

SURVEYED	SWX	14.07.2015	APPROVED	DATE
DESIGNED				
DRAWN	LK	14.07.2015		
CHECKED				
APPROVED				
REVISION	CHANGES		CHECKED	DATE
0	ORIGINAL ISSUE		MC	15.07.15
2	FINAL ISSUE		MC	15.06.16

**NOTES:**

BEARING AND COORDINATE DATUM IS  
NEW ZEALAND TRANSVERSE MERCATOR PROJECTION  
LEVELS ARE IN TERMS OF LANDS AND SURVEY  
DATUM (MSL) AUCKLAND 1946

**SURVEY EQUIPMENT USED:**  
INSTRUMENT: TRIMBLE ROBOTIC S8 1"  
GPS: TRIMBLE R6/R8 SYSTEMS  
PRECISE LEVELLING: TRIMBLE Dini Series 0.3mm DIGITAL  
VERTICAL PLUMMING: FOIF DZJ2 LASER PLUMMIT

**COPYRIGHT:**  
This document and the copyright in this document remain the  
property of SURVEY WORX. The contents of this document  
may not be reproduced either in whole or in part by any means  
whatsoever without the prior written consent of SURVEY WORX.

**SURVEY  
WORX+**  
CONSTRUCTION & LAND SURVEYORS

mobile +64 021 824 084  
office +64 09 948 6491  
[www.surveyyorx.co.nz](http://www.surveyyorx.co.nz)

6 Aranui Road, Sylvia Park, Auckland, NZ



REGISTERED  
PROFESSIONAL  
SURVEYOR

MEMBERS OF:



**NZIS**  
New Zealand  
Institute of Surveyors  
Te Kaitiaki o Aotearoa

**CLIENT**

SPINNAKER BAY LID

**PROJECT**


SOLWAY  
285 ARA - KOTINGA

**TITLE**

BUTTRESS DRAIN  
ASBUILT STAGE 1  
LOCATION PLAN

**SURVEY  
WORX+**  
CONSTRUCTION & LAND SURVEYORS

I, Clinton James Healy, LAND SURVEYOR OF  
AUCKLAND, NZ, HEREBY CERTIFY THAT THIS AS-BUILT PLAN  
AND THE INFORMATION PROVIDED HAS BEEN FIELD SURVEYED  
BY SURVEY WORX AND IS CORRECT.  
THE COORDINATES (X, Y) ARE IN TERMS OF NZTM ON NZGD(2000),  
AND ARE WITHIN ±50mm.  
THE LEVELS (Z) ARE IN TERMS OF THE AUCKLAND 1946 (MSL)  
LINZ DATUM (DOSH DATUM), AND ARE WITHIN ± 25mm.

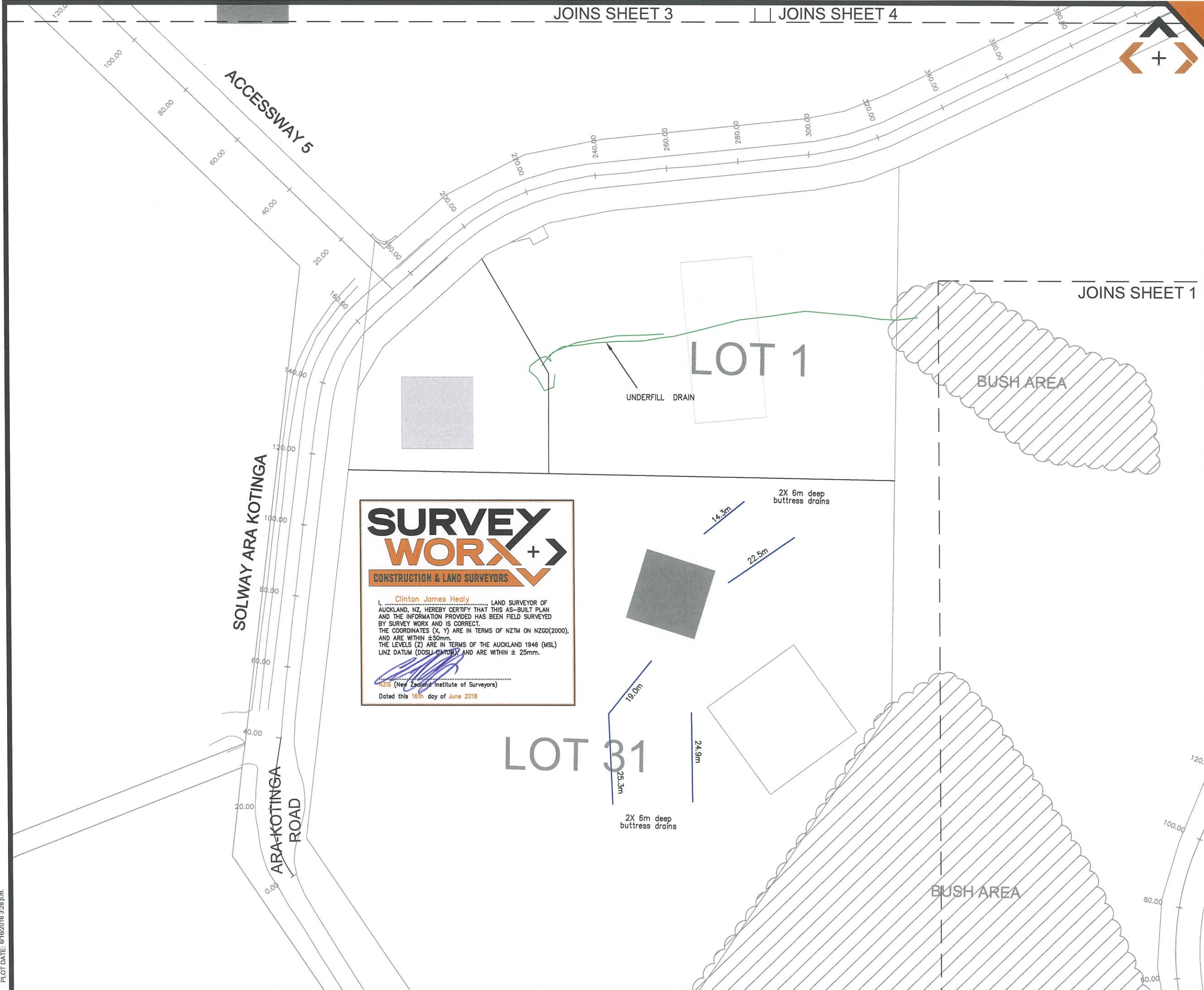


NZIS (New Zealand Institute of Surveyors)  
Dated this 16th day of June 2016

<b>SCALE</b>	1:500 (A1)	1:1000 (A3)
<b>DRAWING No</b>	55-932-605-16	<b>SHEET</b>
		1 of 9
		<b>REVISION</b>
		2

PLOT DATE: 01/06/2016 3:28 p.m.





