DYRSL EXTENSION & CAR PARK

DEE WHY RSL CLUB LTD

CONSTRUCTION AND ENVIRONMENTAL MANAGEMENT PLAN TO SUPPORT S96(2) APPLICATION

February 2018

Contents

1. INTRODUCTION

This Construction and Environmental Management Plan (CEMP) has been prepared to support a S96 modification application to Northern Beaches Council for approved development DA2017/0244 at 932 Pittwater Rd Dee Why.

This CEMP outlines the proposed project staging, the environmental, health & safety impacts and how they will be managed during delivery of the proposed project and other key matters to be addressed during construction.

This CEMP is still an initial plan prepared in advance of the appointment of Contractor and Building. A more detailed CEMP will be prepared prior to commencement of works and updated from time to time to respond to the changing construction staging or methodology.

2. THE PROJECT AND STAGING

2.1. The Site

The Dee Why RSL site is located at 932 Pittwater Road, Dee Why, with the legal description of Lot 1 in DP706230 and a total site area of 1.483ha.

The Dee Why RSL Club site is bounded by Pittwater Road and Oceangrove residences to the west, Hawkesbury Avenue to the north, Clarence Avenue to the east and a childcare centre (Dee Why Kindergarten) to the south.

Existing improvements on the site comprise an AMF bowling centre and the Dee Why RSL Club including a free standing two storey carpark to the south east of the site.

2.2. The Project Modifications

The modifications proposed to the approved project are:

- Reduced excavation, shoring and dewatering to create a tanked basement;
- construction of a new split level carpark (four and a half levels in-ground) and new loading dock entry positioned away from the porte cochere;
- Reduction of the club expansion in the area of 135m2
- 600m2 reduction in shoring wall
- 8000m3 reduction in bulk excavation
- 1270m2 reduction in formwork & suspended slabs
- Basement reduction from eastern Oceangrove Seniors living village boundary allows for soil & rock anchors to be installed to western shoring wall, eliminating internal bracing and allowing bulk excavation program to be reduced
- 1 month saving to program basement reduction & L2 floor plan reduction
- Diaphragm wall cut off wall to rock, ensures that all dewatering will be within the basement walls with no draw down of the water table
- Car park redesign allows access to lifts and club reception from all levels, previously mezzanine and ground level needed to use egress stairs

The Project Team consists of the below key parties which may change from time to time;

Role	Company
Principal	Dee Why RSL Club Pty Ltd
Principal's Representative	Farrell Coyne Projects
Contractor TBC	Icon Construction / Hutchinson Builders
Architect	ALTIS Architecture
Quantity Surveyor	MBM Consulting
Planning Consultant	Urbis
BCA Consultant	BM+G
Structural Engineer	SDA Consulting
Civil Engineer	Acor Consulting
Mechanical Engineer	Evolved Engineering
Electrical Engineer	Evolved Engineering
Wet Fire & Hydraulic Engineer	To be confirmed
ESD consultant	Cundall
Geotechnical Engineer	Douglas Partners
Environmental Engineer	Douglas Partners
Access Consultant	Morris Goding
Acoustic Consultant	Wilkinson Murray
Fire Engineer	Innova Consulting
Traffic Engineer	PT&C
Waste Management	Waste Audit & Consultancy Service

3. ENVIRONMENTAL, HEALTH & SAFETY MANAGEMENT

3.1. General

It is imperative that the safety and wellbeing of all the Dee Why RSL stakeholders, the general public and visitors to the site, the client, consultants, subcontractors and all site staff are addressed in all planning, design and management decisions.

A comprehensive Environmental, Health and Safety Management Plan which addresses how the builder and Project Team intends to manage environmental health and safety during the construction of the project will be developed and will become part of their Construction Management Plan. The principal contractor for any stage of the works will be required to establish, maintain and enforce an environmental, health and safety management plan inclusive of the full extent of the proposed works.

The Project Team, led by the Principal, Project Manager and Principal Contractor will have responsibility for maintaining relationships with project stakeholders to ensure that the project objectives are achieved with minimal disruption to the adjoining owners, businesses, the authorities and service providers that we interact with. The Project Team will seek to achieve a workable balance between maintaining project momentum in accordance with the delivery program and the needs and expectations of stakeholders.

3.2. Safety

Any party engaged to undertake works at the site will be assessed to ensure they are qualified, competent, insured, financial and appropriately licensed to deliver a project of this type and complexity.

All head contractor staff and subcontractors are required to undergo a site induction which outlines the construction procedures and management framework specific to the project. The induction is aimed at instilling in each person a common-sense approach to safety to ensure they employ the responsible environmental practices and awareness needed to deliver the project in accordance with the relevant regulations and standards. A record of all site inducted personnel will be retained on site.

All site personnel are required to have completed their White Card Training which will be confirmed during the site induction. It will be a prerequisite for all parties entering the site and/or conducting any works on site to attend a site induction which will induct that attendee into the site environmental, health and safety management plan as updated and amended from time to time.

