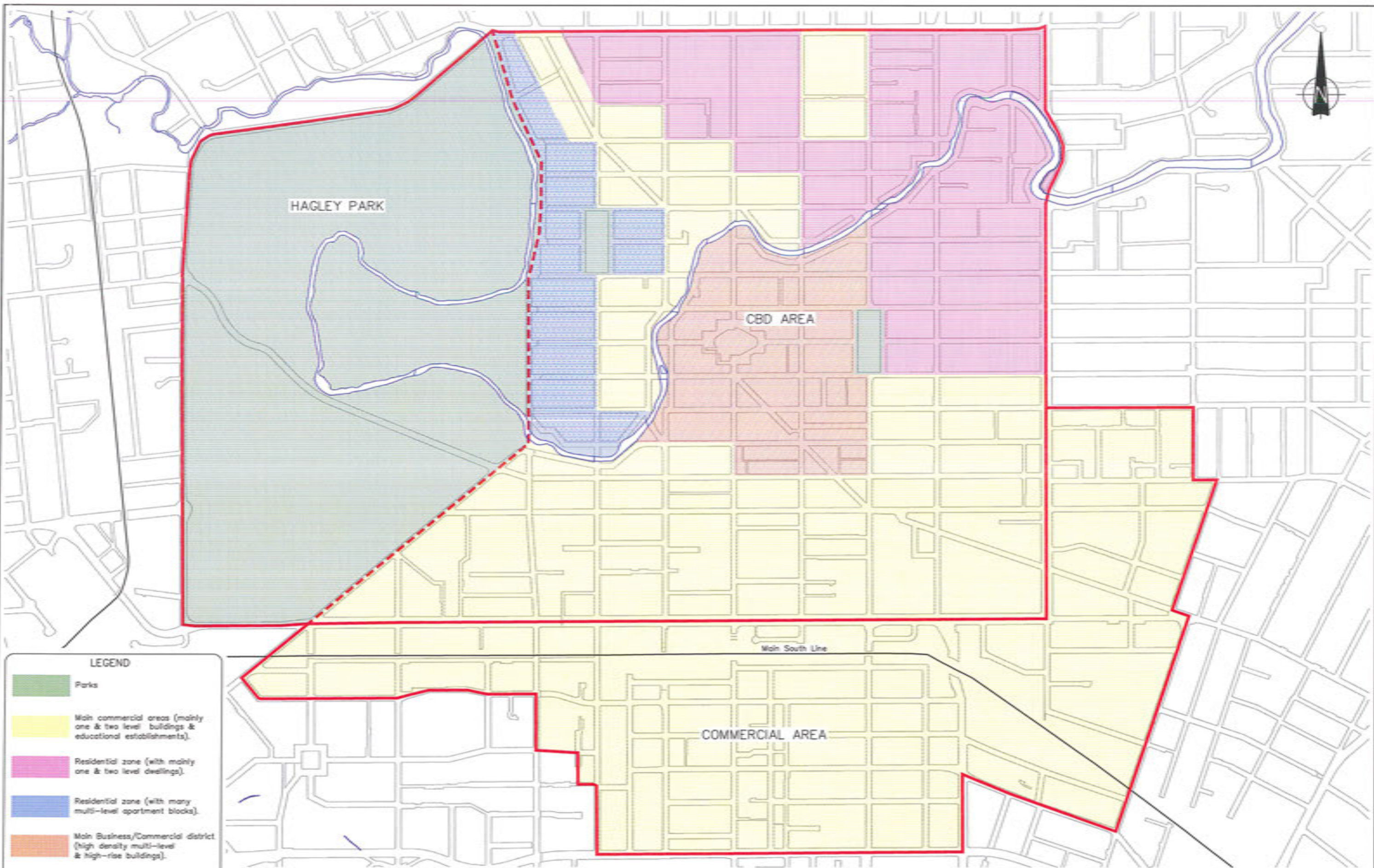


**Appendix A: Site and Ground Investigation Location
Plans**



LEGEND

- Parks
- Main commercial areas (mainly one & two level buildings & educational establishments).
- Residential zone (with mainly one & two level dwellings).
- Residential zone (with many multi-level apartment blocks).
- Main Business/Commercial district (high density multi-level & high-rise buildings).

NOTES:
 1. Street map sourced from Terralink International (Copyright 2002-2005 Terralink International Limited and its licensors).

SCALE 1:12,500

0 100 200 300 400 500 600 700 800 (m)

