


The information shown on this plan is not to be used for house design purposes. Contours shown are not of sufficient accuracy for house design. Contact Harrison Grierson Survey Consultants for site specific plans.




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NOTES:  
1. CONTOURS ARE AT 1.0m INTERVALS  
2. TOPSOIL OF APPROX. 0.2m HAS BEEN LAID ON ALL SUBGRADE



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CONSULTING ENGINEERS SURVEYORS PLANNERS

Level 16 2-6 Gilmer Terrace Wellington Ph 04 385 0005 Fax 04 385 0006

C	DISCLAIMER ADDED	LRC	10/06
B	MINOR AMENDMENTS	ATS	04.07.06
A	INITIAL RELEASE	PWJ	29.03.06
REF	AMENDMENT	BY	DATE

PROJECT:  
  
CARRUS LIMITED  
AOTEA BLOCK - PORIRUA  
STAGE 4 C, D & E

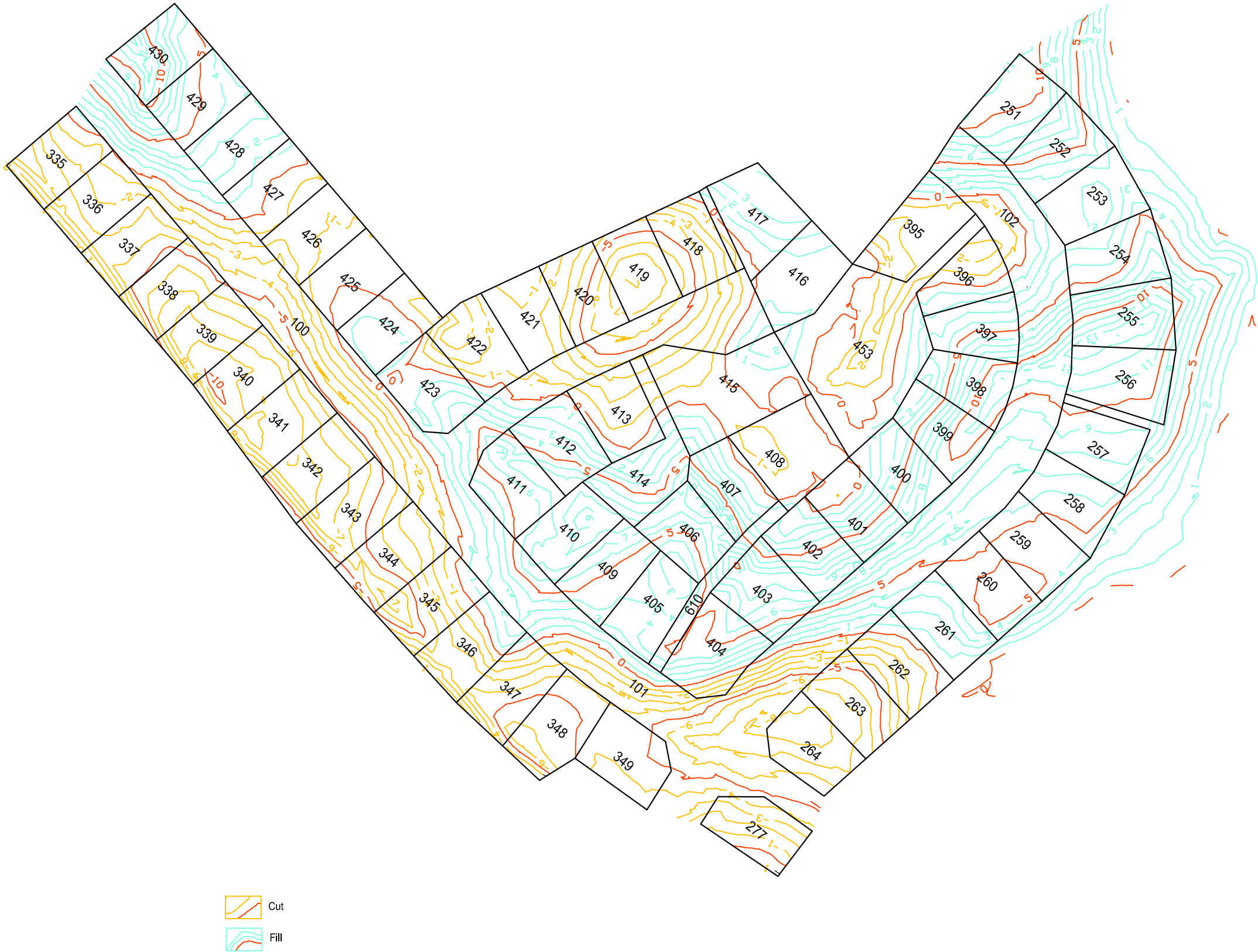
TITLE:  
  
