Preliminary Construction Traffic Management Plan

Lot E - 200 Aldington Road Industrial Estate, Kemps Creek

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1 Introduction

1.1 Overview

Ason Group has been engaged by Stockland Fife Kemps Creek Trust (SFKC) to prepare this Draft Construction Traffic Management Plan (CTMP) to support the application in relation to State Significant Development (SSD) 85510213. The SSD relates to a proposed industrial development at Lot E of the 200 Aldington Road Industrial Estate, Kemps Creek (the Site).

This Draft CTMP details the proposed construction management strategies which would provide for the safe and efficient completion of the proposed works while minimising construction traffic impacts on the surrounding road network and public road network users.

From the outset, it is noted that the future CTMP, once implemented, will be designed to be updated over time as additional details in regard to the construction proposal are revised / finalised as is standard in any major construction project. All such updates would be completed in consultation with Penrith City Council (Council) in whose Local Government Area (LGA) the Site lies; and / or with the relevant authorities such as Transport for NSW (TfNSW) where special road occupancy or the like are required.

Importantly, Ason Group has been responsible for the preparation of this Draft CTMP, which has been prepared with reference to all available information in regard to the project, and all relevant CTMP preparation guidelines. The implementation of the recommendations and strategies detailed in this CTMP are the strict responsibility of SKFC and / or the designated construction Project Manager once appointed.

1.2 Proposed Development

Lot E comprises two warehouse buildings:

- Warehouse 4A, proposed as a speculative warehouse facility, designed to accommodate a range of potential industrial tenants; and
- Warehouse 4B, designed as a temperature-controlled warehouse, including provisions for chilled and frozen storage.

The combined site area for Lot E is 68,258 m², with the following Gross Floor Areas (GFA) and parking provisions:

- Lot 4A, inclusive of:
  - 21,179m² Warehouse GFA (excluding 1,595m² Loading Area)
  - 900m² Office GFA
  - 64m² Dock Office GFA
  - 98 car parking spaces (including 2 accessible spaces)
- Lot 4B, inclusive of:
  - 16,314m² Warehouse GFA (excluding 1,884m² Loading Area)
  - 698m² Office GFA
  - 81m² Dock Office GFA
  - 74 car parking spaces (including 2 accessible spaces)

An extract of the Lot E site plan is presented below.

The Lot E site plan is presented below.

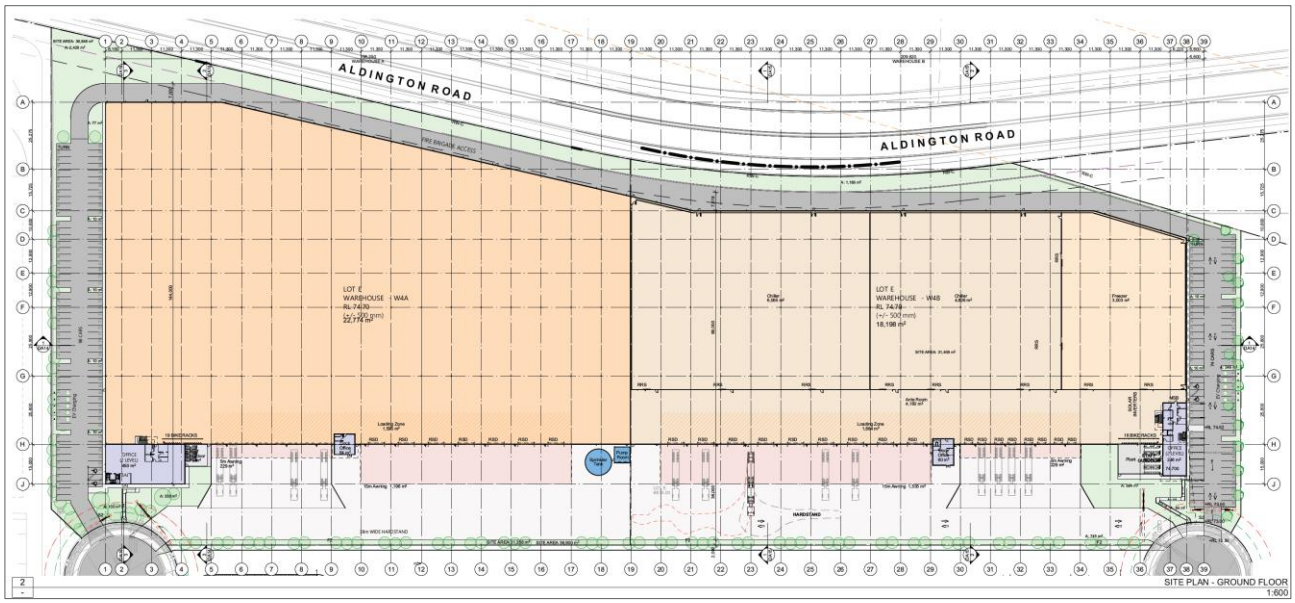

Figure 1: Proposed Masterplan

2 The Site

2.1 Site Location

The wider Estate is located within Mamre Road Precinct (MRP) and has an area of approximately 72 hectares (ha), with an approximately 1.2km of direct frontage to Aldington Road.

The Site is located approximately 5km north-west of the future Western Sydney International (Nancy-Bird Walton) Airport (WSA), 13km south-east of the Penrith CBD and 40km west of the Sydney CBD. A Site and Location Plan is presented in **Figure 2.**

The subject site, Lot E, is located towards the west of the Estate, between Road 03 and Road 04.