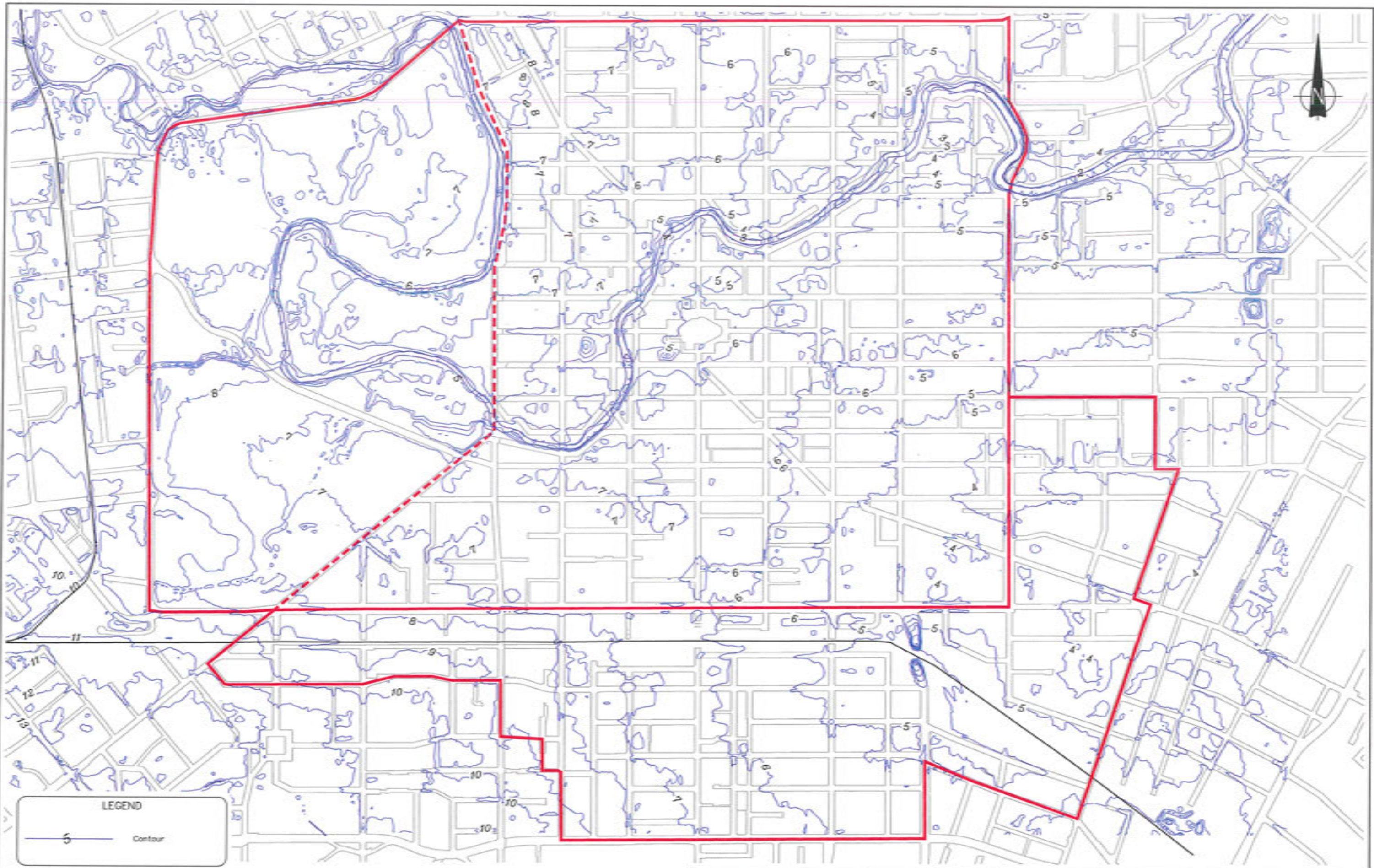
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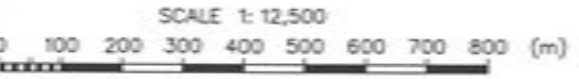
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CHRISTCHURCH CITY COUNCIL
 GEOLOGICAL INTERPRETATIVE REPORT
 CHRISTCHURCH CENTRAL CITY
 Site Location and Land Use Plan



NOTES:
 1. Street map sourced from Terralink International (Copyright 2002-2005 Terralink International Limited and its licensors).
 2. Ground elevations based on LIDAR survey conducted by New Zealand Aerial Mapping (NZAM, February 2011).



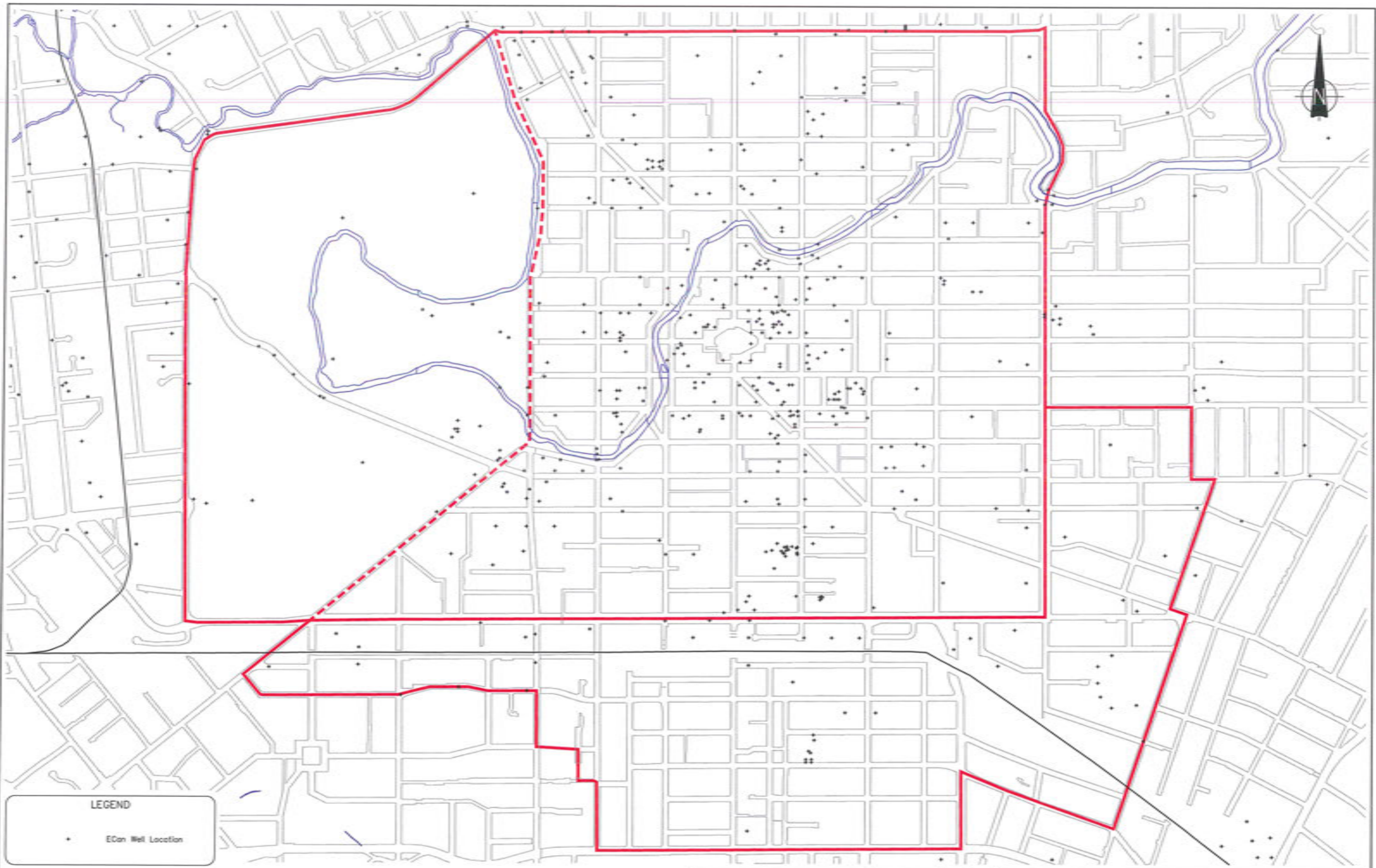
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CHRISTCHURCH CITY COUNCIL
 GEOLOGICAL INTERPRETATIVE REPORT
 CHRISTCHURCH CENTRAL CITY
 Topographical Plan

FIG. No. A2

REV. 0



LEGEND

• ECan Well Location

NOTES:
 1. Street map sourced from Terralink International (Copyright 2002–2005 Terralink International Limited and its licensors).
 2. Well locations obtained from Environment Canterbury.
 3. See zone factual reports for Large scale location plans, well identification numbers and logs.
 4. Note that more than one well record may be present at individual locations.

