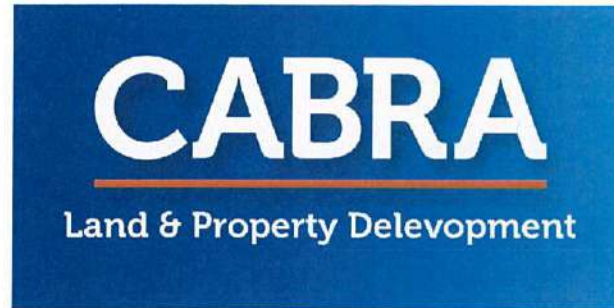


CLIENT:

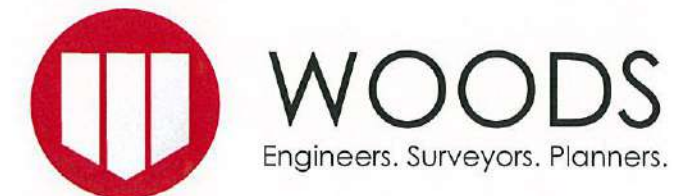


COUNCIL:



KAREPIRO DEVELOPMENT STAGE 4ii

AS-BUILT DRAWINGS FOR 224C
NOVEMBER 2016



KAREPIRO DEVELOPMENT

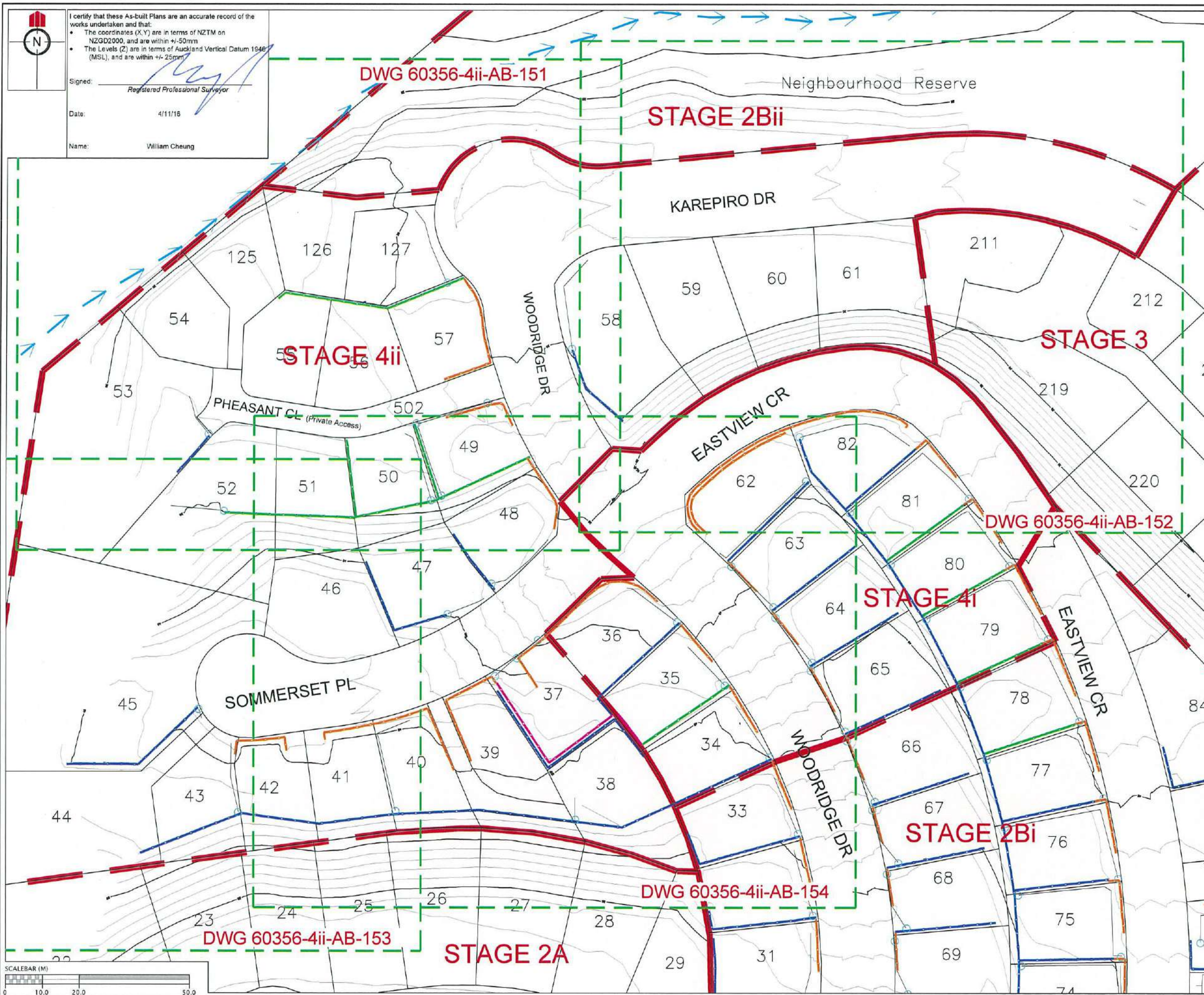
CONTENT INDEX AND LOCALITY PLAN

SHEET NO.	SHEET TITLE
60356-4ii- AB- 000 to 001	Cover and Index Plans
STAGE 4ii PLANS	
60356-4ii- AB- 150 to 154	Retaining Wall Layout Plan
60356-4ii- AB- 200 to 203	Roading Plans
60356-4ii- AB- 240	Roading Undercut Plan
60356-4ii- AB- 250 to 256	Typical Road Cross Sections
60356-4ii- AB- 300 to 303	Stormwater Drainage Plans
60356-4ii- AB- 310 to 313	Wastewater Drainage Plans
60356-4ii- AB- 390	Overland Flow Path Plans
60356-4ii- AB- 600 to 603	Water Reticulation Plans
GENERAL PLANS	
60356-4ii- AB- 380	Stormwater to be Vested in Future Stage Plan
60356-4ii- AB- 385	Wastewater to be Vested in Future Stage Plan



LOCATION PLAN

1:5000 @ A3



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, and are within +/- 50mm
- The Levels (Z) are in terms of Auckland Vertical Datum 1948 (MSL), and are within +/- 25mm

Signed: *[Signature]*
Registered Professional Surveyor

Date: 4/11/16

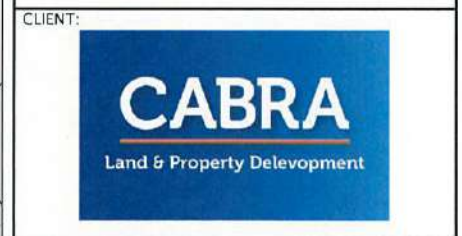
Name: William Cheung

REVISION DETAILS	NAME	DATE
1. ISSUED FOR ASBUILT	BP	4/11/16

LEGEND

- (thin black line) CONTOURS (1.0m INTERVAL)
- (blue line) RETAINING WALL TYPE D
- (green line) RETAINING WALL TYPE E
- (orange line) RETAINING WALL TIMBER TWO TIER
- (red line) RETAINING WALL KEYSTONE
- (thin black line) PRIVATE DRAINAGE
- (circle) PRIVATE DRAINAGE CATCHPIT
- - - (red dashed line) STAGE BOUNDARIES

- NOTES**
- WHERE WALLS FALL TOWARDS FRONT OF LOTS, PRIVATE DRAINAGE CONNECTS INTO PUBLIC SW SYSTEM AT LOT CONNECTION.
 - WHERE WALLS FALL TOWARDS BACK OF LOTS, PRIVATE DRAINAGE DISCHARGES TO BUSH WHERE POSSIBLE OR IF NOT POSSIBLE THEN IS PIPED TO FRONT OF LOT AND CONNECTS TO PUBLIC SW SYSTEM AT LOT CONNECTION.
 - WALLS WITH LARGE TOP SLOPES HAVE DISH CHANNELS INSTALLED WHICH ARE PIPED TO THE PUBLIC SW SYSTEM.
 - ALL WALLS ABOVE 1.2m HAVE BARRIER FENCES INSTALLED.

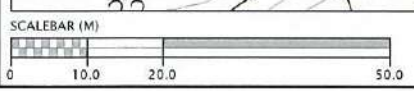


**KAREPIRO DEVELOPMENT
STAGE 4ii**

**RETAINING WALLS OVERALL
ASBUILT PLAN**

AUCKLAND COUNCIL

DESIGNED: BP	ISSUED FOR AS-BUILT
CHECKED: <i>[Signature]</i>	DRAWN: SL
APPROVED: <i>[Signature]</i>	SURVEYED: WC
JOB NUMBER: 60356	SCALE: 1:1000 @ A3
ISSUED: 4/11/16	
DWG. NO. 60356-4ii-AB-150	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, and are within +/-50mm
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL), and are within +/-25mm

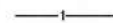







Signed: 
Registered Professional Surveyor

Date: 4/11/16

Name: William Cheung

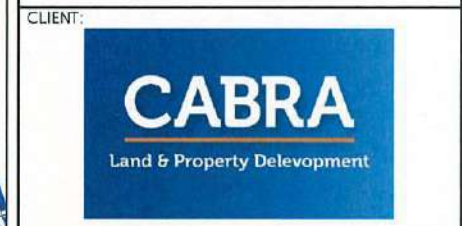
REVISION DETAILS	NAME	DATE
1. ISSUED FOR ASBUILT	BP	4/11/16

LEGEND

	CONTOURS (1.0m INTERVAL)
	RETAINING WALL TYPE D
	RETAINING WALL TYPE E
	RETAINING WALL TIMBER TWO TIER
	RETAINING WALL KEYSTONE
	PRIVATE DRAINAGE
	PRIVATE DRAINAGE CATCHPIT
	STAGE BOUNDARIES

NOTES



- WHERE WALLS FALL TOWARDS FRONT OF LOTS, PRIVATE DRAINAGE CONNECTS INTO PUBLIC SW SYSTEM AT LOT CONNECTION.
- WHERE WALLS FALL TOWARDS BACK OF LOTS, PRIVATE DRAINAGE DISCHARGES TO BUSH WHERE POSSIBLE OR IF NOT POSSIBLE THEN IS PIPED TO FRONT OF LOT AND CONNECTS TO PUBLIC SW SYSTEM AT LOT CONNECTION.
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- ALL WALLS ABOVE 1.2m HAVE BARRIER FENCES INSTALLED.

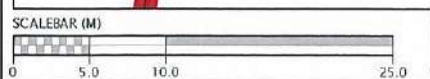


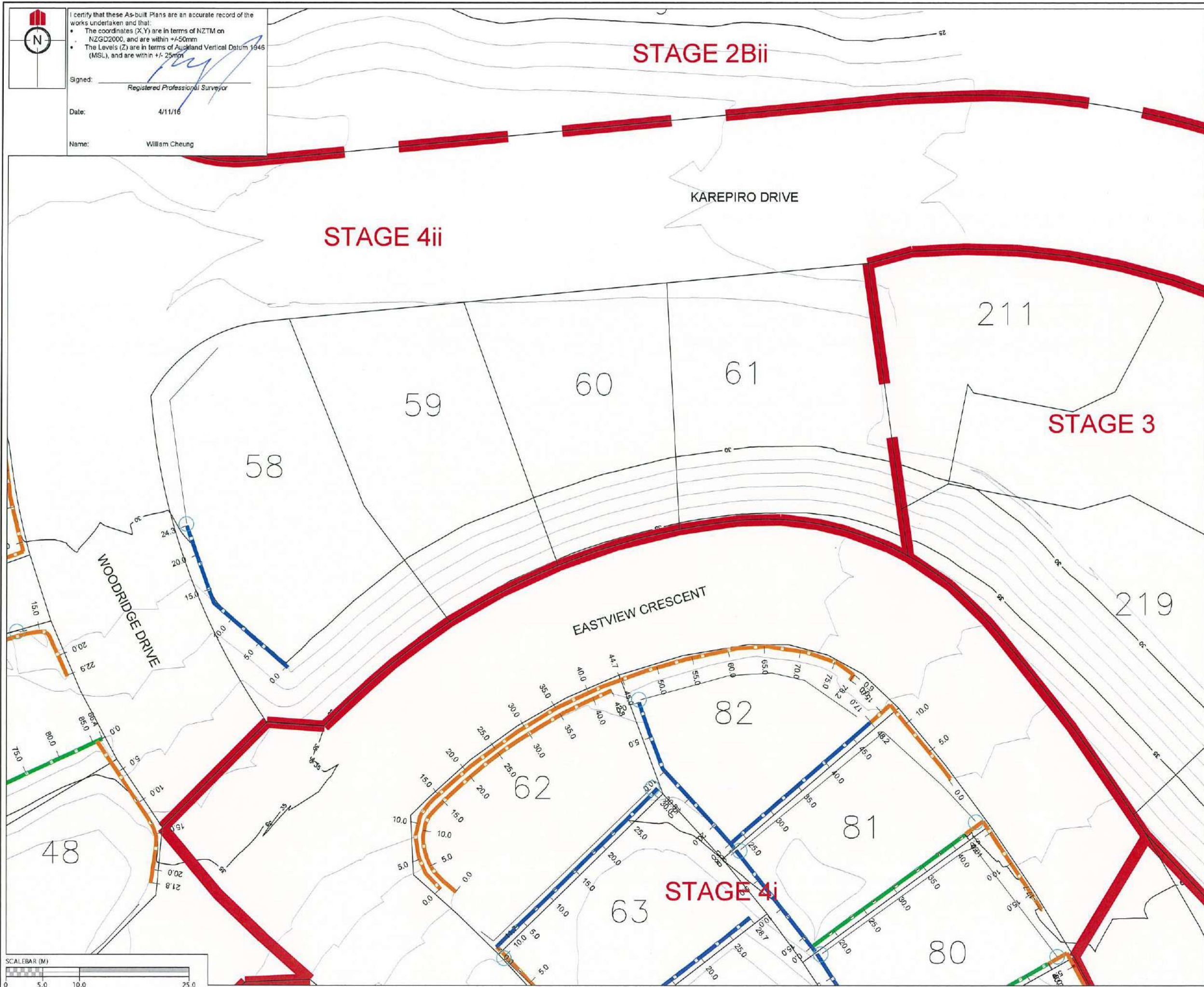
**KAREPIRO DEVELOPMENT
STAGE 4ii**

**RETAINING WALLS ASBUILT PLAN
(1 OF 4)**

AUCKLAND COUNCIL

DESIGNED: BP	ISSUED FOR AS-BUILT
CHECKED: 	DRAWN: SL
APPROVED: 	SURVEYED: WC
JOB NUMBER: 60356	SCALE: 1:500 @ A3
ISSUED: 4/11/16	
DWG. NO. 60356-4ii-AB-151	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, and are within +/-50mm
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL), and are within +/- 25mm

Signed: *[Signature]*
 Registered Professional Surveyor

Date: 4/11/16

Name: William Cheung

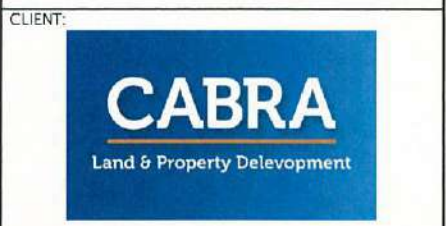
REVISION DETAILS	NAME	DATE
1. ISSUED FOR ASBUILT	BP	4/11/16

LEGEND

	CONTOURS (1.0m INTERVAL)
	RETAINING WALL TYPE D
	RETAINING WALL TYPE E
	RETAINING WALL TIMBER TWO TIER
	RETAINING WALL KEYSTONE
	PRIVATE DRAINAGE
	PRIVATE DRAINAGE CATCHPIT
	STAGE BOUNDARIES

NOTES

- WHERE WALLS FALL TOWARDS FRONT OF LOTS, PRIVATE DRAINAGE CONNECTS INTO PUBLIC SW SYSTEM AT LOT CONNECTION.
- WHERE WALLS FALL TOWARDS BACK OF LOTS, PRIVATE DRAINAGE DISCHARGES TO BUSH WHERE POSSIBLE OR IF NOT POSSIBLE THEN IS PIPED TO FRONT OF LOT AND CONNECTS TO PUBLIC SW SYSTEM AT LOT CONNECTION.
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- ALL WALLS ABOVE 1.2m HAVE BARRIER FENCES INSTALLED.



**KAREPIRO DEVELOPMENT
 STAGE 4ii**

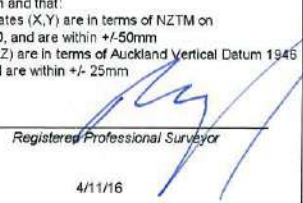
**RETAINING WALLS ASBUILT PLAN
 (2 OF 4)**

AUCKLAND COUNCIL

DESIGNED: BP	ISSUED FOR AS-BUILT
CHECKED: <i>[Signature]</i>	DRAWN: SL
APPROVED: <i>[Signature]</i>	SURVEYED: WC
JOB NUMBER: 60356	SCALE: 1:500 @ A3
ISSUED: 4/11/16	
DWG. NO. 60356-4ii-AB-152	REV. 1

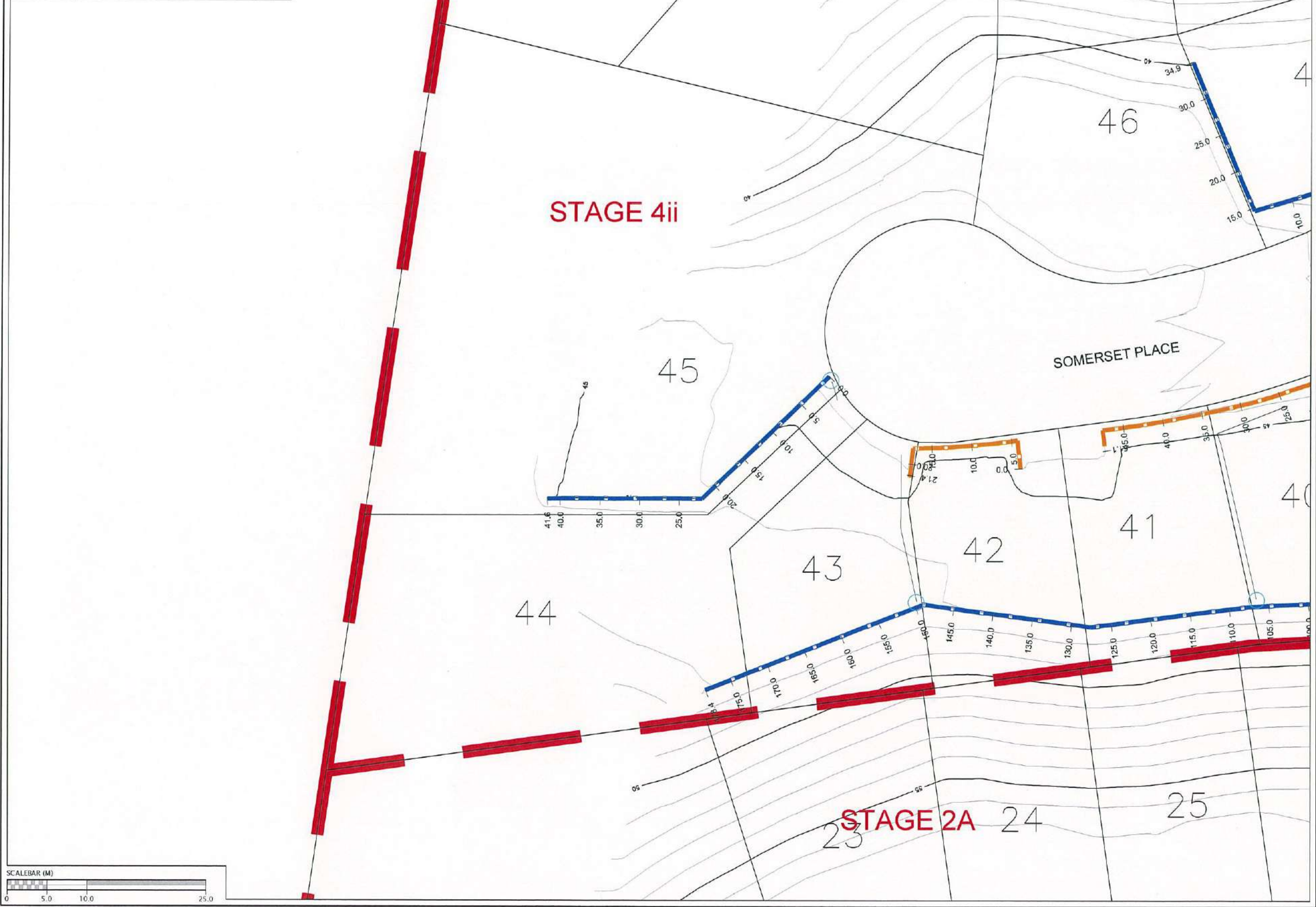
I certify that these As-built Plans are an accurate record of the works undertaken and that:

- The coordinates (X,Y) are in terms of NZTM on NZGD2000, and are within +/-50mm
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL), and are within +/- 25mm

Signed: 
 Registered Professional Surveyor









Date: 4/11/16

Name: William Cheung



REVISION DETAILS	NAME	DATE
1. ISSUED FOR ASBUILT	BP	4/11/16


LEGEND

	CONTOURS (1.0m INTERVAL)
	RETAINING WALL TYPE D
	RETAINING WALL TYPE E
	RETAINING WALL TIMBER TWO TIER
	RETAINING WALL KEYSTONE
	PRIVATE DRAINAGE
	PRIVATE DRAINAGE CATCHPIT
	STAGE BOUNDARIES

NOTES

- WHERE WALLS FALL TOWARDS FRONT OF LOTS, PRIVATE DRAINAGE CONNECTS INTO PUBLIC SW SYSTEM AT LOT CONNECTION.
- WHERE WALLS FALL TOWARDS BACK OF LOTS, PRIVATE DRAINAGE DISCHARGES TO BUSH WHERE POSSIBLE OR IF NOT POSSIBLE THEN IS PIPED TO FRONT OF LOT AND CONNECTS TO PUBLIC SW SYSTEM AT LOT CONNECTION.
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

