

RIVIERE APPLECROSS

59 Canning Beach Road, WA 6153





CONSTRUCTION MANAGEMENT PLAN

Program: Approx 97 weeks, January 2023, completing October 2024

Construction Management Plan (CMP)

Date Amended Plan:	22/11/2022	Revision:	Rev5

Date	Revision	Section:	Description of Amendments
5/11/2021	01	BP issue	Initial Issue
8/12/2021	02	BP Issue	Revised Section 1.11 Updated suburb parking options Included requirement for verge permit application Updated TGS Waste and waste-water removal of temp amenity
01/06/2022	03	Forward Works Only	Updated to represent forward works contract only; the following sections updated; 1.1 Introduction 1.4 Construction Works 1.6 Site Mobilisation and Setup 1.9 Laydown area and Cranage 1.11 Site Access 1.12 Subcontractor Parking 1.14 Proposed Construction Equipment 1.19 Traffic and Pedestrian Management Attachment 1 & Attachment 2
01/07/2022	04	Forward Works Only	Updated Attachment 1 to reflect sight lines

			1.12 Deleted reference to parking permits 1.19 Updated to not additional TMP approval and communication with Raffles Residents
22/11/2022	05	Main Works	Updated to represent main works; the following sections updated; 1.2 Introduction 1.4 Construction Works 1.6 Site Mobilisation and Setup 1.9 Laydown area and Cranage 1.11 Site Access 1.12 Subcontractor Parking 1.13 Dilapidation 1.14 Proposed Construction Equipment 1.19 Traffic and Pedestrian Management Attachment 1 & Attachment 2
5/12/2022	06	Main Works – BP Issue	Attachment 1 - Site Plan updated to note waste area and truck wash down zone 1.29 – Updated to address light spill and further details on neighbour engagement added. 1.13 – Dilapidation section updated to include schedule up BA20's 1.26 – Updated to include reference to verge remediation.

Acknowledgement and Sign Off: The undersigned acknowledge that they have read and understood the assigned responsibilities in line with the requirements contained within the plan listed above.

Name	Position	Signature	Date

1.1 Introduction

This Construction Management Plan (CMP) sets out the management strategies that will be employed on Riviere Applecross Main Works. It describes PACT's approach to planning and construction methodologies from the current status of the Forward Works through to Practical Completion.

The CMP covers PACT's proposed logistics and construction methodology based on PACT's previous experience on similar projects and current understanding of the existing environment.

The proposed construction methodologies will be further developed throughout the planning and construction phases.

DA Approval Reference DAP / 19/01638 dated 23 December 2019, Clause 15 requires the following to be addressed.

- Public safety and security (Refer Section 1.8)
- Hours of operation (Refer Section 1.10)
- Noise and Vibrational Controls, (Refer 1.16 and 1.18)
- Air and Dust Management (Refer Section 1.15)
- Stormwater, Groundwater and sediment control, (Refer Section 1.22)
- Waste and material disposal, (Refer Section 1.21)
- Traffic Management Plans prepared by an accredited personnel for various pahases of the construction Including any proposed road closures, (Refer Section 1.19)
- The parking arrangents for contractorsand the subcontractors, (Refer Section 1.12)
- Onsite delivery times and access arrangements, (Refer Section 1.10)
- The storage of materials and equipment on site
- Any other matters likely to impact upon the surrounding properties

1.2 Location

The Riviere Applecross Project is located 59 Canning Beach Road, Applecross as per Figure 1 below.

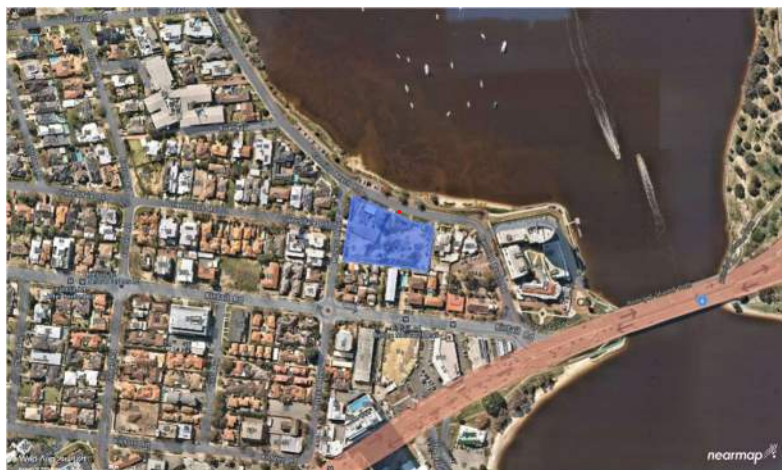


Figure 1 – Aerial Site View

1.3 Key Participants

STAKEHOLDER	NAME

[illegible]

