

Loreto Normanhurst School
Redevelopment
(Concept Proposal and Stage 1)



Construction Management Plan





Document Control

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Appendix A: Site Establishment Plans



1 Introduction

Established in Normanhurst in 1897, Loreto Normanhurst is an independent, Catholic day and boarding school for girls from Years 5 to 12. The School is administered by a School Board and the Institute of the Blessed Virgin Mary (Loreto Sisters). The Normanhurst site contains the junior and senior school campuses.

Loreto Normanhurst is in need of redevelopment to upgrade and provide quality boarding facilities, to improve access arrangements to bring them into line with current accessibility standards, and to improve movement and spatial relationships whilst focusing on the future growth of the school ensuring that it remains appropriate into the future.

The campus is bound by Osborne road (To the West) Pennant Hills Road (to the North), Mount Pleasant Avenue (to the East) and bushland abutting neighbouring properties (to the South). The locational context of the school is illustrated at **Figure 1**. **Figure 2** provides an aerial map of the school and its surrounding.

The staged redevelopment will increase the student population from 1150 to 2000 students with the development of multiple new building envelopes across the campus for education and ancillary use, upgrade and replace school buildings, boarding and sporting facilities, increased onsite parking and interlinking roadways. It is anticipated that the development will be delivered in separate stages, over a period of up to 30 years. In addition to seeking approval for building envelopes and a maximum student cap of 2000 students as part of the Concept SSD for the Masterplan.

Overview of the Proposed Development

Project Staging

STAGE 1

- New PUDO at Osborn Rd (P3) carpark, including separation of bus PUDO and parents PUDO
- Provision of additional on-grade carparking in Osborn Rd (P3) carpark
- Boarding house redevelopment (providing 29 additional enrolments)
- Boarding house basement (P5) carparking and modifications to primary (P4) carpark

STAGE 2

- New PUDO for parents near Tennis Courts including through site link
- New tennis court (P7) carpark
- Modifications to existing year 12 (P1) carpark
- Growth in primary (one new year 5 and 6 stream introduced) – no building work required
- Infill growth in high school – no building work required

STAGE 3

- New basketball (P4A) carpark
- Growth in primary school with K-4 classes introduced (additional 110 enrolments) – building work to separate future DA
- Growth in high school – refurbishment and building work to separate future DA

STAGE 4

- Growth in high school – refurbishment and building work to separate future DA
- Estimated timeframe of full stable enrolment number = 2029

STAGE 5

- Osborn Rd (P3) carpark redevelopment and expansion
- Estimated timeframe of full stable enrolment number = 2047

