

Trinity Grammar School Summer Hill Campus
The Renewal Project
Preliminary Construction Management Plan

7 February 2020

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# Appendix A

Construction Staging Diagrams

### Appendix B

Preliminary Construction Schedule

# 1 Background

The project involves the redevelopment of Trinity Grammar School in Summer Hill.

The proposed development seeks approval of new teaching and educational facilities include:

- New five (5) storey building at the heart of the Campus to accommodate contemporary, flexible teaching and learning spaces;
- Improve movement and flow for students, with better east-west and north-south links across the school grounds and between levels, including more accessible connections between the Junior School, ovals and car park, and providing strong visual and physical connections;
- Renewal and Refurbishment of existing teaching and learning facilities;
- Reconfiguration and connection of underground car park improve traffic flow for the school drop-off and pick-up zone and improve the safety of boys and visitors who enter the school grounds as pedestrians from Victoria Street;
- New multipurpose pavilion between Ovals 1 and 3 containing a championship size basketball court with practice overlay, spectator seating and amenities;
- Demolition of school-owned residences at 46, 48, 50 and 52 Seaview Street, improving the existing service, maintenance and delivery facilities;
- Improvement and extension to Junior School outdoor teaching, assembly and recreational area.

The proposed construction of the works is forecast to take place over five years in multiple stages while the school remains operational.

The following represents the stages of the project:

- Stage 1: Maintenance and delivery services & Seaview Demolition
- Stage 2: New Parking Structure & Driveway
- Stage 3: General Learning Precinct & Carparks Completion
- Stage 4: Performing Arts Precinct / Upper Founders / Multi-Purpose Hall Pavilion
- Stage 5: Junior School Landscaping Area
- Stage 6: All Remaining Minor Works / Oval 3 Make Good and Hand Back to School

Refer to Appendix A for the staging diagrams.

Detailed explanation of the delivery of the above stages is located in Section 3.3 below.

#### 2 Introduction

This Preliminary Construction Management Plan (PCMP) has been prepared as required by the SEARs issued for the State Significant Development (SSD) Application (SSD-10371) for the proposed redevelopment of the Trinity Grammar Masterplan Project.

This PCMP is intended to describe the Project's key construction characteristics, including;

- (a) Detail the scope of the works to be completed including details of the various stages, e.g. Demolition, Excavation, Construction etc. and the duration of each stage.
- (b) Identify local traffic routes to be used by construction vehicles
- (c) Identify ways to manage construction works to address impacts school traffic routes entering and exiting carparks.
- (d) Detail how construction workers will travel to and from the site and parking arrangements for those that drive to site.
- (e) Identify any proposed road closures, temporary traffic routes, loss of pedestrian or cyclist access or reversing manoeuvres onto a public road and provide Traffic Control Plans (TCPs) prepared by accredited traffic consultant to manage these temporary changes.
- (f) Detail the types, numbers and frequency of arrival of the construction vehicles that will service the site for each stage of works.
- (g) Provide for the standing of vehicles during construction.
- (h) If trucks are to be accommodated on the site, show where the construction vehicles will stand, and the vehicle swept path to show that these vehicles can access and egress the site in a forward direction (including dimensions and all adjacent traffic control devices, such as parking restrictions, pedestrian facilities, kerb extensions, etc.).
- (i) If trucks are to be accommodated on Council property, provide a drawing showing the location of any proposed Works Zone (including dimensions and all adjacent traffic control devices, such as parking restrictions, pedestrian facilities, kerb extensions, etc.).
- (j) Show the location of any site sheds and any anticipated use of cranes and concrete pumps and identify the relevant permits that will be required.
- (k) If a crane/s are to be accommodated on site, provide location and time period of utilisation of the crane.
- (I) Show the location of any proposed excavation and estimated volumes.
- (m) Demolition works are planned to be undertaken during Christmas shutdown period.
- (n) When excavation works are to be undertaken on school days, all vehicular movements associated with this work shall only be undertaken between the hours of 9.30am and 2.30pm, in order to minimise disruption to the traffic network during school pick up and drop off times.

This PCMP is a live document, intended to be updated by the selected Construction Contractor(s) as the Project develops.

# 3 Construction Management Planning

#### 3.1 Construction Works

The proposed redevelopment works are in Trinity Grammar School in Summer Hill. The school is surrounded by dwellings along Prospect Road on the Eastern side, Victoria Street on the Western side, Seaview Street on the Northern side and by YEO park infants' school on the Southern side.

The following figure illustrates the schools' location and surroundings.



