

Residential
Development
25-27 Boyd Street,
Tweed Heads

Homes NSW

Preliminary Construction Traffic
Management Plan

October 2024

Residential development,
25/27 Boyd Street, Tweed Heads
Preliminary Construction Traffic Management Plan

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1 Introduction

1.1. Project Overview

Seca Solution Pty Ltd has been commissioned by CKDS on behalf of Homes NSW to prepare a traffic, access and parking assessment for the proposed affordable housing development at 25-27 Boyd Street, Tweed Heads. The plans allow for a 13 storey multi-level residential development.

As part of the SEARs issued for the project a Preliminary Construction Traffic Management Plan (CTMP) is required to ensure traffic issues can be safely and efficiently managed during the construction activities on site.

The site is located on the corner of Brett Street and Boyd Street, Tweed Heads as shown in Figure 1-1 below.

The site is vacant having been recently cleared.

Access to the site is currently provided from Boyd Street with the future access to be from Brett Street.



Figure 1-1 – Site Location

1.2. Purpose and Scope

The purpose of this report is to propose the traffic management required to enable the safe and efficient movement of deliveries and materials associated with the construction of the multi-level residential development which includes excavation for a basement carpark.

This includes factors such as speed zones, deliveries, vehicle movements, interactions with traffic including vehicles, pedestrians and cyclists.

As the project is subject to approval with no contractor nor construction methodology determined, assumptions have been made and some areas left blank.

This report would be subject to review and updating prior to the issue of a construction certificate.

1.3. Project Objectives

The project objectives are to manage the removal of excavation materials, and the management of deliveries associated with construction to :

- Have minimal impact on traffic
- Allow for the safe movement of pedestrians and cyclists
- Provide a safe construction site for road users and workers
- Enable the efficient construction of the 13-storey residential development

1.4. Responsibilities

Title	Role
Project Manager	Management of project as a whole. Focus on program, budget and procurement.
Works Supervisor	Onsite construction management, dealing directly with trades and suppliers. Plans works for the day, provides OHS and quality management.
Team Leader	Works specific leader to guide trades for the construction of specific elements. Ensures materials are ordered, OHS issues are reported
Traffic Control	Provide safe access and egress from works site, ensure management of traffic passed site. Ensure traffic signage is maintained.

1.5. Project Representative's & Contact Details

Title	Name and Contact Details
Emergency Services	000
Project Manager	TBC
Project Engineer	TBC
Works Supervisor	TBC
Traffic Control	TBC

1.6. Location Description

The site is located on the north-western corner of Boyd Street and Brett Street, Tweed Heads.

To the west of the subject site, another site is under construction (September 2024) with the surrounding area primarily developed with a mix of residential, commercial and retail uses.

1.7. Schedule of Works

It is anticipated that the site would be developed commencing 2025 (subject to approval) for completion within 2 years.

1.8. Site Constraints

Located on a corner with a single lane roundabout with splitter islands allowing for pedestrian movements.

Parking controls (2P) along the Boyd Street frontage.

Some demand for pedestrian movements along the site frontages.

1.9. Permits & Road Occupancy Licenses

ROL required assuming a work zone on Brett Street.

SPZ -an application to adjust the speed zone will be required.

Any approvals required for the transport of wide loads shall be gained from Transport for NSW

All new permits, amendments and renewals via the NHVR Portal: <https://www.service.nhvr.gov.au/>

For assistance utilising the NHVR Portal, contact the NHVR on 1800 696 487.

2. Traffic Management

2.1. Traffic Management Objectives

The objectives for the traffic management are to:

- Ensure through traffic is maintained on adjacent roads
- Have minimal impact on traffic
- Provide access for pedestrians

2.2. Preliminary Risk Assessment Risk Management

Refer Appendix B for Pro-Forma documentation.