SCALE 1: 12,500

0 100 200 300 400 500 600 700 800 (m)



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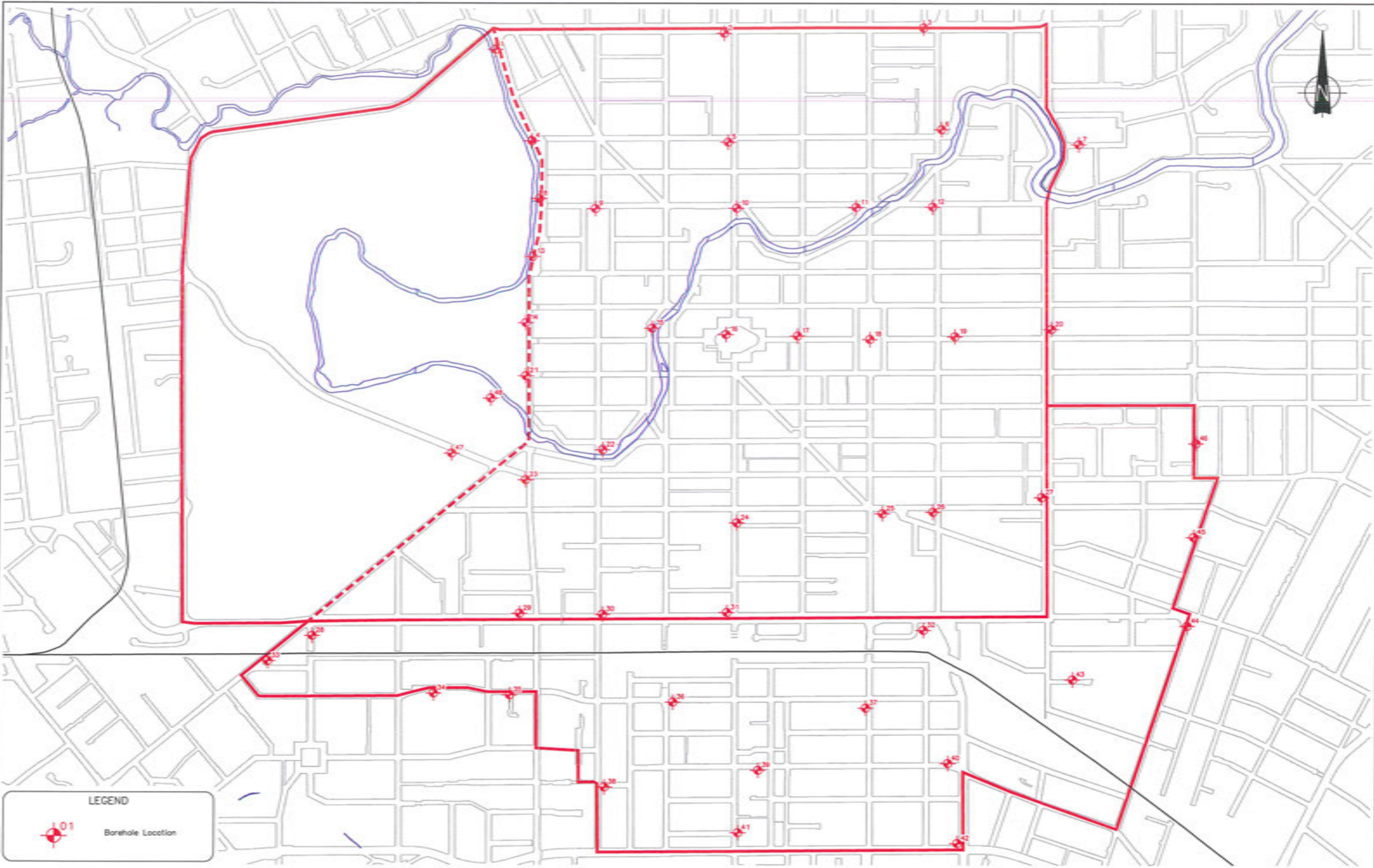
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CHRISTCHURCH CITY COUNCIL
 GEOLOGICAL INTERPRETATIVE REPORT
 CHRISTCHURCH CENTRAL CITY
 Environment Canterbury Well Locations

FIG. No. A3

REV. 0

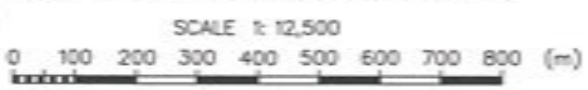
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LEGEND

 Borehole Location

- NOTES:**
1. Street map sourced from Temalink International (Copyright 2002-2005 Temalink International Limited and its licensors).
 2. See Zone Factual Reports for large scale location plans and borehole logs/core photographs.
 3. All borehole numbers are prefixed by "BH-CBD-".

