

MACQUARIE POINT STADIUM PROJECT STAGE 2024



The team respectfully acknowledges the First Peoples of Australia, their Elders past, present and emerging, who were and are the keepers of their cultural and spiritual knowledge and traditions, and the traditional custodians of the land on which we live, work and play.

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01 BACKGROUND

BACKGROUND

INTRODUCTION

This report supports a Project of State Significance (PoSS) application for the development of the new Macquarie Point Multipurpose Stadium, which is declared by order of the Governor made under section 18(2) of the State Policies and Projects Act 1993 (“the Act”) on 16 October 2023.

A Project of State Significance (PoSS) application is being made for the Multipurpose Stadium as set out in the Architectural Drawings and Landscape and Public Domain Drawings accompanying the PoSS.

The development of the multipurpose stadium forms part of the overall mixed-use development of the precinct including proposed future residential development along the waterfront, Huon Quays, future redevelopment of the Antarctic Facilities Zone and the Macquarie Wharf Ports area as part of the 30 Year Greater Hobart Plan through the MPDC.

Any proposed development works are controlled through the precinct masterplan that is cognisant of both the immediate concerns with the proposed multipurpose stadium and the broader Macquarie Point requirements. Thus, any environmental issues across the area will be handled with all interfaces addressed appropriately through consultation during the early stages and by plans that will cover the needs of the individual sites as they are developed.

Planning will address the potential for up to 104,000 of combined interstate and overseas visitors and 184,000 intrastate visitors on an annual basis. This will cover urban activation, culture and the arts, sports and entertainment, events, transport, public health, environmental and economic needs.

PROJECT OBJECTIVES

The purpose of the Stadium project is to create a vibrant, multi-purpose venue that attracts professional sport, entertainment, and community events.

The Stadium will open Tasmania up to a variety of events that would otherwise only be accessible on the mainland. The venue can accommodate both full stadium concerts and smaller, amphitheatre-style events. This will enable cultural events at a scale not previously available in Tasmania and will be an important addition to the cultural offerings already available in Hobart, such as MONA and the Tasmanian Symphony Orchestra.

This Stadium will bring additional social and cultural benefits that come with having a new multipurpose venue of this scale. It also enables a new AFL team, the Tasmania Devils. Tasmania has always had a keen interest in AFL and has produced a number of well-known legends of the game along with numerous current AFL and AFLW stars playing for some of the game's best clubs. There is extensive grassroots participation from a young age through the AusKick programme, and multitiered competitions for all ages across the state. A Tasmanian AFL team will be the culmination of decades of effort.

Beyond AFL, having a high-quality sporting venue of this nature that will support access to sport at the highest level in Tasmania.

CONSTRUCTION STRATEGIES

The major strategies to be in place for the Macquarie Point Multipurpose Stadium consist of preparation of Management Plans that demonstrate works can be undertaken in a safe manner utilizing a combination of local and interstate labour resources to deliver the project to the required standards and within parameters determined by the EMPC Act.

The key trades of structural steel, building services, concrete structures trades, plasterboard walls and ceilings, and façades will generally need to supplement locally available labour with interstate labour for installation of the works. Each trade subcontractor will be responsible for adherence to the various plans that will be developed to ensure compliance not only with safety requirements but also quality, environmental and programming constraints to absorb the likely influx of visitors from interstate in short term stays and more medium-term accommodation, both during construction and when the stadium is completed and hosting major events. Additionally, the available skillsets of construction workers to meet the stringent quality requirements for welding has prompted a review of the type of connection details proposed to be used for the structural steel roof members so that the work to the required quality can be delivered in the marketplace using resources available in the industry.

CONSTRUCTION MANAGEMENT

Section 9.2 of *The Tasmanian Planning Commission Guidelines for the Macquarie Point Multipurpose Stadium - Project of State Significance*, sets out requirements for the Construction Management aspects of the report, which are quoted as follows:

9.2.1 The reports are to provide full details on the timeframe and staging for construction. The reports are to discuss and assess the potential effects of construction activities on the environment, surrounding land uses and infrastructure.

9.2.2 The reports are to outline:

- 1. the stages and periods of construction;*
- 2. daily working timeframes for different elements of the construction process;*
- 3. transport routes and access points for heavy and light vehicles;*
- 4. location of areas for storage, on-site manufacturing or temporary offices;*
- 5. potential adverse environmental effects;*
- 6. potential adverse effects from construction noise;*
- 7. potential adverse effects from dust;*
- 8. the results of soil contamination and acid sulphate soil analysis and description of any proposed disturbance;*
- 9. the proposed construction stormwater management approach and mitigation strategies for the potential for release of entrained sediment and contaminants from construction activities to the Derwent Estuary; and*
- 10. the expected overall and daily quantities of materials and movement of heavy and light vehicles.*

The reports are to outline strategies that address significant effects and demonstrate that construction is able to occur:

- *within acceptable environmental limits; and*
- *in a manner that avoids significant adverse effects to surrounding land uses and infrastructure.*

As Australian construction planning and programming specialists, Zancan's expertise relate to the planning for construction projects specifically with respect to project staging, sequencing and timelines within the site constraints established by necessary regulatory controls. The Zancan team for the project, has specific experience as construction managers of large-scale stadiums and projects in Australia in the disciplines of construction programming, construction methodology experts, services Infrastructure specialists and is experienced in preparing similar reports as part of development planning applications. Where reports from specialist engineering disciplines are beyond the expertise of the Zancan team, such as those aspects referenced at 9.2.2 points 5 to 9 above, they are specifically referenced in this report.

SITE DESCRIPTION

The site is located at Macquarie Point bounded by Evans Street to the South-West, the Tasman Highway to the West, the Cenotaph to the North and the Port of Hobart to the East. The site is made up of seven titles which are CT 179192/2, CT 179192/3, CT 179192/4, CT 45404/1, CT 129483/6, CT 20452/2 and CT 210801/1.

The site includes hard stand, open areas and several ancillary buildings, structures and amenities. With the exception of the Royal Engineers Building, these will be removed from the site, or relocated in the instance of the Goods Shed, to support the long-term development of the site.

CONSTRUCTION MANAGEMENT PLAN

This preliminary Construction Management Plan (CMP) demonstrates that the works associated with the construction of the proposed stadium are possible and can be carried out in a manner that will not unduly impact on the environment and the community.

The CMP is an initial document is subject to change and will likely next be updated after engagement of the Design & Construct Contractor ("Contractor"), that is anticipated in the final quarter of 2025, and prior to site works commencing.

All tasks undertaken in relation to the project are to be undertaken in accordance with the following:

- Suppliers and trade subcontractors shall provide assurances of the quality of all goods, materials, and services to be provided;
- All materials and works are to be undertaken to the manufacturer's specification, Australian Standards or industry codes of practice; and
- Liaison with relevant authorities to co-ordinate the works.

Macquarie Point Development Corporation (“MPDC”) has engaged various consultants to provide documents which support the PoSS including:

- Architect: Cox Architecture.
- Structural: Aecom.
- Building Services and Infrastructure: Aecom.
- Civil: Pitt & Sherry.
- Specialist Roof Structure: Schlaich Bergermann Partners.
- Traffic and Pedestrian Management: WSP.
- Geotechnical and Environmental: WSP.
- Landscape: Cumulus Studio.

The Contractor will be required to adhere to the objectives of the environmental management and pollution control system established by the Act in Part 2 of Schedule 1 of the Environmental Management and Pollution Control Act 1994 (“EMPC Act”).

The principles that underpin the EMP Act are:

- Best practice environmental management to achieve minimization of harm of the activities to the environment.
- To protect, restore and enhance the quality of the environment, having regard for the need to achieve an ecologically sustainable development.
- To provide increased opportunities for public involvement and participation in environmental protection.
- To ensure that the community has access to relevant and meaningful information about pollution and its prevention.
- Reduction of the discharge of substances likely to cause harm to the environment.
- Reduction in the use of materials and the re-use or recycling of materials.
- Simplify the regulatory framework for environment protection and the administration of the environment protection legislation.
- To assist in the achievement of the objectives of waste minimisation through prevention and treatment

02 SITE ESTABLISHMENT

SITE ESTABLISHMENT

In this section of the report, an initial approach with respect to the following topics will be addressed:

- Temporary site fencing/gates to secure areas not already secured by fencing.
- On-site storage, compounds, site office, etc.
- Hoardings to protect the public.
- Traffic crossing over public access.
- Connection to temporary services.
- Site amenities installation.
- Sediment and erosion control measures.
- Identification of services to be protected.
- Statutory and contact signage.