SURVEYED	SWX	14.07.2015	APPROVED	DATE
DESIGNED	LK	14.07.2015		
DRAWN				
CHECKED				
APPROVED				
REVISION	CHANGES		CHECKED	DATE
0	ORIGINAL ISSUE		MC	15.07.15
2	FINAL ISSUE		MC	15.06.16

**NOTES:**

BEARING AND COORDINATE DATUM IS  
NEW ZEALAND TRANSVERSE MERCATOR PROJECTION  
LEVELS ARE IN TERMS OF LANDS AND SURVEY  
DATUM (MSL) AUCKLAND 1946

**SURVEY EQUIPMENT USED:** **Trimble**  
INSTRUMENT: TRIMBLE ROBOTIC S8 1"  
GPS: TRIMBLE R6/R8 SYSTEMS  
PRECISE LEVELLING: TRIMBLE DINI Series 0.3mm DIGITAL  
VERTICAL PLUMMING: FOIF DZJ2 LASER PLUMMIT

**COPYRIGHT:**  
This document and the copyright in this document remain the  
property of SURVEY WORX. The contents of this document  
may not be reproduced either in whole or in part by any means  
whatsoever without the prior written consent of SURVEY WORX.

**SURVEY  
WORX**  
CONSTRUCTION & LAND SURVEYORS

mobile +64 021 824 084  
office +64 09 948 6491  
[www.surveyyorx.co.nz](http://www.surveyyorx.co.nz)

6 Aranui Road, Sylvia Park, Auckland, NZ

**NZIS**  
REGISTERED  
PROFESSIONAL  
SURVEYOR

MEMBERS OF:  
**NZIS**  
New Zealand  
Institute of Surveyors  
Te Kaitiaki o Aotearoa

**CLIENT**

SPINNAKER BAY LID

**PROJECT**

SOLWAY  
285 ARA - KOTINGA

**TITLE**

BUTTRESS DRAIN  
ASBUILT STAGE 1  
LOCATION PLAN

<b>SCALE</b>	1:500 (A1)	1:1000 (A3)
<b>DRAWING No</b>	55-932-605-16	<b>SHEET</b> 2 of 9
		<b>REVISION</b> 2

PLOT DATE: 07/06/2016 3:28 p.m.





I, Clinton James Healy, LAND SURVEYOR OF AUCKLAND, NZ, HEREBY CERTIFY THAT THIS AS-BUILT PLAN AND THE INFORMATION PROVIDED HAS BEEN FIELD SURVEYED BY SURVEY WORX AND IS CORRECT. THE COORDINATES (X, Y) ARE IN TERMS OF NZTM ON NZGD(2000), AND ARE WITHIN  $\pm 50\text{mm}$ . THE LEVELS (Z) ARE IN TERMS OF THE AUCKLAND 1946 (MSL) LINZ DATUM (DOSL DATUM), AND ARE WITHIN  $\pm 25\text{mm}$ .

[Signature]  
NZIS (New Zealand Institute of Surveyors)  
Dated this 18th day of June 2016

Unformed Legal Road

LOT 28

2X 5m deep  
buttress drains

LOT 27

LOT 29

LOT 30

METAL ACCESSWAY 6

3X 5m deep  
buttress drains

2X 5m deep  
buttress drains

1X 5m deep  
buttress drains

SURVEYED	SWX	14.07.2015	APPROVED	DATE
DESIGNED	LK	14.07.2015		
DRAWN				
CHECKED				
APPROVED				
REVISION	CHANGES		CHECKED	DATE
0	ORIGINAL ISSUE		MC	15.07.15
1	UPDATED		MC	21.07.15
2	FINAL ISSUE		MC	15.06.16

>NOTES:

BEARING AND COORDINATE DATUM IS  
NEW ZEALAND TRANSVERSE MERCATOR PROJECTION  
LEVELS ARE IN TERMS OF LANDS AND SURVEY  
DATUM (MSL) AUCKLAND 1946

SURVEY EQUIPMENT USED:  
INSTRUMENT: TRIMBLE ROBOTIC S8 1"  
GPS: TRIMBLE R6/R8 SYSTEMS  
PRECISE LEVELLING: TRIMBLE DINI Series 0.3mm DIGITAL  
VERTICAL PLUMMING: FOIF DZJ2 LASER PLUMMIT

>COPYRIGHT:

This document and the copyright in this document remain the  
property of SURVEY WORX. The contents of this document  
may not be reproduced either in whole or in part by any means  
whatsoever without the prior written consent of SURVEY WORX.



mobile +64 021 824 084  
office +64 09 948 6491  
[www.surveymorx.co.nz](http://www.surveymorx.co.nz)

