

# GUIDELINES FOR TEMPORARY SPEED HUMPS AT WORK SITES

## 1. Purpose

The purpose of this document is to outline guidelines for the use of portable speed humps where a 40 km/h work zone speed limit has already been established.

## 2. Background

Excessive speed of passing motorists at road works has been identified as a major safety issue for road workers. Speed control of vehicles at roadwork sites has traditionally been primarily managed by the use of speed restriction signing and traffic controllers.

It is recognised that a significant proportion of road users do not strictly observe roadwork speed limit signs, and in some cases don't respond to the directions given by traffic controllers to slow down through road work sites.

Greater speed compliance can be achieved through an established 40 km/h work site by the application of strategically placed temporary speed humps laid out in conjunction with accompanying warning signs.

Only approved temporary speed hump devices shall be considered for use at roadwork sites to assist in reducing speeds and therefore creating a safer work environment for road workers through these 40 km/h work sites.



Figure 1. Portable Speed Hump

## Application of a Speed Hump Device

Prior to the use of any temporary speed hump device on a 40 km/h work site, a Traffic Control Diagram (TCD) shall be developed for the particular work site. Due consideration needs to be given to the most appropriate course of action to protect workers, during the development of the TCD (AS 1742.3).

If higher order devices (such as safety barriers), are considered to be inappropriate or unmanageable, a 40km/h speed zone with temporary speed humps can be considered subject to a risk assessment being undertaken.

Temporary Speed humps shall only be implemented where all other road environment options which can be used to encourage compliance with the speed limit have been exhausted and non-compliance with the 40km/h speed limit continues to be an issue.

Temporary speed humps shall only be utilised:

- On a short term work site that is already under 40 km/h speed control, installed as part of a TCD developed in accordance with AS 1742.3 and Main Roads CoP.
- In conjunction with appropriate training for installers.
- In daylight hours or under floodlighting at each temporary speed hump location point.
- Within the confines of the area defined by the work zone.
- In conjunction with appropriate warning signs (as outlined in this guideline).
- When the work site is attended and removed when no roadwork is being carried out. ***(It is important to note that removing devices whilst the job site is unattended is essential to maintain the credibility of the device).***
- When temporary speed humps are considered at road works, it is essential that they only be incorporated within a TCD which genuinely warrants the use of 40 km/h speed limits.

There are a number of points that should be considered when installing temporary speed humps as part of a TCD. They include:

- Determining the most appropriate installation procedure to be used at the site.
- Establishing the number of temporary speed humps to be used at the site.
- Establishing if there is actually a requirement to install temporary speed humps in traffic lanes not immediately adjacent to the work area.
- Determining the number, type and position of speed hump warning signs required for the site.
- The layout of delineation and other traffic control devices which are used in conjunction with the temporary speed humps.
- Whether the road surface is sealed or unsealed and its condition (which influences the effectiveness of affixing the humps to the surface and their ability to stay in position).

### **3. Setting up of Temporary Speed Humps**

#### **4.1 Speed Control Signing**

Appropriate 40 km/h speed restriction signing installed in accordance with AS 1742.3 and Main Roads CoP shall be utilised.

#### **4.2 Number of Temporary Speed Humps at a Work Site**

A minimum of two temporary speed humps shall be utilised at a work site, one at each end of the road work area.

If the length of the work zone is greater than 200 meters, or there is an interrupted line of sight between each end of the work zone, then intermediate temporary speed humps and their associated signing shall be installed at intervals of not more than 100 meters.

In two directional arrangements, it may only be necessary to install temporary speed humps in the lane closest to the work site.

#### **4.3 Speed Hump Warning Signs**

A temporary warning sign shall be located in advance of the work areas containing temporary speed humps. These warning signs shall only be visible in the direction in which the hump is traversed.

#### **4.4 Advance warning signs**

Temporary advance warning signs shall be installed in the transition area of the road work site where temporary speed humps have been installed.

#### **4. Speed Hump Installation Requirements**

All temporary speed humps shall be installed, maintained and removed in accordance with a TCD developed in accordance with AS 1742.3 and Main Roads CoP.

The manufacturer's installation instructions are to be strictly complied with. Traffic shall be controlled by traffic controllers during installation, maintenance or removal of humps.

Any speed hump should be positioned to allow a bicycle rider or motor bike to safely manoeuvre around the end of the hump without hitting any other object or hazard. A minimum clearance of 0.5 metres should be allowed.

