



Construction Traffic Management Plan

Outline Traffic Management Plan

Routine Maintenance TMP (MMA-CON-PLN-PW-GE-GE012)

TMP's & Site Access Arrangements (MMA-CON-PLN-PW-GE-GE013)

November 2023

Mt Messenger Alliance

MMA-CON-PLN-PW-GE-GE007





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Glossary

Acronym /Term	Definition
CEMP	Construction Environmental Management Plan
CoPTTM	Code of Practice for Temporary Traffic Management
CTMP	Construction Traffic Management Plan
NOC	Network Outcomes Contract (SH3 Road Maintenance Contract)
NPDC	New Plymouth District Council
SAP	Site Access Point
SH3	State Highway 3
STMS	Site Traffic Management Supervisor (NZQA Qualification)
TMP	Traffic Management Plan
TTM	Temporary Traffic Management
Waka Kotahi	Waka Kotahi NZ Transport Agency





1 Introduction

This Construction Traffic Management Plan (CTMP) has been prepared for Waka Kotahi NZ Transport Agency's Te Ara o Te Ata Mt Messenger Bypass project (the Project).

1.1 Purpose and objectives of the CTMP

The CTMP has been prepared to manage, mitigate and monitor the effects of construction activities and construction traffic on other road users and the State Highway Network. The objective of the CTMP is to detail the best practicable option to avoid adverse safety and efficiency effects caused by construction and to mitigate any such effects should they occur.

The CTMP identifies how construction traffic will be managed to:

- Protect public safety;
- Minimise delays to road users;
- Minimise disruption to property access; and
- Inform the public about any potential impacts on the road network.

The CTMP includes detail on the following:

- Construction activities that might create road safety and/or efficiency effects;
- Sensitive locations on the road network;
- Management procedures and mitigation methods;
- Roles and responsibilities;
- Training of staff in relation to traffic management;
- Monitoring methods;
- Methods for managing complaints and keeping compliance records; and
- The framework for reporting and review.

In preparing this CTMP, information has been drawn from practical experience with the management of traffic from and around large construction projects as well as the following documents:

- *The Code of Practice for Temporary Traffic Management* prepared by the New Zealand Transport Agency, 4th Edition February 2017 (CoPTTM); and
- *The Austroads Guide to Road Design*, prepared by Austroads, December 2009.

This CTMP complies with the CoPTTM. Any time where it is not possible to adhere to the CoPTTM, the CoPTTM's prescribed Engineering Exception Decision process shall be followed.

This CTMP is an appendix to the Construction Environmental Management Plan (CEMP) for the Project. The construction methodology for the Project is set out in the CEMP; as well as in the Assessment of Environmental Effects for the Project.

The CTMP shall remain in place until the completion of construction.

1.2 Review and updates to the CTMP

This CTMP is a live document that will be reviewed and updated during the course of the Project to reflect significant changes associated with construction techniques, communication, mitigation or the natural environment.

A review and amendment process is described in Section 8 of the CEMP. The review process for this CTMP shall include reviewing any comments or recommendations from New Plymouth District Council (NPDC) or the Network Outcomes Contract (SH3 Road Maintenance Contract). The outcomes of any review shall be provided to NPDC.





1.3 Relevant conditions

Table 1.1 identifies the designation conditions relevant to this CTMP and where they are addressed in the plan.

Table 1.1 - Designation Conditions relevant to this CTMP

Condition No.	Condition	Relevant CTMP section
22	<p>The Requiring Authority shall implement the Construction Traffic Management Plan (CTMP), which identifies how the Requiring Authority will manage construction traffic to:</p> <ul style="list-style-type: none"> (a) protect public safety; (b) minimise delays to road users; (c) minimise disruption to property access; and (d) inform the public about any potential impacts on the road network. <p>The CTMP shall remain in place until the Completion of Construction Works.</p>	This plan
23	<p>The CTMP shall include:</p> <ul style="list-style-type: none"> (a) details of traffic management activities and sequencing proposed for the Project; (b) methods for managing construction related traffic movements; (c) provisions to ensure that, as far as practicable, road users will not be held up by construction activities for an unreasonable period of time (such time period to be specified); and (d) provisions for emergency services to have access along SH3 24 hours per day, unless construction requires the temporary closure of a road, in which case, prior to any temporary closure, an emergency action plan shall be developed and agreed with emergency services to provide for access for the duration of that closure. 	<p>Sections 2 and 3</p> <p>Sections 6 and 7</p> <p>Section 7.6</p> <p>Section 7.7</p>
24	<p>The CTMP shall comply with the version of the NZ Transport Agency Code of Practice for Temporary Traffic Management which applies at the date of the CTMP. Where it is not possible to adhere to the COPTTM, the COPTTM’s prescribed Engineering Exception Decision process shall be followed.</p>	Section 1.1





2 Construction methodology

A detailed description of the construction works is provided in the CEMP with key aspects relevant to this CTMP outlined below.

2.1 Construction zones

For the purposes of programme and physical works management, the Project area has been split into two main construction regions: north and south of the new Mt Messenger tunnel. The construction regions are further spilt into ten construction zones as outlined in Table 2.1.

Table 2.1- Construction Regions and Zones

Construction Regions and Zones	Overview of Main Construction Features / Activities*
SOUTHERN CONSTRUCTION REGION - Chainage 3635 to Chainage 5955	
Excess fill from the southern zone will amount to approximately 145,000m ³ of structural fill and unsuitable material. This will likely be moved from the south to the north or taken to nearby spoil disposal sites depending on the construction programme.	
Zone 5 – Chainage 3635 – 4150 (the bridge)	<ul style="list-style-type: none"> • Cableway construction (Establishment Works) • Large cut and fill works between the tunnel and the bridge • Access tracks • Drainage works
Zone 6 – Chainage 4150 - 4270	<ul style="list-style-type: none"> • Access tracks to the bridge work site • Bridge construction yard establishment and operation • Bridge construction, which will comprise: <ul style="list-style-type: none"> ○ Piling works ○ In-situ pour concrete ○ Steel erection ○ Deck slab construction, pavement and surfacing
Zone 7 – Chainage 4270 - 4825	<ul style="list-style-type: none"> • Cuts and fills • Access tracks • Drainage works
Zone 8 – Chainage 4825 - 5250	<ul style="list-style-type: none"> • Cuts and fills • Drainage works • Access tracks • Establishment and operation of main construction yard • Southern tie-in to existing SH3
Zone 9 – Chainage 5250 - 5955	<ul style="list-style-type: none"> • Cuts and fills • Drainage works • Access tracks • Tie-in to existing SH3
Zone 10 (no chainage)	<ul style="list-style-type: none"> • Spoil disposal site
NORTHERN CONSTRUCTION REGION - Chainage 0 – Chainage 3635	





Construction Regions and Zones	Overview of Main Construction Features / Activities*
Cuts and fills of structural fill are balanced in the northern region, with buttress fill to be imported from the southern region once the tunnel and bridge are complete.	
Zone 1- Chainage 0 – 350	<ul style="list-style-type: none"> Northern tie-in to existing SH3 on alignment Note: Zone includes additional approximately 400 m on the existing SH3 for construction works
Zone 2 - Chainage 350 – 2375	<ul style="list-style-type: none"> Cuts and fills, drainage works Stream diversions Access tracks / haul roads Spoil disposal site
Zone 3 - Chainage 2375 - 3400	<ul style="list-style-type: none"> Cableway construction (Establishment Works) Cuts and fills, including a large fill on the tunnel approach Drainage works Piling under fills Temporary storage of fill material Stream diversions Access tracks / haul roads Bridge construction, which will comprise: <ul style="list-style-type: none"> Access to the bridge works site Earthworks for the bridge abutments and supporting MSE walls In-situ pour concrete Steel erection and deck slab construction
Zone 4 – Chainage 3400 – 3635 (the tunnel)	<ul style="list-style-type: none"> Cableway construction (Establishment Works) Tunnel portal construction Tunnel construction yard establishment and operation Tunnelling operations Installation of tunnel lighting, ventilation etc. Construction of tunnel control building and water tanks

* Pavement and surfacing works will occur across zones 1-9

* Refer to Table 7.1 for the Site Access Points

2.2 Construction staging and sequencing

Due to the nature and scale of the Project, construction of the Project will be undertaken on a number of fronts or work faces, such that different construction operations will, at times, be simultaneously progressed across multiple construction zones.

As each construction zone, or sub-zone, is accessed the construction approach will involve:

- Establishment works** – Progressively opening up and establishing the site, including:
 - construction and / or widening of roads / tracks to access construction areas and install sediment control measures (e.g. sediment control ponds);
 - vegetation clearance;





- construction of a cableway to provide worker and plant access to Fill 12 (a large fill site on the approach to the northern entrance of the tunnel). This will enable construction of the project from Fill 12 outwards along the project alignment;
- establishment of construction yards;
- establishing full width access tracks / haul roads;
- installing remaining erosion and sediment controls; and
- stream diversions.
- **Main construction works** - Construction works, including:
 - ground improvement works;
 - temporary and permanent drainage installation;
 - bulk earthworks (including cut and fill activities);
 - bridge and tunnel construction;
 - pavements and surfacing;
 - site reinstatement;
 - mitigation and pest management measures;
 - landscaping; and
 - installation of permanent road furniture and ancillary works.

2024

2025

Figure 2.2 shows the indicative construction programme and sequencing for the Project.

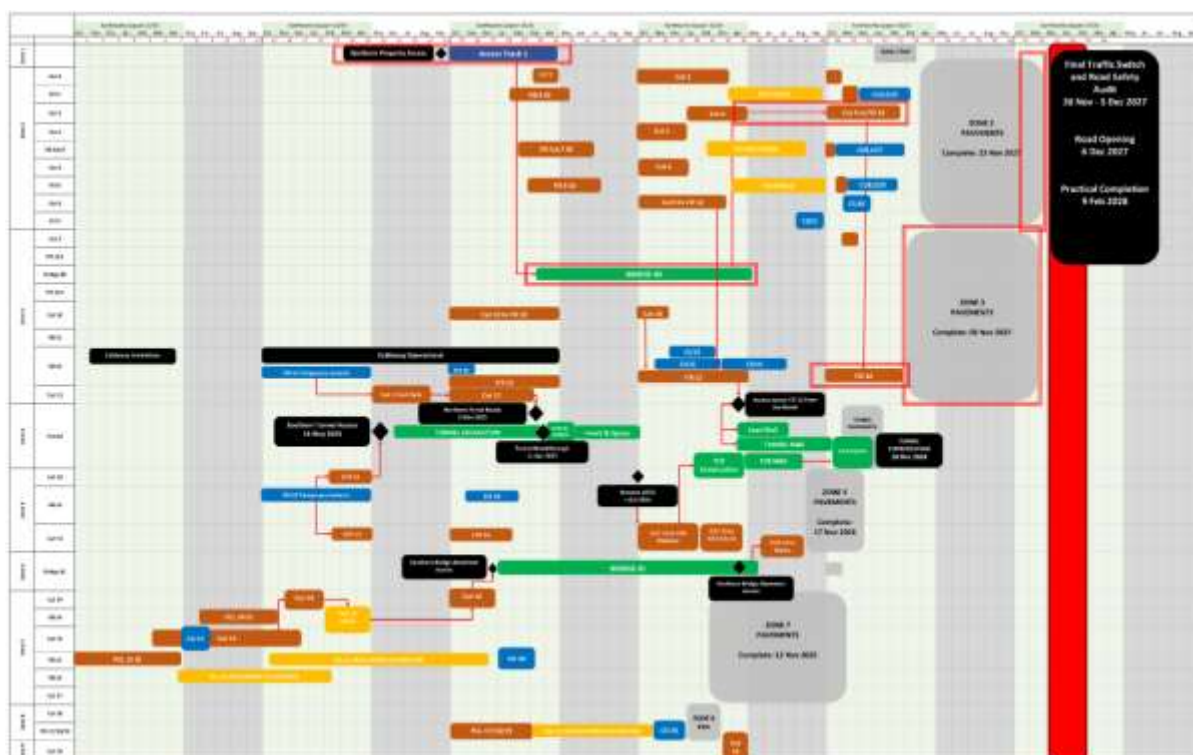


Figure 2.2 - Indicative Construction Programme and Sequencing

General working hours will be Monday to Sunday 6:30 am - 9:00 pm. These general hours take into account the remote Project location and small number of surrounding dwellings.