Figure 1-Location & Surroundings of Trinity Grammar School

The proposed construction works includes the following work activities:

- Demolition and Strip out
- Earthworks such as excavation and piling works
- Concrete structures
- Structural steel installation
- façade works
- Internal fitout
- General siteworks and landscaping
- Refurbishment works
- Temporary structures installation

#### 3.2 Construction Site Access

The Trinity Grammar School Construction site access varies depending on the construction stages and works undergoing:

- During the Junior school landscaping upgrade and the maintenance and delivery services works the construction access will be Via Seaview Street.
- During the new carpark and pavilion earthworks and construction works the construction access will be via Victoria Street
- During the arts and general learning precincts demolition and construction works the construction access will be via Victoria Street.
- During the existing arts and general learning precincts refurbishment and the landscape upgrade works the construction access will be through Victoria Street

# 3.3 Construction Staging

The proposed construction of the works is forecast to take place over five years in multiple stages while the school remains operational.

The following represents the stages of the project:

- Stage 1: Maintenance and delivery services & Seaview Demolition
- Stage 2: New Parking Structure & Driveway
- Stage 3: General Learning Precinct & Carparks Completion
- Stage 4: Performing Arts Precinct / Upper Founders / Multi-Purpose Hall Pavilion
- Stage 5: Junior School Landscaping Area
- Stage 6: All Remaining Minor Works / Oval 3 Make Good and Hand Back to School

During the construction phase the impact to school traffic accessing the carparks is described in more detail in the staging diagrams below. The construction driveway will be separate from the carpark entries which will minimise interaction between construction and school vehicles.

In Stage 1, there is minimal availability of parking spaces for worker vehicles. It is envisaged that a small number of construction workers will be onsite due to the size and scope of the works. In the other stages, the construction compound is larger which will be set up on either Oval 2 or 3 depending on the stage and site parking to be considered by the contractor in the compound.

For stages 2 to 3 a mobile crane may be set up on the indicative lifting zones or lay down areas after providing propping in the carpark. A tower crane is required for stages 3 to 4, refer to staging diagrams for the indicative location of the mobile and tower crane.

The only excavation occurs in stages 2, 3 and 4 as proposed in the Engineering Consultants bulk excavation drawings, screenshot of this drawing is shown below:

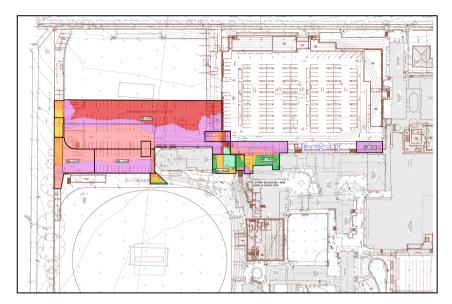


Figure 2 - Bulk Earthworks

During bulk excavation works, the vehicular movements will be limited to occur between school drop off and pick up times (9.30am to 2.30pm).

### 3.3.1 Stage 1 Maintenance and Delivery Services & Seaview Demolition

Stage 1 consists of upgrading maintenance and delivery services area.

This stage includes mobilisation, site establishment and hoardings installation, starting with demolition works for some of the existing houses in the area, clearing the site, hardstand platform slab then start with new maintenance and delivery services structure construction.

The estimated duration for this stage is 4 months.

During this stage, the construction access to the site will be through Seaview Street. The demolition works may require trucks to be stood on the street as construction space is limited.

The works described above is depicted in the diagram below and is also provided in Appendix A staging diagrams:

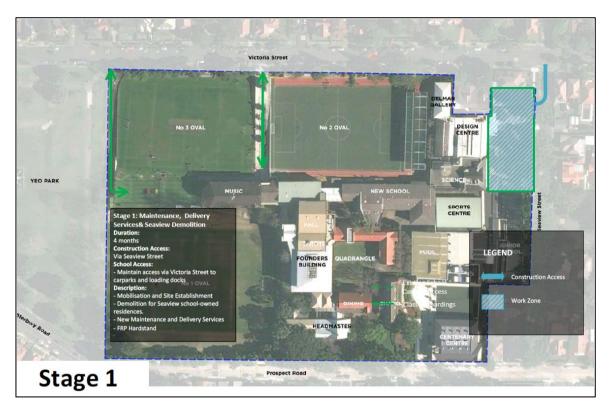


Figure 3 - Stage 1 Maintenance and Delivery Services

# 3.3.2 Stage 2 New Parking Structure & Driveway

This stage consists of new carpark construction underneath Oval 3.

The stage starts with bulk excavation, piling and concrete structural works for the new carpark under Oval 3 and demolition and reconstruction of the new driveway between Oval3 and YEO park. The construction access for this phase of works will be via Victoria St through Oval 3. Carparks and loading docks access will be through Victoria Street between YEO Park and Oval 3 areas. The duration of this phase is estimated to be 5 months.

