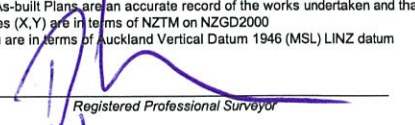




I certify that these As-built Plans are an accurate record of the works undertaken and that:

- 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: 16/11/12








Name: Daniel Wayne Williams

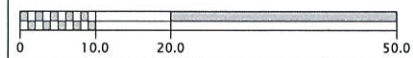



NOTES

1. CONTOURS ARE AT 0.5m INTERVALS

LEGEND


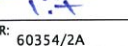
-  MAJOR CONTOURS (1.0m INTERVAL)
-  MINOR CONTOURS (0.5m INTERVAL)
-  TIMBER POLE RETAINING WALL TYPE A
-  TIMBER POLE RETAINING WALL TYPE B
-  TIMBER POLE RETAINING WALL TYPE C
-  KEYSTONE RETAINING WALL
-  STAGE 2AC EXTENTS

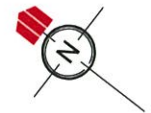


REVISION DETAILS	NAME	DATE	CLIENT:
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B. ISSUED FOR GEO COMPLETION REPORT	CD	14.11.12	

BEACHWOOD SUBDIVISION - STAGE 2A
 FINAL CONTOURS ASBUILT PLAN
 RMA SLC-57858 & RDC 21082
 AUCKLAND COUNCIL

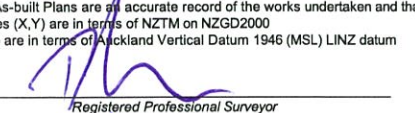


DESIGNED: MW	ASBUILT
CHECKED: 	DRAWN: CD
APPROVED: 	SURVEYED: WC
JOB NUMBER: 60354/2A	SCALE: 1:1000 @ A3
ISSUED: NOV 2012	
DWG. NO. 60354-2A-EW-100-AB	REV. B



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: 16/11/12





Name: Daniel Wayne Williams




NOTES

1. CONTOURS ARE AT 1 METRE INTERVALS

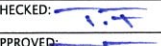

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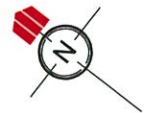
-  -1 FILL CONTOURS
-  -1 CUT CONTOURS
-  ZERO CONTOURS
-  STAGE 2A EXTENTS

REVISION DETAILS	NAME	DATE	CLIENT:
A. ISSUED FOR 224c	AS	8/11/2012	 CABRA DEVELOPMENTS LIMITED
B. ISSUED FOR GEO COMPLETION REPORT	CD	14.11.12	

BEACHWOOD SUBDIVISION - STAGE 2A
CUT / FILL CONTOURS ASBUILT PLAN
ORIGINAL SURFACE TO ASBUILT SURFACE
RMA SLC-57858 & RDC 21082
AUCKLAND COUNCIL

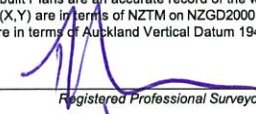


DESIGNED: MW	ASBUILT
CHECKED: 	DRAWN: CD
APPROVED: 	SURVEYED: WC
JOB NUMBER: 60354/2A	SCALE: 1:1000 @ A3
ISSUED: NOV 2012	
DWG. NO. 60354-2A-EW-110-AB	REV. B



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

Signed: 
 Registered Professional Surveyor

Date: 16/11/12







Name: Daniel Wayne Williams

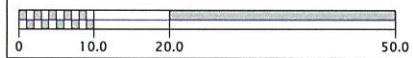



NOTES

1. CONTOURS ARE AT 1 METRE INTERVALS

LEGEND


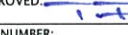
-  1 FILL CONTOURS
-  -1 CUT CONTOURS
-  ZERO CONTOURS
-  SUBSOIL DRAIN
-  EXISTING SUBSOIL DRAIN
-  STAGE 2A EXTENTS



REVISION DETAILS	NAME	DATE	CLIENT:
A. ISSUED FOR 224c	AS	8/11/2012	
B. ISSUED FOR GEO COMPLETION REPORT	CD	14.11.12	

BEACHWOOD SUBDIVISION - STAGE 2A
 CUT / FILL CONTOURS ASBUILT PLAN
 UNDERCUT SURFACE TO ASBUILT SURFACE
 RMA SLC-57858 & RDC 21082
 AUCKLAND COUNCIL



DESIGNED: MW	ASBUILT
CHECKED: 	DRAWN: CD
APPROVED: 	SURVEYED: WC
JOB NUMBER: 60354/2A	SCALE: 1:1000 @ A3
ISSUED: NOV 2012	
DWG. NO. 60354-2A-EW-111-AB	REV. B



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: *[Signature]*
 Registered Professional Surveyor
 Date: 16/11/12
 Name: Daniel Wayne Williams

NOTES

- PRIVATE DRAINAGE FROM WALL DRAINCOILS ARE DETAILED IN BUILDING CONSENT BY WAY OF PS3d AND DRAINLAYERS ASBUILTS.
- KEystone WALLS DESIGNED BY COFFEY GEOTECHNICS

WALL NOTES

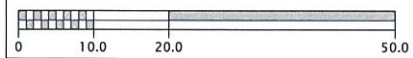
TYPE A WALL
 18° FRONT SLOPE
 22° BACK SLOPE
 NO SURCHARGE POLES AT 1200 CENTRES

TYPE B WALL
 NO FRONT SLOPE
 NO BACK SLOPE
 5kpa SURCHARGE POLES A 1200 CENTRES
 ALTERNATIVE - NO SURCHARGE 22° BACK SLOPE

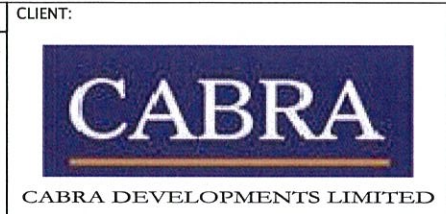
TYPE C WALL
 NO FRONT SLOPE
 NO BACK SLOPE
 10kpa SURCHARGE POLES AT 1200 CENTRES

KEystone WALL
 AS PER COFFEY GEOTECHNICS DESIGN

1.4 RETAINED HEIGHT (FROM FGL.)



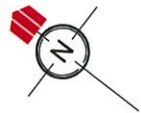
REVISION DETAILS	NAME	DATE	CLIENT:
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B. ISSUED FOR GEO COMPLETION REPORT	CD	14.11.12	



BEACHWOOD SUBDIVISION - STAGE 2A
 ASBUILT RETAINING WALL PLAN
 RMA SLC-57858 & RDC 21082
 AUCKLAND COUNCIL



DESIGNED: MW	ASBUILT
CHECKED: <i>[Signature]</i>	DRAWN: CD
APPROVED: <i>[Signature]</i>	SURVEYED: WC
JOB NUMBER: 60354/2A	SCALE: 1:1000 @ A3
ISSUED: NOV 2012	
DWG. NO. 60354-2A-EW-120-AB	REV. B



Lot 1
DP 62075



NOTES

1. DIMENSIONS ARE TAKEN FROM THE BOUNDARY.
2. THIS PLAN PREPARED BY WOODS ON BEHALF OF COFFEY GEOTECHNICS AS PER THEIR SPECIFIC GEOTECHNICAL RECOMMENDATIONS.
3. THIS PLAN TO BE READ IN CONJUNCTION WITH THE COFFEY GEOTECHNICS GEOTECHNICAL COMPLETION REPORT..