There will however be some construction activities undertaken outside the general working hours. These activities may include:





- Works on the existing SH3 corridor, including construction of site access points at the start of the Project and tie-ins of the new alignment to the existing State Highway at the end of the Project;
- After hours material and plant delivery, including bridge and tunnelling equipment and materials where the transport of oversize loads outside working hours will be less disruptive;
- Tunnelling works, which will be undertaken 24 hours a day, 7 days a week during the relevant phase of the Project;
- Early morning concrete pours; and
- On-site servicing of plant and equipment to minimise impacts on construction programme.





3 Construction activities that may generate traffic effects

The new road will be predominately constructed off-line from the existing SH3, with most of the earthworks cut material being reused on site. Construction during the first season will have the most impact on traffic as SAP's (Site Access Points), the site compound access, tree clearance close to SH3 and Cableway is completed. Construction of these areas will require active TTM. After this, there will be relatively little interaction with general traffic using the existing State Highway, or interruption to private property access gained via this section of SH3, until nearing the end of completion where ties ins will be undertaken. The scope for adverse traffic effects associated with construction of the Project will be limited.

The construction activities that have the potential to generate adverse traffic effects will generally be limited to:

- Operation of the site access points 1&2 Combined, 3, 4 & 9 located along the State Highway (access to construction zones 2, 3, 4, 5, 6, and 7, - refer to Section 7.2 of this CTMP for further detail), where there is a risk of a potential safety risks between a passing vehicle and a Project / construction vehicle entering or exiting the site;
- Construction of the tie-ins to the existing SH3 at the northern and southern Project extents (construction zones 1, 8 and 9), creating an interface between construction plant and road users, with potential for temporary delays and / or safety risks to road users and site staff;
- Travel along the existing section of SH3 by construction vehicles (trucks and light vehicles), particularly through the Mt Messenger Tunnel. The increase in number of vehicles using this section of SH3 has the potential to result in temporary delays to other road users; and
- Works across or close to the three private property accesses (construction zones 4, 8 and 9) and the Kiwi Road walking track in zone 7, where there is potential to affect temporarily access during construction works.





4 Construction Traffic Management Philosophy

The overarching philosophy for the management of construction traffic during the Project is to:

- Early interaction & advice from affected parties.
- Maximise safety of the travelling public and site staff;
- Enable construction efficiencies;
- Minimise delays to the public and road users;
- Minimise disruption to property access;
- Ensure appropriate access for emergency vehicles; and
- Inform the public about potential impacts of Project construction on the road network.

This will be achieved by a high standard of:

- Planning construction traffic movement;
- Design of site access points and temporary traffic management;
- Maintenance of roads, signs, and work sites; and
- Communication internally within the Project, and with road users.





5 Roles and responsibilities

General roles and responsibilities for the Project are outlined in the CEMP. Specific roles and responsibilities relating to the implementation of this CTMP are detailed in Table 5.1.

Table 5.1 - Roles and responsibilities

Role	Responsibility
Waka Kotahi NZ Transport Agency – Requiring Authority	<ul style="list-style-type: none"> Overall responsibility for Project compliance and performance in relation to environment, quality assurance and incident management Review of the CTMP
Alliance Manager	<ul style="list-style-type: none"> Overall responsibility for site management Reporting to the Transport Agency and New Plymouth District Council (NPDC) any incidents or issues as appropriate
Safety Manager	<ul style="list-style-type: none"> Oversight and advice on the safety of the interfaces with the travelling public
Construction Manager	<ul style="list-style-type: none"> Ensure the approved CTMP is implemented Ensure staff are trained to the required level Ensure Temporary Traffic Management (TTM) records / monitoring results are kept and TTM audits undertaken
Traffic Engineer	<ul style="list-style-type: none"> Prepare site access designs Prepare and submit Traffic Management Plans (TMPs) Audit TTM
Site Traffic Management Supervisor (STMS)	<ul style="list-style-type: none"> Implement TTM in accordance with approved Traffic Management Plans (refer to section 6.2.2) Maintain TTM records
Traffic Controller (TC)	<ul style="list-style-type: none"> Fulfil manual traffic control roles on-site as directed by the STMS
NOC (Road Maintenance) Contractor	<ul style="list-style-type: none"> Fulfil obligations as stipulated in road maintenance agreement, including approving TMPs for works within the State highway corridor
NPDC	<ul style="list-style-type: none"> Auditing to assess compliance with the CTMP



6 Management procedures

A number of procedures exist to identify and address risks associated with temporary traffic management during construction of the Project as outlined below.

6.1 Site Staff

All staff involved in the Project will attend a Project induction prior to the commencement of work to ensure a common basis for approaching their work. The induction will include cultural, environmental, health and safety and hazard management in relation to the Project area, along with temporary traffic control (refer to Section 10 of this CTMP).

Training will include the following:

- Specific training will be provided to those involved in temporary traffic management as appropriate to their role and responsibilities.
- Regular toolbox talks will provide a forum to reinforce and educate Project staff around specific temporary traffic control issues and actions during the Project.
- The STMS will also conduct briefings on-site prior to every TTM operation to identify hazards pertaining to the work site and controls to be implemented to protect the safety of Project staff and public.

Refer to Section 4 of the CEMP for further detail on the Project induction and training requirements.

6.1.1 Personal Protective Equipment

As a minimum, all personnel working on site must wear a day or night compliant high visibility garment. Construction workers will therefore be clearly visible, and will set a consistent high level of Personal Protective Equipment and appearance across the site.

6.2 Construction and Temporary Traffic Planning

6.2.1 Work Pack Planning

Construction of the Project will be divided into a number of work activities, with a Site Engineer responsible for managing a number of activities at any one time. As part of the construction planning process, the Site Engineers will develop a work pack for each activity comprising:

- 1 The design plans and specifications applicable to the activities covered by the work pack;
- 2 A Method Statement describing exactly how the work will be undertaken and the hold points for checks, approvals, and records;
- 3 A Job Safety and Environmental Analysis (JSEA) documenting the identification, assessment and mitigation of safety and environmental risks associated with the activity; and
- 4 Permits required for the respective works, such as an approved TMP.

The work pack will then be reviewed and signed off by the Construction Manager, Environmental Manager, Design Manager and Safety Manager (or their respective delegates), usually within 24 hours and with changes made as necessary for approval.

Temporary traffic management requirements associated with work activities will be included in the work packs.





6.2.2 Traffic Management Plan

Traffic Management Plans (TMPs) will be required for all work within the live road corridor.

The TMPs will be prepared for discrete stages of work within the road corridor and follow the format set in CoPTTM. They will describe the measures to be implemented to manage the temporary traffic effects associated with temporary road layouts or traffic controls required for specific corridor works.

TMPs will be submitted to, and approved by, the Traffic Management Coordinator responsible for the section of road involved, in this case the SH3 Traffic Management co-ordinator from WSP New Plymouth. The TMPs will be assessed by the Traffic Management Coordinator for compliance with CoPTTM and the ability to avoid adverse effects on the travelling public.

TMPs for the key works on the existing SH3 network (the northern and southern tie-ins of the new road) are provided at Appendix A. TMPs for minor works on the State Highway Network, such as shoulder closures to construct site access points, will be prepared in accordance with the time period outlined in CoPTTM.

6.2.3 TTM Signage

Traffic and temporary warning signage shall conform to the standards specified in COPTTM. All such specific signage will be clearly shown on SSTMPs submitted to the TMC for approval.

The use of Project signage is included in the Communications and Stakeholder Plan ([MMA-SYS-PLN-PW-GE-GE041](#)).

6.2.4 Road Construction Zones

Where works require oversize construction plant to work within the live road corridor, such as at the tie-ins to the existing SH3 network, the Transport Agency (as Road Controlling Authority) will be asked to declare a Road Construction Zone under the Heavy Motor Vehicle Regulations 1974. This declaration will provide the authority to operate such plant without specific permits for each vehicle and will include conditions as necessary to ensure the safety of the public. The declaration will cover the entire section of road – from North to South Tie in.

6.2.5 Road Maintenance Agreement – Routine & Non-Routine Maintenance Traffic Management

Road maintenance standards will be maintained with the same triggers, remedies and response times as exist for the current road maintenance contract (Network Outcomes Contract (NOC)). Responsibilities, yet to be established, for the completion of the repairs of this stretch of existing road are to be agreed within a formal PSF15 Maintenance Responsibilities during Construction agreement.

6.3 Implementation

Each day's work will begin with a Job Start Briefing for each crew, at which the specific work being undertaken that day will be discussed and documented, including the risks involved and the mitigation measures to be implemented to avoid or mitigate the risks i.e. temporary traffic control measures.

Any issues which cannot be solved by the crew will be escalated to the Construction Manager / Traffic Manager / Alliance Manager as appropriate. A process for further escalation to the Alliance Management Team (AMT) and Project Alliance Board (PAB) will operate, as required.





7 Mitigation measures

7.1 Tie-ins to SH3

At the northern tie-in to the existing SH3, a length of the existing SH3 corridor will be required to be dug out and rebuilt as part of the works. This short section of the corridor will be controlled through the use of temporary signals or stop / go control.

At the southern tie-in, a longer length of the existing SH3 road will be upgraded as part of the overall improvement works. To minimise the impact on the operation of the existing road, it is intended that the eastern lane be constructed first, the live traffic will then be moved across to the new lane to enable the new western lane to be constructed.

The primary mitigation measure for construction of the tie-ins to the existing SH3, where public traffic will interact with the work zone, is the implementation of the TMPs described in Section 6.2.2.

The TMPs for the tie-in of the new road to the existing SH3 corridor are provided in Appendix A.

Temporary traffic layouts and control devices (cones, signs etc.) will be set up in standard layouts outlined in the TMP and as guided by CoPTTM. This will provide a road environment that is consistent with driver expectations, and ensure safe working room to protect workers and the travelling public alike.

7.2 Site Access Controls

The site access points (SAPs) for the construction area have been selected to enable construction to proceed efficiently, and with appropriate traffic management controls in place to provide for the safe operation of the SAPs. They are shown in drawing MMA-DES-CON-E1-DRG-1010, provided at Appendix B.

