants, is of the highest importance. The Construction project manager 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 are identified below.

The surrounding properties include:

- Varroville House
- Mt Carmel Catholic College
- Mt Carmel Retreat Centre
- Carmel of Mary and Joseph
- St Sava College
- Residential properties adjoining the northern boundaries

6.3 Surrounding Properties Management

6.3.1 Communication

Prior to commencement of works, the Construction project manager will undertake a communication meeting with the contractors and occupiers of surrounding properties. 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 and residents before finalising methodology.

To ensure ease of communication between all parties, a protocol will be established to:

- Define lines of communication and appoint a single point of contact for neighbours
- Specific dates for regular communication meetings
- Clarify the escalation process

It is essential that the neighbours and community is aware of current and future activities within the premises and how these could impact on them. Points of contact between the project team, neighbours and stakeholders will be agreed for various scenarios, with 24 hour contact numbers. Key personnel from the project team will be available to attend community meetings to communicate details of the proposed works to the affected parties.

- Early works within a tenanted area prior to shutdown of CBW
- Works that may affect the services to a tenanted area
- Activities in the general public realm
- Works that may affect local traffic flow
- Works that may exceed the agreed noise and vibration criteria
- Major services changeovers or shutdowns.
- The benefits to all parties of the DSA process include:
- Proposed works are planned in detail
- Stakeholders are briefed on the proposal
- Stakeholders are empowered and become active participants in the project
- Early dissemination of this information effectively to relevant team members
- Works are undertaken in a more controlled and diligent manner.

6.3.3 Complaints Response Process

The complaints response process for the Project will be outlined in the Communication Plan when it is developed. This Plan will describe the project teams' approach and procedures for communication with internal and external stakeholders, authorities, and the public.

6.3.4 Emergency Contact

The initial point of contact for the Project for complaints will be the Project Manager and the Site Manager. As other key personnel commence onsite, further names and contact numbers will be issued and displayed prominently on signboards.

7. Public Amenity, Safety and Pedestrian Management

7.1 Hours of Work

General construction works will be undertaken within the hours permitted under the development approval

Working hours (to be confirmed) are foreseen as follows:

- Between 7am and 6pm Monday to Friday
- Between 7am and 6pm Saturday
- No working Sundays or public holidays

7.2 Noise & Vibration Management

Particular care will need to be taken during the construction of the project to control noise and vibration. Work methodologies and plant selection for excavation and construction will be reviewed to determine the most practical and programme-effective solutions for these works. This active approach will mitigate the potential for human discomfort and noise and vibration disruptions to surrounding neighbours.

Prior to the commencement of any works onsite, a Noise and Vibration Management Plan will be developed by the project team to develop strategies for the mitigation of noise and vibration generated by the works. In order to help meet the noise and vibration requirements of the site, baseline testing will be carried out and existing operational levels identified. Early identification of baseline levels will enable subcontractor methodologies to be specifically tailored to ensure the benchmarks are not exceeded.

Vibration and noise generating activities will be coordinated and undertaken in consultation with the appropriate parties and carried out during the subsequent agreed periods. Work methodologies and plant selection will be reviewed to mitigate the potential for noise and vibration from the new works effecting adjoining properties.

Work practices that minimise noise and vibration will be used wherever possible. These include but are not limited to the following:

- Flexible working hours avoiding noisy work during peak business operation times
- Plant and equipment selection to reduce noise where possible
- Plant and equipment fitted with silencers where possible
- Acoustic testing of proposed methodologies prior to commencing work
- Erection of temporary screens to encapsulate dust and noise
- Diligent housekeeping to minimise the generation of dust
- Methodology development aimed at finding alternatives capable of reducing noise and vibration where possible
- Location of major plant away from noise and vibration sensitive areas where possible.
- The following items outline some of the project teams' key control measures which will be applied during the construction stage to assist with noise reduction:

- (a) Plant known to emit noise strongly in one direction would, where possible, be orientated so that noise is directed away from noise sensitive areas.
- (b) Machines fitted with engine covers would be kept closed when not operating.
- (c) The height materials are placed either into or out of trucks would be limited where possible.
- (d) Stationary and mobile equipment including offsite vehicles would be maintained regularly.
- (e) Operation would be limited to occur within the approved hours.
- Continuous training through inductions and ongoing meetings would be provided for operators, labourers, subcontractors and supervisors, to keep minimal noise impacts on local residents.
- Notifications of particularly noisy works would be undertaken prior to any planned works commencing. This would include either personal or community meetings with adjoining property owners.
- Regular servicing of equipment , or when an individual plant item are identified as being particularly noisy, would be conducted.
- A construction noise monitoring plan for the construction period prior to commencing works would be designed and implemented.
- All complaints in relation to noise would be monitored and recorded.
- An onsite person would be identified as the contact point in the event of noise complaints with contact details provided within the Construction Management Plan.

Noise monitoring will be undertaken to monitor and help minimise construction noise in order to avoid discomfort to the occupants of surrounding premises. The specific noise monitoring methods that will be used will be outlined in the Construction Noise Plan.

7.3 Public Safety

Works will be undertaken with public safety as a significant consideration. Security fencing will be erected around the site perimeter and where construction is occurring over or adjacent to public thoroughfares.

General safety measures will be undertaken as standard practice such as scaffolding around works, adequate lighting, safety signage, provision of site security, flashing lights at vehicle cross overs, and physical barriers between construction works areas and public access areas.