List Site Specific Hazards	Risks associated with Hazard	Risk Level From Matrix	Controls to be considered In Hierarchy of Controls	Responsible Supervisor/ Project Manager / Traffic Team
Site located on intersection with roundabout	<i>Sight lines impacted by construction. Vehicle collision impacts.</i>	<i>Moderate</i>	<i>Ensure visibility is maintained for road users. Reduce/manage construction vehicle movements adjacent to the roundabout.</i>	Project Manager Site Supervisor Traffic team
	<i>Pedestrian demands.</i>	<i>High</i>	<i>Pedestrian detours along site frontage.</i>	
Parking demands along site frontages	<i>Sight lines for exiting vehicles impacted by parked cars could result in collision for exiting vehicles.</i>	<i>Moderate</i>	<i>Provide work zone on site frontage to control parking and ensure all vehicles exit in a forward direction</i>	Traffic team
Requirement for vehicles to reverse into or out of the site	<i>Risk of collision with through traffic</i>	<i>Moderate</i>	<i>Traffic control to stop through traffic to allow for reversing vehicle Provision of work zone on Brett Street to allow for unloading adjacent to the site</i>	Traffic team Project Manager Site Supervisor

2.3. Existing Traffic Conditions

2.3.1 Existing Road Network and Local Characteristics

The **Pacific Motorway** is located to the west of the site and provides the major access route through the locality.

It connects with a number of local roads including a grade separated interchange at Kennedy Drive which becomes Wharf Street to the south of the site. To the north of the site the motorway connects with the Gold Coast Highway which in turn connects with Musgrave Street and Marine Parade.

To the east of the site **Wharf Street** provides a collector road with a north-south orientation providing for local and tourist traffic in the area.

Boyd Street and Brett Street are local roads within the Tweed Heads town centre. In the vicinity of the site they have widths in the order of 12.5 metres which allows a single lane of travel in each direction and parking on each side. They have a posted speed limit of 50km/h. They have kerb and guttering, footpaths and street lighting consistent with their function as town roads.

Parking is permitted along both sides of the streets with some parking timed to provide a turn over of parking for local businesses. As well there are normal restrictions at intersections and driveways.

Boyd Street and Brett Street intersect at a single lane roundabout

Brett Street intersects with Wharf Street at a 4-way intersection which allows for left turn only into and out of Brett Street with Wharf Street having priority. At its southern end Boyd Street connects with Wharf Street at a signalised T-intersection allowing for all movements.

Recreation Street is a local road within the Tweed Heads town centre to the west of the site. It has a width of 12 metres which allows a single lane of travel in each direction and parking on each side. It has a posted speed limit of 50km/h with a straight alignment. It has kerb and guttering, footpaths and street lighting. To the south it connects to Wharf Street at a T-intersection allowing left in left out only.

2.3.2 Traffic Volumes and Road Operation

Traffic volumes in the immediate vicinity of the subject site are relatively low, reflective of the local streets providing access for local residents rather than for through traffic movements which are carried on Wharf Street.

Two-way flows on Brett Street west of Boyd Street are less than 200 vehicles per hour (vph) in the peak periods.

Flows on Boyd Street south of Brett Street are higher, being 821 vph two way in the AM (460 northbound, 361 southbound) and 744 vph two way in the PM (332 northbound, 412 southbound).

2.4. Traffic Diversions

No requirement for routing

2.5. Traffic Impacts

Minimal impact on traffic given low flows on Brett Street.

A work zone can be considered along the site frontage on Brett Street to manage parking and provide access for unloading/hoisting if required.

2.6. Propose Speed Zone/s during works (Day & Night)

Existing speed is 50km/h.

Proposed 40km/hr zone during work hours to allow for the safe unloading of vehicles along the Brett Street frontage.

2.7. Night Works

No night works are anticipated for this except as allowed under WHS.

3 Construction Activities

(Subject to contractor appointment and methodology)

3.1 Methodology

The development shall require earthworks to be completed at the beginning of the project to allow for the future basement parking and the multi-level residential building to be constructed on top of this basement parking.

The project proposes 80 residential units along with 66 parking spaces.

Preliminary earthworks shall require excavator plant to be on site, with these machines delivered at the commencement of the project and removed once the earthwork is complete. Upon completion of the earthwork, the remaining works will then commence, with the construction of the basement car park to be the first work and then the continual construction above this of the residential apartments.

A site office may be established on site for the duration of the works.

At the commencement of the work, some staff vehicles will be able to park within the site however during the construction of the basement parking there will be no on-site parking provided.

As part of the project, workers will be advised of the parking constraints with public on-street parking available in the area.