The controls will include the following and are outlined in relation to the respective SAPs in Table 7.1:

- Constructing a right turn bay for the major access point where the speed of passing traffic is high relative to the available sight distance. The right turn bay will be constructed in accordance with the Austroads Guide to Road Construction;
- Clearing vegetation on the inside of bends to improve visibility, with clearance undertaken in accordance with the provisions of the CEMP;
- Intelligent Transport System (ITS) solutions comprising flashing LED warning signs that indicate when a vehicle is waiting to enter or exit a site access;
- Turning restrictions where all vehicles are prevented from making right hand turns into a site access (that does not have a right hand turn bay) for safety reasons; and
- Stabilising the first 10m of an access point and / or installing a wheel cleaning facility to prevent detritus being tracked onto the carriageway.

Additional Site Access Points may be required throughout the project as additional land agreements are put into place and relevant consent applications are approved. In these cases, all the above steps will be followed when creating access points as well as full designs and inclusion into the overall approved TMP.





Table 7.1 - Site Access Points

	SAP 1 & 2 (combined) North Access	SAP 3 Rest Area	SAP 4	SAP 5	SAP 6	SAP 7 & 8 (combined)	SAP 9 Construction Compound Access	SAP 9.5	SAP 10	Stopping Bay 1	Stopping Bay 2	Turning Bay 1
Operational TSL when SAP in use)	50 km/hr	30km/hr	30km/hr	TBC	TBC	TBC	50 km/hr	TBC	TBC	N/A	N/A	N/A
Overall Proposed Speed Reduction during Construction	50km/h											
Vehicle use	Light Vehicles Highway truck/ trailer Transporter Crane/ structure components	Light Vehicles Highway truck/trailer Cable in removal 6 x 4 truck Cableway Access	Light Vehicles Highway truck/trailer Transporters Tunnel Construction Equipment and Tunnel Servicing	Light Vehicles Highway truck/ trailer Transporter	Light Vehicles Highway truck/ trailer Transporter	Light Vehicles Highway truck/trailer Transporter Crane/ structure components	Staff & Visitor Vehicles Highway truck/trailers Transporters Dumpers from Cut 19	Light Vehicles Highway truck/trailer Transporter Crane/ structure components	Light Vehicles Highway truck/ trailer Transporter Crane/ structure components	Light Vehicles Highway truck/trailer Transporter Crane/ structure components	Light Vehicles Highway truck/trailer Transporter Crane/ structure components	Light Vehicles Highway truck/trailer Transporter Crane/ structure components
Turning Movements	Left in/out Right in/out	Left in Left out	Left in Left out	Left in Left out	Left in Left out	Left in Left and Right out	Left in/out Right in/out	Left in/out	Left in/out Right in/out	Left in Left out	Left in Left out	Left and right in Left out
Construction Date	Est. September	In use	In use	In use	In use	In use	In use	N/A	In use	In use	In use	In use



	SAP 1 & 2 (combined) North Access	SAP 3 Rest Area	SAP 4	SAP 5	SAP 6	SAP 7 & 8 (combined)	SAP 9 Construction Compound Access	SAP 9.5	SAP 10	Stopping Bay 1	Stopping Bay 2	Turning Bay 1
	2024 (Northern land acquisition required)											
Required Access Dates	Aug 2022 – Dec 2027	Nov 2021 – Dec 2027	Nov 2021 – Dec 2027	October 2021 – Dec 2027	October 2021 – Dec 2027	October 2021 – Dec 2027	Nov 2021 – Dec 2027	N/A	October 2021 – Dec 2027	October 2021 – Dec 2027	October 2021 – Dec 2027	October 2021 – Dec 2027
Proposed TTM features	TSL – 50km/hr Right-turn Bay	TSL – 30km/hr Road Marked Right Hand Turn Bay Vehicle Activated Warning Signage	TSL – 30km/hr Vehicle Activated Warning Signage	TBC	TBC	TBC TSL – 50km/hr	TSL – 50km/hr Right-turn Bay	TBC TSL – 50km/hr	TSL – 50km/hr Right-turn Bay	TBC	TBC	TBC
Operation notes	SAP1 and SAP2 combined – once property acquisition is completed	Access to Cableway spoil removal Access to Cableway operations	Left hand turn in only. Right Hand turn out to dump site Northbound trucks to turn around	N/A	N/A	Access to storage area	Access to southern compound and cuts. Also private access.	N/A	Access to Consented Fill area	N/A	N/A	N/A



	SAP 1 & 2 (combined) North Access	SAP 3 Rest Area	SAP 4	SAP 5	SAP 6	SAP 7 & 8 (combined)	SAP 9 Construction Compound Access	SAP 9.5	SAP 10	Stopping Bay 1	Stopping Bay 2	Turning Bay 1
		Turn around area for SAP4 vehicles - seal/line mark grass area Driveway access required at all times Roadmark to provide Right Hand turn bay	at SAP3 or further on at gravel pit.				Assume existing entrance closed off – all traffic through new access. Internal traffic coordination outside of SAP scope. Standalone TSL					
Design Requirements	Geometrics – 2D and 3D Geotechnical – Specific to culvert option Water – Typical SWC, culvert upgrade possible with NOC	Geometrics – 2D Geotechnical – none Water – Typical SWC Pavement - Specification	Geometrics – 2D Geotechnical – none Water – Typical SWC Pavement - Specification	N/A	N/A	Geometrics – 2D and 3D Geotechnical – none Water – Typical SWCMP Pavement - Specification	Geometrics – 2D and 3D Geotechnical – none Water – Typical SWC Pavement - Specification	Geometrics – 2D and 3D Geotechnical – none Water – Typical SWCMP Pavement - Specification	Geometrics – 2D and 3D Geotechnical – none Water – Typical SWCMP Pavement - Specification	N/A	N/A	N/A



	SAP 1 & 2 (combined) North Access	SAP 3 Rest Area	SAP 4	SAP 5	SAP 6	SAP 7 & 8 (combined)	SAP 9 Construction Compound Access	SAP 9.5	SAP 10	Stopping Bay 1	Stopping Bay 2	Turning Bay 1
	budget approval Pavement - Specification											

All site access points will be clearly signed to guide incoming drivers. Access points will be positioned and constructed so as to ensure sufficient visibility and proper safety is assured for all entering and exiting traffic. They will be manned as required, and locked at night or when not in use, where practicable.

These access point controls will enable construction traffic to enter and exit the site safely.



7.3 Construction Traffic Movements

Construction vehicle movements will be required to and from particular locations throughout all of the course of the Project. Truck movements will be required for the transport of spoil, aggregate, concrete, plant and equipment for the Project. Trucks will enter and exit the site as outlined in Section 7.2 above.

Some oversize loads may be transported to site outside typical working hours as practicable, to minimise effects on the network. Refer to Section 6.2.3 for further information on the management of oversize loads.

Construction vehicles will use SH3 to access the Project area. At peak periods, a total of 200 to 250 staff are expected to be onsite at any one time. Staff will travel to site by a combination of single occupant vehicles, while others will carpool with three to four people per vehicle. On average, 2 movements / staff member would be expected corresponding to an additional 500 movements / day during peak times. Project construction yards will have dedicated car parking available for staff. Flagman supervision will be provided where required.

To protect the public safety during construction works, all construction vehicles in a mobile operation must be fitted with at least one amber flashing beacon in accordance with CoPTTM. Beacons must be fitted on the roof of the vehicle, or in some other suitable position, where all those involved in the activity and other road users will have a clear view of them at all times.

Access/Turning Right across the existing SH3 without additional traffic STMS support is only permitted at designated righthand turn bays and at Turning Bay 1.

7.4 Property Access

Disruption to property access during construction will be minimised to the extent possible with reasonable vehicle access maintained for the three property accesses which cross the work area as practicable. The properties accessed via these driveways are:

- Ngāti Tama's Parininihi land block and the Beard land, both accessed at the top of the hill;
- 2528 Mokau Road; and
- 2454 Mokau Road.

Generally during construction, this will involve keeping a 3m wide metalled access track open to provide property access, albeit the access track alignment may be shifted from time to time to avoid active work areas.

On occasion, it will be necessary to close the access temporarily. This will occur when activities such as laying new services or surfacing the road immediately in front of the driveway are being undertaken. Such activities will typically take up to half a day to complete.

Discussion with the occupants of the affected properties will take place at least 48 hours in advance to identify:

- Any times of day that are better than others for the work;
- Any alternative routes that can be established; and
- Any need for shuttles etc. to or from transport on either side of the work area.

These processes will avoid any unreasonable inconvenience to landowners and minimise disruption to private property access.

7.5 Construction Yard and Support Area

One main construction yard will be established for the Project, along with smaller yards to support the Northern Sections of work, bridges and tunnel construction activities and works in remote locations where crews are based.

The yard locations (outlined in Table 5-1) are based on consideration of a number of factors, including:

- Sites which minimise environmental, social and cultural effects;
- Access to and safe operation of yard access in relation to SH3;





- Proximity to the alignment and key work areas, such as bridge or tunnel works; and
- Topography of the area, favouring reasonably level sites to minimise site establishment works.

All yards will be fenced as required to make them secure during the construction phase. Yard establishment will include site clearance, ground preparation, and the installation of erosion and sediment control measures and temporary drainage (refer to the CWMP for detail on the latter). All storage of equipment associated with the construction works shall take place within the boundaries of the Project designation.

Upon the completion of works, the construction yards will be disestablished and the areas reinstated. Reinstatement will be undertaken in accordance with the LEDF and ELMP.

It is estimated that the number of construction staff working on-site will peak at approximately 200 to 250 persons.

Table 5-1 - Overview of Construction Yards and Support Areas

Construction Yard and Area	Key Construction Activities / Features
<p>Main construction yard</p> <p>Southern end of the alignment (Chainage 4800 - 5100).</p> <p>Approximately 5,000m²</p>	<ul style="list-style-type: none"> • Main Project office, administrative centre (with training room, first aid room and toilets) and meeting place for construction staff • Main carpark for the site • Main plant/equipment storage and workshop and servicing • Fuel storage and refuelling facilities • Main access to northern end of alignment • Main delivery point and laydown area for materials (including stockpiles) • Transfer and segregation point for site and Project office waste (for off-site disposal)
<p>Secondary construction yards</p> <ul style="list-style-type: none"> • Tunnel yard and laydown area • Bridge yard and laydown area • Remote work areas <p>Approximately 2,500m²</p>	<p>Secondary construction yards will provide for:</p> <ul style="list-style-type: none"> • Small office and welfare facility • Local plant/equipment storage • Local access to alignment • Delivery point for construction materials • Collection of site waste.

Figure 3-3 provides an indicative layout for the main construction yard.





Figure 3-3 – Main Construction Yard –Proposed Layout

7.5.1.1 Construction yard operation

Construction yards will operate as follows:

- Construction yards will typically operate Monday to Sunday 6.30am-9pm (typical construction hours for the Project). Some works may occur outside of these hours.
- Buildings within the construction yards will be single storey pre-fabricated buildings.
- Stormwater discharge from hardstand areas of the yard will be managed in accordance with the CWMP.
- The construction yards will be lit with lighting directed inwards into the yard in order to minimise light spill beyond the yard boundaries. Glare will be kept below the recommendations in AS 4282 – 1997 “Control of the Obtrusive Effects of Outdoor Lighting”. All construction lighting will also comply with the relevant ELMP section relating to night works and lighting.
- Dust generated from operation of the yards will be managed in accordance with the CDMP (Appendix F).

7.5.2 Site parking

Most staff and vehicle parking will be located within the dedicated construction yards. Areas of car parking in the construction yards will be designed to separate vehicles and pedestrians by using designated pedestrian walkways, designed vehicle routes, and strategically placed pedestrian crossing points.