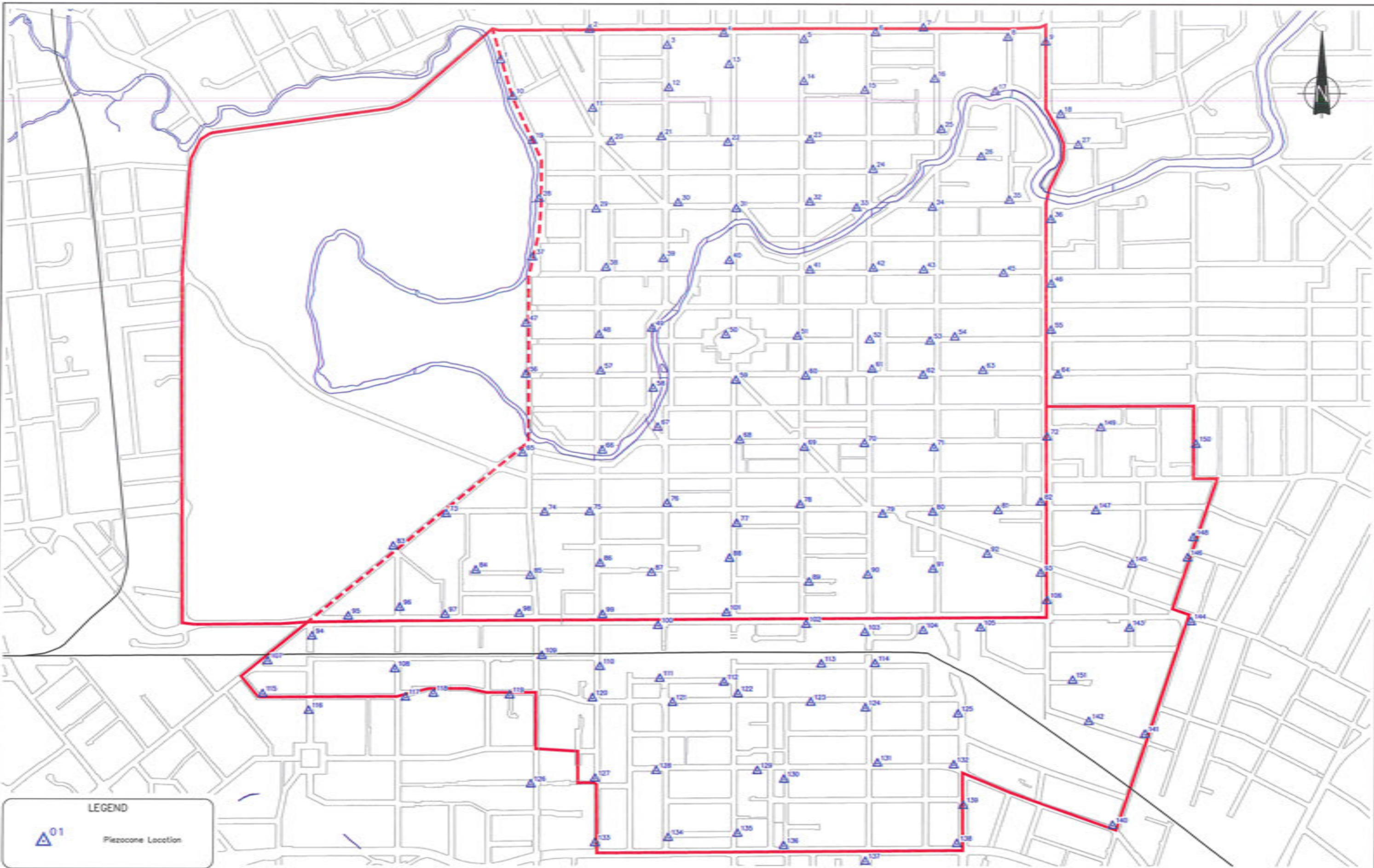


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CHRISTCHURCH CITY COUNCIL
 GEOLOGICAL INTERPRETATIVE REPORT
 CHRISTCHURCH CENTRAL CITY
 Borehole Location Plan

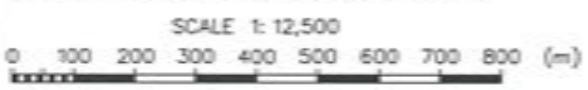
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LEGEND

 Piezocone Location

- NOTES:**
1. Street map sourced from Terralink International (Copyright 2002-2005 Terralink International Limited and its licensors).
 2. See Zone Factual Reports for large scale location plan and piezocone records.
 3. All CPT numbers are prefixed by "CPT-CBD-".

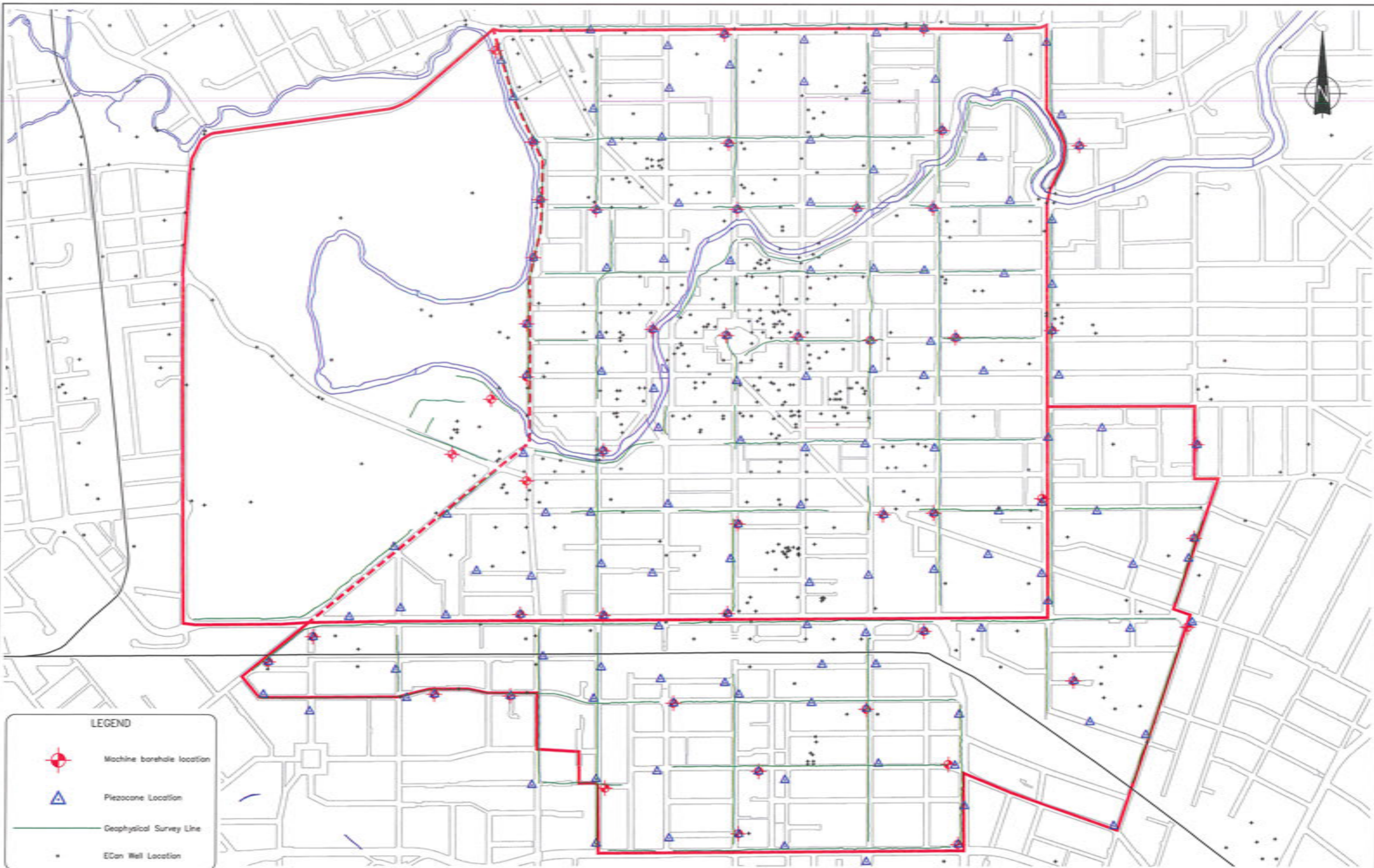


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 GEOLOGICAL INTERPRETATIVE REPORT
 CHRISTCHURCH CENTRAL CITY
 Piezocone Location Plan

