PREFACE

These traffic guidance schemes (TGSs) have been prepared to provide guidance for personnel engaged in common MRWA minor improvement and general maintenance road work activities. They are applicable to road works which are carried out during daylight hours, located on Highways and Main Roads. There are a number of work types and locations where these TGSs may not be appropriate. The intent is not to replace all road specific TGSs or the need for traffic management plans (TMPs). The purpose of the generic TCDs are to ensure consistent application of traffic management across the state.

Two TGSs have been prepared for each work type, one using Australian Standards 1742.3 stand-alone signs and one using Multi-Message Signs (MMS) allowable under Main Roads WA Code of Practice for Works on Roads (WACoP). For particular work types there is a requirement to refer to AS1742.3 and / or WACoP, which is indicated on the relevant TGSs.

It is vital a risk assessment be made of the proposed adoption of these treatments taking particular account of factors such as road environment, traffic volume and speed, road geometry and width, and the general behaviour of road users.

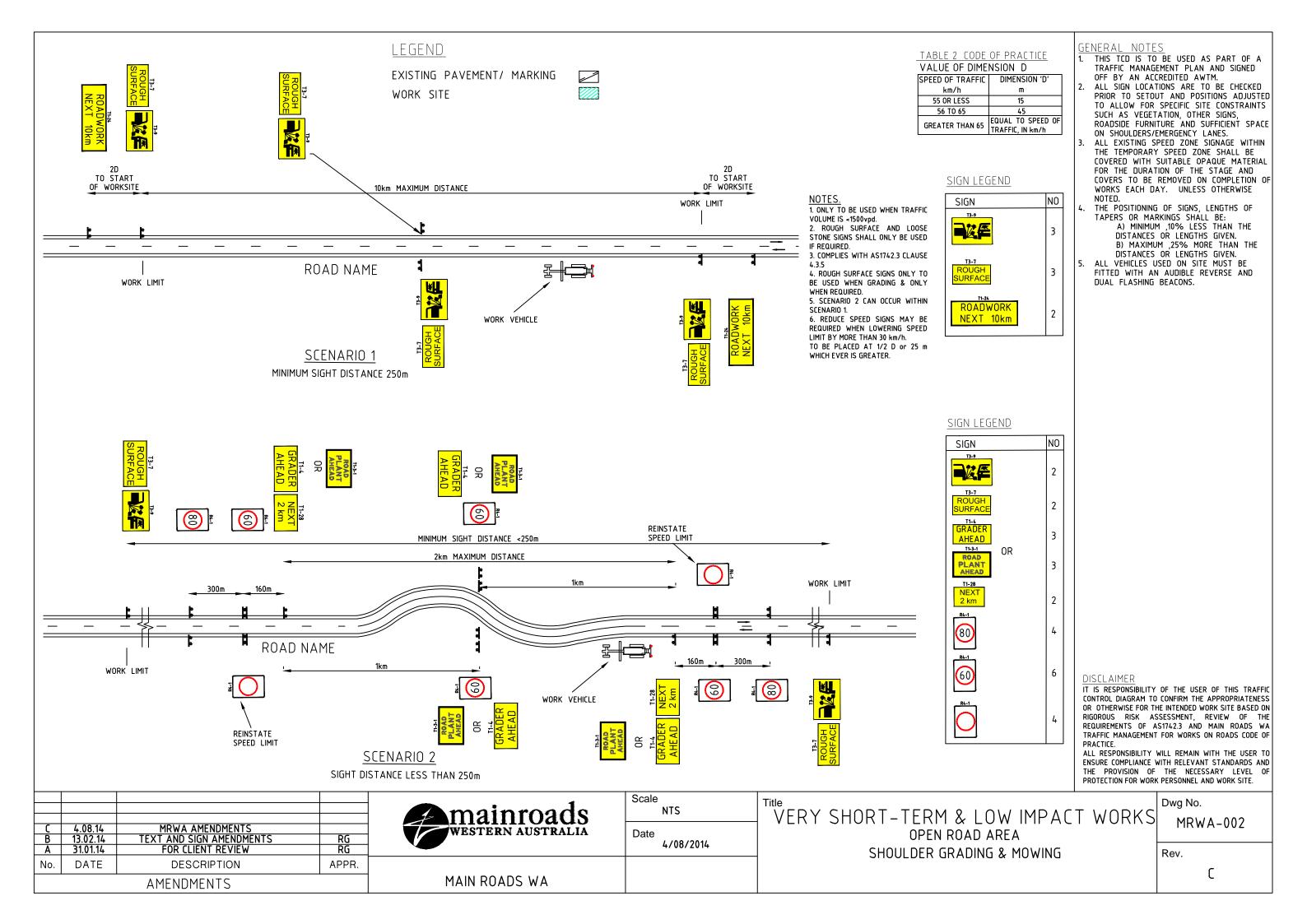
MMS have some advantages over stand-alone signs due to the signs being easier to lift and quicker to deploy. Prior to considering implementation of MMS **a site specific risk assessment** which considers variables affecting their performance such as work types, duration of works, sight distances, wind, road worker exposure, traffic volumes, traffic speeds and vehicles types needs to be undertaken.

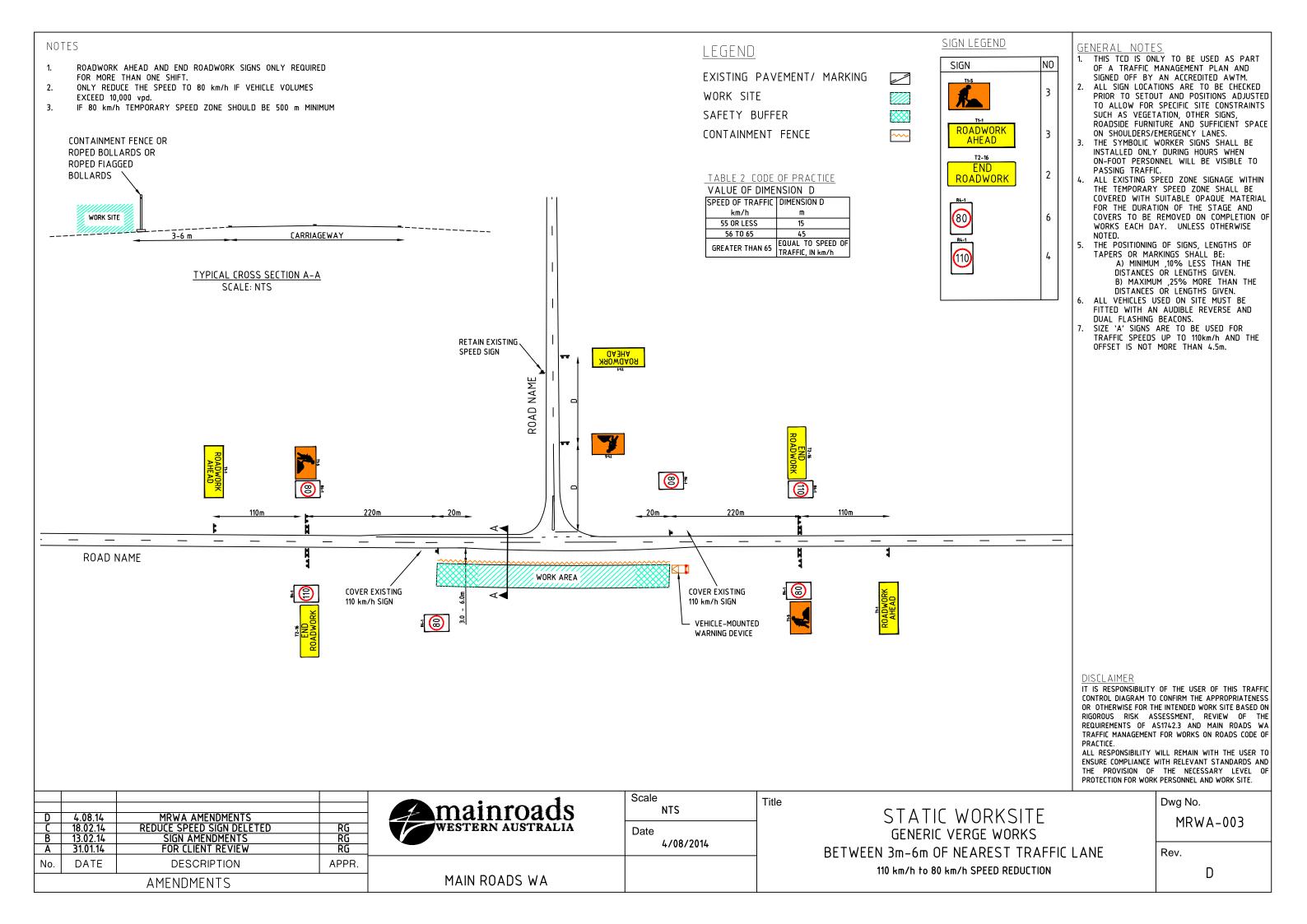
Road asset owners need to make sure that their minor improvement and maintenance TMPs and TGSs are aligned to these generic diagrams for the work scenarios that have been covered.

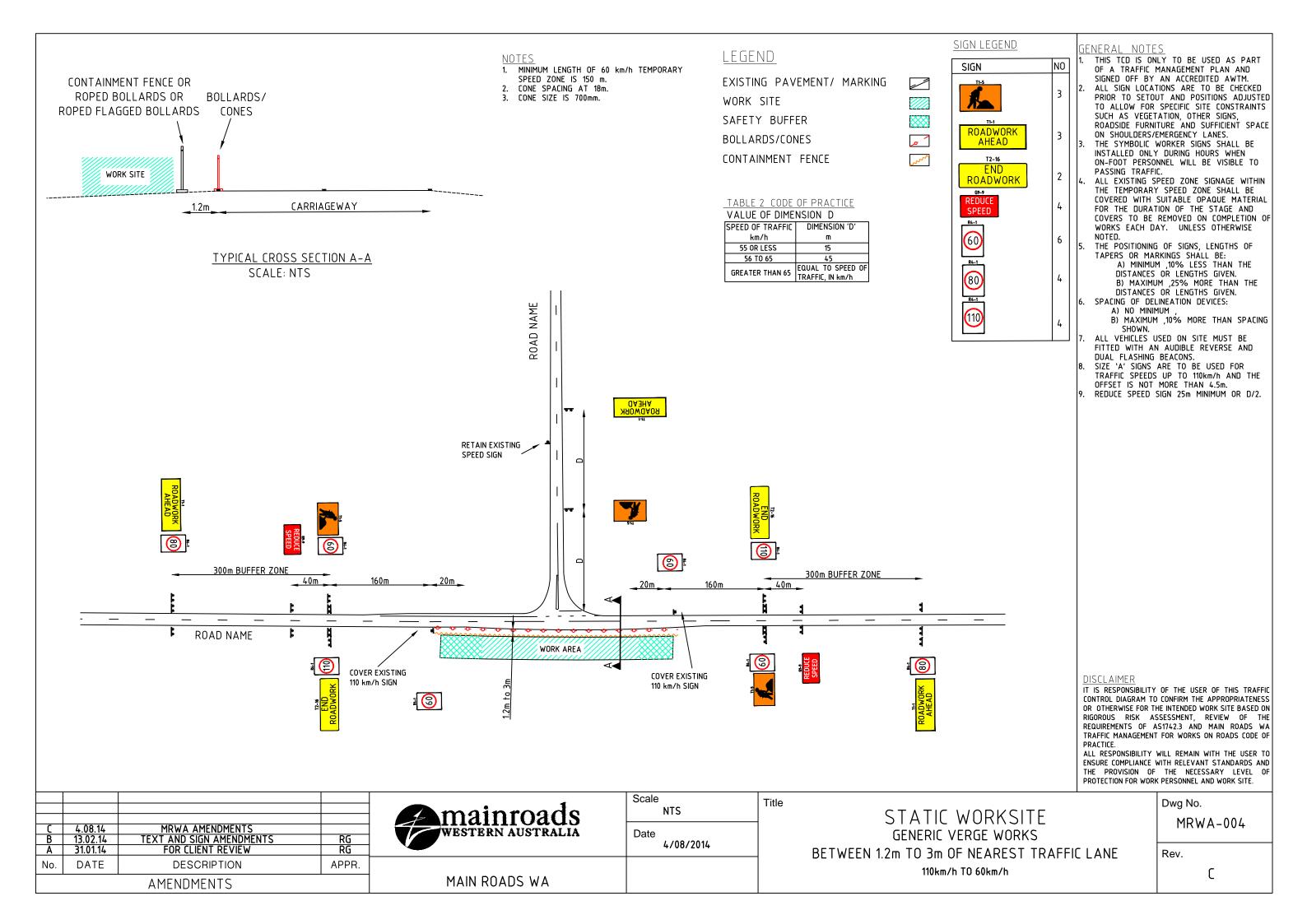
Main Roads WA Generic Traffic Guidance Schemes (AS 1742.3 signs)

