

Stockland Developments Pty Ltd
c/- Cardno Pty Ltd
Level 1, 47 Burelli Street
WOLLONGONG NSW 2500

Project 48694.26
9 December 2011
AC:ac

Attention: Mr Ryhan Thomson

Dear Sirs

Geotechnical Comment
Stage 6 McCauleys Beach Estate, Bulli

As requested, we have reviewed existing information relevant to Stage 6 McCauleys Beach Estate and provide the following comments in relation to the geotechnical items detailed in the NSW Planning Department Determination of Major Project No.07-0032, namely:

C15 Geotechnical Certification

A suitably qualified geotechnical engineer must supervise all filling activity. The geotechnical engineer shall provide written certification that the completed landfilling or land re-shaping works are in compliance with the approved plans and specifications. The certification shall include appropriate test results, a test location diagram and date of testing.

Filling within the allotments was placed under controlled (Level 1) conditions as described in AS3798 – 2007 (Ref. 1) with inspection and testing services provided by Douglas Partners Pty Ltd.

At the completion of construction, a lot classification report (Project 48694.26 dated 7 December 2011) was prepared which includes the results of earthworks testing completed to 22 November 2011 within the overall Stages 1 – 4 and 6 subdivision. In summary, it is considered that the placement and compaction of bulk filling undertaken from 24 September 2010 to 22 November 2011 (which includes all controlled filling associated within the Stage 6 development area) was carried out in general accordance with the requirements of the specification. A copy of the test report summary and location plan (Drawing 1) are attached.

We certify that the geotechnical results and site filling are in accordance with the specifications and that the finished batter slopes (based on survey information provided) are in accordance with the approved plans. This certification does not include comment on the as-built surface levels or extent of filling.

C16 Final Geotechnical Report – Subdivision Certificate

The submission of a final geotechnical report by a suitably qualified and experienced geotechnical consultant to the PCA shall occur prior to the issue of the Subdivision Certificate. The report shall include, but is not necessarily limited to:

a) All earthwork operations;

Earthworks has comprised the removal of uncontrolled filling to depths up to 8.5 m (apart from sections adjacent to the northern and eastern boundaries as described below and in Item b) that was present within the proposed building areas prior to the commencement of construction, culling of oversize and other deleterious fractions, re-compaction of approved soils under geotechnical control, and pavement construction. It is noted that due to the depth of existing uncontrolled filling and the requirement to provide support to the northern and eastern boundaries during construction, complete removal of the filling to the boundaries was not possible. As such, remnant uncontrolled filling is present within parts of the lots (refer attached Drawing 1).

b) The suitability of each allotment for residential development. In this regard each lot shall be given a classification in accordance with AS 2870.1 – Residential Slabs and Footings;

A lot classification report (Project 48694.26) dated 30 November 2011 was prepared by Douglas Partners Pty Ltd at the completion of the subdivision. In summary, all allotments are considered suitable for residential development from the geotechnical perspective.

Lots 601 – 605 and Lot 607 were given a conventional Class M1* (moderately reactive/filled lot) or Class H1* (highly reactive/filled lot) classification in accordance with AS 2870 – 2011 *Residential Slabs and Footings*. It is noted that the classification is only applicable to areas underlain by controlled filling (refer attached Drawing 2). Due to the topographic location, the presence of deep uncontrolled filling and underlying soft clays, Lot 606 was classified as Class P. Notwithstanding this, Lots 601 – 607 are geotechnical suitable for residential development and reference must be made to Section 6.6 of the lot classification report (Project 48694.26) dated 7 December 2011 with respect to footing requirements.

c) A fill plan showing extent and depth of fill;

Reference should be made to the works-as-executed drawing prepared by Craig Robson & Associates Pty Ltd for the subdivision for this information.

d) Certification that all earthworks within the site have complied with the Subdivision Code. This shall include appropriate test results, and test location diagram and date of testing;

In order to obtain the design surface levels, filling was placed to depths of up to 8.5 m. All filling placed within the allotments as part of subdivision construction was placed under Level 1 control (AS 3798 – 2007). Filling within road alignments was placed under (at least) Level 2 control (AS 3798 – 2007).

We certify that the results indicate density ratios within lot filling of at least 98% relative to Standard compaction, with placement moisture contents within 2% of standard optimum, in accordance with the Subdivision Code. The test result summary sheets and density test location plan are attached.

- e) *Certification that all recommendations contained in geotechnical report lodged in support of the Development Consent and all subsequent geotechnical reports lodged in support of this development have been satisfied;*

We certify that all geotechnical requirements have been satisfied.

- f) *The exact extent of any restricted building zones or any other restrictions affecting any of the allotments. Particular attention shall be paid to the location of subsurface drainage lines, which shall be burdened with a restriction-as-to-user within the Section 88B Instrument.*

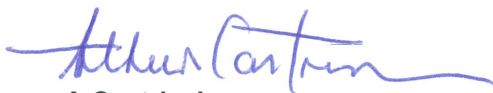
No restricted building zones have been nominated for geotechnical reasons. It is noted however, that the M or H1 lot classifications exclude zones underlain by uncontrolled filling within Lots 601 – 605 and Lot 607. Notwithstanding this, construction within these zones would be geotechnically feasible utilising the underlying stiff natural soils or weathered rock for foundation support.

- g) *Identification of all land affected by landslip or instability constraints (if applicable)*

No such areas have been identified.

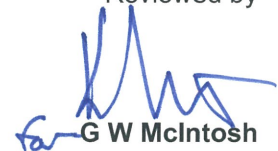
We trust that the above information is in accordance with your present requirements. However, should you require additional information at this stage, please do not hesitate to contact the undersigned.

Yours faithfully
Douglas Partners Pty Ltd



A Castrissios
Senior Associate

Reviewed by



G W McIntosh
Principal

Attachments: Controlled Filling Summary Sheets (51 sheets)
 Density Test Location Plans (1 sheet)
 Drawing 1

CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 1 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments etc
			DENSITY RATIO %	MOISTURE VARIATION		
24/09/10	1	9.54	99.0	0.0	PASS	
24/09/10	2	9.76	100.0	0.5 Dry	PASS	
24/09/10	3	10.17	99.0	0.5 Dry	PASS	
24/09/10	4	10.44	99.5	0.0	PASS	
24/09/10	5	10.86	98.0	0.5 Dry	PASS	
24/09/10	6	11.48	99.5	0.0	PASS	
25/09/10	7	8.90	98.0	0.5 Dry	PASS	
25/09/10	8	9.27	99.5	0.5 Wet	PASS	
27/09/10	9	11.14	99.0	1.5 Wet	PASS	
27/09/10	10	11.47	98.5	1.5 Wet	PASS	
27/09/10	11	11.91	98.0	1.0 Wet	PASS	
27/09/10	12	10.07	99.0	0.5 Wet	PASS	
27/09/10	13	11.35	99.0	0.5 Wet	PASS	
27/09/10	14	12.02	100.0	0.0	PASS	
28/09/10	15	12.32	98.5	1.5 Wet	PASS	
28/09/10	16	11.46	98.0	2.0 Wet	PASS	
28/09/10	17	11.95	98.0	2.0 Wet	PASS	
28/09/10	18	12.54	101.0	2.0 Wet	PASS	
28/09/10	19	21.00	102.0	0.5 Dry	PASS	Temp Acid Pond
28/09/10	20	11.94	98.5	0.5 Wet	PASS	
28/09/10	21	12.73	100.0	0.5 Wet	PASS	
29/09/10	22	13.39	98.5	2.0 Dry	PASS	
29/09/10	23	12.81	98.5	2.0 Dry	PASS	
29/09/10	24	13.12	98.5	1.5 Dry	PASS	
29/09/10	25	13.75	101.0	1.0 Dry	PASS	

CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 2 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments etc
			DENSITY RATIO %	MOISTURE VARIATION		
30/09/10	26	13.33	99.0	0.5 Wet	PASS	
30/09/10	27	12.95	101.0	0.5 Wet	PASS	
1/10/10	28	13.88	99.5	1.0 Wet	PASS	
1/10/10	29	13.33	100.5	0.5 Dry	PASS	
11/10/10	30	9.94	99.5	0.0	PASS	
11/10/10	31	10.31	101.0	0.5 Wet	PASS	
11/10/10	32	10.68	99.5	1.5 Wet	PASS	
11/10/10	33	11.00	99.0	0.5 Dry	PASS	
11/10/10	34	11.39	100.5	1.0 Wet	PASS	
11/10/10	35	11.77	98.0	0.5 Dry	PASS	
11/10/10	36	12.16	98.0	0.5 Wet	PASS	
11/10/10	37	12.58	99.5	0.5 Wet	PASS	
12/10/10	38	12.31	87.5	3.0 Wet	FAIL	Retest required
12/10/10	39	12.36	99.0	1.0 Wet	PASS	Retest of Test No 38
12/10/10	40	12.95	98.5	2.0 Wet	PASS	
13/10/10	41	13.25	90.0	5.0 Wet	FAIL	Retest required
14/10/10	42	10.71	98.5	1.0 Wet	PASS	
14/10/10	43	10.10	98.0	1.0 Wet	PASS	
14/10/10	44	10.94	99.0	0.5 Wet	PASS	
14/10/10	45	10.34	99.0	1.0 Wet	PASS	
15/10/10	46	11.22	98.5	0.5 Dry	PASS	
15/10/10	47	10.61	98.5	0.5 Wet	PASS	
18/10/10	48	11.00	99.0	0.0	PASS	
18/10/10	49	11.55	99.5	0.5 Dry	PASS	
18/10/10	50	11.18	99.0	0.0	PASS	

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PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 3 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments etc
			DENSITY RATIO %	MOISTURE VARIATION		
18/10/10	51	11.93	100.5	0.0	PASS	
18/10/10	52	12.44	100.0	0.5 Dry	PASS	
18/10/10	53	12.45	102.0	0.5 Dry	PASS	
18/10/10	54	12.79	100.5	0.0	PASS	
18/10/10	55	12.96	100.5	0.0	PASS	
19/10/10	56	12.70	101.5	0.5 Wet	PASS	
19/10/10	57	13.24	98.5	0.5 Dry	PASS	Retest of Test No 41
19/10/10	58	13.05	101.0	0.0	PASS	
19/10/10	59	13.49	102.0	0.0	PASS	
21/10/10	60	10.49	99.5	1.0 Wet	PASS	
21/10/10	61	10.07	100.0	1.0 Dry	PASS	
21/10/10	62	10.41	99.5	0.5 Dry	PASS	
21/10/10	63	10.51	98.5	0.0	PASS	
22/10/10	64	10.91	99.5	0.5 Wet	PASS	
22/10/10	65	10.68	100.0	1.0 Dry	PASS	
23/10/10	66	11.00	99.0	1.0 Wet	PASS	
23/10/10	67	11.20	100.0	1.5 Wet	PASS	
8/11/10	68	11.36	99.0	0.5 Wet	PASS	
8/11/10	69	11.04	98.0	0.5 Wet	PASS	
8/11/10	70	12.15	99.0	0.5 Wet	PASS	
8/11/10	71	11.84	100.0	0.5 Dry	PASS	
25/11/10	72	4.36	100.0	0.5 Wet	PASS	
25/11/10	73	4.71	99.0	1.0 Wet	PASS	
25/11/10	74	5.22	99.0	1.0 Dry	PASS	
25/11/10	75	5.76	98.5	0.5 Dry	PASS	

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PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 4 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments etc
			DENSITY RATIO %	MOISTURE VARIATION		
26/11/10	76	6.31	99.0	1.0 Dry	PASS	
26/11/10	77	6.89	98.0	0.0	PASS	
26/11/10	78	7.35	100.0	1.0 Dry	PASS	
26/11/10	79	7.90	101.5	0.5 Wet	PASS	
14/12/10	80	8.34	99.0	0.5 Wet	PASS	
14/12/10	81	8.69	99.0	0.5 Dry	PASS	
14/12/10	82	9.17	101.0	1.0 Dry	PASS	
15/12/10	83	9.49	98.5	1.0 Dry	PASS	
15/12/10	84	9.37	99.0	0.5 Wet	PASS	
15/12/10	85	10.01	99.5	0.0	PASS	
15/12/10	86	9.82	98.5	0.5 Dry	PASS	
15/12/10	87	10.34	99.5	1.0 Dry	PASS	
15/12/10	88	10.20	99.0	1.0 Dry	PASS	
15/12/10	89	8.25	101.5	1.0 Wet	PASS	
15/12/10	90	8.88	99.0	1.0 Wet	PASS	
16/12/10	91	10.83	99.0	1.0 Wet	PASS	
16/12/10	92	9.89	100.0	1.0 Wet	PASS	
16/12/10	93	11.15	98.5	0.5 Wet	PASS	
16/12/10	94	10.14	98.0	2.0 Wet	PASS	
17/12/10	95	11.47	101.0	0.5 Dry	PASS	
17/12/10	96	10.57	99.0	0.5 Wet	PASS	
17/12/10	97	11.78	99.5	0.5 Dry	PASS	
17/12/10	98	10.42	101.5	1.0 Wet	PASS	
18/12/10	99	11.85	99.5	0.5 Wet	PASS	
18/12/10	100	11.20	100.5	1.0 Wet	PASS	

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PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

