

CLIENT:



COUNCIL:



MILLWATER - ARRAN POINT STAGE I ASBUILTS DRAWINGS FOR ENGINEERING APPROVAL

SEPTEMBER 2016

DISCLAIMER
THE INFORMATION PORTRAYED ON THIS
PLAN IS INTENDED TO BE SOLELY USED AS
THE BASE DATA FOR THE PURPOSES OF 224c
APPLICATION TO COUNCIL.
WFH PROPERTIES LTD AND WOOD AND
PARTNERS CONSULTANTS ACCEPT NO
RESPONSIBILITY FOR ANY BUILDING DESIGN
OR CONSTRUCTION WORK BASED ON THIS
DRAWING FILE



MILLWATER - ARRAN POINT STAGE I

CONTENT INDEX AND LOCALITY PLAN

SHEET NO.		SHEET TITLE
37001-01-	000	Plans Index and Location Plan
37001-01-	100	Final Contour Asbuilt Plan
37001-01-	110-111	Cut & Fill Asbuilt Original to Final Surface
37001-01-	120-121	Shear Key, Undercuts & Subsoil Drains Asbuilt Plan
37001-01-	130-133	Retaining Wall Asbuilt
37001-01-	200-203	Roading Asbuilt Plans
37001-01-	250-251	Reserve Asbuilt
37001-01-	300-303	Stormwater Asbuilt Plans
37001-01-	400-403	Sanitary Sewer Asbuilt Plans
37001-01-	600-602	Watermain Asbuilt Plans

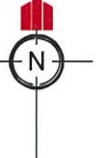
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LOCATION PLAN

NOT TO SCALE



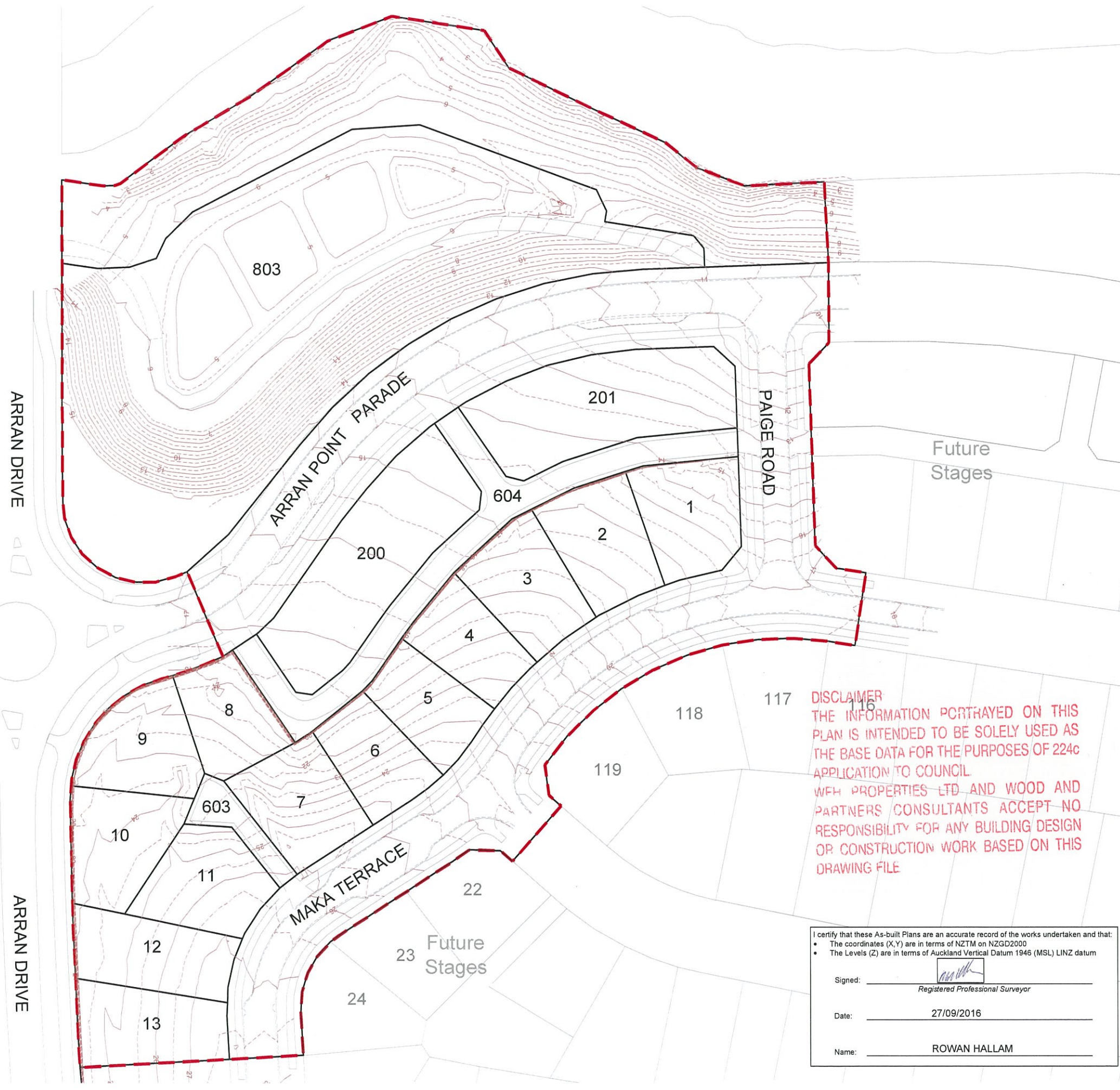


REVISION DETAILS	NAME	DATE
1. Issued.	MRH	27/09/2016

NOTES
1. CONTOURS ARE AT 0.5 METRE INTERVALS

LEGEND

	CONTOURS MAJOR
	CONTOURS MINOR
	STAGE BOUNDARIES
	LOT BOUNDARIES



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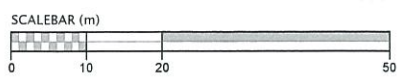
I certify that these As-built Plans are an accurate record of the works undertaken and that:

- 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: 27/09/2016

Name: ROWAN HALLAM

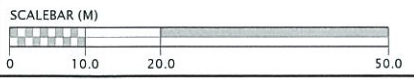
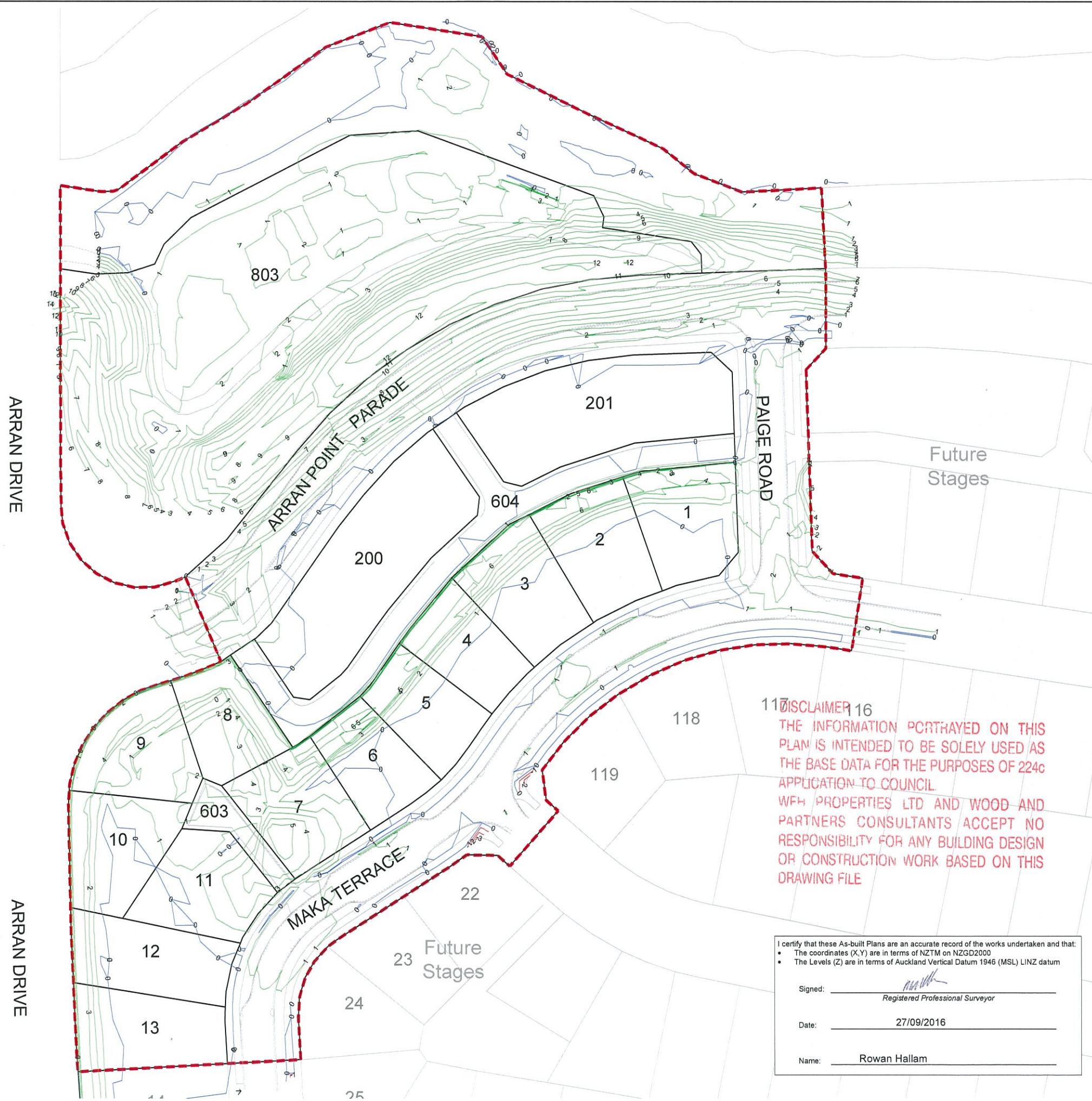


**MILLWATER
ARRAN POINT
STAGE 1**

FINAL CONTOUR
AS-BUILT PLAN
(SLC-62000)

AUCKLAND COUNCIL

DESIGNED: MB	AS-BUILT
CHECKED: RDC	DRAWN: RDC
APPROVED: MRH	SURVEYED: PK
JOB NUMBER: 37001	SCALE: 1:1000 @ A3
ISSUED: SEPT 2016	
DWG. NO. 37001-01-AB-100	REV. 1.



REVISION DETAILS	NAME	DATE
1. Issued.	MRH	27-09-2016

NOTES
1. CONTOURS ARE AT 1.0 METRE INTERVALS

LEGEND

	ZERO CONTOUR
	CUT CONTOUR
	FILL CONTOUR
	STAGE BOUNDARIES
	LOT BOUNDARIES

CLIENT:




WOODS
Engineers. Surveyors. Planners.
Urban Designers. Architects.

**MILLWATER
ARRAN POINT
STAGE 1**


CUT & FILL AS-BUILT
LOWEST TO FINAL SURFACE
SHEET 1 OF 2
(SLC-62000)
AUCKLAND COUNCIL

DESIGNED: MB	AS-BUILT
CHECKED: RDC	DRAWN: RDC
APPROVED: MRH	SURVEYED: PK
JOB NUMBER: 37001	SCALE: 1:1000 @ A3
ISSUED: SEPT 2016	
DWG. NO. 37001-01-AB-110	REV. 1.

DISCLAIMER
16
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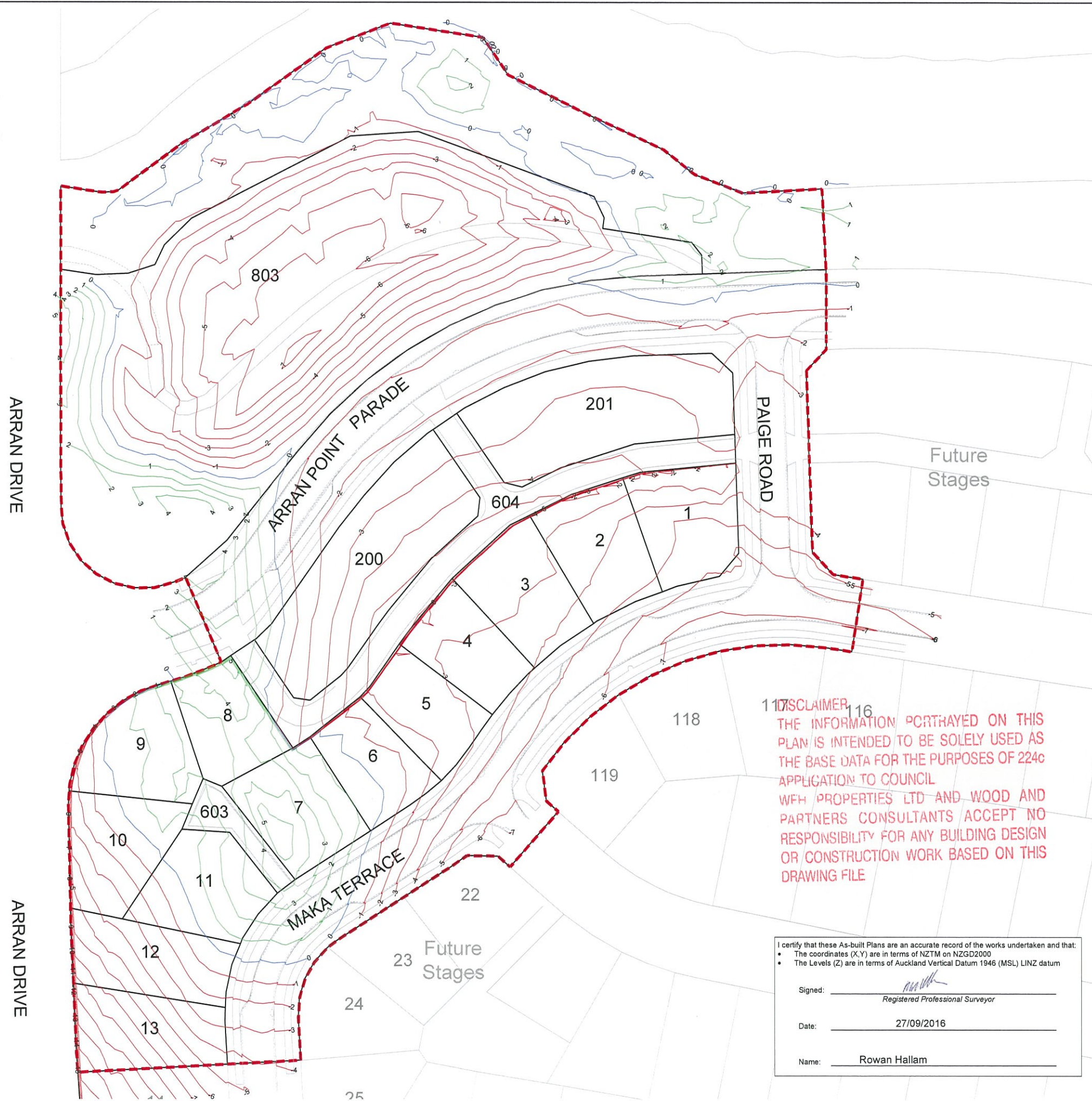
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Signed: 
Registered Professional Surveyor

Date: 27/09/2016

Name: Rowan Hallam



REVISION DETAILS	NAME	DATE
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NOTES
1. CONTOURS ARE AT 1.0 METRE INTERVALS

LEGEND

	ZERO CONTOUR
	CUT CONTOUR
	FILL CONTOUR
	STAGE BOUNDARIES
	LOT BOUNDARIES



**MILLWATER
ARRAN POINT
STAGE 1**

CUT & FILL AS-BUILT
ORIGINAL TO FINAL SURFACE
SHEET 2 OF 2
(SLC-62000)

AUCKLAND COUNCIL

DESIGNED: MB	AS-BUILT
CHECKED: RDC	DRAWN: RDC
APPROVED: MRH	SURVEYED: PK
JOB NUMBER: 37001	SCALE: 1:1000 @ A3
ISSUED: SEPT 2016	
DWG. NO. 37001-01-AB-111	REV. 1.

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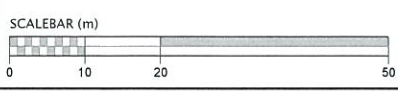
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Date: 27/09/2016

Name: Rowan Hallam



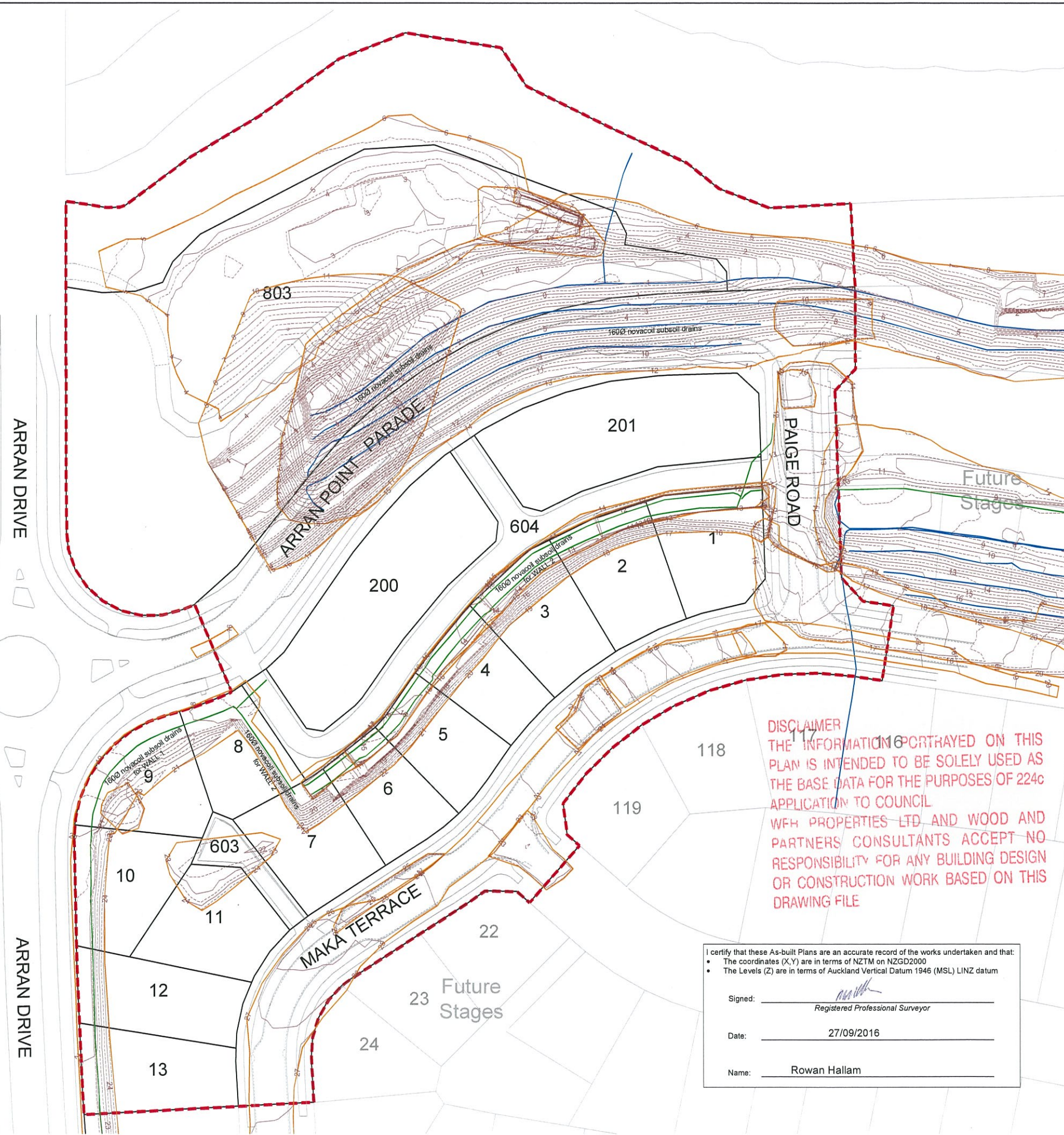


REVISION DETAILS		NAME	DATE
1.	ISSUED	MRH	27/09/16

NOTES
1. CONTOURS ARE AT 0.5 METRE INTERVALS

LEGEND

	NOVACOIL SUBSOIL DRAINS
	REINFORCED EARTH & RETAINING WALL SUBSOIL DRAINS
	EXISTING STORMWATER DRAINAGE
	NEW STORMWATER DRAINAGE
	STAGE BOUNDARIES
	LOT BOUNDARIES
	CONTOURS
	SHEAR KEY & UNDERCUT AREAS



