# **APPENDICES**

LRMS Manual Effective from: July 2004

# Appendix A: Network Update Form

- A-1 Network Update Form (blank)
- **A-2** Network Update Form Instructions
- **A-3** Network Update Form Examples

LRMS Manual Effective from: July 2004

Section 1: - NN	I Consultant to con	nplete ———			
NM Area			NM Consultant		
Project Name					
Effective Date	/	/ PI	ROMAN Number		
Prepared by					
Phone Number			Prepared Date	/	/
Update Type (s)					
SH New	Revoked		ROUNDABOU	Γ  New	Remove
RS New	Revoked Move	Length Chang	e INTERCHANG	E New	Renumber
DIVIDED CARRIA	AGEWAY New	Extend / shore	ten RAMP	New	Merge Remo
Brainet Extent					•
Project Extent	D. ( 0. ii		rent		posed
State Highway	Reference Station	Start (m)	End (m)	Start (m)	End (m)
Sketch of Network	k Change (include side	roads and their loca	tion and attach addii	ional information if	required)
_	pmeter Calibrated	ļ	Field audit of I		
RS Length res	urveyed/confirmed		Spatial Consult	ant Informed	

Section 1 (Contin	uea) ———				
Details of Required N			C C CD1	TNZ Head Office Actioned / Comment.	
Actio	on		Section of Road	Actionea / Comment.	S
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				<b></b>	
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<b>-</b>					
<b>-</b>				<b></b>	
NOTE:					
Attached Documentat Reference Station I Appendix B		n (s) –	Other (specify)		
Section 2: Transit	t Regional Offi	ce to Complete			
Reviewed by			Date	/ /	
Information provided	d Satisfactory	Yes, forward	ded to TNZ HO	No, returned to NMC with comme	nte
Comments		- 1 cs, 101 war		• 140, returned to review with comme.	1113
					_
Section 3: Transi	t Head Office t	o Complete			
LRMS Administrator					
Information provided	d Satisfactory	Yes, action	ed changes	No, returned to NMC with commer	nts
Comments					_
					_
Completed by			Date	/ /	
RAMM Administrator					
	Project Data network length to be	undated by NMC	Copy o	f form sent to Transit Regional Offic	ee
Sent by			Date	/ /	

Г	Section 4: NM Consultant to complete (after receiving RAMM Project Data)					
	Project Data Satisfactory	Yes, NMC to up project data	odate	No, returned to TNZ HO with further instructions		
	NMC Updates Checklist		Attached Do	ocumentation Checklist		
	NMC Updates Checklist  Carriageway Sections  New surfacing and lay  New inventory data act  Old inventory updated  Treatment Length upd  Forward Works Progra	s updated yers added dded d dated	RAMM Updated	Inventory Update Form – SMO50 copy of Project Data by report of carriageway table		
	Completed by  Comments		Date			
_						
	Reviewed by  Information provided Satisfactory  Comments		Dat	No, returned to NMC with comments		
	Section 6: Transit Head Offic	ce to Complete				
	Documents Satisfactory  Comments	Yes, loaded in I	RAMM	No, returned to NMC with comments		
	Completed by		Date	· / /		
	Confirmation sent  NMC	Transit Regional	Office			

### **Network Update Form Instructions**

The Network Update Form (NUF) consists of 3 pages. These pages contain separate sections for the Network management Consultant (NMC), Transit Regional Office and Transit National office representatives.

Complete each section for every Network Update in the region according to the attached example and the following guidelines.

#### **Section 1: NM Consultant to complete.**

#### General

For easy identification and follow up, the following details are required:

- □ Transit region and/or maintenance area
- □ Network Maintenance Consultant and person responsible
- □ Project name and PROMAN number
- □ Effective Date

Note that the person responsible will need to provide a daytime phone number, where they can be reached in case any further information is required by the LRMS Administrator.

#### **Update Type (s)**

This section should be used to record the general type of network change required. This information will aid the identification of the network update.

The most common network change, a **Realignment** will be recorded as an RS Length change.

The second most common network change, a **Extension of a Divided Carriageway**, will be recorded as a Divided Carriageway extension.

Due to the complexity of some network updates, it is anticipated that in some occasions more than one option can be selected.

For example where a new bypass has been constructed within an existing RS, new ramps and divided road sections were created, while the old portion of road section has been revoked, the 'New' boxes will be checked for RS, Roundabout, Interchange and Ramp

#### **Project Extend**

This section has been designed to record the road section, where updates are required. The following examples will help the use of this table.

#### Realignment

Say SH01N, RS 262, has been realigned and road section 262/00.50-01.25, has been shortened by 150m. The record will show as follows:

		Current		Prop	osed
State Highway	Reference Station	Start (m)	End (m)	Start (m)	End (m)
01N	262	500	1250	500	1100

#### **New Divided Road Section**

Say SH01N, RS 262, which is 1800m in length, has been divided.