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DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments etc
			DENSITY RATIO %	MOISTURE VARIATION		
20/12/10	101	12.09	98.0	1.0 Wet	PASS	
20/12/10	102	12.00	100.0	0.5 Wet	PASS	
20/12/10	103	12.45	100.0	1.0 Wet	PASS	
20/12/10	104	12.39	99.0	1.0 Wet	PASS	
20/12/10	105	8.77	98.0	1.0 Dry	PASS	
20/12/10	106	9.25	100.5	1.0 Dry	PASS	
21/12/10	107	9.41	98.0	0.5 Dry	PASS	
21/12/10	108	9.95	98.5	0.5 Wet	PASS	
21/12/10	109	10.11	99.0	1.0 Wet	PASS	
21/12/10	110	10.65	99.5	2.0 Wet	PASS	
21/12/10	111	10.95	99.5	2.0 Wet	PASS	
21/12/10	112	12.92	101.0	2.0 Wet	PASS	
21/12/10	113	11.51	99.5	1.5 Wet	PASS	
22/12/10	114	11.91	98.5	0.5 Dry	PASS	
22/12/10	115	12.31	99.0	2.0 Dry	PASS	
22/12/10	116	11.80	100.5	1.0 Dry	PASS	
22/12/10	117	12.55	98.5	0.5 Wet	PASS	
23/12/10	118	12.22	101.0	0.5 Wet	PASS	
23/12/10	119	12.95	98.5	0.5 Wet	PASS	
23/12/10	120	12.61	99.5	0.5 Wet	PASS	
4/1/11	121	13.28	98.5	0.5 Wet	PASS	
4/1/11	122	13.05	98.0	1.0 Dry	PASS	
4/1/11	123	13.14	101.0	0.5 Wet	PASS	
4/1/11	124	12.51	98.5	1.5 Dry	PASS	
4/1/11	125	13.29	99.0	0.5 Wet	PASS	

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PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 6 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments etc
			DENSITY RATIO %	MOISTURE VARIATION		
4/1/11	126	13.00	101.0	0.5 Dry	PASS	
5/1/11	127	13.37	100.0	0.5 Wet	PASS	
5/1/11	128	13.41	100.0	0.5 Wet	PASS	
5/1/11	129	12.99	100.0	0.5 Dry	PASS	
5/1/11	130	13.53	99.0	0.5 Dry	PASS	
5/1/11	131	13.41	99.0	0.5 Dry	PASS	
5/1/11	132	13.75	98.5	0.5 Wet	PASS	
5/1/11	133	13.88	101.5	0.5 Wet	PASS	
7/1/11	134	14.23	98.0	0.5 Wet	PASS	
7/1/11	135	14.20	98.5	0.0 Dry	PASS	
7/1/11	136	6.98	100.5	0.5 Wet	PASS	
7/1/11	137	6.26	99.0	1.0 Wet	PASS	
7/1/11	138	6.97	98.5	0.5 Wet	PASS	
7/1/11	139	6.88	100.5	0.5 Dry	PASS	
8/1/11	140	9.46	99.5	0.5 Wet	PASS	
8/1/11	141	9.94	101.0	1.0 Wet	PASS	
17/1/11	142	10.61	98.5	1.0 Wet	PASS	
17/1/11	143	9.94	98.0	1.0 Wet	PASS	
17/1/11	144	10.98	99.5	0.5 Wet	PASS	
17/1/11	145	10.39	98.0	0.5 Wet	PASS	
17/1/11	146	11.22	101.0	1.0 Wet	PASS	
17/1/11	147	10.81	99.0	1.0 Wet	PASS	
17/1/11	148	11.29	100.0	0.5 Wet	PASS	
18/1/11	149	11.45	98.0	0.5 Wet	PASS	
18/1/11	150	11.62	100.5	0.5 Wet	PASS	

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PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 7 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments etc
			DENSITY RATIO %	MOISTURE VARIATION		
18/1/11	151	11.71	99.5	0.5 Wet	PASS	
18/1/11	152	11.91	100.5	0.5 Wet	PASS	
18/1/11	153	12.29	99.5	0.5 Wet	PASS	
18/1/11	154	12.37	98.5	0.5 Wet	PASS	
19/1/11	155	12.55	98.5	0.5 Wet	PASS	
19/1/11	156	12.67	101.0	0.5 Dry	PASS	
19/1/11	157	12.91	98.5	0.5 Wet	PASS	
19/1/11	158	12.96	98.0	0.5 Dry	PASS	
19/1/11	159	13.83	98.5	1.0 Wet	PASS	
19/1/11	160	13.20	98.5	2.0 Wet	PASS	
20/1/11	161	13.54	99.5	0.5 Wet	PASS	
20/1/11	162	13.66	100.5	0.5 Dry	PASS	
20/1/11	163	13.75	100.5	1.0 Wet	PASS	
20/1/11	164	13.81	99.5	0.5 Dry	PASS	
21/1/11	165	14.11	101.5	0.5 Wet	PASS	
21/1/11	166	14.14	100.5	0.5 Dry	PASS	
21/1/11	167	14.43	101.5	0.0	PASS	
21/1/11	168	14.50	100.5	0.0	PASS	
24/1/11	169	7.36	99.0	0.0	PASS	
24/1/11	170	7.21	100.5	0.5 Wet	PASS	
24/1/11	171	8.71	98.5	0.5 Dry	PASS	
24/1/11	172	10.43	99.0	0.0	PASS	
24/1/11	173	9.11	99.5	0.5 Wet	PASS	
24/1/11	174	9.49	100.0	0.0	PASS	
24/1/11	175	10.70	101.0	0.5 Wet	PASS	

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PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 8 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments etc
			DENSITY RATIO %	MOISTURE VARIATION		
25/1/11	176	7.80	99.0	0.5 Dry	PASS	
25/1/11	177	7.62	99.5	0.0	PASS	
25/1/11	178	11.11	100.5	0.5 Wet	PASS	
25/1/11	179	9.71	101.0	0.5 Dry	PASS	
25/1/11	180	7.94	99.0	0.5 Dry	PASS	
25/1/11	181	8.19	98.5	0.0	PASS	
25/1/11	182	11.46	99.0	0.5 Wet	PASS	
25/1/11	183	10.17	100.0	0.5 Dry	PASS	
27/1/11	184	8.51	98.0	0.5 Dry	PASS	
27/1/11	185	8.71	100.0	1.0 Dry	PASS	
27/1/11	186	9.12	98.0	1.0 Dry	PASS	
27/1/11	187	10.94	100.0	0.0	PASS	
27/1/11	188	10.21	99.5	0.0	PASS	
27/1/11	189	11.42	98.5	0.5 Wet	PASS	
31/1/11	190	10.81	100.5	1.0 Dry	PASS	
31/1/11	191	11.20	100.0	0.5 Dry	PASS	
31/1/11	192	9.20	98.0	0.5 Wet	PASS	
31/1/11	193	11.54	100.5	1.0 Dry	PASS	
31/1/11	194	11.35	101.0	0.0	PASS	
31/1/11	195	9.31	99.0	1.0 Wet	PASS	
31/1/11	196	11.69	101.0	0.5 Wet	PASS	
31/1/11	197	11.71	101.0	0.0	PASS	
31/1/11	198	9.43	101.5	0.5 Wet	PASS	
1/2/11	199	11.91	100.5	0.5 Wet	PASS	
1/2/11	200	11.97	102.0	0.0	PASS	

CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 9 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments etc
			DENSITY RATIO %	MOISTURE VARIATION		
1/2/11	201	9.57	100.0	0.0	PASS	
1/2/11	202	12.22	99.5	0.5 Dry	PASS	
1/2/11	203	12.39	100.0	0.0	PASS	
1/2/11	204	10.11	101.0	1.0 Dry	PASS	
1/2/11	205	10.44	101.0	1.0 Dry	PASS	
2/2/11	206	12.47	95.5	3.0 Wet	FAIL	Retest required
2/2/11	207	12.85	101.0	2.0 Wet	PASS	
2/2/11	208	12.88	100.0	0.5 Wet	PASS	
2/2/11	209	12.45	100.0	0.5 Wet	PASS	Retest of 206
2/2/11	210	10.92	98.5	0.5 Dry	PASS	
2/2/11	211	13.11	98.5	1.0 Dry	PASS	
4/2/11	212	12.96	99.0	0.0	PASS	
4/2/11	213	13.19	99.0	1.5 Wet	PASS	
4/2/11	214	13.87	99.0	0.5 Wet	PASS	
4/2/11	215	13.76	101.0	0.5 Dry	PASS	
5/2/11	216	11.47	99.5	0.5 Wet	PASS	
5/2/11	217	11.84	99.5	1.0 Wet	PASS	
7/2/11	218	14.10	99.5	0.5 Dry	PASS	
7/2/11	219	14.15	101.5	0.5 Wet	PASS	
7/2/11	220	12.22	98.5	1.0 Dry	PASS	
7/2/11	221	12.59	99.5	0.5 Dry	PASS	
8/2/11	222	14.47	99.0	0.5 Dry	PASS	
8/2/11	223	14.59	101.5	1.0 Dry	PASS	
8/2/11	224	13.10	100.5	1.0 Dry	PASS	
8/2/11	225	13.56	98.5	0.0	PASS	

CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 10 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments etc
			DENSITY RATIO %	MOISTURE VARIATION		
9/2/11	226	14.72	98.0	1.0 Dry	PASS	
9/2/11	227	14.75	99.0	0.0	PASS	
9/2/11	228	8.91	100.5	0.0	PASS	
9/2/11	229	9.29	100.5	0.5 Dry	PASS	
9/2/11	230	9.77	98.5	0.5 Dry	PASS	
9/2/11	231	15.02	101.0	0.5 Dry	PASS	
9/2/11	232	10.21	98.0	1.0 Wet	PASS	
9/2/11	233	10.66	99.5	0.5 Dry	PASS	
10/2/11	234	13.47	100.5	1.0 Dry	PASS	
10/2/11	235	13.88	102.0	1.0 Dry	PASS	
10/2/11	236	11.11	98.0	1.0 Wet	PASS	
10/2/11	237	11.56	98.0	0.5 Wet	PASS	
10/2/11	238	12.01	99.0	1.0 Dry	PASS	
10/2/11	239	12.62	99.0	1.0 Wet	PASS	
11/2/11	240	13.07	98.5	2.0 Dry	PASS	
11/2/11	241	13.42	98.5	1.5 Dry	PASS	
11/2/11	242	13.99	101.5	2.0 Dry	PASS	
11/2/11	243	14.37	99.5	1.0 Dry	PASS	
11/2/11	244	15.21	99.5	1.0 Dry	PASS	
11/2/11	245	14.85	98.0	1.0 Wet	PASS	
14/2/11	246	7.04	98.0	1.0 Wet	PASS	
14/2/11	247	7.47	99.5	0.0	PASS	
14/2/11	248	7.99	101.5	0.5 Wet	PASS	
14/2/11	249	8.52	98.5	0.5 Wet	PASS	
14/2/11	250	8.92	98.5	0.5 Dry	PASS	

CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 11 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments etc
			DENSITY RATIO %	MOISTURE VARIATION		
14/2/11	251	9.47	98.5	0.5 Dry	PASS	
14/2/11	252	9.81	100.0	0.5 Dry	PASS	
14/2/11	253	10.17	100.5	1.0 Wet	PASS	
15/2/11	254	10.51	98.0	1.5 Wet	PASS	
15/2/11	255	10.71	99.5	0.5 Wet	PASS	
15/2/11	256	11.22	98.5	0.0	PASS	
15/2/11	257	11.37	98.5	0.5 Wet	PASS	
15/2/11	258	11.91	101.5	1.0 Wet	PASS	
15/2/11	259	12.56	101.0	0.0	PASS	
16/2/11	260	12.94	99.5	1.0 Wet	PASS	
16/2/11	261	13.33	101.5	1.0 Dry	PASS	
16/2/11	262	13.41	98.5	0.0	PASS	
16/2/11	263	13.92	100.5	1.0 Wet	PASS	
17/2/11	264	13.86	99.0	1.0 Dry	PASS	
17/2/11	265	14.32	100.0	0.5 Wet	PASS	
17/2/11	266	14.68	99.0	1.0 Wet	PASS	
17/2/11	267	15.01	100.0	1.0 Wet	PASS	
17/2/11	268	14.21	100.5	1.0 Wet	PASS	
17/2/11	269	15.36	98.0	0.5 Dry	PASS	
17/2/11	270	14.81	98.5	1.0 Dry	PASS	
17/2/11	271	15.22	100.5	1.0 Dry	PASS	
18/2/11	272	6.47	100.0	1.0 Wet	PASS	
18/2/11	273	6.92	100.5	0.5 Wet	PASS	
18/2/11	274	7.32	100.5	0.0	PASS	
18/2/11	275	7.80	100.0	0.5 Wet	PASS	

CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 12 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments etc
			DENSITY RATIO %	MOISTURE VARIATION		
18/2/11	276	1m BFL	99.0	2.0 Dry	PASS	Roadway
18/2/11	277	8.17	100.0	1.0 Wet	PASS	
18/2/11	278	8.51	99.5	1.0 Wet	PASS	
19/2/11	279	8.85	101.0	0.5 Wet	PASS	
19/2/11	280	9.11	99.5	0.0	PASS	
19/2/11	281	9.36	100.0	1.0 Wet	PASS	
19/2/11	282	0.5m BFL	101.0	1.0 Dry	PASS	Roadway
19/2/11	283	9.75	101.0	0.5 Wet	PASS	
21/2/11	284	10.16	101.5	0.0	PASS	
21/2/11	285	10.53	98.5	0.5 Wet	PASS	
21/2/11	286	10.86	101.0	0.5 Dry	PASS	
21/2/11	287	11.29	99.5	0.5 Dry	PASS	
21/2/11	288	11.60	99.0	0.5 Dry	PASS	
21/2/11	289	12.04	98.5	0.5 Dry	PASS	
21/2/11	290	12.42	100.5	1.0 Dry	PASS	
22/2/11	291	12.73	98.5	0.0	PASS	
22/2/11	292	13.21	99.0	0.5 Wet	PASS	
22/2/11	293	13.65	98.5	1.0 Wet	PASS	
22/2/11	294	14.14	99.0	0.5 Wet	PASS	
22/2/11	295	14.46	101.0	0.0	PASS	
22/2/11	296	14.65	99.0	1.0 Dry	PASS	
23/2/11	297	14.93	101.0	0.5 Wet	PASS	
23/2/11	298	15.19	99.0	1.0 Dry	PASS	
23/2/11	299	15.50	101.5	0.5 Wet	PASS	
23/2/11	300	15.47	99.0	0.5 Dry	PASS	