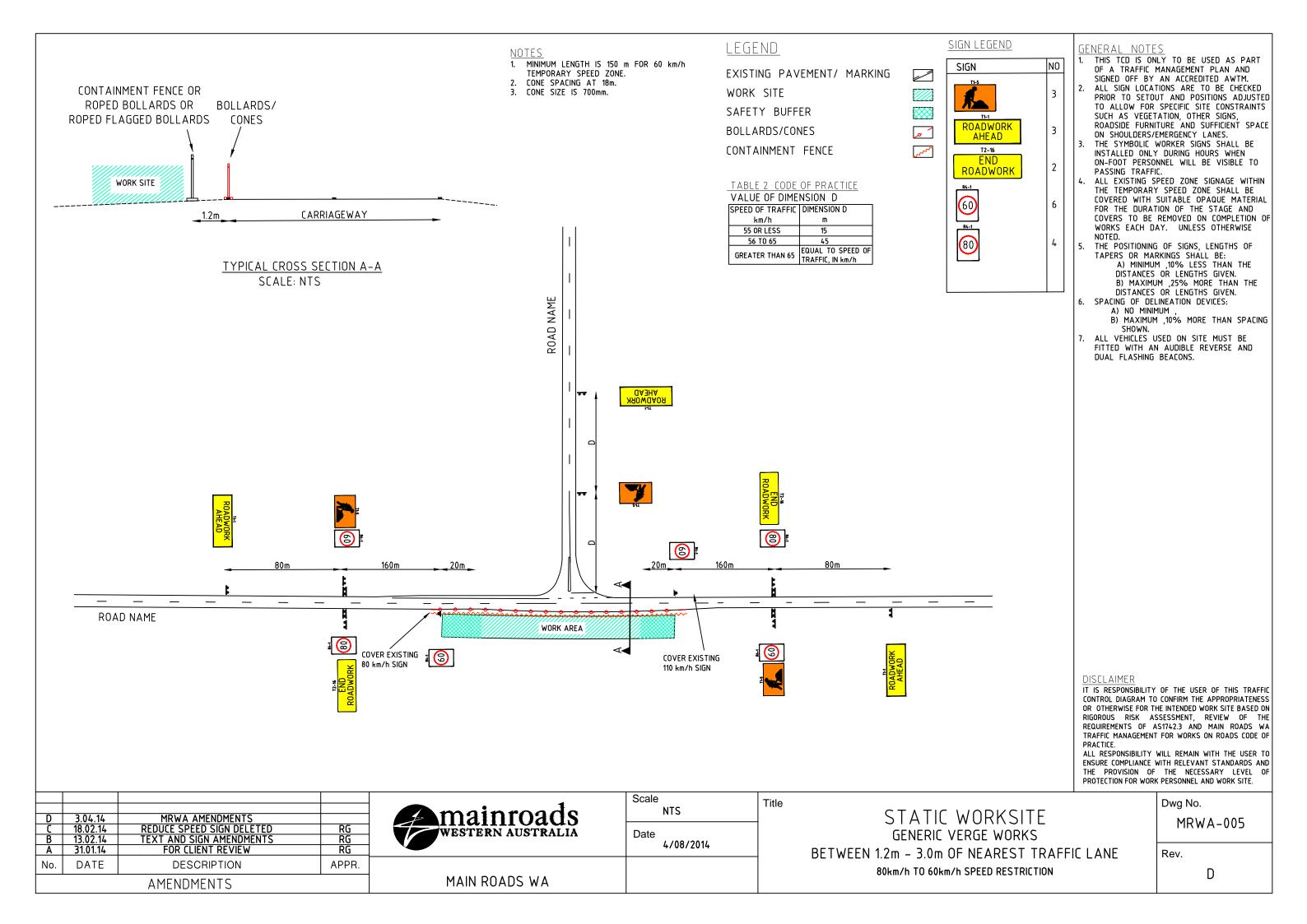
TGS No	Issue Date	Description
001	6/08/2014	Very short term and low impact works: Open road area - frequently changing work area
002	6/08/2014	Very short term and low impact works: Open road area - shoulder grading and mowing
003	6/08/2014	Static worksite: Generic verge works between 3 m to 6m of nearest traffic (110 km/h to 80 km/h)
004	6/08/2014	Static worksite: Generic verge works between 1.2 m to 3 m of nearest traffic (110 km/h to 60 km/h)
005	6/08/2014	Static worksite: Generic verge works between 1.2 m to 3 m of nearest traffic (80 km/h to 60 km/h)
006	6/08/2014	Static worksite: Generic verge works within 1.2 m of nearest traffic (110 km/h to 40 km/h)
007	6/08/2014	Static worksite: Generic verge works within 1.2 m of nearest traffic (80 km/h to 40 km/h)
008	6/08/2014	Static worksite: Generic verge works between 1.2 m to 3 m of nearest traffic (default state limit to 60 km/h)
009	6/08/2014	Static worksite: Generic single lane shuttle operation – works within 1.2 m of nearest traffic (60 km/h to 40 km/h)
010	6/08/2014	Static worksite: Generic single lane shuttle operation – works between 1.2 m to 3 m of nearest traffic (80 km/h to 60 km/h)
011	6/08/2014	Static worksite: Generic single lane shuttle operation – high speed – works between 1.2 m to 3 m of nearest traffic (110 km/h to 60 km/h)
012	6/08/2014	Static worksite: Generic single lane shuttle operation – high speed – works within 1.2 m of nearest traffic (110 km/h to 40 km/h)
013	6/08/2014	Works on a multilane carriageway: Generic single lane closure mid-block – works within 1.2 m of traffic (60km/h to 40 km/h)
014	6/08/2014	Works on a multilane carriageway: Generic single lane closure mid-block – works within 1.2 m of traffic (80km/h to 40 km/h)
015	6/08/2014	Works on a multilane carriageway: Generic single lane closure mid-block – works within 1.2 m of traffic (110km/h to 40 km/h)
016	6/08/2014	Works on a hold line: verge side lane – Generic single lane closure – works with in 1.2 m of traffic and 200 m of a signalized intersection (60 km/h to 40 km/h)
017	6/08/2014	Works on a hold line: median lane – Generic single lane closure – works with in 1.2 m of traffic and 200 m of a signalized intersection (60 km/h to 40 km/h)
018	6/08/2014	Works on minor road intersection: Traffic volumes less than 1500 vpd – works within 1.2 m of traffic (60 km/h to 40 km/h)
019	6/08/2014	Emergency and unplanned works: Short term response in emergency situation
020	6/08/2014	Static worksite: Generic verge works outside of 6 m to nearest traffic
021	6/08/2014	Mobile works – Pavement testing two lane, two way roads
022	6/08/2014	Mobile works – example of ride-on line marking
023	6/08/2014	Mobile works- two-lane, two way road – AS1742.3 – table 4.3- Plant and vehicle positioning
024	6/08/2014	Very short term and low impact works: Open road area – works between gaps in traffic
025	6/08/2014	Very short term and low impact works: Open road area – short term work near traffic

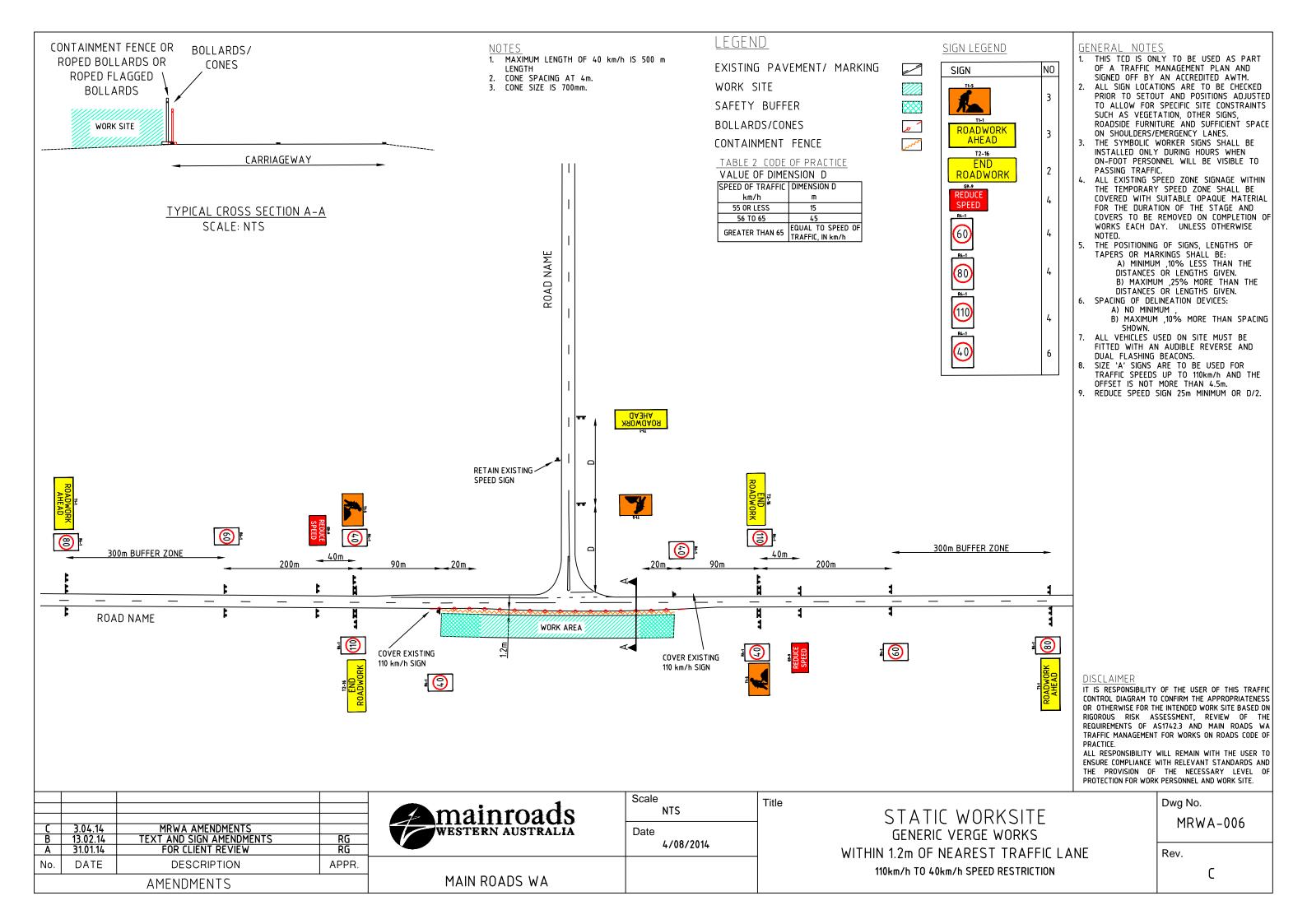
AS1742.3 - 2009 SECTION 4.3 - SHORT TERM LOW IMPACT WORKS - OPEN ROAD GENERAL NOTES LEGEND SIGN LEGEND AREA THIS TCD IS ONLY TO BE USED AS PART OF A TRAFFIC MANAGEMENT PLAN AND FREQUENTLY CHANGING WORK AREA NO SIGNED OFF BY AN ACCREDITED AWTM. FOR ACTIVITIES SUCH AS MINOR MAINTENANCE ON THE PAVEMENT OR SHOULDER, INCLUDING ROAD FURNITURE EXISTING PAVEMENT/ MARKING SIGN MAINTENANCE AND LONGITUDINAL SURVEY WORK AT SUCCESSIVE LOCATIONS LESS THAN 2 KM APART, THIS ALL SIGN LOCATIONS ARE TO BE CHECKED PRIOR TO SETOUT AND POSITIONS ADJUSTED TCD MAY BE APPLIED. THIS TCD SHALL BE SUBJECT TO THE FOLLOWING REQUIREMENTS -WORK SITE 1) A VEHICLE MOUNTED WARNING DEVICE SHALL BE DISPLAYED ON THE WORK VEHICLE, AND SHALL BE SEEN BY TO ALLOW FOR SPECIFIC SITE CONSTRAINTS NEXT 2 km SUCH AS VEGETATION, OTHER SIGNS, APPROACHING ROAD USERS. 2 ROADSIDE FURNITURE AND SUFFICIENT SPACE 2) WORK VEHICLES AND EQUIPMENT ARE PARKED CLEAR OF MOVING TRAFFIC. 3) WORKS CAN BE CONDUCTED IN THE FOLLOWING TWO SCENARIOS: TABLE 2 CODE OF PRACTICE ON SHOULDERS/EMERGENCY LANES. THE SYMBOLIC WORKER SIGNS SHALL BE VALUE OF DIMENSION D A) WORK BETWEEN GAPS IN TRAFFIC INSTALLED ONLY DURING HOURS WHEN SPEED OF TRAFFIC DIMENSION 'D WORK THAT IS OF SUCH SHORT DURATION THAT IT CAN BE CARRIED OUT WITHIN GAPS IN TRAFFIC MAY BE ON-FOOT PERSONNEL WILL BE VISIBLE TO km/h 2 DONE PROVIDED THAT A LOOKOUT PERSON WHO CAN SEE APPROACHING TRAFFIC IN TIME TO WARN PASSING TRAFFIC. 55 OR LESS WORKERS TO VACATE THE ROADWAY BEFORE ITS ARRIVAL, IS POSTED: AND 15 THE POSITIONING OF SIGNS, LENGTHS OF TAPERS OR MARKINGS SHALL BE: 56 TO 65 B) SHORT TERM WORK OFF THE ROADWAY EQUAL TO SPEED OF A) MINIMUM ,10% LESS THAN THE OR GREATER THAN 65 T1-3-1 WORKERS MAY WORK WITHIN 1.2 M OF MOVING TRAFFIC PROVIDED THE ROADWAY AT ANY ONE WORK SITE IS NOT DISTANCES OR LENGTHS GIVEN. TRAFFIC, IN km/h 2 ROAD B) MAXIMUM ,25% MORE THAN THE DISTANCES OR LENGTHS GIVEN. OCCUPIED FOR MORE THAN 5 MINS AND THE CONDITIONS BELOW ARE OBSERVED. THIS MAY BE INCREASED TO PLANT 20 MINS FOR WORKS OUTSIDE 1.2 m OF MOVING TRAFFIC AHEAD 5. ALL VEHICLES USED ON SITE MUST BE SIGHT DISTANCE TO THE VEHICLE-MOUNTED WARNING DEVICE FOR APPROACHING DRIVERS SHALL BE -FITTED WITH AN AUDIBLE REVERSE AND A) GREATER THAN 150 M IN A 60 KM/H OR LOWER SPEED ZONE; OR DUAL FLASHING BEACONS. B) GREATER THAN 250 M ELSEWHERE. A LOOKOUT PERSON SHALL BE POSTED TO WARN WORKERS NEAR THE ROADWAY OF THE APPROACH OF ANY VEHICLES WHOSE SPPED OR SIZE MIGHT CONSTITUTE A SAFETY THREAT. 2km MAXIMUM DISTANCE ROAD NAME 20-40m **SPOTTER** MAINTENANCE VEHICLE WORKER ONLY) OFF ROAD'S SEAL (WORKERS MUST BE ABLE TO VACATE IN TIME) DISCLAIMER IT IS RESPONSIBILITY OF THE USER OF THIS TRAFFIC CONTROL DIAGRAM TO CONFIRM THE APPROPRIATENESS PLANT OR OTHERWISE FOR THE INTENDED WORK SITE BASED ON RIGOROUS RISK ASSESSMENT, REVIEW OF THE REQUIREMENTS OF AS1742.3 AND MAIN ROADS WA TRAFFIC MANAGEMENT FOR WORKS ON ROADS CODE OF PRACTICE. ALL RESPONSIBILITY WILL REMAIN WITH THE USER TO ENSURE COMPLIANCE WITH RELEVANT STANDARDS AND THE PROVISION OF THE NECESSARY LEVEL OF PROTECTION FOR WORK PERSONNEL AND WORK SITE. Scale Dwg No. mainroads NTS "VERY SHORT-TERM & LOW IMPACT WORKS MRWA AMENDMENTS SIGNAGE AMENDED TEXT & SIGN AMENDMENTS FOR CLIENT REVIEW 4.08.14 19.02.14 MRWA-001 WESTERN AUSTRALIA Date OPEN ROAD AREA RG RG 13.02.14 4/08/2014 31.01.14 FREQUENTLY CHANGING WORK AREA Rev. No. DATE APPR. DESCRIPTION D MAIN ROADS WA **AMENDMENTS**