REFER TO BLOW UP 60354-2A-EW-131-AB FOR RESTRICTION ZONE DIMENSIONS

SEAVIEW CRESCENT

BEACHWOOD DRIVE

WALL NOTES

- TYPE A WALL**
 18° FRONT SLOPE
 22° BACK SLOPE
 NO SURCHARGE POLES AT 1200 CENTRES
- TYPE B WALL**
 NO FRONT SLOPE.
 NO BACK SLOPE
 5kpa SURCHARGE POLES A 1200 CENTRES
 ALTERNATIVE - NO SURCHARGE 22° BACK SLOPE
- TYPE C WALL**
 NO FRONT SLOPE
 NO BACK SLOPE
 10kpa SURCHARGE POLES AT 1200 CENTRES
- KEYSTONE WALL**
 AS PER COFFEY GEOTECHNICS DESIGN
- RETAINING WALL RESTRICTION ZONE

RESTRICTION ZONE NOTE:

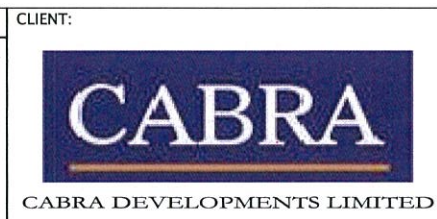
NO EARTHWORKS OR STRUCTURES TO BE CONSTRUCTED IN THE RETAINING WALL RESTRICTION ZONES, UNLESS SPECIFICALLY DESIGNED BY A SUITABLY QUALIFIED ENGINEER.

EARTHWORKS RESTRICTION ZONE DIMENSIONS ARE TAKEN FROM THE BOUNDARY.

REFER TO BLOW UP 60354-2A-EW-132-AB FOR RESTRICTION ZONE DIMENSIONS



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A. ISSUED FOR 224c	AS	8/11/2012	CABRA DEVELOPMENTS LIMITED
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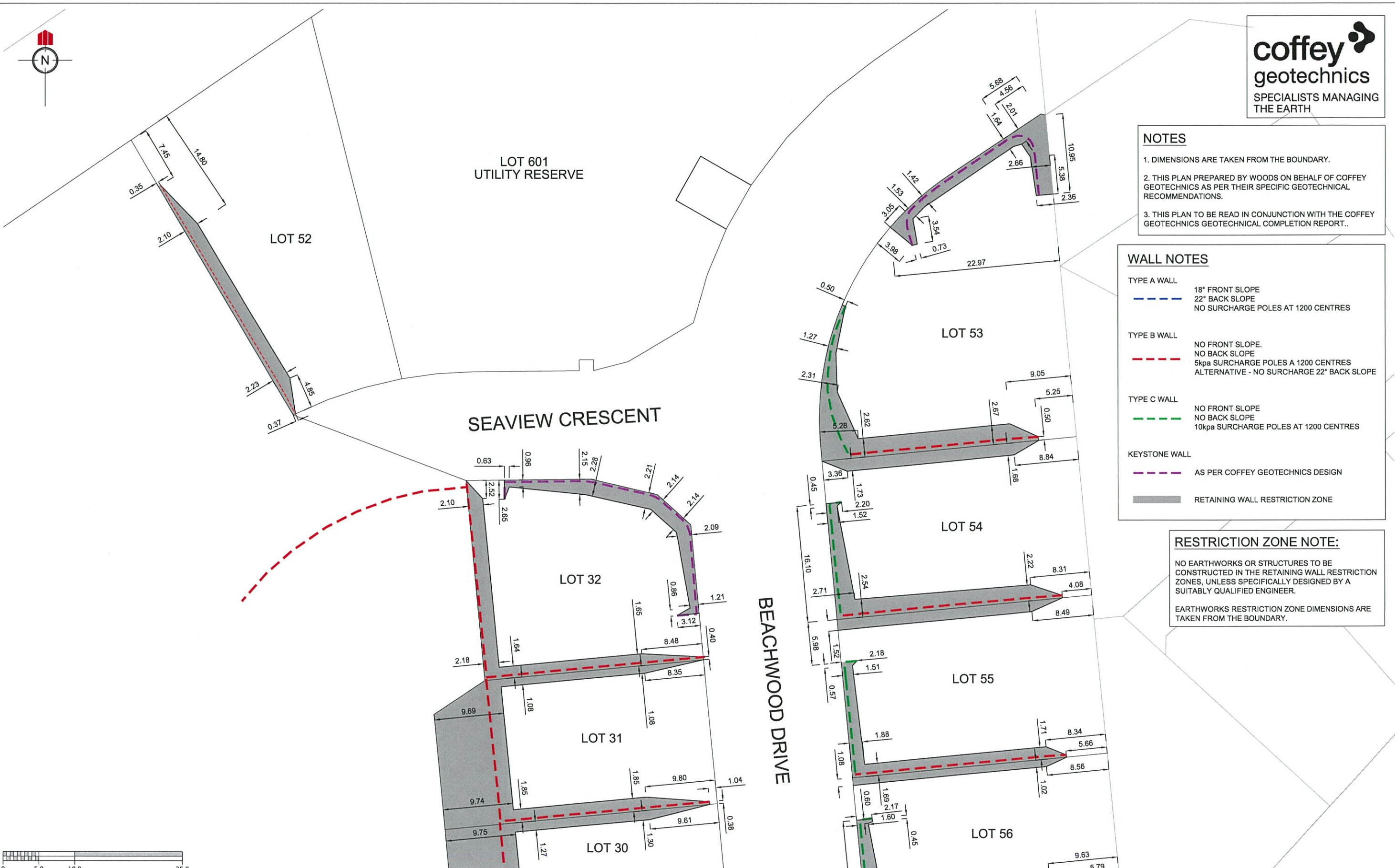
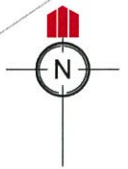
BEACHWOOD SUBDIVISION - STAGE 2A

OVERALL ASBUILT RETAINING WALL RESTRICTION ZONE PLAN
RMA SLC-57858 & RDC 21082

AUCKLAND COUNCIL



DESIGNED: MW	ASBUILT
CHECKED: [Signature]	DRAWN: CD
APPROVED: [Signature]	SURVEYED: WC
JOB NUMBER: 60354/2A	SCALE: 1:1000 @ A3
ISSUED: NOV 2012	
DWG. NO. 60354-2A-EW-130-AB	REV. B



NOTES

1. DIMENSIONS ARE TAKEN FROM THE BOUNDARY.
2. THIS PLAN PREPARED BY WOODS ON BEHALF OF COFFEY GEOTECHNICS AS PER THEIR SPECIFIC GEOTECHNICAL RECOMMENDATIONS.
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WALL NOTES

TYPE A WALL
 18° FRONT SLOPE
 22° BACK SLOPE
 NO SURCHARGE POLES AT 1200 CENTRES

TYPE B WALL
 NO FRONT SLOPE.
 NO BACK SLOPE
 5kpa SURCHARGE POLES A 1200 CENTRES
 ALTERNATIVE - NO SURCHARGE 22° BACK SLOPE

TYPE C WALL
 NO FRONT SLOPE
 NO BACK SLOPE
 10kpa SURCHARGE POLES AT 1200 CENTRES

KEYSTONE WALL
 AS PER COFFEY GEOTECHNICS DESIGN


RETAINING WALL RESTRICTION ZONE

RESTRICTION ZONE NOTE:

NO EARTHWORKS OR STRUCTURES TO BE CONSTRUCTED IN THE RETAINING WALL RESTRICTION ZONES, UNLESS SPECIFICALLY DESIGNED BY A SUITABLY QUALIFIED ENGINEER.