LEGEND – BFL = Below Finished Level

CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 13 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments etc
			DENSITY RATIO %	MOISTURE VARIATION		
23/2/11	301	9.11	98.0	0.5 Dry	PASS	
23/2/11	302	9.20	98.5	0.0	PASS	
23/2/11	303	9.16	98.0	0.5 Wet	PASS	
23/2/11	304	9.38	98.0	0.5 Wet	PASS	
24/2/11	305	9.45	98.5	0.0	PASS	
24/2/11	306	9.54	101.5	1.0 Dry	PASS	
24/2/11	307	9.79	99.0	0.5 Wet	PASS	
24/2/11	308	9.93	101.0	0.5 Dry	PASS	
24/2/11	309	8.36	100.5	0.0	PASS	
24/2/11	310	8.78	98.5	0.5 Dry	PASS	
24/2/11	311	9.16	101.0	0.0	PASS	
24/2/11	312	9.50	99.5	0.0	PASS	
24/2/11	313	9.97	99.5	0.5 Dry	PASS	
24/2/11	314	10.12	99.0	0.5 Wet	PASS	
24/2/11	315	10.15	99.0	0.5 Dry	PASS	
25/2/11	316	11.46	99.0	1.0 Dry	PASS	
25/2/11	317	10.97	98.0	1.5 Dry	PASS	
25/2/11	318	10.41	100.5	0.5 Wet	PASS	
25/2/11	319	8.15	101.5	0.0	PASS	
25/2/11	320	11.82	101.0	0.5 Dry	PASS	
25/2/11	321	11.30	99.0	1.5 Dry	PASS	
25/2/11	322	12.18	98.0	2.0 Dry	PASS	
25/2/11	323	11.63	100.5	0.5 Dry	PASS	
25/2/11	324	11.54	100.0	2.0 Dry	PASS	
25/2/11	325	8.58	98.5	0.5 Wet	PASS	

LEGEND – BFL = Below Finished Level

CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 14 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments etc
			DENSITY RATIO %	MOISTURE VARIATION		
25/2/11	326	10.53	99.5	1.0 Dry	PASS	
25/2/11	327	10.58	98.5	0.5 Wet	PASS	
26/2/11	328	12.64	101.5	2.0 Dry	PASS	
26/2/11	329	11.98	99.5	1.5 Dry	PASS	
26/2/11	330	10.95	98.0	0.5 Dry	PASS	
26/2/11	331	10.98	98.5	0.5 Dry	PASS	
26/2/11	332	13.01	98.0	1.0 Dry	PASS	
26/2/11	333	12.30	100.0	2.0 Dry	PASS	
26/2/11	334	11.33	98.5	0.5 Wet	PASS	
26/2/11	335	11.27	98.0	0.5 Wet	PASS	
28/2/11	336	13.39	99.0	0.5 Dry	PASS	
28/2/11	337	12.72	100.5	1.5 Dry	PASS	
28/2/11	338	12.60	100.5	2.0 Dry	PASS	
28/2/11	339	11.67	98.5	0.5 Wet	PASS	
28/2/11	340	11.72	100.0	0.5 Wet	PASS	
28/2/11	341	13.76	98.0	0.5 Wet	PASS	
28/2/11	342	13.03	98.0	0.5 Wet	PASS	
28/2/11	343	14.19	100.5	2.0 Dry	PASS	
28/2/11	344	13.47	98.0	2.0 Dry	PASS	
28/2/11	345	12.13	101.0	0.5 Dry	PASS	
28/2/11	346	12.06	98.5	0.5 Dry	PASS	
01/3/11	347	14.50	98.5	2.0 Dry	PASS	
01/3/11	348	14.01	99.0	1.0 Dry	PASS	
01/3/11	349	13.83	98.5	0.0	PASS	
01/3/11	350	7.91	99.0	2.0 Dry	PASS	

LEGEND – BFL = Below Finished Level

CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 15 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments etc
			DENSITY RATIO %	MOISTURE VARIATION		
01/3/11	351	12.35	99.0	2.0 Dry	PASS	
01/3/11	352	12.44	99.0	2.0 Dry	PASS	
01/3/11	353	14.83	98.0	1.0 Dry	PASS	
01/3/11	354	14.18	98.5	0.5 Dry	PASS	
01/3/11	355	8.27	99.5	0.5 Wet	PASS	
01/3/11	356	12.77	98.5	0.5 Wet	PASS	
01/3/11	357	12.75	98.0	0.5 Dry	PASS	
02/3/11	358	13.08	99.0	0.5 Dry	PASS	
02/3/11	359	13.11	100.0	0.0	PASS	
02/3/11	360	14.44	101.5	2.0 Dry	PASS	
02/3/11	361	13.94	101.0	1.5 Dry	PASS	
02/3/11	362	13.40	98.5	0.5 Dry	PASS	
02/3/11	363	13.39	98.5	1.0 Dry	PASS	
02/3/11	364	8.25	101.5	0.0	PASS	
02/3/11	365	13.72	98.5	0.5 Wet	PASS	
02/3/11	366	13.68	101.0	1.0 Dry	PASS	
02/3/11	367	14.03	100.0	0.0	PASS	
02/3/11	368	14.01	98.5	0.5 Wet	PASS	
03/3/11	369	14.26	98.5	0.5 Dry	PASS	
03/3/11	370	14.26	101.0	1.5 Dry	PASS	
03/3/11	371	14.52	101.5	2.0 Dry	PASS	
03/3/11	372	14.48	99.0	1.5 Dry	PASS	
03/3/11	373	0.5 m BSG	102.0	0.5 Dry	PASS	Roadway
03/3/11	374	0.5 m BSG	100.5	1.0 Dry	PASS	Roadway
03/3/11	375	14.74	100.5	2.0 Dry	PASS	

LEGEND – BFL = Below Finished Level, BSG = Below Subgrade

CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 16 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments etc
			DENSITY RATIO %	MOISTURE VARIATION		
03/3/11	376	14.73	99.0	2.0 Dry	PASS	
04/3/11	377	15.01	101.5	1.5 Dry	PASS	
04/3/11	378	15.02	99.5	2.0 Dry	PASS	
04/3/11	379	15.29	99.0	0.5 Dry	PASS	
04/3/11	380	4.86	99.0	0.0	PASS	
04/3/11	381	4.93	99.5	0.0	PASS	
04/3/11	382	5.19	98.5	0.0	PASS	
04/3/11	383	5.55	99.5	0.0	PASS	
04/3/11	384	5.89	100.0	0.5 Dry	PASS	
04/3/11	385	5.96	99.5	0.5 Wet	PASS	
08/3/11	386	15.32	101.0	2.0 Dry	PASS	
08/3/11	387	6.32	99.0	0.0 Dry	PASS	
08/3/11	388	6.65	99.0	0.0 Dry	PASS	
08/3/11	389	7.04	99.5	0.5 Dry	PASS	
08/3/11	390	7.39	101.5	1.5 Dry	PASS	
08/3/11	391	7.77	100.5	2.0 Dry	PASS	
08/3/11	392	8.16	100.0	0.5 Dry	PASS	
08/3/11	393	8.51	98.5	2.0 Dry	PASS	
08/3/11	394	8.60	98.5	1.5 Dry	PASS	
09/3/11	395	FL	100.5	2.0 Dry	PASS	Roadway
09/3/11	396	8.94	102.0	0.5 Dry	PASS	
09/3/11	397	8.92	100.5	0.5 Dry	PASS	
09/3/11	398	9.31	100.5	0.0	PASS	
09/3/11	399	9.40	98.5	1.5 Dry	PASS	

LEGEND – BFL = Below Finished Level, BSG = Below Subgrade, FL = Finished Level

CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 17 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments Etc
			DENSITY RATIO %	MOISTURE VARIATION		
09/3/11	400	9.66	99.0	2.0 Dry	PASS	
09/3/11	401	9.71	101.5	1.5 Dry	PASS	
09/3/11	402	10.05	100.0	1.5 Dry	PASS	
09/3/11	403	10.11	99.0	2.0 Dry	PASS	
10/3/11	404	10.43	101.0	1.5 Dry	PASS	
10/3/11	405	10.46	98.5	2.0 Dry	PASS	
10/3/11	406	10.87	99.0	1.5 Dry	PASS	
10/3/11	407	10.85	100.5	2.0 Dry	PASS	
10/3/11	408	11.71	98.0	2.0 Dry	PASS	
10/3/11	409	12.04	98.5	1.5 Dry	PASS	
10/3/11	410	12.42	102.0	2.0 Dry	PASS	
10/3/11	411	12.82	102.0	2.0 Dry	PASS	
10/3/11	412	11.25	100.5	1.5 Dry	PASS	
10/3/11	413	11.64	100.5	1.5 Dry	PASS	
11/3/11	414	12.05	101.0	1.5 Dry	PASS	
11/3/11	415	13.14	99.0	2.0 Dry	PASS	
11/3/11	416	13.37	100.0	2.0 Dry	PASS	
11/3/11	417	13.47	99.5	2.0 Dry	PASS	
11/3/11	418	13.60	100.5	1.5 Dry	PASS	
11/3/11	419	13.79	98.5	1.5 Dry	PASS	
11/3/11	420	8.68	99.5	1.5 Dry	PASS	
11/3/11	421	10.14	101.0	2.0 Dry	PASS	
11/3/11	422	9.08	100.0	1.5 Dry	PASS	
11/3/11	423	8.91	101.5	2.0 Dry	PASS	
11/3/11	424	9.30	100.0	2.0 Dry	PASS	

LEGEND – BFL = Below Finished Level, BSG = Below Subgrade

CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 18 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments Etc
			DENSITY RATIO %	MOISTURE VARIATION		
12/3/11	425	9.71	99.5	1.5 Dry	PASS	
12/3/11	426	9.50	98.5	2.0 Dry	PASS	
12/3/11	427	9.88	101.0	2.0 Dry	PASS	
12/3/11	428	10.57	98.5	1.5 Dry	PASS	
12/3/11	429	10.24	99.5	1.5 Dry	PASS	
12/3/11	430	10.85	100.0	1.5 Dry	PASS	
14/3/11	431	10.10	99.0	0.0 Dry	PASS	
14/3/11	432	11.26	99.0	0.5 Dry	PASS	
14/3/11	433	10.68	99.0	0.5 Wet	PASS	
14/3/11	434	10.51	102.0	1.5 Dry	PASS	
14/3/11	435	11.64	100.5	1.5 Dry	PASS	
14/3/11	436	11.09	102.0	2.0 Dry	PASS	
14/3/11	437	11.46	101.5	2.0 Dry	PASS	
14/3/11	438	12.03	99.0	1.5 Dry	PASS	
14/3/11	439	10.93	99.0	1.5 Dry	PASS	
15/3/11	440	11.82	99.5	2.0 Dry	PASS	
15/3/11	441	11.28	101.0	1.5 Dry	PASS	
15/3/11	442	10.50	101.0	2.0 Dry	PASS	
15/3/11	443	10.41	100.0	1.5 Dry	PASS	
15/3/11	444	10.86	100.0	2.0 Dry	PASS	
15/3/11	445	10.73	99.5	2.0 Dry	PASS	
15/3/11	446	11.27	99.5	1.5 Dry	PASS	
15/3/11	447	11.13	101.5	1.5 Dry	PASS	
15/3/11	448	11.66	100.0	1.5 Dry	PASS	
15/3/11	449	11.50	99.5	1.5 Dry	PASS	

LEGEND – BFL = Below Finished Level, BSG = Below Subgrade

CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 19 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments Etc
			DENSITY RATIO %	MOISTURE VARIATION		
16/3/11	450	11.91	100.5	2.0 Dry	PASS	
16/3/11	451	12.09	99.5	1.5 Dry	PASS	
16/3/11	452	10.90	99.0	1.5 Dry	PASS	
16/3/11	453	10.30	99.5	2.0 Dry	PASS	
16/3/11	454	11.28	98.5	1.5 Dry	PASS	
16/3/11	455	11.64	102.0	1.5 Dry	PASS	
16/3/11	456	12.07	98.5	1.5 Dry	PASS	
16/3/11	457	12.48	100.0	2.0 Dry	PASS	
16/3/11	458	12.35	98.5	1.5 Dry	PASS	
31/3/11	459	12.46	100.5	2.0 Dry	PASS	
31/3/11	460	13.47	99.5	2.0 Dry	PASS	
31/3/11	461	4.54	99.0	0.5 Wet	PASS	
31/3/11	462	12.90	101.5	1.5 Dry	PASS	
31/3/11	463	13.78	99.0	1.5 Dry	PASS	
31/3/11	464	4.91	99.5	0.5 Dry	PASS	
1/4/11	465	5.30	99.5	0.5 Wet	PASS	
1/4/11	466	5.65	99.5	0.0	PASS	
1/4/11	467	6.09	98.5	0.5 Dry	PASS	
4/4/11	468	6.42	99.0	0.5 Dry	PASS	
4/4/11	469	6.81	101.5	1.5 Dry	PASS	
4/4/11	470	7.13	99.5	2.0 Dry	PASS	
5/4/11	471	4.96	98.5	2.0 Dry	PASS	
5/4/11	472	5.32	98.5	2.0 Dry	PASS	
6/4/11	473	5.73	98.5	2.0 Dry	PASS	
6/4/11	474	6.05	100.5	0.5 Dry	PASS	