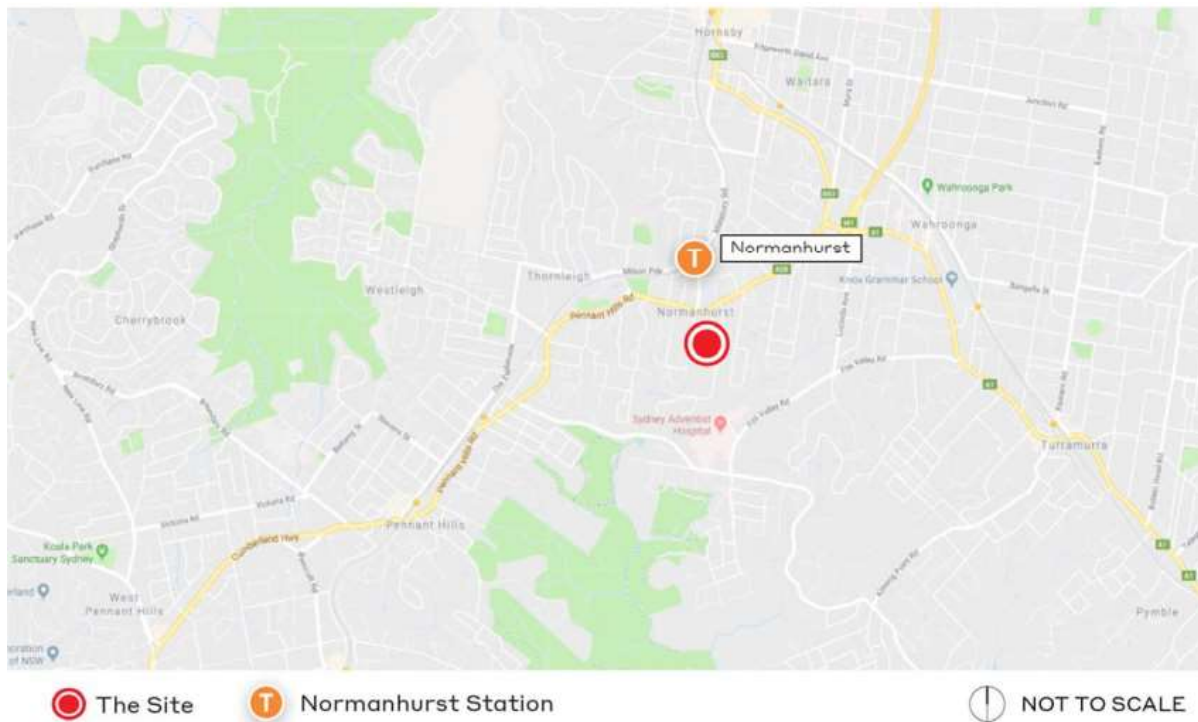


Figure 1: Location Context plan
Source: Google Maps & Ethos Urban



Figure 2: Aerial Map
Source: Nearmaps

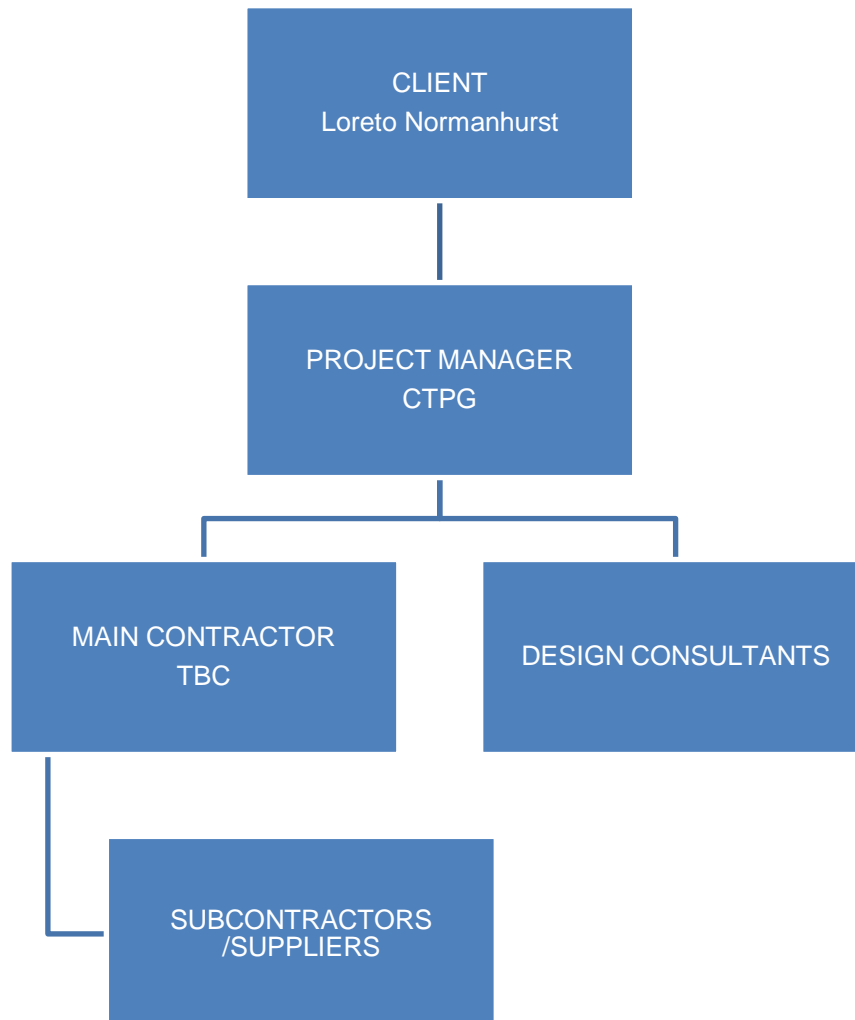


2 Key Participants / Stakeholders

Stakeholder	Contact Details
Client(s)	Loreto Normanhurst
Client Representative(s)	Carmichael Tomkins Property Group (CTPG)
Principal Contractor	To be appointed

3 Organisational Chart

Project Organisational Chart.





4 Construction Methodology

For Details, refer to Appendix A – Site Establishment Plans

This PCMP has been compiled to provide a high-level overview of the delivery of the works. The plan will be further developed by the Principal Contractor to respond to detailed site planning prior to the issuing of a construction certificate by the PCA. The CMP will then remain a 'live' document reflecting the site delivery parameters for the duration of the project.

The Plan covers the following areas of management:

a) Site Operations and Associated Risks

- Legislative and Regulatory Requirements
- Identification & Management of Key Project Risks
- Managing Risks within an Operational School Environment
- Hazardous Materials
- Fencing and Hoarding
- Disruption Notices
- Site Amenities
- Site Inductions
- Service Diversions and Temporary Services
- Dilapidation Report
- Tree Protection

b) Operating Hours

c) Traffic/pedestrian management for the duration of the works;

- Traffic and Pedestrian Management Plan
- Pedestrian Protection
- Deliveries and Material Storage

d) Environmental Health and Safety:

- Environmental Impacts
- Noise and Vibration Management
- Odour control
- Waste Management and Recycling Principals
- Dust, Sediment and Erosion Controls



5 Operations and Risks

All statements and proposals documented in this Preliminary Construction Management Plan will be further detailed at the time of Contract Award for the Works to ensure alignment with the proposed methodologies and construction staging of the Principal Contractor.

6.1 Legislative and Regulatory Requirements

The Works will be undertaken in accordance with the following legislative requirements and any others that must be complied with, as required:

- National Construction Code 2019 comprising the Building Code of Australia;
- Applicable Australian Standards;
- Protection of the Environment Operations Act and Regulations;
- Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA);
- Environmentally Hazardous Chemicals Materials Act 2017;
- Protection of the Environment Administration Act and Regulations;
- Work, Health and Safety Act 2011 and relevant codes of practice and Standards;
- Work Health and Safety Regulation 2017;
- Code of Practice for the Safe Removal of Asbestos (2020));
- Waste Avoidance and Resource and Recovery Act 2001;
- Environmental Planning and Assessment Act 1987;
- Contaminated Land Management Act (1997)5
- Heritage Act 1997;
- Local Government Act 1993;

6.2 Identification & Management of Key Project Risks

Construction of the Masterplan presents a number of challenges that need to be delivered through a planned and structured approach. During the detailed design and pre-construction phase an extensive analysis of the project documents will be required including multiple site inspections to thoroughly understand and plan the project to mitigate the key risks.

An initial assessment has been carried out of such risks which include but are not limited to:

- Disruption to School operations
- Environmental conditions; noise, dust, vibration
- Identification of potentially hazardous materials
- Damage to existing buildings and equipment
- Continued compliance of existing fire zones and egress routes
- Disruption of the existing Schools car parking
- Construction workers access and egress affecting daily operations and the local road, cyclists and pedestrian network.
- Ensuring residents are well supported through appropriate management and notification of construction activities
- Working around children
- Unauthorised access to the construction site

The contractor must prepare a detailed Risk Assessment during the pre-construction phase to inform the construction methodology, eliminate or manage risks appropriately and to ensure a smooth interface with the existing School Campus.



6.3 Managing Risks within an Operational School Environment

School operations will be ongoing throughout the entire construction program. Revised pedestrian & vehicular access will be managed over all stages of the works through the implementation of traffic management

Upon receipt of the detailed design and during the pre-construction phase, the Principal Contractor must work in a collaborative manner with Loreto Normanhurst, CTPG, surrounding neighbours and Hornsby Shire Council to develop a stakeholder communication structure to address all stakeholder requirements and concerns.

The activities below have the potential to significantly impact on the operation of the school, and neighbours, if not managed effectively and communicated proactively with stakeholders:

- Disruption Notices time frames
- Access and traffic management;
- Planning and management of any major shutdowns;
- Minimising and controlling disruptions;
- Protection of existing school assets;
- Maintenance of existing students and staff privacy and security;
- Emergency after-hours call-out;
- Hazardous material identification and removal;
- Noise, dust and vibration control; air monitoring (for contaminants) and
- Out of hours work.

The following management plans should be developed as a minimum during pre-construction planning, incorporating stakeholder input and establish clear and concise communication channels for each area of interface works to support the ongoing operation of the School:

- Work, Health and Safety (WHS) Management Plan.
- Works Methodology plans



6.4 Hazardous Materials

To manage hazardous material on the project the contractor(s) shall develop a site-specific Hazardous Material and Unexpected Find protocol. The Contractor(s) protocol shall cover hazardous material removal including investigation, identification, testing, removal, final testing and clearance certificate prior to subsequent works commencing.

Ongoing investigations will be required to be undertaken by the Principal Contractor prior to commencement and further through the redevelopment project.

