

Certificate of Acceptance of new water and/or wastewater assets

Watercare reference number:

9	5	9	1	3			
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Auckland Council EPA number:

6	0	3	0	8	8	1	6		
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Site details

Job name:

Legal site address: Street number Street name

Suburb Postcode

Lot number Deposited plan (DP) number Certificate of Title (CT) number

Stage/s that relates to this certificate

Certification statement

Watercare has received the following documentation:

- As-built (PDF)
- As-built CAD (DWG)
- Watercare Schedule of assets
- CS3
- CS4

This Watercare Certificate of Acceptance is issued with respect to all aspects of the engineering water and/or wastewater works covered by the above engineering plan approval and to satisfy Auckland Council's engineering approval completion certificate.

The assets have been connected correctly to the existing public networks.

The total value of these assets to be vested to Auckland Council is:

Watercare representative

Full name Signature

Date

Schedule of Land and Assets to Vest in Council

Sheet 2: Land, Roothing and Parks



Developer's name and address
 Fulton Hogan Land Development Ltd.
 40 Flexman Place
 Silverdale
 AUCKLAND

Notice for assets vested from a development at:
 Site address:
 Suburb:
 Sub / Land Use Consent #:
 Eng approval #:
 Construction Practical Completion date:

Milldale Stage 1C
 Milldale
 BUN60067243
 ENG60308816
 17-Jun-19

All values are to be exclusive of GST

Land to Vest			
Land Use	Area (m ²)	Cost / Value	Council's Contribution
Roothing	18435.00	\$737,400.00	
Recreation Reserve	-	-	
Local Purpose Reserve	6232.00	\$249,280.00	
Other - Accessway	1157.00	\$46,280.00	

Roothing			
Category	Measure	Cost / Value	Council's Contribution
Roothing (must match RAMM sheet entries)	Area (m ²)	7383.44	\$563,423.65
Footpaths (including Pram Crossings)	Area (m ²)	3327.20	\$402,535.45
Kerb & Channel/Nib (including drains)	Length (m)	1440.00	\$151,726.76
Dish channels	Length (m)	35	\$3,273.78
Street Lights	No.	30.00	\$99,460.00
Traffic Signals	No.	-	-
Traffic Signs	No.	22.00	\$8,615.00
Driveway	Area (m ²)	57	\$8,251.10
Catchpits	No.	36.00	\$169,830.00
Double Catchpits	No.	-	-
Retaining Walls	Item	-	-
Fences	Item	-	-
Noise Walls	Length (m)	-	-
Trees	No.	65.00	\$73,525.00
Subtotal:			\$1,480,640.74

Parks			
Bridges - Pedestrian	No.	-	-
Stream Landscaping	Area (m ²)	5380.00	\$80,396.45
Footpaths	Area (m ²)	367.00	\$41,287.50
Fences	Length (m)	118	\$19,664.70
Planter Boxes	No.	-	-
Playgrounds	No.	-	-
Accessways/carparks	Area (m ²)	-	-
BBQ	No.	-	-
Litterbin	No.	-	-
Picnic Tables	No.	-	-
Seats/benches	No.	-	-
Subtotal:			\$141,348.65

Other			
Buildings	Item	-	-

This information is certified as being true and correct.	
Name:	Sam Muirhead
Company:	WOODS
Position of signatory in relation to developer: Consulting Engineer	
Signed:	<i>Sam Muirhead</i>
Dated:	24/06/2019

Cast Iron Flanged Tees				
50 on 100mm diameter tee.	No	2.00	\$2,420.00	
100 on 100mm diameter tee.	No	12.00	\$12,600.00	
100 on 200mm diameter tee.	No	3.00	\$5,610.00	
Cast Iron Flanged Bends				
50mm diameter bend. (90°, 45°, 22.5° and 11.25°)	No	2.00	\$562.00	
100mm diameter bend. (90°, 45°, 22.5° and 11.25°)	No	18.00	\$17,100.00	
Blank Caps				
50mm diameter blank cap.	No	5.00	\$625.00	
100mm diameter blank cap.	No	6.00	\$3,990.00	
200mm diameter blank cap.	No	2.00	\$3,000.00	
Cast Iron Flanged Reducers				
50mm to 100mm diameter reducer.	No	6.00	\$7,260.00	
Lot Connections				
25mm Ø PE80 PN12.5 SDR11	No	72.00	\$38,880.00	
100Ø Ducting	m	73.50	\$1,084.13	
			Subtotal:	\$245,472.91
This information is certified as being true and correct				
Name: Sam Muirhead				
Company: WOODS				
Position of signatory in relation to developer: Consulting Engineer				
Signed: <i>Sam Muirhead</i>				
Dated: 24/06/2019				

I certify that these As-built Plans are an accurate record of the works undertaken and that:

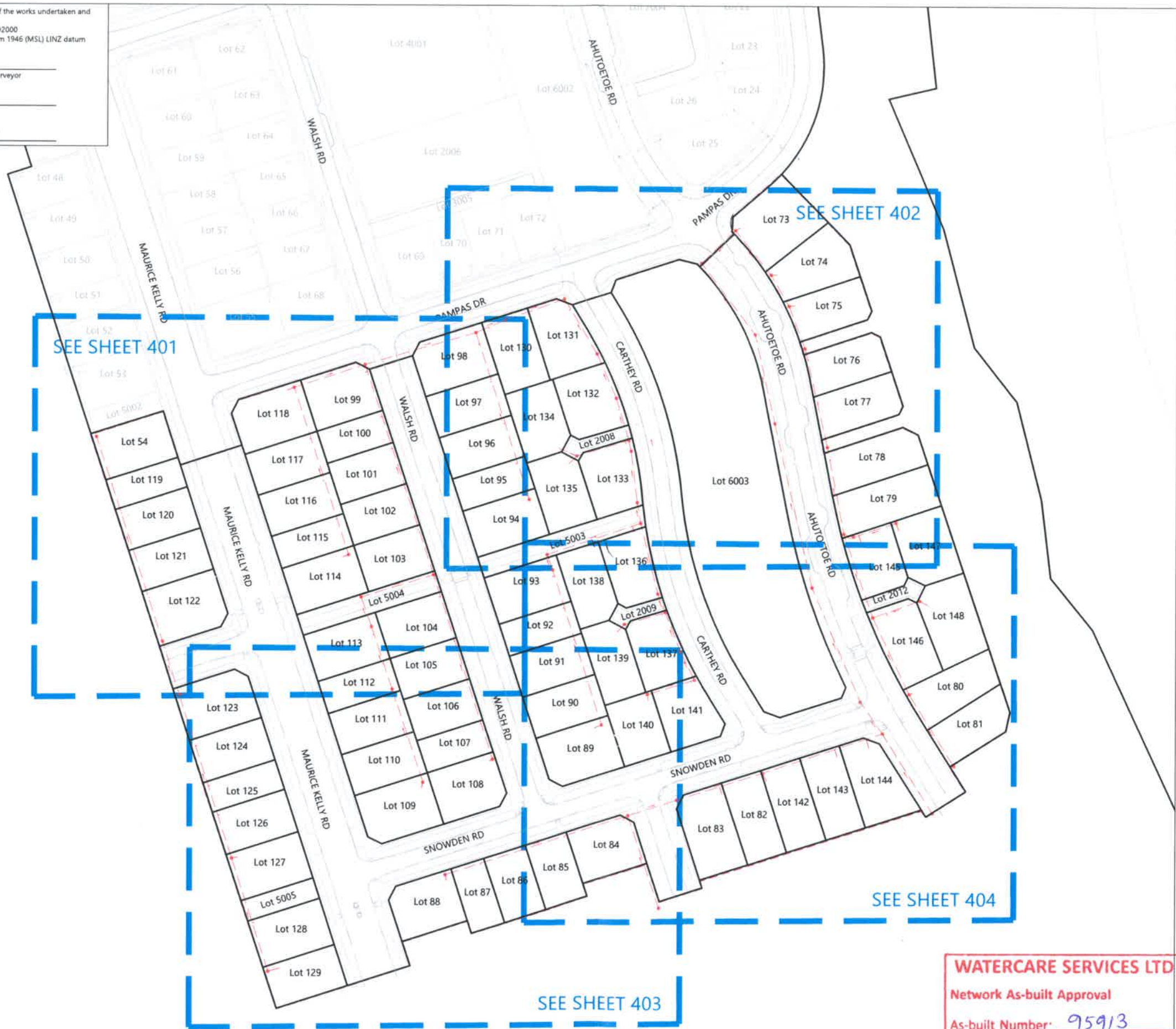
- The coordinates (X,Y) are in terms of NZTM on NZGD2000
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL) LINZ datum

Signed: 
 Registered Professional Surveyor
 Date: 13/06/2019
 Name: Rowan Hallam



SCHEDULE OF COORDINATES
SEWER LOT CONNECTIONS

NAME	EASTING	NORTHING
SS 54	1748142.08	5946757.58
SS 73	1748378.81	5946839.23
SS 74	1748392.44	5946821.99
SS 75	1748399.02	5946810.61
SS 76	1748404.36	5946790.52
SS 77	1748408.01	5946774.56
SS 78	1748412.47	5946753.64
SS 79	1748415.14	5946740.11
SS 80	1748443.13	5946667.14
SS 81	1748452.30	5946650.52
SS 82	1748373.23	5946632.16
SS 83	1748372.64	5946629.43
SS 84	1748336.35	5946619.71
SS 85	1748314.39	5946613.16
SS 86	1748299.11	5946608.15
SS 87	1748283.48	5946602.96
SS 88	1748270.73	5946597.02
SS 89	1748325.33	5946653.81
SS 90	1748322.35	5946670.90
SS 91	1748317.44	5946686.40
SS 92	1748313.66	5946698.17
SS 93	1748309.60	5946709.90
SS 94	1748299.65	5946739.84
SS 95	1748295.89	5946751.69
SS 96	1748291.35	5946766.53
SS 97	1748286.29	5946781.96
SS 98	1748281.87	5946795.82
SS 99	1748240.28	5946785.37
SS 100	1748245.87	5946768.72
SS 101	1748249.80	5946757.00
SS 102	1748254.64	5946742.35
SS 103	1748259.67	5946727.13
SS 104	1748267.65	5946702.13
SS 105	1748273.12	5946685.80
SS 106	1748278.10	5946670.46
SS 107	1748283.05	5946655.10
SS 108	1748286.27	5946641.37
SS 109	1748261.38	5946631.34
SS 110	1748255.76	5946650.19
SS 111	1748251.43	5946663.52
SS 112	1748246.96	5946677.27
SS 113	1748243.31	5946688.11
SS 114	1748232.19	5946716.98
SS 115	1748229.47	5946730.80
SS 116	1748224.63	5946745.06
SS 117	1748219.56	5946760.60
SS 118	1748211.26	5946778.54
SS 119	1748146.67	5946743.69
SS 120	1748150.27	5946733.04
SS 121	1748155.21	5946717.94
SS 122	1748160.50	5946701.63
SS 123	1748174.02	5946665.76
SS 124	1748178.41	5946646.88
SS 125	1748183.37	5946631.96
SS 126	1748186.87	5946621.14
SS 127	1748193.68	5946605.46
SS 128	1748199.81	5946581.20
SS 129	1748209.10	5946564.27
SS 130	1748286.05	5946801.74
SS 131	1748315.45	5946808.66
SS 132	1748333.67	5946771.72
SS 133	1748336.71	5946759.22
SS 134	1748312.06	5946757.43
SS 135	1748315.54	5946751.68
SS 136	1748339.86	5946726.58
SS 137	1748350.28	5946695.76
SS 138	1748325.19	5946720.99
SS 139	1748333.74	5946689.54
SS 140	1748345.22	5946664.14
SS 141	1748361.13	5946670.78
SS 142	1748389.12	5946634.43
SS 143	1748415.19	5946643.47
SS 144	1748426.95	5946646.72
SS 145	1748423.87	5946722.94
SS 146	1748433.61	5946695.76
SS 147	1748437.67	5946727.46
SS 148	1748448.79	5946699.70



LEGEND

- NEW SANITARY SEWER MANHOLE
- NEW SANITARY SEWER
- EXISTING SANITARY SEWER
- UPDATED SEWER DATA
- LOT BOUNDARIES
- STAGE BOUNDARY

- NOTES**
- ALL WORKS AND MATERIALS COMPLY WITH AUCKLAND COUNCIL & WATERCARE SERVICES LTD STANDARDS FOR ENGINEERING DESIGN AND CONSTRUCTION.
 - ALL SANITARY SEWER LINES ARE 150mmØ uPVC CLASS SN16 UNLESS STATED OTHERWISE.
 - ALL PIPE BEDDING COMPLIES WITH WATERCARE STANDARDS.
 - ALL PIPE CROSSINGS UNDER ROADS AND ACCESSWAYS HAVE BEEN HARDFILL BACKFILLED.
 - ALL PRIVATE LOT CONNECTIONS ARE 100mmØ
 - LOT BOUNDARIES ARE SUBJECT TO FINAL SURVEY.
 - ALL PIPE AND MH DIAMETERS ARE INTERNAL AND SHOWN IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
 - ASBUILT DATA HAS BEEN SOURCED FROM A COMBINATION OF WOODS SURVEY MEASURED DATA AND CONTRACTOR RECEIVED DATA.