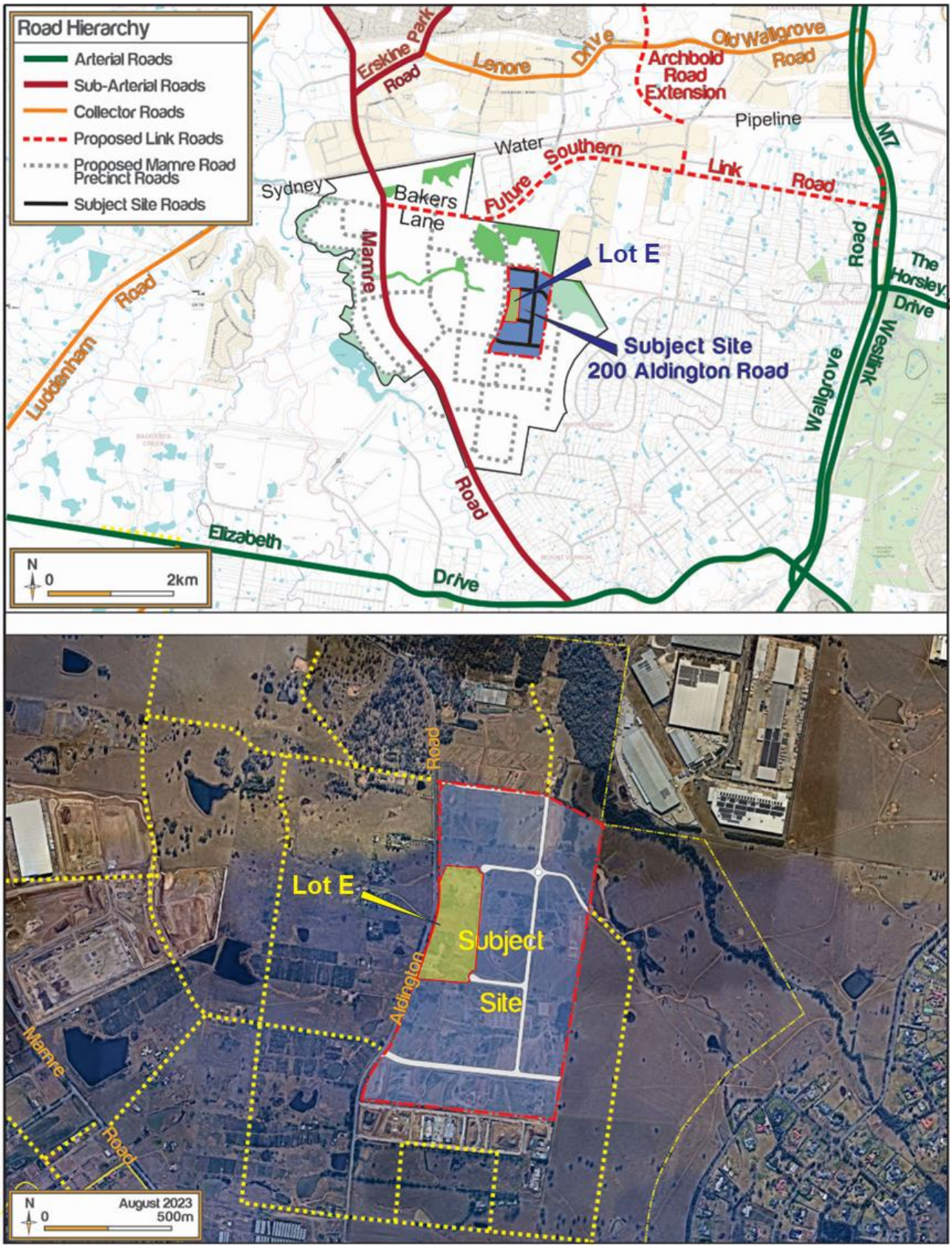

Figure 2: Site Location & Road Hierarchy

2.2 Road Network

Key roads in the vicinity of the Site are shown in **Figure 2**, and include:

- Westlink M7 Motorway: M7 Motorway is a high-capacity road link of state significance and was built to accommodate future traffic growth in the Western Sydney region. It provides a key north-south link between the M2 Motorway to the north and the M5 Motorway to the south as part of the Sydney orbital road network. A major interchange between the M7 Motorway and M4 Western Motorway is located approximately 3.5 km north of the Site, which connects the Sydney CBD and western Sydney suburbs. The M7 Motorway provides 4 lanes (2 lanes per direction, divided carriageway) and has a posted speed limit of 100 km/h
- Erskine Park Road: Erskine Park Road is a sub-arterial road which generally runs north-south between the Great Western Highway and M4, and Mamre Road respectively; it also links east to the M7 via Lenore Drive. Erskine Park Road provides 2 traffic lanes in each direction, and has a posted speed limit of 70km/h.
- Elizabeth Drive: An TfNSW classified main road (MR 535) that runs in an east-west direction to the south of the site. Elizabeth Drive in the vicinity of the site generally provides 2 lanes (1 lane per direction) and has a posted speed limit of 80km/h. This road forms the Site's southern frontage and provides a vital link between Westlink M7 Motorway and The Northern Road.
- Mamre Road: Mamre Road is an arterial road servicing traffic between the Great Western Highway and M4 to the north and Elizabeth Drive to the south. In the vicinity of the Site, Mamre Road generally provides 2 lanes for two-way traffic, with additional through movement and turning infrastructure at key intersections to the north through the Erskine Park and Mamre West industrial precincts, and at Elizabeth Drive to the south. Mamre Road has a posted speed limit of 80km/h in the vicinity of the Site. TfNSW has confirmed road upgrades will be undertaken for Mamre Road between Elizabeth Drive and Luddenham Road.
- Bakers Lane: Bakers Lane is a local access that runs east-west (to the east of Mamre Road) and currently provides access for a number of rural residential, educational and retirement sites. Bakers Lane provides 1 traffic lane in each direction and has a posted speed limit of 60km/h, with School Zone restrictions (40km/h during school peaks) adjacent to the Trinity Primary School and Emmaus College.