1.4 Construction Works

Construction of a mixed use apartment building over 15 floors comprising the following:

- 220 Apartments in total with a mix of 1, 2 and 3 bedrooms
- Community facilities for local area residents including a community resource centre
- A men's shed
- Retail and F&C tenancies
- Medical suites
- Private communal facilities for Residents

The construction will be staged as follows:

Stage 1: Forward Works – Piling, Inground services, footings and slab on ground. Currently at 85% complete

Stage 2: Main Works - Construction of full podium building (above ground slab), tower one and tower two apartment buildings

Stage 3: Construction of T3 apartment building levels 3 to 14 (Stage 3 construction does not form part of this contract of works and therefore does not fall under this CMP).

Construction will be carried out in accordance with the associated specification, drawings and contract documentation including the supply of all labour, material, equipment, plant, transportation and accommodation in order to safely complete the proposed works.

Inground works consist of foundation piling, excavations, inground stormwater works, lift Pits, and concrete pile caps and raft foundations as well as slab on ground construction.

The main building works includes traditional reinforced concrete slabs, concrete columns and walls and concrete roof. External walls are a combination of pre-cast, lightweight lined and glazed walls.

Internal Walls are lined steel stud, and gyprock ceilings throughout.

1.5 Contact Details of Essential Site Personnel

The PACT Construction site sign will be installed to the site fencing in a prominent location. The sign will contain the PACT Site Manager mobile number.

PACT have a full time Site Manager who will be responsible for the supervision of the site.



1.6 Site Mobilisation and Set Up

Site mobilization occurred in April 2022 for the forward works which will continue through for the main works.

Site establishment will commence by erecting a fence around the construction area and will consist of 1800mm hoarding to the full extent of Canning Beach Road and Moreau Mews, providing public safety and site security. Use of the verge area on Canning Beach Rd directly outside the site will be required, with a verge permit to the local council required.

Site office and amenities will be installed on the verge as noted on the site plan which will be relocated to within the building after lower levels structure works are completed (STAGE 2 WORKS). Some verge space may also be required to locate site amenities – a verge permit application will be made if this is the case.

Dewatering equipment is currently located on the Canning Beach Road verge towards the middle of site. This equipment has been required during the construction of the footings is estimated to be removed in December 2022. Following the removal of the dewatering equipment, the verge will be used for deliveries to site, unloading materials and concrete pumping activities.

Attachment 1 Provides details of the site layout including the location of key construction plant.

1.7 Temporary Services

PACT Construction has applied for the connection of temporary services from both Western Power and the Water Corporation as part of the Forward Works. These services will then be run within the

site to the areas where required. Service capacity requirements will be discussed with the service provider once a possession date has been agreed.

Temporary site facilities (lunch rooms, toilets, offices, first aid room) will be provided for the duration of the works. Initially these will be typical temporary site shed accommodation units with relocation into the GF podium area of the constructed building at the earliest possible time.

All temporary office, lunchroom, toilet and other facilities will be connected to relevant authority provider services – water, waste water, power.

Suitable bins will be provided to all facilities and daily cleaning will take place, including removal of rubbish from site.

1.8 Site and Public Safety and Security

Access to the site will be monitored and controlled to prevent persons unrelated to the project from entering without the appropriate permission. PACT Construction will ensure that no persons unrelated to the project shall enter the site without the permission of PACT. All visitors will be directed to the site office to sign attendance register. All contractors will be fully site inducted prior to work commencement. Signage will be erected, warning of dangerous construction issues around the site. Site safety will be managed in accordance with controls outlined within our Safety Management Plan.

The road entry will be kept clean at all times and all truck movements will be monitored in and out of site to prevent interruption to local traffic as much as possible.