Initial investigations have identified hazardous materials likely to be encountered including:

- Polycyclic Aromatic Hydrocarbons (PAHs) and Total Recoverable Hydrocarbons (TRH) identified within the fill material
- Asbestos Containing Material (ACM) (one bonded fibre cement fragment was encountered on the surface of the site)

The Principal Contractor(s) site-specific methodology for removal of hazardous waste and unexpected finds shall ensure that waste is disposed of correctly and efficiently including:

- Review and revision of the Asbestos Management Plan and Register, and continual validation of the material data that has been captured to date;
- Ensure the Asbestos Remediation Contractor is appropriately licensed, and the chain of custody is documented with the landfill facility to ensure the asbestos is appropriately and lawfully disposed of;
- Review all site occupational and environmental management and monitoring programmes;
- Review and revision of communications and Industrial Relations strategies; and
- RAP (if required) Validation process to be implemented throughout the works.

Of major importance in managing the removal of hazardous materials is communicating the works activity to the stakeholders. To this end appropriate and responsive communication protocols will need to be addressed in the Contractors Management Plan.

6.5 Fencing and Hoarding

For Details, refer to Appendix A – Site Establishment Plans

Maintaining a secure and safe perimeter line to protect the public and staff from construction activities will be of critical importance to on-going safe school operation. Appropriate hoarding/fencing (as specified in Australian Standards and SafeWork NSW requirements) will prevent unauthorised access into the construction site 24 hours a day. Site security is paramount for public safety and the Principal Contractor shall implement secure entry points and sign-in registers for each stage of works to prevent unauthorised access. Vehicle entrances will be managed by Traffic Controllers. All traffic signage will be installed and maintained for the duration of the works.

Site Notices will be erected at the boundary of the works. The site notices will include details of; Principal Contractor details, name of Site Manager and 24-hour contact number, approved hours of work, and details of the Principal and other appropriate stakeholders. Safety related statutory signage will also be erected on the boundary of the site in accordance with SafeWork NSW requirements.

The Principal Contractor is responsible for maintaining safe access around the site and the safe movement of vehicles and pedestrians around the site, without any substantial detrimental effect to the operation of the School. This safe access must be documented by the Principal Contractor as part of its Construction Methodology Plan. The Principal Contractor is responsible for maintaining clear access to walkways and vehicle movements throughout the duration of the works. Methodologies indicated will be reviewed throughout the project.



6.6 Disruption Notices

Any planned disruptions to school operations will be managed through the process of Disruption Notices (DNs). For such stoppages, the DN will describe the applicable works, timetable, issues and risk management plans.

DNs are submitted by the contractor to the project manager and school stakeholders for approval. Depending on the nature of the works these may be required between 48hrs and 6 weeks prior to commencement of works.

6.7 Site Amenities

The site amenities and compounds erected will accommodate lunch, bathroom and change facilities for the duration of the project.

Accommodation and amenities for the construction workforce will be provided in demountable site sheds. These site sheds will be erected, relocated, and removed throughout the redevelopment to cater for fluctuating workforce demand and moving work areas.

In an effort to mitigate any further congestion around the school campus and neighbouring properties, the Contractor and sub-contractors will be advised during their site inductions that there is minimal parking on site and within the adjacent streets. To minimise impact on street parking, contractors and sub-contractors will be encouraged to use public transport or car share as the site is within close proximity to Normanhurst Train Station.

6.8 Site Inductions

All site personnel will be site inducted prior to commencing work on site

Inductions for the project will be specifically tailored to inform workers of their obligations working within the Loreto Normanhurst Campus and the main contractors required safety protocols. These site-specific measures will include at a minimum

- Site Safety
- Emergency protocols
- Working around children: All workers will be made aware of their responsibilities towards working in facilities with children
- Site Access, Site amenities, & Parking
- Travel & Deliveries.
- Client requirements
- Neighbour requirements including worker behaviour, dust, vibration, noise control, travel around adjoining streets
- Principal Contractor policies & procedures
- Environmental considerations
- Other specific school requirements such as No-go zones, drop off times, bell times, holiday periods



6.9 Service Diversions and Temporary Services

During the Works, service diversions will be undertaken. In general, the following principles will be adopted when diverting services:

- Services impacts on the existing campus facilities will be undertaken with full coordination, development and input with relevant school and authority stakeholders and will only proceed with approval, via a Disruption Notice process and appropriate consultation with the relevant service providers
- Impacts on the campus will be kept to the absolute minimum, which may result in 'Out of Hours' work or works during school holiday periods.

6.10 Dilapidation Reports

Prior to commencing the works onsite and at completion, the Principal Contractor will undertake a Pre and Post Dilapidation Report. The following areas are to be covered at a minimum;

- Existing surrounding council & RMS roads and internal campus roads;
- Adjacent neighbouring properties, including buildings adjacent to each subsequent staging;
- Existing landscape, including trees being retained;
- Services mains & infrastructure
- Stormwater systems; and
- Existing utilities and authority services.

The full extent of the Dilapidation reports will be agreed with the Principal prior to investigations proceeding.

6.11 Tree Protection

A number of existing trees in the vicinity of the work zones have been identified to be retained and protected during the works. As such protection of these trees in accordance with the statutory requirements and in line with the Arboricultural Assessment Report by Earthscape Horticultural Services should be maintained by the Principal Contractor.



6 Operating Hours

The Preferred working Hours:

Monday to Friday	7:00am – 6:00pm (Subject to approval conditions)
Saturday	8:00am – 1:00pm (Subject to approval conditions)
Sunday & Public Holidays	No Work (Subject to approval conditions)

Peak school traffic volume (School drops & pickups)

Mornings	7:00am – 9:00am
Afternoons	2:30pm – 4:30pm

All major deliveries will be managed with consideration of the above hours to mitigate the impact on the operation of the school and local traffic

In addition to regular working hours, there will be occasions where specific out of hours works are required. These out of hours works will be further developed as the projects design is developed and interfacing works become better understood.

Prior to commencement of the project, the Principal Contractor shall agree an out of hour's works process with Loreto Normanhurst, Hornsby Shire Council and all other necessary stakeholders to address the notification and approvals process for out of hour working.



7 Traffic Management

8.1 Traffic Management Plan

Note: This section is to be read in conjunction with the Transport Assessment appended to the EIS prepared by TTW.

One of the key requirements to achieve the successful delivery of the Master plan will be managing the flow of materials and equipment into and out of the construction site with as little impact on the existing school operations and minimising further congestion on the neighbouring roads.

Prior to construction works commencing, a detailed Traffic Management Plan shall be prepared by the Principal Contractor for each package of the project during its start-up/ planning phase to ensure coordination between the site, the school operation and neighbouring properties.

Key issues for traffic and pedestrian management during construction to be considered in the Traffic Management Plan include, but is not limited to:

- Provide safe and uninterrupted access for pedestrians and vehicles moving around the construction site and school campus;
- Carpark entry and egress;
- Ensure maximum safety of site personnel, pedestrians, and drivers;
- Outline construction vehicle paths of travel;
- 24-hour access to the school drop off area;
- Minimise environmental nuisance and impact as a result of construction traffic;
- Pedestrian access routes including the relocation of crossings away from the site but remaining within the vicinity of existing pedestrian routes;
- Ensure construction traffic does not unduly interrupt existing traffic flows on the local road network;
- Have no vehicles arrive at the site, without prior arrangement, outside the approved working hours;
- Encourage site workers to utilise local public transport system and car sharing wherever possible;
- Timely and effective implementation of traffic management measures; and
- Maintain access at all times for school and stakeholder's deliveries; and

8.2 Pedestrian Protection

Pedestrian and vehicular movements for areas around the school excluding construction zones will be maintained, or alternate routes determined where approved, and be defined by clear signage. If necessary, physical traffic management personnel will be used to guide pedestrians and vehicles safely.