The works described above is depicted in the diagrams below and is also provided in Appendix A staging diagrams:

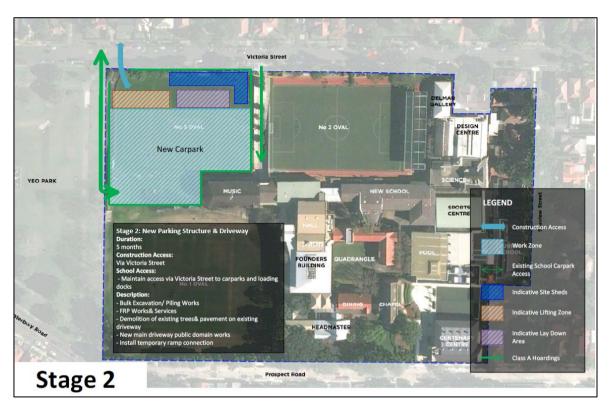


Figure 4 – Stage 2 New Parking Structure

#### 3.3.3 Stage 3 General Learning Precinct & Carparks Completion

Stage 3 includes demolition, strip out and construction works for new general learning precinct building and completion of carparks structures underneath Oval 2 and 3

The first phase of this stage is establishing temporary classrooms next to the maintenance and delivery services area and then relocating. After finishing the temporary classrooms installation, the work zone will move to the General Learning precinct. Part of the existing structures is going to be demolished (Occurs early November after HSC completion), while the other part will have internal strip out.

This phase also consists of installing new entry and new pedestrian access. The new entry leads to the carpark underneath Oval 2. The installation is estimated to take 3 months. During this phase, the carparks and loading dock access will remain available between YEO Park and Oval 3. Access to the carpark between Ovals 2 and 3 will be temporary closed whilst the new entrance to carpark under Oval 2 and new pedestrian access are being constructed. The carpark under Oval 2 will be accessed through the new Oval 3 carpark then through temporary installed ramp between both carparks. The construction access remains the same via Victoria Street.

This phase is estimated to remain for 4 months. During this time the construction access will be via Victoria Street through Oval 2.

After the demolition of the existing structures in General Learning Precinct, construction works will begin. Construction works consist of earthworks, structural works, façade, fitout and external landscaping works including landscaping upgrade area on Prospect Road. The new constructed buildings will contain 3 stories and a roof. Ground floor will include a library and reception. First

floor will include library, learning spaces and senior study spaces. The second floor includes GLAs, seminars and staff rooms. The third floor will include GLAs, project space, amenities, maths staff room, kitchen and outdoor project space.

After completing the access to the carpark underside Oval 2, the new grand stand construction will start followed by the permanent ramp connection between Oval 2 and 3 to allow for the removal of the temporary ramp connection.

The overall duration of this phase is expected to be 21 months

The works described above is depicted in the diagrams below and is also provided in Appendix A staging diagrams:

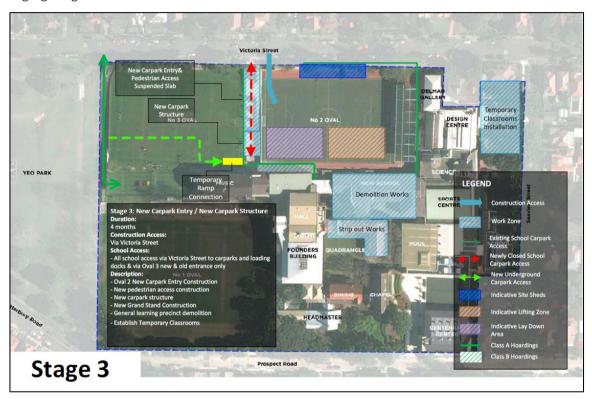


Figure 5 – Stage 3 New Carpark Entry / New Carpark Structure

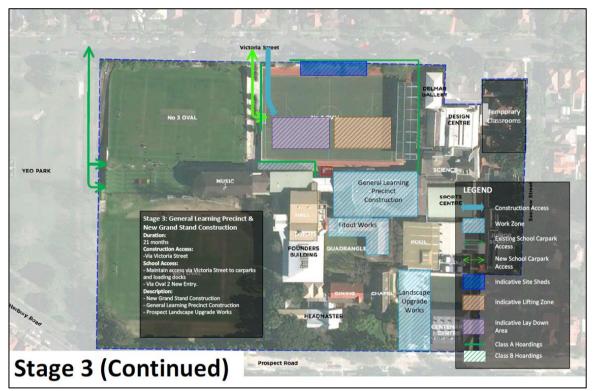


Figure 6 – Stage 3 (Continued) General Learning Precinct & New Grand Stand Construction

# 3.3.4 Stage 4 Performing Arts Precinct & Multipurpose Hall Pavilion Construction

This stage consists of construction new pavilion structure next to Oval 2 and demolition then reconstructing the new performing arts precinct. As seen in Stage 3, some of the existing building are going to be removed while the others will remain for strip out and refurbishment works.