REVISION DETAILS	BY	DATE
1 ISSUED FOR INFORMATION	KR	13/06/19

SURVEYED	WOODS	WOODS Ltd
DESIGNED	TB	LEVEL 1 BUILDING B
DRAWN	SK	8 NUGENT STREET, GRAFTON
CHECKED	SM	AUCKLAND 1023
APPROVED	JW	09 308 9229
		WOODS.CO.NZ

MILLDALE
Connecting Allergies

MILLDALE
STAGE 1C

WASTEWATER ASBUILT
OVERALL LAYOUT
SHEET 1 OF 5

WATERCARE SERVICES LTD
 Network As-built Approval
 As-built Number: 95913
 Engineer: Nita
 Date: 22/07/2019

STATUS	ISSUED FOR INFORMATION	REV
SCALE	1 : 1500 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	P17-296-01C-400-AB	

SCHEDULE OF COORDINATES					
NAME	EASTING	NORTHING	SS 96	SS 97	SS 98
SS 54	1748142.08	5946757.58	1748291.35	1748286.29	1748281.87
SS 73	1748378.81	5946839.23	1748240.28	1748245.87	1748248.87
SS 74	1748392.44	5946821.99	1748249.80	1748255.87	1748258.87
SS 75	1748399.02	5946810.61	1748254.64	1748260.63	1748263.63
SS 76	1748404.36	5946790.52	1748259.67	1748265.66	1748268.66
SS 77	1748408.01	5946774.56	1748267.65	1748272.64	1748275.64
SS 78	1748412.47	5946753.64	1748273.12	1748278.11	1748281.11
SS 79	1748415.14	5946740.11	1748278.10	1748283.09	1748286.09
SS 80	1748443.13	5946667.14	1748283.05	1748288.04	1748291.04
SS 81	1748452.30	5946650.52	1748286.27	1748291.26	1748294.26
SS 82	1748373.23	5946632.16	1748261.38	1748266.37	1748269.37
SS 83	1748372.64	5946629.43	1748255.76	1748260.75	1748263.75
SS 84	1748336.35	5946619.71	1748251.43	1748256.42	1748259.42
SS 85	1748314.39	5946613.16	1748246.96	1748251.95	1748254.95
SS 86	1748299.11	5946608.15	1748243.31	1748248.30	1748251.30
SS 87	1748283.48	5946602.96	1748232.19	1748237.18	1748240.18
SS 88	1748270.73	5946597.02	1748229.47	1748234.46	1748237.46
SS 89	1748325.33	5946653.81	1748224.63	1748229.62	1748232.62
SS 90	1748322.35	5946670.90	1748219.56	1748224.55	1748227.55
SS 91	1748317.44	5946686.40	1748211.26	1748216.25	1748219.25
SS 92	1748313.66	5946698.17	1748146.67	1748151.66	1748154.66
SS 93	1748309.60	5946709.90	1748150.27	1748155.26	1748158.26
SS 94	1748299.65	5946739.84	1748155.21	1748160.20	1748163.20
SS 95	1748295.89	5946751.69	1748160.50	1748165.49	1748168.49



LEGEND	
NEW SANITARY SEWER MANHOLE	●
NEW SANITARY SEWER	---
EXISTING SANITARY SEWER	- - - -
UPDATED SEWER DATA	LL= 25.53
LOT BOUNDARIES	---
STAGE BOUNDARY	---

- NOTES**
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WATERCARE SERVICES LTD
 Network As-built Approval
 As-built Number: 95913
 Engineer: Nita
 Date: 24/07/2019

REVISION DETAILS		BY	DATE
1	ISSUED FOR INFORMATION	KR	13/06/19

SURVEYED	WOODS	WOODS Ltd LEVEL 1 BUILDING B 8 NUGENT STREET, GRAFTON AUCKLAND 1023 09 308 9229 WOODS.CO.NZ
DESIGNED	TB	
DRAWN	SK	
CHECKED	SM	
APPROVED	JW	



**MILLDALE
 STAGE 1C**
 WASTEWATER
 ASBUILT PLAN
 SHEET 2 OF 5

STATUS	ISSUED FOR INFORMATION	REV
SCALE	1: 500 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	P17-296-01C-401-AB	

I certify that these As-built Plans are an accurate record of the works undertaken and that:
 • The coordinates (X,Y) are in terms of NZTM on NZGD2000
 • The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL) LINZ datum

Signed: _____
 Registered Professional Surveyor

Date: 13/06/2019

Name: Rowan Hallam

I certify that these As-built Plans are an accurate record of the works undertaken and that:

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Signed: 
Registered Professional Surveyor

Date: 13/06/2019

Name: Rowan Hallam

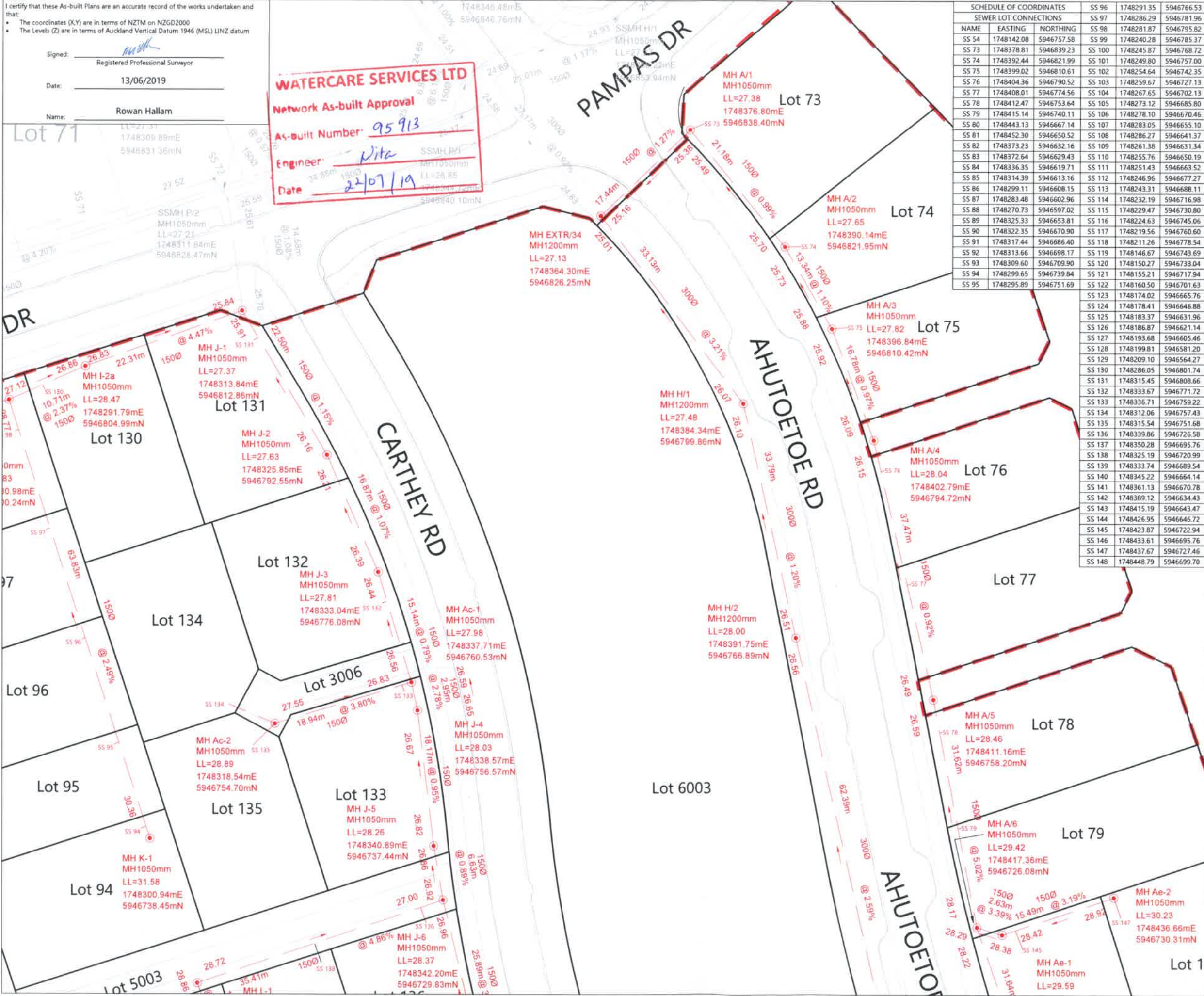
WATERCARE SERVICES LTD

Network As-built Approval

As-built Number: 95913

Engineer: Nita

Date: 22/07/19



SCHEDULE OF COORDINATES			SS 96	1748291.35	5946766.53
SEWER LOT CONNECTIONS			SS 97	1748286.29	5946781.96
NAME	EASTING	NORTHING	SS 98	1748281.87	5946795.82
SS 54	1748142.08	5946757.58	SS 99	1748240.28	5946785.37
SS 73	1748378.81	5946839.23	SS 100	1748245.87	5946768.72
SS 74	1748392.44	5946821.99	SS 101	1748249.80	5946757.00
SS 75	1748399.02	5946810.61	SS 102	1748254.64	5946742.35
SS 76	1748404.36	5946790.52	SS 103	1748259.67	5946727.13
SS 77	1748408.01	5946774.56	SS 104	1748267.65	5946702.13
SS 78	1748412.47	5946753.64	SS 105	1748273.12	5946685.80
SS 79	1748415.14	5946740.11	SS 106	1748278.10	5946670.46
SS 80	1748443.13	5946667.14	SS 107	1748283.05	5946655.10
SS 81	1748452.30	5946650.52	SS 108	1748286.27	5946641.37
SS 82	1748373.23	5946632.16	SS 109	1748261.38	5946631.34
SS 83	1748372.64	5946629.43	SS 110	1748255.76	5946650.19
SS 84	1748336.35	5946619.71	SS 111	1748251.43	5946663.52
SS 85	1748314.39	5946613.16	SS 112	1748246.96	5946677.27
SS 86	1748299.11	5946608.15	SS 113	1748243.31	5946688.11
SS 87	1748283.48	5946602.96	SS 114	1748232.19	5946716.98
SS 88	1748270.73	5946597.02	SS 115	1748229.47	5946730.80
SS 89	1748325.33	5946653.81	SS 116	1748224.63	5946745.06
SS 90	1748322.35	5946670.90	SS 117	1748219.56	5946760.60
SS 91	1748317.44	5946686.40	SS 118	1748211.26	5946778.54
SS 92	1748313.66	5946698.17	SS 119	1748146.67	5946743.69
SS 93	1748309.60	5946709.90	SS 120	1748150.27	5946733.04
SS 94	1748299.65	5946739.84	SS 121	1748155.21	5946717.94
SS 95	1748295.89	5946751.69	SS 122	1748160.50	5946701.63
SS 123	1748174.02	5946665.76	SS 124	1748178.41	5946646.88
SS 125	1748183.37	5946631.96	SS 126	1748186.87	5946621.14
SS 127	1748193.68	5946605.46	SS 128	1748199.81	5946581.20
SS 129	1748209.10	5946564.27	SS 130	1748286.05	5946801.74
SS 131	1748315.45	5946808.66	SS 132	1748333.67	5946771.72
SS 133	1748336.71	5946759.22	SS 134	1748312.06	5946757.43
SS 135	1748315.54	5946751.68	SS 136	1748339.86	5946726.58
SS 137	1748350.28	5946695.76	SS 138	1748325.19	5946720.99
SS 139	1748333.74	5946689.54	SS 140	1748345.22	5946664.14
SS 141	1748361.13	5946670.78	SS 142	1748389.12	5946634.43
SS 143	1748415.19	5946643.47	SS 144	1748426.95	5946646.72
SS 145	1748423.87	5946722.94	SS 146	1748433.61	5946695.76
SS 147	1748437.67	5946727.46	SS 148	1748448.79	5946699.70



