



Dunedin 3 Waters Strategy

Halsey Street Integrated Catchment Management Plan

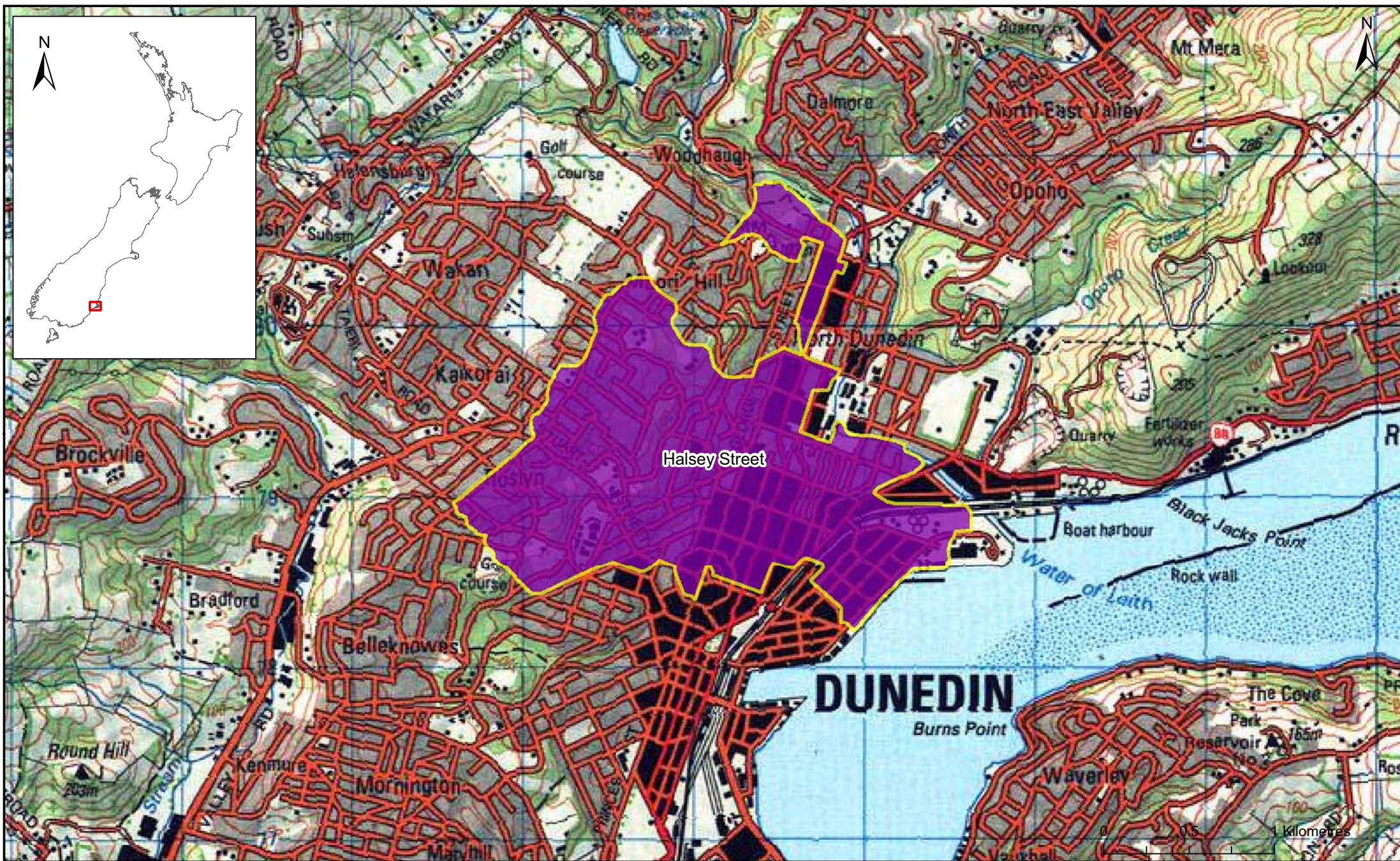
Figures

List of Figures:



- Figure 4-1: Halsey Street Catchment Location
- Figure 4-2: Halsey Street Catchment Contour Map
- Figure 4-3: Halsey Street Catchment Geology Map
- Figure 4-4: Halsey Street Catchment Land Use Zones
- Figure 4-5: Halsey Street Catchment Archaeological and Heritage Sites
- Figure 4-6: Recent Consents and Designations
- Figure 4-7: Contaminated Land Sites
- Figure 4-8: Current Imperviousness of the Halsey Street Catchment
- Figure 4-10: Stormwater Drainage Network
- Figure 4-11: Pipe Network Ages
- Figure 4-12: Stormwater Network Criticality
- Figure 4-13: Stormwater Flooding Complaints
- Figure 4-14: Wastewater Flooding Complaints
- Figure 4-15: Three Waters Networks
- Figure 5-1: Marine Receiving Environment
- Figure 7-1: Halsey Street Stormwater Catchment Model Extent
- Figure 9-1: Catchment Issues
- Figure 12-1: Stormwater Quantity Active Management Options