		Current		Pro	posed
State Highway	Reference Station	Start (m)	End (m)	Start (m)	End (m)
01N	262	0	1800	262-1 / 0	262-I/1800
				262-D / 0	262-D/1800

Due to the complexity of some network updates, it si anticipated that several pages may be required to document the changes.

# **Sketch Network Change**

As per example

Please note that Side Roads and any other feature, such as bridges, will require to have a Route Position recorded. This will aid the proper updating of Transit's systems.

#### **NMC Checklist**

This checklist has been provided to remind the NMC that the following is required:

- □ Electronic Tripmeter calibrated. This should be carried out as per Chapter 5 of the LRMS Manual and prior to any RS Length review.
- □ RS Length resurveyed/confirmed. The NMC is required to review the true length of any RS where network changes have affected their true length.
- □ Field Audit of LRM signs. The NMC is responsible to ensure that all LRM signs on the network are true and meet the criteria set out on Chapter 3 of the LRMS Manual.
- □ Spatial Consultant Informed. The NMC is required to inform the Spatial Consultant (via the LRMS Administrator) where any network updates have been carried out. This process is in place to ensure that the geographical representation of Transit's Network in Highways is up to date and true.

Please refer to Chapter 4 of the LRMS Manual, for further information on the requirements when network changes occur.

### Details of required Network Change

This section will detail the actions required from the LRMS Administrator and confirm the network update requirements.

This section has a blank section for detailing the action required, but generic actions are preferred. The examples below will help the user to fill I this section:

#### Realignment

Say SH01N, RS 262 (1800m in length), has been realigned and road section 262/00.50-01.25, has been shortened by 150m. The actions required will be recorded as follows:

Action	Section of Road
☐ Isolate and remove	01N-0262/00.50-01.25
☐ Add and merge	01N-0262/00.50-01.10
☐ Shift by -150m	01N-0262/01.25-01.80

#### **New Divided Road Section**

Action

Say SH01N, RS 262, which is 1800m in length, has been divided.

Action	Section of Road
☐ Remove	01N-0262 / 00.00 - 01.80
☐ Add new road	01N-0262-I / 00.00-01.80
☐ Add new road	01N-0262-D/ 00.00-01.80

#### **New Ramps**

Say two new ramps (at 980 and 1150m) were constructed on SH01N, RS 262. The interchange number will be 263 and we need to add the two new ramps.

☐ Add new ramp 01N-0263-R1	01N-0262/0.98-OFF(253m)
☐ Add new ramp 01N-0263-R2	01N-0262/01.15-ON (350m)

Section of Road

The TNZ Head Office Actioned/Comments section will be completed by the LRMS Administrator to identify progress on the network update.

Due to the complexity of some network updates, it si anticipated that several pages may be required to document the changes.

The use of the "Notes" section will help the LRMS Administrator identify any complicated situation.

Attached Documentation Checklist

An updated copy of the Reference Station Locality Diagram is required, where a change to the RS length has occurred.

The NMC has the opportunity to attach any other documentation they see necessary for clarification or is required.

#### **Section 2: Transit Regional Office to Complete**

#### **Review**

Transit Regional Office representative shall review the NUF supplied by the NMC.

Should any problems be found, it should be supplied back to the NMC with comments detailing the problems.

Once satisfactory the Transit Regional Office representative shall populate Section 2 and supply it to the LRMS Administrator.

#### **Section 3: Transit Head Office to Complete**

#### LRMS Administrator

The LRMS Administrator shall check that the Transit Regional Office representative has approved the NUF supplied.

Should any problems be found, it should be supplied back to the Transit Regional Office representative with comments detailing the problems.

If satisfactory the LRMS Administrator shall update Highways as per details on the NUF.

Once complete, the LRMS Administrator shall populate Section 3 LRMS Administrator and supply the NUF to the RAMM Administrator.

### RAMM Administrator

Once received, the RAMM Administrator shall action the Project Data export, populate Section 3 RAMM Administrator and supply the NUF together with the Project Data back to the NMC.

#### **Section 4: NM Consultant to Complete**

#### **Project Data**

The NMC shall review the project data supplied by the RAMM Administrator and provided any feedback if required. If satisfied with the network update, then the NMC shall populate Section 4 and proceed with the updating of withstanding inventory data.

When all inventory data is updated, it shall be supplied back to Transit Regional Office for implementation into Transit's Asset Register.

#### Checklist

A list of generic inventory updates and documentation has been listed as

a reminder to the NMC.

Please note that this list is not complete and should only be used as a guide. Some blank options are provided for NMC use.

The respective Transit Office shall populate section 5 and 6, once the data has been received by the NMC.