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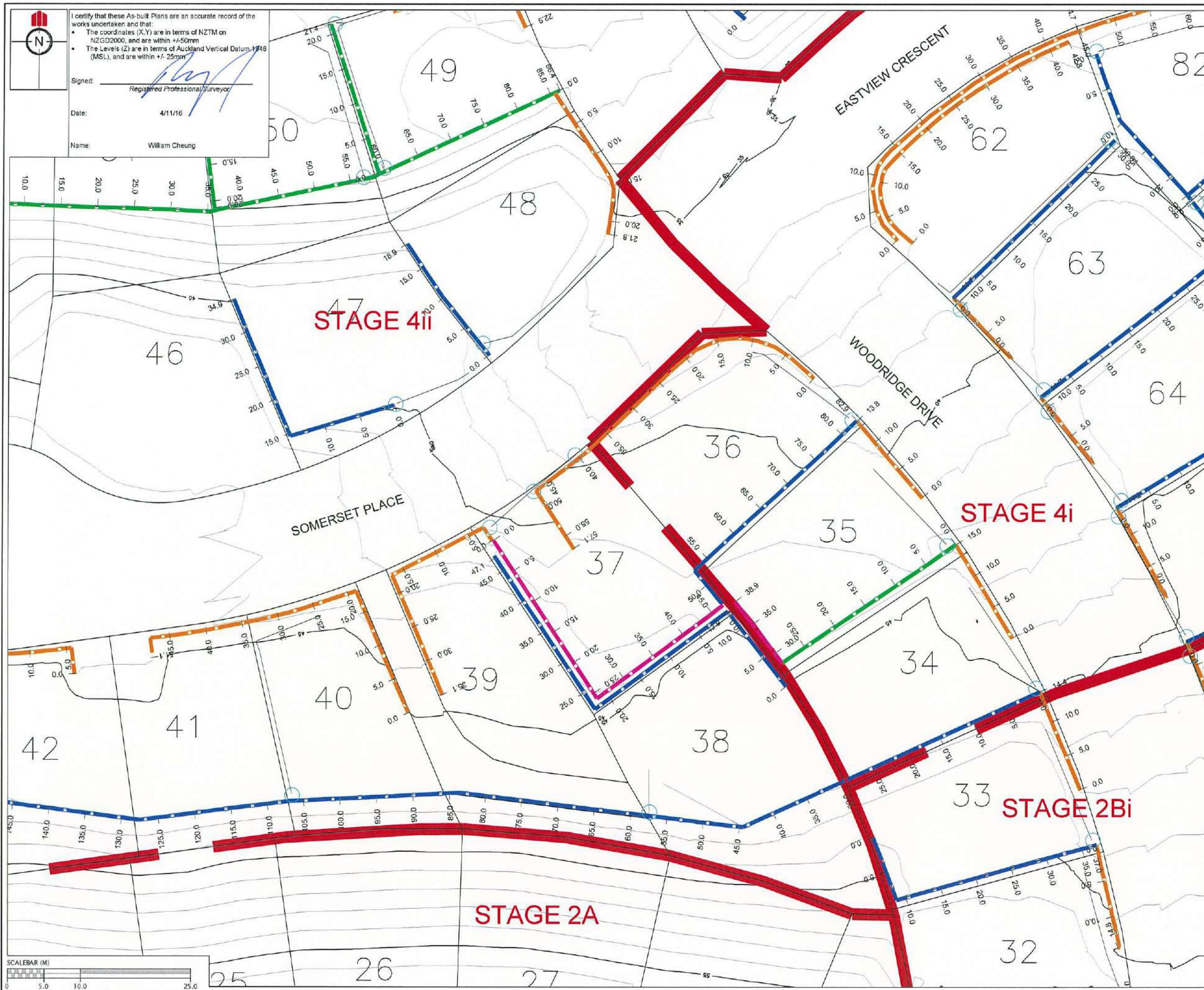



**KAREPIRO DEVELOPMENT
STAGE 4ii**

**RETAINING WALLS ASBUILT PLAN
(3 OF 4)**

AUCKLAND COUNCIL

DESIGNED: BP	ISSUED FOR AS-BUILT
CHECKED: 	DRAWN: SL
APPROVED: 	SURVEYED: WC
JOB NUMBER: 60356	SCALE: 1:500 @ A3
ISSUED: 4/11/16	
DWG. NO. 60356-4ii-AB-153	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, and are within +/-50mm
- The Levels (Z) are in terms of Auckland Vertical Datum 1948 (MSL), and are within +/- 25mm

Signed: *[Signature]*
 Registered Professional Surveyor

Date: 4/11/16

Name: William Cheung

REVISION DETAILS	NAME	DATE
1. ISSUED FOR ASBUILT	BP	4/11/16

LEGEND

	CONTOURS (1.0m INTERVAL)
	RETAINING WALL TYPE D
	RETAINING WALL TYPE E
	RETAINING WALL TIMBER TWO TIER
	RETAINING WALL KEYSTONE
	PRIVATE DRAINAGE
	PRIVATE DRAINAGE CATCHPIT
	STAGE BOUNDARIES

- NOTES**
- WHERE WALLS FALL TOWARDS FRONT OF LOTS, PRIVATE DRAINAGE CONNECTS INTO PUBLIC SW SYSTEM AT LOT CONNECTION.
 - WHERE WALLS FALL TOWARDS BACK OF LOTS, PRIVATE DRAINAGE DISCHARGES TO BUSH WHERE POSSIBLE OR IF NOT POSSIBLE THEN IS PIPED TO FRONT OF LOT AND CONNECTS TO PUBLIC SW SYSTEM AT LOT CONNECTION.
 - WALLS WITH LARGE TOP SLOPES HAVE DISH CHANNELS INSTALLED WHICH ARE PIPED TO THE PUBLIC SW SYSTEM.
 - ALL WALLS ABOVE 1.2m HAVE BARRIER FENCES INSTALLED.

CLIENT:

**KAREPIRO DEVELOPMENT
 STAGE 4ii**

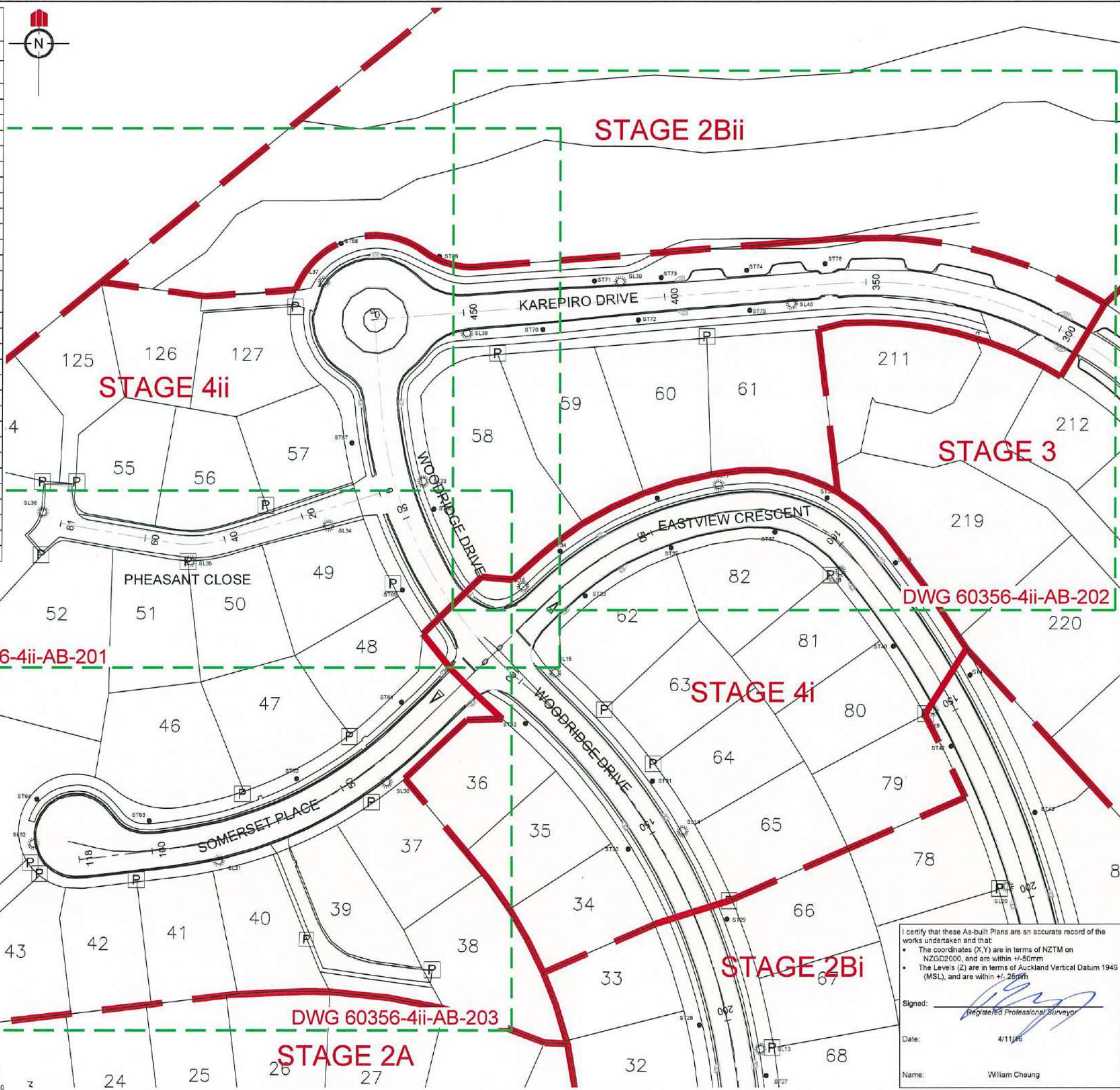
**RETAINING WALLS ASBUILT PLAN
 (4 OF 4)**

AUCKLAND COUNCIL

DESIGNED: BP	ISSUED FOR AS-BUILT
CHECKED: <i>[Signature]</i>	DRAWN: SL
APPROVED: <i>[Signature]</i>	SURVEYED: WC
JOB NUMBER: 60356	SCALE: 1:500 @ A3
ISSUED: 4/11/16	
DWC. NO. 60356-4ii-AB-154	REV. 1

SCHEDULE OF COORDINATES STREETLIGHTS		
STREET LIGHT	mE POSITION	mN POSITION
SL30	1754921.94	5944338.10
SL31	1754880.42	5944318.65
SL32	1754834.57	5944322.83
SL33	1754930.93	5944412.52
SL34	1754907.57	5944401.60
SL35	1754873.33	5944392.77
SL36	1754836.77	5944404.93
SL37	1754906.34	5944461.96
SL38	1754941.81	5944449.26
SL39	1754979.82	5944461.95
SL40	1755022.27	5944456.55
SL41	TBC	TBC

TREES		
STREET TREE	mE POSITION	mN POSITION
ST61	1754925.68	5944357.85
ST62	1754899.77	5944338.89
ST63	1754863.20	5944328.51
ST64	1754835.40	5944333.82
ST65	1754925.87	5944385.63
ST66	1754933.67	5944405.68
ST67	1754913.31	5944422.05
ST68	1754910.49	5944471.42
ST69	1754934.91	5944468.22
ST70	1754960.65	5944450.17
ST71	1754973.41	5944462.15
ST72	1754984.30	5944452.52
ST73	1754989.93	5944463.00
ST74	1755011.06	5944464.81
ST75	1755011.89	5944454.93
ST76	1755030.50	5944466.44

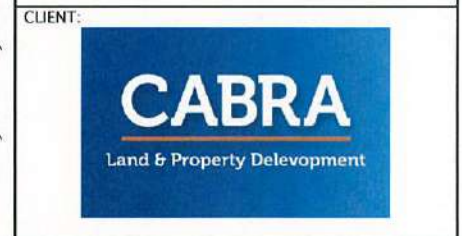


REVISION DETAILS	NAME	DATE
1. ISSUED FOR AS-BUILT	BP	4/11/16

- NOTES**
- ALL WORKS AND MATERIALS COMPLY WITH AUCKLAND COUNCIL (RDC) STANDARDS FOR ENGINEERING DESIGN AND CONSTRUCTION (NOV 2005).
 - ALL ROADS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE APPROVED ENGINEERING PLANS. SEE 60356-4ii-AB-250 FOR CONSTRUCTION DETAILS.
 - ALL FINISHED ROAD SURFACES ARE ASPHALT CONCRETE 30mm THICK. SEE 60356-4ii-AB-250 FOR DETAILS.
 - ALL FOOTPATHS ARE 125mm THICK BRUSHED CONCRETE UNLESS OTHERWISE NOTED. SEE 60356-4ii-AB-250 FOR DETAILS.
 - ALL PIPE CROSSINGS UNDER ROADS ARE CLASS 4 AND HAVE BEEN HARDFILL BACKFILLED.

LEGEND

ROAD CENTRELINE	
SINGLE SPLAY PIT	
DOUBLE SPLAY PIT	
POWER TUDD	
STREET TREES	ST18
STREET LIGHTS	SL07
STAGE BOUNDARIES	



**KAREPIRO DEVELOPMENT
STAGE 4ii**

ROADING AND STREET TREE
AS-BUILT PLAN
OVERALL

AUCKLAND COUNCIL

DESIGNED: BP	ISSUED FOR AS-BUILT
CHECKED:	DRAWN: SL
APPROVED:	SURVEYED: WOODS
JOB NUMBER: 60356	SCALE: 1:1000 @ A3
ISSUED: 4/11/16	
DWG. NO. 60356-4ii-AB-200	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, and are within +/-50mm
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL), and are within +/-25mm

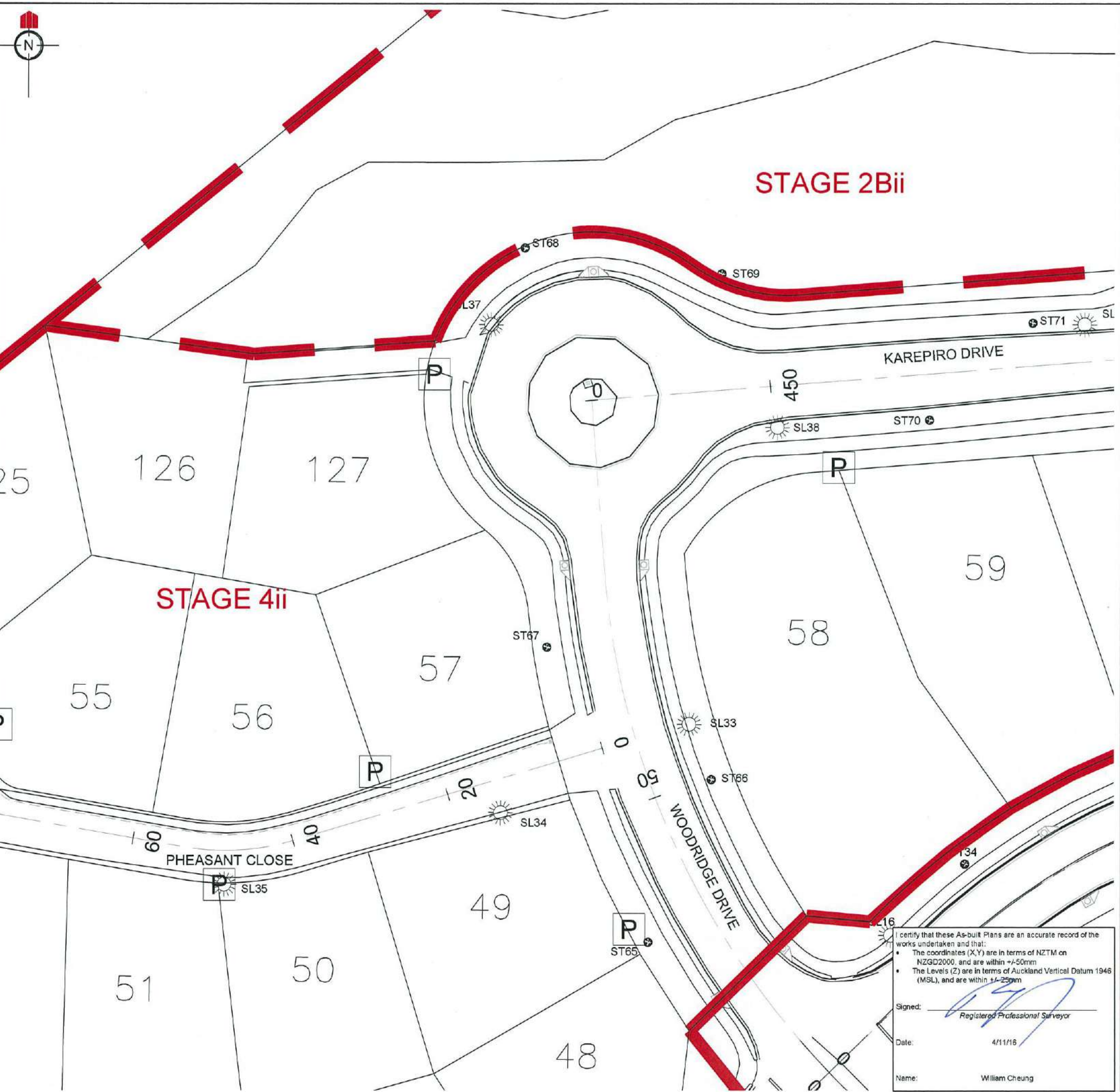
Signed:
Registered Professional Surveyor

Date: 4/11/16

Name: William Cheung

SCHEDULE OF COORDINATES STREETLIGHTS		
STREET LIGHT	mE POSITION	mN POSITION
SL30	1754921.94	5944338.10
SL31	1754880.42	5944318.65
SL32	1754834.57	5944322.83
SL33	1754930.93	5944412.52
SL34	1754907.57	5944401.60
SL35	1754873.33	5944392.77
SL36	1754836.77	5944404.93
SL37	1754906.34	5944461.96
SL38	1754941.81	5944449.26
SL39	1754979.82	5944461.95
SL40	1755022.27	5944456.55
SL41	TBC	TBC

TREES		
STREET TREE	mE POSITION	mN POSITION
ST61	1754925.68	5944357.85
ST62	1754899.77	5944338.89
ST63	1754863.20	5944328.51
ST64	1754835.40	5944333.82
ST65	1754925.87	5944385.63
ST66	1754933.67	5944405.68
ST67	1754913.31	5944422.05
ST68	1754910.49	5944471.42
ST69	1754934.91	5944468.22
ST70	1754960.65	5944450.17
ST71	1754973.41	5944462.15
ST72	1754984.30	5944452.52
ST73	1754989.93	5944463.00
ST74	1755011.06	5944464.81
ST75	1755011.89	5944454.93
ST76	1755030.50	5944466.44



REVISION DETAILS	NAME	DATE
1. ISSUED FOR AS-BUILT	BP	4/11/16

- NOTES**
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 - ALL ROADS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE APPROVED ENGINEERING PLANS. SEE 60356-4ii-AB-250 FOR CONSTRUCTION DETAILS.
 - ALL FINISHED ROAD SURFACES ARE ASPHALT CONCRETE 30mm THICK. SEE 60356-4ii-AB-250 FOR DETAILS.
 - ALL FOOTPATHS ARE 125mm THICK BRUSHED CONCRETE UNLESS OTHERWISE NOTED. SEE 60356-4ii-AB-250 FOR DETAILS.
 - ALL PIPE CROSSINGS UNDER ROADS ARE CLASS 4 AND HAVE BEEN HARDFILL BACKFILLED.

LEGEND

ROAD CENTRELINE	
SINGLE SPLAY PIT	
DOUBLE SPLAY PIT	
POWER TUDD	
STREET TREES	ST18
STREET LIGHTS	SL07
STAGE BOUNDARIES	



KAREPIRO DEVELOPMENT STAGE 4ii

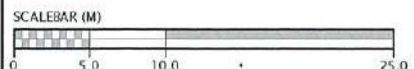
ROADING AND STREET TREE AS-BUILT PLAN (1 OF 3)
AUCKLAND COUNCIL

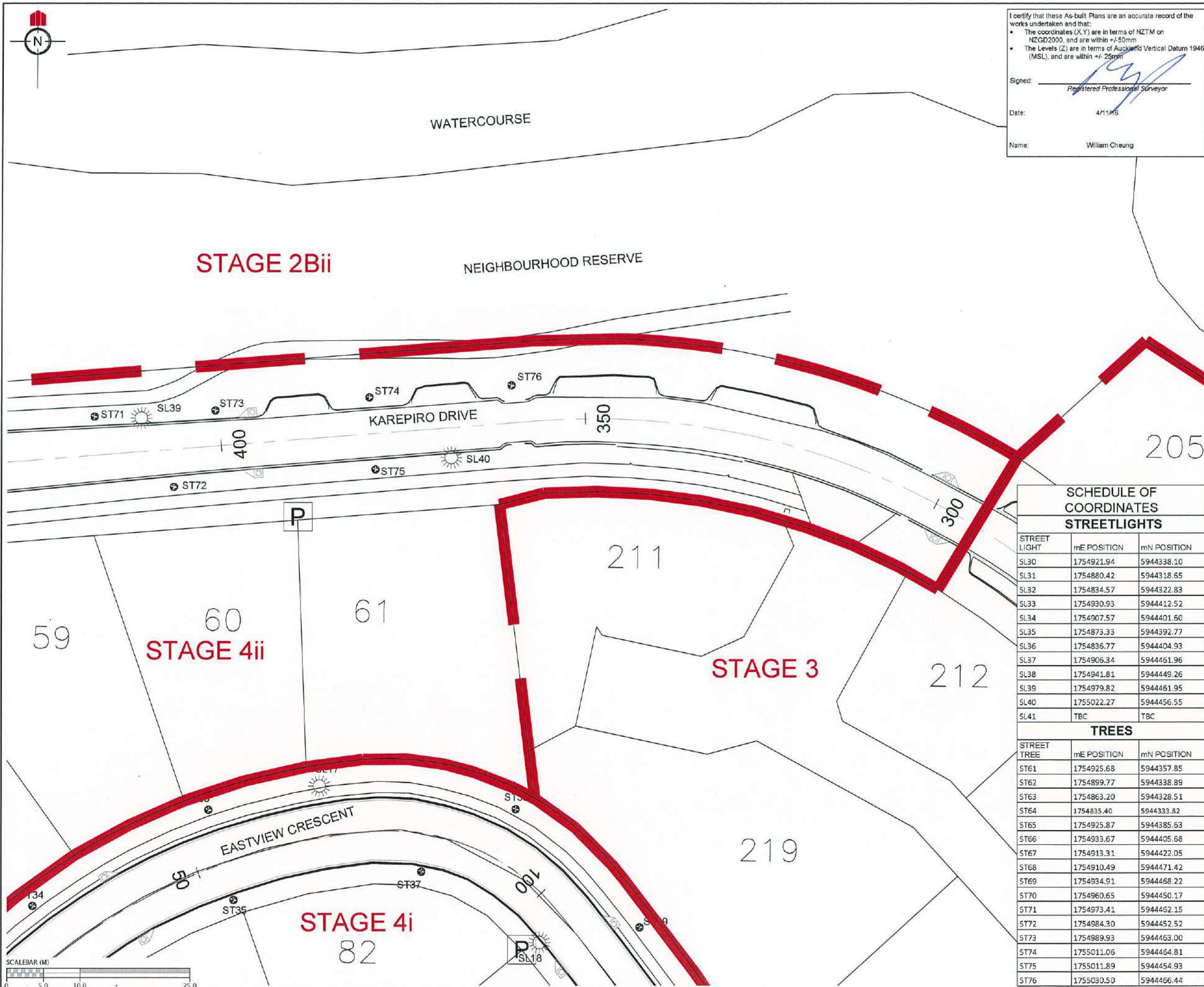
DESIGNED: BP	ISSUED FOR AS-BUILT
CHECKED:	DRAWN: SL
APPROVED:	SURVEYED: WOODS
JOB NUMBER: 60356	SCALE: 1:500 @ A3
ISSUED: 4/11/16	
DWG. NO. 60356-4ii-AB-201	REV. 1

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, and are within +/-50mm
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL), and are within +/-25mm

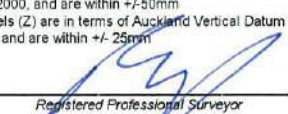
Signed:
Registered Professional Surveyor
Date: 4/11/16
Name: William Cheung





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, and are within +/-50mm
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL), and are within +/- 25mm

Signed: 
 Registered Professional Surveyor

Date: 4/11/16

Name: William Cheung

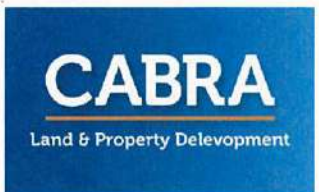
REVISION DETAILS	NAME	DATE
1. ISSUED FOR AS-BUILT	BP	4/11/16

- NOTES**
- ALL WORKS AND MATERIALS COMPLY WITH AUCKLAND COUNCIL (RDC) STANDARDS FOR ENGINEERING DESIGN AND CONSTRUCTION (NOV 2005).
 - ALL ROADS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE APPROVED ENGINEERING PLANS. SEE 60356-4ii-AB-250 FOR CONSTRUCTION DETAILS.
 - ALL FINISHED ROAD SURFACES ARE ASPHALT CONCRETE 30mm THICK. SEE 60356-4ii-AB-250 FOR DETAILS.
 - ALL FOOTPATHS ARE 125mm THICK BRUSHED CONCRETE UNLESS OTHERWISE NOTED. SEE 60356-4ii-AB-250 FOR DETAILS.
 - ALL PIPE CROSSINGS UNDER ROADS ARE CLASS 4 AND HAVE BEEN HARDFILL BACKFILLED.