LEGEND	
NEW SANITARY SEWER MANHOLE	
NEW SANITARY SEWER	
EXISTING SANITARY SEWER	
UPDATED SEWER DATA	
LOT BOUNDARIES	
STAGE BOUNDARY	

- NOTES**
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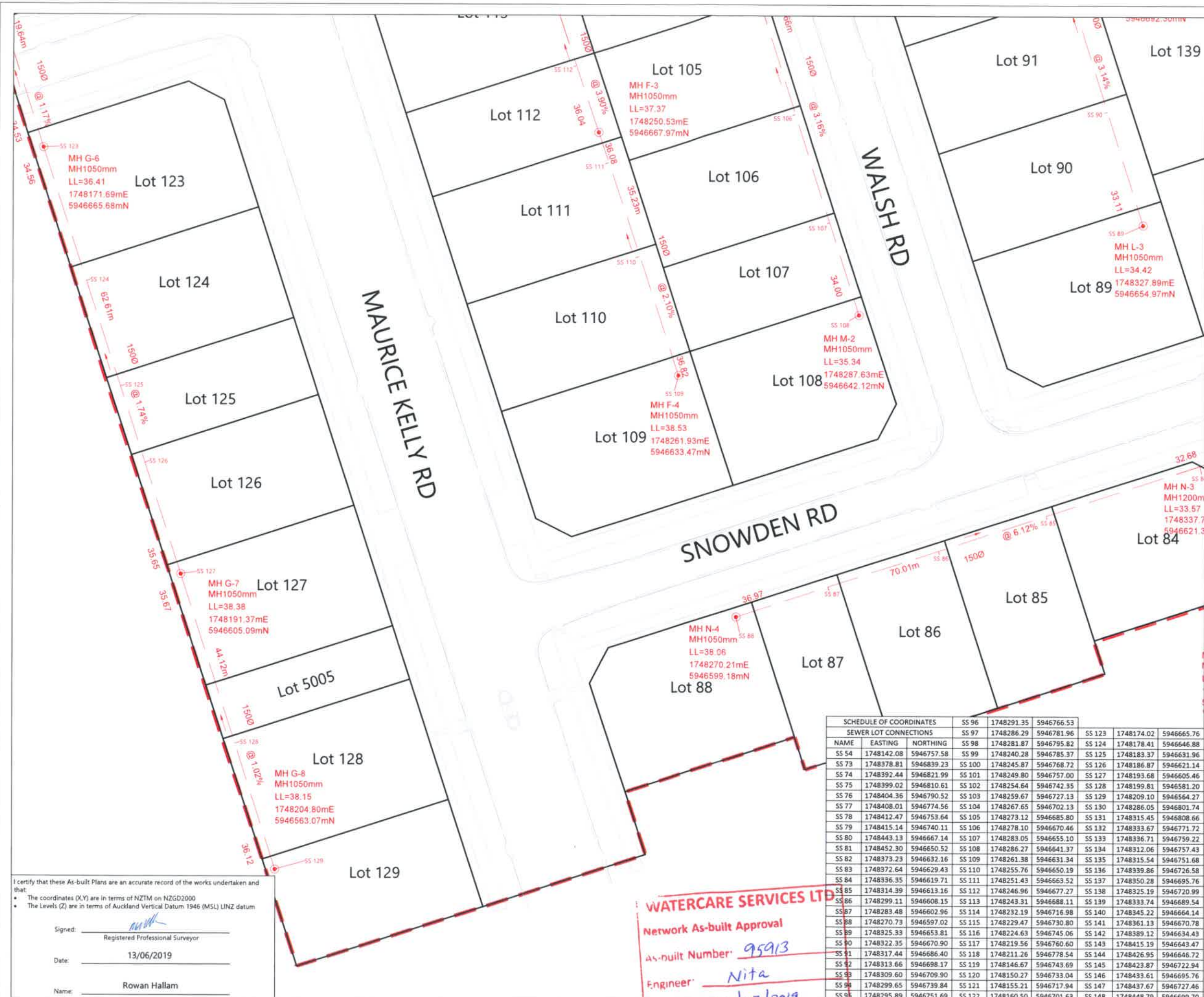
REVISION DETAILS		BY	DATE
1	ISSUED FOR INFORMATION	KR	13/06/19

SURVEYED	WOODS	WOODS Ltd LEVEL 1 BUILDING 8 8 NUGENT STREET, GRAFTON AUCKLAND 1023 09 308 9229 WOODS.CO.NZ
DESIGNED	TB	
DRAWN	SK	
CHECKED	SM	
APPROVED	JW	



MILLDALE
STAGE 1C
WASTEWATER
ASBUILT PLAN
SHEET 3 OF 5

STATUS	ISSUED FOR INFORMATION	REV
SCALE	1:500 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	P17-296-01C-402-AB	



LEGEND

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- NEW SANITARY SEWER
- EXISTING SANITARY SEWER
- UPDATED SEWER DATA
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REVISION DETAILS

NO	DESCRIPTION	BY	DATE
1	ISSUED FOR INFORMATION	KR	13/06/19

SURVEYED	WOODS	WOODS Ltd LEVEL 1 BUILDING B 8 NUGENT STREET, GRAFTON AUCKLAND 1023	
DESIGNED	TB		
DRAWN	SK		
CHECKED	SM		09 308 9229
APPROVED	JW		WOODS.CO.NZ



MILLDALE
STAGE 1C
WASTEWATER
ASBUILT PLAN
SHEET 4 OF 5

STATUS	ISSUED FOR INFORMATION	REV
SCALE	1:500 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	P17-296-01C-403-AB	

SCHEDULE OF COORDINATES

NAME	EASTING	NORTHING	SS 96	1748291.35	5946766.53	SS 123	1748174.02	5946665.76
SEWER LOT CONNECTIONS								
SS 97	1748286.29	5946781.96	SS 123	1748174.02	5946665.76	SS 98	1748281.87	5946795.82
SS 99	1748240.28	5946785.37	SS 124	1748183.37	5946631.96	SS 99	1748240.28	5946785.37
SS 100	1748245.87	5946768.72	SS 125	1748183.37	5946631.96	SS 100	1748245.87	5946768.72
SS 101	1748249.80	5946757.00	SS 126	1748186.87	5946621.14	SS 101	1748249.80	5946757.00
SS 102	1748254.64	5946742.35	SS 127	1748193.68	5946605.46	SS 102	1748254.64	5946742.35
SS 103	1748259.67	5946727.13	SS 128	1748199.81	5946581.20	SS 103	1748259.67	5946727.13
SS 104	1748267.65	5946702.13	SS 129	1748209.10	5946564.27	SS 104	1748267.65	5946702.13
SS 105	1748273.12	5946685.80	SS 130	1748286.05	5946801.74	SS 105	1748273.12	5946685.80
SS 106	1748278.10	5946670.46	SS 131	1748315.45	5946808.66	SS 106	1748278.10	5946670.46
SS 107	1748283.05	5946655.10	SS 132	1748333.67	5946771.72	SS 107	1748283.05	5946655.10
SS 108	1748286.27	5946641.37	SS 133	1748336.71	5946759.22	SS 108	1748286.27	5946641.37
SS 109	1748261.38	5946631.34	SS 134	1748312.06	5946757.43	SS 109	1748261.38	5946631.34
SS 110	1748255.76	5946650.19	SS 135	1748315.54	5946751.68	SS 110	1748255.76	5946650.19
SS 111	1748251.43	5946663.52	SS 136	1748339.86	5946726.58	SS 111	1748251.43	5946663.52
SS 112	1748246.96	5946677.27	SS 137	1748350.28	5946695.76	SS 112	1748246.96	5946677.27
SS 113	1748243.31	5946688.11	SS 138	1748325.19	5946720.99	SS 113	1748243.31	5946688.11
SS 114	1748232.19	5946716.98	SS 139	1748333.74	5946689.54	SS 114	1748232.19	5946716.98
SS 115	1748229.47	5946730.80	SS 140	1748345.22	5946664.14	SS 115	1748229.47	5946730.80
SS 116	1748224.63	5946745.06	SS 141	1748361.13	5946670.78	SS 116	1748224.63	5946745.06
SS 117	1748219.56	5946760.60	SS 142	1748389.12	5946634.43	SS 117	1748219.56	5946760.60
SS 118	1748211.26	5946778.54	SS 143	1748415.19	5946643.47	SS 118	1748211.26	5946778.54
SS 119	1748146.67	5946743.69	SS 144	1748426.95	5946646.72	SS 119	1748146.67	5946743.69
SS 120	1748150.27	5946733.04	SS 145	1748423.87	5946722.94	SS 120	1748150.27	5946733.04
SS 121	1748155.21	5946717.94	SS 146	1748433.61	5946695.76	SS 121	1748155.21	5946717.94
SS 122	1748160.50	5946701.63	SS 147	1748437.67	5946727.46	SS 122	1748160.50	5946701.63
SS 123	1748174.02	5946665.76	SS 148	1748448.79	5946699.70	SS 123	1748174.02	5946665.76

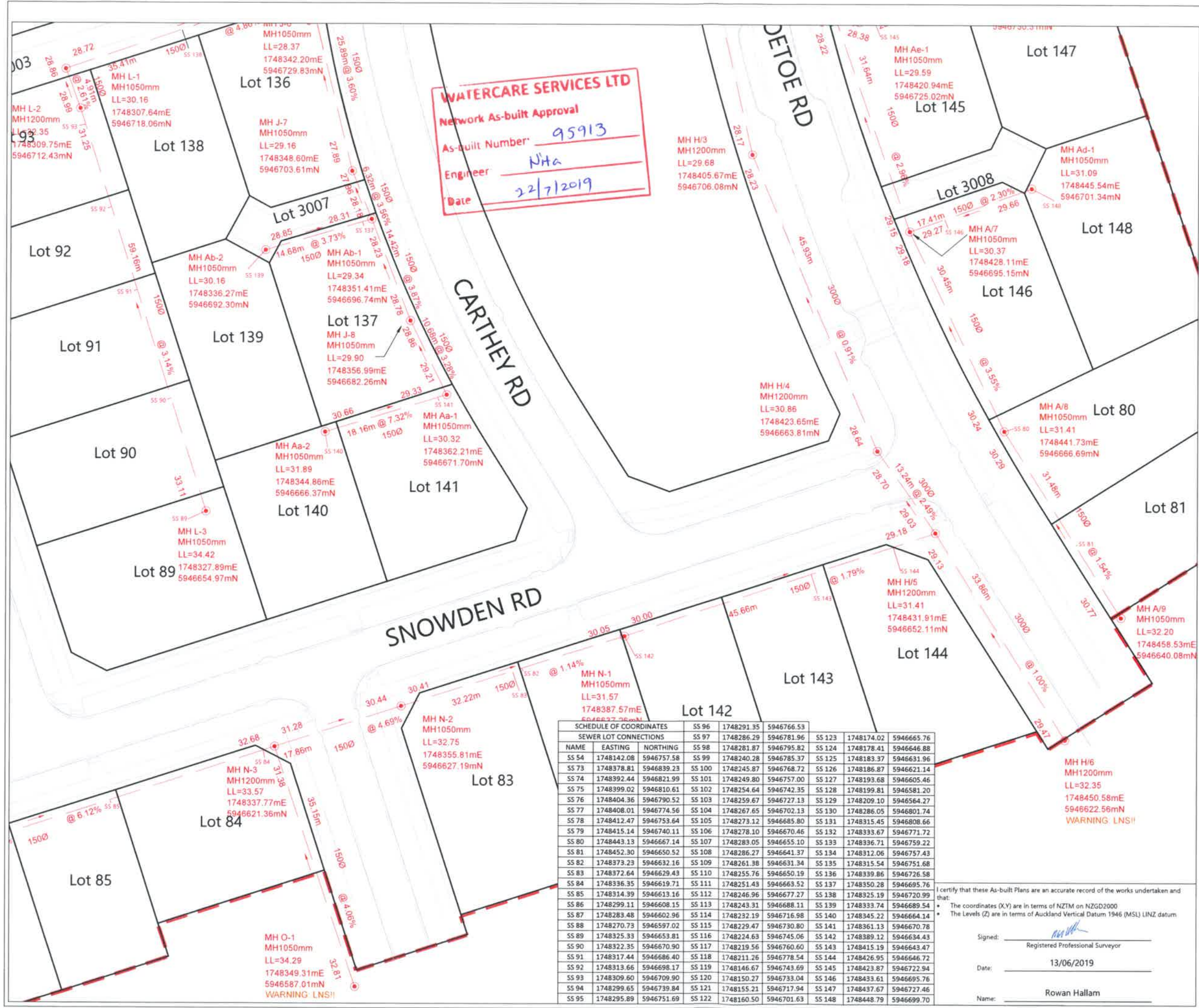
WATERCARE SERVICES LTD
Network As-built Approval
As-built Number: 95913
Engineer: Nita
Date: 22/07/2019