EARTHWORKS RESTRICTION ZONE DIMENSIONS ARE TAKEN FROM THE BOUNDARY.



REVISION DETAILS	NAME	DATE	CLIENT:
A. ISSUED FOR 224c	AS	8/11/2012	 CABRA DEVELOPMENTS LIMITED
B. ISSUED FOR GEO COMPLETION REPORT	CD	14.11.12	

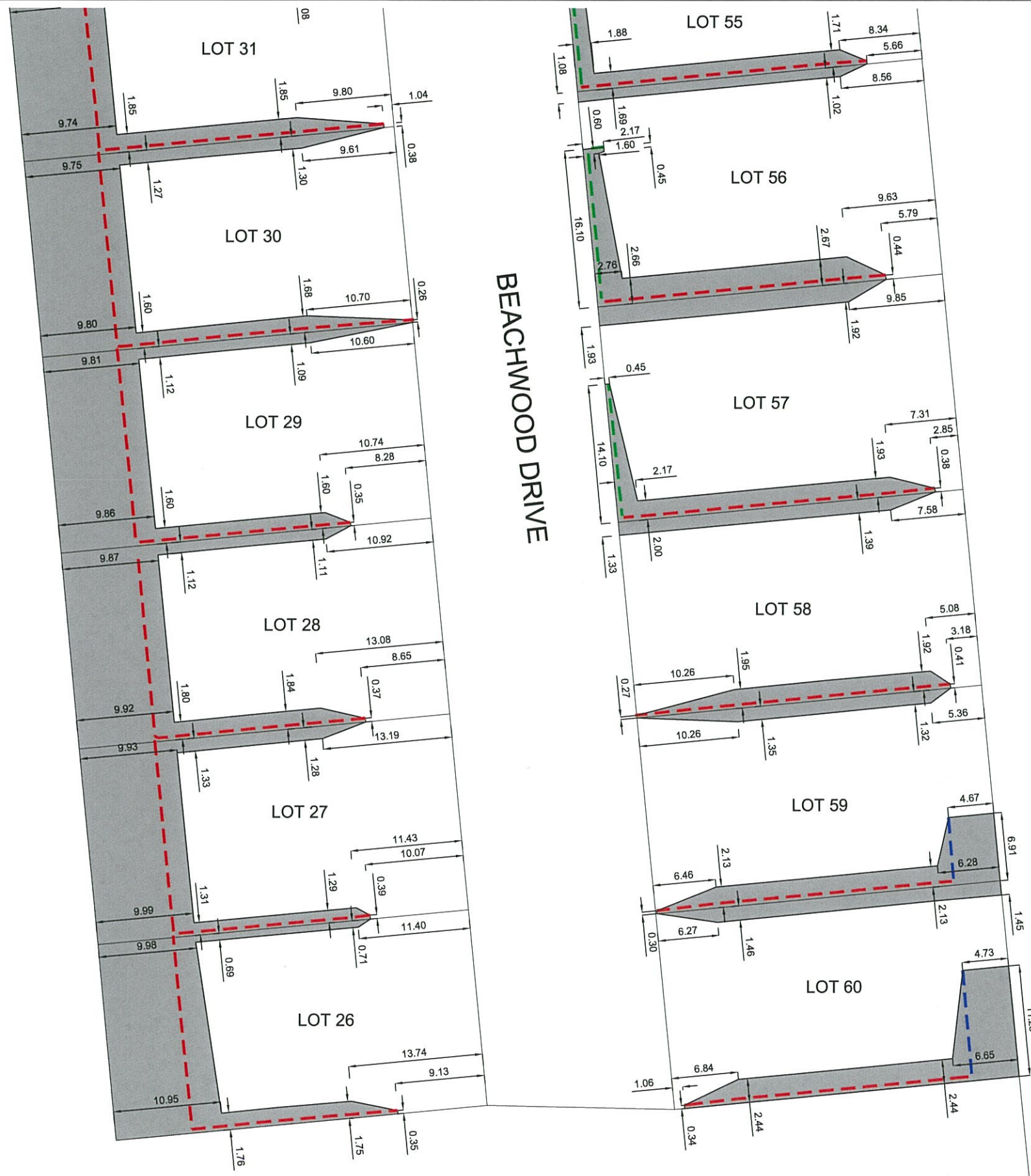
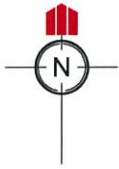
BEACHWOOD SUBDIVISION - STAGE 2A

ASBUILT RETAINING WALL RESTRICTION ZONE PLAN 1
 RMA SLC-57858 & RDC 21082

AUCKLAND COUNCIL



DESIGNED: MW	ASBUILT
CHECKED: [Signature]	DRAWN: CD
APPROVED: [Signature]	SURVEYED: WC
JOB NUMBER: 60354/2A	SCALE: 1:500 @ A3
ISSUED: NOV 2012	
DWG. NO. 60354-2A-EW-131-AB	REV. B



NOTES

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3. THIS PLAN TO BE READ IN CONJUNCTION WITH THE COFFEY GEOTECHNICS GEOTECHNICAL COMPLETION REPORT..

WALL NOTES

TYPE A WALL
 18° FRONT SLOPE
 22° BACK SLOPE
 NO SURCHARGE POLES AT 1200 CENTRES

TYPE B WALL
 NO FRONT SLOPE.
 NO BACK SLOPE
 5kpa SURCHARGE POLES A 1200 CENTRES
 ALTERNATIVE - NO SURCHARGE 22° BACK SLOPE

TYPE C WALL
 NO FRONT SLOPE
 NO BACK SLOPE
 10kpa SURCHARGE POLES AT 1200 CENTRES

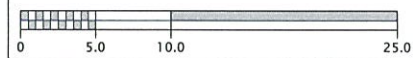
KEYSTONE WALL
 AS PER COFFEY GEOTECHNICS DESIGN


RETAINING WALL RESTRICTION ZONE

RESTRICTION ZONE NOTE:

NO EARTHWORKS OR STRUCTURES TO BE CONSTRUCTED IN THE RETAINING WALL RESTRICTION ZONES, UNLESS SPECIFICALLY DESIGNED BY A SUITABLY QUALIFIED ENGINEER.

EARTHWORKS RESTRICTION ZONE DIMENSIONS ARE TAKEN FROM THE BOUNDARY.