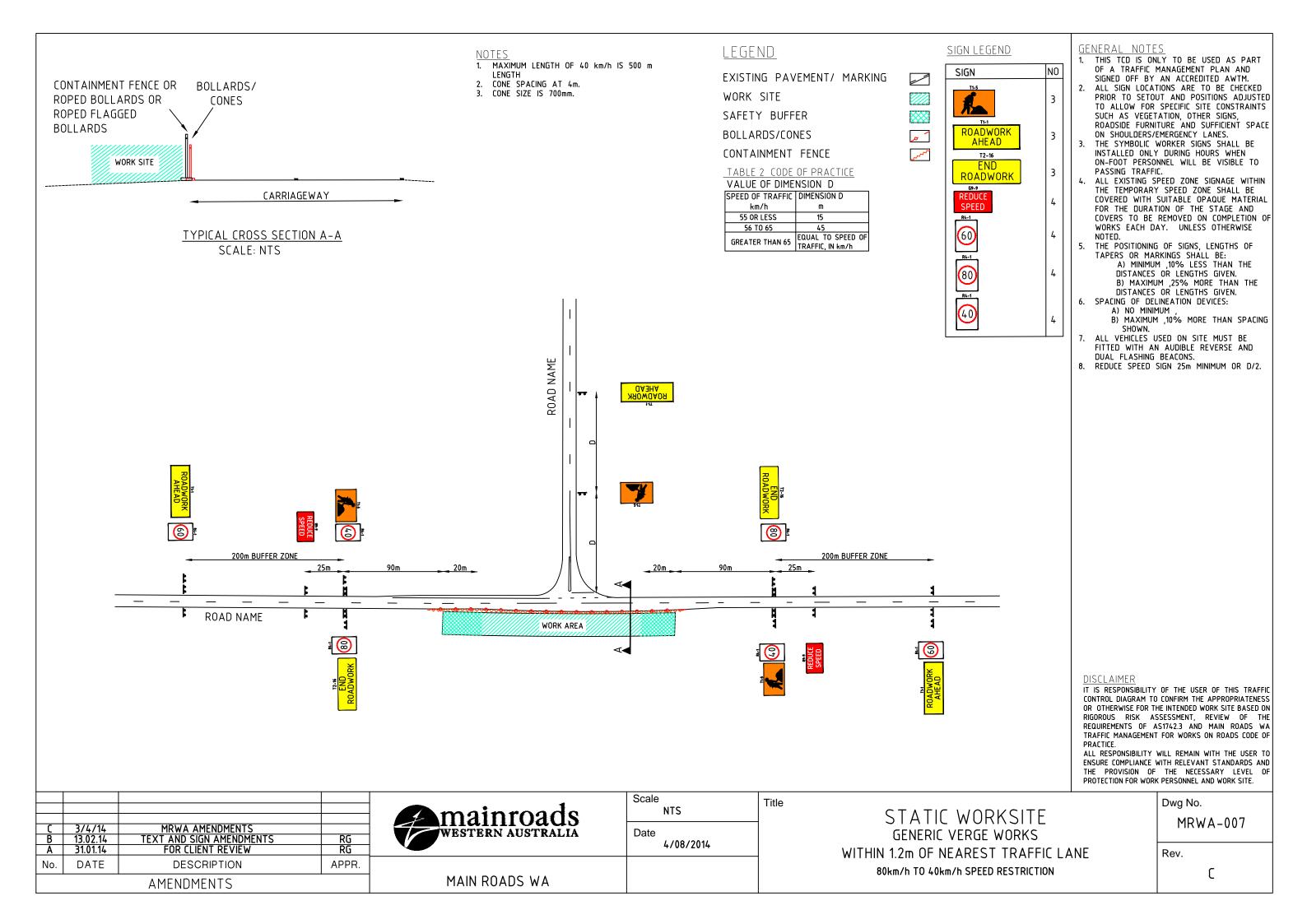


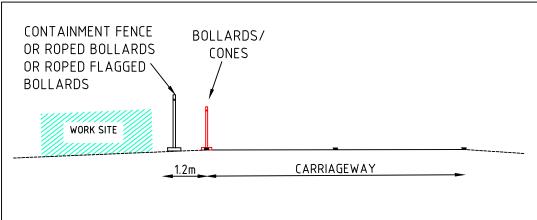












TYPICAL CROSS SECTION A-A
SCALE: NTS

- 1. MINIMUM LENGTH OF 60 km/h IS 150 m LENGTH
- 2. CONE SPACING AT 18m.
- 3. CONE SIZE IS 700 mm.

LEGEND

EXISTING PAVEMENT/ MARKING

WORK SITE

SAFETY BUFFER

BOLLARDS/CONES

CONTAINMENT FENCE

TABLE 2 CODE OF PRACTICE

VALUE OF DIMENSION D

THE OL OI DITIL	
PEED OF TRAFFIC	DIMENSION D
km/h	m
55 OR LESS	15
56 TO 65	45
GREATER THAN 65	EQUAL TO SPEED OF

Title

NTS

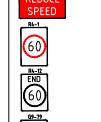
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SIGN LEGEND









GENERAL NOTES

NO

3

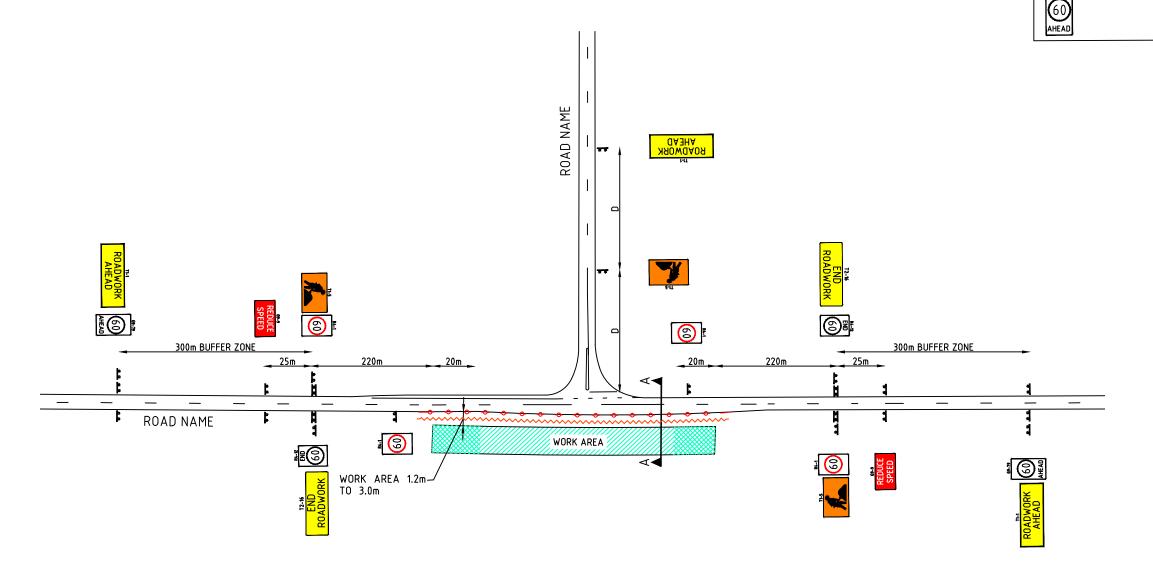
- THIS TCD IS ONLY TO BE USED AS PART OF A TRAFFIC MANAGEMENT PLAN AND SIGNED OFF BY AN ACCREDITED AWTM.
- . ALL SIGN LOCATIONS ARE TO BE CHECKED PRIOR TO SETOUT AND POSITIONS ADJUSTED TO ALLOW FOR SPECIFIC SITE CONSTRAINTS SUCH AS VEGETATION, OTHER SIGNS, ROADSIDE FURNITURE AND SUFFICIENT SPACE ON SHOULDERS/EMERGENCY LANES.
- THE SYMBOLIC WORKER SIGNS SHALL BE INSTALLED ONLY DURING HOURS WHEN ON-FOOT PERSONNEL WILL BE VISIBLE TO PASSING TRAFFIC.
- 4. ALL EXISTING SPEED ZONE SIGNAGE WITHIN THE TEMPORARY SPEED ZONE SHALL BE COVERED WITH SUITABLE OPAQUE MATERIAL FOR THE DURATION OF THE STAGE AND COVERS TO BE REMOVED ON COMPLETION OF WORKS EACH DAY. UNLESS OTHERWISE NOTED.
- NOTED.

 THE POSITIONING OF SIGNS, LENGTHS OF TAPERS OR MARKINGS SHALL BE:

 A) MINIMUM ,10% LESS THAN THE DISTANCES OR LENGTHS GIVEN.

 B) MAXIMUM ,25% MORE THAN THE DISTANCES OR LENGTHS GIVEN.
- 6. SPACING OF DELINEATION DEVICES:

 A) NO MINIMUM
 - B) MAXIMUM ,10% MORE THAN SPACING SHOWN.
- ALL VEHICLES USED ON SITE MUST BE FITTED WITH AN AUDIBLE REVERSE AND DUAL FLASHING BEACONS.
- 8. REDUCE SPEED SIGN 25m MINIMUM OR D/2.



DISCLAIMER

IT IS RESPONSIBILITY OF THE USER OF THIS TRAFFIC CONTROL DIAGRAM TO CONFIRM THE APPROPRIATENESS OR OTHERWISE FOR THE INTENDED WORK SITE BASED ON RIGOROUS RISK ASSESSMENT, REVIEW OF THE REQUIREMENTS OF AS1742.3 AND MAIN ROADS WA TRAFFIC MANAGEMENT FOR WORKS ON ROADS CODE OF PRACTICE.

ALL RESPONSIBILITY WILL REMAIN WITH THE USER TO ENSURE COMPLIANCE WITH RELEVANT STANDARDS AND THE PROVISION OF THE NECESSARY LEVEL OF PROTECTION FOR WORK PERSONNEL AND WORK SITE.

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C	4.08.14	MRWA AMENDMENTS	
В	13.02.14	TEXT AND SIGN AMENDMENTS	RG
Α	31.01.14	FOR CLIENT REVIEW	RG
No.	DATE	DESCRIPTION	APPR.
		AMENDMENTS	