ASBUILT CONTOUR SURFACE

DESIGNED:	DATE:	SIGNATURE:	PLOT DATE:	04.07.06
DRAWN:	DATE:	SIGNATURE:	CAD REF:	000632-4C-AB200
PWJ	03/2006		CAD XREF:	
CHECKED:	DATE:	SIGNATURE:	SURVEY BY:	RZK/GMB
APPROVED:	DATE:	SIGNATURE:	SURVEY DATE:	
			SDR REF:	

PLOT STATUS:  
  
ISSUE A

PROJECT No:	1850-000632-01	SCALES:	1:750 (A1) 1:1500 (A3)	A1
DRAWING No:	000632-4C-AB200			REV C

J:\1850\00632\_a\cad\As Builts\Stage C,D E\000632-4C-AB200.dwg





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Level 16 2-6 Gilmer Terrace Wellington Ph 04 385 0005 Fax 04 385 0006

B	MINOR AMENDMENTS	ATS	04.07.06
A	INITIAL RELEASE	PWJ	29.03.06
REF	AMENDMENT	BY	DATE

PROJECT:

CARRUS LIMITED  
AOTEA BLOCK - PORIRUA  
STAGE 4 C, D & E

TITLE:

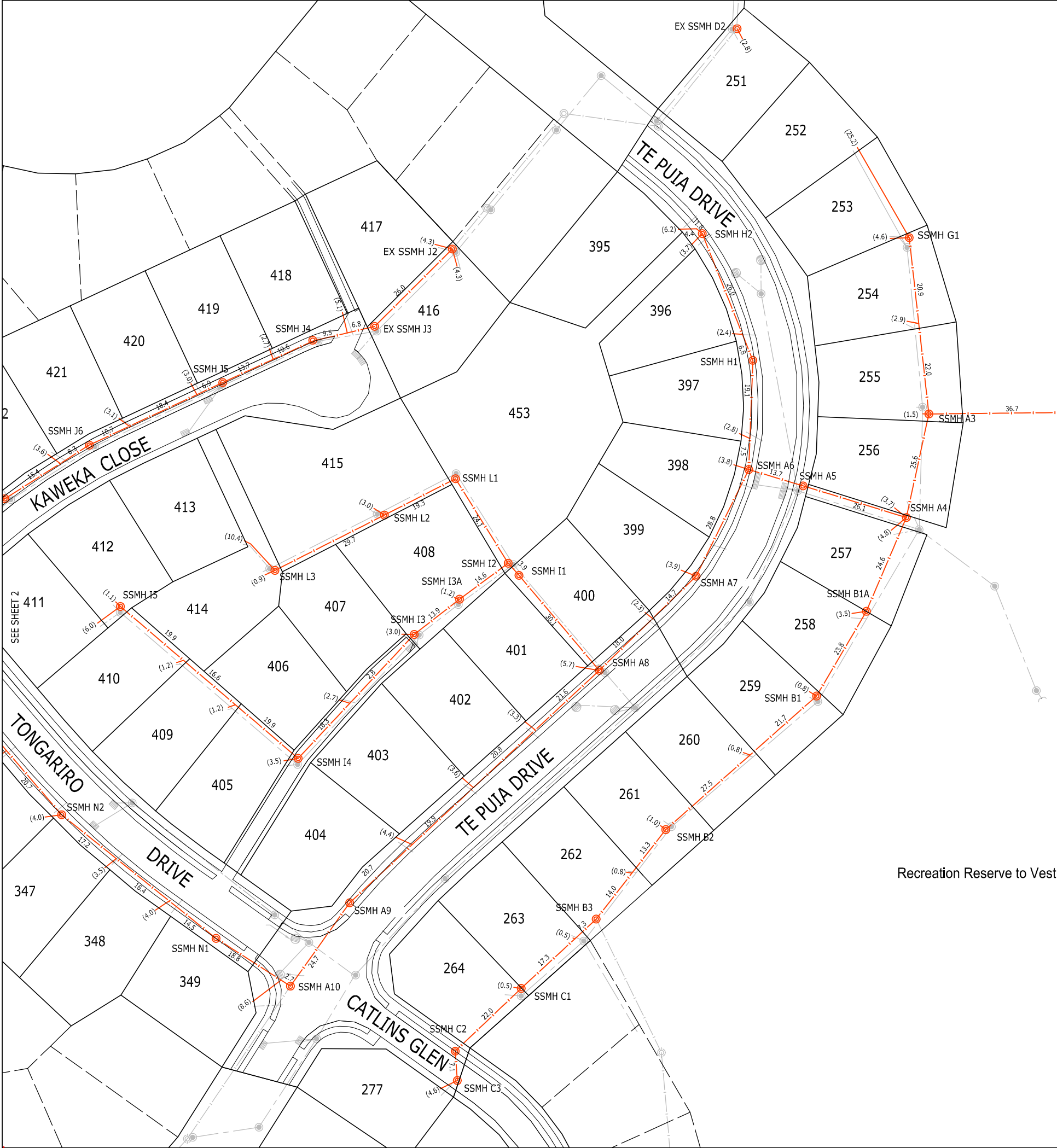
ASBUILT CUT/FILL SURFACE

DESIGNED:	DATE:	SIGNATURE:	PLOT DATE:	04.07.06
DRAWN:	DATE:	SIGNATURE:	CAD REF:	000632-4C-AB201-AB202
CHECKED:	DATE:	SIGNATURE:	CAD XREF:	
APPROVED:	DATE:	SIGNATURE:	SURVEY BY:	RZK/GMB
			SURVEY DATE:	
			SDR REF:	


PLOT STATUS:

ISSUE A

PROJECT No:	1850-000632-01	SCALES:	1:750 1:1500 (A3)	A1
DRAWING No:	000632-4C-AB201	REV	B	



MH No.	mN	mE	LL	IL
SSMH A1	819238.98	408010.18	42.42	41.32
SSMH A2	819243.10	408002.34	42.99	41.74
SSMH A3	819242.70	407965.63	60.43	57.90
SSMH A4	819217.66	407960.18	59.94	58.47
SSMH A5	819225.32	407935.21	62.19	60.58
SSMH A6	819229.26	407922.08	62.15	60.89
SSMH A7	819203.44	407909.32	62.82	61.47
SSMH A8	819180.68	407885.92	64.85	63.31
SSMH A9	819124.49	407825.56	74.32	72.64