Temporary hoarding appropriate to the interaction between pedestrians and construction works (as per SafeWork NSW requirements and Australian Standards) will be constructed to prevent unauthorised access to the construction site. These hoardings and fences may be staged to allow for appropriate construction methodologies to be planned.

8.3 Deliveries and Materials Storage

Deliveries to within the site will be managed through dedicated site entrances and exits. These will be outlined by the Principal Contractor and agreed by Loreto Normanhurst.

Materials will be staged and stored in such a way to promote a clear and safe work site. At all times, materials are to be stored within the confines of the site. While loading and unloading vehicles, it will be clearly stated that vehicles must not obstruct roads, driveways and escape routes from the building or fire protection equipment.

8 Environmental Health and Safety

9.1 Environmental impacts

An Environmental Management Plan (EMP) that complies with environmental legislation will be developed by the Principal Contractor. The EMP will describe the environmental strategy, methods, controls, and requirements for the execution of the Works. It will stand alone as the master document for site environmental activities.

The primary aim and objective of the EMP will be to provide a framework of procedures to minimise the impacts of the construction of the project on the environment. The environmental performance of the contractor will be monitored throughout the Works.

9.2 Noise and Vibration Management

Note: This section is to be read in conjunction with the Noise and Vibration Report appended to the SSDA prepared by RWDI

Noise from the construction site shall not exceed the limits set out in the Interim Construction Noise Guidelines, EPA and Australian Standards. No machine work will occur outside the approved working hours set unless approval has been given through the DN process.

The noise and vibration from the use of any plant equipment and/or building services associated with the premises shall not give rise to an offensive noise as defined under the provisions of the Interim Construction Noise Guidelines, EPA and Australian Standards.

As part of noise mitigation for the project, the contractor will be responsible for the management, checking of compliant maintenance regimes and statutory supervision of all equipment, such as making sure all trucks and machinery involved in the Works will be checked for defective exhaust systems and general servicing.

Guidelines for operational limits, identification of at-risk receivers and implementation of mitigation measures will be provided in a project Noise and Vibration Management Plan. The objectives of the Construction Noise and Vibration Management Plan will be to:

- Ensure that construction works do not significantly impact background noise levels around the school campus, and that applicable guidelines and regulations are met;
- Ensure all equipment operates within the applicable noise levels;
- Vibration does not affect the school campus or neighbouring properties; and
- Ensure construction methodologies adopted minimise the impact of noise, dust and vibration.

9.3 Odour Control

Odours associated with demolition for the site will be assessed and minimised. All plant and machinery involved in the works will be regularly serviced and checked for exhaust emissions and catalytic converters are to be utilised.

9.4 Waste Management and Recycling Principles

Note: This section is to be read in conjunction with the Waste Management Strategy prepared by Foresight Environmental

Excavated waste:

Shall be reused on site wherever possible, any surplus material requiring exporting is to be exported to the designated waste management facility according to the EPA soil classification requirements. Any material identified as hazardous in accordance with the EPA will be disposed at the appropriately licensed waste management facility



Construction generated waste:

The Principal Contractor will be required to recycle and reuse materials where possible and ensure when waste is disposed it is done so at a licensed EPA waste disposal facility.

Procedures will be in place to ensure waste generated by the project is categorized with consideration of re-use or recycle where possible.

Strategies are to be developed specific to each stage of the project (Groundworks / Structure / Fitout) to manage waste production and assure the waste generated is managed appropriately.

Establish provision for on site monitoring of waste disposal such as reporting on disposal destinations, recycling reporting from waste management facilities.

Establish protocols for hazardous waste and measures to be implemented to minimise environmental impact such as spill control, battery disposals etc.

The contractor will be committed to achieving compliance with the EPA guidelines.

9.5 Dust, Sediment and Erosion Controls

Note: This section is to be read in conjunction with TTW sediment and erosion control plans for each respective stage

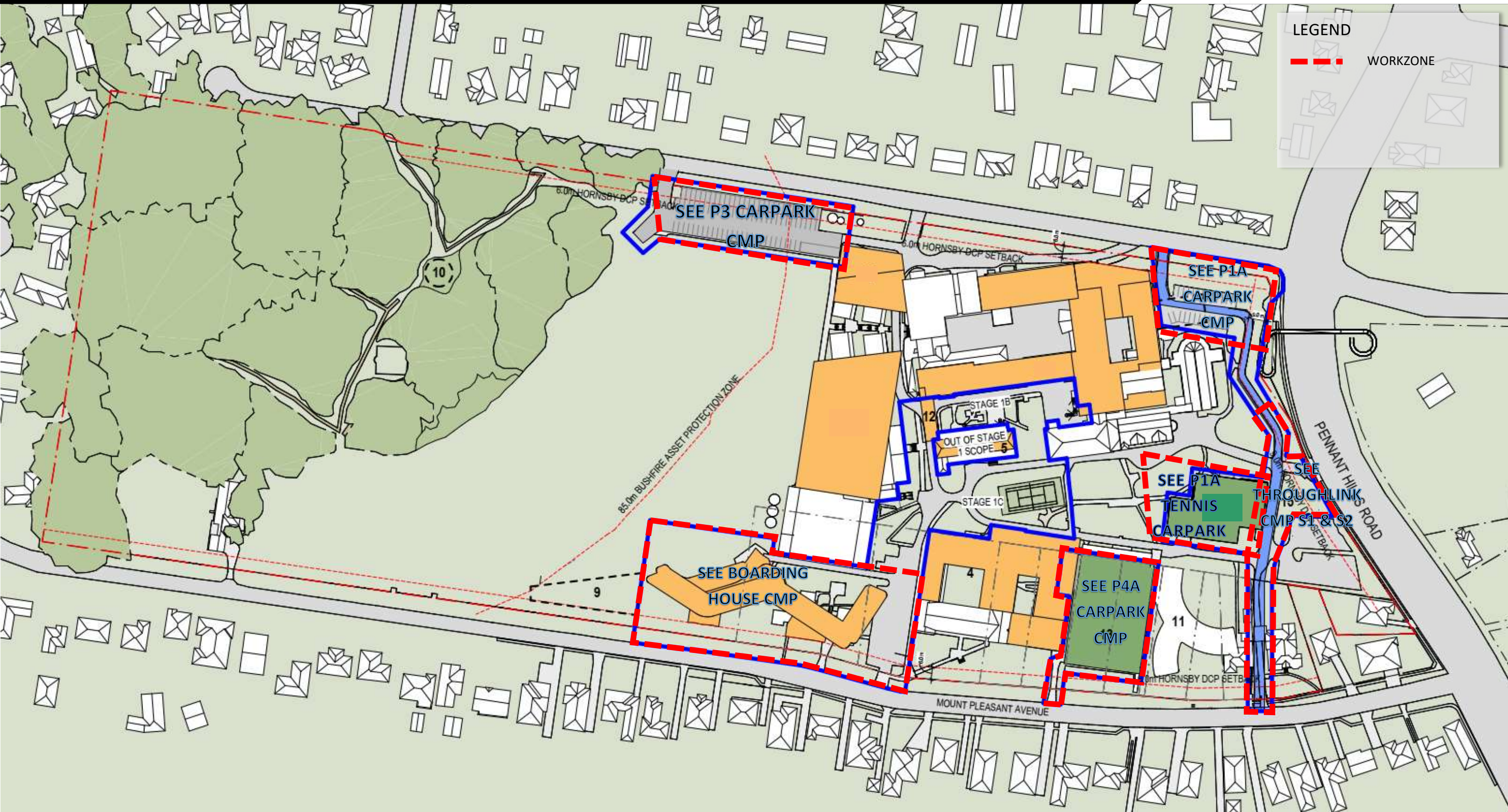
The appointed Principal Contractor will develop a strategy in accordance with the statutory regulations for dust control, and a comprehensive Soil and Water Management Plan, both of which will be included in the EMP. This strategy will include control measures and document how these measures are to be implemented and monitored.