Further to the above, it is clear that the Site is well located in regard to immediate access to the local and sub-regional road network. **Figure 3** shows the Site context with specific reference to the current TfNSW Restricted Access Vehicle (RAC) routes, which allow for up to 25m/26m B-Double combinations. It is expected that Aldington Road and Abbotts Road will be gazetted as a B-Double route following road upgrades.

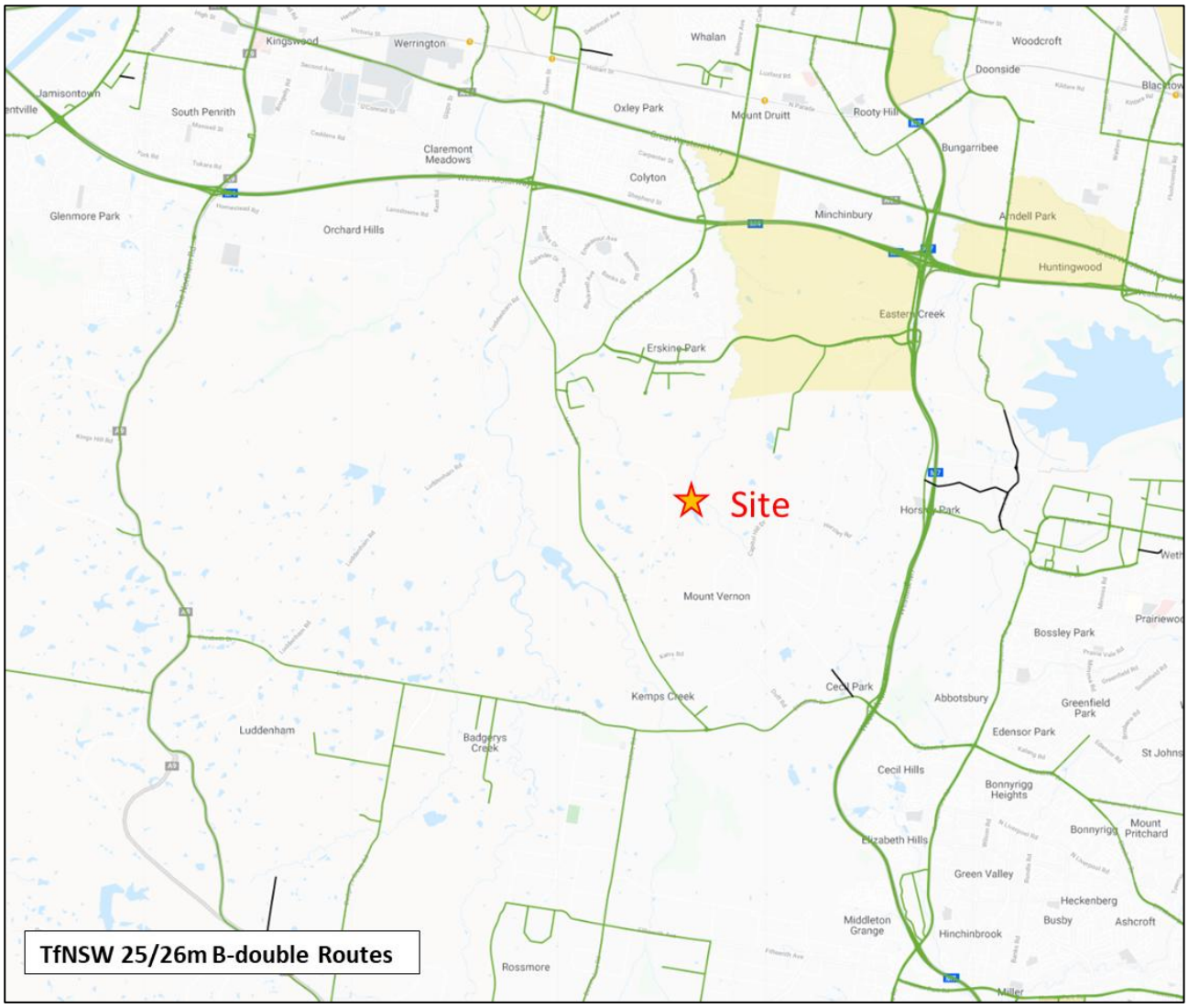

Figure 3: TfNSW Approved 25/26m B-Double Routes

3 Overview of Construction Works

3.1 Other Construction Activities

It is acknowledged that construction of the development will coincide with other construction activity for other developments within the Mamre Road Precinct (MRP). In addition, construction activity would also arise from road upgrades being delivered by others (Aldington Road & Abbotts Road).

Noting that the construction works are subject to the relevant approvals processes, it is very difficult to ascertain which activities would overlap. Further, each construction project would be subject to its own site-specific strategy, informed by the contractors. Finally, there are multiple variables that impact progress of construction activities (i.e. weather delays). Therefore, it is not feasible to accurately forecast which stages would overlap, and the trip generation association with each project.

Nevertheless, the currently active planning projects have been reviewed to understand those which may coincide with construction of the Site. The development works most critical to the project are shown in **Figure 4** As this Site itself is located along Aldington Road, construction activities will contribute to cumulative impacts alongside other developments in this corridor. All construction traffic for these sites will need to use the Mamre Road / Abbotts Road intersection for access to Mamre Road, reinforcing the need for coordinated management of traffic impacts.