The general site safety principles will be to:

- establish a safety first culture for all parties involved with the project;
- ensure a safe environment for the public travelling past the site and occupants of the adjoining properties including the club;
- ensure safe access onto the site and a safe working environment for staff, employees, subcontractors and site visitors;
- ensure site safety is addressed by all persons on the site in accordance with relevant Work Health and Safety legislation;
- Implement responsible and practical management procedures to minimise any impacts and disruptions during the construction process to surrounding infrastructure;

Upon appointment of a principal contractor for any stage of the works, the principal contractor will be required to prepare a detailed site safety plan and manage the site in accordance with relevant Work Health and Safety legislation and project specific site rules.

3.3. Sediment Control and Dewatering

The principal contractor will ensure that sedimentation control measures such as drain socks, geofabric and or sand bags and the like are installed at critical locations around the site to divert, dam and remove, filter or catch water containing sediment from entering waterways, the existing storm water or sewerage systems. Sediment and erosion control measures will be implemented and maintained for the demolition, earthworks and construction works to prevent the movement of sediment particles into the stormwater system.

Refer to the sediment and erosion control plan provided in the civil works package (prepared by ACOR consulting drawing C3.01, March 2017) as part of this development application for further detail regarding the proposed sediment and erosion control measures.

Dewatering of basement excavations will be required (refer Douglas Partners Groundwater Analysis and Preliminary Modelling report included as part of this development application). A detailed dewatering management plan will be developed and implemented by the principal contractor in accordance the requirements of the Office of Water and to the satisfaction of the principal certifying authority, The Department of Land and Water Conservations Erosion and Sediment Control Manual, the Department of Housing Manual, Managing Urban Stormwater Soils and Construction (August 1998) and the NSW Protection of the Environmental Operations Act 1997.

Ground water will be tested to confirm the appropriate method of filtering and/or treating prior to its disposal into the stormwater or sewer system (as determined by the dewatering management plan and approved by the relevant authority). Any ground water or storm water entering the basement into the excavation area shall be collected into a sump constructed within the basement excavation. The water in the sump shall be allowed to settle with the aid of flocculants (as required) and then pumped out into the existing storm water systems pending approval by the relevant authority.

Wheels of vehicles departing from the site will be monitored for cleanliness and washed as required prior to leaving site. The existing footpath crossovers will be regularly monitored and maintained as required to prevent the occurrence of any wheel based sediment entering Council's stormwater system. The adjacent public roads will also be monitored for sediment deposits and a sweeper truck engaged to remove any material as the need arises.

3.4. Demolition and Hazardous Materials

A pre-demolition hazardous materials building materials report has been prepared by Douglas Partners (November 2016, refer Appendix included in the Douglas Partners Waste Management and Acid Sulfate Soils Assessment). Douglas Partners conducted a full access sampling and identification survey (pre-demolition) of the carpark to facilitate the identification and location of asbestos-containing materials (ACM) and other hazardous materials (Hazmat Survey) to enable their removal prior to demolition. This inspection involved visually identifying known or suspected hazardous materials, collecting representative samples from suspected ACM and/or other hazardous materials, and recording the type and location of hazardous materials throughout the accessed areas of the building.

No hazardous building materials were identified in the surveyed building; however it is noted that some areas were not accessible due to height and access restrictions and that further investigations must be undertaken prior to commencement of works on site. Any hazardous materials found must be removed and disposed of by licensed contractors in accordance with Environmental Protection Authority and WorkCover NSW guidelines.

All demolition materials will be sorted into concrete, brick, timber and steel on site to ensure as much material as possible is recycled. It is anticipated that 100% of all brick, concrete and reinforcement steel will be recycled at a recycling facility such as Kimbriki Resource Recovery Centre or other as elected by the contractor.

Flammable fuels such as petrol, diesel, Oxy-acetylene, oils, etc. will be stored in lockable compounds with sufficient ventilation. Material safety data sheets for all flammable and potentially harmful liquids will be maintained and stored on site.

3.5. Excavation and Contamination

Detailed geotechnical investigations undertaken to date by Douglas Partners (historically and more recently; see Geotechnical Report, March 2017 provided as part of this Development Application) states that the subsurface profile encountered in the boreholes is generally as summarised below:

- pavement surface, with road base and fill to circa 300mm deep;
- fill material up to approximately 1.2m;
- sand, clayey sand and sandy clay; and
- sandstone bedrock of varying strengths and depths.

The Douglas Partners Preliminary Waste Classification and Acid Sulfate Soil Assessment (Assessment) concludes the site materials include insitu fill and natural materials with potential acid sulfate soils present (see section 3.6).

This preliminary Assessment concluded that all filling materials on site meet the criteria for General Solid Waste as defined by the EPA and identified no special waste or hazardous waste. The Assessment included a classification of the natural soils and bedrock underlying the filling, and confirmed that the materials satisfy the EPA classification of VENM.

Further detailed testing is required to finalise these preliminary waste classifications prior to disposal. This testing, and the appropriate disposal of material to a licensed waste disposal facility in accordance with legislative requirements is the responsibility of the principal contractor.

3.6. Acid Sulphate Soils

Investigations undertaken by Douglas Partners have found evidence of potential acid sulphate soil material (PASSM) on the site. In response, a preliminary ASS/PASSM management plan has been prepared and included as part of this development application.