LEGEND

ROAD CENTRELINE	
SINGLE SPLAY PIT	
DOUBLE SPLAY PIT	
POWER TUDD	
STREET TREES	 ST18
STREET LIGHTS	 SL07
STAGE BOUNDARIES	

CLIENT:




**KAREPIRO DEVELOPMENT
STAGE 4ii**

**ROADING AND STREET TREE
AS-BUILT PLAN
(2 OF 3)**

AUCKLAND COUNCIL

**SCHEDULE OF
COORDINATES
STREETLIGHTS**

STREET LIGHT	mE POSITION	mN POSITION
SL30	1754921.94	5944338.10
SL31	1754880.42	5944318.65
SL32	1754834.57	5944322.83
SL33	1754930.93	5944412.52
SL34	1754907.57	5944401.60
SL35	1754873.33	5944392.77
SL36	1754836.77	5944404.93
SL37	1754906.34	5944451.96
SL38	1754941.81	5944449.26
SL39	1754979.82	5944451.95
SL40	1755022.27	5944456.55
SL41	TBC	TBC

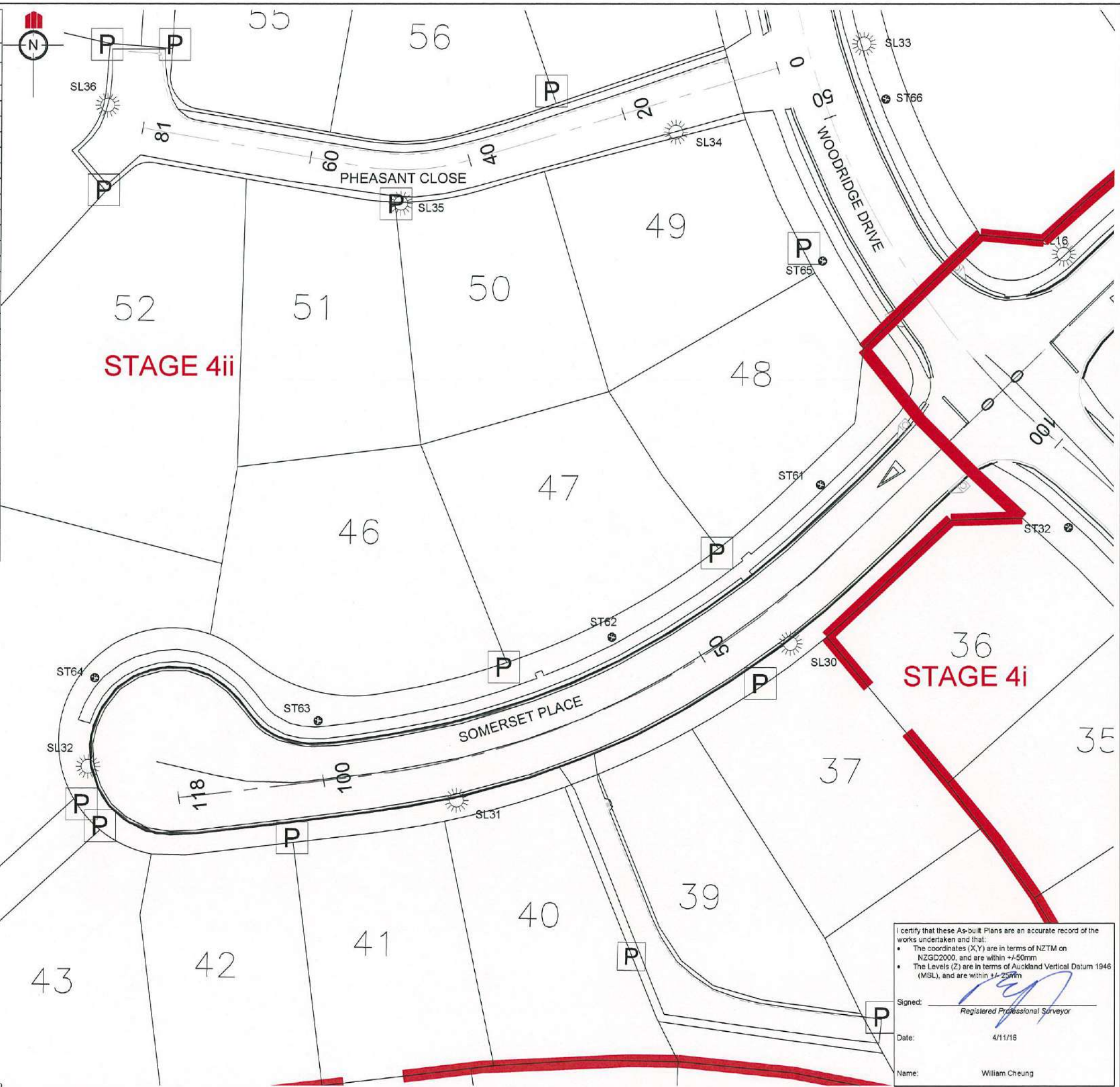
TREES

STREET TREE	mE POSITION	mN POSITION
ST61	1754925.68	5944357.85
ST62	1754899.77	5944338.89
ST63	1754863.20	5944328.51
ST64	1754835.40	5944333.82
ST65	1754925.87	5944385.63
ST66	1754933.67	5944405.68
ST67	1754913.31	5944422.05
ST68	1754910.49	5944471.42
ST69	1754934.91	5944468.22
ST70	1754960.65	5944450.17
ST71	1754973.41	5944462.15
ST72	1754984.30	5944452.52
ST73	1754989.93	5944463.00
ST74	1755011.06	5944464.81
ST75	1755011.89	5944454.93
ST76	1755030.50	5944466.44



SCHEDULE OF COORDINATES STREETLIGHTS		
STREET LIGHT	mE POSITION	mN POSITION
SL30	1754921.94	5944338.10
SL31	1754880.42	5944318.65
SL32	1754834.57	5944322.83
SL33	1754930.93	5944412.52
SL34	1754907.57	5944401.60
SL35	1754873.33	5944392.77
SL36	1754836.77	5944404.93
SL37	1754906.34	5944461.96
SL38	1754941.81	5944449.26
SL39	1754979.82	5944461.95
SL40	1755022.27	5944456.55
SL41	TBC	TBC

TREES		
STREET TREE	mE POSITION	mN POSITION
ST61	1754925.68	5944357.85
ST62	1754899.77	5944338.89
ST63	1754863.20	5944328.51
ST64	1754835.40	5944333.82
ST65	1754925.87	5944385.63
ST66	1754933.67	5944405.68
ST67	1754913.31	5944422.05
ST68	1754910.49	5944471.42
ST69	1754934.91	5944468.22
ST70	1754960.65	5944450.17
ST71	1754973.41	5944462.15
ST72	1754984.30	5944452.52
ST73	1754989.93	5944463.00
ST74	1755011.06	5944464.81
ST75	1755011.89	5944454.93
ST76	1755030.50	5944466.44

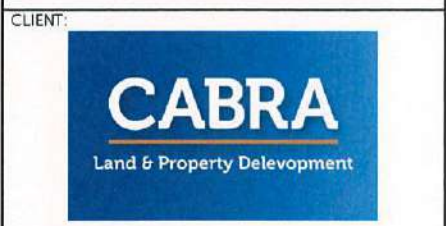


REVISION DETAILS	NAME	DATE
1. ISSUED FOR AS-BUILT	BP	4/11/16

- NOTES**
- ALL WORKS AND MATERIALS COMPLY WITH AUCKLAND COUNCIL (RDC) STANDARDS FOR ENGINEERING DESIGN AND CONSTRUCTION (NOV 2005).
 - ALL ROADS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE APPROVED ENGINEERING PLANS. SEE 60356-4ii-AB-250 FOR CONSTRUCTION DETAILS.
 - ALL FINISHED ROAD SURFACES ARE ASPHALT CONCRETE 30mm THICK. SEE 60356-4ii-AB-250 FOR DETAILS.
 - ALL FOOTPATHS ARE 125mm THICK BRUSHED CONCRETE UNLESS OTHERWISE NOTED. SEE 60356-4ii-AB-250 FOR DETAILS.
 - ALL PIPE CROSSINGS UNDER ROADS ARE CLASS 4 AND HAVE BEEN HARDFILL BACKFILLED.

LEGEND

ROAD CENTRELINE	
SINGLE SPLAY PIT	
DOUBLE SPLAY PIT	
POWER TUDD	
STREET TREES	ST18
STREET LIGHTS	SL07
STAGE BOUNDARIES	



KAREPIRO DEVELOPMENT STAGE 4ii

ROADING AND STREET TREE AS-BUILT PLAN (3 OF 3)

AUCKLAND COUNCIL

DESIGNED: BP	ISSUED FOR AS-BUILT
CHECKED:	DRAWN: SL
APPROVED:	SURVEYED: WOODS
JOB NUMBER: 60356	SCALE: 1:500 @ A3
ISSUED: 4/11/16	
DWG. NO. 60356-4ii-AB-203	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, and are within +/-50mm
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL), and are within +/-25mm

Signed:
Registered Professional Surveyor

Date: 4/11/16

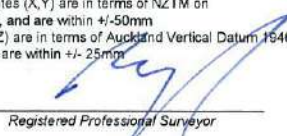
Name: William Cheung





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


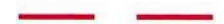
- The coordinates (X,Y) are in terms of NZTM on NZGD2000, and are within +/-50mm
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL), and are within +/- 25mm

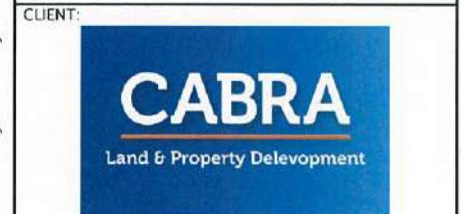
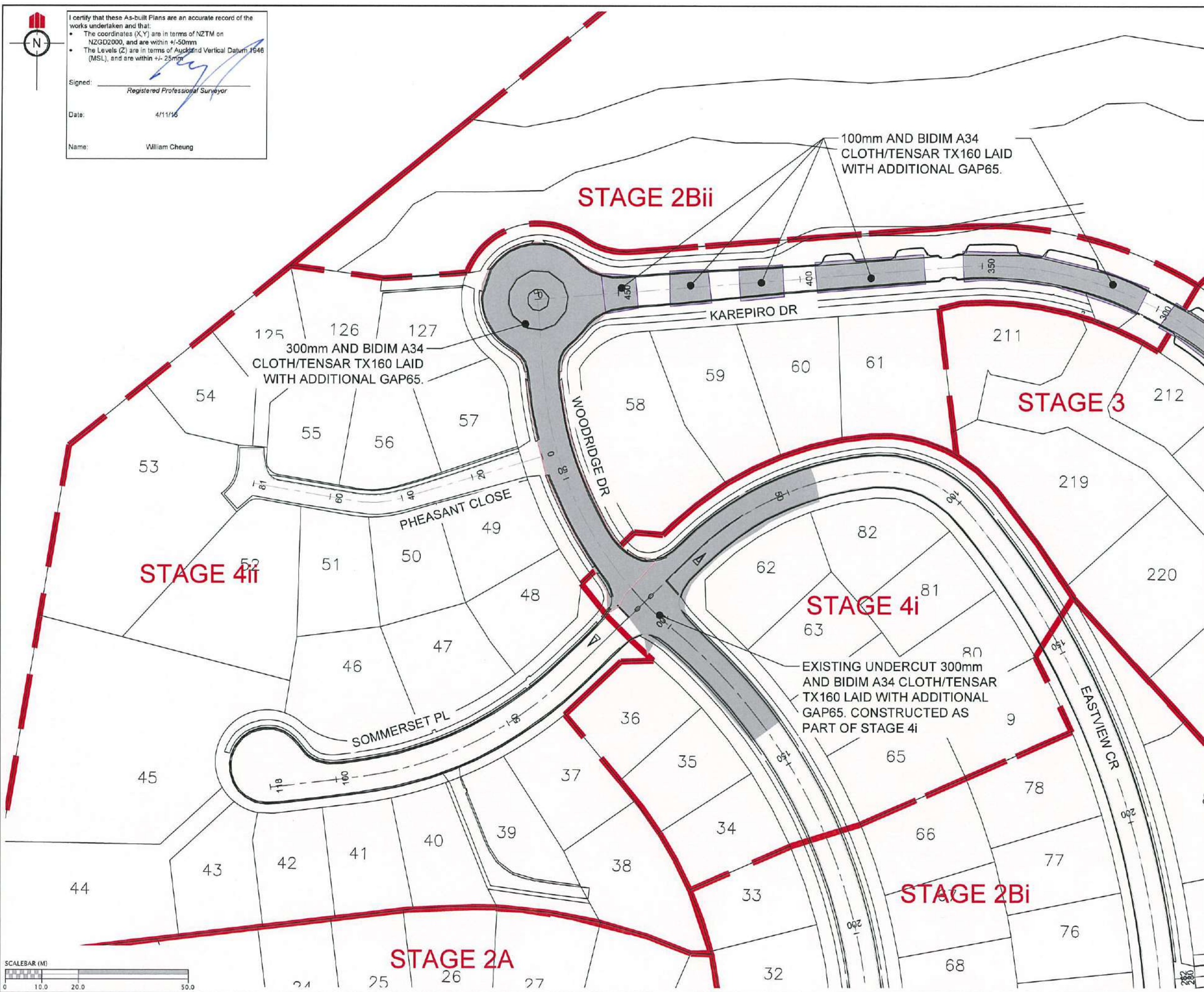
Signed: 
Registered Professional Surveyor

Date: 4/11/16

Name: William Cheung

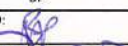

REVISION DETAILS	NAME	DATE
1. ISSUED FOR AS-BUILT	SL	4/11/16

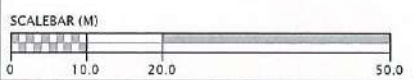
LEGEND	
UNDERCUT AREAS	
STAGE BOUNDARIES	

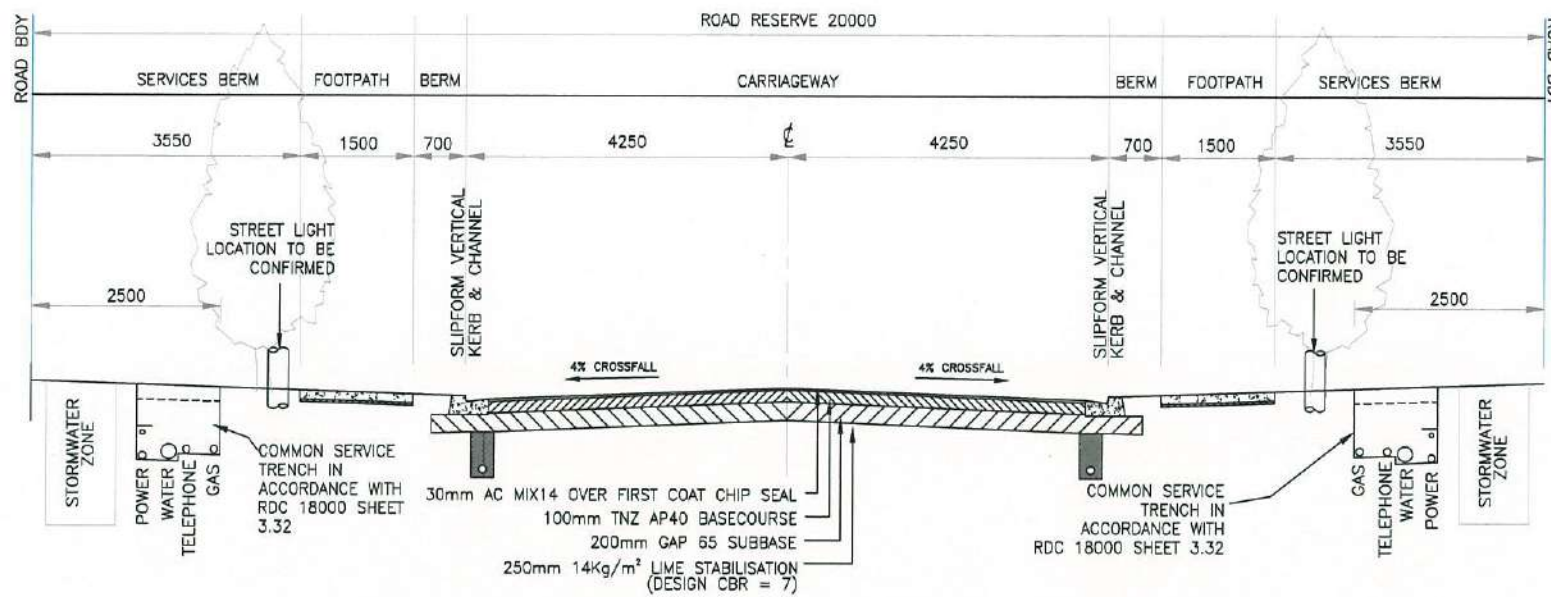


**KAREPIRO DEVELOPMENT
STAGE 4ii**

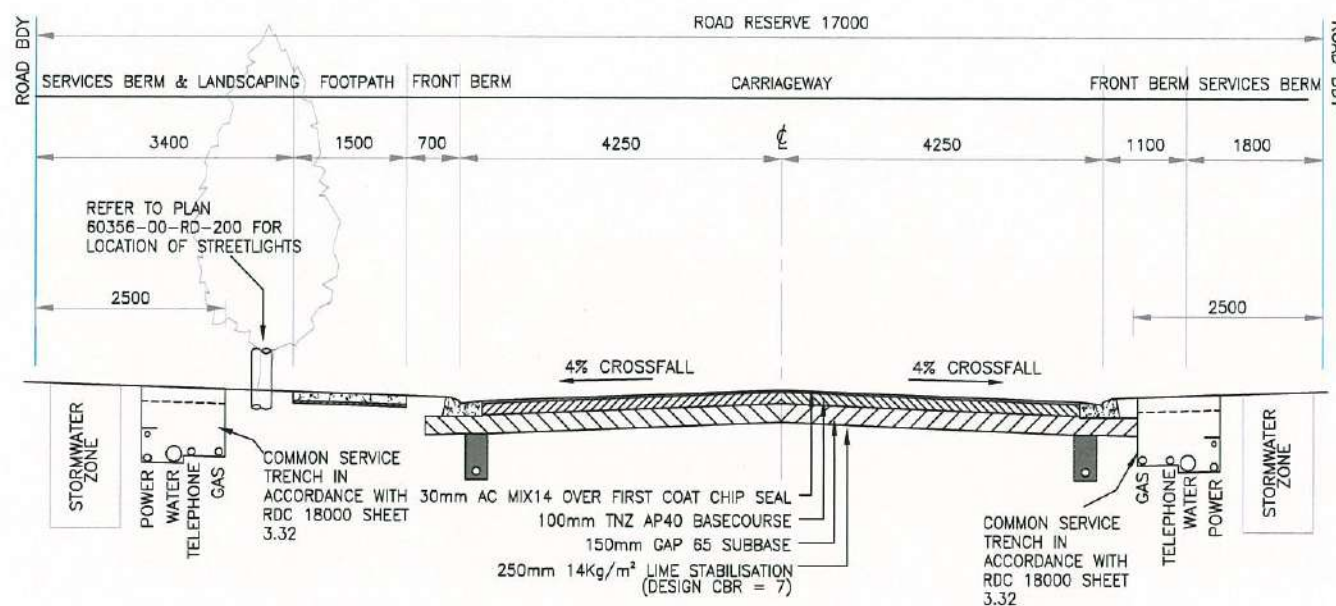
ROADING UNDERCUT AS-BUILT PLAN
AUCKLAND COUNCIL

DESIGNED: BP	ISSUED FOR AS-BUILT
CHECKED: 	DRAWN: SL
APPROVED: 	SURVEYED: WOODS
JOB NUMBER: 60356	SCALE: 1:1000 @ A3
ISSUED: 4/11/16	
DWG. NO. 60356-4ii-AB-240	REV. 1