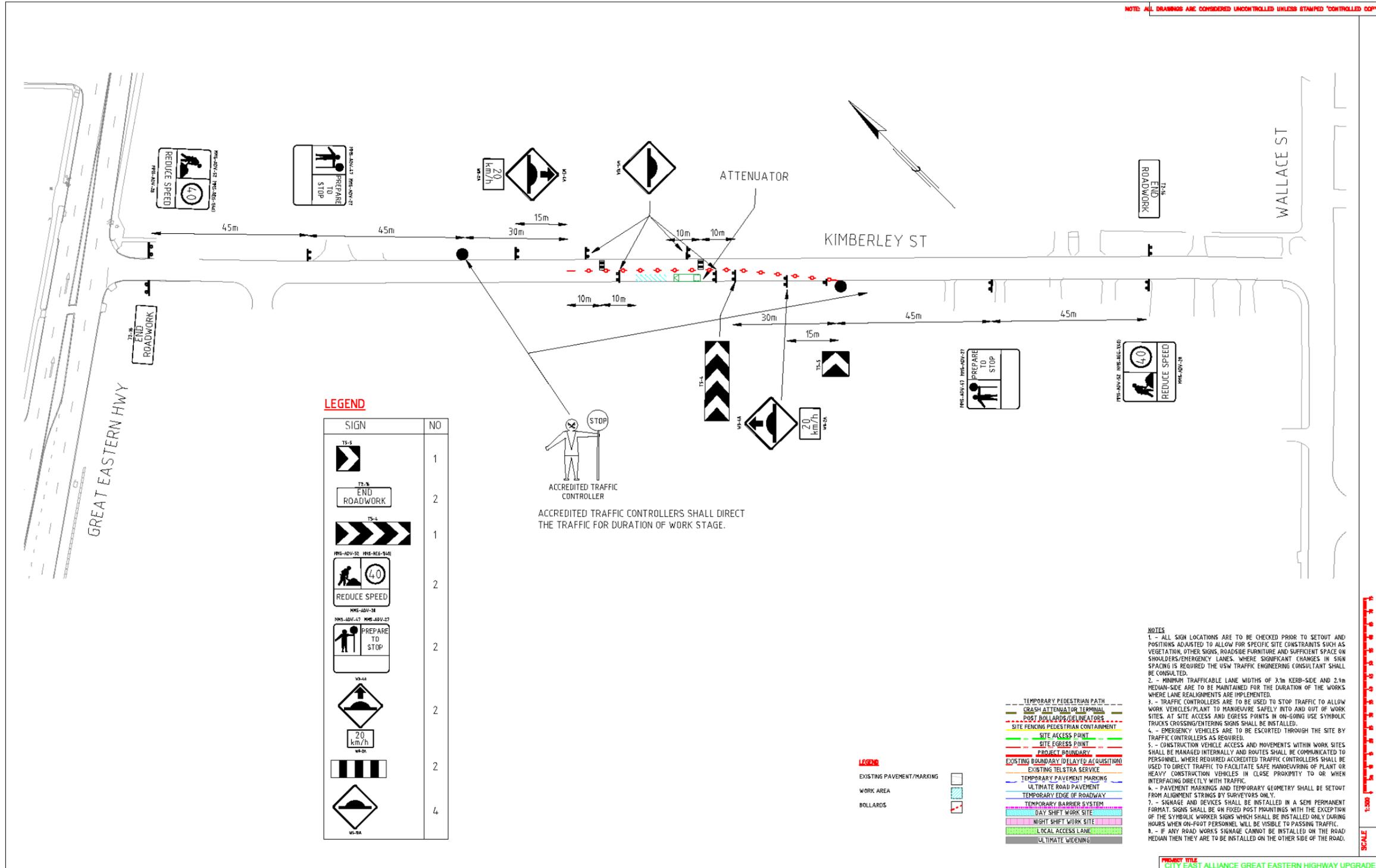
A device which is to be used as a Temporary Speed Hump shall not be approved if it were, in itself, to present an unacceptable increased risk of causing an incident.

#### **5. Delineation**

Where two-way traffic passes through the work area, there will be a need to ensure traffic does not attempt to bypass the temporary speed humps. Delineation may be required between each of the lanes to guide vehicles over the temporary speed humps. Traffic cones and bollards should be considered for this purpose, with procedures in place to keep them intact.