6 Aranui Road, Sylvia Park, Auckland, NZ



>CLIENT

SPINNAKER BAY LID

>PROJECT

SOLWAY  
285 ARA - KOTINGA

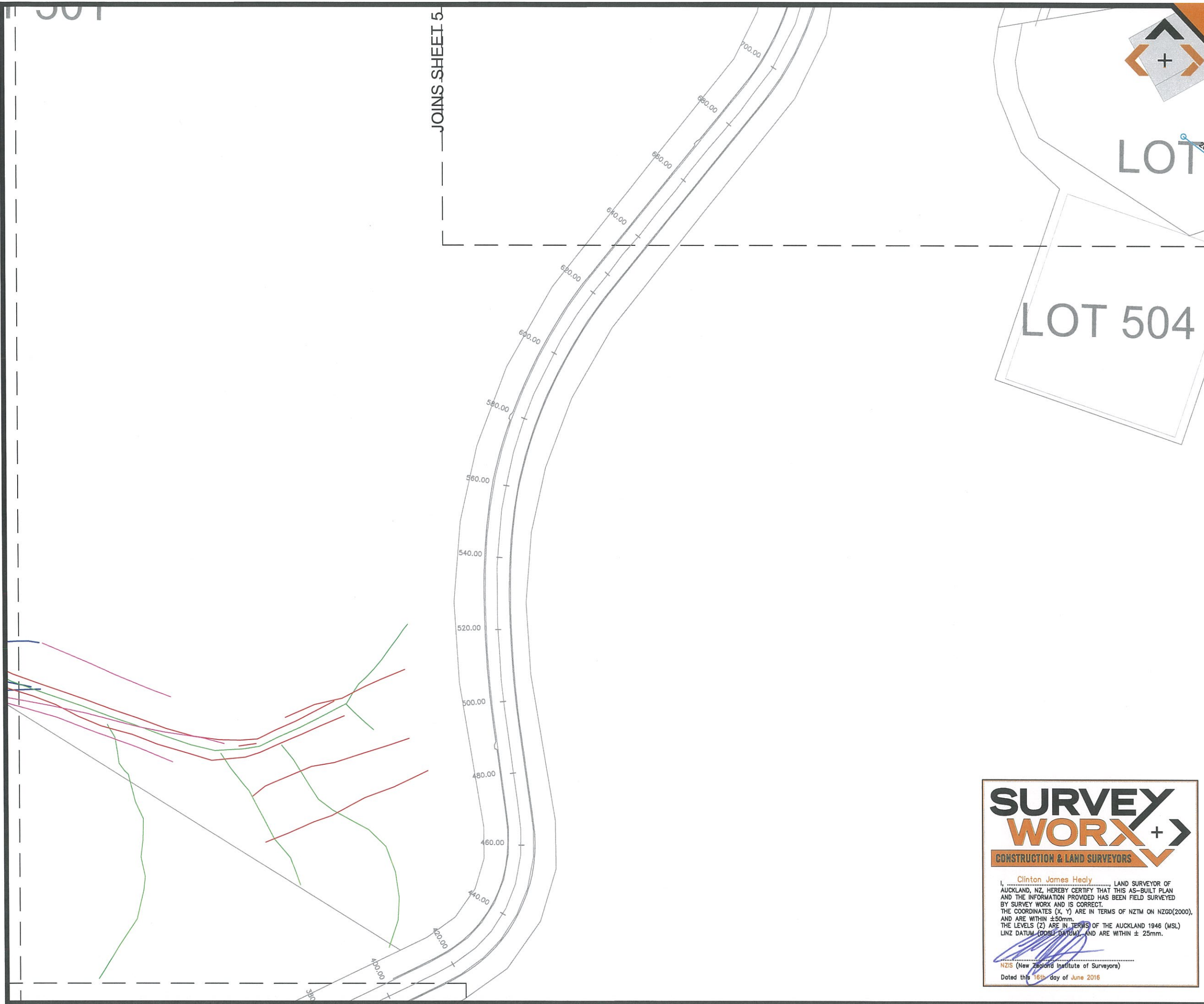
>TITLE

BUTTRESS DRAIN  
ASBUILT STAGE 1  
LOCATION PLAN

>SCALE 1:500 (A1) 1:1000 (A3)

>DRAWING No 55-932-605-16 >SHEET 3 of 9 >REVISION 2





SURVEYED	SWX	14.07.2015	APPROVED	DATE
DESIGNED	LK	14.07.2015		
DRAWN				
CHECKED				
APPROVED				

REVISION	CHANGES	CHECKED	DATE
0	ORIGINAL ISSUE	MC	15.07.15
2	FINAL ISSUE	MC	15.06.16

**NOTES:**

BEARING AND COORDINATE DATUM IS  
NEW ZEALAND TRANSVERSE MERCATOR PROJECTION  
LEVELS ARE IN TERMS OF LANDS AND SURVEY  
DATUM (MSL) AUCKLAND 1946

**SURVEY EQUIPMENT USED:**  
INSTRUMENT: TRIMBLE ROBOTIC S8 1"  
GPS: TRIMBLE R6/R8 SYSTEMS  
PRECISE LEVELLING: TRIMBLE DINI Series 0.3mm DIGITAL  
VERTICAL PLUMMIT: FOIF DZJ2 LASER PLUMMIT

**COPYRIGHT:**  
This document and the copyright in this document remain the  
property of SURVEY WORX+. The contents of this document  
may not be reproduced either in whole or in part by any means  
whatsoever without the prior written consent of SURVEY WORX+.

**SURVEY WORX+**  
CONSTRUCTION & LAND SURVEYORS

mobile +64 021 824 084  
office +64 09 948 6491  
[www.surveymorx.co.nz](http://www.surveymorx.co.nz)  
6 Aranui Road, Sylvia Park, Auckland, NZ

**NZIS**  
REGISTERED  
PROFESSIONAL  
SURVEYOR

MEMBERS OF:  
**NZIS**  
New Zealand  
Institute of Surveyors  
Te Kaitiaki o Aotearoa