SSMH A10	819104.34	407811.23	75.99	74.59
SSMH B1	819174.50	407938.47	60.84	59.29
SSMH B1A	819194.98	407950.52	60.27	59.07
SSMH B2	819142.19	407902.00	65.36	63.53
SSMH B3	819120.58	407885.16	69.98	68.43
SSMH C1	819103.79	407867.04	73.67	71.80
SSMH C2	819088.61	407851.08	75.26	73.42
SSMH C3	819081.52	407851.61	75.14	73.63
EXSSMH D2	819335.65	407919.05	64.14	62.87
SSMH G1	819285.34	407960.87	61.36	59.80
SSMH H1	819255.65	407923.06	62.75	61.41
SSMH H2	819286.32	407910.83	64.83	63.58
SSMH I1	819203.68	407866.51	66.66	65.29
SSMH I2	819206.61	407863.90	67.21	65.88
SSMH I3	819189.38	407841.17	72.70	71.45
SSMH I3A	819197.90	407852.13	72.45	70.85
SSMH I4	819159.42	407813.10	76.60	75.11
SSMH I5	819196.15	407770.12	84.37	83.12
EXSSMH J2	819283.14	407851.15	76.50	74.62
EXSSMH J3	819263.87	407831.60	78.74	77.48
SSMH J4	819260.52	407816.62	79.24	77.99
SSMH J5	819250.30	407794.87	81.01	79.49
SSMH J6	819235.16	407762.61	84.89	83.29
SSMH L1	819227.04	407851.16	71.08	69.71
SSMH L2	819218.25	407833.96	76.70	74.76
SSMH L3	819204.88	407807.49	78.42	76.98
SSMH N1	819115.89	407793.25	77.56	75.89
SSMH N2	819145.78	407755.90	83.15	81.50



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NOTE:  
1. All house connections are 100mm dia uPVC.  
2. All sewer main pipes are 150mm dia uPVC unless shown otherwise.  
3. All positions and levels are accurate at time of survey.  
4. Levels are in terms of Wellington Vertical Datum 1953.  
(Orlgn of levels: BMLB51 S0 31708, RL = 2.936m)  
5. Coordinates are in terms of NZGD2000 - Wellington Circuit.