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B. ISSUED FOR GEO COMPLETION REPORT	CD	14.11.12	

BEACHWOOD SUBDIVISION - STAGE 2A
 ASBUILT RETAINING WALL RESTRICTION ZONE PLAN 2
 RMA SLC-57858 & RDC 21082
 AUCKLAND COUNCIL

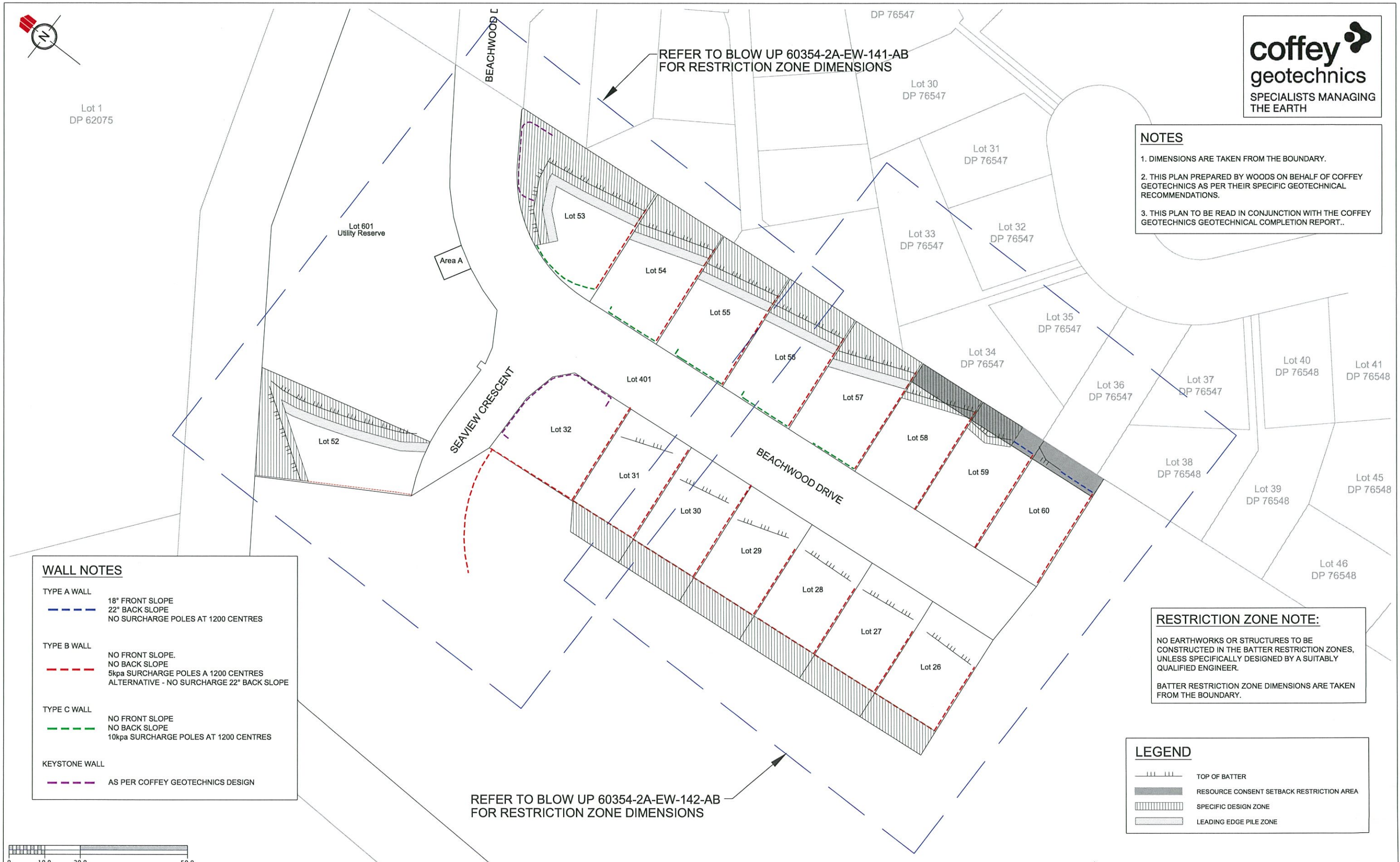


DESIGNED: MW	ASBUILT
CHECKED: [Signature]	DRAWN: CD
APPROVED: [Signature]	SURVEYED: WC
JOB NUMBER: 60354/2A	SCALE: 1:500 @ A3
ISSUED: NOV 2012	
DWG. NO. 60354-2A-EW-132-AB	REV. B



NOTES

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3. THIS PLAN TO BE READ IN CONJUNCTION WITH THE COFFEY GEOTECHNICS GEOTECHNICAL COMPLETION REPORT..



WALL NOTES

TYPE A WALL
 18° FRONT SLOPE
 22° BACK SLOPE
 NO SURCHARGE POLES AT 1200 CENTRES

TYPE B WALL
 NO FRONT SLOPE.
 NO BACK SLOPE
 5kpa SURCHARGE POLES A 1200 CENTRES
 ALTERNATIVE - NO SURCHARGE 22° BACK SLOPE

TYPE C WALL
 NO FRONT SLOPE
 NO BACK SLOPE
 10kpa SURCHARGE POLES AT 1200 CENTRES

KEYSTONE WALL
 AS PER COFFEY GEOTECHNICS DESIGN

RESTRICTION ZONE NOTE:

NO EARTHWORKS OR STRUCTURES TO BE CONSTRUCTED IN THE BATTER RESTRICTION ZONES, UNLESS SPECIFICALLY DESIGNED BY A SUITABLY QUALIFIED ENGINEER.

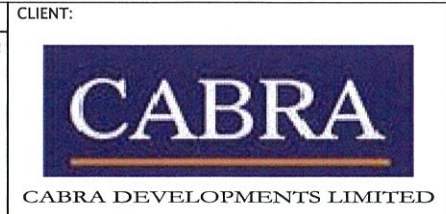
BATTER RESTRICTION ZONE DIMENSIONS ARE TAKEN FROM THE BOUNDARY.

LEGEND

- TOP OF BATTER
- RESOURCE CONSENT SETBACK RESTRICTION AREA
- SPECIFIC DESIGN ZONE
- LEADING EDGE PILE ZONE



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A. ISSUED FOR 224c	AS	8/11/2012	CABRA DEVELOPMENTS LIMITED
B. ISSUED FOR GEO COMPLETION REPORT	CD	14.11.12	



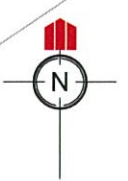
BEACHWOOD SUBDIVISION - STAGE 2A

OVERALL ASBUILT BATTER RESTRICTION ZONE PLAN
 RMA SLC-57858 & RDC 21082

AUCKLAND COUNCIL



DESIGNED: MW	ASBUILT
CHECKED: T.F	DRAWN: CD
APPROVED: T.F	SURVEYED: WC
JOB NUMBER: 60354/2A	SCALE: 1:1000 @ A3
ISSUED: NOV 2012	
DWC. NO. 60354-2A-EW-140-AB	REV. B



NOTES

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WALL NOTES

TYPE A WALL
 18° FRONT SLOPE
 22° BACK SLOPE
 NO SURCHARGE POLES AT 1200 CENTRES

TYPE B WALL
 NO FRONT SLOPE.
 NO BACK SLOPE
 5kpa SURCHARGE POLES A 1200 CENTRES
 ALTERNATIVE - NO SURCHARGE 22° BACK SLOPE