Beyond individual construction sites, the following road upgrades may coincide with construction works for this development:

- LOG-E Works: SKFC has collaborated with other landowners on road upgrades to Abbotts Road and Aldington Road, including the upgrade of the Mamre Road intersection and the delivery of three signalised intersections along Aldington Road.
- LOG-N Works: While upgrades are proposed landowners, construction vehicles associated with this development are not expected to use the road network being upgraded under LOG-N. This is mentioned here for completeness but is not anticipated to impact this development's construction activities.

The LOG-E road works are expected to commence in advance of construction of the Site. Notably, as part of the construction staging strategy approved for the Mamre Road / Abbotts Road intersection upgrade, temporary signals will be installed as a construction traffic management measure[1].

Noting that these road works are approved, they are expected to commence in advance of construction of the Site. Therefore, both routes out of Aldington Road will be controlled via the signalised intersections. As such, it is expected that the cumulative construction volumes can be adequately managed.

Further information of each of the relevant development sites is provided below.

[1] https://www.planningportal.nsw.gov.au/major-projects/projects/mod-5-external-road-upgrades

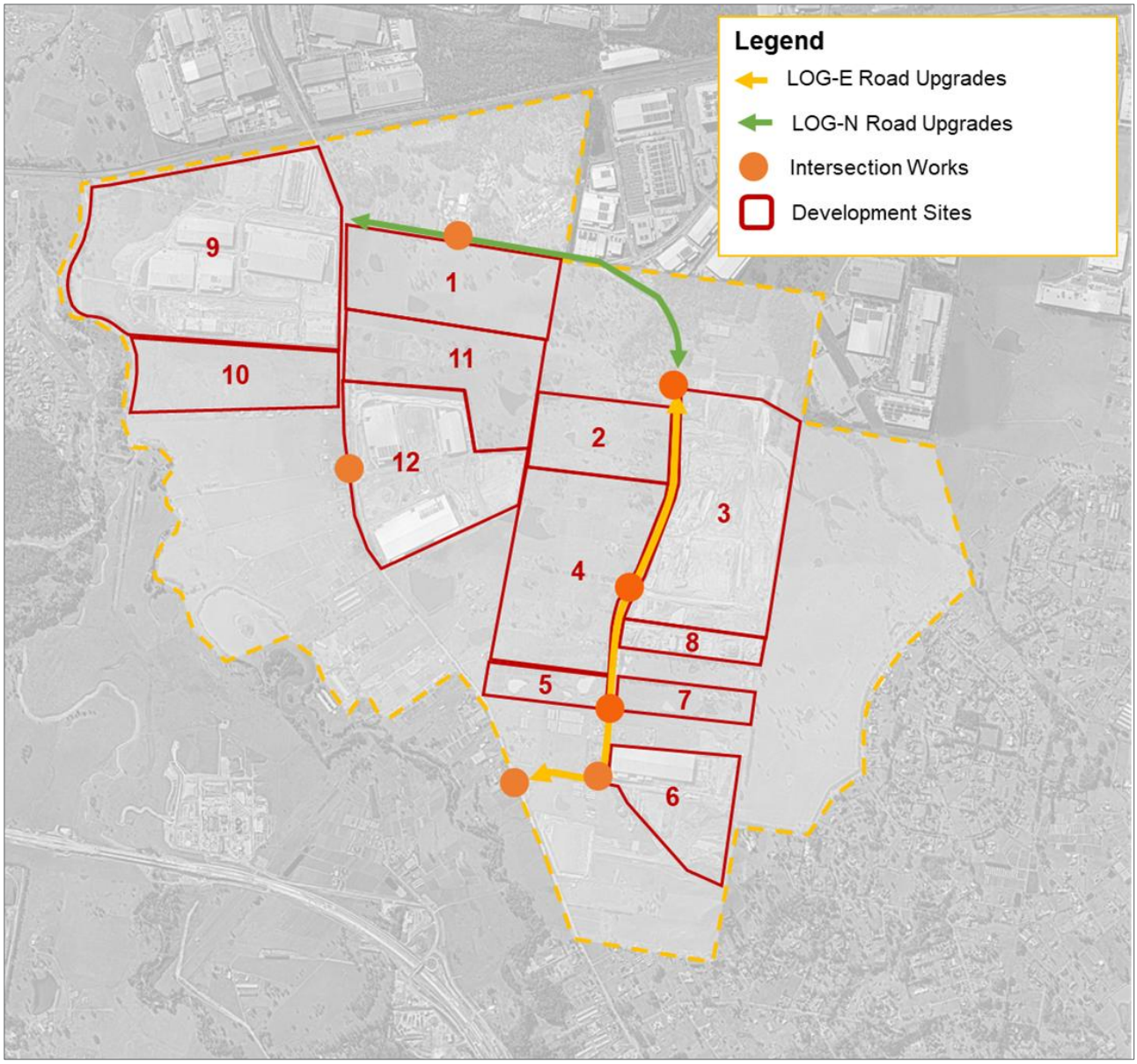

Figure 4: 2026 MRP Road Network and Development Sites

With reference to Figure 4, the relevant development sites within the MRP and respective approval status is outlined in **Table 1**.

As shown, all the sites are at various stages of construction. Sites 9 and 12 are in the advanced stages of construction, and are likely to be much less intensive than the sites yet to commence. It is expected that most of the construction activities associated with these sites would be largely complete by the time construction on the Site starts.