**CLIENT**  
SPINNAKER BAY LID

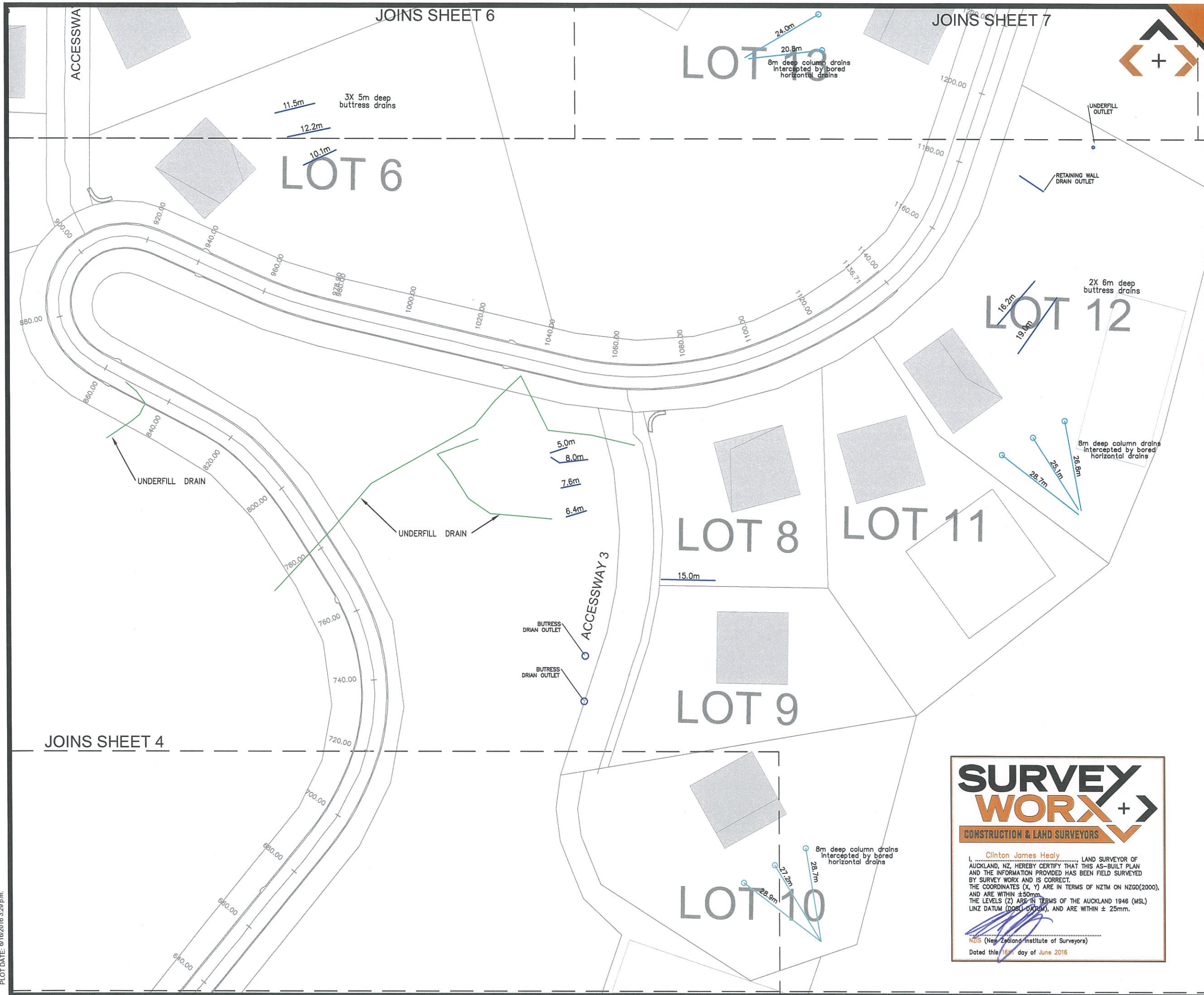
**PROJECT**  
SOLWAY  
285 ARA - KOTINGA

**TITLE**  
BUTTRESS DRAIN  
ASBUILT STAGE 2  
LOCATION PLAN

**SCALE** 1:500 (A1) 1:1000 (A3)

**DRAWING No** 55-932-605-16 **SHEET** 4 of 9 **REVISION** 2





SURVEYED	SWX	14.07.2015	APPROVED	DATE
DRAWN	LK	14.07.2015		
CHECKED				
APPROVED				
REVISION	CHANGES		CHECKED	DATE
0	ORIGINAL ISSUE		MC	15.07.15
2	FINAL ISSUE		MC	15.06.16

NOTES:  
BEARING AND COORDINATE DATUM IS  
NEW ZEALAND TRANSVERSE MERCATOR PROJECTION  
LEVELS ARE IN TERMS OF LANDS AND SURVEY  
DATUM (MSL) AUCKLAND 1946

SURVEY EQUIPMENT USED:  
INSTRUMENT: TRIMBLE ROBOTIC S8 1"  
GPS: TRIMBLE R6/R8 SYSTEMS  
PRECISE LEVELLING: TRIMBLE DiNi Series 0.3mm DIGITAL  
VERTICAL PLUMMING: FOIF DZJ2 LASER PLUMMIT

COPYRIGHT:  
This document and the copyright in this document remain the  
property of SURVEY WORX. The contents of this document  
may not be reproduced either in whole or in part by any means  
whatsoever without the prior written consent of SURVEY WORX.

**SURVEY**  
**WORX**  
CONSTRUCTION & LAND SURVEYORS

mobile +64 021 824 084  
office +64 09 948 6491  
[www.surveymorx.co.nz](http://www.surveymorx.co.nz)  
6 Aranui Road, Sylvia Park, Auckland, NZ



REGISTERED  
PROFESSIONAL  
SURVEYOR

MEMBERS OF:  
**NZIS**  
New Zealand  
Institute of Surveyors  
Te Hōiwi Kaitiaki o Aotearoa