HALSEY STREET INTEGRATED CATCHMENT MANAGEMENT PLAN

Figure 4-1

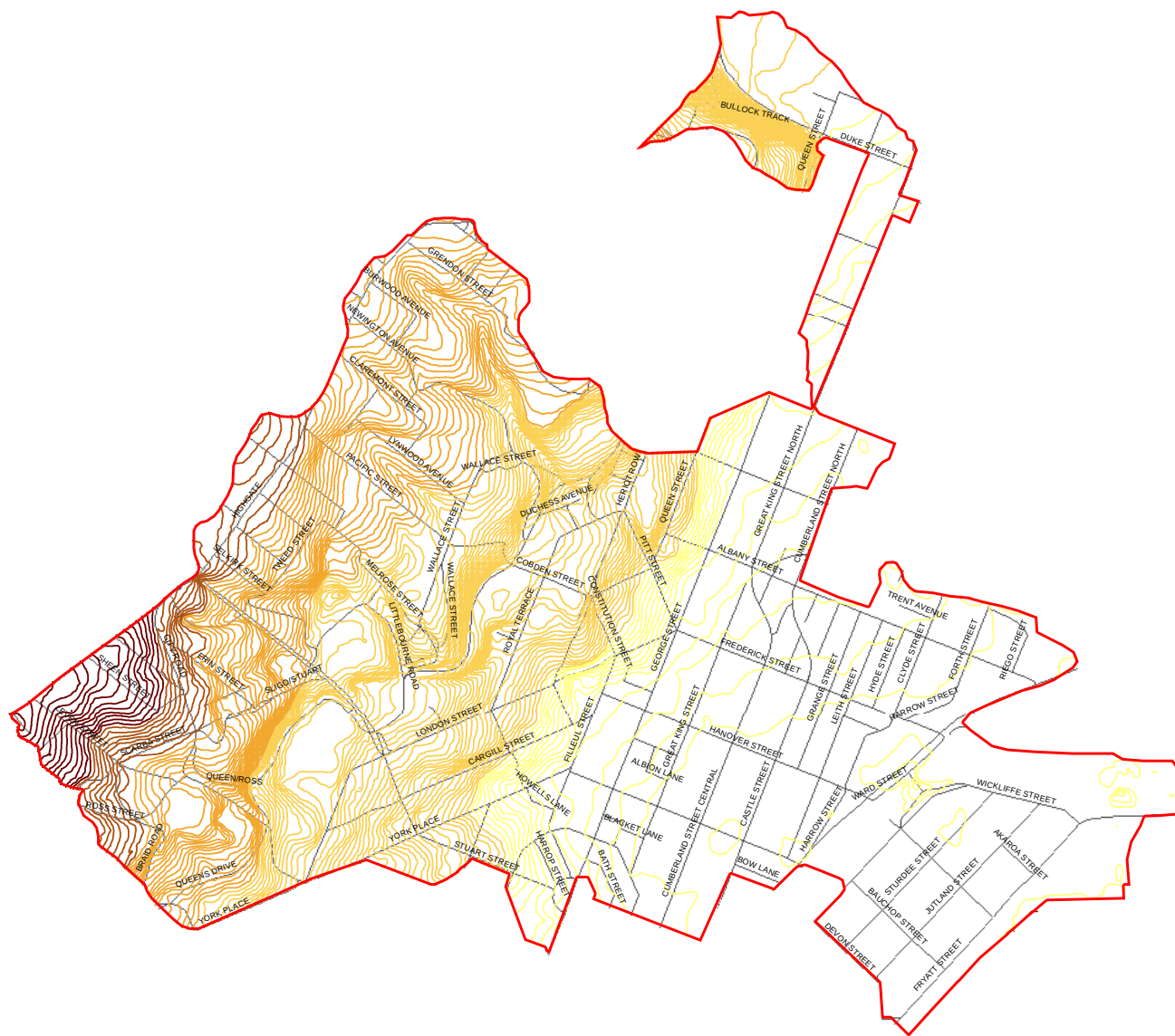
Halsey Street Catchment Location

DISCIPLINE
Stormwater

Drawn: KC	Status: Final
Checked: HES	Scale: 1:20,000
Approved: SDH	Plot Date: Sep 2011
Date: Sep 2011	Job No: 42173227
	Map No: Figure 4-1
	Revision: -