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LEGEND

-  Machine borehole location
-  Piezocene Location
-  Geophysical Survey Line
-  ECan Well Location

NOTES:

1. Street map sourced from Terralink International (Copyright 2002-2005 Terralink International Limited and its licensors).
2. See Zone Factual Reports for large scale location plans.
3. See figures A8 to A11 for detailed geophysical survey location plans.

SCALE 1: 12,500

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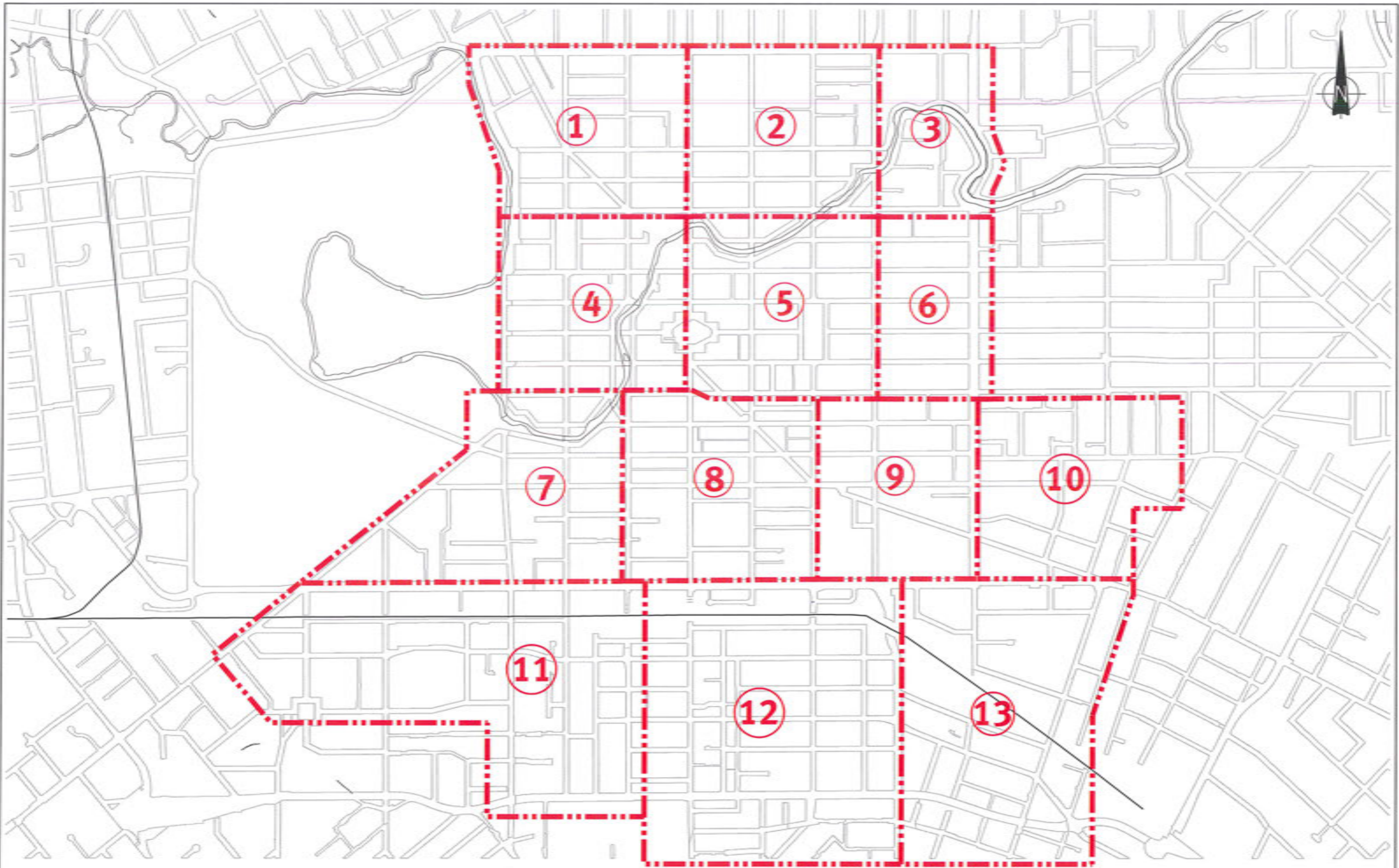


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Project No.	52000.301	

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 GEOLOGICAL INTERPRETATIVE REPORT
 CHRISTCHURCH CENTRAL CITY
 Composite Ground Investigation Location Plan

REV. No. **A6** REV. **0**



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NOTES:

1. Street map sourced from Terralink International (Copyright 2002-2005 Terralink International Limited and its licensors).
2. Location of geophysical survey lines provided by Southern Geophysical Ltd (October, 2011)