LEGEND  
STORMWATER LINE  
STORMWATER MANHOLE  
STORMWATER CONNECTION  
SUMP  
SUPERPIT  
SEWER LINE  
SEWER MANHOLE  
SEWER CONNECTION  
EXISTING SEWER LINE  
EXISTING SEWER MANHOLE

NOTE  
THIS PLAN PART SUPERSEDES DRAWING NO. 000632-4C-AB400.  
  
WARNING: Levels, locations and dimenstons of drainage services shown on  
these plans may not be accurate due to circumstances not notified to Harrison  
Grierson Consultants Ltd. A physical check should be made on all levels,  
locations and dimensions before starting design or works.



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CONSULTING ENGINEERS SURVEYORS PLANNERS

Level 16 Grand Plimmer Tower 2-6 Gilmer Terrace Wellington Ph 04 385 0005 Fax 04 385 0006

B	DISCLAIMER ADDED, PRESENTATION AMENDMENTS	NDH	22/02/2008
A	INITIAL RELEASE	MJH	09/10/2008
REF	AMENDMENT	BY	DATE

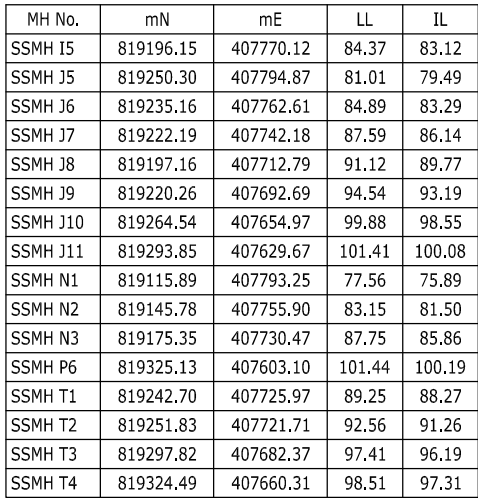
PROJECT:  
  
CARRRUS LIMITED  
AOTEA BLOCK - PORIRUA  
STAGE 4C, 4D & 4E

TITLE:  
  
SANITARY SEWER RETICULATION  
AS BUILT PLANS  
SHEET 1 OF 2

DESIGNED: GAW	DATE: 09/2005	SIGNATURE:	PLOT DATE: 22/02/2008
DRAWN: TAJ	DATE: 10/2007	SIGNATURE:	CAD REF: 000632-4CDE-AB400
CHECKED: MJH/CSR	DATE: 21/02/2008	SIGNATURE:	SURVEY BY: GMB, LRC
APPROVED: JMS	DATE: 21/02/2008	SIGNATURE:	SURVEY DATE: 06/2006

PLOT STATUS:  
  
AS BUILT

PROJECT No: 1850-000632-01	SCALES: 1:500 (A1) 1:1000 (A3)	A1
DRAWING No:  000632-4CDE-AB402-SS	REV  B	



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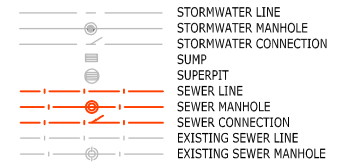
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NOTE:

1. All house connections are 100mm dia uPVC.
2. All sewer main pipes are 150mm dia uPVC unless shown otherwise.
3. All positions and levels are accurate at time of survey.
4. Levels are in terms of Wellington Vertical Datum 1953.  
(Origin of levels: BMLB51 SO 31708, RL = 2.936m)
5. Coordinates are in terms of NZGD2000 - Wellington Circuit.

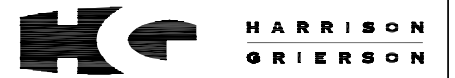
LEGEND



**NOTE**

THIS PLAN PART SUPERSEDES DRAWING NO. 000632-4C-AB400.

WARNING: Levels, locations and dimensions of drainage services shown on these plans may not be accurate due to circumstances not notified to Harrison Grierson Consultants Ltd. A physical check should be made on all levels, locations and dimensions before starting design or works.