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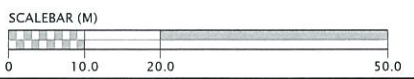
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Registered Professional Surveyor

Date: 27/09/2016

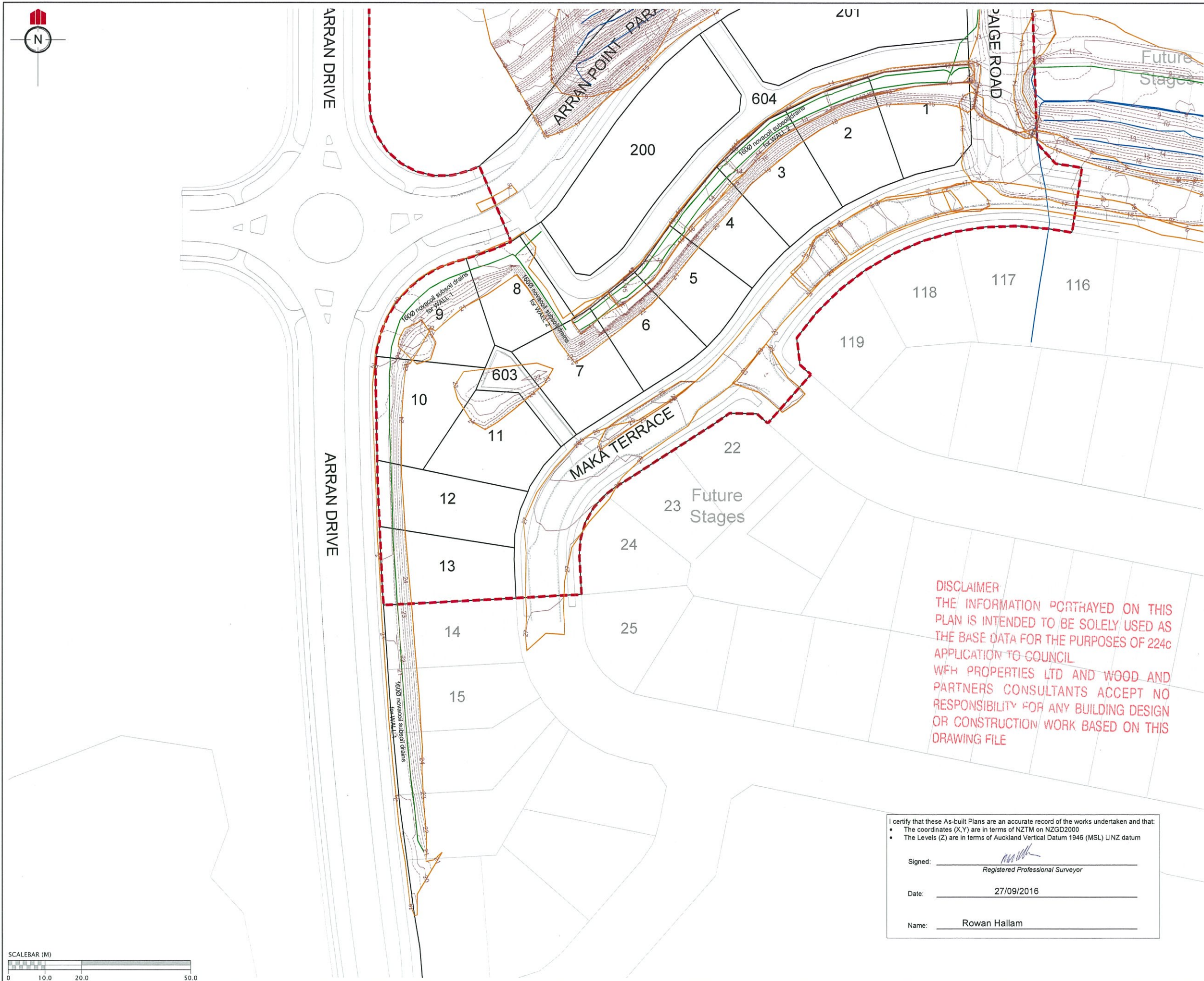
Name: Rowan Hallam



**MILLWATER
ARRAN POINT
STAGE 1**

SHEAR KEY, UNDERCUTS, &
SUBSOIL DRAINS
AS-BUILT PLAN
SHEET 1 of 2
AUCKLAND COUNCIL

DESIGNED: MB	ISSUED FOR INFORMATION
CHECKED: RDC	DRAWN: RDC
APPROVED: MRH	SURVEYED: WOODS
JOB NUMBER: 37001	SCALE: 1:1000 @ A3
ISSUED: 16-09-2016	
DWG. NO. 37001-01-AB-120	REV. 1.



REVISION DETAILS	NAME	DATE
1. Issued for information.	MRH	27-09-2016

NOTES
1. CONTOURS ARE AT 0.5 METRE INTERVALS

LEGEND

	NOVACOIL SUBSOIL DRAINS
	REINFORCED EARTH & RETAINING WALL SUBSOIL DRAINS
	EXISTING STORMWATER DRAINAGE
	NEW STORMWATER DRAINAGE
	STAGE BOUNDARIES
	LOT BOUNDARIES
	CONTOURS
	SHEAR KEY & UNDERCUT AREAS



**MILLWATER
ARRAN POINT
STAGE 1**

**SHEAR KEY, UNDERCUTS, &
SUBSOIL DRAINS
AS-BUILT PLAN
SHEET 2 of 2**
AUCKLAND COUNCIL

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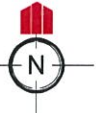
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Registered Professional Surveyor

Date: 27/09/2016

Name: Rowan Hallam

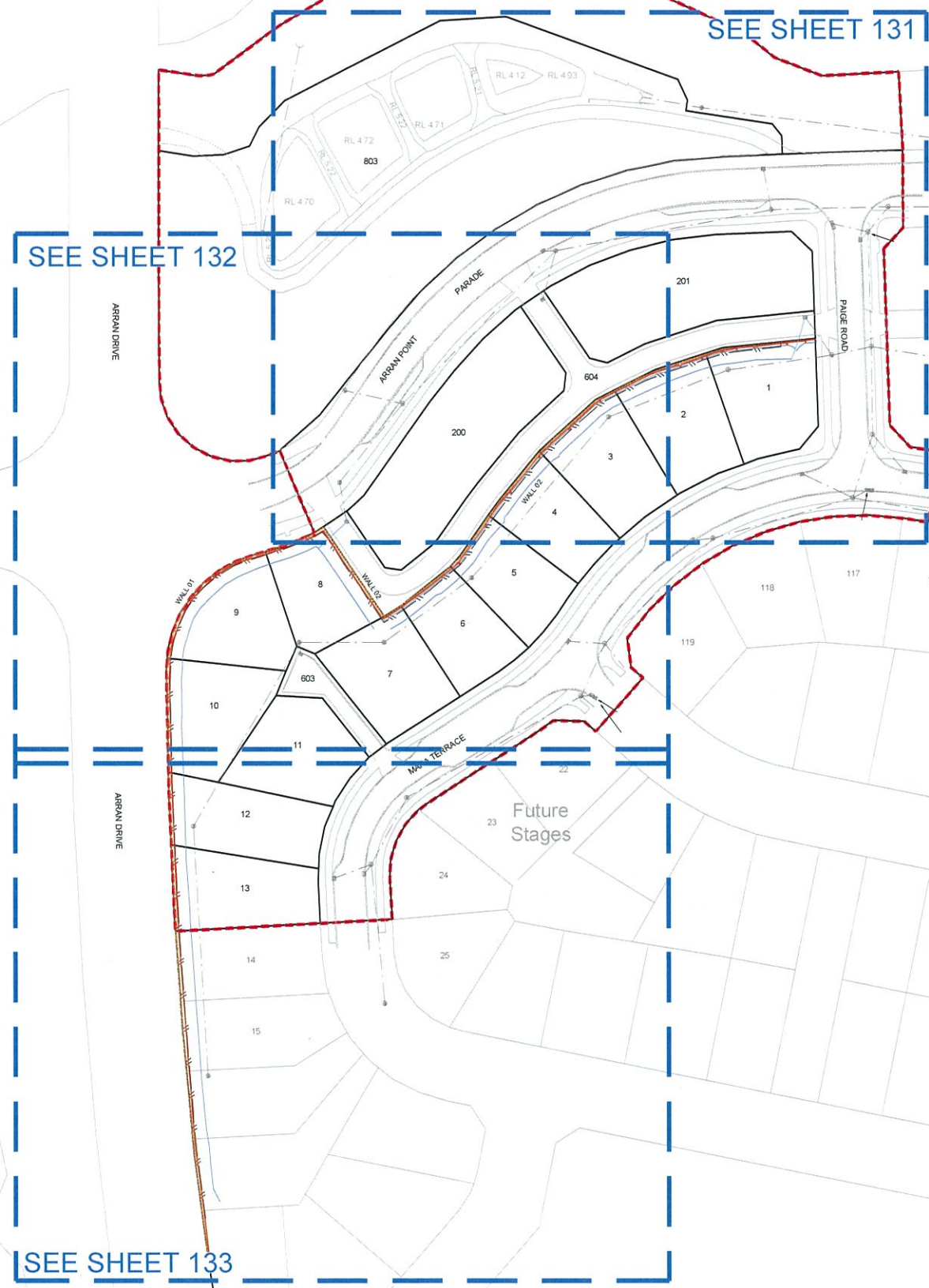
DESIGNED: MB	ISSUED FOR INFORMATION
CHECKED: RDC	DRAWN: RDC
APPROVED: MRH	SURVEYED: WOODS
JOB NUMBER: 37001	SCALE: 1:1000 @ A3
ISSUED: 16-09-2016	
DWG. NO. 37001-01-AB-121	REV. 1.



REVISION DETAILS	NAME	DATE
1. Issued.	MRH	27-09-2016

LEGEND:

- BOTTOM FACE OF WALL
- TOP FACE OF WALL
- CATCH PIT/BERM SUMP
- STORMWATER MANHOLE
- FENCE
- STORMWATER LINE
- BOUNDARY
- WALL DRAINAGE LINE



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Signed: Registered Professional Surveyor
 Date: 27/09/2016
 Name: Rowan Hallam

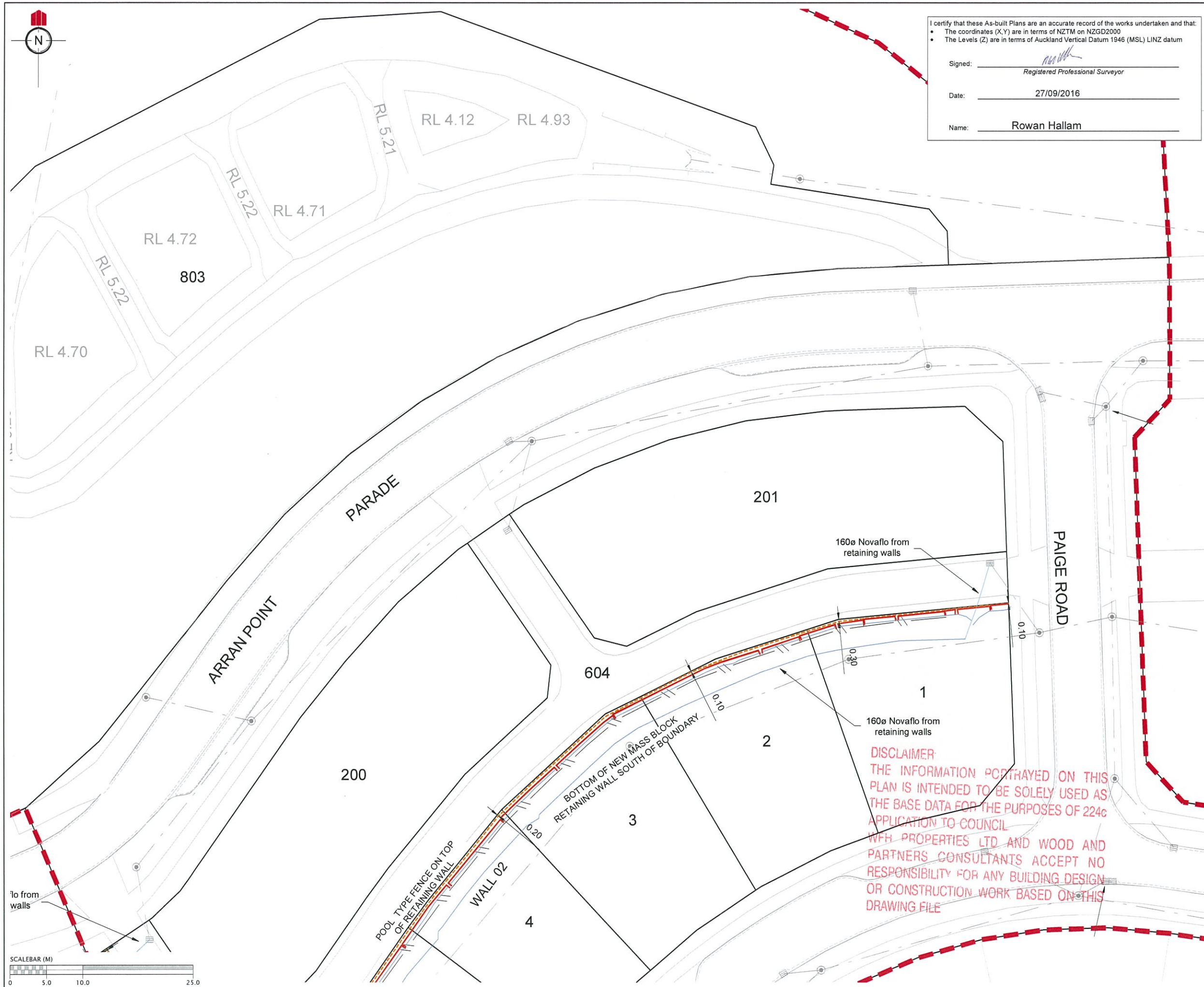


**MILLWATER
 ARRAN POINT
 STAGE 1**

RETAINING WALL AS-BUILT
 SHEET 1 OF 4

AUCKLAND COUNCIL

DESIGNED: MB	AS-BUILT
CHECKED: RDC	DRAWN: RDC
APPROVED: MRH	SURVEYED: PK
JOB NUMBER: 37001	SCALE: 1:1500 @ A3
ISSUED: SEPT 2016	
DWG. NO. 37001-01-AB-130	REV. 1.



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Signed: Rowan Hallam
Registered Professional Surveyor

Date: 27/09/2016

Name: Rowan Hallam

REVISION DETAILS	NAME	DATE
1. Issued.	MRH	27-09-2016

LEGEND:

- BOTTOM FACE OF WALL
- TOP FACE OF WALL
- ≡ CATCH PIT/BERM SUMP
- STORMWATER MANHOLE
- - - FENCE
- - - STORMWATER LINE
- BOUNDARY
- WALL DRAINAGE LINE



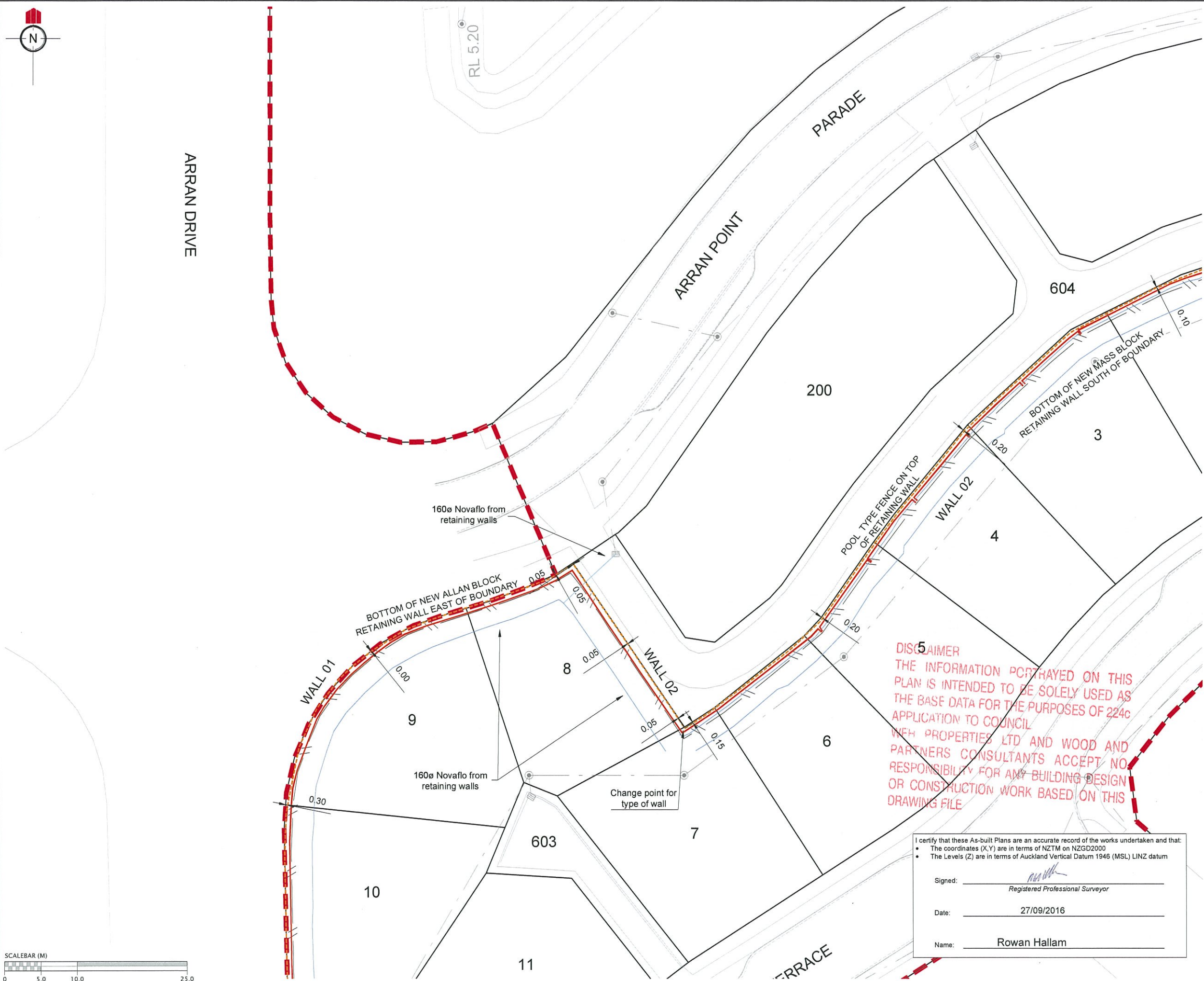
**MILLWATER
ARRAN POINT
STAGE 1**

RETAINING WALL AS-BUILT
SHEET 2 OF 4

AUCKLAND COUNCIL

DESIGNED: MB	AS-BUILT
CHECKED: RDC	DRAWN: RDC
APPROVED: MRH	SURVEYED: PK
JOB NUMBER: 37001	SCALE: 1:500 @ A3
ISSUED: SEPT 2016	
DWG. NO. 37001-01-AB-131	REV. 1.