Appendix A

Site Establishment

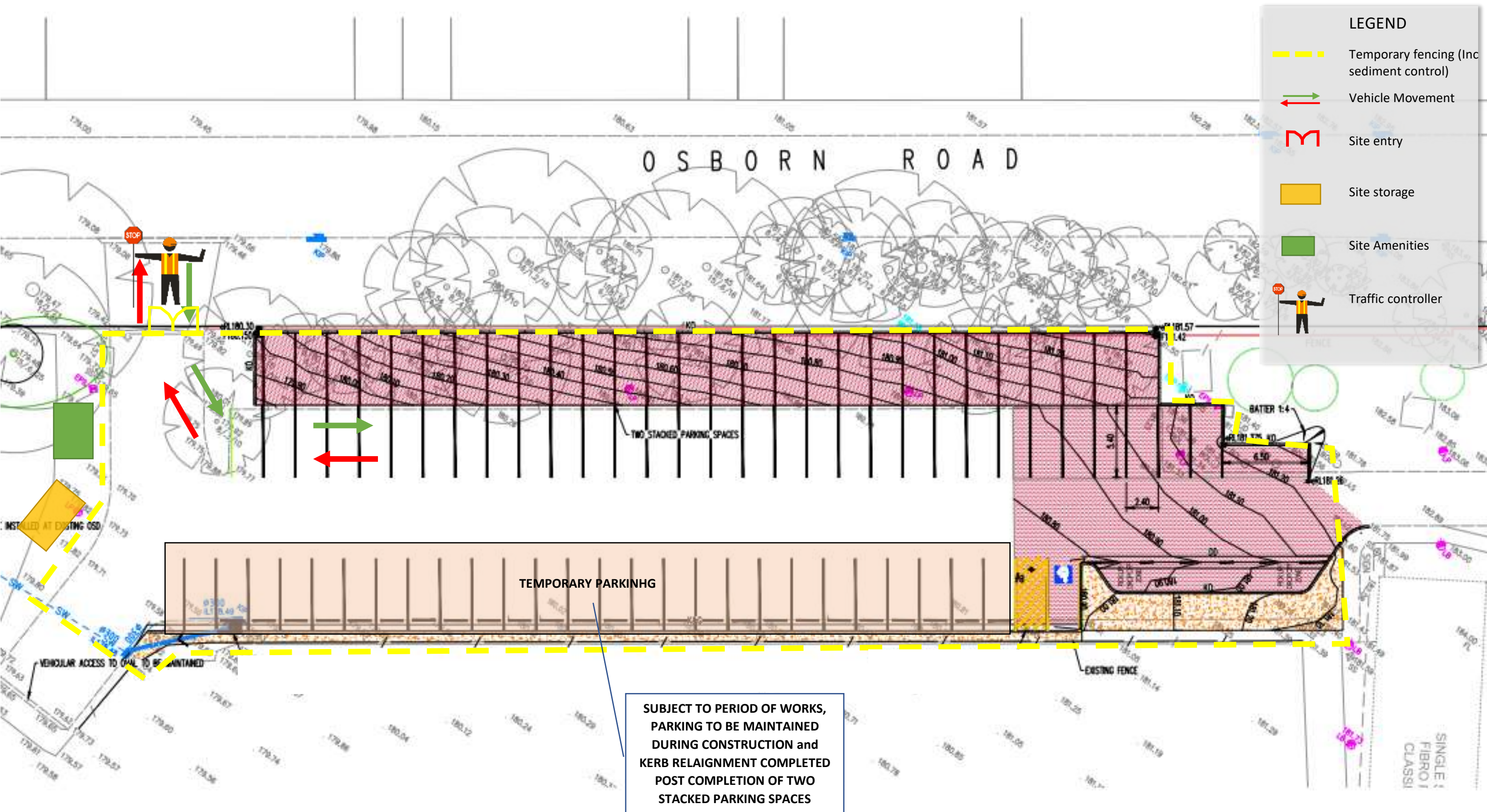
Plans





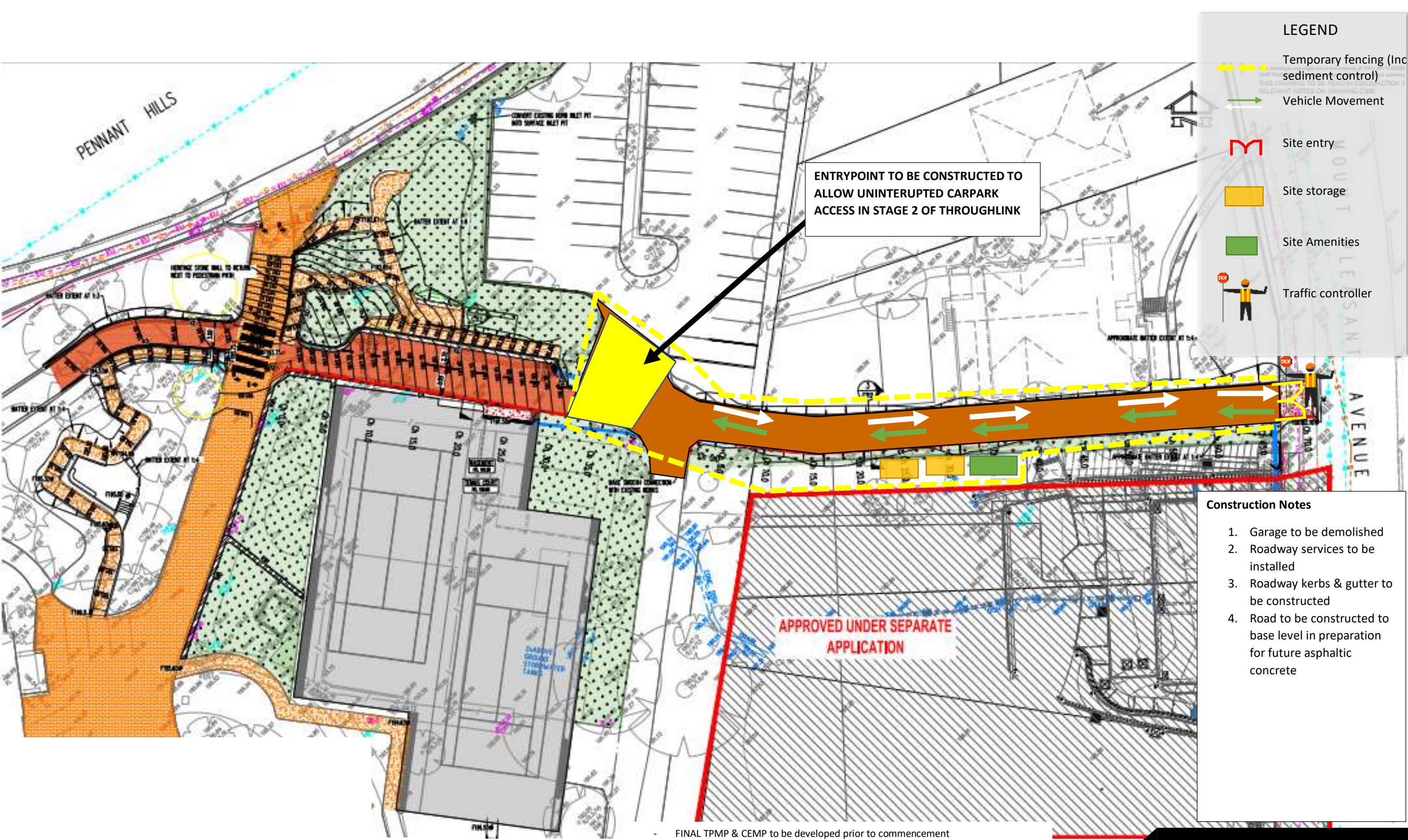
CONSTRUCTION MANAGEMENT PLAN

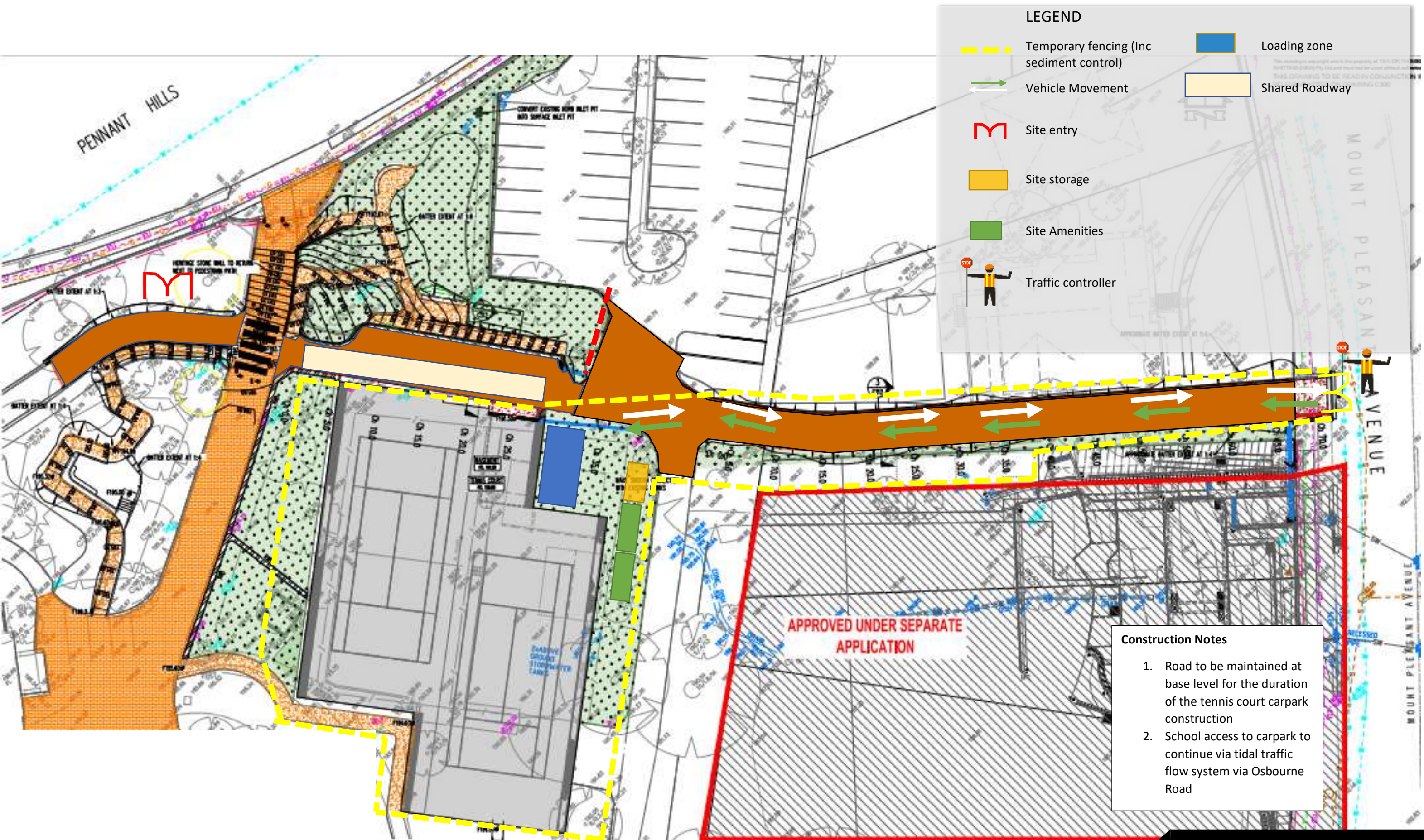
- FINAL TPMP & CEMP to be developed prior to commencement
- Sediment control measures to be installed as detailed
- Amenities to be allocated according to each CMP



CONSTRUCTION MANAGEMENT PLAN

- FINAL TPMP & CEMP to be developed prior to commencement
- Sediment control measures to be installed as detailed
- Site Amenities to be provided
- Pedestrian footpath at front of site to be maintained at all times