The other notable sites would be Site 10 and 11, which are yet to commence construction. While development consent has been provided to these developments, it is understood that the post-DA approvals are still ongoing. Therefore, it is very difficult to ascertain when the works would commence.

Nevertheless, the key consideration for the cumulative traffic impacts will be the Mamre Road and Bakers Lane intersection. This intersection has recently been upgraded and therefore, it is anticipated that the cumulative construction activities (which typically generate less traffic than operational development) would be accommodated by the existing intersection.

At the time of preparation of the CTMP for implementation, the cumulative construction activities would need to be reviewed.

TABLE 1: STATUS OF MAMRE ROAD PRECINCT DEVELOPMENT SITES

No.	Application No [Note 1]	Site	Status [Note 1]	Construction Status
1	SSD-30628110	Summit at kemps Creek (Subject Site)	Response to Submissions	Subject to approvals
2	SSD-32722834	113-153 Aldington Road	Response to Submissions	Subject to approvals
3	SSD-10479	200 Aldington Road Estate (Stage 1)	Approved	Under Construction
4	SSD-17552047	Edge South Industrial Estate 141-251 Aldington Road	Response to Submissions	Subject to approvals
5	SSD-23480429	Westgate Industrial Estate 253-267 Aldington Road	Response to Submissions	Subject to approvals
6	SSD-9138102 (Stage 1)	Westlink Industrial Estate	Approved	Under Construction
7	PL23_0027	270 Aldington Road	Application Submitted	Subject to approvals
8	DA17/1247	Public Place of Worship 230 - 242 Aldington Road	Deferred Commencement	Under Construction
9	SSD-9522	The Yards	Approved	Under Construction
	SSD-10101987	Kemps Creek Data Centre		Nearing Completion
	SSD-25725029	ARDEX Warehouse and Manufacturing Facility		Nearing Completion
	DA22/1172	Probiotic Warehouse Facility		Nearing Completion
	DA22/0671	Cargoline Warehouse		Nearing Completion
10	DA23_0067	Yiribana West Logistics Estate	Approved	Construction yet to commence
11	SSD-10272349	Yiribana East Logistics Estate	Approved	Construction yet to commence
12	SSD-10448	Aspect Industrial Estate (AIE) Stage 1, Warehouse 1	Approved	Operational
		AIE Stage 1, Warehouse 3		Constructed
	SSD-46516461	AIE Stage 2, Warehouse 9		Operational
	SSD-58257960	AIE Stage 3, Warehouse 2		Construction yet to commence
	SSD-60513208	AIE Stage 4, Warehouse 8		Construction yet to commence

Note 1: Application number and status relate to current planning submissions. This will be updated to reflect any modification applications at the time of preparing the final Construction Traffic Management Plan.

3.2 Staging and Duration of Works

While there is no Contractor engaged for the works proposed under SSD-79300218, for the purposes of the preliminary CTMP, staging and duration of works has been based on similar developments in the area. Based on this, it is anticipated that construction works for the preliminary stages would commence approximately 6 months from the date of this report, subject to authority approvals and inclement weather delays.

The following summarises key aspects of the construction phases:

- Equipment staging and early works are set to have a duration of 4 weeks.
- General construction works are estimated to continue concurrently with completion of the warehouse structure and services within 6 months.

3.3 Construction Hours

The type of work being undertaken will remain consistent throughout the duration of construction and associated activities. All works are expected to be undertaken within the following hours:

- Monday to Friday (other than Public Holidays): 7:00am – 6:00pm.
- Saturday: 8:00am – 1:00pm
- Sunday & Public Holidays: No works to be undertaken.

Any work to be undertaken outside of the standard construction hours will be required to obtain an Out of Hours (OOH) approval; any such works would necessarily be undertaken in accordance with the appropriate OOH protocols and approval processes.

3.4 Site Access

3.4.1 Construction Vehicle Access

All construction vehicles will enter and depart the Site from / to Aldington Road and access Mamre Road by way of Abbotts Road to the south of the Site; to avoid conflict with School peak periods.

It is anticipated that the largest vehicle accessing the Site would be a 19.6m Truck & Dog combination.

The following **Figure 5** shows the indicative Site access location and **Figure 6** details the likely key access strategy into the routes between the Site and the regional road network.