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REVISION DETAILS	NAME	DATE
1. Issued.	MRH	27-09-2016

LEGEND:

- BOTTOM FACE OF WALL
- TOP FACE OF WALL
- CATCH PIT/BERM SUMP
- STORMWATER MANHOLE
- FENCE
- STORMWATER LINE
- BOUNDARY
- WALL DRAINAGE LINE

CLIENT:

Engineers. Surveyors. Planners.
Urban Designers. Architects.

**MILLWATER
ARRAN POINT
STAGE 1**

RETAINING WALL AS-BUILT
SHEET 3 OF 4

AUCKLAND COUNCIL

DESIGNED: MB	AS-BUILT
CHECKED: RDC	DRAWN: RDC
APPROVED: MRH	SURVEYED: PK
JOB NUMBER: 37001	SCALE: 1:500 @ A3
ISSUED: SEPT 2016	
DWG. NO. 37001-01-AB-132	REV. 1.

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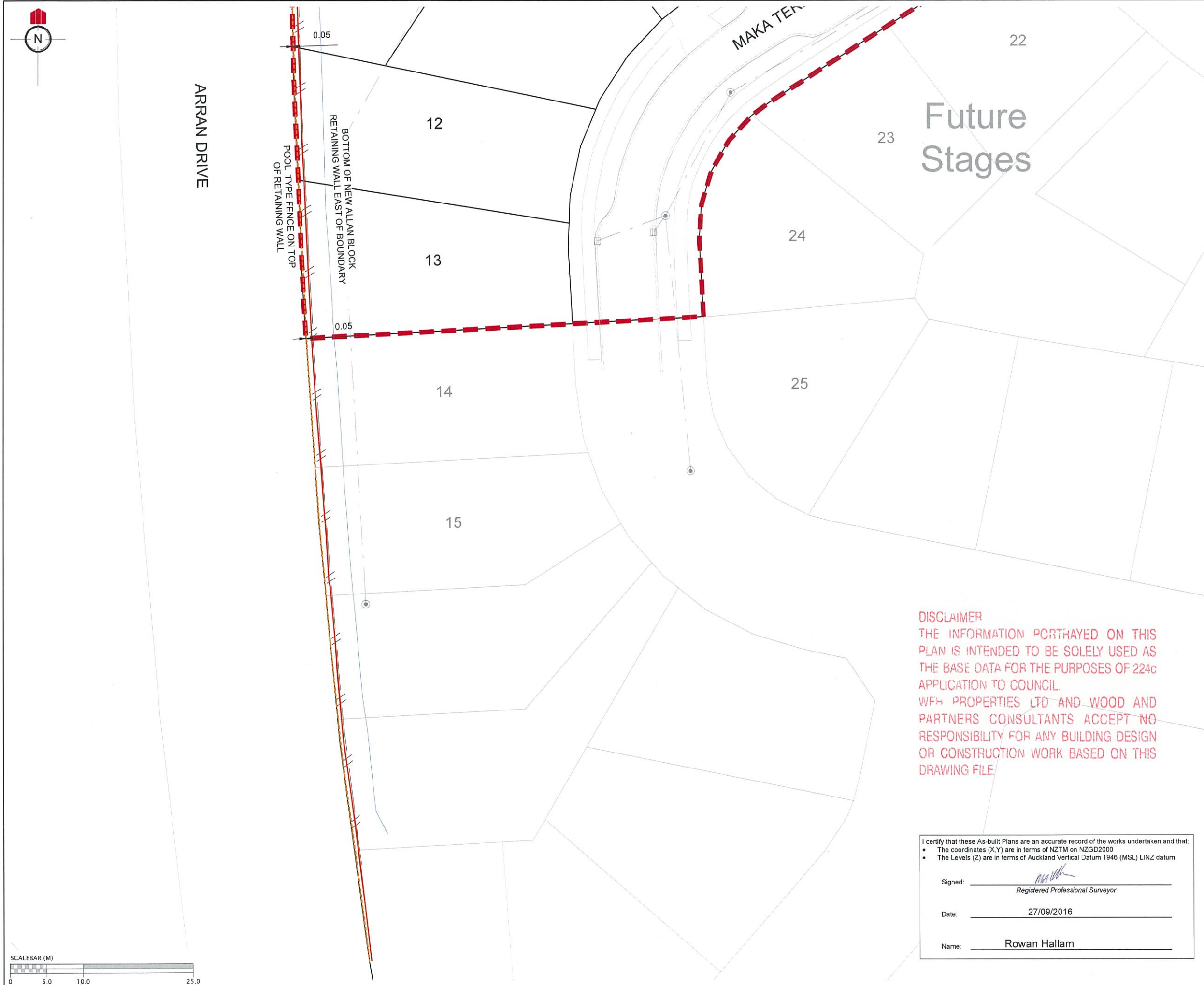
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Signed: Registered Professional Surveyor

Date: 27/09/2016

Name: Rowan Hallam





REVISION DETAILS	NAME	DATE
1. Issued.	MRH	16-09-2016

LEGEND:

- BOTTOM FACE OF WALL
- TOP FACE OF WALL
- CATCH PIT/BERM SUMP
- STORMWATER MANHOLE
- FENCE
- STORMWATER LINE
- BOUNDARY
- WALL DRAINAGE LINE

CLIENT:

Engineers. Surveyors. Planners.
Urban Designers. Architects.

**MILLWATER
ARRAN POINT
STAGE 1**

RETAINING WALL AS-BUILT
SHEET 4 OF 4

AUCKLAND COUNCIL

DESIGNED: MB	AS-BUILT
CHECKED: RDC	DRAWN: RDC
APPROVED: MRH	SURVEYED: PK
JOB NUMBER: 37001	SCALE: 1:500 @ A3
ISSUED: SEPT 2016	
DWG. NO. 37001-01-AB-132	REV. 1.

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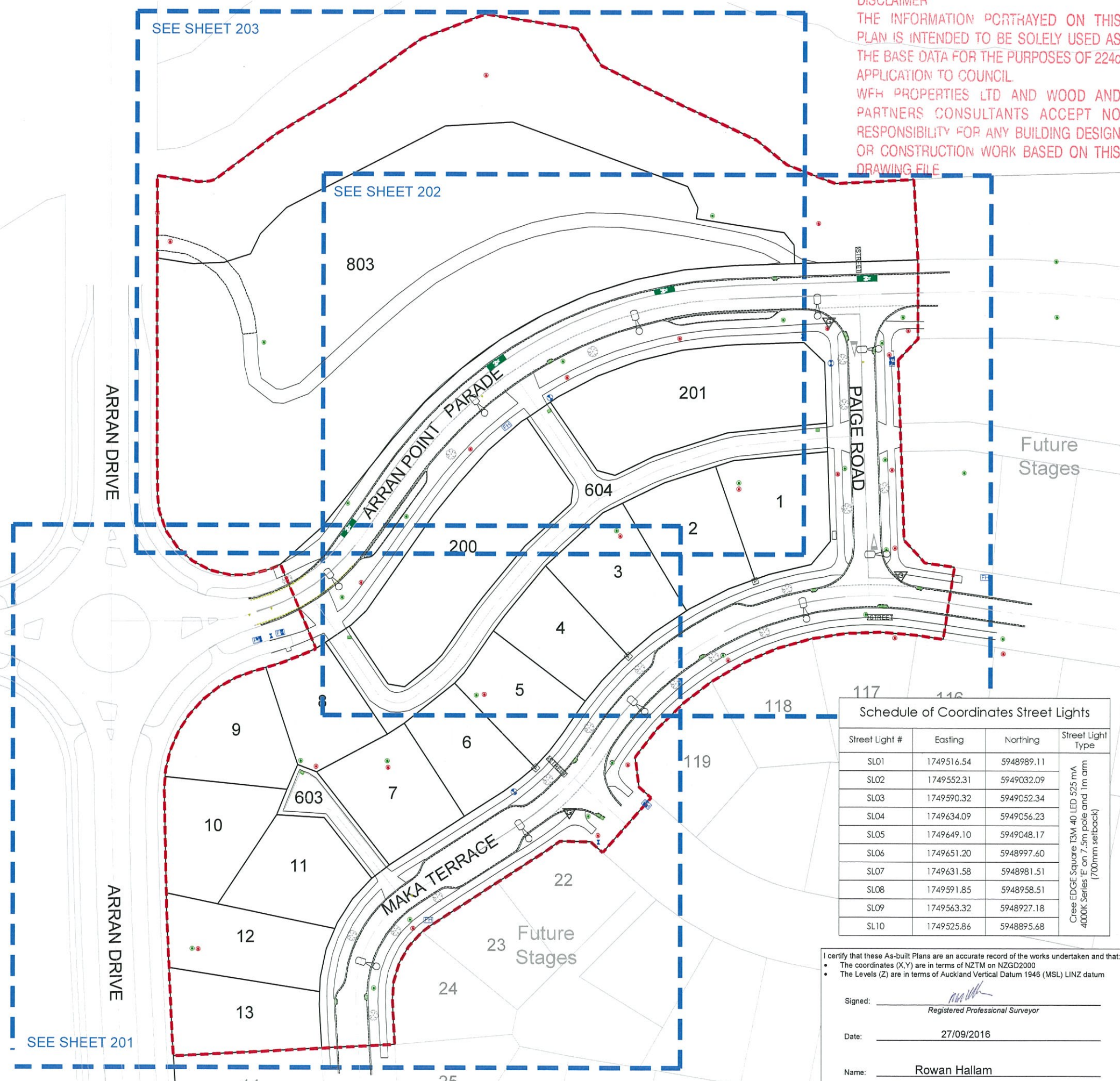
Schedule of Coordinates Street Trees

Tree #	Easting	Northing	Tree Type
ST01	1749503.82	5948990.88	Pohutukawa
ST02	1749543.98	5949021.91	
ST03	1749578.81	5949047.29	
ST08	1749626.70	5948988.88	Totara
ST09	1749621.21	5948978.16	
ST10	1749608.69	5948971.98	
ST11	1749599.41	5948965.43	
ST12	1749590.60	5948969.08	
ST13	1749578.11	5948954.52	
ST14	1749568.01	5948941.65	
ST15	1749540.86	5948912.72	Liquidamber
ST16	1749530.55	5948904.45	
ST17	5948904.45	5948903.26	
ST18	1749525.04	5948883.71	
ST04	1749640.26	5949045.56	
ST05	1749640.66	5949034.45	
ST06	1749650.63	5949013.86	
ST07	1749641.38	5949008.74	

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- NOTES**
- ALL WORKS AND MATERIALS COMPLY WITH AC STANDARDS FOR ENGINEERING DESIGN AND CONSTRUCTION ISSUE NOV 2005.
 - ALL ROADS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH APPROVED ENGINEERING PLANS.
 - ALL FINISHED ROAD SURFACES ARE ASPHALT CONCRETE 30mm THICK.
 - ALL FOOTPATHS ARE 125mm THICK BRUSHED CONCRETE UNLESS OTHERWISE NOTED.
 - ALL PIPE CROSSINGS UNDER ROADS HAVE BEEN HARDFILL BACKFILLED
 - ASBUILT DATA HAS BEEN SOURCED FROM A COMBINATION OF WOODS SURVEY DATA AND CONTRACTOR RECEIVED DATA.



- LEGEND**
- STREET LIGHT
 - ROAD NAME SIGN
 - CATCH PIT/BERM SUMP
 - STORMWATER MANHOLE
 - RG-6 SIGN (GIVE WAY)
 - STREET TREE
 - STAGE EXTENTS
 - SS BOUNDARY KIT
 - SS ISOLATION VALVE
 - SS FLUSHING POINT
 - SS AIR VALVE
 - WATER SLUICE VALVE
 - WATER PEET VALVE
 - WATER FIRE HYDRANT
 - GAS METER
 - TELECOMMUNICATIONS MANHOLE

Schedule of Coordinates Street Lights

Street Light #	Easting	Northing	Street Light Type
SL01	1749516.54	5948989.11	Cree EDGE Square 13M 40 LED 525 mA 4000K Series 'E' on 7.5m pole and 1m arm (700mm setback)
SL02	1749552.31	5949032.09	
SL03	1749590.32	5949052.34	
SL04	1749634.09	5949056.23	
SL05	1749649.10	5949048.17	
SL06	1749651.20	5948997.60	
SL07	1749631.58	5948981.51	
SL08	1749591.85	5948958.51	
SL09	1749563.32	5948927.18	
SL10	1749525.86	5948895.68	

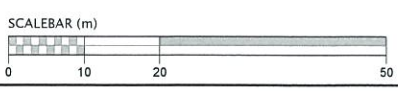
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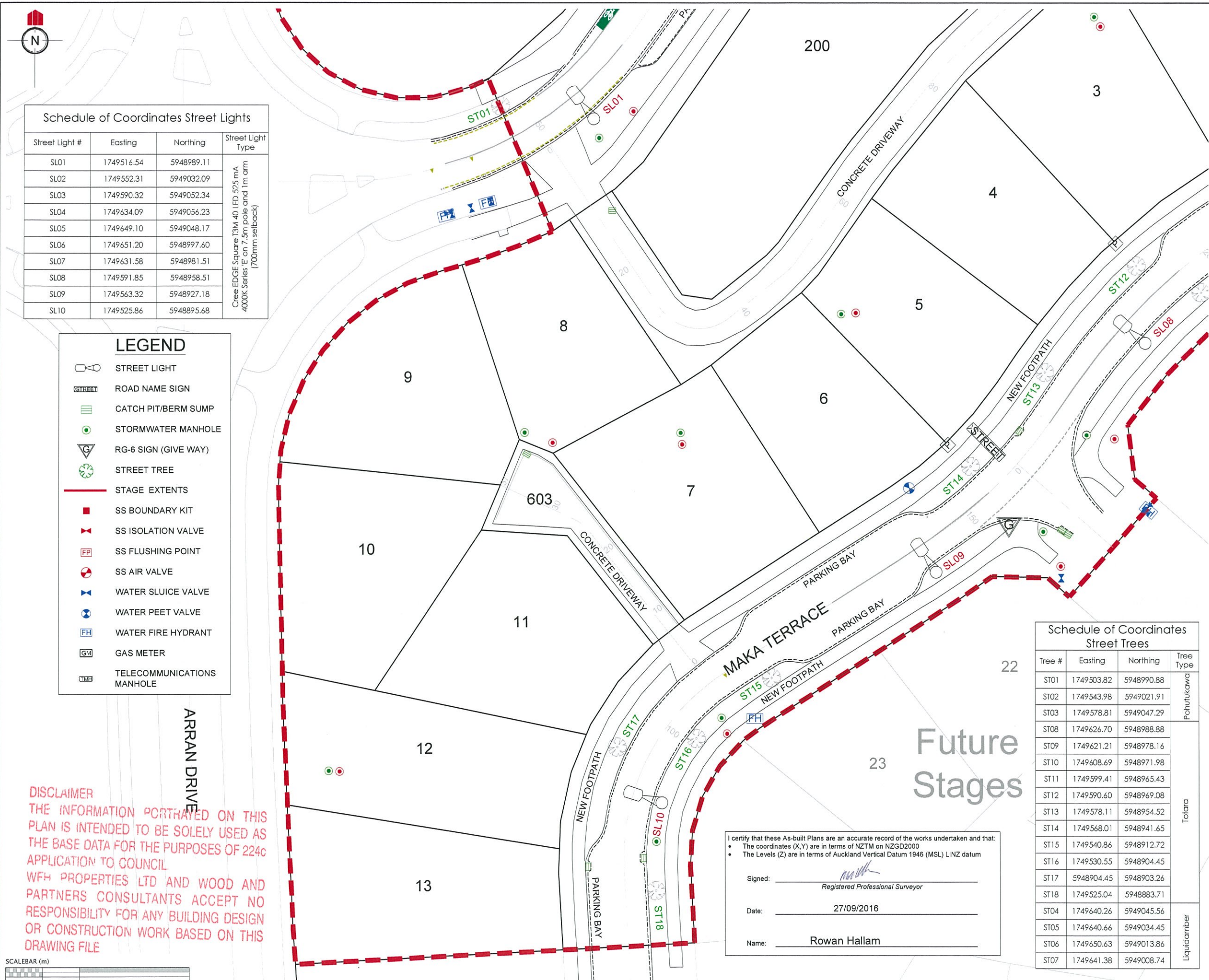


**MILLWATER
 ARRAN POINT
 STAGE 1**

ROADING ASBUILT
 OVERALL LAYOUT
 SHEET 1 OF 4
 (SLC-62000)

AUCKLAND COUNCIL

DESIGNED: MB	ASBUILT
CHECKED: RDC	DRAWN: RDC
APPROVED: MRH	SURVEYED: PK
JOB NUMBER: 37001	SCALE: 1:1000 @ A3
ISSUED: SEPT 2016	
DWG. NO. 37001-01-AB-200	REV. 1.