A draft Site Establishment Plan prepared in consideration of the topics listed above, is indicated in Figure 1

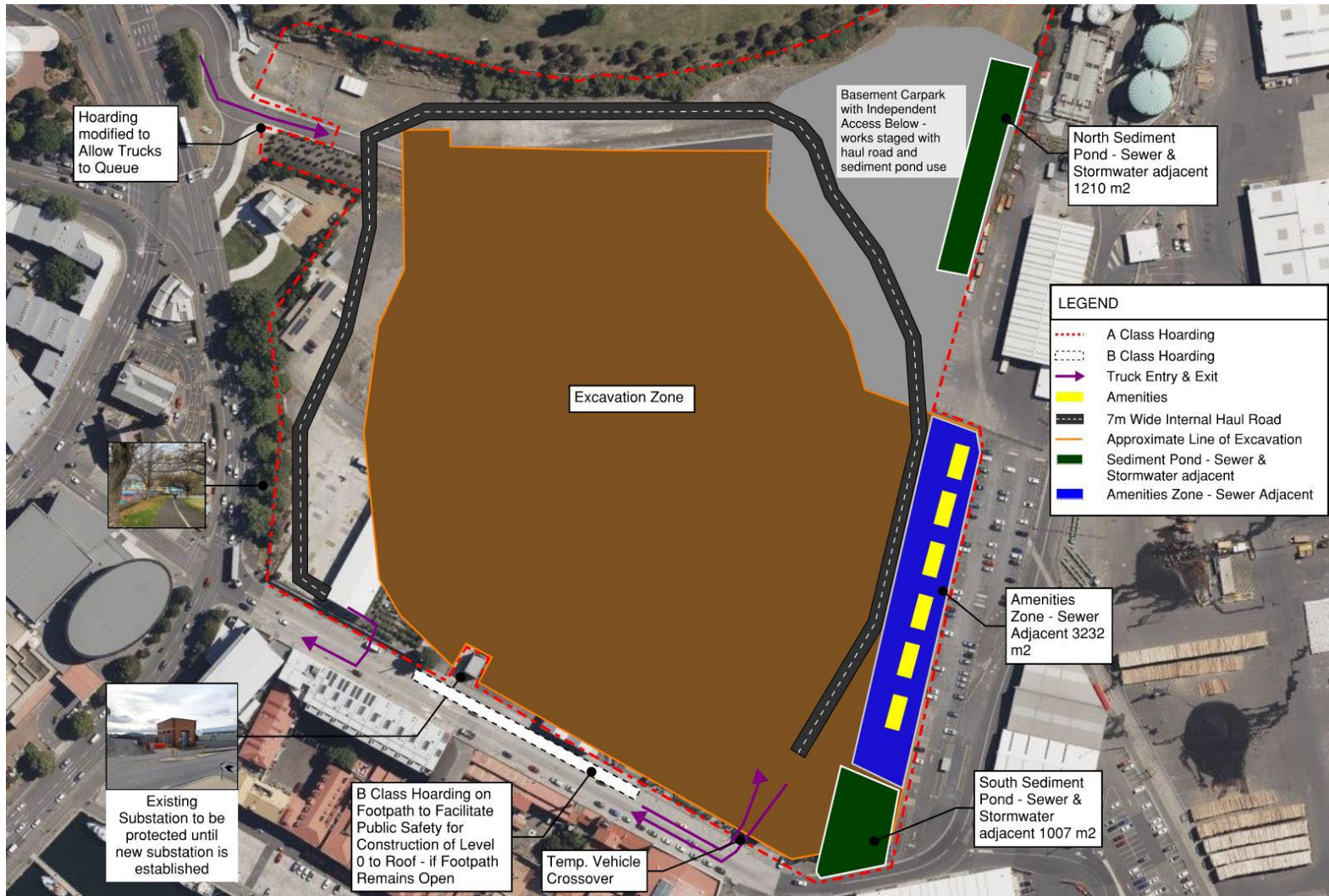


Figure 1 - Site Establishment Plan¹

¹ Refer Appendix 1.0 to this report.

In establishing the “Site”, the Contractor will be required to secure the site for all active work areas including the carpark provided for the use of site-based tradespeople, to ensure the safety of the public and protection of the works.

Whilst there are multiple areas for site facilities to be established within the site, on preliminary analysis of the site access and staging a likely location is for the main site compound to be established in the South-East quadrant of the site to maximize distance to the existing sewerage treatment plant that is located on the North-East of the site. This area will include, first-aid office, lunchrooms, change rooms and ablutions blocks as well as induction rooms. The amenities could be located near existing sewer line connections to avoid the need to pump effluent back up to the connection points.

The site has a natural fall from West to East and from North to South. Subject to engineering design, sedimentation could be located on the Eastern sides of the boundaries and split into two areas to catch run off with minimal path. Both areas are near stormwater and sewer connections and will facilitate sampling, testing of water prior to any discharge into these systems.

Possible vehicle cross overs and vehicle entry and exits from site are shown at Figure 1. Also shown are potential areas to park construction vehicles overnight, as well as proposed adjustments to alignment and left turn lane from Davey Street and the InterCity Cycleway at the North gate entry point (subject to engineering design and authority approvals) and a possible internal haul road to accommodate plant movements within the site.

The building located at 8A Evans Street is to be maintained to serve as a Project Office and will be demolished at a later stage.

Figure 2 shows the North Access Road that will necessitate modification to the left turn in; it also shows changes to the Intercity Cycleway (subject to engineering design and authority approvals as further noted at section 7.3).

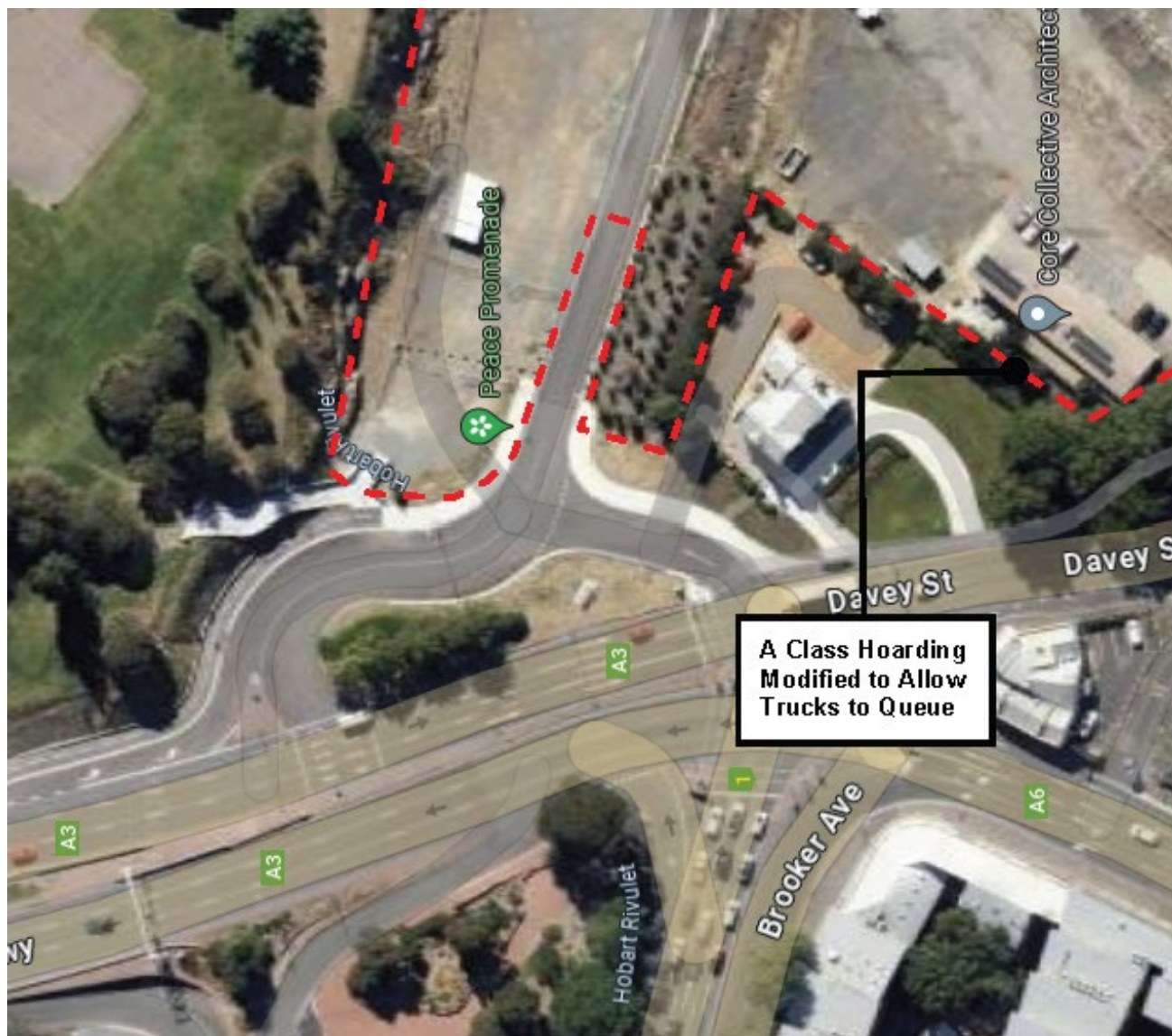


Figure 2 - North Gate Access

Services utilities works will need to be carried out prior to the main works commencing as part of a proposed Enabling Works package, the Corporation is already progressing across the site, i.e. the realignment of the Sewer mains. This will not only reduce the potential for possible accidental services outages through working under less demanding circumstances, but importantly will also maintain a safe environment for the operatives that will be working near existing services. The new authority services required will affect Evans Street (and to a lesser extent Davey Street) and will require road closures (subject to separate application and approval) prior to the works being carried out.

It will be in the interests of public safety and amenity to carry out these works prior to the main works commencing when there will be more vehicle movements to the site. This will help spread the load on the surrounding road network over time.

03 CONSTRUCTION TIMEFRAMES

CONSTRUCTION TIMEFRAMES

STAGES AND PERIODS OF CONSTRUCTION

It is anticipated that construction works will commence after contract award is granted followed by Early Works in late 2025 and then Main Contract works. It is understood that the project construction works are currently planned to run through to completion of building, testing and commissioning of the Main Works prior to AFL overlay and other events focused works that will run for up to six (6) months. The project will likely involve the following indicative overlapping stages:

- Enabling Works including shop drawings, site establishment. etc (9-11 months)
- Site Retention and Bulk Excavation. (8-10 months)
- Substructure. (5-7 months)
- Structure and Roof (25-30 months)
- Services and Finishes (12-15 months)
- Landscaping and public domain (8-10 months)

DAILY WORK TIMEFRAMES FOR THE CONSTRUCTION PROCESS

Generally, works will be conducted in daylight hours as they are likely to be approved in the development consent. This will allow construction to occur in conformance with the *Environmental Management and Pollution Control (Noise) Regulations 2016*² to allow any neighbours and the community to enjoy the Macquarie Point precinct without undue noise, dust or construction activity outside of those approved hours. Works are not currently planned to be undertaken on Sundays or public holidays.