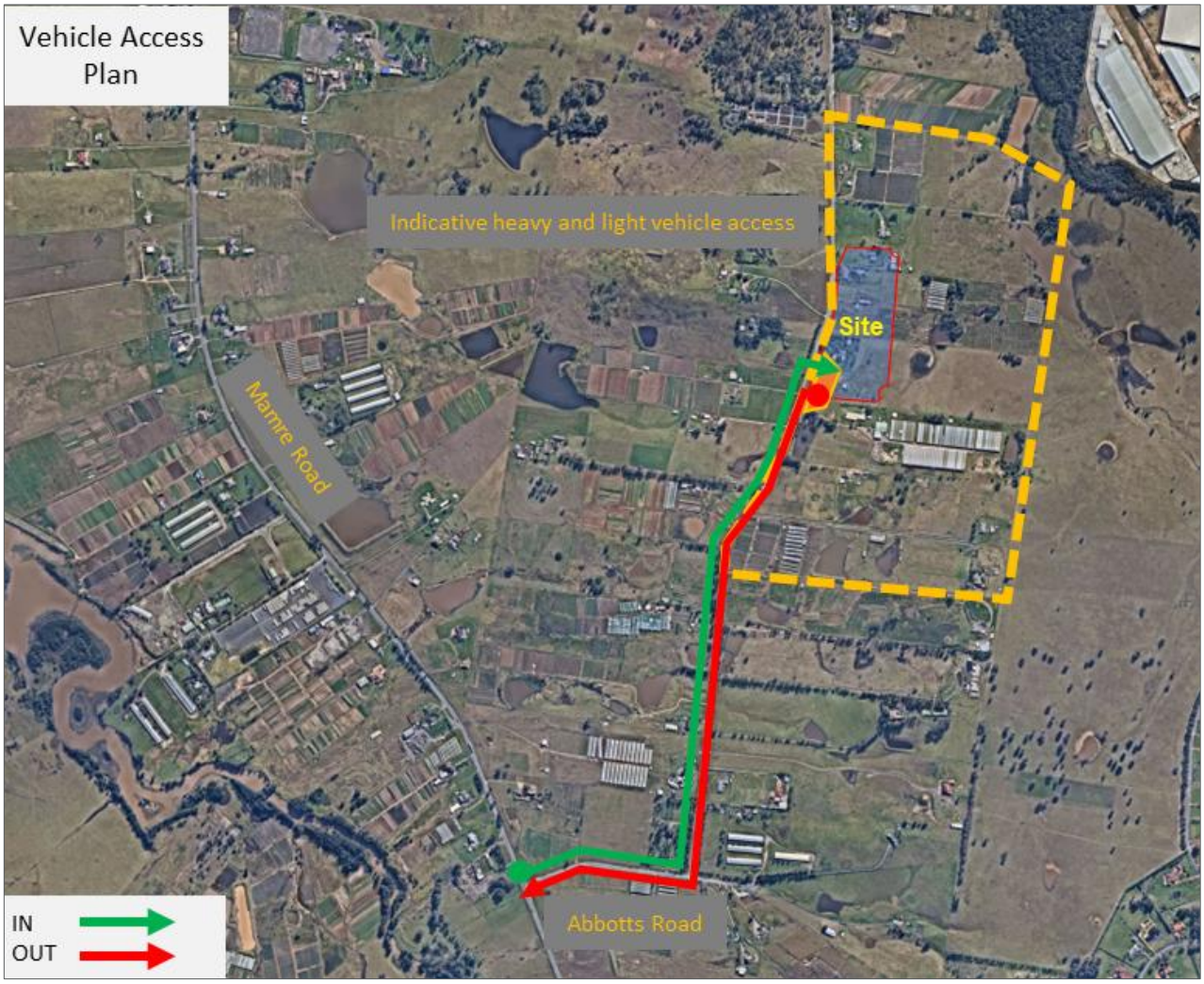

Figure 5: Indicative Vehicle Access Plan

3.4.2 Emergency Vehicle Access

Emergency vehicle access to and from the Site will be available at all times while the Site is occupied by construction workers; emergency protocols during the works will be developed by the Project Manager for inclusion within the final CTMP.

3.4.3 Pedestrian Access

There are currently no pedestrian amenities or footpaths along Aldington Road adjacent to the Site. However, the grassed verge on both sides of the road remains usable for any pedestrian that may wish to walk use it.

Further to the above, while there is no expectation of pedestrians crossing the future construction access road, pedestrian safety will be managed through the provision of appropriate signage and pedestrian barriers. Construction personnel will also be able to access the Site by foot via a secure access gate along the access road, though with all construction staff (and vehicle) parking to be provided within the Site there is again little potential for such pedestrian demand.

3.5 Construction Vehicle Access Routes

As discussed, all construction vehicles will enter and exit the Site via Aldington Road.

It is anticipated that all heavy vehicles will access Site via the following routes:

- Arrival Trips:
  - Route 1: From M4 Western Motorway, southbound along Mamre Road and left into Abbotts Road. Continue on to Aldington Road and right into Site.
  - Route 2: From Westlink M7, westbound on Old Wallgrove Road, Lenore Drive and Erskine Park Road, then south along Mamre Road and left into Abbotts Road. Continue on to Aldington Road and right into Site.
- Departure Trips:
  - Route 1: From the Site, left onto Aldington Road then south on Mamre Road to Elizabeth Drive and left to the M7 Motorway and sub-regional routes to the east.
  - Route 2: From the Site, left onto Aldington Road then south on Mamre Road to Elizabeth Drive and right to Badgerys Creek and The Northern Road to the west.

These routes are shown in **Figure 6**.