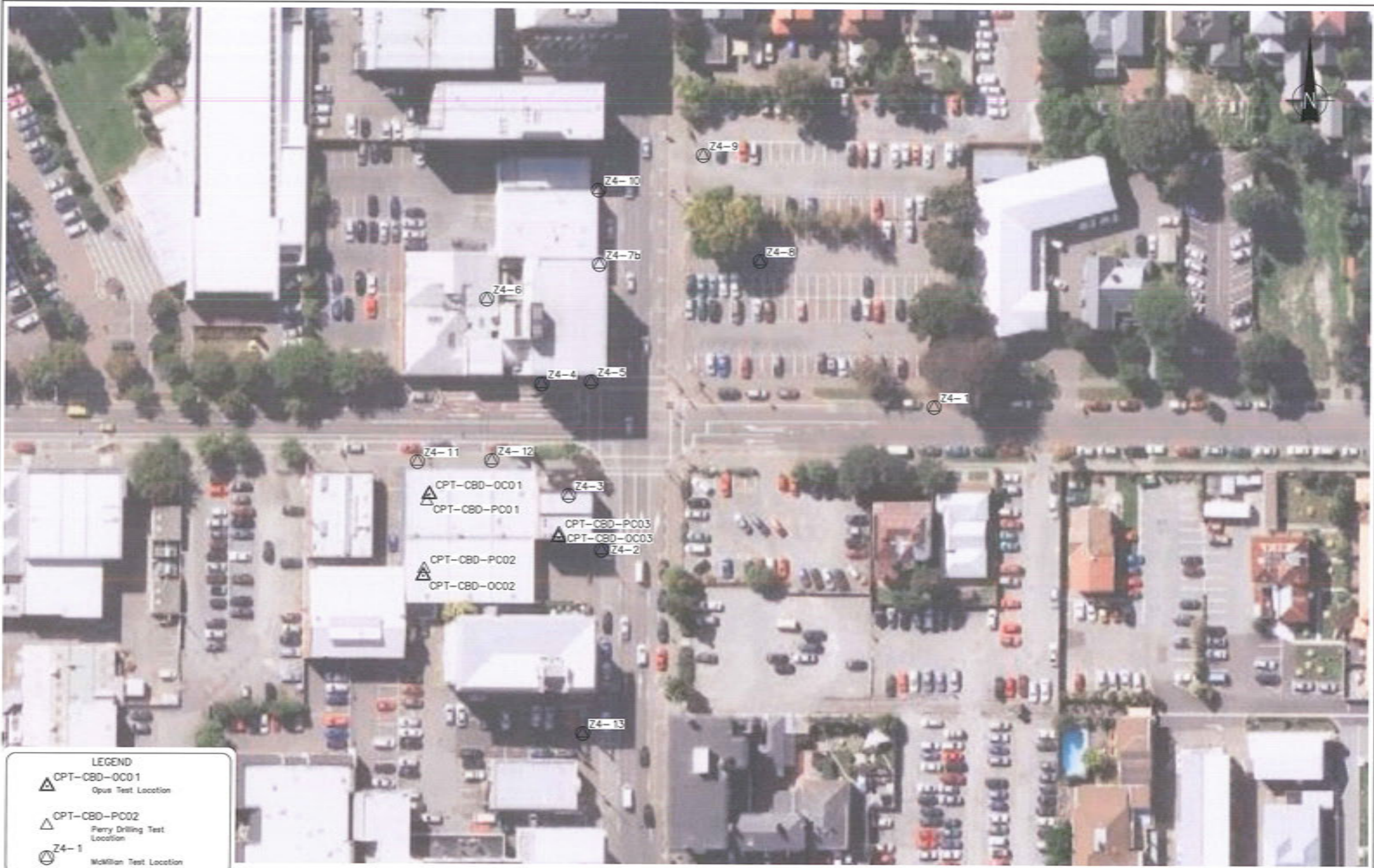
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GEOLOGICAL INTERPRETATIVE REPORT
CHRISTCHURCH CENTRAL CITY
 Factual Report Zones

FIG. No. A7

REV. 0



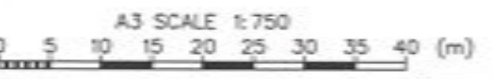
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LEGEND

- CPT-CBD-OC01
Opus Test Location
- CPT-CBD-PC02
Perry Drilling Test Location
- Z4-1
McMillan Test Location

NOTES:

1. Aerial image sourced from Terralink International (Copyright 2002-2005 Terralink International Limited and its licensors).
2. University of Canterbury piezocone hole locations are approximate only (not surveyed).