This report details how any ASS or PASSM encountered during excavation will be managed, and details how the material will be removed off site to an approved treatment or disposal facility. On site treatment is not considered feasible given the spatial restrictions of the development site.

3.7. Dust Management

The contractor will establish and maintain dust suppression strategies to ensure impacts to air quality are managed within the legislative guidelines and will ensure personnel are aware of sensitive receptors and need for controlled work practices.

Where reasonably possible, a wet process for cutting, drilling and grinding is to be adopted to limit dust emission. The contractor will ensure measures are in place to prevent dust from affecting the amenity of the surrounding land uses during construction in accordance to WorkCover NSW's codes of practice.

As required, for dust producing activities the contractor may choose to install a water system with water pipes along the boundary of the site with spray nozzles at regular centres to continually wet down the demolition excavation activities. During any demolition, or excavation works including hammering, sawing or ripping it is common practise that the site is also attended by a labourer with a gurney to wet down at the source.

The contractor shall ensure that all trucks leaving the site have their loads covered. Loose materials stored on site will be protected in a manner to minimise impacts from prevailing weather conditions.

3.8. Noise and Vibration Management

The contractor will prepare a detailed noise and vibration management plan as part of their overarching construction management plan for the project. The plan will include a process for monitoring and testing of significant noise producing activities during the works, which will build upon the analysis and recommendations in the Acoustic Report prepared by Wilkinson and Murray as part of the Development Application.

The principal contractor will undertake all works using equipment and a methodology with reference to the EPA noise guidelines and the recommendations in the Wilkinson Murray report. Acoustic protection is proposed at key locations to shield receptors at the perimeter of the site as indicated in Annexure A. The contractor will ensure noise and vibration is minimised and kept within acceptable levels, with ripping and saw cutting adopted in lieu of jackhammering where viable, reasonable and feasible. The contractor will ensure equipment employed is the correct size for the work and no larger, and will select plant with a lower noise output where possible.

Prior to commencement of any works, a dilapidation survey is to be undertaken of the adjoining properties and public infrastructure.

3.9. Construction Waste Management

A detailed waste management plan will be prepared by the principal contractor. Waste during the construction period will be sorted into, paper, cardboard, brick, concrete, timber, steel, aluminium and general waste. Suitable bins will be provided to allow all possible materials to be recycled. All bins will be removed by a licenced contractor with appropriate systems to sort, recycle waste and ensure proper disposal as required.

It is anticipated that 100% of all brick, concrete and reinforcement steel will be recycled at a recycling facility such as Kimbriki Resource Recovery Centre (as determined by the contractor). In addition, the principal contractor will ensure offsite fabrication is maximised where practical to ensure the amount of wastage on site is minimised.

4. CONSTRUCTION MANAGEMENT

4.1. Working Hours

The site working hours will be within the working hours approved in the development consent and will include Monday – Saturday, with no works on Sundays or Public Holidays without express permission from the consent authority.

4.2. Site Security

The principal contractor will be responsible for access to and security of the site during demolition and construction of the project.

The site will be secured by perimeter fencing (complying with WorkCover NSW codes of practice) and hoardings with designated vehicle and pedestrian entry gates. Vehicle entry points will be manned while in operation to ensure protection of the public when vehicles are entering or leaving the site. All gates will be appropriately secured after hours.

Daily inspections of all hoardings, fences & gates will be undertaken with graffiti and bill posters removed and/or painted over within 48 hours and damage repaired as quickly as reasonably possible.

Indicative perimeter fencing and overhead protection to adjoining public and private properties is set out in the construction management diagrams provided in Annexure A for the different phases of construction.

The principal contractor will review and confirm its preferred fencing and overhead protection strategy as part of its construction management plan to be prepared and approved by the principal certifying authority prior to commencement of works.

The principal contractor is responsible to report any serious external security concerns with the local police.

4.3. Pedestrian Circulation

The public footpath on Clarence Avenue will remain available for use by the public at all times, with protective hoardings employed as required. Construction will be managed to ensure the Dee Why Kindergarten retains access to and from the existing retained car park at all times throughout the construction period. Direct connection from the southern carpark to the childcare will also be retained throughout the development.

If specific construction activities require the closure of the footpath or public road, an application will be made to Council for this approval.

4.4. Site Accommodation & Ablution Facilities

Site accommodation and ablution facilities will be provided by the principal contractor in accordance with WorkCover NSW requirements.

Indicative locations for the site accommodation and ablution facilities are shown on the construction management diagrams provided in Annexure A, and include a site office in the existing space above the childcare, and builder's sheds on top of the B class hoarding on Clarence Avenue. The principal contractor will review and confirm its preferred location for the site accommodation & facilities as part of its construction management plan to be prepared and approved by the principal certifying authority and The Principal prior to commencement of works.