TYPE C WALL
 NO FRONT SLOPE
 NO BACK SLOPE
 10kpa SURCHARGE POLES AT 1200 CENTRES

KEYSTONE WALL
 AS PER COFFEY GEOTECHNICS DESIGN

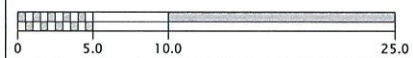
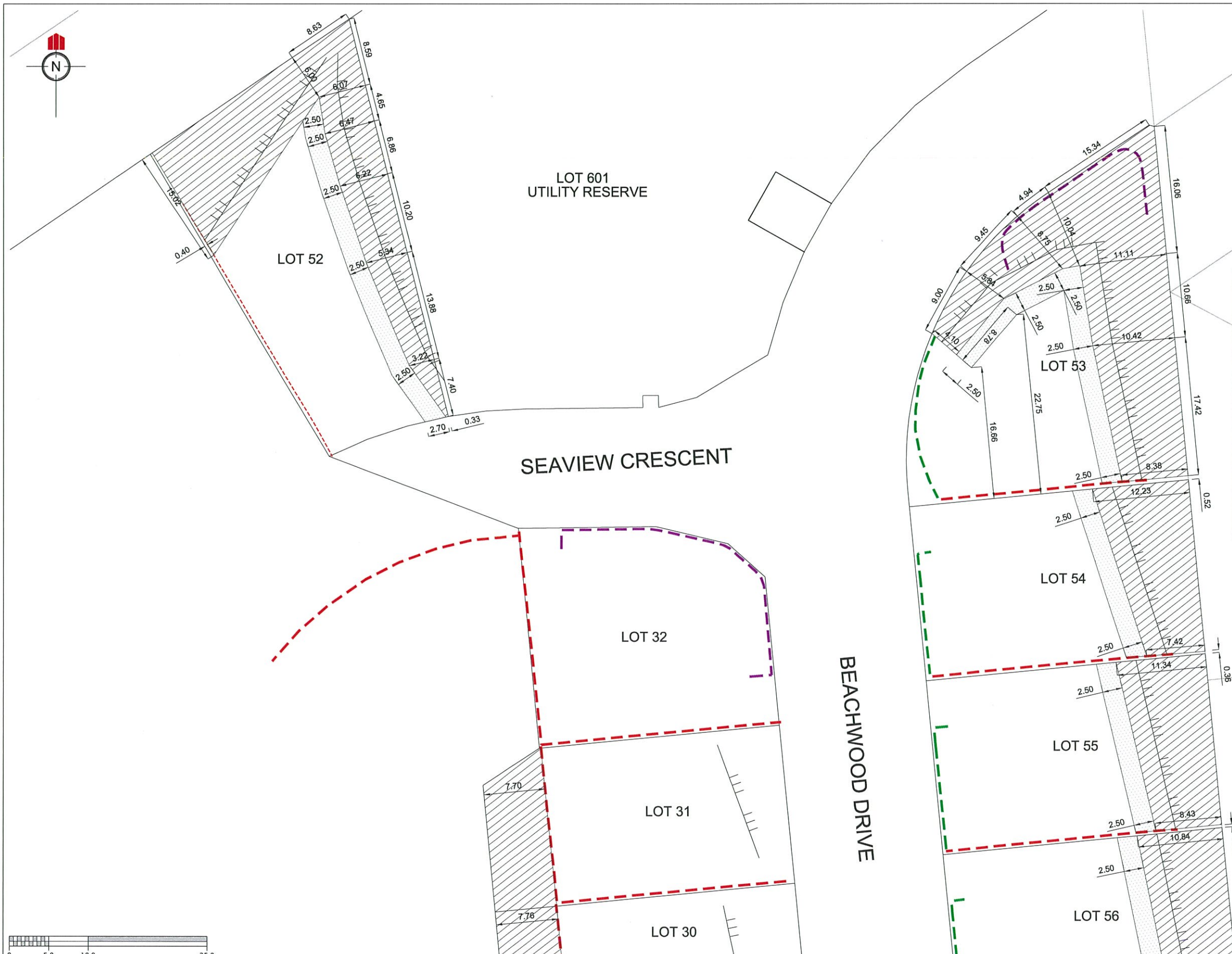
LEGEND

- TOP OF BATTER
- RESOURCE CONSENT SETBACK RESTRICTION AREA
- SPECIFIC DESIGN ZONE
- LEADING EDGE PILE ZONE

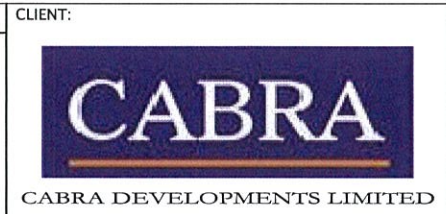
RESTRICTION ZONE NOTE:

NO EARTHWORKS OR STRUCTURES TO BE CONSTRUCTED IN THE BATTER RESTRICTION ZONES, UNLESS SPECIFICALLY DESIGNED BY A SUITABLY QUALIFIED ENGINEER.

EARTHWORKS RESTRICTION ZONE DIMENSIONS ARE TAKEN FROM THE BOUNDARY.



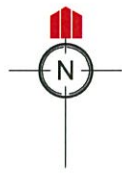
REVISION DETAILS	NAME	DATE	CLIENT:
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B. ISSUED FOR GEO COMPLETION REPORT	CD	14.11.12	



BEACHWOOD SUBDIVISION - STAGE 2A
 ASBUILT BATTER RESTRICTION ZONE PLAN 1
 RMA SLC-57858 & RDC 21082
 AUCKLAND COUNCIL



DESIGNED: MW	ASBUILT
CHECKED: [Signature]	DRAWN: CD
APPROVED: [Signature]	SURVEYED: WC
JOB NUMBER: 60354/2A	SCALE: 1:500 @ A3
ISSUED: NOV 2012	
DWG. NO. 60354-2A-EW-141-AB	REV. B



NOTES

1. DIMENSIONS ARE TAKEN FROM THE BOUNDARY.
2. THIS PLAN PREPARED BY WOODS ON BEHALF OF COFFEY GEOTECHNICS AS PER THEIR SPECIFIC GEOTECHNICAL RECOMMENDATIONS.
3. THIS PLAN TO BE READ IN CONJUNCTION WITH THE COFFEY GEOTECHNICS GEOTECHNICAL COMPLETION REPORT..

WALL NOTES

- TYPE A WALL**
 18° FRONT SLOPE
 22° BACK SLOPE
 NO SURCHARGE POLES AT 1200 CENTRES
- TYPE B WALL**
 NO FRONT SLOPE.
 NO BACK SLOPE
 5kpa SURCHARGE POLES A 1200 CENTRES
 ALTERNATIVE - NO SURCHARGE 22° BACK SLOPE
- TYPE C WALL**
 NO FRONT SLOPE
 NO BACK SLOPE
 10kpa SURCHARGE POLES AT 1200 CENTRES
- KEYSTONE WALL**
 AS PER COFFEY GEOTECHNICS DESIGN

LEGEND

- TOP OF BATTER
- RESOURCE CONSENT SETBACK RESTRICTION AREA
- SPECIFIC DESIGN ZONE
- LEADING EDGE PILE ZONE

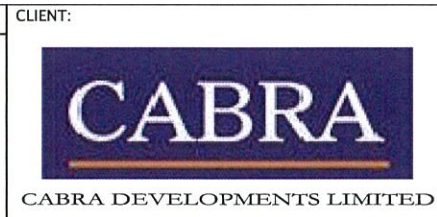
RESTRICTION ZONE NOTE:

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EARTHWORKS RESTRICTION ZONE DIMENSIONS ARE TAKEN FROM THE BOUNDARY.



