



# Planning Approval Consistency Assessment Form

SM-17-00000111

Metro Body of Knowledge (MBoK)

<b>Assessment name:</b>	Haldon Street Bridge Anti-Throw screen Installation and Landscaping (SM Package 4 HSE MCL)
<b>Prepared by:</b>	Andrew Lynam (HSEJV)
<b>Prepared for:</b>	Sydney Metro
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For information – do not alter:

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The Planning Approval Consistency Assessment Form should be completed in accordance with SM-17-00000103 Planning Approval Consistency Assessment Procedure.

## 1. Existing Approved Project

### Planning approval reference details (Application/Document No. (including modifications)):

SSI\_8256 Sydney Metro City & Southwest – Sydenham to Bankstown (S2B)

SSI\_8256 Sydney Metro City & Southwest – Sydenham to Bankstown Station: Modification 1 – October 2020

### Date of determination:

Infrastructure Approval date – 12 December 2018

Modification 1 Approval date – 22 October 2020

### Type of planning approval:

Critical State Significant Infrastructure

### Description of existing approved project you are assessing for consistency:

The project involves upgrading ten existing stations west of Sydenham (Marrickville to Bankstown inclusive), and a 13 kilometre long section of the Sydney Trains T3 Bankstown Line, between west of Sydenham Station and west of Bankstown Station, to improve accessibility for customers and meet the standards required for metro operations.

The Marrickville, Canterbury and Lakemba (MCL) Station Upgrades is one of the stages of the Sydenham to Bankstown upgrade - herein referred to as the Southwest Metro (SWM) Project.

**Upgrade works at Lakemba Station involves the following:**

- Refurbish and repurpose rooms of existing platform buildings;
- Refurbish concourse area;
- Construction of the Sydney Metro Services Building adjacent to Railway Parade;
- Regrade platform as per SM's requirement and provide drainage, platform screen doors, platform edge screens and mechanical gap fillers to Platform 1 and 2;
- New cabling and containment for LV services and lighting;
- Installation of new glass screens to existing concourse and footbridge;
- Provide new landscaped plaza at Railway Parade including additional bicycle hoops and feature paving;
- Installation of new vertical protection screens to both sides of the existing Haldon Street Bridge;
- Minor refresh of existing entry concourse stairs;•Installation of new CSR cable route; and
- Installation of security fencing.

During the initial approvals process it was assumed that construction activities would occur along the length of the rail corridor and that all construction areas would be accessed via existing corridor gates. Section 10.3.3 of the Environment Impact Statement (EIS) identified that changes to the road network, including temporary road and lane closures, around stations would be required as a result of construction. Table 10.35 of the EIS identified potential changes to the road network for station works, and this was amended during detailed design and construction planning.

The Submissions and Preferred Infrastructure Report (SPIR) also identifies key changes to the construction methodology for the 'preferred project' when compared to the 'exhibited project' in the EIS. The SPIR supports a design solution that reduces community impacts. The SPIR also identifies, based on the indicative construction methodology, that no full road closures would be required during the station upgrade works. However, both the EIS and SPIR note that the final construction methodology would be determined by the construction contractor, once appointed.

The EIS also assessed landscaping and public domain works as part of the finishing works (9.6.1). Site rehabilitation would be undertaken in accordance with the CEMP, guided by the Construction Environmental Management Framework. It would ensure that all construction work sites, compounds and access routes would be returned to the same or better condition than prior to construction commencement.

This Consistency Assessment has been produced to assess potential impacts of a temporary, partial, road closure of Haldon Street Bridge associated with Lakemba Station to install Anti-throw screens, and to determine whether those impacts can be appropriately managed under the current Conditions of Approval, Revised Environmental Mitigation Measures, management plans and procedures. This Consistency Assessment also assesses the impacts of the landscaping works required at Lakemba Station.

**Relevant background information (including EA, REF, Submissions Report, Director General's Report, MCoA):**

- The Sydney Metro City & Southwest – Sydenham to Bankstown – State Significant Infrastructure Assessment (SSI 8256), 12 December 2018
- The Sydney Metro City & Southwest – Sydenham to Bankstown – Environmental Impact Statement, 7 September 2017;
- The Sydney Metro City & Southwest – Sydenham to Bankstown – Submissions and Preferred Infrastructure Report, June 2018;
- The Sydney Metro City & Southwest – Sydenham to Bankstown – Submissions Report, September 2018;
- The Sydney Metro City & Southwest – Sydenham to Bankstown – Modified Conditions of Approval – October 2020

- The Sydney Metro City & Southwest – Sydenham to Bankstown – Modification 1 – Bankstown Station, 22 October 2020.

All proposed works identified in this assessment would be undertaken in accordance with the mitigation measures identified in the EIS, SPIR, and the conditions of approval.

## 2. Description of proposed development/activity/works

**Describe ancillary activities, duration of work, working hours, machinery, staffing levels, impacts on utilities/authorities, wastes generated or hazardous substances/dangerous goods used.**

This Consistency Assessment relates to the temporary partial road closure of Haldon Street Bridge, between Railway Parade and The Boulevarde, Lakemba and landscaping works as per the initial contract and design. The closure of Haldon Street Bridge would be during shutdown/possessions only and is for the installation of Anti-Throw screens and the already approved trimming of vegetation impacting the installation of the screens. Both the roadway and the footpath on each side of the bridge would be closed, but the closures would be alternated to ensure access and use of the bridge is maintained under traffic control. These works have been approved within a Traffic Control Plan (TCP) that has been submitted to Canterbury Bankstown Council (see appendix B). The landscaping works would not require further road closures.

The landscape and traffic island works consist of Service searching, Pour minor concrete slabs, Pavement/tile installation, Installation of planter boxes, Installation of bike racks, Bus shelter refurbishment, installation of traffic islands on The Boulevarde and kerb and gutter works both on Railway Parade and The Boulevarde. The proposal area for the traffic island works are located outside the approved project boundary as defined by the SPIR as seen in Appendix A.

Closure of Haldon Street Bridge would be required during shutdown/possession works only and would take place under the relevant Out of Hours Works Application prepared by HSEJV and approved by Sydney Metro.

The proposed closure would directly impact the eastern and western travel lane and footpath on the bridge for a five (5) day duration during shutdown/possession, however the eastern and western sides of the bridge would be closed non-concurrently which would maintain access/use of the bridge by the public.

The proposed road closure area in Appendix A is on land owned by the City of Canterbury Bankstown Council and a relevant ROL and Traffic Control Plan (TCP) has been approved, located in Appendix B. The landscaping works are also on council owned land and fall within, on or just outside the boundary of the proposed project area. These works are consistent with, and are covered by the approved project.

Site uses would be used by traffic controllers as part of the full road closure works. Plant and equipment to undertake the works would be used and is not expected to differ from the approved construction methodology. See below a non-exhaustive list of indicative plant/machinery that is subject to change, within reason, prior to the works commencing:

- Flatbed truck / Delivery truck
- 4.5T crew truck
- Contractor vehicles
- Tree chipper
- 12T tipper
- 5T excavator
- Lighting towers
- Generator
- Approximately 50 workers
- Roller
- Whacker rammer
- Concrete truck
- Hand tools
- Mobile crane

Fuel may be required for the crane, generators and lighting towers. Fuel would be stored in a bund and spill kit located within the work area.

Upon completion of works the proposed area would be reinstated to the public.

### 3. Timeframe

#### When will the proposed change take place? For how long?

The landscaping, traffic island and Haldon Street Bridge works would be undertaken during shutdown/possession before completion of the station works and should take about five days to be completed. The proposed dates are 24 September to 9 October 2022 but the works may fall outside of these dates. The Haldon Street bridge and traffic island works will take place under an OOHWA. The landscaping works, already approved contract scope, will be completed both under an OOHWA and during standard hours until the end of the project.

### 4. Site description

The proposal would be located within the road reserve on land owned by the City of Canterbury Bankstown Council. As such there are no Lot and Deposited Plan details. Refer to Section 5 below for Site Environmental Characteristics.

Appendix A provides a map of the proposed road closure and landscaping works location.

Haldon Street Bridge is located within 60 metres of Lakemba Station. The station area is bounded by Railway Parade to the north and The Boulevarde to the south. Access to the station is provided off Railway Parade and The Boulevarde. The surrounding area is generally residential, retail and commercial buildings.

### 5. Site Environmental Characteristics

The proposal is located on the streets surrounding Lakemba Station, a railway station in operation along the T3 Bankstown Line rail corridor. Lakemba Station was opened on 14 April 1909 and as such is listed on the following heritage registers:

- RailCorp Section 170 Heritage and Conservation register (4801916)
- City of Canterbury LEP 2012 heritage register (I143)

The buffer zone around the station catchment includes three heritage items:

- Federation weatherboard house – Canterbury LEP 2012 (I144)



- Inter-War post office building – Lakemba Post Office – Canterbury LEP 2012 (I145)
- Electricity Substation no. 143 – Ausgrid Section 170 Heritage and Conservation Register (3430296)

A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System - AHIMS ID 720677) with a buffer of 50m from Lot : 2, DP:DP1012364 was performed on 28/09/2022 and has shown that no Aboriginal sites or Aboriginal places are recorded within this buffer zone.

The landscaping work areas consist of combination grass verge and footpaths. There is native and non-native vegetation in the proposal area, but this would be left in-tact during the works.

Railway Parade and The Boulevarde are busy streets with street parking and businesses in the vicinity of the landscaping works. These streets contain the below features:

- gutters, a footpath, War Memorial, restaurants, train station entrance and private property.

The environment at Haldon Street Bridge, Lakemba can be described as typical urban streetscape. The Bridge itself comprises of a road and a footpath on each side. The bridge is flanked by The Boulevard to the south and Railway Parade to its North. These streets contain the below features:

- gutters, a footpath, War Memorial, restaurants, train station entrance and private property.

Nearby vegetation consists of;

- planted native and exotic trees, and weeds. No vegetation would be impacted apart from trees within the corridor that directly impact the installation of the throw screens. These trees have already been approved for removal.

Rainfall runoff from the proposal would flow to either Railway Parade or The Boulevarde where it will enter stormwater pits located within the kerb side gutters of the aforementioned streets.

There are no known protected flora or fauna in the vicinity.

HSEJV would restore the area to its pre-existing condition upon completion of the works.

### 6. Justification for the proposed works

The landscaping areas are required to fulfil the conditions within the project scope and contract.

The partial closure is required in order to install the anti-throw screens on Haldon Street bridge as per the Sydney Metro design. The anti-throw screens are necessary for both pedestrian safety and train operation safety.

### 7. Environmental Benefit

N/A.