Works will start with the multipurpose pavilion structure structural works followed façade & fitout works. Meanwhile, existing buildings demolition will start followed by the construction of a basement, 3 stories and a roof building construction. The basement will contain performing arts and sports facilities, storages and plantrooms. Ground floor will contain lockers, practice rooms and a cafeteria. First floor will contain band room, orchestra, lobby, offices, amenities and a theatre going all the way to the top of the building. Second floor will contain GLAs, practice rooms and editing pads. Third floor will contain GLAs, TV studios, staff rooms and seminars.

This stage also covers the refurbishment of the existing building and music centre. The work will start with strip out and demolition of existing internal walls and structural modifications. Followed by the fitout of the building from basement 2 to the third floor then commissioning work.

The estimated duration for this stage is around 20 months. The construction access during this stage will remain via Victoria Street through Oval 2.

The works described above is depicted in the diagrams below and is also provided in Appendix A staging diagrams:

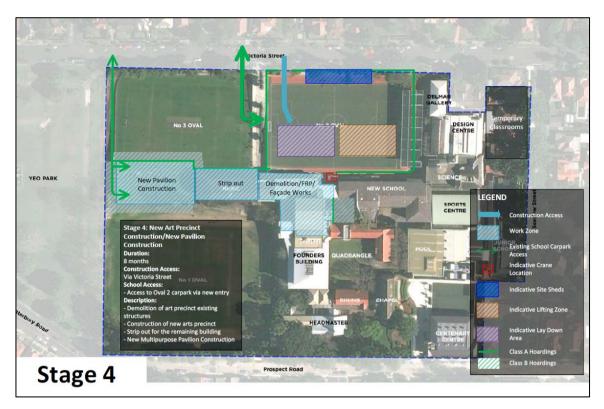
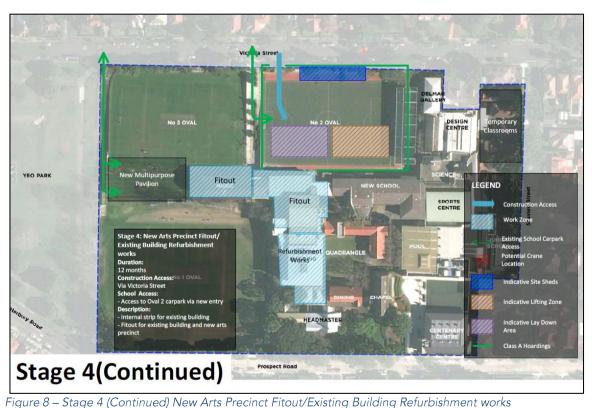


Figure 7 – Stage 4 New Art Precinct Construction/New Pavilion Construction



#### Stage 5 Junior School Landscaping Area 3.3.5

Stage 5 covers the external landscaping works in Junior School landscaping area after removing the temporary classrooms and demolishing the concrete structure hardstand platform that was

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installed in Stage 1. During this stage the handover and demobilising process will start after finishing all the construction works in the previous stages.

The construction access to the site will be through Seaview Street during this stage.

This stage is estimated to take 3.5 months.

The works described above is depicted in the diagram below and is also provided in Appendix A staging diagrams:

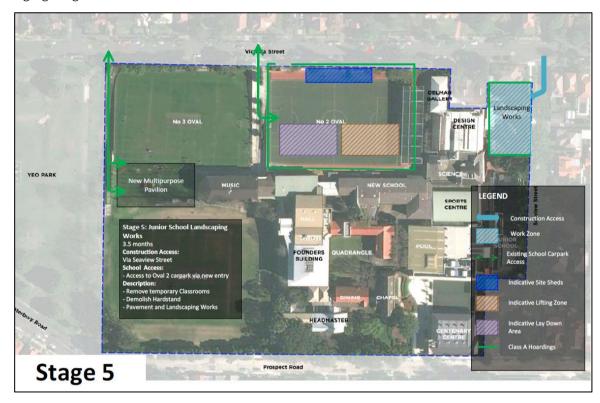


Figure 9 – Stage 5 Junior School Landscaping Works

# 3.3.6 Stage 6 All Remaining Minor Works / Oval 3 Make Good and Hand Back to School

Concurrently with Stage 5, Stage 6 covers making good to Oval 2 and 3 fields after demobilising from the area, such as grass, seats, landscaping, services, etc, finishing all remaining minor works and defects completion.

The estimated duration of this stage is 9 months.

The works described above is depicted in the diagram below and is also provided in Appendix A staging diagrams:

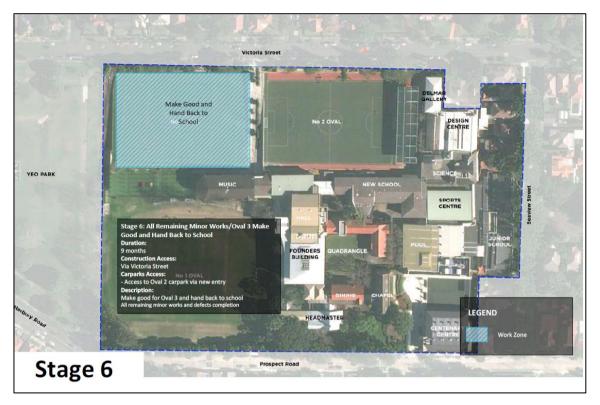


Figure 10 – Stage 6 All Remaining Minor Works / Oval 3 Make Good and Hand Back to School

#### 3.4 Construction Schedule

An indicative construction schedule has been prepared for the purpose of preparing this PCMP.