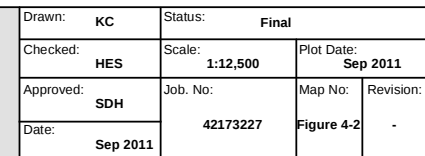
Dunedin 3 Waters Strategy

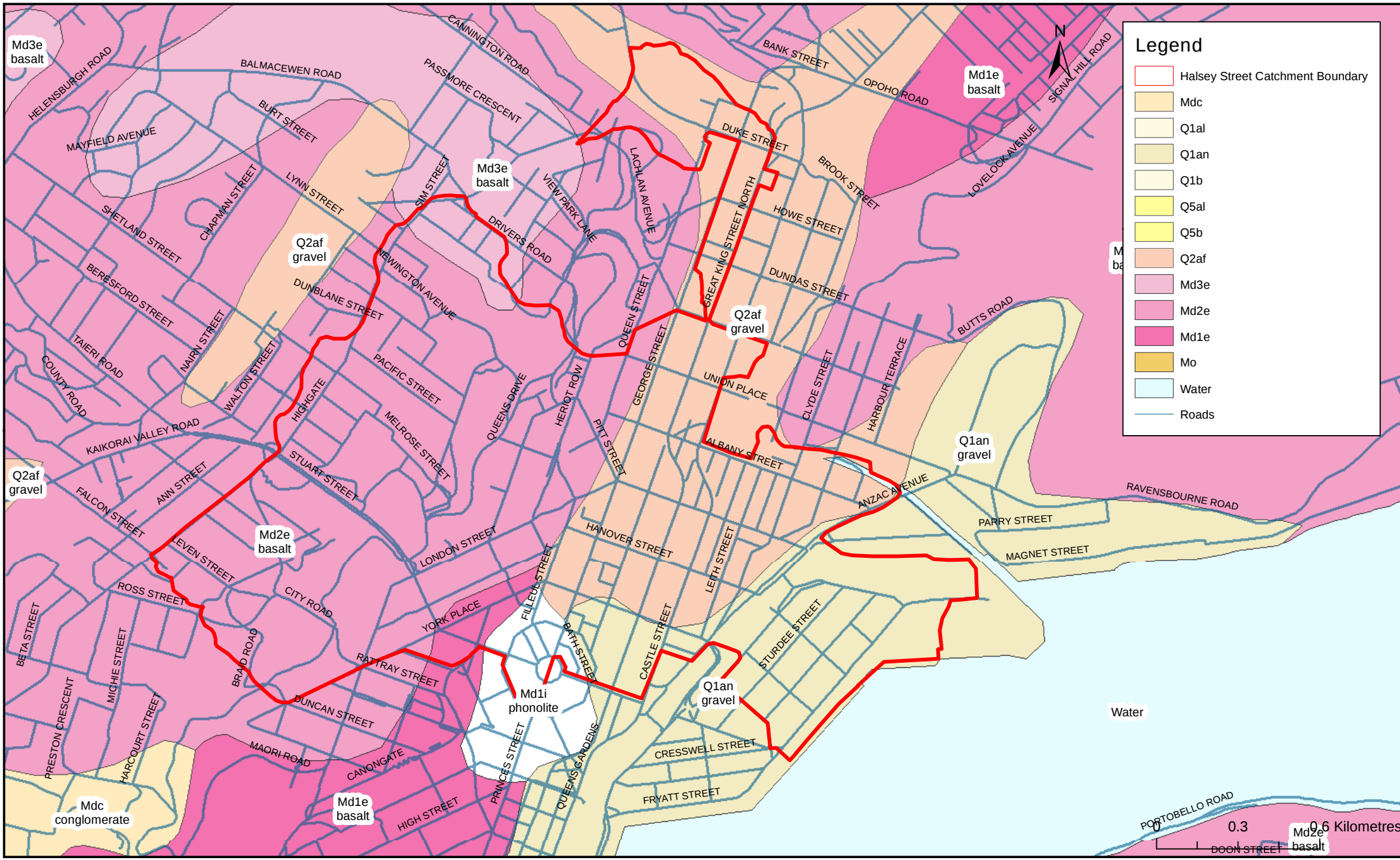


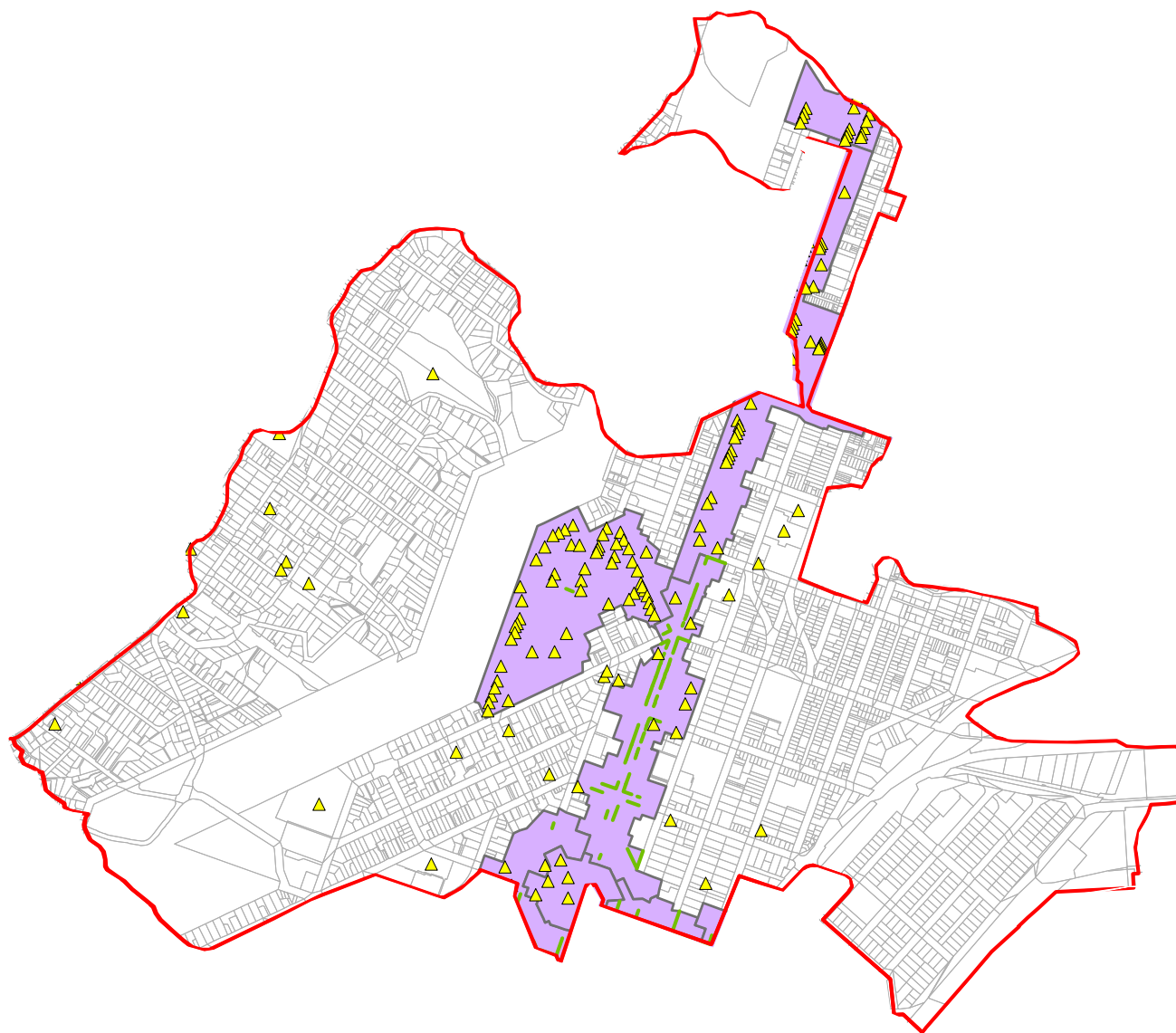


— <30
— 30-110
— 111-155
— 156-170
— >170

0 0.3 0.6 Kilometres







Legend

- Catchment Boundary
- DP Heritage Structure
- DP Archeological Sites
- DP Heritage Facade
- DP Townscape and Heritage Precinct
- Parcel Boundaries

Dunedin 3 Waters Strategy

HALSEY ST INTEGRATED CATCHMENT MANAGEMENT PLAN

Figure 4-5
Halsey Street Catchment Archaeological and Heritage Sites

Discipline:

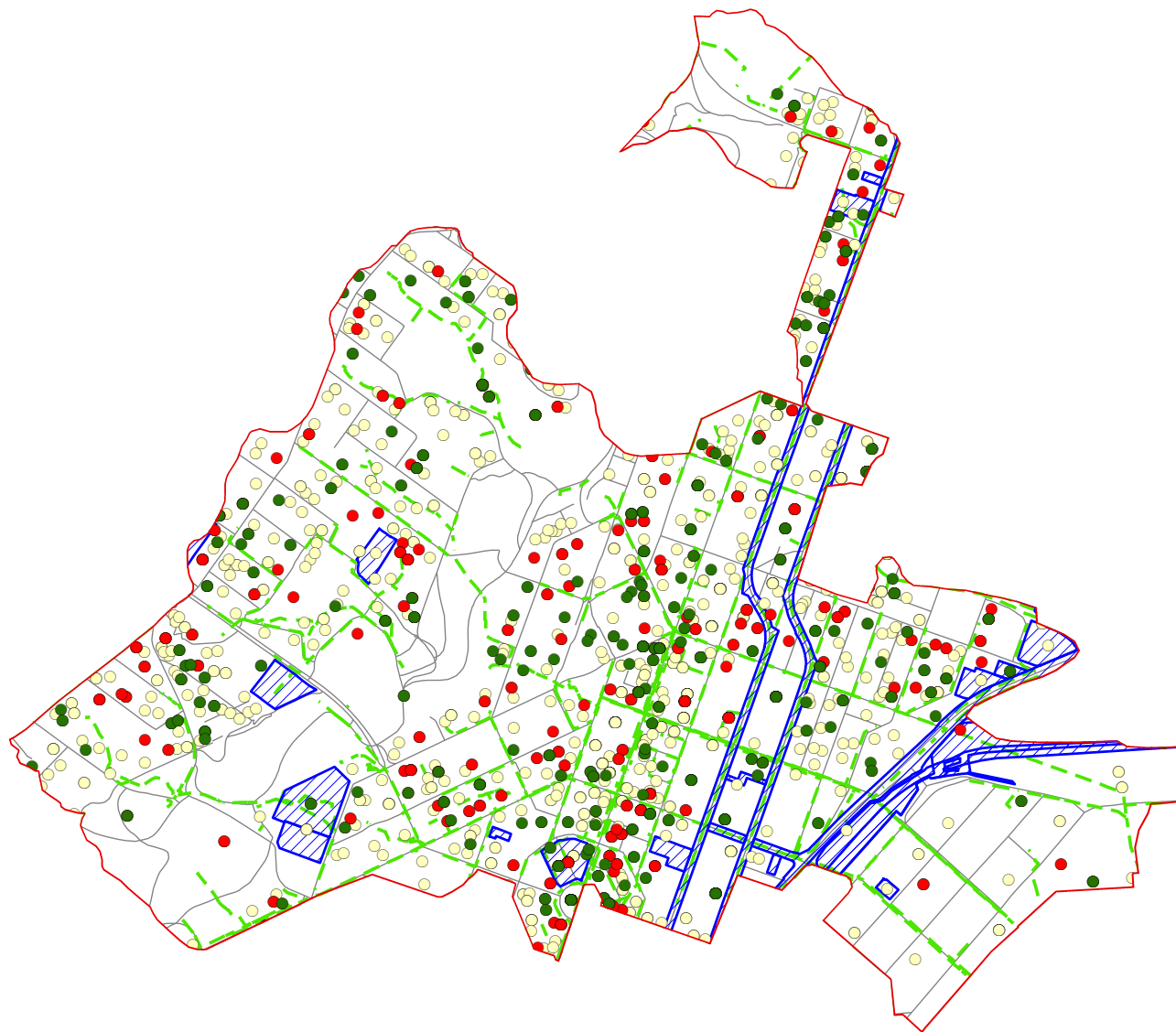
Stormwater

DESIGNED BY	MG	REVIEWED BY	Final
DRAWN BY	LB	DATE	February 11
CHECKED BY	HS	DATE	February 11
DATE	February 11	3-d1040.07	

