

MCT/SHPW/T-A26: Tuvalu Airport Service Tower & Vehicle Storage Building



Traffic Management Plan

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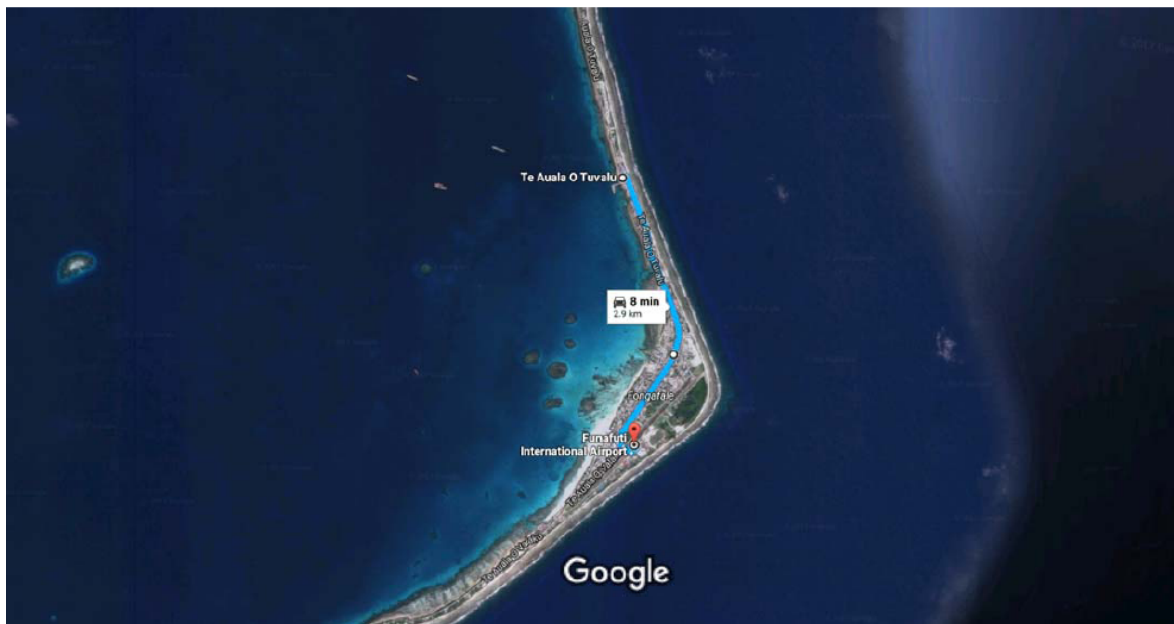
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1.0 PROJECT INFORMATION

1.1 Purpose and Scope

The Scope of Works at the new Flight Service Tower and Vehicle Storage Building at Funafuti requires the construction of the new Flight Service Tower and Vehicle Storage Building, located on the laydown yard next to PWD. The materials that will be used on the build will be freighted to Funafuti port from Fiji, China and Australia; and then delivered to the laydown area which is approximately 3km in distance from the port. The carting of all materials will be undertaken using three 10 m³ tipper truck, 8.0lm Tag Trailer and 5m³ Agitator truck. The staff will use vehicles and scooters to allow access to various locations when required.

1.1 Project Location



The above plan indicates the main route to be taken between the Funafuti Port and site area. The distance between each destination is approximately 3km.

1.3 Site Constraints/Impacts


1.3.1 Port – Site

The travelled path for the movement of containers to is restricted to one main road which passes through some main community areas. The Route does not directly pass any schools but, school children in high numbers move through all of these areas during the hours before and after school

The existing road from the Port to the Site is a sealed road and generally 6.0 m in width and currently in good condition. The road has a number of traffic speed control devices being concrete humps across the full carriageway that restricts speed to 20 kph through the township. The main vehicles are scooters with minimal vehicles used in Funafuti. There are very small number of light commercial vehicles and are not commonly seen apart from some government works vehicles.

Normal flight days occur Tuesdays and Thursdays between 10am and 1pm when the runway and side roads cannot be accessed by any traffic. Local traffic uses the side roads at all other times and the runway is used for sporting activities most afternoons. The runway can only be crossed at the access points provided.