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B. ISSUED FOR GEO COMPLETION REPORT	CD	14.11.12	



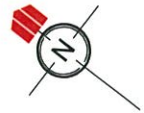
BEACHWOOD SUBDIVISION - STAGE 2A

ASBUILT BATTER RESTRICTION ZONE PLAN 2
 RMA SLC-57858 & RDC 21082

AUCKLAND COUNCIL



DESIGNED: MW	ASBUILT
CHECKED: [Signature]	DRAWN: CD
APPROVED: [Signature]	SURVEYED: WC
JOB NUMBER: 60354/2A	SCALE: 1:500 @ A3
ISSUED: NOV 2012	
DWG. NO. 60354-2A-EW-142-AB	REV. B



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: [Signature]
 Registered Professional Surveyor
 Date: 16/11/12
 Name: Daniel Wayne Williams

NOTES

1. ALL WORKS AND MATERIALS COMPLY WITH AC STANDARDS FOR ENGINEERING DESIGN AND CONSTRUCTION ISSUE NOV 2005.
2. ALL ROADS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH APPROVED ENGINEERING PLANS. SEE 60354-2A-RD-220-AB FOR CONSTRUCTION DETAILS.
3. ALL FINISHED ROAD SURFACES ARE ASPHALT CONCRETE 30mm THICK. SEE 60354-2A-RD-220-AB AB FOR DETAILS.
4. ALL FOOTPATHS ARE 125mm THICK BRUSHED CONCRETE UNLESS OTHERWISE NOTED. SEE 60354-2A-RD-220-AB AB FOR DETAILS.
5. ALL PIPE CROSSINGS UNDER ROADS ARE CLASS 4 AND HAVE BEEN HARDFILL BACKFILLED.

LEGEND

- SW CATCHPIT
- OVERLAND FLOW
- STREET LIGHTS
- STREET TREES
- PEET VALVE
- SLUICE VALVE
- STAGE 2 EXTENTS
- STREET SIGN & TYPE

Lot 1
DP 62075

Lot 601
Utility Reserve

Lot 29
DP 76547

Lot 28
DP 76547

Lot 30
DP 76547

Lot 31
DP 76547

Lot 33
DP 76547

Lot 32
DP 76547

Lot 35
DP 76547

Lot 34
DP 76547

Lot 36
DP 76547

Lot 37
DP 76547

Lot 52

Lot 32

Lot 31

Lot 30

Lot 29

Lot 28

Lot 27

Lot 26

Lot 58

Lot 59

Lot 60

Lot 38
DP 76548

Lot 39
DP 76548

Lot 45
DP 76548

Lot 46
DP 76548

SCHEDULE OF COORDINATES STREETLIGHTS		
NAME	mE	mN
SL01	1750878.80	5951754.77
SL02	1750844.48	5951719.34
SL03	1750829.97	5951696.09
SL04	1750853.52	5951672.46
SL05	1750847.83	5951626.88
SL06	1750862.56	5951575.87

SCHEDULE OF COORDINATES STREET TREES		
NAME	mE	mN
ST01	1750867.36	5951746.93
ST02	1750871.57	5951737.88
ST03	1750854.04	5951736.50
ST04	1750851.74	5951707.00
ST05	1750842.30	5951679.07
ST06	1750817.02	5951696.19
ST07	1750806.76	5951704.96
ST08	1750789.51	5951692.62
ST09	1750778.45	5951695.96
ST10	1750855.21	5951660.10
ST11	1750846.26	5951637.99
ST12	1750859.32	5951615.99
ST13	1750849.71	5951600.92
ST14	1750862.11	5951586.84
ST15	1750852.91	5951568.10



REVISION DETAILS	NAME	DATE	CLIENT:
A. ISSUED FOR 224c	AS	8/11/2012	 CABRA DEVELOPMENTS LIMITED
B. ISSUED FOR GEO COMPLETION REPORT	CD	14.11.12	

BEACHWOOD SUBDIVISION - STAGE 2A

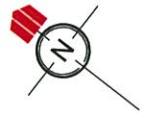
ROADING AND STREET TREE AS-BUILT PLAN
 RMA SLC-57858 & RDC 21082

AUCKLAND COUNCIL



WOODS
 Engineers. Surveyors. Planners.

DESIGNED: MW	ASBUILT
CHECKED: [Signature]	DRAWN: CD
APPROVED: [Signature]	SURVEYED: WC
JOB NUMBER: 60354/2A	SCALE: 1:1000 @ A3
ISSUED: NOV 2012	
DWG. NO. 60354-2A-RD-200-AB	REV. B

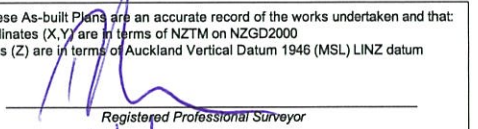


Stormwater Notes:

1. All pipes are RCRRJ class 2 unless noted otherwise
2. All pipes laid, including service connections are trenched unless noted otherwise
3. All bedding & backfill type is as per AC standards unless noted otherwise
4. All service connections are 100mm Ø uPVC class SN16 unless otherwise noted

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: 16/11/12

Name: Daniel Wayne Williams

NOTES

1. ALL WORKS AND MATERIALS COMPLY WITH AC STANDARDS FOR ENGINEERING DESIGN AND CONSTRUCTION.
2. ALL PIPE BEDDING COMPLIES WITH AC STANDARD DETAIL DRAWINGS 18000 SHEET 4.4 & SHEET 4.6.
3. ALL BERM SUMP AND 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.
5. ALL SW 100mm DIA. RAMPED RISERS HAVE BEEN EXTENDED AND CAPPED OFF 1.0m BELOW THE FINISHED GROUND SURFACE.
6. ALL CESSPITS ARE STANDARD 675mm X 450mm
7. ALL PRIVATE DRAINAGE CONNECTIONS ARE 100mmØ.
8. LOT BOUNDARIES ARE SUBJECT TO FINAL SURVEY.
9. ALL CESSPIT LEADS ARE 225mm Ø RCRRJ CLASS 4

LEGEND

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

OVERLAND FLOW

→

AB STORMWATER

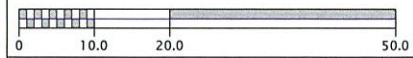
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EXISTING STORMWATER

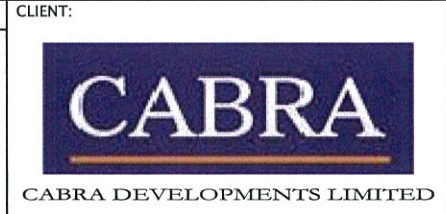
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STAGE 2 EXTENTS

- - -



REVISION DETAILS	NAME	DATE	CLIENT:
A. 224c ISSUE	CD	08.11.12	CABRA DEVELOPMENTS LIMITED
B. ISSUED FOR GEO COMPLETION REPORT	CD	14.11.12	