- Appropriate signage within site car parks will safely direct people to their intended location;
- Car parks will have adequate lighting to ensure the safety of both the pedestrian and vehicle traffic; and
- Car parks will consist of an all-weather clean basecourse surface with an effective drainage solution.



7.6 Walking Track Access

The existing Mt Messenger to Kiwi Road walking track will be kept open during construction as far as reasonably practicable and as safety permits during working hours, during weekends, and after work hours. This will be consistent with the DOC status of the track being available for public use.

7.7 Travel on Existing SH3

To reduce the extent of delay for road users and any safety risk from additional truck traffic on SH3 associated with construction of the Project, the following measures will be implemented:

- The construction programme and sequencing will be structured to enable most excavated fill material to be transported within the Project area on the new alignment. In general, the only fill that will be transported via the SH3 network is excess fill requiring disposal in one of the Project spoil disposal sites.
- A stopping / pullover bay, for trucks to wait if site access is not immediately available, will be located on the southern approach to the site, and the old road at the northern side. Truck drivers will have radio contact with site crews to check site access prior to entry. The stopping bay will comprise a 3m wide and 100m long sealed shoulder.

These two measures will reduce the risk of excessive truck traffic through the existing Mt Messenger Tunnel, and the frequency with which oncoming trucks will have to pass each other, which will minimise potential adverse effects on road users.

7.8 Emergency Services

SH3 provides a critical route for emergency services connecting Taranaki with Waikato Hospital.

As detailed in the TMPs, emergency services will always be given priority along the State Highway when temporary traffic controls are in place, to avoid or minimise any delays.

While not currently expected, if the need arises for works that have potential to impede movement of emergency services (such as a temporary road closure), the works will be discussed with emergency services at least 48 hours in advance to develop an emergency action plan to be agreed between the Transport Agency and emergency services.

Emergency services will also be provided with the site access map to enable rapid response to any emergencies on site.

7.9 Stakeholder and Communications

Travel information will be provided in a number of different forms:

- A stakeholder engagement and communications team will be available for the duration of the Project to field queries and to speak to affected property owners / occupants about works that may impact them, such as temporary access constraints. The stakeholder engagement and communications team serve as a central point of contact for involving other Project members, such as traffic engineers, in discussions with property owners;
- A regular Project newsletter will be emailed to all members of the Project stakeholder database. The newsletter will include relevant construction information / updates, including travel information as appropriate, to keep road users and property owners informed as works progress;
- Any significant construction works / temporary traffic management that has the potential to create delays on the SH3 network of greater than five minutes will be notified with newspaper advertisements, social media, media releases and / or variable message boards on the roadside, along with direct notification to the Road Transport Forum; and
- Any works that may limit the size of vehicles that can proceed through the works will be notified to the Heavy Haulage Association.





Project communications will be implemented to maximise the extent to which the public, road users and property owners / occupants are aware of any construction activities along the SH3 corridor that have the potential to impact travel, enabling them to plan accordingly.

Refer to Section 6 of the CEMP for further detail on Project stakeholder engagement and communications.





8 Monitoring

Table 8.1 outlines the temporary traffic monitoring to be undertaken during construction of the Project.

Table 8.1 - Construction Traffic Management monitoring programme

Monitoring Activities	Frequency	Responsibility
Check method statement reflects requirements and requisite TMP has been approved	Prior to approving Work Packs	Construction Manager
Inspect temporary traffic management layout	2 hourly when site is live	STMS
Documented check of all temporary traffic management	Daily and as layouts change	STMS
TTM Audit in accordance with CoPTTM	Monthly	Traffic Engineer






9 Complaints and Incidents

The complaints response procedures for the Project is detailed in Section 6 of the CEMP. This includes the process for acknowledging and investigating any complaint, implementing any changes, and responding to the complainant.

Incidents or issues identified by the Project team will be recorded using an Event Pad form (refer Figure 9.1).



TRANSPORT AGENCY
WAKA KOTAHI

Mt Messenger Bypass

EVENT

01199

TYPE OF EVENT (Tick appropriate boxes)

PLANT / VEHICLE DAMAGE
 INJURY
 OBSERVATION CONVERSATION
 PLANT CONDITION
 ENVIRONMENT INCIDENT/SPILL
 NEAR MISS
 SUGGESTION
 HAZARD
 PROPERTY DAMAGE
 COMPLAINT
 SYSTEM IMPROVEMENT
 OTHER

CONTRACT PLANT NO / PERSONS INVOLVED

PERSON REPORTING EVENT: DATE: ___/___/___

DESCRIPTION OF EVENT AND INITIAL ACTION TAKEN: TIME: ___/___/___

IS FURTHER ACTION REQUIRED? YES NO

FURTHER ACTION TAKEN / LEARNING SHARED	COMPLETED?

SIGNED: _____ DATE: ___/___/___
Person Reporting Event

SIGNED: _____ DATE: ___/___/___
Site Supervisor / Engineer to sign off and file when completed or direct further investigation or action

MPA ST05A Version 09/13

Figure 9.1 - Event Pad

The triplicate forms enable a copy to be given to the manager responsible (Construction Manager for construction traffic issues) and a copy for the Safety Manager within 24 hours. The need or otherwise for further action or investigation will be determined by the Construction and Safety Managers (refer to the CEMP for further detail on corrective action as a result of monitoring, an incident or a complaint).

The Construction Manager has the responsibility to respond to and follow up all complaints regarding construction traffic, and furthermore to ensure that suitably trained personnel are available.





10 Training

General training requirements in relation to the construction of the Project are outlined in the CEMP. Training in relation to temporary traffic management is outlined in Table 10.1.

Table 10.1 - Training Requirements

Qualification/Training	Description	Who
Project induction	Initial hour long induction (refer to Section 10.1 below for detail)	All Project staff, including site staff, office staff and anyone who is approved to enter the site without an escort
Cultural Induction	Pukearuhe Marae – 4hr induction presented by Ngāti Tama	All Project staff, including site staff, office staff and anyone who is approved to enter the site without an escort
ConstructSafe	Construction Safety Council Tier 1.1 Test to demonstrate proficiency in safety on sites	All Project staff, including site staff, office staff and anyone who is approved to enter the site without an escort
Toolbox talks	Fortnightly meetings, to highlight key messages or issues, and receive feedback	All site staff working on the Project at the time
Site Traffic Management Supervisor (STMS) Level 1	NZQA Qualification to oversee site in live road environment	Person responsible for traffic management associated with the Project while the tie-ins to the existing SH3 are constructed at the northern and southern Project extents
Traffic Controller (TC)	NZQA Qualification to assist with traffic management	All staff undertaking traffic management associated with the Project while the tie-ins to the existing SH3 are constructed at the northern and southern Project extents

10.1 Project Induction

The Project induction will address (but not be limited to) the following matters relevant to this Plan:

- Information about the Mt Messenger environment, including those that relate to traffic management and safety of site staff and road users;
- Roles and responsibilities of Project staff, including individual responsibilities around traffic management and safety;
- Safety hazards, including weather, driving, water, and remote access with limited communication, amongst others;
- Rules and processes to mitigate safety hazards;
- The key aspects of this CTMP, in particular works on the SH3 network or that may impact private property access;
- The emergency plan; and
- Looking after project neighbours and the travelling public.





Only once staff have attended the induction, and passed the 'fitness to work' test¹, are they approved for general access to the site.

¹ To AS/NZS 4308:2008





11 Reporting

In addition to the documentation described in Section 8 (Monitoring) and the complaints reporting process described in the CEMP, any injury events or serious near misses will be reported immediately to the AMT. The Alliance Manager will then report promptly to NPDC.



Appendices

Appendix A: Site Access Point Layouts

Appendix B: Estimated and schedule of construction and movement



Appendix A: Site Access Point Layout

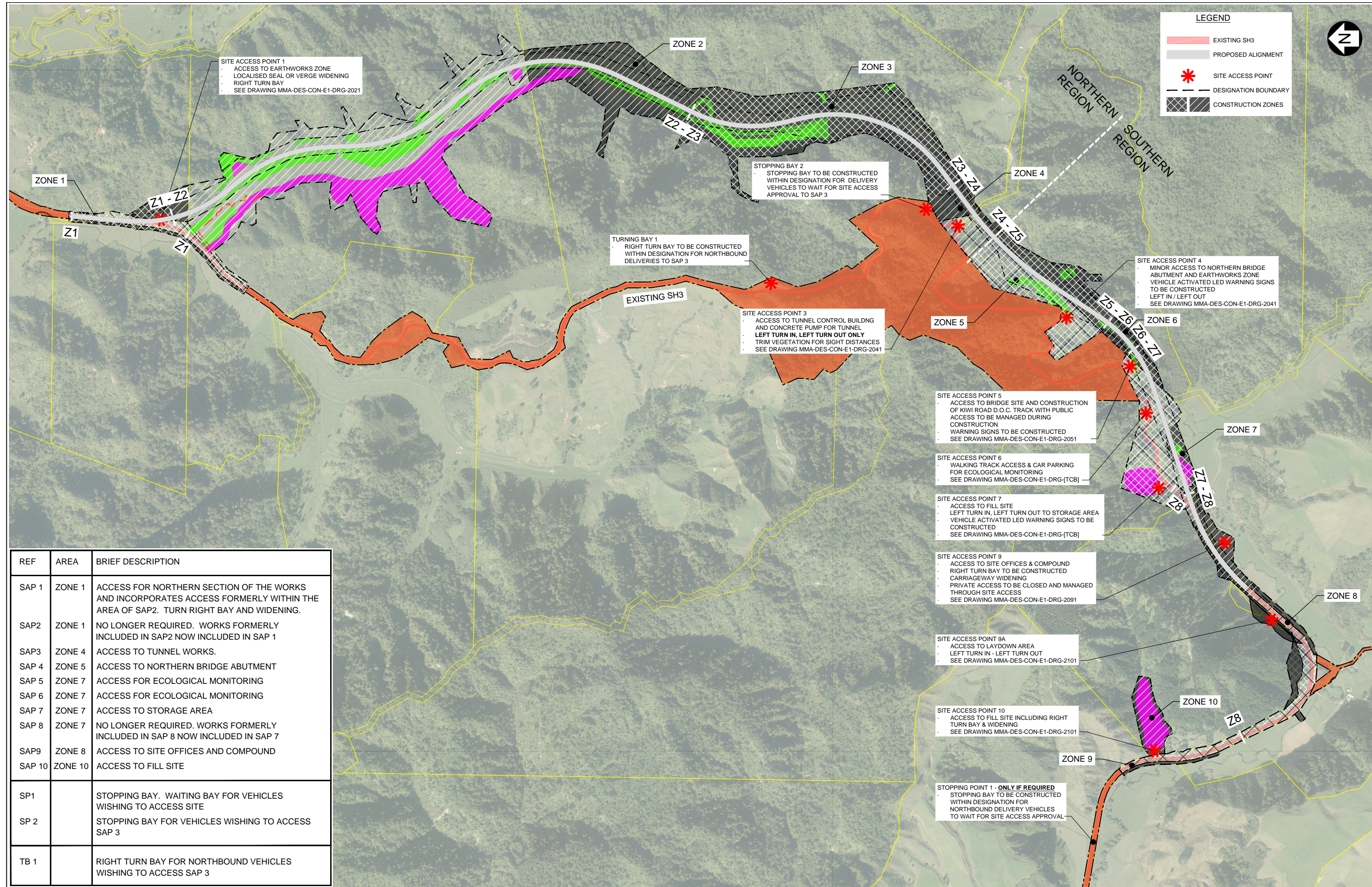
Site Access Points: [MMA-DES-CON-E1-DRG-1010.pdf](#)

Example SAPs [MMA-DES-CON-E1-DRG-2011_2101.pdf](#) includes SAP 1, 2, 3, 4, 5, 9 and 10.