### 8. Control Measures

Works would be completed under the project Construction Traffic Management Plan (CTMP), Construction Environmental Management Plan (CEMP) and sub-plans, including the Construction Noise and Vibration Management Plan (CNVMP), Construction Heritage Management Plan (CHMP), Construction Soil and Water Management Plan (CSWMP), and Community Consultation Strategy (CCS).

### 9. Climate Change Impacts

N/A.

## 10. Impact Assessment – Construction

Aspect	Nature and extent of impacts (negative and positive) during construction (if control measures implemented) of the proposed/activity, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Flora and fauna	The landscaping work areas consist of combination grass verge and footpaths. There is native and non-native vegetation in the proposal area, but this would be left in-tact during the works. The works are of such minor nature that they would have little to no impact on the approved project.	No additional measures required.	Y	Y	
Water	No changes from the approved project	No additional measures required.	Y	Y	
Air quality	No changes from the approved project	No additional measures required.	Y	Y	
Noise vibration	<p>The works do not differ from those described within the EIS and SPIR and therefore noise and vibration impacts are expected to be consistent with those assessed in the approved project. All work outside of standard construction hours have been assessed and submitted.</p> <p>Additional Mitigation Measures as per the Construction Noise and Vibration Strategy (CNVS) (i.e. community consultation and notifications) would be implemented.</p>	<p>Implementation of control measures as per the CEMP, CNVMP and OOHV.</p> <p>Mitigation and respite would be applied in accordance with the CNVMP and Sydney Metro CNVS.</p>	Y	Y	

Aspect	Nature and extent of impacts (negative and positive) during construction (if control measures implemented) of the proposed/activity, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Aboriginal heritage	A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System - AHIMS ID 720677) with a buffer of 50m from Lot : 2, DP:DP1012364 was performed on 28/09/2022 and has shown that no Aboriginal sites or Aboriginal places are recorded within this buffer zone. No changes from the already approved and assessed project. The works are consistent with the approved project / impact as assessed in the SPIR.	No additional measures required.	Y	Y	

Aspect	Nature and extent of impacts (negative and positive) during construction (if control measures implemented) of the proposed/activity, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Non-Aboriginal heritage	<p>Lakemba Station is locally listed on the Canterbury LEP 2012 Register and on the RailCorp Section 170 Register (Platform Buildings, Overhead Booking Office/Concourse, Platforms, Footbridge, Canopies, War Memorial).</p> <p>The Inter-War post office building – Lakemba Post Office, a local heritage asset, is located adjacent to the project area along The Boulevarde. The Lakemba Post Office is on the local register. The war memorial, in the plaza adjacent to the station is also located on The Boulevarde. The war memorial was dedicated on Sunday 19 April 1953.</p> <p>Non-Aboriginal heritage in the SPIR concluded that the War Memorial at Lakemba is of high heritage significance. The Approved Project was considered to have a neutral impact on the heritage item provided that the proposal would be carried out so as to minimise any direct impacts and that the memorial is adequately protected during the works.</p> <p>As noted in Appendix A (below), the landscaping works at their eastern most extent would conclude at the eastern edge of the existing lift shafts, on Railway Parade and The Boulevarde meaning that the works would take place within the already assessed heritage curtilage and approximately 25m from the council landscaped garden on the corner of Railway Street and Haldon Street, respectively. The work will not affect significant built elements.</p> <p>Neither of these Heritage Items would be impacted by the works as described here within and would not affect the overall heritage impact assessed for Lakemba Station for the Approved Project, therefore the changes are consistent with the approved project.</p>	No additional measures required.	Y	Y	

Aspect	Nature and extent of impacts (negative and positive) during construction (if control measures implemented) of the proposed/activity, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Community and stakeholder	<p>Rerouting of traffic during road closure may cause temporary disruption to community members and stakeholders.</p> <p>Road and footpath access through Haldon Street bridge would be maintained via alternating closures of the East and West side of the bridge.</p> <p>Ongoing community consultation is currently taking place. Notification for this work would be included as per the monthly notification.</p>	<p>Ongoing consultation and notification as per the Community Communications Strategy (CCS).</p> <p>Implementation of control measures as per the CEMP, CEMP sub-plans, CCS and CTMP.</p>	Y	Y	
Traffic	<p>The proposal would occur for five days over the possession period in October 2022 (SD4) on the T3 Bankstown Line. Lakemba Station would therefore not be accessible during this time. This is consistent with the Approved Project.</p> <p>Single lane closure and footpath closure would be required on Haldon Street Bridge. This would occur on both sides/ directions of traffic but would be implemented at different times to ensure one footpath remains open to the community.</p> <p>Traffic control would be in place to assist local residents to maintain use of Haldon Street bridge.</p> <p>Traffic impact is predicated to be low as the works would maintain footpath and road access to alternating sides of the bridge at all times.</p>	<p>Implementation of control measures as per the CEMP and CTMP. The CTMP would be updated to include the lane area once approved.</p> <p>A valid ROL issued by the City of Canterbury Bankstown Council must be in place – any requirements of this permit must be implemented.</p> <p>TCPs must be implemented, including appropriate signage and traffic controllers as required.</p> <p>Consultation with any agencies identified within REMM TC3 would occur.</p>	Y	Y	
Waste	No changes from the approved project	No additional measures required.	Y	Y	
Social	As above for Community and Stakeholder.	No additional measures required.	Y	Y	

Aspect	Nature and extent of impacts (negative and positive) during construction (if control measures implemented) of the proposed/activity, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Economic	No changes from the approved project	No additional measures required.	Y	Y	
Visual	All visual impacts associated with the works, apart from the throw screens themselves, are temporary and negligible in the context of the approved project. Some light spill may occur from the works, either from lighting towers or heavy vehicles.	Visual impacts are to be managed in accordance with the Visual Amenity Management Plan.  Light spill would be minimised by pointing lights away from residential properties and the roadway, towards the works.	Y	Y	
Urban design	No changes from the approved project	No additional measures required.	Y	Y	
Geotechnical	No changes from the approved project	No additional measures required.	Y	Y	
Land use	No changes from the approved project	No additional measures required.	Y	Y	
Climate Change	No changes from the approved project	No additional measures required.	Y	Y	
Risk	No changes from the approved project	No additional measures required.	Y	Y	
Management and mitigation measures	No changes from the approved project	No additional measures required.	Y	Y	

## 11. Impact Assessment – Operation

The proposed works are during construction only.

Aspect	Nature and extent of impacts (negative and positive) during operation (if control measures implemented) of the proposed activity/works, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Flora and fauna	No changes from the approved project	No additional measures required.	N/A	Y	
Water	No changes from the approved project	No additional measures required.	N/A	Y	
Air quality	No changes from the approved project	No additional measures required.	N/A	Y	
Noise vibration	No changes from the approved project	No additional measures required.	N/A	Y	
Aboriginal heritage	No changes from the approved project	No additional measures required.	N/A	Y	
Non-Aboriginal heritage	No changes from the approved project	No additional measures required.	N/A	Y	
Community and stakeholder	No changes from the approved project	No additional measures required.	N/A	Y	
Traffic	No changes from the approved project	No additional measures required.	N/A	Y	
Waste	No changes from the approved project	No additional measures required.	N/A	Y	
Social	No changes from the approved project	No additional measures required.	N/A	Y	
Economic	No changes from the approved project	No additional measures required.	N/A	Y	
Visual	No changes from the approved project	No additional measures required.	N/A	Y	



Aspect	Nature and extent of impacts (negative and positive) during operation (if control measures implemented) of the proposed activity/works, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Urban design	No changes from the approved project	No additional measures required.	N/A	Y	
Geotechnical	No changes from the approved project	No additional measures required.	N/A	Y	
Land use	No changes from the approved project	No additional measures required.	N/A	Y	
Climate Change	No changes from the approved project	No additional measures required.	N/A	Y	
Risk	No changes from the approved project	No additional measures required.	N/A	Y	
Management and mitigation measures	No changes from the approved project	No additional measures required.	N/A	Y	

## 12. Consistency with the Approved Project

<p><b>Based on a review and understanding of the existing Approved Project and the project (including the proposed changes), is there a transformation of the Project?</b></p>	<p>No. The proposed works would not transform the project. The project would continue to provide a new metro rail line between Chatswood and Sydenham. The proposed road closure is to facilitate the project and is consistent with the project as defined in the EIS/SPIR.</p>
<p><b>Is the project (including the proposed changes) consistent with the objectives and functions of the Approved Project as a whole?</b></p>	<p>Yes. The proposed works are consistent with the objectives and functions of the approved project.</p>
<p><b>Is the project (including the proposed changes) consistent with the objectives and functions of elements of the Approved Project?</b></p>	<p>Yes. The changes identified in this assessment are temporary and are consistent with the objectives and functions of the Approved Project.</p>
<p><b>Are there any new environmental impacts as a result of the proposed works?</b></p>	<p>Yes, there would be temporary impact to traffic movement across Haldon Street Bridge (five days). This would be managed with the CTMP, ROLs and council permits.</p>
<p><b>Is the project (including the proposed changes) consistent with the conditions of approval?</b></p>	<p>Yes. The proposed works are consistent with the conditions of approval.</p>
<p><b>Are the impacts of the proposed activity/works known and understood?</b></p>	<p>Yes. The impacts of the proposed works are understood.</p>
<p><b>Are the impacts of the proposed activity/works able to be managed so as not to have an adverse impact?</b></p>	<p>Yes. The impacts of the proposed works can be managed so as to avoid an adverse impact.</p>

## 13. Other Environmental Approvals

**Identify all other approvals required for the project:**

Consultation with the City of Canterbury Bankstown City Council has been undertaken, and Traffic Control Plans and Road Occupancy Licenses approved.

## Author certification

To be completed by person preparing checklist.

I certify that to the best of my knowledge this Consistency Checklist:

- Examines and takes into account the fullest extent possible all matters affecting or likely to affect the environment as a result of activities associated with the Proposed Revision; and
- Examines the consistency of the Proposed Revision with the Approved Project; is accurate in all material respects and does not omit any material information.

Name:	Andrew Lynam	Signature:	
Title:	Environment Manager		
Company:	HSEJV	Date:	06/09/2022


This section is for Sydney Metro only.

### Application supported and submitted by

Name:	Yvette Buchli	Date:	28/09/2022
Title:	Associate Director Planning Approvals	Comments:	
Signature:			

Based on the above assessment, are the impacts and scope of the proposed activity/modification consistent with the existing Approved Project?