Level 16 Grand Plimmer Tower 2-6 Gilmer Terrace Wellington Ph 04 385 0005 Fax 04 385 0006

B	DISCLAIMER ADDED, PRESENTATION AMENDMENTS	NDH	22/02/2008
A	INITIAL RELEASE	MJH	09/10/2008
REF	AMENDMENT	BY	DATE

PROJECT:

CARRRUS LIMITED  
AOTEA BLOCK - PORIRUA  
STAGE 4C, 4D & 4E

**TITLE:**

SANITARY SEWER RETICULATION  
AS BUILT PLANS  
SHEET 2 OF 2

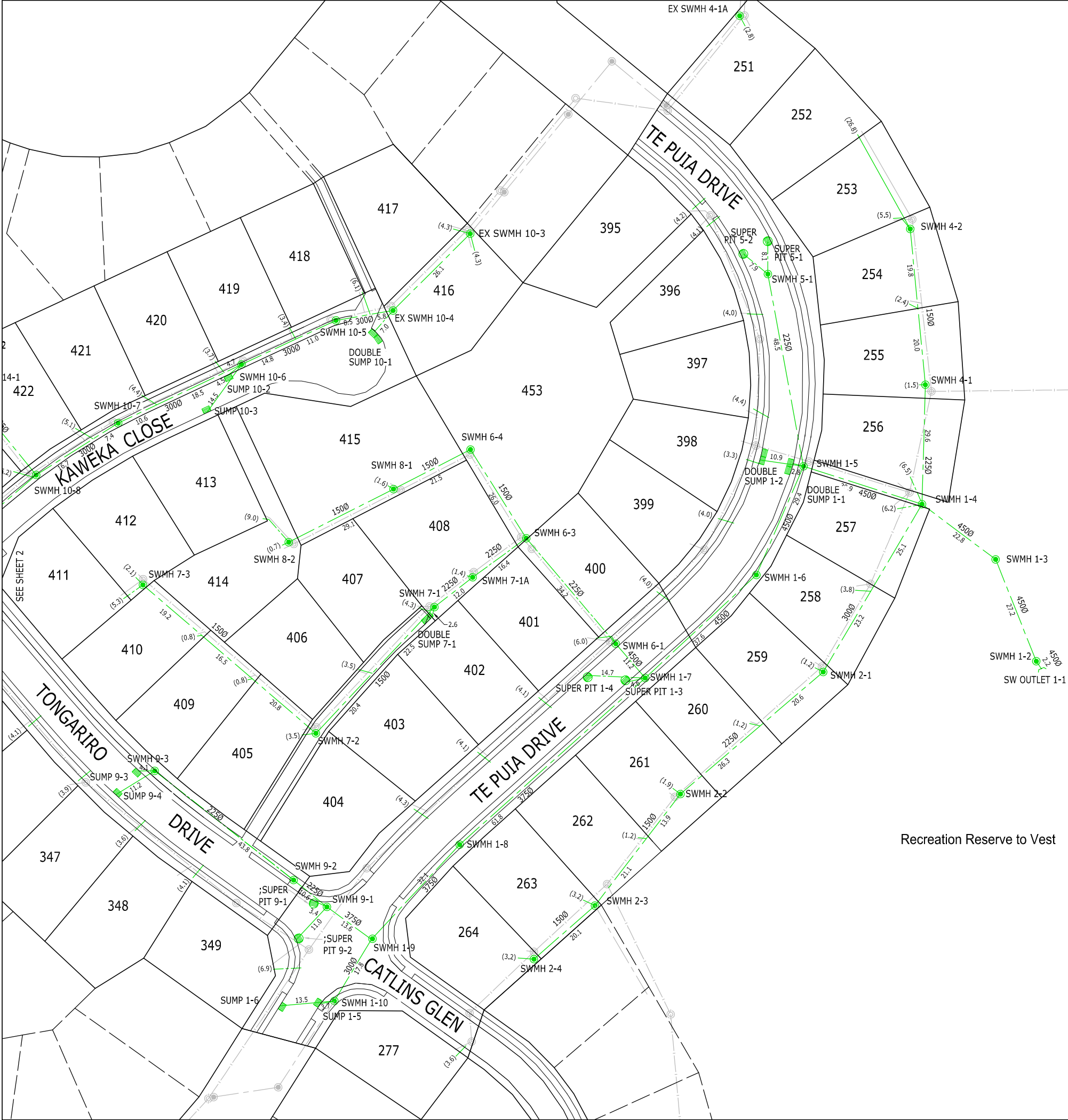
DESIGNED: GAW	DATE: 09/2005	SIGNATURE:	PLOT DATE: 22/02/2008
DRAWN: (TAJ)	DATE: 10/2007	SIGNATURE:	CAD REF: 000632-4CDE-AB400
CHECKED: MJH/CSR	DATE: 21/02/2008	SIGNATURE:	CAD XREF:
APPROVED: JMS	DATE: 21/02/2008	SIGNATURE:	SURVEY BY: GMB, LRC
			SURVEY DATE: 06/2006
			SDR REF:


PLOT STATUS:

AS BUILT

PROJECT No: 1850-000632-01	SCALES: 1:500 (A1) 1:1000 (A3)	A1
DRAWING No:		REV

000632-4CDE-AB403-SS	B
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**NOTE:**  
1. All house connections are 100mm dia uPVC.  
2. All single sump leads are 225mm dia rcrrj class z.  
3. All double sump leads are 300mm dia rcrrj class z.  
4. All positions and levels are accurate as at time of survey  
5. Levels are in terms of Wellington Vertical Datum 1953  
(Origin of levels: BMLB51 50 31708, RL = 2.936m)  
6. Coordinates are in terms of NZGD2000 - Wellington C1rcut


**LEGEND**

	STORMWATER LINE
	STORMWATER MANHOLE
	STORMWATER CONNECTION
	SUMP
	SUPERPIT
	SEWER LINE
	SEWER MANHOLE
	SEWER CONNECTION
	EXISTING STORMWATER LINE
	EXISTING STORMWATER MANHOLE

MH No.	mN	mE	LL	IL
SW OUT 1-1	819173.98	407992.86	-	39.23
SWMH 1-2	819175.80	407991.62	41.44	39.41
SWMH 1-3	819201.05	407981.54	48.87	47.20
SWMH 1-4	819214.73	407963.28	59.50	57.80
SWMH 1-5	819224.14	407933.89	62.21	60.20
SWMH 1-6	819197.20	407922.22	62.59	60.99
SWMH 1-7	819171.44	407894.66	64.82	63.06
SWMH 1-8	819130.36	407848.62	71.92	70.50
SWMH 1-9	819107.02	407827.00	75.21	74.18
SWMH 1-10	819091.72	407817.48	76.90	75.98
SWMH 2-1	819173.15	407938.78	60.83	59.15
SWMH 2-2	819142.90	407903.37	65.17	63.38
SWMH 2-3	819115.24	407882.18	70.91	69.66
SWMH 2-4	819101.97	407867.04	73.71	72.61
SWMH 4-1	819244.35	407964.12	60.39	59.10
EXSWMH 4-1A	819336.74	407918.25	64.10	62.76
SWMH 4-2	819282.96	407960.36	61.32	59.73
SWMH 5-1	819271.78	407925.06	63.51	61.36
SWMH 6-1	819180.14	407887.30	64.70	63.22
SWMH 6-3	819206.30	407865.14	67.06	65.52
SWMH 6-4	819228.28	407851.31	71.31	69.74
SWMH 7-1	819189.24	407842.37	72.63	71.34
SWMH 7-1A	819196.62	407851.85	72.46	71.01
SWMH 7-2	819157.94	407812.95	76.69	74.96
SWMH 7-3	819194.74	407770.07	84.36	83.09
SWMH 8-1	819218.48	407832.22	76.92	75.42
SWMH 8-2	819205.32	407806.22	78.62	77.09
SWMH 9-1	819114.92	407815.71	75.39	74.36
SWMH 9-2	819121.58	407807.44	76.41	74.95
SWMH 9-3	819148.65	407773.00	81.98	80.53
EXSWMH 10-3	819281.79	407851.24	76.49	74.99
EXSWMH 10-4	819262.73	407832.11	78.84	77.66
SWMH 10-5	819260.30	407817.95	79.17	77.42
SWMH 10-6	819249.37	407794.52	81.05	79.62
SWMH 10-7	819234.83	407763.94	84.78	83.24
SWMH 10-8	819221.99	407743.60	87.43	86.07
DSUMP 1-1	819224.10	407930.81	61.95	-
DSUMP 1-2	819226.33	407923.59	61.96	-
S-PIT 1-3	819170.78	407889.89	64.91	-
S-PIT 1-4	819172.19	407880.18	65.46	-
SUMP 1-5	819090.97	407813.76	76.60	-
SUMP 1-6	819090.42	407804.15	77.08	-
S-PIT 5-1	819280.19	407925.56	63.79	-
S-PIT 5-2	819276.51	407918.44	63.82	-
DSUMP 7-1	819186.05	407840.62	72.92	-
S-PIT 9-1	819116.06	407812.89	75.57	-
S-PIT 9-2	819107.03	407808.43	75.86	-
SUMP 9-3	819148.68	407768.48	82.13	-
SUMP 9-4	819143.00	407763.51	82.04	-
DSUMP 10-1	819256.58	407828.18	78.61	-
SUMP 10-2	819246.37	407791.15	81.26	-
SUMP 10-3	819237.87	407786.08	82.13	-