8. Environmental Management

An Environmental Management Plan will be developed to provide a coordinated high level plan that details, at a project level, the environmental management strategies and procedures that will be adopted on the project on which the selected contractor will operate as the Principal Contractor.

This plan will be reviewed and certified to:

- AS/NZS ISO 9001:2008 – Quality Management System
- AS/NZS ISO 14001:2004 – Environmental Management System
- AS/NZS 4801:2001 – Occupational Health and Safety Management System
- New South Wales Government Accreditation Scheme.

8.1 Focus Areas

The following areas/features of the project have been identified as posing potential risk to the environment during construction:

- Site discharge during excavation works and dam rehabilitation.

- Potential effects of noise and vibration on neighbouring properties.
- Potential water and air contamination

The Environmental Management Plan will address these concerns through sub-plans including, but not limited to:

- Spill Management
- Air Quality Management
- Waste Management
- Noise and Vibration Management
- Liquid Waste
- Water Quality
- Disturbance of Flora and Fauna
- Indigenous and European Heritage
- Refuelling
- Groundwater Management

8.2 Occupational Health & Safety

A Contractor will be the nominated "Principal Contractor" as required under the WHS Act. This role will require the careful and controlled management of worker and public safety. Detailed methodologies are yet to be developed, however typical approaches include job training, toolbox talks, and implementation of emergency management plans, safe work method statements, weekly WHS meetings and audits to confirm compliance. The Contractor will be required to report on WHS on a regular basis.

8.3 Hazardous Materials

Consultant survey works are required in order 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.

In the event that 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
- Advise the client of the most cost and time efficient solutions whilst adhering to industry best practice standards
- Agree strategy and commence implementation.

General procedures for hazardous materials removal will be carried out as follows, but 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 bunted off at a minimum 10 metre radius
- 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 hazardous materials to have completed the approved Work cover courses and to be the holders of valid, Work Cover approved removal licenses
- Tools and equipment appropriate to the type of material to be used for its removal in order to minimise the disturbance of the material thus preventing the release and propagation of the material.
- Clearance certificates to be provided on completion of Hazmat Removal.

Consultant survey works have not been carried out to establish existing site conditions and to identify a remediation works that may be required. When hazardous materials are identified, procedures and principles that have been developed in accordance with the RAP will be utilised. These procedures and principles will be consistent for expected and unexpected hazardous materials. They are outlined below:

- Notify client and project stakeholders
- Advise the client of efficient solutions according to industry best practice standards
- Agree strategy and commence documentation of DSA (Disruption Shutdown Applications)
- Communicate DSA to all stakeholders
- Validation of Remediation Action Plan upon completion of hazardous material removal.

Hazardous substances supplied to the project will be approved for use and accompanied by a current Material Safety Data Sheet (MSDS). All hazardous substances will be registered, correctly stored, decanted, used and disposed in accordance with the MSDS and regulatory requirements. Employees will be trained in the Safe Work Method Statement (SWMS) based on the MSDS and provided with the appropriate Personal Protective Equipment (PPE).

9.4 External services

The protection of all council infrastructure including trees, overhead cables, and existing services will be managed to ensure that all infrastructure is maintained, and in the same condition at the completion of the project.

The following protection procedure will be adopted:

- Ensure all existing services are identified, and terminated or diverted as appropriate
- Ensure movement or placement of construction plant does not damage infrastructure
- At the beginning of construction we will advise adjoining and nearby properties of commencement date, possible disruptions and approximate construction time.

9.5 Site Discharge

Any discharges from the site 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.

9.6 Dewatering

The project is committed to the management of water discharge from the site throughout the duration of the project. To ensure effective management, 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 the 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.

9.7 Silt and sedimentation protection

A stormwater and sediment control plan will be developed to ensure that stormwater from the project does not enter the existing watercourses without being filtered, and that no water entering the local stormwater system contains silt or other contaminants.

The stormwater and sediment control plan includes but is not limited to providing further detail to the below key control measures:

- Extent/location of silt protection to be installed
- Extent/location of sediment basins to be installed
- Regular weekly checks of silt fences, banks and the like
- Specific checks after any significant storm event to ensure integrity and performance of silt protection
- Sediment fences to be repaired as required and excessive sediment deposits should be removed
- Water quality samples must be taken and analysed prior to the release of any water from the sediment pond/catchment
- All water quality data including dates of rainfall, testing and water releases must be maintained in an onsite register
- Maintenance and cleaning of adjoining/surrounding access roads.

9.8 Dust Control

Dust control will be implemented in areas of all active excavation and construction. Dust control will also be implemented within the construction zone as determined by the project team, and as required for the health and safety of employees.

All works will be undertaken in accordance with 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 excavation stage 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:

- Hoardings and screens.
- Reviewing tool and plant selection in an attempt to select plant with superior acoustic performance
- Continuous cleaning throughout dust generating work activities
- Ensuring construction skips are covered at all times.
- Site perimeter – Screening will be provided as required during the construction stage and shade cloth will be installed to minimise the escape of dust
- Excavation – Working surfaces will be watered down as required with stock piling of material minimised

- Plant movement within the site will be minimised with all loads covered before exiting the site and a stabilised driveway maintained
- Construction – A high level of housekeeping to minimise the likelihood of windblown dust and the banning any dry grinding will be maintained.

9.9 Waste Management

It will be part of the project teams' philosophy that a tidy site is a safe site, and this principle will be maintained throughout the construction 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 removed from site regularly. Subcontract trade packages will be prepared and tendered to ensure optimum recycling through Waste Management achieves the required Green Star targets. Where space permits, the Contractor will also provide specifically labelled 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.