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The main areas identified:

- Pedestrian and vehicle safety of the community with heavy vehicles proposed to pass through residential and commercial areas.
- Trucks carting materials from Port to site have the potential to cause noise and adverse traffic effects.
- Flight days incur the most traffic and congestion in and around the main township
- School children will be in close proximity to heavy vehicles using the haulage route as they travel to and from school, creating safety issues for the children.
- Entrance to PWD's yard maybe temporarily impeded when goods and materials are being off-loaded to site.

1.4 Traffic Management Objectives

The primary objective of this Traffic Management Plan (TMP) is to allow the continuation of traffic at all times during the day without increasing the risk of near misses, accidents or congestion on the road. This plan also addresses its proximity to an international airport and the safety concerns this poses to traffic movement. The following conditions have been placed upon this TMP by the EMP as a result of considerable community consultation:

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Traffic Management Plan

	Issue	Objective	Management Strategy	Responsibility	Target Date
Resource Use and Socio-economic Impacts	Traffic management	Reduce traffic impacts on community	<ul style="list-style-type: none"> ■ All workers and drivers on the site will be informed of the traffic management requirements of the site through tool box talks and induction. ■ The site and the construction programme will be arranged so that all traffic can enter the site at the existing vehicle entrance near the road. ■ The site will be arranged and managed so that construction truck / vehicle standing and parking can be provided on the site for the duration of construction. ■ All unloading and loading operations will be carried out within the site itself. All materials will be stored on the site. ■ The site may require a wheel brush area near the site exit, situated near the south-eastern corner of the site. When a truck exits the site the wheels are to be brushed with a broom and cleaned of all loose material. ■ A road clean-up crew will be available at all times on site so that in the event sediment or dust is carried off the site it the carriageway and footpath can be cleaned immediately. ■ Contact will be made with the Principals of the schools about the project to advise students on traffic management issues and road safety. 	Construction manager	On-going
	Dust	Reduce impact of dust emissions from the site and activities on community	<ul style="list-style-type: none"> ■ Site fencing to have shade cloth to suitable areas to reduce dust to passing traffic and pedestrians. ■ After delivering fill, all drivers leaving the site must clean the tyres and truck body to ensure that there is no significant dust residue left on tyres and tailgates before leaving the site. 	Construction manager	On-going
	Hours of operation	Reduce impact of noise on community	<ul style="list-style-type: none"> ■ Restrict the hours of operation to 7am to 4pm, Monday to Friday; and 7am to 12pm on Saturday. No work on Sundays without prior permission from the Construction Manager. 	Construction manager	On-going

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Issue	Objective	Management Strategy	Responsibility	Target Date
Accounting for social or community concerns (including gender issues)	Minimise social disturbance and maximise community benefits from the activity	<ul style="list-style-type: none"> ■ Advise the local community of the development plan in advance of any activity, and where possible involve them in planning. This will be done via community radio announcements and local notice boards. ■ Minimise disturbances such as noise or visual impacts near living areas when possible. 	Community Participation Coordinator and Construction manager	Before start of works and Ongoing
	Ensure maximum safety of construction personnel and local residents	<ul style="list-style-type: none"> ■ Ensure all occupational health and safety requirements are in place on construction sites and in work camps. ■ Establish a hazard reduction plan for the activity. ■ Install lights and cautionary signs in hazardous areas. These will be defined on a plan and shared with the community. 	Construction Manager	Before start of works.
Sensitive Natural Areas	Minimise negative impacts on sensitive ecosystems or the natural environment	<ul style="list-style-type: none"> ■ The adjacent coastal area is identified as the main natural area for protection. This is to be highlighted as part of the induction of workers to the site. ■ Keep machinery and trucks out of the coastal area. (i.e. keep away from sand beaches or coral reefs) 	Construction Manager	On-going
Asbestos	Remove the risk of asbestos contamination	<ul style="list-style-type: none"> ■ Task a team under the direction of a trained supervisor to inspect the existing site to identify, remove any asbestos products on the site and to issue a certificate confirming that the asbestos products have been removed, prior to the Contractor taking possession of the site. 	Construction Manager	N/A
Noise	Ensure nuisance from noise is minimised	<ul style="list-style-type: none"> ■ Use modern and well-maintained equipment (with mufflers where appropriate). ■ Consult with local people when there will be unusual, unavoidable noise. 	Construction Manager	On-going.