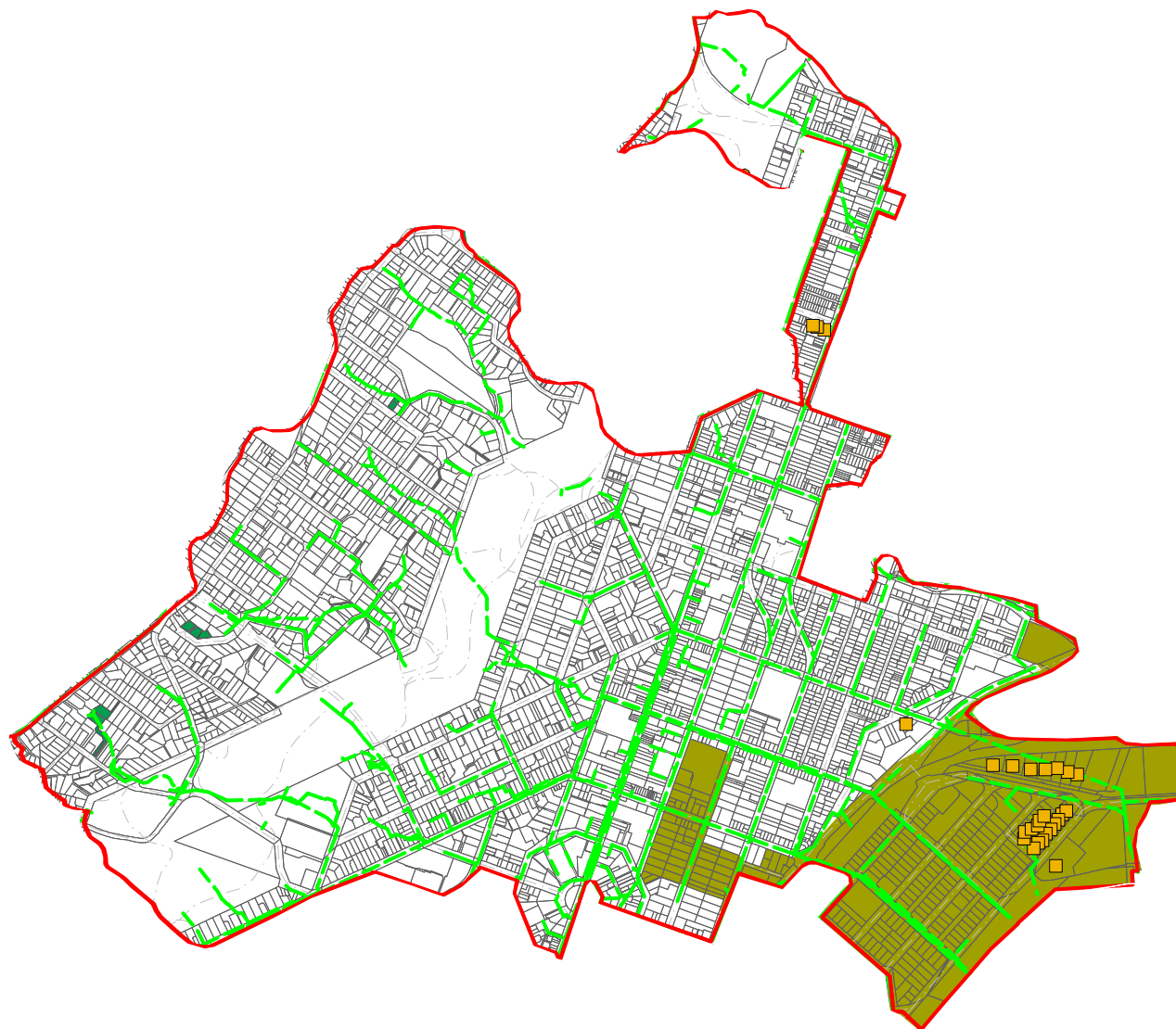


Legend

- Halsey Street Catchment Boundary
- Consents**
 - Other Consents
 - Land Use Change
 - Building Consent
- Stormwater Network
- Main Roads
- District Plan Designation

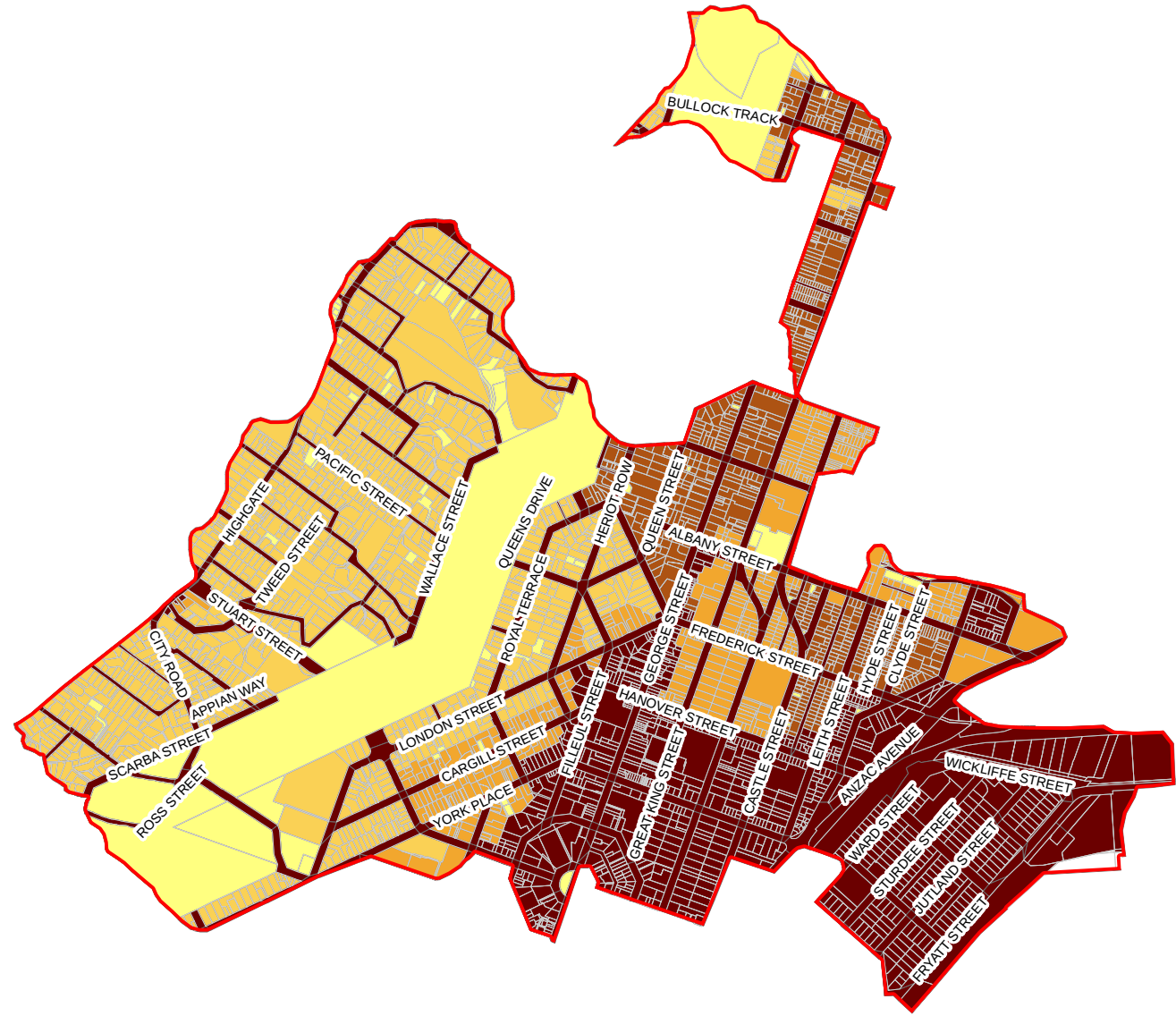


0 0.5 1 Kilometres



Legend

-  Catchment Boundary
-  Stormwater Network
-  Road
-  Parcel Boundaries
-  Contaminated Site
-  Landfill
-  Reclamation
-  Reclaimed Land
-  ORC Contaminated Sites



Legend

- Halsey Street Catchment Boundary
- Land Parcels

Current Land Use Imperviousness

Impervious (%)