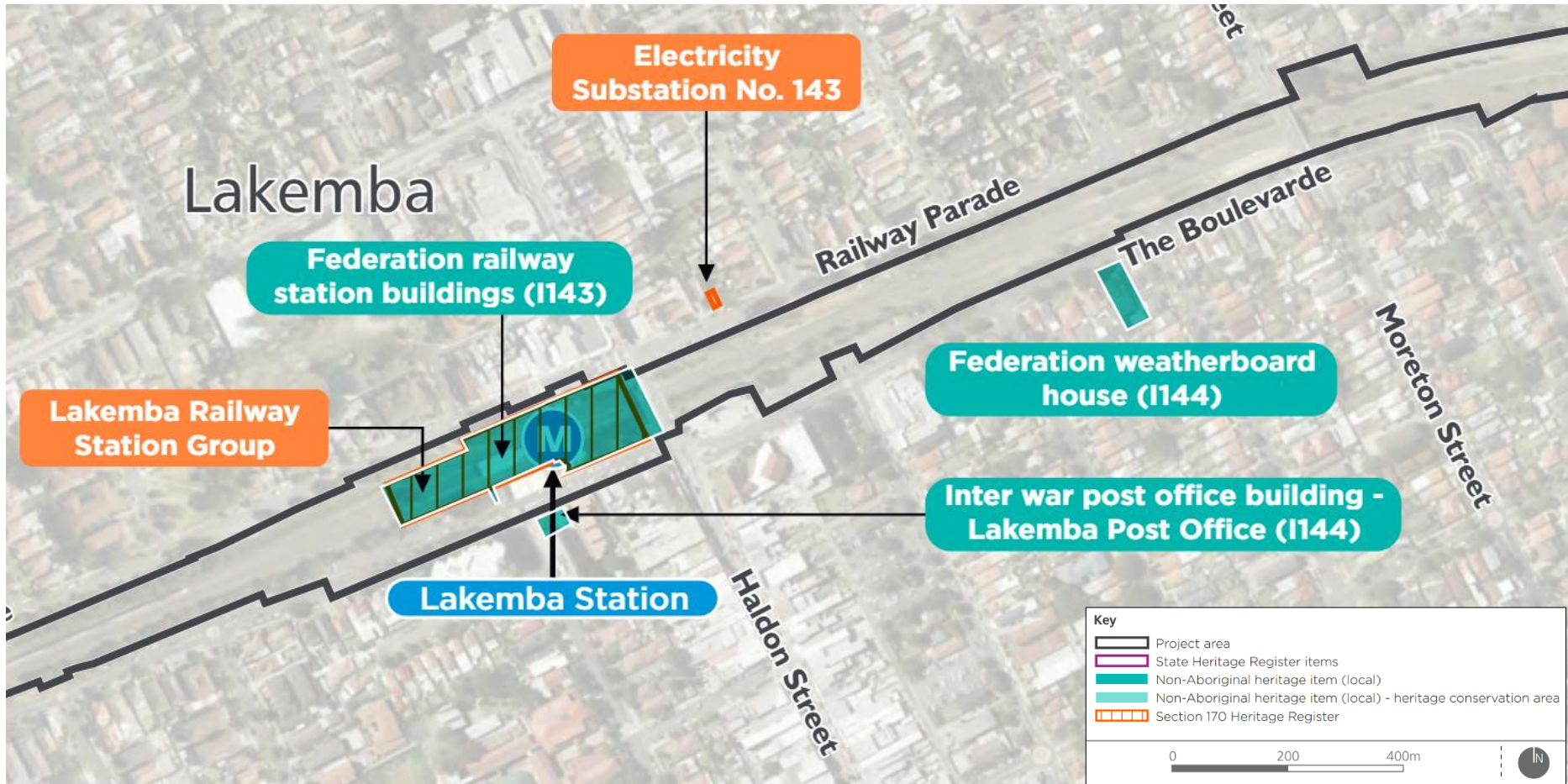
- Yes  The proposed activity/works are consistent and no further assessment is required.
- No  The proposed works/activity is not consistent with the Approved Project. A modification or a new activity approval/ consent is required. Advise Project Manager of appropriate alternative planning approvals pathway to be undertaken.

Endorsed by			
Name:	Fil Cerone	Date:	28 September 2022
Title:	Director City & Southwest, Sustainability, Environment & Planning	Comments:	
Signature:			

## Appendix A – Site Location and Indicative Heritage Areas



Appendix A – Indicative area of Haldon Street Bridge closure



Appendix A – Heritage listed items and proposal area (Figure 12.2 of the SPIR)

## Appendix B – Relevant TCPs



## Appendix C – Lakemba AIHMS Search Results

## TGS VERIFICATION CHECKLIST

1	Have the below items been addressed on the TGS for this location?	Yes	No
1.1	Traffic Volumes <input checked="" type="checkbox"/> <input type="checkbox"/> Predicted queue length <input checked="" type="checkbox"/> <input type="checkbox"/> Shoulder widths <input checked="" type="checkbox"/> <input type="checkbox"/> Sight distances <input checked="" type="checkbox"/> <input type="checkbox"/> Existing infrastructure <input checked="" type="checkbox"/> <input type="checkbox"/> Transport services (i.e. bus stops) <input checked="" type="checkbox"/> <input type="checkbox"/> Pedestrian generators <input checked="" type="checkbox"/> <input type="checkbox"/> Appropriate site access <input checked="" type="checkbox"/> <input type="checkbox"/> Appropriate escape route for traffic controllers <input checked="" type="checkbox"/> <input type="checkbox"/>		
2	Confirmation	Yes	No
2.1	Does the TGS require adjustments within tolerances? <input type="checkbox"/> <input type="checkbox"/> Does the TGS require any additional modifications? <input type="checkbox"/> <input type="checkbox"/> Is the TGS appropriate for use for works? <input type="checkbox"/> <input type="checkbox"/> Have key risk been addressed on site? <input type="checkbox"/> <input type="checkbox"/>		

Additional comments

## RISK ASSESSMENT

3	<input type="checkbox"/> Does the TGS Involve Detours of traffic?	Yes	No	Risk	Risk rating
3.1	Are Detour routes suitable for all vehicle classes being detoured? <input type="checkbox"/> <input type="checkbox"/> Is access to residential properties and businesses maintained? <input type="checkbox"/> <input type="checkbox"/> Are detour signs located at decision points? <input type="checkbox"/> <input type="checkbox"/> Can roads and intersections used as detour routes accommodate the volumes? <input type="checkbox"/> <input type="checkbox"/> Is the same level of safety maintained for turn movements? <input type="checkbox"/> <input type="checkbox"/>				
4	<input type="checkbox"/> Does the TGS involve Stop/slow arrangements?	Yes	No	Risk	Risk rating
4.1	Are escape routes defined on the TGS, clear and safe to use? <input type="checkbox"/> <input type="checkbox"/> Is a PTCD used in place of a Traffic Controller where speed >45kmh? <input type="checkbox"/> <input type="checkbox"/> Is the speed of the road >=60km/h where TC or PTCD are in use? <input type="checkbox"/> <input type="checkbox"/> Are 4x traffic cones placed on the edge or centre line, approaching TC or PTCD? <input type="checkbox"/> <input type="checkbox"/> Is Prepare to stop and Traffic control or PTCD symbolic sign installed? <input type="checkbox"/> <input type="checkbox"/> Do TC and PTCD positions have adequate lighting during low light conditions? <input type="checkbox"/> <input type="checkbox"/> Does sight distance of at least 1.5D exist on approach to TC or PTCD? <input type="checkbox"/> <input type="checkbox"/>				
5	General	Yes	No	Risk	Risk rating
5.1	Does the TGS define minimum clearances required of workers to live traffic? <input checked="" type="checkbox"/> <input type="checkbox"/> Are distances compliant? <input checked="" type="checkbox"/> <input type="checkbox"/> Are worker symbolic signs shown in advance of workers that are visible to traffic? <input checked="" type="checkbox"/> <input type="checkbox"/> Are all signs placed at correct distances? i.e. D for multiple or 2D for single sign? <input checked="" type="checkbox"/> <input type="checkbox"/> Are taper lengths compliant and not placed in areas with poor sight distance? <input checked="" type="checkbox"/> <input type="checkbox"/> Are lane status signs to be placed in advance of a lane merge? <input checked="" type="checkbox"/> <input type="checkbox"/> Are the correct tapers being used? i.e. Merge, Traffic Control, Lateral shift? <input checked="" type="checkbox"/> <input type="checkbox"/> Does the TGS clearly define transition zones between tapers on Multi-lane roads? <input checked="" type="checkbox"/> <input type="checkbox"/> Are they compliant? <input checked="" type="checkbox"/> <input type="checkbox"/> Does the TGS clearly define buffer areas and are they at least 30m in length? <input checked="" type="checkbox"/> <input type="checkbox"/> Does the TGS clearly define site access and egress for work vehicles? <input checked="" type="checkbox"/> <input type="checkbox"/> Are any impacts on traffic managed? <input checked="" type="checkbox"/> <input type="checkbox"/> Does the TGS clearly define pedestrian routes, and are they suitable? <input checked="" type="checkbox"/> <input type="checkbox"/> Does the TGS consider cyclists and can they traverse site safely? <input checked="" type="checkbox"/> <input type="checkbox"/>				

### RISK EVALUATION MATRIX

Risk Ratings Very High – VH High – H Medium – M Low – L		Consequence					
		Insignificant C6	Minor C5	Moderate C4	Major C3	Severe C2	Catastrophic C1
Likelihood	Almost certain L1	M	H	H	VH	VH	VH
	Very likely L2	M	M	H	H	VH	VH
	Likely L3	L	M	M	H	H	VH
	Unlikely L4	L	L	M	M	H	H
	Very unlikely L5	L	L	L	M	M	H
	Almost unprecedented L6	L	L	L	L	M	M

### RISK MANAGEMENT

\* If 'No' selected for any question in items 3, 4 or 5 in the RISK ASSESSMENT above a control needs to be assigned in the table below to mitigate any additional risk. Where blank refer Risk Assessment included as part of TMP.