**NOTE**  
THIS PLAN PART SUPERSEDES DRAWING NO. 000632-4C-AB400.

WARNING: Levels, locations and dimenstons of drainage services shown on these plans may not be accurate due to circumstances not notified to Harrison Grierson Consultants Ltd. A physical check should be made on all levels, locations and dimensions before starting design or works.



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CONSULTING ENGINEERS SURVEYORS PLANNERS

Level 16 Grand Plimmer Tower 2-6 Gilmer Terrace Wellington Ph 04 385 0005 Fax 04 385 0006

B	DISCLAIMER ADDED, PRESENTATION AMENDMENTS	NDH	22/02/2008
A	INITIAL RELEASE	MJH	09/10/2008
REF	AMENDMENT	BY	DATE

PROJECT:

CARRRUS LIMITED  
AOTEA BLOCK - PORIRUA  
STAGE 4C, 4D & 4E

TITLE:

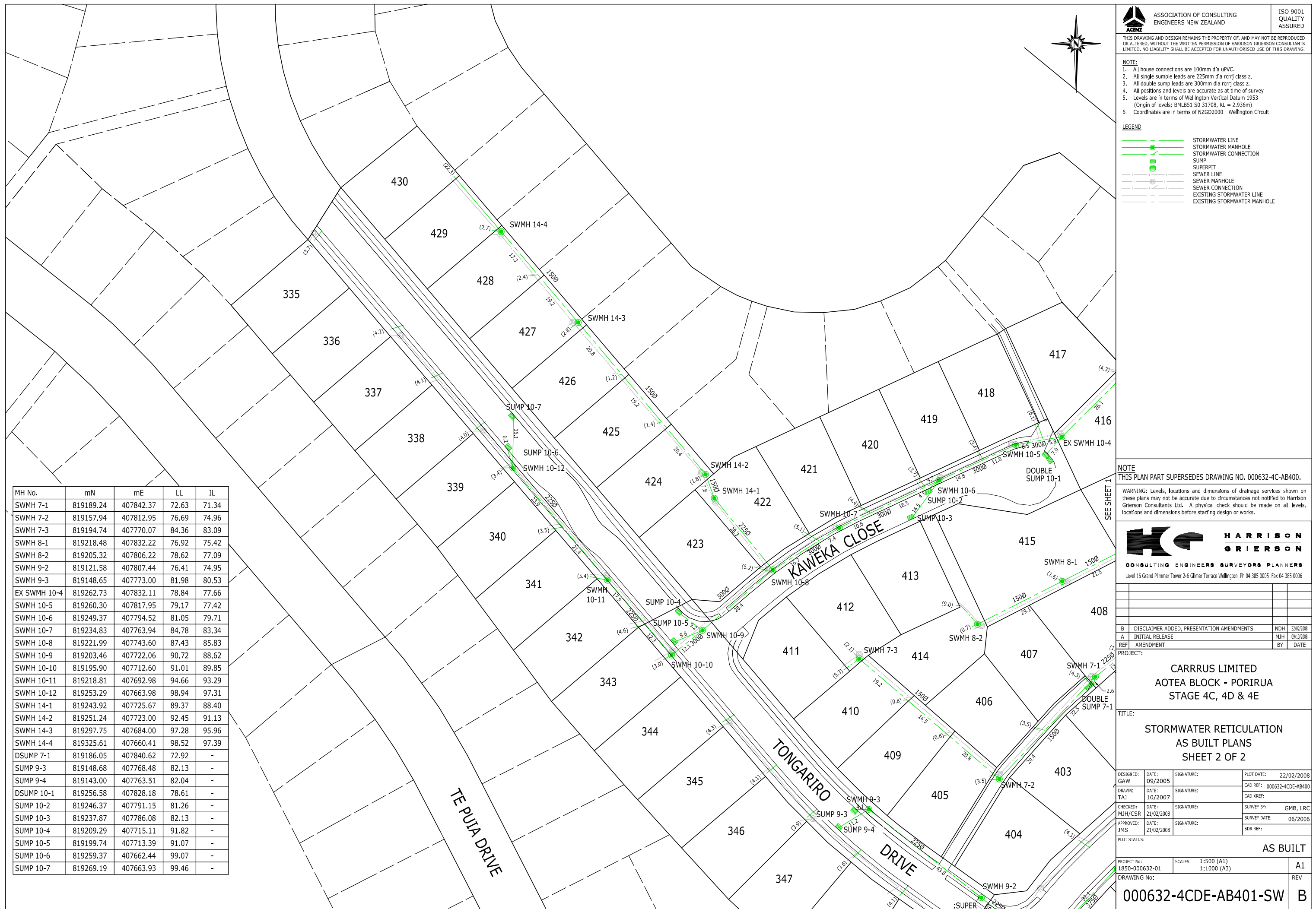
STORMWATER RETICULATION  
AS BUILT PLANS  
SHEET 1 OF 2

DESIGNED:	DATE:	SIGNATURE:	PLOT DATE:
GAW	09/2005		22/02/2008
DRAWN:	DATE:	SIGNATURE:	CAD REF:
TAJ	10/2007		000632-4CDE-AB400
CHECKED:	DATE:	SIGNATURE:	CAD XREF:
MJH/CSR	21/02/2008		
APPROVED:	DATE:	SIGNATURE:	SURVEY BY:
JMS	21/02/2008		GMB, LRC
			SURVEY DATE:
			06/2006
			SDR REF:

PLOT STATUS:

AS BUILT

PROJECT No:	SCALES:	
1850-000632-01	1:500 (A1) 1:1000 (A3)	A1
DRAWING No:		REV
000632-4CDE-AB400-SW		B













FH 1	407910.08	819201.75
FH 2	407803.38	819122.85
FH 4	407784.79	819244.33
GV 2	407834.12	819117.46
GV 3	407830.25	819093.80
GV 4	407805.83	819109.59
GV 5	407798.77	819131.61
GV 6	407912.96	819285.32
GV 7	407785.94	819244.79
GV 8	407833.97	819117.56
SV 1	407827.16	819124.00
SV 2	407833.53	819100.22
SV 3	407807.47	819096.99
SV 4	407804.41	819122.14

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FH 2	407803.38	819122.85