mainroads	Scale
WESTERN AUSTRALIA	Date
MAIN ROADS WA	

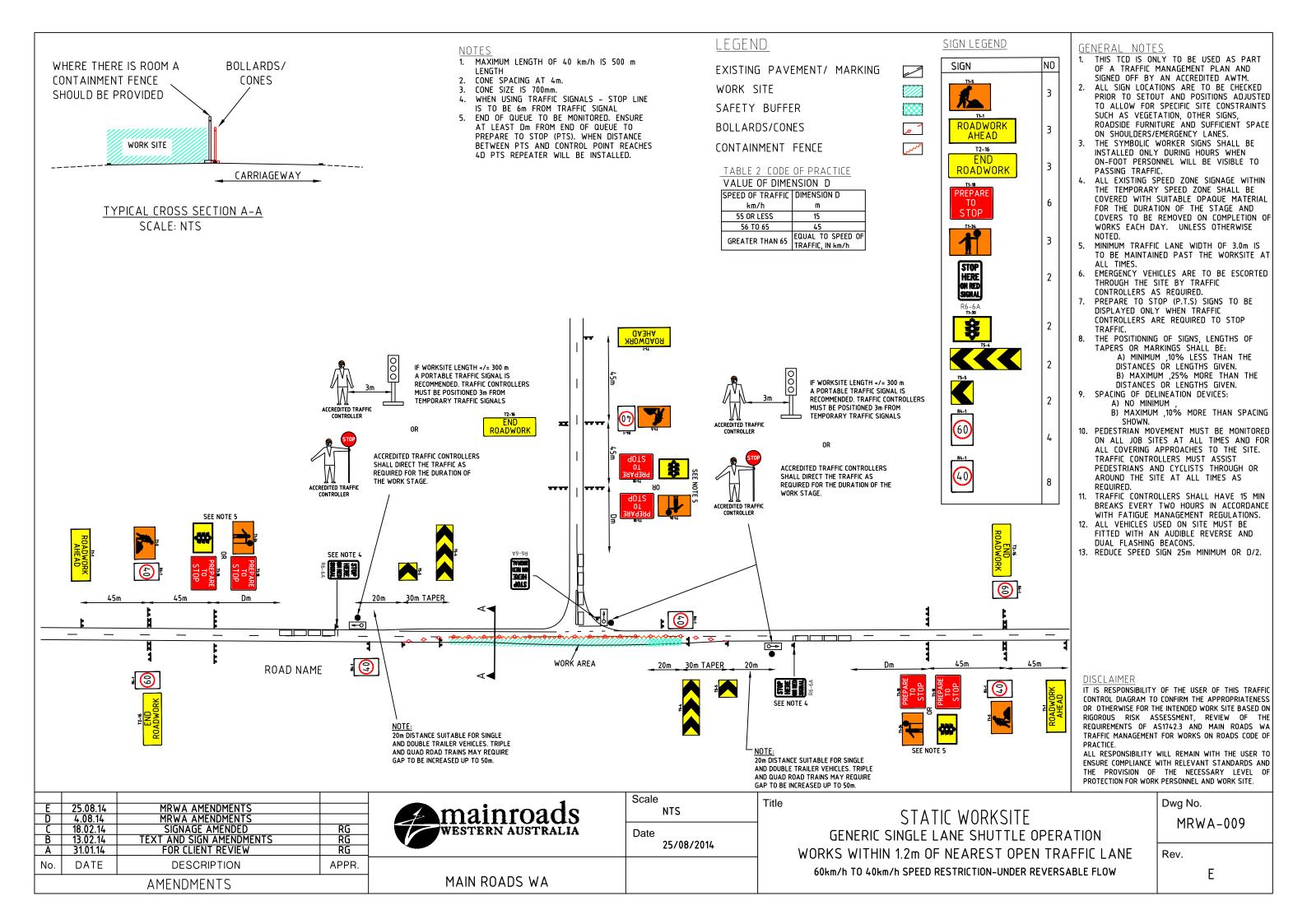
STATIC WORKSITE

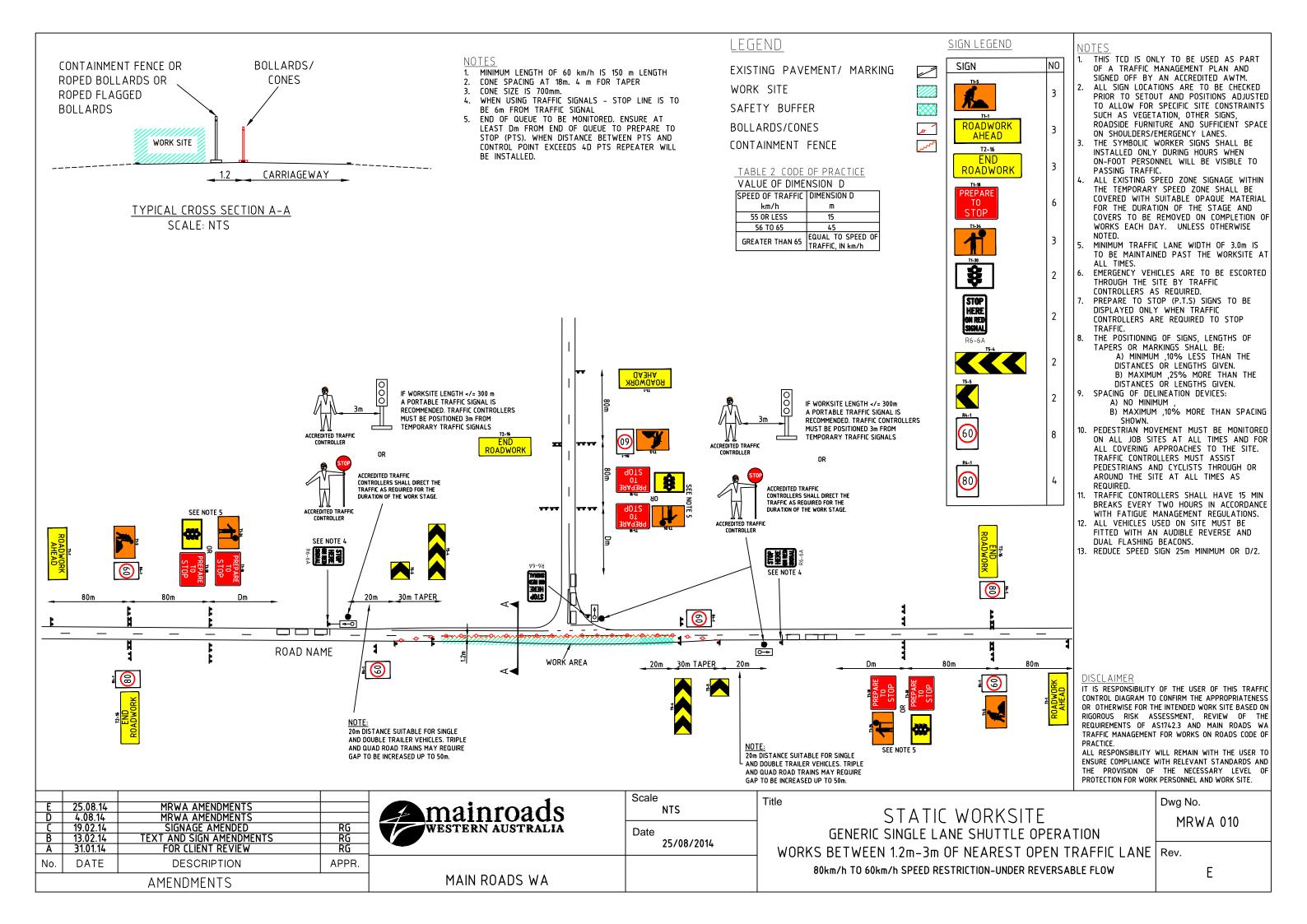
GENERIC VERGE WORKS

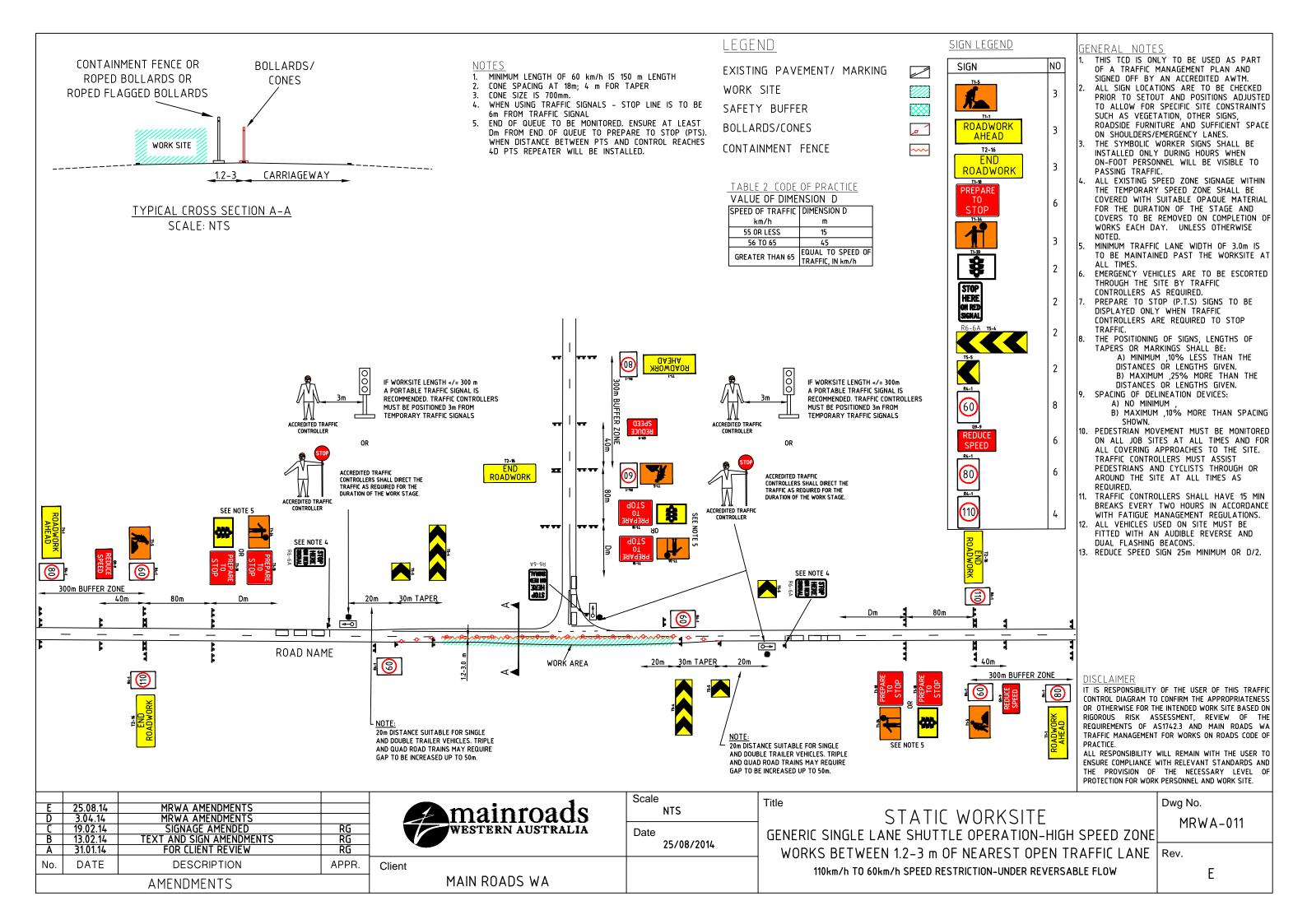
BETWEEN 1.2m TO 3.0m OF NEAREST TRAFFIC LANE