3.2 Timing

Subject to approval the excavation is expected to commence in 2025 taking 3-4 months. The construction work will follow with the total project expected to be completed within 20-24 months

3.3 Working Hours

The project consent shall nominate construction hours

Work may be undertaken outside these hours where the following occurs:

- The delivery of fill or material may occur outside these hours if required by the Police or other authorities.
- Council providing permission for working out of hours;
- It is required in an emergency to avoid loss of life, damage to property and / or to prevent environmental harm;
- Residents likely to be affected by the works are notified of the timing and duration of these works at least 48 hours prior to the commencement of the works.

3.4 Construction staff numbers

Staff demands for the excavation work will be less than 20 on site. The staffing levels for the construction work may have a peak of 100, however there will be a ramping up of staff and this level will only be met during the later stages of the fit out of the dwellings.

Construction staff will be encouraged to car pool to reduce parking demands in the area.

3.5 Construction Access

Access during the construction shall be provided primarily from Brett Street given the low traffic volumes on this road.

Egress may be required from Boyd Street or along the Boyd Street frontage from time to time.

The removal of excavation waste may see trucks entering from either Brett Street and exiting to Boyd Street allowing through movements in a forward direction.

The main demand will occur during concrete pours when consideration will be required for the concrete trucks and associated pumper as well as the need for the holding of concrete trucks on the approach to the site. Local streets can allow for these movements.

A work zone on Brett Street may be required to allow for the delivery and hoisting of materials.

4 Traffic Management Assessment

4.1 Works Vehicle Movement

As shown in Figure 4-1 below, deliveries are anticipated to approach the site from the south, using Wharf Street to then turn left at Recreation Street and right into Brett Street.

Vehicles will be able to park along the Brett Street frontage (work zone) as required.

Exiting vehicles will travel south on Boyd Street to turn right onto Wharf Street at the signalised T-intersection.

Deliveries to Boyd Street may turn left into Brett Street off Wharf Street and then right into Boyd Street. No work zone has been provided for this at this stage.

4.2 Construction Parking

Parking is available on street within the general vicinity of the site.

4.3 Public Transport

No changes anticipated to public transport facilities or movements.

4.4 Pedestrians & Cyclists

During periods when the frontages are activated (vehicle access or workzone) the footpaths will be closed.

A TGS allowing for a work zone on Brett Street and the closure of the footpath has been included in this Preliminary CTMP.

No on street cycling infrastructure, on road cyclists will be subject to the direction of any traffic management measures.

4.5 Commercial Business

No commercial businesses are expected to be impacted upon by this project. Businesses within the immediate vicinity next to and opposite the site on Boyd Street and Brett Street shall be advised by letter box drop of the proposed works and changes to any on street parking.

Access to commercial business sites shall be maintained at all times.

4.6 Emergency Services

The project has no impact on emergency services

4.7 Local Residents

Due to the nature of the works and the movement of heavy vehicles at the start and finish of the earthworks portion of the project, consultation with the residents in the locality will be undertaken via a letter drop along properties in Brett Street, Boyd Street and Recreation Street including during any specific intense construction activities e.g. concrete pours.

4.8 Other Developments

There will be minimal impact upon the on-going development within the locality of the site.

It is anticipated that the project under construction next door will be completed or near completion however this should be monitored and the project manager contacted otherwise.

4.9 Impact on Adjoining Council Areas

There will be minimal impact upon adjoining Council areas. Traffic routes in and out of the locality will be along the arterial road network where possible with minimal impacts due to the works.

It is noted that the site is located in close proximity to the New South Wales/ Queensland Border with some contractors/materials being sourced from Queensland.