4.5. Neighbourhood Management Plan

Regular notification and consultation will be undertaken with adjoining owners, occupants and the general public prior to commencement of works and during the construction period. The principal contractor will manage relevant stakeholders in accordance with the following principles:

- Manage the site in accordance with this Construction and Environmental Management Plan;
- Work within the approved hours of operation as set out in the planning approval;
- In the event that any work, delivery or operation which is considered out of the ordinary is required, then the contractor is to attain all necessary approvals and make the required notices prior to undertaking the work, delivery or operation;
- In the event that out of hours work will be required, approval from Council is to be obtained and a letterbox note to adjoining neighbours is to be effected at least 24 hours prior to the work being undertaken; and
- Respond to concerns raised during construction

4.6. Deliveries and Materials Handling

Proposed access routes to and from the site for construction traffic and loading / unloading areas are shown on the construction management diagrams provided in Annexure A for the different phases of construction.

The principal contractor will review and confirm its preferred access routes to and from the site for construction traffic and loading / unloading areas as part of its construction management plan to be prepared and approved by the principal certifying authority prior to commencement of works.

4.7. Site and Traffic Management

Delivery of the project encompasses three key phases of works which will inform the site and traffic management strategies. Phases 1, 2 and 3 works are described below and in Site Management Diagrams, provided at Annexure A. The Site Management Diagrams have been developed to recognise the changing nature of site conditions and housekeeping requirements as the works proceed throughout the estimated 22 – 24month construction period.

Signage will be placed at all site entrances clearly stating that access is for authorised persons only. Daily sign-in registers will be kept, and each sub-contracting entity will be required to advise of numbers of personnel on site each day. Only those workers who have completed site specific inductions will be allowed to enter the site and undertake works. The Principal Contractor will maintain a site entry register requiring all visitors to sign in upon entry. All visitors are required to wear an identification “visitor” badge and wear appropriate PPE at all times while on site.

4.7.1. Phase 1: Demolition, Excavation and In-Ground Works

Phase 1 works requires the demolition of the existing carpark (part), construction of the basement walls and excavation and construction of the new basement car park levels, up to and including the ground floor. Approximate timeframes for these works include 4-6 weeks for demolition, 8-10 weeks for construction of the basement wall, 4 months to excavate the basement and six months for the substructure. The Phase 1 Plan provided in Annexure A

illustrates the application and locations of the following site and traffic management strategies applicable for Phase 1 works. Key points:

- site establishment;
- scaffolding and hoardings (A Class and B Class), painted and appropriately lit and signposted;
- internal adjustments including hoardings and signage;
- locate jersey kerbs to protect deep excavations;
- location of loading access for excavation spoil removal by truck and dog, from within the site, forward in / forward out truck movement. Heavy vehicular traffic will consist of an average of approximately six truck and trailer movements per hour during the excavation period;
- establishment and management of temporary access and loading locations and routes for club deliveries
- material handling area on L1 of the existing carpark
- Clarence Avenue construction zone and B-class hoarding for materials handling via tower crane and locating concrete placement equipment;
- location of site offices within the existing office to the south of the site;
- location of site sheds on the B class hoarding along Clarence Avenue (to be confirmed by the builder)
- vehicular access maintained into the existing southern section of parking.
- pedestrian thoroughfares along Clarence Avenue and into the Childcare are maintained as a safe path of travel; and
- acoustic protection to the southern and western site boundary.

4.7.2. Phase 2: Above Ground Works

Phase 2 works include the construction of the two above ground levels of the carpark, as well as the club expansion space, being level 2. The above ground structure is likely to take approximately 4 months. The Phase 2 Plan provided in Annexure A demonstrates the following key site management strategies to be implemented for Phase 2 works. Key points:

- hoardings (A Class and B Class), painted and appropriately lit and signposted;
- identification of delivery route for trucks coming to and going from the site;
- Clarence Avenue construction zone and B-class hoarding for materials handling via tower crane and locating concrete placement equipment;
- location of site accommodation and ablution facilities;
- identification of overhead protection to port cochere during construction of level 2 slab ensuring the safety of public below is preserved and club operations are maintained;
- pedestrian thoroughfares along Clarence Avenue maintained for safe path of travel; and
- vehicular and pedestrian access maintained to the southern carpark.

4.7.3. Phase 3: Fitout Works

Phase 3 works comprises of the fitout of level 2 and the lobby and will take an estimated 6 months to complete. The associated works will require some interface between the club operations and the worksite, and these works will be appropriately managed through the following Site Management Strategies as illustrated in Phase 3 Plan of Annexure A. Key points include:

- identification of internal hoardings which maintain a physical separation between the fitout works and the club operations. Hoardings will be painted and appropriately sign-posted;
- location of site accommodation and ablution facilities;
- identification of the lift in carpark as main access route for moving materials and goods to level 2;
- all deliveries of materials and goods are contained within the site boundaries and therefore the application of hoardings is not necessary;
- identification of delivery route for trucks coming to and going from the site; and
- pedestrian thoroughfares are maintained for safe path of travel.

4.7.4. Traffic Management Strategy

As indicated in the Site Management Diagrams at Annexure A, a consistent approach to traffic management is to be adopted throughout the undertaking of all phases of the works. The approach to the site from the north will be via two routes:

- for light vehicles, via Hawkesbury Avenue, then Clarence Avenue
- for heavy vehicles, left onto Dee Why Parade and then left onto Clarence Avenue to ensure that trucks movements to and from the construction site will apply the 'left-in, left-out' principle, avoiding disruptions to the flow of traffic and any need to turn across the line of oncoming vehicles.