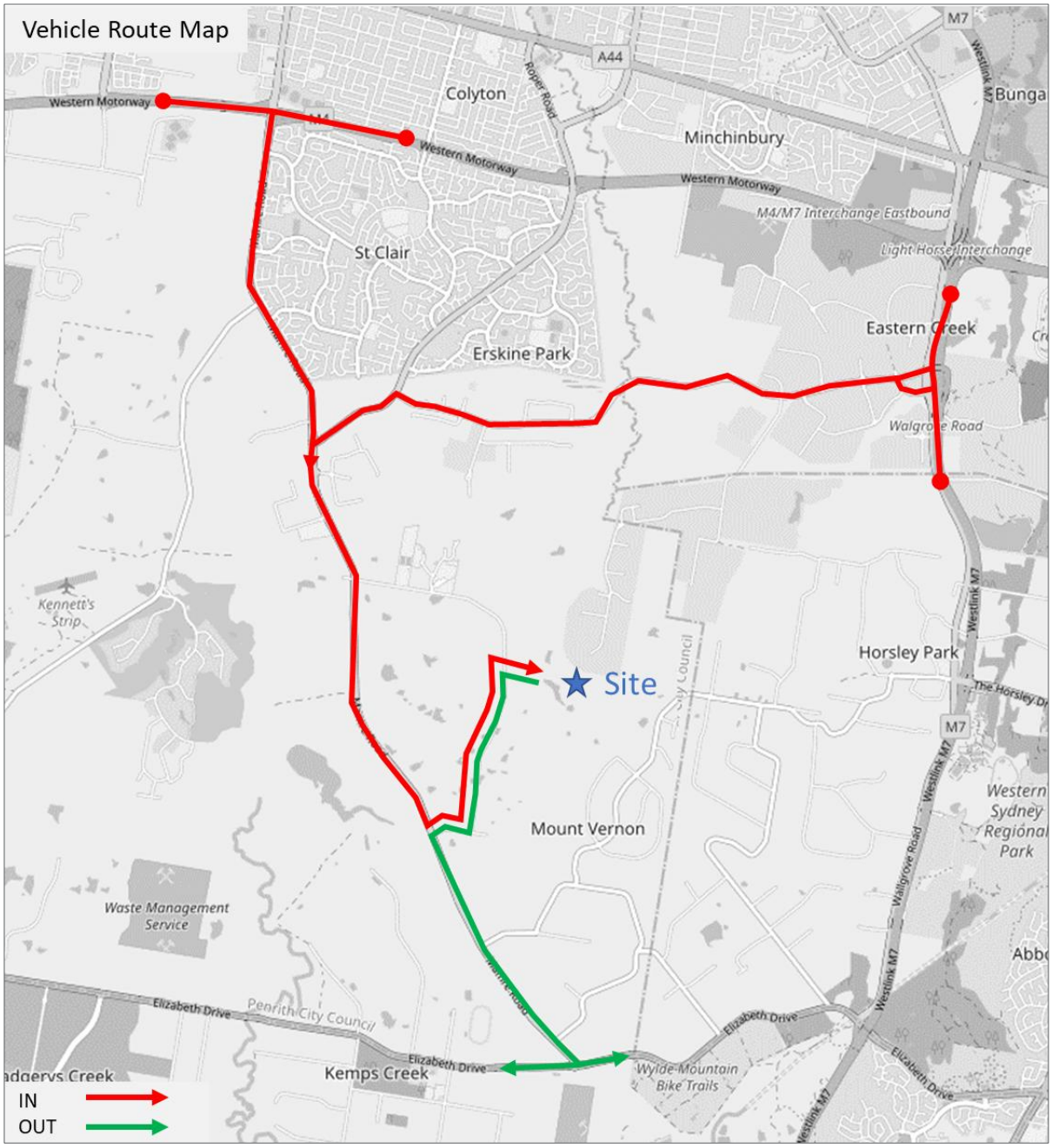

Figure 6: Construction Vehicle Routes

A copy of the approved routes will be distributed by the Project Manager to all drivers as part of their induction process.

In the event that an oversized or over-mass vehicles is required to travel to and / or from the Site, a permit from TfNSW and / or the National Heavy Vehicle Register (NHVR) will be required prior to arrival to the site. Notwithstanding, this CTMP relates to general construction which does not seek the use of oversize vehicles; a separate application would be submitted if such access is required.

3.6 Fencing Requirements

Security fencing will be erected along the entire boundary of the Site and will be maintained for the duration of the construction works to ensure that unauthorised persons are kept out of the Site.

Site access gates would be provided at the access driveway which would remain closed at all times outside of the permitted construction hours.

3.7 Materials Handling

All material loading will be undertaken wholly within the Site, and all construction equipment, materials and waste will similarly be strictly kept within the Site.

While not anticipated, should any materials handling (or other constructed related activity) be required from the public roadway (i.e. Aldington Road) then prior approval shall be sought and obtained from the appropriate authorities.

3.8 Additional Site Management

Although it is not expected, in the event that any Site construction traffic management outside of that described in the implemented CTMP is required, the Project Manager will be required to notify adjacent properties of any temporary traffic restrictions (or the like) at least fourteen (14) days in advance.

3.9 Road Occupancy

The potential exists for future road occupancy requirements to facilitate the construction of any further upgrades to Aldington Road and the intersection of Mamre Road and Abbotts Road.

Road occupancy permits will necessarily be procured prior to starting intersection construction works, while a detailed intersection-specific CTMP would be prepared in consultation with Council and TfNSW to ensure traffic along Aldington Road would continue to operate adequately during any such occupancy period.

3.10 CTMP – Monitoring & Review Process

This CTMP has been prepared referencing the existing Site conditions. Consultation with Council, TfNSW and neighbouring developments will continue to be undertaken to ensure that the cumulative traffic impacts of construction within the area do not adversely impact the operations of the neighbouring developments or the local road network.

4 Traffic and Transport Impacts

4.1 Construction Vehicle Traffic Generation

Table 2 provides a breakdown of potential vehicle movements throughout the proposed works (to be confirmed by Contractor once appointed, based on similar projects in area):

TABLE 2: MOVEMENTS OVERVIEW

Stage	Early Works	General Construction
Period	Week 1 to 4	Week 4 to 30
Maximum on-site at any one time	15	50 – 250
Truck Frequency (Maximum movements per day)	10 (5 in / 5 out)	300 (150 in / 150 out)
Peak Hour Heavy Vehicle Movements	2 (1 in / 1 out)	30 (15 in / 15 out)
Largest Vehicle Size	Truck & Dog	Truck & Dog

4.1.1 Light Vehicle Movements

It is anticipated that a peak construction workforce of up to 250 workers on-site at any one time (based on the specific constructions tasks being undertaken). Light vehicle traffic generation would generally be associated with construction staff movements to and from the Site, including Project Managers, trade and general employees.