LEGEND – BFL = Below Finished Level, BSG = Below Subgrade

CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 20 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments Etc
			DENSITY RATIO %	MOISTURE VARIATION		
6/4/11	475	6.54	99.0	0.0	PASS	
7/4/11	476	6.88	102.0	1.5 Dry	PASS	
7/4/11	477	7.25	98.5	2.0 Dry	PASS	
7/4/11	478	7.65	101.5	2.0 Dry	PASS	
7/4/11	479	8.09	98.5	1.5 Dry	PASS	
7/4/11	480	8.56	98.5	0.5 Dry	PASS	
7/4/11	481	8.94	99.0	0.5 Dry	PASS	
7/4/11	482	9.35	99.0	1.5 Dry	PASS	
7/4/11	483	9.71	100.5	2.0 Dry	PASS	
7/4/11	484	10.80	98.0	0.5 Dry	PASS	
7/4/11	485	11.33	100.5	1.0 Dry	PASS	
7/4/11	486	10.05	100.0	1.5 Dry	PASS	
8/4/11	487	4.83	101.0	2.0 Dry	PASS	
8/4/11	488	5.22	100.0	1.5 Dry	PASS	
8/4/11	489	11.81	98.0	1.0 Dry	PASS	
8/4/11	490	10.48	100.5	2.0 Dry	PASS	
8/4/11	491	10.92	99.5	1.0 Dry	PASS	
8/4/11	492	12.35	101.0	0.5 Dry	PASS	
8/4/11	493	5.59	102.0	1.5 Dry	PASS	
8/4/11	494	11.31	99.0	1.5 Dry	PASS	
8/4/11	495	5.95	99.5	1.5 Dry	PASS	
8/4/11	496	12.82	98.0	0.5 Dry	PASS	
9/4/11	497	6.30	98.5	0.5 Dry	PASS	
9/4/11	498	6.72	98.0	2.0 Dry	PASS	
9/4/11	499	11.72	99.0	1.5 Dry	PASS	

LEGEND – BFL = Below Finished Level, BSG = Below Subgrade

CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 21 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments Etc
			DENSITY RATIO %	MOISTURE VARIATION		
9/4/11	500	7.16	98.0	1.5 Dry	PASS	
9/4/11	501	12.08	99.0	0.5 Dry	PASS	
9/4/11	502	7.50	101.0	1.0 Dry	PASS	
9/4/11	503	12.40	99.5	1.5 Dry	PASS	
9/4/11	504	12.76	100.5	1.5 Dry	PASS	
11/4/11	505	7.84	99.0	1.5 Dry	PASS	
11/4/11	506	8.17	99.0	2.0 Dry	PASS	
11/4/11	507	13.07	99.0	1.5 Dry	PASS	
11/4/11	508	8.51	98.5	2.0 Dry	PASS	
11/4/11	509	8.82	101.0	1.5 Dry	PASS	
11/4/11	510	9.16	99.0	1.0 Dry	PASS	
11/4/11	511	13.40	102.0	0.5 Dry	PASS	
11/4/11	512	13.76	100.5	1.0 Dry	PASS	
11/4/11	513	9.57	99.0	0.5 Wet	PASS	
12/4/11	514	9.92	99.0	1.5 Dry	PASS	
12/4/11	515	10.25	98.5	1.5 Dry	PASS	
12/4/11	516	10.62	98.5	1.0 Dry	PASS	
12/4/11	517	10.94	99.5	0.5 Wet	PASS	
12/4/11	518	11.29	98.0	1.5 Dry	PASS	
12/4/11	519	11.62	99.5	1.0 Dry	PASS	
12/4/11	520	13.28	98.5	0.0	PASS	
13/4/11	521	11.95	101.5	2.0 Dry	PASS	
13/4/11	522	12.32	100.0	1.5 Dry	PASS	
13/4/11	523	1m BSG	101.0	0.5 Dry	PASS	Road 01
13/4/11	524	12.61	99.0	1.5 Wet	PASS	

LEGEND – BFL = Below Finished Level, BSG = Below Subgrade

CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 22 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments Etc
			DENSITY RATIO %	MOISTURE VARIATION		
13/4/11	525	12.93	99.0	2.0 Wet	PASS	
13/4/11	526	0.5m BSG	98.0	0.5 Dry	PASS	Road 01
13/4/11	527	4.70	100.5	2.0 Dry	PASS	
13/4/11	528	5.08	99.0	1.5 Dry	PASS	
13/4/11	529	5.41	101.5	1.0 Dry	PASS	
14/4/11	530	Subgrade	101.0	0.5 Dry	PASS	Road 01
14/4/11	531	Subgrade	101.5	1.0 Dry	PASS	Road 01
14/4/11	532	10.5	99.5	1.5 Dry	PASS	Base of GPT Pit
14/4/11	533	5.77	98.0	0.0	PASS	
14/4/11	534	6.18	99.5	2.0 Dry	PASS	
14/4/11	535	6.55	98.0	0.5 Dry	PASS	
14/4/11	536	6.89	102.0	1.5 Dry	PASS	
14/4/11	537	7.21	99.0	1.5 Dry	PASS	
14/4/11	538	7.54	100.0	1.5 Dry	PASS	
15/4/11	539	7.59	99.5	0.5 Wet	PASS	
15/4/11	540	7.85	99.0	0.5 Dry	PASS	
15/4/11	541	7.95	98.5	1.0 Dry	PASS	
15/4/11	542	8.21	101.5	0.5 Wet	PASS	
15/4/11	543	8.36	101.0	0.5 Wet	PASS	
15/4/11	544	8.65	101.0	1.5 Dry	PASS	
15/4/11	545	8.75	99.0	2.0 Dry	PASS	
15/4/11	546	9.07	101.5	1.5 Dry	PASS	
15/4/11	547	9.15	99.0	1.5 Dry	PASS	
15/4/11	548	9.43	99.0	2.0 Dry	PASS	
20/4/11	549	4.68	100.0	1.5 Dry	PASS	

LEGEND – BFL = Below Finished Level, BSG = Below Subgrade

CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 23 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments Etc
			DENSITY RATIO %	MOISTURE VARIATION		
20/4/11	550	5.04	100.5	1.0 Dry	PASS	
20/4/11	551	5.43	98.5	0.0	PASS	
20/4/11	552	5.84	99.0	1.5 Dry	PASS	
20/4/11	553	6.19	102.5	1.0 Dry	PASS	
20/4/11	554	6.57	102.5	0.0	PASS	
20/4/11	555	7.01	99.0	1.5 Dry	PASS	
20/4/11	556	7.40	102.0	1.0 Dry	PASS	
21/4/11	557	7.73	102.5	2.0 Dry	PASS	
21/4/11	558	4.78	100.5	1.5 Dry	PASS	
21/4/11	559	5.19	99.5	1.5 Dry	PASS	
21/4/11	560	5.58	98.5	2.0 Dry	PASS	
21/4/11	561	5.94	99.0	1.0 Dry	PASS	
21/4/11	562	6.38	100.5	0.0	PASS	
21/4/11	563	6.79	98.5	0.5 Wet	PASS	
21/4/11	564	7.27	100.0	0.0	PASS	
3/5/11	565	6.27	99.5	0.5 Wet	PASS	
3/5/11	566	6.71	100.0	0.5 Wet	PASS	
3/5/11	567	7.05	100.0	0.5 Wet	PASS	
4/5/11	568	7.57	99.0	0.5 Wet	PASS	
4/5/11	569	7.87	101.5	1.0 Wet	PASS	
4/5/11	570	8.28	102.0	0.0	PASS	
4/5/11	571	8.67	101.0	0.0	PASS	
4/5/11	572	8.15	101.5	2.0 Wet	PASS	
4/5/11	573	8.53	99.5	1.5 Wet	PASS	
5/5/11	574	8.90	101.5	0.5 Dry	PASS	

LEGEND – BFL = Below Finished Level, BSG = Below Subgrade

CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 24 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments Etc
			DENSITY RATIO %	MOISTURE VARIATION		
5/5/11	575	9.31	101.0	0.5 Wet	PASS	
5/5/11	576	9.21	101.0	2.0 Dry	PASS	
5/5/11	577	9.54	98.0	1.5 Dry	PASS	
5/5/11	578	9.70	98.5	0.5 Dry	PASS	
5/5/11	579	9.91	99.0	1.5 Dry	PASS	
5/5/11	580	9.61	100.0	2.0 Dry	PASS	
5/5/11	581	10.24	101.5	2.0 Wet	PASS	
5/5/11	582	9.99	99.5	1.5 Wet	PASS	
6/5/11	583	10.35	101.0	0.5 Dry	PASS	
6/5/11	584	10.74	102.0	0.5 Dry	PASS	
6/5/11	585	10.57	98.5	2.0 Wet	PASS	
6/5/11	586	10.40	99.0	1.5 Wet	PASS	
6/5/11	587	11.16	101.5	1.0 Dry	PASS	
6/5/11	588	11.52	100.0	0.0	PASS	
6/5/11	589	11.91	99.0	0.0	PASS	
6/5/11	590	12.27	98.5	0.5 Dry	PASS	
6/5/11	591	12.68	99.5	0.5 Dry	PASS	
7/5/11	592	9.08	98.0	0.5 Wet	PASS	
7/5/11	593	9.45	101.0	0.5 Wet	PASS	
7/5/11	594	10.90	101.5	1.5 Wet	PASS	
7/5/11	595	10.78	100.0	2.0 Wet	PASS	
7/5/11	596	9.84	102.0	0.5 Dry	PASS	
7/5/11	597	10.28	99.5	0.5 Dry	PASS	
9/5/11	598	11.06	100.0	0.0	PASS	
9/5/11	599	11.26	99.0	0.5 Wet	PASS	

LEGEND – BFL = Below Finished Level, BSG = Below Subgrade

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CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 25 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments Etc
			DENSITY RATIO %	MOISTURE VARIATION		
9/5/11	600	10.68	98.5	0.5 Dry	PASS	
9/5/11	601	11.05	100.0	1.5 Wet	PASS	
9/5/11	602	11.50	98.0	2.0 Wet	PASS	
9/5/11	603	11.89	99.5	0.0	PASS	
9/5/11	604	12.35	98.0	1.5 Wet	PASS	
10/5/11	605	12.74	98.5	1.0 Wet	PASS	
10/5/11	606	11.63	99.0	2.0 Wet	PASS	
10/5/11	607	11.38	101.0	2.0 Wet	PASS	
10/5/11	608	4.41	100.0	1.5 Wet	PASS	
10/5/11	609	12.04	98.5	2.0 Wet	PASS	
10/5/11	610	11.79	102.0	1.5 Wet	PASS	
10/5/11	611	4.77	101.0	0.5 Wet	PASS	
10/5/11	612	5.12	101.0	0.5 Dry	PASS	
10/5/11	613	5.53	99.5	0.0	PASS	
11/5/11	614	12.09	98.0	1.5 Wet	PASS	
11/5/11	615	12.41	99.0	1.5 Wet	PASS	
11/5/11	616	6.56	101.0	0.5 Wet	PASS	
11/5/11	617	4.72	101.5	0.5 Dry	PASS	
11/5/11	618	6.97	100.0	0.5 Wet	PASS	
11/5/11	619	7.33	98.0	0.0	PASS	
11/5/11	620	5.11	98.0	1.5 Wet	PASS	
11/5/11	621	5.45	99.5	1.5 Wet	PASS	
11/5/11	622	5.85	102.0	1.0 Wet	PASS	
12/5/11	623	7.74	101.0	0.5 Dry	PASS	
12/5/11	624	8.12	100.0	0.5 Wet	PASS	

LEGEND – BFL = Below Finished Level, BSG = Below Subgrade

CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 26 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments Etc
			DENSITY RATIO %	MOISTURE VARIATION		
12/5/11	625	6.21	98.5	1.5 Wet	PASS	
12/5/11	626	8.48	98.5	2.0 Wet	PASS	
12/5/11	627	6.54	101.0	2.0 Wet	PASS	
12/5/11	628	8.87	99.0	1.0 Dry	PASS	
12/5/11	629	6.87	99.5	0.5 Wet	PASS	
12/5/11	630	9.18	102.0	1.5 Wet	PASS	
12/5/11	631	7.28	99.0	0.5 Wet	PASS	
13/5/11	632	9.58	98.5	2.0 Wet	PASS	
13/5/11	633	12.77	100.5	0.5 Dry	PASS	
13/5/11	634	12.37	102.0	2.0 Wet	PASS	
13/5/11	635	7.66	99.0	2.0 Dry	PASS	
13/5/11	636	9.95	98.0	0.5 Dry	PASS	
13/5/11	637	10.34	100.0	0.5 Dry	PASS	
13/5/11	638	10.69	98.0	1.5 Wet	PASS	
13/5/11	639	11.10	102.0	2.0 Wet	PASS	
13/5/11	640	11.48	98.0	0.0	PASS	
14/5/11	641	12.18	98.5	0.5 Dry	PASS	
14/5/11	642	11.89	101.0	1.5 Wet	PASS	
14/5/11	643	12.27	101.0	0.5 Wet	PASS	
14/5/11	644	12.53	100.0	0.5 Wet	PASS	
14/5/11	645	12.64	98.0	2.0 Dry	PASS	
14/5/11	646	12.98	100.0	0.0	PASS	
16/5/11	647	16.44	102.0	0.5 Dry	PASS	
16/5/11	648	16.31	101.5	0.5 Wet	PASS	
16/5/11	649	13.40	99.0	1.5 Wet	PASS	