Appendix: TCD example of Temporary Speed Humps (note- this is a guide only and does not encompass all other required Traffic Management signage and/or devices)

NOTE: ALL DRAWINGS ARE CONSIDERED UNCONTROLLED UNLESS STAMPED 'CONTROLLED COPY'



REV	DATE	DESCRIPTION	APPROVED	HEBHT BALTUN	AHD
C	03.11.11	SIGNAGE ADDED			
B	08.10.11	SIGNAGE AMENDMENTS			
A	03.10.11	FOR CLIENT REVIEW			

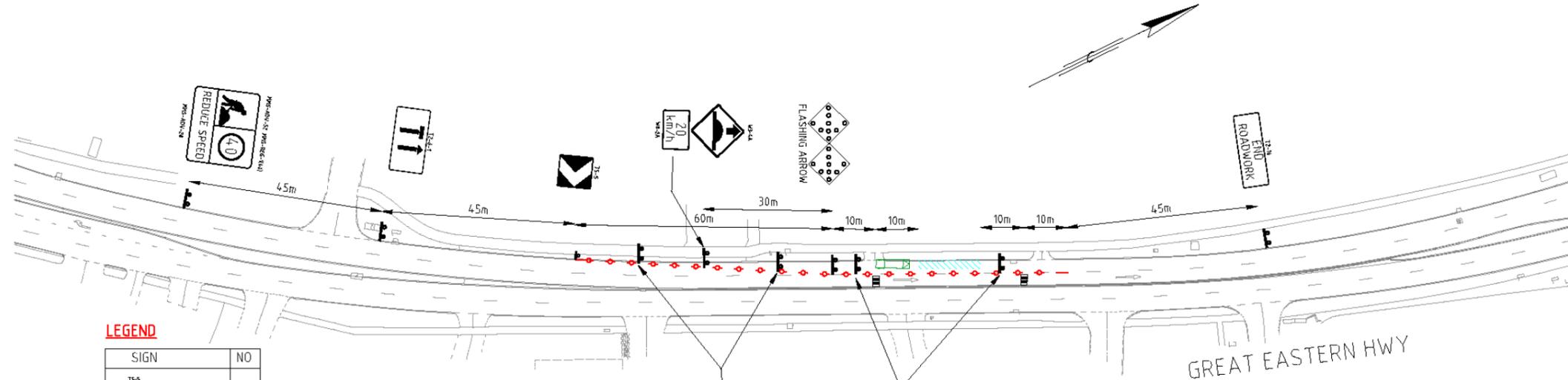
METADATA	
GROUND SURVEY STANDARD:	67-08-43
DATE OF CAPTURE:	
MAPPING SURVEY STANDARD:	
DATE OF CAPTURE:	
MAIN ROADS PROJECT ZONE:	PG94
HEBHT BALTUN	AHD

		DESIGNED BY	03.10.11	REVIEWED BY	
		DRAWN BY	TR	DESIGN MANAGER APPROVED	
		CHECKED BY	RG	ALLIANCE PROJECT DIRECTOR APPROVED	
		DRAWING PATH			

PROJECT TITLE		DRAWING TITLE		PROJECT
CITY EAST ALLIANCE GREAT EASTERN HIGHWAY UPGRADE		TRAFFIC MANAGEMENT LAYOUT		A1
		TWO DIRECTION TEMPORARY SPEED HUMP ARRANGEMENT		
		SHEET 1 OF 1		
LOCAL AUTHORITY		MAIN ROADS RESPONSIBILITY AREA		
DRAWING STATUS		DRAWING NUMBER		REV
		01.41-TM-DG-093		C

Appendix: TCD example of Temporary Speed Humps (note- this is a guide only and does not encompass all other required Traffic Management signage and/or devices)

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LEGEND

SIGN	NO
	1
	1
	2
	1
	1
	1
	1
	2
	2

LEGEND

EXISTING PAVEMENT/MARKING	
WORK AREA	
BOLLARDS	

TEMPORARY PEDESTRIAN PATH	
CRASH ATTENUATOR TERMINAL	
POST BOLLARDS/DELINEATORS	
SITE FENCING PEDESTRIAN CONTAINMENT	
SITE ACCESS POINT	
SITE EGRESS POINT	
PROJECT BOUNDARY	
EXISTING BOUNDARY (DELAYED ACQUISITION)	
EXISTING TELSTRA SERVICE	
TEMPORARY PAVEMENT MARKING	
ULTIMATE ROAD PAVEMENT	
TEMPORARY EDGE OF ROADWAY	
TEMPORARY BARRIER SYSTEM	
DAY SHIFT WORK SITE	
NIGHT SHIFT WORK SITE	
LOCAL ACCESS LANE	
ULTIMATE WIDENING	