Item	Control Measures	Residual Risk

### SIGNED – DESIGNER AND VERIFICATION (PWZTMP OR ITCP)

Name: Alex Gosper Sign: Date: 07.03.2022 Card No: TCT0002693 (PWZ)

Name: \_\_\_\_\_ Sign: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Card No: \_\_\_\_\_

<table border="1" style="width: 100%; border-collapse: collapse; font-size: x-small;"> <tr><td>REV</td><td>BY</td><td>DATE</td><td>DESCRIPTION</td><td>APPD.</td></tr> <tr><td>P4</td><td>AG</td><td>15.06.22</td><td>AMENDMENTS AS PER SITE TEAMS COMMENTS</td><td>LP</td></tr> <tr><td>P3</td><td>AG</td><td>15.05.22</td><td>UPDATE PEDESTRIAN DELINEATION</td><td>LP</td></tr> <tr><td>P2</td><td>AG</td><td>22.09.21</td><td>UPDATE PEDESTRIAN DELINEATION</td><td>LP</td></tr> <tr><td>P1</td><td>LP</td><td>16.07.21</td><td>ORIGINAL ISSUE</td><td>LP</td></tr> </table>	REV	BY	DATE	DESCRIPTION	APPD.	P4	AG	15.06.22	AMENDMENTS AS PER SITE TEAMS COMMENTS	LP	P3	AG	15.05.22	UPDATE PEDESTRIAN DELINEATION	LP	P2	AG	22.09.21	UPDATE PEDESTRIAN DELINEATION	LP	P1	LP	16.07.21	ORIGINAL ISSUE	LP	DRAWN BY: LP DRW CHECK: LP APPROVED: LP IND REVIEW: N/A		CLIENT 	HASLIN CONSTRUCTIONS - LAKEMBA STATION UPGRADE HALDON STREET NORTHBOUND LANE CLOSURE OVER RAIL BRIDGE WITH 40km/h AND FOOPATH DETOUR RISK ASSESSMENT	DRAWING No: HAS-LAK-40034-P4 SHEET 1 OF 3 REVISION P4
REV	BY	DATE	DESCRIPTION	APPD.																										
P4	AG	15.06.22	AMENDMENTS AS PER SITE TEAMS COMMENTS	LP																										
P3	AG	15.05.22	UPDATE PEDESTRIAN DELINEATION	LP																										
P2	AG	22.09.21	UPDATE PEDESTRIAN DELINEATION	LP																										
P1	LP	16.07.21	ORIGINAL ISSUE	LP																										



SHEET 2

### GENERAL NOTES

- THIS TRAFFIC GUIDANCE SCHEME (TGS) HAS BEEN PREPARED IN ACCORDANCE WITH THE TCAWS MANUAL V6.1 2022.
- THE CONTRACTOR SHALL ENSURE ALL ROAD OCCUPANCY PERMITS AND SPEED ZONE AUTHORISATION REQUIREMENTS ARE SATISFIED PRIOR IMPLEMENTATION OF THIS TGS.
- ANY EXISTING SIGNAGE THAT CONFLICTS WITH THIS TGS MUST BE COVERED AT THE START OF OPERATION AND UNCOVERED AT THE COMPLETION.
- THE SITE MUST COMPLY WITH THE TRAFFIC CONTROL AT WORK SITES MANUAL V6.1 2022 EDITION AND A.S. 1742.3
- LOCATION CHECKLIST MUST BE COMPLETED FOR ALL WORKSITES
- SIGNS TO BE POSITIONED IN ACCORDANCE WITH THE TCAWS MANUAL V6 2020.
- TRAFFIC CONTROLLERS TO BE POSITIONED WHERE THEY CAN MAINTAIN A CLEAR ESCAPE PATH.
- THIS TGS USE IS LIMITED TO THAT OF HASLIN CONSTRUCTIONS AND THEIR ASSOCIATED SUBCONTRACTORS, TRAFFIC CONTROL PROVIDERS AND FOR THE PROJECT REFERENCED.

### SITE SPECIFIC NOTES

PRIMARY ROAD	HALDON STREET
SECONDARY ROAD	THE BOULEVARDE
PERMITTED TIMES FOR USE	24/7
PREDICTED END-OF-QUEUE LENGTH	N/A - LIMITED
EXISTING SPEED - PRIMARY ROAD	50km/h
EXISTING SPEED - SECONDARY ROAD	50km/h
DIMENSION D ADOPTED	50m
CONE SPACING (MAX)	12m
SIGN SIZE (MIN)	B
MINIMUM CLEARANCE TO WORKERS FROM TRAFFIC	1.5m

REV	BY	DATE	DESCRIPTION	APPD.
P4	AG	15.06.22	AMENDMENTS AS PER SITE TEAMS COMMENTS	LP
P3	AG	22.09.21	UPDATE PEDESTRIAN DELINEATION	LP
P2	AG	22.09.21	UPDATE PEDESTRIAN DELINEATION	LP
P1	LP	16.07.21	ORIGINAL ISSUE	LP

**DRAWN BY:** LP

**DRW CHECK:** LP

**APPROVED:** LP

**IND REVIEW:** N/A

DESIGNER



CLIENT



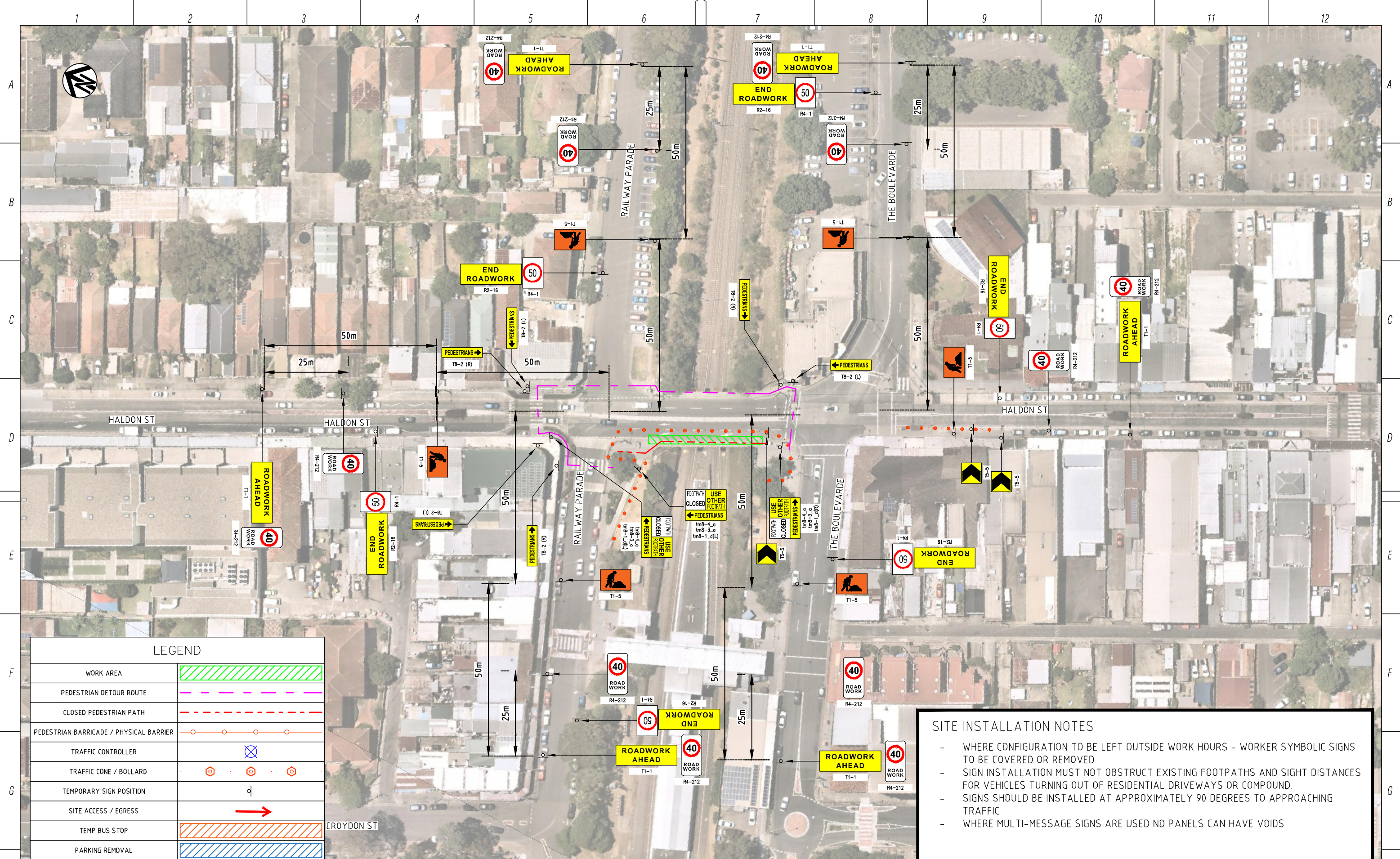
**HASLIN CONSTRUCTIONS - LAKEMBA STATION UPGRADE**

**HALDON STREET NORTHBOUND LANE CLOSURE OVER RAIL BRIDGE WITH 40km/h AND FOOPATH DETOUR LOCALITY PLAN**

**DRAWING No:** HAS-LAK-40034-P4

**SHEET** 2 **OF** 3

**REVISION** P4



**LEGEND**

WORK AREA	
PEDESTRIAN DETOUR ROUTE	
CLOSED PEDESTRIAN PATH	
PEDESTRIAN BARRICADE / PHYSICAL BARRIER	
TRAFFIC CONTROLLER	
TRAFFIC CONE / BOLLARD	
TEMPORARY SIGN POSITION	
SITE ACCESS / EGRESS	
TEMP BUS STOP	
PARKING REMOVAL	

**SITE INSTALLATION NOTES**

- WHERE CONFIGURATION TO BE LEFT OUTSIDE WORK HOURS - WORKER SYMBOLIC SIGNS TO BE COVERED OR REMOVED
- SIGN INSTALLATION MUST NOT OBSTRUCT EXISTING FOOTPATHS AND SIGHT DISTANCES FOR VEHICLES TURNING OUT OF RESIDENTIAL DRIVEWAYS OR COMPOUND.
- SIGNS SHOULD BE INSTALLED AT APPROXIMATELY 90 DEGREES TO APPROACHING TRAFFIC
- WHERE MULTI-MESSAGE SIGNS ARE USED NO PANELS CAN HAVE VOIDS

REV	BY	DATE	DESCRIPTION	APPD.
P4	AG	15.06.22	AMENDMENTS AS PER SITE TEAMS COMMENTS	LP
P3	AG	22.09.21	UPDATE PEDESTRIAN DELINEATION	LP
P2	AG	22.09.21	UPDATE PEDESTRIAN DELINEATION	LP
P1	LP	16.07.21	ORIGINAL ISSUE	LP

DRAWN BY: LP  
 DRW CHECK: LP  
 APPROVED: LP  
 IND REVIEW: N/A

DESIGNER

CLIENT

HASLIN CONSTRUCTIONS - LAKEMBA STATION UPGRADE  
 HALDON STREET NORTHBOUND LANE CLOSURE OVER  
 RAIL BRIDGE WITH 40km/h AND FOOPATH DETOUR  
 TRAFFIC GUIDANCE SCHEME