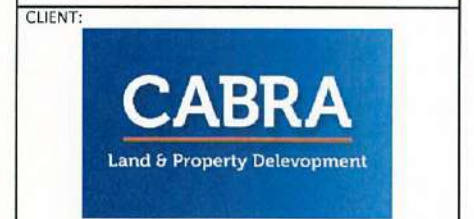


TYPICAL CROSS SECTION - WOODRIDGE DRIVE



TYPICAL CROSS SECTION - SOMMERSET PLACE

REVISION DETAILS	NAME	DATE
1. ISSUED FOR AS-BUILT	SL	4/11/16



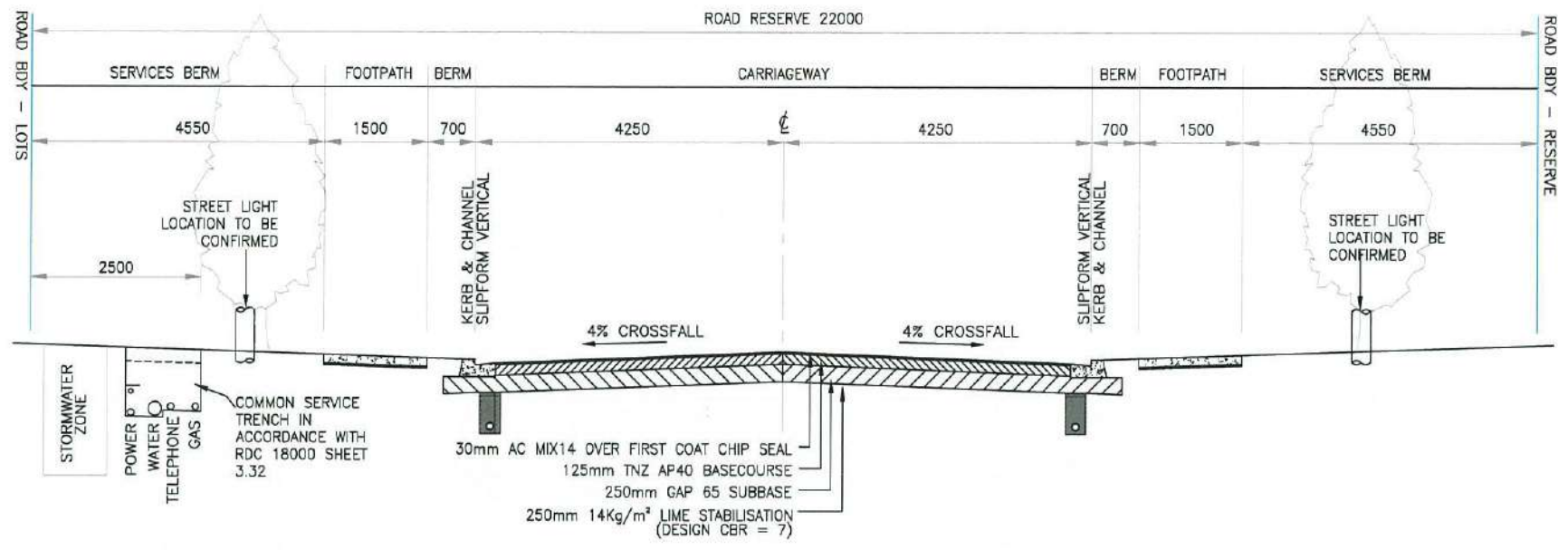
KAREPIRO DEVELOPMENT STAGES 4ii

ROADING AS-BUILT TYPICAL SECTIONS

AUCKLAND COUNCIL

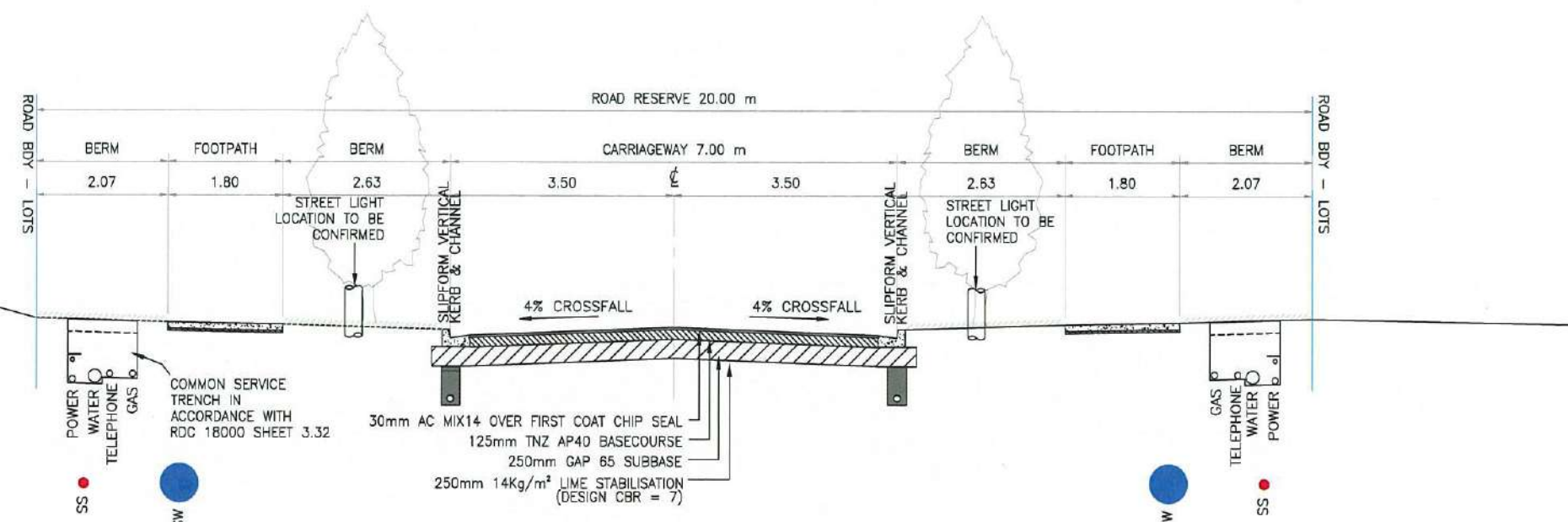
DESIGNED: BP	ISSUED FOR AS-BUILT
CHECKED: <i>[Signature]</i>	DRAWN: SL
APPROVED: <i>[Signature]</i>	SURVEYED: WOODS
JOB NUMBER: 60356	SCALE: NTS
ISSUED: 4/11/16	
DWG. NO: 60356-4ii-AB-250	REV. 1

REVISION DETAILS	NAME	DATE
1. ISSUED FOR AS-BUILT	SL	4/11/16

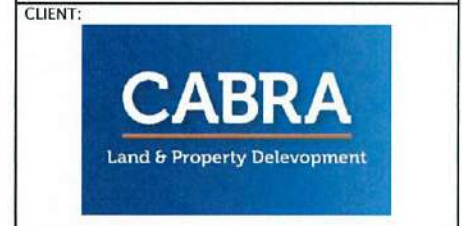


TYPICAL CROSS SECTION - KAREPIRO DRIVE
(CH 400.00 - CH 475.00m)¹

¹ ROAD CARRIAGEWAY WIDTH INCREASES FROM 7m TO 8.5m BETWEEN CH398-CH0433. ROAD RESERVE WIDTH INCREASES FROM 20m TO 22m BETWEEN CH356-CH363.



TYPICAL CROSS SECTION - KAREPIRO DRIVE
(CH 67.00 - CH 400.00m)



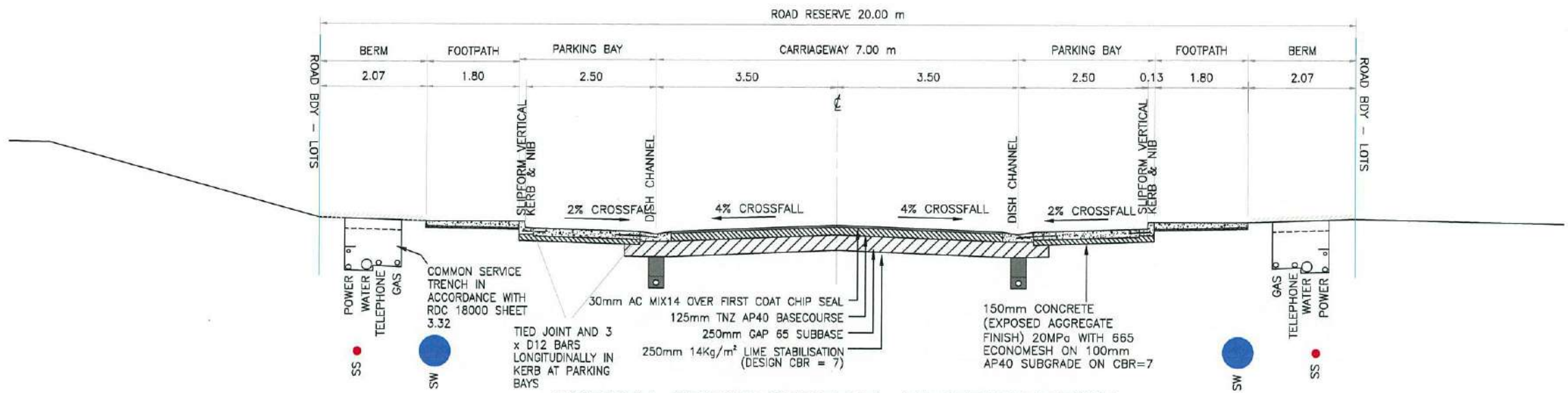
KAREPIRO DEVELOPMENT STAGES 4ii

ROADING AS-BUILT TYPICAL SECTIONS

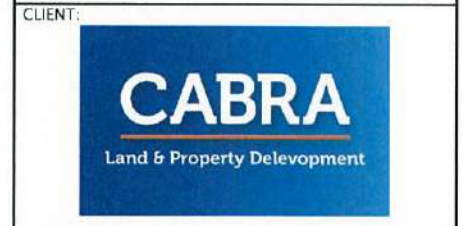
AUCKLAND COUNCIL

DESIGNED: BP	ISSUED FOR AS-BUILT
CHECKED: [Signature]	DRAWN: SL
APPROVED: [Signature]	SURVEYED: WOODS
JOB NUMBER: 60356	SCALE: NTS
ISSUED: 4/11/16	
DWG. NO. 60356-4ii-AB-251	REV. 1

REVISION DETAILS	NAME	DATE
1. ISSUED FOR AS-BUILT	SL	4/11/16



**TYPICAL CROSS SECTION - KAREPIRO DRIVE
WITH PARKING BAYS**



**KAREPIRO
DEVELOPMENT
STAGES 4ii**

ROADING AS-BUILT
TYPICAL SECTIONS

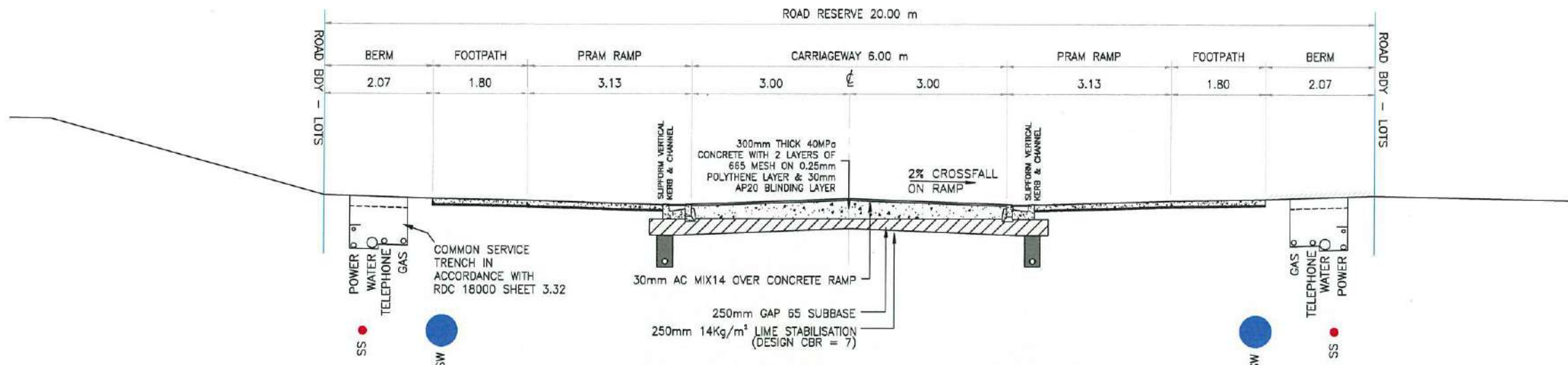
AUCKLAND COUNCIL

DESIGNED: BP	ISSUED FOR AS-BUILT
CHECKED: [Signature]	DRAWN: SL
APPROVED: [Signature]	SURVEYED: WOODS
JOB NUMBER: 60356	SCALE: NTS
ISSUED: 4/11/16	
DWG. NO. 60356-4ii-AB-252	REV. 1

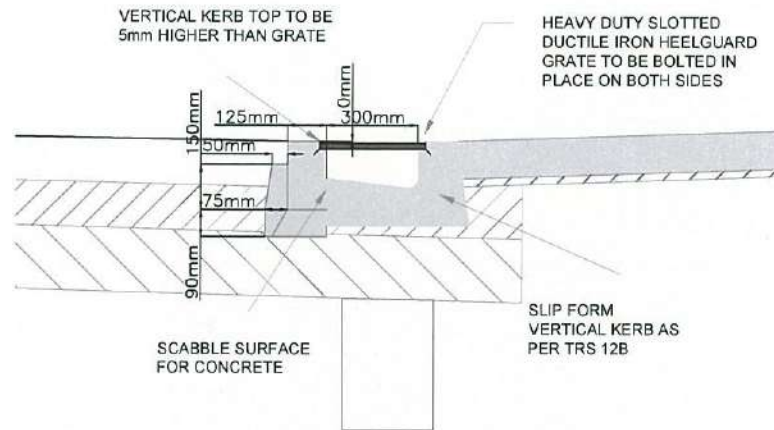
REVISION DETAILS	NAME	DATE
1. ISSUED FOR AS-BUILT	SL	4/11/16

NOTES:

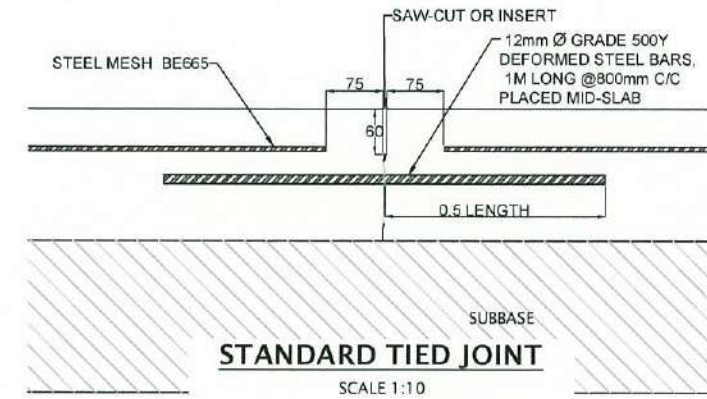
- CONCRETE RAMP CONSTRUCTION TO BE IN ACCORDANCE WITH AUCKLAND TRANSPORT DRAWING TC005 VERSION 1.



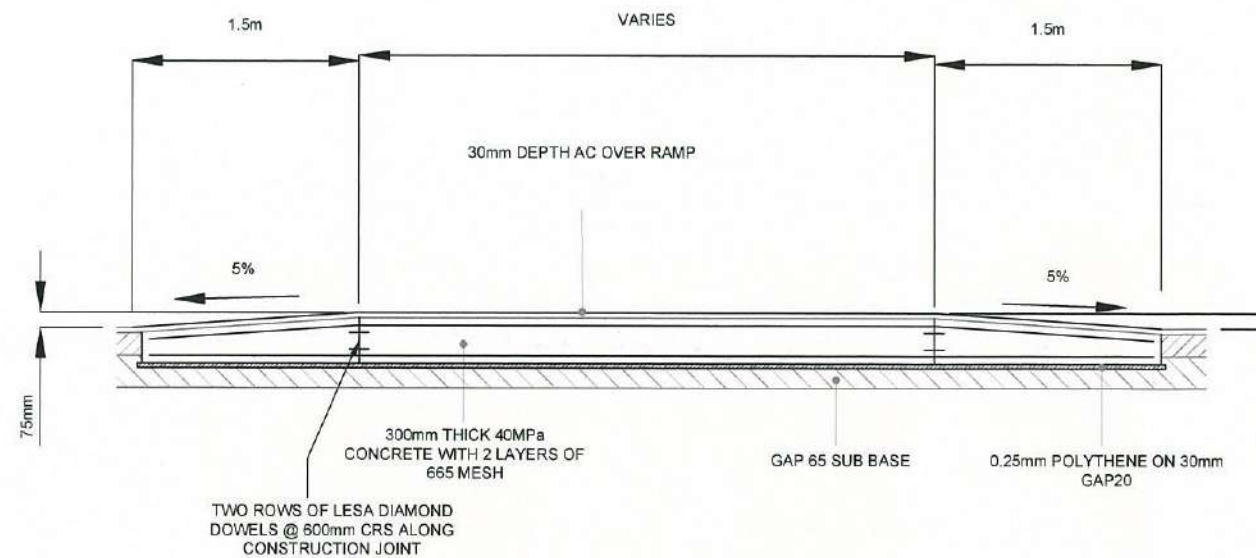
**TYPICAL CROSS SECTION - ROAD 1 (KAREPIRO DRIVE)
ROAD NARROWING/PEDESTRIAN ACCESS**
SCALE 1:100 @ A3



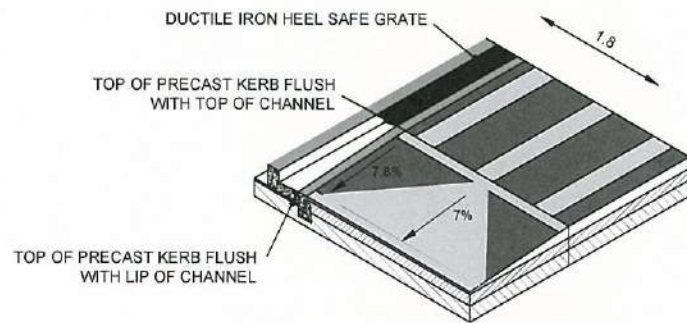
**PEDESTRIAN CROSSING
CHANNEL DETAIL**
SCALE 1:50 @ A3



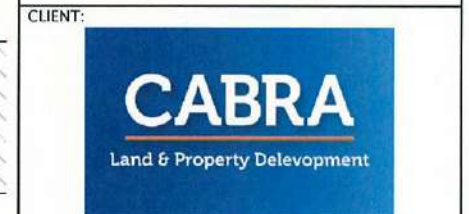
STANDARD TIED JOINT
SCALE 1:10



**PEDESTRIAN CROSSING
LONGITUDINAL SECTION**
SCALE 1:50 @ A3



**ROAD NARROWING/PEDESTRIAN ACCESS
KERB LAYOUT**
SCALE 1:100 @ A3

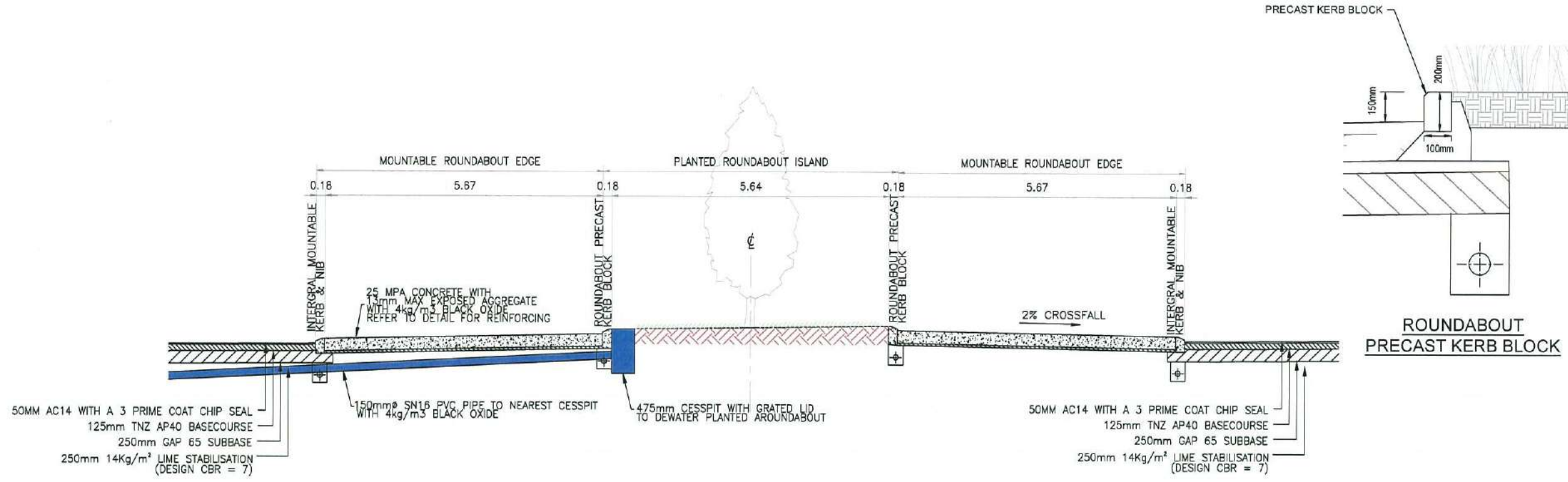


**KAREPIRO
DEVELOPMENT
STAGES 4ii**

**ROADING AS-BUILT
TYPICAL SECTIONS**

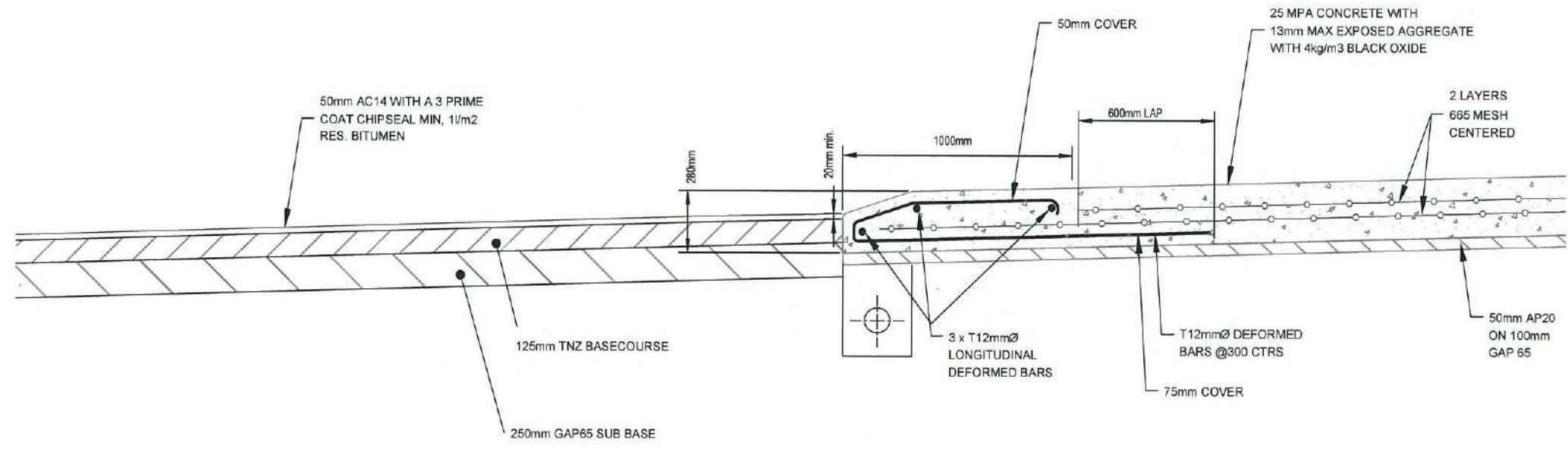
AUCKLAND COUNCIL

DESIGNED: BP	ISSUED FOR AS-BUILT
CHECKED:	DRAWN: SL
APPROVED:	SURVEYED: WOODS
JOB NUMBER: 60356	SCALE: NTS
ISSUED: 4/11/16	
DWG. NO. 60356-4ii-AB-253	REV. 1