The only exception to the proposed site working hours will be as per the site safety rules such as if there is a life threatening or otherwise emergency situation that needs to be dealt with. Under these circumstances, communications with compliance officers will take place.

It is likely that there will be isolated occasions, especially during the harsh winter months, when the prevailing weather conditions will hinder the finishing of "wet" concrete floors. This may require some slight relaxation of working hours restrictions to allow floors to be finished to the necessary standards. Should this need arise, a future communications plan will deal with the protocols for liaison with the key stakeholders by the Contractor, in coordination with the City of Hobart compliance officers beforehand. When this occurs, the works will largely be confined to a few construction workers carrying out what would be deemed within the permissible environmental criteria for noise, dust, vibration and the like.

The Contractor may also request to carry out a number of high risk work for specific scopes of work outside the likely approved hours of development consent for such activities such as connections of permanent power to the grid, (similarly for the supply of water, gas, etc.), fire safety services testing and back up emergency supplies. Similarly, to maximise crane time and maintain scheduled progress on such a significant project, there may be a request that maintenance works to plant, and equipment takes place outside of site working hours. This might require a small number of mechanics and technicians on site every 2 - 3 months for a short period of time.

² See for example - <https://epa.tas.gov.au/environment/noise/noise-management/residential-noise-and-hours-of-use>

Should there be unforeseen delays to the works, the Contractor may seek approval to carry out works within enclosed areas where the sounds of construction are contained and controlled during the latter stages of the construction and commissioning process in the period leading up to completion of the works. Should this request be made, it will likely be accompanied with data noting ambient noise levels, how the works will be conducted in largely completed areas for "quiet" trades such as painting, carpet installation, rectification of defects, testing and commissioning of building services or similar activities.

Where practical, the hours of works relating to services relocations and disconnections (such as certain sewer and electrical connections etc.) will need to be approved by the relevant Authorities and be negotiated with surrounding impacted neighbours.

HOBART CENOTAPH SIGNIFICANT EVENTS

Hobart Cenotaph (Usually *The Cenotaph*, also referred to as *Hobart War Memorial*) is the main commemorative military monument for the Australia state of Tasmania. It is located in the capital Hobart in a prominent position on the Queens Domain, on a small rise overlooking the city and the River Derwent. The Cenotaph sits directly above what was once the location of the Queens Battery. The following events shall be non-working days as part of the construction duration;

- ANZAC Day, set date 25 April (key times are generally: 6am service, 11.45am service).
- Battle of Britain, commemorated on Sunday mid-September - wreath laying ceremony generally around 11am.
- Siege of Tobruk, commemorated on Sunday, November to December.
- Battle of Crete, commemorated on Sunday, end of May.
- Remembrance Day, set date 11 November (10am-11.30am, at 11am a period of silence).
- Vietnam Veterans Remember Day, set date 18 August (generally 11.30 to 1pm).
- Anniversary of the Korean War Armistice, set date 27 July.

04 ENVIRONMENTAL

ENVIRONMENTAL

The following specific environmental management principles will be implemented on site with environmental performance to be monitored throughout the Works, in accordance with future engineering design requirements.

NOISE & VIBRATION MEASURES

The Contractor will prepare and implement a Construction Noise and Vibration Management Plan. The Plan will require consideration of the following noise and vibration mitigation measures to be applied to the work and in accordance with the Acoustic Report³:

- A member(s) of the Contractor's staff member will be suitably qualified and appointed as the Responsible Person(s) with respect to noise and vibration.
- Regular training will be conducted with all workers and contractors (such as at toolbox talks) in the use of equipment and carrying out works in ways to minimise noise.
- The Contractor will ensure good work practices are adopted to avoid issues such as noise from communication radios is kept as low as is practicable.
- The Contractor will avoid the use of radios or stereos outdoors.
- The Contractor will check and rectify any defective exhaust systems in trucks and machinery used on site.
- Turning off all vehicles, plant, and equipment when not in use.
- The Contractor will ensure that the Responsible Person(s) checks the conditions of the powered equipment used on site daily to ensure plant is properly maintained so that noise emitted is as low as practicable.
- The Contractor will ensure the working hours on site are controlled such that work is only done during the approved periods (7am to 5pm on weekdays and 7am to 3pm on Saturdays. No work on Sundays or public holidays).
- The Contractor will follow a communications plan to ensure that the local community is advised on expected activities, coordinating scheduling and locations of noisy works around any critical user events where practicable. This shall include face to face meetings with nearby receivers if requested and a letter box drop and shall include close liaison with neighbours.
- The Contractor will where practicable use sound dampening measures on vehicles.
- The Contractor will adhere to the construction noise and vibration mitigation measures outlined in the Noise and Vibration Impact Assessment.
- It is understood that baseline conditions have been established for the site and the surrounding areas with monitoring equipment positioned to obtain data at a number of locations.

The sensitive receptors are located as identified in Figure 3.

³ Refer to Acoustic report "PoSS 8.4_Noise and Vibration Report_240717"