Additionally, all trucks are to maintain a steady flashing yellow light on top of the cab while travelling between sites.

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1.5 Responsibilities

The following Companies are committed to exercise a “duty of care” to workers and all road users, but not necessarily to the exclusion of construction expediency and cost considerations in the implementation of the TMP:

- Reeves International

2.0 WORKS ON ROAD

2.1 Project Scope

The Scope of this TMP is to endeavour to ensure the additional heavy traffic caused by the new Tuvalu Airport Service Tower & Vehicle Storage Building construction works do not increase the risk of near misses, accidents or congestion on the road along the travelled path of the haulage to site. This TMP consists of a number of steps to reduce the risk including;

1. Community Consultation
2. The Traffic Control Plan (TCP)
3. Staging of the Works
4. Continuous monitoring of the TCP to ensure best performance

The following details advise of the responsible organisations:

Responsibility	Organisation	Contact Person	Position	Contact Details
Overall responsibility	Reeves International	Greg Srhoj	Project Manager	0404 281 062
Traffic Management Plan Implementation	Reeves International	Brian Oman	Construction Manager	700 3002
The Road Authority	Tuvalu PWD			

2.1.1 Details of Work

The Scope of Works consists of haulage of materials from the port to site at current Laydown Area. Works are due to commence in late January 2018 and are schedule for completion late June 2017 and is dependent upon a number of factors including weather constraints. Haulage will commence at approximately 0700 hours and will be no later than 1600 hours from Monday to Friday; 0700 hours to 1200 hours Saturday and will not occur on Public Holidays or Sundays without further consultation.

The heavy vehicles will consist of 1 X 10 m³ six-wheel truck and trailer, 1 x 5m³ Agitator Truck, 1 x 3 Ton Manitou. Vehicle movement will vary and will not be consistent daily. The main route from the port to the site will only be use when goods are delivered at the wharf on a monthly or bi-monthly basis. This will reduce further as the project proceeds.

2.1.2 Staging of Work


The first stage will be site clearance (collection of rocks, plants and rubbish) and removal of waste from site area. All wastes are to be carted away to designated and appropriate area.

Second stage requires excavations for footing and foundation for project. Spoils are to be removed from site to appropriate area.

2.2 Existing Traffic and Speed Environment

The speed of the existing traffic is currently set at 20kph and is maintained by the use of a number of concrete hump traffic calming devices across both lanes. Traffic does not get congested due to the lack of vehicles. There are minimal vehicles with the main traffic consisting of scooters and pedestrians.

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2.3 Project Representatives

Initial & Main Contact – Greg Srhoj, Reeves International, T 0404 281 062
gsrhoj@reevesint.com .

3.0 Traffic Assessment (Vehicular Traffic)

3.1 General

There does not appear to be a peak time in Funafuti. Flight days consist of the most movement of transport and parking congestion in and around the central township. This period last for approximately two hours on Tuesdays and Thursdays. All other hours' traffic is very minimal. In order to maintain community safety on flight days no deliveries to site or lay down yard are made within the flight arrival and departure times. Bollards are placed in form of the site gates to prevent traffic parking and blocking access.

3.2 Public Transport

There are no known designated bus stops at any point along the route however; it is customary for vehicles to stop and the driver's converse with passing pedestrians at any time, especially as the traffic speed is low, less than 20kph. There are no known Taxis on Funafuti.

3.4 Special Events and Other Works

It is understood that any special events that would affect traffic are held on Public Holidays and construction work and haulage will not be undertaken on these days.

3.5 Non-motorised Road Users

Pedestrians

Special consideration is given to Pedestrians. Please see the TCP below.

3.6 Crossings

Currently, pedestrians cross the roads between the light traffic and occasional heavy vehicle and there are no designated crossings for pedestrians. It is considered crossing between traffic at very low speeds will still be sufficiently safe without requiring pedestrian crossings.

4.0 Site Assessment

4.1 Access to Adjoining Development

No access will be impeded during the duration of this TMP.

4.2 Environmental Conditions

All site works are to be contained within the boundaries of existing perimeter fence. Works will not have any implication or impact to outside activities either to the sports field of PWD' yard.

There are few existing signs in place and it is anticipated these current signs will remain during the operation of the TMP.

