



Technical and Approvals Consultancy
Services: Parkes to Narromine
Flood Study Report Volume 2

December 2018

3-0001-240-IHY-00-RP-0004



Appendix A

Existing Conditions Flood Maps

A01 - Existing Flood Depth 18% AEP

A02 – Existing Flood Depth 5% AEP

A03 – Existing Flood Depth 2% AEP

A04 – Existing Flood Depth 0.05% AEP

A05 – Existing Flood Velocity 18% AEP

A06 – Existing Flood Velocity 5% AEP

A07 – Existing Flood Velocity 2% AEP

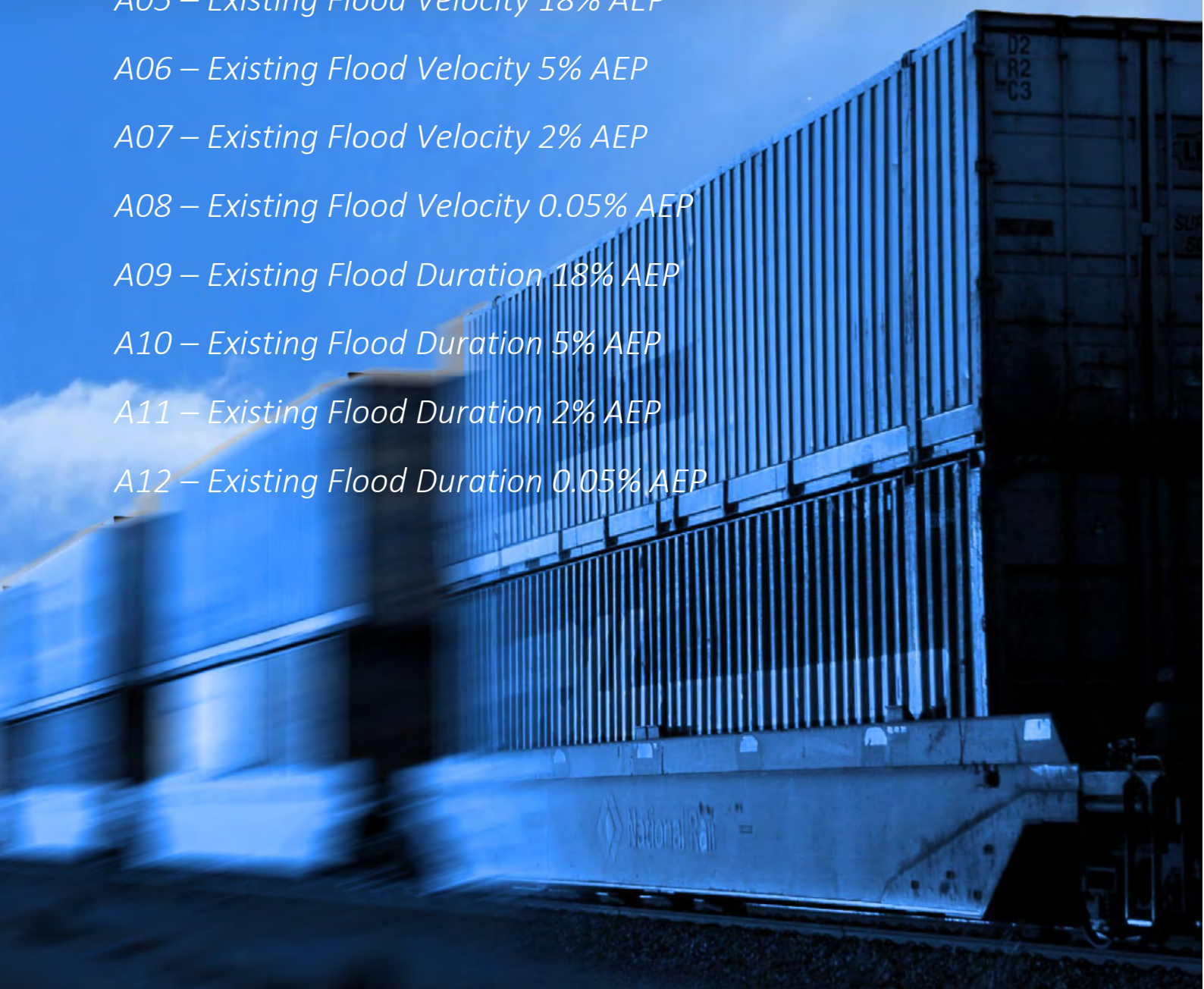
A08 – Existing Flood Velocity 0.05% AEP

A09 – Existing Flood Duration 18% AEP

A10 – Existing Flood Duration 5% AEP

A11 – Existing Flood Duration 2% AEP

A12 – Existing Flood Duration 0.05% AEP

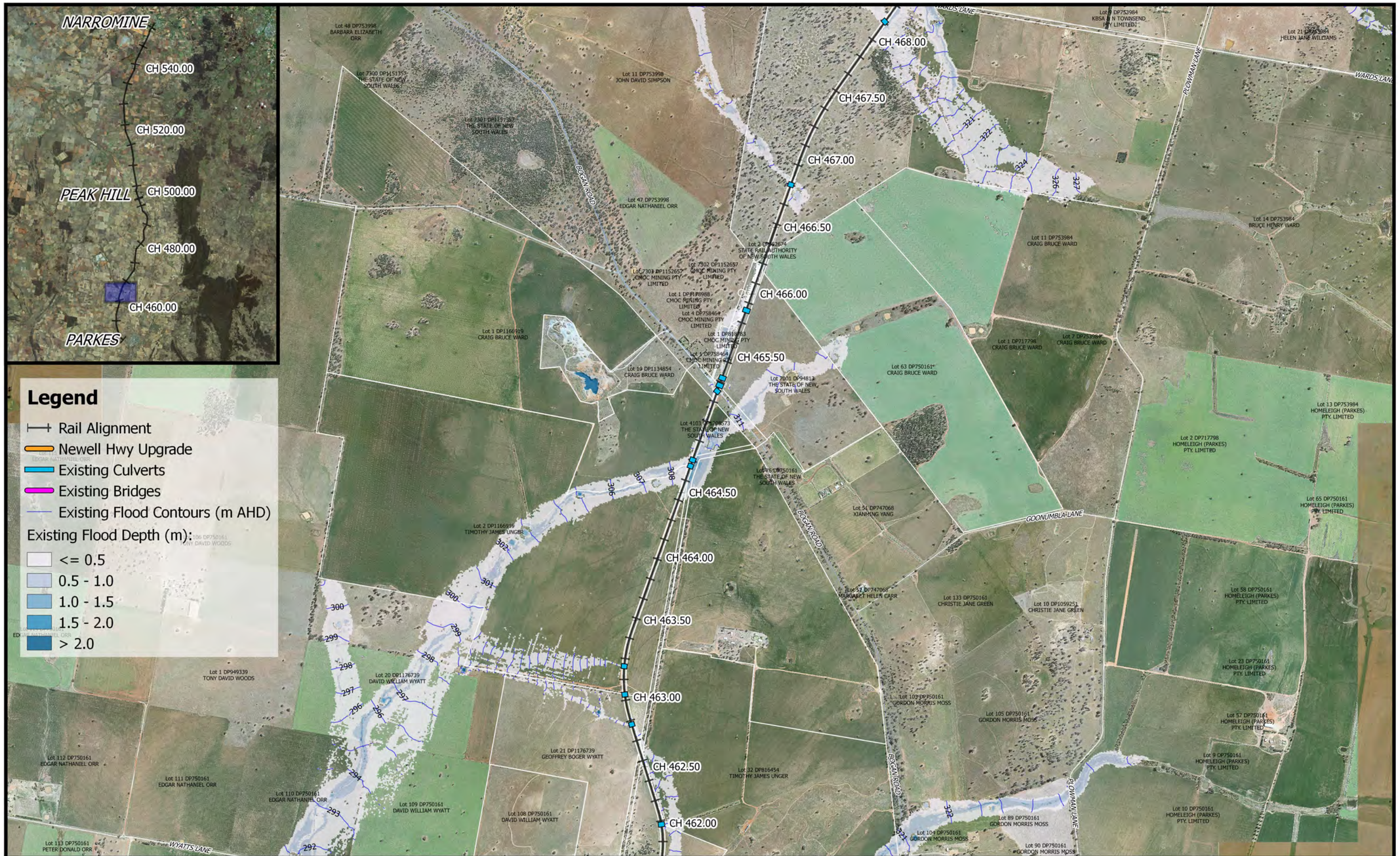




	<p>1:25,000</p> <p>Coordinate system: GDA 1994 MGA Zone 55 Scale ratio correct when printed at A3</p>		Date: 18/10/2018	<p>Parkes to Narromine DD100% - Cross Drainage Flood Impact Assessment Results</p> <p>Figure EX5L2 5% AEP Existing Flood Depths and Levels - CH 455.00</p>
			Rev: B	
			Prepared By: YeohM	



	<p>1:25,000</p> <p>Coordinate system: GDA 1994 MGA Zone 55 Scale ratio correct when printed at A3</p>		Date: 18/7/2018	<p>Parkes to Narromine DD100% - Cross Drainage Flood Impact Assessment Results</p> <p>Figure EX5L3 5% AEP Existing Flood Depths and Levels - CH 460.00</p>
			Rev: A	
			Prepared By: YeohM	



Legend

- Rail Alignment
 - Newell Hwy Upgrade
 - Existing Culverts
 - Existing Bridges
 - Existing Flood Contours (m AHD)
- Existing Flood Depth (m):
- <= 0.5
 - 0.5 - 1.0
 - 1.0 - 1.5
 - 1.5 - 2.0
 - > 2.0

Date: 18/7/2018

Rev: A

Prepared By: YeohM

Parkes to Narromine
DD100% - Cross Drainage Flood Impact Assessment Results

Figure EX5L4
5% AEP Existing Flood Depths and Levels - CH 465.00



Legend

- Rail Alignment
 - Newell Hwy Upgrade
 - Existing Culverts
 - Existing Bridges
 - Existing Flood Contours (m AHD)
- Existing Flood Depth (m):
- <= 0.5
 - 0.5 - 1.0
 - 1.0 - 1.5
 - 1.5 - 2.0
 - > 2.0



0 250 500 750 1000 m
1:25,000

Coordinate system: GDA 1994 MGA Zone 55
Scale ratio correct when printed at A3



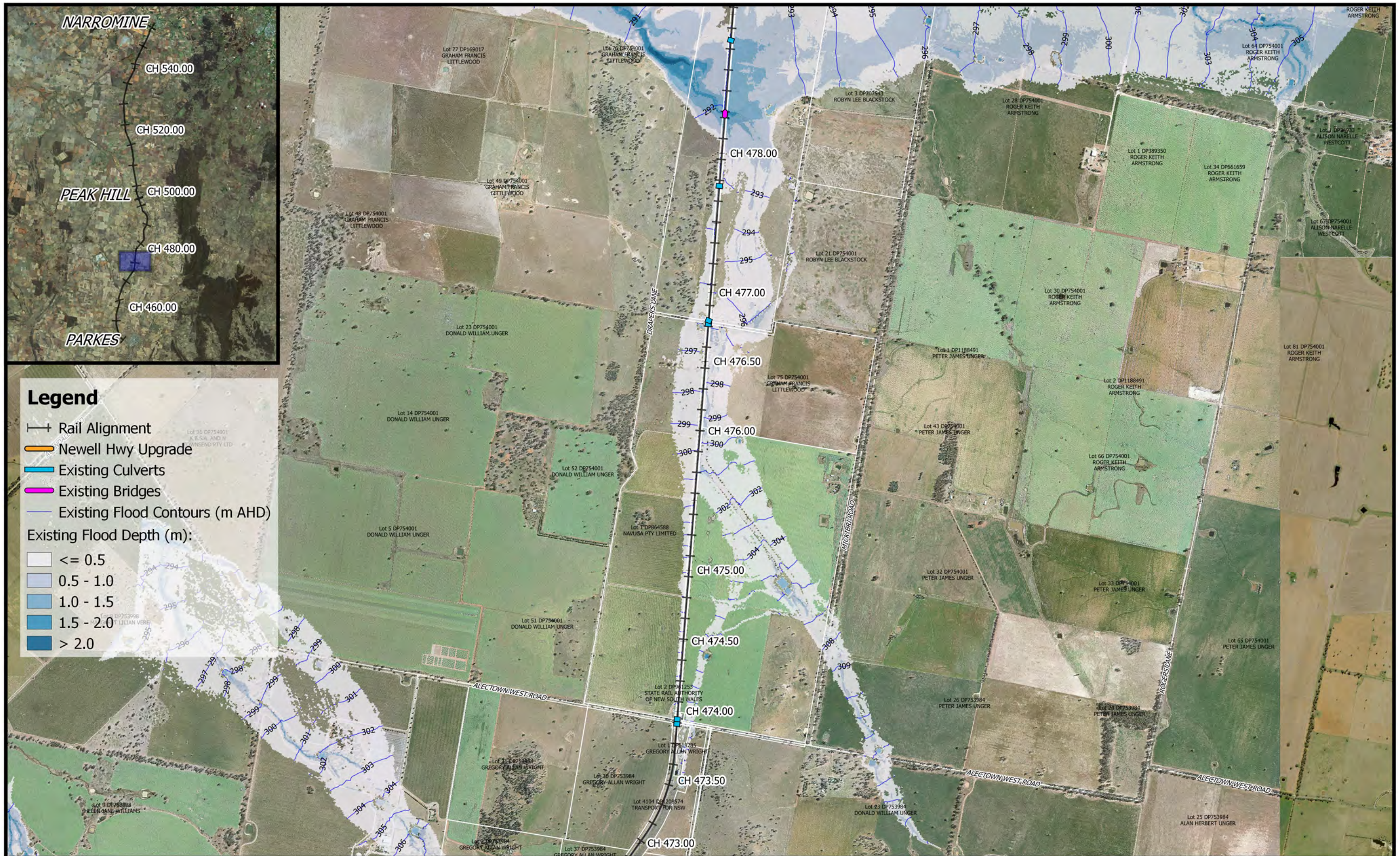
Date: 18/7/2018

Rev: A

Prepared By: YeohM

Parkes to Narromine
DD100% - Cross Drainage Flood Impact Assessment Results

Figure EX5L5
5% AEP Existing Flood Depths and Levels - CH 470.00



	<p>1:25,000</p> <p>Coordinate system: GDA 1994 MGA Zone 55 Scale ratio correct when printed at A3</p>		Date: 18/7/2018	<p align="center">Parkes to Narromine</p> <p align="center">DD100% - Cross Drainage Flood Impact Assessment Results</p> <p align="center">Figure EX5L7</p> <p align="center">5% AEP Existing Flood Depths and Levels - CH 475.00</p>
			Rev: A	
			Prepared By: YeohM	



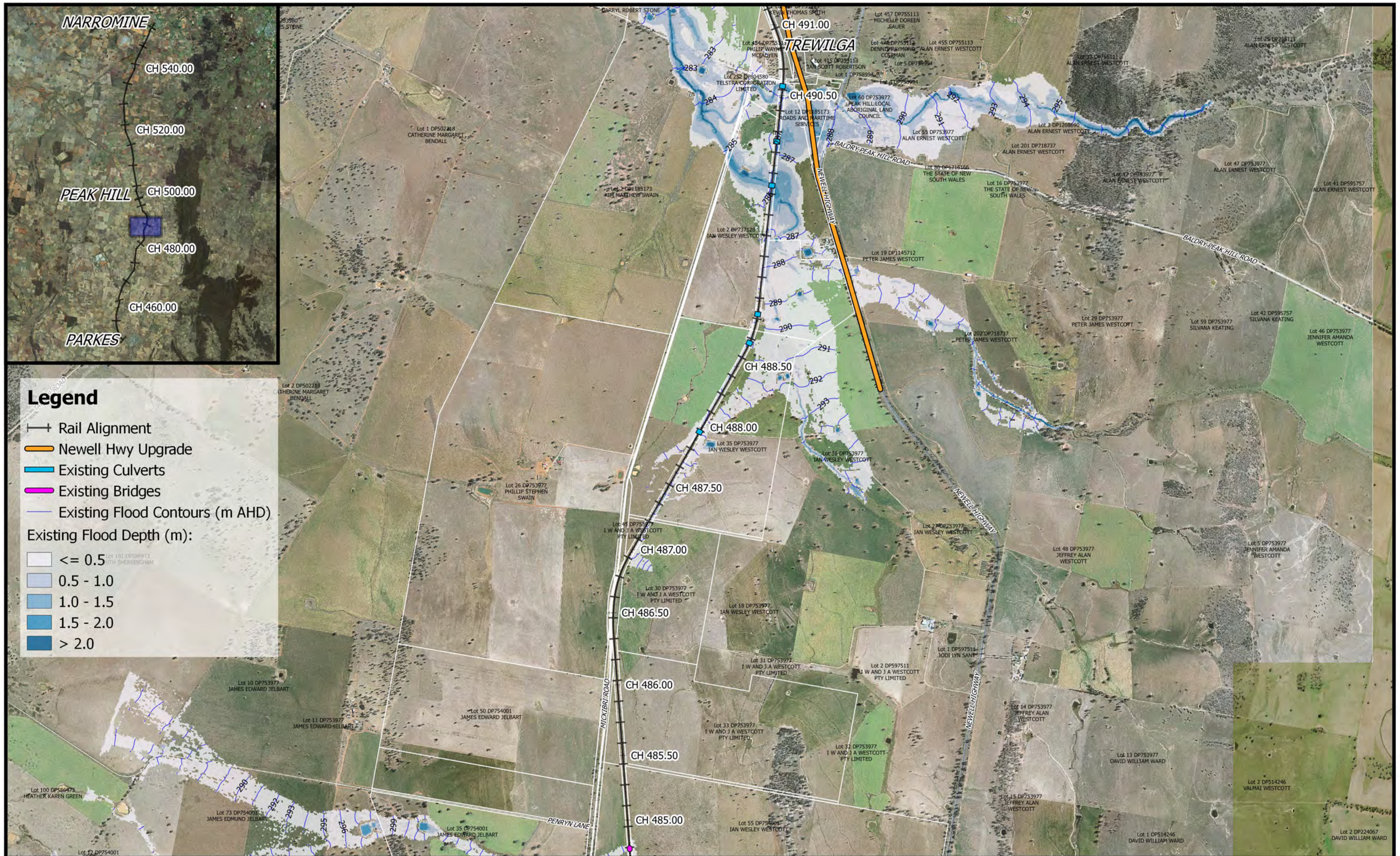
	 1:25,000		Date: 18/7/2018	Parkes to Narromine DD100% - Cross Drainage Flood Impact Assessment Results Figure EX5L8 5% AEP Existing Flood Depths and Levels - CH 480.00
	Coordinate system: GDA 1994 MGA Zone 55 Scale ratio correct when printed at A3		Rev: A	
	Prepared By: YeohM			



Legend

- Rail Alignment
 - Newell Hwy Upgrade
 - Existing Culverts
 - Existing Bridges
 - Existing Flood Contours (m AHD)
- Existing Flood Depth (m):
- ≤ 0.5
 - 0.5 - 1.0
 - 1.0 - 1.5
 - 1.5 - 2.0
 - > 2.0

	<p>0 250 500 750 1000 m</p> <p>1:25,000</p>		Date: 18/7/2018	<p>Parkes to Narromine DD100% - Cross Drainage Flood Impact Assessment Results</p> <p>Figure EX5L9 5% AEP Existing Flood Depths and Levels - CH 485.00</p>	
	<p>Coordinate system: GDA 1994 MGA Zone 55 Scale ratio correct when printed at A3</p>		Rev: A		
	<p>Prepared By: YeohM</p>				



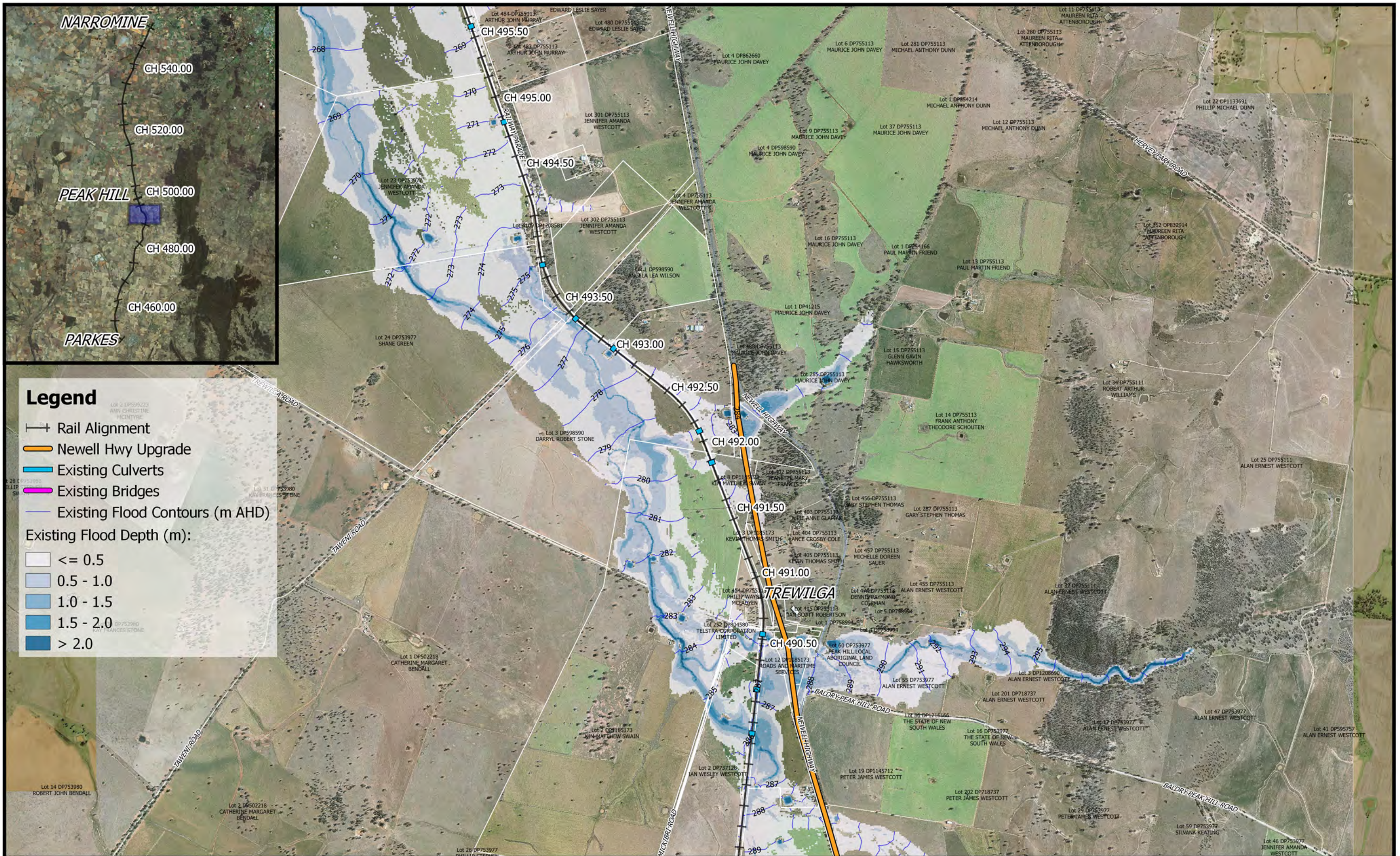
Legend

- Rail Alignment
- Newell Hwy Upgrade
- Existing Culverts
- Existing Bridges
- Existing Flood Contours (m AHD)

Existing Flood Depth (m):

- <= 0.5
- 0.5 - 1.0
- 1.0 - 1.5
- 1.5 - 2.0
- > 2.0

	<p>0 250 500 750 1000 m</p> <p>1:25,000</p> <p>Coordinate system: GDA 1994 MGA Zone 55 Scale ratio correct when printed at A3</p>		Date: 18/7/2018	<p>Parkes to Narromine DD100% - Cross Drainage Flood Impact Assessment Results</p> <p>Figure EX5L10 5% AEP Existing Flood Depths and Levels - CH 490.00</p>
	Rev: A			
	Prepared By: YeohM			



	<p>1:25,000</p> <p>Coordinate system: GDA 1994 MGA Zone 55 Scale ratio correct when printed at A3</p>		Date: 18/7/2018	Parkes to Narromine DD100% - Cross Drainage Flood Impact Assessment Results Figure EX5L11 <i>5% AEP Existing Flood Depths and Levels - CH 492.00</i>
			Rev: A	
			Prepared By: YeohM	



Legend

- Rail Alignment
- Newell Hwy Upgrade
- Existing Culverts
- Existing Bridges
- Existing Flood Contours (m AHD)

Existing Flood Depth (m):

- <= 0.5
- 0.5 - 1.0
- 1.0 - 1.5
- 1.5 - 2.0
- > 2.0

	<p>0 250 500 750 1000 m</p> <p>1:25,000</p> <p>Coordinate system: GDA 1994 MGA Zone 55 Scale ratio correct when printed at A3</p>		Date: 18/7/2018	<p>Parkes to Narromine</p> <p>DD100% - Cross Drainage Flood Impact Assessment Results</p> <p>Figure EX5L12</p> <p><i>5% AEP Existing Flood Depths and Levels - CH 495.00</i></p>
	Rev: A			
	Prepared By: YeohM			

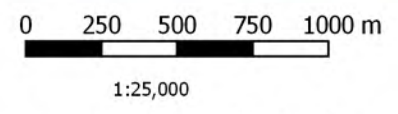


Legend

- Rail Alignment
- Newell Hwy Upgrade
- Existing Culverts
- Existing Bridges
- Existing Flood Contours (m AHD)

Existing Flood Depth (m):

- <= 0.5
- 0.5 - 1.0
- 1.0 - 1.5
- 1.5 - 2.0
- > 2.0



1:25,000
Coordinate system: GDA 1994 MGA Zone 55
Scale ratio correct when printed at A3



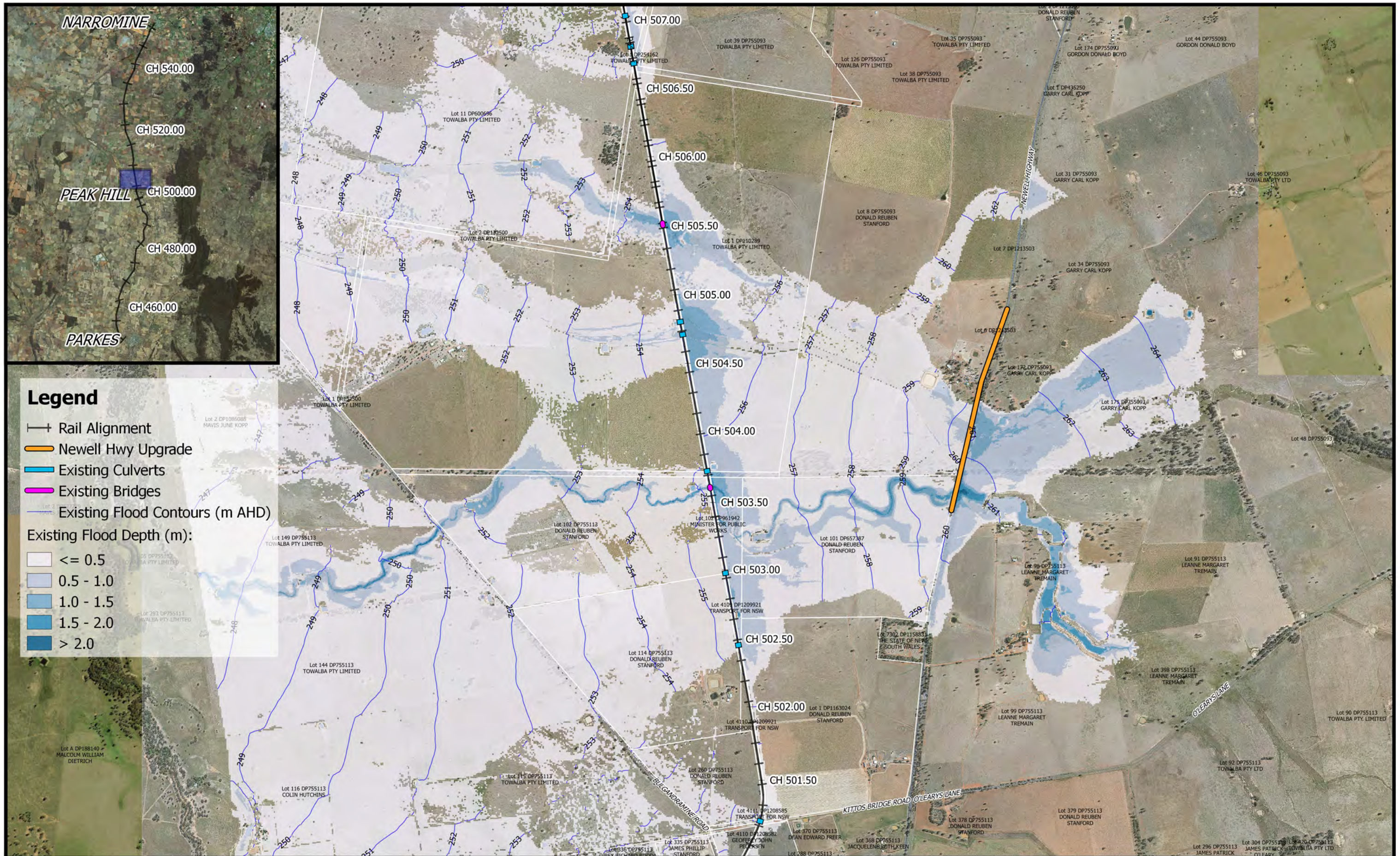
Date: 18/7/2018

Rev: A

Prepared By: YeohM

Parkes to Narromine
DD100% - Cross Drainage Flood Impact Assessment Results

Figure EX5L13
5% AEP Existing Flood Depths and Levels - CH 500.00



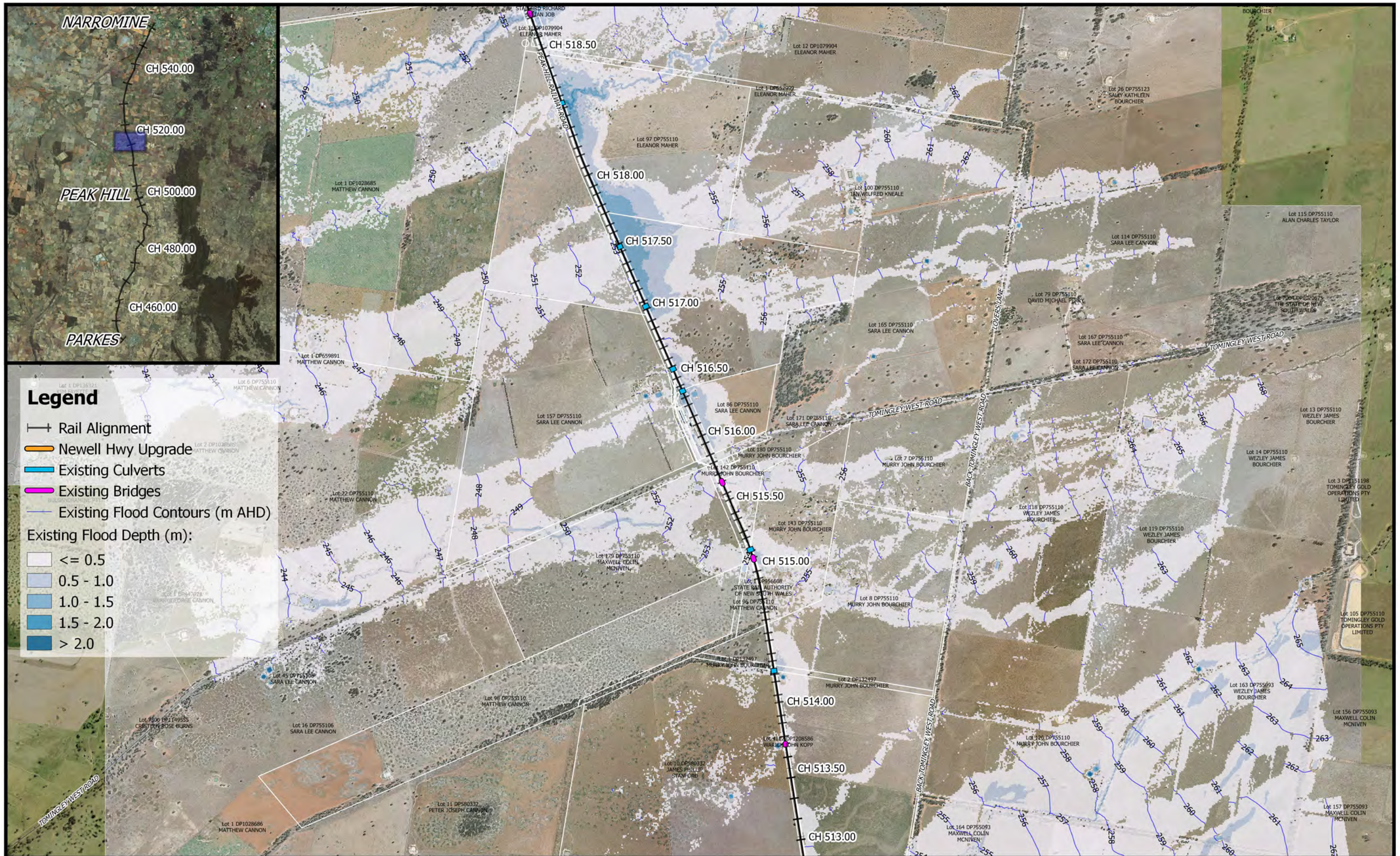
	 1:25,000 Coordinate system: GDA 1994 MGA Zone 55 Scale ratio correct when printed at A3		Date: 18/7/2018	Parkes to Narromine DD100% - Cross Drainage Flood Impact Assessment Results Figure EX5L14 5% AEP Existing Flood Depths and Levels - CH 505.00
			Rev: A	
			Prepared By: YeohM	



	<p>1:25,000</p> <p>Coordinate system: GDA 1994 MGA Zone 55 Scale ratio correct when printed at A3</p>		Date: 18/7/2018	<p align="center">Parkes to Narromine DD100% - Cross Drainage Flood Impact Assessment Results</p> <p align="right">Figure EX5L15 5% AEP Existing Flood Depths and Levels - CH 510.00</p>
			Rev: A	
			Prepared By: YeohM	



	 1:25,000		Date: 18/7/2018	Parkes to Narromine DD100% - Cross Drainage Flood Impact Assessment Results Figure EX5L16 <i>5% AEP Existing Flood Depths and Levels - CH 512.00</i>
	Coordinate system: GDA 1994 MGA Zone 55 Scale ratio correct when printed at A3		Rev: A	
	Prepared By: YeohM			



Legend

- Rail Alignment
 - Newell Hwy Upgrade
 - Existing Culverts
 - Existing Bridges
 - Existing Flood Contours (m AHD)
- Existing Flood Depth (m):
- <= 0.5
 - 0.5 - 1.0
 - 1.0 - 1.5
 - 1.5 - 2.0
 - > 2.0

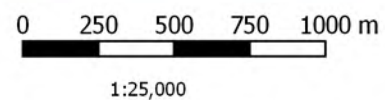
Date: 18/7/2018

Rev: A

Prepared By: YeohM

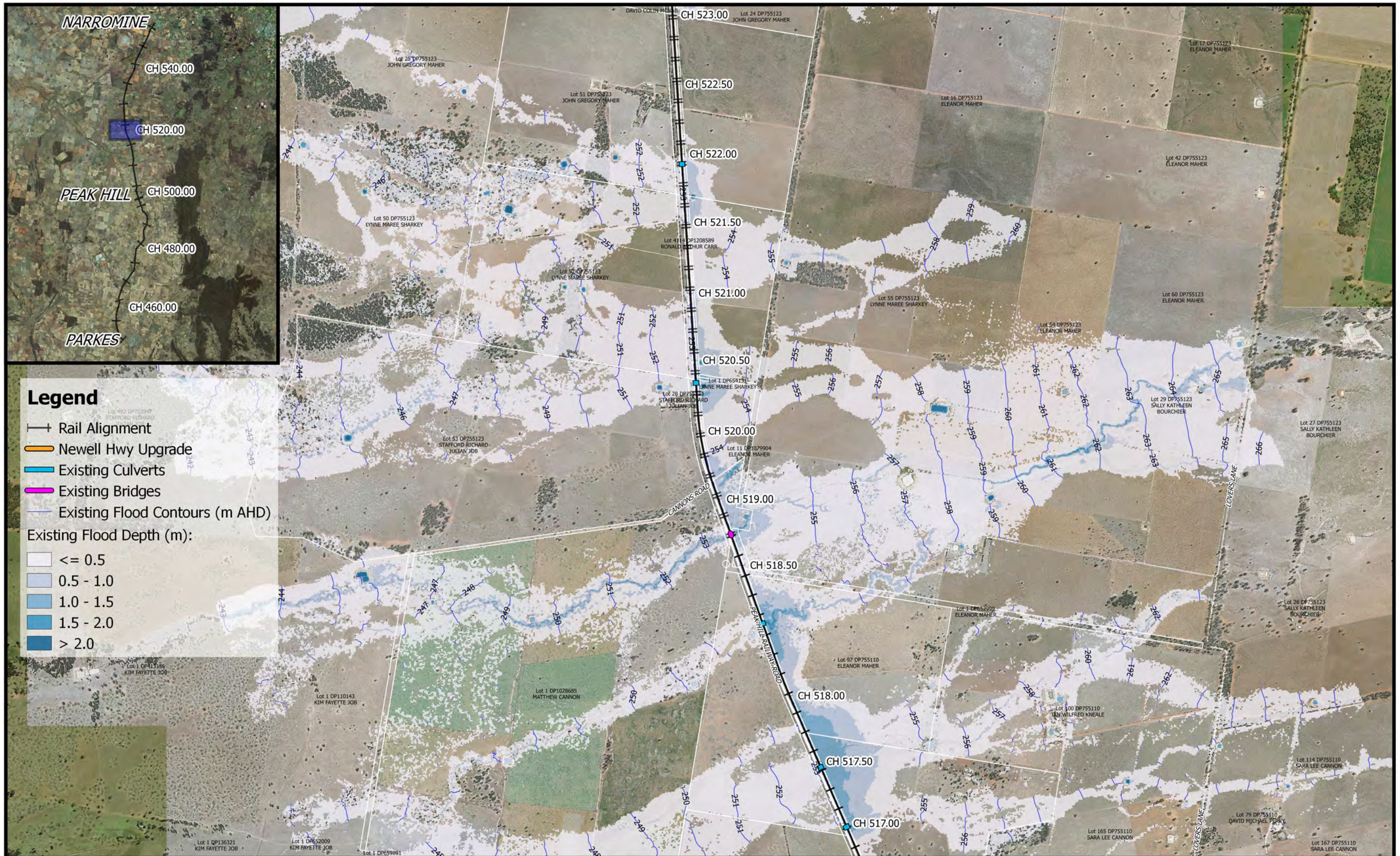
Parkes to Narromine
DD100% - Cross Drainage Flood Impact Assessment Results

Figure EX5L17
5% AEP Existing Flood Depths and Levels - CH 515.00



Coordinate system: GDA 1994 MGA Zone 55
Scale ratio correct when printed at A3





	<p>1:25,000</p> <p>Coordinate system: GDA 1994 MGA Zone 55 Scale ratio correct when printed at A3</p>		Date: 18/7/2018	<p align="center">Parkes to Narromine DD100% - Cross Drainage Flood Impact Assessment Results</p> <p align="right">Figure EX5L18 <i>5% AEP Existing Flood Depths and Levels - CH 520.00</i></p>
	Rev: A			
	Prepared By: YeohM			



Legend

- Rail Alignment
 - Newell Hwy Upgrade
 - Existing Culverts
 - Existing Bridges
 - Existing Flood Contours (m AHD)
- Existing Flood Depth (m):
- <= 0.5
 - 0.5 - 1.0
 - 1.0 - 1.5
 - 1.5 - 2.0
 - > 2.0

Date: 18/7/2018

Rev: A

Prepared By: YeohM

Parkes to Narromine
DD100% - Cross Drainage Flood Impact Assessment Results

Figure EX5L19
5% AEP Existing Flood Depths and Levels - CH 525.00



0 250 500 750 1000 m
1:25,000

Coordinate system: GDA 1994 MGA Zone 55
Scale ratio correct when printed at A3

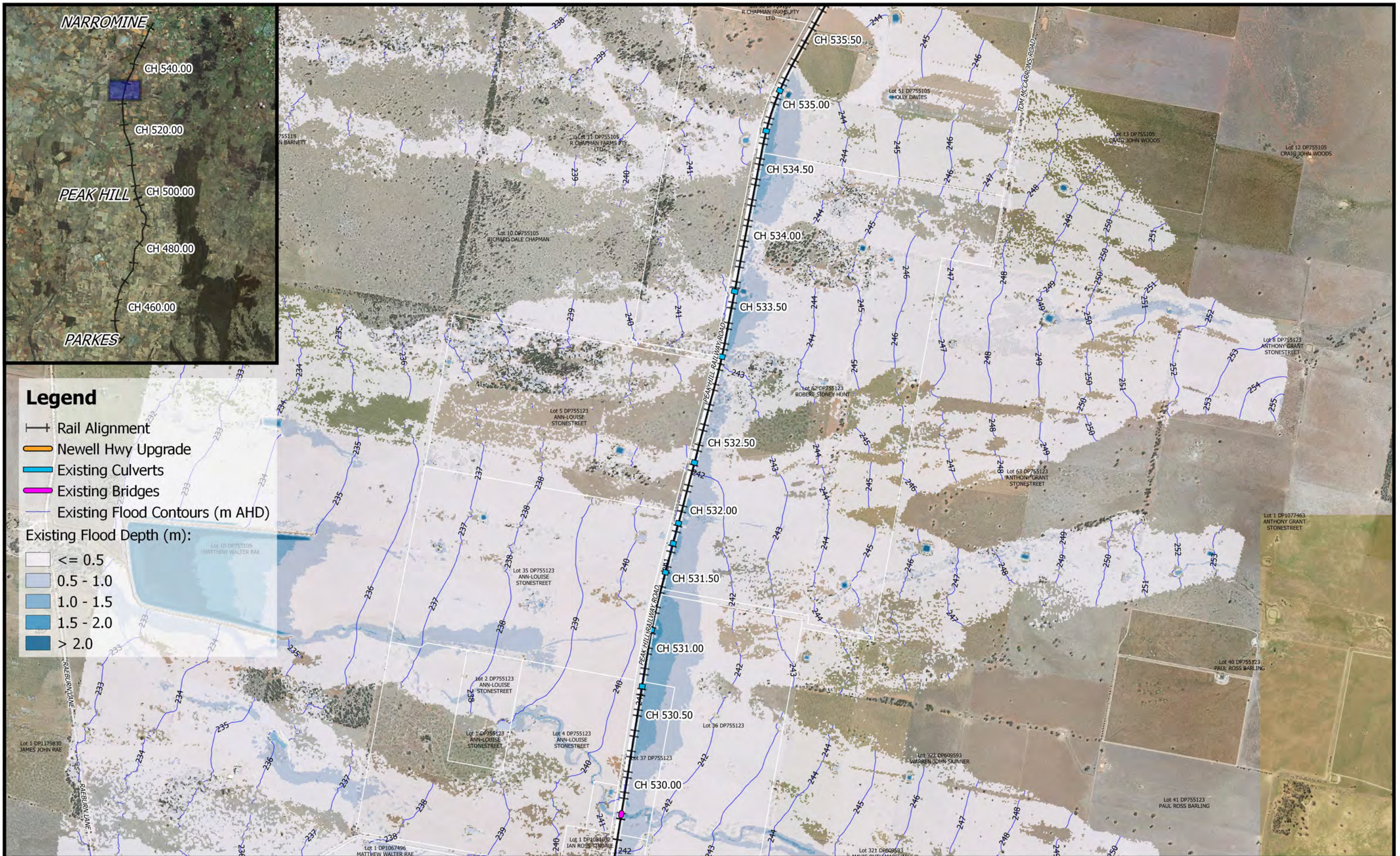




Legend

- Rail Alignment
 - Newell Hwy Upgrade
 - Existing Culverts
 - Existing Bridges
 - Existing Flood Contours (m AHD)
- Existing Flood Depth (m):
- ≤ 0.5
 - 0.5 - 1.0
 - 1.0 - 1.5
 - 1.5 - 2.0
 - > 2.0

	<p>0 250 500 750 1000 m</p> <p>1:25,000</p> <p>Coordinate system: GDA 1994 MGA Zone 55 Scale ratio correct when printed at A3</p>		Date: 18/7/2018	<p>Parkes to Narromine DD100% - Cross Drainage Flood Impact Assessment Results</p> <p>Figure EX5L20 <i>5% AEP Existing Flood Depths and Levels - CH 530.00</i></p>
	Rev: A		Prepared By: YeohM	



Legend

- Rail Alignment
- Newell Hwy Upgrade
- Existing Culverts
- Existing Bridges
- Existing Flood Contours (m AHD)

Existing Flood Depth (m):

- <= 0.5
- 0.5 - 1.0
- 1.0 - 1.5
- 1.5 - 2.0
- > 2.0

	<p>0 250 500 750 1000 m</p> <p>1:25,000</p> <p>Coordinate system: GDA 1994 MGA Zone 55 Scale ratio correct when printed at A3</p>		Date: 18/7/2018	<p>Parkes to Narromine DD100% - Cross Drainage Flood Impact Assessment Results</p> <p>Figure EX5L21 <i>5% AEP Existing Flood Depths and Levels - CH 533.00</i></p>
	Rev: A			
	Prepared By: YeohM			



Legend

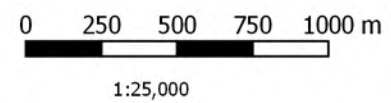
- Rail Alignment
 - Newell Hwy Upgrade
 - Existing Culverts
 - Existing Bridges
 - Existing Flood Contours (m AHD)
- Existing Flood Depth (m):
- ≤ 0.5
 - 0.5 - 1.0
 - 1.0 - 1.5
 - 1.5 - 2.0
 - > 2.0

	 1:25,000		Date: 18/7/2018	Parkes to Narromine DD100% - Cross Drainage Flood Impact Assessment Results Figure EX5L22 <i>5% AEP Existing Flood Depths and Levels - CH 535.00</i>
	Coordinate system: GDA 1994 MGA Zone 55 Scale ratio correct when printed at A3		Rev: A	
			Prepared By: YeohM	



Legend

- Rail Alignment
 - Newell Hwy Upgrade
 - Existing Culverts
 - Existing Bridges
 - Existing Flood Contours (m AHD)
- Existing Flood Depth (m):
- <= 0.5
 - 0.5 - 1.0
 - 1.0 - 1.5
 - 1.5 - 2.0
 - > 2.0



Coordinate system: GDA 1994 MGA Zone 55
Scale ratio correct when printed at A3



Date: 18/7/2018
Rev: A
Prepared By: YeohM

Parkes to Narromine
DD100% - Cross Drainage Flood Impact Assessment Results

Figure EX5L23
5% AEP Existing Flood Depths and Levels - CH 540.00



	<p>1:25,000</p> <p>Coordinate system: GDA 1994 MGA Zone 55</p> <p>Scale ratio correct when printed at A3</p>		Date: 18/7/2018	<p align="center">Parkes to Narromine</p> <p align="center">DD100% - Cross Drainage Flood Impact Assessment Results</p> <p align="right">Figure EX5L24</p> <p align="right"><i>5% AEP Existing Flood Depths and Levels - CH 545.00</i></p>
			Rev: A	
			Prepared By: YeohM	



	 1:25,000		Date: 18/7/2018	Parkes to Narromine DD100% - Cross Drainage Flood Impact Assessment Results Figure EX5L25 <i>5% AEP Existing Flood Depths and Levels - CH 550.00</i>
	Coordinate system: GDA 1994 MGA Zone 55 Scale ratio correct when printed at A3		Rev: A	
	Prepared By: YeohM			