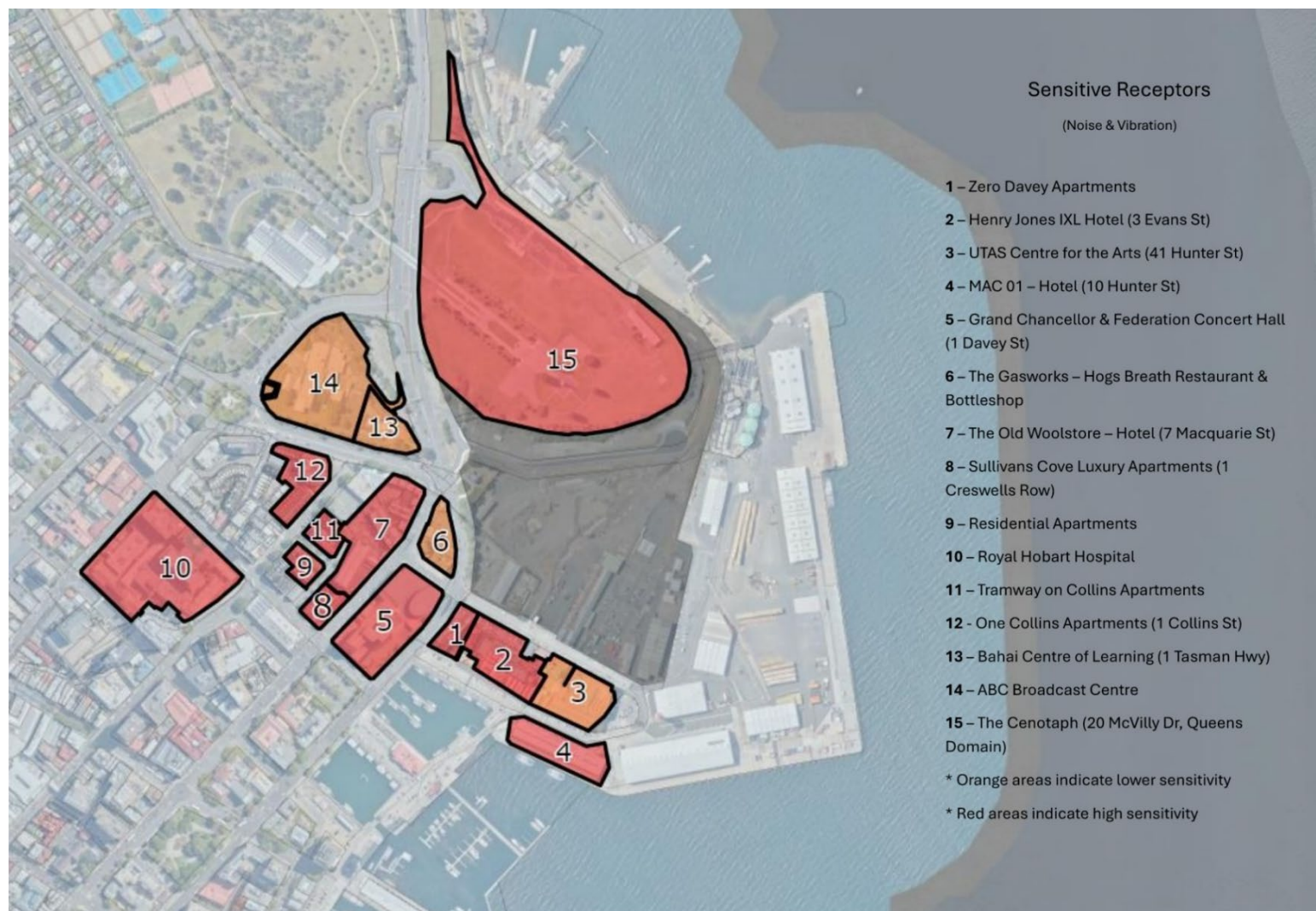


Figure 3 - Noise & Vibration Sensitive Receptors

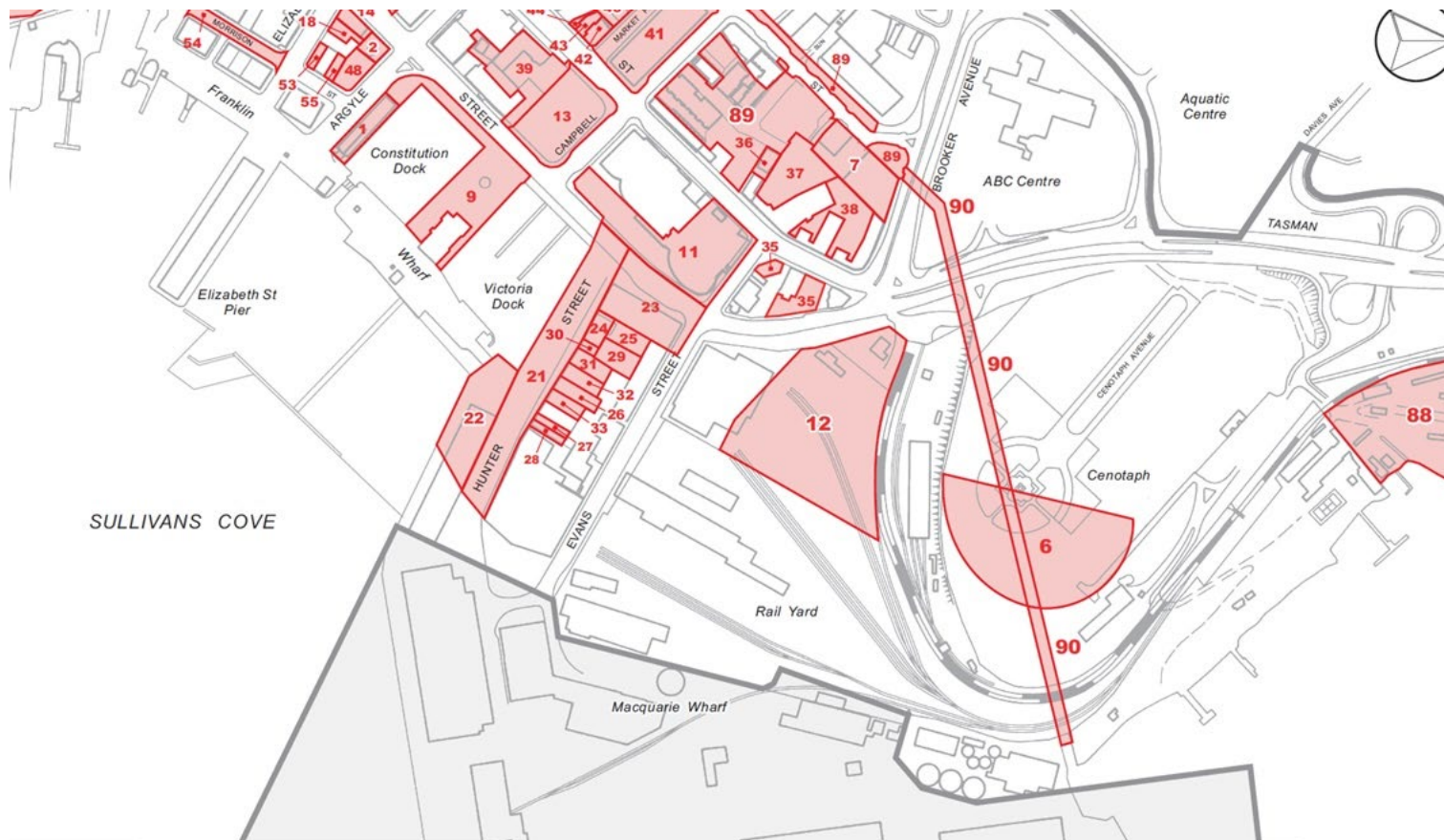


Figure 3a shows Rivulet sensitivity receptor



Figure 3b shows the Royal Engineers Building where receptor is housed.

After assessment of the data obtained from the sensitive receptors during the future investigations, controls can be determined to maintain noise emanating from the site during construction at acceptable levels.

The likely highest levels of vibration and sound emissions will come during the excavation of hard rock over an indicative period of 13 to 17 months as the stadium is being brought down to the required building levels. The use of hydraulic rock breakers on excavators will generate extensive energy that will need mitigating measures. Equipment to be used will likely be restricted to have non-metallic suspension of its percussion mechanism in a fully seated box to reduce noise and vibration transmission. Anticipated sound power levels could be in the order of 120dBA.

Additional measures to reduce the effects of this machinery may include enclosing areas to prevent noise escaping and causing discomfort to members of the community outside the site.

All operators and site staff will have the necessary personal protective equipment, including but not limited to appropriate earmuffs that offer up to 30dB noise reduction, safety glasses and high visibility clothing.

After the activity of rock breaking during excavation, sound power levels reaching approximately 103 dB will likely be generated during concrete pumping operations. Acoustic enclosures will likely be provided around the concrete pump to contain breakout noise.

DUST AND AIR CONTROL MEASURES

Dust control measures for site works will be as determined by a qualified engineer, to meet the requirements of the environmental management and pollution control system established by the Act in Part 2 of Schedule 1 of the Environmental Management and Pollution Control Act 1994 and likely include:

- Erection of site fencing to provide appropriate barriers at the site boundary.
- Erection of effective screens and barriers around dusty activities.
- Cleaning of the barriers should be completed as necessary.
- Communication with neighbouring properties prior to undertaking works in proximity to their premises.
- Establishment of a complaints management system to record details of any air quality-based complaints.
- Use of effective water suppression where necessary.
- Limit excavation activities that will create dust during times of adverse wind.
- Covering of stockpiles.
- Trucks to have payload tarpaulin covers in place prior to leaving the loading area.
- Wheel washing system for trucks.
- Implementation of a Dust Management Plan by the Contractor to meet the environmental limits in the plan.

MONITORING OF AIR QUALITY

Monitoring of air quality includes daily and weekly visual surveillance of dust emissions; dust controls and plant emissions will need to occur during construction.

Weather and physical parameters such as wind speed, rain, temperature, and humidity will likely be recorded to assist in programming works (impact of rain and wind conditions on site) and works will not be conducted during periods of rainfall where there is the potential to generate adverse runoff, or where heavy rain is forecast. Weather data (such as wind direction) will also be used where complaints are received in relation to dust or noise.

ODOUR CONTROL

Prior to the commencement of excavation, a validation consultant will be required to prepare a detailed Sampling, Analysis and Quality Plan (SAQP) in accordance with the Consultants Reporting Guidelines. This will utilise the same controls as adopted currently for the site remediation work being undertaken.

As the proposed development of the stadium is staged as part of the wider precinct development, a separate SAQP will be prepared for each stage to account for staging of the works.

It is anticipated that when the main works are ready to commence, a clearance certificate will have been obtained confirming contaminated materials have been removed and any material that gives rise to odours will have been removed or suitably treated to render it inoffensive.

STORAGE OF DANGEROUS GOODS

The works may involve the use of flammable fuels such as petrol, diesel, oxy-acetylene, lubricants and oils. Such items will be required to be stored in a lockable compound, within an appropriately bunded area to prevent leakage into stormwater systems.

There will need to be sufficient ventilation in accordance with relevant codes of practice and standards.

Material safety data sheets (MSDS) on all flammable and potentially harmful liquids will be provided to the Contractor undertaking the works. Copies of MSDS will be kept in the site office and easily accessible to all construction personnel.

EROSION AND SEDIMENT CONTROL

Appropriate erosion and sediment controls to meet the requirements of the environmental management and pollution control system established by the Act in Part 2 of Schedule 1 of the Environmental Management and Pollution Control Act 1994 will be in place before starting Works and maintained up to the commencement of construction works.

During the works, the stormwater infrastructure will be utilised whilst excavation and clearing works are conducted and maintained through construction works up until completion.

The site would be managed through implementing appropriate measures to prevent sediment run-off, erosion emanating from the site during construction. An area of approximately 2000m² will be set aside on the eastern side of the site to act as a sedimentation tank to settle material and allow solids to be captured flowing from the higher parts of the site during construction.

Erosion and sediment control measures will be implemented and maintained throughout the construction period in accordance with the details of the erosion and sediment control plan and to the satisfaction of the principal certifying authority.

All necessary erosion and sediment control devices will remain in place during the works.

WATER QUALITY MANAGEMENT

Control and monitoring measures carried out by the Contractor will be required to comply with the requirements of the environmental management and pollution control system established by the Act in Part 2 of Schedule 1 of the Environmental Management and Pollution Control Act 1994 and likely include but not be limited to the following:

- All run-off surface water will be diverted from site where possible and run-off captured in the sedimentation tank for treatment prior to disposal.
- Before pumping any water out an Approval to Discharge or Reuse Water will be obtained from TasWater.
- Quantities of sealants, solvents, oil, and fuels will be stored correctly and bunded.
- All roads will be maintained and cleaned to prevent spoil entering the stormwater system.
- Temporary bund protection products will be used to manage potential spills/leaks and any potential contaminants.
- Temporary bunds will surround stormwater drainage paths near any concrete sawing or brick and block cutting activities.
- Streets will be swept to manage sediment tracking onto road surfaces throughout works.
- Maintenance and checking of controls, check machinery daily for any oil or fuel leaks.
- Any water from rainfall onto the work site will be managed appropriately prior to discharge.
- of materials will be located away from areas where it could potentially move to waterways or stormwater drains, or alternatively stockpiles will be isolated with sediment controls in place.
- All loads to be covered during excavation to prevent spillage of material and dust being swept into the air.
- Stockpiles Install sediment controls on stormwater inlets such as sediment traps and barriers where required by the changing location and nature of the works.
- The quality of surface water discharges from site will be monitored visually during and after rainfall events and if required the Environmental Consultant will establish further controls.
- The monitoring frequency shall be determined on a case-by-case basis by the Environmental Consultant.