The Preliminary Construction Schedule is presented at Appendix B

It is assumed that the SSDA will be submitted by mid February 2020 with Stage A construction commencing early December 2020.

The current forecast completion date for the project is June 2026.

It is noted that this schedule shall be updated as the project progresses and its scope evolves.

#### 3.5 Site Establishment

# 3.5.1 Trees, Dilapidation Report, Existing Services Survey

Prior to commencing work on site a Pre-Construction Dilapidation Report will be sought. This detail survey will encompass current structural, architectural, services and heritage conditions of the existing premises, construction zones and infrastructure. The dilapidation report will cover all areas where a construction certificate would apply and include adjoining facilities.

Utilities and Services locaters will survey the site and surrounding areas to plot the locations of existing services.

Tree protection will be carried out complying with AS 4970. Protection of Trees on the sites would also be undertaken in accordance with any applicable tree protection specifications from Council.

Additional geotechnical investigations of existing footings will be carried out progressively following demolition of the existing buildings. It is expected that existing building materials will be salvaged for re-use and initial excavation will determine the need for any archaeological monitoring.

#### 3.5.2 Site Fencing, Hoardings and Accommodation

Temporary Site fencing, screens, barriers and gates will be installed around all internal and external construction site areas.

Temporary hoardings and signage will be adopted in and around working areas at all times during construction.

Temporary scaffold systems will be installed for any elevated demolition and construction activities which will also provide protection to adjoining school areas.

Temporary B-Class hoardings will also be installed over adjacent pathways for any overhead demolition and construction activities.

Site accommodation will be established based on the location of works and intensity of work activity on the site.

#### 3.5.3 Temporary Utilities and Services

All existing services in the construction area will be identified and located (eg as-built drawings, dial before you dig, pot-holing inspections) to minimise disruption to the construction works and to adjacent facilities. Thorough investigation and staging of works will be undertaken to ensure that any capping and removal of services does not affect other Stages of the facility.

All existing services and utilities shall be disconnected and /or diverted around building work areas prior to demolition or construction works commencing. These services works will be carried out as required by the relevant utilities or services provider.

Reticulated power and lighting installations will comply to the requirements of the WH&S Regulations, Electricity Supply Authority and the Code of Practice for Temporary Electrical Installations on Building and Construction Sites.

Noise, air and vibration monitoring units will be established to manage air quality and vibration movement during the demolition and construction of the Project.

#### 3.6 Vehicle Access

Each of the construction sites offer a primary and alternative location for construction vehicles access. All vehicles will follow the same travel path by entering and leaving the sites via the designated primary gate.

Weekend and/or night loading may be required for larger deliveries for items such as structural steel framing and glass. If required, a temporary loading area can be used following the necessary applications, notices, approvals and permits are obtained.

Vehicles delivering concrete, concrete pumping, reinforcement, steel can occur in designated and approved work zones or contractor laydown areas within the temporary established site boundaries.

Acknowledging the site is surrounded by residential zone, a traffic and pedestrian management plan would be prepared to manage the parking of waiting vehicles in the adjacent areas and provides several access options for vehicle loads and marshalling areas.

The traffic and pedestrian management plan will also address any additional requirements during school pick-up and drop-off times.

Vehicle shaker grids and wash facilities will be used to wash down exiting vehicle tyres especially during demolition and excavation works.

During the construction phase of the project, construction will interact with the carparks depending on the location of construction work zone. Traffic management plan will address interaction between construction works and school traffic.

Refer to the staging diagrams in Appendix A for the school and construction access interaction depending on stages of the undergoing works.

#### 3 7 Construction Personnel Access

The two locations for vehicle access gates for each site will also provide adjoining access for construction personnel to restrict unnecessary movements through school grounds.

Within the school premises, access to construction personnel shall be controlled and conform to the prevailing Working with Children requirements.

Unimpeded pedestrian access will be maintained where possible and if required provided under controlled conditions where pedestrian and construction paths overlap or intersect.

#### 3.8 Craneage and Materials Handling

A fixed tower crane could be expected to operate on the main campus during most of the Stages 3 to 4 construction periods.

It is expected that Mobile cranes will also be intermittently required to facilitate some of the loading of materials on to the various construction sites.

Although lifting will most likely be from construction delivery vehicles and contractor laydown areas within the site, in some instances, crane(s) will need to be capable of lifting from construction vehicles from approved work zones.