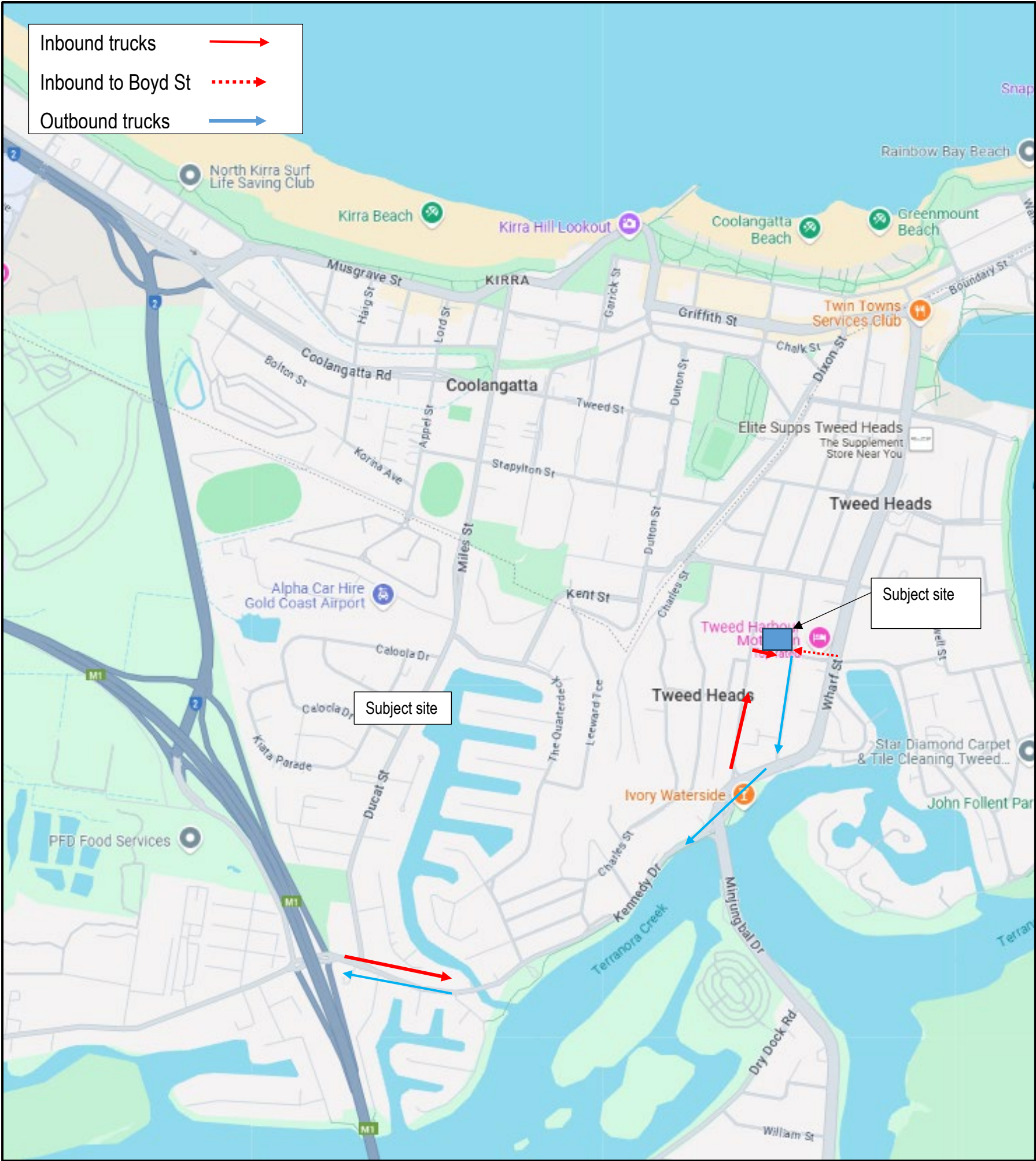


Figure 4-1 Overview of heavy vehicle movements associated with earthworks and construction works.

5. Incident Procedures

In the case of a traffic incident the emergency services will be contacted as appropriate. Traffic management will be implemented to direct traffic around the incident until it is resolved.

In the case of an incident on site, emergency services will be notified and given priority access to the site as required.

6. Environmental Conditions

Environmental conditions shall be covered in the project environmental management plan prepared by others for the site.

Noise shall be considered in the approved working times.

All loose materials being removed from the site shall be covered to minimise dust with vehicles exiting the site to have clean wheels to ensure that soil and other waste tracked onto the public roads is minimised.

An inspection will be completed with Council staff prior to the commencement of work on site and at the end of the construction work to document the existing road surface condition and ensure that the surface is reinstated to the same standard post construction.

7. Review Process

The TMP and relevant TCGPs will be monitored regularly to ensure their effectiveness and applicability and updated accordingly.

TGSs shall be reviewed in conjunction with adjoining work sites if appropriate.

8. Compliance Documentation

Refer to Legislative and Jurisdiction compliance requirements, company policy & procedure documentation

9. Stakeholder Representatives

Name	Organisation	Signature	Date

10 Traffic Guidance Scheme

10.1 General

The following traffic control plan has been prepared to meet the requirements of the Traffic Control at Work Sites Manual (TCAWS) Ver 6.1. The plan covers the anticipated access requirements to the site and the safe passage of vehicles in and out of the subject site during construction

At all times the TCAWS guidelines or advice by Tweed Shire Council must be adhered to. Please refer to the TfNSW guidelines for traffic control matters not listed in this report.