SAP3: [MMA-DES-CON-E1-FIG-1026_1028.pdf](#)

SAP9: [MMA-DES-CON-E1-DRG-2092_2099.pdf](#) design set that includes cross sections.





REF	AREA	BRIEF DESCRIPTION
SAP 1	ZONE 1	ACCESS FOR NORTHERN SECTION OF THE WORKS AND INCORPORATES ACCESS FORMERLY WITHIN THE AREA OF SAP2. TURN RIGHT BAY AND WIDENING.
SAP2	ZONE 1	NO LONGER REQUIRED. WORKS FORMERLY INCLUDED IN SAP2 NOW INCLUDED IN SAP 1
SAP3	ZONE 4	ACCESS TO TUNNEL WORKS.
SAP 4	ZONE 5	ACCESS TO NORTHERN BRIDGE ABUTMENT
SAP 5	ZONE 7	ACCESS FOR ECOLOGICAL MONITORING
SAP 6	ZONE 7	ACCESS FOR ECOLOGICAL MONITORING
SAP 7	ZONE 7	ACCESS TO STORAGE AREA
SAP 8	ZONE 7	NO LONGER REQUIRED. WORKS FORMERLY INCLUDED IN SAP 8 NOW INCLUDED IN SAP 7
SAP9	ZONE 8	ACCESS TO SITE OFFICES AND COMPOUND
SAP 10	ZONE 10	ACCESS TO FILL SITE
SP1		STOPPING BAY. WAITING BAY FOR VEHICLES WISHING TO ACCESS SITE
SP 2		STOPPING BAY FOR VEHICLES WISHING TO ACCESS SAP 3
TB 1		RIGHT TURN BAY FOR NORTHBOUND VEHICLES WISHING TO ACCESS SAP 3

Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date
B	UPDATED TO SUIT CEMP REPORT	JGC	QDO'S	GD	SPP	TP	03/10/2022
A	FOR INFORMATION	QDO'S	-	RSG	SH	SH	03/05/2022

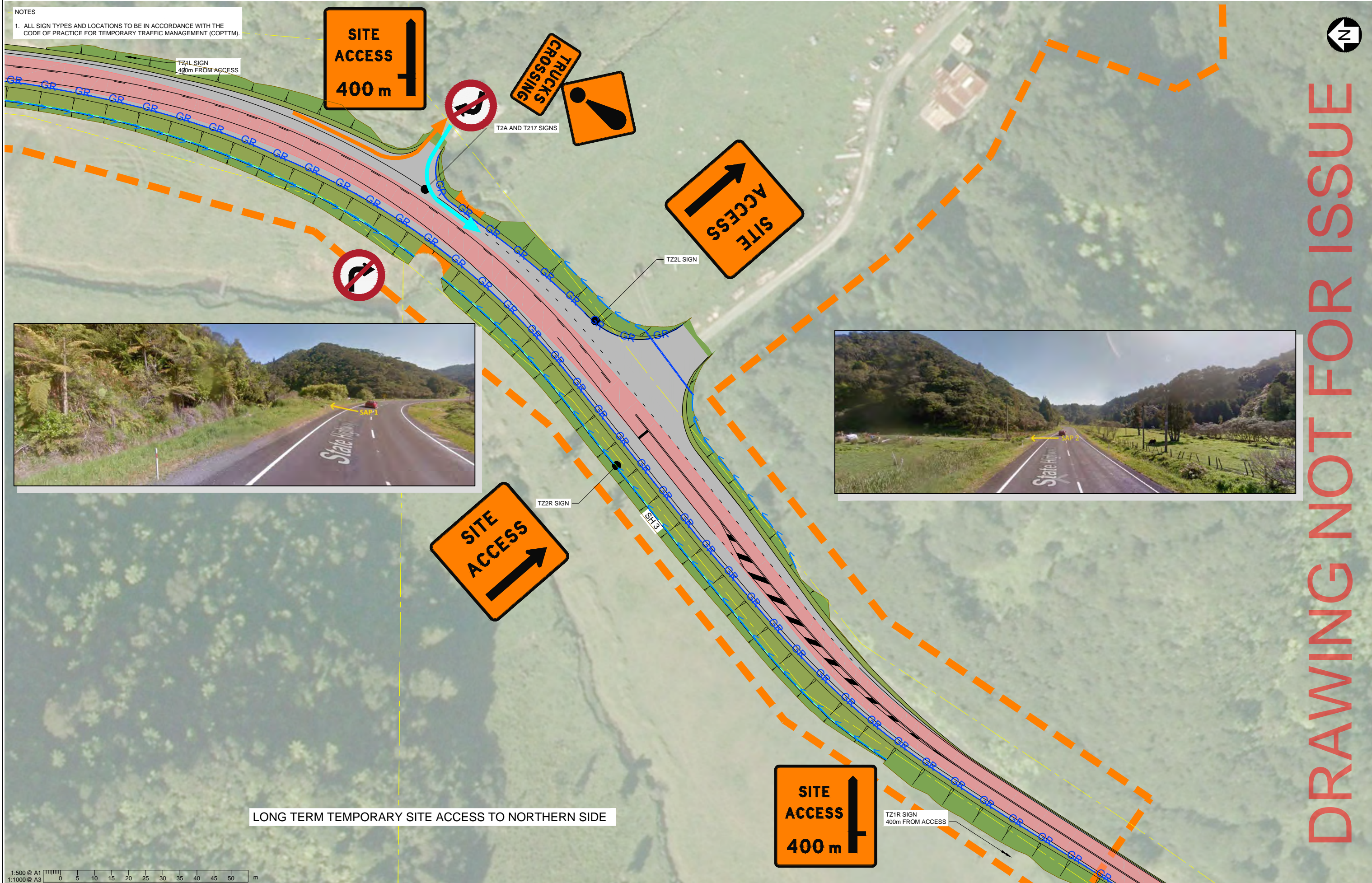
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Original Size	A1



This drawing is not to be used for construction purposes unless signed approved and issued For Construction

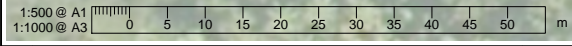
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CONSTRUCTION SITE ACCESS POINTS		NOT FOR CONSTRUCTION FOR INFORMATION
Drawing Number	MMA-DES-CON-E1-DRG-1010	Revision
		B

NOTES
 1. ALL SIGN TYPES AND LOCATIONS TO BE IN ACCORDANCE WITH THE CODE OF PRACTICE FOR TEMPORARY TRAFFIC MANAGEMENT (COPPTM).



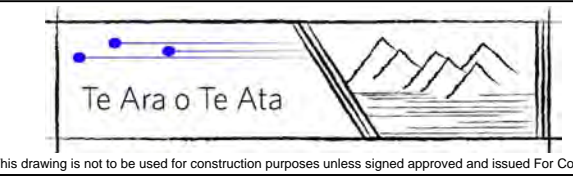
DRAWING NOT FOR ISSUE

LONG TERM TEMPORARY SITE ACCESS TO NORTHERN SIDE



Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date
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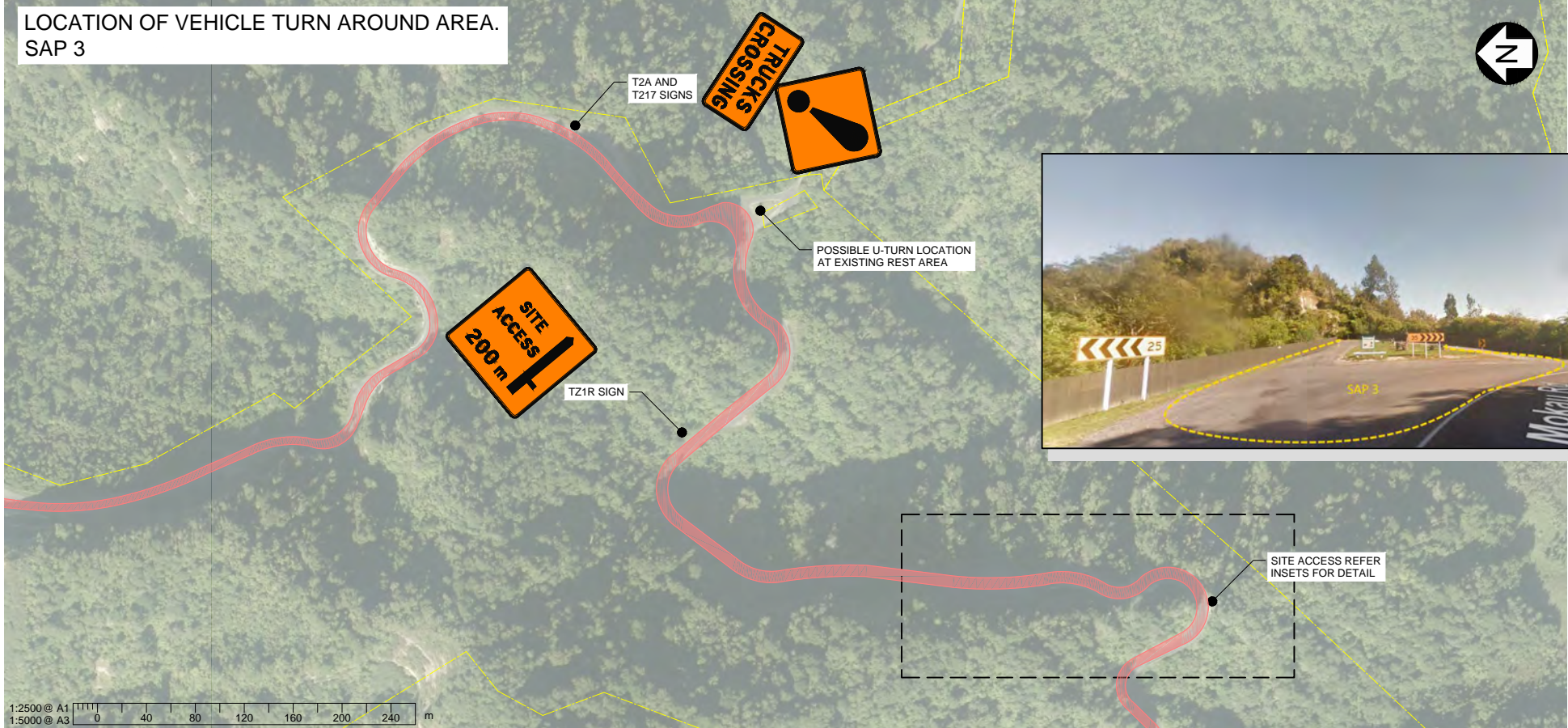
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Original Size	A1