TYPICAL CROSS SECTION - ROAD 1&2 ROUNDABOUT ISLAND

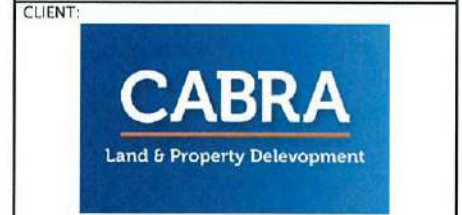
SCALE 1:100 @ A3



ROUNDABOUT COLLAR DETAIL

SCALE 1:25 @ A3

REVISION DETAILS	NAME	DATE
1. ISSUED FOR AS-BUILT	SL	4/11/16



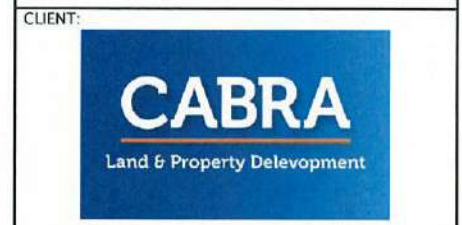
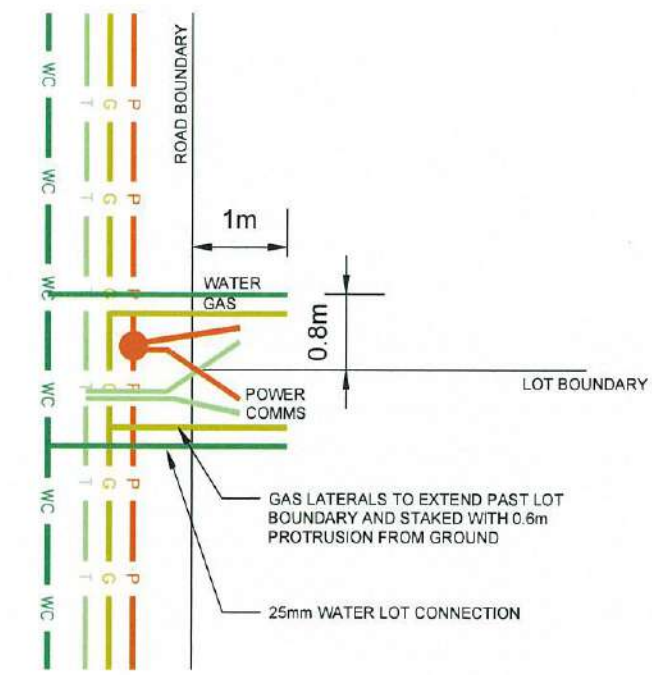
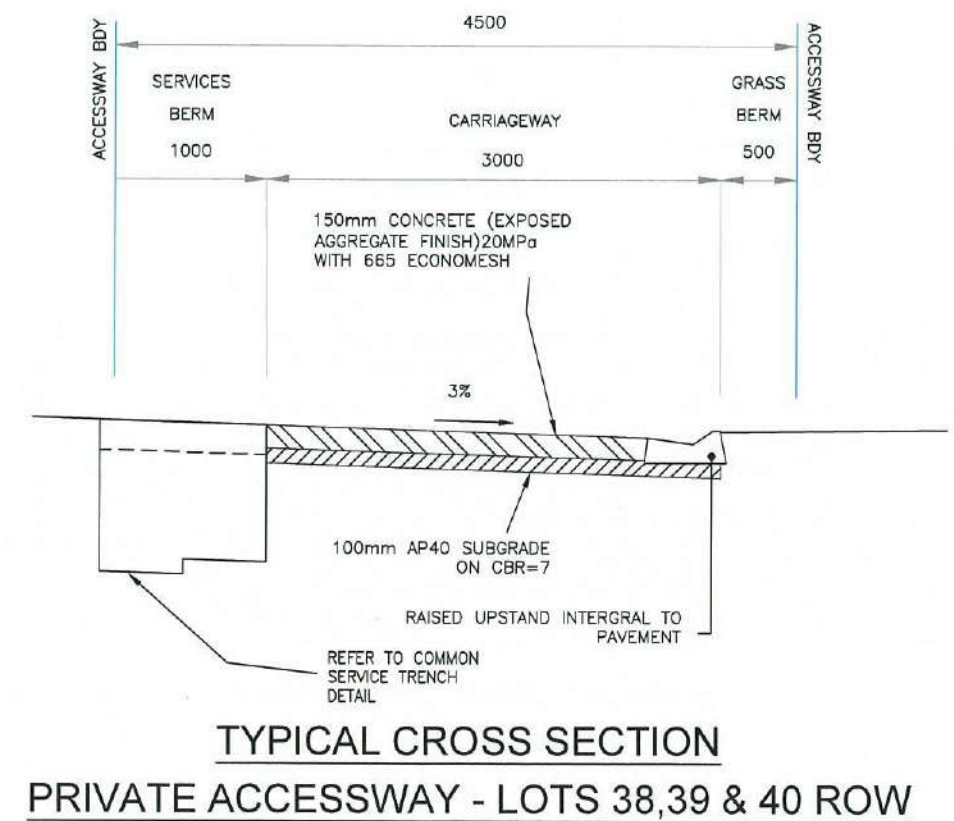
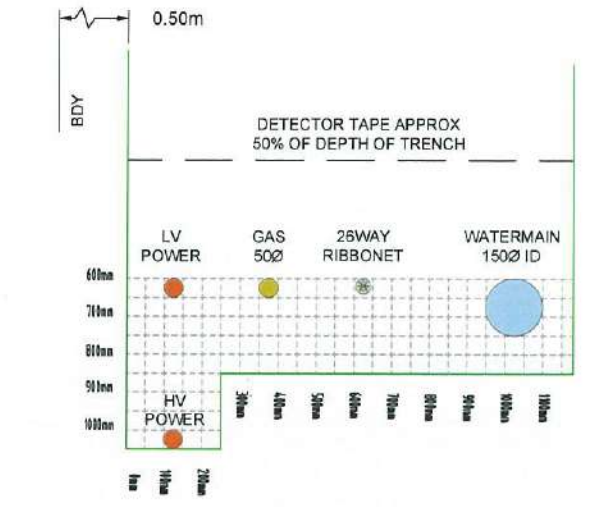
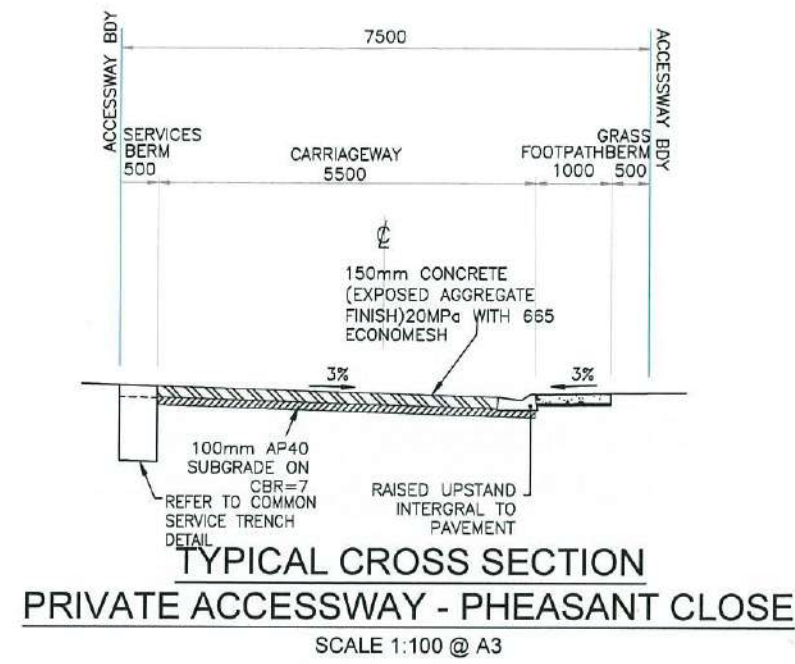
KAREPIRO DEVELOPMENT STAGES 4ii

ROADING AS-BUILT TYPICAL SECTIONS

AUCKLAND COUNCIL

DESIGNED: BP	ISSUED FOR AS-BUILT
CHECKED: [Signature]	DRAWN: SL
APPROVED: [Signature]	SURVEYED: WOODS
JOB NUMBER: 60356	SCALE: NTS
ISSUED: 4/11/16	
DWG. NO. 60356-4ii-AB-254	REV. 1

REVISION DETAILS	NAME	DATE
1. ISSUED FOR AS-BUILT	SL	4/11/16



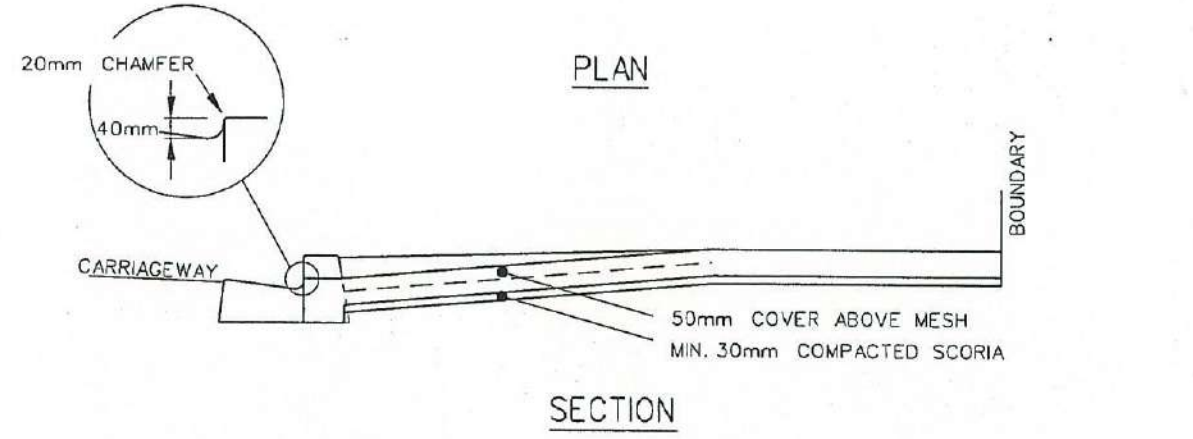
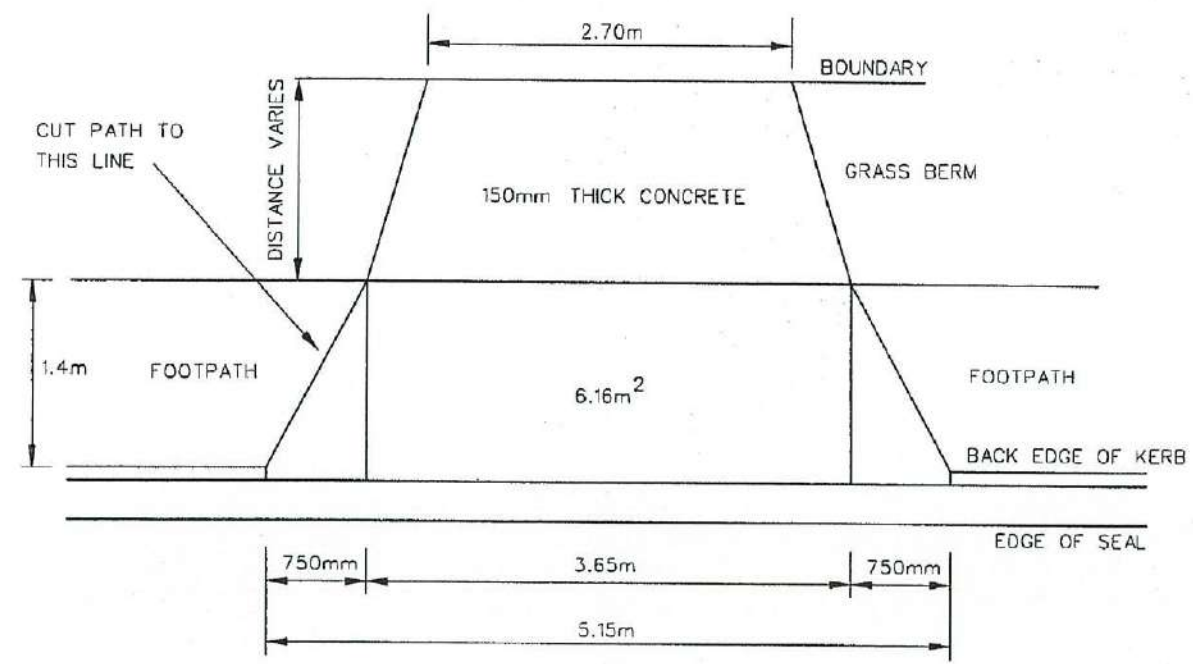
**KAREPIRO
DEVELOPMENT
STAGES 4ii**

**ROADING AS-BUILT
TYPICAL SECTIONS**

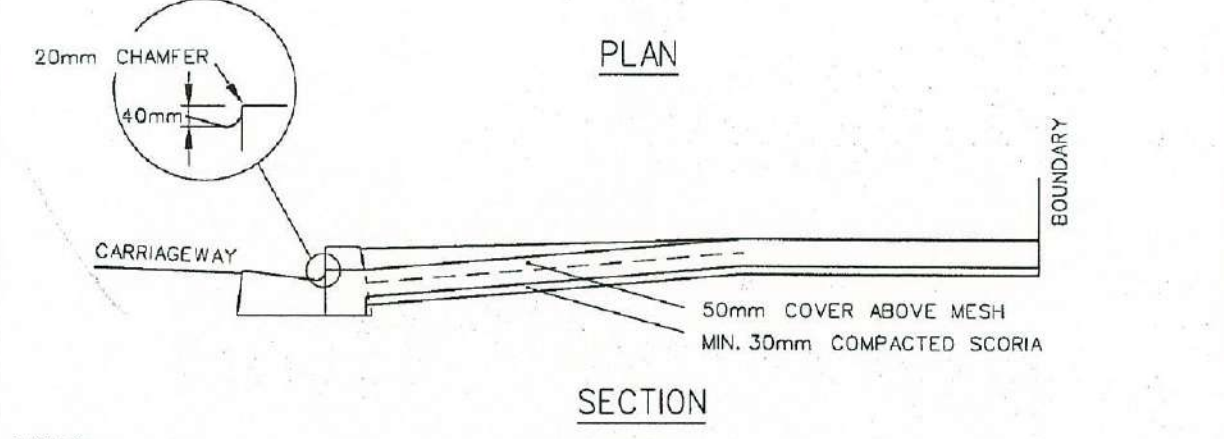
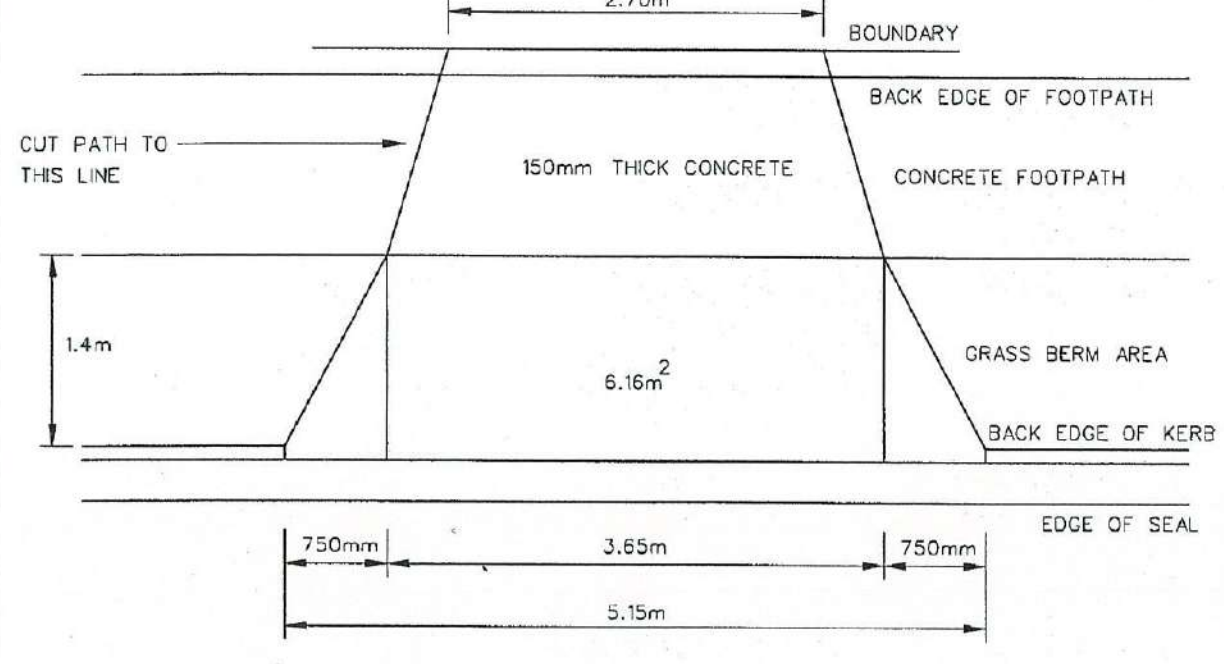
AUCKLAND COUNCIL

DESIGNED: BR	ISSUED FOR AS-BUILT
CHECKED: [Signature]	DRAWN: SL
APPROVED: [Signature]	SURVEYED: WOODS
JOB NUMBER: 60356	SCALE: AS SHOWN
ISSUED: 4/11/16	
DWG. NO. 60356-4ii-AB-255	REV. 1

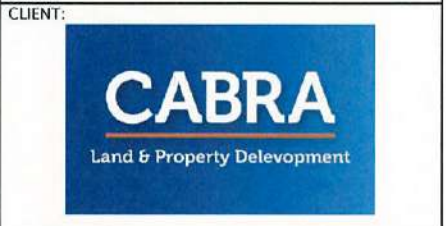
REVISION DETAILS	NAME	DATE
1. ISSUED FOR AS-BUILT	SL	4/11/16



- NOTES:-
1. Work must be inspected by the Council representative before any concrete is poured.
 2. Concrete strength shall be 20 MPa at 28 days.
 3. Excavation shall be fenced and lit at night.
 4. Existing concrete to be cut out neatly and removed.
 5. Brick or precast concrete paving units may be used only between the property boundary and the rear of the footpath to comply with NZS 3116:1981 Interlocking Concrete Paving.
 6. Business crossing plan dimensions to be specifically designed, to accommodate all vehicle types that may be required to access the site.
 7. Residential crossings to be min. 150mm thick. May be reduced to 110mm thick if one layer of 665 mesh used.
 8. Business crossings shall be 200mm thick without mesh.
 9. Refer also to sheet 3.8 - TYPICAL VEHICLE CROSSING SLOPE DETAILS.
 10. Crossings shall not be sited over or through traffic control devices or formed parking bays.



- NOTES:-
1. Work must be inspected by the Council representative before any concrete is poured.
 2. Concrete strength shall be 20 MPa at 28 days.
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 5. Brick or precast concrete paving units may be used only between the property boundary and the rear of the footpath to comply with NZS 3116:1981 Interlocking Concrete Paving.
 6. Business crossing plan dimensions to be specifically designed, to accommodate all vehicle types that may be required to access the site.
 7. Residential crossings to be min. 150mm thick. May be reduced to 110mm thick if one layer of 665 mesh used.
 8. Business crossings shall be 200mm thick without mesh.
 9. Refer also to sheet 3.8 - TYPICAL VEHICLE CROSSING SLOPE DETAILS.
 10. Crossings shall not be sited over or through traffic control devices or formed parking bays.