DRAWING No:	HAS-LAK-40034-P4		
SHEET	3	OF	3
REVISION	P4		

## TGS VERIFICATION CHECKLIST

1	Have the below items been addressed on the TGS for this location?	Yes	No
1.1	Traffic Volumes <input checked="" type="checkbox"/> <input type="checkbox"/> Predicted queue length <input checked="" type="checkbox"/> <input type="checkbox"/> Shoulder widths <input checked="" type="checkbox"/> <input type="checkbox"/> Sight distances <input checked="" type="checkbox"/> <input type="checkbox"/> Existing infrastructure <input checked="" type="checkbox"/> <input type="checkbox"/> Transport services (i.e. bus stops) <input checked="" type="checkbox"/> <input type="checkbox"/> Pedestrian generators <input checked="" type="checkbox"/> <input type="checkbox"/> Appropriate site access <input checked="" type="checkbox"/> <input type="checkbox"/> Appropriate escape route for traffic controllers <input checked="" type="checkbox"/> <input type="checkbox"/>		
2	Confirmation	Yes	No
2.1	Does the TGS require adjustments within tolerances? <input type="checkbox"/> <input type="checkbox"/> Does the TGS require any additional modifications? <input type="checkbox"/> <input type="checkbox"/> Is the TGS appropriate for use for works? <input type="checkbox"/> <input type="checkbox"/> Have key risk been addressed on site? <input type="checkbox"/> <input type="checkbox"/>		

Additional comments

## RISK ASSESSMENT

3	<input type="checkbox"/> Does the TGS Involve Detours of traffic?	Yes	No	Risk	Risk rating
3.1	Are Detour routes suitable for all vehicle classes being detoured? <input type="checkbox"/> <input type="checkbox"/> Is access to residential properties and businesses maintained? <input type="checkbox"/> <input type="checkbox"/> Are detour signs located at decision points? <input type="checkbox"/> <input type="checkbox"/> Can roads and intersections used as detour routes accommodate the volumes? <input type="checkbox"/> <input type="checkbox"/> Is the same level of safety maintained for turn movements? <input type="checkbox"/> <input type="checkbox"/>				
4	<input type="checkbox"/> Does the TGS involve Stop/slow arrangements?	Yes	No	Risk	Risk rating
4.1	Are escape routes defined on the TGS, clear and safe to use? <input checked="" type="checkbox"/> <input type="checkbox"/> Is a PTCO used in place of a Traffic Controller where speed >45kmh? <input checked="" type="checkbox"/> <input type="checkbox"/> Is the speed of the road >=60km/h where TC or PTCO are in use? <input type="checkbox"/> <input checked="" type="checkbox"/> Are 4x traffic cones placed on the edge or centre line, approaching TC or PTCO? <input checked="" type="checkbox"/> <input type="checkbox"/> Is Prepare to stop and Traffic control or PTCO symbolic sign installed? <input checked="" type="checkbox"/> <input type="checkbox"/> Do TC and PTCO positions have adequate lighting during low light conditions? <input checked="" type="checkbox"/> <input type="checkbox"/> Does sight distance of at least 1.5D exist on approach to TC or PTCO? <input checked="" type="checkbox"/> <input type="checkbox"/>				
5	General	Yes	No	Risk	Risk rating
5.1	Does the TGS define minimum clearances required of workers to live traffic? <input checked="" type="checkbox"/> <input type="checkbox"/> Are distances compliant? <input checked="" type="checkbox"/> <input type="checkbox"/> Are worker symbolic signs shown in advance of workers that are visible to traffic? <input checked="" type="checkbox"/> <input type="checkbox"/> Are all signs placed at correct distances? i.e. D for multiple or 2D for single sign? <input checked="" type="checkbox"/> <input type="checkbox"/> Are taper lengths compliant and not placed in areas with poor sight distance? <input checked="" type="checkbox"/> <input type="checkbox"/> Are lane status signs to be placed in advance of a lane merge? <input checked="" type="checkbox"/> <input type="checkbox"/> Are the correct tapers being used? i.e. Merge, Traffic Control, Lateral shift? <input checked="" type="checkbox"/> <input type="checkbox"/> Does the TGS clearly define transition zones between tapers on Multi-lane roads? <input checked="" type="checkbox"/> <input type="checkbox"/> Are they compliant? <input checked="" type="checkbox"/> <input type="checkbox"/> Does the TGS clearly define buffer areas and are they at least 30m in length? <input checked="" type="checkbox"/> <input type="checkbox"/> Does the TGS clearly define site access and egress for work vehicles? <input checked="" type="checkbox"/> <input type="checkbox"/> Are any impacts on traffic managed? <input checked="" type="checkbox"/> <input type="checkbox"/> Does the TGS clearly define pedestrian routes, and are they suitable? <input checked="" type="checkbox"/> <input type="checkbox"/> Does the TGS consider cyclists and can they traverse site safely? <input checked="" type="checkbox"/> <input type="checkbox"/>				

### RISK EVALUATION MATRIX

Risk Ratings Very High – VH High – H Medium – M Low – L		Consequence					
		Insignificant C6	Minor C5	Moderate C4	Major C3	Severe C2	Catastrophic C1
Likelihood	Almost certain L1	M	H	H	VH	VH	VH
	Very likely L2	M	M	H	H	VH	VH
	Likely L3	L	M	M	H	H	VH
	Unlikely L4	L	L	M	M	H	H
	Very unlikely L5	L	L	L	M	M	H
	Almost unprecedented L6	L	L	L	L	M	M

### RISK MANAGEMENT

\* If 'No' selected for any question in items 3, 4 or 5 in the RISK ASSESSMENT above a control needs to be assigned in the table below to mitigate any additional risk. Where blank refer Risk Assessment included as part of TMP.

Item	Control Measures	Residual Risk

### SIGNED – DESIGNER AND VERIFICATION (PWZTMP OR ITCP)

Name: Alex Gosper Sign: Date: 07.03.2022 Card No: TCT0002693 (PWZ)

Name: \_\_\_\_\_ Sign: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Card No: \_\_\_\_\_

DRAWN BY: LP DRW CHECK: LP APPROVED: LP IND REVIEW: N/A			HASLIN CONSTRUCTIONS - LAKEMBA STATION UPGRADE HALDON STREET NORTHBOUND LANE CLOSURE OVER RAIL BRIDGE WITH 40km/h AND FOOTPATH DETOUR AND STOP/SLOW RISK ASSESSMENT	DRAWING No: HAS-LAK-40044-P3 SHEET 1 OF 3 REVISION P3
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Plot Date: 1 June 2022 - 7:00 AM
Cad File No: C:\Users\Alex\OneDrive\00\_Civlink Consulting\Projects\20200612 - Wahroonga Station Bridge\10\_TCP\HAS-LAK-40044-P2.dwg



SHEET 2

**GENERAL NOTES**

- THIS TRAFFIC GUIDANCE SCHEME (TGS) HAS BEEN PREPARED IN ACCORDANCE WITH THE TCAWS MANUAL V6.1 2022.
- THE CONTRACTOR SHALL ENSURE ALL ROAD OCCUPANCY PERMITS AND SPEED ZONE AUTHORISATION REQUIREMENTS ARE SATISFIED PRIOR IMPLEMENTATION OF THIS TGS.
- ANY EXISTING SIGNAGE THAT CONFLICTS WITH THIS TGS MUST BE COVERED AT THE START OF OPERATION AND UNCOVERED AT THE COMPLETION.
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- LOCATION CHECKLIST MUST BE COMPLETED FOR ALL WORKSITES
- SIGNS TO BE POSITIONED IN ACCORDANCE WITH THE TCAWS MANUAL V6 2020.
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- THIS TGS USE IS LIMITED TO THAT OF HASLIN CONSTRUCTIONS AND THEIR ASSOCIATED SUBCONTRACTORS, TRAFFIC CONTROL PROVIDERS AND FOR THE PROJECT REFERENCED.


**SITE SPECIFIC NOTES**

PRIMARY ROAD	HALDON STREET
SECONDARY ROAD	THE BOULEVARDE
PERMITTED TIMES FOR USE	24/7
PREDICTED END-OF-QUEUE LENGTH	N/A - LIMITED
EXISTING SPEED - PRIMARY ROAD	50km/h
EXISTING SPEED - SECONDARY ROAD	50km/h
DIMENSION D ADOPTED	50m
CONE SPACING (MAX)	12m
SIGN SIZE (MIN)	B
MINIMUM CLEARANCE TO WORKERS FROM TRAFFIC	1.5m

REV	BY	DATE	DESCRIPTION	APPD.
P3	AG	15.06.22	AMENDMENTS AS PER SITE TEAMS COMMENTS	LP
P2	LP	31.05.22	UPDATE SIGNALS FLASHING AND BUS STOP	LP
P1	LP	17.05.22	ORIGINAL ISSUE	LP