- 0.0 - 20.0
- 20.1 - 40.0
- 40.1 - 60.0
- 60.1 - 80.0
- 80.1 - 100.0





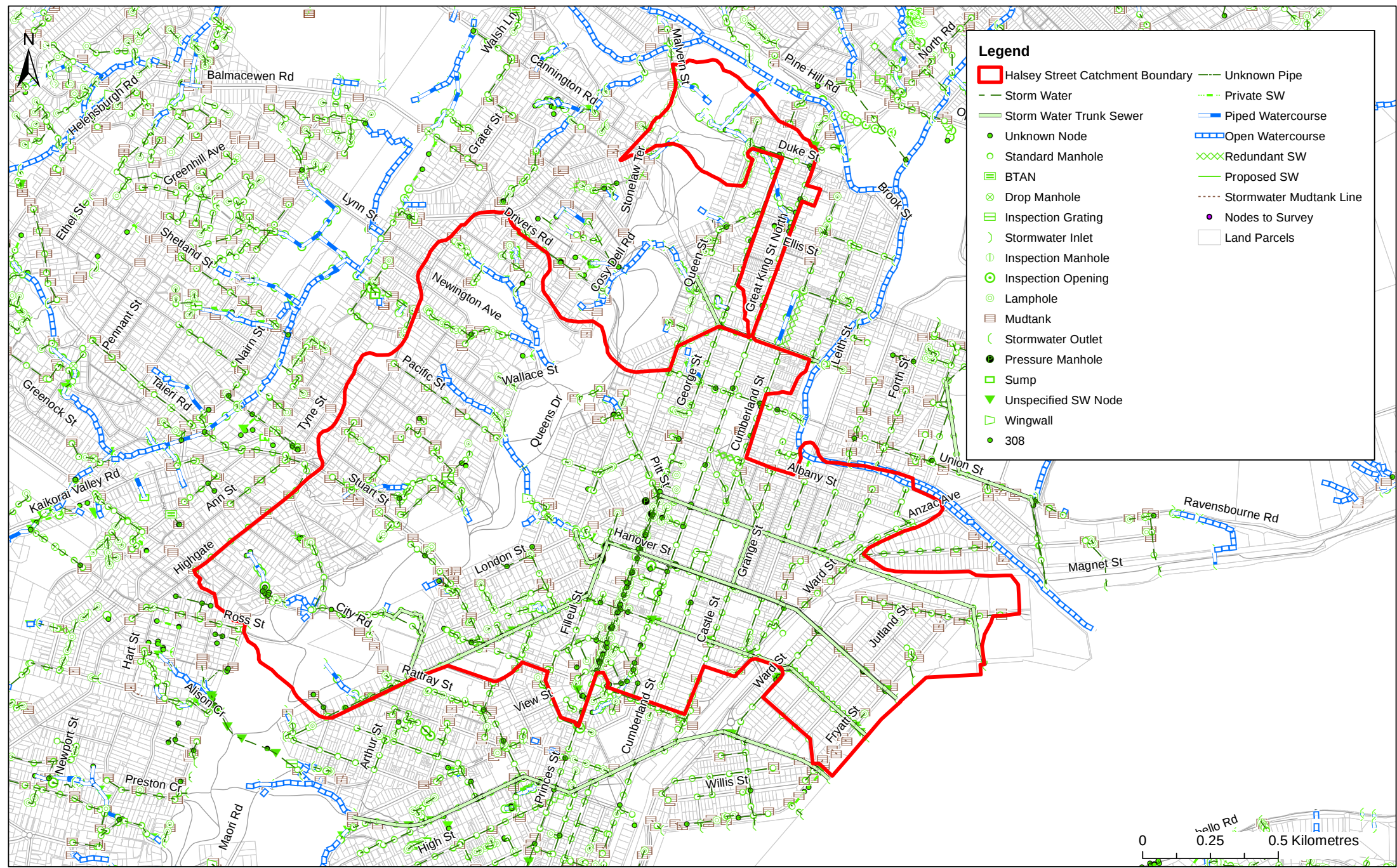
Dunedin 3 Waters Strategy

HALSEY STREET INTEGRATED CATCHMENT MANAGEMENT PLAN

Figure 4-8

Halsey Street Catchment Current Imperviousness

DISCIPLINE Stormwater	Drawn: KC	Status: Final	
	Checked: HES	Scale: 1:12,500	Plot Date: Sep 2011
	Approved: SDH	Job. No: 42173227	Map No: Figure 4-8
	Date: Sep 2011		Revision: -