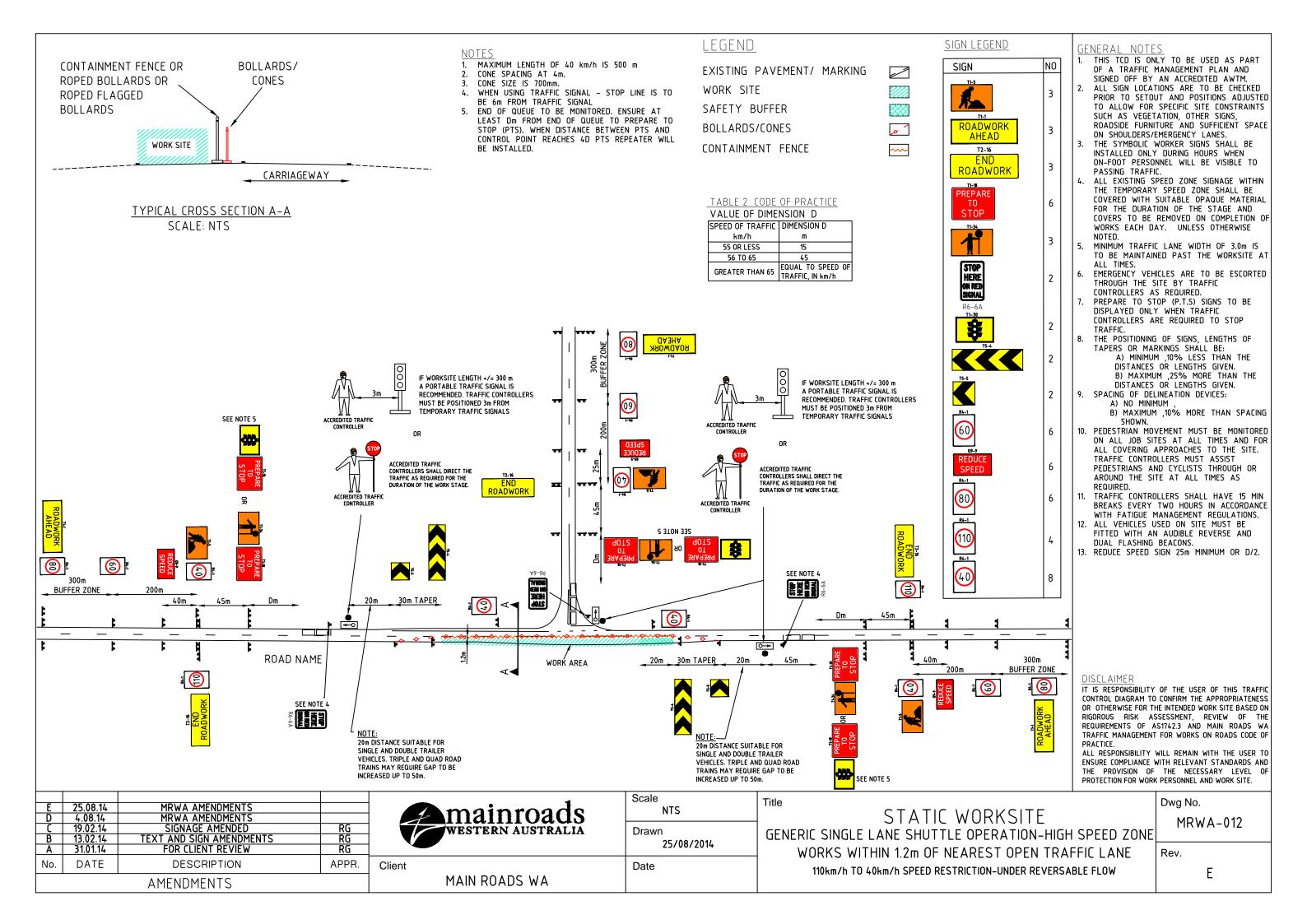
DEFAULT STATE SPEED LIMIT TO 60 km/h

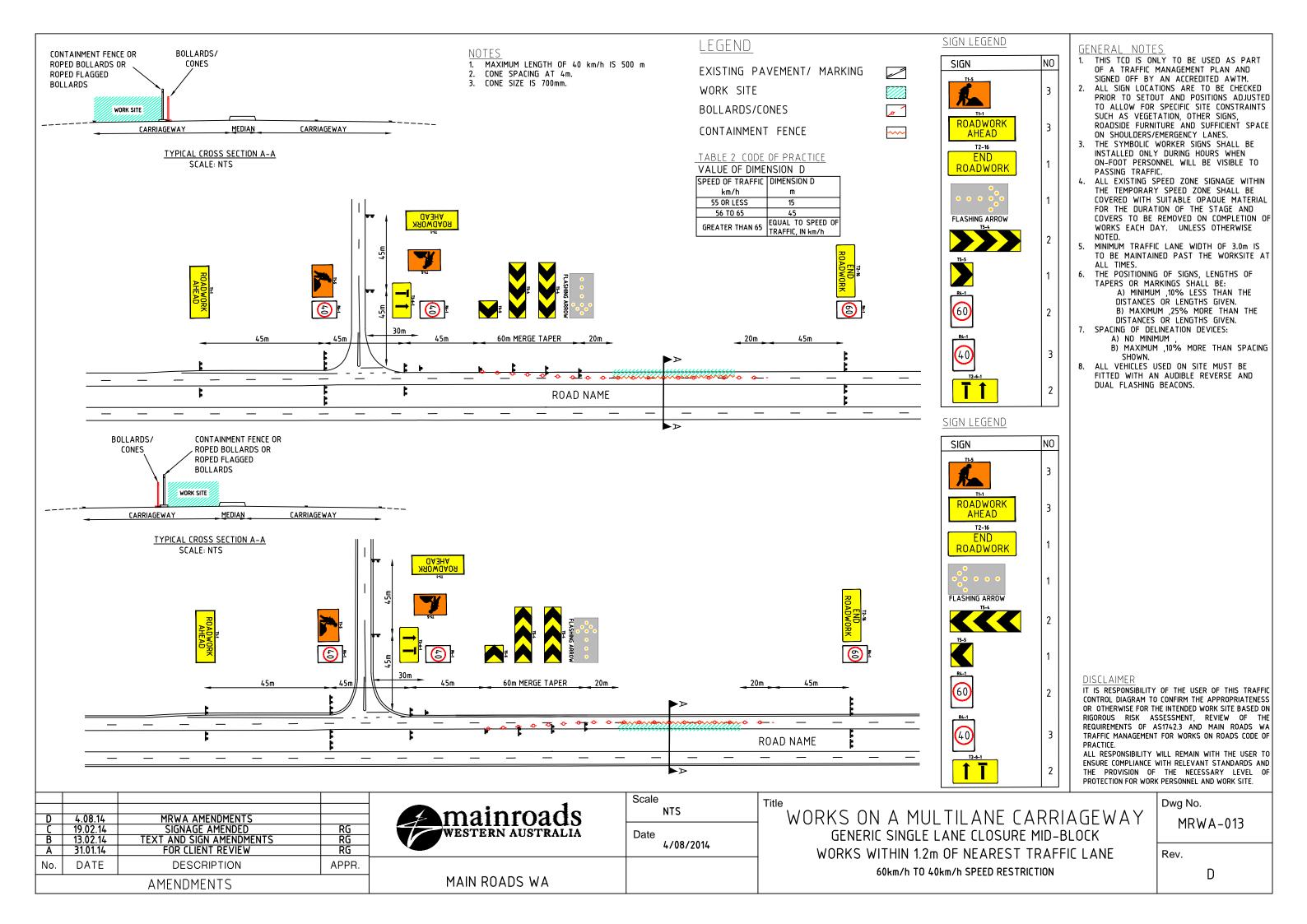
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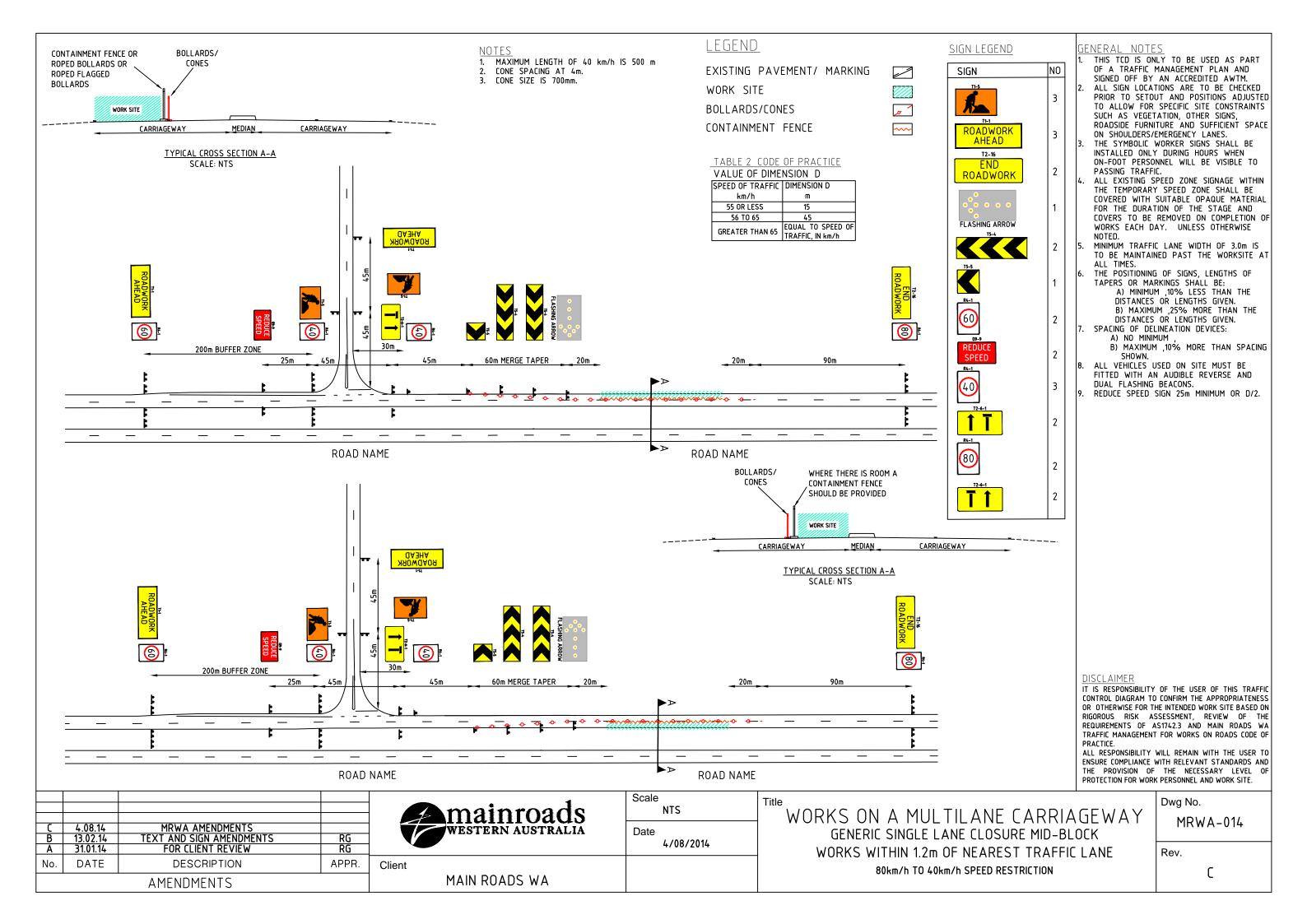