Demolition and Excavation material disposal and delivery of small items will be undertaken via designated gates at construction site boundaries.

Concrete delivery will be undertaken via trucks parked on site or in approved work zones, with others nearby in a controlled marshalling area to avoid congestion on the local streets. It is anticipated that a mobile concrete boom pump would be established on the various construction sites as required.

Delivery of Structural Steel frames and beams will most likely occur using a table top semi-trailer, prime mover, and then lifted from alternative lifting zones during out of school hours or weekends.

Smaller building elements can be lifted from within the site from approved work zones, delivered via smaller table top trucks.

# 4 Construction Management Supporting Plans

## 4.1 Preliminary Construction Traffic and Pedestrian Management Plan

A Preliminary Construction Traffic and Pedestrian Management Plan (PCTPMP) has been separately prepared for the Project.

It is anticipated that the construction contractor(s) will update the construction traffic & pedestrian management plan prior to obtaining a construction certificate.

Long term road closures are not envisaged however authorised short term lane closures may be required for large material deliveries which can occur out of normal work hours. The contractor will liaise and apply to the appropriate authorities to obtain permits as needed.

The contractor will monitor and coordinate all vehicles entering and exiting the Construction sites.

Appropriate traffic controls will be put in place during construction to separate construction activities from the public. In addition, traffic controllers will be engaged to manage the interface between pedestrians and to direct vehicles entering and leaving the site.

Any work from neighbouring properties will be managed and coordinated with these stakeholders to maintain access and amenity.

The number and path of vehicle movements will vary during the construction period of the project. The majority of construction vehicles will access directly onto the work sites.

## 4.1.1 Stage 1

The table below outlines the current estimated daily major construction traffic movements during Stage 1 construction:

Month	Activity	Daily Average Peak
December 2020	Site Establishment	5
January 2021	Demolition and Site Clearing	8
February 2021 – April 2021	Structure, Façade, Fitout	15

The construction vehicles expected in this stage are:

- Dump trucks for demolition works
- Flat bed trucks & concrete mixers for structural, façade and fitout

# 4.1.2 Stage 2

The table below outlines the current estimated daily major construction traffic movements during Stage 2 construction:

Month	Activity	Daily Average Peak
April 2021 – May 2021	Bulk Excavation	45
June 2021	Piling Works	15
July 2021 – August 2021	Structure	20

The construction vehicles expected in this stage are:

- Dump trucks for excavation and piling works
- Concrete mixers for FRP works

### 4.1.3 Stage 3

The table below outlines the current estimated daily major construction traffic movements during Stage 3 construction:

Month	Activity	Daily Average Peak
September 2021 – January 2022	Demolition, Structure	40
January 2022 – February 2022	Earthworks, Structure	20
February 2022 – August 2022	Structure	30
September 2022 – December 2023	Façade, Fitout	20
January 2023 – April 2023	Fitout	15
April 2023 – August 2023	Fitout, FRP Pavement and Pathways, Landscaping	20
September 2023 October 2023	Commissioning	5

The construction vehicles expected in this stage are:

- Dump trucks for earthworks and demolition works
- Concrete mixers for FRP, pavement and pathways works
- Flatbed trucks for façade and fitout works

### 4.1.4 Stage 4

The table below outlines the current estimated daily major construction traffic movements during Stage 4 construction:

Month	Activity	Daily Average Peak
December 2023	Structure	10
January 2024 – February 2024	Structure, Demolition	20
March 2024	Earthworks, Façade, Fitout	40
April 2024 - May 2024	Structure, Façade, Fitout	50

Month	Activity	Daily Average Peak
June 2024 – July 2024	Structure, Façade, Fitout	60
July 2024 – August 2024	Façade, Fitout	30
September 2024	Fitout, Stripout, Demolition	40
October 2024 - November 2024	Structural, Fitout	25
December 2024 - January 2025	Landscaping, Pavement, Fitout	30
February 2025 – May 2025	Fitout	15
June 2025 – August 2025	Fitout, Comissioning	20

The construction vehicles expected in this stage are:

- Dump trucks for earthworks and demolition works
- Concrete mixers for FRP, pavement and pathways works
- Flatbed trucks for façade, landscaping and fitout works

# 4.1.5 Stage 5 & 6

The table below outlines the current estimated daily major construction traffic movements during Stage 5 and 6 construction:

Month	Activity	Daily Average Peak
September 2025	Strip out, Demolition, Make good	20
October 2025 – November 2025	Landscaping, Make good	15

The construction vehicles expected in this stage are:

- Dump trucks for demolition and strip out works
- Flat Bed Trucks for landscaping and make good works.

### 4.1.6 Stage 6

The table below outlines the current estimated daily major construction traffic movements during Stage 6 construction:

Month	Activity	Daily Average Peak
	Make Good & Remaining Minor Works Completion	10

# 4.2 Preliminary Vibration and Noise Impact Assessment plan

A Preliminary Noise Impact Assessment Plan (PNIAP) will be separately prepared for the Project.