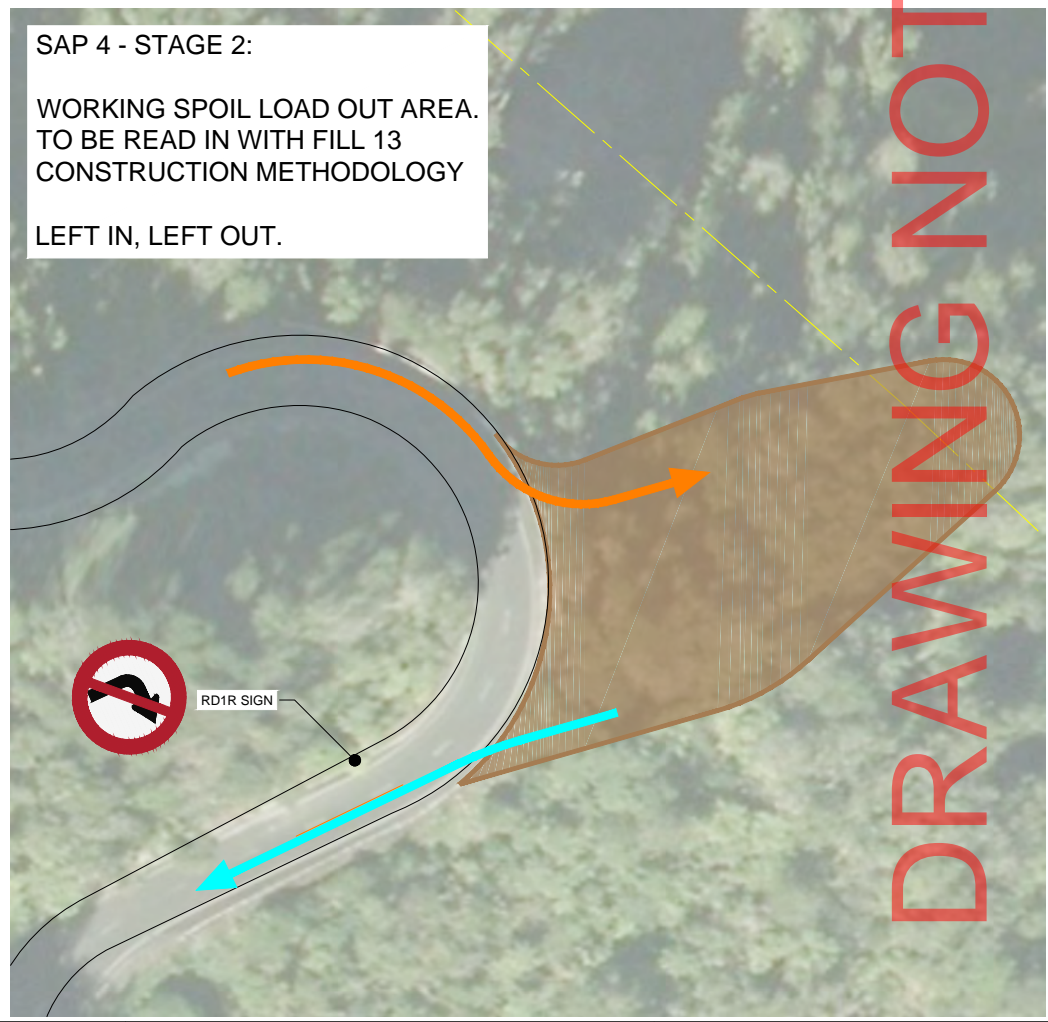
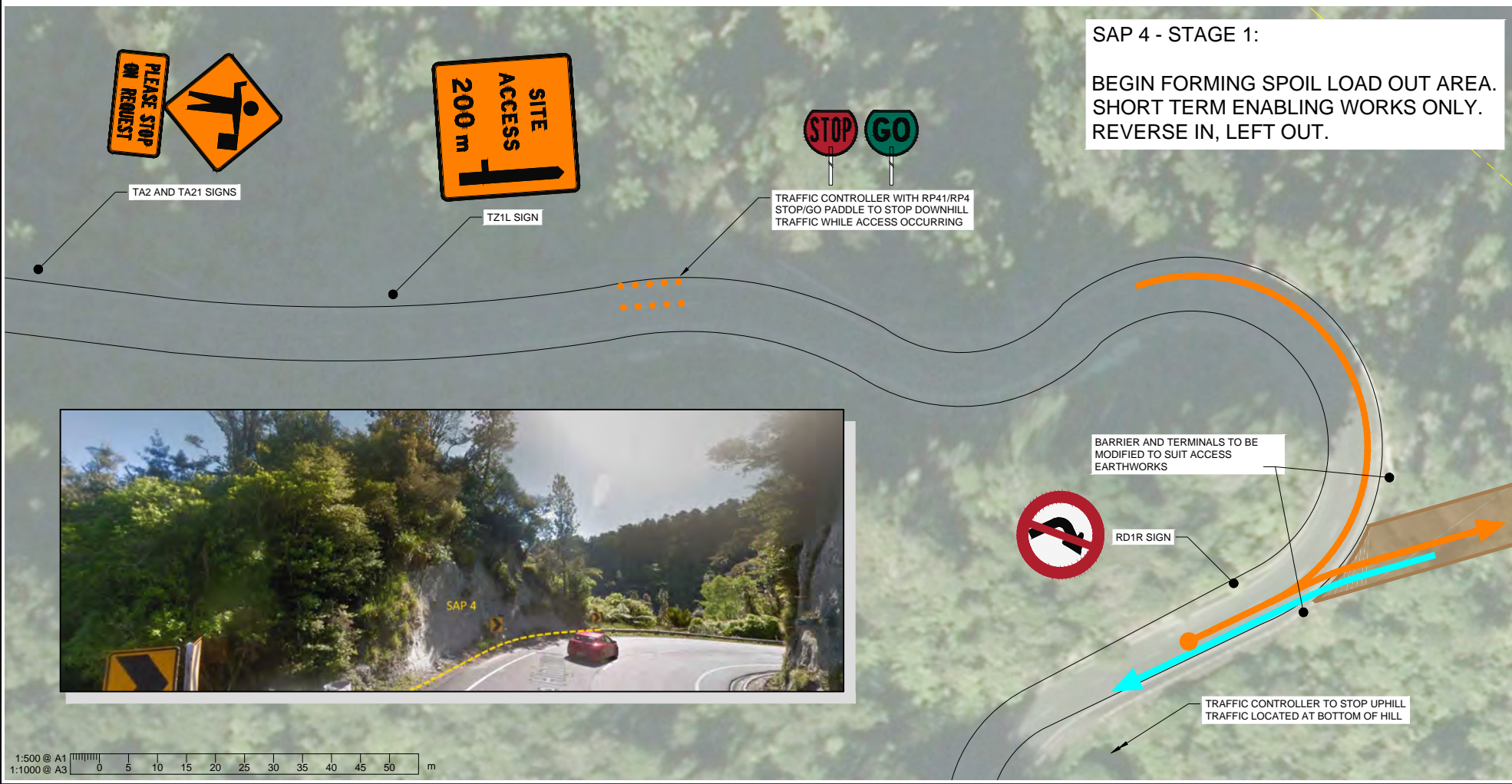
MT MESSENGER BYPASS
 CONSTRUCTION
 SITE ACCESS POINT 1 and 2
 CONSTRUCTION YARD ACCESS LAYOUT

Approved	NOT FOR CONSTRUCTION
Status	FOR INFORMATION
Drawing Number	MMA-DES-CON-E1-DRG-2021
Revision	A

NOTES
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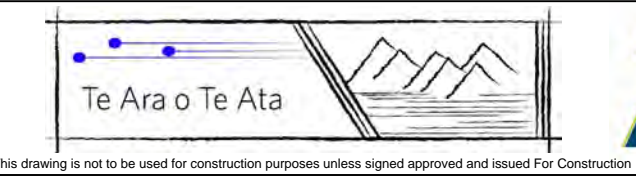


DRAWING NOT FOR ISSUE



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A	FOR INFORMATION	QDO'S	-	QDO'S	RSG	HM	18/05/2018

Tab	MMA-DES-CON-E1-DRG-2041
Scales	AS SHOWN
Original Size	A1



MT MESSENGER BYPASS
 CONSTRUCTION
 SITE ACCESS POINT 3 and 4
 FILL 13 ACCESS LAYOUT

Approved	NOT FOR CONSTRUCTION
Status	FOR INFORMATION
Drawing Number	MMA-DES-CON-E1-DRG-2041
Revision	A

NOTES

1. ALL SIGN TYPES AND LOCATIONS TO BE IN ACCORDANCE WITH THE CODE OF PRACTICE FOR TEMPORARY TRAFFIC MANAGEMENT (COPTTM).

SAP 5:
 OFF-ROAD PARKING AREA FOR FOOT ACCESS TO SOUTH BRIDGE ABUTMENT.
 PUBLIC ACCESS TO BE MANAGED FOR KIWI ROAD D.O.C. TRACK.
 LEFT IN, LEFT OUT.



TZ1L SIGN



RD1R SIGN

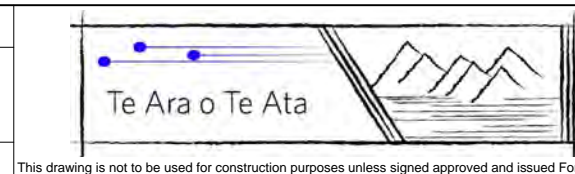


DRAWING NOT FOR ISSUE

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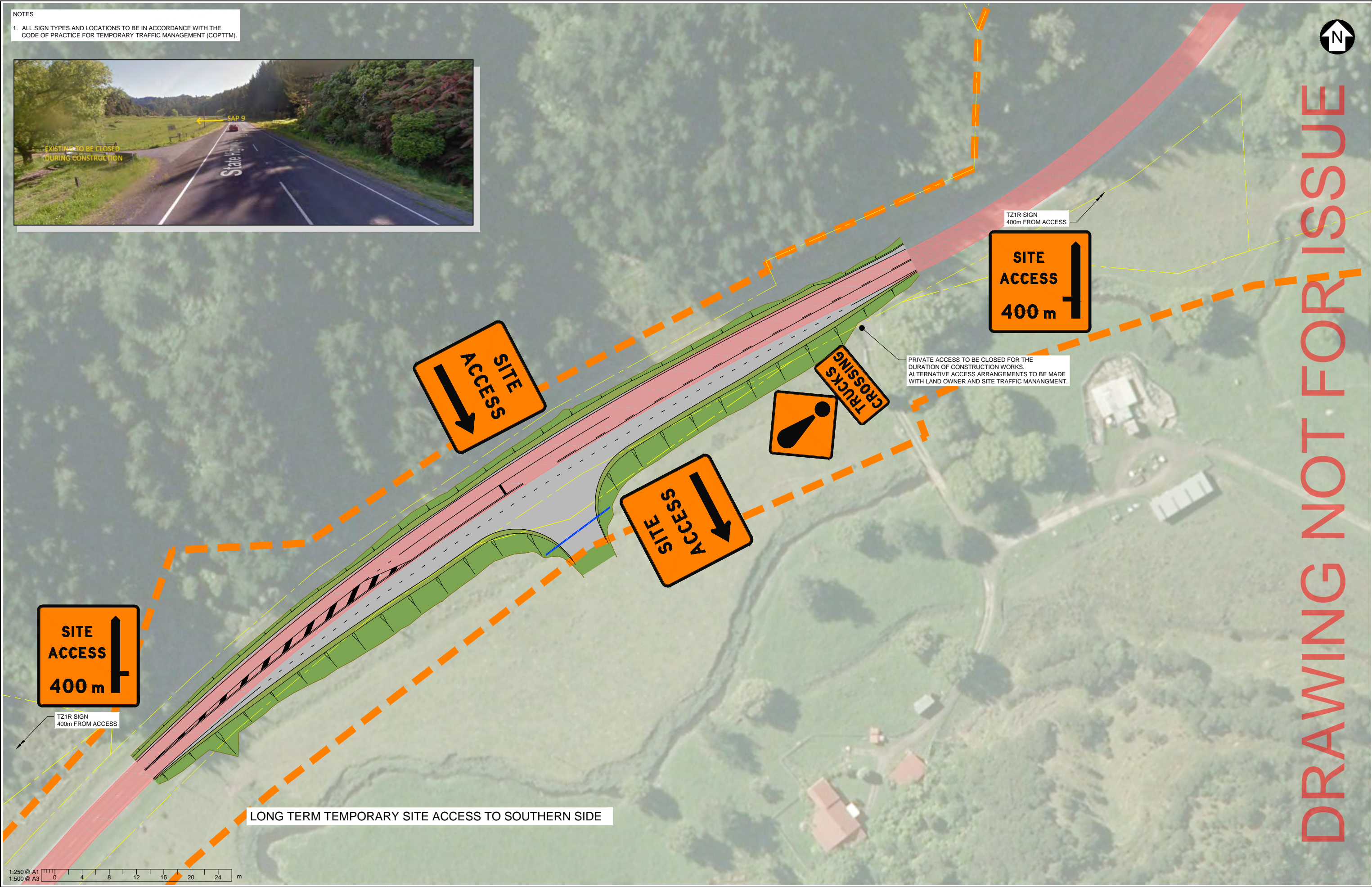
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A	FOR INFORMATION	QDO'S	-	QDO'S	RSG	HM	18/05/2018