LEGEND – BFL = Below Finished Level, BSG = Below Subgrade

CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 27 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments Etc
			DENSITY RATIO %	MOISTURE VARIATION		
16/5/11	650	13.10	100.0	0.5 Wet	PASS	
16/5/11	651	13.79	102.0	0.5 Wet	PASS	
16/5/11	652	13.48	98.0	0.0	PASS	
16/5/11	653	14.12	99.0	1.5 Wet	PASS	
16/5/11	654	14.49	102.0	2.0 Wet	PASS	
16/5/11	655	14.81	100.5	0.5 Wet	PASS	
17/5/11	656	15.12	102.0	2.0 Wet	PASS	
17/5/11	657	16.87	99.0	0.5 Wet	PASS	
17/5/11	658	16.43	101.5	0.5 Wet	PASS	
17/5/11	659	16.74	99.5	0.5 Dry	PASS	
17/5/11	660	17.21	101.5	1.5 Dry	PASS	
18/5/11	661	15.39	101.5	1.0 Dry	PASS	
18/5/11	662	8.07	99.0	0.5 Wet	PASS	
18/5/11	663	8.41	98.0	1.0 Wet	PASS	
18/5/11	664	17.05	100.0	0.0	PASS	
18/5/11	665	17.50	99.5	0.5 Wet	PASS	
18/5/11	666	8.90	101.0	0.5 Wet	PASS	
18/5/11	667	9.34	98.0	0.5 Wet	PASS	
18/5/11	668	9.75	98.0	1.0 Wet	PASS	
19/5/11	669	10.16	101.0	1.0 Wet	PASS	
19/5/11	670	10.54	99.5	0.5 Wet	PASS	
19/5/11	671	16.35	101.5	2.0 Dry	PASS	
19/5/11	672	16.76	100.0	1.5 Dry	PASS	
19/5/11	673	11.01	101.0	0.5 Wet	PASS	
19/5/11	674	5.51	99.5	2.0 Wet	PASS	

LEGEND – BFL = Below Finished Level, BSG = Below Subgrade

CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 28 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments Etc
			DENSITY RATIO %	MOISTURE VARIATION		
19/5/11	675	11.50	98.0	1.0 Dry	PASS	
19/5/11	676	17.15	102.0	0.0	PASS	
19/5/11	677	17.51	100.0	1.5 Dry	PASS	
20/5/11	678	10.21	98.5	1.5 Wet	PASS	
20/5/11	679	5.89	98.5	2.0 Wet	PASS	
20/5/11	680	17.91	101.0	0.5 Wet	PASS	
20/5/11	681	9.23	100.0	0.5 Dry	PASS	
20/5/11	682	9.64	101.0	1.0 Dry	PASS	
20/5/11	683	10.01	99.0	2.0 Dry	PASS	
20/5/11	684	12.90	98.5	2.0 Wet	PASS	
20/5/11	685	10.48	99.5	0.5 Wet	PASS	
20/5/11	686	10.89	99.5	0.0	PASS	
21/5/11	687	13.26	98.5	1.5 Wet	PASS	
21/5/11	688	16.88	101.0	0.5 Dry	PASS	
21/5/11	689	17.29	101.0	0.5 Wet	PASS	
21/5/11	690	18.29	99.0	1.5 Wet	PASS	
21/5/11	691	13.59	99.0	2.0 Wet	PASS	
21/5/11	692	6.29	98.0	0.5 Dry	PASS	
23/5/11	693	11.32	98.0	1.5 Dry	PASS	
23/5/11	694	11.68	98.5	1.5 Dry	PASS	
23/5/11	695	17.69	101.0	0.5 Wet	PASS	
23/5/11	696	12.04	99.5	0.5 Dry	PASS	
23/5/11	697	12.44	98.0	1.5 Dry	PASS	
23/5/11	698	18.04	102.0	0.5 Dry	PASS	
23/5/11	699	6.70	98.5	1.5 Wet	PASS	

LEGEND – BFL = Below Finished Level, BSG = Below Subgrade

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CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 29 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments Etc
			DENSITY RATIO %	MOISTURE VARIATION		
23/5/11	700	7.06	99.0	2.0 Wet	PASS	
23/5/11	701	18.43	101.0	1.5 Wet	PASS	
24/5/11	702	7.39	99.0	1.0 Wet	PASS	
24/5/11	703	7.09	98.5	2.0 Wet	PASS	
24/5/11	704	18.83	101.0	0.5 Dry	PASS	
24/5/11	705	19.19	100.0	0.5 Dry	PASS	
24/5/11	706	7.77	98.0	1.5 Wet	PASS	
24/5/11	707	7.52	98.5	1.5 Wet	PASS	
24/5/11	708	12.86	101.0	0.5 Dry	PASS	
24/5/11	709	19.60	101.0	1.0 Dry	PASS	
24/5/11	710	8.13	99.5	2.0 Wet	PASS	
25/5/11	711	20.04	101.5	0.5 Dry	PASS	
25/5/11	712	18.66	100.0	0.5 Dry	PASS	
25/5/11	713	22.38	98.5	1.0 Wet	PASS	
25/5/11	714	13.97	98.0	1.5 Wet	PASS	
25/5/11	715	7.85	100.5	1.5 Wet	PASS	
25/5/11	716	8.48	99.0	1.5 Wet	PASS	
25/5/11	717	20.35	100.0	0.5 Dry	PASS	
25/5/11	718	8.87	99.0	2.0 Wet	PASS	
26/5/11	719	8.21	98.5	0.5 Wet	PASS	
26/5/11	720	8.83	98.0	0.5 Wet	PASS	
26/5/11	721	9.20	99.5	1.5 Wet	PASS	
26/5/11	722	8.59	98.0	1.5 Wet	PASS	
26/5/11	723	10.50	98.0	1.5 Wet	PASS	
26/5/11	724	9.58	99.5	1.5 Wet	PASS	

LEGEND – BFL = Below Finished Level, BSG = Below Subgrade

CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 30 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments Etc
			DENSITY RATIO %	MOISTURE VARIATION		
26/5/11	725	8.10	101.0	0.5 Dry	PASS	
26/5/11	726	12.55	98.5	0.5 Wet	PASS	
27/5/11	727	9.99	98.5	1.5 Wet	PASS	
27/5/11	728	9.02	98.0	2.0 Wet	PASS	
27/5/11	729	5.10	100.0	0.5 Dry	PASS	
27/5/11	730	5.46	98.5	0.5 Dry	PASS	
27/5/11	731	5.79	102.0	0.5 Wet	PASS	
27/5/11	732	6.15	100.5	0.5 Dry	PASS	
28/5/11	733	6.56	98.5	1.0 Wet	PASS	
28/5/11	734	6.95	98.5	0.5 Dry	PASS	
28/5/11	735	7.26	98.0	0.5 Dry	PASS	
8/6/11	736	9.45	99.5	1.5 Wet	PASS	
8/6/11	737	10.39	99.5	2.0 Wet	PASS	
8/6/11	738	7.71	101.0	0.5 Wet	PASS	
8/6/11	739	10.02	98.5	0.5 Dry	PASS	
9/6/11	740	10.38	101.0	1.0 Wet	PASS	
9/6/11	741	8.07	99.5	0.5 Wet	PASS	
9/6/11	742	9.78	98.5	0.5 Dry	PASS	
9/6/11	743	10.74	98.5	0.5 Dry	PASS	
9/6/11	744	8.41	98.0	2.0 Wet	PASS	
9/6/11	745	10.71	99.5	1.5 Wet	PASS	
9/6/11	746	11.13	100.0	1.5 Wet	PASS	
9/6/11	747	10.24	98.5	1.5 Wet	PASS	
10/6/11	748	11.15	99.0	0.5 Wet	PASS	
10/6/11	749	8.80	101.5	0.5 Dry	PASS	

LEGEND – BFL = Below Finished Level, BSG = Below Subgrade

CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 31 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments Etc
			DENSITY RATIO %	MOISTURE VARIATION		
10/6/11	750	10.61	100.0	0.5 Dry	PASS	
10/6/11	751	11.49	100.5	0.5 Dry	PASS	
21/6/11	752	8.49	101.0	0.5 Dry	PASS	
21/6/11	753	11.41	100.0	0.5 Dry	PASS	
21/6/11	754	8.91	98.5	1.0 Wet	PASS	
21/6/11	755	11.69	98.0	0.0	PASS	
21/6/11	756	11.01	99.0	1.5 Wet	PASS	
21/6/11	757	11.87	98.5	1.5 Wet	PASS	
22/6/11	758	11.37	99.5	2.0 Wet	PASS	
22/6/11	759	12.26	99.0	1.5 Wet	PASS	
22/6/11	760	11.68	98.5	0.5 Dry	PASS	
22/6/11	761	12.54	98.5	0.5 Wet	PASS	
22/6/11	762	9.32	100.0	0.5 Wet	PASS	
22/6/11	763	12.00	102.0	0.5 Dry	PASS	
22/6/11	764	12.82	99.5	1.5 Wet	PASS	
22/6/11	765	12.03	98.0	2.0 Wet	PASS	
23/6/11	766	8.58	98.5	2.0 Wet	PASS	
23/6/11	767	12.61	99.0	1.5 Wet	PASS	
23/6/11	768	8.94	101.0	0.5 Dry	PASS	
23/6/11	769	9.31	99.0	0.5 Dry	PASS	
23/6/11	770	12.39	98.0	1.5 Wet	PASS	
23/6/11	771	13.10	99.5	1.5 Wet	PASS	
23/6/11	772	9.69	102.0	0.5 Wet	PASS	
24/6/11	773	9.76	100.0	0.5 Dry	PASS	
24/6/11	774	12.31	101.5	0.5 Dry	PASS	

LEGEND – BFL = Below Finished Level, BSG = Below Subgrade

CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 32 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments Etc
			DENSITY RATIO %	MOISTURE VARIATION		
24/6/11	775	12.57	99.0	1.0 Wet	PASS	
24/6/11	776	10.15	99.0	0.5 Wet	PASS	
24/6/11	777	10.84	98.5	2.0 Wet	PASS	
24/6/11	778	11.20	99.5	1.5 Wet	PASS	
24/6/11	779	10.63	101.5	0.5 Dry	PASS	
24/6/11	780	12.96	101.0	0.5 Wet	PASS	
24/6/11	781	11.64	98.0	2.0 Wet	PASS	
24/6/11	782	11.03	98.5	0.5 Wet	PASS	
25/6/11	783	13.22	98.5	0.0	PASS	
25/6/11	784	11.42	101.0	1.0 Dry	PASS	
25/6/11	785	13.46	98.5	0.5 Dry	PASS	
25/6/11	786	11.83	100.0	0.5 Dry	PASS	
25/6/11	787	13.77	99.0	0.5 Dry	PASS	
25/6/11	788	12.22	102.0	0.5 Dry	PASS	
27/6/11	789	14.10	99.5	0.5 Wet	PASS	
27/6/11	790	12.58	99.5	0.5 Dry	PASS	
27/6/11	791	14.33	101.0	1.0 Wet	PASS	
27/6/11	792	12.89	100.0	0.5 Wet	PASS	
28/6/11	793	7.77	98.0	1.5 Wet	PASS	
28/6/11	794	8.13	99.5	1.5 Wet	PASS	
28/6/11	795	8.47	98.0	2.0 Wet	PASS	
28/6/11	796	8.86	98.0	1.5 Wet	PASS	
28/6/11	797	13.17	101.5	0.5 Dry	PASS	
28/6/11	798	10.10	98.5	2.0 Wet	PASS	
28/6/11	799	9.30	99.5	0.5 Wet	PASS	

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CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 33 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments Etc
			DENSITY RATIO %	MOISTURE VARIATION		
29/6/11	800	9.66	99.5	0.5 Dry	PASS	
29/6/11	801	10.06	98.0	0.5 Dry	PASS	
29/6/11	802	12.12	98.5	1.5 Wet	PASS	
29/6/11	803	12.50	98.0	1.5 Wet	PASS	
30/6/11	804	12.88	99.5	1.5 Wet	PASS	
30/6/11	805	10.45	98.5	1.5 Wet	PASS	
30/6/11	806	10.76	99.0	2.0 Wet	PASS	
4/7/11	807	11.09	101.0	0.5 Dry	PASS	
4/7/11	808	11.37	101.5	0.5 Wet	PASS	
4/7/11	809	13.20	100.0	0.5 Dry	PASS	
5/7/11	810	6.94	99.0	1.5 Dry	PASS	
5/7/11	811	7.32	99.0	1.5 Dry	PASS	
5/7/11	812	7.73	99.5	2.0 Dry	PASS	
5/7/11	813	8.09	98.5	0.5 Wet	PASS	
5/7/11	814	8.37	99.0	1.5 Wet	PASS	
5/7/11	815	8.77	98.0	1.5 Wet	PASS	
6/7/11	816	9.00	98.5	0.5 Wet	PASS	
6/7/11	817	11.60	100.0	0.5 Wet	PASS	
6/7/11	818	13.53	98.0	0.5 Dry	PASS	
6/7/11	819	11.85	98.0	1.5 Wet	PASS	
6/7/11	820	13.84	98.5	1.5 Wet	PASS	
7/7/11	821	14.28	100.0	0.5 Wet	PASS	
7/7/11	822	12.16	100.5	0.5 Dry	PASS	
7/7/11	823	9.45	98.0	0.5 Wet	PASS	
7/7/11	824	12.34	98.5	1.5 Wet	PASS	