Legend

Halsey Street Catchment Boundary

Storm Water

Storm Water Trunk Sewer

Unknown Node

Standard Manhole

BTAN

Drop Manhole

Inspection Grating

Stormwater Inlet

Inspection Manhole

Inspection Opening

Lamphole

Mudtank

Stormwater Outlet

Pressure Manhole

Sump

Unspecified SW Node

Wingwall

308

Unknown Pipe

Private SW

Piped Watercourse

Open Watercourse

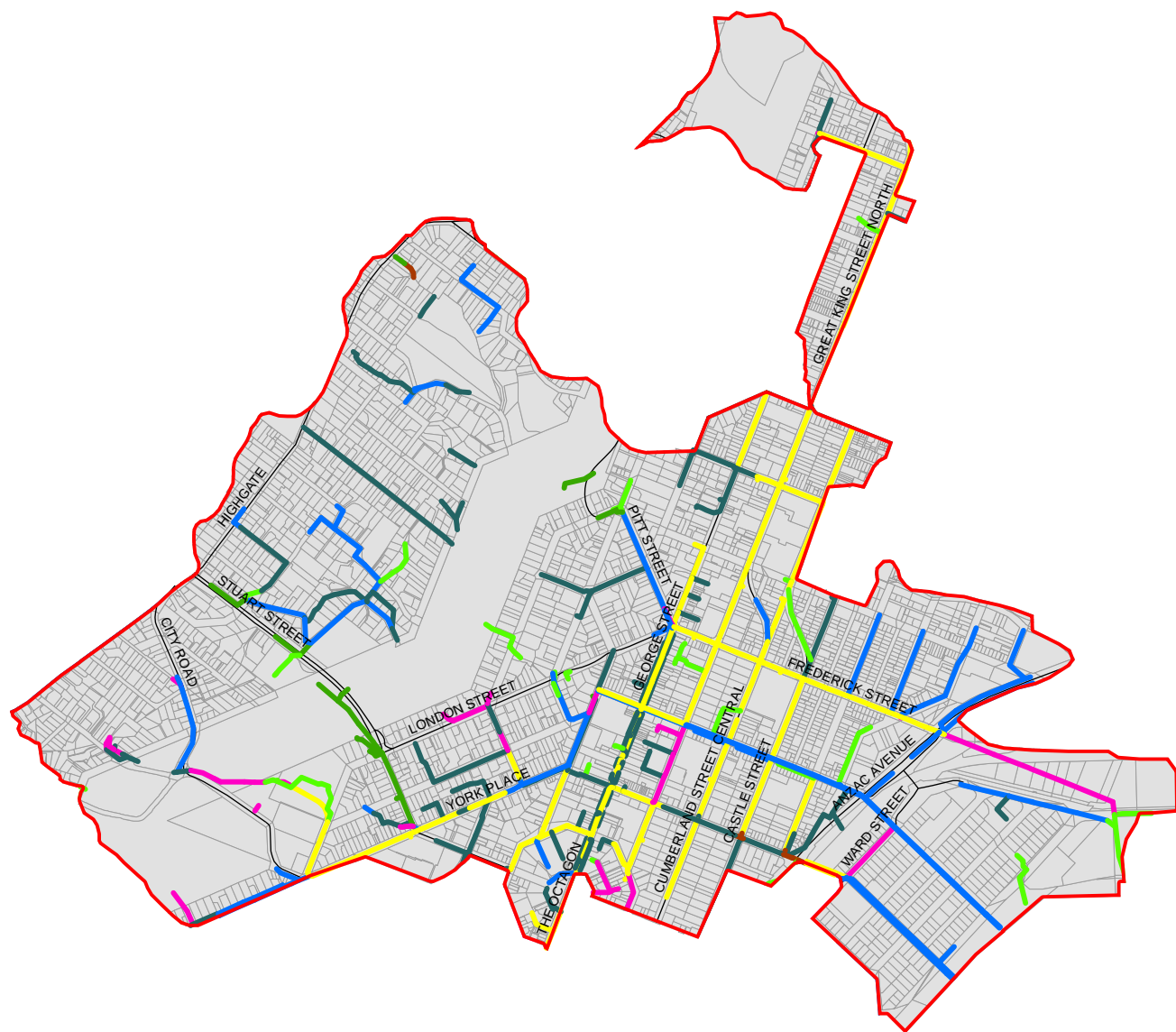
Redundant SW

Proposed SW

Stormwater Mudtank Line

Nodes to Survey

Land Parcels



Legend

Halsey Street Catchment Boundary

Land Parcels

Installation Year

Installed Before 1900

Installed 1901 - 1920

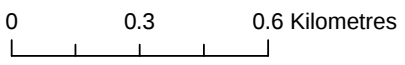
Installed 1921 - 1940

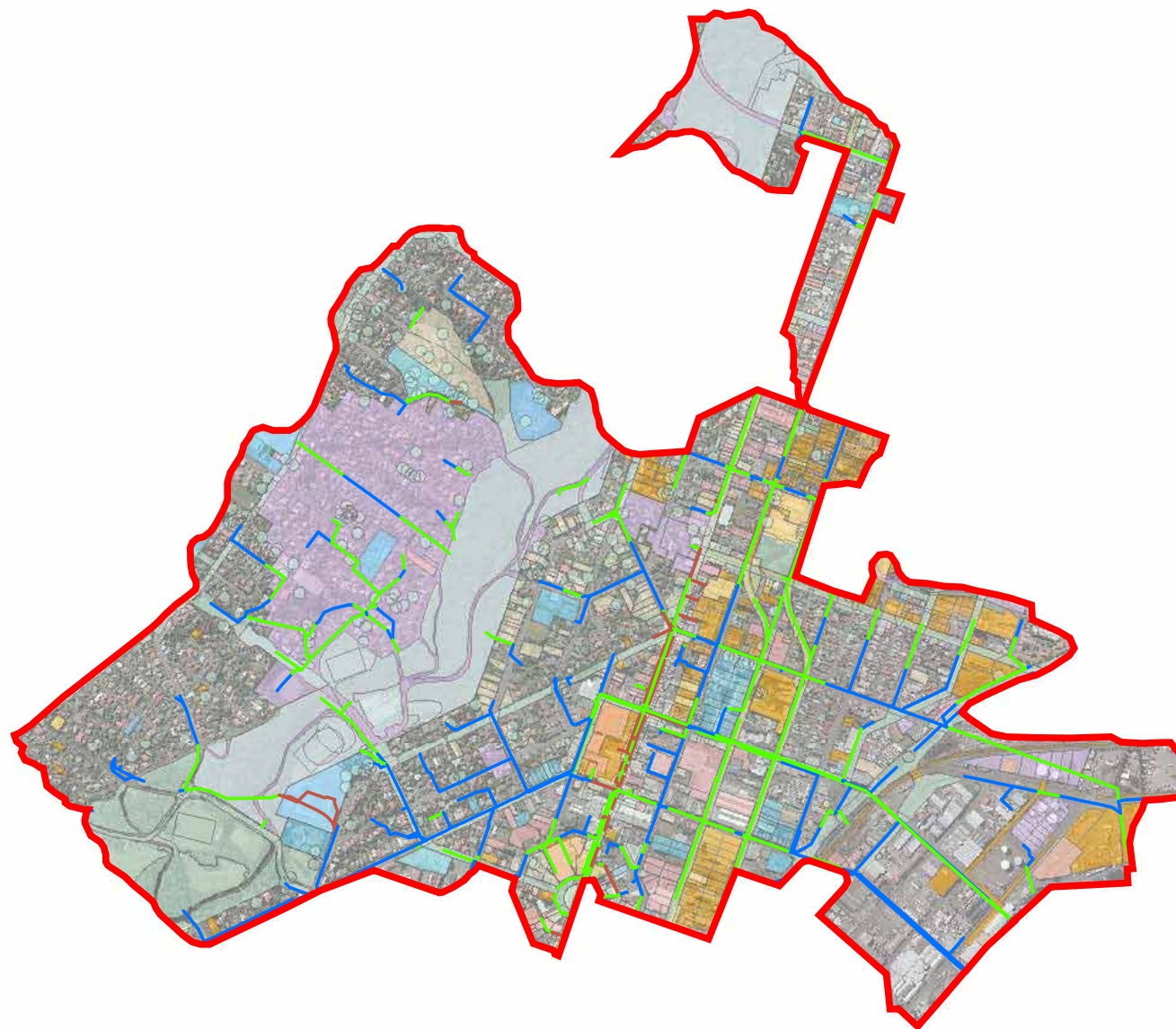
Installed 1941 - 1960

Installed 1961 - 1980

Installed 1981 - 2000

Installed 2001 - 2010





Legend

Stormwater Criticality

Total Criticality Score

1

2

3

Social Minor Location

Social Major Location

Economic Minor Location

Environmental Major Location

Cultural Location

Economic Major Location

Halsey Street Catchment Boundary

0 0.125 0.25 0.5 Kilometres

HALSEY STREET INTEGRATED CATCHMENT MANAGEMENT PLAN

Figure 4-12

Halsey Street Catchment Stormwater Network Criticality

DISCIPLINE
Stormwater

Drawn: MM	Status: Final		
Checked: HS	Scale: 1:12,500	Plot Date: Sep 2011	
Approved: HS	Job. No: 42173227	Map No: Figure 4-12	Revision: A
Date: Sep 2011			



Legend

Halsey Street Catchment Boundary

Stormwater Flooding Complaints

Year

☆

Undated

●

2005

●

2006

●

2007

▲

2008

■

2009

●

2010

Exact Location Known (Full Address)

Problem Description

●

Complaints

●

Floodgate Outlet Damaged

●

Pollution Spill

●

Stormwater Channel Screen Blocked

●

Stormwater Channel Screen Damaged

●

Stormwater Overflowing - Into my basement or garage

●

Stormwater Overflowing - Onto my property

●

Drain - Boundary trap overflow

●

Lamphole - Overflowing

●

Sewer Blocked

●

Sewer Collapsed

●

Sewer Leaking

●

Sewer Overflowing

●

Sewer Manhole - Overflowing

Exact Location Unknown (Road Name Only)

Problem Description

—

Complaint

—

Stormwater Channel Screen Blocked

—

Stormwater Channel Screen Damaged

—

Stormwater Overflowing - Into my basement or garage

—

Stormwater Overflowing - Onto my property

—

Sewer Blocked

—

Sewer Leaking

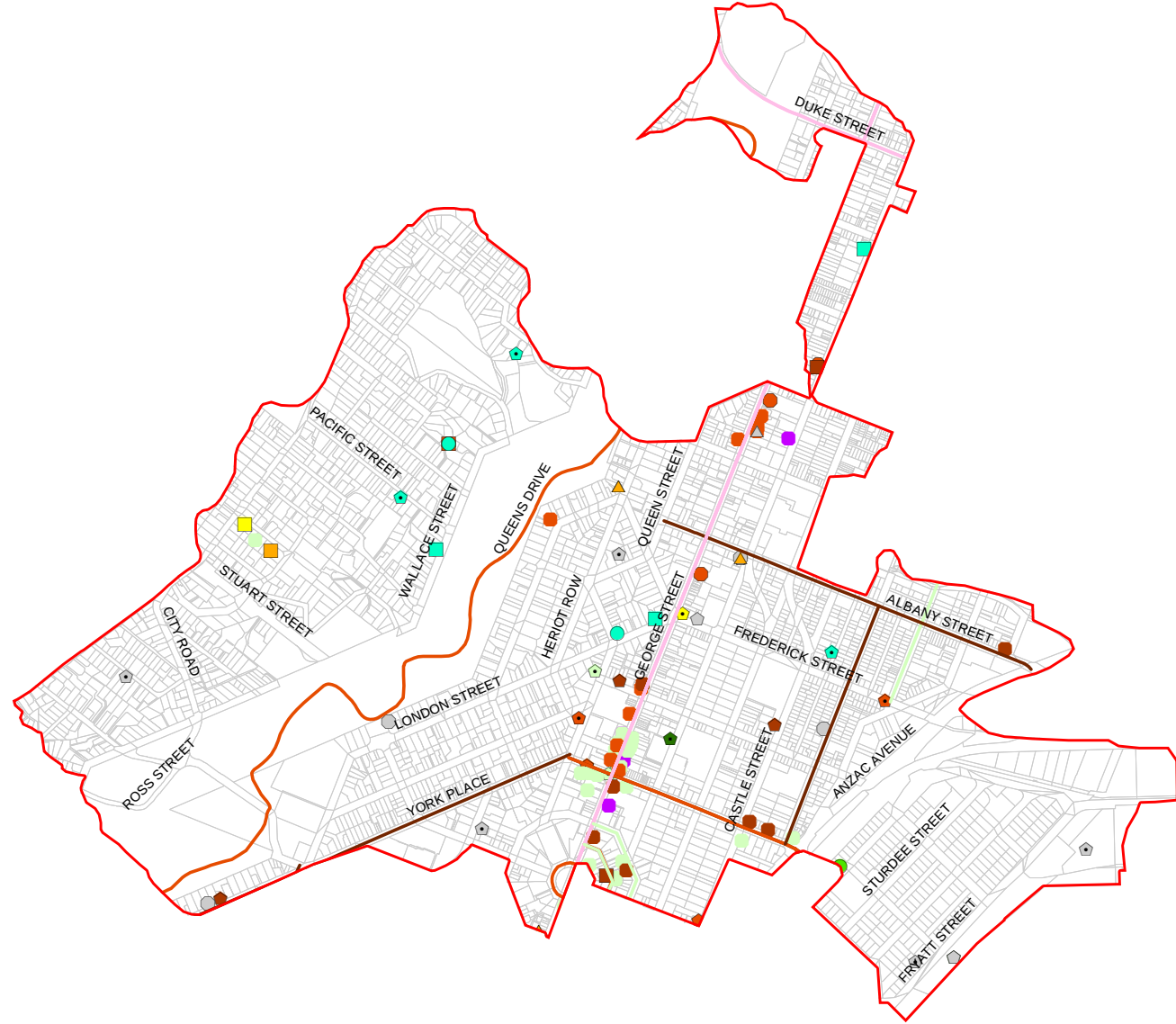
—

Sewer Overflowing

—

Sewer Manhole - Overflowing

Land Parcels



Dunedin 3 Waters Strategy

HALSEY STREET INTEGRATED CATCHMENT MANAGEMENT PLAN

Figure 4-13

Halsey Street Catchment Reported Stormwater Flooding

DISCIPLINE Stormwater	Drawn: KC	Status: Final		
	Checked: HES	Scale: 1:12,500	Plot Date: Sep 2011	
	Approved: SDH	Job. No:	Map No:	Revision:
	Date: Sep 2011	42173227	Figure 4-13	-

Legend

- Halsey Street Catchment Boundary
- Land Parcels

Wastewater Complaints

Year

- ★ 2006
- 2007
- ▲ 2008
- 2009
- 2010

Exact Location Known (Full Address)

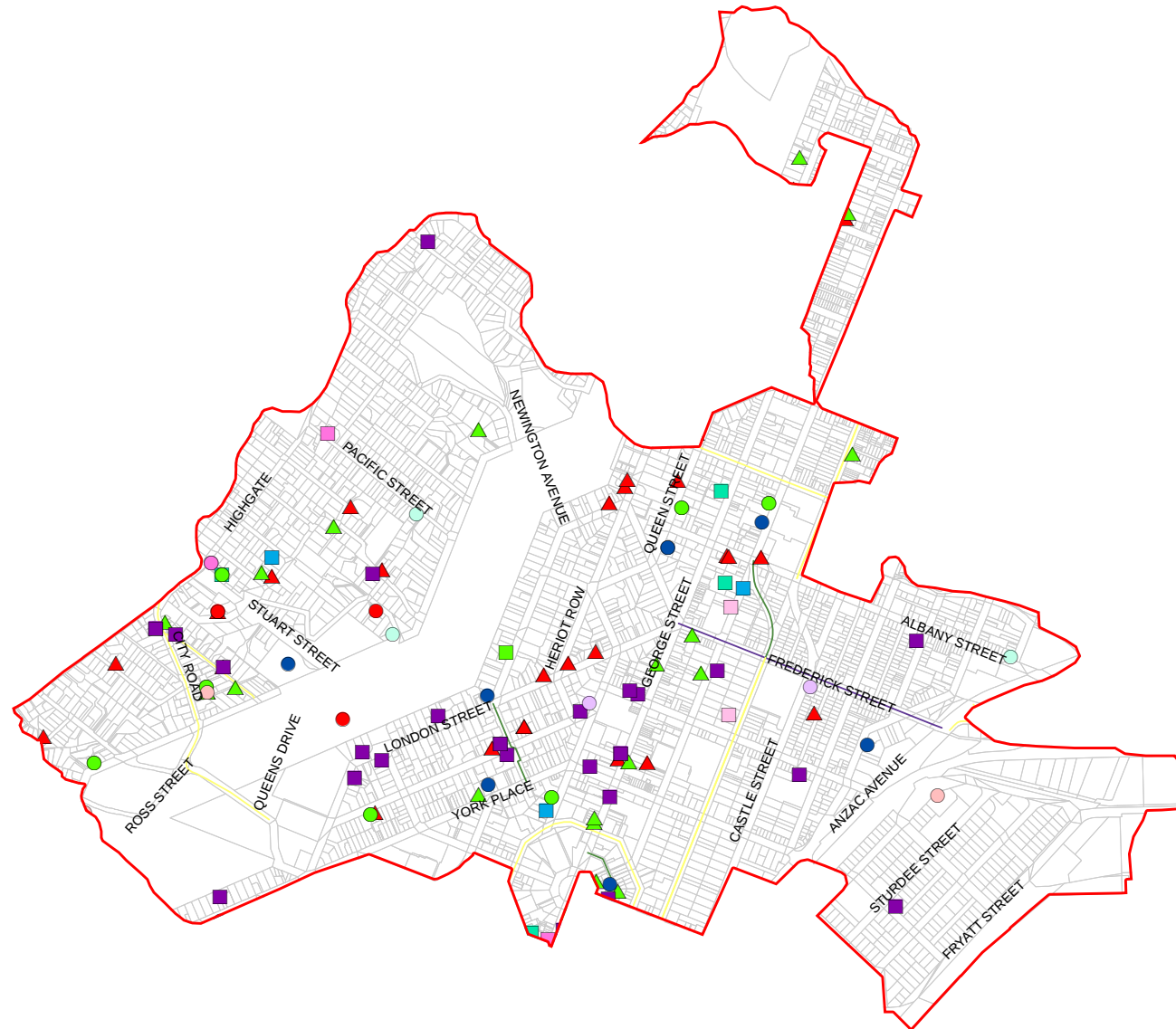
Problem Description

- Foul Drain - Boundary Trap Overflow
- Foul Sewer - Blocked
- Foul Sewer - Broken
- Foul Sewer - Collapsed
- Foul Sewer - Complaint - Service Other
- Foul Sewer - Drain Gully Trap Overflow
- Foul Sewer - Overflowing
- Foul Sewer - Problem, Other
- Foul Sewer - Lamphole Overflowing
- Foul Sewer - Manhole Overflowing
- Foul Sewer - Overflowing Inside My House
- Foul Sewer - Pump Station Overflowing