10.2 General Traffic Control Considerations

The factors that have been considered in preparing this TGS are:

- During the excavation works trucks may require access from either Brett Street or Boyd Street. During the construction it is anticipated that vehicle movements will access the site as detailed in the VMP via Wharf Street to connect with the Pacific Motorway via Kennedy Drive.
- Staff are unlikely to be able to park on site and will be encouraged to car pool to reduce parking demands.
- The majority of loading/delivery will be completed on Brett Street
 - a works zone maybe required along the site frontage to this road as part of the construction work.
- The speed zone along Brett Street and Boyd Street will be reduced to 40 km/h for the duration of the construction works to allow for the work zone. The need to modify the speed on Boyd Street would be subject to review in conjunction with a future methodology.
- Pedestrian and cyclist considerations – there is no change to the existing situation for cyclists. Pedestrians will be diverted to use the footpath opposite the site on Brett Street. If Boyd Street frontage is also active for construction access then pedestrian detours would also require consideration.
- A fence will be provided to restrict general public access to the site.
- Location of machines/personnel on-site relative to roadway;
- Access to/from Work Site;
- Timing of works, and
- Safety of road users and site personnel.

Earth works are expected to take 3-4 months to complete. General construction works are expected to take around 20 months to complete.

The location and nature of the work will **NOT** require safety barrier to be installed.

10.3 Traffic Control – Signage and Line Marking

A copy of the TGS and this section of the CTMP including Drivers Code of Conduct must be on site at all times.

10.4 Daily Checklist

In accordance with the Roads and Traffic Authority of New South Wales 'Traffic Control at Worksites' guidelines, the site foreman / manager should complete a daily traffic control checklist and this checklist should be filed for future reference.

10.5 Contractors Contact Details

Project Manager:

Mobile:

E-mail

10.6 TGS Approval

The TGS and CTMP will be submitted to the road authority for review and approval.

Details for lodging this TGS and the Construction Traffic Management Plan are:

Tweed Shire Council:

Tweed Shire Council
PO Box 816
Murwillumbah NSW 2484

Telephone 02 6670-2400

Transport for NSW:

Road Occupancy Unit (ROU)
1300 656 371
road.access@transport.nsw.gov.au

This Traffic Guidance Scheme has been prepared and reviewed by suitable qualified professionals in accordance with the Traffic Control at Work Sites Manual Ver 6.1 edition.