From the south:

- light vehicles may turn right at Hawkesbury Avenue and then right into Clarence Avenue;
- heavy vehicles will turn right into Oaks Avenue, then left onto Avon Parade, left onto Dee Why Parade and right onto Clarence Street to ensure they approach the site on the left hand side of the road.

Construction traffic in and out of the site will come under the direction of dedicated traffic controllers to manage separation between people and vehicular movements and to move along any vehicle not obeying the traffic management strategy.

Separate applications will be submitted for works zones, road closures, hoardings, erection and dismantling of tower cranes.

4.7.5. Parking for Construction Workers

The construction phasing of the works is not anticipated to generate significant parking demand for construction workers attending the site. It is considered that there is adequate street parking available and that any street parking demand is likely to be staggered with the needs of local residents (refer to the Parking and Traffic Consultants report submitted as part

of this application). The workforce will be discouraged from parking at the nearby retail precincts which will be reinforced through site inductions and tool box talks.

4.8. Quality Management

A detailed Quality Management Plan will be developed during the contract finalisation phase of the Dee Why RSL development. In summary, it will document and identify the process of implementation of the Quality Management System, the organisational structure for the project, the responsibilities and authorities of personnel associated with the project and details of implementation procedures. The main objectives of implementing a Quality Management System are to maintain a consistent approach to the delivery of products and/or services and deliver the project on time, within budget and to achieve satisfaction for the Club.

The Quality Management Plan will be developed and documented to comply with the specific requirements of the project and outlines as a minimum the following elements:

- Project Organisation Responsibilities and Duties
- Subcontractor requirements
- Design Control with respect to Build ability
- Value Management and Particular Design Responsibilities
- Document Control
- Purchasing
- Process Control
- Inspection and Testing
- Control of Inspection, Measuring and Test Equipment
- Corrective/Preventative Action
- Control of Quality Records
- Auditing

4.9. Tree Protection

No trees within the construction zone are planned to be retained, and as such, no tree protection will be required. The principal contractor should be made aware of the existing Ficus to the South West of the site (outside of the works zone) which is to be retained.

4.10. Emergency Response Procedures

A detailed Emergency Management Plan will be developed prior to site establishment works and updated regularly to reflect the unique nature of the current activities on site. The emergency response procedures will be outlined during the initial induction and updated with toolbox talks and information boards.

4.11. Project Completion

The Project Team members will ensure the specific contractual requirements for the project in respect of staged completion, handovers, and access for the Principal and its contractors, and the requirements for separate contractors to carry out any fit out or other completion works are met.

Project completion procedures will be established early on with the project delivery team and the project architect for all commissioning, completion and defects inspections. These inspections will be documented to ensure any fault identified is actioned as a matter of very high priority.

5. CONCLUSION

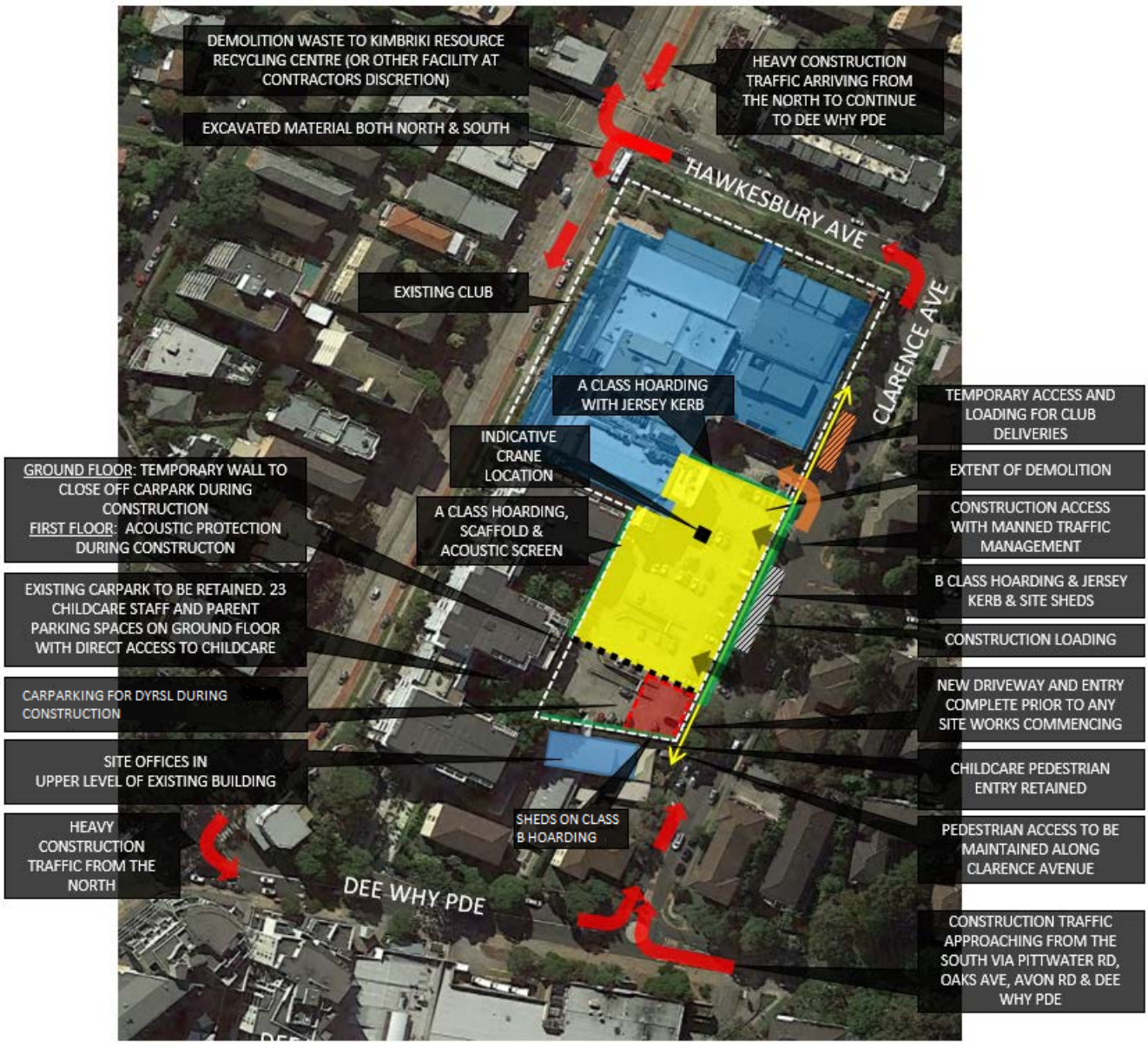
This Construction and Environmental Management Plan has been prepared to support the S96(2) modification application to DA217/0244 which was approved by Northern Beaches Council on the 8th August 2017.