Schedule of Coordinates Street Lights

Street Light #	Easting	Northing	Street Light Type
SL01	1749516.54	5948989.11	Cree EDGE Square T3M 40 LED 525 mA 4000K Series 'E' on 7.5m pole and 1m arm (700mm setback)
SL02	1749552.31	5949032.09	
SL03	1749590.32	5949052.34	
SL04	1749634.09	5949056.23	
SL05	1749649.10	5949048.17	
SL06	1749651.20	5948997.60	
SL07	1749631.58	5948981.51	
SL08	1749591.85	5948958.51	
SL09	1749563.32	5948927.18	
SL10	1749525.86	5948895.68	

LEGEND

- STREET LIGHT
- ROAD NAME SIGN
- CATCH PIT/BERM SUMP
- STORMWATER MANHOLE
- RG-6 SIGN (GIVE WAY)
- STREET TREE
- STAGE EXTENTS
- SS BOUNDARY KIT
- SS ISOLATION VALVE
- SS FLUSHING POINT
- SS AIR VALVE
- WATER SLUICE VALVE
- WATER PEET VALVE
- WATER FIRE HYDRANT
- GAS METER
- TELECOMMUNICATIONS MANHOLE

Schedule of Coordinates Street Trees

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ST03	1749578.81	5949047.29		
ST08	1749626.70	5948988.88		
ST09	1749621.21	5948978.16		
ST10	1749608.69	5948971.98		
ST11	1749599.41	5948965.43		
ST12	1749590.60	5948969.08		
ST13	1749578.11	5948954.52		
ST14	1749568.01	5948941.65		
ST15	1749540.86	5948912.72		
ST16	1749530.55	5948904.45		
ST17	5948904.45	5948903.26	Totara	
ST18	1749525.04	5948883.71		
ST04	1749640.26	5949045.56		Liquidamber
ST05	1749640.66	5949034.45		
ST06	1749650.63	5949013.86		
ST07	1749641.38	5949008.74		

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

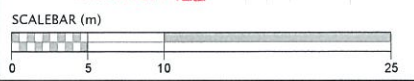
- The coordinates (X,Y) are in terms of NZTM on NZGD2000
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL) LINZ datum

Signed: _____
Registered Professional Surveyor

Date: 27/09/2016

Name: Rowan Hallam

DISCLAIMER
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WFH PROPERTIES LTD AND WOOD AND PARTNERS CONSULTANTS ACCEPT NO RESPONSIBILITY FOR ANY BUILDING DESIGN OR CONSTRUCTION WORK BASED ON THIS DRAWING FILE



REVISION DETAILS

REVISION	NAME	DATE
1. Issued for information.	MRH	27/09/2016

- NOTES**
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 - ALL FOOTPATHS ARE 125mm THICK BRUSHED CONCRETE UNLESS OTHERWISE NOTED.
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 - ASBUILT DATA HAS BEEN SOURCED FROM A COMBINATION OF WOODS SURVEY DATA AND CONTRACTOR RECEIVED DATA.

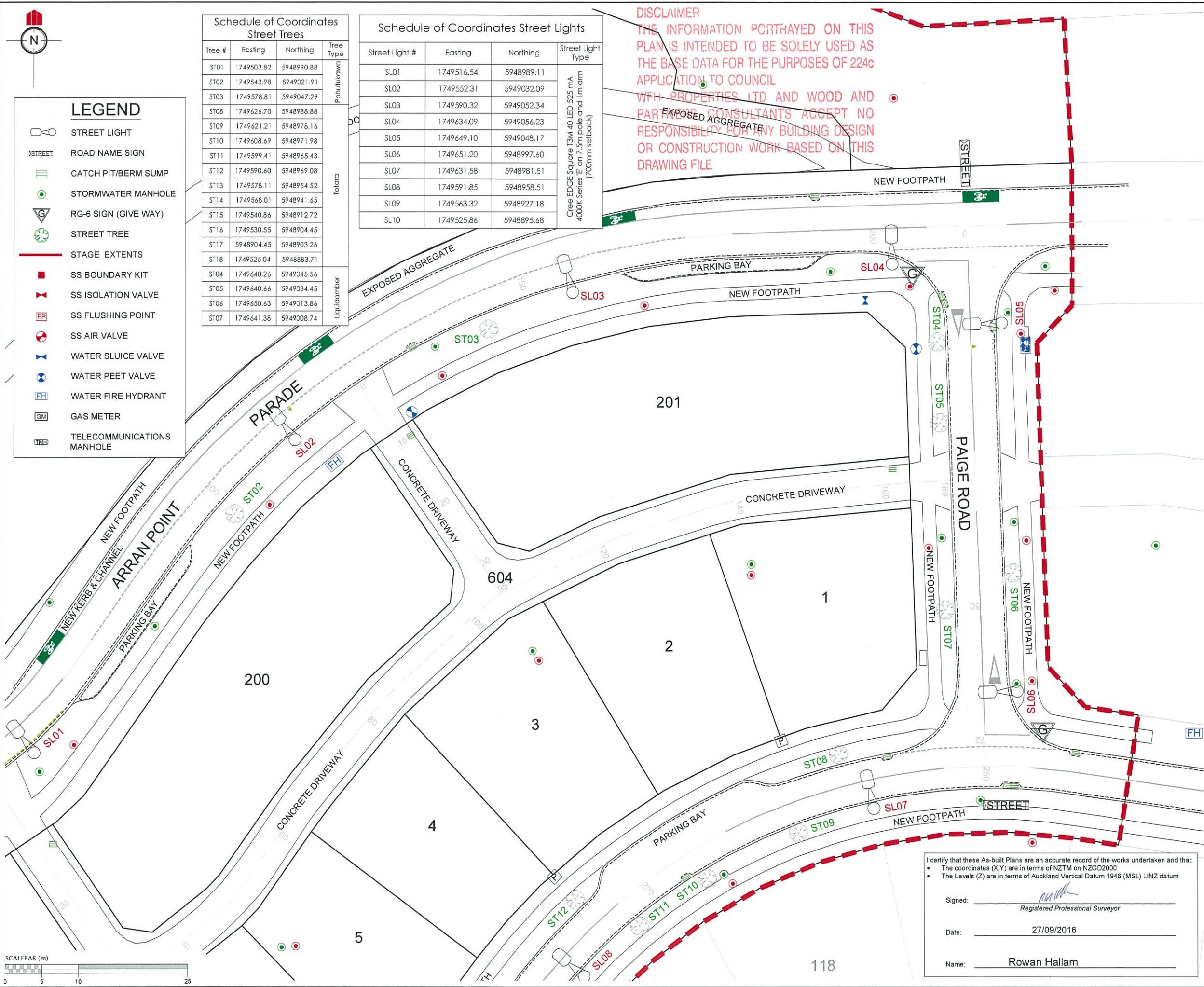


**MILLWATER
ARRAN POINT
STAGE 1**

**ROADING ASBUILT
SHEET 2 OF 4
(SLC-62000)**

AUCKLAND COUNCIL

DESIGNED: MB	ASBUILT
CHECKED: RDC	DRAWN: RDC
APPROVED: MRH	SURVEYED: PK
JOB NUMBER: 37001	SCALE: 1:500 @ A3
ISSUED: SEPT 2016	
DWG. NO. 37001-01-AB-201	REV. 1.



LEGEND

- STREET LIGHT
- ROAD NAME SIGN
- CATCH PIT/BERM SUMP
- STORMWATER MANHOLE
- RG-6 SIGN (GIVE WAY)
- STREET TREE
- STAGE EXTENTS
- SS BOUNDARY KIT
- SS ISOLATION VALVE
- SS FLUSHING POINT
- SS AIR VALVE
- WATER SLUICE VALVE
- WATER PEET VALVE
- WATER FIRE HYDRANT
- GAS METER
- TELECOMMUNICATIONS MANHOLE

Schedule of Coordinates Street Trees

Tree #	Easting	Northing	Tree Type
ST01	1749503.82	5948990.88	Ponutukawa
ST02	1749543.98	5949021.91	Ponutukawa
ST03	1749578.81	5949047.29	Ponutukawa
ST08	1749626.70	5948988.88	Ponutukawa
ST09	1749621.21	5948978.16	Ponutukawa
ST10	1749608.69	5948971.98	Ponutukawa
ST11	1749599.41	5948965.43	Ponutukawa
ST12	1749590.60	5948969.08	Ponutukawa
ST13	1749578.11	5948954.52	Totara
ST14	1749568.01	5948941.65	Totara
ST15	1749540.86	5948912.72	Totara
ST16	1749530.55	5948904.45	Totara
ST17	5948904.45	5948903.26	Liquidamber
ST18	1749525.04	5948883.71	Liquidamber
ST04	1749640.26	5949045.56	Liquidamber
ST05	1749640.66	5949034.45	Liquidamber
ST06	1749650.63	5949013.86	Liquidamber
ST07	1749641.38	5949008.74	Liquidamber

Schedule of Coordinates Street Lights

Street Light #	Easting	Northing	Street Light Type
SL01	1749516.54	5948989.11	Cree Edge Square T3M 40 LED 525 mA 4000K Series 'E' on 7.5m pole and 1m arm (700mm setback)
SL02	1749552.31	5949032.09	Cree Edge Square T3M 40 LED 525 mA 4000K Series 'E' on 7.5m pole and 1m arm (700mm setback)
SL03	1749590.32	5949052.34	Cree Edge Square T3M 40 LED 525 mA 4000K Series 'E' on 7.5m pole and 1m arm (700mm setback)
SL04	1749634.09	5949056.23	Cree Edge Square T3M 40 LED 525 mA 4000K Series 'E' on 7.5m pole and 1m arm (700mm setback)
SL05	1749649.10	5949048.17	Cree Edge Square T3M 40 LED 525 mA 4000K Series 'E' on 7.5m pole and 1m arm (700mm setback)
SL06	1749651.20	5948997.60	Cree Edge Square T3M 40 LED 525 mA 4000K Series 'E' on 7.5m pole and 1m arm (700mm setback)
SL07	1749631.58	5948981.51	Cree Edge Square T3M 40 LED 525 mA 4000K Series 'E' on 7.5m pole and 1m arm (700mm setback)
SL08	1749591.85	5948958.51	Cree Edge Square T3M 40 LED 525 mA 4000K Series 'E' on 7.5m pole and 1m arm (700mm setback)
SL09	1749563.32	5948927.18	Cree Edge Square T3M 40 LED 525 mA 4000K Series 'E' on 7.5m pole and 1m arm (700mm setback)
SL10	1749525.86	5948895.68	Cree Edge Square T3M 40 LED 525 mA 4000K Series 'E' on 7.5m pole and 1m arm (700mm setback)

DISCLAIMER
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 WFH PROPERTIES LTD AND WOOD AND PARTIAL CONSULTANTS ACCEPT NO RESPONSIBILITY FOR ANY BUILDING DESIGN OR CONSTRUCTION WORK BASED ON THIS DRAWING FILE.

REVISION DETAILS

NO.	DESCRIPTION	NAME	DATE
1.	Issued for information.	MRH	27/09/2016

- NOTES**
- ALL WORKS AND MATERIALS COMPLY WITH AC STANDARDS FOR ENGINEERING DESIGN AND CONSTRUCTION ISSUE NOV 2005.
 - ALL ROADS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH APPROVED ENGINEERING PLANS.
 - ALL FINISHED ROAD SURFACES ARE ASPHALT CONCRETE 30mm THICK.
 - ALL FOOTPATHS ARE 125mm THICK BRUSHED CONCRETE UNLESS OTHERWISE NOTED.
 - ALL PIPE CROSSINGS UNDER ROADS HAVE BEEN HARDFILL BACKFILLED.
 - ASBUILT DATA HAS BEEN SOURCED FROM A COMBINATION OF WOODS SURVEY DATA AND CONTRACTOR RECEIVED DATA.

CLIENT:

**MILLWATER
ARRAN POINT
STAGE 1**

ROADING ASBUILT
SHEET 3 OF 4
(SLC-62000)

AUCKLAND COUNCIL

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

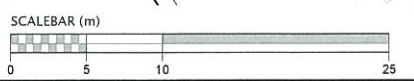
- The coordinates (X,Y) are in terms of NZTM on NZGD2000
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL) LINZ datum

Signed: _____
 Registered Professional Surveyor

Date: 27/09/2016

Name: Rowan Hallam

DESIGNED: MB	ASBUILT
CHECKED: RDC	DRAWN: RDC
APPROVED: MRH	SURVEYED: PK
JOB NUMBER: 37001	SCALE: 1:500 @ A3
ISSUED: SEPT 2016	
DWG. NO. 37001-01-AB-202	REV. 1.





LEGEND	
	STREET LIGHT
	ROAD NAME SIGN
	CATCH PIT/BERM SUMP
	STORMWATER MANHOLE
	RG-6 SIGN (GIVE WAY)
	STREET TREE
	STAGE EXTENTS
	SS BOUNDARY KIT
	SS ISOLATION VALVE
	SS FLUSHING POINT
	SS AIR VALVE
	WATER SLUICE VALVE
	WATER PEET VALVE
	WATER FIRE HYDRANT
	GAS METER
	TELECOMMUNICATIONS MANHOLE

Schedule of Coordinates Street Trees			
Tree #	Easting	Northing	Tree Type
ST01	1749503.82	5948990.88	Pohutukawa
ST02	1749543.98	5949021.91	
ST03	1749578.81	5949047.29	
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ST10	1749608.69	5948971.98	
ST11	1749599.41	5948965.43	
ST12	1749590.60	5948969.08	
ST13	1749578.11	5948954.52	
ST14	1749568.01	5948941.65	
ST15	1749540.86	5948912.72	
ST16	1749530.55	5948904.45	
ST17	5948904.45	5948903.26	
ST18	1749525.04	5948883.71	
ST04	1749640.26	5949045.56	Liquidamber
ST05	1749640.66	5949034.45	
ST06	1749650.63	5949013.86	
ST07	1749641.38	5949008.74	

Schedule of Coordinates Street Lights			
Street Light #	Easting	Northing	Street Light Type
SLO1	1749516.54	5948989.11	Cree EDGE Square T3M 40 LED 525 mA 4000K Series 'E' on 7.5m pole and 1m arm (700mm setback)
SLO2	1749552.31	5949032.09	
SLO3	1749590.32	5949052.34	
SLO4	1749634.09	5949056.23	
SLO5	1749649.10	5949048.17	
SLO6	1749651.20	5948997.60	
SLO7	1749631.58	5948981.51	
SLO8	1749591.85	5948958.51	
SLO9	1749563.32	5948927.18	
SLO10	1749525.86	5948895.68	

REVISION DETAILS		NAME	DATE
1.	Issued for information.	MRH	27/09/2016

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CLIENT:

**MILLWATER
ARRAN POINT
STAGE 1**

ROADING ASBUILT
SHEET 4 OF 4
(SLC-62000)
AUCKLAND COUNCIL

DESIGNED:	MB	ASBUILT
CHECKED:	RDC	DRAWN: RDC
APPROVED:	MRH	SURVEYED: PK
JOB NUMBER:	37001	SCALE: 1:500 @ A3
ISSUED:	SEPT 2016	
DWG. NO.	37001-01-AB-203	REV. 1.

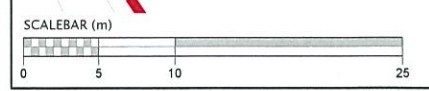
DISCLAIMER:
THE INFORMATION PORTRAYED ON THIS PLAN IS INTENDED TO BE SOLELY USED AS THE BASE DATA FOR THE PURPOSES OF 224c APPLICATION TO COUNCIL
WFH PROPERTIES LTD AND WOOD AND PARTNERS CONSULTANTS ACCEPT NO RESPONSIBILITY FOR ANY BUILDING DESIGN OR CONSTRUCTION WORK BASED ON THIS DRAWING FILE

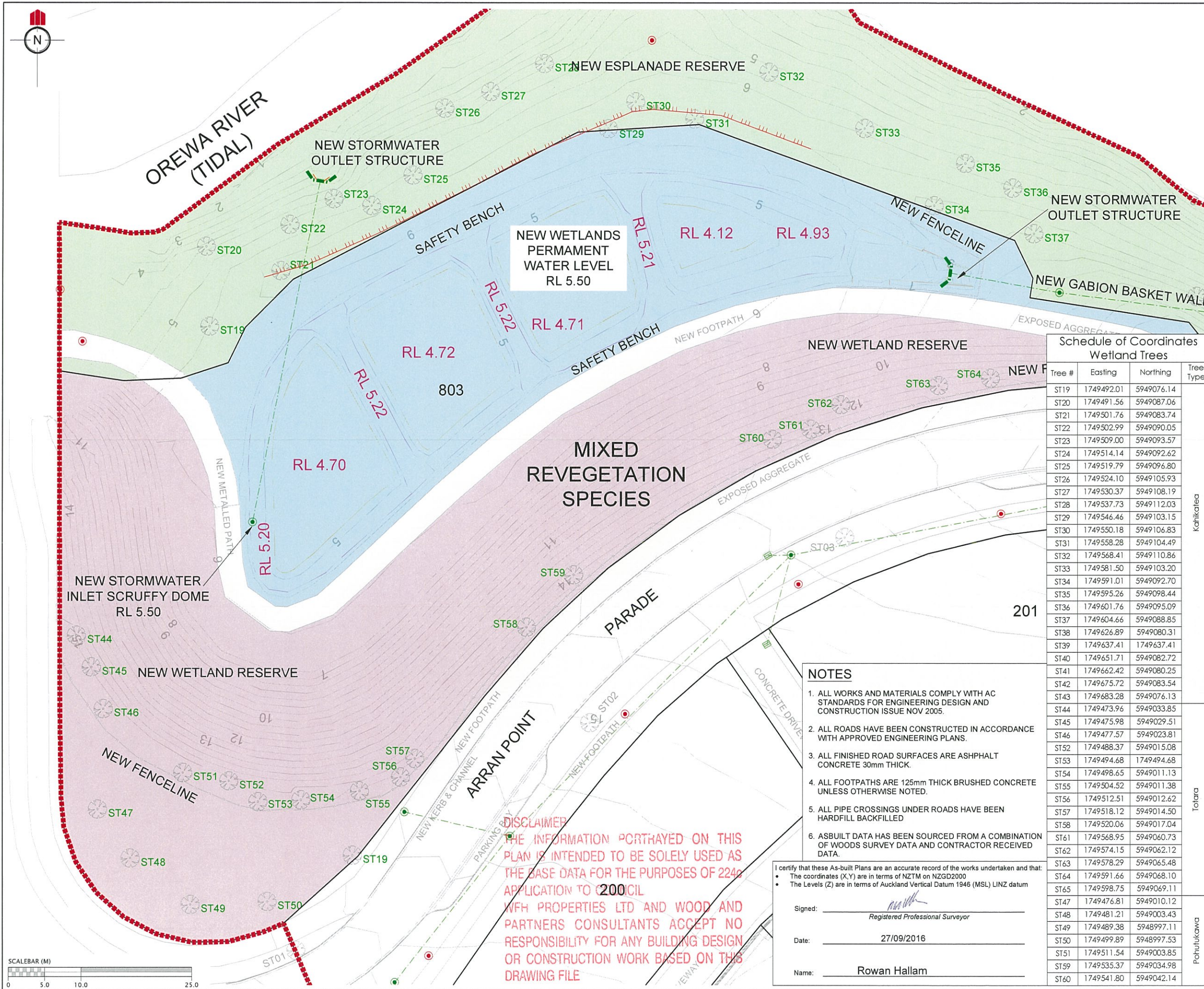
I certify that these As-built Plans are an accurate record of the works undertaken and that:
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 • The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL) LINZ datum

Signed: _____
Registered Professional Surveyor

Date: 27/09/2016

Name: Rowan Hallam





REVISION DETAILS	NAME	DATE
1. ISSUED.	MRH	27/09/2016

LEGEND	
	STREET LIGHT
	ROAD NAME SIGN
	CATCH PIT/BERM SUMP
	STORMWATER MANHOLE
	RG-6 SIGN (GIVE WAY)
	STREET TREE
	STAGE EXTENTS
	FENCELINE
	WALL