KAREPIRO DEVELOPMENT STAGES 4ii

ROADING AS-BUILT TYPICAL SECTIONS

AUCKLAND COUNCIL

STANDARD DETAIL: **VEHICLE CROSSING (FOOTPATH ADJACENT TO KERB)**

Copyright on this Drawing is Reserved
DATE: June 2005
NOT TO SCALE

RDC NO: 18000 SHEET NO: 3.4

REV: _____

Head Office: 50 Centreway Road, Orero
Private Bag 300, Orero, 1461, New Zealand
Tel: 0800 4265169, Fax: (03) 4267280
Email: info@rodneynz.govt.nz

STANDARD DETAIL: **VEHICLE CROSSING (FOOTPATH AWAY FROM KERB)**

Copyright on this Drawing is Reserved
DATE: June 2005
NOT TO SCALE

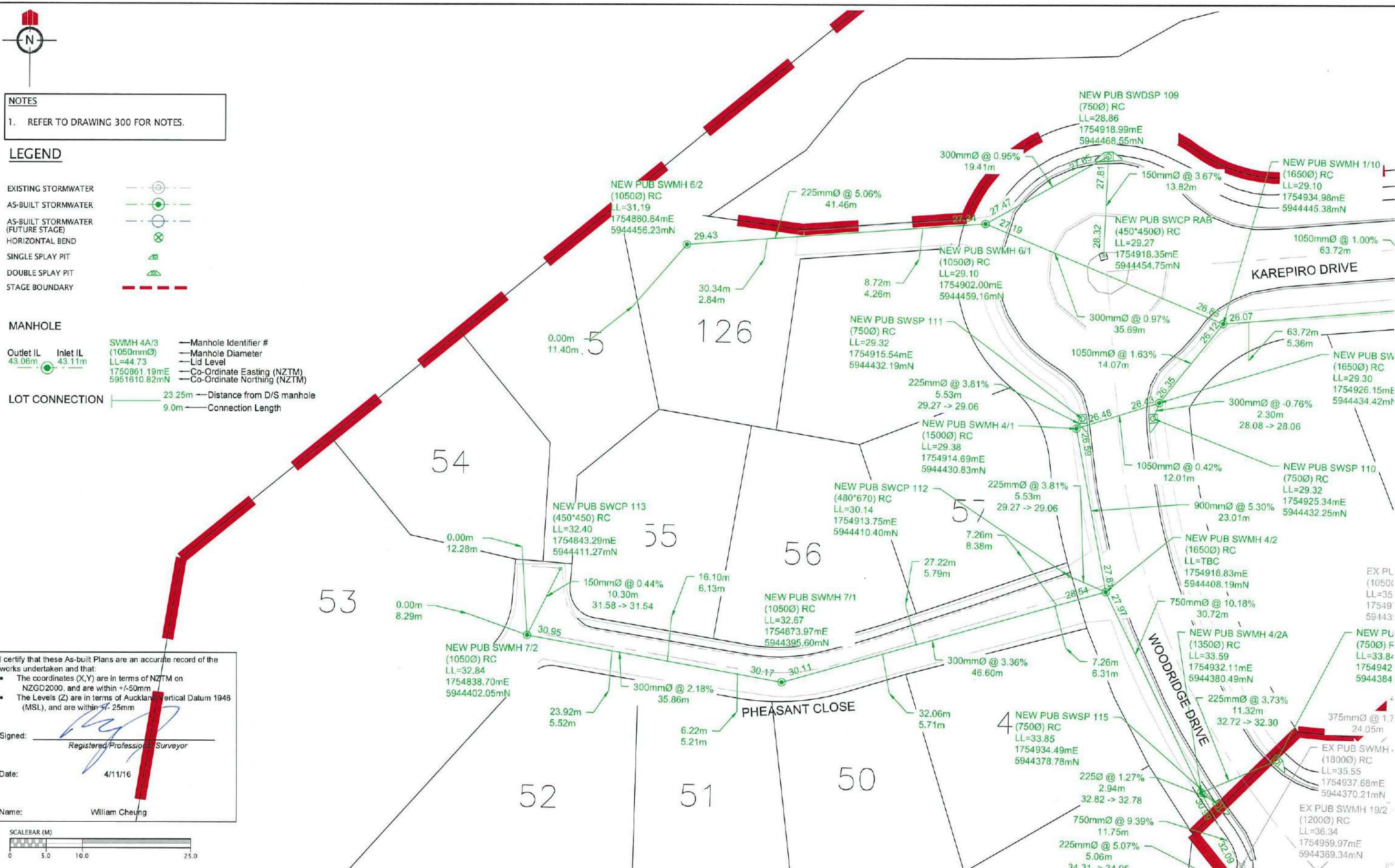
RDC NO: 18000 SHEET NO: 3.5

REV: _____

Head Office: 50 Centreway Road, Orero
Private Bag 300, Orero, 1461, New Zealand
Tel: 0800 4265169, Fax: (03) 4267280
Email: info@rodneynz.govt.nz

DESIGNED: BP	ISSUED FOR AS-BUILT
CHECKED: _____	DRAWN: SL
APPROVED: _____	SURVEYED: WOODS
JOB NUMBER: 60356	SCALE: AS SHOWN
ISSUED: 4/11/16	

DWG. NO: 60356-4ii-AB-256	REV: 1
---------------------------	--------



NOTES
 1. REFER TO DRAWING 300 FOR NOTES.

LEGEND

EXISTING STORMWATER
 AS-BUILT STORMWATER
 AS-BUILT STORMWATER (FUTURE STAGE)
 HORIZONTAL BEND
 SINGLE SPLAY PIT
 DOUBLE SPLAY PIT
 STAGE BOUNDARY

MANHOLE

Outlet IL 43.06m Inlet IL 43.11m
 SVMMH 4A/3 (1050mmØ) LL=44.73
 1750861.19mE 5951610.82mN

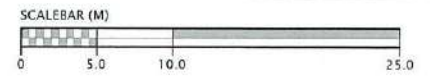
Manhole Identifier #
 Manhole Diameter
 Lid Level
 Co-Ordinate Easting (NZTM)
 Co-Ordinate Northing (NZTM)

LOT CONNECTION
 23.25m Distance from D/S manhole
 9.0m Connection Length

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, and are within +/-50mm
- The Levels (Z) are in terms of Auckland Vertical Datum 1948 (MSL), and are within +/-25mm

Signed: *[Signature]*
 Registered Professional Surveyor
 Date: 4/11/16
 Name: William Cheung



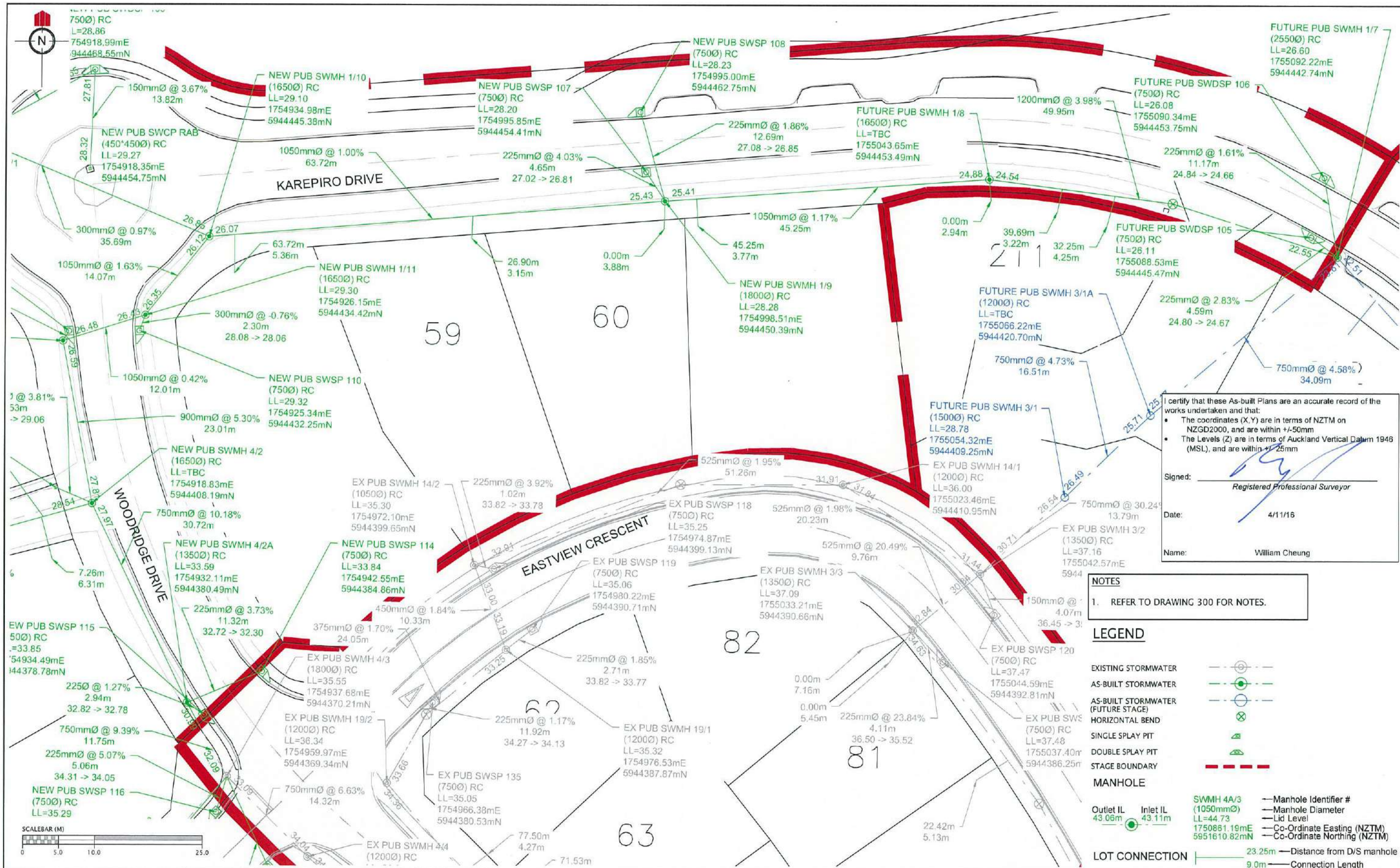
REVISION DETAILS	NAME	DATE	CLIENT
1. ISSUED FOR AS-BUILT	BP	4/11/16	CABRA



KAREPIRO DEVELOPMENT - STAGE 4ii
 STORMWATER AS-BUILT PLAN
 (SHEET 1 OF 3)
 AUCKLAND COUNCIL



DESIGNED:	ISSUED FOR AS-BUILT
BP	SL
CHECKED:	DRAWN:
APPROVED:	SURVEYED:
JOB NUMBER: 60356	SCALE: 1:500 @ A3
ISSUED: 4/11/16	REV. 1
DWG. NO. 60356-4ii-AB-301	



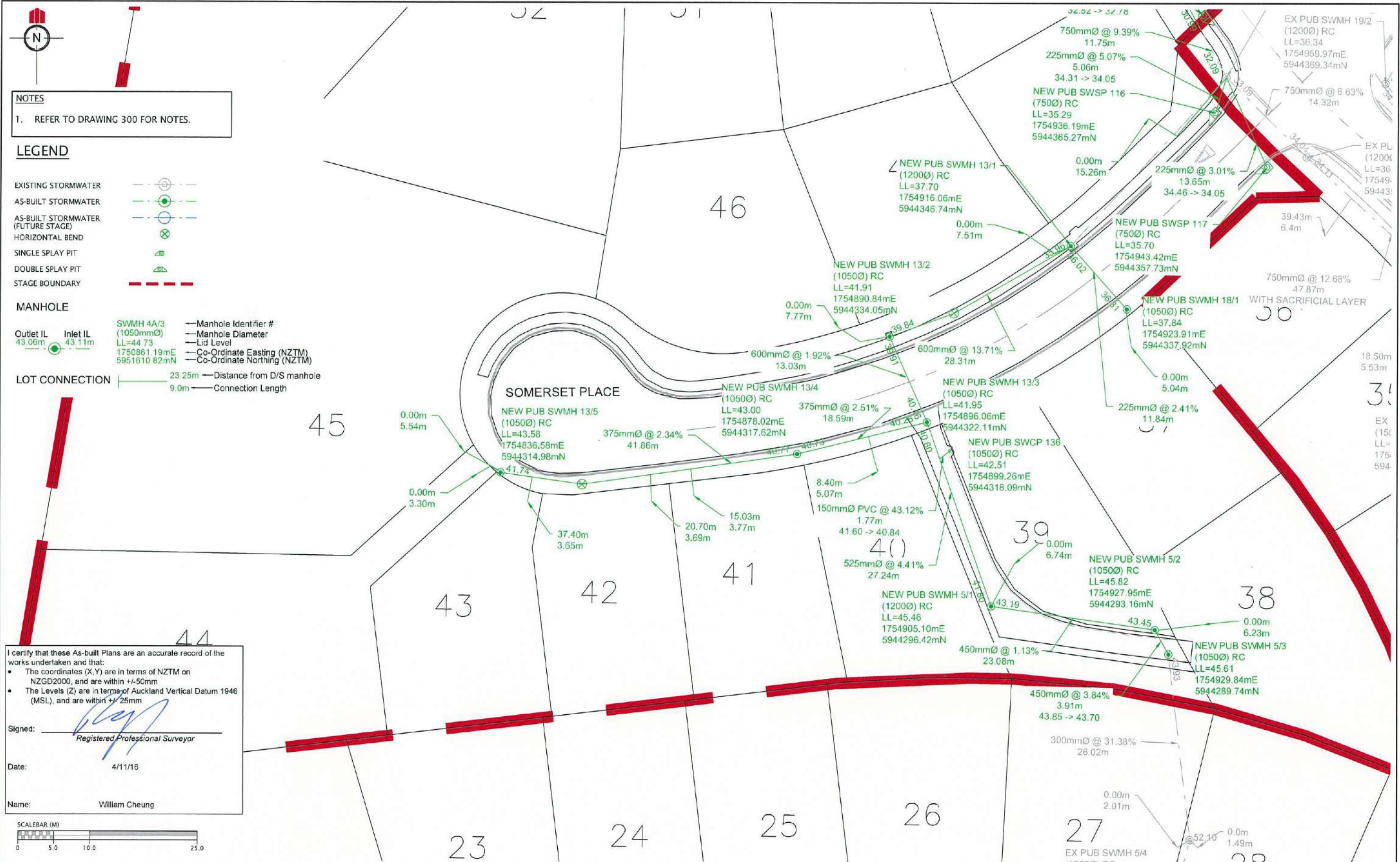
REVISION DETAILS	NAME	DATE	CLIENT
1. ISSUED FOR AS-BUILT	BP	4/11/16	

CABRA
Land & Property Development

KAREPIRO DEVELOPMENT - STAGE 4ii
STORMWATER AS-BUILT PLAN
(SHEET 2 OF 3)
AUCKLAND COUNCIL

WOODS
Engineers, Surveyors, Planners.

DESIGNED: BP	ISSUED FOR AS-BUILT
CHECKED: [Signature]	DRAWN: SL
APPROVED: [Signature]	SURVEYED: WOODS
JOB NUMBER: 60356	SCALE: 1:500 @ A3
ISSUED: 4/11/16	
DWG. NO. 60356-4ii-AB-302	REV. 1



NOTES
 1. REFER TO DRAWING 300 FOR NOTES.

LEGEND

EXISTING STORMWATER
 AS-BUILT STORMWATER
 AS-BUILT STORMWATER (FUTURE STAGE)
 HORIZONTAL BEND
 SINGLE SPLAY PIT
 DOUBLE SPLAY PIT
 STAGE BOUNDARY

MANHOLE

Outlet IL 43.06m Inlet IL 43.11m
 SWMH 4A/3 (1050mmØ) LL=44.73
 1750861.19mE 5951610.82mN

Manhole Identifier #
 Manhole Diameter
 Lid Level
 Co-Ordinate Easting (NZTM)
 Co-Ordinate Northing (NZTM)

LOT CONNECTION
 23.25m Distance from D/S manhole
 9.0m Connection Length

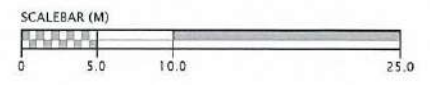
I certify that these As-built Plans are an accurate record of the works undertaken and that:

- The coordinates (X,Y) are in terms of NZTM on NZGD2000, and are within +/-50mm
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL), and are within +/-25mm

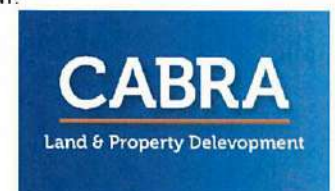
Signed: *[Signature]*
 Registered Professional Surveyor

Date: 4/11/16

Name: William Cheung



REVISION DETAILS	NAME	DATE	CLIENT:
1. ISSUED FOR AS-BUILT	BP	4/11/16	



KAREPIRO DEVELOPMENT - STAGE 4ii
 STORMWATER AS-BUILT PLAN
 (SHEET 3 OF 3)
 AUCKLAND COUNCIL



DESIGNED:	ISSUED FOR AS-BUILT
BP	SL
CHECKED: <i>[Signature]</i>	DRAWN: WOODS
APPROVED: <i>[Signature]</i>	SURVEYED: WOODS
JOB NUMBER: 60356	SCALE: 1:500 @ A3
ISSUED: 4/11/16	
DWG. NO. 60356-4ii-AB-303	REV. 1



DWG 60356-4ii-AB-301

NOTES


1. ALL WORKS AND MATERIALS COMPLY WITH AUCKLAND COUNCIL (RDC) STANDARDS FOR ENGINEERING DESIGN AND CONSTRUCTION ISSUE JANUARY 2009 AND (WSL) CODE OF PRACTICE FOR WW.
2. ALL PIPE BEDDING COMPLIES WITH AC STANDARD DETAIL DRAWINGS 18000 SHEET 4.4 & SHEET 4.6 AND WITH WITH WSL CODE OF PRACTICE.
3. WW PIPES ARE 150mm DIA. uPVC SN16 UNLESS OTHERWISE NOTED IN THE DRAWINGS, IN WHICH CASE SUCH NOTES SHALL TAKE PRECEDENCE.
4. ALL PIPE CROSSINGS UNDER ROADS ARE HARDFILL BACKFILLED.
5. ALL WW 100mm DIA. RAMPED RISERS HAVE BEEN EXTENDED AND CAPPED OFF 1.0m BELOW THE FINISHED GROUND SURFACE.
6. ALL PRIVATE DRAINAGE CONNECTIONS ARE 100mm \varnothing .
7. ALL NEW DRAINAGE LINES ARE PUBLIC UNLESS NOTED AND ARE TO BE VESTED IN AUCKLAND COUNCIL AS PUBLIC DRAINAGE. ALL NEW DRAINAGE LINES MARKED 'PVT' ARE TO REMAIN PRIVATE.
8. STAGE 4ii INCLUDES LOTS 37-61 & 125-127.
9. LOT BOUNDARIES ARE SUBJECT TO FINAL SURVEY.

LEGEND

- EXISTING WASTEWATER
- AS-BUILT WASTEWATER
- AS-BUILT WASTEWATER (FUTURE STAGE)
- STAGE BOUNDARIES
- HORIZONTAL BENDS

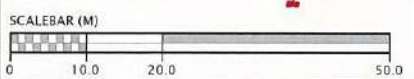
I certify that these As-built Plans are an accurate record of the works undertaken and that:

- The coordinates (X,Y) are in terms of NZTM on NZGD2000, and are within +/-50mm
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL), and are within +/-25mm

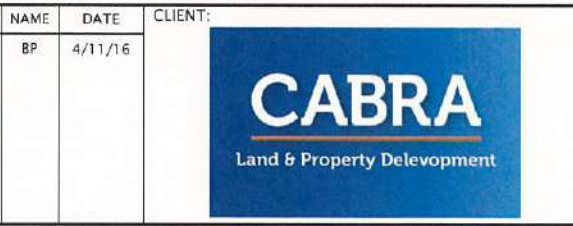
Signed: 
Registered Professional Surveyor

Date: 4/11/16

Name: William Cheung



REVISION DETAILS	NAME	DATE	CLIENT:
1. ISSUED FOR AS-BUILT	BP	4/11/16	

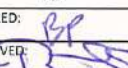



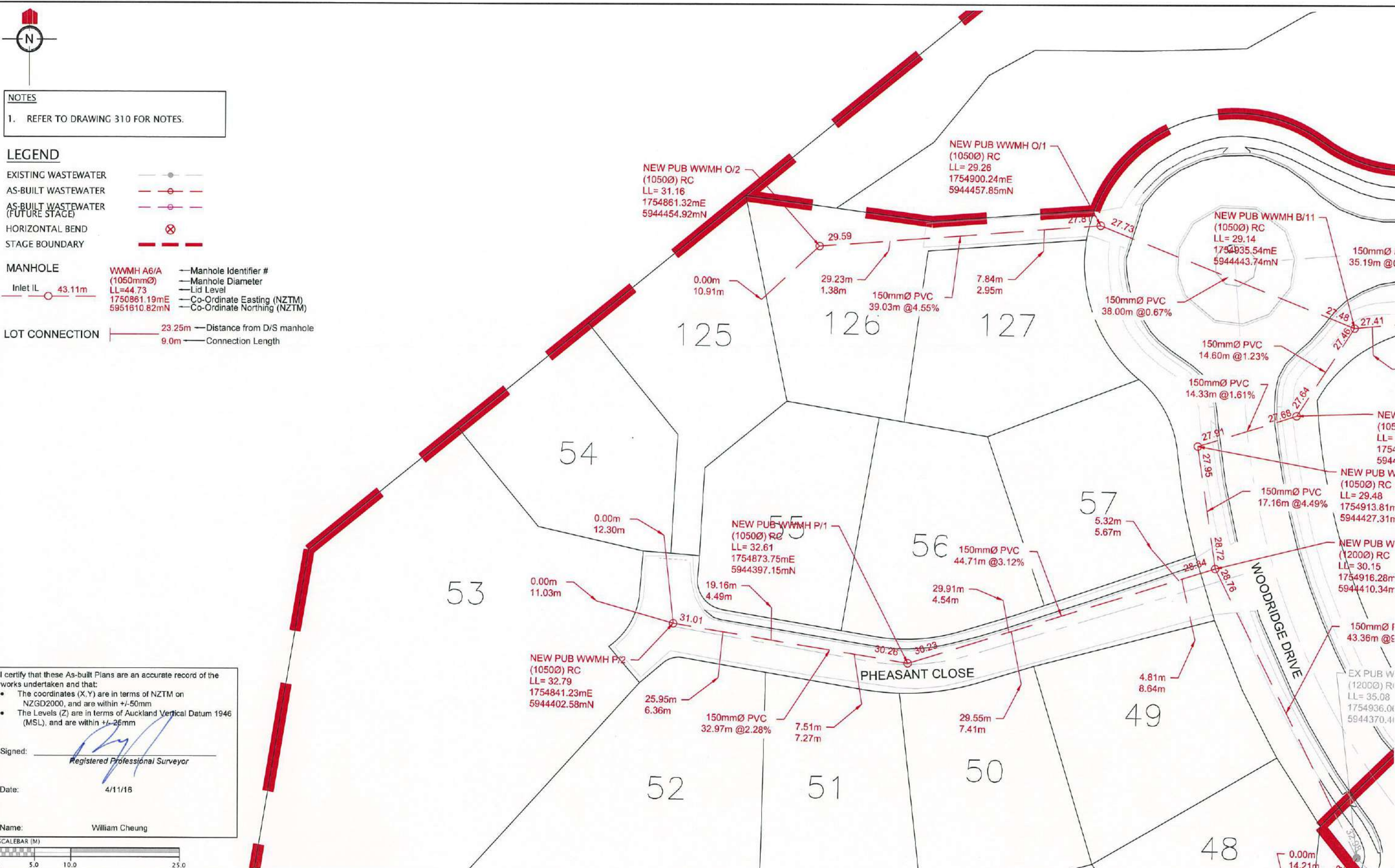
KAREPIRO DEVELOPMENT - STAGE 4ii

WASTEWATER AS-BUILT PLAN

AUCKLAND COUNCIL



DESIGNED: BP	ISSUED FOR AS-BUILT
CHECKED: 	DRAWN: SL
APPROVED: 	SURVEYED: WOODS
JOB NUMBER: 60356	SCALE: 1:1000 @ A3
ISSUED: 4/11/16	
DWG. NO. 60356-4ii-AB-310	REV. 1



NOTES
 1. REFER TO DRAWING 310 FOR NOTES.