Tab	MMA-DES-CON-E1-DRG-2051
Scales	AS SHOWN
Original Size	A1



Approved	NOT FOR CONSTRUCTION
Status	FOR INFORMATION
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Revision	A

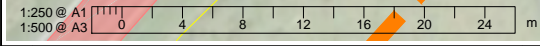
NOTES
 1. ALL SIGN TYPES AND LOCATIONS TO BE IN ACCORDANCE WITH THE CODE OF PRACTICE FOR TEMPORARY TRAFFIC MANAGEMENT (COPTTM).



DRAWING NOT FOR ISSUE

PRIVATE ACCESS TO BE CLOSED FOR THE DURATION OF CONSTRUCTION WORKS. ALTERNATIVE ACCESS ARRANGEMENTS TO BE MADE WITH LAND OWNER AND SITE TRAFFIC MANAGEMENT.

LONG TERM TEMPORARY SITE ACCESS TO SOUTHERN SIDE



Tab	MMA-DES-CON-E1-DRG-2091							
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Original Size	A1							
Rev	Revision Description	QDO'S	Drawn	Checked	Designed	RSG	HM	18/05/2018
A	FOR INFORMATION	-						

NZ TRANSPORT AGENCY
 WAKA KOTAHĪ
Mt Messenger Bypass

MT MESSENGER BYPASS
 CONSTRUCTION
 SITE ACCESS POINT 9
 SOUTHERN SITE ACCESS LAYOUT

Approved	NOT FOR CONSTRUCTION
Status	FOR INFORMATION
Drawing Number	MMA-DES-CON-E1-DRG-2091
Revision	A

- NOTES
1. ALL SIGN TYPES AND LOCATIONS TO BE IN ACCORDANCE WITH THE CODE OF PRACTICE FOR TEMPORARY TRAFFIC MANAGEMENT (COPTTM).
 2. SEAL WIDENING AS PER NZTA PLANNING POLICY MANUAL, DIAGRAM E.

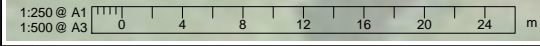


T2A AND T217 SIGNS



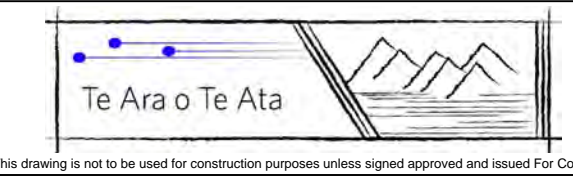
LONG TERM TEMPORARY SITE ACCESS TO FILL DISPOSAL SITE

DRAWING NOT FOR ISSUE



Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date
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Tab	MMA-DES-CON-E1-DRG-2101
Scales	1:500 (A3) 1:250 (A1)
Original Size	A1



MT MESSENGER BYPASS
CONSTRUCTION
 SITE ACCESS POINT 10
 FILL DISPOSAL SITE ACCESS LAYOUT

Approved	NOT FOR CONSTRUCTION
Status	FOR INFORMATION
Drawing Number	MMA-DES-CON-E1-DRG-2101
Revision	A



UR	**UNDER REVISION**		QDO'S						
A	FOR INFORMATION		QDO'S	-	QDO'S	SH	SH		03/05/2022
Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date		

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Scales	1:800 (A3) 1:400 (A1)
Original Size	A1

Te Ara o Te Ata

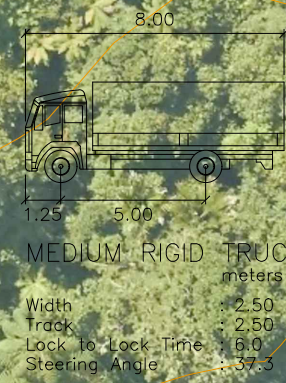
WAKA KOTAHU
NZ TRANSPORT
AGENCY

Mt Messenger Bypass

This drawing is not to be used for construction purposes unless signed approved and issued For Construction

MT MESSENGER BYPASS CONSTRUCTION SITE ACCESS POINT 3 SHEET 1

Approved	NOT FOR CONSTRUCTION
Status	FOR INFORMATION
Drawing Number	MMA-DES-CON-E1-FIG-1026
Revision	*UR*



UR **UNDER REVISION**		QDO'S					
A	FOR INFORMATION	QDO'S	-	QDO'S	SH	SH	03/05/2022
Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date

Tab	MMA-DES-CON-E1-FIG-1027
Scales	1:500 (A3) 1:250 (A1)
Original Size	A1



MT MESSENGER BYPASS

CONSTRUCTION

SITE ACCESS POINT 3

SHEET 2

Approved	NOT FOR CONSTRUCTION
Status	FOR INFORMATION
Drawing Number	MMA-DES-CON-E1-FIG-1027
Revision	*UR*



UR **UNDER REVISION**		QDO'S					
A	FOR INFORMATION	QDO'S	-	QDO'S	SH	SH	03/05/2022
Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date

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Scales	1:500 (A3) 1:250 (A1)
Original Size	A1



Te Ara o Te Ata

WAKA KOTAHI
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AGENCY

Mt Messenger Bypass

MT MESSENGER BYPASS

CONSTRUCTION

SITE ACCESS POINT 3

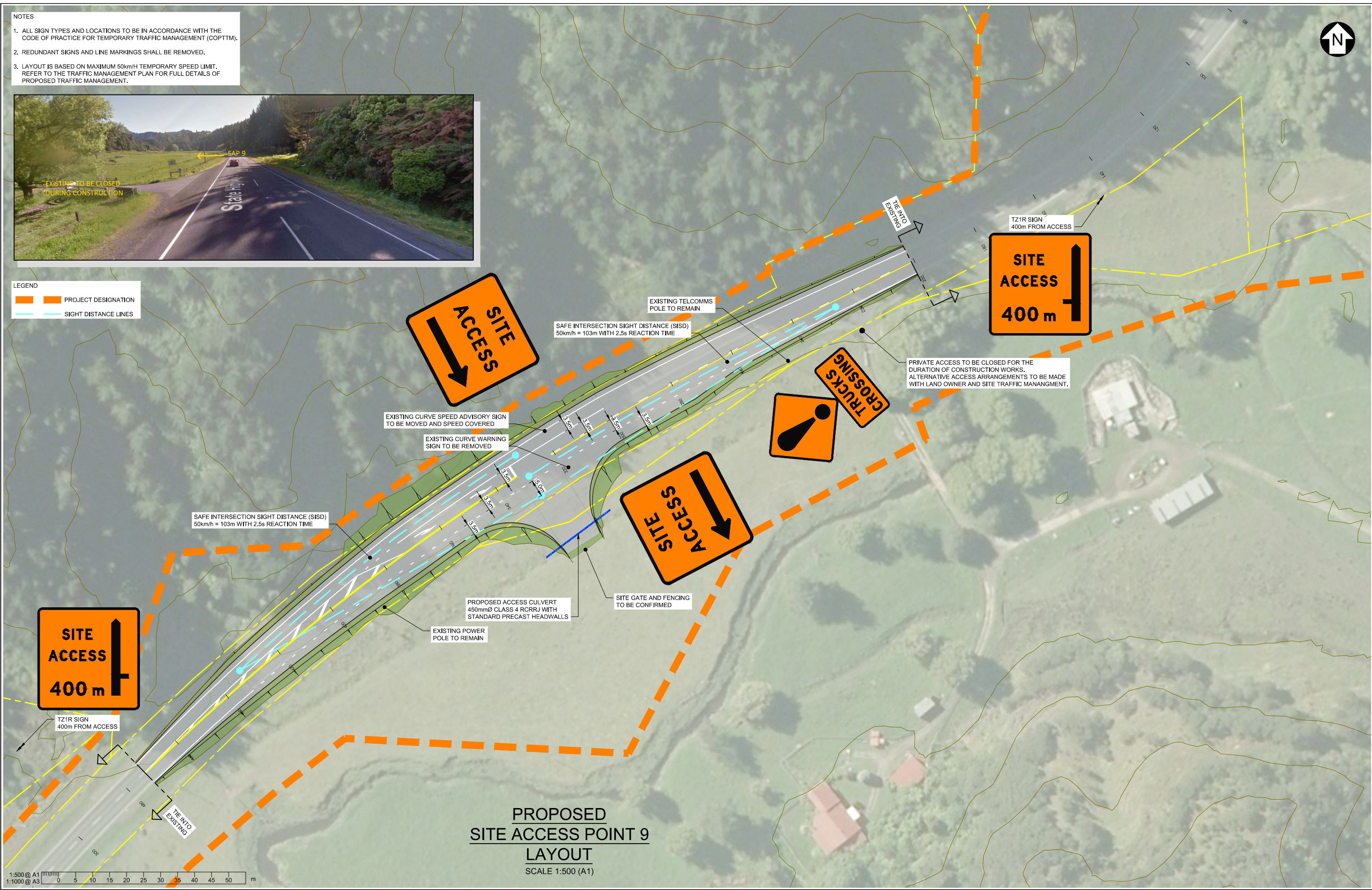
SHEET 3

Approved	NOT FOR CONSTRUCTION
Status	FOR INFORMATION
Drawing Number	MMA-DES-CON-E1-FIG-1028
Revision	*UR*

- NOTES
1. ALL SIGN TYPES AND LOCATIONS TO BE IN ACCORDANCE WITH THE CODE OF PRACTICE FOR TEMPORARY TRAFFIC MANAGEMENT (COPTTM).
 2. REDUNDANT SIGNS AND LINE MARKINGS SHALL BE REMOVED.
 3. LAYOUT IS BASED ON MAXIMUM 50km/h TEMPORARY SPEED LIMIT. REFER TO THE TRAFFIC MANAGEMENT PLAN FOR FULL DETAILS OF PROPOSED TRAFFIC MANAGEMENT.