All deliveries and traffic movement will then be monitored strictly and in line with the traffic management plan.

Also refer Section 1.19 which outlines proposed Traffic Guidance Schemes.

1.9 Lay Down Area and Cranage

Deliveries to site will be via Gate 1, located on Moreau Mews, during the planned Water Corporation sewer tank works during January and February 2023. We have received advice from Valmec (Water Corporations Subcontractor) that both Westbound and Eastbound traffic will be closed for approximately 7 weeks.

Once Canning Beach Road is reopened, deliveries to site will be via Loading Zone 1 & 2 and via Gate 2 with all materials to be stored within the site compound.

Deliveries will be organized during working hours. All materials will be kept safe and secure within the site to prevent windblown egress from site.

Two tower cranes will be erected for the transportation of materials both horizontally and vertically within the site. This crane type, along with the proposed verge permit will assist in reducing disruption to the traffic flow within the areas as well as minimizing disruption to the adjacent neighboring properties.

1.10 Working Hours

Work hours will be 7:00am to 7:00pm Monday to Saturday as per the City of Melville Guidelines. This will be monitored and enforced by PACT personnel.

1.11 Site Access

Access into site for construction works, will be from Canning Beach Road. A supplementary access gate located at the Moreau Mews will be used during the Water Corporation works on Canning Beach Road.

Traffic Management will be implemented as and when required and as noted within the enclosed TGS Traffic Management Plans. Required generally when works are occurring outside of the site boundary, where vehicle, bicycle and pedestrian traffic may be affected by construction works and mobilization or demobilization of large plant and vehicles entering and leaving site cannot remain within standard turning circles and roadways (including having to enter or leave in reverse).

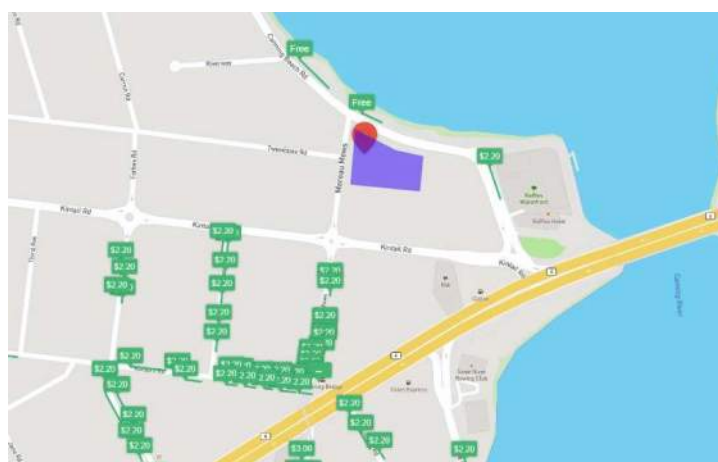
The area around the entry/exit to site will be kept clean and tidy at all times for the duration of the contract.

Deliveries will be conducted within working hours 7:00am and 7:00pm Monday to Saturday only, and will be coordinated to avoid peak hour traffic periods wherever possible. Where this is not possible, eg during concrete pours, crane erection etc, appropriate traffic signage and traffic management personnel will be onsite to direct pedestrian traffic safely as required.

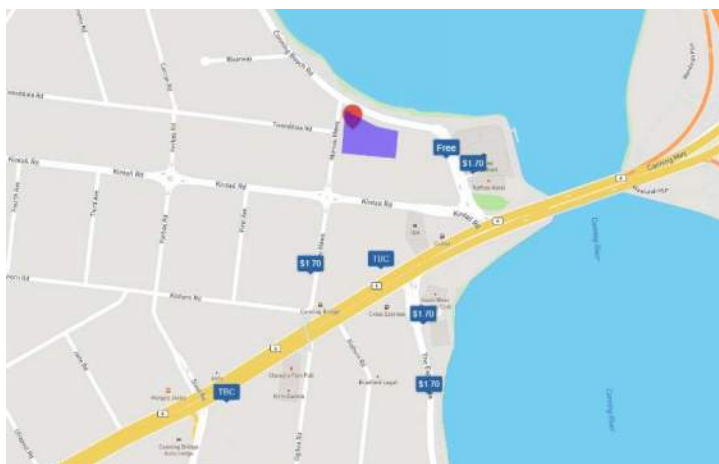
1.12 Subcontractor Parking

All subcontractors will be encouraged to utilize carpooling, rideshare (e.g. park and rideshare from Heathcote Reserve) and public transport to reduce the parking demands wherever possible. Storage areas for tools and equipment will be provided onsite to assist trades in this.

Due to the site location and lack of unconstructed site area, parking will be within the local area throughout working hours, strictly in accordance with council requirements. PACT nominates the following locations as preferred parking locations for workers, with local roadside parking to supplement:



Street parking options in relation to site area



Commercial/ garage parking options

All Subcontractors will be subject to the relevant parking fees and requirements of the City of Melville as found on the City's website:

<https://www.melvillecity.com.au/our-city/about-our-city/parking-and-getting-around/parking-areas-and-fees>

This information will be relayed to all Subcontractors and Permits issues as part of the onboarding and prestart process.

Estimated numbers of trades on site are:

- Foundation works: 25 persons
- Above Ground Structure: 80 persons
- Internal Fit Out: 170 persons

1.13 Dilapidation

Dilapidation surveys have been conducted by an independent specialised company on behalf of PACT for the purposes of their records. The dilapidation survey include adjacent properties and PACT will also document nearby roads, paving, kerbs and any tree's and vegetation.

Copies of adjoining property surveys will be provided to the respective property owners.

A copy of survey report for local council infrastructure, roads etc can be provided to council if requested.

With vibration works being minimal and no boundary retention required there are expected to be no issues with surrounding properties.

BA20 & 20a's have been signed by all neighbours in relation to the boundary works.

1.14 Proposed Construction Equipment

~~A piling rig will be the first major piece of equipment arriving on site followed by excavation equipment which will include loaders for bulk excavation and excavators of varying sizes to accommodate the size and depth of trenches being excavated. Both hydraulic and electrical contractors will also have excavators during the deeper services installation period. Smaller excavators will also be used by the concrete contractor to excavate both pad and strip footings.~~ Completed in Forward Works

~~Dewatering activities will be required for foundation construction works with water treatment plant to be located within the approved construction site / verge work zones. Approvals relating dewatering, water treatment and disposal are underway with the relevant authorities and will be confirmed in due course.~~ Completed in Forward Works

As mentioned above, the tower crane will be used throughout the structural delivery phase of the project. The crane will be responsible for reinforcement movement into any remaining pad and strip footings, formwork erection for all suspended slabs, post tensioning cables, reinforcement for suspended slabs, structural steel, roof sheeting, mechanical plant and many other areas around the site. Mobile cranes will be used prior to the mobilization and after the demobilization of the tower crane for all other incidental lifts and movements.

This project is within a heavily populated area and as such dust, noise and vibration suppression and management will be paramount during construction of the project.

1.15 Air & Dust Management

All forms of dust migration prevention will be considered and the most effective for this site will be implemented, this includes but not limited to, shade cloth on fencing, watering and ground stabilization.

Dust suppression will be managed with the use of water carts during ground works with mesh lined perimeter fencing also assisting in controlling dust migration outside of the site boundary. Ground stabilisation will also be an option to consider in areas that are not being worked on.

Dust Management will be continually assessed throughout the project duration.

1.16 Vibration Management

All piling and major bulk excavation works will be carried out using the most up to date methods so there should be little vibration limited to the Services and Structure compaction works.

Vibration control and management will be achieved with the use of low frequency machinery.

1.17 Excavation Management

Excavation works are limited to construction of foundations and service install at ground level, there is no basement construction. Works at boundary with adjacent properties is limited to typical strip footing construction that will require minimal disruption to boundary areas.

There will be no external risk to the surrounding neighbors due to excavation works.

1.18 Noise Management

Noise will be managed by working strictly within the City of Melville's stated working hours and ensuring plant and equipment sound attenuation used where required and in order to meet the requirements of the Building Licence.

Activities likely to generate significant noise and or vibration will, wherever practical, will be scheduled between the hours of 7:00am and 7:00pm Monday – Saturday. All machinery and equipment will be checked prior to commencement to ensure compliancy with the relevant standards.

Noise and vibration management will be continually assessed throughout the project duration.

1.19 Traffic and Pedestrian Management

Traffic and pedestrian management will be undertaken in accordance with our HSEQ Management Plan as well as task specific Traffic Management Plans completed by Prime Traffic Solutions. An updated plan (Rev 4) was issued to the City of Melville on the 16th November 2022.

PACT Construction will have fully qualified traffic management labour on site to safely direct traffic and pedestrians during any time when traffic and pedestrian management is required.

During times of heavy traffic onto the site and off the site, traffic and pedestrian management will be used in conjunction with our traffic management plan prior to commencement of major deliveries. The site entry will be kept clear and tidy at all times to minimise pedestrian and local traffic impact.

Pedestrian traffic is not expected to be impacted as no footpaths currently exist on either of the two verge boundaries outside the subject site.

A separate TMP approval will be issued for the erection of Tower Crane 2. PACT to provide details of erection date and communicate in advance with residents (as per Tower Crane 1 erection).

Please refer to the enclosed Traffic Guidance Schemes for detailed approaches. The following is a summary of the likely scenarios in which relevant TGS will be utilised.

TGS Ref number	Relevant use	Frequency
PC105-01	Surrounding site signage installed daily	Daily
PC105-02	Stop traffic when deliveries reversing or out of site	Frequent; Once a week
PC105-03	Lane closure for unloading materials via crane to within site compound	Frequent; Once a week
PC105-04	Lane close for erection and dismantle of tower crane and mobilise of piling rig equipment.	Infrequent; 5-6 times during project
PC105-05	Detour route for lane closures.	Infrequent; 5-6 times during project
PC105-06	After hour signage	As required
PC105-07	Stop traffic when lifting from within construction	Daily
PC105-08	Stop traffic when deliveries reversing or out of site	Frequent; Once a week
PC105-09	Stop traffic when deliveries reversing or out of site	Frequent; Once a week

1.20 Safety and Security Signage

All signage on the site, including warning, information and directional signage, will comply with legislative requirements. The Site Manager will ensure that warning signs will be displayed within the site in an area where a hazard exists. Safety signage will be displayed at the entry to site for all to see prior to entering the work zone, this sign will include the Site Managers contact details. Security signage will also be displayed at the entry and around the site warning that the site is covered by a monitoring system.

1.21 Waste Management

All waste bins will be kept on site within the confines of the site boundary. PACT Construction is accredited to ISO 14001. We take our environmental accreditation very seriously and will always endeavor to use sustainable materials and work practices. PACT have a preferred supply agreement with WA's leading waste management company who take every waste bin to their recycle plant and recycle every possible item. Reporting of this practice can be viewed if requested.

Waste management will be well executed during delivery of the project where we will proactively control how waste is generated on site, is sorted, stored and ultimately disposed of without affecting neighbouring properties and being ever mindful of working to minimise landfill. We have a preferred supply agreement in place with Instant Waste Management which guarantees that as a minimum, 90% of all waste captured on our projects is recycled.

1.22 Stormwater, Groundwater and Sediment Control

Stormwater retention / disposal will be confined to the site through the use of typical practices such as bunding, fencing and hoardings with particular care taken at adjoining property locations.

The ground slabs will have been completed as part of the Forward works which minimizes sediment. Storm water detention tanks and re infiltration cells were also completed as part of the Forward Works which will be utilized to contain rain water.

1.23 Flood Management

The ground floor slab at RL1.4 is 700mm below the 1 in 100 (1%) annual exceedance probability (AEP) flood event. Advice from the developers Structural engineers Stantec is that the building footings and ground slab has been designed to accommodate this and that no deterioration of structure will occur in this instance (only damage to finishes would occur).

During construction, in the unlikely instance of the above occurring, the following strategies may be adopted to mitigate the effects;

- Delay completing ground floor works below the flood event level until the back end of the project and outside of the winter months
- Time permitting, install sandbags around key areas to minimize damage
- Where reasonable to do so, keep the ground floor areas free of plant and equipment
- Temporary dewatering pumps are required.

1.24 Water Management during construction

Through consultation with our selected Hydraulic subcontractor strategies to minimize risk or potential damage during construction that can be implemented include;

- Temporary water to be run on the outside of the building (i.e. fixed to perimeter scaffold)
- Staging pressure testing of lines during construction
- Isolate water supply during weekends, holiday breaks etc.
- Isolate individual levels as required
- Ensure QA and testing is in line with standard quality procedures and documentation
- Regular monitoring of water lines
- Develop and implement PTW (permit to Work) for working on live water systems

1.25 Protection of Existing Services and Trees

Tree protection zones (TPZ) will be in place throughout construction works and will be created using mesh fence panels around the existing mature trees along Moreau Mews in accordance with the DA conditions. PACT will regularly monitor these locations in conjunction with a qualified Arborist throughout delivery of the project.

1.26 Material on Verge / workzone

As indicated on the enclosed site layout plan some verge areas will be required during the works to assist with construction and access.

The use of the this verge area (and any others) will be subject to the issue of an appropriate verge permit from City of Melville following application.

As part of the development approval, the surrounding verge is to be upgraded to connect to the new building. PACT will undertake any remediation of the verges, kerbs as part of this process including any required cleanup

1.27 Work Force Behaviour Standards

PACT Construction recognizes its moral and legal responsibilities to provide an equal opportunity workplace. Discrimination, bullying, harassment and other unacceptable behaviors have no place in a modern workplace. All workers have a right to fair treatment.

PACT Construction is committed to providing its workers with a workplace free from discrimination, bullying and harassment and will not tolerate behavior that conflicts with this commitment.

Each and every worker has a responsibility to treat other workers, client and the general public with dignity and respect. Any worker found to be breaching our behavior standards will be progressed by corrective disciplinary and counselling and may result in removal from site depending on the seriousness of the matter and the workers response to disciplinary action.

1.28 Industrial Relations Management

PACT Construction has developed an Industrial and Employee Relations Management Plan (IERMP) which identifies those elements that are required to support the maintenance of a harmonious working environment for direct employees, the Client, sub-contractors, and other service providers during all stages of the contract including execution of the Works through to demobilization. This

includes compliance with the legal and contractual requirements and, if applicable, alignment to the client's operations.

PACT Construction has established procedures to ensure recruitment and induction, and staff development and training is conducted to the highest possible standard. This is achieved via the implementation of the PACT Integrated Management System which also encompasses quality, safety, and environmental management. In addition to this, the ABN Group has its own dedicated Human Resource Manager who is supported by human resource specialists, as well as maintaining strong relationships with other entities such as Master Builders Association, Workplace Relations specialists, Fair Work Australia, and the Office of the Fair Work Building and Construction Commissioner.

Through the implementation of the PACT Integrated Management System, in conjunction with effective communication processes, PACT Construction is able to substantially mitigate the risks associated with any unforeseen employee relations issues.

1.29 Neighbour Relations - Consultation, Communication and Complaint Management

PACT have created relationships with all adjacent neighbours during the BA20 process and are in regular communication due to the works required on the boundary. When any works may affect surrounding residents, letter drops are undertaken to advise re; tower crane install, early morning pours. These letter drops include contact details for PACT staff for the residents to make contact if required.

Following a meeting with the City of Melville on the 8th December 2022, it was agreed weekly updates on works/traffic impacts would be sent to the City each Thursday for publishing on the Council website. Residents would be directed there in the first instance for regular updates.

All complaints will be reported in the first instance to the Site Manager (or elevated to the Project Manager where required) and will be documented using the Complaint Record form. Following complaints, the cause will be identified, and work practices modified or re-scheduled to reduce or eliminate the risk of future events. All complaints shall be recorded in the PACT Corrective Actions Register.

Contact Details for the designated Site Manager is clearly stated on the main site signage.