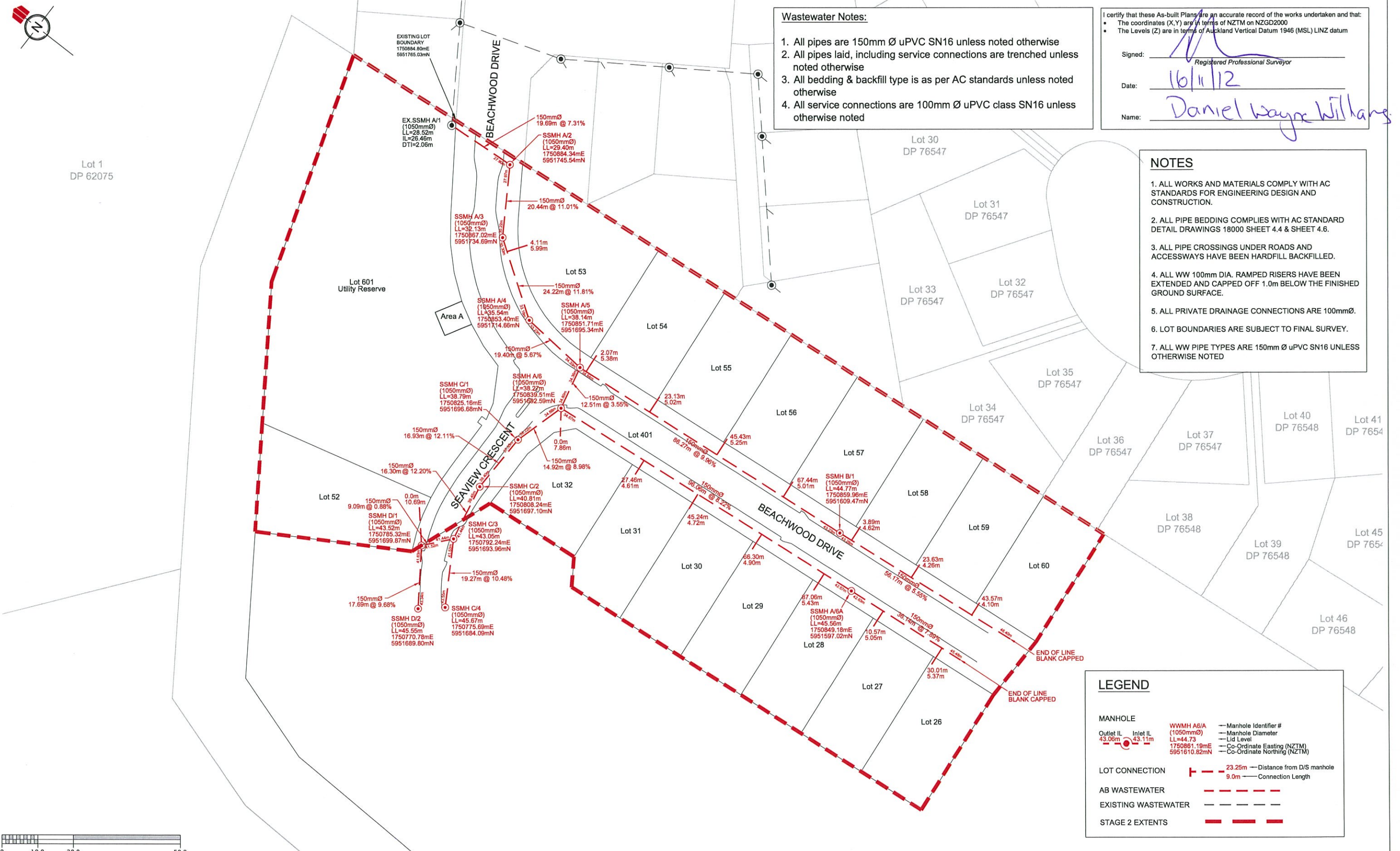
BEACHWOOD SUBDIVISION - STAGE 2A

ASBUILT STORMWATER PLAN
RMA SLC 57858 & RDC 21082

AUCKLAND COUNCIL



DESIGNED: MW	ASBUILT
CHECKED: 	DRAWN: CD
APPROVED: 	SURVEYED: WOODS
JOB NUMBER: 60354/2A	SCALE: 1:1000 @ A3
ISSUED: NOV 2012	
DWG. NO. 60354-2A-DR-380-AB	REV. B



Wastewater Notes:

- All pipes are 150mm Ø uPVC SN16 unless noted otherwise
- All pipes laid, including service connections are trenchless unless noted otherwise
- All bedding & backfill type is as per AC standards unless noted otherwise
- All service connections are 100mm Ø uPVC class SN16 unless otherwise noted

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: *[Signature]*
 Registered Professional Surveyor
 Date: 16/11/12
 Name: Daniel Wayne Williams

NOTES

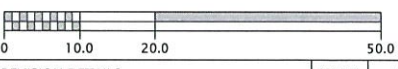
- ALL WORKS AND MATERIALS COMPLY WITH AC STANDARDS FOR ENGINEERING DESIGN AND CONSTRUCTION.
- ALL PIPE BEDDING COMPLIES WITH AC STANDARD DETAIL DRAWINGS 18000 SHEET 4.4 & SHEET 4.6.
- ALL PIPE CROSSINGS UNDER ROADS AND ACCESSWAYS HAVE BEEN HARDFILL BACKFILLED.
- ALL WW 100mm DIA. RAMPED RISERS HAVE BEEN EXTENDED AND CAPPED OFF 1.0m BELOW THE FINISHED GROUND SURFACE.
- ALL PRIVATE DRAINAGE CONNECTIONS ARE 100mmØ.
- LOT BOUNDARIES ARE SUBJECT TO FINAL SURVEY.
- ALL WW PIPE TYPES ARE 150mm Ø uPVC SN16 UNLESS OTHERWISE NOTED

LEGEND

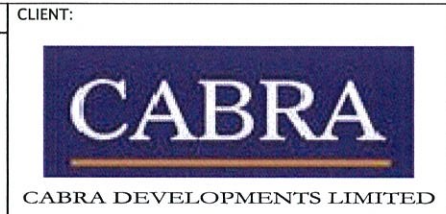
MANHOLE
 Outlet IL 43.06m Inlet IL 43.11m
 WWMH A6/A (1050mmØ) — Manhole Identifier #
 LL=44.73 — Manhole Diameter
 1750861.19mE — Lid Level
 5951610.82mN — Co-Ordinate Easting (NZTM)
 — Co-Ordinate Northing (NZTM)

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

AB WASTEWATER (Red dashed line)
EXISTING WASTEWATER (Black dashed line)
STAGE 2 EXTENTS (Thick red dashed line)



REVISION DETAILS	NAME	DATE	CLIENT:
A. 224c ISSUE	CD	08.11.12	CABRA DEVELOPMENTS LIMITED
B. ISSUED FOR GEO COMPLETION REPORT	CD	14.11.12	



BEACHWOOD SUBDIVISION - STAGE 2A

ASBUILT WASTEWATER PLAN
 RMA SLC 57858 & RDC 21082
 AUCKLAND COUNCIL



DESIGNED: MW	ASBUILT
CHECKED: <i>[Signature]</i>	DRAWN: CD
APPROVED: <i>[Signature]</i>	SURVEYED: WOODS
JOB NUMBER: 60354/2A	SCALE: 1:1000 @ A3
ISSUED: NOV 2012	
DWC. NO. 60354-2A-DR-400-AB	REV. B