Construction Notes

1. Road to be maintained at base level for the duration of the tennis court carpark construction
2. School access to carpark to continue via tidal traffic flow system via Osbourne Road

CONSTRUCTION MANAGEMENT PLAN

- FINAL TPMP & CEMP to be developed prior to commencement
- Sediment control measures to be installed as detailed
- Shared roadway area required for major construction tasks such as concrete pours and material handling



LEGEND

- Temporary Fencing (Inc sediment control)
- Vehicle Movement
- Site entry
- Site storage
- Site Amenities
- Traffic controller

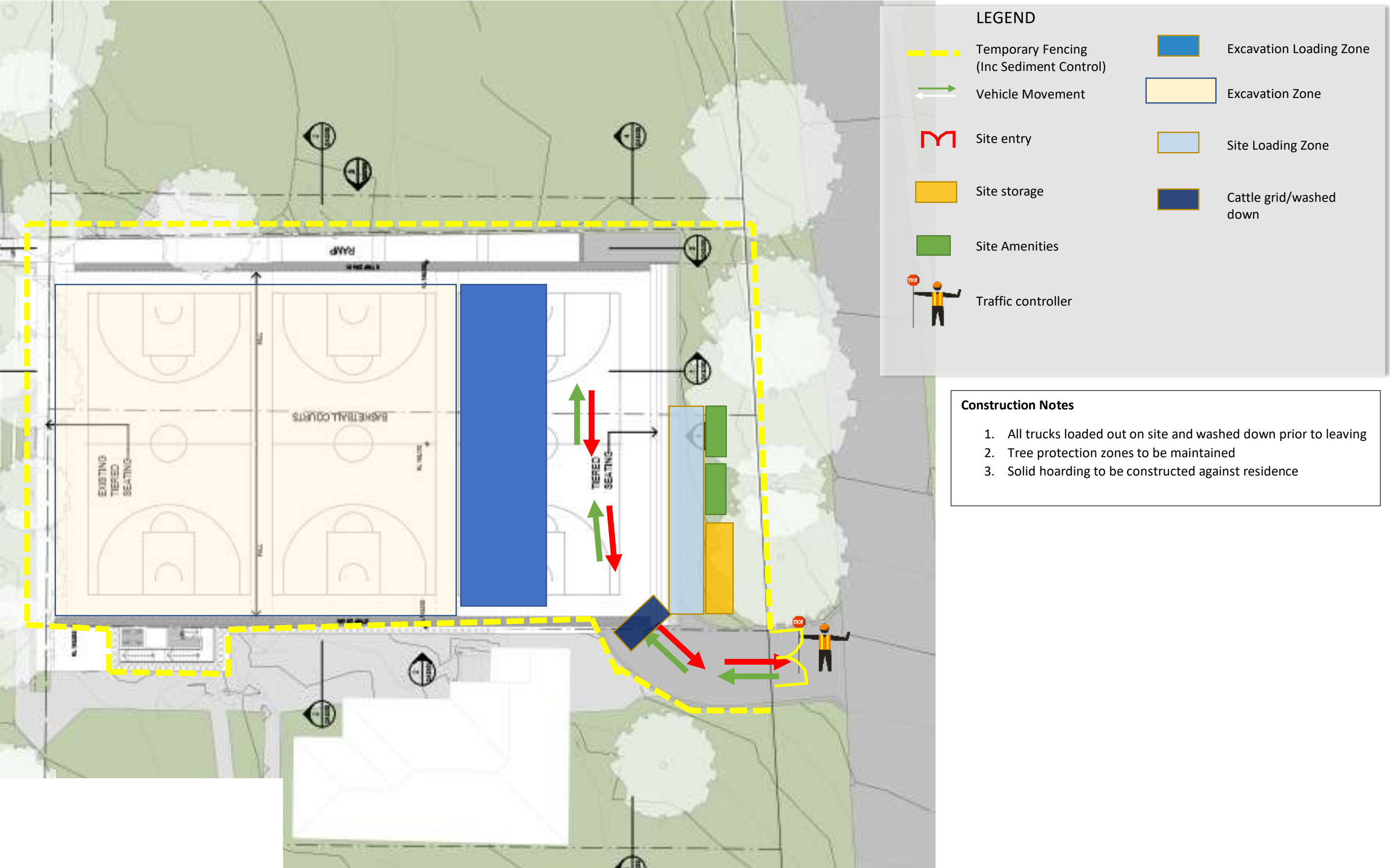
- Construction Notes
1. Proposed Works to be completed during Holidays
 2. Retaining walls & Batters to be constructed
 3. Roadway services to be installed
 4. Roadway kerbs & gutter to be constructed
 5. All major deliveries to be finalised
 6. Road construction to be recompacted & proof rolled as required
 7. Asphaltic concrete to be installed

CONSTRUCTION MANAGEMENT PLAN

- FINAL TPMP & CEMP to be developed prior to commencement
- Sediment control measures to be installed as detailed
- Staff carpark link road ramp construction to be completed during school holidays