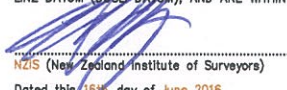
CLIENT  
SPINNAKER BAY LID

PROJECT  
SOLWAY  
285 ARA - KOTINGA

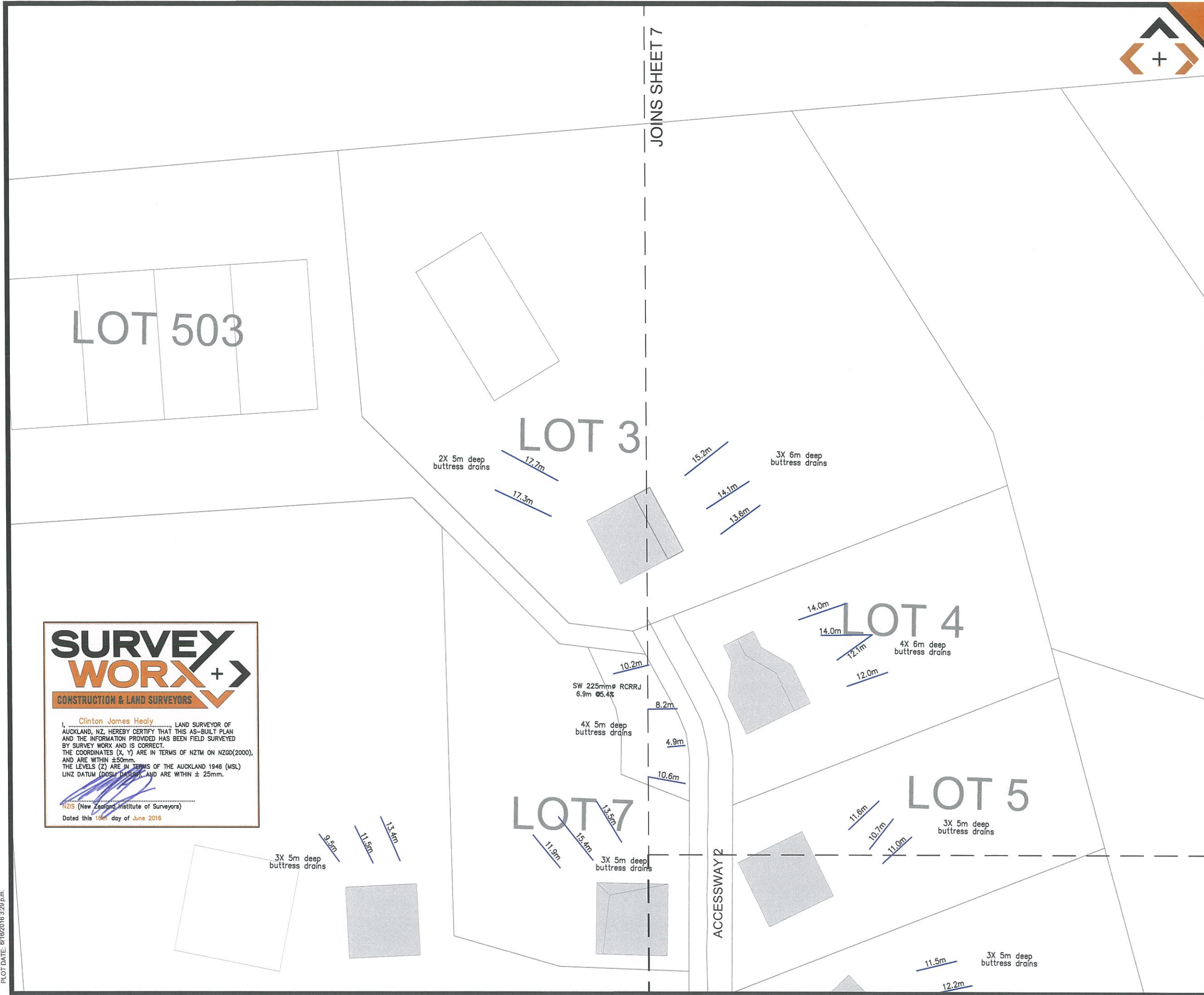
TITLE  
BUTTRESS DRAIN  
ASBUILT STAGE 2  
LOCATION PLAN

SCALE	1:500 (A1)	1:1000 (A3)
DRAWING No	55-932-605-16	SHEET 5 of 9
REVISION		2

**SURVEY**  
**WORX**  
CONSTRUCTION & LAND SURVEYORS

Clinton James Healy  
I, CLINTON JAMES HEALY, LAND SURVEYOR OF  
AUCKLAND, NZ, HEREBY CERTIFY THAT THIS AS-BUILT PLAN  
AND THE INFORMATION PROVIDED HAS BEEN FIELD SURVEYED  
BY SURVEY WORX AND IS CORRECT.  
THE COORDINATES (X, Y) ARE IN TERMS OF NZTM ON NZGD(2000),  
AND ARE WITHIN ±50mm.  
THE LEVELS (Z) ARE IN TERMS OF THE AUCKLAND 1946 (MSL)  
LINZ DATUM (DMSL-DATUM), AND ARE WITHIN ± 25mm.  
  
NZIS (New Zealand Institute of Surveyors)  
Dated this 15th day of June 2016





JOINS SHEET 7



SURVEYED	SWX	14.07.2015	APPROVED		DATE
DESIGNED	LK	14.07.2015			
DRAWN					
CHECKED					
APPROVED					
REVISION	CHANGES		CHECKED	DATE	
0	ORIGINAL ISSUE		MC	15.07.15	
2	FINAL ISSUE		MC	15.06.16	

NOTES:  
BEARING AND COORDINATE DATUM IS  
NEW ZEALAND TRANSVERSE MERCATOR PROJECTION  
LEVELS ARE IN TERMS OF LANDS AND SURVEY  
DATUM (MSL) AUCKLAND 1946

SURVEY EQUIPMENT USED: Trimble  
INSTRUMENT: TRIMBLE ROBOTIC S8 1"  
GPS: TRIMBLE R6/R8 SYSTEMS  
PRECISE LEVELLING: TRIMBLE DiNI Series 0.3mm DIGITAL  
VERTICAL PLUMMIT: FOIF DZJZ LASER PLUMMIT

COPYRIGHT:  
This document and the copyright in this document remain the  
property of SURVEY WORX. The contents of this document  
may not be reproduced either in whole or in part by any means  
whatsoever without the prior written consent of SURVEY WORX.

**SURVEY**  
**WORX** +  
CONSTRUCTION & LAND SURVEYORS

mobile +64 021 824 084  
office +64 09 948 6491  
[www.surveymorx.co.nz](http://www.surveymorx.co.nz)  
6 Aranui Road, Sylvia Park, Auckland, NZ

REGISTERED  
PROFESSIONAL  
SURVEYOR

MEMBERS OF:  
  
NZIS  
New Zealand  
Institute of Surveyors  
Te Kaitiaki o Te Kaitiaki

CLIENT  
SPINNAKER BAY LID

PROJECT  
SOLWAY  
285 ARA - KOTINGA

TITLE  
BUTTRESS DRAIN  
ASBUILT STAGE 2  
LOCATION PLAN

SCALE 1:500 (A1) 1:1000 (A3)  
DRAWING No 55-932-605-16 SHEET 6 of 9 REVISION 2

**SURVEY**  
**WORX** +  
CONSTRUCTION & LAND SURVEYORS

Clinton James Healy  
LAND SURVEYOR OF  
AUCKLAND, NZ, HEREBY CERTIFY THAT THIS AS-BUILT PLAN  
AND THE INFORMATION PROVIDED HAS BEEN FIELD SURVEYED  
BY SURVEY WORX AND IS CORRECT.  
THE COORDINATES (X, Y) ARE IN TERMS OF NZTM ON NZGD(2000),  
AND ARE WITHIN ±50mm.  
THE LEVELS (Z) ARE IN TERMS OF THE AUCKLAND 1946 (MSL)  
LINZ DATUM (DOSH DATUM), AND ARE WITHIN ± 25mm.  
  