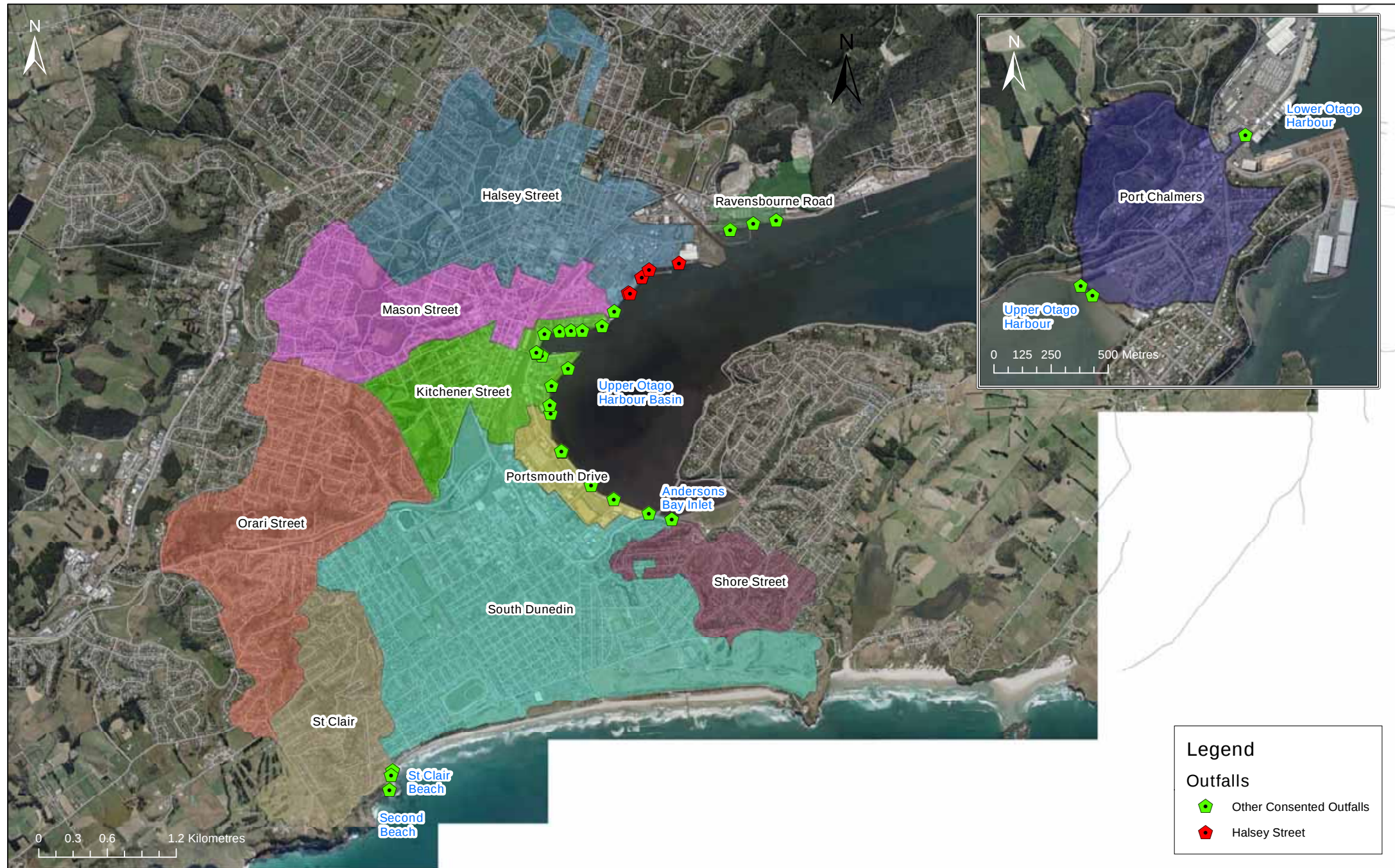
Exact Location Unknown (Road Name Only)

Problem Description

- FOUL DRAIN - BOUNDARY TRAP OVERFLOW
- FOUL SEWER - BLOCKED
- FOUL SEWER - BROKEN
- FOUL SEWER - COLLAPSED
- FOUL SEWER - COMPLAINT - SERVICE OTHER
- FOUL SEWER - DRAIN GULLY TRAP OVERFLOW
- FOUL SEWER - OVERFLOWING
- FOUL SEWER - PROBLEM OTHER
- FOUL SEWER MANHOLE - OVERFLOWING
- FOUL SEWER PUMP STATION - OVERFLOWING



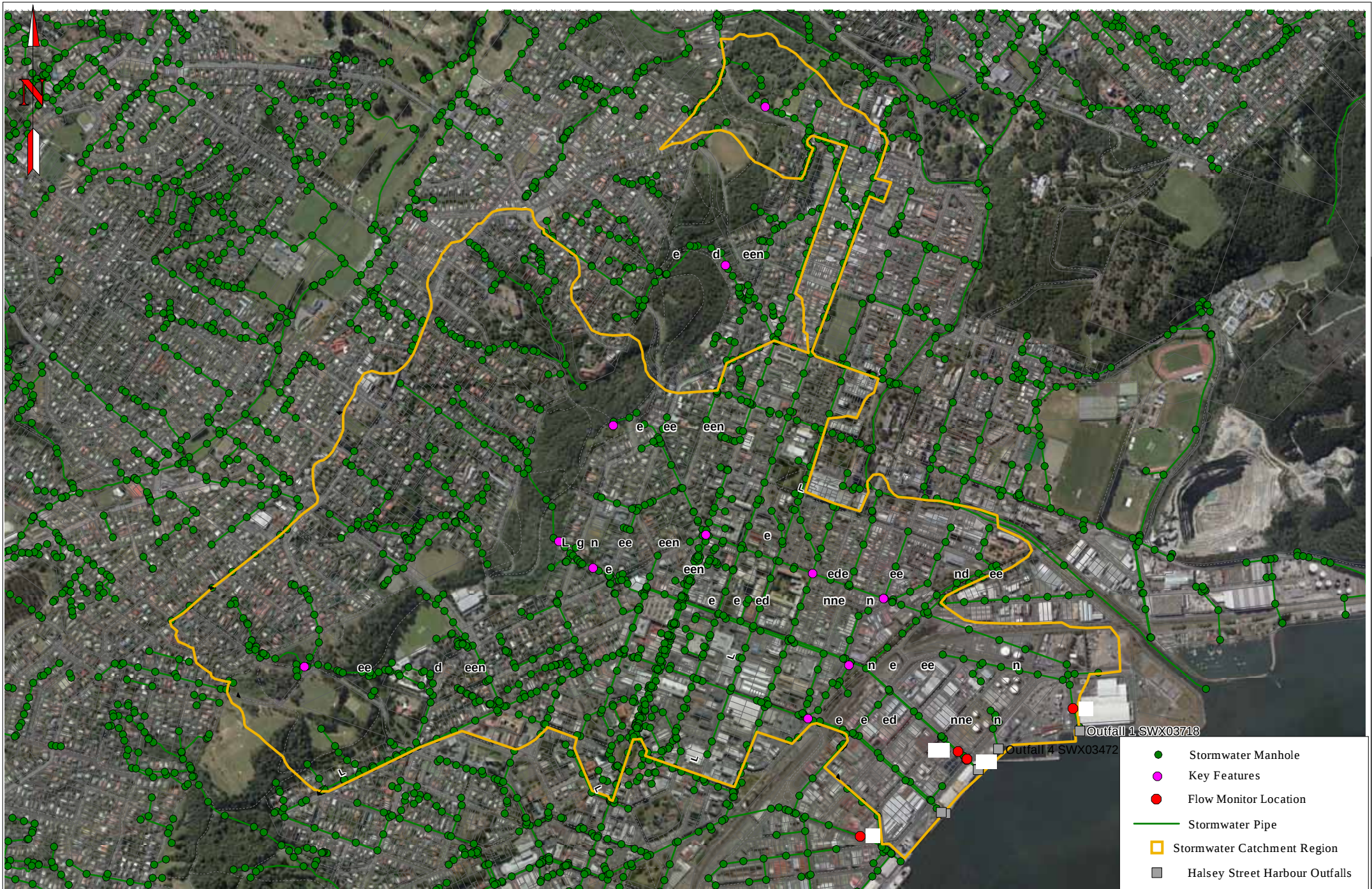
0 0.3 0.6 Kilometres



Legend

Outfalls

-  Other Consented Outfalls
-  Halsey Street



- Stormwater Manhole
- Key Features
- Flow Monitor Location
- Stormwater Pipe
- Stormwater Catchment Region
- Halsey Street Harbour Outfalls

Dunedin 3 Waters Strategy

HALSEY ST INTEGRATED CATCHMENT MANAGEMENT PLAN

Figure 7-1
Halsey Street Stormwater Catchment Model Extent

Discipline:

Stormwater

DATE	BY	STATUS	Final
15/01/2011	MG	REVIEW	NTS
15/01/2011	WB	REVIEW	3-d1040.07
15/01/2011			