#### NETWORK UPDATE FORM

Page 1 of 3 Section 1: - NM Consultant to complete MWH NZ Ltd NM Consultant NM Area Wellington Mc Kays Crossing Project Name 1105103 PROMAN Number Effective Date Freddy Salvador Prepared by 381 6719 Prepared Date 28/04/03 Phone Number Update Type (s) ROUNDABOUT New Revoked New New Revoked Move Length Change INTERCHANGE New Renumber DIVIDED CARRIAGEWAY New Extend / shorten RAMP Merge Remove Project Extent Current Proposed State Highway Reference Station End (m) Start (m) End (m) Start (m) 9550 0942 7100 9850 7100 OIN Sketch of Network Change (include side roads and their location and attach additional information if required) 9850 RS 7100 9550 ERP 620 - Old alignment - New alignment **NMC Checklist** Field audit of LRM signs Electronic Tripmeter Calibrated RS Length resurveyed/confirmed Spatial Consultant Informed

## NETWORK UPDATE FORM

Section 1 (Continued)		Page 2 of 3
Details of Required Network Change		TNZ Head Office
Action	Section of Road	Actioned / Comments
☐ IsolaTe and Remove	OIN-0942/07-10-09.85	
☐ Add and Herge	OIN-0942/07.10-09.55	<u> </u>
□ Shift by -300 m	OIN-0942/09.85-11.43	<b></b>
<b>_</b>		<b></b>
<u> </u>		
NOTE:		
Reviewed by Reuben  Information provided Satisfactory		d to NMC with comments
Comments		
- Section 3: Transit Head Office to C  LRMS Administrator  Information provided Satisfactory  Comments		d to NMC with comments
Completed by Philip Blo	agdon Date 30	104/03
RAMM Administrator		
Attached Project Data (for affected network length to be update)	Copy of form sent to	Transit Regional Office
Sent by Warwick To	aglor Date 01	1 05 / 03

#### **NETWORK UPDATE FORM**

Page 3 of 3 Section 4: NM Consultant to complete (after receiving RAMM Project Data) Project Data Satisfactory Yes, NMC to update No, returned to TNZ HO with further instructions project data **NMC Updates Checklist** Attached Documentation Checklist RAMM Inventory Update Form – SMO50 Carriageway Sections updated Updated copy of Project Data New surfacing and layers added Hardcopy report of carriageway table New inventory data added Old inventory updated Treatment Length updated Forward Works Program updated Freddy Salvador Completed by Date 05 103 Comments Section 5: Transit Regional Office to Complete -20/05/03 Reviewed by Reuben Pokiha Date Yes, forwarded to TNZ HO No, returned to NMC with comments Information provided Satisfactory Comments Section 6: Transit Head Office to Complete **Documents Satisfactory** Yes, loaded in RAMM No, returned to NMC with comments Comments Completed by Date 23/05/03 Warwick Taylor NMC Transit Regional Office Confirmation sent

#### NETWORK UPDATE FORM Page 1 of 3 Section 1: - NM Consultant to complete Wellington NM Consultant MWH NZ Ltd NM Area Forest Lake Divided Project Name Section 01/05/03 9999992 Effective Date PROMAN Number Prepared by Freddy Salvador Prepared Date Phone Number Update Type (s) New Revoked ROUNDABOUT New Remove New Revoked Move Length Change INTERCHANGE Renumber DIVIDED CARRIAGEWAY New Extend / shorten RAMP Merge Remove **Project Extent** Current Proposed End (m) State Highway Reference Station Start (m) End (m) Start (m) 915-D/1300 915-D/3300 OIN 0915 3300 1300 915-1/1300 915-1/3300 Sketch of Network Change (include side roads and their location and attach additional information if required) New Divided Section 1300 RS 3300 915 New Seal Widening and Hedian Barrier - old alignment - New alignment **NMC Checklist** Electronic Tripmeter Calibrated Field audit of LRM signs RS Length resurveyed/confirmed Spatial Consultant Informed

NETW	ORK UPDATE FORM	Page 2 of 3
Section 1 (Continued)		1 uge 2 of 3
Details of Required Network Change	G	TNZ Head Office
Action	Section of Road	Actioned / Comments
Add new road section	OIN-0915/01.30-I	□
Add new road section	01N-0915/01.30-D	<b>_</b>
☐ Rename to 01N-0915/03.30	01N-0915/03:30-16	.07
		<b>_</b>
<b></b>		
NOTE:		
Section 2: Transit Regional Office t		2 / 24 / 102
Reviewed by Reuben Po	Kiha Date 2	9/04/03
Information provided Satisfactory	Yes, forwarded to TNZ HO No, re	eturned to NMC with comments
Comments		
Section 3: Transit Head Office to Co	omplete	
LRMS Administrator		
Information provided Satisfactory	Yes, actioned changes No, re	eturned to NMC with comments
Comments		
Completed by Philip Bla	gdon Date 3	0 / 04 /03
RAMM Administrator		
Attached Project Data (for affected network length to be upda	Copy of form s	ent to Transit Regional Office
Sent by Warwick to		01/05/03