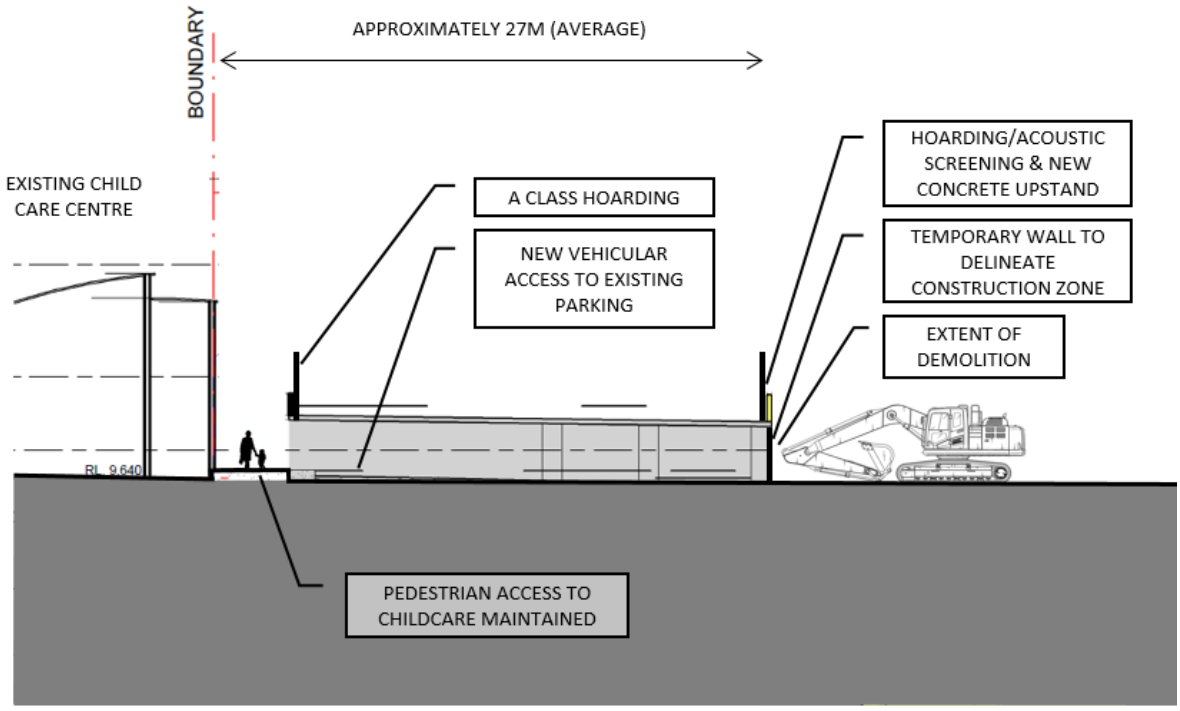
A further Construction & Environmental Management Plan will be prepared by any Principal Contractor prior to the commencement of their works on site to the satisfaction of the Principal Certifying Authority.