LEGEND

EXISTING WASTEWATER
 AS-BUILT WASTEWATER
 AS-BUILT WASTEWATER (FUTURE STAGE)
 HORIZONTAL BEND
 STAGE BOUNDARY

MANHOLE

WWMH A6/A (1050mmØ)
 LL=44.73
 1750861.19mE
 5951610.82mN

Manhole Identifier #
 Manhole Diameter
 Lid Level
 Co-Ordinate Easting (NZTM)
 Co-Ordinate Northing (NZTM)

LOT CONNECTION

23.25m Distance from D/S manhole
 9.0m Connection Length

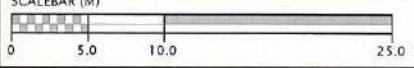
I certify that these As-built Plans are an accurate record of the works undertaken and that:

- The coordinates (X,Y) are in terms of NZTM on NZGD2000, and are within +/-50mm
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL), and are within +/-25mm

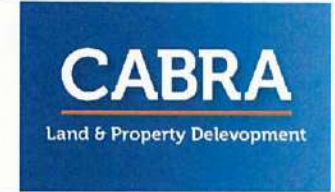
Signed: *[Signature]*
 Registered Professional Surveyor

Date: 4/11/16

Name: William Cheung



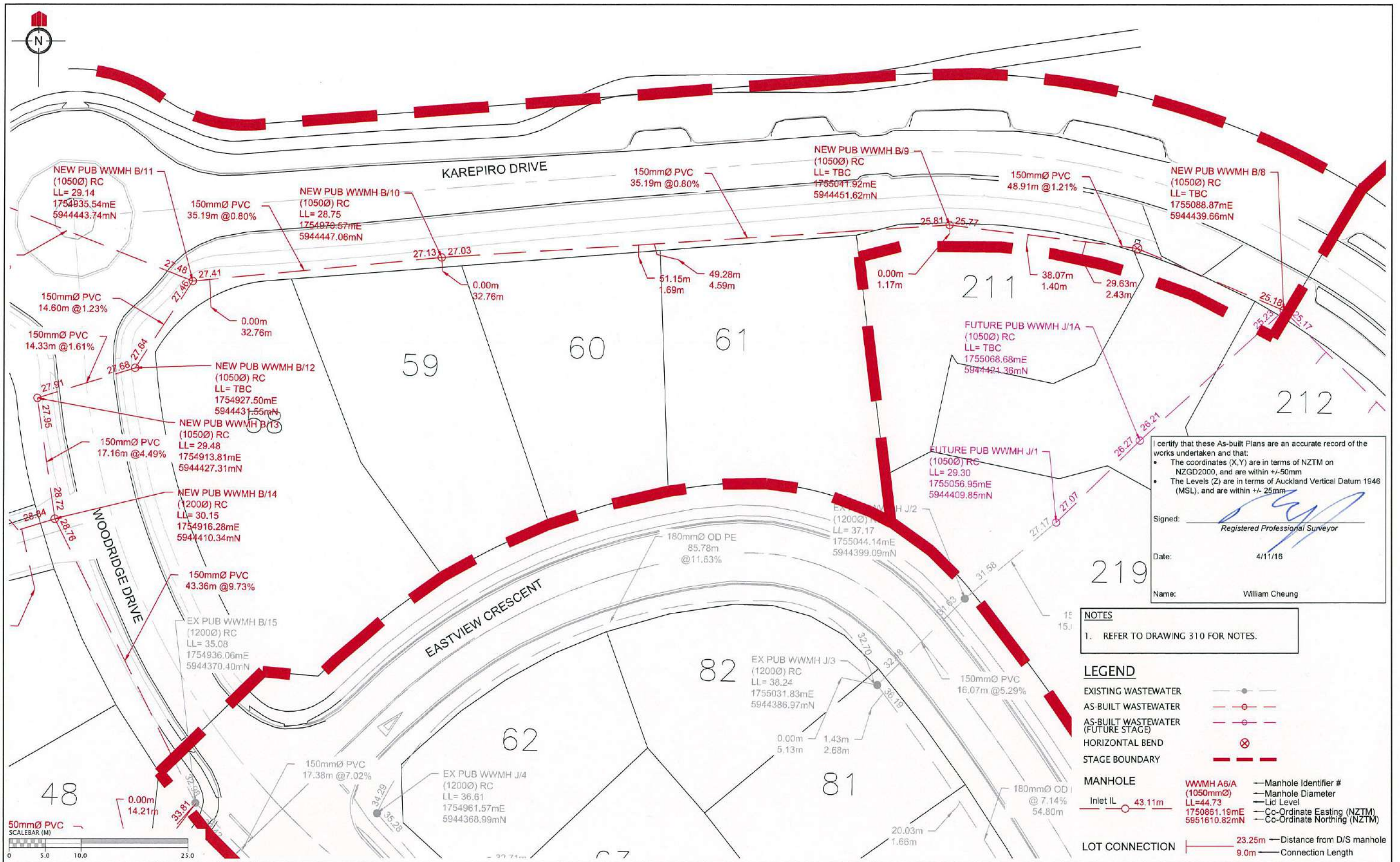
REVISION DETAILS	NAME	DATE	CLIENT:
1. ISSUED FOR AS-BUILT	BP	4/11/16	



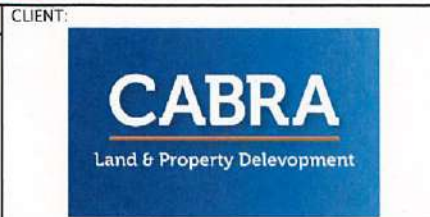
KAREPIRO DEVELOPMENT - STAGE 4ii
 STORMWATER AS-BUILT PLAN
 (SHEET 1 OF 3)
 AUCKLAND COUNCIL



DESIGNED: BP	ISSUED FOR AS-BUILT
CHECKED: <i>[Signature]</i>	DRAWN: SL
APPROVED: <i>[Signature]</i>	SURVEYED: WC
JOB NUMBER: 60356	SCALE: 1:500 @ A3
ISSUED: 4/11/16	
DWG. NO. 60356-4ii-AB-311	REV. 1



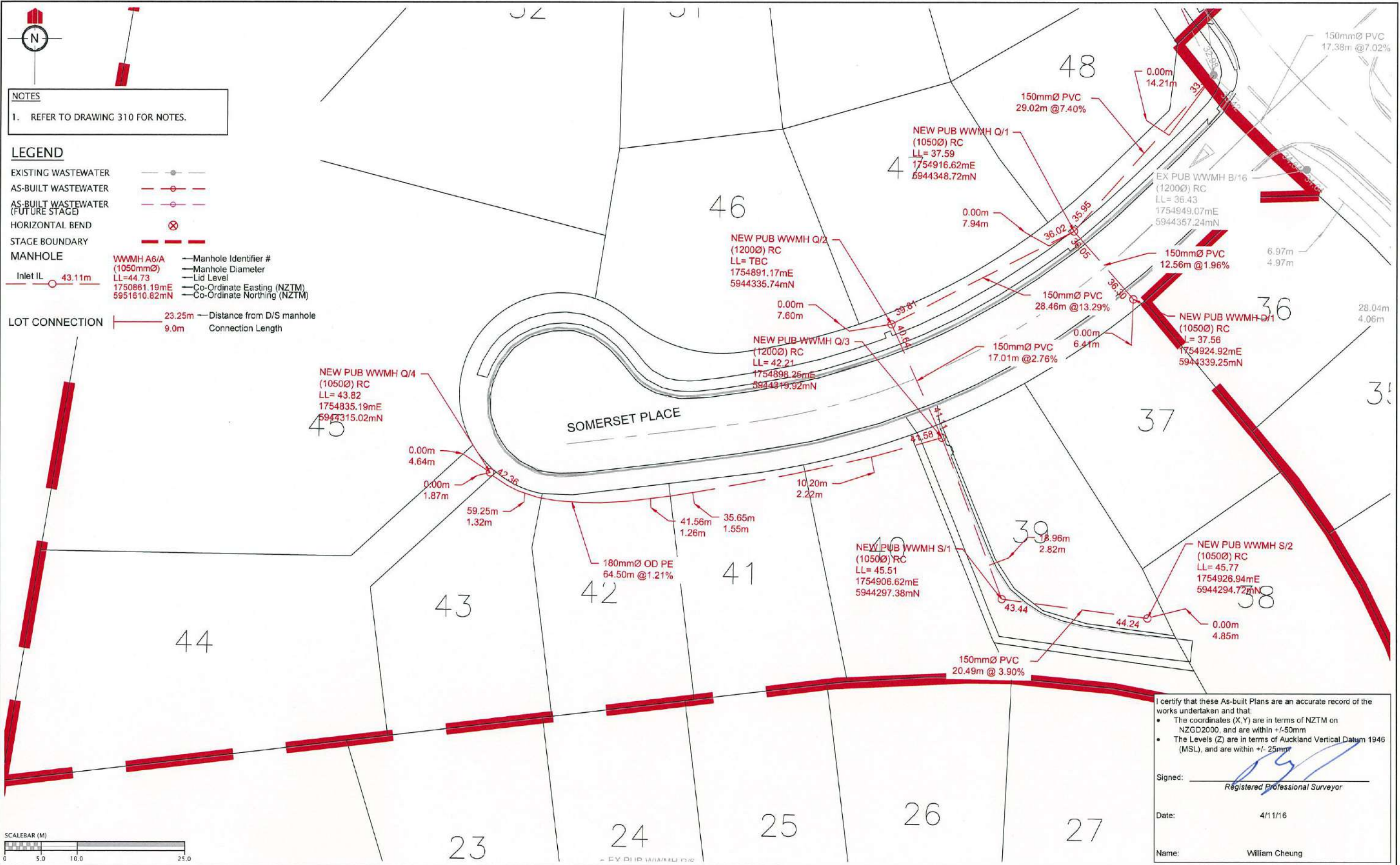
REVISION DETAILS	NAME	DATE	CLIENT
1. ISSUED FOR AS-BUILT	BP	4/11/16	



KAREPIRO DEVELOPMENT - STAGE 4ii
 STORMWATER AS-BUILT PLAN
 (SHEET 2 OF 3)
 AUCKLAND COUNCIL



DESIGNED:	ISSUED FOR AS-BUILT
BP	
CHECKED: [Signature]	DRAWN: SL
APPROVED: [Signature]	SURVEYED: WC
JOB NUMBER: 60356	SCALE: 1:500 @ A3
ISSUED: 4/11/16	
DWG. NO. 60356-4ii-AB-312	REV. 1



NOTES
 1. REFER TO DRAWING 310 FOR NOTES.

LEGEND

EXISTING WASTEWATER —●—
 AS-BUILT WASTEWATER —○—
 AS-BUILT WASTEWATER (FUTURE STAGE) —○—
 HORIZONTAL BEND ⊗
 STAGE BOUNDARY — — — — —
 MANHOLE

WWMH A6/A (10500) RC
 LL=44.73
 1750861.19mE
 5951610.82mN

Manhole Identifier #
 Manhole Diameter
 Lid Level
 Co-Ordinate Easting (NZTM)
 Co-Ordinate Northing (NZTM)

LOT CONNECTION ——— 23.25m — Distance from D/S manhole
 9.0m — Connection Length



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

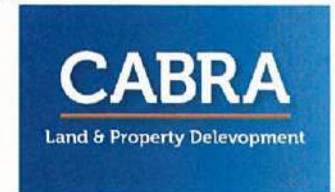
- The coordinates (X,Y) are in terms of NZTM on NZGD2000, and are within +/-50mm
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL), and are within +/- 25mm

Signed: Registered Professional Surveyor

Date: 4/11/16

Name: William Cheung

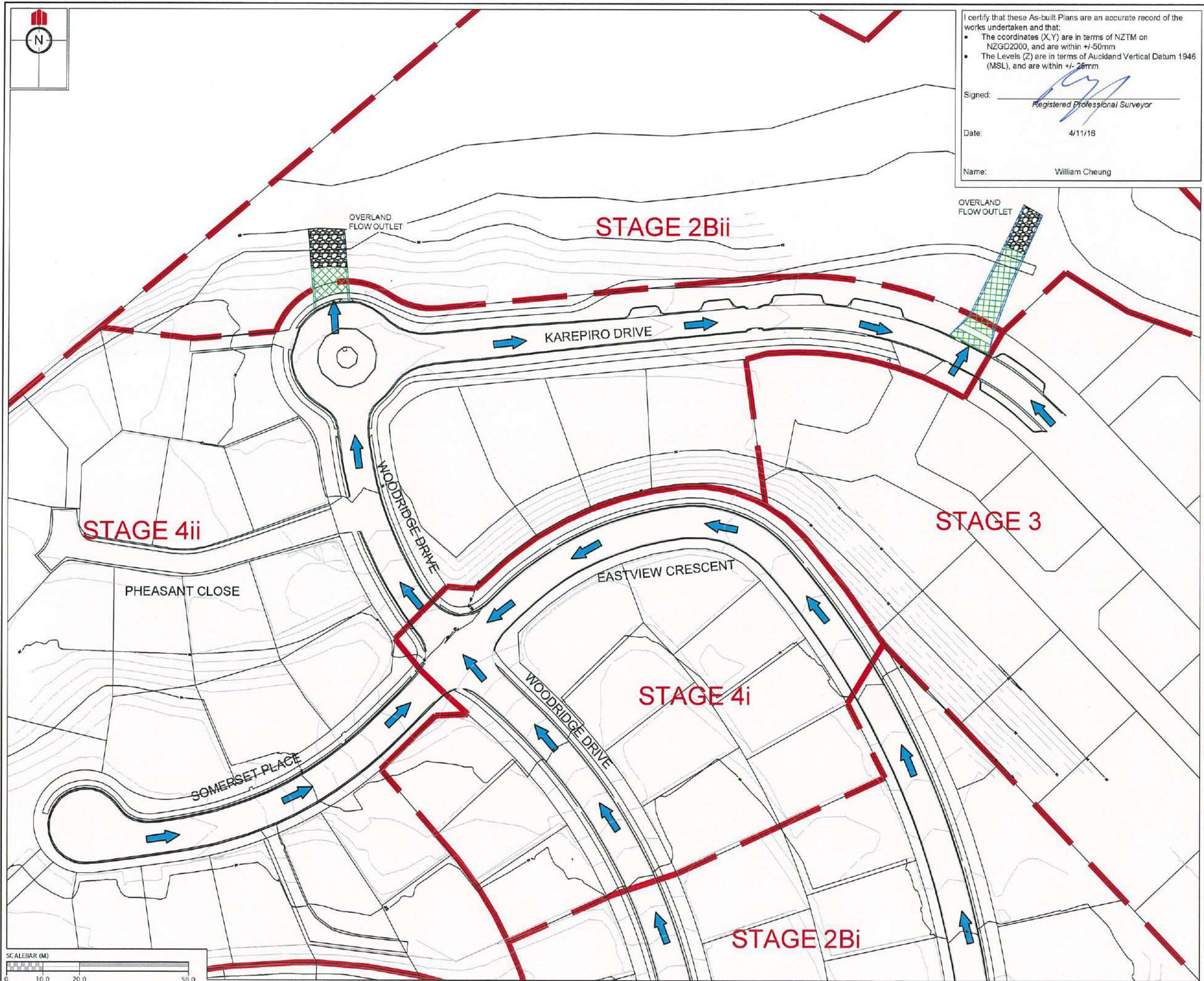
REVISION DETAILS	NAME	DATE	CLIENT:
1. ISSUED FOR AS-BUILT	BP	4/11/16	



KAREPIRO DEVELOPMENT - STAGE 4ii
 STORMWATER AS-BUILT PLAN
 (SHEET 3 OF 3)
 AUCKLAND COUNCIL



DESIGNED:	ISSUED FOR AS-BUILT
BP	
CHECKED:	DRAWN: SL
APPROVED:	SURVEYED: WC
JOB NUMBER: 60356	SCALE: 1:500 @ A3
ISSUED: 4/11/16	
DWG. NO. 60356-4ii-AB-313	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, and are within +/-50mm
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL), and are within +/- 25mm

Signed: *[Signature]*
Registered Professional Surveyor

Date: 4/11/16

Name: William Cheung

REVISION DETAILS	NAME	DATE
1. ISSUED FOR AS-BUILT	BP	4/11/16

NOTES

- HEIGHTS ARE IN TERMS OF AUCKLAND DATUM 1946
- COORDINATES ARE IN TERMS OF NZGD2000 MOUNT EDEN CIRCUIT
- LOT BOUNDARIES ARE SUBJECT TO FINAL SURVEY.

LEGEND

	CONTOURS (1.0m INTERVAL)
	SUBDIVISION STAGE 8 EXTENTS
	OVERLAND FLOW PATH
	OVERLAND FLOW PATH OUTLET

CLIENT:

**KAREPIRO DEVELOPMENT
STAGE 4ii**

AS-BUILT OVERLAND FLOW PATH
PLAN - STAGE 4ii

AUCKLAND COUNCIL

DESIGNED: BP	ISSUED FOR AS-BUILT
CHECKED: <i>[Signature]</i>	DRAWN: SL
APPROVED: <i>[Signature]</i>	SURVEYED: WOODS
JOB NUMBER: 60356	SCALE: 1:1000 @ A3
ISSUED: 4/11/16	
DWG. NO. 60356-4ii-AB-390	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, and are within +/-50mm
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL), and are within +/- 25mm

Signed: _____
Registered Professional Surveyor

Date: 4/11/16

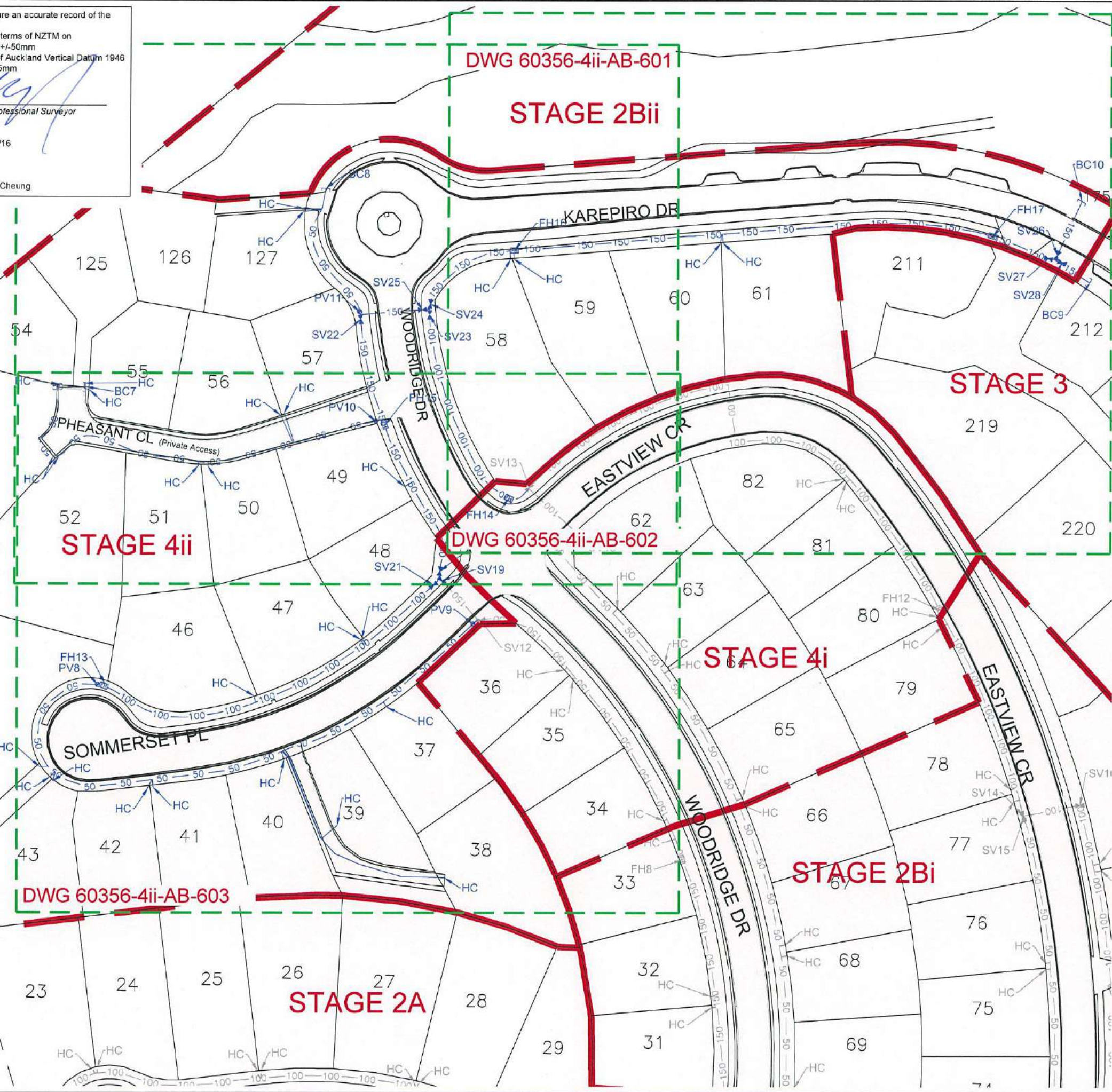
Name: William Cheung

SLUICE VALVE		
ID	SCHEDULE OF COORDINATES	
SV19	5944364.19 mN	1754932.29 mE
SV20	5944366.59 mN	1754931.84 mE
SV21	5944363.06 mN	1754930.23 mE
SV22	5944428.85 mN	1754912.04 mE
SV23	5944430.02 mN	1754929.05 mE
SV24	5944432.66 mN	1754929.28 mE
SV25	5944431.24 mN	1754927.26 mE
SV26	5944444.94 mN	1755084.51 mE
SV27	5944444.17 mN	1755082.24 mE
SV28	5944443.18 mN	1755085.71 mE

PEET VALVE		
ID	SCHEDULE OF COORDINATES	
PV8	5944338.37 mN	1754847.20 mE
PV9	5944353.48 mN	1754940.01 mE
PV10	5944403.70 mN	1754915.90 mE
PV11	5944430.76 mN	1754911.78 mE

FIRE HYDRANT		
ID	SCHEDULE OF COORDINATES	
FH13	5944338.01 mN	1754848.70 mE
FH14	5944384.63 mN	1754948.90 mE
FH15	5944402.73 mN	1754918.07 mE
FH16	5944446.01 mN	1754950.10 mE
FH17	5944449.47 mN	1755068.58 mE

BLANK CAP		
ID	SCHEDULE OF COORDINATES	
BC7	5944412.07 mN	1754843.95 mE
BC8	5944461.18 mN	1754903.33 mE
BC9	5944438.15 mN	1755092.52 mE
BC10	5944458.29 mN	1755090.55 mE

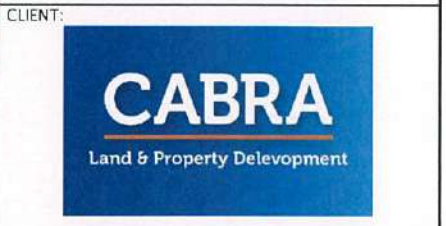


REVISION DETAILS		NAME	DATE
1.	ISSUED FOR AS-BUILT	BP	4/11/16

- NOTES**
- ALL WORKS AND MATERIALS COMPLIES WITH AC STANDARD FOR ENGINEERING DESIGN AND CONSTRUCTION.
 - PIPE BEDDING COMPLIES WITH AC STANDARD DETAIL DRAWING 18000 SHEET 4.4 UNLESS OTHERWISE NOTED.
 - ALL PIPE CROSSINGS UNDER ROADS AND ACCESSWAYS HAVE BEEN HARDFILL BACKFILLED.
 - ALL PIPE DIAMETERS ARE INTERNAL DIAMETERS.
 - ALL LINES SHOWN ARE NEW PUBLIC LINES UNLESS NOTED OTHERWISE
 - LOT BOUNDARIES ARE SUBJECT TO FINAL SURVEY.