I certify that these As-built Plans are an accurate record of the works undertaken and that:
• The coordinates (X,Y) are in terms of NZTM on NZGD2000
• The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL) LINZ datum

Signed: _____
Registered Professional Surveyor

Date: 13/06/2019

Name: Rowan Hallam



LEGEND

- NEW SANITARY SEWER MANHOLE (Red circle with dot)
- NEW SANITARY SEWER (Red dashed line)
- EXISTING SANITARY SEWER (Black dashed line)
- UPDATED SEWER DATA (LL=25.53)
- LOT BOUNDARIES (Black solid line)
- STAGE BOUNDARY (Red dashed line)

- NOTES**
- ALL WORKS AND MATERIALS COMPLY WITH AUCKLAND COUNCIL & WATERCARE SERVICES LTD STANDARDS FOR ENGINEERING DESIGN AND CONSTRUCTION.
 - ALL SANITARY SEWER LINES ARE 150mmØ uPVC CLASS SN16 UNLESS STATED OTHERWISE.
 - ALL PIPE BEDDING COMPLIES WITH WATERCARE STANDARDS.
 - ALL PIPE CROSSINGS UNDER ROADS AND ACCESSWAYS HAVE BEEN HARDFILL BACKFILLED.
 - ALL PRIVATE LOT CONNECTIONS ARE 100mmØ
 - LOT BOUNDARIES ARE SUBJECT TO FINAL SURVEY.
 - ALL PIPE AND MH DIAMETERS ARE INTERNAL, AND SHOWN IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
 - ASBUILT DATA HAS BEEN SOURCED FROM A COMBINATION OF WOODS SURVEY MEASURED DATA AND CONTRACTOR RECEIVED DATA.

REVISION DETAILS		BY	DATE
1	ISSUED FOR INFORMATION	KR	13/06/19

SURVEYED	WOODS	WOODS Ltd LEVEL 1 BUILDING B 8 NUGENT STREET, GRAFTON AUCKLAND 1023 09 308 9229 WOODS.CO.NZ
DESIGNED	TB	
DRAWN	SK	
CHECKED	SM	
APPROVED	JW	

**MILLDALE
STAGE 1C
WASTEWATER
ASBUILT PLAN
SHEET 5 OF 5**

SCHEDULE OF COORDINATES

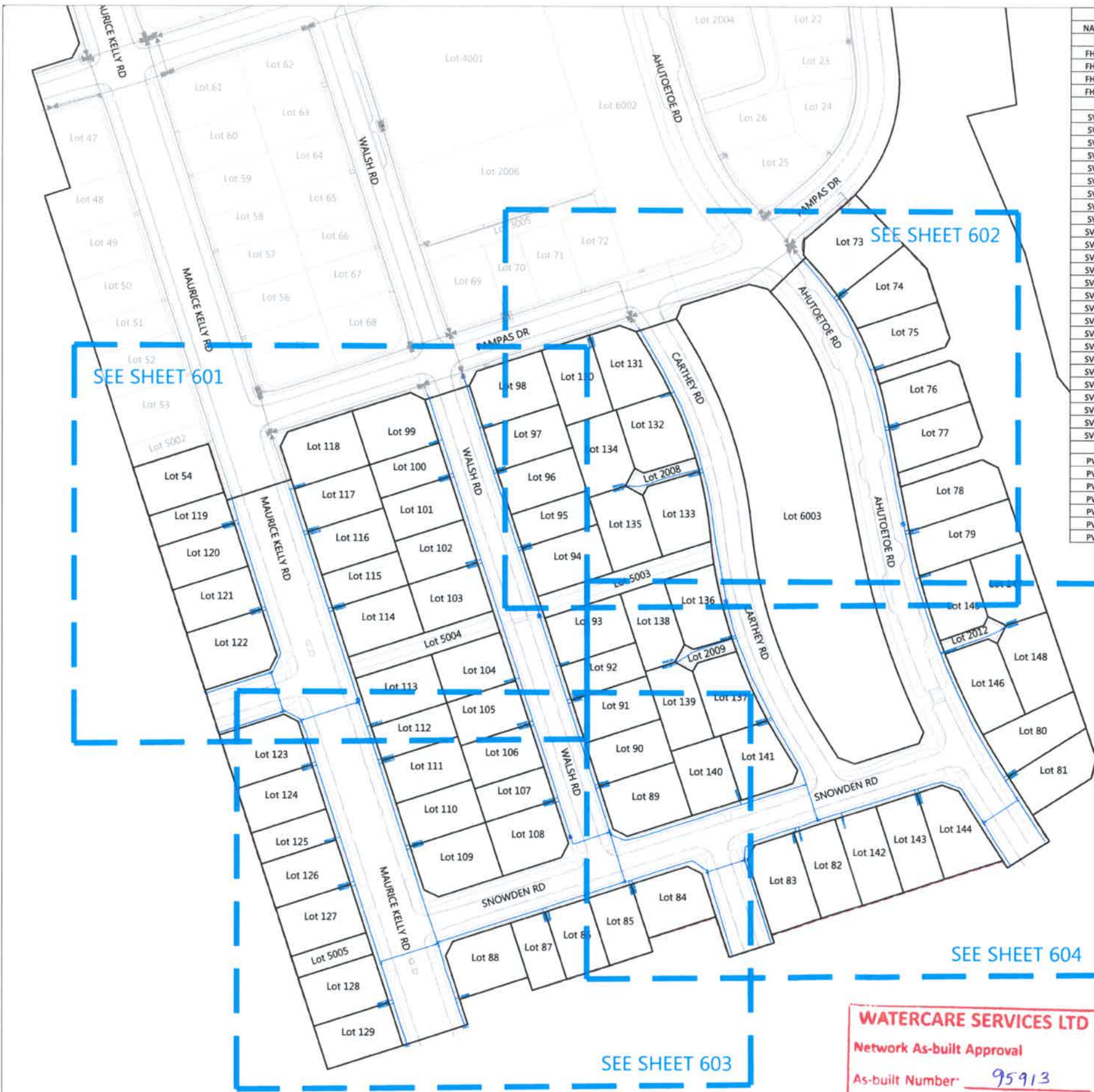
NAME	EASTING	NORTHING	SS 96	1748291.35	5946766.53	SS 123	1748174.02	5946665.76
SS 97	1748286.29	5946781.96	SS 124	1748178.41	5946646.88			
SS 54	1748142.08	5946757.58	SS 99	1748240.28	5946785.37			
SS 73	1748378.81	5946839.23	SS 100	1748245.87	5946768.72			
SS 74	1748392.44	5946821.99	SS 101	1748249.80	5946757.00			
SS 75	1748399.02	5946810.61	SS 102	1748254.64	5946742.35			
SS 76	1748404.36	5946790.52	SS 103	1748259.67	5946727.13			
SS 77	1748408.01	5946774.56	SS 104	1748267.65	5946702.13			
SS 78	1748412.47	5946753.64	SS 105	1748273.12	5946685.80			
SS 79	1748415.14	5946740.11	SS 106	1748278.10	5946670.46			
SS 80	1748443.13	5946667.14	SS 107	1748283.05	5946655.10			
SS 81	1748452.30	5946650.52	SS 108	1748286.27	5946641.37			
SS 82	1748373.23	5946632.16	SS 109	1748261.38	5946631.34			
SS 83	1748372.64	5946629.43	SS 110	1748255.76	5946650.19			
SS 84	1748336.35	5946619.71	SS 111	1748251.43	5946663.52			
SS 85	1748314.39	5946613.16	SS 112	1748246.96	5946677.27			
SS 86	1748299.11	5946608.15	SS 113	1748243.31	5946688.11			
SS 87	1748283.48	5946602.96	SS 114	1748232.19	5946716.98			
SS 88	1748270.73	5946597.02	SS 115	1748229.47	5946730.80			
SS 89	1748325.33	5946653.81	SS 116	1748224.63	5946745.06			
SS 90	1748322.35	5946670.90	SS 117	1748219.56	5946760.60			
SS 91	1748317.44	5946686.40	SS 118	1748211.26	5946778.54			
SS 92	1748313.66	5946698.17	SS 119	1748146.67	5946743.69			
SS 93	1748309.60	5946709.90	SS 120	1748150.27	5946733.04			
SS 94	1748299.65	5946739.84	SS 121	1748155.21	5946717.94			
SS 95	1748295.89	5946751.69	SS 122	1748160.50	5946701.63			

I certify that these As-built Plans are an accurate record of the works undertaken and that:

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- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL) LINZ datum.

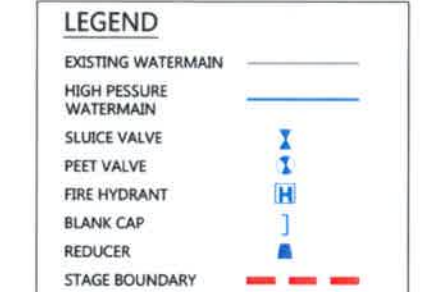
Signed: Registered Professional Surveyor
Date: 13/06/2019
Name: Rowan Hallam