Water Notes:

1. All pipes are PE80B class PN12.5 SDR11 unless noted otherwise
2. All pipes laid including service connections are trenched unless noted otherwise
3. All bedding & backfill is type as per AC Standards unless noted otherwise
4. All water pipes are laid at an average depth of 0.60 unless noted otherwise

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

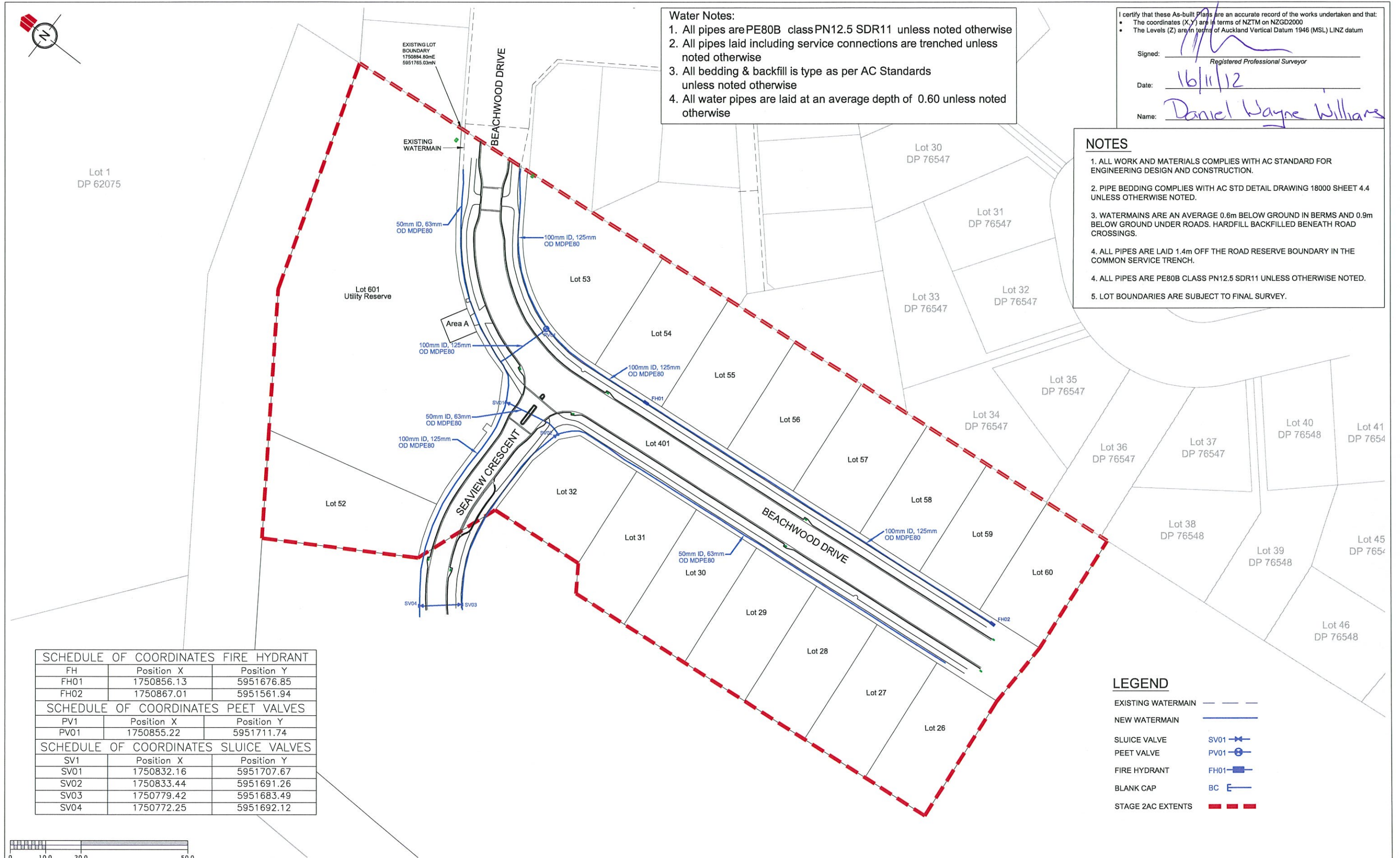
Signed: _____
Registered Professional Surveyor

Date: 16/11/12

Name: Daniel Wayne Williams

NOTES

1. ALL WORK AND MATERIALS COMPLIES WITH AC STANDARD FOR ENGINEERING DESIGN AND CONSTRUCTION.
2. PIPE BEDDING COMPLIES WITH AC STD DETAIL DRAWING 18000 SHEET 4.4 UNLESS OTHERWISE NOTED.
3. WATERMAINS ARE AN AVERAGE 0.6m BELOW GROUND IN BERMS AND 0.9m BELOW GROUND UNDER ROADS. HARDFILL BACKFILLED BENEATH ROAD CROSSINGS.
4. ALL PIPES ARE LAID 1.4m OFF THE ROAD RESERVE BOUNDARY IN THE COMMON SERVICE TRENCH.
4. ALL PIPES ARE PE80B CLASS PN12.5 SDR11 UNLESS OTHERWISE NOTED.
5. LOT BOUNDARIES ARE SUBJECT TO FINAL SURVEY.



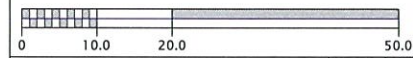
SCHEDULE OF COORDINATES FIRE HYDRANT		
FH	Position X	Position Y
FH01	1750856.13	5951676.85
FH02	1750867.01	5951561.94

SCHEDULE OF COORDINATES PEET VALVES		
PV1	Position X	Position Y
PV01	1750855.22	5951711.74

SCHEDULE OF COORDINATES SLUICE VALVES		
SV1	Position X	Position Y
SV01	1750832.16	5951707.67
SV02	1750833.44	5951691.26
SV03	1750779.42	5951683.49
SV04	1750772.25	5951692.12

LEGEND

- EXISTING WATERMAIN ———
- NEW WATERMAIN ———
- SLUICE VALVE SV01
- PEET VALVE PV01
- FIRE HYDRANT FH01
- BLANK CAP BC
- STAGE 2AC EXTENTS ———



REVISION DETAILS	NAME	DATE	CLIENT:
A. ISSUED FOR 224c	AS	8/11/2012	 CABRA DEVELOPMENTS LIMITED
B. ISSUED FOR GEO COMPLETION REPORT	CD	14.11.12	

BEACHWOOD SUBDIVISION - STAGE 2A
 WATERMAIN AS-BUILT PLAN
 RMA SLC-57858 & RDC 21082
 AUCKLAND COUNCIL

WOODS
Engineers. Surveyors. Planners.

DESIGNED: MW	ASBUILT
CHECKED: J.H.	DRAWN: CD
APPROVED: J.H.	SURVEYED: WC
JOB NUMBER: 60354/2A	SCALE: 1:1000 @ A3
ISSUED: NOV 2012	
DWG. NO. 60354-2A-WS-600-AB	REV. B