- LEGEND
- PROJECT DESIGNATION
 - SIGHT DISTANCE LINES



**PROPOSED
SITE ACCESS POINT 9
LAYOUT**
SCALE 1:500 (A1)

1:500 @ A1
1:1000 @ A3
0 5 10 15 20 25 30 35 40 45 50 m

1	ISSUED FOR CONSTRUCTION	QDO'S	TW	QDO'S	TW	SP	15/11/2022
Rev	Revision Description	Drawn	Drawing Checked	Designed	Design Checked	Approved	Date

Tab	MMA-DES-CON-E1-DRG-2091
Scales	1:1000 (A3) 1:500 (A1)
Original Size	A1



MT MESSENGER BYPASS
CONSTRUCTION SITE ACCESS POINT 9 CONSTRUCTION YARD ACCESS LAYOUT

Approved	T. PINK
Status	FOR CONSTRUCTION
Drawing Number	MMA-DES-CON-E1-DRG-2091
Revision	1

- NOTES
1. ALL SIGN TYPES AND LOCATIONS TO BE IN ACCORDANCE WITH THE CODE OF PRACTICE FOR TEMPORARY TRAFFIC MANAGEMENT (COPTTM).
 2. REDUNDANT SIGNS AND LINE MARKINGS SHALL BE REMOVED.
 3. LAYOUT IS BASED ON MAXIMUM 50km/H TEMPORARY SPEED LIMIT. REFER TO THE TRAFFIC MANAGEMENT PLAN FOR FULL DETAILS OF PROPOSED TRAFFIC MANAGEMENT.



- LEGEND
- PROJECT DESIGNATION
 - NEW PAVEMENT AREA
 - PAVEMENT JOINT



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1:1000 @ A3
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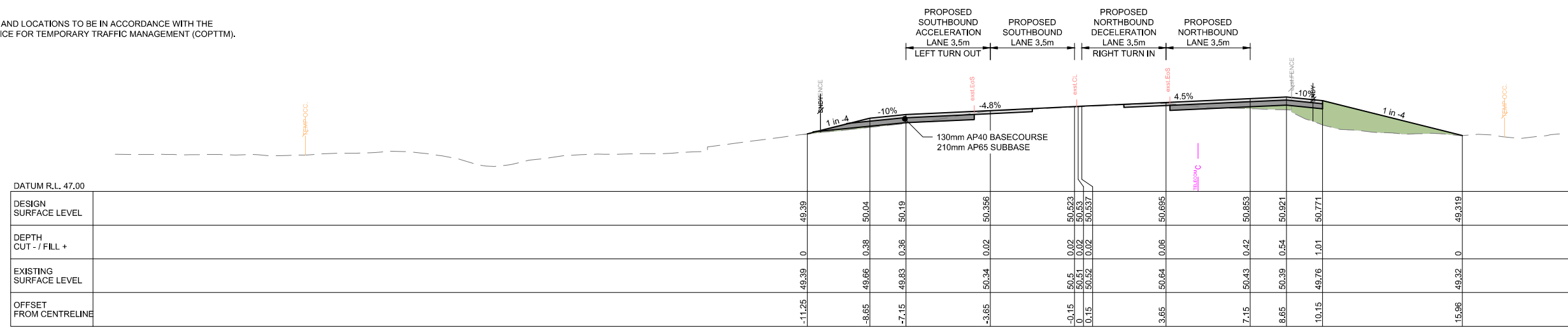
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Rev	Revision Description	Drawn	Drawing Checked	Designed	Design Checked	Approved	Date

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Original Size	A1

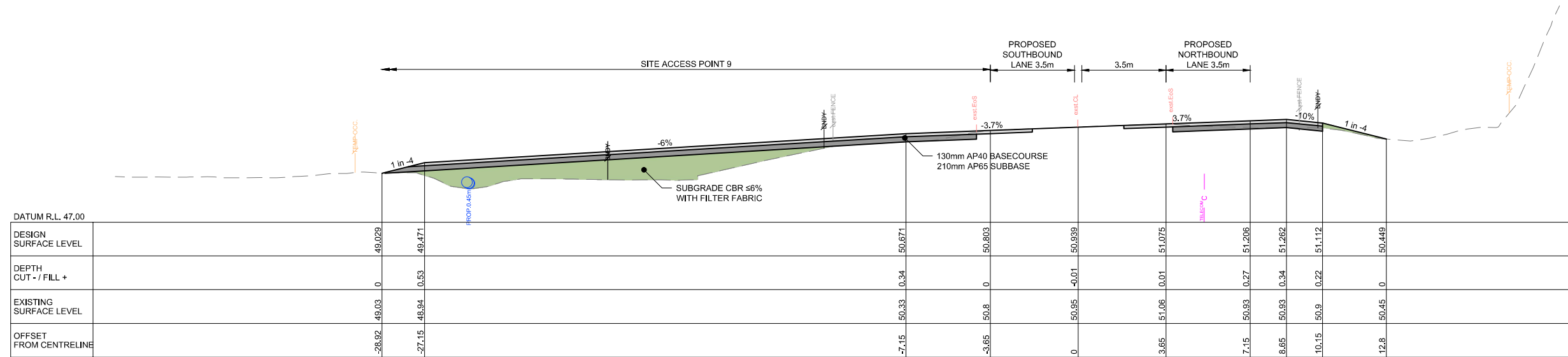


MT MESSENGER BYPASS		Approved	T. PINK
CONSTRUCTION SITE ACCESS POINT 9 CONSTRUCTION YARD ACCESS LAYOUT		Status	FOR CONSTRUCTION
		Drawing Number	MMA-DES-CON-E1-DRG-2092
		Revision	1

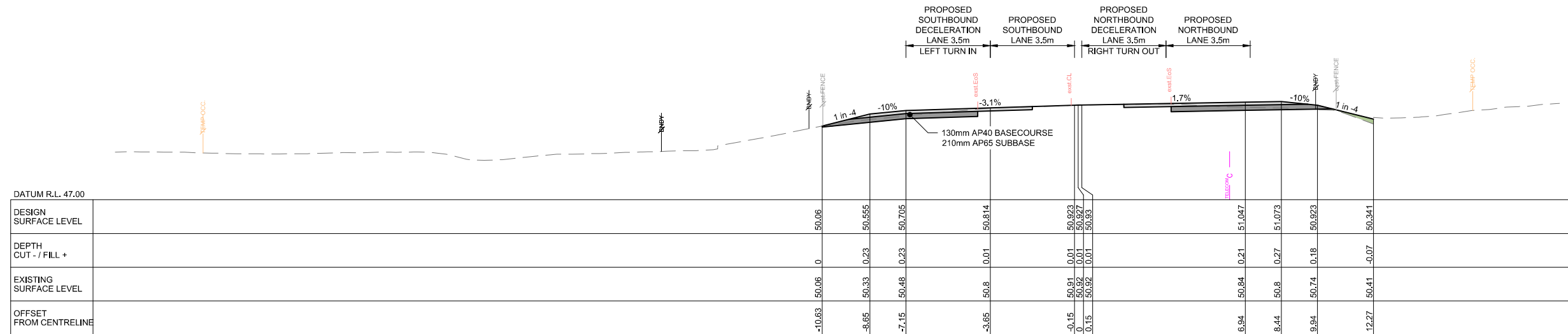
NOTES
 1. ALL SIGN TYPES AND LOCATIONS TO BE IN ACCORDANCE WITH THE CODE OF PRACTICE FOR TEMPORARY TRAFFIC MANAGEMENT (COPTTM).



CH 365



CH 325



CH 295

1:100 @ A1
 1:200 @ A3

Rev	Revision Description	Drawn	Checked	Designed	Design Checked	Approved	Date
1	ISSUED FOR CONSTRUCTION	QDO'S	TW	QDO'S	TW	SP	15/11/2022

Tab	MMA-DES-CON-E1-DRG-2096
Scales	1:200 (A3) 1:100 (A1)
Original Size	A1



MT MESSENGER BYPASS
CONSTRUCTION
SITE ACCESS POINT 9
CROSS SECTIONS

Approved	T. PINK
Status	FOR CONSTRUCTION
Drawing Number	MMA-DES-CON-E1-DRG-2096
Revision	1

Appendix B: Estimated and schedule of construction and movement

Category	Operation	Notes	Expected Truck Movements (Over Length of Project)	Duration of Works Days	Est Duration of Work Weeks
Access Points	Construction of SAP 10		N/A	15	3
	Construction of SAP 9.5		N/A	10	2
	Construction of SAP 9		N/A	15	3
	Construction of SAP 7		N/A	10	2
	Construction of SAP 4		N/A	5	1
	Construction of SAP 3		N/A	5	1
	Construction of SAP 1		N/A	15	3
	Decommission of SAP 10		N/A	5	1
	Decommission of SAP 9.5		N/A	5	1
	Decommission of SAP 9		N/A	5	1
	Decommission of SAP 7		N/A	5	1
	Decommission of SAP 4		N/A	5	1

	Decommission of SAP 3		N/A	5	1
	Decommission of SAP 1		N/A	5	1
	Maintained of Above SAP's	1 site check a week full day	208	208	41.6
	Turning Bay prep and maintenance			10	2
Large Bridge Items	Bridge 00 Beam Delivery	6no Super T's	6 Jinker Trucks	3	0.6
	Bridge 00 Parapet Panels	20no	4 Trucks	2	0.4
	Bridge 00 Crane Entry & Exit		N/A	2	0.4
	Bridge 01 Piling Rig Entry and Exit		N/A	2	0.4
	bridge 01 Staging In and out		N/A	10	2
	Bridge 01 Steel Girders	16no Steel Girders inc Pier	16 Trucks	10	2
	Bridge 01 Concrete Deck Panels	150no	30 Trucks	20	4
	Bridge 01 Parapet Panels	60no	12 Trucks	5	1
	Bridge 01 Crane Entry & Exit		6 Trucks	2	0.4
Permanent Culverts	CU03	2.5m x 2.5m	2-3 Trucks	1	0.2
	CU05	2m x 2.5m	2-3 Trucks	1	0.2

	CU05a	2m x 2.5m	2-3 Trucks	1	0.2
	CU06	2.5m x 2.5m	2-3 Trucks	1	0.2
	CU07	2m x 2.5m	2-3 Trucks	1	0.2
	CU08	2m x 2.5m	2-3 Trucks	1	0.2
	CU09	4m(W)x3m(H)	2-3Trucks (Oversized)	1	0.2
	CU14	2m x 2.5m	12-15Trucks	3	0.6
	CU15	5m x 3.5m	25-30 Trucks	6	1.2
	CU16	2.5m x 2.5m	13-15 Trucks	3	0.6
	CU18	3m(W)x2m(H)	2-3 Trucks	1	0.2
	CU20	2m x 2.5m	2-3 Trucks	1	0.2
	Culvert 20 Build (Within existing corridor)		N/A	5	1
	Culvert 1 Build (Within existing corridor)		N/A	5	1
	Culvert 2 Build (Within existing corridor)		N/A	5	1
Temp Drainage Material	PKS Delivery		50 Trucks		0

	Farm Boss		50 Trucks		0
Tunnel Items	Tunnel Equipment In and Out			10	2
	Wick Leader In and Out			2	0.4
Season 1 Works	Cut 13 Access Track, Retaining wall works			40	8
Tie Ins	South			60	12
	North			60	12
	South Preload Works	15000m3		30	6
Decommission of Cableway	Tower and SAB Removal			40	8
Cut 19 LOS Works	Vegetation and Earthworks Trimming for LOS	15000m3		40	8