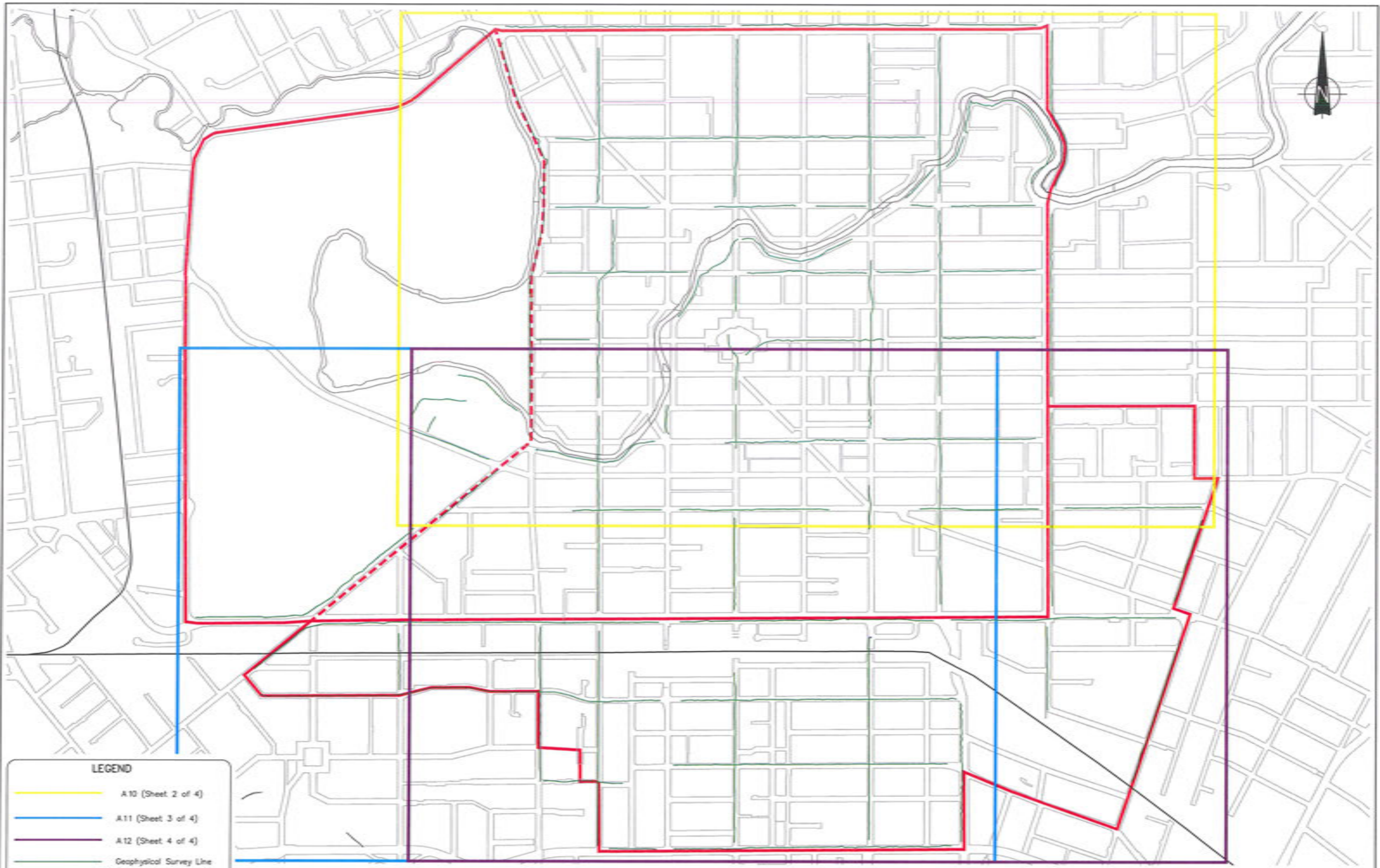


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GEOLOGICAL INTERPRETATIVE REPORT
CHRISTCHURCH CENTRAL CITY
Piezocone Calibration Testing Location Plan

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LEGEND	
	A10 (Sheet 2 of 4)
	A11 (Sheet 3 of 4)
	A12 (Sheet 4 of 4)
	Geophysical Survey Line

NOTES:
 1. Street map sourced from Terralink International (Copyright 2002-2005 Terralink International Limited and its licensors).
 2. Location of geophysical survey lines provided by Southern Geophysical Ltd (October, 2011)

SCALE 1:12,500



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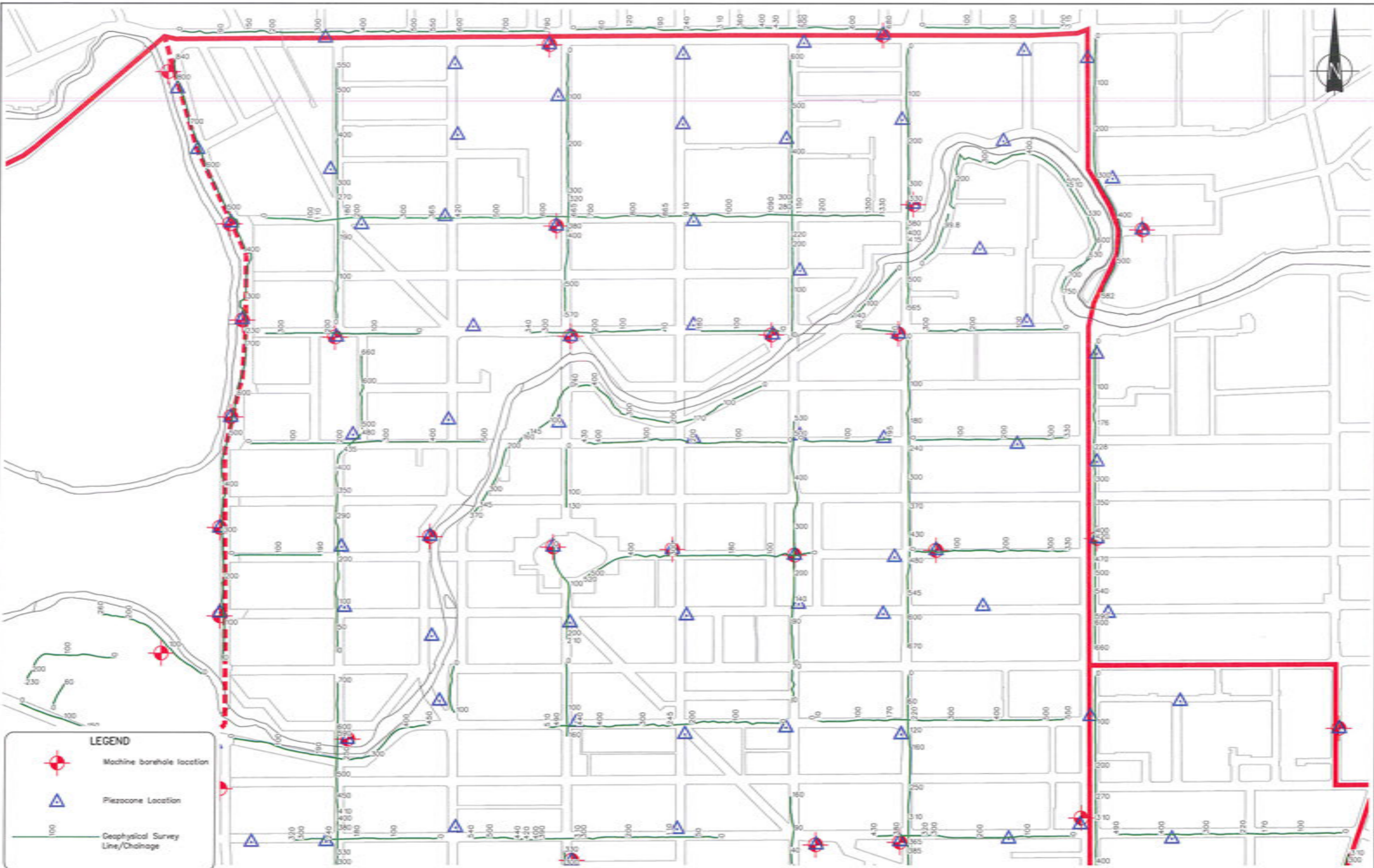
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GEOLOGICAL INTERPRETATIVE REPORT
CHRISTCHURCH CENTRAL CITY
 Geophysical Survey Location Plan (Sheet 1 of 4)




FIG. No. **A9**

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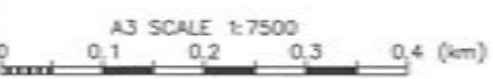


LEGEND

-  Machine borehole location
-  Piezocene Location
-  Geophysical Survey Line/Chainage

NOTES:

- Street map sourced from TerraLink International (Copyright 2002-2005 TerraLink International Limited and its licensors).
- Location of geophysical survey lines provided by Southern Geophysical Ltd (October, 2011)