Noise and vibration from the construction process may impact on surrounding building occupants and public amenities. Vibration could also potentially affect any existing heritage fabric of the school.

In order to help meet the noise and vibration requirements of the site, baseline testing will be carried out and existing operational levels identified. The identification of baseline levels will enable construction contractors' methodologies to be specifically tailored to ensure benchmarks are not exceeded. Noise and vibration monitoring will be installed on site and monitored throughout the project.

The Contractor will develop these management plans to manage the construction caused vibration and noise that will occur during the Project, including mitigation strategies.

Vibration and noise activities that will occur during construction include the following:

- (a) quick cut saws,
- (b) excavation equipment, rock hammers
- (c) hammer drills
- (d) angle grinders
- (e) air compressors,
- (f) generators
- (q) concrete pumps
- (h) diesel static crane

Noise mitigation strategies that could be employed include:

- (a) excavation, piling, shoring and retention works will be undertaken primarily using nonpercussive methods where achievable given the subsurface conditions,
- (b) plant used intermittently during construction activities such as, trucks, excavators, cranes, piling machines will be turned off in periods between works activities rather than left idling,
- (c) plant and equipment selection to reduce noise where possible; plant and equipment fitted with silencers where possible,
- (d) erection of temporary screens to control dust and noise emissions eg hoarding to the existing building as an acoustic barrier
- (e) vibration and noise awareness training for all site staff including subcontractors as part of general site induction and tool-box meetings,
- (f) regular reviews of the program and construction methodologies to minimise the duration of noise-intensive works.

- (g) adherence to permitted working times with approved flexible working hours to avoid noisy work during sensitive hours and school days
- (h) acoustic testing of proposed methodologies

# 4.3 Site Safety Management and Work Method Statements

A Site Safety Plan and safe work method statements will be developed by the Construction Contractor to demonstrate the commitment to Work Health & Safety (WH&S) prior to construction.

The site safety plan is required to identify the scope of work to be undertaken, the hazards associated with the work and the risk assessment processes and risk control measures to be used in the execution of the project activities.

Objectives for a Site Safety Plan include the following:

- (a) maintain lost time injury reporting and review positive performance indicators,
- (b) report all incidents and near misses and develop corrective action plans,
- (c) conduct Senior Management and WH&S Group reviews,
- (d) develop required WH&S resources,
- (e) formalise regular senior management reviews of WH&S systems and implement relevant improvements,
- (f) continually develop WH&S systems, policies, procedures and WH&S Plans to comply with statutory requirements and industry best practice,
- (g) maintain an Audit Programme to comply with system's requirements,
- (h) ensure all corrective actions and Non-Conformances are closed out,
- (i) meet or exceed the requirements of AS 4801 certification and Federal Safety commission accreditation,
- (j) adopt a zero-tolerance safety philosophy,
- (k) provide Safety Awareness and other appropriate WH&S training,
- (I) continue to implement ongoing induction procedures on all Projects,
- (m) hold regular Consultative Committee meetings, maintain minutes and record actions,
- (n) issue Safety Alerts to all staff and other stakeholders according to requirements,
- (o) conduct and record regular toolbox meetings on site.

A Site Safety Plan would also outline the key responsibilities for achieving the above objectives. A statement of responsibilities by the Construction Contractor would identify who will be responsible for the following:

- (a) undertake audits to ensure appropriate implementation of the WH&S Plan occurs,
- (b) coordinate WH&S training,
- (c) establish, implement and maintain procedures for controlling all relevant documents and data required,
- (d) implement WH&S matters in construction design and planning,
- (e) make all reasonable endeavours to ensure that the WH&S management system is established, implemented and maintained on the Project,
- (f) monitor and constantly review risk management to the site,

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(g) ensure all Work Method Statements have been received on site prior to the commencement of work.

The Site Safety Plan would also address the following requirements, as required:

- (a) Working with Children legislation and school policies.
- (b) WH&S training identification of WH&S training needs of all personnel, induction training, refresher training, attendance of WH&S committee personnel at consultation training etc;
- (c) incident management identifies who will be available during and outside normal working hours to prevent, prepare for, respond to and recover from illness/ injury and incidents;
- (d) site safety rules As a minimum will include induction and safety training, PPE, Site access and security, emergency procedures, illness and injury, protection of personnel and the public, work at elevated areas, safe working, hazardous materials and dangerous goods etc;
- (e) Safe Work Method Statements All activities assessed as having WH&S risks require a SWMS to be prepared and implemented.

# 4.4 Construction Environmental and Waste Management

A construction environmental management plan (CEMP) will be developed and executed by the Construction Contractor in accordance with relevant authorities conditions, standards and specifications prior to the Project's site commencement.