6. ANNEXURES

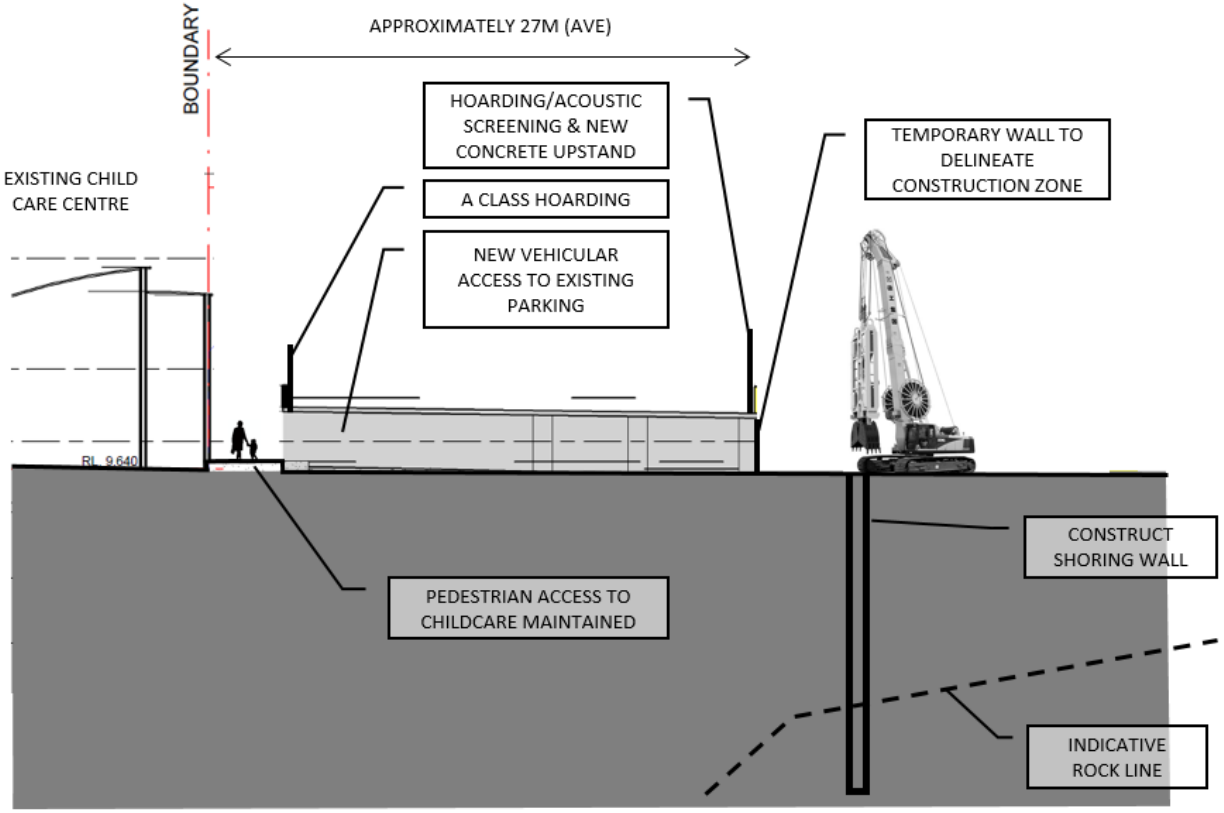
6.1. Annexure A: Site Management Diagrams

Phase 1: Demolition, Excavation & in-ground Works.