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PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 34 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments Etc
			DENSITY RATIO %	MOISTURE VARIATION		
7/7/11	825	12.80	98.0	2.0 Wet	PASS	
8/7/11	826	14.74	99.5	0.5 Wet	PASS	
8/7/11	827	6.63	101.0	1.5 Dry	PASS	
8/7/11	828	7.04	99.0	1.5 Dry	PASS	
8/7/11	829	7.42	99.5	2.0 Dry	PASS	
8/7/11	830	7.84	98.0	0.5 Wet	PASS	
8/7/11	831	8.30	98.0	0.5 Wet	PASS	
9/7/11	832	15.10	99.5	1.0 Wet	PASS	
9/7/11	833	12.55	100.0	0.5 Wet	PASS	
9/7/11	834	15.51	100.5	0.5 Wet	PASS	
9/7/11	835	12.94	98.5	0.5 Dry	PASS	
11/7/11	836	15.86	99.0	0.5 Dry	PASS	
11/7/11	837	13.35	98.5	1.5 Wet	PASS	
11/7/11	838	9.93	98.5	1.5 Wet	PASS	
11/7/11	839	13.68	99.5	0.5 Dry	PASS	
11/7/11	840	10.37	99.0	1.0 Dry	PASS	
12/7/11	841	14.08	100.5	0.5 Dry	PASS	
12/7/11	842	10.76	99.0	0.5 Dry	PASS	
12/7/11	843	14.49	98.5	0.0	PASS	
12/7/11	844	11.24	101.0	0.5 Dry	PASS	
12/7/11	845	11.72	99.5	0.5 Dry	PASS	
12/7/11	846	8.76	99.5	0.5 Dry	PASS	
13/7/11	847	9.09	99.0	1.0 Wet	PASS	
13/7/11	848	5.57	101.0	0.5 Dry	PASS	
13/7/11	849	5.95	101.0	0.5 Dry	PASS	

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PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 35 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments Etc
			DENSITY RATIO %	MOISTURE VARIATION		
13/7/11	850	6.36	98.5	0.5 Dry	PASS	
13/7/11	851	6.78	98.0	0.5 Wet	PASS	
13/7/11	852	7.16	98.5	0.5 Dry	PASS	
14/7/11	853	7.62	98.0	1.5 Wet	PASS	
14/7/11	854	8.04	98.0	1.5 Wet	PASS	
14/7/11	855	8.43	99.5	0.5 Wet	PASS	
14/7/11	856	8.94	101.0	1.0 Dry	PASS	
14/7/11	857	9.32	99.0	0.5 Dry	PASS	
14/7/11	858	9.45	98.5	0.5 Dry	PASS	
15/7/11	859	9.71	101.0	1.5 Dry	PASS	
15/7/11	860	9.86	99.5	1.5 Dry	PASS	
15/7/11	861	10.09	100.0	0.5 Dry	PASS	
15/7/11	862	10.26	98.5	0.5 Dry	PASS	
15/7/11	863	12.16	99.0	0.5 Wet	PASS	
18/7/11	864	10.52	98.0	1.5 Wet	PASS	
18/7/11	865	10.65	99.0	2.0 Wet	PASS	
18/7/11	866	11.02	99.0	0.5 Wet	PASS	
18/7/11	867	10.85	98.5	0.5 Wet	PASS	
19/7/11	868	11.25	98.0	1.5 Wet	PASS	
19/7/11	869	11.11	99.5	1.5 Wet	PASS	
19/7/11	870	11.49	100.0	0.5 Dry	PASS	
19/7/11	871	11.42	101.0	0.5 Dry	PASS	
1/8/11	872	11.73	98.5	2.0 Wet	PASS	
1/8/11	873	12.00	98.0	2.0 Wet	PASS	
2/8/11	874	12.36	99.5	0.5 Dry	PASS	

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CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 36 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments Etc
			DENSITY RATIO %	MOISTURE VARIATION		
2/8/11	875	12.04	98.0	0.5 Wet	PASS	
3/8/11	876	12.42	98.0	1.5 Wet	PASS	
3/8/11	877	12.69	99.5	2.0 Wet	PASS	
4/8/11	878	12.90	101.0	1.5 Dry	PASS	
4/8/11	879	12.78	99.5	1.5 Dry	PASS	
5/8/11	880	14.97	101.0	1.5 Dry	PASS	
5/8/11	881	12.67	99.5	2.0 Dry	PASS	
6/8/11	882	9.77	99.5	0.5 Dry	PASS	
6/8/11	883	10.18	100.0	0.5 Wet	PASS	
6/8/11	884	13.41	98.0	1.5 Wet	PASS	
8/8/11	885	9.81	98.0	0.5 Wet	PASS	
8/8/11	886	10.07	98.5	0.5 Dry	PASS	
8/8/11	887	10.51	99.0	1.5 Dry	PASS	
8/8/11	888	10.20	98.0	1.5 Dry	PASS	
9/8/11	889	10.51	101.0	0.5 Dry	PASS	
9/8/11	890	10.87	99.5	1.0 Dry	PASS	
10/8/11	891	10.99	98.5	1.5 Wet	PASS	
10/8/11	892	11.32	98.0	2.0 Wet	PASS	
10/8/11	893	11.67	99.5	2.0 Dry	PASS	
10/8/11	894	11.99	101.0	1.5 Dry	PASS	
11/8/11	895	14.26	99.0	1.5 Wet	PASS	
11/8/11	896	14.89	98.0	1.5 Wet	PASS	
11/8/11	897	12.30	98.0	1.5 Wet	PASS	
24/8/11	898	12.20	92.5	6.5 Wet	FAIL	
24/8/11	899	12.25	97.5	3.5 Wet	FAIL	

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CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 37 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments Etc
			DENSITY RATIO %	MOISTURE VARIATION		
25/8/11	900	12.41	98.5	1.0 Wet	PASS	Retest of 899
26/8/11	901	13.22	99.0	1.5 Wet	PASS	
26/8/11	902	14.72	98.0	1.5 Wet	PASS	
26/8/11	903	15.31	98.0	2.0 Wet	PASS	
26/8/11	904	13.75	99.5	1.5 Wet	PASS	
29/8/11	905	12.38	99.0	1.0 Wet	PASS	Retest of 898
29/8/11	906	12.68	101.0	0.5 Wet	PASS	
31/8/11	907	8.80	98.0	1.5 Wet	PASS	
31/8/11	908	9.28	98.5	1.0 Wet	PASS	
31/8/11	909	9.81	98.0	2.0 Wet	PASS	
1/9/11	910	9.07	99.5	0.5 Wet	PASS	
1/9/11	911	9.51	100.0	0.5 Dry	PASS	
1/9/11	912	9.11	98.0	1.5 Dry	PASS	
1/9/11	913	10.07	98.0	2.0 Dry	PASS	
1/9/11	914	9.59	99.5	0.5 Dry	PASS	
1/9/11	915	10.08	98.5	0.5 Dry	PASS	
2/9/11	916	10.55	98.0	2.0 Wet	PASS	
2/9/11	917	8.95	99.5	0.5 Wet	PASS	
2/9/11	918	9.47	98.5	1.5 Wet	PASS	
2/9/11	919	9.88	98.0	1.5 Wet	PASS	
2/9/11	920	10.26	101.0	0.5 Dry	PASS	
5/9/11	921	6.01	101.0	1.5 Dry	PASS	
5/9/11	922	6.49	98.5	1.5 Wet	PASS	
5/9/11	923	6.91	99.0	1.5 Wet	PASS	
5/9/11	924	6.90	98.0	0.5 Wet	PASS	

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CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 38 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments Etc
			DENSITY RATIO %	MOISTURE VARIATION		
5/9/11	925	7.35	99.5	0.5 Dry	PASS	
6/9/11	926	7.34	101.0	1.5 Dry	PASS	
6/9/11	927	7.71	99.5	1.5 Dry	PASS	
6/9/11	928	7.75	100.0	1.0 Dry	PASS	
6/9/11	929	8.02	98.5	0.5 Dry	PASS	
6/9/11	930	8.38	98.0	1.5 Wet	PASS	
6/9/11	931	8.21	99.0	2.0 Wet	PASS	
6/9/11	932	8.79	101.0	0.5 Dry	PASS	
6/9/11	933	8.67	100.5	0.5 Dry	PASS	
7/9/11	934	10.66	100.0	1.5 Dry	PASS	
7/9/11	935	10.67	98.5	1.5 Wet	PASS	
7/9/11	936	11.06	98.0	1.5 Wet	PASS	
7/9/11	937	11.49	99.0	1.5 Dry	PASS	
7/9/11	938	11.18	101.0	0.5 Dry	PASS	
7/9/11	939	11.90	98.5	1.0 Wet	PASS	
7/9/11	940	11.66	99.5	1.0 Dry	PASS	
8/9/11	941	12.21	99.0	1.0 Wet	PASS	
8/9/11	942	7.50	98.0	1.5 Wet	PASS	
8/9/11	943	7.10	99.0	1.0 Wet	PASS	
8/9/11	944	7.62	98.0	2.0 Wet	PASS	
8/9/11	945	8.06	99.5	1.0 Wet	PASS	
8/9/11	946	10.37	98.0	0.5 Wet	PASS	
8/9/11	947	10.85	101.0	1.0 Dry	PASS	
8/9/11	948	11.43	99.5	1.5 Dry	PASS	
9/9/11	949	9.12	98.0	1.0 Dry	PASS	

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CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 39 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments Etc
			DENSITY RATIO %	MOISTURE VARIATION		
9/9/11	950	9.48	98.0	0.5 Dry	PASS	
9/9/11	951	9.99	98.5	0.5 Dry	PASS	
12/9/11	952	10.40	98.0	1.0 Wet	PASS	
12/9/11	953	9.27	99.5	1.0 Wet	PASS	
12/9/11	954	9.66	100.0	0.0	PASS	
12/9/11	955	10.84	98.5	0.5 Dry	PASS	
12/9/11	956	10.03	98.0	1.5 Wet	PASS	
12/9/11	957	11.26	99.0	1.5 Wet	PASS	
12/9/11	958	11.62	99.0	1.5 Wet	PASS	
12/9/11	959	10.49	98.0	2.0 Wet	PASS	
13/9/11	960	12.06	98.0	1.5 Wet	PASS	
13/9/11	961	10.97	98.5	2.0 Wet	PASS	
13/9/11	962	8.64	99.0	0.5 Dry	PASS	
13/9/11	963	9.25	99.5	0.5 Wet	PASS	
13/9/11	964	9.83	98.0	1.0 Wet	PASS	
13/9/11	965	11.12	98.0	1.5 Wet	PASS	
13/9/11	966	11.71	98.0	1.5 Wet	PASS	
13/9/11	967	2.90	101.0	1.0 Dry	PASS	
14/9/11	968	3.31	99.5	1.5 Dry	PASS	
14/9/11	969	3.65	98.0	2.0 Dry	PASS	
14/9/11	970	4.12	98.5	1.5 Wet	PASS	
14/9/11	971	4.56	101.0	0.5 Dry	PASS	
14/9/11	972	4.94	99.5	0.5 Dry	PASS	
14/9/11	973	5.35	100.0	0.5 Dry	PASS	
14/9/11	974	5.75	98.0	1.0 Wet	PASS	

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CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 40 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments Etc
			DENSITY RATIO %	MOISTURE VARIATION		
14/9/11	975	6.21	98.0	2.0 Dry	PASS	
15/9/11	976	3.71	99.5	1.0 Dry	PASS	
15/9/11	977	4.09	98.0	1.5 Wet	PASS	
15/9/11	978	4.54	98.5	1.5 Wet	PASS	
15/9/11	979	4.93	98.0	2.0 Wet	PASS	
15/9/11	980	5.39	98.5	1.0 Dry	PASS	
15/9/11	981	5.85	99.5	1.5 Dry	PASS	
15/9/11	982	10.45	98.0	1.5 Dry	PASS	
15/9/11	983	11.02	99.0	0.5 Dry	PASS	
16/9/11	984	12.50	98.5	2.0 Wet	PASS	
16/9/11	985	11.43	98.5	1.5 Wet	PASS	
16/9/11	986	1.42	100.5	1.5 Dry	PASS	
16/9/11	987	1.93	99.0	1.5 Dry	PASS	
16/9/11	988	2.31	98.5	0.5 Wet	PASS	
16/9/11	989	2.73	98.5	1.5 Wet	PASS	
16/9/11	990	3.24	98.0	1.5 Dry	PASS	
16/9/11	991	3.61	99.5	0.5 Dry	PASS	
17/9/11	992	4.12	98.0	2.0 Wet	PASS	
17/9/11	993	4.58	98.0	2.0 Wet	PASS	
17/9/11	994	5.06	98.0	0.5 Wet	PASS	
17/9/11	995	5.38	100.0	0.5 Dry	PASS	
17/9/11	996	5.79	99.0	1.0 Wet	PASS	
17/9/11	997	6.23	98.5	1.5 Wet	PASS	
19/9/11	998	6.59	100.5	0.5 Dry	PASS	
19/9/11	999	6.75	98.0	1.0 Dry	PASS	