FH 3	407734.56	819187.94
FH 4	407784.79	819244.33
FH 5	407622.66	819318.99
GV 5	407798.78	819131.61
GV 6	407732.24	819202.19
GV 8	407654.19	819267.63
GV 9	407660.52	819274.57
SV 1	407827.16	819124.00
SV 4	407804.41	819122.14
SV 5	407730.17	819210.08
SV 7	407785.94	819244.79



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- |   |                                |
|---|--------------------------------|
|  | GATE VALVE                     |
|  | SLUICE VALVE                   |
|  | FIRE HYDRANT                   |
|  | WATER TOBY                     |
|  | 150mmØ PVC WATERMAIN           |
|  | 50mmØ MDPE RIDERMAIN           |
|  | WATER/RIDERMAIN IN OTHER STAGE |
|  | RIDERMAIN IN OTHER STAGE       |

1. All Dimensions are shown in metres unless otherwise stated.

This drawing supercedes drawing number 000632-4C-AB600.

**WARNING:** Levels, locations and dimensions of water services shown on these plans may not be accurate due to circumstances not notified to Harrison Grierson Consultants Ltd. A physical check should be made on all levels, locations and dimensions before starting design or works.



A	INITIAL RELEASE	JMS	30/01/20
REF	AMENDMENT	BY	DATE

PROJECT:

CARRUS LIMITED  
AOTEA BLOCK - PORIRUA  
STAGE 4C, 4D & 4E

**TITLE:**

WATER AS-BUILTS  
LAYOUT PLAN  
SHEET 2 OF 2

DESIGNED: GAW	DATE: 07/2005	SIGNATURE:	PLOT DATE: 30/01/20
DRAWN: NDH	DATE: 12/2007	SIGNATURE:	CAD REF:
CHECKED: CSR	DATE: 15/01/2008	SIGNATURE:	CAD XREF:
APPROVED: JMS	DATE: 30/01/2008	SIGNATURE:	SURVEY BY: GMB, LI
			SURVEY DATE: 06/20
			SDR REF:

PLOT STATUS:

AS BUILT

PROJECT No: 1850-000632-01	SCALES: 1:500 1:1000 (A3)	A1
DRAWING No:  000632-4CDE-AB501		REV  A