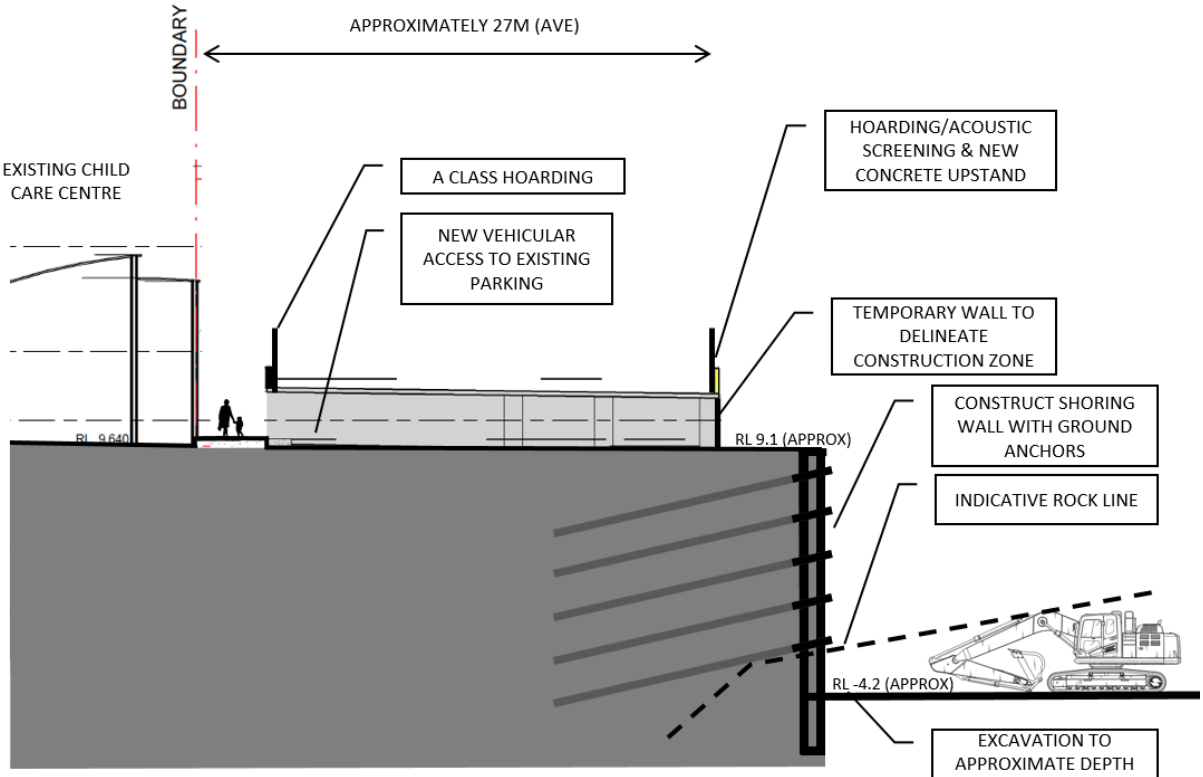




Carpark demolition_ Indicative Section (North/South)

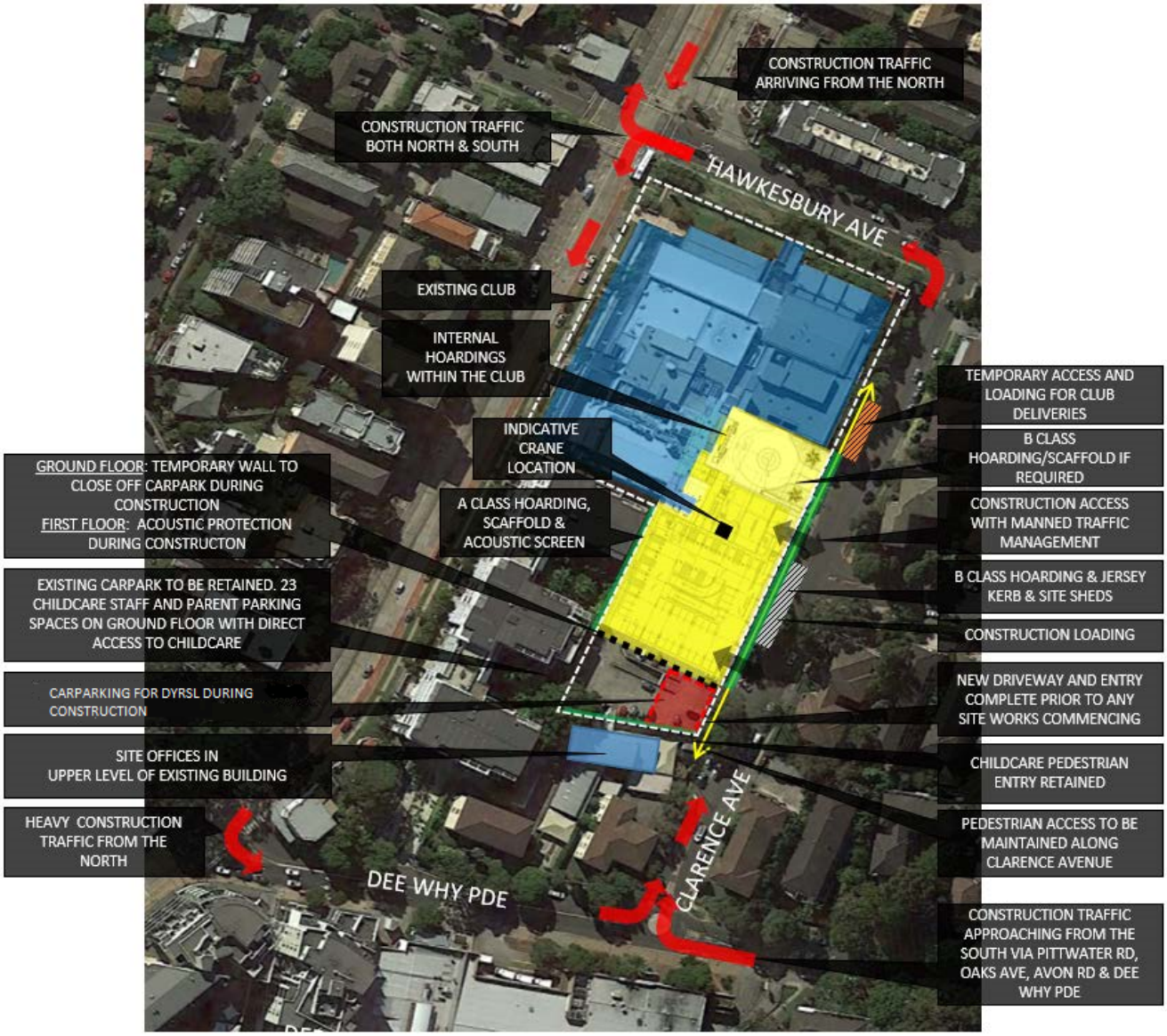


Basement wall construction_ Indicative Section (North/South)



Basement excavation and shoring_ Indicative Section (North/South)

Phase 2: Above ground structure.



Phase 3: Fitout works.