Light spill into adjacent properties will be managed by ensuring that lights will be turned off in accordance with permitted working hours. Lighting on cranes etc will not result in light spill due to the height of the cranes

Attachment One: Site Layout

P.A.W

TREE PROTECTION ZONES

EXISTING TREES

SITE HOARDING LINE

TOWER 2

TOWER 2 - JUMPFORM

LOADING ZONE DURING WATER CORPORATION WORKS - JAN/FEB

GATE 1

TREE PROTECTION ZONES

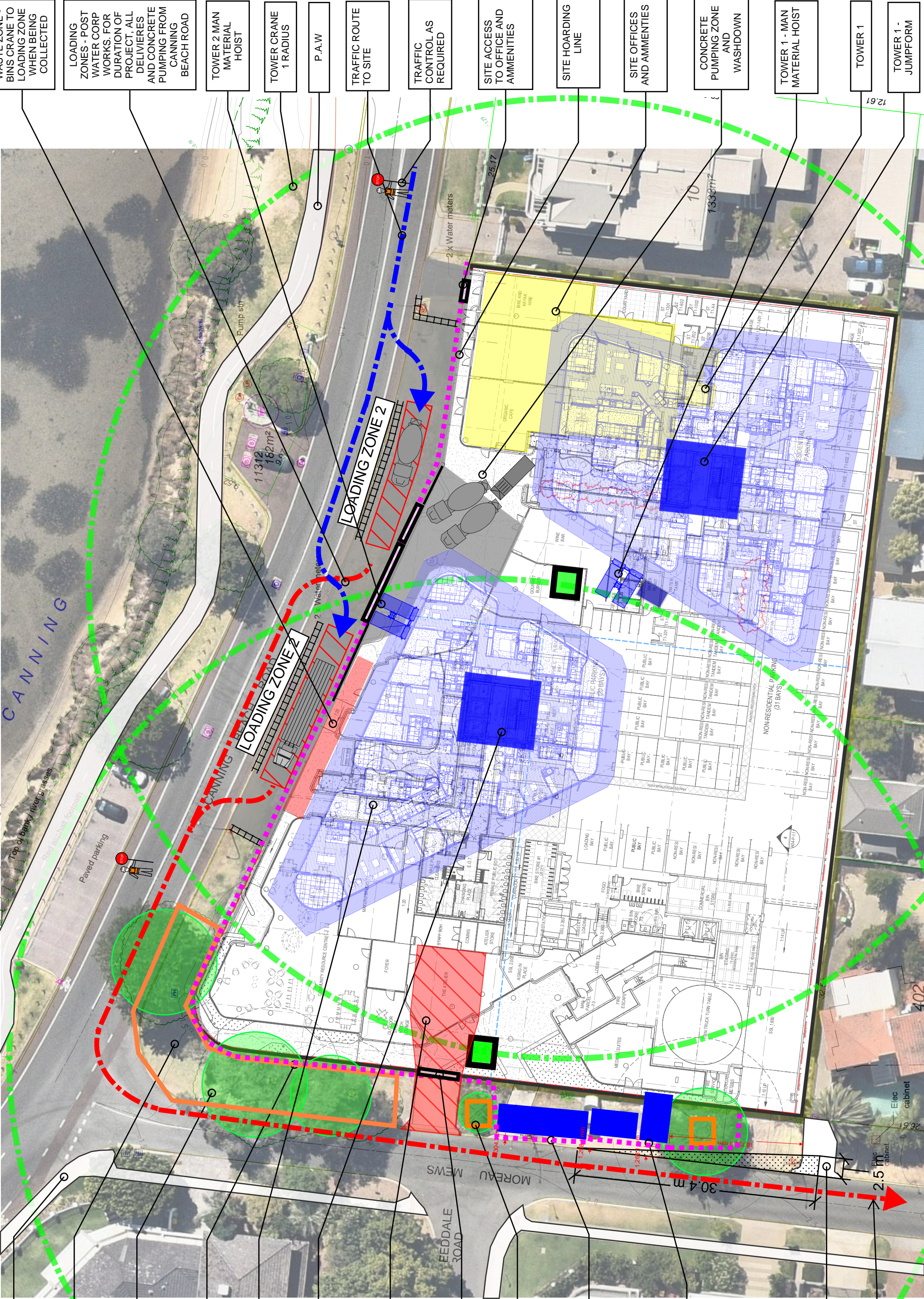
PACT SITE SHEDS (163sqm)

TEMP FENCE DISTANCE OFF KERB (TO MAINTAIN SIGHTLINE FROM 8 MOREAU MEWS

AS2890.1 CL3.2.4 40KM/H

CROSSOVER

TRAFFIC ROUTE FROM SITE



RIVIERE APARTMENTS MAIN WORKS - JANUARY 23 - OCTOBER 24