05 TRAFFIC MANAGEMENT

TRAFFIC MANAGEMENT

The Contractor will be required to prepare a Construction Pedestrian and Traffic Management Plan (CPTMP) informed by the Traffic Impact Assessment and obtain relevant approval of the plan prior to commencement of works. The overall principles of traffic management during works will be as per the Traffic Impact Assessment which will likely include:

- Minimising the impact on pedestrian movements.
- Maintaining appropriate public access to adjoining lands and properties.
- Minimising the impact to existing traffic on adjacent roads and intersections.
- Maintaining access to/from any adjacent properties.
- Strictly adhering construction vehicle movements to designated routes to/from the site.
- Managing and controlling construction vehicle activity in the vicinity of the site.
- Ensuring construction activity is carried out in accordance with approved hours of works.
- All trucks will be loaded to their prescribed weight limits, within the site boundary, and be covered with a tarpaulin (rubbish loads only) prior to exiting the site.

The following machinery used on site will follow strict traffic guidelines:

- Bulldozers and excavators for excavating the site to levels and services trenches.
- Piling rigs for installing bored piles.
- Backhoes and smaller “bobcats” for cleaning up.
- “Truck and dog” assemblies for excavated materials and rubbish disposal.
- Semi-trailers for loading and unloading machinery, structural steel, and precast panels.
- Generators for power and lighting.
- Concrete pumps and concrete trucks.
- Mobile cranes ranging from large to small erecting precast and steel members.
- Forklifts for unload/loading trucks.

The excavation phase will likely involve trucks travelling to designated waste disposal sites at Blue Hills Road, Copping for the Level 3 contaminated waste and other tip sites at Glenorchy or McRobies Gully, South Hobart for level 2 or lower spoil material. This transfer shall be in accordance with the environmental consultant's categorisation and accompanying EPA approvals.

CONSTRUCTION VEHICLE TRANSPORT ROUTES

Transport routes to the project are largely yet to be proposed and will involve rigorous and thorough consultation with the City of Hobart officers responsible for the issue of permits and approvals as will be any temporary road closures necessary and other necessary authorities. It is also anticipated that the Contractor may require some adjustment made to the Intercity Cycleway and modifications made to allow construction traffic to be separated from the public.

Preliminary studies indicate that vehicles will generally travel along the Tasman Highway crossing the Tasman Bridge from the North or if travelling from the West, along the Brooker Highway and Brooker Avenue before entering the site from the northern road on the high side of the site or along Evans Street.

Figure 4 depicts route for deliveries to and from site. It is also anticipated that that the internal haul roads are used for overnight parking as shown in Figure 1. Proposed parking for trades are also shown at Figure 10 below.

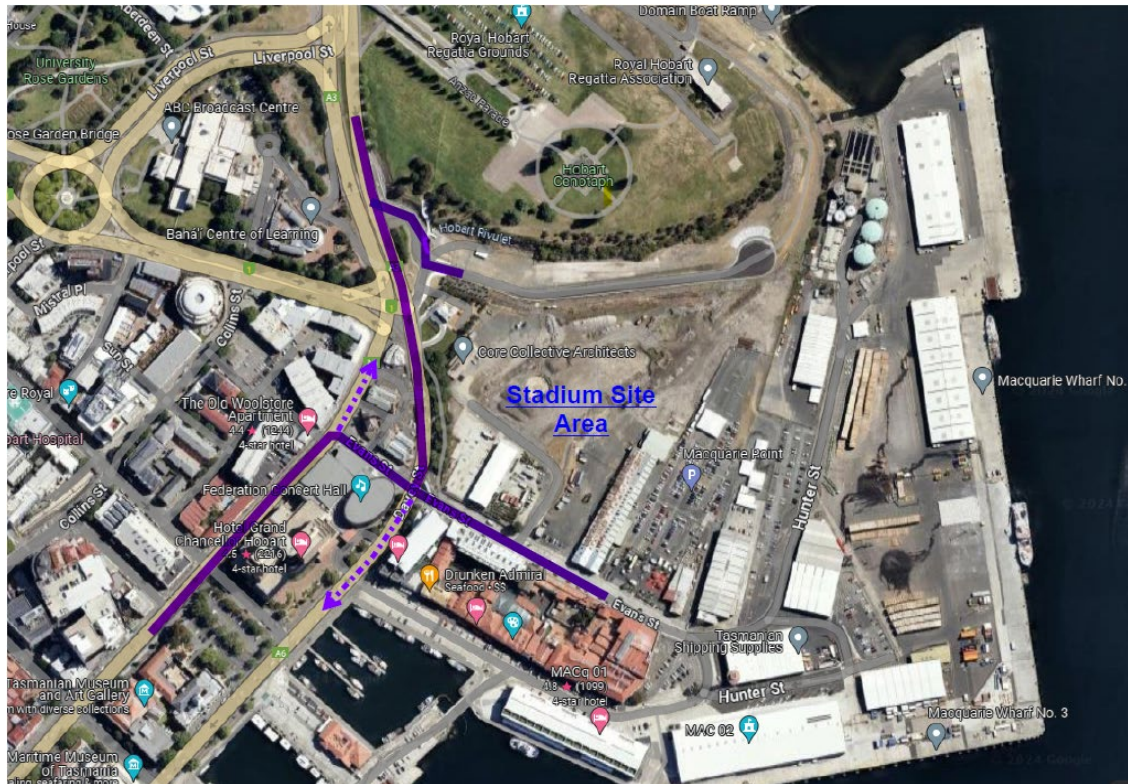


Figure 4 - Site Access Routes

Selection of the site cranes based on capacity and lifting radius will be examined to inform the design completion and particularly for developing the temporary support structures required during erection of the structural steel frame. This will inform the materials handling strategy. The crane(s) capacity and reach will dictate the type of transport for some structural steel members and roofing material. It is anticipated that the future crane study will advocate for all lifting to be done from within the site in a safe manner utilising the movement of materials on trailers.

TRANSPORT ROUTES AND ACCESS POINTS FOR HEAVY AND LIGHT VEHICLES

The preliminary site studies show the proposed ingress and egress to the site will be through different gates to aid the flow of materials to and from the site during the site clearance and bulk excavation stages.

It is proposed that the local road network will be used for transportation of materials and personnel to and from the site. The travel paths are defined in the Traffic Report⁴.

⁴ Refer WSP Transport Study Report "PS206346-WSP-MEL-PAM-REP-001-REVB"

HEIGHT OF PROPOSED STRUCTURES AND SET-BACK FROM BOUNDARIES

The building design will consider the heights of existing structures and the need to keep the proposed stadium structure to within limits. During construction, it is anticipated that there will be a small increase over the heights of the proposed new structures for temporary access in order to safely prepare and install components of the works. As described in the Architectural Report⁵, setbacks from the site boundaries respect the significant structures and historical features of the Cenotaph, the Royal Engineers Building and Land, the Aboriginal Culturally Sensitive Zone as well as visual connections with the water and ports area.

DELIVERIES THROUGH TASPORTS - MACQUARIE WHARF

In addition to site access via land, exploration of the option to bring materials in by water through TasPorts will be evaluated and considered for feasibility and will be subject to further investigation and agreement in consultation with TasPorts.

Preliminary discussions have occurred between MPDC and TasPorts to ascertain the availability of the TasPorts-controlled Macquarie Wharf for use in receiving materials for use on the stadium. It is understood that, whilst there are some periods during the summer months when cruise ships, logging and cargo ships and other vessels that are bound for Antarctic missions, there appears an opportunity to capitalise on the close proximity of the wharf that would be of significant benefit during the construction of the stadium.

Delivery of materials via the wharf could also take a large number of trucks and heavy vehicles off the road network and also allow an easier route for oversize deliveries to site. This would lessen potential deleterious impacts on the environment through road transport that would otherwise be utilised and has been successfully undertaken at other projects currently underway in Australia, including the new Sydney Fish Markets where large glulam timber roof elements and roof modular cassette windows are being assembled nearby at Glebe Island prior to being delivered to site via barges, as shown in Figure 5 below.

⁵ Refer Cox Architecture Document "COX Case Studies-Inner City Stadia"



Figure 5 - Wharf Material Delivery (Sydney Fish Markets example)

Materials that might be transported by barge to the wharf include:

- Structural steel members and roofing materials.
- Precast concrete seating plats.
- Glulam timber roof sections.
- Mechanical plant and equipment.
- Building materials such as plasterboard, wall and floor tiling.
- Wall cladding panels, glazed window units.
- Containers with finished building elements.
- Stadium seating for patrons.

06 CONSTRUCTION METHODOLOGY

CONSTRUCTION METHODOLOGY

HOARDINGS

Areas of the site where works will be undertaken will be required to be securely fenced off to protect the public and separate construction worker areas from the community. The following matters will be required to be considered by the Contractor regarding the site hoardings, fencing, and barriers:

- Where possible maintain the existing perimeter fencing and attach shade cloth, or erect hoardings, to control views and manage dust.
- The site hoardings, perimeter fencing barrier systems will be kept tidy throughout the programme of works.
- all excavations below 1m in height will have safety barriers delineating potential fall areas.
- Hoardings, barriers, and other perimeter fencing will be suitably lined to limit public viewing to designated viewing areas. This will aid pedestrian flow around the site and some interaction with the public to offer viewing of the progress of the project.
- The hoarding/fences may be adjusted to suit the phases of the precinct's development.

Figure 6a shows "A" class hoardings, lined with painted plywood that will enclose the site and provide separation of the construction site from the community and public.



Figure 6a - A Class Hoarding

An Overhead Protection Gantry (OHP) to protect the public from any lifting of plant and equipment is also shown on part of Evans Street, where the new stadium structure is to be built close to the boundary. An alternative to this approach will require the temporary closure of part of Evans Street footpath.