Cathy Thomas

Prepare a Work Zone Traffic Management Plan 6715071-4856311

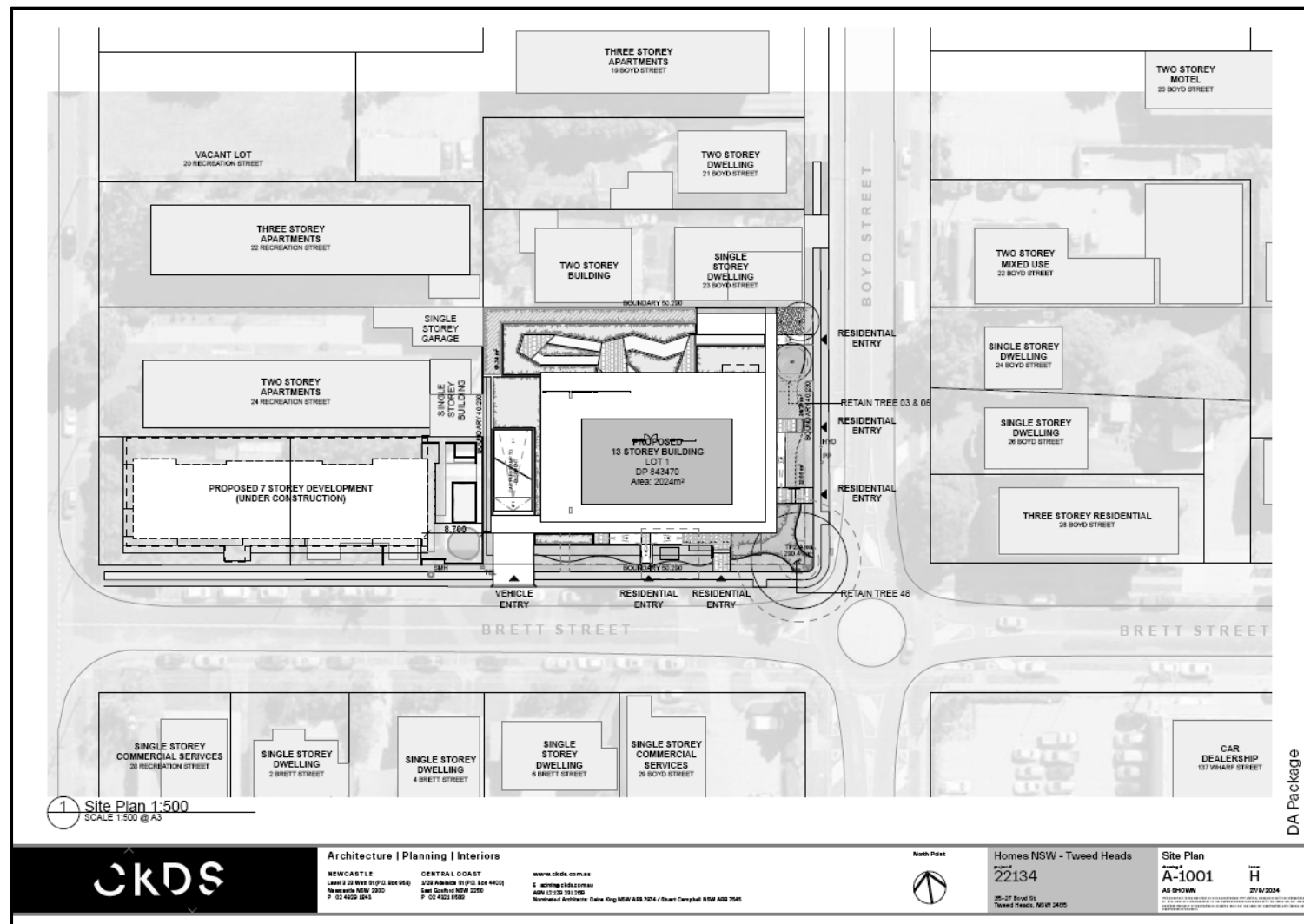
Director



Lachlan Thomas

Traffic Control Work -Prepare a Work Zone TCT1021869

Appendix A. Site Plan



Appendix B. Proforma Hazard Assessment Form

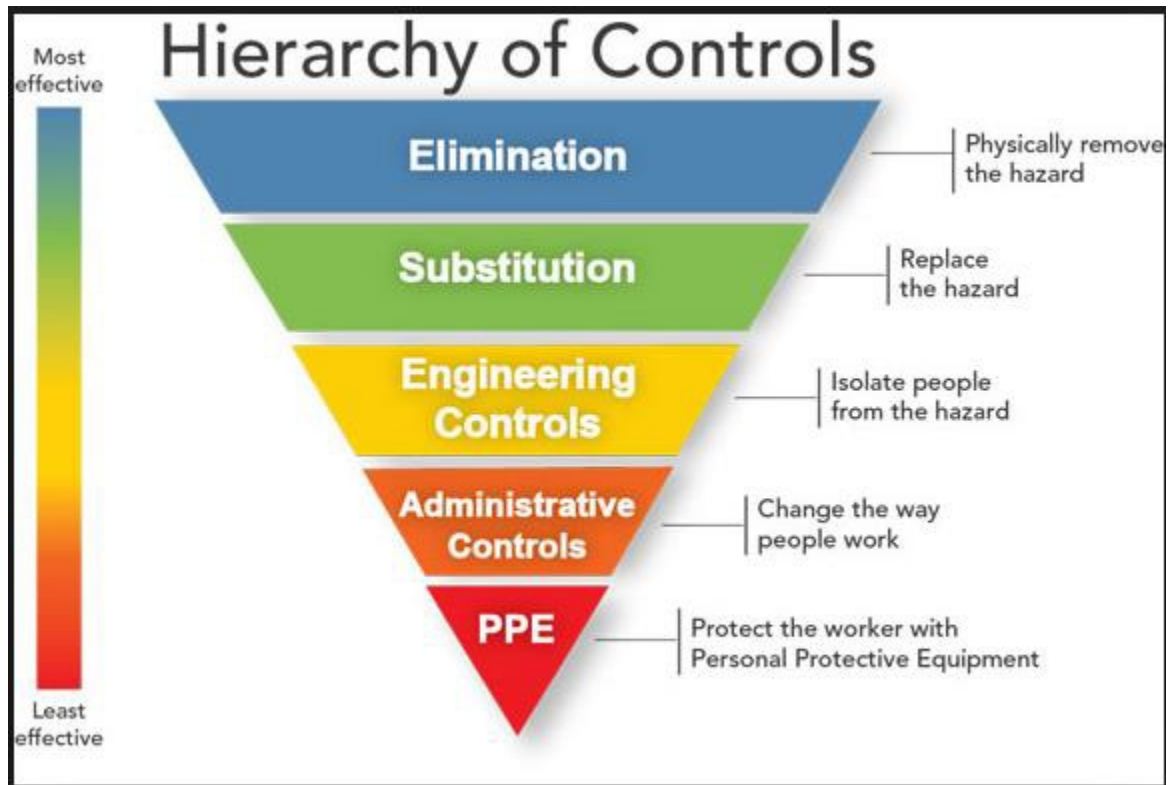
WORKSITE HAZARD ASSESSMENT FORM

PROJECT NAME

Project / Works Location..... Date Inspected.....

Assessed by

List Site Specific Hazards	Risks associated with Hazard	Risk Level From Matrix	Controls to be considered In Hierarchy of Controls	Responsible Supervisor/ Project Manager / Traffic Team
Plant & Machinery Movements within work area and adjacent to traffic	<i>Vehicle collision impacts. Workers injured through plant movements on site</i>	<i>High</i>	• Engineering • Administration	Project Manager Site Supervisor



5 things to do before implementing risk controls

Assess the risk controls for any hazards that may result from their implementation and conduct a risk assessment. If necessary, rethink or rework the control to prevent it creating other hazards in your workplace.

Advise affected workers of the control and **train** them in the procedures surrounding the control.

Amend checking, reporting and auditing documents to reflect the new control (e.g. maintenance records).

Review the control regularly to determine whether it is working to eliminate or reduce the original risk.

Provide adequate supervision to ensure controls are being implemented correctly.

The reason that this part of the process is so important is that you need to make sure that a new control does not create a problem in your workplace in the process of trying to fix the original problem.

Table 1 - Severity (Consequence)

Severity (Consequence)	
Environment / Personal Injury	Safety