NZIS (New Zealand Institute of Surveyors)  
Dated this 15th day of June 2016





Clinton James Healy  
I, CLINTON JAMES HEALY, LAND SURVEYOR OF AUCKLAND, NZ, HEREBY CERTIFY THAT THIS AS-BUILT PLAN AND THE INFORMATION PROVIDED HAS BEEN FIELD SURVEYED BY SURVEY WORX AND IS CORRECT.  
THE COORDINATES (X, Y) ARE IN TERMS OF NZTM ON NZGD(2000), AND ARE WITHIN  $\pm 50\text{mm}$ .  
THE LEVELS (Z) ARE IN TERMS OF THE AUCKLAND 1946 (MSL) LINZ DATUM (DOSL-DATUM), AND ARE WITHIN  $\pm 25\text{mm}$ .  
NZIS (New Zealand Institute of Surveyors)  
Dated this 16th day of June 2016

JOINS SHEET 6

UNDERFILL OUTLET  
UNDERFILL OUTLET

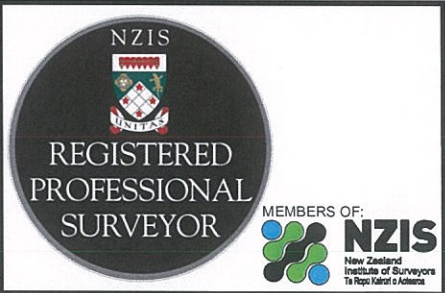
NOTES:  
BEARING AND COORDINATE DATUM IS NEW ZEALAND TRANSVERSE MERCATOR PROJECTION  
LEVELS ARE IN TERMS OF LANDS AND SURVEY DATUM (MSL) AUCKLAND 1946

SURVEY EQUIPMENT USED:  
INSTRUMENT: TRIMBLE ROBOTIC S8 1"  
GPS: TRIMBLE R6/R8 SYSTEMS  
PRECISE LEVELLING: TRIMBLE DINI Series 0.3mm DIGITAL VERTICAL PLUMMIT  
FOIF DZJ2 LASER PLUMMIT

COPYRIGHT:  
This document and the copyright in this document remain the property of SURVEY WORX. The contents of this document may not be reproduced either in whole or in part by any means whatsoever without the prior written consent of SURVEY WORX.



mobile +64 021 824 084  
office +64 09 948 6491  
www.surveyworx.co.nz  
6 Aranui Road, Sylvia Park, Auckland, NZ