Schedule of Coordinates Wetland Trees

Tree #	Easting	Northing	Tree Type
ST19	1749492.01	5949076.14	
ST20	1749491.56	5949087.06	
ST21	1749501.76	5949083.74	
ST22	1749502.99	5949090.05	
ST23	1749509.00	5949093.57	
ST24	1749514.14	5949092.62	
ST25	1749519.79	5949096.80	
ST26	1749524.10	5949105.93	
ST27	1749530.37	5949108.19	
ST28	1749537.73	5949112.03	
ST29	1749546.46	5949103.15	
ST30	1749550.18	5949106.83	
ST31	1749558.28	5949104.49	
ST32	1749568.41	5949110.86	
ST33	1749581.50	5949103.20	
ST34	1749591.01	5949092.70	
ST35	1749595.26	5949098.44	
ST36	1749601.76	5949095.09	
ST37	1749604.66	5949088.85	
ST38	1749626.89	5949080.31	
ST39	1749637.41	1749637.41	
ST40	1749651.71	5949082.72	
ST41	1749662.42	5949080.25	
ST42	1749675.72	5949083.54	
ST43	1749683.28	5949076.13	
ST44	1749473.96	5949033.85	
ST45	1749475.98	5949029.51	
ST46	1749477.57	5949023.81	
ST52	1749488.37	5949015.08	
ST53	1749494.68	1749494.68	
ST54	1749498.65	5949011.13	
ST55	1749504.52	5949011.38	
ST56	1749512.51	5949012.62	
ST57	1749518.12	5949014.50	
ST58	1749520.06	5949017.04	
ST61	1749568.95	5949060.73	
ST62	1749574.15	5949062.12	
ST63	1749578.29	5949065.48	
ST64	1749591.66	5949068.10	
ST65	1749598.75	5949069.11	
ST47	1749476.81	5949010.12	
ST48	1749481.21	5949003.43	
ST49	1749489.38	5948997.11	
ST50	1749499.89	5948997.53	
ST51	1749511.54	5949003.85	
ST59	1749535.37	5949034.98	
ST60	1749541.80	5949042.14	

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 WFH PROPERTIES LTD AND WOOD AND PARTNERS CONSULTANTS ACCEPT NO RESPONSIBILITY FOR ANY BUILDING DESIGN OR CONSTRUCTION WORK BASED ON THIS DRAWING FILE

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Signed: _____
 Registered Professional Surveyor

Date: 27/09/2016

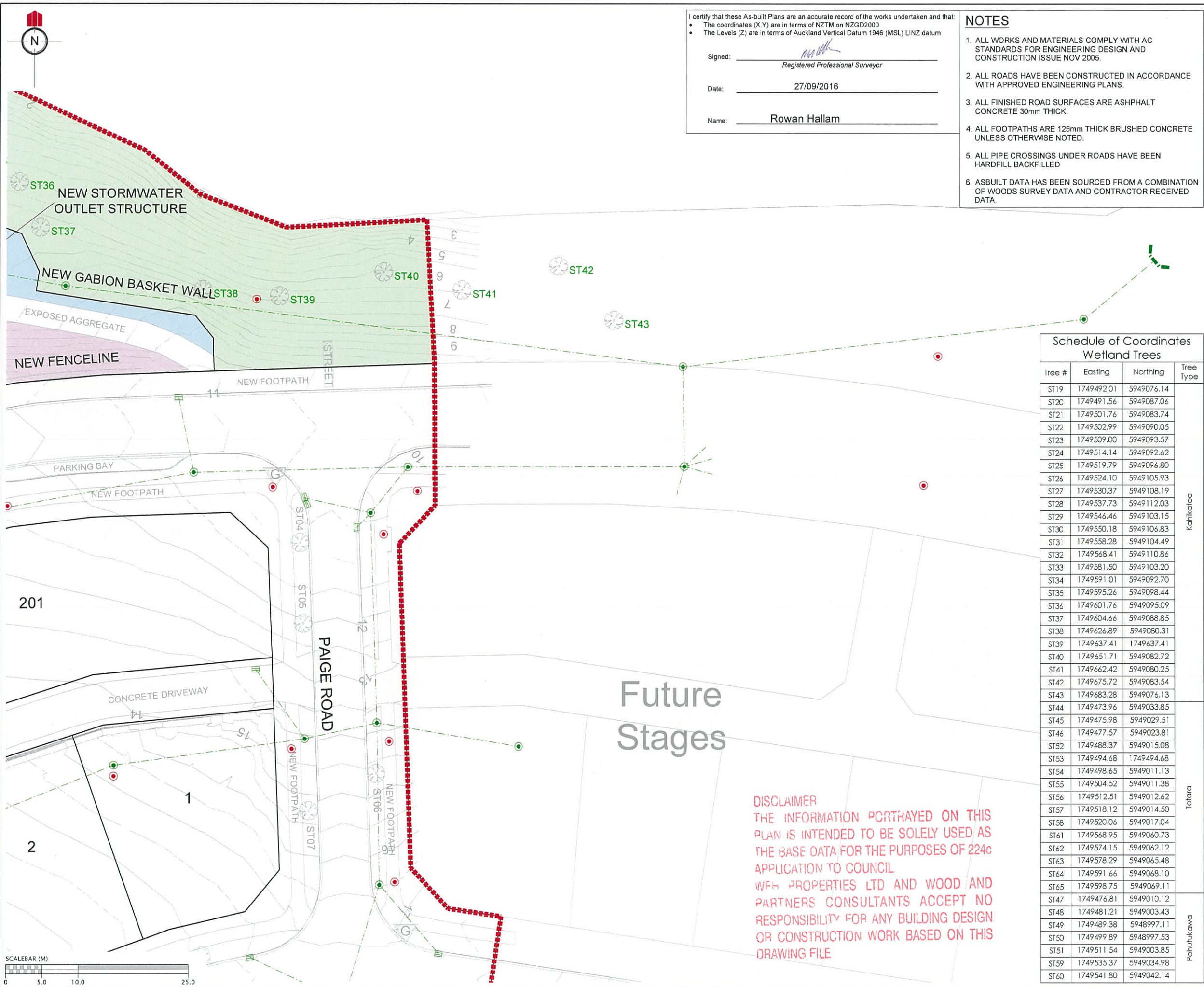
Name: Rowan Hallam

CLIENT:

**MILLWATER
 ARRAN POINT
 STAGE 1**

RESERVE AS-BUILT
 SHEET 1 OF 2
 (SLC-62000)
 AUCKLAND COUNCIL

DESIGNED: MB	ISSUED AS-BUILT
CHECKED: RDC	DRAWN: RDC
APPROVED: MRH	SURVEYED: PK
JOB NUMBER: 37001	SCALE: 1:500 @ A3
ISSUED: SEPT 2016	
DWG. NO. 37001-01-AB-250	REV. 1.



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: 27/09/2016

Name: Rowan Hallam

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REVISION DETAILS	NAME	DATE
1. ISSUED.	MRH	27/09/2016

LEGEND

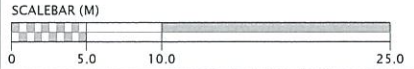
- STREET LIGHT
- ROAD NAME SIGN
- CATCH PIT/BERM SUMP
- STORMWATER MANHOLE
- RG-6 SIGN (GIVE WAY)
- STREET TREE
- STAGE EXTENTS
- FENCELINE
- WALL

Schedule of Coordinates Wetland Trees

Tree #	Easting	Northing	Tree Type	
ST19	1749492.01	5949076.14	Kahikatea	
ST20	1749491.56	5949087.06		
ST21	1749501.76	5949083.74		
ST22	1749502.99	5949090.05		
ST23	1749509.00	5949093.57		
ST24	1749514.14	5949092.62		
ST25	1749519.79	5949096.80		
ST26	1749524.10	5949105.93		
ST27	1749530.37	5949108.19		
ST28	1749537.73	5949112.03		
ST29	1749546.46	5949103.15		
ST30	1749550.18	5949106.83		
ST31	1749558.28	5949104.49		
ST32	1749568.41	5949110.86		
ST33	1749581.50	5949103.20		
ST34	1749591.01	5949092.70		
ST35	1749595.26	5949098.44		
ST36	1749601.76	5949095.09		
ST37	1749604.66	5949088.85		
ST38	1749626.89	5949080.31		
ST39	1749637.41	1749637.41		
ST40	1749651.71	5949082.72		
ST41	1749662.42	5949080.25		
ST42	1749675.72	5949083.54		
ST43	1749683.28	5949076.13		
ST44	1749473.96	5949033.85		Tolara
ST45	1749475.98	5949029.51		
ST46	1749477.57	5949023.81		
ST52	1749488.37	5949015.08		
ST53	1749494.68	1749494.68		
ST54	1749498.65	5949011.13		
ST55	1749504.52	5949011.38		
ST56	1749512.51	5949012.62		
ST57	1749518.12	5949014.50		
ST58	1749520.06	5949017.04		
ST61	1749568.95	5949060.73	Pohutukawa	
ST62	1749574.15	5949062.12		
ST63	1749578.29	5949065.48		
ST64	1749591.66	5949068.10		
ST65	1749598.75	5949069.11		
ST47	1749476.81	5949010.12		
ST48	1749481.21	5949003.43		
ST49	1749489.38	5948997.11		
ST50	1749499.89	5948997.53		
ST51	1749511.54	5949003.85		
ST59	1749535.37	5949034.98		
ST60	1749541.80	5949042.14		

Future Stages

DISCLAIMER
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WFH PROPERTIES LTD AND WOOD AND PARTNERS CONSULTANTS ACCEPT NO RESPONSIBILITY FOR ANY BUILDING DESIGN OR CONSTRUCTION WORK BASED ON THIS DRAWING FILE

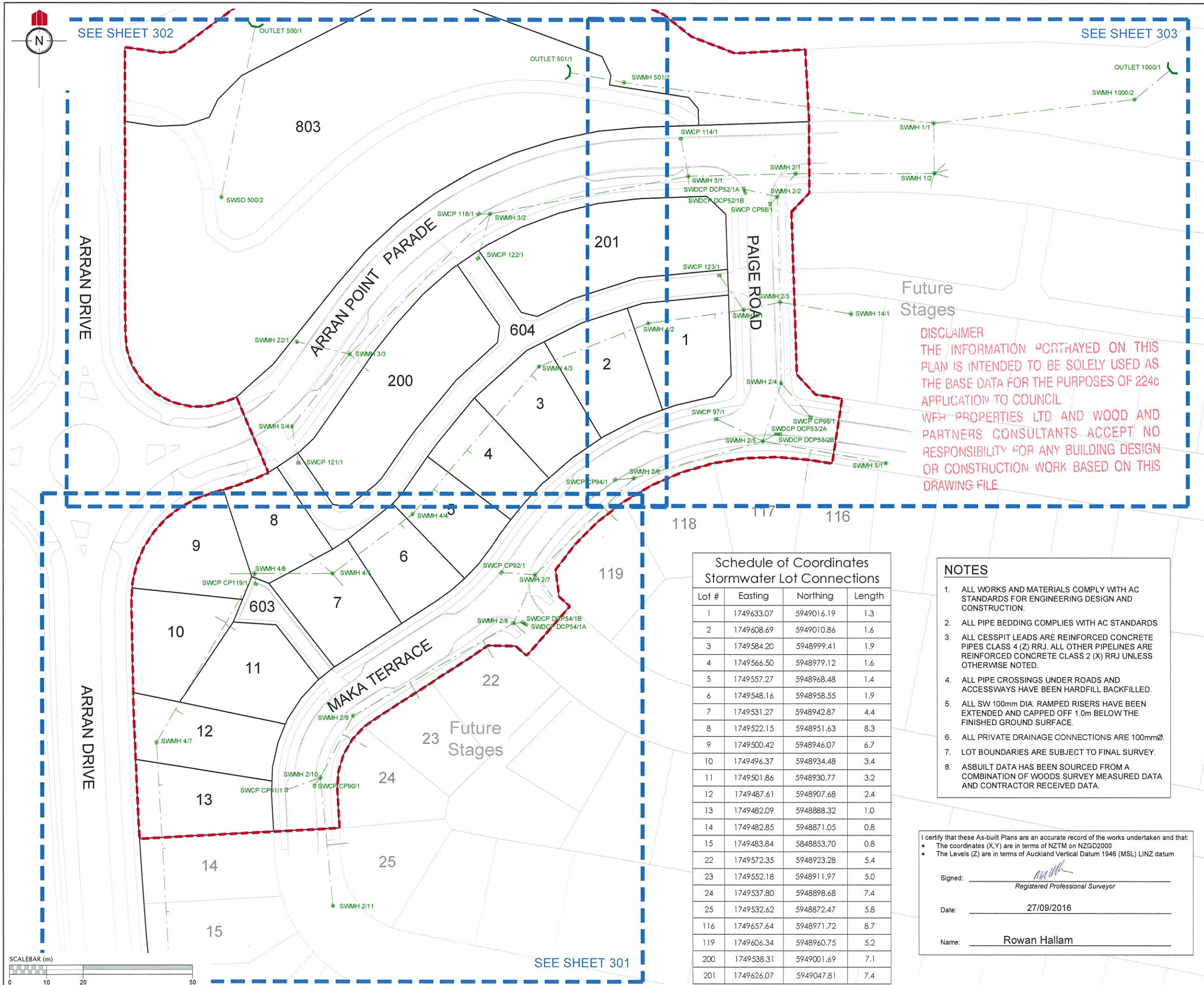


CLIENT:

MILLWATER ARRAN POINT STAGE 1

RESERVE AS-BUILT SHEET 2 OF 2 (SLC-62000)
AUCKLAND COUNCIL

DESIGNED: MB	ISSUED AS-BUILT
CHECKED: RDC	DRAWN: RDC
APPROVED: MRH	SURVEYED: PK
JOB NUMBER: 37001	SCALE: 1:500 @ A3
ISSUED: SEPT 2016	
DWG. NO. 37001-01-AB-251	REV. 1.



REVISION DETAILS	NAME	DATE
1. Issued for information.	MRH	27/09/2016

LEGEND

- STORMWATER MANHOLE
- STORMWATER CESSPIT
- STORMWATER DOUBLE CESSPIT
- OVERLAND FLOW
- NEW STORMWATER
- EXISTING STORMWATER
- SUBSOIL DRAINAGE
- STAGE BOUNDARY

DISCLAIMER
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 WFH PROPERTIES LTD AND WOOD AND PARTNERS CONSULTANTS ACCEPT NO RESPONSIBILITY FOR ANY BUILDING DESIGN OR CONSTRUCTION WORK BASED ON THIS DRAWING FILE.

CLIENT:

**MILLWATER
 ARRAN POINT
 STAGE 1**

**STORMWATER ASBUILT
 OVERALL LAYOUT
 SHEET 1 OF 4
 (SLC-62000)
 AUCKLAND COUNCIL**

DESIGNED: MB	ASBUILT
CHECKED: RDC	DRAWN: RDC
APPROVED: MRH	SURVEYED: PK
JOB NUMBER: 37001	SCALE: 1:1000 @ A3
ISSUED: SEPT 2016	
DWG. NO. 37001-01-AB-300	REV. 1.

**Schedule of Coordinates
 Stormwater Lot Connections**

Lot #	Easting	Northing	Length
1	1749633.07	5949016.19	1.3
2	1749608.69	5949010.86	1.6
3	1749584.20	5948999.41	1.9
4	1749566.50	5948979.12	1.6
5	1749557.27	5948968.48	1.4
6	1749548.16	5948958.55	1.9
7	1749531.27	5948942.87	4.4
8	1749522.15	5948951.63	8.3
9	1749500.42	5948946.07	6.7
10	1749496.37	5948934.48	3.4
11	1749501.86	5948930.77	3.2
12	1749487.61	5948907.68	2.4
13	1749482.09	5948888.32	1.0
14	1749482.85	5948871.05	0.8
15	1749483.84	5848853.70	0.8
22	1749572.35	5948923.28	5.4
23	1749552.18	5948911.97	5.0
24	1749537.80	5948898.68	7.4
25	1749532.62	5948872.47	5.8
116	1749657.64	5948971.72	8.7
119	1749606.34	5948960.75	5.2
200	1749538.31	5949001.69	7.1
201	1749626.07	5949047.81	7.4

- NOTES**
- ALL WORKS AND MATERIALS COMPLY WITH AC STANDARDS FOR ENGINEERING DESIGN AND CONSTRUCTION.
 - ALL PIPE BEDDING COMPLIES WITH AC STANDARDS
 - ALL CESSPIT LEADS ARE REINFORCED CONCRETE PIPES CLASS 4 (Z) RRJ. ALL OTHER PIPELINES ARE REINFORCED CONCRETE CLASS 2 (X) RRJ UNLESS OTHERWISE NOTED.
 - ALL PIPE CROSSINGS UNDER ROADS AND ACCESSWAYS HAVE BEEN HARDFILL BACKFILLED.
 - ALL SW 100mm DIA. RAMPED RISERS HAVE BEEN EXTENDED AND CAPPED OFF 1.0m BELOW THE FINISHED GROUND SURFACE.
 - ALL PRIVATE DRAINAGE CONNECTIONS ARE 100mmØ.
 - LOT BOUNDARIES ARE SUBJECT TO FINAL SURVEY.
 - ASBUILT DATA HAS BEEN SOURCED FROM A COMBINATION OF WOODS SURVEY MEASURED DATA AND CONTRACTOR RECEIVED DATA.

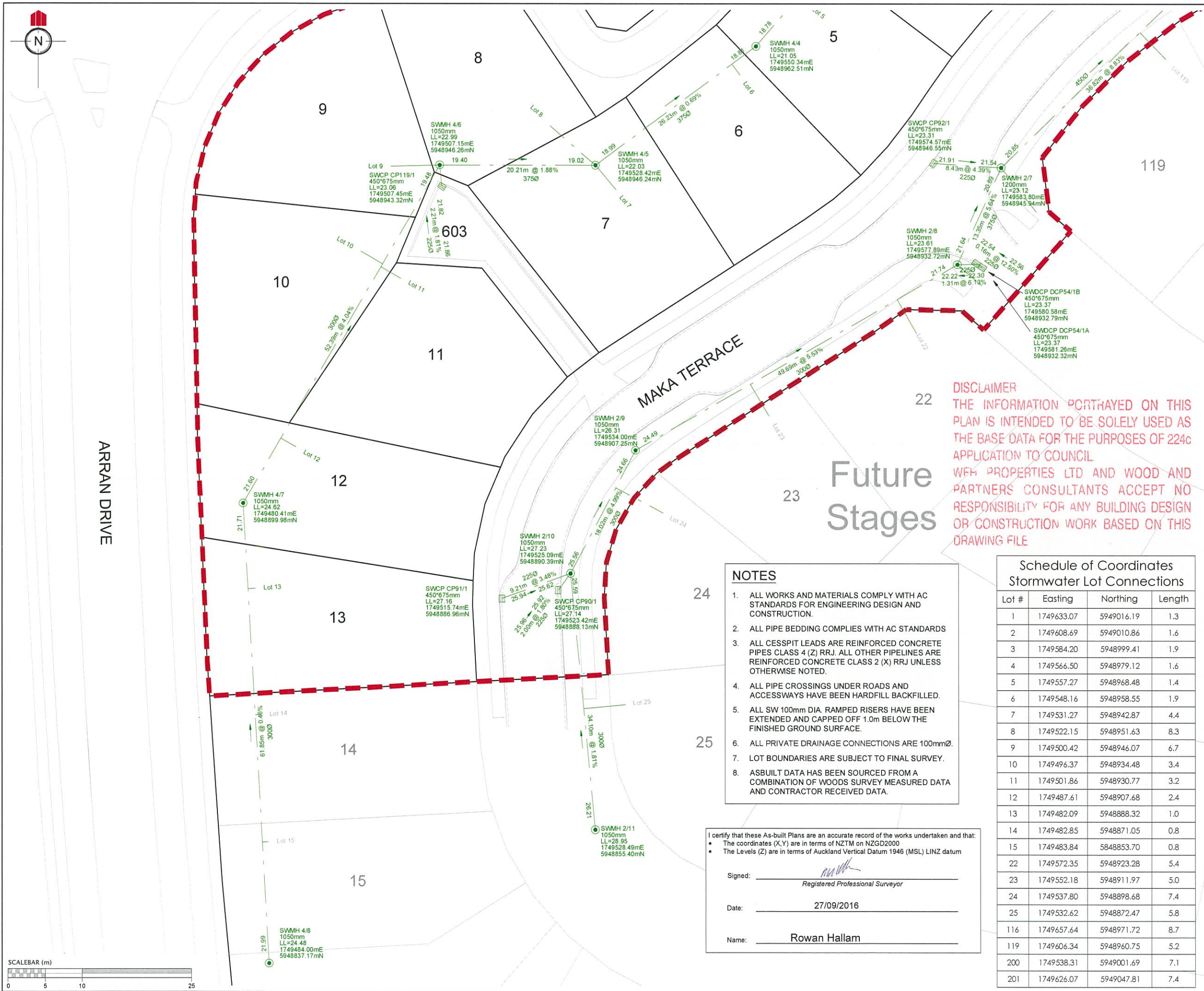
I certify that these As-built Plans are an accurate record of the works undertaken and that:

- 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: 27/09/2016

Name: Rowan Hallam



REVISION DETAILS	NAME	DATE
1. Issued for information.	MRH	27/09/2016

LEGEND	
STORMWATER MANHOLE	
STORMWATER CESSPIT	
STORMWATER DOUBLE CESSPIT	
OVERLAND FLOW	
NEW STORMWATER	
EXISTING STORMWATER	
SUBSOIL DRAINAGE	
STAGE BOUNDARY	

DISCLAIMER
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 WFH PROPERTIES LTD AND WOOD AND PARTNERS CONSULTANTS ACCEPT NO RESPONSIBILITY FOR ANY BUILDING DESIGN OR CONSTRUCTION WORK BASED ON THIS DRAWING FILE

Future Stages

- NOTES**
1. ALL WORKS AND MATERIALS COMPLY WITH AC STANDARDS FOR ENGINEERING DESIGN AND CONSTRUCTION.
 2. ALL PIPE BEDDING COMPLIES WITH AC STANDARDS
 3. ALL CESSPIT LEADS ARE REINFORCED CONCRETE PIPES CLASS 4 (Z) RRJ. ALL OTHER PIPELINES ARE REINFORCED CONCRETE CLASS 2 (X) RRJ UNLESS OTHERWISE NOTED.
 4. ALL PIPE CROSSINGS UNDER ROADS AND ACCESSWAYS HAVE BEEN HARDFILL BACKFILLED.
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 6. ALL PRIVATE DRAINAGE CONNECTIONS ARE 100mmØ.
 7. LOT BOUNDARIES ARE SUBJECT TO FINAL SURVEY.
 8. ASBUILT DATA HAS BEEN SOURCED FROM A COMBINATION OF WOODS SURVEY MEASURED DATA AND CONTRACTOR RECEIVED DATA.

Schedule of Coordinates Stormwater Lot Connections

Lot #	Easting	Northing	Length
1	1749633.07	5949016.19	1.3
2	1749608.69	5949010.86	1.6
3	1749584.20	5948999.41	1.9
4	1749566.50	5948979.12	1.6
5	1749557.27	5948968.48	1.4
6	1749548.16	5948958.55	1.9
7	1749531.27	5948942.87	4.4
8	1749522.15	5948951.63	8.3
9	1749500.42	5948946.07	6.7
10	1749496.37	5948934.48	3.4
11	1749501.86	5948930.77	3.2
12	1749487.61	5948907.68	2.4
13	1749482.09	5948888.32	1.0
14	1749482.85	5948871.05	0.8
15	1749483.84	5848853.70	0.8
22	1749572.35	5948923.28	5.4
23	1749552.18	5948911.97	5.0
24	1749537.80	5948898.68	7.4
25	1749532.62	5948872.47	5.8
116	1749657.64	5948971.72	8.7
119	1749606.34	5948960.75	5.2
200	1749538.31	5949001.69	7.1
201	1749626.07	5949047.81	7.4

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: 27/09/2016

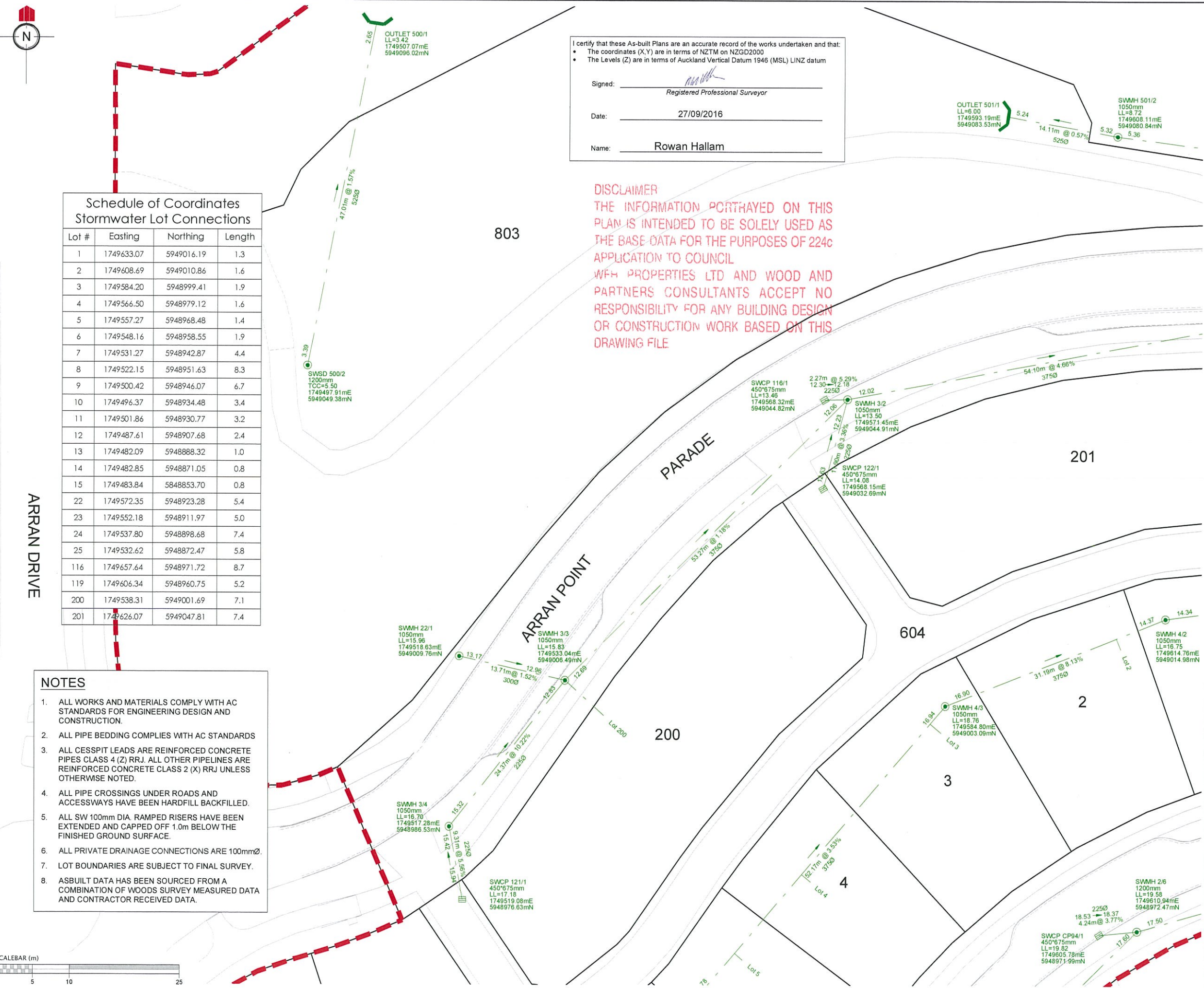
Name: Rowan Hallam



**MILLWATER
 ARRAN POINT
 STAGE 1**

**STORMWATER ASBUILT
 SHEET 2 OF 4
 (SLC-62000)
 AUCKLAND COUNCIL**

DESIGNED: MB	ASBUILT
CHECKED: RDC	DRAWN: RDC
APPROVED: MRH	SURVEYED: PK
JOB NUMBER: 37001	SCALE: 1:500 @ A3
ISSUED: SEPT 2016	
DWG. NO. 37001-01-AB-301	REV. 1.



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Signed: _____
Registered Professional Surveyor

Date: 27/09/2016

Name: Rowan Hallam

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WFH PROPERTIES LTD AND WOOD AND PARTNERS CONSULTANTS ACCEPT NO RESPONSIBILITY FOR ANY BUILDING DESIGN OR CONSTRUCTION WORK BASED ON THIS DRAWING FILE

Schedule of Coordinates
Stormwater Lot Connections

Lot #	Easting	Northing	Length
1	1749633.07	5949016.19	1.3
2	1749608.69	5949010.86	1.6
3	1749584.20	5948999.41	1.9
4	1749566.50	5948979.12	1.6
5	1749557.27	5948968.48	1.4
6	1749548.16	5948958.55	1.9
7	1749531.27	5948942.87	4.4
8	1749522.15	5948951.63	8.3
9	1749500.42	5948946.07	6.7
10	1749496.37	5948934.48	3.4
11	1749501.86	5948930.77	3.2
12	1749487.61	5948907.68	2.4
13	1749482.09	5948888.32	1.0
14	1749482.85	5948871.05	0.8
15	1749483.84	5848853.70	0.8
22	1749572.35	5948923.28	5.4
23	1749552.18	5948911.97	5.0
24	1749537.80	5948898.68	7.4
25	1749532.62	5948872.47	5.8
116	1749657.64	5948971.72	8.7
119	1749606.34	5948960.75	5.2
200	1749538.31	5949001.69	7.1
201	1749626.07	5949047.81	7.4

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REVISION DETAILS	NAME	DATE
1. Issued for information.	MRH	27/09/2016

LEGEND

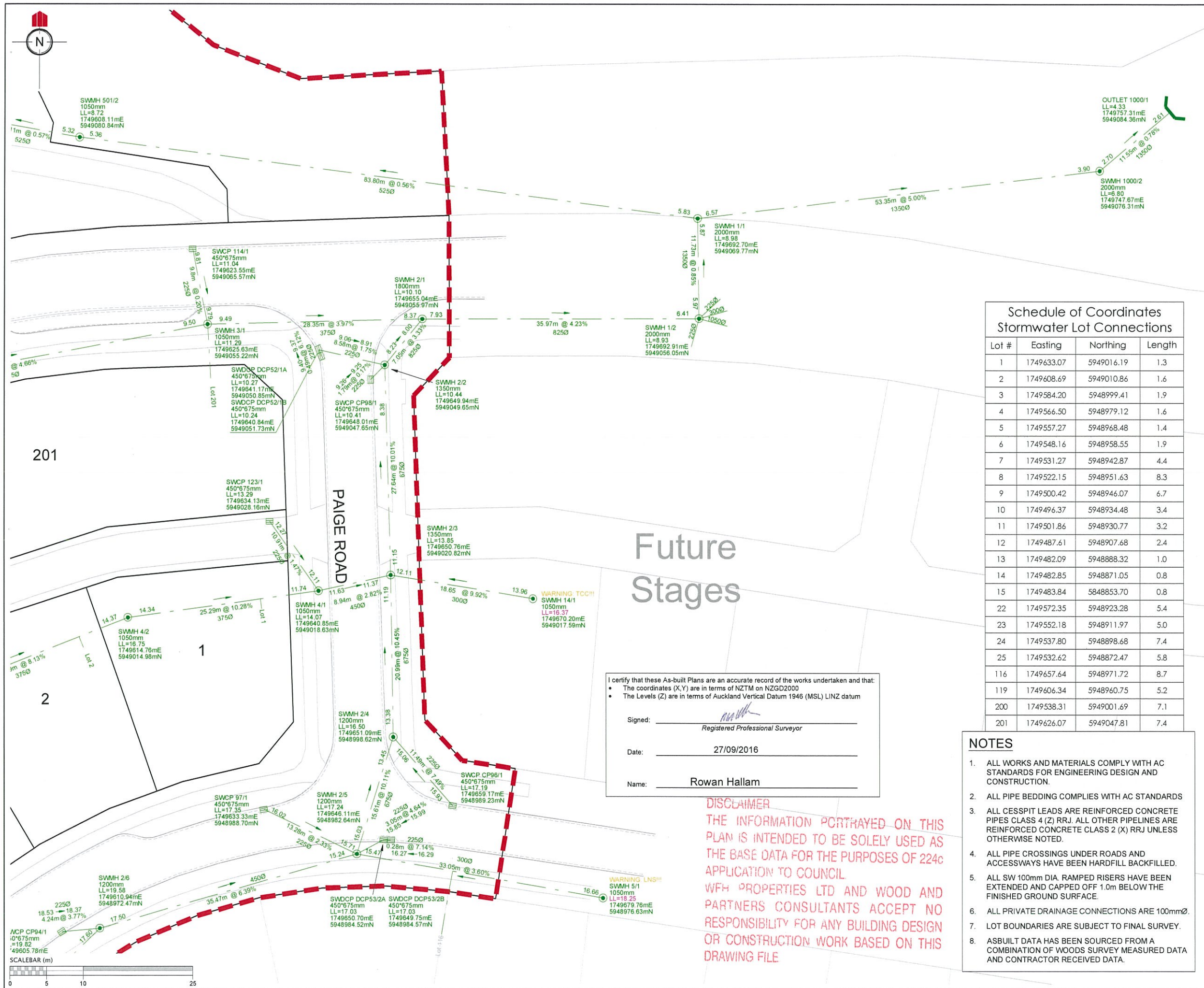
- STORMWATER MANHOLE
- STORMWATER CESSPIT
- STORMWATER DOUBLE CESSPIT
- OVERLAND FLOW
- NEW STORMWATER
- EXISTING STORMWATER
- SUBSOIL DRAINAGE
- STAGE BOUNDARY

CLIENT:

**MILLWATER
ARRAN POINT
STAGE 1**

**STORMWATER ASBUILT
SHEET 3 OF 4
(SLC-62000)
AUCKLAND COUNCIL**

DESIGNED: MB	ASBUILT
CHECKED: RDC	DRAWN: RDC
APPROVED: MRH	SURVEYED: PK
JOB NUMBER: 37001	SCALE: 1:500 @ A3
ISSUED: SEPT 2016	
DWG. NO. 37001-01-AB-302	REV. 1.



REVISION DETAILS	NAME	DATE
1. Issued for information.	MRH	27/09/2016

LEGEND

- STORMWATER MANHOLE
- STORMWATER CESSPIT
- STORMWATER DOUBLE CESSPIT
- OVERLAND FLOW
- NEW STORMWATER
- EXISTING STORMWATER
- SUBSOIL DRAINAGE
- STAGE BOUNDARY

**Schedule of Coordinates
Stormwater Lot Connections**

Lot #	Easting	Northing	Length
1	1749633.07	5949016.19	1.3
2	1749608.69	5949010.86	1.6
3	1749584.20	5948999.41	1.9
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200	1749538.31	5949001.69	7.1
201	1749626.07	5949047.81	7.4

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

Signed: _____
Registered Professional Surveyor

Date: 27/09/2016

Name: Rowan Hallam

DISCLAIMER
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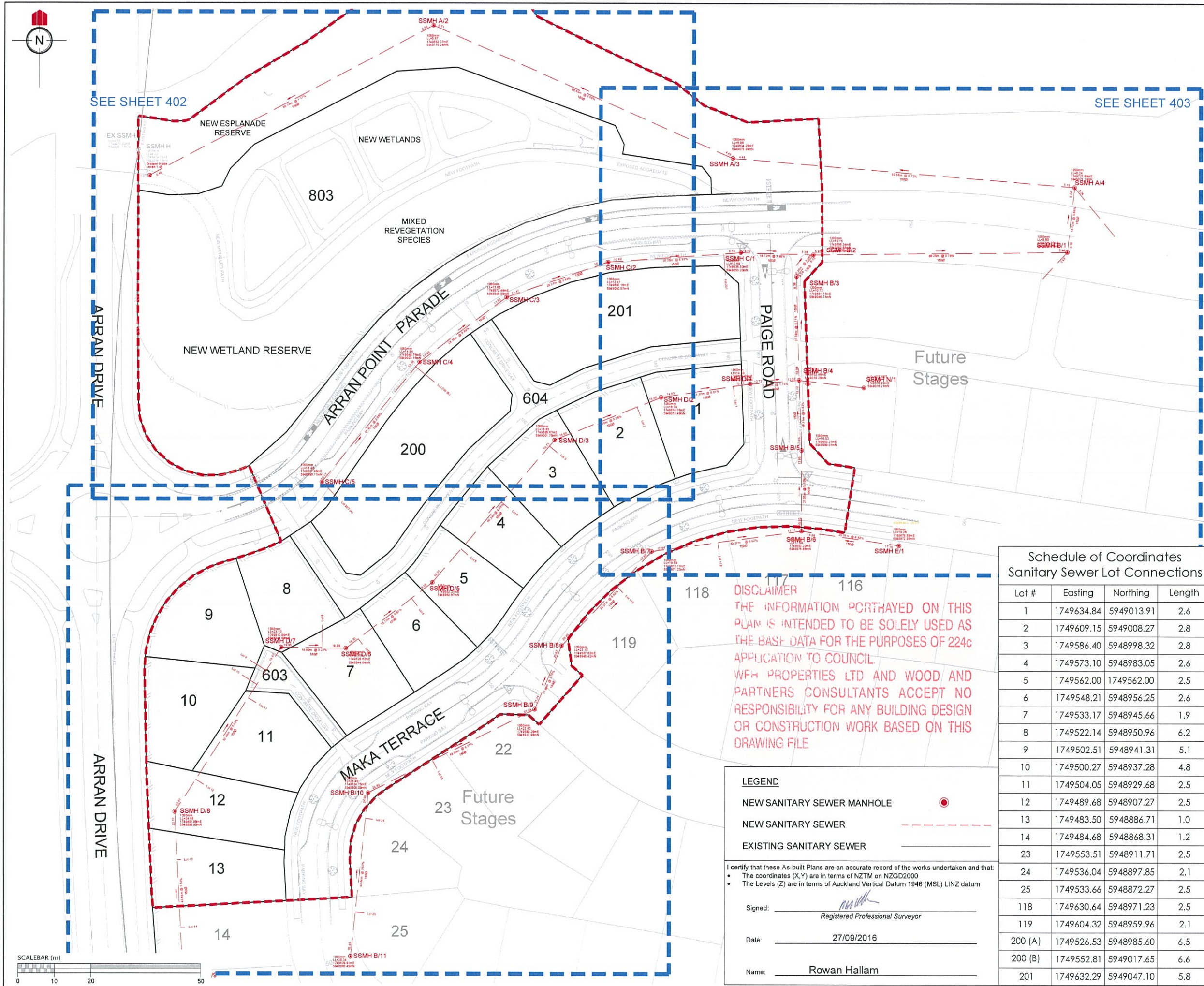
- NOTES**
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 - LOT BOUNDARIES ARE SUBJECT TO FINAL SURVEY.
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CLIENT:

**MILLWATER
ARRAN POINT
STAGE 1**

**STORMWATER ASBUILT
SHEET 4 OF 4
(SLC-62000)
AUCKLAND COUNCIL**

DESIGNED: MB	ASBUILT
CHECKED: RDC	DRAWN: RDC
APPROVED: MRH	SURVEYED: PK
JOB NUMBER: 37001	SCALE: 1:500 @ A3
ISSUED: SEPT 2016	
DWG. NO. 37001-01-AB-303	REV. 1.



REVISION DETAILS	NAME	DATE
2. Issued for information.	MRH	27/09/2016
3. SWMH H internal dropper added and grade updated	MRH	17/10/2016

- NOTES**
1. ALL WORKS AND MATERIALS COMPLY WITH AUCKLAND COUNCIL & WATERCARE SERVICES LTD STANDARDS FOR ENGINEERING DESIGN AND CONSTRUCTION.
 2. ALL SANITARY SEWER LINES ARE 150mmØ uPVC CLASS SN16 UNLESS STATED OTHERWISE.
 3. ALL PIPE BEDDING COMPLIES WITH WATERCARE STANDARDS.
 4. ALL PIPE CROSSINGS UNDER ROADS AND ACCESSWAYS HAVE BEEN HARDFILL BACKFILLED.
 5. ALL PRIVATE LOT CONNECTIONS ARE 100mmØ
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 8. ASBUILT DATA HAS BEEN SOURCED FROM A COMBINATION OF WOODS SURVEY MEASURED DATA AND CONTRACTOR RECEIVED DATA.

CLIENT:

**MILLWATER
ARRAN POINT
STAGE 1**

**SANITARY SEWER ASBUILT
OVERALL LAYOUT
SHEET 1 OF 4
(SLC-62000)
AUCKLAND COUNCIL**

DESIGNED: MB	ASBUILT
CHECKED: PK	DRAWN: AAC
APPROVED: MRH	SURVEYED: PK
JOB NUMBER: 37001	SCALE: 1:1000 @ A3
ISSUED: SEPT 2016	
DWG. NO. 37001-01-AB-400	REV. 3.

Schedule of Coordinates
Sanitary Sewer Lot Connections

Lot #	Easting	Northing	Length
1	1749634.84	5949013.91	2.6
2	1749609.15	5949008.27	2.8
3	1749586.40	5948998.32	2.8
4	1749573.10	5948983.05	2.6
5	1749562.00	1749562.00	2.5
6	1749548.21	5948956.25	2.6
7	1749533.17	5948945.66	1.9
8	1749522.14	5948950.96	6.2
9	1749502.51	5948941.31	5.1
10	1749500.27	5948937.28	4.8
11	1749504.05	5948929.68	2.5
12	1749489.68	5948907.27	2.5
13	1749483.50	5948886.71	1.0
14	1749484.68	5948868.31	1.2
23	1749553.51	5948911.71	2.5
24	1749536.04	5948897.85	2.1
25	1749533.66	5948872.27	2.5
118	1749630.64	5948971.23	2.5
119	1749604.32	5948959.96	2.1
200 (A)	1749526.53	5948985.60	6.5
200 (B)	1749552.81	5949017.65	6.6
201	1749632.29	5949047.10	5.8

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LEGEND

NEW SANITARY SEWER MANHOLE

NEW SANITARY SEWER

EXISTING SANITARY SEWER

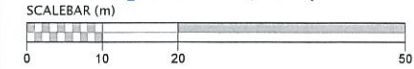
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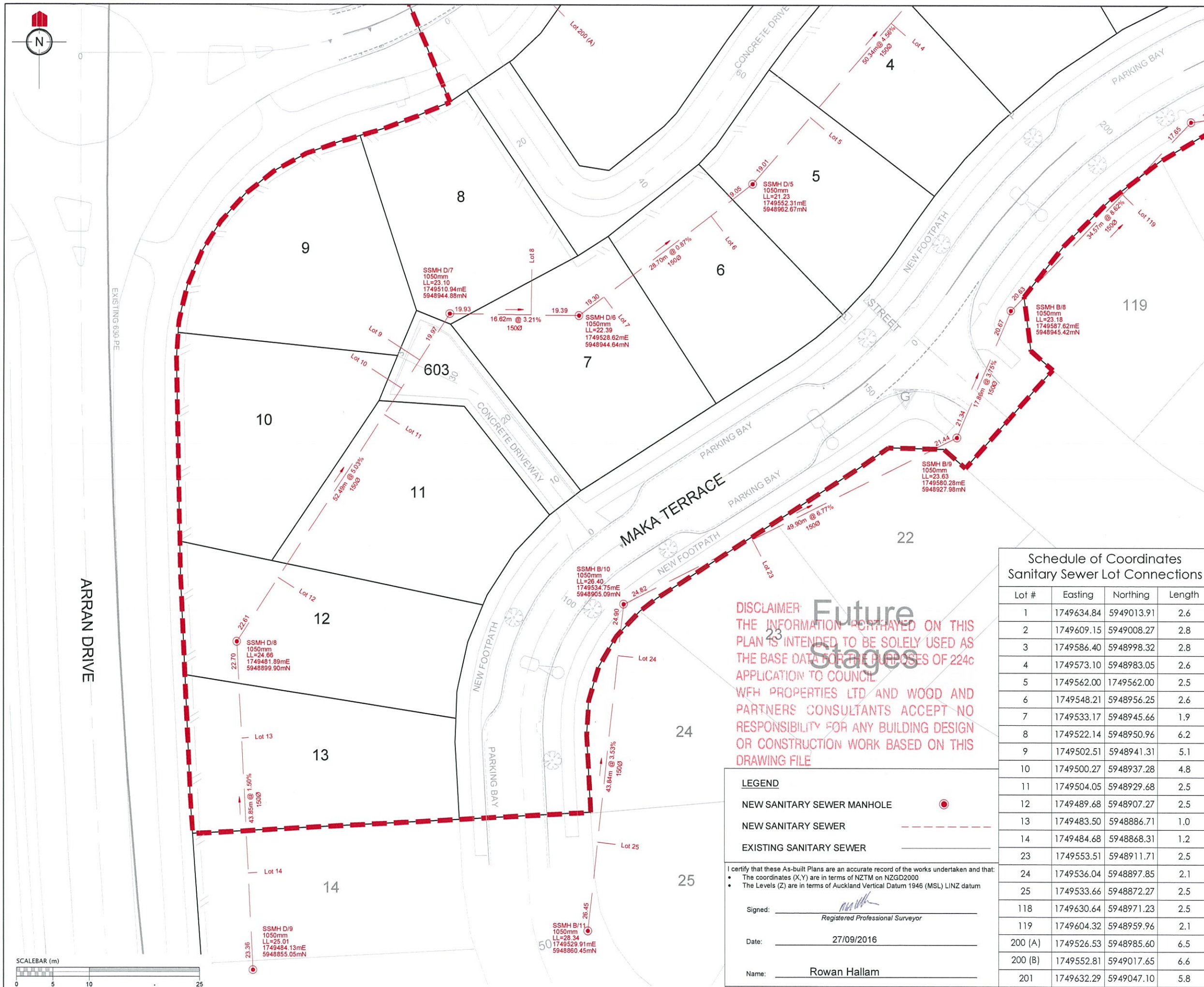
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- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL) LINZ datum

Signed:
Registered Professional Surveyor

Date: 27/09/2016

Name: Rowan Hallam





REVISION DETAILS	NAME	DATE
2. Issued for information.	MRH	27/09/2016
3. SWMH H internal dropper added and grade updated	MRH	17/10/2016

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CLIENT:

**MILLWATER
ARRAN POINT
STAGE 1**

**SANITARY SEWER ASBUILT
SHEET 2 OF 4
(SLC-62000)
AUCKLAND COUNCIL**

DESIGNED: MB	ASBUILT
CHECKED: PK	DRAWN: AAC
APPROVED: MRH	SURVEYED: PK
JOB NUMBER: 37001	SCALE: 1:500 @ A3
ISSUED: SEPT 2016	
DWG. NO. 37001-00-AB-401	REV. 3.

Schedule of Coordinates
Sanitary Sewer Lot Connections

Lot #	Easting	Northing	Length
1	1749634.84	5949013.91	2.6
2	1749609.15	5949008.27	2.8
3	1749586.40	5948998.32	2.8
4	1749573.10	5948983.05	2.6
5	1749562.00	5949562.00	2.5
6	1749548.21	5948956.25	2.6
7	1749533.17	5948945.66	1.9
8	1749522.14	5948950.96	6.2
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10	1749500.27	5948937.28	4.8
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14	1749484.68	5948868.31	1.2
23	1749553.51	5948911.71	2.5
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LEGEND

NEW SANITARY SEWER MANHOLE

NEW SANITARY SEWER

EXISTING SANITARY SEWER

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

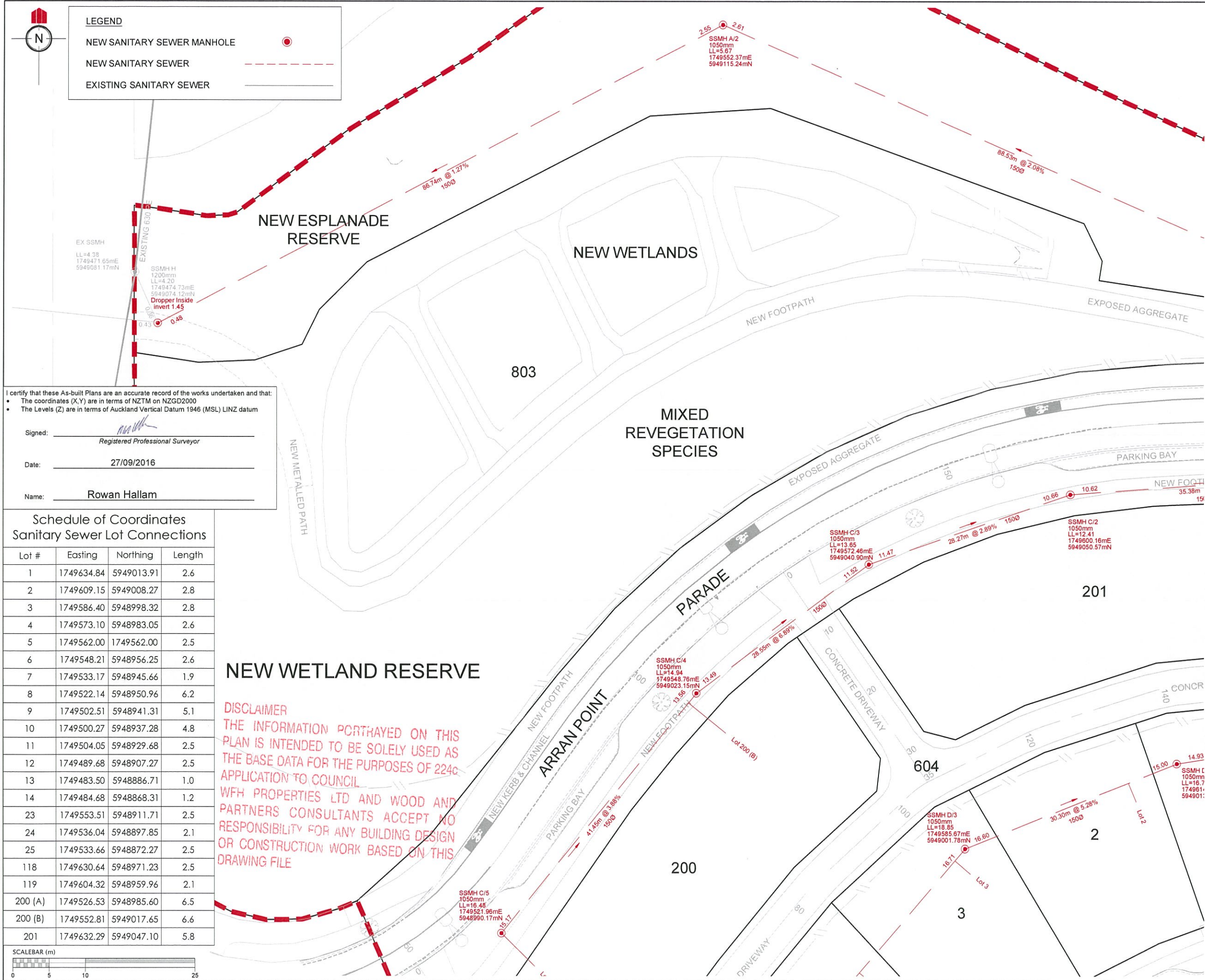
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Signed:
Registered Professional Surveyor

Date: 27/09/2016

Name: Rowan Hallam





REVISION DETAILS	NAME	DATE
2. Issued for information.	MRH	27/09/2016
3. SSMH H internal dropper added and grade updated	MRH	17/10/2016

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Signed: _____
Registered Professional Surveyor

Date: 27/09/2016

Name: Rowan Hallam

Schedule of Coordinates
Sanitary Sewer Lot Connections

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1	1749634.84	5949013.91	2.6
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14	1749484.68	5948868.31	1.2
23	1749553.51	5948911.71	2.5
24	1749536.04	5948897.85	2.1
25	1749533.66	5948872.27	2.5
118	1749630.64	5948971.23	2.5
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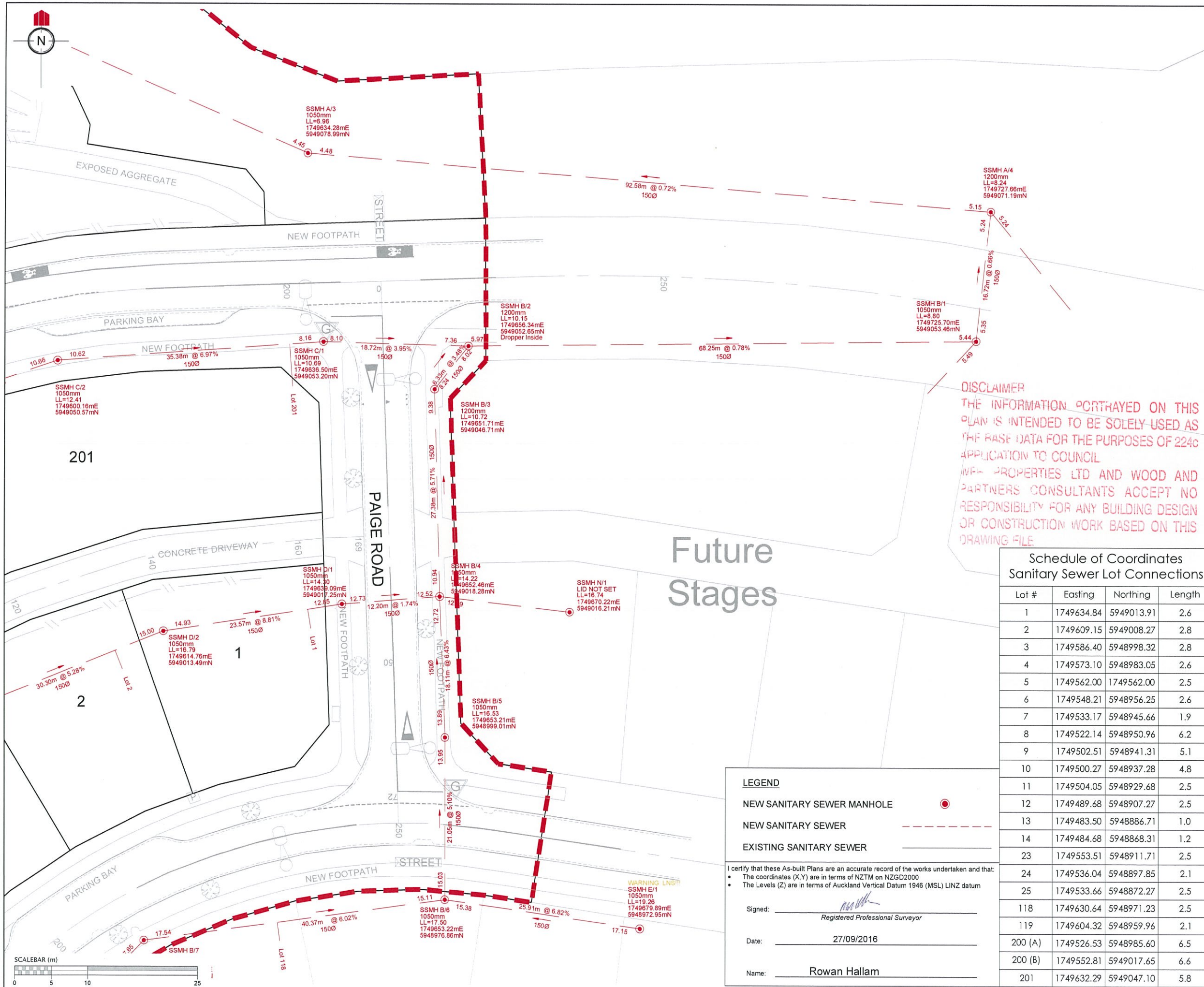
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**MILLWATER
ARRAN POINT
STAGE 1**

**SANITARY SEWER ASBUILT
SHEET 3 OF 4
(SLC-62000)**
AUCKLAND COUNCIL

DESIGNED: MB	ASBUILT
CHECKED: PK	DRAWN: AAC
APPROVED: MRH	SURVEYED: PK
JOB NUMBER: 37001	SCALE: 1:500 @ A3
ISSUED: SEPT 2016	
DWG. NO. 37001-01-AB-402	REV. 3.



REVISION DETAILS	NAME	DATE
2. Issued for information.	MRH	27/09/2016
3. SWMH H internal dropper added and grade updated	MRH	17/10/2016

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 - ASBUILT DATA HAS BEEN SOURCED FROM A COMBINATION OF WOODS SURVEY MEASURED DATA AND CONTRACTOR RECEIVED DATA.

DISCLAIMER
 THE INFORMATION PORTRAYED ON THIS PLAN IS INTENDED TO BE SOLELY USED AS THE BASE DATA FOR THE PURPOSES OF 224C APPLICATION TO COUNCIL
 WFP PROPERTIES LTD AND WOOD AND PARTNERS CONSULTANTS ACCEPT NO RESPONSIBILITY FOR ANY BUILDING DESIGN OR CONSTRUCTION WORK BASED ON THIS DRAWING FILE

CLIENT:

**MILLWATER
 ARRAN POINT
 STAGE 1**

**SANITARY SEWER ASBUILT
 SHEET 4 OF 4
 (SLC-62000)
 AUCKLAND COUNCIL**

Schedule of Coordinates
 Sanitary Sewer Lot Connections

Lot #	Easting	Northing	Length
1	1749634.84	5949013.91	2.6
2	1749609.15	5949008.27	2.8
3	1749586.40	5948998.32	2.8
4	1749573.10	5948983.05	2.6
5	1749562.00	1749562.00	2.5
6	1749548.21	5948956.25	2.6
7	1749533.17	5948945.66	1.9
8	1749522.14	5948950.96	6.2
9	1749502.51	5948941.31	5.1
10	1749500.27	5948937.28	4.8
11	1749504.05	5948929.68	2.5
12	1749489.68	5948907.27	2.5
13	1749483.50	5948886.71	1.0
14	1749484.68	5948868.31	1.2
23	1749553.51	5948911.71	2.5
24	1749536.04	5948897.85	2.1
25	1749533.66	5948872.27	2.5
118	1749630.64	5948971.23	2.5
119	1749604.32	5948959.96	2.1
200 (A)	1749526.53	5948985.60	6.5
200 (B)	1749552.81	5949017.65	6.6
201	1749632.29	5949047.10	5.8

LEGEND

- NEW SANITARY SEWER MANHOLE
- NEW SANITARY SEWER
- EXISTING SANITARY SEWER

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

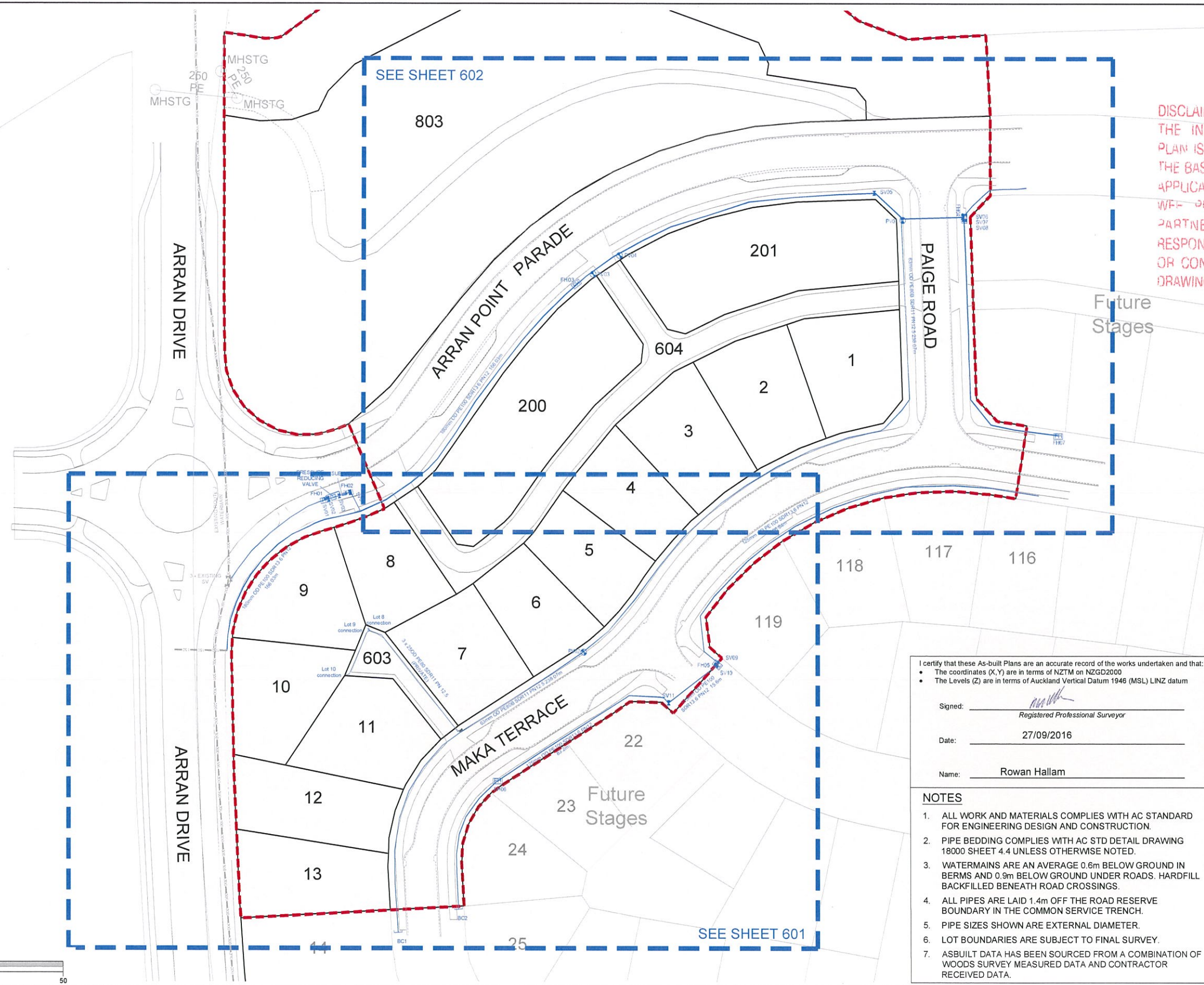
Signed: _____
 Registered Professional Surveyor

Date: 27/09/2016

Name: Rowan Hallam



DISCLAIMER
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 WFF PROPERTIES LTD AND WOOD AND PARTNERS CONSULTANTS ACCEPT NO RESPONSIBILITY FOR ANY BUILDING DESIGN OR CONSTRUCTION WORK BASED ON THIS DRAWING FILE



LEGEND

EXISTING WATERMAIN	—
HIGH PESSURE WATERMAIN	—
SLUICE VALVE	⊕
PEET VALVE	⊕
FIRE HYDRANT	[FH]
BLANK CAP	[]
STAGE BOUNDARY	---

Schedule of Coordinates

Fire Hydrants		
Name	Eastings	Northing
FH01	1749496.39	5948975.94
FH02	1749502.07	5948977.72
FH03	1749557.67	5949028.89
FH04	1749652.36	5949045.10
FH05	1749592.23	5948935.67
FH06	1749538.53	5948907.16
FH07	1749675.37	5948991.83
Sluice Valves		
SV01	1749496.70	5948976.35
SV02	1749497.15	5948976.17
SV03	1749499.80	5948976.95
SV04	1749502.51	5948977.86
SV05	1749630.40	5949051.30
SV06	1749652.38	5949046.01
SV07	1749652.00	5949045.48
SV08	1749652.37	5949044.68
SV09	1749592.18	5948936.17
SV10	1749591.87	5948935.40
SV11	1749580.34	5948926.37
Peet Valves		
PV01	1749637.36	5949044.62
PV02	1749559.61	5948938.71
PV03	1749561.84	5949031.28
PV04	1749568.27	5949035.91

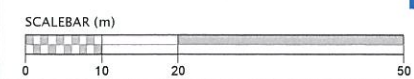
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Signed: _____
 Registered Professional Surveyor

Date: 27/09/2016

Name: Rowan Hallam

- 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.
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REVISION DETAILS

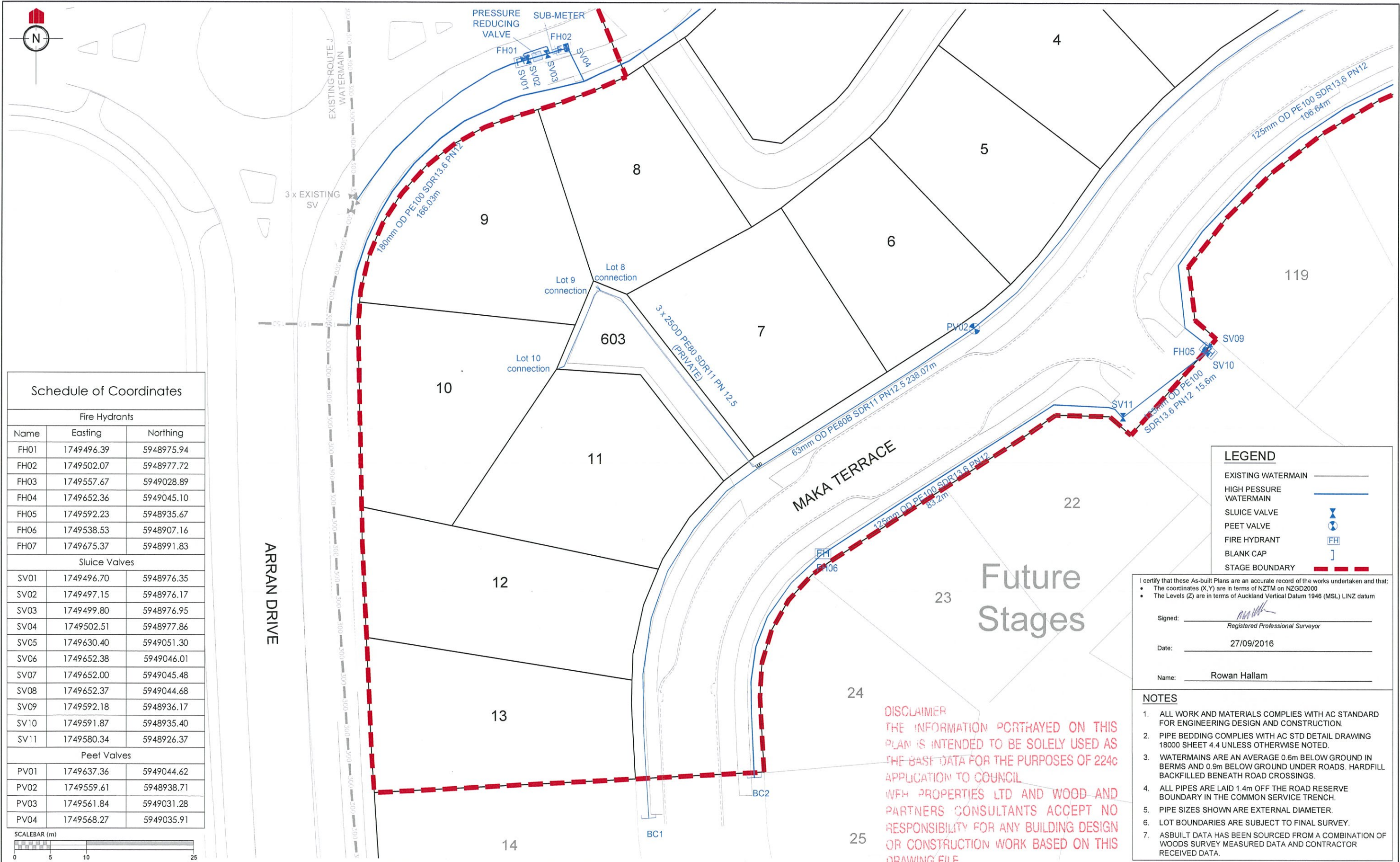
NAME	DATE	CLIENT:
MRH	16/09/2016	



MILLWATER - ARRAN-POINT - STAGE 1
 WATERMAIN ASBUILT
 SHEET 1 OF 3
 AUCKLAND COUNCIL



DESIGNED: MB	ASBUILT
CHECKED: RDC	DRAWN: AAC
APPROVED: MRH	SURVEYED: PK
JOB NUMBER: 37001	SCALE: 1:1000 @ A3
ISSUED: SEPT 2016	
DWG. NO. 37001-01-AB-600	REV. 1.



Schedule of Coordinates		
Fire Hydrants		
Name	Easting	Northing
FH01	1749496.39	5948975.94
FH02	1749502.07	5948977.72
FH03	1749557.67	5949028.89
FH04	1749652.36	5949045.10
FH05	1749592.23	5948935.67
FH06	1749538.53	5948907.16
FH07	1749675.37	5948991.83
Sluice Valves		
SV01	1749496.70	5948976.35
SV02	1749497.15	5948976.17
SV03	1749499.80	5948976.95
SV04	1749502.51	5948977.86
SV05	1749630.40	5949051.30
SV06	1749652.38	5949046.01
SV07	1749652.00	5949045.48
SV08	1749652.37	5949044.68
SV09	1749592.18	5948936.17
SV10	1749591.87	5948935.40
SV11	1749580.34	5948926.37
Peet Valves		
PV01	1749637.36	5949044.62
PV02	1749559.61	5948938.71
PV03	1749561.84	5949031.28
PV04	1749568.27	5949035.91

LEGEND	
EXISTING WATERMAIN	
HIGH PESSURE WATERMAIN	
SLUICE VALVE	
PEET VALVE	
FIRE HYDRANT	
BLANK CAP	
STAGE BOUNDARY	

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- 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: 27/09/2016

Name: Rowan Hallam

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REVISION DETAILS	NAME	DATE	CLIENT:
2. Issued for information.	MRH	16/09/2016	



MILLWATER - ARRAN-POINT - STAGE 1
 WATERMAIN ASBUILT
 SHEET 2 OF 3
 AUCKLAND COUNCIL



DESIGNED: MB	ASBUILT
CHECKED: RDC	DRAWN: AAC
APPROVED: MRH	SURVEYED: PK
JOB NUMBER: 37001	SCALE: 1:500 @ A3
ISSUED: SEPT 2016	
DWG. NO. 37001-01-AB-601	REV. 2.



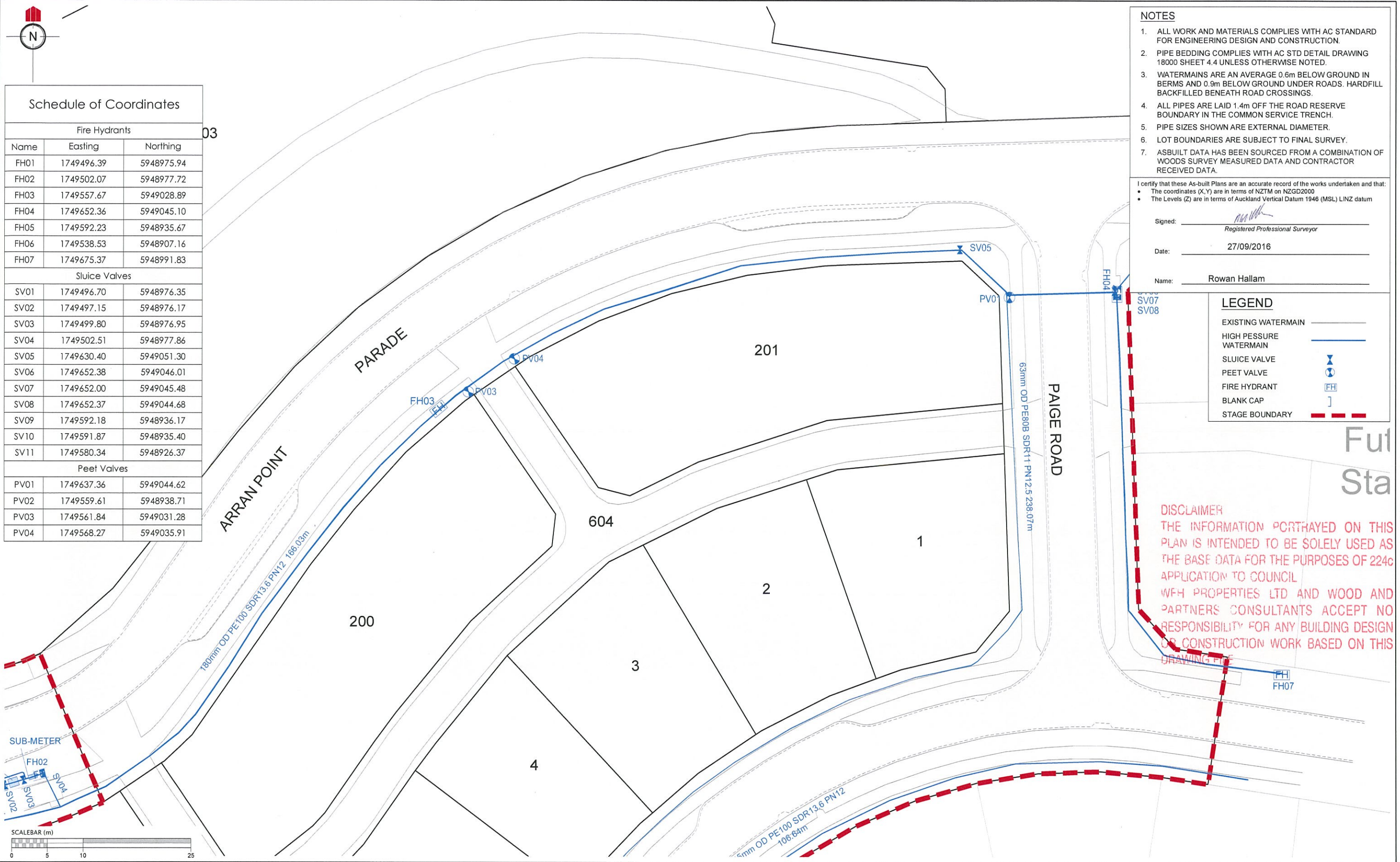
Schedule of Coordinates

Fire Hydrants		
Name	Easting	Northing
FH01	1749496.39	5948975.94
FH02	1749502.07	5948977.72
FH03	1749557.67	5949028.89
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FH05	1749592.23	5948935.67
FH06	1749538.53	5948907.16
FH07	1749675.37	5948991.83

Sluice Valves		
SV01	SV02	SV03
1749496.70	1749497.15	1749499.80
5948976.35	5948976.17	5948976.95
SV04	SV05	SV06
1749502.51	1749630.40	1749652.38
5948977.86	5949051.30	5949046.01
SV07	SV08	SV09
1749652.00	1749652.37	1749592.18
5949045.48	5949044.68	5948936.17
SV10	SV11	
1749591.87	1749580.34	
5948935.40	5948926.37	

Peet Valves		
PV01	PV02	PV03
1749637.36	1749559.61	1749561.84
5949044.62	5948938.71	5949031.28
PV04		
1749568.27		
5949035.91		


03



- NOTES**
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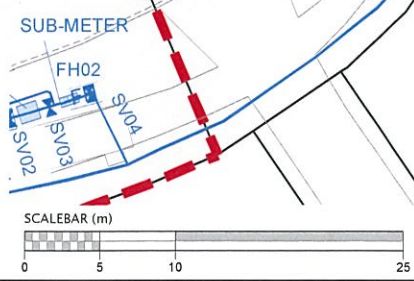
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Signed: 
Registered Professional Surveyor
Date: 27/09/2016
Name: Rowan Hallam

LEGEND

EXISTING WATERMAIN	
HIGH PESSURE WATERMAIN	
SLUICE VALVE	
PEET VALVE	
FIRE HYDRANT	
BLANK CAP	
STAGE BOUNDARY	

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REVISION DETAILS	NAME	DATE	CLIENT:
2. Issued for information.	MRH	16/09/2016	



MILLWATER - ARRAN-POINT - STAGE 1
WATERMAIN ASBUILT
SHEET 3 OF 3
AUCKLAND COUNCIL



DESIGNED: MB	ASBUILT
CHECKED: RDC	DRAWN: AAC
APPROVED: MRH	SURVEYED: PK
JOB NUMBER: 37001	SCALE: 1:500 @ A3
ISSUED: SEPT 2016	
DWG. NO. 37001-01-AB-602	REV. 2.