LEGEND

STAGE BOUNDARY	
AS-BUILT WATERMAIN	
EXISTING WATERMAIN	
SLUICE VALVE	
PEET VALVE	
FIRE HYDRANT	
BLANK CAP	
HOUSE CONNECTION	

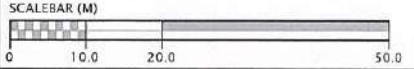


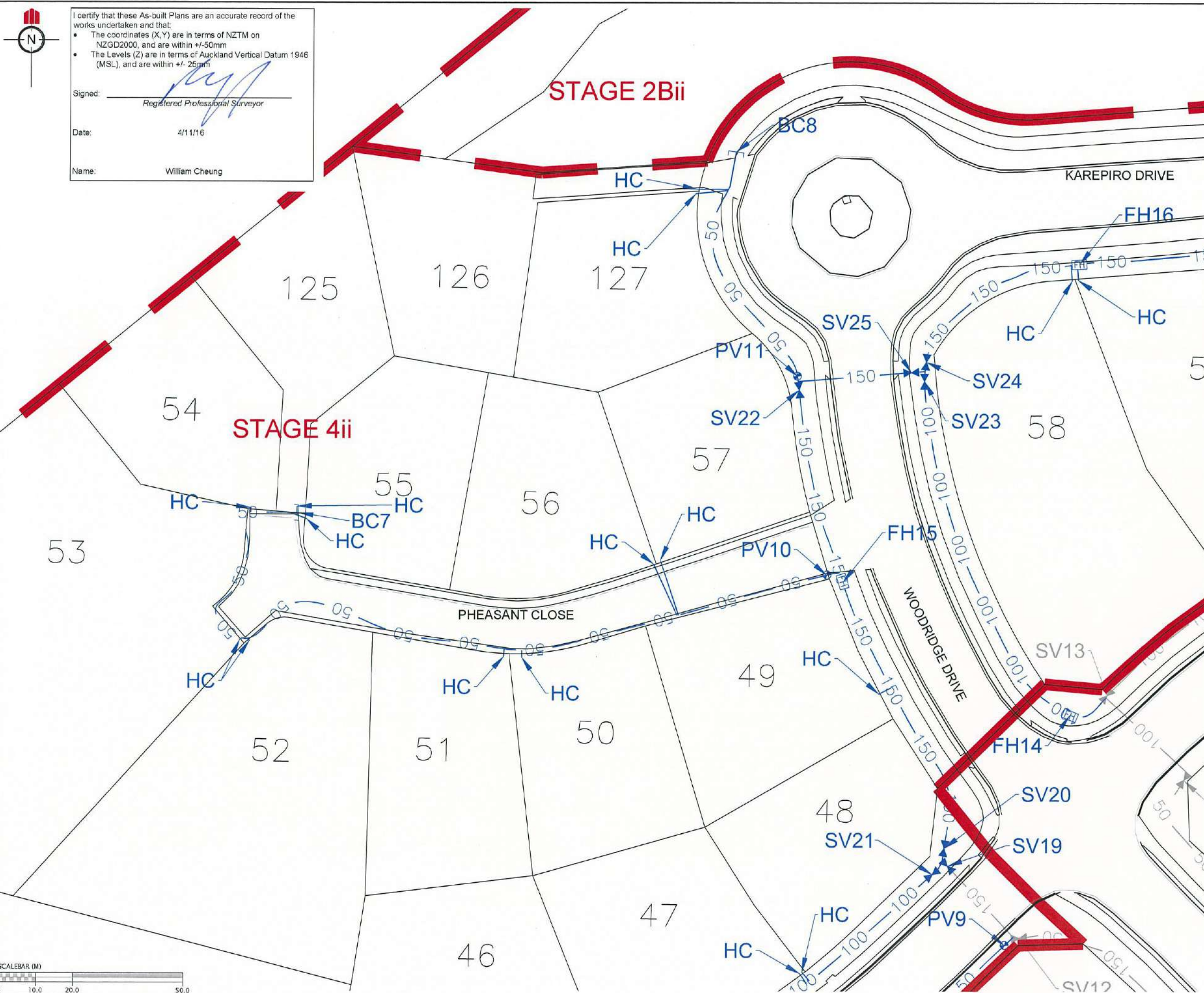
KAREPIRO DEVELOPMENT STAGE 4ii

AS-BUILT WATER RETICULATION PLAN OVERALL

AUCKLAND COUNCIL

DESIGNED: BP	ISSUED FOR AS-BUILT
CHECKED:	DRAWN: SL
APPROVED:	SURVEYED: WOODS
JOB NUMBER: 60356	SCALE: 1:1000 @ A3
ISSUED: 4/11/16	
DWG. NO. 60356-4ii-AB-600	REV. 1



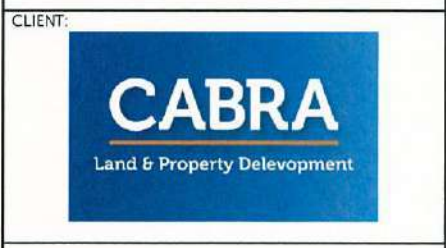


REVISION DETAILS	NAME	DATE
1. ISSUED FOR AS-BUILT	BP	4/11/16

- NOTES**
- ALL WORKS AND MATERIALS COMPLIES WITH AC STANDARD FOR ENGINEERING DESIGN AND CONSTRUCTION.
 - PIPE BEDDING COMPLIES WITH AC STANDARD DETAIL DRAWING 18000 SHEET 4.4 UNLESS OTHERWISE NOTED.
 - ALL PIPE CROSSINGS UNDER ROADS AND ACCESSWAYS HAVE BEEN HARDFILL BACKFILLED.
 - ALL PIPE DIAMETERS ARE INTERNAL DIAMETERS.
 - ALL LINES SHOWN ARE NEW PUBLIC LINES UNLESS NOTED OTHERWISE
 - LOT BOUNDARIES ARE SUBJECT TO FINAL SURVEY.

LEGEND

STAGE BOUNDARY	
AS-BUILT WATERMAIN	
EXISTING WATERMAIN	
SLUICE VALVE	
PEET VALVE	
FIRE HYDRANT	
BLANK CAP	
HOUSE CONNECTION	



KAREPIRO DEVELOPMENT STAGE 4ii

AS-BUILT WATER RETICULATION PLAN (1 OF 3)
AUCKLAND COUNCIL

DESIGNED: BP	ISSUED FOR AS-BUILT
CHECKED:	DRAWN: SL
APPROVED:	SURVEYED: WOODS
JOB NUMBER: 60356	SCALE: 1:500 @ A3
ISSUED: 4/11/16	
DWG. NO. 60356-4ii-AB-601	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, and are within +/-50mm
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL), and are within +/- 25mm

Signed:
Registered Professional Surveyor

Date: 4/11/16

Name: William Cheung



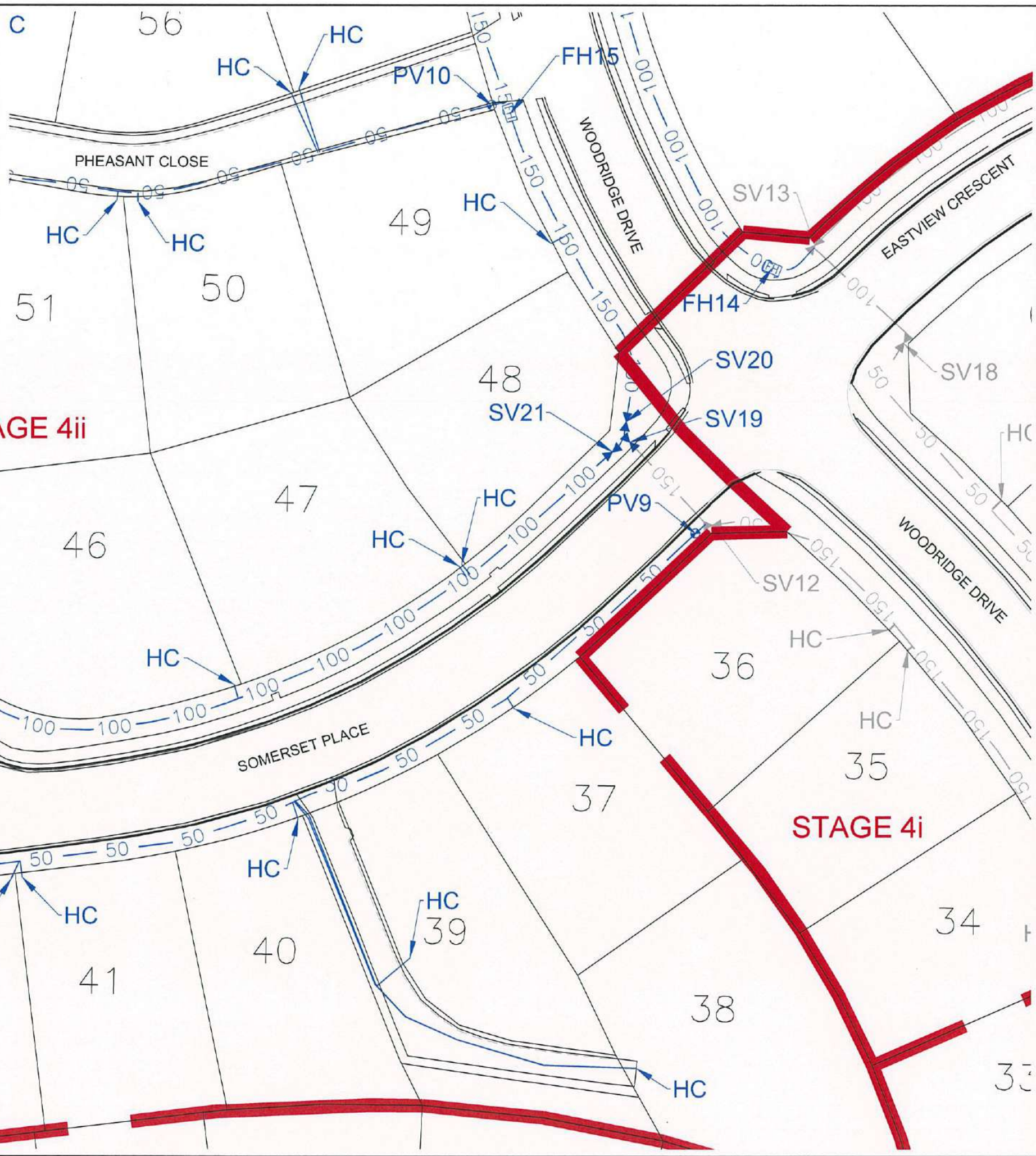
I certify that these As-built Plans are an accurate record of the works undertaken and that:

- The coordinates (X,Y) are in terms of NZTM on NZGD2000, and are within +/-50mm
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL), and are within +/- 25mm

Signed: _____
Registered Professional Surveyor

Date: 4/11/16

Name: William Cheung

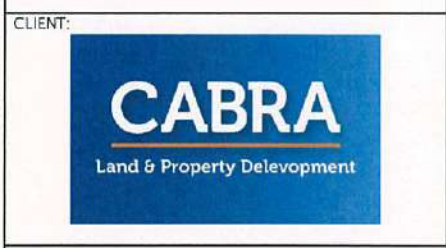


REVISION DETAILS	NAME	DATE
1. ISSUED FOR AS-BUILT	BP	4/11/16

- NOTES**
- ALL WORKS AND MATERIALS COMPLIES WITH AC STANDARD FOR ENGINEERING DESIGN AND CONSTRUCTION.
 - PIPE BEDDING COMPLIES WITH AC STANDARD DETAIL DRAWING 18000 SHEET 4.4 UNLESS OTHERWISE NOTED.
 - ALL PIPE CROSSINGS UNDER ROADS AND ACCESSWAYS HAVE BEEN HARDFILL BACKFILLED.
 - ALL PIPE DIAMETERS ARE INTERNAL DIAMETERS.
 - ALL LINES SHOWN ARE NEW PUBLIC LINES UNLESS NOTED OTHERWISE
 - LOT BOUNDARIES ARE SUBJECT TO FINAL SURVEY.

LEGEND

STAGE BOUNDARY	
AS-BUILT WATERMAIN	
EXISTING WATERMAIN	
SLUICE VALVE	
PEET VALVE	
FIRE HYDRANT	
BLANK CAP	
HOUSE CONNECTION	



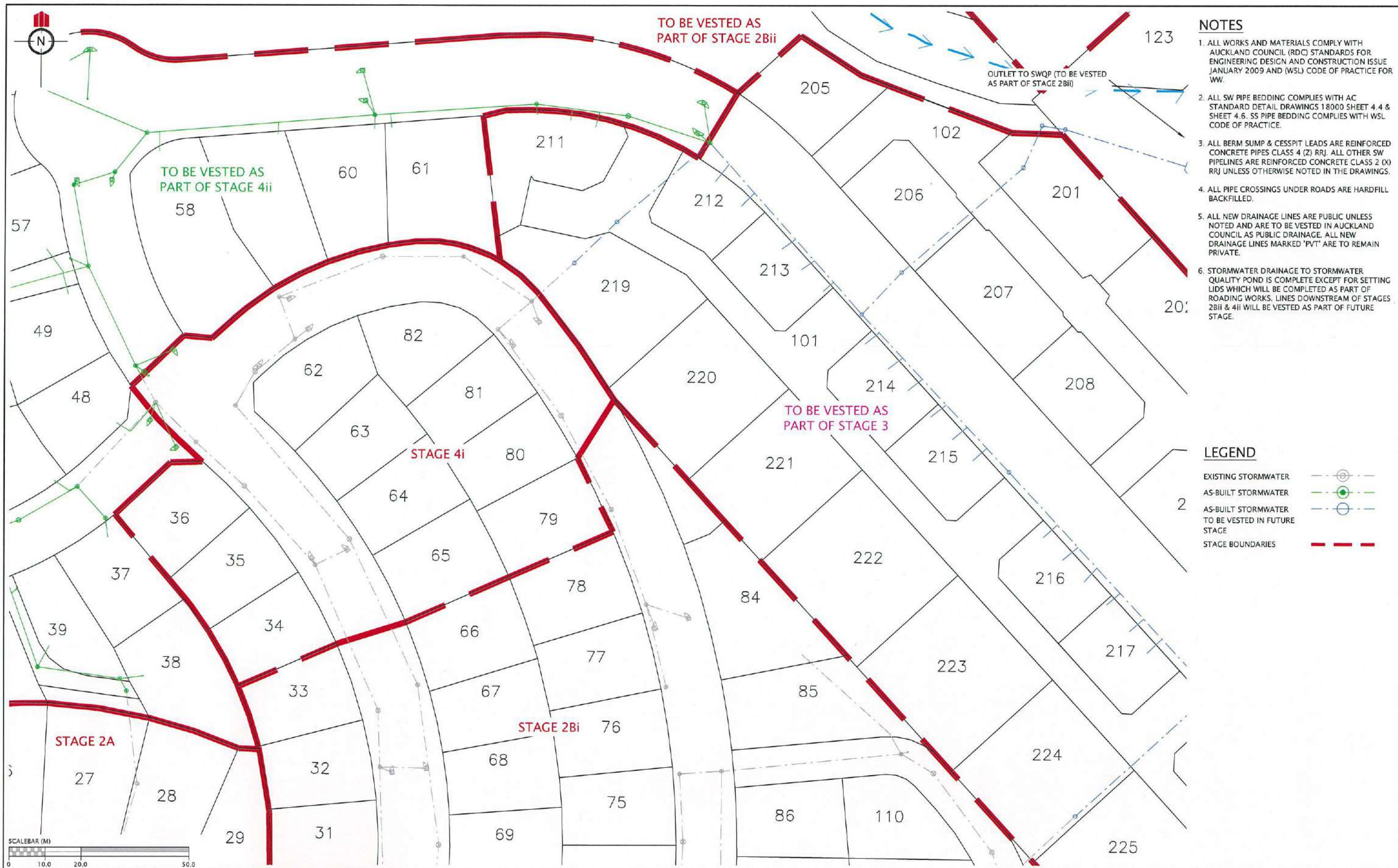
**KAREPIRO DEVELOPMENT
STAGE 4ii**

AS-BUILT WATER RETICULATION PLAN
(3 OF 3)

AUCKLAND COUNCIL

DESIGNED: BP	ISSUED FOR AS-BUILT
CHECKED:	DRAWN: SL
APPROVED:	SURVEYED: WOODS
JOB NUMBER: 60356	SCALE: 1:500 @ A3
ISSUED: 4/11/16	
DWC. NO. 60356-4ii-AB-603	REV. 1

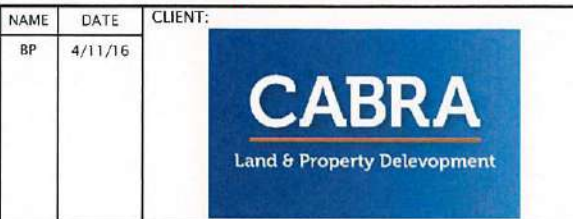




- NOTES**
1. ALL WORKS AND MATERIALS COMPLY WITH AUCKLAND COUNCIL (RDC) STANDARDS FOR ENGINEERING DESIGN AND CONSTRUCTION ISSUE JANUARY 2009 AND (WSL) CODE OF PRACTICE FOR WW.
 2. ALL SW PIPE BEDDING COMPLIES WITH AC STANDARD DETAIL DRAWINGS 18000 SHEET 4.4 & SHEET 4.6. SS PIPE BEDDING COMPLIES WITH WSL CODE OF PRACTICE.
 3. ALL BERM SUMP & CESSPIT LEADS ARE REINFORCED CONCRETE PIPES CLASS 4 (Z) RRJ. ALL OTHER SW PIPELINES ARE REINFORCED CONCRETE CLASS 2 (X) RRJ UNLESS OTHERWISE NOTED IN THE DRAWINGS.
 4. ALL PIPE CROSSINGS UNDER ROADS ARE HARDFILL BACKFILLED.
 5. ALL NEW DRAINAGE LINES ARE PUBLIC UNLESS NOTED AND ARE TO BE VESTED IN AUCKLAND COUNCIL AS PUBLIC DRAINAGE. ALL NEW DRAINAGE LINES MARKED 'PVT' ARE TO REMAIN PRIVATE.
 6. STORMWATER DRAINAGE TO STORMWATER QUALITY POND IS COMPLETE EXCEPT FOR SETTING LIDS WHICH WILL BE COMPLETED AS PART OF ROADING WORKS. LINES DOWNSTREAM OF STAGES 2Bii & 4ii WILL BE VESTED AS PART OF FUTURE STAGE.

- LEGEND**
- EXISTING STORMWATER
 - AS-BUILT STORMWATER
 - AS-BUILT STORMWATER TO BE VESTED IN FUTURE STAGE
 - STAGE BOUNDARIES

REVISION DETAILS	NAME	DATE	CLIENT
1. ISSUED FOR AS-BUILT	BP	4/11/16	



KAREPIRO DEVELOPMENT - STAGE 4ii
 STORMWATER AS-BUILT PLAN
 DOWN STREAM LINES TO BE VESTED AS PART OF FUTURE STAGES
 AUCKLAND COUNCIL



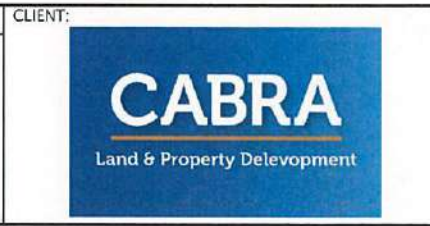
DESIGNED: BP	ISSUED FOR AS-BUILT
CHECKED:	DRAWN: BP
APPROVED:	SURVEYED: WOODS
JOB NUMBER: 60356	SCALE: 1:1000 @ A3
ISSUED: 4/11/16	
DWG. NO. 60356-4ii-AB-380	REV. 1



- NOTES**
1. ALL WORKS AND MATERIALS COMPLY WITH AUCKLAND COUNCIL (RDC) STANDARDS FOR ENGINEERING DESIGN AND CONSTRUCTION ISSUE JANUARY 2009 AND (WSL) CODE OF PRACTICE FOR WW.
 2. ALL PIPE BEDDING COMPLIES WITH AC STANDARD DETAIL DRAWINGS 18000 SHEET 4.4 & SHEET 4.6 AND WITH WSL CODE OF PRACTICE.
 3. WW PIPES ARE 150mm DIA. uPVC SN16 UNLESS OTHERWISE NOTED IN THE DRAWINGS, IN WHICH CASE SUCH NOTES SHALL TAKE PRECEDENCE.
 4. ALL PIPE CROSSINGS UNDER ROADS ARE HARDFILL BACKFILLED.
 5. ALL NEW DRAINAGE LINES ARE PUBLIC UNLESS NOTED AND ARE TO BE VESTED IN AUCKLAND COUNCIL AS PUBLIC DRAINAGE. ALL NEW DRAINAGE LINES MARKED 'PVT' ARE TO REMAIN PRIVATE.
 6. STORMWATER DRAINAGE TO STORMWATER QUALITY POND IS COMPLETE EXCEPT FOR SETTING LIDS WHICH WILL BE COMPLETED AS PART OF ROADING WORKS. LINES DOWNSTREAM OF STAGES 2Bii & 4ii WILL BE VESTED AS PART OF FUTURE STAGE.
 9. LOT BOUNDARIES ARE SUBJECT TO FINAL SURVEY.

- LEGEND**
- EXISTING SANITARY SEWER (dashed line with circles)
 - AS-BUILT SANITARY SEWER (solid red line)
 - AS-BUILT SANITARY SEWER TO BE VESTED IN FUTURE STAGE (dashed red line)
 - STAGE BOUNDARIES (thick red line)

REVISION DETAILS	NAME	DATE	CLIENT:
1. ISSUED FOR AS-BUILT	BP	4/11/16	



KAREPIRO DEVELOPMENT - STAGE 4ii
 WASTEWATER AS-BUILT PLAN
 DOWN STREAM LINES TO BE VESTED AS PART OF FUTURE STAGES
 AUCKLAND COUNCIL



DESIGNED: BP	ISSUED FOR AS-BUILT
CHECKED: BP	DRAWN: BP
APPROVED: [Signature]	SURVEYED: WOODS
JOB NUMBER: 60356	SCALE: 1:1000 @ A3
ISSUED: 4/11/16	
DWG. NO: 60356-4ii-AB-385	REV: 1