With respect to the potential impacts of light vehicle traffic, the overwhelming majority of trips would occur in the short workforce arrival and departure periods, being (based on the proposed construction hours) 6:30am – 7:00am and 6:00pm – 6:30pm respectively; as such, staff vehicle trips would not coincide with the road network or school peak hours.

4.1.2 Heavy Vehicle Movements

As indicated in **Table 2,** the construction phases are estimated to generate a peak demand for up to 300 truck movements per day (150 vehicles arriving / 150 vehicles departing).

The latter stages of the bulk earthworks (excavation) are expected to overlap with general construction activities. However, the peak heavy vehicle movements associated with earthworks during this time would be around 150 movements per day (75 in / 75 out). With earthworks coming to an end, the peak volumes would be lower.

During this overlapping period there could be 400-450 heavy vehicle movements per day. The majority of these movements would be expected to be outside of the road network peak hours, with construction activities / strategies seeking to avoid road network peak times.

On average, it is expected there would be an approximate 30 truck movements during the peak hours (15 vehicles arriving / 15 vehicles departing), which equates to 1 movement every 2 minutes.

Vehicle movements into the Site will be unfettered to ensure no queuing onto the road network.

4.2 Vehicle Management

4.2.1 Principles

In accordance with TfNSW requirements, all vehicles transporting loose materials would have the entire load covered and/or secured to prevent any large items, excess dust or dirt particles depositing onto the roadway during travel to and from the Site.

Further to covering/securing the load to prevent deposits onto the roadway, a Shaker Grid is proposed and installed at the point of vehicle egress to minimise the risk of dirt tracking out onto Aldington Road.

4.2.2 Construction Staff Parking

All construction staff and contractors will be required to park wholly within the Site, noting that there will be significant area available (at all times) to meet the peak parking demand.

5 Traffic Control

5.1 Traffic Control

The TfNSW guide “Traffic Control at Worksites” (TCAW) manual contains standard traffic control plans (TCPs) for a range or work activities. The manual’s objective is to maximise safety by ensuring traffic control at worksites complies with best practice.

The TfNSW TCAW outlines the requirements for a Vehicle Movement Plan (VMP) for construction works such as proposed; a VMP is a diagram showing the preferred travel paths for vehicles associated with a work site entering, leaving or crossing the through traffic stream. A VMP should also show travel paths for trucks at key points on routes remote from the work site such as places to turn around, accesses, ramps and side roads.

Regarding construction work on roads with an average daily total (ADT) in excess of 1,500 vehicles, approach speeds of between 60 km/hr and 80 km/hr, with truck movements > 20 veh/shift, and sight distance is less than 2d, (where d equals the posted speed limit and in this instance the sight distance is required to be up to 120 metres), it would be expected for the following to be required by the TfNSW TCAW:

- A detailed Traffic Control Plan (TCP) with Traffic controllers.
- A VMP.
- Warning Signs required during shifts.

5.2 Authorised Traffic Controller

An authorised Traffic Controller(s) is to be present on-site throughout the proposed works. Responsibilities of the Traffic Controller will include:

- The supervision of all construction vehicle movements into and out of site at all times,
- The supervision of all loading and unloading of construction materials during the deliveries in the construction phase of the project, and
- Pedestrian management, to ensure that adverse conflicts between vehicle movements and pedestrians do not occur, while maintaining radio communication with construction vehicles at all times.

6 Monitoring & Communication Strategies

6.1 Development of Monitoring Program

The development of a program to monitor the effectiveness of this CTMP shall be established by the Project Manager and should consider scheduled reviews as well as additional reviews should construction characteristics be substantially changed. All and any reviews of the CTMP should be documented, with key considerations expected to include:

- Tracking heavy vehicle movements against the estimated heavy vehicle flows during the works.
- The identification of any shortfalls in the CTMP, and the development of revised strategies / action plans to address such issues.
- Ensuring that all TCPs are updated (if necessary) by "Prepare a Work Zone Traffic Management Plan" card holders to ensure they remain consistent with the set-up on-site.
- Regular checks to ensure all loads are departing the Site covered as outlined within this CTMP.

6.2 Communications Strategy

A Communications Strategy shall be established by the Project Manager for implementation throughout the construction works; this strategy will outline the most effective communication methods to ensure adequate information within the community and assist the Project Team to ensure the construction works have minimal disruption on the road network. The Communications Strategy will include:

- The erection of appropriate signage providing advanced notice of works and any traffic control measures to be implemented.
- Written notices to surrounding landowners (and tenants) likely to be directly affected by the works, prior to commencement.

Ongoing communication is also required so that all stakeholders are kept up to date of works and potential impacts.

7 Summary

This Draft Construction Traffic Management Plan has been prepared to ensure appropriate traffic management is undertaken during construction of the industrial development.

Ultimately, this CTMP report has been prepared with regard to the management principles outlined in the TfNSW Traffic Control at Worksites Manual (2018) and AS1742.3, and per the detailed strategies outlined in the Draft CTMP are recommended for adoption at the Site.

In summary the following measures are recommended:

- Traffic control would be required to manage and regulate construction vehicle traffic movements to and from the Site during construction.
- All vehicles transporting loose materials will have the load covered and/or secured to prevent any items depositing onto the roadway during travel to and from the Site.
- All vehicles are to enter and depart the Site in a forward direction, with reverse movements to occur only within the Site boundary.
- All contractor parking is to be contained wholly within the Site, and.
- Pedestrian and cyclist traffic along the Site frontage will be managed appropriately at all times.

In summary, the Draft CTMP report is proposed in accordance with the TfNSW TCAW.