There are lower tree branches that may need to be trimmed along the haulage route and there are several low electrical wire and Telecom wires also over the road. The maximum height of the trucks is 3.50 m and the cables and wires will not be damages. PWD, the Electrical Authority and Telecom will be informed and requested to check.

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An emergency spill kit is available at the Site specifically for use for hydrocarbons in the event one of the haulage trucks is involved in a traffic accident

4.3 Impact on Adjoining Road Network

The additional impact on roads will be minimal due to low numbers of movements per day given the very low speed environment. In terms of road maintenance, roads other than the sealed section will require periodic maintenance to repair pot holes and a weekly inspection will be carried out by Reeves International to determine any repair requirement.

It is not considered there will be any detrimental effect to the sealed section and road conditional photographs will be undertaken prior to commencement to establish a base of condition.

Dust for the wheel of the trucks may be an issue although at very slow speeds this may not be an issue. Should there be a dust issue Reeves International will undertake to reduce the dust to an absolute minimum where practicably possible.

4.4 Night Work Provisions

No night works will be permitted or are planned.

5.0 Emergency Planning

In the event of an emergency, this TMP will not affect any safety measures that need to be taken for any reason. Further, should any emergency condition arise where in the opinion of the local Police and Reeves International continuation of haul operations may be detrimental or unsafe, haulage will stop. An emergency spill kit is available at the Site specifically for use for hydrocarbons in the event one of the haulage trucks is involved in a traffic accident.

5.1 Consultation and Communication

5.1.1 Approvals

This TMP provides evidence of how road, utility and service authorities have been consulted with and their requirements complied with. Contact details are provided.

Details of approvals are noted at the end of this TMP.

5.1.2 Public Notification

Initial community consultation was undertaken and the following comments were recorded:

- Pedestrian and vehicle safety of the community with heavy vehicles proposed to pass through residential and commercial areas.
- Trucks carting materials through the township have the potential to cause noise and adverse traffic effects.
- School children will be in close proximity to heavy vehicles using the haulage route as they travel to and from school, creating safety issues for the children.
- Parking and traffic movement on flight days need to be monitored.
- Regular communication is to be maintained between Airport Management and Site Management

5.2 Summary

In conclusion, community stakeholders are prepared to work together in generating community awareness and support for the project.

Reeves International will continue with ongoing community interaction and monitor any community related issues that may arise from time to time.

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6.0 IMPLEMENTATION

6.1 Traffic Control Plans

When a site event occurs that may disrupt local traffic and pedestrian’s movement a “Traffic Control Form” will be filled out by the safety officer and then confirmed by the construction manager. All local authority’s and public will be notified in advance if they are to be affected.

Barriers are to place in from of the site gates during flights arrivals and departures to prevent vehicles parking and preventing access to site.

No machine movements or deliveries are to occur on flight days between arrivals and departures.



Figure 1: Funafuti Port: Pickup point and drop off point for all container deliveries to Funafuti Port. 20 ft Containers are loaded onto tag trailer and driven to Site for decanting. Empty containers are returned to port.



Figure 2: Path to Site Area: This figure shows the common path for deliveries to and from site from the Site Area. All bulk materials are to be stored on the site.

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7.0 MONITORING AND MEASUREMENT

7.1 Site Inspections & Record Keeping

All temporary signs, devices and controls will be maintained at all times and checked weekly. To achieve this, the following check sheet will be used:

TRAFFIC MANAGEMENT PLAN WEEKLY CHECKLIST		Date:	
#	OPERATION AND CHECK	Y / N	Comments
1	Complete length of haul driven?		
2	Is the road clean from Haulage material?		
3	Are all the signs in position and complete?		
4	Are all the signs in good order and clean?		
5	Is the condition of the roads OK?		
6	Is the condition of the Seal section of Road OK?		
7	Are there any aerial issues from trees, power or comms?		
8	Is the traffic behaving as it should?		
9	Have there been any reported incidents or complaints this week?		
10	Are there any outstanding items from last week that have not been completed satisfactorily?		
ITEMS REQUIRING MAINTENANCE OR ATTENTION FROM THIS INSPECTION			
1			
2			
3			
4			
5			
6			
7			

Signed by:

Name:	Sign:	Date:
Name:	Sign:	Date: