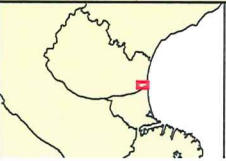


Notes:  
 Road Database supplied by Terralink International Ltd  
 Rivers and lagoons licensed under Creative Commons Attribution 3.0 New Zealand and sourced from LINZ



**Canterbury  
 Earthquake  
 Recovery  
 Authority**

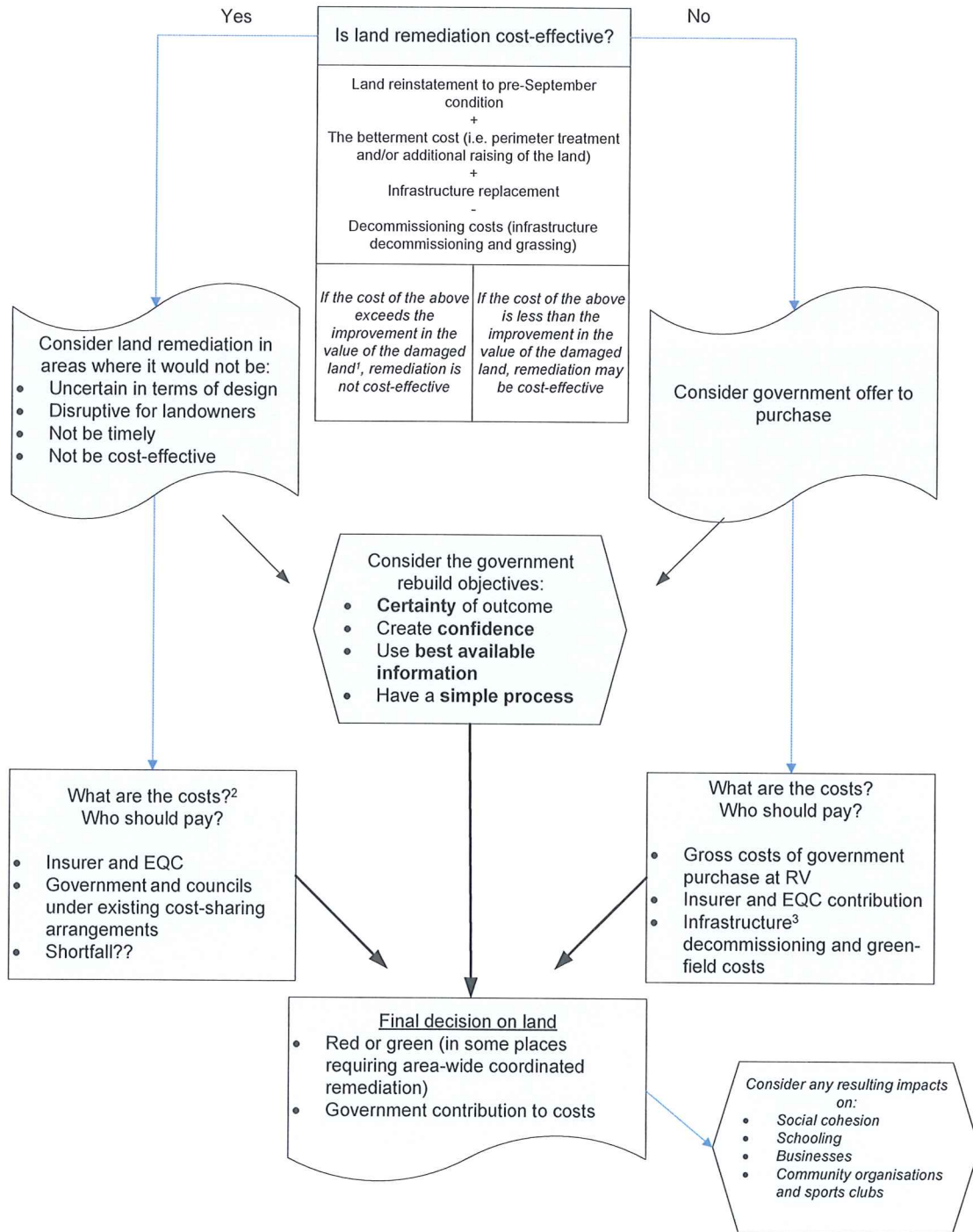
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CHECKED	
APPROVED	
ARC FILE	
SCALE (AT A3 SIZE) 1:15,000	

Canterbury Land Information Map  
 Waimakariri District, Kaiapoi Ward  
 Residential Zones  
 23rd June 2011

FIGURE No.  
**APPENDIX A**

Rev.

APPENDIX B – Process for determining reclassification of Orange Zones



Footnotes:

<sup>1</sup>Despite the recent earthquake events, properties are likely to have some land value left. We assume there is 10% of the land value remaining in the properties, as indicated by the Valuer General.

<sup>2</sup>Uncertainty in cost calculations for remediation must be considered, and the time-cost of money

<sup>3</sup>Includes roads and water pipes (fresh, storm and waste)



**Legend**

- Building Damage Ratio**  
(Repair cost estimate / replacement cost)
- 0% - 20%
  - 20% - 40%
  - 40% - 60%
  - 60% - 80%
  - 80% - 100%
  - 100% (rebuild because it is uneconomic to repair the building)



**Notes:**  
 Low-resolution aerial photos sourced from Google Earth (Copyright: 2009).  
 High-resolution aeriels provided by New Zealand Aerial Mapping (February 2011)  
 Building damage based on data provided by AMI, Ansva, EQC, FMG, Housing New Zealand, IAG, Lumley, MAS, Tower and Vero



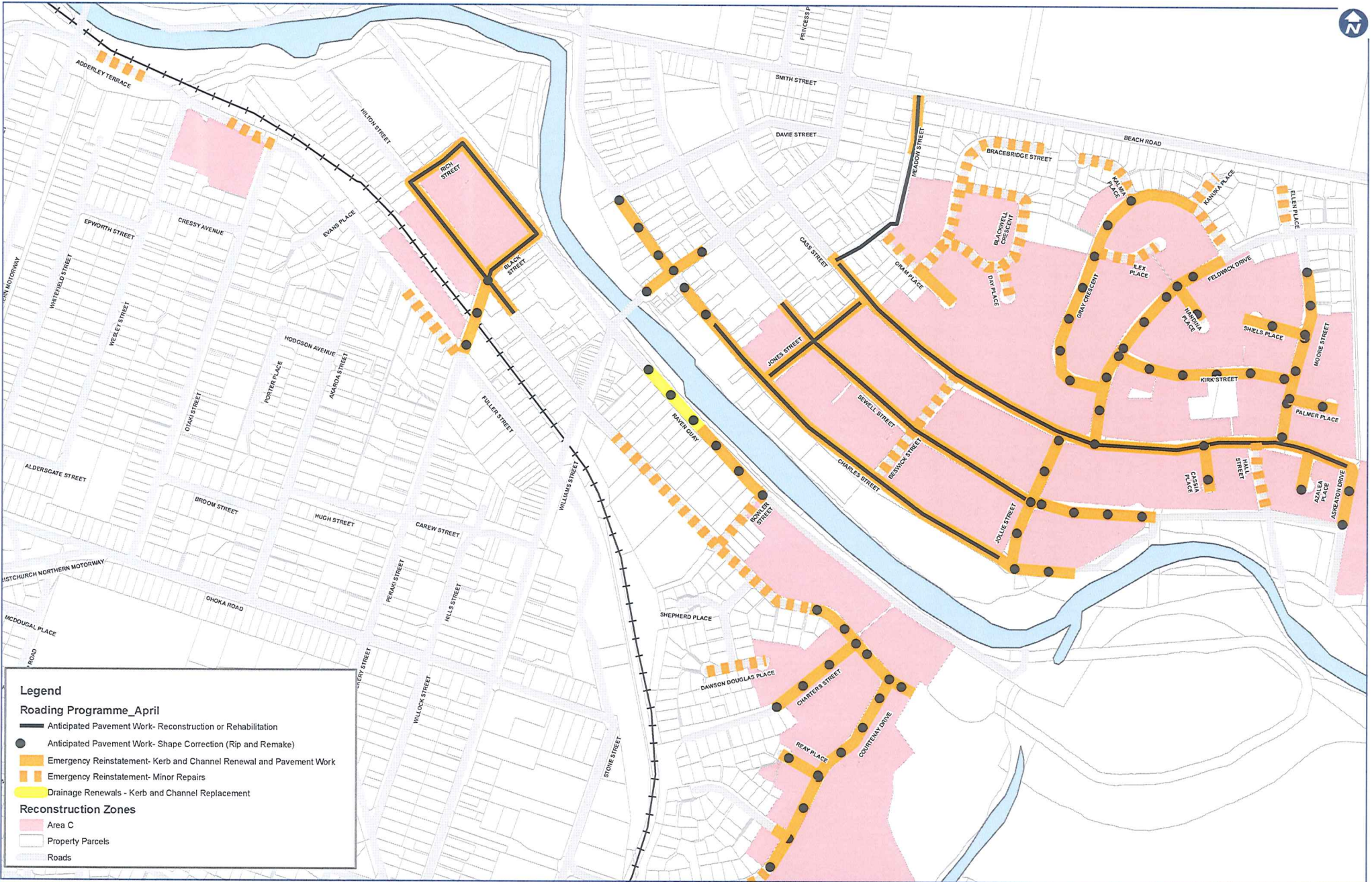
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PROJECT No.	

**CERA**  
**CANTERBURY EARTHQUAKE RECOVERY**  
**Aggregated Building Damage Map**  
**Aggregated Building Damage After 22 February 2011**

FIG. No.	REV.
	0

APPENDIX C





**Legend**

**Roading Programme\_April**

- Anticipated Pavement Work- Reconstruction or Rehabilitation
- Anticipated Pavement Work- Shape Correction (Rip and Remake)
- Emergency Reinstatement- Kerb and Channel Renewal and Pavement Work
- - - Emergency Reinstatement- Minor Repairs
- Drainage Renewals - Kerb and Channel Replacement

**Reconstruction Zones**

- Area C
- Property Parcels
- Roads

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Notes:

Printed	9 May 2011
Approved	Martyn Wooster
Designed	N/A
Drawn	Joanne Goiden
File Name	WDC_Mains_Renewals_Kaipoi

© Copyright AECOM New Zealand Limited 2010. This map is confidential and shall only be used for the purpose of this project. Asset data displayed in this map was obtained from the Waimakariri District Council and reflects the accuracy of asset records held.

Map features depicted in terms of NZTM projection.

Date Sources:  
 NZ Topographic Dataworks, LINZ 2009  
 NZ CRS Database, LINZ 2007  
 WDC Asset Records  
 WDC CAD drawings and spreadsheet repair data.

Date	10 May 2011
Checked	XXX
Checked	XXX

APPENDIX  
D

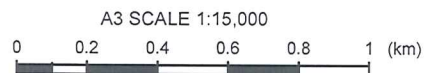
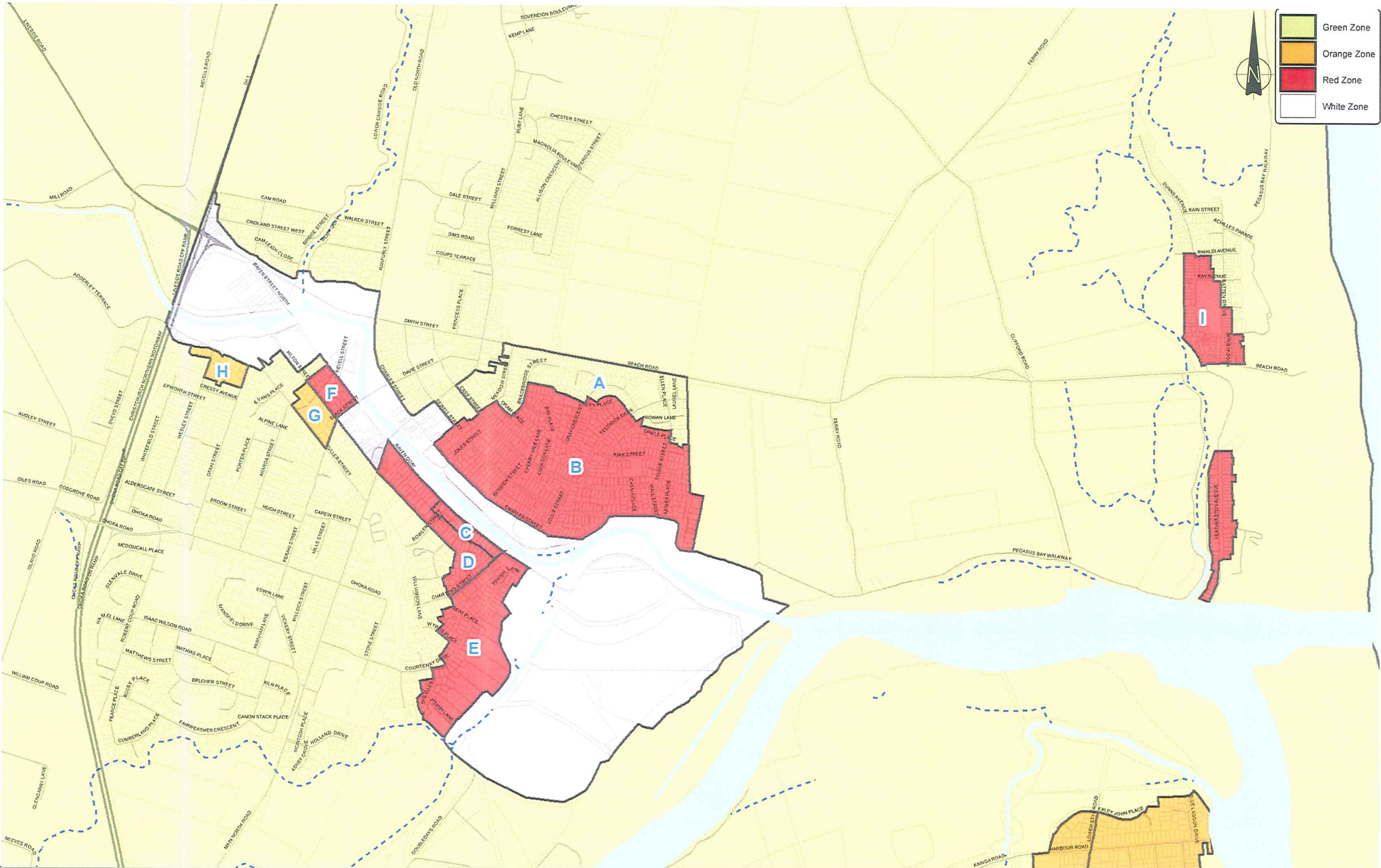
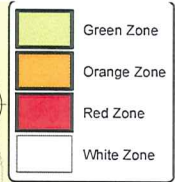
Project: **WAIMAKARIRI DISTRICT COUNCIL**

Title: **Water Main Renewal Recommendations Kaipoi**

Map 3 - Roding Programme & Area C

Scale: Draft      Map No: **Figure 1**      Rev: F





**Canterbury Earthquake Recovery Authority**

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APPROVED	
ARCFILE	
SCALE (AT A3 SIZE)	
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Canterbury Land Information Map  
Waimakariri District  
Residential Zones  
11th August 2011

FIGURE No.	APPENDIX E	Rev.	
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Notes:  
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