Figure 6b shows an example of “B” class hoarding (10kPa rating) overhead protection proposed over part of Davey Street

HERITAGE

The heritage listed Royal Engineers Building and Land are important items that form part of the site and precinct's rich history. This building will need to be protected and respected throughout the construction work for the proposed stadium in accordance with any heritage requirements. The Royal Engineers Building and Land will need to be suitably shielded from construction works by temporary fencing and "A" class hoardings. The precinct also has a number of significant structures and heritage buildings in the surrounding areas. These are set out in the Urban Design Framework Report and include:

- IXL Jam Factory - University of Tasmanian Centre for the Arts.
- Hobart Cenotaph and Anzac Parade.
- Henry Jones & Co.
- Goods Shed (which is proposed to be relocated on site).



Figure 7 - Heritage Area

PEDESTRIAN & CYCLEWAY ACCESS ALONG DAVEY STREET

Discussions with City of Hobart will need to address possible changes to pedestrian and cycleway access along Davey Street at the left turn into Evans Street heading South, to provide safe passage for the public and community and will be subject to authority approval. If approved, this work is anticipated to be carried out by the Contractor prior to commencement of excavation as part of an Enabling Works package.



Figure 8 - Pedestrian & Cycleway Access along Davey Street

SIGNAGE

The Contractor will be required to comply with law and regulatory requirements with respect to site signage and address issues such as the following:

- Signs will be displayed in a number of areas around the site advising of the 24hr contact details for the site.
- All works related to signage (including particularly safety-related signage) will comply with the relevant Tasmanian codes of practice.
- A temporary hoarding will be erected between the work site and adjoining public lands before starting work and must be kept in place until completion of the works as there is a risk that the works:
 1. could cause danger, obstruction, or inconvenience to pedestrian or vehicular traffic.
 2. could cause danger, obstruction, or inconvenience to the Aboriginal Culturally Sensitive Zones.
 3. could cause damage to adjoining lands.

The City of Hobart compliance officers will need to be notified in writing prior to the erection of any structure or other obstruction on public land such as fences, hoardings, and vehicle crossings. The site is currently undergoing remediation works to render it suitable for development. However, there may be hazard removal areas in fully isolated zones if contaminated material is identified as still remaining, for example in services trenches.

TRUCK MOVEMENT DURING CONSTRUCTION AND FOUNDATION PILING

Throughout the different phases of the project, the types of vehicles accessing the site will differ. As excavation reaches completion, vehicles accessing the site for substructure (or foundations) work are considered.

Preliminary investigations of the geotechnical data available⁶ shows that for the structural loads imposed by the proposed stadium structure, 900mm diameter piles would be required. This would enable transfer of the loads into the foundations as supported by the rock at depths and load capacities as determined by the structural engineer.

After consideration of piling rig options, it is understood that the use of driven piles is not preferred due to the vibration and sound transmission from such a method of construction. Continuous flight auger piles or bored piles using a steel cylindrical sleeve were preferred based on the impact on time and cost whilst providing the best environmental outcome (less vibration and noise). Also, the amount of spoil that needs to be disposed of with bored piers makes it the likely most economical option. This assessment was made on the basis that the environmental issues would take precedence over cost and time considerations in this instance.

Initially, to carry out the foundation works there will need to be two (2) large piling rigs on site to bore the piles. This will need excavation and removal of additional site material to lay a piling platform to allow safe access for the heavy plant and equipment. It will consist of a layer of up to 800mm of crushed rock of up to 30,000 tonnes to be removed and replaced with suitable engineering fill over the site footprint. Initial calculations indicate that establishment of a piling platform would involve fifty (50) truck movements daily for twenty (20) days.

⁶ Refer Geotechnical Report "PoSS 1.3 & 1.4_Geotechnical_July 2024"

It is anticipated that during the period of foundation piling, other pad footing foundations may also be constructed.

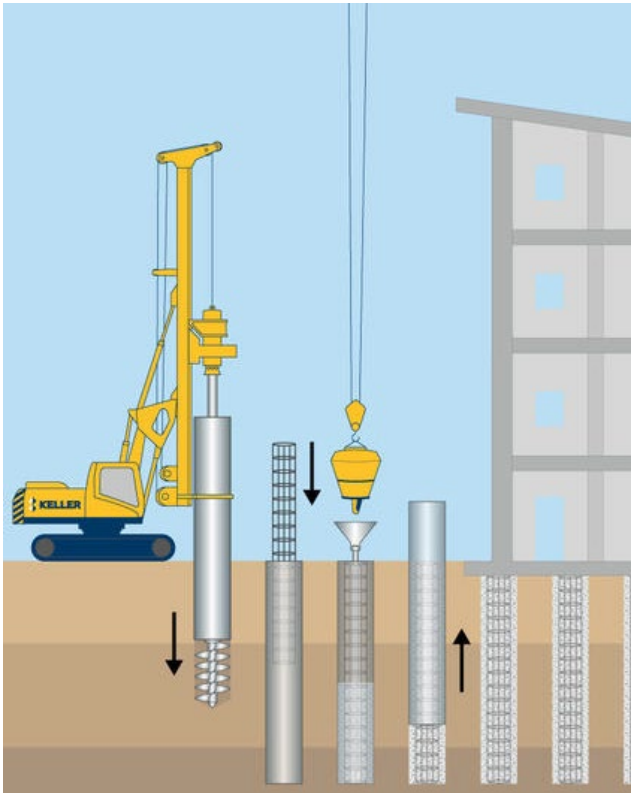


Figure 9 - Piling Works Sample Image

For the Superstructure phase of the works, it is anticipated daily truck movements will likely consist of heavy vehicles mainly for delivery of formwork materials, viz, stacks of plywood sheets, scaffolding frames and props, other heavy metal components and steel reinforcement, building services pipes and fittings, mechanical ductwork, plant and equipment, electrical cables and precast concrete elements and transit mixers for concrete for incorporation into the works whilst there will generally be 2-3 bins of rubbish and site waste leaving the site.

It is anticipated that most daily deliveries will be by the use of heavy vehicles that will be required to avoid driving on public roads during morning and afternoon peak periods to allow more efficient movements on the public roads. To deal with this issue, it is likely that the Contractor will be required to deliver materials via road vehicles predominantly in the evenings or early mornings and park off site in specially allocated truck parking bays prior to their movement to the selected site materials handling zones. This will be especially so for interstate and overseas deliveries.

During concrete pours, there will be a greater intensity of truck movements requiring placement of up to 400m³ over a 6-to-7-hour period from 7.00am onwards and utilising a concrete truck entering the radio controlled site gate every 4-5 minutes to discharge its load into concrete pumps prior to washing out excess concrete slurry and waste into the purpose-made settling ponds and leaving the site. There will be up to approximately seventy (70) daily truck movements for these concrete pours. This is likely to be the case for some 12 months or more.

LOCATION OF STORAGE AREAS, ON-SITE MANUFACTURING, SITE OFFICES

The site establishment areas proposed shown at Figure 1 above have been initially proposed to minimise the travel distance to site for construction workers moving daily from their allocated lunch and change rooms, ablutions blocks or materials storage areas, to the workface in the most expeditious and efficient manner.

Consideration has also been given to maintain separation from the Aboriginal Culturally Informed Zone, the heritage areas of the Royal Engineers Building and Land and to respect the adjacent land uses proposed at the Antarctic Facilities Zone. Visually, the sensitive areas will be required to be shielded from further disturbance with processes in place to seek approval for any works that might have the potential to impact on these sensitive locations. Site amenities are based on forecast labour required to deliver the project estimated to be over four hundred (400) at peak, within the timeframes for the construction and handover of the stadium.

Lunch sheds, change rooms and ablutions blocks have been sized based on meeting WH&S requirements and industry standards for social distancing post Covid-19.

Areas have also been allocated outside the site for overnight parking of heavy vehicles that will be travelling from dispatch points either from interstate or elsewhere.

Other areas are required for storage of materials upon delivery to site prior to the installation into the works. This has been estimated to require a significant volume of space for materials supply as well as lay down areas for the assembly of various components. Further as part of contingency planning, the intent would be to take into account any potential delays in the supply chain that might impact on timely delivery of goods. Accordingly, the space will be allocated to stockpile some materials, plant and equipment to provide some "buffer" in the event of unforeseen circumstances.

"B" class hoarding will be provided in areas where overhead lifting of materials will occur. In other areas "A" class hoardings of waterproof plywood will enclose the site. These hoardings will have Government branded signs advertising the project and its main sponsors as well as providing some relevant information for the public in terms of project description, major project stakeholders and sponsors, 24/7 telephone number or email address for anyone wishing to reach the authorities for comments or complaints, etc.

The plywood hoardings also act to provide a measure of containment of noise and dust to within the site.

07 CONSTRUCTION MANAGEMENT

CONSTRUCTION MANAGEMENT

AVOIDING SIGNIFICANT ADVERSE EFFECTS TO SURROUNDING LAND & INFRASTRUCTURE

It is understood that MPDC has held high level discussions on the local industry capacity and ability to provide the necessary resources to deliver the works within the timeframes suggested. There will undoubtedly be labour from the subcontractor markets from interstate as well as locally sourced who will travel to the site daily by private car. To cater for this, it is proposed that a construction worker car park be established as indicated in Figure 10.



Figure 10 - Potential Trades Parking⁷

By adopting a pro-active approach to the number of vehicles, it is anticipated that there will be a reduced impact on neighbouring streets, and property so that the wider community is impacted less.