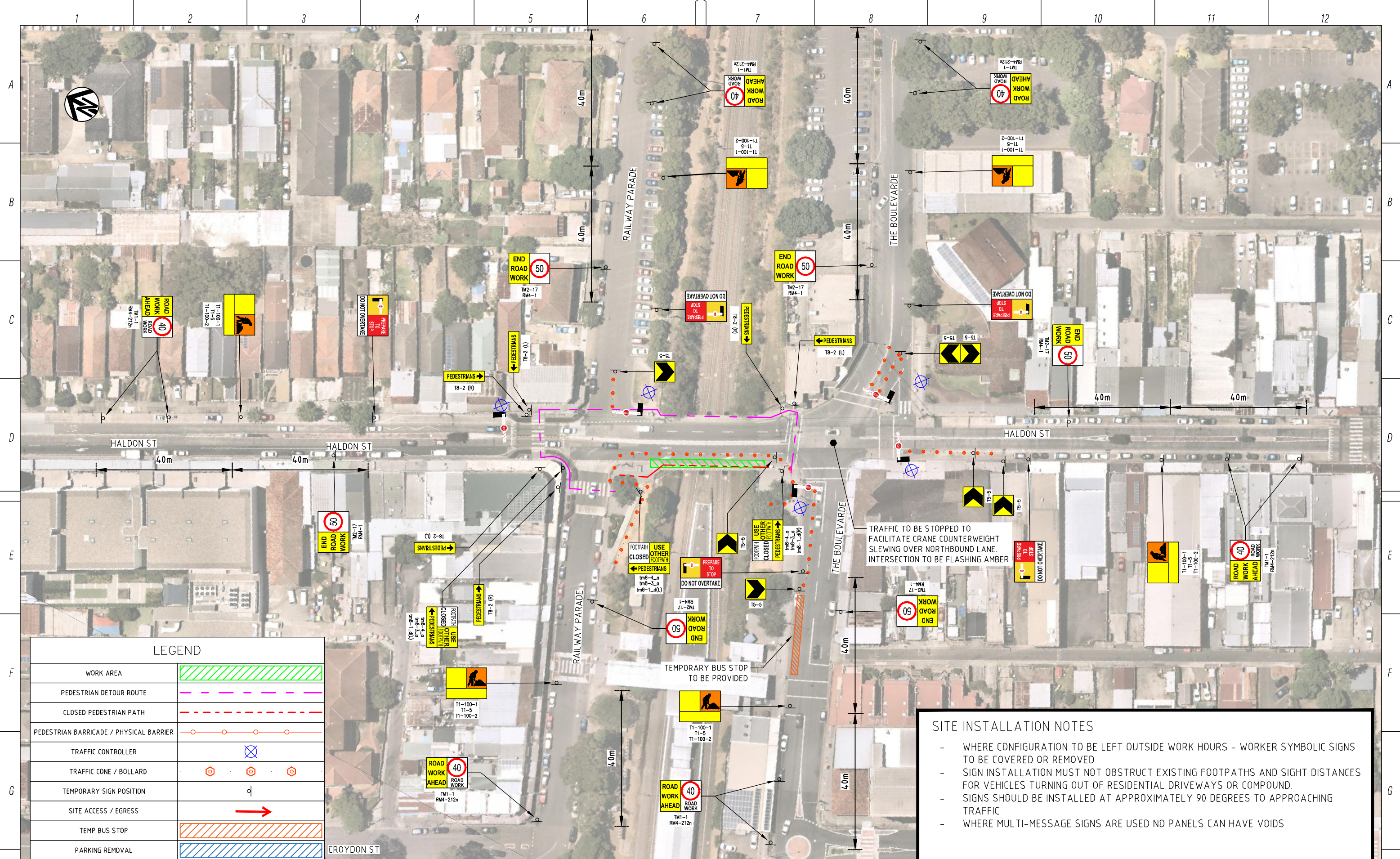
**DRAWN BY:** LP  
**DRW CHECK:** LP  
**APPROVED:** LP  
**IND REVIEW:** N/A

DESIGNER  


CLIENT  


**HASLIN CONSTRUCTIONS - LAKEMBA STATION UPGRADE**  
**HALDON STREET NORTHBOUND LANE CLOSURE OVER RAIL BRIDGE WITH 40km/h AND FOOPATH DETOUR AND STOP/SLOW LOCALITY PLAN**

**DRAWING No:** HAS-LAK-40044-P3  
**SHEET** 2 **OF** 3  
**REVISION** P3



**SITE INSTALLATION NOTES**

- WHERE CONFIGURATION TO BE LEFT OUTSIDE WORK HOURS - WORKER SYMBOLIC SIGNS TO BE COVERED OR REMOVED
- SIGN INSTALLATION MUST NOT OBSTRUCT EXISTING FOOTPATHS AND SIGHT DISTANCES FOR VEHICLES TURNING OUT OF RESIDENTIAL DRIVEWAYS OR COMPOUND.
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- WHERE MULTI-MESSAGE SIGNS ARE USED NO PANELS CAN HAVE VOIDS

LEGEND	
WORK AREA	
PEDESTRIAN DETOUR ROUTE	
CLOSED PEDESTRIAN PATH	
PEDESTRIAN BARRICADE / PHYSICAL BARRIER	
TRAFFIC CONTROLLER	
TRAFFIC CONE / BOLLARD	
TEMPORARY SIGN POSITION	
SITE ACCESS / EGRESS	
TEMP BUS STOP	
PARKING REMOVAL	

REV	BY	DATE	DESCRIPTION	APPD.
P3	AG	15.06.22	AMENDMENTS AS PER SITE TEAMS COMMENTS	LP
P2	LP	31.05.22	UPDATE SIGNALS FLASHING AND BUS STOP	LP
P1	LP	17.05.22	ORIGINAL ISSUE	LP

DRAWN BY:	LP
DRW CHECK:	LP
APPROVED:	LP
IND REVIEW:	N/A

DESIGNER:

CLIENT:

HASLIN CONSTRUCTIONS - LAKEMBA STATION UPGRADE

HALDON STREET NORTHBOUND LANE CLOSURE OVER RAIL BRIDGE WITH 40km/h AND FOOPATH DETOUR AND STOP/SLOW TRAFFIC GUIDANCE SCHEME

DRAWING No:	HAS-LAK-40044-P3
SHEET	3 OF 3
REVISION	P3

## TGS VERIFICATION CHECKLIST

1	Have the below items been addressed on the TGS for this location?	Yes	No
1.1	Traffic Volumes <input checked="" type="checkbox"/> <input type="checkbox"/> Predicted queue length <input checked="" type="checkbox"/> <input type="checkbox"/> Shoulder widths <input checked="" type="checkbox"/> <input type="checkbox"/> Sight distances <input checked="" type="checkbox"/> <input type="checkbox"/> Existing infrastructure <input checked="" type="checkbox"/> <input type="checkbox"/> Transport services (i.e. bus stops) <input checked="" type="checkbox"/> <input type="checkbox"/> Pedestrian generators <input checked="" type="checkbox"/> <input type="checkbox"/> Appropriate site access <input checked="" type="checkbox"/> <input type="checkbox"/> Appropriate escape route for traffic controllers <input checked="" type="checkbox"/> <input type="checkbox"/>		
2	Confirmation	Yes	No
2.1	Does the TGS require adjustments within tolerances? <input type="checkbox"/> <input type="checkbox"/> Does the TGS require any additional modifications? <input type="checkbox"/> <input type="checkbox"/> Is the TGS appropriate for use for works? <input type="checkbox"/> <input type="checkbox"/> Have key risk been addressed on site? <input type="checkbox"/> <input type="checkbox"/>		

Additional comments

## RISK ASSESSMENT

3	<input type="checkbox"/> Does the TGS Involve Detours of traffic?	Yes	No	Risk	Risk rating
3.1	Are Detour routes suitable for all vehicle classes being detoured? <input type="checkbox"/> <input type="checkbox"/> Is access to residential properties and businesses maintained? <input type="checkbox"/> <input type="checkbox"/> Are detour signs located at decision points? <input type="checkbox"/> <input type="checkbox"/> Can roads and intersections used as detour routes accommodate the volumes? <input type="checkbox"/> <input type="checkbox"/> Is the same level of safety maintained for turn movements? <input type="checkbox"/> <input type="checkbox"/>				
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## RISK EVALUATION MATRIX

Risk Ratings		Consequence						
		Insignificant C6	Minor C5	Moderate C4	Major C3	Severe C2	Catastrophic C1	
Likelihood	Very High - VH	L1	M	H	H	VH	VH	VH
	High - H	L2	M	M	H	H	VH	VH
	Medium - M	L3	L	M	M	H	H	VH
	Low - L	L4	L	L	M	M	H	H
	Almost certain	L5	L	L	L	M	M	H
	Very likely	L6	L	L	L	M	M	M

## RISK MANAGEMENT

\* If 'No' selected for any question in items 3, 4 or 5 in the RISK ASSESSMENT above a control needs to be assigned in the table below to mitigate any additional risk. Where blank refer Risk Assessment included as part of TMP.

Item	Control Measures	Residual Risk

### SIGNED - DESIGNER AND VERIFICATION (PWZTMP OR ITCP)

Name: Alex Gosper Sign: Date: 07.03.2022 Card No: TCT0002693 (PWZ)

Name: \_\_\_\_\_ Sign: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Card No: \_\_\_\_\_

DRAWN BY: LP DRW CHECK: LP APPROVED: LP IND REVIEW: N/A			HASLIN CONSTRUCTIONS - LAKEMBA STATION UPGRADE HALDON STREET SOUTHBOUND LANE CLOSURE OVER RAIL BRIDGE WITH 40km/h AND FOOTPATH DETOUR AND STOP/SLOW RISK ASSESSMENT	DRAWING No: HAS-LAK-40045-P3 SHEET 1 OF 3 REVISION P3
REV BY DATE DESCRIPTION APPD. P3 AG 15.06.22 AMENDMENTS AS PER SITE TEAMS COMMENTS LP P2 LP 31.05.22 UPDATE SIGNALS FLASHING AND BUS STOP LP P1 LP 17.05.22 ORIGINAL ISSUE LP	COORDINATE SYSTEM: _____ HEIGHT DATUM: _____ SCALE: _____			

Plot Date: 1 June 2022 - 6:33 AM Cad File No: C:\Users\Alex\OneDrive\00\_Civlink Consulting\Projects\20200612 - Warronga Station Bridge\10\_TCP\HAS-LAK-40045-P2.dwg





SHEET 2

**GENERAL NOTES**

- THIS TRAFFIC GUIDANCE SCHEME (TGS) HAS BEEN PREPARED IN ACCORDANCE WITH THE TCAWS MANUAL V6.1 2022.
- THE CONTRACTOR SHALL ENSURE ALL ROAD OCCUPANCY PERMITS AND SPEED ZONE AUTHORISATION REQUIREMENTS ARE SATISFIED PRIOR IMPLEMENTATION OF THIS TGS.
- ANY EXISTING SIGNAGE THAT CONFLICTS WITH THIS TGS MUST BE COVERED AT THE START OF OPERATION AND UNCOVERED AT THE COMPLETION.
- THE SITE MUST COMPLY WITH THE TRAFFIC CONTROL AT WORK SITES MANUAL V6.1 2022 EDITION AND A.S. 1742.3
- LOCATION CHECKLIST MUST BE COMPLETED FOR ALL WORKSITES
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- TRAFFIC CONTROLLERS TO BE POSITIONED WHERE THEY CAN MAINTAIN A CLEAR ESCAPE PATH.
- THIS TGS USE IS LIMITED TO THAT OF HASLIN CONSTRUCTIONS AND THEIR ASSOCIATED SUBCONTRACTORS, TRAFFIC CONTROL PROVIDERS AND FOR THE PROJECT REFERENCED.