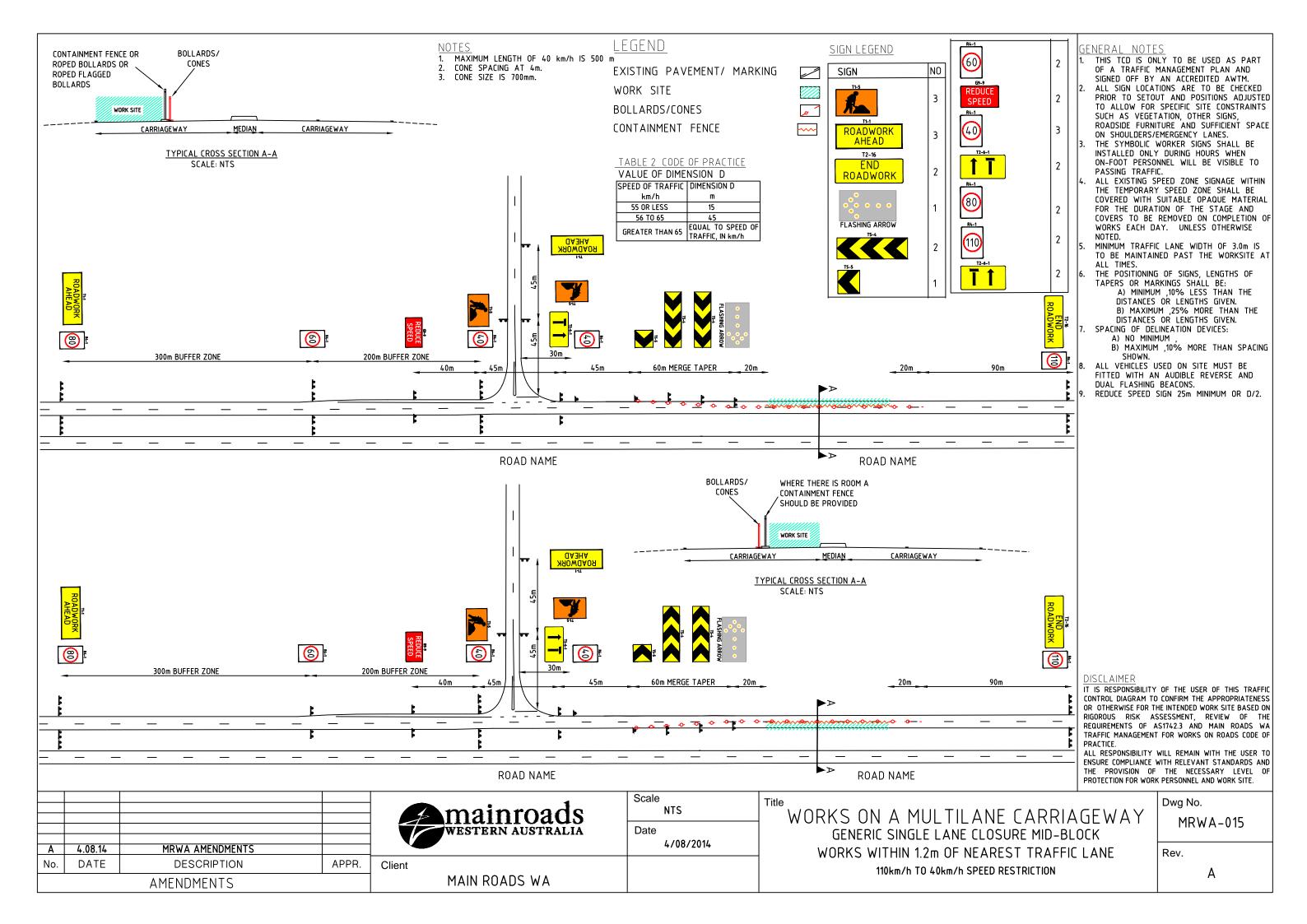


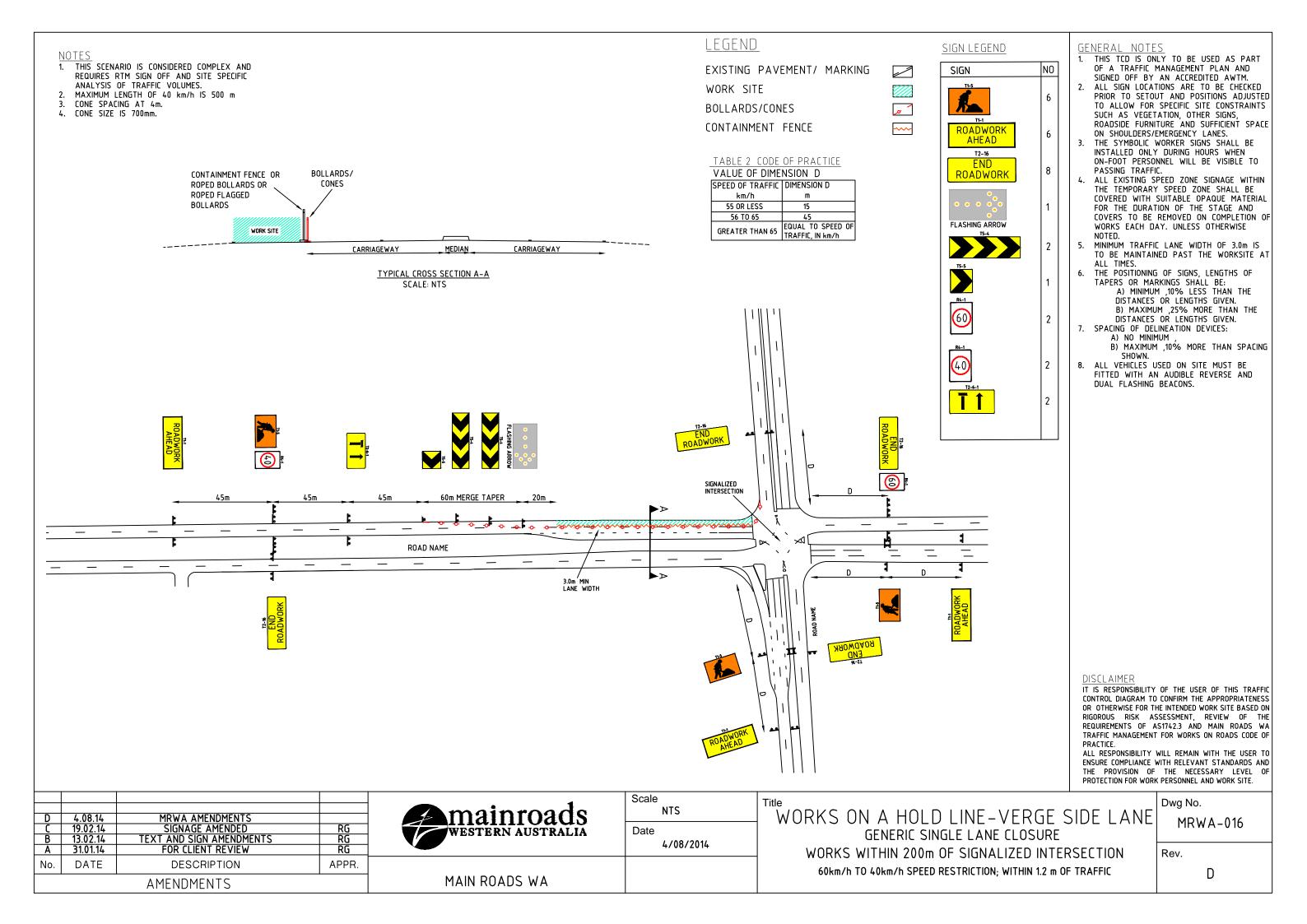


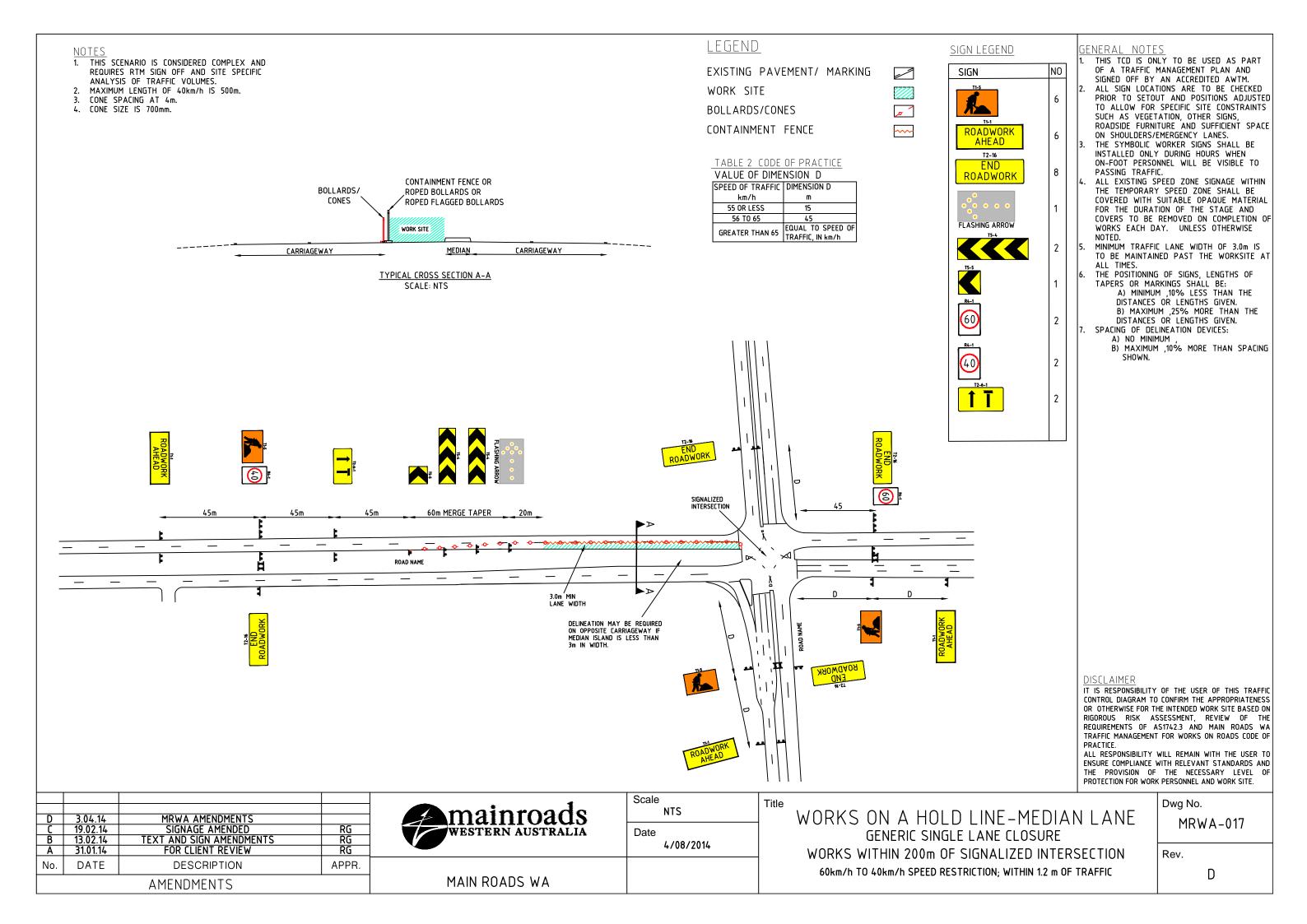


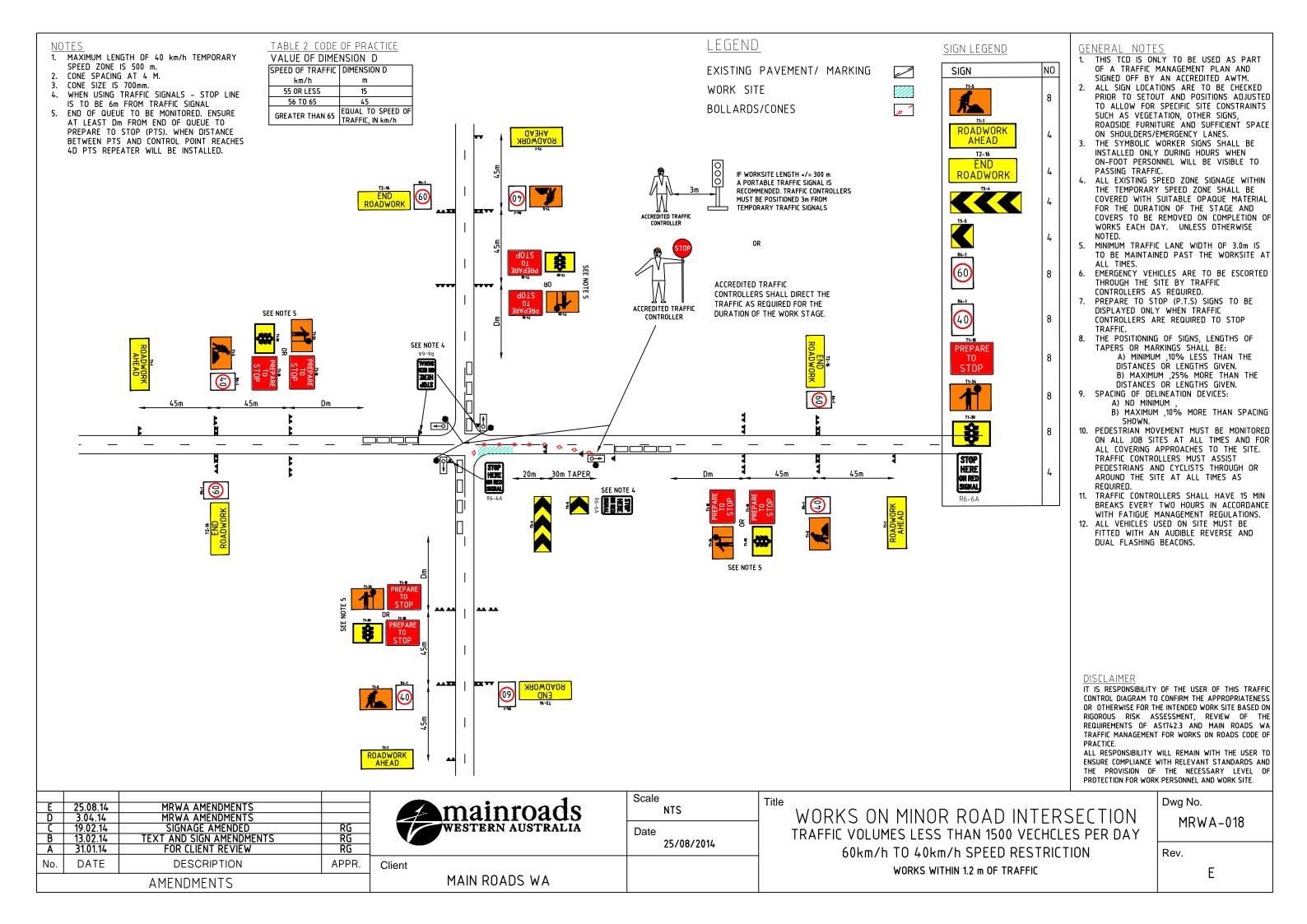












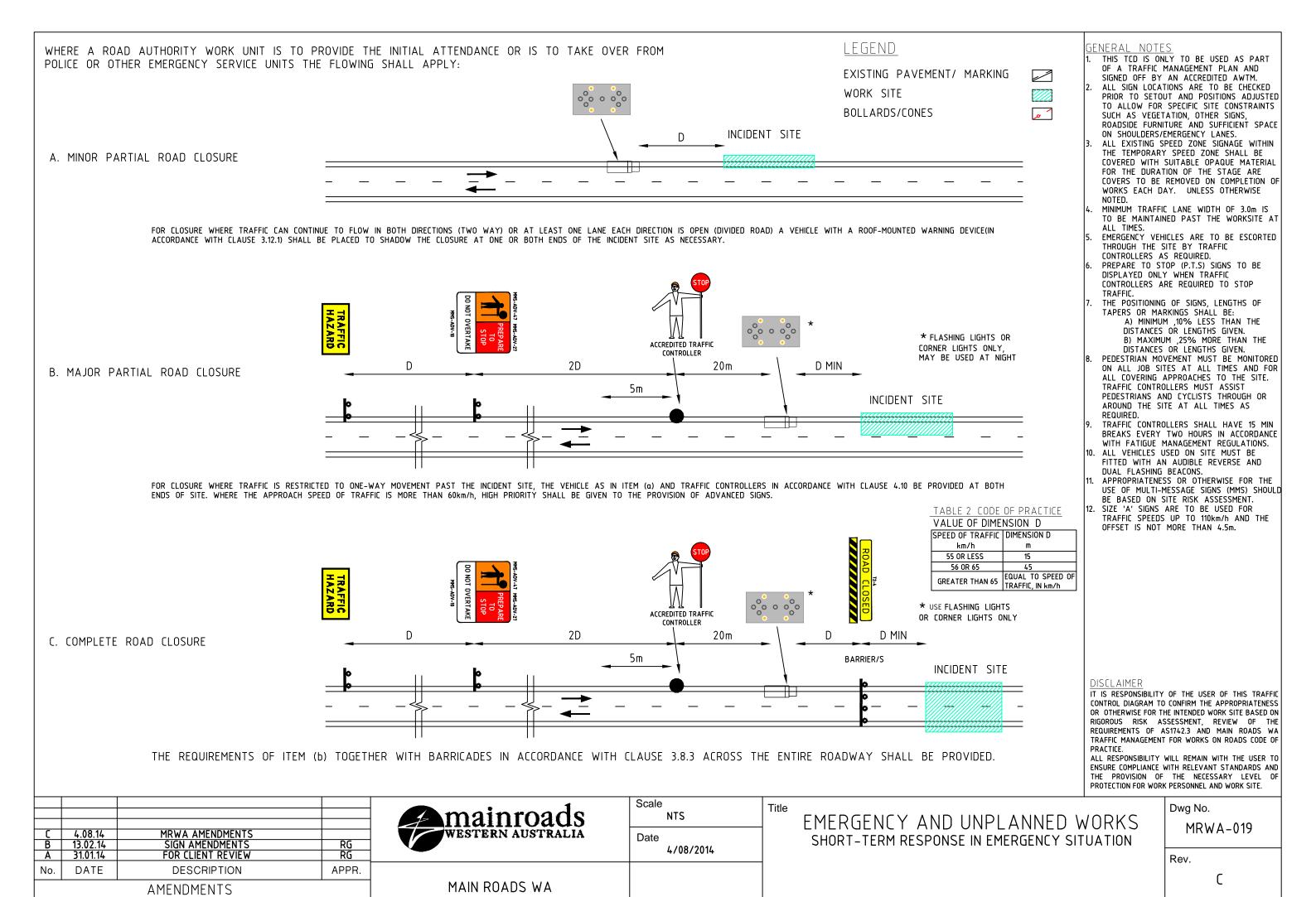


TABLE 2 CODE OF PRACTICE

VALUE OF DIMENSION D

VALUE OF DITIE	
SPEED OF TRAFFIC	DIMENSION 'D'
km/h	m
55 OR LESS	15
56 TO 65	45
GREATER THAN 65	EQUAL TO SPEED O
UKLATEK THAN 65	TRAFFIC, IN km/h

LEGEND

BOLLARDS/CONES

EXISTING PAVEMENT/ MARKING WORK SITE SAFETY BUFFER





GENERAL NOTES

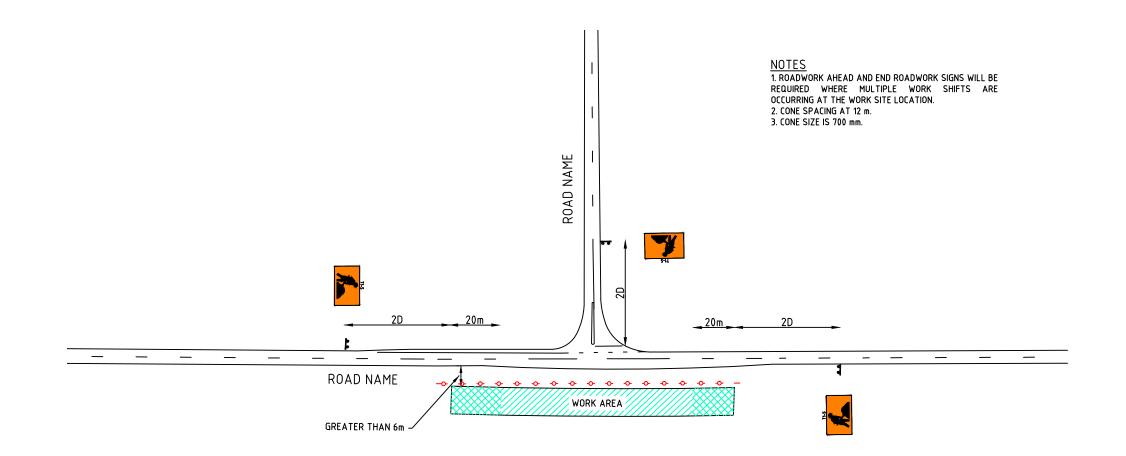
- 1. THIS TCD IS ONLY TO BE USED AS PART OF A TRAFFIC MANAGEMENT PLAN AND SIGNED OFF BY AN ACCREDITED AWTM.
- ALL SIGN LOCATIONS ARE TO BE CHECKED PRIOR TO SETOUT AND POSITIONS ADJUSTED TO ALLOW FOR SPECIFIC SITE CONSTRAINTS SUCH AS VEGETATION, OTHER SIGNS, ROADSIDE FURNITURE AND SUFFICIENT SPACE ON SHOULDERS/EMERGENCY LANES.
- THE SYMBOLIC WORKER SIGNS SHALL BE INSTALLED ONLY DURING HOURS WHEN ON-FOOT PERSONNEL WILL BE VISIBLE TO PASSING TRAFFIC.
- PASSING TRAFFIC.