Similarly, it is proposed that overnight deliveries can be transported and parked away from local streets in designated truck and heavy vehicle parking bays in the queuing

⁷ Refer WSP Transport Study Report "PS206346-WSP-MEL-PAM-REP-001-REVB"

area or the internal site haul roads as indicated on the proposed site establishment drawing.

POTENTIAL ADVERSE ENVIRONMENTAL EFFECTS

For the Macquarie Point Multipurpose Stadium, the day-to-day environmental matters are addressed through the Construction Management Plan, the Environmental Management Plan including Noise and Dust Management, Water Quality Management, Odour Control, Soil and Erosion Control and Sedimentation Management Plan, Traffic and Pedestrian Management Plan.

Control of noise and dust has been set by having ambient noise levels established and then, a set of parameters put in place that will be met to mitigate any deleterious effects on the environment and community. Noise, dust and vibration concerns are addressed through a combination of active and passive controls. Amongst planning considerations, amenities are to be positioned using the mass of structures both temporary and permanent, to shield the public from excessive noise and dust during construction. This is to be considered in conjunction with acoustic treatment as determined by the acoustic engineer for items of plant and equipment that might generate higher levels of noise and vibration.

Generally due to the type of foundations being bored piles, this will not cause damaging or uncomfortable levels of vibration. There will be intermittently higher levels of noise and vibration generated during concrete placing activities, but these are not excessive and are addressed in the acoustic engineer's report⁸.

Should there be substantial rain during excavation, the site will not allow trucks to enter or leave the site without being thoroughly washed down and any mud cleaned off before going onto the public road network. Generally, in extended periods of rain, the tip sites will be closed due to road conditions and not take delivery of materials from anywhere.

POTENTIAL ADVERSE EFFECTS FROM CONSTRUCTION NOISE

The use of electric powered cranes is considered as likely to have less of an impact on acoustics emanating from the site. This is from the point of view of reducing emissions from petrol or diesel engine usage and from a noise perspective as electric-driven cranes do not have an impact on the acoustic environment as much as diesel powered cranes. Other obstacles that need to be overcome include the available power to the site being limited until after the installation of upgraded supply from a new substation and the restrictions that would be placed on positioning of cranes to reduce voltage drop and supply fluctuations that might affect the safe use of electric cranes. All this was assessed with electric cranes deemed not suitable due to operational limits on lifting and the potential to extend the overall duration of construction work.

Site planning will also consider the use of the mass of structures both temporary and permanent. Concrete plant, placing booms and pumps will be positioned on site to maximise sound absorption by building mass and solid objects between the item of plant and the site boundaries. This will shield the public from excessive noise and dust during construction. In addition, acoustic treatment as determined by the acoustic engineer will be applied to concrete pumps in operation to reduce the impact of any sound transmitted during concrete works of plant and equipment that might generate higher levels of noise and vibration.

The major construction components of steel for the structural frame of the stadium and roof will likely be required to be erected using large cranes generally lifting from inside the stadium bowl area. This has the advantage of taking erection of major sections far from the public that might be adjacent to the work site - all lifting will be conducted using Safe Work Method Statements developed specifically for the project by the Contractor in particular, responding to the unique elements of the structure that

⁸ Refer to Acoustic report "PoSS 8.4_Noise and Vibration Report_240628"

need to have bespoke solutions.

Viewing areas will be allocated around the perimeter of the site to afford the community a closer, but safe view of progress and it is anticipated that family open days will be scheduled during the construction to allow Tasmanians to view the progress of the works firsthand.

All materials delivered to site will be unloaded either by crane or forklift to proposed storage areas or wherever possible, lifted into areas adjacent to where the components are required to be incorporated into the works. Generally, works at the higher levels will be undertaken from multiple elevated working platforms that will be more flexible in being able to be manoeuvred into the right location for the works when compared with a fixed platform scaffolding that may be used where there are larger areas with longer periods of access required.

During the construction phase, it is likely there will be 2-3 large capacity (16-23m³) waste bins being removed daily and sent to tip sites for sorting and recycling where possible. Whilst it is desirable to segregate materials for recycling, the site will probably use any available space for storage or assembly of elements, precluding site-based recycling operations.

POTENTIAL ADVERSE EFFECTS FROM DUST

Continuous water spray of areas that are exposed during the excavation works will dampen and minimise the potential for air borne particles to cause discomfort. All loads leaving the site will be covered and trucks washed down prior to exiting from the site. As the work progresses and other trades conduct the construction activities, in the first instance, pre-planning and preparation of workshop drawings will ensure the fabrication of formwork, pipework and similar materials will be

sized to the actual lengths and dimensions required. This will limit cutting of materials onsite such that should this be required for smaller elements; it will be carried out in designated partitioned areas that contain any dust and prevent the discharge of particles into the atmosphere.

08 DEMOLITION & CONSTRUCTION MANAGEMENT

DEMOLITION & CONSTRUCTION MANAGEMENT

DILAPIDATION SURVEY

The Design & Construct Contractor will engage a dilapidation consultant to carry out dilapidation survey prior to commencement of work. The dilapidation survey will cover surrounding buildings, pavements, fences, fixtures, landscaping, trees immediately adjacent to the site. It will be the responsibility of the Contractor to inspect and ensure the gates/hoardings are adequate for their intended use and maintained in good working order:

- Temporary hoarding and fencing that will have been installed to delineate the site boundary and protect buildings and roadways in Early Works will be checked and maintained by the Contractor.
- The site will be kept neat and tidy to maintain public safety and local amenity.
- Perimeter signage will be installed as required. The signage will be required to identify construction contact points and give notice prohibiting unauthorised entry to site.
- Roads, pathways, and kerbs likely to be damaged by construction or worker traffic are to be protected by temporary overlays and ramps.
- Supervision of the works will ensure that the safety of the public is maintained at all times.
- Public and property protection measures will be revised by the Contractor from time to time as required by changes in circumstances.

RESTRICTED AREAS

The site will be fenced to restrict public access with access points managed by the Contractor through traffic control systems including signs placed in clearly identifiable positions stating that unauthorised entry to the site is not permitted. The signs are to include an after-hours contact name and telephone number. All exclusion zones, as nominated by the Contractor will be properly indicated throughout the works.

No unauthorized persons will be permitted into the work area. All visitors will follow the Site Visitor Registration Procedure.

PERMITS

Due to the historical use of the site, any excavation or installation works will be undertaken under a strict permit system controlled by the relevant authorities and the Contractor.

The following indicative permits and approvals will be applicable to the works:

- Permit to erect awning over the road or footpath.
- Permit for a vehicular crossing (permanent or temporary).
- Permits for temporary disconnection/connection of services (obtain from relevant authority).
- Permit for a road opening.
- Permit for a road closure.
- Permit to use a mobile crane, plant and equipment or lift on road.
- Permit for works in adjoining land reserves.

INSTALL ENVIRONMENTAL & SAFETY CONTROLS

Environmental and safety controls will be installed by the Contractor prior to the commencement of any onsite works. These will include but not be limited to:

- Security measures (fencing and gate access).
- Occupational health and safety measures (personal protective equipment, first aid supplies signage and barriers) where required.
- Environmental management measures (spill kits, booms, storm water control, dust control, silt control, tree protection).

SITE ENVIRONMENTAL MANAGEMENT PLAN ("SEMP")

Site remediation is currently progressing through the South West corner of the site which is incorporated in the Site Environment Management Plan (SEMP) ⁹. The SEMP will be updated before the excavation works commence.

SERVICES DISCONNECTIONS

The Contractor will be required to address the capping of some services as identified in the Dial Before You Dig (DBYD) Plan. There will be a number of services (sewer, stormwater, gas, and electrical connections) which will need to be maintained until new services are online, whereupon they can be disconnected and removed.

⁹ Refer to SEMP Report "60598077 - MPDC Macquarie Point Development Corporation - Site Environmental Management Plan SEMP - Rev 1 - 17 November 2021"

A report by JMG has been prepared, “Services Report Macquarie Point Infrastructure Strategy... August 2024” that shows some of the services will need to be modified prior to earthworks commencing. As this is works outside of the POSS nominated zone and part of existing MPDC works program of Infrastructure upgrades, it will be carried out as an Enabling Works package, to avoid possible damage to the existing services and ensure the safety of the operatives. The works will be undertaken in accordance with relevant authority requirements and their approvals processes - i.e. TasWater approval will be sought for Sewer realignment and water Infrastructure upgrades for example.

The highlighted services are noted below:

SEWER

The existing main sewer line running through the site will be relocated by MPDC as part of an Enabling Works Package to outside the proposed new Stadium building line. The works will include laying a new relocated line followed by cutover and connection into the system, then removal of the existing line as part of demolition and site clearance scope.

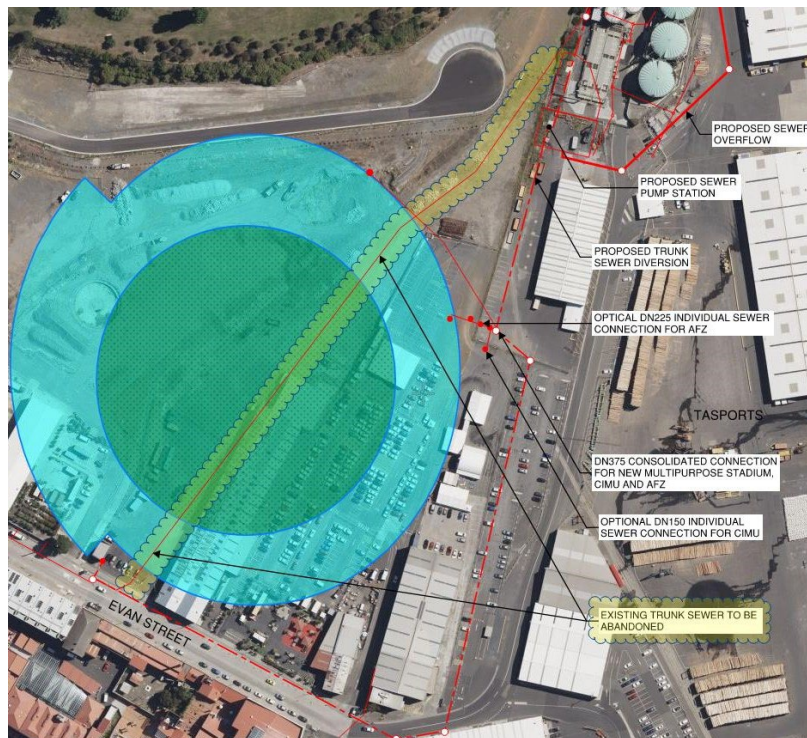


Figure 11 - Sewer Works (Subject to Survey & Locating)

The proposed stadium design for sewer reticulation will determine the need for pits and locations to connect into at a later stage as works progress.