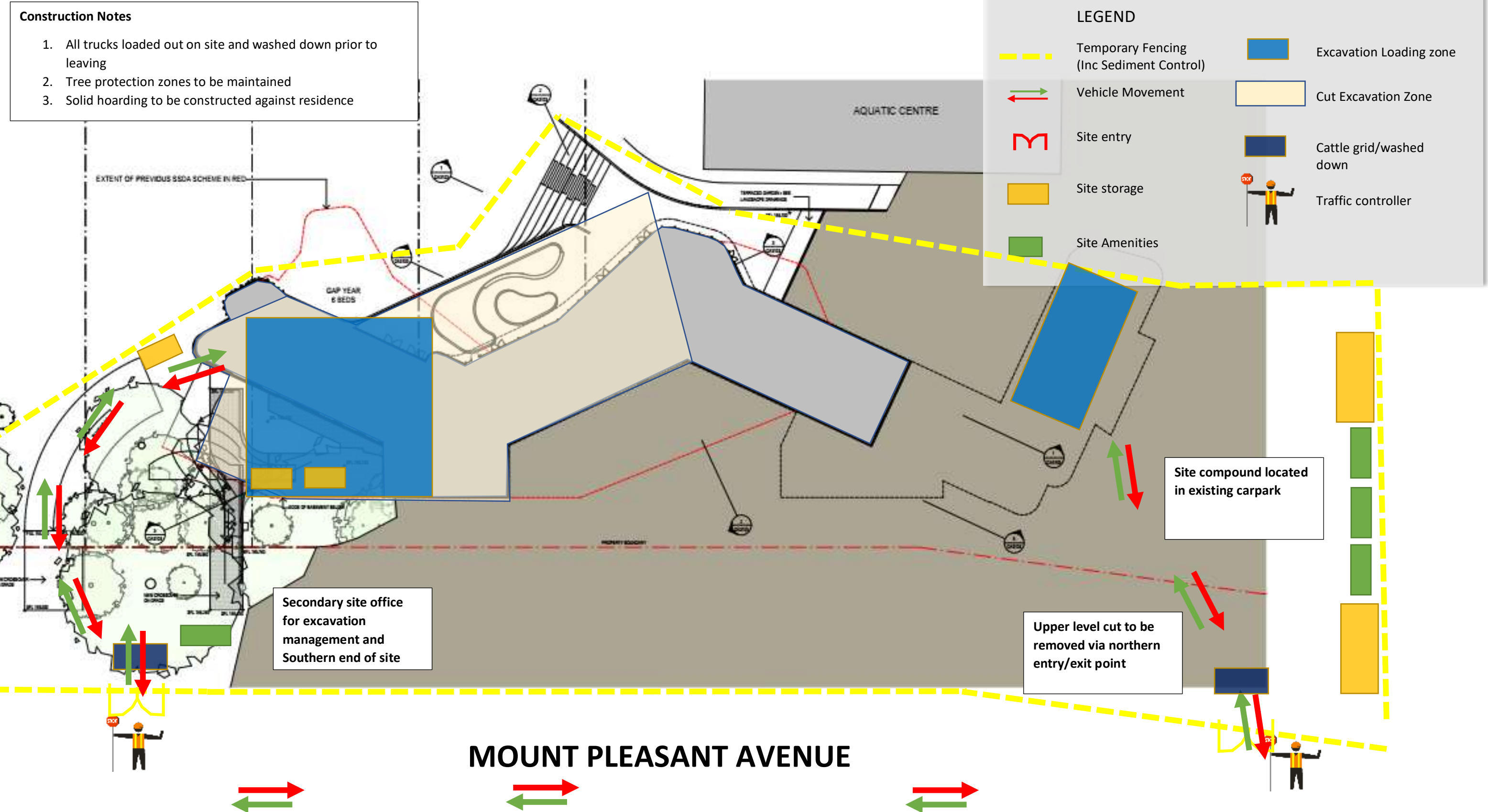


- FINAL TPMP & CEMP to be developed prior to commencement
- Sediment control measures to be installed as detailed
- Staff carpark link road reconstruction and throughlink connection to be completed during school holidays



CONSTRUCTION MANAGEMENT PLAN











- FINAL TPMP & CEMP to be developed prior to commencement
- Sediment control measures to be installed as detailed

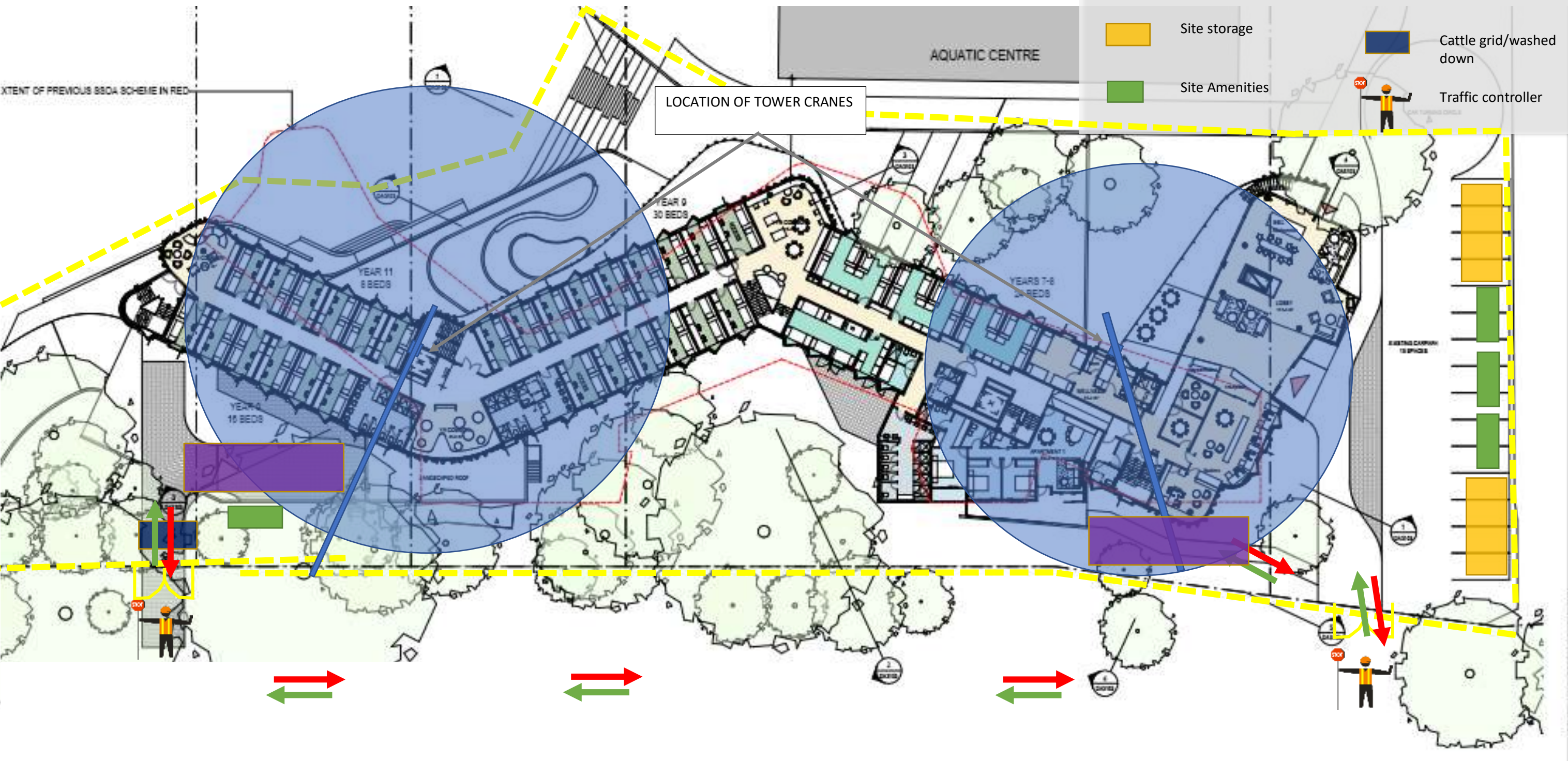


Construction Notes

- 1. All trucks loaded out on site and washed down prior to leaving
- 2. Tree protection zones to be maintained
- 3. Solid hoarding to be constructed against residence & Aquatic Centre
- 4. All existing large construction traffic to be managed by traffic controllers

LEGEND

-  Temporary Fencing (Inc sediment control)
-  Vehicle Movement
-  Site entry
-  Site storage
-  Site Amenities
-  Excavation Loading zone
-  Excavation Zone
-  Crane Loading Zone
-  Cattle grid/washed down
-  Traffic controller



CONSTRUCTION MANAGEMENT PLAN

- FINAL TPMP & CEMP to be developed prior to commencement
- Sediment control measures to be installed as detailed