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CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 41 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments Etc.
			DENSITY RATIO %	MOISTURE VARIATION		
19/9/11	1000	7.00	99.0	1.5 Dry	PASS	
19/9/11	1001	7.21	99.5	2.0 Dry	PASS	
19/9/11	1002	7.36	98.0	2.0 Wet	PASS	
19/9/11	1003	7.60	98.0	1.5 Wet	PASS	
19/9/11	1004	7.77	99.0	1.5 Wet	PASS	
19/9/11	1005	8.04	98.5	1.5 Wet	PASS	
20/9/11	1006	8.28	98.0	2.0 Dry	PASS	
20/9/11	1007	11.57	98.5	2.0 Dry	PASS	
20/9/11	1008	14.13	101.0	1.0 Dry	PASS	
20/9/11	1009	10.75	98.0	2.0 Wet	PASS	
20/9/11	1010	8.23	98.0	2.0 Wet	PASS	
20/9/11	1011	8.55	99.0	2.0 Wet	PASS	
20/9/11	1012	8.70	98.5	1.5 Wet	PASS	
20/9/11	1013	8.96	98.0	2.0 Wet	PASS	
21/9/11	1014	9.48	101.0	1.0 Dry	PASS	
21/9/11	1015	9.06	99.0	0.5 Dry	PASS	
21/9/11	1016	9.99	98.5	2.0 Dry	PASS	
21/9/11	1017	9.40	98.0	1.5 Dry	PASS	
21/9/11	1018	8.56	100.0	0.5 Dry	PASS	
21/9/11	1019	10.67	100.5	1.0 Dry	PASS	
21/9/11	1020	9.15	98.0	2.0 Dry	PASS	
21/9/11	1021	8.94	98.0	2.0 Wet	PASS	
21/9/11	1022	11.11	98.0	2.0 Wet	PASS	
22/9/11	1023	11.57	100.5	1.0 Dry	PASS	
22/9/11	1024	9.30	101.0	0.5 Dry	PASS	

LEGEND – BFL = Below Finished Level, BSG = Below Subgrade

CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 42 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments Etc.
			DENSITY RATIO %	MOISTURE VARIATION		
22/9/11	1025	10.02	98.0	1.5 Wet	PASS	
22/9/11	1026	9.88	101.0	0.5 Dry	PASS	
22/9/11	1027	10.45	100.0	1.0 Dry	PASS	
22/9/11	1028	9.72	98.0	1.5 Dry	PASS	
22/9/11	1029	12.08	99.5	1.5 Dry	PASS	
22/9/11	1030	11.63	98.5	1.5 Dry	PASS	
23/9/11	1031	10.96	99.0	1.5 Wet	PASS	
23/9/11	1032	10.34	98.0	1.5 Wet	PASS	
23/9/11	1033	12.60	98.0	1.5 Wet	PASS	
23/9/11	1034	10.20	98.5	2.0 Wet	PASS	
23/9/11	1035	10.78	98.0	1.0 Dry	PASS	
23/9/11	1036	11.42	99.5	0.5 Dry	PASS	
24/9/11	1037	13.01	101.0	1.0 Dry	PASS	
24/9/11	1038	10.48	99.0	0.5 Dry	PASS	
24/9/11	1039	10.74	98.5	0.5 Wet	PASS	
24/9/11	1040	13.50	99.5	1.0 Wet	PASS	
27/9/11	1041	11.17	96.0	6.0 Wet	FAIL	
27/9/11	1042	10.51	94.5	7.5 Wet	FAIL	
28/9/11	1043	11.06	99.5	1.0 Wet	PASS	Retest of No 1041
28/9/11	1044	12.83	101.0	0.5 Dry	PASS	
28/9/11	1045	11.79	98.5	1.0 Dry	PASS	
28/9/11	1046	11.87	100.0	0.5 Dry	PASS	
28/9/11	1047	12.38	101.5	0.5 Dry	PASS	
30/9/11	1048	11.71	98.0	1.5 Wet	PASS	
30/9/11	1049	11.14	99.5	1.5 Wet	PASS	

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CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 43 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments Etc.
			DENSITY RATIO %	MOISTURE VARIATION		
5/10/11	1050	11.47	98.0	1.0 Wet	PASS	
5/10/11	1051	11.98	98.5	1.5 Wet	PASS	
6/10/11	1052	12.27	101.0	0.5 Dry	PASS	
6/10/11	1053	11.82	98.0	1.0 Dry	PASS	
6/10/11	1054	12.28	98.0	2.0 Wet	PASS	
6/10/11	1055	12.60	98.5	1.5 Wet	PASS	
10/10/11	1056	11.11	100.0	1.0 Dry	PASS	
10/10/11	1057	11.26	98.5	0.5 Dry	PASS	
10/10/11	1058	12.95	100.0	1.0 Dry	PASS	
10/10/11	1059	12.73	99.0	0.5 Dry	PASS	
11/10/11	1060	11.57	101.0	1.0 Dry	PASS	
11/10/11	1061	11.41	102.0	1.0 Dry	PASS	
11/10/11	1062	10.37	98.0	1.0 Wet	PASS	Retest of No 1042
11/10/11	1063	11.85	100.0	0.5 Dry	PASS	
11/10/11	1064	11.73	99.5	0.5 Dry	PASS	
12/10/11	1065	6.26	98.0	1.5 Dry	PASS	
12/10/11	1066	9.53	99.0	2.0 Dry	PASS	
12/10/11	1067	9.89	99.5	2.0 Dry	PASS	
12/10/11	1068	6.68	98.0	2.0 Dry	PASS	
12/10/11	1069	7.11	100.0	1.0 Dry	PASS	
12/10/11	1070	9.91	98.0	1.5 Dry	PASS	
13/10/11	1071	10.37	98.0	0.5 Wet	PASS	
13/10/11	1072	7.52	99.5	1.0 Wet	PASS	
13/10/11	1073	7.90	101.0	1.5 Dry	PASS	
13/10/11	1074	10.69	99.5	1.5 Dry	PASS	

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CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 44 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments Etc.
			DENSITY RATIO %	MOISTURE VARIATION		
13/10/11	1075	8.30	98.5	2.0 Dry	PASS	
13/10/11	1076	11.02	99.0	1.5 Dry	PASS	
13/10/11	1077	10.09	98.0	1.0 Dry	PASS	
13/10/11	1078	10.56	98.0	1.5 Dry	PASS	
14/10/11	1079	10.97	99.5	2.0 Dry	PASS	
14/10/11	1080	11.33	98.5	2.0 Dry	PASS	
14/10/11	1081	11.76	99.0	1.5 Dry	PASS	
14/10/11	1082	8.92	98.0	1.5 Wet	PASS	
14/10/11	1083	12.10	101.0	1.5 Dry	PASS	
14/10/11	1084	9.30	98.0	1.5 Wet	PASS	
17/10/11	1085	12.16	101.5	1.0 Dry	PASS	
17/10/11	1086	12.52	101.0	1.5 Dry	PASS	
17/10/11	1087	10.78	98.0	1.5 Wet	PASS	
17/10/11	1088	11.11	98.5	2.0 Wet	PASS	
17/10/11	1089	11.36	98.0	1.5 Wet	PASS	
17/10/11	1090	11.80	99.5	0.5 Dry	PASS	
18/10/11	1091	10.81	101.0	1.0 Dry	PASS	
18/10/11	1092	9.73	98.5	1.5 Dry	PASS	
18/10/11	1093	11.20	98.0	1.5 Wet	PASS	
18/10/11	1094	10.17	98.0	2.0 Wet	PASS	
18/10/11	1095	10.55	100.0	1.5 Dry	PASS	
18/10/11	1096	10.95	98.5	2.0 Dry	PASS	
18/10/11	1097	13.25	101.5	1.5 Dry	PASS	
19/10/11	1098	12.21	98.5	2.0 Wet	PASS	
19/10/11	1099	12.57	98.0	2.0 Wet	PASS	

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CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 45 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments Etc.
			DENSITY RATIO %	MOISTURE VARIATION		
19/10/11	1100	11.44	100.5	1.0 Dry	PASS	
19/10/11	1101	13.92	98.5	0.5 Dry	PASS	
19/10/11	1102	13.03	99.0	1.5 Dry	PASS	
20/10/11	1103	14.26	100.0	1.0 Dry	PASS	
20/10/11	1104	11.70	98.5	1.5 Dry	PASS	
20/10/11	1105	12.28	98.0	2.0 Dry	PASS	
20/10/11	1106	12.61	99.5	1.0 Dry	PASS	
20/10/11	1107	13.02	98.0	2.0 Dry	PASS	
21/10/11	1108	13.34	100.5	1.5 Dry	PASS	
21/10/11	1109	13.70	98.0	1.5 Dry	PASS	
21/10/11	1110	14.04	101.0	1.5 Dry	PASS	
21/10/11	1111	11.43	98.5	2.0 Dry	PASS	
22/10/11	1112	22.45	100.5	1.0 Dry	PASS	
22/10/11	1113	22.78	99.5	2.0 Dry	PASS	
22/10/11	1114	23.08	98.0	2.0 Dry	PASS	
24/10/11	1115	11.74	101.0	1.0 Dry	PASS	
24/10/11	1116	11.56	102.0	0.5 Dry	PASS	
24/10/11	1117	12.15	99.0	0.5 Dry	PASS	
24/10/11	1118	11.94	98.5	0.5 Dry	PASS	
24/10/11	1119	11.39	99.0	1.5 Dry	PASS	
25/10/11	1120	11.70	98.0	2.0 Dry	PASS	
25/10/11	1121	12.41	99.5	1.5 Dry	PASS	
25/10/11	1122	12.30	98.5	1.0 Dry	PASS	
28/10/11	1123	8.83	98.0	2.0 Dry	PASS	
28/10/11	1124	9.56	98.5	2.0 Dry	PASS	

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CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 46 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments Etc.
			DENSITY RATIO %	MOISTURE VARIATION		
28/10/11	1125	9.41	98.0	1.5 Wet	PASS	
28/10/11	1126	10.07	98.0	1.0 Dry	PASS	
28/10/11	1127	10.27	99.5	2.0 Dry	PASS	
28/10/11	1128	9.51	98.5	1.0 Dry	PASS	
29/10/11	1129	8.50	98.0	1.5 Dry	PASS	
29/10/11	1130	8.98	99.5	1.5 Dry	PASS	
29/10/11	1131	8.10	100.5	2.0 Dry	PASS	
29/10/11	1132	9.50	98.0	1.0 Dry	PASS	
29/10/11	1133	10.03	101.0	1.0 Dry	PASS	
31/10/11	1134	10.49	99.0	1.5 Wet	PASS	
31/10/11	1135	10.90	98.0	2.0 Dry	PASS	
31/10/11	1136	11.42	98.5	1.5 Dry	PASS	
31/10/11	1137	8.62	98.0	0.5 Wet	PASS	
31/10/11	1138	9.09	98.0	1.5 Wet	PASS	
31/10/11	1139	9.62	98.5	1.5 Dry	PASS	
31/10/11	1140	10.06	99.5	0.5 Wet	PASS	
31/10/11	1141	10.59	100.0	0.5 Dry	PASS	
1/11/11	1142	11.17	101.0	0.5 Dry	PASS	
1/11/11	1143	11.61	98.5	1.5 Dry	PASS	
1/11/11	1144	12.07	99.5	1.0 Dry	PASS	
1/11/11	1145	12.55	99.5	1.5 Dry	PASS	
1/11/11	1146	12.91	100.5	0.5 Dry	PASS	
1/11/11	1147	13.39	98.5	2.0 Dry	PASS	
1/11/11	1148	11.28	98.0	1.5 Wet	PASS	
1/11/11	1149	11.90	98.0	1.5 Wet	PASS	

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CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 47 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments Etc.
			DENSITY RATIO %	MOISTURE VARIATION		
2/11/11	1150	12.36	98.0	1.5 Dry	PASS	
2/11/11	1151	12.85	98.5	2.0 Dry	PASS	
2/11/11	1152	12.76	98.0	1.0 Wet	PASS	
2/11/11	1153	12.92	99.0	0.5 Wet	PASS	
2/11/11	1154	12.18	98.0	0.5 Wet	PASS	
2/11/11	1155	10.02	98.0	1.5 Wet	PASS	
5/11/11	1156	11.87	99.5	1.5 Dry	PASS	
5/11/11	1157	12.36	98.0	1.5 Wet	PASS	
5/11/11	1158	10.53	98.5	1.0 Dry	PASS	
5/11/11	1159	12.98	100.5	0.5 Dry	PASS	
5/11/11	1160	13.46	98.0	1.5 Dry	PASS	
5/11/11	1161	14.04	98.5	1.0 Dry	PASS	
7/11/11	1162	7.60	99.0	1.0 Wet	PASS	
7/11/11	1163	8.11	99.5	0.5 Dry	PASS	
7/11/11	1164	8.44	98.0	2.0 Wet	PASS	
7/11/11	1165	9.02	98.5	0.5 Dry	PASS	
7/11/11	1166	12.66	101.5	0.5 Dry	PASS	
7/11/11	1167	13.20	99.5	0.5 Wet	PASS	
7/11/11	1168	9.63	98.0	2.0 Dry	PASS	
8/11/11	1169	23.02	99.5	1.0 Dry	PASS	
8/11/11	1170	23.42	98.0	1.5 Dry	PASS	
8/11/11	1171	23.93	99.0	0.5 Dry	PASS	
8/11/11	1172	24.09	100.5	0.5 Dry	PASS	
8/11/11	1173	24.48	98.0	1.5 Wet	PASS	
8/11/11	1174	24.66	99.0	1.5 Wet	PASS	