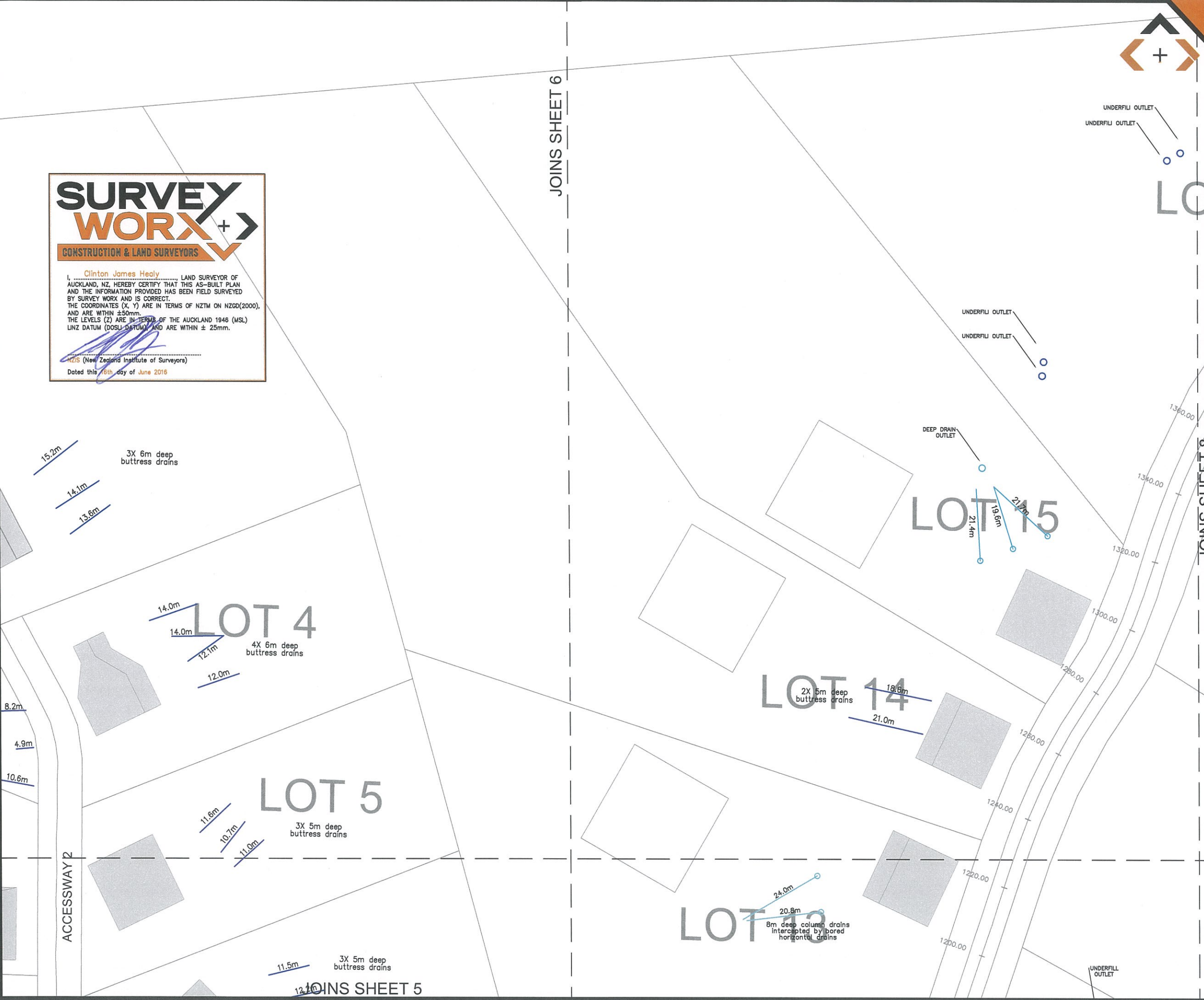
CLIENT  
SPINNAKER BAY LID

PROJECT  
SOLWAY  
285 ARA - KOTINGA

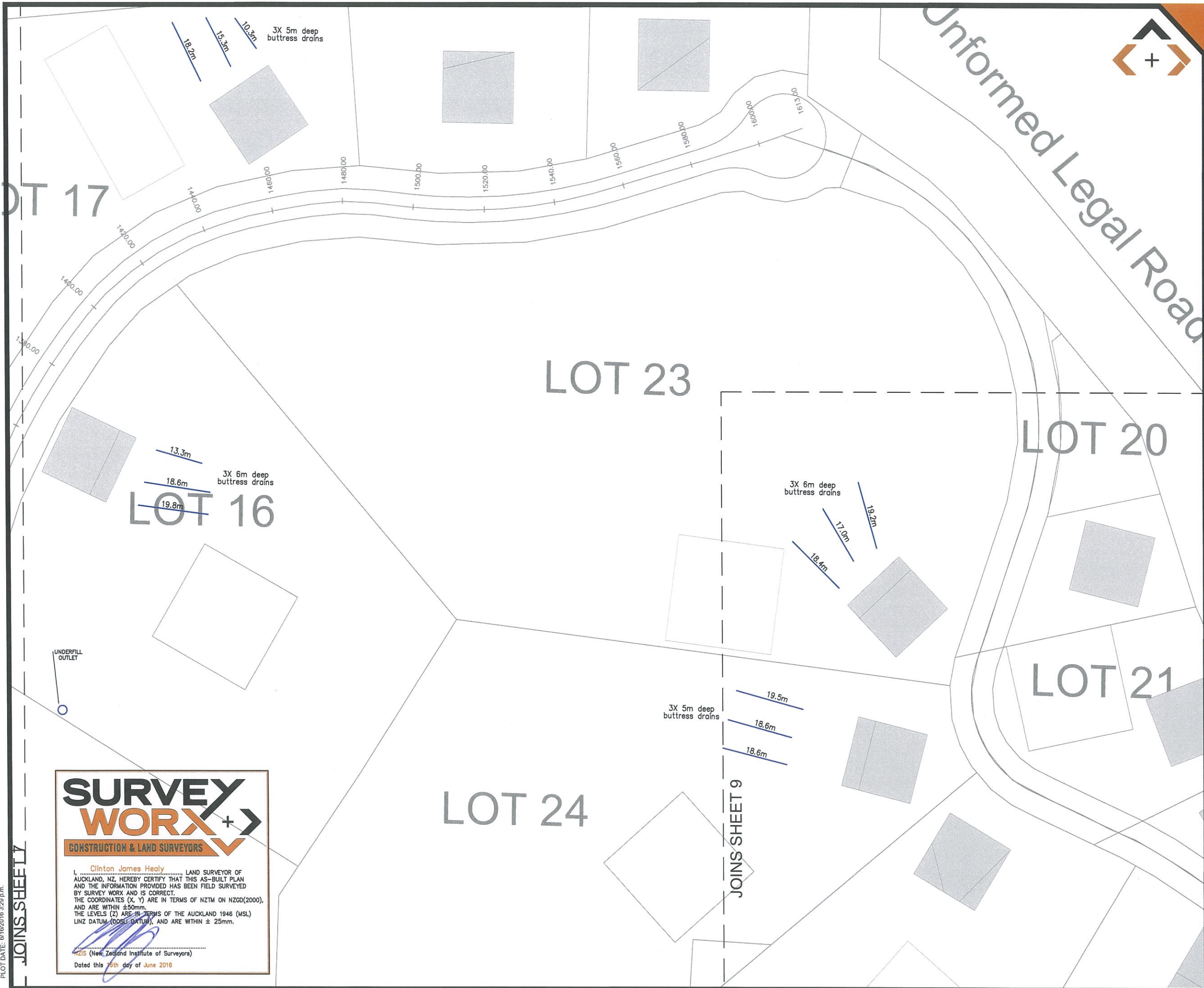
TITLE  
BUTTRESS DRAIN  
ASBUILT STAGE 2  
LOCATION PLAN

SCALE 1:500 (A1) 1:1000 (A3)  
DRAWING No 55-932-605-16  
SHEET 7 of 9  
REVISION 2

PLOT DATE: 6/10/2016 3:29 p.m.







SURVEYED	SWX	14.07.2015	APPROVED		DATE
DESIGNED					
DRAWN	LK	14.07.2015			
CHECKED					
APPROVED					

REVISION	CHANGES	CHECKED	DATE
0	ORIGINAL ISSUE	MC	15.07.15
2	FINAL ISSUE	MC	15.06.16

**NOTES:**

BEARING AND COORDINATE DATUM IS  
NEW ZEALAND TRANSVERSE MERCATOR PROJECTION  
LEVELS ARE IN TERMS OF LANDS AND SURVEY  
DATUM (MSL) AUCKLAND 1946

**SURVEY EQUIPMENT USED:** **Trimble**  
INSTRUMENT: TRIMBLE ROBOTIC S8 1"  
GPS: TRIMBLE R6/R8 SYSTEMS  
PRECISE LEVELLING: TRIMBLE DiNi Series 0.3mm DIGITAL  
VERTICAL PLUMMING: FOIF DZJ2 LASER PLUMMIT

**COPYRIGHT:**  
This document and the copyright in this document remain the  
property of SURVEY WORX. The contents of this document  
may not be reproduced either in whole or in part by any means  
whatsoever without the prior written consent of SURVEY WORX.

**SURVEY WORX**  
CONSTRUCTION & LAND SURVEYORS  
mobile +64 021 824 084  
office +64 09 948 6491  
[www.surveymorx.co.nz](http://www.surveymorx.co.nz)  
6 Aranui Road, Sylvia Park, Auckland, NZ

**NZIS**  
REGISTERED  
PROFESSIONAL  
SURVEYOR  
MEMBERS OF:  
 **NZIS**  
New Zealand  
Institute of Surveyors  
Te Kaitiaki Take Kōwhiri

**CLIENT**  
SPINNAKER BAY LID

**PROJECT**  
SOLWAY  
285 ARA - KOTINGA

**TITLE**  
BUTTRESS DRAIN  
ASBUILT STAGE 2  
LOCATION PLAN

**SCALE** 1:500 (A1) 1:1000 (A3)

**DRAWING No** 55-932-605-16 **SHEET** 8 of 9 **REVISION** 2

PLOT DATE: 01/02/2016 3:20 p.m.