1. Can cause significant or high, and irreversible, damage to the individual /environment	Death, or permanent disability of a person, unable to return to normal work duties Extensive damage / loss (greater than \$100,000)
2. Can lead to high but reversible damage to the individual /environment	Serious injury requiring time off work or more than 4 weeks alternative duties Significant damage/major financial loss (> \$50,000 up to \$100,000)
3. Can cause significant (not high) but reversible damage to the individual /environment	Medical treatment required (e.g. attends doctor or physio) Requires temporary alternative duties for less than 4 weeks Appreciable damage / loss (>\$10,000 up to \$50,000)
4. Can result in minor but reversible damage to the individual /environment	First aid treatment e.g., applying ice to bruise or slight strain Minor levels of damage / loss (>\$1,000 up to \$10,000)
5. Not of significance	No injuries, Minimal damage / loss with a value up to \$1,000

Table 2 - Probability (Likelihood)

Probability (Likelihood)	
A. Common occurrence – Almost Certain	Consequence is expected to occur in most situations
B. Known to occur – Likely	Consequence will probably occur in most situations
C. Could occur or "I've heard of it happening" - Possible	Consequence could occur at some time
D. Not likely to occur – Unlikely but possible	Consequence may occur at some time
E. Practically impossible - Rare	Consequence may occur under exceptional situations

Table 3 - Qualitative Risk Analysis Matrix

Severity	Probability				
	A	B	C	D	E
1	Very High	Very High	High	Moderate	Moderate
2	Very High	High	High	Moderate	Low
3	High	High	Moderate	Low	Low
4	High	Moderate	Low	Low	Very Low
5	Moderate	Low	Low	Very Low	Very Low

HAZARDS RATED MODERATE OR ABOVE ARE DEEMED TO BE SIGNIFICANT

ANY SIGNIFICANT RISK MUST BE CONTROLLED BEFORE THE WORK IS UNDERTAKEN.

Appendix C. Preliminary Traffic Guidance Scheme