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CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 48 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments Etc.
			DENSITY RATIO %	MOISTURE VARIATION		
8/11/11	1175	25.10	98.5	1.5 Dry	PASS	
8/11/11	1176	24.97	100.5	1.5 Dry	PASS	
8/11/11	1177	25.45	98.0	2.0 Wet	PASS	
9/11/11	1178	13.72	98.5	2.0 Wet	PASS	
9/11/11	1179	14.16	99.0	1.5 Wet	PASS	
9/11/11	1180	14.65	99.5	1.5 Dry	PASS	
9/11/11	1181	15.16	99.5	1.0 Dry	PASS	
9/11/11	1182	10.01	98.0	2.0 Dry	PASS	
9/11/11	1183	10.52	98.5	2.0 Dry	PASS	
9/11/11	1184	15.57	99.5	2.0 Dry	PASS	
9/11/11	1185	11.03	100.5	1.5 Dry	PASS	
10/11/11	1186	25.04	101.0	0.5 Dry	PASS	
10/11/11	1187	11.39	99.5	1.0 Dry	PASS	
10/11/11	1188	11.91	101.5	0.5 Dry	PASS	
10/11/11	1189	12.46	98.0	2.0 Dry	PASS	
10/11/11	1190	12.95	99.0	2.0 Dry	PASS	
11/11/11	1191	13.10	101.0	1.0 Dry	PASS	
11/11/11	1192	13.58	98.0	1.5 Dry	PASS	
11/11/11	1193	15.90	99.5	0.5 Dry	PASS	
11/11/11	1194	16.26	100.0	1.0 Dry	PASS	
11/11/11	1195	16.67	98.0	0.5 Wet	PASS	
11/11/11	1196	8.10	98.5	1.0 Wet	PASS	
11/11/11	1197	8.69	98.0	0.5 Dry	PASS	
11/11/11	1198	17.00	101.0	0.5 Dry	PASS	
12/11/11	1199	25.40	100.0	0.5 Dry	PASS	

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PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 49 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments Etc.
			DENSITY RATIO %	MOISTURE VARIATION		
12/11/11	1200	23.46	98.5	0.5 Wet	PASS	
12/11/11	1201	23.80	101.5	0.5 Dry	PASS	
12/11/11	1202	25.61	99.5	1.5 Dry	PASS	
12/11/11	1203	25.96	98.0	2.0 Dry	PASS	
14/11/11	1204	9.32	98.5	1.0 Wet	PASS	
14/11/11	1205	9.90	99.5	1.5 Wet	PASS	
14/11/11	1206	10.58	99.5	1.5 Wet	PASS	
14/11/11	1207	12.96	100.5	0.5 Dry	PASS	
14/11/11	1208	10.14	99.0	1.0 Dry	PASS	
14/11/11	1209	11.29	98.0	1.5 Wet	PASS	
14/11/11	1210	13.37	98.0	1.5 Dry	PASS	
14/11/11	1211	10.62	98.0	1.5 Dry	PASS	
15/11/11	1212	11.08	100.0	0.5 Dry	PASS	
15/11/11	1213	13.68	98.5	1.0 Dry	PASS	
15/11/11	1214	11.90	98.0	0.5 Dry	PASS	
15/11/11	1215	12.57	99.5	1.0 Dry	PASS	
15/11/11	1216	14.01	101.0	0.5 Wet	PASS	
15/11/11	1217	11.53	99.5	0.5 Wet	PASS	
15/11/11	1218	13.15	98.0	1.5 Dry	PASS	
16/11/11	1219	14.39	99.5	0.5 Dry	PASS	
16/11/11	1220	12.00	100.5	1.0 Dry	PASS	
16/11/11	1221	13.76	98.0	1.5 Wet	PASS	
16/11/11	1222	14.44	98.0	0.5 Dry	PASS	
16/11/11	1223	12.44	101.5	0.5 Wet	PASS	
16/11/11	1224	14.70	99.0	0.5 Wet	PASS	

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CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 50 OF 53

DATE	DENSITY TEST NO.	RL	RESULTS		PASS / FAIL	COMMENT Retest/Comments Etc.
			DENSITY RATIO %	MOISTURE VARIATION		
16/11/11	1225	10.70	101.0	1.5 Dry	PASS	
16/11/11	1226	15.16	98.0	1.5 Dry	PASS	
17/11/11	1227	10.06	99.0	0.5 Dry	PASS	
17/11/11	1228	11.75	99.0	1.0 Dry	PASS	
17/11/11	1229	12.09	99.5	1.0 Wet	PASS	
17/11/11	1230	10.49	98.0	0.5 Wet	PASS	
17/11/11	1231	11.00	100.5	0.5 Dry	PASS	
17/11/11	1232	12.47	100.0	0.5 Wet	PASS	
17/11/11	1233	11.28	98.0	1.0 Dry	PASS	
17/11/11	1234	11.10	98.0	1.5 Dry	PASS	
17/11/11	1235	11.46	98.0	2.0 Dry	PASS	
18/11/11	1236	11.87	99.0	1.0 Dry	PASS	
18/11/11	1237	10.36	98.5	2.0 Dry	PASS	
18/11/11	1238	10.91	99.5	2.0 Dry	PASS	
18/11/11	1239	12.43	98.0	1.5 Dry	PASS	
18/11/11	1240	12.95	100.5	0.5 Dry	PASS	
18/11/11	1241	11.48	98.0	0.5 Wet	PASS	
18/11/11	1242	13.39	98.0	1.5 Wet	PASS	
18/11/11	1243	11.88	98.0	1.5 Wet	PASS	
19/11/11	1244	10.56	101.0	1.0 Dry	PASS	
19/11/11	1245	11.07	98.5	0.5 Dry	PASS	
19/11/11	1246	11.62	99.5	0.5 Dry	PASS	
19/11/11	1247	12.05	100.0	0.5 Wet	PASS	
19/11/11	1248	12.54	100.0	1.5 Wet	PASS	
19/11/11	1249	13.00	98.5	1.0 Dry	PASS	

LEGEND – BFL = Below Finished Level, BSG = Below Subgrade

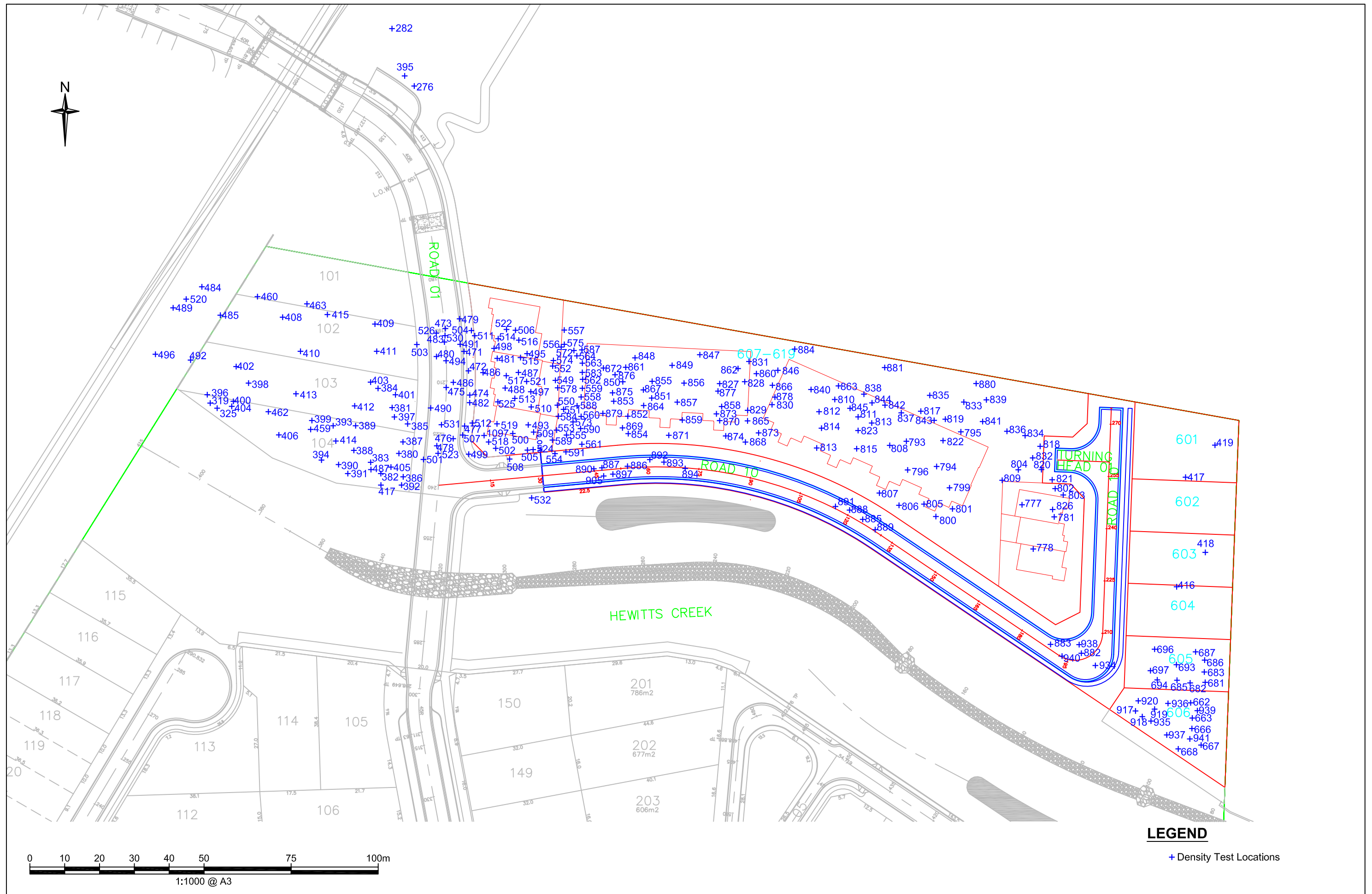
CLIENT: STOCKLAND DEVELOPMENTS PTY LTD C/- CARDNO PTY LTD

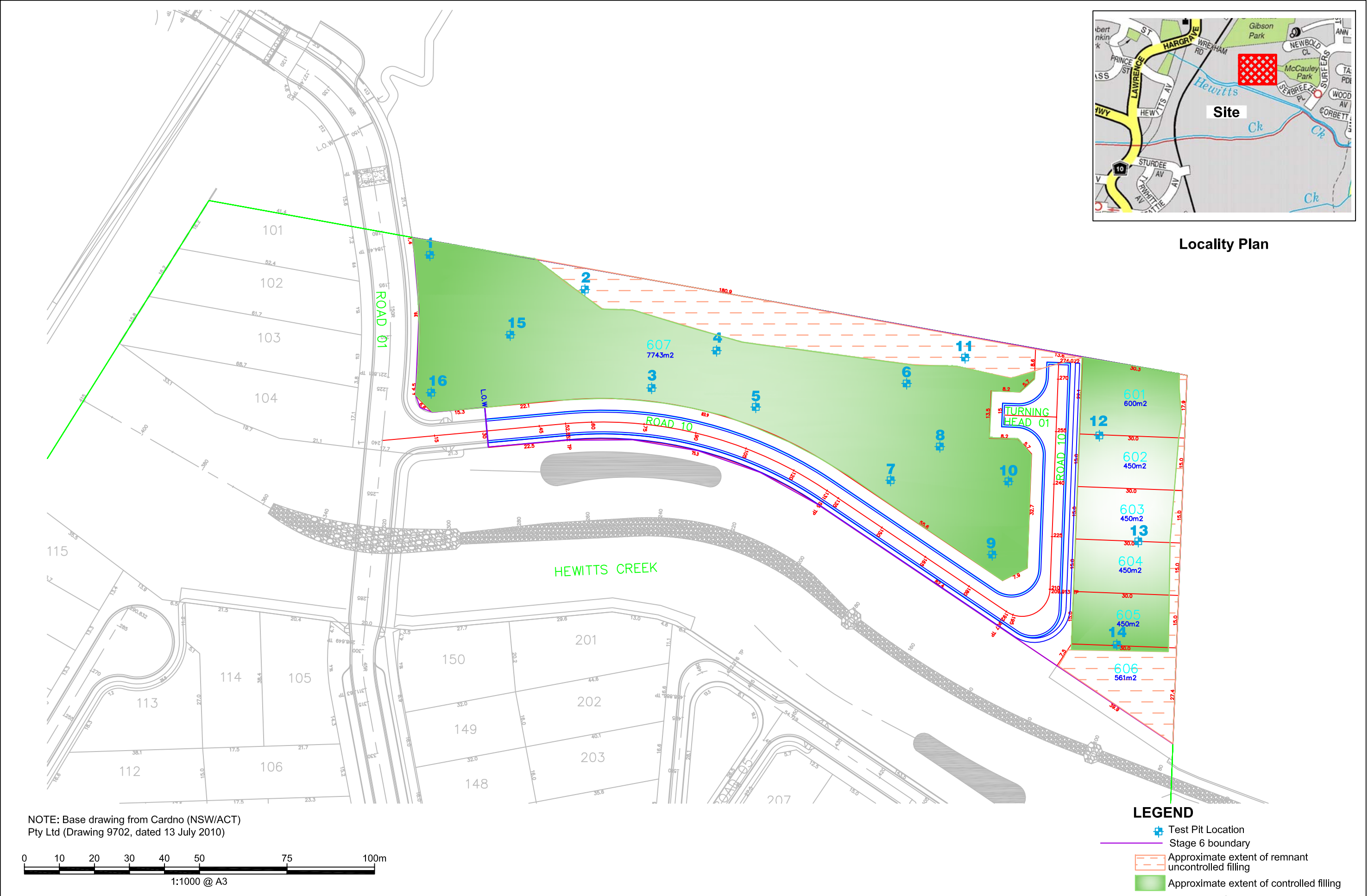
PROJECT: STAGES 1 – 4 & 6 McCAULEY'S BEACH ESTATE, BULLI PROJECT: 671056

LOCATION: SITE FILLING PAGE: 51 OF 53

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LEGEND – BFL = Below Finished Level, BSG = Below Subgrade





 Douglas Partners Geotechnics Environment Groundwater	CLIENT: Stockland Developments Pty Ltd		TITLE: Location of Field Tests Lot Classification Stage 6 McCauleys Beach Estate, BULLI		PROJECT No: 48694.26
	OFFICE: Wollongong	DRAWN BY: PSCH			DRAWING No: 1
	SCALE: As shown	DATE: 29.11.2011			REVISION: A