A CEMP would include the following items;

- (a) erosion and sediment control
- (b) water discharge from the site
- (c) recycling
- (d) noise control,
- (e) dust reduction,
- (f) waste reduction,
- (g) organising material removal.

A Waste Management Plan is required to:

- (a) minimise waste from site activities;
- (b) establish the site specific waste management requirements and improve efficiencies via waste separation, recycling and re-use measures,
- (c) hazardous materials identification, separation, collection and disposal of environmental waste,

Where possible, excavated natural material will be reused by the contractor on site. Prior to disposal, a waste classification of the soils to be excavated will be provided.

Waste will be sorted on site and care will be taken to avoid cross contamination with recyclables.

If Hazardous Materials are found then the contractor will ensure the following;

- (a) In accordance with the National Occupational Health and Safety Commission's Guide to the Control of Asbestos Hazards in Building and Structures [NOHSC:2002(1988)], appropriate warning signs will be placed on the asbestos materials identified.
- (b) All asbestos-containing materials will be removed prior to any renovation, demolition or work taking place in an area.

- (c) All removal procedures should be undertaken by an experienced appropriately licensed removal contractor in accordance with the National Occupational Health and Safety Commission's Code of Practice for the Safe Removal of Asbestos [NOHSC: 2002 (2005)].
- (d) Monitoring for airborne asbestos in accordance with the Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres [NOHSC:3003(2005)] will be carried out during any removal operations in accordance with Clause 50 and 51 of the WorkCover 2001 OH&S Regulation requirements.
- (e) At the end of removal operations all surfaces in the subject area, such as frames, floor / ground, etc., will be vacuumed then wet wiped. An industrial High Efficiency Particulate Air (HEPA) vacuum cleaner will be used. Spreading of dust into clean areas or outside the subject areas will be prevented.
- (f) A clearance inspection should be carried out after the removal operations are completed in accordance with WorkCover and NOHSC requirements.

The contractor will provide skips primarily for metal, cardboard, concrete and masonry. Recyclables to be recovered are likely to consist of off cuts of materials such as stone, pipes, timber, steel, plasterboard, tiles and miscellaneous packaging.

The main goal will be to reduce the total volume of waste produced, which will be achieved by effective materials procurement, supply and management. Project managers, engineers, builders and subcontractors will play a key role in achieving on-site waste reduction targets on a day-to-day basis.

# 4.5 Community Construction Consultation Strategy

For an optimal Community Construction consultation and liaison process, a Community and Stakeholder Management Strategy will be developed.

The Strategy will be developed from the selected construction contractors' previous experiences on similar prominent projects and will deliver a useful communication system for the Project duration.

The consultation objectives will include the following:

- (a) Establish and maintain relationships with key stakeholders,
- (b) Develop general public awareness and knowledge of the Project
- (c) Ensure key stakeholders are kept informed and satisfied of, upcoming activities, Project status, impacts arising from unforeseen events and arrangements to mitigate the impact as needed,
- (d) Mitigate the impact of the construction activities on the surrounding areas,
- (e) Manage objections by understanding the main stakeholders' needs and take necessary actions for their effective management.

The key stakeholder groups would include the following:

- (a) Staff, students and parents of Trinity Grammar School,
- (b) Contractors, sub-contractors and suppliers,
- (c) The local Community,
- (d) Heritage and Environmental groups,
- (e) Interested local business groups and construction sites
- (f) Pedestrians and users of the neighbourhood,

- (g) Government Authorities esp. Local Council, NSW Government, the Commonwealth.
- (h) Local utilities and services providers

After identifying and prioritising stakeholders' concerns and impact, a stakeholder management plan can be created in order to notify key stakeholders, so as to keep them aligned with the Project and avoid any misunderstandings.

Likely issues of concern to stakeholders may include the following:

- (a) Containment of Noise and Dust,
- (b) Vibration caused from demolition, excavation and construction activities,
- (c) Environmental remediation,
- (d) Construction traffic,
- (e) Construction personnel,
- (f) Restrictions / alterations to pedestrian and traffic flow,
- (g) Protection of existing Trinity Grammar Buildings including heritage elements,
- (h) Protection of existing trees.

It is expected that the Construction Contractor will allocate liaison personnel particularly for communicating with the stakeholders on planned works or activities that require explanation and solutions to alleviate issues that may arise during the Project's construction phase.

The stakeholder management process would typically involve the following;

- (a) An initial consultation session held before the commencement of construction and letters of introduction sent to the surrounding properties, advising Project specifics, including commencement date, duration, contact details, site safety and public protection,
- (b) Contractor developed periodic reports issued to key stakeholders advising of imminent activities
- (c) A register of all stakeholder contact information and concerns developed and reviewed at the regular meetings
- (d) Regular communication and consultation with the relevant consent authority, or its designated representatives, in relation to the site management and impact on surrounding areas.

# Appendix A

Construction Staging Diagrams

# Appendix B

Preliminary Construction Schedule