HIGH VOLTAGE LINES

The previous route for HV cables has been modified to take the alignment away from the site of the proposed stadium. The location for the substation will be coordinated with the architectural plans, refer to section below (Figure 12).



Figure 12 -Substation Upgrade (Subject to Survey & Locating)

The existing substation will be removed when the new substation, as part of the broader site Infrastructure upgrades, is commissioned by TasNetworks.

NBN & TELSTRA

The plans also show existing Telstra and NBN lines traversing the new works. Should the lines affect excavation, refer to section below (Figure 13), where they will need to be adjusted prior to the excavation being carried out as part of the main works package.

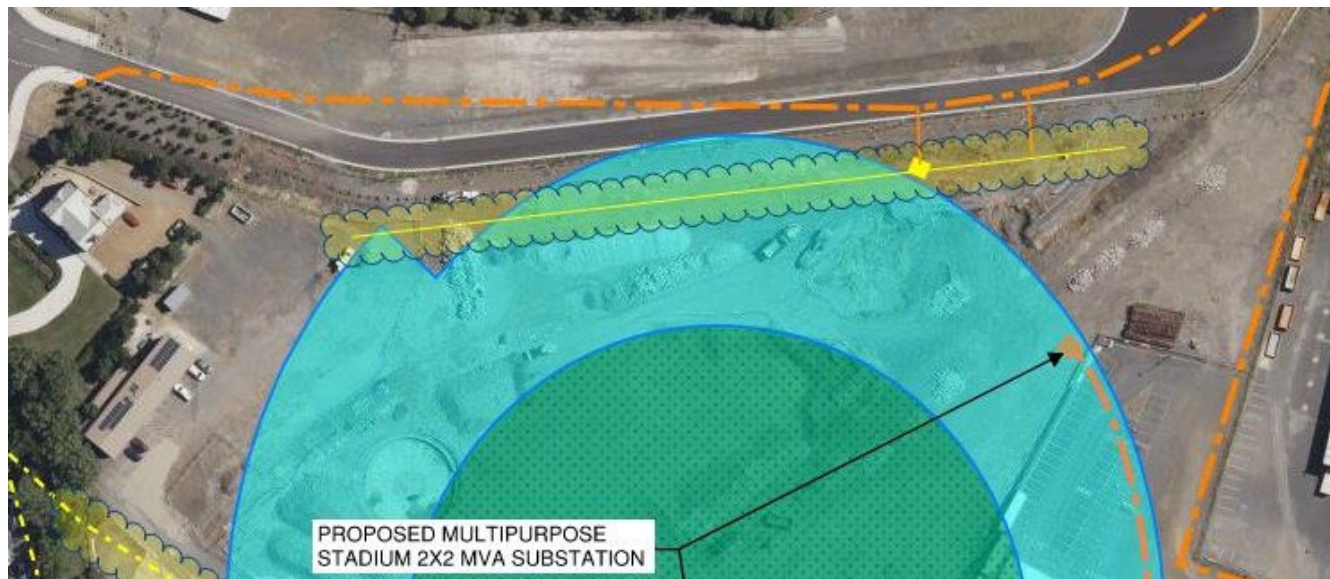


Figure 13 - NBN & Telstra Services Upgrade (Subject to Survey & Locating)

Other existing services will also need to be re-routed prior to commencement of excavation, to avoid damage or disruption to neighbours and minimize impact to the proposed stadium works as these existing services will be affected by the excavation or will affect truck access and egress from the site.

Any services diversion or removal will need to consider the impact on neighbouring properties.

The following principles will be adopted when disconnecting services:

- All service authorities will be consulted, and where necessary obtain relevant permits, prior to the works commencing to ascertain lead times and correct termination locations.
- All termination works should be undertaken in accordance with design engineers' specifications and instructions.
- All termination works should be undertaken by suitably licensed contractors.

REMOVAL OF EXCAVATED MATERIAL FROM SITE

The materials being won from excavation will be stockpiled on site; samples taken for laboratory testing. When results are received, the material will be loaded onto trucks for despatch to the appropriate tip site depending on the classification of the material by the environmental scientist.

Given the existing site levels and the proposed playing arena and concourse levels, it is calculated that up to 120,000m³ of material will need to be removed during excavation of the site. This equates to approximately 180,000 tonnes that will be transported from site at an average daily rate of 1,500 tonnes or fifty to fifty five (50-55) trucks per day running from 7.00am to 5.00pm Mondays - Fridays and 7.00am to 3.00pm on Saturdays at a frequency of one truck movement every 4 to 6 minutes for up to 180 days, or 7-8 months. It is anticipated that due to the nature of the excavated material being classified as contaminated that it will need to be disposed at designated tip sites that are licensed to accept this type of material. The travel distances in this instance are greater than would be the case if the material was classified as solid waste. As a result, whilst the number of loads remains the same, the number of trucks required to service the site during bulk excavation will be greater than if the material was able to be disposed at tip sites that can accept uncontaminated material. In addition to the bulk excavation, there is a significant amount of material from the piling operations that will be assessed by the environmental scientist for suitability as fill material to be spread on site or disposed off site if not acceptable for re-use due to the level of contamination or otherwise deemed unsuitable for engineering fill purposes. Based on the anticipated depth of piling and socketing into rock for the preliminary proposed stadium design, the volume of material is estimated to be 3.8m³ per pile, leaving the site at a daily rate of 2-3 trucks per day.

RESULTS OF SOIL ANALYSIS AND DESCRIPTION OF PROPOSED DISTURBANCE

Given the historical uses of the site, removal of soil contamination as well as any acid sulphate soil detected by analysis forms part of the bulk excavation strategy such that the site can be given a clearance by the environmental engineer. The results of soil contamination and acid sulphate soil analysis are covered under the AECOM report¹⁰ In addition, any proposed routes for incoming new services will be reviewed to ensure removal of contaminated material. As a mitigation, the selective placement of any contaminated material as subgrade fill material under designated roadways will be adopted as necessary after finalisation of calculation of excavation volumes.

In order to control soil erosion and sedimentation during construction activity, a 2000m² collection pit¹¹ will be positioned to take advantage of the natural fall of the site to capture surface run off.

PROPOSED CONSTRUCTION STORMWATER MANAGEMENT, MITIGATION STRATEGIES FOR THE RELEASE OF SEDIMENT AND CONTAMINANTS TO THE DERWENT ESTUARY

Use of a "cattle grid" and wheel wash bay style enclosure through which all site vehicles will pass prior to exit onto any public roads, will be mandatory. Stormwater run-off will be controlled during construction and roads kept clean of mud or other debris through regular cleaning, use of water hoses and inspection by the contractors. Hay bales, geofabric "socks" and other materials will be used around stormwater inlets and pits to prevent silting up and other materials being taken into the stormwater system.

¹⁰ Refer to SEMP Report by AECOM "60598077 - MPDC Macquarie Point Development Corporation - Site Environmental Management Plan SEMP - Rev 1 - 17 November 2021"

¹¹ Refer to "APPENDIX 1.0 – SITE ESTABLISHMENT PLAN" - North & South Sediment Ponds

Concrete transit mixers will be instructed to wash chutes and any excess concrete into purpose-made pits for settling solids. There the materials will be collected via pump out or backhoe removal from the pit with recycling of materials and/or disposal after treatment. Water run through the settling pond will be tested so that only treated water that passes environmental guidelines will be allowed to be discharged.

The overall controls are designed to ensure monitoring of water quality from any usage on site and that there is no release of contaminants into the Derwent Estuary.

EXPECTED OVERALL AND DAILY QUANTITIES OF MATERIALS, MOVEMENT OF VEHICLES

As noted during excavation, there will be bulldozers pushing material up for the excavators to load trucks in a cycle that would involve up to, ten or twelve heavy vehicles on average, making forty truck movements per day allowing for loading and travelling of trucks to various tip sites.

The deliveries to the site will largely rely on the local road network around the precinct traversing through from the bridge crossing along streets designated trafficable for heavy vehicles. The movement of heavy vehicles will be avoided during office business hours to minimise traffic congestion.

Generally, works will be conducted in daylight hours as are likely to be approved in the development consent to allow any neighbours and the community to enjoy the Macquarie Point precinct without undue noise, dust or construction activity outside of those approved hours. No works will be undertaken on Sundays or public holidays. Land travel routes to and from that site as initially proposed are shown at Figure 4 above

In summary, there will be significant controls in place to ensure the works to the proposed stadium can be carried out in a manner that is both safe and also respectful of its immediate surroundings and with the least practicable effects on the community and environment whilst under construction.

APPENDIX 1.0 – SITE ESTABLISHMENT PLA