 4. THE POSITIONING OF SIGNS, LENGTHS OF TAPERS OR MARKINGS SHALL BE:

 A) MINIMUM, 10% LESS THAN THE DISTANCES OR LENGTHS GIVEN.

 B) MAXIMUM, 25% MORE THAN THE DISTANCES OR LENGTHS GIVEN.

 5. ALL VEHICLES USED ON SITE MUST BE FITTED WITH AN AUDIBLE REVERSE AND DUAL FLASHING BEACONS.



<u>DISCLA</u>IMER

IT IS RESPONSIBILITY OF THE USER OF THIS TRAFFIC CONTROL DIAGRAM TO CONFIRM THE APPROPRIATENESS OR OTHERWISE FOR THE INTENDED WORK SITE BASED ON RIGOROUS RISK ASSESSMENT, REVIEW OF THE REQUIREMENTS OF AS1742.3 AND MAIN ROADS WA TRAFFIC MANAGEMENT FOR WORKS ON ROADS CODE OF PRACTICE.

ALL RESPONSIBILITY WILL REMAIN WITH THE USER TO ENSURE COMPLIANCE WITH RELEVANT STANDARDS AND THE PROVISION OF THE NECESSARY LEVEL OF PROTECTION FOR WORK PERSONNEL AND WORK SITE.

С	4.08.14	MRWA AMENDMENTS	
В	13.02.14	TEXT AND SIGN AMENDMENTS	RG
Α	31.01.14	FOR CLIENT REVIEW	RG
No.	DATE	DESCRIPTION	APPR.
		AMENDMENTS	

main roads WESTERN AUSTRALIA

MAIN ROADS WA

Scale Title NTS Date 4/08/2014

STATIC WORKSITE GENERIC VERGE WORKS GREATER THAN 6m OFF NEAREST TRAFFIC LANE

Dwg No.
MRWA-020

Rev.

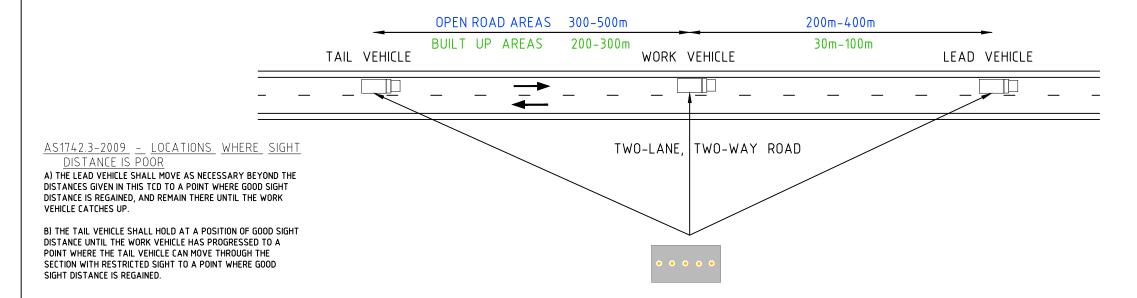
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AS1742.3 - 2009

CLAUSE 4.6

MOBILE WORKS: PAVEMENT TESTING - TWO-LANE, TWO WAY ROAD

NOTE: ALL SIGNS AND WARNING DEVICES SHALL BE DISPLAYED ON MOVING VEHICLES IN THE CONVOY.



AS PER AUSTRALIAN STANDARD 1742.3 OF 2009 CLAUSE 4.6.3(e)(iii) WHEN WORKING WITHIN A LANE, AND FOLLOWING TRAFFIC CANNOT BE SAFELY DIRECTED TO PASS TO THE LEFT OF THE VEHICLE, IT MAY BE PERMITTED TO OVERTAKE PARTIALLY INTO THE PATH OF ONCOMING TRAFFIC. IN THIS CASE 'PARTIALLY' MEANS THAT THERE IS SUFFICIENT REMAINING WIDTH FOR AN OVERTAKING VEHICLE TO PASS AN ONCOMING VEHICLE IN AN EMERGENCY. ONLY THE BAR OR FOUR CORNER LIGHTS OF THE ILLUMINATED FLASHING ARROW SHALL BE DISPLAYED IN THIS FASE.

NOTE:

- TRUCK MOUNTED ATTENUATOR SHOULD BE USED WHEN WORKERS ARE ON FOOT IN THE TRAFFIC LANE.
- 2. A SHADOW VEHICLE IS REQUIRED WHEN WORKS INVOLVE WORKERS ON FOOT REGARDLESS OF LOCATION OR SPEED ENVIRONMENT.
- 3. TRAFFIC CONTROLLERS SHALL NOT DIRECT TRAFFIC FROM A MOVING VEHICLE DURING MOBILE WORKS. IF A SITUATION NECESSITATES THE USE OF A TRAFFIC CONTROLLER, A STATIC WORK POSITION SHALL BE ESTABLISHED.
- 4. ALL VEHICLE MOUNTED WARNING SIGNS AND DEVICES SHALL BE REMOVED FROM DISPLAY OR DEACTIVATED WHEN THE VEHICLE IS NO LONGER WORKING OR BECOMES PART OF THE NORMAL TRAFFIC STREAM.

MRWA CoP

MOBILE WORKS - MOBILE SPEEDING
THE ROAD TRAFFIC CODE NOW HAS PROVISIONS FOR MOBILE SPEED LIMITS.

A RISK MANAGEMENT APPROACH TO THE SAFETY OF WORKERS ON FOOT OR USING SMALL ITEMS OF PLANT SHALL BE USED IN THE PLANNING OF THE MOBILE WORKS. WHERE IT IS DETERMINED THAT THERE IS NO ALTERNATIVE TO MOBILE SPEED ZONING THE USE OF REGULATORY SPEED SIGNS WITH BLACK LETTERS INSIDE OF A RED CIRCLE IS PERMITTED.

GENERAL NOTES

- 1. THIS TCD IS ONLY TO BE USED AS PART OF A TRAFFIC MANAGEMENT PLAN AND SIGNED OFF BY AN ACCREDITED AWTM.
- 2. ALL VEHICLES USED ON SITE MUST BE FITTED WITH DUAL FLASHING BEACONS AND VEHICLE MOUNTED ARROW BOARD.
- ALL SIGNS USED TO IN MOBILE CONVOYS SHALL BE CARRIED ON VEHICLES OR PLANT.

DISCLAIMER

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AMENDMENTS			

mainroads WESTERN AUSTRALIA

MAIN ROADS WA

Scale NTS

Date 4/08/2014

Title

MOBILE WORKS
TWO-LANE, TWO-WAY ROADS

Dwg No.

MRWA-021

Rev.

AS 1742.3.2009: FIGURE 4.4 EXAMPLES OF MOBILE WORKS PROTECTION- RIDE-ON LINE MARKING (OPEN ROAD ENVIRONMENT)

LINE MAKKING

LINE MARKING

200 - 400 m

LINE MARKING

INF MARKING

300 - 500 m

LINE MARKING

LINE MARKING

LEAD

SHOULDER

- STRADDLES LINE IF IT IS THE STRADDLE TYPE

MARKING

MACHINE

MAY STRADDLE

PRACTICABLE

TAII

VEHICLE

SEPARATION LINE IF

VEHICLE

AS1742.3-2009 - MOBILE WORKS

THIS IS AN EXAMPLE OF MOBILE WORKS TAKEN FROM THE AS 1742.3 - 2009 AND IS NOT SITE SPECIFIC OR APPROPRIATE IN MANY CASES.

IT IS VITAL A RISK ASSESSMENT BE MADE OF THE PROPOSED ADOPTION OF THESE TREATMENTS TAKING PARTICULAR ACCOUNT OF FACTORS SUCH AS ROAD ENVIRONMENT, TRAFFIC VOLUME AND SPEED, ROAD GEOMETRY AND WIDTH, AND THE GENERAL BEHAVIOUR OF ROAD USERS.

REFERENCE TO CLAUSE 4.6, MOBILE WORKS, OF AS 1742.3 – 2009 WILL BE REQUIRED.

ILLUMINATED FLASHING ARROW SIGN:

REQUIREMENTS FOR THE FLASHING OF DIFFERENT PATTERNS OF THE LIGHTS ARE AS FOLLOWS;

- I) WHEN TRAFFIC IS EXPECTED TO PASS THE SIGN ON A PARTICULAR SIDE AND CAN DO SO IN SAFETY, I.E. IT IS NOT REQUIRED TO SEEK A GAP IN ONCOMING TRAFFIC, THE BAR OF THE ARROW AND THE BARB DIRECTING TRAFFIC TO THAT SIDE SHALL BE FLASHED.
- II) WHEN THE SIGN IS USED TO GIVE A GENERAL WARNING OF WORKS ACTIVITY AHEAD INCLUDING MOBILE WORKS, BUT EITHER SIGN IS LOCATED CLEAR OF THE TRAFFIC PATH OR THE DISPLAY OF AN ARROW WOULD NOT BE APPROPRIATE FOR SOME OTHER REASON, EITHER THE BAR OF THE ARROW ONLY OR THE FOUR CORNER LIGHTS AT THE EXTREMITIES OF THE BARBS SHALL BE FLASHED. IN THE LATTER CASE DIAGONAL PAIRS SHOULD BE FLASHED ALTERNATELY

TAIL VEHICLE:

IN POOR SIGHT DISTANCE THE TAIL VEHICLE SHALL HOLD A POSITION OF GOOD SIGHT DISTANCE UNTIL THE WORK VEHICLE HAS PROGRESSED TO A POINT WHERE THE TAIL VEHICLE CAN MOVE THROUGH THE SECTION WITH RESTRICTED SIGHT TO A POINT WHERE GOOD SIGHT DISTANCE IS REGAINED. IT IS VITAL THE TAIL VEHICLE MONITORS APPROACHING TRAFFIC AND RESPONDS APPROPRIATELY TO RISKS.

LEAD VEHICLE:

IN POOR SIGHT DISTANCE THE LEAD VEHICLE SHALL MOVE AS NECESSARY BEYOND THE DISTANCES GIVEN TO A POINT WHERE GOOD SIGHT DISTANCE IS REGAINED, AND REMAIN THERE UNTIL THE WORK VEHICLE CATCHES UP. IT IS VITAL THE LEAD VEHICLE MONITORS APPROACHING TRAFFIC AND RESPONDS APPROPRIATELY TO RISKS.

WORK VEHICLE:

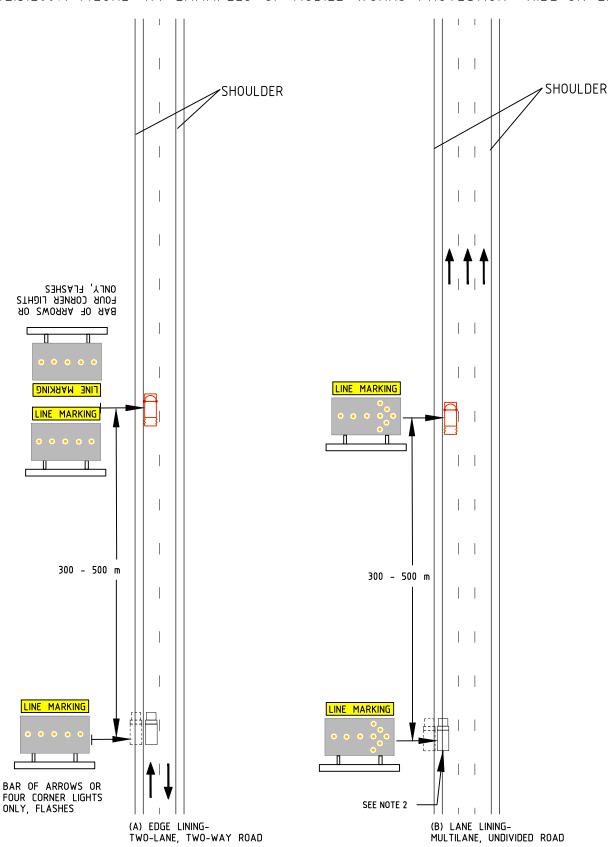
THE WORK VEHICLE REQUIRES A TMA, AS THE OPERATORS ARE MORE AT RISK FROM BEING HIT AS THEY MAY BE DISTRACTED FROM MONITORING TRAFFIC AND SIGHT DISTANCE DUE TO THE WORK TASK, HOWEVER IT IS IMPORTANT THE TAIL AND LEAD VEHICLES COMMUNICATE WITH THE WORK VEHICLE AND THE WORK VEHICLE OPERATORS ARE AWARE OF THE RISKS.

TMA'S

TMA'S HAVE BEEN USED ON THE WORK VEHICLE AS IT MAY BE MOST AT RISK DUE TO THEM BEING THE LEAST AWARE OF THE TRAFFIC AND SIGHT DISTANCES, HOWEVER IT MAY BE DETERMINED OTHER VEHICLES REQUIRE TMA'S BASED ON A SITE SPECIFIC RISK ASSESSMENT.

COMMUNICATION:

COMMUNICATION OF ON-SITE RISKS, SUCH AS SPEEDING ROAD
USERS, BETWEEN ALL VEHICLES IS VITAL TO ENSURE SAFETY OF
ALL PERSONNEL AND AN APPROPRIATE RESPONSE HAS BEEN
POUR CORNER LIGHTS



GENERAL NOTES

- THIS TCD IS ONLY TO BE USED AS PART OF A TRAFFIC MANAGEMENT PLAN AND SIGNED OFF BY AN ACCREDITED AWTM.
- 2. ALL VEHICLES USED ON SITE MUST BE FITTED WITH DUAL FLASHING BEACONS AND VEHICLE MOUNTED ARROW BOARD.
- FOR WORKS ON FREEWAY AN ADDITIONAL TAIL VEHICLE WILL BE REQUIRED. THIS MAY ALSO BE DETERMINED ON OTHER ROADS WITH HIGHER SPEEDS AND/OR VOLUME.
- 4. ALL SIGNS USED TO IN MOBILE CONVOYS SHALL BE CARRIED ON VEHICLES OR PLANT.