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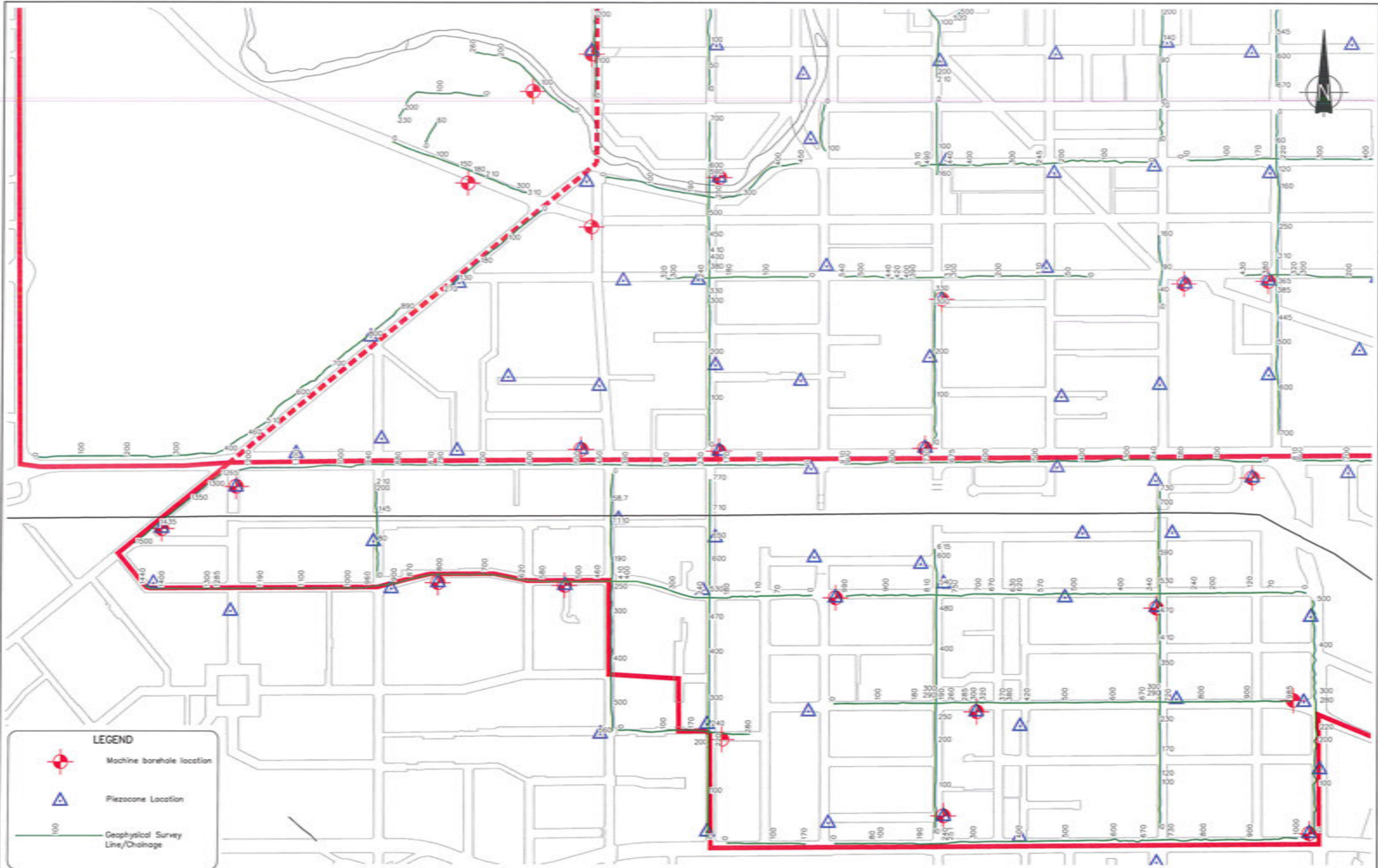
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GEOLOGICAL INTERPRETATIVE REPORT
CHRISTCHURCH CENTRAL CITY
Geophysical Survey Location Plan (Sheet 2 of 4)




FIG. No. A 10

REV. 0

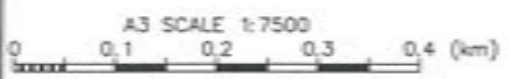
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LEGEND

-  Machine borehole location
-  Piezometer Location
-  Geophysical Survey Line/Charge

- NOTES:**
1. Street map sourced from TerraLink International (Copyright 2002-2005 TerraLink International Limited and its licensors).
 2. Location of geophysical survey lines provided by Southern Geophysical Ltd (October, 2011)



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Approved	HF	✓
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GEOLOGICAL INTERPRETATIVE REPORT
CHRISTCHURCH CENTRAL CITY
 Geophysical Survey Location Plan (Sheet 3 of 4)

FIG. No.	A11	REV.	0
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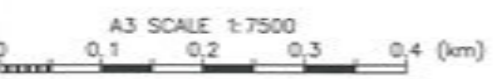
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LEGEND

-  Machine borehole location
-  Piezometer Location
-  Geophysical Survey Line/Drainage

NOTES:
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 2. Location of geophysical survey lines provided by Southern Geophysical Ltd (October, 2011)



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 GEOLOGICAL INTERPRETATIVE REPORT
 CHRISTCHURCH CENTRAL CITY
 Geophysical Survey Location Plan (Sheet 4 of 4)

REV. No. **A 12** REV. **0**



Z8-1
Z8-2
Z8-3
Z8-4

Z8-7
Z8-11
Z8-6

Z5-1
Z5-2
Z5-3
Z5-5

Z1-1
Z1-8
Z1-3

Z1-4
Z1-5
Z1-6

Z1-10
Z1-7
Z1-9

Z2-6
Z2-7
Z2-5
Z2-11

Z2-4
Z2-2b
Z2-9
Z2-10

Z2-1

Z4-10
Z4-7a&b
Z4-6
Z4-4
Z4-5
Z4-11
Z4-12
Z4-3
Z4-2
Z4-13

Z4-9
Z4-8
Z4-1

LEGEND

Z1-1 University of Canterbury Piezocone Test Location

NOTES:
1. Aerial image sourced from Terralink International (Copyright 2002-2005 Terralink International Limited and its licensors).
2. University of Canterbury piezocone hole locations are approximate only (not surveyed).

A3 SCALE 1:3000
0 30 60 90 120 150 (m)

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GEOLOGICAL INTERPRETATIVE REPORT
CHRISTCHURCH CENTRAL CITY
University of Canterbury Piezocone Location Plan

FIG. No. A13

REV. 0

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