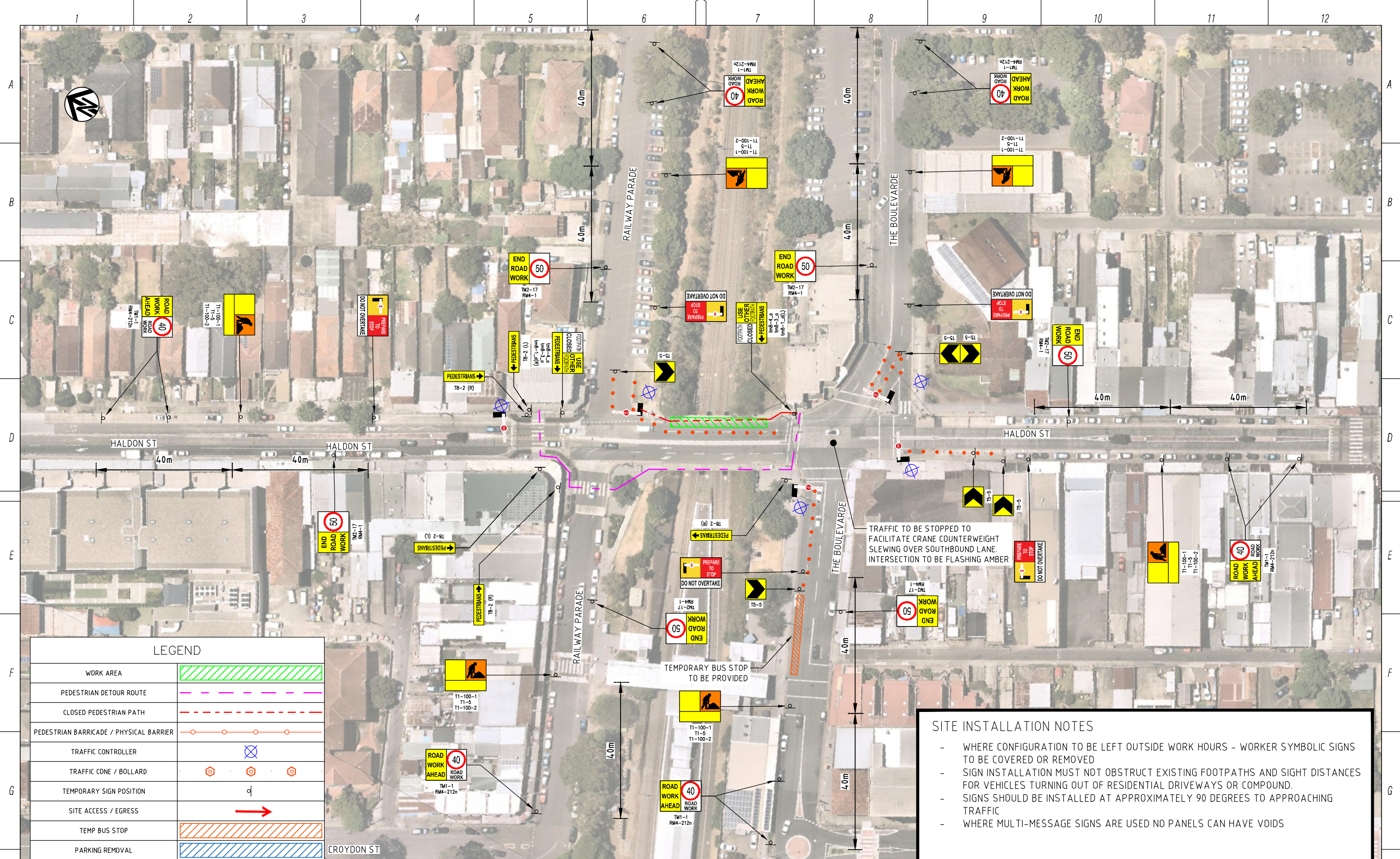
**SITE SPECIFIC NOTES**

PRIMARY ROAD	HALDON STREET
SECONDARY ROAD	THE BOULEVARDE
PERMITTED TIMES FOR USE	24/7
PREDICTED END-OF-QUEUE LENGTH	N/A - LIMITED
EXISTING SPEED - PRIMARY ROAD	50km/h
EXISTING SPEED - SECONDARY ROAD	50km/h
DIMENSION D ADOPTED	50m
CONE SPACING (MAX)	12m
SIGN SIZE (MIN)	B
MINIMUM CLEARANCE TO WORKERS FROM TRAFFIC	1.5m

REV	BY	DATE	DESCRIPTION	APPD.
P3	AG	15.06.22	AMENDMENTS AS PER SITE TEAMS COMMENTS	LP
P2	LP	31.05.22	UPDATE SIGNALS FLASHING AND BUS STOP	LP
P1	LP	17.05.22	ORIGINAL ISSUE	LP
DRAWN BY:		LP	DESIGNER	
DRW CHECK:		LP	CLIENT	
APPROVED:		LP		
IND REVIEW:		N/A		
COORDINATE SYSTEM:		HEIGHT DATUM:	SCALE:	

**HASLIN CONSTRUCTIONS - LAKEMBA STATION UPGRADE**  
**HALDON STREET SOUTHBOUND LANE CLOSURE OVER RAIL BRIDGE WITH 40km/h AND FOOPATH DETOUR AND STOP/SLOW LOCALITY PLAN**

DRAWING No: **HAS-LAK-40045-P3**  
 SHEET **2** OF **3**  
 REVISION **P3**



**LEGEND**

WORK AREA	
PEDESTRIAN DETOUR ROUTE	
CLOSED PEDESTRIAN PATH	
PEDESTRIAN BARRICADE / PHYSICAL BARRIER	
TRAFFIC CONTROLLER	
TRAFFIC CONE / BOLLARD	
TEMPORARY SIGN POSITION	
SITE ACCESS / EGRESS	
TEMP BUS STOP	
PARKING REMOVAL	

**SITE INSTALLATION NOTES**

- WHERE CONFIGURATION TO BE LEFT OUTSIDE WORK HOURS - WORKER SYMBOLIC SIGNS TO BE COVERED OR REMOVED
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P1	LP	17.05.22	ORIGINAL ISSUE	LP

DRAWN BY: LP  
 DRW CHECK: LP  
 APPROVED: LP  
 IND REVIEW: N/A

DESIGNER:

CLIENT:

**HASLIN CONSTRUCTIONS - LAKEMBA STATION UPGRADE**  
**HALDON STREET SOUTHBOUND LANE CLOSURE OVER RAIL BRIDGE WITH 40km/h AND FOOPATH DETOUR AND STOP/SLOW TRAFFIC GUIDANCE SCHEME**

DRAWING No:	HAS-LAK-40045-P3		
SHEET	3	OF	3
REVISION	P3		

## TGS VERIFICATION CHECKLIST

1	Have the below items been addressed on the TGS for this location?	Yes	No
1.1	Traffic Volumes <input checked="" type="checkbox"/> <input type="checkbox"/> Predicted queue length <input checked="" type="checkbox"/> <input type="checkbox"/> Shoulder widths <input checked="" type="checkbox"/> <input type="checkbox"/> Sight distances <input checked="" type="checkbox"/> <input type="checkbox"/> Existing infrastructure <input checked="" type="checkbox"/> <input type="checkbox"/> Transport services (i.e. bus stops) <input checked="" type="checkbox"/> <input type="checkbox"/> Pedestrian generators <input checked="" type="checkbox"/> <input type="checkbox"/> Appropriate site access <input checked="" type="checkbox"/> <input type="checkbox"/> Appropriate escape route for traffic controllers <input checked="" type="checkbox"/> <input type="checkbox"/>		
2	Confirmation	Yes	No
2.1	Does the TGS require adjustments within tolerances? <input type="checkbox"/> <input type="checkbox"/> Does the TGS require any additional modifications? <input type="checkbox"/> <input type="checkbox"/> Is the TGS appropriate for use for works? <input type="checkbox"/> <input type="checkbox"/> Have key risk been addressed on site? <input type="checkbox"/> <input type="checkbox"/>		

Additional comments

## RISK ASSESSMENT

3	<input type="checkbox"/> Does the TGS Involve Detours of traffic?	Yes	No	Risk	Risk rating
3.1	Are Detour routes suitable for all vehicle classes being detoured? <input type="checkbox"/> <input type="checkbox"/> Is access to residential properties and businesses maintained? <input type="checkbox"/> <input type="checkbox"/> Are detour signs located at decision points? <input type="checkbox"/> <input type="checkbox"/> Can roads and intersections used as detour routes accommodate the volumes? <input type="checkbox"/> <input type="checkbox"/> Is the same level of safety maintained for turn movements? <input type="checkbox"/> <input type="checkbox"/>				
4	<input type="checkbox"/> Does the TGS involve Stop/slow arrangements?	Yes	No	Risk	Risk rating
4.1	Are escape routes defined on the TGS, clear and safe to use? <input type="checkbox"/> <input type="checkbox"/> Is a PTCO used in place of a Traffic Controller where speed >45kmh? <input type="checkbox"/> <input type="checkbox"/> Is the speed of the road >=60km/h where TC or PTCO are in use? <input type="checkbox"/> <input type="checkbox"/> Are 4x traffic cones placed on the edge or centre line, approaching TC or PTCO? <input type="checkbox"/> <input type="checkbox"/> Is Prepare to stop and Traffic control or PTCO symbolic sign installed? <input type="checkbox"/> <input type="checkbox"/> Do TC and PTCO positions have adequate lighting during low light conditions? <input type="checkbox"/> <input type="checkbox"/> Does sight distance of at least 1.5D exist on approach to TC or PTCO? <input type="checkbox"/> <input type="checkbox"/>				
5	General	Yes	No	Risk	Risk rating
5.1	Does the TGS define minimum clearances required of workers to live traffic? <input checked="" type="checkbox"/> <input type="checkbox"/> Are distances compliant? <input checked="" type="checkbox"/> <input type="checkbox"/> Are worker symbolic signs shown in advance of workers that are visible to traffic? <input checked="" type="checkbox"/> <input type="checkbox"/> Are all signs placed at correct distances? i.e. D for multiple or 2D for single sign? <input checked="" type="checkbox"/> <input type="checkbox"/> Are taper lengths compliant and not placed in areas with poor sight distance? <input checked="" type="checkbox"/> <input type="checkbox"/> Are lane status signs to be placed in advance of a lane merge? <input checked="" type="checkbox"/> <input type="checkbox"/> Are the correct tapers being used? i.e. Merge, Traffic Control, Lateral shift? <input checked="" type="checkbox"/> <input type="checkbox"/> Does the TGS clearly define transition zones between tapers on Multi-lane roads? <input checked="" type="checkbox"/> <input type="checkbox"/> Are they compliant? <input checked="" type="checkbox"/> <input type="checkbox"/> Does the TGS clearly define buffer areas and are they at least 30m in length? <input checked="" type="checkbox"/> <input type="checkbox"/> Does the TGS clearly define site access and egress for work vehicles? <input checked="" type="checkbox"/> <input type="checkbox"/> Are any impacts on traffic managed? <input checked="" type="checkbox"/> <input type="checkbox"/> Does the TGS clearly define pedestrian routes, and are they suitable? <input checked="" type="checkbox"/> <input type="checkbox"/> Does the TGS consider cyclists and can they traverse site safely? <input checked="" type="checkbox"/> <input type="checkbox"/>				

### RISK EVALUATION MATRIX

Risk Ratings Very High – VH High – H Medium – M Low – L		Consequence					
		Insignificant C6	Minor C5	Moderate C4	Major C3	Severe C2	Catastrophic C1
Likelihood	Almost certain L1	M	H	H	VH	VH	VH
	Very likely L2	M	M	H	H	VH	VH
	Likely L3	L	M	M	H	H	VH
	Unlikely L4	L	L	M	M	H	H
	Very unlikely L5	L	L	L	M	M	H
	Almost unprecedented L6	L	L	L	L	M	M

### RISK MANAGEMENT

\* If 'No' selected for any question in items 3, 4 or 5 in the RISK ASSESSMENT above a control needs to be assigned in the table below to mitigate any additional risk. Where blank refer Risk Assessment included as part of TMP.