STATUS	ISSUED FOR INFORMATION	REV
SCALE	1:500 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	P17-296-01C-404-AB	



SCHEDULE OF COORDINATES			SCHEDULE OF COORDINATES		
NAME	EASTING	NORTHING	WATERMAIN LOT CONNECTIONS		
FIRE HYDRANTS					
FH01	1748218.56	5946680.15	WM73	1748387.37	5946823.56
FH02	1748282.59	5946710.04	WM74	1748388.08	5946822.43
FH03	1748348.32	5946715.28	WM75	1748400.17	5946797.60
FH04	1748410.96	5946742.86	WM76	1748405.62	5946777.39
SLUICE VALVES					
SV1	1748191.92	5946676.40	WM77	1748405.78	5946776.23
SV2	1748191.68	5946676.05	WM78	1748412.79	5946740.62
SV3	1748192.23	5946676.16	WM79	1748413.00	5946739.54
SV4	1748198.57	5946673.09	WM80	1748447.86	5946653.96
SV5	1748218.43	5946679.20	WM81	1748448.55	5946652.92
SV6	1748218.67	5946679.69	WM82	1748374.24	5946634.45
SV7	1748218.87	5946678.96	WM83	1748371.78	5946633.71
SV8	1748246.33	5946593.81	WM84	1748315.46	5946615.80
SV9	1748246.85	5946594.53	WM85	1748314.37	5946615.30
SV10	1748246.80	5946593.55	WM86	1748284.95	5946606.16
SV11	1748282.48	5946710.47	WM87	1748283.92	5946605.71
SV12	1748307.17	5946633.47	WM88	1748253.86	5946574.71
SV13	1748307.41	5946633.83	WM89	1748303.37	5946649.48
SV14	1748307.82	5946632.84	WM90	1748303.01	5946650.38
SV15	1748312.60	5946615.89	WM91	1748293.58	5946679.39
SV16	1748312.85	5946616.19	WM92	1748293.25	5946680.68
SV17	1748341.95	5946619.83	WM93	1748289.33	5946692.55
SV18	1748354.53	5946623.67	WM94	1748276.04	5946733.45
SV19	1748354.91	5946623.54	WM95	1748275.74	5946734.42
SV20	1748354.74	5946624.05	WM96	1748267.24	5946760.73
SV21	1748380.85	5946638.13	WM97	1748266.79	5946761.47
SV22	1748381.23	5946637.92	WM98	1748262.01	5946776.81
SV23	1748439.66	5946637.50	WM99	1748247.17	5946772.05
SV24	1748439.97	5946637.01	WM100	1748251.01	5946760.18
SV25	1748440.09	5946630.41	WM101	1748251.47	5946759.06
SV26	1748451.71	5946645.54	WM102	1748260.99	5946729.57
PEET VALVE					
PV1	1748187.30	5946689.65	WM103	1748261.30	5946728.57
PV2	1748188.03	5946689.98	WM104	1748274.55	5946687.78
PV3	1748198.54	5946672.44	WM105	1748279.29	5946672.56
PV4	1748226.73	5946586.94	WM106	1748279.94	5946671.14
PV5	1748307.55	5946633.25	WM107	1748288.30	5946645.48
PV6	1748341.97	5946619.19	WM108	1748288.70	5946644.19
PV7	1748376.53	5946650.51	WM109	1748236.53	5946627.56
			WM110	1748236.11	5946628.76
			WM111	1748226.85	5946657.80
			WM112	1748226.33	5946659.15
			WM113	1748222.61	5946671.14
			WM114	1748209.42	5946711.79
			WM115	1748208.94	5946712.93
			WM116	1748200.57	5946739.09
			WM117	1748200.23	5946740.05
			WM118	1748195.36	5946754.97
			WM119	1748174.80	5946743.43
			WM120	1748175.46	5946742.27
			WM121	1748184.77	5946712.87
			WM122	1748184.89	5946711.70
			WM123	1748202.54	5946657.80
			WM124	1748203.00	5946656.79
			WM125	1748211.22	5946631.34
			WM126	1748216.29	5946615.59
			WM127	1748216.74	5946614.21
			WM128	1748229.76	5946573.75
			WM129	1748230.09	5946572.50
			WM130	1748299.48	5946808.99
			WM131	1748300.59	5946809.26
			WM132	1748329.31	5946789.01
			WM133	1748339.55	5946760.63
			WM134	1748312.29	5946756.69
			WM135	1748312.35	5946755.61
			WM136	1748350.71	5946703.00
			WM137	1748363.33	5946673.84
			WM138	1748330.02	5946694.69
			WM139	1748329.98	5946692.76
			WM140	1748353.32	5946644.44
			WM141	1748363.70	5946673.15
			WM142	1748389.42	5946639.51
			WM143	1748415.40	5946647.93
			WM144	1748416.53	5946648.33
			WM145	1748416.59	5946723.78
			WM146	1748426.11	5946697.62
			WM147	1748447.57	5946707.36
			WM148	1748447.89	5946706.45

- NOTES**
- ALL WORK AND MATERIALS COMPLIES WITH AC STANDARD FOR ENGINEERING DESIGN AND CONSTRUCTION.
 - PIPE BEDDING COMPLIES WITH AC STD DETAIL DRAWING 18000 SHEET 4.4 UNLESS OTHERWISE NOTED.
 - WATERMANS ARE AN AVERAGE 0.6m BELOW GROUND IN BERMS AND 0.9m BELOW GROUND UNDER ROADS. HARDFILL BACKFILLED BENEATH ROAD CROSSINGS.
 - ALL PIPES ARE LAID 1.4m OFF THE ROAD RESERVE BOUNDARY IN THE COMMON SERVICE TRENCH.
 - PIPE SIZES SHOWN ARE EXTERNAL DIAMETER.
 - LOT BOUNDARIES ARE SUBJECT TO FINAL SURVEY.
 - ASBUILT DATA HAS BEEN SOURCED FROM A COMBINATION OF WOODS SURVEY MEASURED DATA AND CONTRACTOR RECEIVED DATA.



REVISION DETAILS	BY	DATE
1 ISSUED FOR INFORMATION	KR	31/05/19

SURVEYED	WOODS	WOODS Ltd LEVEL 1 BUILDING B 8 NUGENT STREET, GRAFTON AUCKLAND 1023 09 308 9229 WOODS.CO.NZ
DESIGNED	TB	
DRAWN	SK	
CHECKED	SM	
APPROVED	JW	



**MILLDALE
STAGE 1C**

**WATERMAIN ASBUILT
LAYOUT PLAN
SHEET 1 OF 5**

STATUS	ISSUED FOR INFORMATION	REV
SCALE	1 : 750 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	P17-296-01C-600-AB	

WATERCARE SERVICES LTD
 Network As-built Approval
 As-built Number: 95913
 Engineer: Nita
 Date: 22/7/2019

I certify that these As-built Plans are an accurate record of the works undertaken and that:

- The coordinates (X,Y) are in terms of NZTM on NZGD2000
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL) LINZ datum

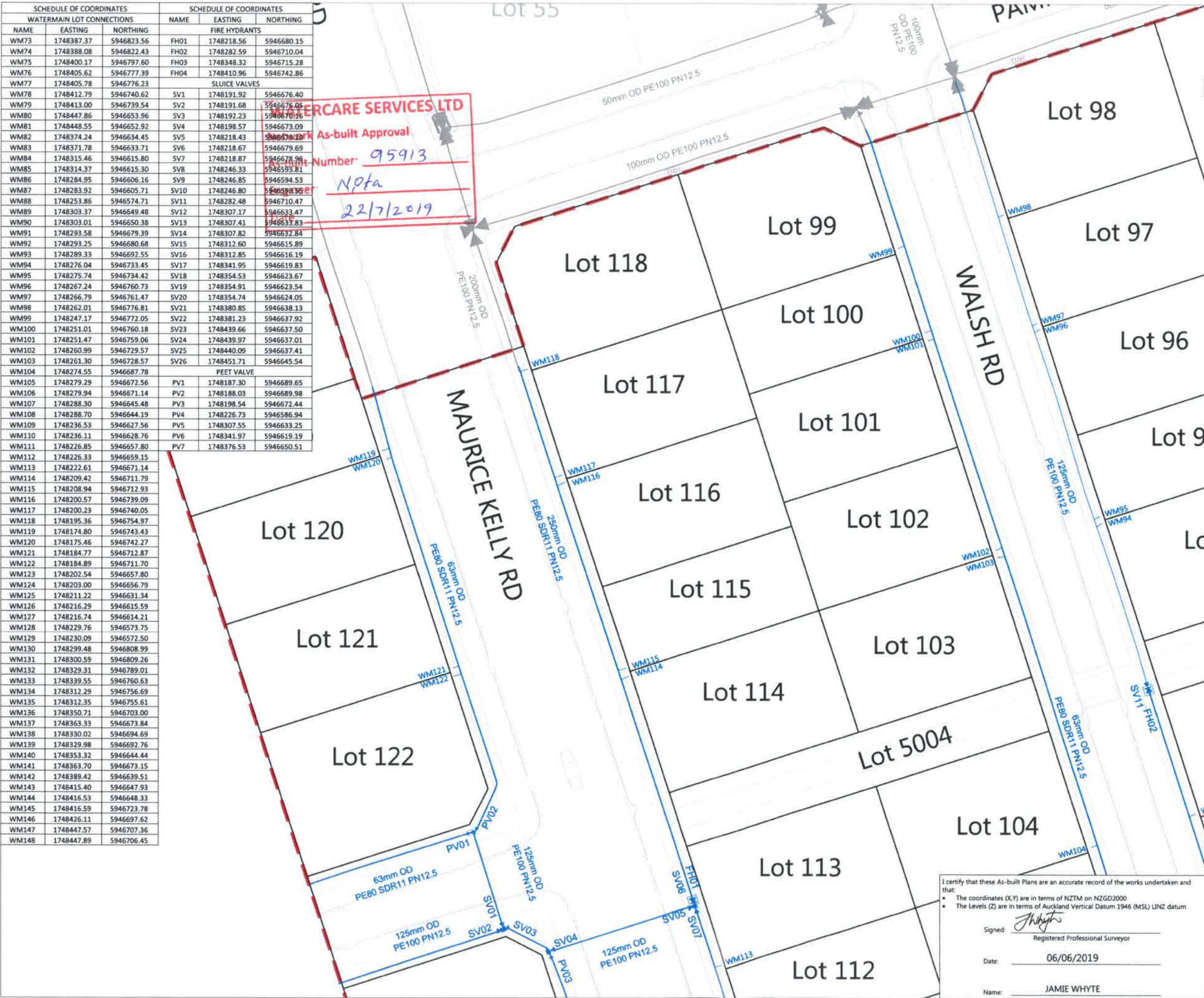
Signed: J Whyte
Registered Professional Surveyor

Date: 06/06/2019

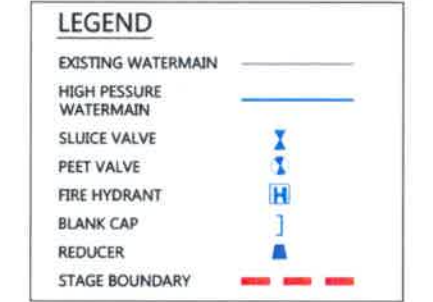
Name: JAMIE WHYTE

SCHEDULE OF COORDINATES			SCHEDULE OF COORDINATES		
WATERMAIN LOT CONNECTIONS			FIRE HYDRANTS		
NAME	EASTING	NORTHING	NAME	EASTING	NORTHING
WM73	1748387.37	5946823.56	FH01	1748218.56	5946680.15
WM74	1748388.08	5946822.43	FH02	1748282.59	5946710.04
WM75	1748400.17	5946797.60	FH03	1748348.32	5946715.28
WM76	1748405.62	5946777.39	FH04	1748410.96	5946742.86
WM77	1748405.78	5946776.23	SLUICE VALVES		
WM78	1748412.79	5946740.62	SV1	1748191.92	5946676.40
WM79	1748413.00	5946739.54	SV2	1748191.68	5946676.05
WM80	1748447.86	5946653.96	SV3	1748192.23	5946676.16
WM81	1748448.55	5946652.92	SV4	1748198.57	5946673.09
WM82	1748374.24	5946634.45	SV5	1748218.43	5946673.09
WM83	1748371.78	5946633.71	SV6	1748218.67	5946679.69
WM84	1748315.46	5946615.80	SV7	1748218.87	5946678.96
WM85	1748314.37	5946615.30	SV8	1748246.33	5946593.81
WM86	1748284.95	5946606.16	SV9	1748246.85	5946594.53
WM87	1748283.92	5946605.71	SV10	1748246.80	5946594.53
WM88	1748253.86	5946574.71	SV11	1748282.48	5946710.47
WM89	1748303.37	5946649.48	SV12	1748307.17	5946633.47
WM90	1748303.01	5946650.38	SV13	1748307.41	5946633.83
WM91	1748293.58	5946679.39	SV14	1748307.82	5946632.84
WM92	1748293.25	5946680.68	SV15	1748312.60	5946615.89
WM93	1748289.33	5946692.55	SV16	1748312.85	5946616.19
WM94	1748276.04	5946733.45	SV17	1748341.95	5946619.83
WM95	1748275.74	5946734.42	SV18	1748354.53	5946623.67
WM96	1748267.24	5946760.73	SV19	1748354.91	5946623.54
WM97	1748266.79	5946761.47	SV20	1748354.74	5946624.05
WM98	1748262.01	5946776.81	SV21	1748380.85	5946638.13
WM99	1748247.17	5946772.05	SV22	1748381.23	5946637.92
WM100	1748251.01	5946760.18	SV23	1748439.66	5946637.50
WM101	1748251.47	5946759.06	SV24	1748439.97	5946637.01
WM102	1748260.99	5946729.57	SV25	1748440.09	5946637.41
WM103	1748261.30	5946728.57	SV26	1748451.71	5946645.54
WM104	1748274.55	5946687.78	PEET VALVE		
WM105	1748279.29	5946672.56	PV1	1748187.30	5946689.65
WM106	1748279.94	5946671.14	PV2	1748188.03	5946689.98
WM107	1748288.30	5946645.48	PV3	1748198.54	5946672.44
WM108	1748288.70	5946644.19	PV4	1748226.73	5946586.94
WM109	1748236.53	5946627.56	PV5	1748307.55	5946633.25
WM110	1748236.11	5946628.76	PV6	1748341.97	5946619.19
WM111	1748226.85	5946657.80	PV7	1748376.53	5946650.51
WM112	1748226.33	5946659.15			
WM113	1748222.61	5946671.14			
WM114	1748209.42	5946711.79			
WM115	1748208.94	5946712.93			
WM116	1748200.57	5946739.09			
WM117	1748200.23	5946740.05			
WM118	1748195.36	5946754.97			
WM119	1748174.80	5946743.43			
WM120	1748175.46	5946742.27			
WM121	1748184.77	5946712.87			
WM122	1748184.89	5946711.70			
WM123	1748202.54	5946657.80			
WM124	1748203.00	5946656.79			
WM125	1748211.22	5946631.34			
WM126	1748216.29	5946615.59			
WM127	1748216.74	5946614.21			
WM128	1748229.76	5946573.75			
WM129	1748230.09	5946572.50			
WM130	1748299.48	5946808.99			
WM131	1748300.59	5946809.26			
WM132	1748329.31	5946789.01			
WM133	1748339.55	5946760.63			
WM134	1748312.29	5946756.69			
WM135	1748312.35	5946755.61			
WM136	1748350.71	5946703.00			
WM137	1748363.33	5946673.84			
WM138	1748330.02	5946694.69			
WM139	1748329.98	5946692.76			
WM140	1748353.32	5946644.44			
WM141	1748363.70	5946673.15			
WM142	1748389.42	5946639.51			
WM143	1748415.40	5946647.93			
WM144	1748416.53	5946648.33			
WM145	1748416.59	5946723.78			
WM146	1748426.11	5946697.62			
WM147	1748447.57	5946707.36			
WM148	1748447.89	5946706.45			

WATERCARE SERVICES LTD
 As-built Approval
 As-built Number: 95913
 Nota
 22/7/2019



- NOTES**
1. ALL WORK AND MATERIALS COMPLIES WITH AC STANDARD FOR ENGINEERING DESIGN AND CONSTRUCTION.
 2. PIPE BEDDING COMPLIES WITH AC STD DETAIL DRAWING 18000 SHEET 4.4 UNLESS OTHERWISE NOTED.
 3. WATERMAINS ARE AN AVERAGE 0.6m BELOW GROUND IN BERMS AND 0.9m BELOW GROUND UNDER ROADS, HARDFILL BACKFILLED BENEATH ROAD CROSSINGS.
 4. ALL PIPES ARE LAID 1.4m OFF THE ROAD RESERVE BOUNDARY IN THE COMMON SERVICE TRENCH.
 5. PIPE SIZES SHOWN ARE EXTERNAL DIAMETER.
 6. LOT BOUNDARIES ARE SUBJECT TO FINAL SURVEY.
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REVISION DETAILS		BY	DATE
1	ISSUED FOR INFORMATION	KR	31/05/19

SURVEYED	WOODS	WOODS Ltd LEVEL 1 BUILDING B 8 NUGENT STREET, GRAFTON AUCKLAND 1023 09 308 9229 WOODS.CO.NZ
DESIGNED	TB	
DRAWN	SK	
CHECKED	SM	
APPROVED	JW	



MILLDALE
STAGE 1C

WATERMAIN
ASBUILT PLAN
SHEET 2 OF 5

I certify that these As-built Plans are an accurate record of the works undertaken and that:

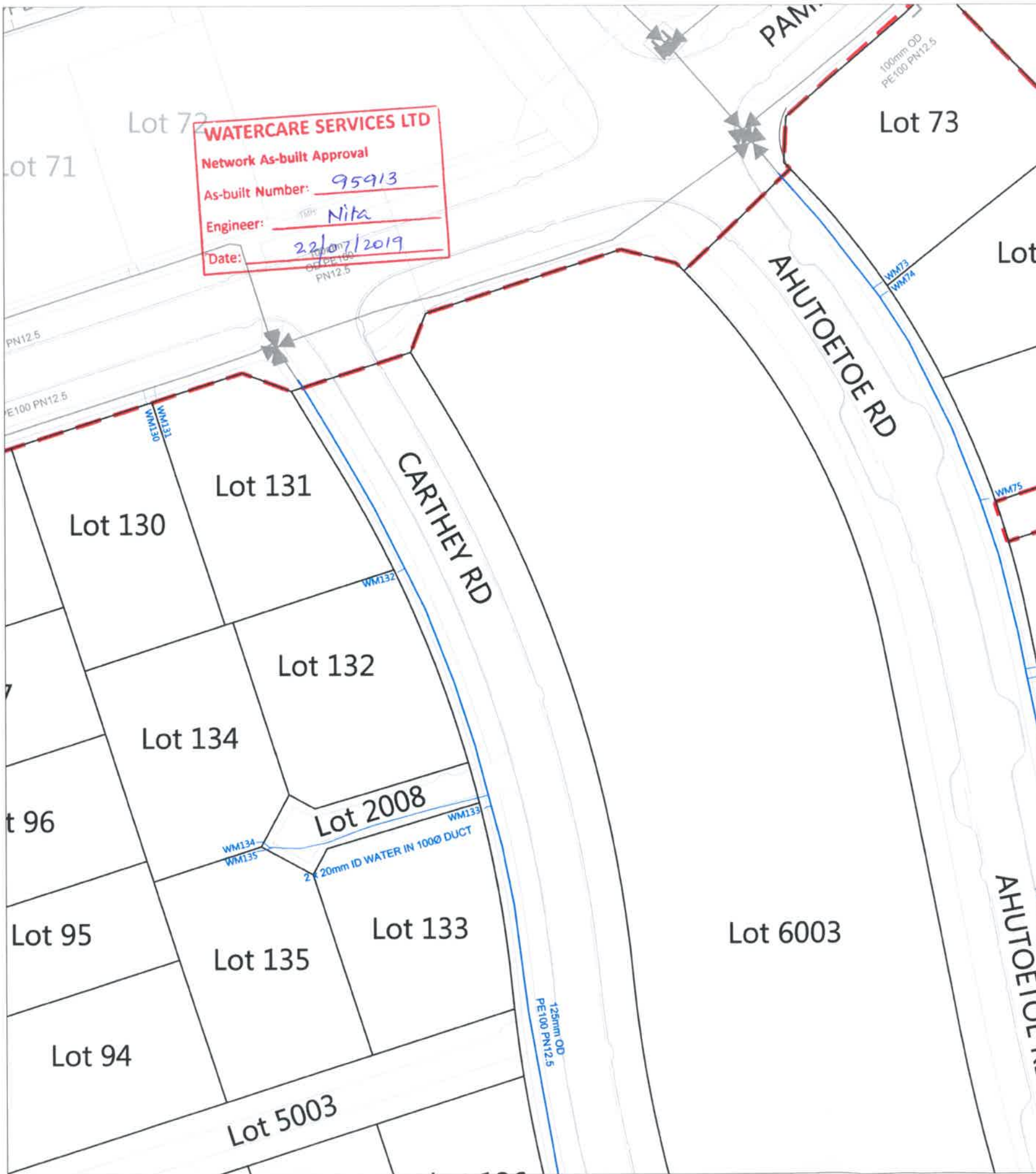
- The coordinates (X,Y) are in terms of NZTM on NZGD2000
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL) LINZ datum

Signed: *J Whyte*
 Registered Professional Surveyor

Date: 06/06/2019

Name: JAMIE WHYTE

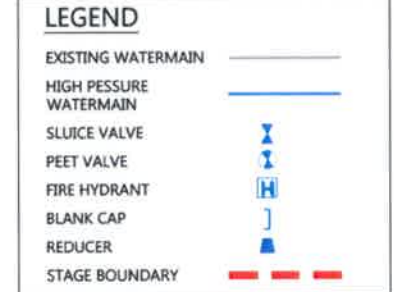
STATUS	ISSUED FOR INFORMATION	REV
SCALE	1 : 500 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	P17-296-01C-601-AB	



WATERCARE SERVICES LTD
 Network As-built Approval
 As-built Number: 95913
 Engineer: Nita
 Date: 22/07/2019

SCHEDULE OF COORDINATES			SCHEDULE OF COORDINATES		
NAME	EASTING	NORTHING	WATERMAIN LOT CONNECTIONS		
FIRE HYDRANTS					
FH01	1748218.56	5946680.15	WM73	1748387.37	5946823.56
FH02	1748282.59	5946710.04	WM74	1748388.08	5946822.43
FH03	1748348.32	5946715.28	WM75	1748400.17	5946797.60
FH04	1748410.96	5946742.86	WM76	1748405.62	5946777.39
SLUICE VALVES					
SV1	1748191.92	5946676.40	WM77	1748405.78	5946776.23
SV2	1748191.68	5946676.05	WM78	1748412.79	5946740.62
SV3	1748192.23	5946676.16	WM79	1748413.00	5946739.54
SV4	1748198.57	5946673.09	WM80	1748447.86	5946653.96
SV5	1748218.43	5946679.20	WM81	1748448.55	5946652.92
SV6	1748218.67	5946679.69	WM82	1748374.24	5946634.45
SV7	1748218.87	5946678.96	WM83	1748371.78	5946633.71
SV8	1748246.33	5946593.81	WM84	1748315.46	5946615.80
SV9	1748246.85	5946594.53	WM85	1748314.37	5946615.30
SV10	1748246.80	5946593.55	WM86	1748284.95	5946606.16
SV11	1748282.48	5946710.47	WM87	1748283.92	5946605.71
SV12	1748307.17	5946633.47	WM88	1748253.86	5946574.71
SV13	1748307.41	5946633.83	WM89	1748303.37	5946649.48
SV14	1748307.82	5946632.84	WM90	1748303.01	5946650.38
SV15	1748312.60	5946615.89	WM91	1748293.58	5946679.39
SV16	1748312.85	5946616.19	WM92	1748293.25	5946680.68
SV17	1748341.95	5946619.83	WM93	1748289.33	5946692.55
SV18	1748354.53	5946623.67	WM94	1748276.04	5946733.45
SV19	1748354.91	5946623.54	WM95	1748275.74	5946734.42
SV20	1748354.74	5946624.05	WM96	1748267.24	5946760.73
SV21	1748380.85	5946638.13	WM97	1748266.79	5946761.47
SV22	1748381.23	5946637.92	WM98	1748262.01	5946776.81
SV23	1748439.66	5946637.50	WM99	1748247.17	5946772.05
SV24	1748439.97	5946637.01	WM100	1748251.01	5946760.18
SV25	1748440.09	5946637.41	WM101	1748251.47	5946759.06
SV26	1748451.71	5946645.54	WM102	1748260.99	5946729.57
PEET VALVE					
PV1	1748187.30	5946689.65	WM103	1748261.30	5946728.57
PV2	1748188.03	5946689.98	WM104	1748274.55	5946687.78
PV3	1748198.54	5946672.44	WM105	1748279.29	5946672.56
PV4	1748226.73	5946586.94	WM106	1748279.94	5946671.14
PV5	1748307.55	5946633.25	WM107	1748288.30	5946645.48
PV6	1748341.97	5946619.19	WM108	1748288.70	5946644.19
PV7	1748376.53	5946650.51	WM109	1748236.53	5946627.56
			WM110	1748236.11	5946628.76
			WM111	1748226.85	5946657.80
			WM112	1748226.33	5946659.15
			WM113	1748222.61	5946671.14
			WM114	1748209.42	5946711.79
			WM115	1748208.94	5946712.93
			WM116	1748200.57	5946739.09
			WM117	1748200.23	5946740.05
			WM118	1748195.36	5946754.97
			WM119	1748174.80	5946743.43
			WM120	1748175.46	5946742.27
			WM121	1748184.77	5946712.87
			WM122	1748184.89	5946711.70
			WM123	1748202.54	5946657.80
			WM124	1748203.00	5946656.79
			WM125	1748211.22	5946631.34
			WM126	1748216.29	5946615.59
			WM127	1748216.74	5946614.21
			WM128	1748229.76	5946573.75
			WM129	1748230.09	5946572.50
			WM130	1748299.48	5946808.99
			WM131	1748300.59	5946809.26
			WM132	1748329.31	5946789.01
			WM133	1748339.55	5946760.63
			WM134	1748312.29	5946756.69
			WM135	1748312.35	5946755.61
			WM136	1748350.71	5946703.00
			WM137	1748363.33	5946673.84
			WM138	1748330.02	5946694.69
			WM139	1748329.98	5946692.76
			WM140	1748353.32	5946644.44
			WM141	1748363.70	5946673.15
			WM142	1748389.42	5946639.51
			WM143	1748415.40	5946647.93
			WM144	1748416.53	5946648.33
			WM145	1748416.59	5946723.78
			WM146	1748426.11	5946697.62
			WM147	1748447.57	5946707.36
			WM148	1748447.89	5946706.45

- NOTES**
- ALL WORK AND MATERIALS COMPLIES WITH AC STANDARD FOR ENGINEERING DESIGN AND CONSTRUCTION.
 - PIPE BEDDING COMPLIES WITH AC STD DETAIL DRAWING 18000 SHEET 4.4 UNLESS OTHERWISE NOTED.
 - WATERMANS ARE AN AVERAGE 0.6m BELOW GROUND IN BERMS AND 0.9m BELOW GROUND UNDER ROADS. HARDFILL BACKFILLED BENEATH ROAD CROSSINGS.
 - ALL PIPES ARE LAID 1.4m OFF THE ROAD RESERVE BOUNDARY IN THE COMMON SERVICE TRENCH.
 - PIPE SIZES SHOWN ARE EXTERNAL DIAMETER.
 - LOT BOUNDARIES ARE SUBJECT TO FINAL SURVEY.
 - ASBUILT DATA HAS BEEN SOURCED FROM A COMBINATION OF WOODS SURVEY MEASURED DATA AND CONTRACTOR RECEIVED DATA.



REVISION DETAILS		BY	DATE
1	ISSUED FOR INFORMATION	KR	31/05/19

SURVEYED	WOODS	WOODS Ltd LEVEL 1 BUILDING 8 8 NUGENT STREET, GRAFTON AUCKLAND 1023
DESIGNED	TB	
DRAWN	SK	
CHECKED	SM	
APPROVED	JW	

09 308 9229
WOODS.CO.NZ



**MILLDALE
STAGE 1C**

**WATERMAIN
ASBUILT PLAN
SHEET 3 OF 5**

I certify that these As-built Plans are an accurate record of the works undertaken and that:

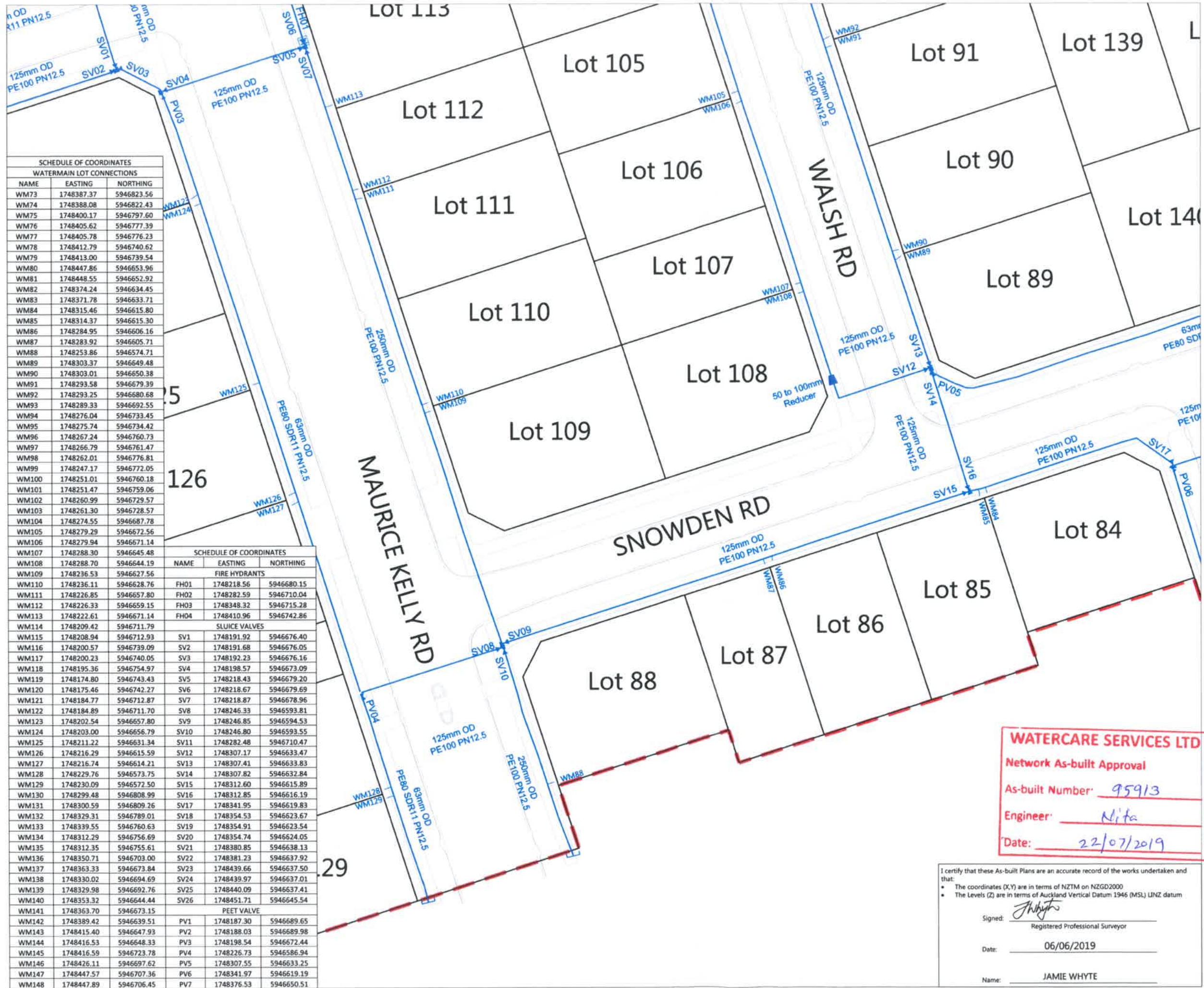
- The coordinates (X,Y) are in terms of NZTM on NZGD2000
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL) LINZ datum

Signed: *J Whyte*
 Registered Professional Surveyor

Date: 06/06/2019

Name: JAMIE WHYTE

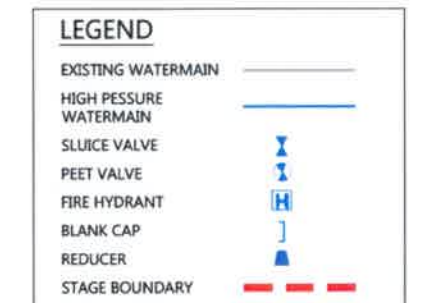
STATUS	ISSUED FOR INFORMATION	REV
SCALE	1 : 500 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	P17-296-01C-602-AB	



SCHEDULE OF COORDINATES		
WATERMAIN LOT CONNECTIONS		
NAME	EASTING	NORTHING
WM73	1748387.37	5946823.56
WM74	1748388.08	5946822.43
WM75	1748400.17	5946797.60
WM76	1748405.62	5946777.39
WM77	1748405.78	5946776.23
WM78	1748412.79	5946740.62
WM79	1748413.00	5946739.54
WM80	1748447.86	5946653.96
WM81	1748448.55	5946652.92
WM82	1748374.24	5946634.45
WM83	1748371.78	5946633.71
WM84	1748315.46	5946615.80
WM85	1748314.37	5946615.30
WM86	1748284.95	5946606.16
WM87	1748283.92	5946605.71
WM88	1748253.86	5946574.71
WM89	1748303.37	5946649.48
WM90	1748303.01	5946650.38
WM91	1748293.58	5946679.39
WM92	1748293.25	5946680.68
WM93	1748289.33	5946692.55
WM94	1748276.04	5946733.45
WM95	1748275.74	5946734.42
WM96	1748267.24	5946760.73
WM97	1748266.79	5946761.47
WM98	1748262.01	5946776.81
WM99	1748247.17	5946772.05
WM100	1748251.01	5946760.18
WM101	1748251.47	5946759.06
WM102	1748260.99	5946729.57
WM103	1748261.30	5946728.57
WM104	1748274.55	5946687.78
WM105	1748279.29	5946672.56
WM106	1748279.94	5946671.14
WM107	1748288.30	5946645.48
WM108	1748288.70	5946644.19
WM109	1748236.53	5946627.56
WM110	1748236.11	5946628.76
WM111	1748226.85	5946657.80
WM112	1748226.33	5946659.15
WM113	1748222.61	5946671.14
WM114	1748209.42	5946711.79
WM115	1748208.94	5946712.93
WM116	1748200.57	5946739.09
WM117	1748200.23	5946740.05
WM118	1748195.36	5946754.97
WM119	1748174.80	5946743.43
WM120	1748175.46	5946742.27
WM121	1748184.77	5946712.87
WM122	1748184.89	5946711.70
WM123	1748202.54	5946657.80
WM124	1748203.00	5946656.79
WM125	1748211.22	5946631.34
WM126	1748216.29	5946615.59
WM127	1748216.74	5946614.21
WM128	1748229.76	5946573.75
WM129	1748230.09	5946572.50
WM130	1748299.48	5946808.99
WM131	1748300.59	5946809.26
WM132	1748329.31	5946789.01
WM133	1748339.55	5946760.63
WM134	1748312.29	5946756.69
WM135	1748312.35	5946755.61
WM136	1748350.71	5946703.00
WM137	1748363.33	5946673.84
WM138	1748330.02	5946694.69
WM139	1748329.98	5946692.76
WM140	1748353.32	5946644.44
WM141	1748363.70	5946673.15
WM142	1748389.42	5946639.51
WM143	1748415.40	5946647.93
WM144	1748416.53	5946648.33
WM145	1748416.59	5946723.78
WM146	1748426.11	5946697.62
WM147	1748447.57	5946707.36
WM148	1748447.89	5946706.45

SCHEDULE OF COORDINATES		
NAME	EASTING	NORTHING
FIRE HYDRANTS		
FH01	1748218.56	5946680.15
FH02	1748282.59	5946710.04
FH03	1748348.32	5946715.28
FH04	1748410.96	5946742.86
SLUICE VALVES		
SV1	1748191.92	5946676.40
SV2	1748191.68	5946676.05
SV3	1748192.23	5946676.16
SV4	1748198.57	5946673.09
SV5	1748218.43	5946679.20
SV6	1748218.67	5946679.69
SV7	1748218.87	5946678.96
SV8	1748246.33	5946593.81
SV9	1748246.85	5946594.53
SV10	1748246.80	5946593.55
SV11	1748282.48	5946710.47
SV12	1748307.17	5946633.47
SV13	1748307.41	5946633.83
SV14	1748307.82	5946632.84
SV15	1748312.60	5946615.89
SV16	1748312.85	5946616.19
SV17	1748341.95	5946619.83
SV18	1748354.53	5946623.67
SV19	1748354.91	5946623.54
SV20	1748354.74	5946624.05
SV21	1748380.85	5946638.13
SV22	1748381.23	5946637.92
SV23	1748439.66	5946637.50
SV24	1748439.97	5946637.01
SV25	1748440.09	5946637.41
SV26	1748451.71	5946645.54
PEET VALVE		
PV1	1748187.30	5946689.65
PV2	1748188.03	5946689.98
PV3	1748198.54	5946672.44
PV4	1748226.73	5946586.94
PV5	1748307.55	5946633.25
PV6	1748341.97	5946619.19
PV7	1748376.53	5946650.51

- NOTES**
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 2. PIPE BEDDING COMPLIES WITH AC STD DETAIL DRAWING 18000 SHEET 4.4 UNLESS OTHERWISE NOTED.
 3. WATERMAINS ARE AN AVERAGE 0.6m BELOW GROUND IN BERMS AND 0.9m BELOW GROUND UNDER ROADS. HARDFILL BACKFILLED BENEATH ROAD CROSSINGS.
 4. ALL PIPES ARE LAID 1.4m OFF THE ROAD RESERVE BOUNDARY IN THE COMMON SERVICE TRENCH.
 5. PIPE SIZES SHOWN ARE EXTERNAL DIAMETER.
 6. LOT BOUNDARIES ARE SUBJECT TO FINAL SURVEY.
 7. ASBUILT DATA HAS BEEN SOURCED FROM A COMBINATION OF WOODS SURVEY MEASURED DATA AND CONTRACTOR RECEIVED DATA.



REVISION DETAILS	BY	DATE
1 ISSUED FOR INFORMATION	KR	31/05/19

SURVEYED	WOODS	WOODS Ltd
DESIGNED	TB	LEVEL 1 BUILDING B 8 NUGENT STREET, GRAFTON AUCKLAND 1023
DRAWN	SK	
CHECKED	SM	09 308 9229
APPROVED	JW	WOODS.CO.NZ

WATERCARE SERVICES LTD
 Network As-built Approval
 As-built Number: 95913
 Engineer: Nita
 Date: 22/07/2019

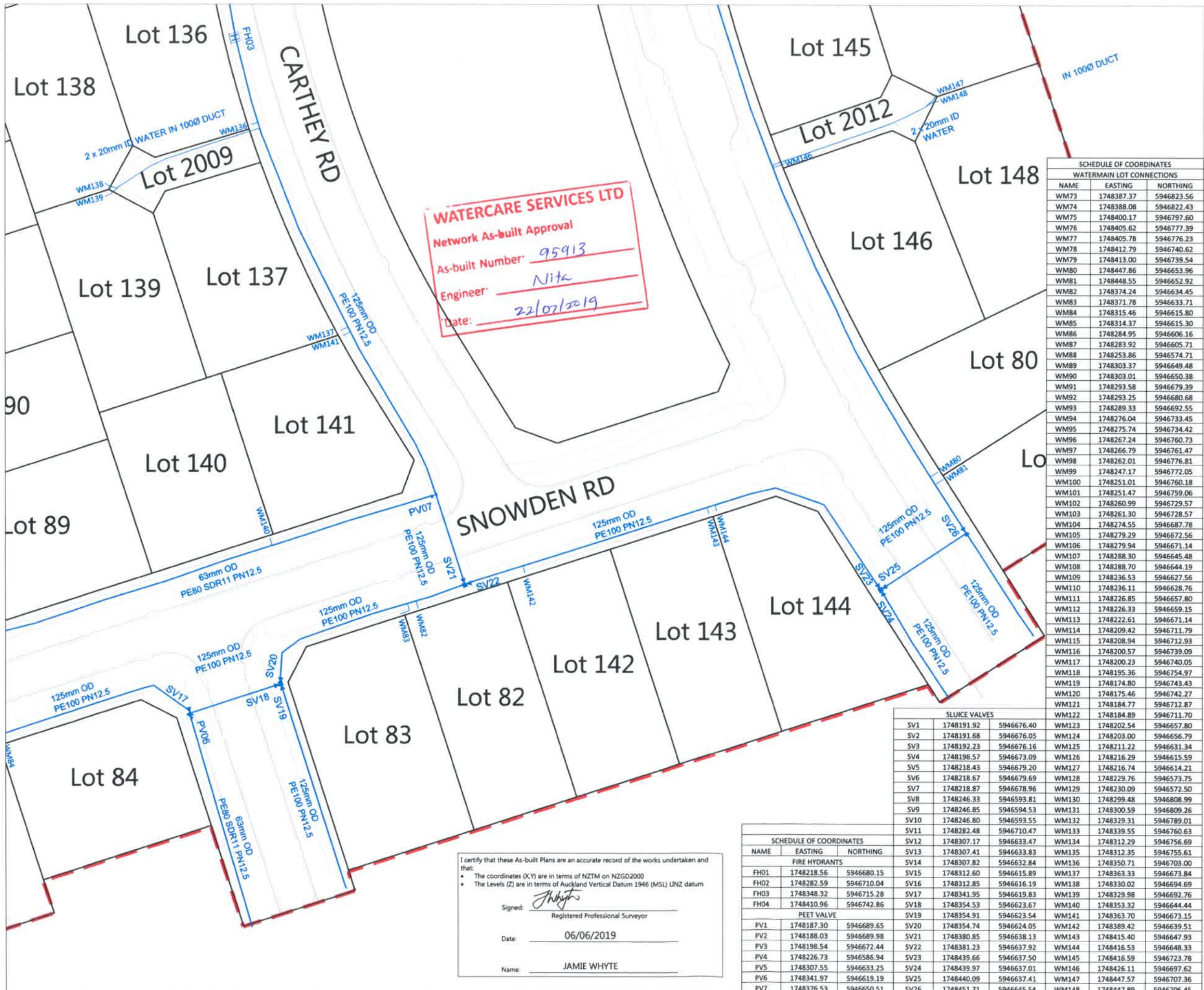
I certify that these As-built Plans are an accurate record of the works undertaken and that:
 • The coordinates (X,Y) are in terms of NZTM on NZGD2000
 • The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL) LINZ datum

Signed: *J Whyte*
 Registered Professional Surveyor
 Date: 06/06/2019
 Name: JAMIE WHYTE



MILLDALE
 STAGE 1C
 WATERMAIN ASBUILT PLAN
 SHEET 4 OF 5

STATUS	ISSUED FOR INFORMATION	REV
SCALE	1 : 500 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	P17-296-01C-603-AB	



WATERCARE SERVICES LTD

Network As-built Approval

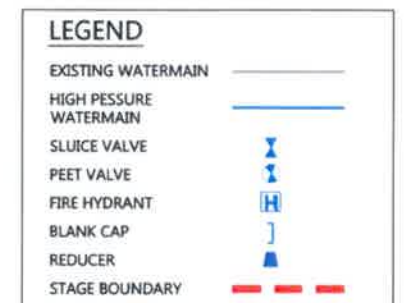
As-built Number: 95913

Engineer: Nita

Date: 22/07/2019

SCHEDULE OF COORDINATES			
WATERMAIN LOT CONNECTIONS			
NAME	EASTING	NORTHING	
WM73	1748387.37	5946823.56	
WM74	1748388.08	5946822.43	
WM75	1748400.17	5946797.60	
WM76	1748405.62	5946777.39	
WM77	1748405.78	5946776.23	
WM78	1748412.79	5946740.62	
WM79	1748413.00	5946739.54	
WM80	1748447.86	5946653.96	
WM81	1748448.55	5946652.92	
WM82	1748374.24	5946634.45	
WM83	1748371.78	5946633.71	
WM84	1748315.46	5946615.80	
WM85	1748314.37	5946615.30	
WM86	1748284.95	5946606.16	
WM87	1748283.92	5946605.71	
WM88	1748253.86	5946574.71	
WM89	1748303.37	5946649.48	
WM90	1748303.01	5946650.38	
WM91	1748293.58	5946679.39	
WM92	1748293.25	5946680.68	
WM93	1748289.33	5946692.55	
WM94	1748276.04	5946733.45	
WM95	1748275.74	5946734.42	
WM96	1748267.24	5946760.73	
WM97	1748266.79	5946761.47	
WM98	1748262.01	5946776.81	
WM99	1748247.17	5946772.05	
WM100	1748251.01	5946760.18	
WM101	1748251.47	5946759.06	
WM102	1748260.99	5946729.57	
WM103	1748261.30	5946728.57	
WM104	1748274.55	5946687.78	
WM105	1748279.29	5946672.56	
WM106	1748279.94	5946671.14	
WM107	1748288.30	5946645.48	
WM108	1748288.70	5946644.19	
WM109	1748236.53	5946627.56	
WM110	1748236.11	5946628.76	
WM111	1748226.85	5946657.80	
WM112	1748226.33	5946659.15	
WM113	1748222.61	5946671.14	
WM114	1748209.42	5946711.79	
WM115	1748208.94	5946712.93	
WM116	1748200.57	5946739.09	
WM117	1748200.23	5946740.05	
WM118	1748195.36	5946754.97	
WM119	1748174.80	5946743.43	
WM120	1748175.46	5946742.27	
WM121	1748184.77	5946712.87	
WM122	1748184.89	5946711.70	
WM123	1748202.54	5946657.80	
WM124	1748203.00	5946656.79	
WM125	1748211.22	5946631.34	
WM126	1748216.29	5946615.59	
WM127	1748216.74	5946614.21	
WM128	1748229.76	5946573.75	
WM129	1748230.09	5946572.50	
WM130	1748299.48	5946808.99	
WM131	1748300.59	5946809.26	
WM132	1748329.31	5946789.01	
WM133	1748339.55	5946760.63	
WM134	1748312.29	5946756.69	
WM135	1748312.35	5946755.61	
WM136	1748350.71	5946703.00	
WM137	1748363.33	5946673.84	
WM138	1748330.02	5946694.69	
WM139	1748329.98	5946692.76	
WM140	1748353.32	5946644.44	
WM141	1748363.70	5946673.15	
WM142	1748389.42	5946639.51	
WM143	1748415.40	5946647.93	
WM144	1748416.53	5946648.33	
WM145	1748416.59	5946723.78	
WM146	1748426.11	5946697.62	
WM147	1748447.57	5946707.36	
WM148	1748447.89	5946706.45	

- NOTES**
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 - PIPE BEDDING COMPLIES WITH AC STD DETAIL DRAWING 18000 SHEET 4.4 UNLESS OTHERWISE NOTED.
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REVISION DETAILS		BY	DATE
1	ISSUED FOR INFORMATION	KR	31/05/19

SURVEYED	WOODS	WOODS Ltd LEVEL 1 BUILDING B 8 NUGENT STREET, GRAFTON AUCKLAND 1023 09 308 9229 WOODS.CO.NZ
DESIGNED	TB	
DRAWN	SK	
CHECKED	SM	
APPROVED	JW	



**MILLDALE
STAGE 1C**

**WATERMAIN
ASBUILT PLAN
SHEET 5 OF 5**

STATUS	ISSUED FOR INFORMATION	REV
SCALE	1 : 500 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	P17-296-01C-604-AB	

I certify that these As-built Plans are an accurate record of the works undertaken and that:

- The coordinates (X,Y) are in terms of NZTM on NZGD2000
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL) LINZ datum

Signed: J Whyte
Registered Professional Surveyor

Date: 06/06/2019

Name: JAMIE WHYTE

SCHEDULE OF COORDINATES			
NAME	EASTING	NORTHING	
FIRE HYDRANTS			
FH01	1748218.56	5946680.15	
FH02	1748282.59	5946710.04	
FH03	1748348.32	5946715.28	
FH04	1748410.96	5946742.86	
PEET VALVE			
PV1	1748187.30	5946689.65	
PV2	1748188.03	5946689.98	
PV3	1748198.54	5946672.44	
PV4	1748226.73	5946586.94	
PV5	1748307.55	5946633.25	
PV6	1748341.97	5946619.19	
PV7	1748376.53	5946650.51	
SLUICE VALVES			
SV1	1748191.92	5946676.40	
SV2	1748191.68	5946676.05	
SV3	1748192.23	5946676.16	
SV4	1748198.57	5946673.09	
SV5	1748218.43	5946679.20	
SV6	1748218.67	5946679.69	
SV7	1748218.87	5946678.96	
SV8	1748246.33	5946593.81	
SV9	1748246.85	5946594.53	
SV10	1748246.80	5946593.55	
SV11	1748282.48	5946710.47	
SV12	1748307.17	5946633.47	
SV13	1748307.41	5946633.83	
SV14	1748307.82	5946632.84	
SV15	1748312.60	5946615.89	
SV16	1748312.85	5946616.19	
SV17	1748341.95	5946619.83	
SV18	1748354.53	5946623.67	
SV19	1748354.91	5946623.54	
SV20	1748354.74	5946624.05	
SV21	1748380.85	5946638.13	
SV22	1748381.23	5946637.92	
SV23	1748439.66	5946637.50	
SV24	1748439.97	5946637.01	
SV25	1748440.09	5946637.41	
SV26	1748451.71	5946645.54	