NOTES

- ALL SIGN LOCATIONS ARE TO BE CHECKED PRIOR TO SETOUT AND POSITIONS ADJUSTED TO ALLOW FOR SPECIFIC SITE CONSTRAINTS SUCH AS VEGETATION, OTHER SIGNS, ROADSIDE FURNITURE AND SUFFICIENT SPACE ON SHOULDERS/EMERGENCY LANES. WHERE SIGNIFICANT CHANGES IN SIGN SPACING IS REQUIRED THE USW TRAFFIC ENGINEERING CONSULTANT SHALL BE CONSULTED.
- MINIMUM TRAFFICABLE LANE WIDTHS OF 3.0m KERB-SIDE AND 2.9m MEDIAN-SIDE ARE TO BE MAINTAINED FOR THE DURATION OF THE WORKS WHERE LANE REALLOCATIONS ARE IMPLEMENTED.
- TRAFFIC CONTROLLERS ARE TO BE USED TO STOP TRAFFIC TO ALLOW WORK VEHICLES/PLANT TO MANOEUVRE SAFELY INTO AND OUT OF WORK SITES. AT SITE ACCESS AND EGRESS POINTS IN ON-GOING USE SYMBOLIC TRUCKS CROSSING/ENTERING SIGNS SHALL BE INSTALLED.
- EMERGENCY VEHICLES ARE TO BE ESCORTED THROUGH THE SITE BY TRAFFIC CONTROLLERS AS REQUIRED.
- CONSTRUCTION VEHICLE ACCESS AND MOVEMENTS WITHIN WORK SITES SHALL BE MARKED INTERNALLY AND ROUTES SHALL BE COMMUNICATED TO PERSONNEL. WHERE REQUIRED ACCREDITED TRAFFIC CONTROLLERS SHALL BE USED TO DIRECT TRAFFIC TO FACILITATE SAFE MANOEUVRING OF PLANT OR HEAVY CONSTRUCTION VEHICLES IN CLOSE PROXIMITY TO OR WHEN INTERFACING DIRECTLY WITH TRAFFIC.
- PAVEMENT MARKINGS AND TEMPORARY GEOMETRY SHALL BE SETOUT FROM ALIGNMENT STRINGS BY SURVEYORS ONLY.
- SIGNAGE AND DEVICES SHALL BE INSTALLED IN A SEMI-PERMANENT FORMAT. SIGNS SHALL BE ON FIXED POST MOUNTINGS WITH THE EXCEPTION OF THE SYMBOLIC WORKER SIGNS WHICH SHALL BE INSTALLED ONLY DURING HOURS WHEN ON-FOOT PERSONNEL WILL BE VISIBLE TO PASSING TRAFFIC.
- IF ANY ROAD WORKS SIGNAGE CANNOT BE INSTALLED ON THE ROAD MEDIAN THEN THEY ARE TO BE INSTALLED ON THE OTHER SIDE OF THE ROAD.

SCALE 1:500

REV	DATE	DESCRIPTION	APPROVED
C	03.11.11	SIGNAGE ADDED	RG
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A	03.10.11	FOR CLIENT REVIEW	RG

**METADATA**

GROUND SURVEY STANDARD: 67-08-43

DATE OF CAPTURE:

MAPPING SURVEY STANDARD:

DATE OF CAPTURE:

MAIN ROADS PROJECT ZONE: PCG94

HEBRT DUTY: AHD

**cityeast alliance**  
GREAT EASTERN HIGHWAY UPGRADE

DESIGNED	RG	03.10.11	INDEPENDENT VERIFIER
DRAWN	TR	03.10.11	PERSON MANAGED APPROVED
CHECKED	RG	03.10.11	ALLIANCE PROJECT DIRECTION APPROVED
DRAWING PATH			

PROJECT TITLE		CITY EAST ALLIANCE GREAT EASTERN HIGHWAY UPGRADE
DRAWING TITLE		TRAFFIC MANAGEMENT LAYOUT SINGLE DIRECTION TEMPORARY SPEED HUMP ARRANGEMENT SHEET 1 OF 1
LOCAL AUTHORITY	DRAWING NUMBER	01.41-TM-DG-094
MAIN ROADS RESPONSIBILITY AREA	REV	C