# NETWORK UPDATE FORM

Г	Section 4: NM Consultant to complete (after receiving RAMM Project Data)				
	Project Data Satisfactory	Yes, NMC to upda project data		o, returned to TNZ HO with rther instructions	
	NMC Updates Checklist		Attached Docu	mentation Checklist	
	Carriageway Sections	updated	RAMM Inve	entory Update Form – SMO50	
	New surfacing and lay	ers added	Updated copy of Project Data		
	New inventory data ad	lded	Hardcopy report of carriageway table		
	Old inventory updated				
	Treatment Length upd	ated			
	Forward Works Progra	am updated			
	_		_		
	Completed by Freddy	Salvador	Date	17/05/03	
	Comments				
Г	Section 5: Transit Regional (	Office to Complete -			
	Reviewed by Review	n Pokiha	Date	20 / 05 / 03	
	Information provided Satisfactory	Yes, forwarded to	o TNZ HO	No, returned to NMC with comments	
	Comments				
_	Section 6: Transit Head Office	ce to Complete -			
	Documents Satisfactory	Yes, loaded in R.	,,,,,, D.,	No material to NIMC with a surround	
	Comments	Yes, loaded in R.	AIMINI 🔲 I	No, returned to NMC with comments	
	Completed by Warwi	CK Taylor	Date	23/05/03	
	Confirmation sent NMC	Transit Regional O	ffice		

#### NETWORK UPDATE FORM Page 1 of 3 Section 1: - NM Consultant to complete MWH NZ Ltd NM Consultant NM Area Wellington Project Name Moonshine Hill Interchange 9999998 Effective Date 01/05/03 PROMAN Number Prepared by Freddy Salvador Phone Number Prepared Date 3816719 Update Type (s) New Revoked ROUNDABOUT New Remove New Revoked Move Length Change INTERCHANGE New RS Renumber New Extend / shorten RAMP DIVIDED CARRIAGEWAY New Merge Remove Project Extent Current Proposed Name ength (m) State Highway Reference Station Start (m) End (m) 9540 955-RI 155 0946 002 955-R2 210 002 9210 0946 Sketch of Network Change (include side roads and their location and attach additional information if required) New Interchange RS 946 New OFF Ramp 9.54 **NMC Checklist** Electronic Tripmeter Calibrated Field audit of LRM signs RS Length resurveyed/confirmed Spatial Consultant Informed

# NETWORK UPDATE FORM

Section 1 (Continued)		Page 2 of 3
Details of Required Network Change		TNZ Head Office
Action	Section of Road	Actioned / Comments
☐ Add ramp 955-RI	002-0946/09.54-OFF	
Add ramp 955-R2	002-0946/09.21-0N	
<u> </u>		
<b>-</b>		
NOTE:		
Reference Station Locality Diagram (s Appendix B	<u>-</u>	
Section 2: Transit Regional Office	to Complete —	
Reviewed by Reuben F	Pokiha Date 20	1/04/03
_	Yes, forwarded to TNZ HO No, return	rned to NMC with comments
Comments		
Continue 2. Transit Hand Office to	Name late	
Section 3: Transit Head Office to C	complete	
LRMS Administrator Information provided Satisfactory	Yes, actioned changes No, return	rned to NMC with comments
Comments		
Completed by Philip Bla	gdon Date 30	0/04/03
RAMM Administrator		
Attached Project Data (for affected network length to be upd	Copy of form sent	to Transit Regional Office
Sent by Warwick T		105/03

#### NETWORK UPDATE FORM

Page 3 of 3 Section 4: NM Consultant to complete (after receiving RAMM Project Data) Project Data Satisfactory Yes, NMC to update No, returned to TNZ HO with further instructions project data **NMC Updates Checklist Attached Documentation Checklist** RAMM Inventory Update Form – SMO50 Carriageway Sections updated Updated copy of Project Data New surfacing and layers added Hardcopy report of carriageway table New inventory data added Old inventory updated Treatment Length updated Forward Works Program updated Freddy Salvador Completed by Date 05 103 Comments Section 5: Transit Regional Office to Complete -20/05/03 Reviewed by Date Information provided Satisfactory Yes, forwarded to TNZ HO No, returned to NMC with comments Comments Section 6: Transit Head Office to Complete Documents Satisfactory Yes, loaded in RAMM No, returned to NMC with comments Comments Completed by Warwick Taylor Date 23/05/03 Confirmation sent NMC Transit Regional Office