DISCLAIMER

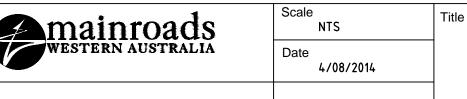
IT IS RESPONSIBILITY OF THE USER OF THIS TRAFFIC CONTROL DIAGRAM TO CONFIRM THE APPROPRIATENESS OR OTHERWISE FOR THE INTENDED WORK SITE BASED ON RIGOROUS RISK ASSESSMENT, REVIEW OF THE REQUIREMENTS OF AS1742.3 AND MAIN ROADS WA TRAFFIC MANAGEMENT FOR WORKS ON ROADS CODE OF PRACTICE.

ALL RESPONSIBILITY WILL REMAIN WITH THE USER TO ENSURE COMPLIANCE WITH RELEVANT STANDARDS AND THE PROVISION OF THE NECESSARY LEVEL OF PROTECTION FOR WORK PERSONNEL AND WORK SITE.

NOTE:

- 1. TRUCK MOUNTED ATTENUATOR SHOULD BE USED WHEN WORKERS ARE ON FOOT IN THE TRAFFIC LANE
- 2. TRUCK MOUNTED ATTENUATOR SHOULD BE ON TAIL VEHICLE WHERE THE TAIL VEHICLE IS NOT STRADDLING THE LANE.
- 3. SEE CLAUSE 3.12.2 REGARDING OPTIONAL USE OF FLASHING LIGHT ON THE VEHICLE-MOUNTED WARNING DEVICES.

C	4.08.14	MRWA AMENDMENTS	
В	13.02.14	TEXT AND SIGN AMENDMENTS	RG
Α	31.01.14	FOR CLIENT REVIEW	RG
No.	DATE	DESCRIPTION	APPR.
AMENDMENTS			



MAIN ROADS WA

MOBILE WORKS EXAMPLE OF RIDE-ON LINEMARKING

(C) SEPARATION LINING-

TWO-LANE, TWO-WAY ROAD

Dwg No.
MRWA-022

Rev.

AS 1742.3 - 2009

TABLE 4.3

MOBILE WORKS ON A TWO-LANE, TWO-WAY ROAD - PLANT AND VEHICLE POSITIONING

			LATERAL PLANT/	VEHICLE POSITION	
LATERAL WORK POSITION	WORKS TYPE	WORK VEHICLE	SHADOW VEHICLE	TAIL VEHICLE	LEAD VEHICLE
DIVIDING LINE	RIDE-ON LINEMARKING	WORKS IN THE LEFT LANE (SEE NOTE 1) OR STRADDLES THE LINE IF LINE MARKER IS THE STRADDLE TYPE.	NOT USED	IF FOLLOWING WORK VEHICLE, MAY STRADDLE LINE IF PRACTICABLE, OTHERWISE MOVES IN LEFT LANE(SEE NOTE 1). IF STOPPED, STOP ON SHOULDER. IF CLOSING UP AT TRAFFIC SPEED, MOVES IN LANE.	STRADDLES LINE WHEN SIGHT DISTANCE ALLOWS THIS TO BE DONE SAFELY, OTHERWISE TRAVELS IN LEFT LANE.
	WORKS ON FOOT OR PEDESTRIAN TYPE LINE MARKING (SEE NOTE 2)	STRADDLES LINE	STRADDLES LINE	AS ABOVE	AS ABOVE
EDGE LINE	RIDE-ON LINEMARKING (SEE NOTE 2)	WORKS IN LEFT LANE (SEE NOTE 3)	NOT USED	TRAVELS IN LEFT LANE	NOT REQUIRED
	WORKS ON FOOT OR PEDESTRIAN TYPE LINE MARKING (SEE NOTE 2)	WORKS IN LEFT LANE (SEE NOTE 3)	TRAVELS IN LEFT LANE	TRAVELS IN LEFT LANE	NOT REQUIRED
WORK WITHIN A LANE (SEE NOTE 3)	PLANT OR VEHICLE ONLY OR VEHICLE PLUS WORKERS ON FOOT (SEE NOTE 2)	WORKS IN LANE (SEE NOTE 3)	IF WORKS ON FOOT PRESENT, WORKS IN LANE	TRAVELS IN LANE	TRAVELS IN LANE

NOTE:

- 1. REQUIREMENTS WHERE TRAFFIC CANNOT PASS SAFELY TO THE LEFT OF THE WORK VEHICLE ARE SPECIFIED IN CLAUSE 4.6.3(e)(ii).
- 2. A MOBILE TEMPORARY SPEED LIMIT, SEE CLAUSE 4.6.5, IS REQUIRE WHEN THERE ARE WORKERS ON FOOT(INCLUDING PEDESTRIAN OPERATED PLANT) WITHIN 1.2m LATERAL CLEARANCE FROM MOVING TRAFFIC.
- 3. REQUIREMENTS WHERE FOLLOWING TRAFFIC MAY BE PARTIALLY DEFLECTED INTO THE PATH OF ONCOMING TRAFFIC, ARE SPECIFIED IN CLAUSE 4.6.3(e)(iii).

DISCLAIMER

GENERAL NOTES

RESTRICTION.

THIS TCD IS TO BE USED AS PART OF A TRAFFIC MANAGEMENT PLAN AND SIGNED OFF BY AN ACCREDITED AWTM.
ALL VEHICLES USED ON SITE MUST BE FITTED WITH DUAL FLASHING BEACONS AND VEHICLE MOUNTED ARROW BOARD.
FOR WORKERS REQUIRING A SPEED RESTRICTION, REFER TO AS 1742.3-2009 CLAUSE 4.6.5 PRIOR TO THE IMPLEMENTATIONS OF PROPOSED SPEED RESTRICTION.

FOR WORKS ON FREEWAY AN ADDITIONAL TAIL VEHICLE WILL BE REQUIRED.
ALL SIGNS USED TO IN MOBILE CONVOYS

SHALL BE CARRIED ON VEHICLES OR PLANT.

IT IS RESPONSIBILITY OF THE USER OF THIS TRAFFIC CONTROL DIAGRAM TO CONFIRM THE APPROPRIATENESS OR OTHERWISE FOR THE INTENDED WORK SITE BASED ON RIGOROUS RISK ASSESSMENT, REVIEW OF THE REQUIREMENTS OF AS1742.3 AND MAIN ROADS WA TRAFFIC MANAGEMENT FOR WORKS ON ROADS CODE OF

PRACTICE.
ALL RESPONSIBILITY WILL REMAIN WITH THE USER TO ENSURE COMPLIANCE WITH RELEVANT STANDARDS AND THE PROVISION OF THE NECESSARY LEVEL OF PROTECTION FOR WORK PERSONNEL AND WORK SITE.

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MOBILE WORKS TABLE 4.3

Dwg No. MRWA-023

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AS1742.3 - 2009 SECTION 4.3.2 WORK BETWEEN GAPS IN TRAFFIC

THIS TCD SHALL BE APPLIED ONLY WHEN WORKS CAN BE DONE IN GAPS OF TRAFFIC AND THE FOLLOWING REQUIREMENTS ARE MET –

A) A LOOKOUT PERSON WHO CAN SEE APPROACHING TRAFFIC IN TIME TO WARN WORKERS TO VACATE THE ROADWAY BEFORE ITS ARRIVAL, IS POSTED; AND

B) WORK VEHICLES AND EQUIPMENT ARE PARKED CLEAR OF MOVING TRAFFIC LANES.

A VEHICLE MOUNTED WARNING DEVICE SHALL BE DISPLAYED ON THE WORK VEHICLE.

THE LOOKOUT PERSON MAY BE DISPENSED WITH IF THE WORK WILL NOT TAKE LONGER THAN 10 SECONDS AND APPROACHING TRAFFIC CAN BE SEEN FOR A DISTANCE AWAY EQUAL TO 20 SECOND OF TRAVEL TIME.

LEGEND

EXISTING PAVEMENT/ MARKING WORK SITE



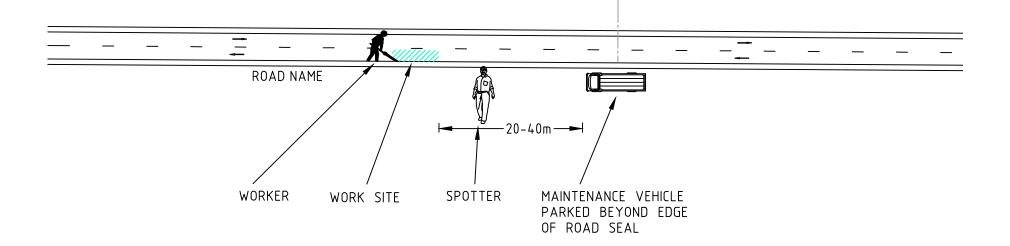
TABLE 2 CODE OF PRACTICE

VALUE OF DIMENSION D

I	SPEED OF TRAFFIC	DIMENSION 'D'
	km/h	m
I	55 OR LESS	15
I	56 TO 65	45
		EQUAL TO SPEED OF TRAFFIC, IN km/h

GENERAL NOTES

- THIS TCD IS TO BE USED AS PART OF A TRAFFIC MANAGEMENT PLAN AND SIGNED OFF BY AN ACCREDITED AWTM.
- 2. ALL VEHICLES USED ON SITE MUST BE FITTED WITH AN AUDIBLE REVERSE AND DUAL FLASHING BEACONS.



DISCLAIMER

IT IS RESPONSIBILITY OF THE USER OF THIS TRAFFIC CONTROL DIAGRAM TO CONFIRM THE APPROPRIATENESS OR OTHERWISE FOR THE INTENDED WORK SITE BASED ON RIGOROUS RISK ASSESSMENT, REVIEW OF THE REQUIREMENTS OF AS1742.3 AND MAIN ROADS WA TRAFFIC MANAGEMENT FOR WORKS ON ROADS CODE OF PRACTICE.

ALL RESPONSIBILITY WILL REMAIN WITH THE USER TO ENSURE COMPLIANCE WITH RELEVANT STANDARDS AND THE PROVISION OF THE NECESSARY LEVEL OF PROTECTION FOR WORK PERSONNEL AND WORK SITE.

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Α	31.01.14	FOR CLIENT REVIEW	RG
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4/08/2014

VERY SHORT-TERM & LOW IMPACT WORKS

OPEN ROAD AREA

WORK BETWEEN GAPS IN TRAFFIC

Dwg No.

MRWA-024

Rev.

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AS1742.3 - 2009 SECTION 4.3.3 SHORT TERM WORK IN TRAFFIC

WORKERS WITH A VEHICLE OR ITEM OF PLANT EQUIPPED WITH A VEHICLE-MOUNTED WARNING DEVICE MAY WORK WITHIN 1.2 M OF MOVING TRAFFIC WITHOUT THE USE OF ADVANCE SIGNS PROVIDED THE ROADWAY AT ANY ONE WORK SITE IS NOT OCCUPIED FOR MORE THAN 5 MINS AND THE CONDITIONS BELOW ARE OBSERVED. THIS MAY BE INCREASED TO 20 MINS FOR WORKS MORE THAN 1.2 M OF MOVING TRAFFIC

SIGHT DISTANCE TO THE VEHICLE-MOUNTED WARNING DEVICE FOR APPROACHING DRIVERS SHALL BE –
A) GREATER THAN 150 M IN A 60 KM/H OR LOWER SPEED ZONE; OR
B) GREATER THAN 250 M ELSEWHERE.

THE VEHICLE-MOUNTED WARNING DEVICE SHALL NOT BE OBSCURED, E.G. BY OVERHANGING VEGETATION OR A RAISED TRUCK BODY.

A LOOKOUT PERSON SHALL BE POSTED TO WARN WORKERS ON FOOT ON THE ROADWAY OF THE APPROACH OF ANY VEHICLES WHOSE SPEED OR SIZE MIGHT CONSTITUTE A SAFETY THREAT. IF TWO OR MORE LOCATIONS WITHIN A SPACE OF 2 KM OR LESS ARE TO BE WORKED AS ABOVE, THE SITE SHALL BE TREATED AS A FREQUENTLY CHANGING WORK AREA.

LEGEND

EXISTING PAVEMENT/ MARKING WORK SITE



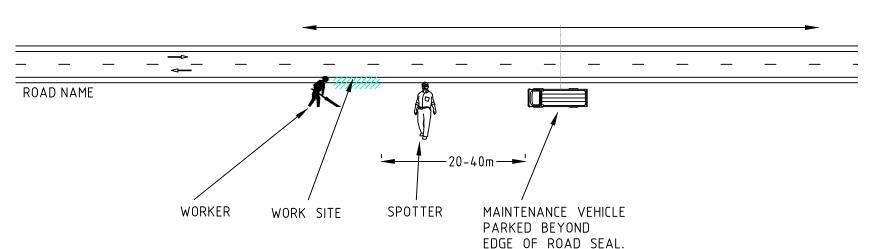
TABLE 2 CODE OF PRACTICE

VALUE OF DIME	
SPEED OF TRAFFIC	DIMENSION D
km/h	m
55 OR LESS	15
56 TO 65	45
GREATER THAN 65	EQUAL TO SPEED (

GENERAL NOTES

- THIS TCD IS TO BE USED AS PART OF A TRAFFIC MANAGEMENT PLAN AND SIGNED OFF BY AN ACCREDITED AWTM.
- 2. ALL VEHICLES USED ON SITE MUST BE FITTED WITH AN AUDIBLE REVERSE AND DUAL FLASHING BEACONS.

MINIMUM SIGHT DISTANCE OF 250m IN EACH DIRECTION



DISCLAIMER

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ALL RESPONSIBILITY WILL REMAIN WITH THE USER TO ENSURE COMPLIANCE WITH RELEVANT STANDARDS AND THE PROVISION OF THE NECESSARY LEVEL OF PROTECTION FOR WORK PERSONNEL AND WORK SITE.

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VERY SHORT-TERM & LOW IMPACT WORKS

OPEN ROAD AREA

SHORT TERM WORK NEAR TRAFFIC

Dwg No.

MRWA-025

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