JOINS SHEET 1

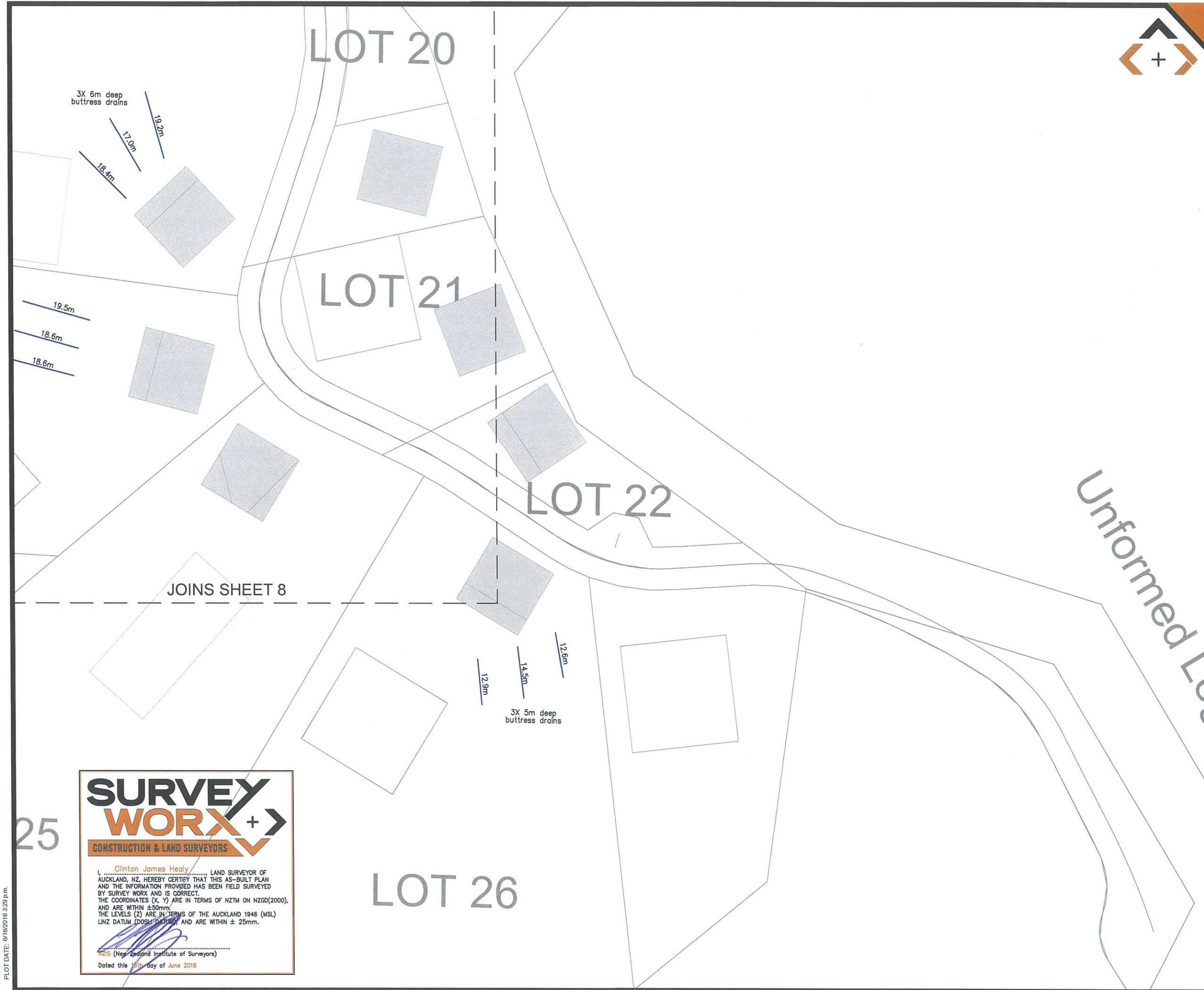
JOINS SHEET 9

**SURVEY WORX**  
CONSTRUCTION & LAND SURVEYORS

Clinton James Healy  
I, Clinton James Healy, LAND SURVEYOR OF  
AUCKLAND, NZ, HEREBY CERTIFY THAT THIS AS-BUILT PLAN  
AND THE INFORMATION PROVIDED HAS BEEN FIELD SURVEYED  
BY SURVEY WORX AND IS CORRECT.  
THE COORDINATES (X, Y) ARE IN TERMS OF NZTM ON NZGD(2000),  
AND ARE WITHIN ±50mm.  
THE LEVELS (Z) ARE IN TERMS OF THE AUCKLAND 1946 (MSL)  
LINZ DATUM (DODG DATUM), AND ARE WITHIN ± 25mm.

**NZIS** (New Zealand Institute of Surveyors)  
Dated this 15th day of June 2016





SURVEYED	SWX	14.07.2015	APPROVED	DATE
DESIGNED				
DRAWN	LK	14.07.2015		
CHECKED				
APPROVED				

REVISION	CHANGES	CHECKED	DATE
0	ORIGINAL ISSUE	MC	15.07.15
2	FINAL ISSUE	MC	15.06.16

**NOTES:**

BEARING AND COORDINATE DATUM IS  
NEW ZEALAND TRANSVERSE MERCATOR PROJECTION  
LEVELS ARE IN TERMS OF LANDS AND SURVEY  
DATUM (MSL) AUCKLAND 1946

**SURVEY EQUIPMENT USED:** **Trimble**  
INSTRUMENT: TRIMBLE ROBOTIC S8 1"  
GPS: TRIMBLE R6/R8 SYSTEMS  
PRECISE LEVELLING: TRIMBLE DINI Series 0.3mm DIGITAL  
VERTICAL PLUMMING: FOIF DZJ2 LASER PLUMMIT

**COPYRIGHT:**  
This document and the copyright in this document remain the  
property of SURVEY WORX. The contents of this document  
may not be reproduced either in whole or in part by any means  
whatsoever without the prior written consent of SURVEY WORX.

**SURVEY WORX+**  
CONSTRUCTION & LAND SURVEYORS

mobile +64 021 824 084  
office +64 09 948 6491  
[www.surveymorx.co.nz](http://www.surveymorx.co.nz)  
6 Aranui Road, Sylvia Park, Auckland, NZ

**NZIS**  
REGISTERED  
PROFESSIONAL  
SURVEYOR

MEMBERS OF:  
 **NZIS**  
New Zealand  
Institute of Surveyors  
Te Kaitiaki Take Kōwhiri

**CLIENT**

SPINNAKER BAY LID

**PROJECT**

SOLWAY  
285 ARA - KOTINGA

**TITLE**

BUTTRESS DRAIN  
ASBUILT STAGE 2  
LOCATION PLAN

**SCALE** 1:500 (A1) 1:1000 (A3)

**DRAWING No** 55-932-605-16 **SHEET** 9 of 9 **REVISION** 2

PLOT DATE: 01/06/2016 3:20 p.m.