Item	Control Measures	Residual Risk

### SIGNED – DESIGNER AND VERIFICATION (PWZTMP OR ITCP)

Name: Alex Gosper Sign: Date: 07.03.2022 Card No: TCT0002693 (PWZ)

Name: \_\_\_\_\_ Sign: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Card No: \_\_\_\_\_

DRAWN BY: LP DRW CHECK: LP APPROVED: LP IND REVIEW: N/A			HASLIN CONSTRUCTIONS - LAKEMBA STATION UPGRADE  HALDON STREET SOUTHBOUND LANE CLOSURE OVER RAIL BRIDGE WITH 40km/h AND FOOPATH DETOUR AFTERCARE <b>RISK ASSESSMENT</b>	DRAWING No: HAS-LAK-40047-P2  SHEET 1 OF 3  REVISION P2
P2 AG 15.06.22 AMENDMENTS AS PER SITE TEAMS COMMENTS LP P1 LP 17.05.22 ORIGINAL ISSUE LP	COORDINATE SYSTEM: _____ HEIGHT DATUM: _____ SCALE: _____			

Plot Date: 17 May 2022 - 5:33 AM Cad File No: C:\Users\Alex\OneDrive\00\_Civlink Consulting\Projects\20200612 - Warronga Station Bridge\10\_TCP\HAS-LAK-40047-P1.dwg

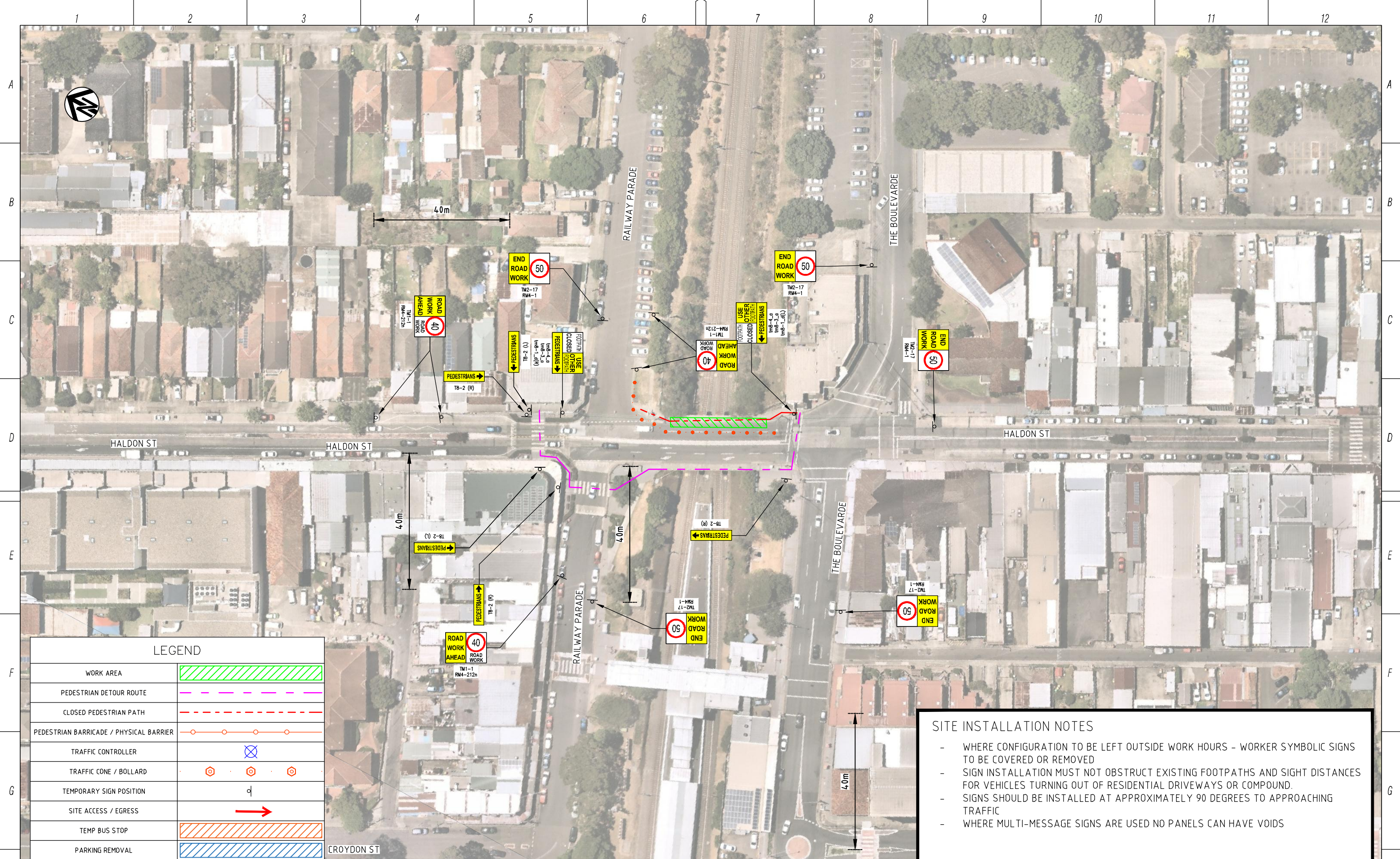


**GENERAL NOTES**

- THIS TRAFFIC GUIDANCE SCHEME (TGS) HAS BEEN PREPARED IN ACCORDANCE WITH THE TCAWS MANUAL V6.1 2022.
- THE CONTRACTOR SHALL ENSURE ALL ROAD OCCUPANCY PERMITS AND SPEED ZONE AUTHORISATION REQUIREMENTS ARE SATISFIED PRIOR IMPLEMENTATION OF THIS TGS.
- ANY EXISTING SIGNAGE THAT CONFLICTS WITH THIS TGS MUST BE COVERED AT THE START OF OPERATION AND UNCOVERED AT THE COMPLETION.
- THE SITE MUST COMPLY WITH THE TRAFFIC CONTROL AT WORK SITES MANUAL V6.1 2022 EDITION AND A.S. 1742.3
- LOCATION CHECKLIST MUST BE COMPLETED FOR ALL WORKSITES
- SIGNS TO BE POSITIONED IN ACCORDANCE WITH THE TCAWS MANUAL V6 2020.
- TRAFFIC CONTROLLERS TO BE POSITIONED WHERE THEY CAN MAINTAIN A CLEAR ESCAPE PATH.
- THIS TGS USE IS LIMITED TO THAT OF HASLIN CONSTRUCTIONS AND THEIR ASSOCIATED SUBCONTRACTORS, TRAFFIC CONTROL PROVIDERS AND FOR THE PROJECT REFERENCED.

SITE SPECIFIC NOTES	
PRIMARY ROAD	HALDON STREET
SECONDARY ROAD	THE BOULEVARDE
PERMITTED TIMES FOR USE	24/7
PREDICTED END-OF-QUEUE LENGTH	N/A - LIMITED
EXISTING SPEED - PRIMARY ROAD	50km/h
EXISTING SPEED - SECONDARY ROAD	50km/h
DIMENSION D ADOPTED	50m
CONE SPACING (MAX)	12m
SIGN SIZE (MIN)	B
MINIMUM CLEARANCE TO WORKERS FROM TRAFFIC	1.5m

DRAWN BY: LP		DESIGNER 	CLIENT 	HASLIN CONSTRUCTIONS - LAKEMBA STATION UPGRADE		DRAWING No: HAS-LAK-40047-P2	
DRW CHECK: LP				HALDON STREET SOUTHBOUND LANE CLOSURE OVER RAIL BRIDGE WITH 40km/h AND FOOPATH DETOUR AFTERCARE LOCALITY PLAN		SHEET 2 OF 3	
APPROVED: LP		IND REVIEW: N/A			REVISION P2		
REV	BY		DATE	DESCRIPTION	APPD.		
COORDINATE SYSTEM:		HEIGHT DATUM:	SCALE:				



**LEGEND**

WORK AREA	
PEDESTRIAN DETOUR ROUTE	
CLOSED PEDESTRIAN PATH	
PEDESTRIAN BARRICADE / PHYSICAL BARRIER	
TRAFFIC CONTROLLER	
TRAFFIC CONE / BOLLARD	
TEMPORARY SIGN POSITION	
SITE ACCESS / EGRESS	
TEMP BUS STOP	
PARKING REMOVAL	

**SITE INSTALLATION NOTES**

- WHERE CONFIGURATION TO BE LEFT OUTSIDE WORK HOURS - WORKER SYMBOLIC SIGNS TO BE COVERED OR REMOVED
- SIGN INSTALLATION MUST NOT OBSTRUCT EXISTING FOOTPATHS AND SIGHT DISTANCES FOR VEHICLES TURNING OUT OF RESIDENTIAL DRIVEWAYS OR COMPOUND.
- SIGNS SHOULD BE INSTALLED AT APPROXIMATELY 90 DEGREES TO APPROACHING TRAFFIC
- WHERE MULTI-MESSAGE SIGNS ARE USED NO PANELS CAN HAVE VOIDS

REV	BY	DATE	DESCRIPTION	APPD.
P2	AG	15.06.22	AMENDMENTS AS PER SITE TEAMS COMMENTS	LP
P1	LP	17.05.22	ORIGINAL ISSUE	LP

DRAWN BY:	LP
DRW CHECK:	LP
APPROVED:	LP
IND REVIEW:	N/A

DESIGNER

CLIENT

**HASLIN CONSTRUCTIONS - LAKEMBA STATION UPGRADE**

**HALDON STREET SOUTHBOUND LANE CLOSURE OVER RAIL BRIDGE WITH 40km/h AND FOOPATH DETOUR AFTERCARE TRAFFIC GUIDANCE SCHEME**

DRAWING No:	HAS-LAK-40047-P2		
SHEET	3	OF	3
REVISION	P2		

Andre Fleury

Date: 28 September 2022

680 George Street  
Haymarket 2000

Attention: Andre Fleury

Email: andre.fleury@transport.nsw.gov.au

Dear Sir or Madam:

**AHIMS Web Service search for the following area at Lot : 2, DP:DP1012364, Section : - with a Buffer of 50 meters, conducted by Andre Fleury on 28 September 2022.**

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

<b>0</b>	<b>Aboriginal sites are recorded in or near the above location.</b>
<b>0</b>	<b>Aboriginal places have been declared in or near the above location. *</b>

### **If your search shows Aboriginal sites or places what should you do?**

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the [NSW Government Gazette \(https://www.legislation.nsw.gov.au/gazette\)](https://www.legislation.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Heritage NSW upon request

### **Important information about your AHIMS search**

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not to be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Heritage NSW and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date. Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.